It is certainly no secret that OpenSUSE released their SUSE Linux 10.1 Final yesterday. The news was carried on about every computer news site in existence. It was big news and just about everyone was excited. I'd like to know how many downloads have actually occurred. The site had to be minimized early in the morning and downloads from all the mirrors I tried moved like molasses. I'm not sure, but it seems this release has generated even more interest than the landmark 10.0 last October. Perhaps I can understand that, given that this release has some exciting new features. I would speculate that on the top of many people's list is the inclusion of the XGL desktop. We at tuxmachines have tried to keep you abreast of the changes coming forth from the SUSE team, but the final was even better than we dared to predict. This is our final report on the development cycle of 10.1.

As stated the mirrors were crawling along yesterday as I pulled in my isos. Fortunately I had retained my RC3 isos and only required the deltasisos. This was a smart move or else I'd still be downloading instead of writing my findings right now. Once they were finished, I booted my RC3 install and applied the delta isos to RC3 and all 5 GM final isos were made without errors. I saw several files fly by in the konsole being copied verbatim, but most had some new files to incorporate. When they finished, I mounted each one one by one as loop and copied the files to a directory in hopes of a hard drive install. We weren't able to complete a hard drive install last release candidate and were still a bit leary with the final. I burnt my boot iso and asked it to install from a hard drive directory. This time there were no problems.

Suse 10.1 brings all kinds of new and exciting features. The excitement starts building from the very first boot screen. This release sports nice a new boot screen and silent splash. If you've not read my earlier reports, the boot splashes are now a new beautiful blue backgrounds similar to all the "wave" wallpapers that were so popular not so long ago. This new theme runs throughout all of suse this release. This is a major improvement in terms of eyecandy. Not only is it beautiful, but it is also very polished and professional looking. This desktop could fit in very well in any office situation - home or business.
Installation

The installation begins with the above new boot screens. From there it is almost the same familiar installer we encountered last release [8]. It probes for your mouse right off the bat and then asks for your preferred language. After which one must accept the license agreement to proceed. If you choose to accept, some hardware detection may occur before you are asked for the Installation Mode: New, Upgrade, or other (repair or boot).

I chose New, so at that point I was asked if I had any Add-on products to use. Upon ticking the checkbox and clicking next, I was presented with a screen to set it up. Click add and browse to its location is all that's required and we will come to find our add-on iso in the package selection later. After accepting another license for the non-oss applications, we move on to Timezone and Hardware Clock settings. After this comes our primary desktop selection: KDE, Gnome, or other (minimal or text). Just pick your favorite of the 4 here because you can still add any others you wish at package selection.

The next screen is the most fun as it is your Installation Settings. Here one can use the Overview or Expert screens for configuration and I suggest the expert for all. You don't have to adjust any of the default settings, but it gives you a chance to review them. Should you wish a change, just click on the heading that functions like a hyperlink to the actual configuration screen for that portion. These screenshots are merely representational and not particularly accurate as they were taken from an emulator. The actual installer will propose a partition scheme, a basic software set, as well as bootloader settings. You can accept the proposals or customize any setting as you like.

The Installation Settings screen is laid out as follows:

- Overview
  - Partitioning
  - Software
  - Language
- Expert
  - System
  - Keyboard Layout
  - Partitioning
  - Software
  - Booting
  - Time Zone
As my disk is already partitioned, I choose Create Custom Partition Setup and then Custom Partitioning. From here I could resize, make new, or rename partitions on my disk. I usually click to highlight my target partition and click edit to name it as / (my root partition). Interestingly, if you click on the System hyperlink, all your hardware will be detected and you can save the findings to a file for later reference. The Booting heading is another to which you should pay particular attention. Review it carefully to be sure it's suitable for your layout. Among other things, you can choose either grub or lilo (or none), edit the proposal, choose the installation location, or add other systems.

Software is another area that you may wish to give some extra attention. SUSE has a wealth of software from which to choose. The default proposal is limited. I don't usually spend much time perusing the individual packages, instead opting for choosing the main category such as All of KDE, Gnome System, or Kernel Development. If you wish to choose from all the individual packages, just click the Details button and they magically appear. If you setup the addon non-oss packages earlier, they will appear here for selection. They contain many interesting and useful apps such as flash, java, antivir, acroread, Opera, Realplayer, textmaker and proprietary drivers. More on this later.

Once you are sure you have all the settings as you like, click finish and the actual installation begins. The base system and many packages usually found on the first CD (iso) are installed before the system reboots. Then one boots the actually SUSE system to finish the installation. After all the packages are installed, you have a few more questions to answer to further customize your setup. The first of these is your machine's Hostname. This is now a convenient step all its own instead of having to dig around the network setup to find it.

Then you setup your root password. Next comes the network setup. This can be as simple or entailed as you need. I simply let the default ride here as dhcp is my method of connection and the hardware detection always correctly identifies my ethernet card, but you may with to setup a static ip or customize nameservers, routing and proxy. After this step one can test their internet connection and mine went just fine taking only a few seconds to report back "success."

Next comes the Online Update Configuration. This step has caused a bit of controversy in that it can send back some information to Novell on your system hardware. This is for the reported purposes of better identifying the updates a particular machine might require. Many details are optional, but it at least needs your architecture in order to properly assign an update mirror and directory to download the correct patches. At this point in the game you can choose to Configure Now or Configure Later. Then you will have a choice as to which information category to send. These are Hardware Profile, Optional Information and Registration Code (if you have one). If you click on Details you will be given the exact hardware information it sends back home. Then you can Run the Update or Skip. I ran it here and it had some patches available already. I tested the Online Update with a patch for Opera which went well. No problems were encountered.

Just about finished now, one is asked to setup an user account before some configuration files are written. After the conf is finished the Release Notes appear for review. Please read through these as they contain some interesting and possibly necessary information. For example this time they include an explanation of the Online Update and the information sent in (such as the output of uname and hwinfo), a description and some tips for AppArmor, and some notes on Zenworks, ATI drivers, and mysql 5.0. All that's left is one last hardware detection. After it detects all your hardware again, it is presented in a Hardware Configuration screen with hyperlinks very much like the Installation Settings screen. Here again, you can accept the proposal or click any heading to edit. Once again SUSE will write some configuration files, but that's it. It's finished. It will take you on to the system, and if you didn't uncheck
autologin/autostart X, your desktop.

SUSE has the best installer in the biz. It is very polished and smooth functioning. It offers the user a point by point choice of ease or complexity. No other installer is as easy to use yet so complete. At this point, one should be directed to their newly installed SUSE system.

**The System**

The install experience is a hard act to follow, but the SUSE desktop pulls it off. As you can see the new theme continues throughout the desktop experience. The new wallpaper is a lovely addition and much improved over the overused lizard of last release. Many applications include a variation as their individual splashes as well. This new theme is much more professional looking and easier on the eyes. It's just pretty, pretty, pretty!

As you may already know, SUSE is always application rich and feature full. This release is no exception. Not only do they have all the usual suspects, they offer a wide variety of software others don't have for their distros. This makes customizing the SUSE system for your individual needs much easier. Here is just a mere sampling:

Not only are there plenty of applications, but SUSE comes with a wide variety of desktops environments from which to work. Of course there are the big players, KDE and Gnome, but SUSE also includes Openbox, Blackbox, windowmaker, icewm, fvwm, and TWM. Most are setup to blend in well with the rest of the system using the same/similar wallpaper, consistant menus, nice default themes.
Up to this point we have experienced no problems whatsoever. The installer, X, desktops, and applications have all functioned like a well oiled machines. Hardware detection and setup is almost 5 x 5 as well. I shouldn't mention my tv card again as it is never setup properly by any linux distro, but I just don't understand why my scanner isn't ready to go out of the box. It is properly detected as evidence appears in several places, but it will never function until I go into yastcc and choose one of the drivers from their list. After this everything is just fine. Multimedia support is still lacking for legal reasons. Decss and media codecs will have to installed manually on your own.

Yast

The crowning jewel and most distinctive characteristic of SUSE is their Yast Control Center. From this one application one can install, configure, and tweak software, hardware and other system components. As I investigated this vast tool, I experienced very few problems. Hardware and system modules functioned very well and very swiftly. The only minor glitches to arise appeared in the Software Managing suite.

The software managing suite has been completely revamped for this release. This made for some bumpy rides along the development path this time. It would work almost flawlessly one beta and be broke in the next release candidate. It suffered some glitches even up until RC3. I was wondering if it would be all straightened out for the final. It was ...mostly.

A new glitch to rear its head in all the software modules was this incessant nag screen that the signature file failed the security check. Although there is a checkbox to "Do not show this message again," it appeared again and again. Even if it was necessary to check it in all the individual modules, it still appeared each time the same module was opened. grrr. Do I predict a patch for this in the near future?

That was the worst of it though. The online update used during install, called from yastcc, used through the Software Manager, or thru the desktop Zenworks applet worked fine. The other components such as Installation Source or Add-on Product gave no negative issues other than the sig failed complaint. System update was difficult to test on a fresh install, but it too offered the same sig failed notice and then complained that the installation sources weren't compatible with the system. Testing this feature from RC3 with the GM sources gave the same complaints but still offered to update 818 packages and install 2 others. The Software Manager worked wonderfully. All the filter choices appeared in the dropdown and functioned as designed. Software categories showed details and selected packages installed with no errors. The only glitch here was with the add-on non-oss source. I selected several packages during the install that did not appear to be actually installed onto the system such as Realplayer, flash, or java and then after install most of the packages had disappeared from the Software Manager selection screen. There's a handy guide HERE on the subject.

Some new features available and configured through Yast this release include AppArmor and Xen. AppArmor is a
security feature meant to place apps in a chroot'd or firewalled-like state in an attempt to prevent exploits from being executed through them. It is not started by default, but it has some default profiles already setup and can be set to start at boot thru Yast > System > System Services. Xen is also new this release and can be installed and configured from Yastcc as well. It required a special Xen kernel and it can be installed during the system install or afterwards. One note here, if you plan on using Xen, it is advisable to use Grub for the bootloader as lilo needs special patching to work with Xen kernels.

The piece de resistance this release is the inclusion of XGL.

**XGL**

XGL has been available for 10.1 from early in the development cycle. At first packages required separate downloading and individual installation. Later on they became available on the install disks. Novell had published a guide to setup XGL on their system, but my testing on several developmental versions failed. Others had better luck. Towards the end of April Novell published a newer more complete XGL configuration guide [here](#) and this release, I had much better luck. This guide is step by step, copy & paste, complete and accurate enough that anyone can have XGL on their nice shiny new system. As some of the instructions are to be executed from outside of X, I made a little file that could be easily cat'd from the terminal. In addition, I issued the gpm command in order to facilitate copy and paste. For me the command was `gpm -m /dev/input/mice -t imps2`

As you might notice, Novell has included instructions for setting up XGL on both the Gnome and KDE desktops. This is an exciting advancement as most distros that include XGL, do so only for Gnome. As KDE is my desktop of choice, this was very welcome. As stated, I just followed the instruction on the above linked site and XGL functioned fairly well. The KDE configuration required just the making of a .desktop file for the Autostart folder over the general system-wide setup. I did have to do a hard reboot in order to get X to restart and some of the listed commands didn't work, but many did. Those that worked include rotating the cube by mouse or keyboard, tilting and rotating by mouse, warping windows, animated menus, translucent window adjustments, and zoom in and out manually.

The Gnome configuration was just as easy as the KDE setup. In fact, all the features worked upon starting Gnome anyway and going thru the setup didn't enable any others. I went through their setup instructions for good measure. As stated some of the listed functions didn't work. Some of these include: Scaling, resizing windows, and zoom once. One general XGL feature missing completely was the F12 - [arranging and view all](#) of the open windows. This is actually my favorite XGL feature.

**Conclusion**
All in all, SUSE 10.1 rocks. It is solid, stable, and professional. It is feature rich and thus lacks very little. With its new features like AppArmor and XGL, SUSE is ahead of the competition. Missing multimedia support is a major drawback, especially for new window converts. Its Software Manager is still demonstrating minor glitches can be quite annoying. The whole Software Management suite is a bit confusing with the separate modules with overlapping functionality. The kernel is a very new version, but KDE and Gnome are already almost considered outdated with KDE 3.5.1 being used over the 3.5.2 that's been out for a coupla months and similarly for the included Gnome 2.12 verses the latest Gnome 2.1.4. But weighing these few complaints against all the features, stability, and overall look & feel & functionality, SUSE still comes out King of Hill. They are the top of the pyramid and the cream of the crop.

Related Links:

- Download SUSE Linux 10.1 [57].
- Full Changelog since RC2 [58].
- Full SUSE 10.1 RPMLIST [59].
- Addon Non-oss RPMLIST [60].
- More Screenshots [61].
- All of Tuxmachines' SUSE coverage [2].

**Reviews SUSE -s**

Source URL: http://www.tuxmachines.org/node/6879

Links:
