Welcome to the SOAD – Suse On Active Diet – Linux! This 'welcome' is a brief introduction to the system, simple addition to the official SuSE documentation.

SOAD Linux is not 'yet another distro'. It's the OpenSUSE. Almost all installed components are available via public repositories or OBS (OpenSUSE Build Service). The best place for you to look for a fresh software is Webpin. You're Welcome to discover the OpenSUSE project wiki, walk through the official forum or chat on irc.freenode.net (#suse channel). OpenSUSE provide superior help resources. Use them the way you like.

The main purpose of this disk was to bring the cutting edge svn code of Enlightenment (E) to your desktop. After the first prototype was released it become clear that the modest efforts was not useless. We tried to pick the best software and make some tiny adjustments to save your time and deliver the best experience “out from the box”. The following E resources could be handy: "Enlightenment for openSUSE" wiki page, official site, E-wiki, User Guide, Exchange, E-forum, various stuff, our download page, themes for E16, E-thread hidden inside the OpenSUSE forum, this LiveCD thread on E-forum.

To begin with we set the public repository in OBS – Enlightenment-cvs-core-metapackage – and it's recommended for all interested in Enlightenment (E). It uses the latest svn code and updates monthly (or up on request if the amount of changes are sufficient). Also we rely on the famous Packman repo and build a couple of packages manually only for this disk (we also contribute to the Packman the packages which can not be created in the OBS). The core benefits of our OpenSUSE Enlightenment repository are proper localization patches (you can read your local UTF-8 RSS feeds with Enlightenment 'news' module for example) and freedom of each user to rebuild E and update installed packages to the current svn version. Example of rebuild script could be found here.

All required repos in Your SOAD system are set by default. You need only to refresh them (to get the current metadata) and select the desired components if they're missed on the disk or apply the required updates.

We would be glad if you like the results of our modest work. Any questions, comments, suggestions are encouraged.

SOAD team.
Mailto: sda00 [at] himki [dot] net
Mailto: dmitry.serpokryl [at] gmail [dot] com

P.S. If you like the results of our efforts or wish to see some improvements – just send an e-mail.
August 9, 2009. revision 7.
THE CORE

The main concept is to provide relatively small, fast, stable, secure and "transparent" distribution for users. For those, who not so lazy to 'vim' /etc/sysconfig/SuSEfirewall2 for example and remember the good old days of SuSE versions 8.2-Pro and below. Enlightenment-DR17 Desktop Shell (E17) along with the EFL (Enlightenment Foundation Libraries) applications aimed to be a major environment and is used as a default WM. IceWM is provided for those, who can't live without the panel located in the bottom of your screen and the 'magic Start button' in the lower left corner. TWM – for the deep meditation in the dark. Selected programs proven to be the best in their area are included in a base distribution set. The legendary Enlightenment-DR16, WindowMaker and JWM are here to recall the glory of a good old days. Ecomorph is TEMPORARILY unavailable until we fix the driver related issues. We're sorry!

No KDE/Gnome/Xfce/Others. No Mono. No Java. No laced useless crap to confirm that you do need XGb of RAM, 3D powerhouse and the latest X-Core CPU. No frills.

IGNITION!

SOAD (Suse On Active Diet) Linux

Welcome
Bienvenue
Vítejte
Benvenuto
Willkommen
Bienvenido

openSUSE
It's time to press F3 and select the desired resolution (if you wish to boot into console – type here `linux 3`, this is very useful if you don't see the 'sax2' setup screen on boot or have any other issues with the video drivers). We have only 1CD, that's why don't expect that applications have the desired localizations out of the box. E17 itself is localized. Other applications have only English menus. It's easy to install the required language packages from pre-selected repositories using YaST or 'zypper'.
The first thing you should notice is the appearance of a command prompt on boot which ask you to choose the following configuration method to be used for system start-up.

1 – is for default automatic X server configuration and no other questions will be asked until you see the 'Entrance' login screen.

3 – is for emergency. X (GUI) will not be started and will not be pre-configured (no xorg.conf), you're login to the console and welcome to do whatever you want. This mode could be very useful if you're experience some issues with the 'Automatic Configuration' and unable to select tty (Ctl+Alt+F1-4) to see what's going on. Those who prefer to explore new systems in 'qemu' should appreciate this. You will be informed that

And here's what you get after pressing and Enter again:

Good old login prompt for tty1. All default services are started except X (GUI).

2 – is the advanced mode to tweak your peripherals before login. After a delay you will see the 'Sax2' configuration window which offers to confirm the proper definition of your devices like Monitor, Keyboard, etc. It's a nice idea to press “Change Configuration” button and select your Keyboard Layout or redefine the Monitor auto configuration. Test all changes until you get exactly what you want.

N.B. Starting from the version 3.1.1 of Enlightenment-LiveCD we provide the installed NVIDIA proprietary drivers for a modern GPU's/(video cards). The ATI users may experience some issues with open source drivers and HIGHLY advised to visit the openSUSE wiki page:

ATI Driver HOWTO

and install required drivers manually!

NVIDIA users of a legacy video cards also should use the link below to get the proper drivers!

nVidia install HOWTO

Please note, that despite on our tests (which are must before the yet another release of SOAD leaved the development farm) we can not ensure proper work of a proprietary drivers! Please e-mai us if you wish them to be excluded in the future releases!
Don't forget to browse through all supported modes for your video card and monitor. Here you can select the desired resolution. We tried to set the constant fonts resolution to 96.0 DPI despite on the actual screen resolution. At least it works with 'Entrance'.

фонс рesolution
After your configuration the 'Sax2' will save the settings and next thing you should choose is the login manager. The default is 'Entrance'. Also a simple and elegant 'emergency text-mode' are available. "GDM" login manager is planned as an option for a future releases.

It's recommended to type '1' (without quotes) and press Enter. The most interesting option is '3' (emergency text mode) of course. Login as root (root/soad) and welcome to do whatever you like. The init scripts for X configuration and start-up are adjusted by SOAD team. If something goes wrong – please ask on forums:

1) Enlightenment forum thread
2) openSUSE forum thread
In rare cases it's best to select the text-mode, login as 'root' and type 'entranced' in command prompt. If you decide to install the system to your hard drive all the questions above will appear only once or if you decide to change/upgrade your video card. If you need the emergency text mode login for installed system – see the recommendation above (type 'linux 3' or 'init 3' at the 'boot:' prompt).

Here is the default 'Entrance' login screen.

Default login details:

User: linux
Pass: soad

User: root
Pass: soad

Choose your favorite environment.

N.B.: please note that we COULD ship the custom kernel for our unofficial Enlightenment LiveCD. We have a limited resources to test our disk. We're doing our best but unable to assure that everything will work for Your PC configuration. Thanks!
E16 (Enlightenment-DR16) is one of the most advanced WM's (Window Manager's) in the *nix world. Released in 1999, still under development, stable, powerful and beautiful. We did some customizations to it's look and behaviour. Hope you like it. Unfortunately you need to issue the following command to allow the modification of the “E-Toolbox” epplet:

```bash
chmod +w ~/.e16/epplet_config/E-Toolbox/E-Toolbox.cfg
```

Tint2 panel is located on the bottom of this screenshot. It has a taskbar, systray and the clock. You can modify it's configuration by editing the

```bash
$HOME/.config/tint2/tint2rc
```

file. Also we included several nice “legendary” E16 themes like “Lave” (set as the default), “23Oz”, “DarkOne”, “Sedation”, “Presence” and the default “Winter” theme. Please copy/link the extra wallpapers to your home dir to be visible for all E16 themes:

```bash
find /usr/share/wallpapers/ -type f -exec ln -sf {} $HOME/.e16/backgrounds/ 
```
Another option is IceWM. It has less features than E16, eats more resources. His single advantage is a kind of a “default traditional look”. Nothing special (comparing to the E16 of course).

That’s exactly what you get by selecting IceWM. All customizations are made by OpenSUSE, we only set the background and select the theme to be used.
Our main playground is **E17**. Known as “pre-alpha stage forever” project it grows without too much noise with a solid community and talented dev team. You will like it or hate it at once.

E17 has a basic systray support (shown on the right corner of a shelf, placed atop of the screen). We also included the 'stalonetray' application to the disk just in case.

'Welcome.pdf' is the document you're reading now (the recent version is always available [here](#)).

The theme shown above is the new default one for Enlightenment-DR17. E17 has a modular structure/design. Each component/toolkit has it's own environment and style. If you wish to have a 'unified' look for applications you need to set similar themes for each toolkit they're using. Use `etk_prefs` to change ETK theme (ETK – Enlightenment Toolkit), `ewl_config` for EWL (Enlightenment Widget Library) and EC (Enlightenment Configuration Panel) for E17. Just press **Alt+Esc** to have an access to the outstanding 'command line' window. All you type there will be matched against the records in '*.desktop' files (upper part of the window) and exact filenames in your $PATH environment (lower part of the window). To select EC make a left click on the desktop or click the start module icon and select “Configuration Panel” option in the “Configuration” Section. EC is a GUI analogue of a mighty command – `enlightenment_remote`. If you wish to explore all customization options – use it. It has a simple structure and a nice context help.

**Hint:** some apps require the separate 'terminal' for a successful launch. Just hit Ctl+Enter after you type required commant in the 'Exec buffer'.
The first launch of E17 creates your basic environment which could be easily adjusted/changed later. Both E17 and Ecomorph are using the same User's settings so it's best to have a separate “Profiles” (Menu → Settings → Settings Panel → Settings → Profiles) for each of them. The first screen will ask you to define your locale (choose your preferred language).

The second screen will ask you to choose the base “Profile” from available presets. Three first rows named “SOAD Default”, “SOAD Orange” and “SOAD Sedation” is our modest attempt to customize the defaults.

Later you can evaluate all “presets” without even logging out by selecting them via mentioned above “Enlightenment Settings Panel” (Menu → Settings → Settings Panel → Settings → Profiles).

Then you should choose the base for xdg menu (select the first “System Default” option) and pick the applications for a quick launch via “IBar” (apps launcher module). Suppose that it'd be much easier to define “IBar” launchers later by navigating to the

Menu → Settings → Settings Panel → Apps → IBar Applications

N.B.: Please note that SOAD* profiles operate with autohided shelf/(panel) placed on top of your screen!
We're glad to note that you have 'SCIM' (Smart Common Input Method) installed and the disk is ready to support input of almost all locales which are available in 'glibc'. Japan, China, Russia, Korea – configure via 'scim-setup' your keyboard shortcuts, start/restart 'scim' and enjoy!

Please, enable 'SCIM' as your preferred input method in 'Settings → Language → Input Method Settings → System'.
The more you spent discovering the configuration capabilities – the more experience you get. “Enlightenment is a new
philosophy in Window Managers. The premise is simple enough - complete control” (Rob Malda). We recommend to
get familiar with all EC configuration options. Some of them could save you hell of a lot of time. Like “Keyboard &
Mouse” configuration section or tiny option “Profiles” hidden inside the “Advanced” section. Use “Language” section
to set your default locale, “Application” - to control autostart/restart applications or create a new '.desktop' launchers
(new applications). “Extensions” - to deal with various E17 modules (all E17's components are modules and this
section is VERY important one. The less modules you load/enable – the less resources will be consumed by E). In the
“System” section you'll find all YaST configuration options, “File Manager” controls EFM (Enlightenment File
Manager). The default section you can see above is “Appearance”. The most interesting elements here are “Fonts” and
“Colors”. Using “Colors” you can set the font color for selected theme parts. “Fonts” itself control the way your fonts
are rendered by E17. Unfortunately it doesn't mean that your GTK or Qt apps will inherit this settings. You need to
modify ETK or EWL themes to change the fonts in related applications. 'qtconfig' will help you to set the base font for
Qt applications and 'gconf-editor' can accomplish the similar task for GTK (heh, only if you install and launch
'gnome-settings-daemon', also you need to install 'gconf-editor' itself). But the best results achieved when you modify
your ~/.gtkrc-2.0 and ~/.gtkrc files. You need to create the ~/.gtkrc file if you wish to modify look'n'feel of the good
old gtk1 applications like 'xmms'. Look at the preset of ~/.gtkrc-2.0:

```sh
# Auto-written by gtk2_prefs. Do not edit.
gtk-theme-name = "vision"

style "user-font"
{
    #font_name="DejaVu Sans 10"
    font_name="Verdana 10"
}

widget_class "*" style "user-font"

gtk-font-name = "Verdana 10"
gtk-icon-theme-name="black-white_2-Gloss"
```
Crystal clear that we use “Verdana” font as a default, theme “vision” and icon theme "black-white_2-Gloss" for our GTK+ applications. ‘gtk2_prefs’ tool require half of Gnome environment to be installed as a dependency – we don’t need such favor.

We also have a nice GUI configuration utility for your GTK+ apps: `lxappearance`:

![Image of Appearance Settings](image)

'Fontconfig' compiled with the full support of BCI (bytecode interpreter) but without subpixel rendering (because E17 doesn’t use it, but operate with Bytecode quite well). To get the basic idea how to tweak the way your fonts are displayed read the following files:

```
less /etc/fonts/conf.d/README
vim ~/.fonts.conf
```

Though we hope that our default presets require no adjustments.

**N.B.** This system uses mostly the standard openSUSE configuration utilities (YaST, Sax2), but there are some **VERY IMPORTANT** differences:

1) please run after any manual adjustment of your “/etc/X11/xorg.conf” file or after any modifications made with Sax2:

```
> sudo /etc/init.d/create_xconf save-profile
```

if you wish to save your changes. We implemented a simple “profiler” which automatically remember and restore exact settings of “/etc/X11/xorg.conf” for each PC were system was ever running. No need to reconfigure various parameters if you’re using a single USB-stick but work with a different computers.

2) use “sys_update” command to update installed packages (perform the update in general) ONLY if system is installed to the hard drive/(another USB-stick)/(other media). Check the scripts in your “~/bin/” folder!

To adjust your fonts size please load ‘Settings – Scaling’ module and set the desired scale.
If you wish to use several language layouts and switch between them – start 'sax2' as 'root' (backup your 'xorg.conf' before!) or edit your /etc/X11/xorg.conf file manually. This is the only TRUE way. It works all the way you start X:

```
Section "InputDevice"
  Identifier     "Keyboard[0]"
  Driver         "kbd"
  Option         "Protocol" "Standard"
  Option         "XkbLayout" "us,ru(winkeys)"
  Option         "XkbModel" "microsoftpro"
  Option         "XkbOptions" "grp:lctrl_lshift_toggle,grp_led:scroll"
  Option         "XkbRules" "xorg"
EndSection
```

In this case we have a Left Control + Left Shift combination to change our layout from the default 'us' to 'ru(winkeys)' and LED scroll indicates the change of the layout.

N.B. The following command could be run by a simple User and achieve the same result as 'xorg.conf' modification:

```
setxkbmap -layout us,ru -option grp:lctrl_lshift_toggle,grp_led:scroll -variant winkeys
```

Hint: ! Look inside your $HOME/bin folder !
The network configuration in OpenSUSE is integrated into the YaST and binded to the applications we didn't want to use. 'Network Manager' is not an option if you have a vpn connection or several virtual tunnels to be managed. 'Kinternet' is good but "not enough". We faked YaST that our system has 'kinternet'. It has not indeed. But if you wish to use YaST for a network configuration – keep in mind that

Traditional Method with ifup is the only 100% working in our case. 'Exalt' is a nice EFL based tool to handle the network setup. It's under development now and could be included or excluded from our releases. Right now the 'Wicd' is here to help you configure your network. We hope that 'Wicd' is flexible enough to match your strict requirements:
'Wicd' allow you to run a custom scripts for a fine network interface setup and has a nice feature to remember your various 'profiles' (very useful if you're travelling a lot).

Example of a bash script to control vpn (dsl0) connection to the ISP could look like this:

```bash
cat ~/bin/vpn_up

#!/bin/sh
sudo ifconfig dsl0 down
sudo kill -9 `pgrep smpppd-ifcfg`
sudo kill -9 `pgrep pptp`
sudo kill -9 `pgrep pppd`
sudo /etc/init.d/smpppd restart
sudo route del default
sudo route add -net NETWORK netmask NETMASK gw GATEWAY
sudo route add -net NETWORK netmask NETMASK gw GATEWAY
sudo route add -net NETWORK netmask NETMASK gw GATEWAY
# ***ADJUST REQUIRED ROUTING FOR A NEW INTERFACE***#
sudo route add default gw GATEWAY
sudo /usr/sbin/smpppd-ifcfg --ifcfg=ifcfg-dsl0 --provider=PROVIDER --user=USER
sudo ifconfig dsl0 up
sudo route del default
sudo route add default gw GATEWAY_FOR_DSL0_INTERFACE
```

All you need is to put the full path to the script in 'Wicd' and press 'Apply' button. Of course you should configure this 'vpn' with YaST as a DSL connection first.

Another option is 'cinternet' - simple frontend for 'smpppd'. Choice is all yours.

There's no NetworkManager installed by default. If you need it – just install from public internet repositories.

Disk is loaded with 'madwifi', 'ndiswrapper' and a lot of firmware and drivers for your equipment (take a look at the '/lib/firmware' folder).
APPLICATIONS AND UTILITIES

The packages selected here match a simple criteria. They're essential to run E16/E17 (they're created with EFL) or they're the best in their field. Result is quite predictable - a “zoo under the hood”. The only excuse – it works. It works damn good to be exact. Please refer to the complete list of installed packages to see what is included into the Enlightenment LiveCD.

**Aria2c:**
A famous multithread download utility. The supported protocols are HTTP(S), FTP, BitTorrent (DHT, PEX, MSE/PE), and Metalink. It can download a file from multiple sources/protocols and tries to utilize your maximum download bandwidth. It even supports downloading a file from HTTP(S)/FTP and BitTorrent at the same time, while the data downloaded from HTTP(S)/FTP is uploaded to the BitTorrent swarm. Using Metalink's chunk checksums, aria2 automatically validates chunks of data while downloading a file like BitTorrent.

**Sedtetris:**

![Sedtetris game](image)

Amazing 'Tetris' game written completely on 'sed' by Julia Jomantaite <julia.jomantaiteNO@SPAMgmail.com> and located in your ~/bin folder. Just type

```
  sedtris.sh
```

to start the game.

Dear Julia, it's a piece of art! Thank You!
Complete OpenOffice Suite without OpenOffice-Base (databases support) is installed only for USB-stick system!
The best audio player packed with a killer 31-band equalizer and other 'blow-my-roof-off' plugins still alive. We contributed all required packages to the 'Packman'.

Compiled with all 'switches' turned 'on'. Bet you like it. Thanks to 'Packman' for the nice 'Mplayer' package.
Other EFL based applications:

**Extrackt.**

Extrackt is an audio CD ripper and encoder.

**Authors**

Hisham Mardam Boy
Jorge Luis Zapata

**Contributors / Thanks**

Etik        Simon 'Mo0m' Tnrey
Misc EFL    Carsten 'The Rasterman' Hatzler
App NameSara 'Maiove' Ashour

**Estickies – sticky notes.**
Designed to watch TV and movies. Can't handle audio and pictures yet, but ... who knows :).
Run `rpm -qi rage` to get the idea how to setup the basic environment.

EFM (Enlightenment File Manager) – a simple file manager for Enlightenment-DR17.
INSTALLATION TO THE HARD DRIVE

If you like the distribution and ready to install please read this chapter. If not – skip it. Installation itself is very simple. Double-click on the 'Installer...' desktop icon, or open 'xterm', become 'root' by typing 'sudo -s' or just 'su' then type 'yast live-installer' and hit Enter. It's straight forward and gives you all options you can expect from SUSE. When you will be asked to create a new user for the installed system don't hurry and check the groups this user is included into by default. Inclusion into the following groups could be useful:

![Group List](image)

Another nasty questions are “how to partition the drive?”, “how much disk space is needed?” and so on. The best practice is at least to have your '/home' on a separate disk/partition. The rest is up to you. Don't forget to make a 'swap' partition. We test each LiveCD release in 'qemu' with the total disk capacity of 4Gb divided to the 'swap' partition (256Mb) and 'root' partition (the rest of the disk, 3.7Gb). This settings allow to boot installed system into E17 with only 32Mb of RAM (swap is used for the rest). It's not the optimal though. If you wish to install all components from LiveCD to the drive 1.8-1.9 Gb will be occupied, plus inevitable 'swap'. Now you can estimate the total requirements according to your needs.

There should be no issues with the login into the new installed system. The following commands will allow you to switch login managers:

```
/usr/bin/switch_to_entrance
```

and

```
/usr/bin/switch_to_gdm
```

The standard SUSE way to make it via YaST will not work and could cause some inconvenience. To restore/repair the GUI, log into the 'emergency text-mode' as 'root' and issue one of the commands above.

Another hint is your network setup. If you have a stable network environment which could be managed by YaST you may wish to disable 'Exalt'. Open your 'xterm', became 'root' (type 'sudo -s' and your password) and type:

```
chkconfig wicd off
chkconfig network on
```

If you're happy with 'Wicd' then no adjustments needed. Of course, you can start 'yast2' with a nice GTK GUI, go to the 'System' → 'System Services (Runlevel)' and adjust the running services from a GUI, but... it's too slow :).

Please use 'yast2' or 'sax2' for a routine system maintenance. Don't forget to make a backup of /etc/X11/xorg.conf BEFORE you launch 'sax2'. 
HINTS

Hint:
If you wish to remove `stalonetray` from E17’s startup routine open 'EC' → 'Applications' → 'Startup Applications' and delete 'stalonetray' entry. If you wish to modify the `stalonetray` parameters (like size, color, default positioning etc) → adjust the `stalonetray.desktop` file located in `~/.local/share/applications` (change the value of 'Exec' string).

Hint:
Check the entries in `/etc/fstab` if you can't write to the NTFS with ordinary user privileges. They should look like:
```
/MOUNT/VOLUME  /MOUNT/POINT  ntfs-3g  user,users,gid=users,locale=en_US.UTF-8 0 0
```
and no crap like 'dmask' or 'fmask' here :).

Hint:
If you need to have a sophisticated firewall/iptables configuration just edit `/etc/sysconfig/SuSEfirewall2` file. You can even load your own rules into the SuSEfirewall schema. Find the `FW_CUSTOMRULES` variable and look at the examples: `/etc/sysconfig/scripts/

Hint:
Read this post to get the idea why native E17 screenlock doesn't work in SuSE and how to improve the situation. Another solution is to switch to the console (Ctl+Alt+F1), login as root, install `gdb` debugger (zypper in gdb) and run `pstree -p` command to get the PID of running E17 (3137 in this case):

```
dbus-launch(3136)
entranced(2913) X(2916)
entrance_login(2958) enlightenment(3137)
```

then run:
```
gdb -p "3137"
call e_desklock_hide()
quit
```

Now you can switch back to GUI (Ctl+Alt+F7).

Hint:
To enable Xorg Composite extension add into the `/etc/X11/xorg.conf` file:
```
Section "Extensions"
  Option "Composite" "Enable"
EndSection
```
P.S. NVIDIA users should use `nvidia-xconfig` instead.

Hint:
To enable your Atheros wifi carg you may try to type `pci=nommconf` (no quotes) in the 'boot:' line of a Welcome screen (first one, where you can press F3 and change the resolution). Or add the `pci=nommconf` into the kernel line of `/boot/grub/menu.lst` (adjust startup parameters). If you failed to configure your Atheros card – try to update your kernel to the latest Vanilla and reboot. You can find the Vanilla kernels here: openSUSE Vanilla Kernels

Hint:
Browse your `~/bin/` folder. We'll put there all tiny commands which might be helpful for you.

Hint:
Due to the high demand we included sweel command which never works as expected...
```
/usr/bin/Kill_X_server
```

ARE YOU READY TO BE ENLIGHTENED?! 
THINK E, BE HAPPY!