

TUT 239: Customizing the Novell Linux Desktop

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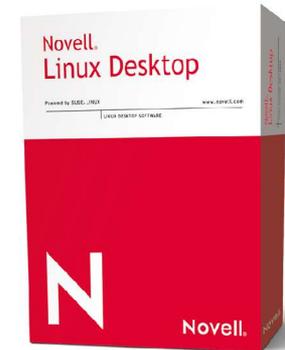
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Novell Linux Desktop 9 Overview

Novell Linux Desktop 9 is an enterprise-ready user productivity environment that gives businesses what they need to leverage Linux and open source with confidence.

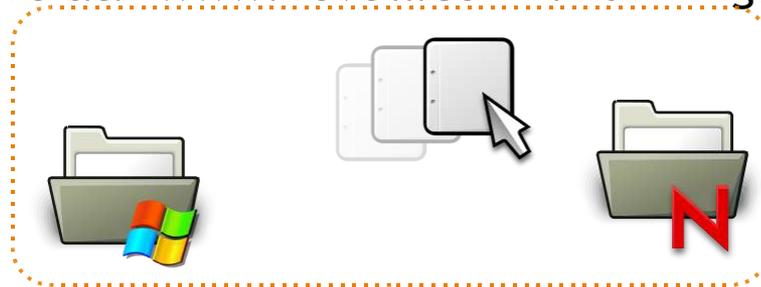
- **Complete Business Productivity Suite**
for the most important business tasks
- **Enterprise deployment and maintenance features**
cut costs with pattern-based installs
- **Powered by SUSE LINUX**
ensuring high performance, security and reliability
- **Backed by Novell**
helping businesses deploy Linux with confidence



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Living ahead of the Adoption Curve Novell's Open Desktop Initiative

- More than 85% of employees use OpenOffice.org full-time
- Novell R&D develops & tests on SUSE LINUX
- 2,978 Linux desktop users today (over ½ of the company)
 - 1,658 use Linux as their primary operating environment
- This provides real-world input into
 - Novell's Migration offerings to customers
 - OpenOffice development efforts
 - Novell Linux Desktop development efforts
- Learn more at: www.novell.com/linux/migrate



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ODI *is not* Novell Linux Desktop (NLD)

ODI is a perfect illustration of what can be achieved with properly planned Linux migration. Leveraging the tools from the Novell Linux Desktop 9, SUSE Linux Enterprise Server 9 and ZENworks Linux Management, Novell IS&T adapted NLD to its users needs and corporate policies.



Customizing Novell Linux Desktop for your company

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Customizing the Desktop

How can I tweak the desktop distribution so that I can just run the install and be done?

Tuning the distribution for the needs of your organization

- Package selection
- Changes to default settings
- Adding backgrounds, templates, etc.
- Adding software packages

Today's session: Creating the “MyCompany.com” edition of the Novell Linux Desktop 9, powered by SUSE LINUX

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Session Overview

- The flow of control/process overview
- Downloading software and building software
- Modifying menus
- Creating RPM packages from scratch
- Hooking into SuSEconfig for on-going invocation
- Bundling everything up into your own installation media
- Using firstboot
- Concluding thoughts
- Q&A

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Process Overview

- Make a plan
- Collect your applications, files, etc.
- Determine what customizations you want
- Build tools to apply the customizations
- Package everything up in RPMs
- Unpack the distribution media
- Add the RPMs to the distribution
- Update installation configuration files
- Burn CDs, DVDs, etc.
- Test and go!

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MyCompany.com Distribution Plan

Download, build and test *linsmith-0.8.4*

Create a Gnome and KDE menu item for *linsmith*

Build RPMs for *linsmith*

Add a desktop wallpaper for MyCompany.com

Customize desktop menus to match company terminology

Build a `SuSEconfig` script to update the default menus

Build RPMs for MyCompany.com items

Update distribution media

Test and update as needed

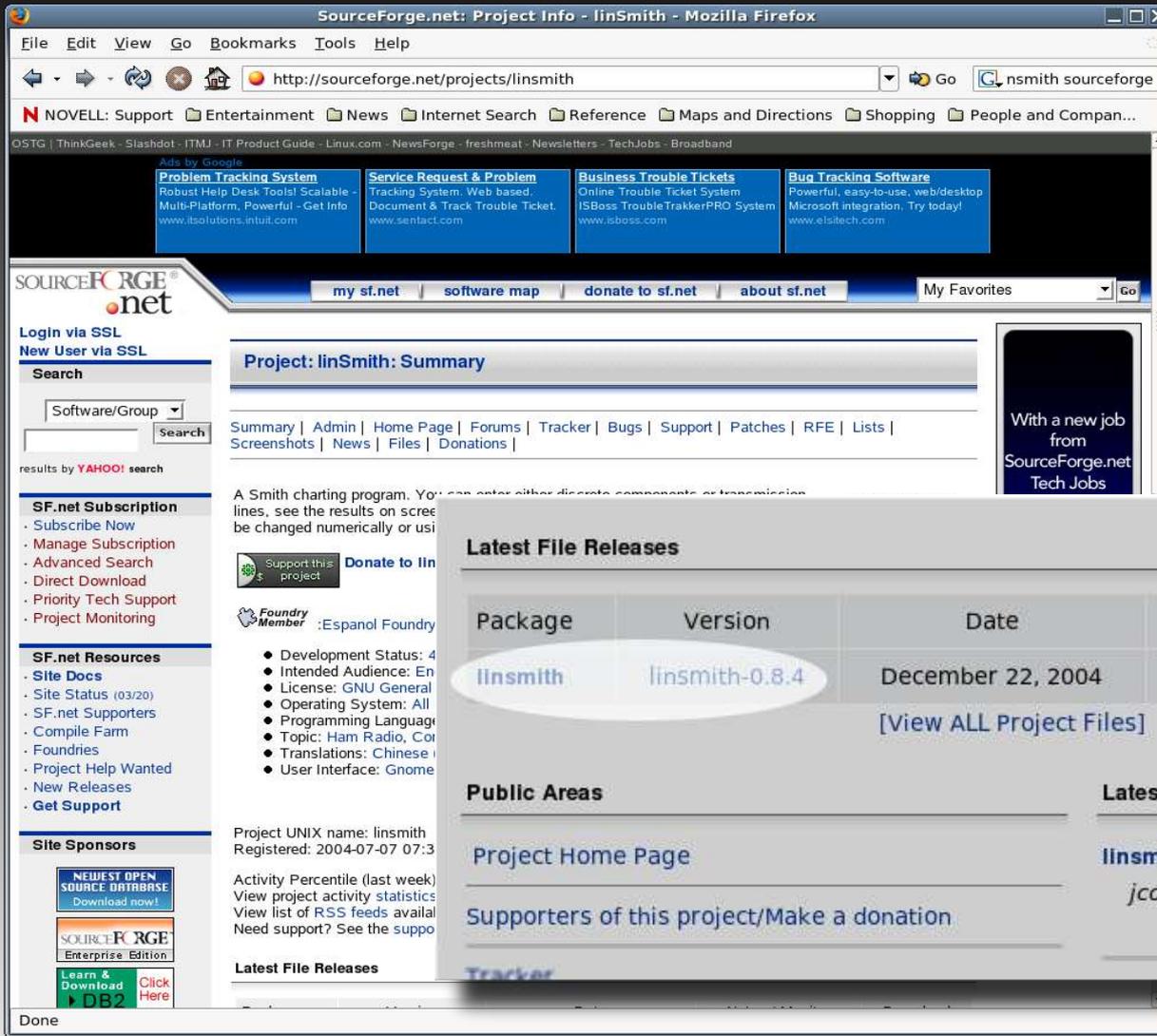
Downloading and Building Software

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Package Building Overview

- Get your tools in place (SDK, etc.)
- Download and unpack your software
- Check `README`, `INSTALL` or similar files for special installation notes, dependencies, etc.
- If needed, run `./configure` or `./autogen.sh` to configure the software
- Build, install, and test the software
- If RPM `.spec` files are included, build the RPMs, if not...

SourceForge.net—a good source for open source software



The screenshot shows the SourceForge.net website for the 'linSmith' project. The browser window title is 'SourceForge.net: Project Info - linSmith - Mozilla Firefox'. The address bar shows 'http://sourceforge.net/projects/linSmith'. The page features a navigation menu with links like 'my sf.net', 'software map', 'donate to sf.net', and 'about sf.net'. A search bar is visible on the left. The main content area displays the 'Project: linSmith: Summary' with a navigation menu for 'Summary', 'Admin', 'Home Page', 'Forums', 'Tracker', 'Bugs', 'Support', 'Patches', 'RFE', 'Lists', 'Screenshots', 'News', 'Files', and 'Donations'. A description of the project is partially visible: 'A Smith charting program. You can enter either discrete components or transmission lines, see the results on screen, and the results can be changed numerically or using a mouse.' Below this, there is a 'Latest File Releases' table. The table has columns for 'Package', 'Version', 'Date', 'Notes / Monitor', and 'Download'. One release is listed: 'linSmith' with version 'linSmith-0.8.4' released on 'December 22, 2004'. A 'Download' link is provided for this release. Below the table is a link to '[View ALL Project Files]'. To the right of the table is a 'Public Areas' section with links for 'Project Home Page', 'Supporters of this project/Make a donation', and 'Tracker'. Further right is a 'Latest News' section with a headline 'linSmith-0.8.4 released' by 'jcoppen' on '2004-12-22 15:49', with a link to '[Read More/Comment]'. The left sidebar contains various links including 'SF.net Subscription', 'SF.net Resources', and 'Site Sponsors'. At the bottom left, there are buttons for 'NEWEST OPEN SOURCE DATABASE', 'SOURCEFORGE Enterprise Edition', and 'Learn & Download DB2'.

| Package | Version | Date | Notes / Monitor | Download |
|----------|----------------|-------------------|---|----------|
| linSmith | linSmith-0.8.4 | December 22, 2004 |   | Download |

Some projects only distribute source code

INSTALL and other useful files...

```
Terminal
File Edit View Terminal Tabs Help
The simplest way to compile this package is:

1. `cd` to the directory containing the package's source code and type
   `./configure` to configure the package for your system. If you're
   using `csh` on an old version of System V, you might need to type
   `sh ./configure` instead to prevent `csh` from trying to execute
   `configure` itself.

Running `configure` takes a few minutes and produces a lot of
messages telling which features are supported.

2. Type `make` to compile the package.

3. Optionally, type `make check` to check the package.

4. Type `make install` to install the package and its
   documentation.

INSTALL lines 39-57/229 26%
```

```
Terminal
File Edit View Terminal Tabs Help
pete@rhesus:/common/src> cd linsmith-0.8.4/
pete@rhesus:/common/src/linsmith-0.8.4> ls
acconfig.h  config.h.in  depcomp      linsmith.gladep  NEWS      TODO
aclocal.m4  configure    doc          Makefile.am      pixmaps
AUTHORS     configure.in INSTALL      Makefile.in      po
autogen.sh  COPYING     install-sh   missing          README
ChangeLog   datafiles   linsmith.glade mkninstalldirs  src
pete@rhesus:/common/src/linsmith-0.8.4> ./autogen.sh --prefix=/opt/linsmith
```

Configuring with `./autogen.sh`

```
Terminal
File Edit View Terminal Tabs Help
checking for suffix of executables...
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
checking for gcc option to accept ANSI C... none needed
checking dependency style of gcc... gcc3
```

When ./configure completes ...

```
Terminal
File Edit View Terminal Tabs Help
Making all in src
make[2]: Entering directory `/common/src/linsmith-0.8.4/src'
if gcc -DHAVE_CONFIG_H -I. -I. -I.. -DPACKAGE_DATA_DIR=\""/opt/linsmith/share\"
-DPACKAGE_LOCALE_DIR=\""/opt/linsmith/share/locale\" -DORBIT2=1 -pthread -DXTH
READS -D_REENTRANT -DXUSE_MTSAFE_API -I/usr/include/libart-2.0 -I/usr/include/li
bxml2 -I/opt/gnome/include/libanomeui-2.0 -I/opt/gnome/include/libanome-2.0 -I/o
pt/gnome/include/
include/gconf/2 -I/
-I/opt/gnome/lib
nclude/libbonobo
fs-2.0/include -I
ango-1.0 -I/usr/i
include -I/opt/gr
ude/libart-2.0 -I
opt/gnome/include
e/pango-1.0 -I/us
n.Tpo" -c -o main
then mv -f ".deps
; fi
```

... run make ...

```
Terminal
File Edit View Terminal Tabs Help
make[1]: Leaving directory `/common/src/linsmith-0.8.4'
pete@rhesus:/common/src/linsmith-0.8.4> sudo make install
Password:
Making install in src
make[1]: Entering directory `/common/src/linsmith-0.8.4/src'
make[2]: Entering directory `/common/src/linsmith-0.8.4/src'
test -z "/opt/linsmith/bin" || mkdir -p -- "/opt/linsmith/bin"
/usr/bin/install -c 'linsmith' '/opt/linsmith/bin/linsmith'
make[2]: Nothing to be done for `install-data-am'.
make[2]: Leaving directory `/common/src/linsmith-0.8.4/src'
make[1]: Leaving directory `/common/src/linsmith-0.8.4/src'
Making install in doc
make[1]: Entering directory `/common/src/linsmith-0.8.4/doc'
make[2]: Entering directory `/common/src/linsmith-0.8.4/doc'
make[2]: Nothing to be done for `install-exec-am'.
make[2]: Nothing to be done for `install-data-am'.
make[2]: Leaving directory `/common/src/linsmith-0.8.4/doc'
make[1]: Leaving directory `/common/src/linsmith-0.8.4/doc'
make[1]: Entering directory `/common/src/linsmith-0.8.4/po'
```

... and then make install (as root)

Completing the Build

Modifying Menus

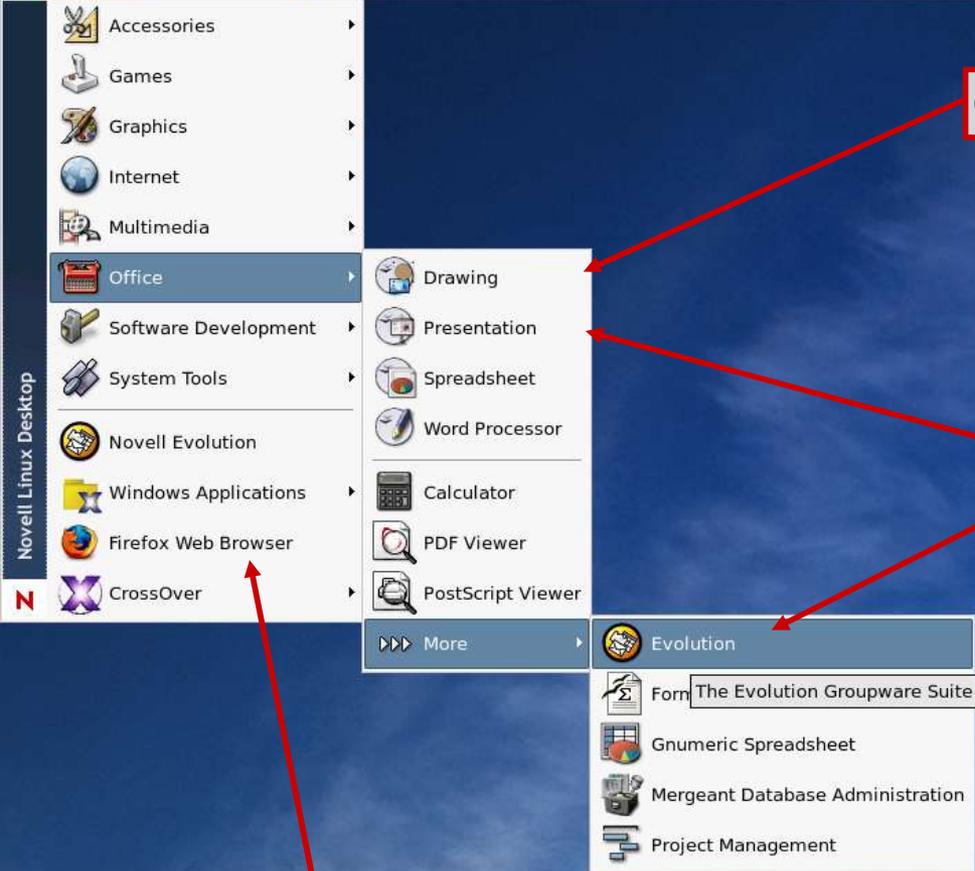
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Adding or Changing Menu Items

Controlled through `.desktop` files

- Essentially the same for Gnome and KDE
 - `/opt/gnome/share/applications`
 - `/opt/kde3/share/applications/kde`
 - etc.
- Special “Ximian” Categories entries for Gnome menus
 - `X-Ximian-Toplevel` for the first level under programs
 - `X-Ximian-Main` to stay out of “more...”
- Special “Generic” names for KDE menus

Generally packaged with associated applications



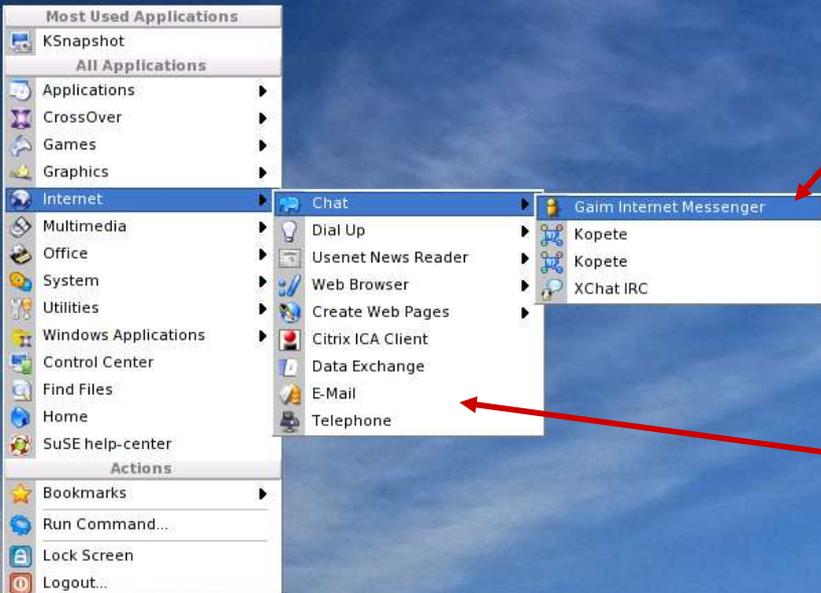
Categories contains "X-Ximian-Main"

Categories contains "Office"

Categories contains "X-Ximian-Toplevel"

Gnome Menu Example

Program sub-menus collapse to a “generic name” when there is only one application of a given type.



Multiple applications of this type

Only one application of this type

KDE Menu Example

Building Custom RPMs from Scratch

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RPM - The RPM Package Manager

About RPM

- Along with Debian `.deb` packages, one of the most common package formats for Linux
- Originally the Red Hat Package Manager, now a community project (still largely controlled by Red Hat)
- Allows you to package, distribute, install, update and remove software
- Not as rich as Windows alternatives, but ubiquity has its benefits...

More information...

- RPM “How To” - <http://www.rpm.org/RPM-HOWTO/>

- Red Hat RPM Guide - <http://www.wiley.com>

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The .spec File and rpmbuild

Information about the package you're creating

- Name, description, version, etc.

The files you want to package up

- Names, locations, permissions

Actions that need to be taken

- Before, after, etc.

The `.spec` file can be as simple or as complicated as you need...

Use `rpmbuild` to make RPMs with `.spec` files

```
Terminal
File Edit View Terminal Tabs Help
##
# spec file for package Linsmith (Version 0.84)
# Please submit bug reports to Pete Goodall <pete@novell.com>
#

BuildRequires:

Name:          Linsmith
%define prefix /opt/linsmith
License:       GPL
Group:         Productivity/Graphics/Other
Requires:     gtk2 python-gtk
Summary:      A Smith charting program
Version:      0.84
Release:      2
Source:       http://cogent.dl.sourceforge.net/sourceforge/linsmith/linsmith-%{version}.tar.gz
Patch:       %name-%version-callbrowser.diff
Patch1:      %name-%version-freetype.diff
Patch2:      %name-%version-lib64.diff
Patch3:      linsmith-gtktype.patch
Patch4:      linsmith-help.diff
URL:         http://sourceforge.net/projects/linsmith
BuildRoot:   %{_tmppath}/%{name}-%{version}-build

%description
A Smith charting program. You can enter either discrete components or
transmission lines, see the results on screen and/or generate Postscript
output. Component values can be changed numerically or using scrollbars.

Authors:
-----
  John Coppens <jcoppens@users.sourceforge.net>

%prep
%setup
%patch -p1
```

1,1

Top

Sample .spec File

```
Terminal
File Edit View Terminal Tabs Help
coolguy:/common/src/linsmith-0.8.4 # ls
.          autogen.sh      config.log      datafiles      linsmith.glade  missing        README
..         autom4te.cache  config.status  depcomp        linsmith.gladep mkinstalldirs  src
acconfig.h ChangeLog      configure      doc            Makefile        NEWS           stamp-h1
aclocal.m4 config.h       configure.in   INSTALL       Makefile.am     pixmaps       TODO
AUTHORS   config.h.in   COPYING       install-sh    Makefile.in     po

coolguy:/common/src/linsmith-0.8.4 # cd ../SPECS/
coolguy:/common/src/SPECS # ls
. .. linsmith.spec
coolguy:/common/src/SPECS # rpmbuild -bb --target=i586 linsmith.spec
Building target platforms: i586
Building for target i586
Executing(%prep): /bin/sh -e /var/tmp/rpm-tmp.39394
+ umask 022
+ cd /usr/src/packages/BUILD
+ cd /usr/src/packages/BUILD
+ rm -rf Linsmith-0.8.4
+ /usr/bin/gzip -dc /usr/src/packages/SOURCES/linsmith-0.8.4.tar.gz
+ tar -xvfv -
drwxrwxrwx 0/0          0 2004-12-22 18:32:18 linsmith-0.8.4/
drwxrwxrwx 0/0          0 2004-12-22 18:32:18 linsmith-0.8.4/po/
-rw-r--r-- 0/0         206 2004-12-09 20:57:32 linsmith-0.8.4/po/ChangeLog
-rw-r--r-- 0/0        7420 2004-12-21 09:52:59 linsmith-0.8.4/po/Makefile.in.in
-rw-r--r-- 0/0         211 2004-07-26 00:02:57 linsmith-0.8.4/po/POTFILES.in
-rw-r--r-- 0/0       12809 2004-12-22 18:32:17 linsmith-0.8.4/po/linsmith.pot
-rw-r--r-- 0/0       15120 2004-12-22 18:32:18 linsmith-0.8.4/po/es.po
-rw-r--r-- 0/0       14959 2004-12-22 18:32:18 linsmith-0.8.4/po/zh.po
-rw-r--r-- 0/0       15301 2004-12-22 18:32:18 linsmith-0.8.4/po/de.po
-rw-r--r-- 0/0         8799 2004-12-22 18:32:18 linsmith-0.8.4/po/es.gmo
-rw-r--r-- 0/0         8175 2004-12-22 18:32:18 linsmith-0.8.4/po/zh.gmo
-rw-r--r-- 0/0         9224 2004-12-22 18:32:18 linsmith-0.8.4/po/de.gmo
-rw-r--r-- 0/0         2060 2004-07-11 20:06:50 linsmith-0.8.4/README
-rw-r--r-- 0/0         1101 2004-12-22 18:29:12 linsmith-0.8.4/configure.in
-rw-r--r-- 0/0       52024 2004-12-22 18:29:26 linsmith-0.8.4/aclocal.m4
-rw-r--r-- 0/0         1195 2004-12-20 14:48:58 linsmith-0.8.4/Makefile.am
-rw-r--r-- 0/0       20096 2004-12-22 18:29:29 linsmith-0.8.4/Makefile.in
-rw-r--r-- 0/0         2668 2004-12-22 18:32:09 linsmith-0.8.4/config.h.in
-rwxr-xr-x 0/0      289035 2004-12-22 18:29:30 linsmith-0.8.4/configure
-rw-r--r-- 0/0         23 2004-07-11 20:07:37 linsmith-0.8.4/AUTHORS
```

Building an RPM with rpmbuild

Hooking into SuSEconfig

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SuSEconfig

SuSEconfig helps keep your configuration “sane”

- Pushes configuration stored in /etc/sysconfig out to various configuration files
- Run by YaST and other system management tools
- Hooking into SuSEconfig means your script will get called even if it is other software that has changed

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Examples

Change menu item names

- Use terms that make sense in your organization

Change menu hierarchy

- Transition issues for your particular user base

Hide menu items

- Simplify for your users without removing your tools

Changes to global configuration settings

- Meet the needs of your organization

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Script Invocation using SuSEconfig

Why you might want to do this...

Why not just tweak the RPMs?

- Changes in version numbering may cause update problems...
- If updates do work, they will likely blow away your changes...

Why not do it in firstboot configuration or with AutoYaST?

- Your changes may not be isolated to update-preserved configuration files, so they may get blown away during updates...
- You can push out updated packages, enabling you to change settings on the fly...

```
Terminal
File Edit View Terminal Tabs Help
tot:/sbin/conf.d # more SuSEconfig.fonts
#!/bin/sh
# Copyright (c) 2000-2002 SuSE Linux AG, Nuernberg, Germany.
# All rights reserved.
#
# Author: Ruediger Oertel <ro@suse.de>, 2000

# check if we are started as root
# only one of UID and USER must be set correctly

if test "$UID" != 0 -a "$USER" != root; then
    echo "You must be root to start $0."
    exit 1
fi

test -n "$ROOT" && exit 0

LC_ALL=POSIX

# test if not mounted readonly
test -d /usr/X11R6/lib/X11/fonts
touch /usr/X11R6/lib/X11/fonts 2

--More-- (88%)
```

```
Terminal
File Edit View Terminal Tabs Help
tot:/sbin/conf.d # ls
.                               SuSEconfig.isdn                SuSEconfig.postfix
..                              SuSEconfig.ispell             SuSEconfig.profiles
SuSEconfig.alljava             SuSEconfig.kde                 SuSEconfig.scpm
SuSEconfig.automake            SuSEconfig.kdm3               SuSEconfig.scrollkeeper
SuSEconfig.fonts               SuSEconfig.libxml2            SuSEconfig.sgmL-skel
SuSEconfig.gnome-vfs2          SuSEconfig.mycompany-wallpaper SuSEconfig.sortpasswd
SuSEconfig.groff               SuSEconfig.news                SuSEconfig.susehelp
SuSEconfig.gtk2                SuSEconfig.pango               SuSEconfig.xdm
SuSEconfig.guile               SuSEconfig.perl
SuSEconfig.icu                 SuSEconfig.permissions

tot:/sbin/conf.d # SuSEconfig --module mycompany-wallpaper
Starting SuSEconfig, the SuSE Configuration Tool...
Running module mycompany-wallpaper only
Reading /etc/sysconfig and updating the system...
Executing /sbin/conf.d/SuSEconfig.mycompany-wallpaper...
Finished.
tot:/sbin/conf.d #
```

SuSEconfig modules—just shell scripts

```
Terminal
File Edit View Terminal Tabs Help
[/opt/gnome/share/applications/MozillaFirefox.desktop]
Name=Firefox Internet Browser
GenericName=Internet Browser
Comment=Mozilla Firefox Internet Browser

[/opt/gnome/share/applications/textdoc.desktop]
Name=OpenOffice.org Writer
GenericName=Word Processing Program
Comment=OpenOffice.org Writer Word Processing Program

[/opt/gnome/share/applications/presentation.desktop]
Name=OpenOffice.org Impress
GenericName=Presentation Program
Comment=OpenOffice.org Impress Presentation Program

[/opt/gnome/share/applications/s
Name=OpenOffice.org Calc
GenericName=Spreadsheet Program
Comment=OpenOffice.org Calc Spre
~
~
~
"mycompany-menu-config" 19L, 646
```

Store Configuration Data in /etc/opt/sysconfig

Make SuSEconfig Scripts "Generic"

```
Terminal
File Edit View Terminal Tabs Help
    curfile=`echo $line | tr -d '[]'`
    if [ ! -f "${curfile}" ]; then
        echo "$0: desktop file ${curfile} not found" 2>&1
        curfile=""
        continue
    fi
    curdir=`dirname ${curfile}`
    if [ ! -w "${curdir}" ]; then
        echo "$0: can't write to ${curdir}" 2>&1
        curfile=""
        continue
    fi
    tempfile="${curfile}.$$"
    ;;
*)
    if [ -z "${curfile}" ]; then
        continue
    fi
    variable=`echo $line | sed -e 's/=.*$//'`
    value=`echo $line | sed -e 's/^.*=/'`
    if grep -q ${variable} ${curfile}; then
        sed -e "s/^${variable}=.*\${variable}=${value}/" ${curfile} >
        ${tempfile}
    "SuSEconfig.mycompany-menu-config" 53L, 1143C
    22,1-8
    67%
```

Building Your Own Installation Media

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Custom Installation Set Overview

Process

- Unpack the media
- Create/update package selection files
- Overlay new packages
- Update package descriptions, indexes, etc.
- Create new CD images

More Information

- YaST Auto Installer/AutoYaST (Anas Nashif)
<http://www.suse.de/~nashif/autoinstall/>

```
Terminal
File Edit View Terminal Tabs Help
tot:/iso # ls
. MD5SUM SLES-9-NLD-9-i386-beta1.6-CD2.iso
.. SLES-9-NLD-9-i386-beta1.6-CD1.iso SLES-9-NLD-9-i386-beta1.6-CD3.iso
tot:/iso # mount -o loop SLES-9-NLD-9-i386-beta1.6-CD1.iso /mnt
tot:/iso # mkdir -p /distro/cd1
tot:/iso # cd /mnt
tot:/mnt # ls
. ChangeLog autorun.inf gpg-pubkey-3d25d3d9-36e12d04.asc
.. INDEX.gz boot gpg-pubkey-9c800aca-39eef481.asc
ARCHIVES.gz LICENSE.TXT content ls-lR.gz
COPYING README control.xml media.1
COPYING.de README.BETA directory.yast pubring.gpg
COPYRIGHT README.DOS docu suse
COPYRIGHT.de SuSEgo.ico dosutils
tot:/mnt # cp -rp * /distro/cd1
tot:/mnt # ls /distro/cd1
. ChangeLog autorun.inf gpg-pubkey-3d25d3d9-36e12d04.asc
.. INDEX.gz boot gpg-pubkey-9c800aca-39eef481.asc
ARCHIVES.gz LICENSE.TXT content ls-lR.gz
COPYING README control.xml media.1
COPYING.de README.BETA directory.yast pubring.gpg
COPYRIGHT README.DOS docu suse
COPYRIGHT.de SuSEgo.ico dosutils
tot:/mnt #
```

Unpack the Distribution

```
Terminal
File Edit View Terminal Tabs Help
tot:/distro # ls *
cd1:
. ChangeLog autorun.inf gpg-pubkey-3d25d3d9-36e12d04.asc
.. INDEX.gz boot gpg-pubkey-9c800aca-39eef481.asc
ARCHIVES.gz LICENSE.TXT content ls-lR.gz
COPYING README control.xml media.1
COPYING.de README.BETA directory.yast pubring.gpg
COPYRIGHT README.DOS docu suse
COPYRIGHT.de SuSEgo.ico dosutils
cd2:
. COPYING INDEX.gz autorun.inf content media.2
.. COPYRIGHT SuSEgo.ico boot ls-lR.gz suse
cd3:
. COPYING INDEX.gz autorun.inf ls-lR.gz suse
.. COPYRIGHT SuSEgo.ico content media.3
tot:/distro # mkdir cd4
tot:/distro # mkdir cd4/media.4
tot:/distro # mkdir cd4/suse
tot:/distro # cp cd1/SuSEgo.ico cd4
tot:/distro # cp cd1/autorun.inf cd4
tot:/distro # cp cd2/COPY* cd4
tot:/distro #
```

And Create Stubs for Your New CD4

Files in media.n must match other media.? directories


```
Terminal
File Edit View Terminal Tabs Help
tot:/usr/src/packages/RPMS # find * -type f -print | cpio -pd /distro/cd4/suse
1120 blocks
tot:/usr/src/packages/RPMS # ls -R !$
ls -R /distro/cd4/suse
/distro/cd4/suse:
. .. i586 noarch

/distro/cd4/suse/i586:
. .. linsmith-0.8.1-mycompany.1.i586.rpm

/distro/cd4/suse/noarch:
. mycompany-menu-config-1-0.1.noarch.rpm
.. mycompany-wallpaper-1-0.1.noarch.rpm
tot:/usr/src/packages/RPMS #
```

Copy RPMs to the Distribution Directory

```
Terminal
File Edit View Terminal Tabs Help
tot:/distro # create_package_descr -d ./cd1/suse -d ./cd2/suse -d ./cd3/suse -d
./cd4/suse -x ./cd1/suse/setup/descr/EXTRA_PROV -o ./cd1/suse/setup/descr/
using settings:
datadirs: ./cd1/suse,./cd2/suse,./cd3/suse,./cd4/suse
languages: english
output dir: ./cd1/suse/setup/descr/
extra_provides: ./cd1/suse/setup/descr/EXTRA_PROV
..... done
now recoding to UTF-8: packages/packages.DU packages.en
tot:/distro # /bin/ls -lR . | gzip > ./cd1/ls-lR.gz
tot:/distro # find . -type f | gzip > ./cd1/INDEX.gz
tot:/distro # cp cd1/{ls-lR,INDEX}.gz cd2
tot:/distro # cp cd1/{ls-lR,INDEX}.gz cd3
tot:/distro # cp cd1/{ls-lR,INDEX}.gz cd4
tot:/distro # ls cd4
. COPYING INDEX.gz autorun.inf ls-lR.gz suse
.. COPYRIGHT SuSEgo.ico content media.4
tot:/distro #
```

And Update the Package Description Files, Indexes, etc.

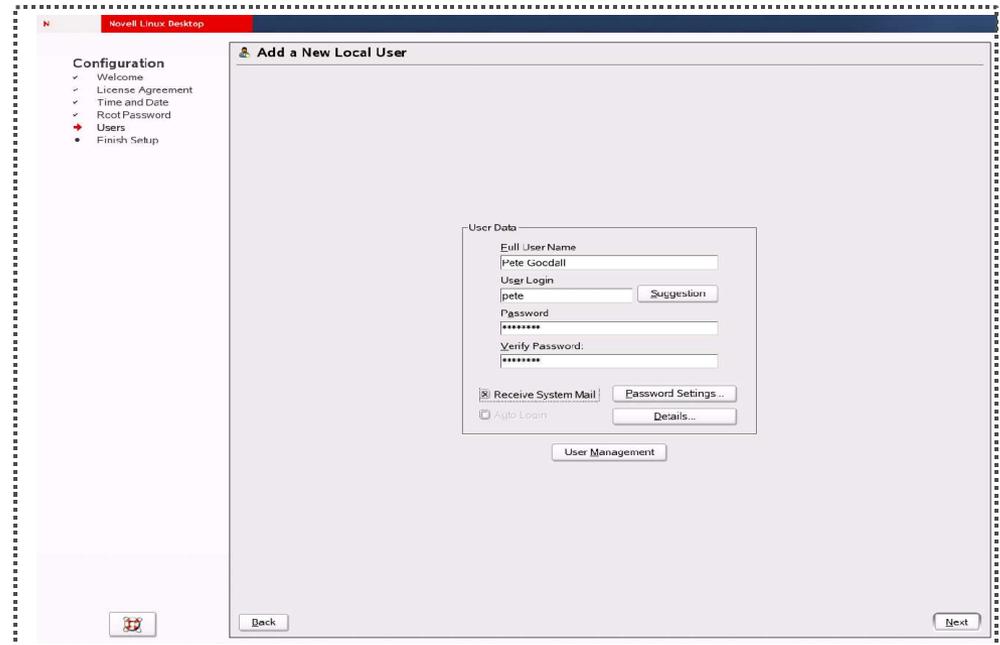
Firstboot

N

Firstboot: First time setup

The YaST firstboot utility can run after installation is completed, and allows for easier configuration of the machine.

- Set timezone, time and date
- Set root password
- create new users
- Customizable for your company



N

Firstboot: First time setup

Novell Linux Desktop

Configuration

- ✓ Welcome
- ✓ License Agreement
- ✓ Time and Date
- ✓ Root Password
- ➔ Users
- Finish Setup

Add a New Local User

User Data

Full User Name
Pete Goodall

User Login
pete

Password

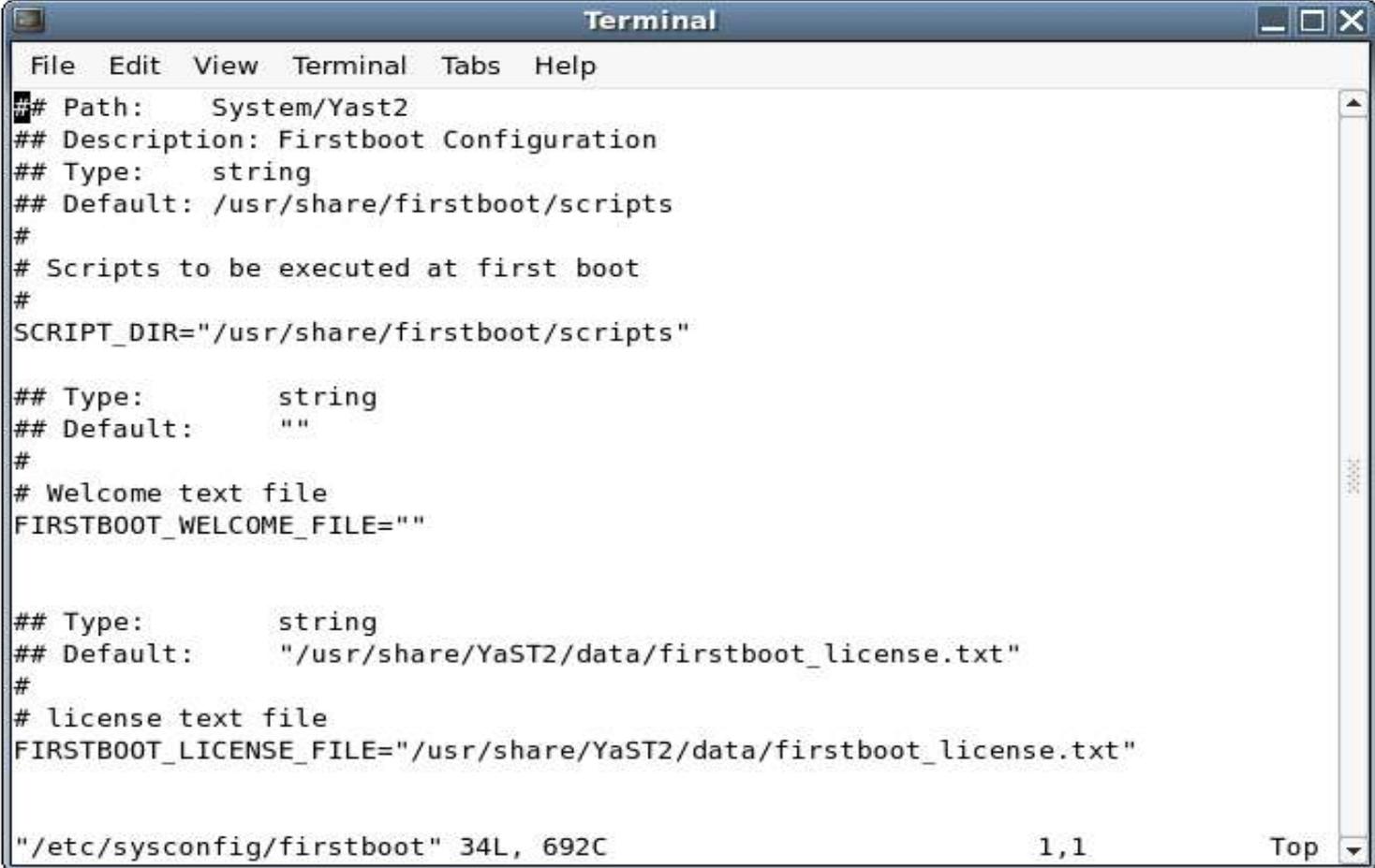
Verify Password:

Receive System Mail

Auto Login

N

Configure Firstboot for Your Company



```
Terminal
File Edit View Terminal Tabs Help
## Path:      System/Yast2
## Description: Firstboot Configuration
## Type:      string
## Default:   /usr/share/firstboot/scripts
#
# Scripts to be executed at first boot
#
SCRIPT_DIR="/usr/share/firstboot/scripts"

## Type:      string
## Default:   ""
#
# Welcome text file
FIRSTBOOT_WELCOME_FILE=""

## Type:      string
## Default:   "/usr/share/YaST2/data/firstboot_license.txt"
#
# license text file
FIRSTBOOT_LICENSE_FILE="/usr/share/YaST2/data/firstboot_license.txt"

"/etc/sysconfig/firstboot" 34L, 692C          1,1          Top
```

Concluding Thoughts

N

Other Things to Consider Changing

Tailoring the package selections...

- Minimize internal support by simplifying the installation
- Meet the needs of *your* organization

Removing unneeded or unwanted packages...

- Games?
- How many CDs does *your* distribution take?

PXE-booting in addition to/instead of your own media

- http://portal.suse.com/sdb/en/2003/06/tsieden_pxe-install.html

N

Things You Might Not Want to Change

Removing packages selected by default

- System instability may result..

Updating/changing Novell-provided packages

- Novell can't support packages it doesn't distribute
- Updates may not flow thorough properly
- Consider configuration changes or alternate package locations instead

Q & A

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This is a content slide...

Company Facts

- Serves 81% of the Fortune 500
- Powers more than 3.8 million servers
- Supports in excess of 80 million users worldwide
- Supports of 27,000 channel partners, 40,000 ISVs and top industry alliance partners

Section break slide