

The Newbie's guide to installing Suse 9.0 Pro and Dans Guardian

Please note, just about everyone in this world knows far more about Linux/DG than I do. And there may be a few important things missing or just plain wrong. All I can say is that this very basic setup works for me and I hope that it will help others to take the plunge.

The following instructions were very successful on two very different systems. The first one was a Dell 4100, 800 MHZ PIII, 512 Meg of RAM and a 40 gig hard drive. The Second one was/is a custom box with a Tyan S2466n-4m Dual AMD MP Board, 2 gig of PC2100 DDR, one Athlon MP 2400 CPU, and a 40 gig hard drive.

These are actually extensive notes that I use and may or may not be missing some things. If you've made it to this document then you can figure out some of this as you go.

This is also using Squid 2.5 Stable and Dans Guardian version 2.7.7-8

Installing Suse9

Install Suse 9 by booting to the CD- ROM. When it first boots up, your first screen will give you some choices and you will need to select "Installation". Continue installing Suse9 with default options.

Change date and time to current.

After CD1 installs, the machine will reboot and then ask for CD2.

Enter in a root user password.

If the password is longer than 8 characters it will ask "Truncate to 8 Characters"? You will want to say yes.

When you get to the "Network Configuration Overview", edit the already configured Ethernet device. Click change and then edit to set up IP, mask, gateway, and DNS and the machine name.

Leave proxy disabled.

Allow remote administration

After you choose all your values then test your internet connection.

If your internet connection test fails, then go back to the "Network Configuration Overview" by clicking the back button and correct whatever is wrong. [Once I entered in a wrong gateway]

When you get a successful internet test, then manually update with all patches.

If when downloading patches and the install hangs, click on "abort update" click on "Continue Updating" and select "skip this patch" (you can always go back at a later time and reinstall the problematic patch.)

After the updates are done, choose "stand alone client".

Enter in a user/basic Username. The machine will now prompt you for a Username and password.

Log in with the root Username.

Now we need to install some tools that are needed to work with Dans Guardian and squid.

With the GUI up and running go to the Control Center, YaST2 modules, Software, Install & Remove software.

Search for “Squid”, Check the box next to “Squid www.proxy server” Now click accept at the bottom right hand corner of the screen.

This will install squid and it may ask for a different CD such as CD4 or CD3.

One at a time, repeat the above process and also install, **Zlib-devel**, **devel-tools**, **make** or **gmake**, and **gcc**

Now we need to ensure that squid starts up when the system is started. (Otherwise you will have to manually restart squid each time you restart the machine.)(Bummer)

Go to Control Center, YaST2 modules, System, and then Run Level Editor. Scroll down to Squid & select Squid. Click Enable.

Now you need to do some basic configuring in squid to get it to work with Dans Guardian.

Configuring Squid

The “squid.conf” file holds all the goodies for squid. Here is the minimum that is needed to make it work. First off, make a backup of this text file in its default settings, in case you muck it up. Rename the backup something like “squid.conf_old”

Open up a command line prompt, (From GUI, click on shell icon in bottom tray)

At the prompt enter in

```
cd /etc/squid
```

then type in

```
Pico squid.conf
```

Use a text editor to edit the config lines in the squid.conf file. Vi, Pico or whatever. I use Pico since I am a certified newbie. It is incredibly easy to use but not as powerful as VI. Now..

Move down to the “access control ” area of squid.

Comment out the recommended minimum configuration with a # in front of each line.

After “acl CONNECT method CONNECT” then enter in the following (using your network info in lines one and two rather than what is here.)

```
acl CONNECT method CONNECT

acl localnet src 192.168.0.0/255.255.255.0
acl all src 192.168.0.0/255.255.255.0
acl manager proto cache_object
acl localhost src 127.0.0.1/255.255.255.255
acl SSL_ports port 443 563
http_access allow localnet
http_access allow localhost
http_access allow CONNECT SSL_ports
http_access deny all
```

Now scroll down further in the squid.conf file and comment out the http_access deny !safe_ports
This was around line 1760 in the squid.conf file.

Save your changes to squid. (Ctrl x)(This is a Pico command)

Now restart squid at the prompt by typing “squid”. I will always get a message saying “squid is already running” and that is okay. What we don’t want is some type of error.

Okay, Squid is installed, configured and ready to work with DG. Let’s install Dans Guardian.

Installing Dans Guardian

Once again, I need to say that most of this is done using the default configurations. Dans Guardian and Squid have extensive options that can be configured to your actual needs. You can always expand and enhance your configuration later on. Right now, we just want to get a very basic filtering setup configured to work.

Go to <http://dansguardian.org/?page=download2> and download version 2.2.7-8

<http://usmirror.dansguardian.org/downloads/2/Beta/DansGuardian-2.7.7-8.source.tar.gz>

The later versions of the Beta category are quite stable. No worries here.
Assuming that you downloaded the file to the root dir
At the command line, do the following

tar -zxpf DansGuardian-2.7.7-8

Make sure that if the file that you downloaded is named differently that you use that filename rather than the above “DansGuardian-2.7.7-8”

cd into the newly created dansguardian dir and run the configure script.

./configure

Then you need to run the make command

make

Then you need to run the make install command

make install

Now run the make clean command

make clean

Now we need to schedule a script to run once per week that will rotate the log files.
Do a **crontab -e** and enter in the following

```
59 23 * * sat /etc/dansguardian/logrotation
```

Now save and exit.

If you have followed the instructions as written, you should not get any errors. If you do get some errors along the way, look at them since there is usually a strong clue as to what the problem is. Most often, you are missing some of the tools needed such as “make” and devel-tools that were explained earlier in this document. Trust me, I’ve been there.

There are only two things at minimum that need to be set in the dansguardian.conf file to make it work in basic networks. Let’s go set them.

The path to the config file is
/etc/dansguardian/dansguardian.conf

Open the dansguardian.conf file and change the “Proxy IP: = “
To the actual IP of the server that DG is running on. Such as

Proxy IP: = 192.168.0.253

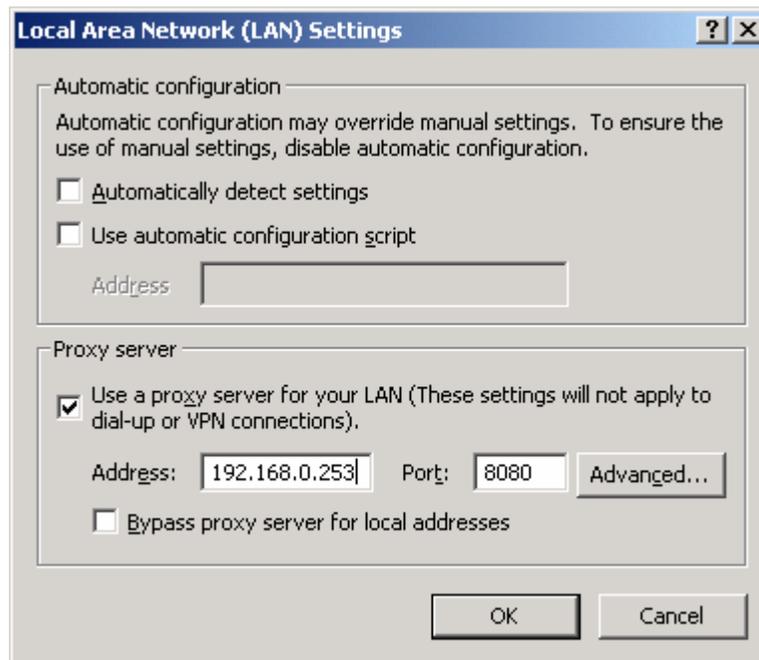
Now change the access denied address to the IP of the DG server. Such as

accessdeniedaddress: = <http://192.168.0.253/cgi-bin/dansguardian.pl>

Save your changes and start up DG for the first time.
Type in “**dansguardian**” at the prompt. To start it.

Now might also be a good time to do a **dansguardian -h** to see some of the other available commands that you can use with Dans Guardian.

At this point, providing that there were no errors when starting dansguardian, you can configure browsers to point to dansguardian and test the filtering.
Internet Explorer is what we use on all desktops so here is a screenshot of what your proxy settings should look like



Enter in the address of your dansguardian server in the Address:
Enter in the port# that Dans Guardian will be listening on; by default that is 8080

The last step is to configure Dans Guardian to run at startup.

One day I will learn a better method but this was quite effective.

Using the Suse GUI, use the “Local Network” icon on the desktop to open up two windows at once.

Open up one window that shows /etc/rc.d/init.d/dansguardian

Open up another window that shows /etc/rc.d/rc5.d

Drag the DansGaurdian file from /etc/rc.d/init.d over to the /etc/rc.d/rc5.d dir

Suse will ask you if you want to copy it or link to the original, choose link to it.

Now rename the script to S18dansguardian or whatever suits you're fancy. My Squid process was "S17squid" and naming the script "S18dansguardian" makes it start up right after squid.

Close out all windows and reboot the machine, watch the startup process and see that at near the end, Squid starts and then DansGuardian starts up right after it. HINT....hitting F2 during the restart will show all the starting processes.

Further customizing of what DG will actually block is a whole other How To.

The default settings are quite restrictive and that is a good thing.

I leave the default settings alone for the most part and manually put entries into the exceptionsitelist and or the bannedsitelist depending on weather I want to permit or deny.

Go to /etc/dansguardian

Run the "ls" command to see the different files that are in the dansguardian dir. Take your time and open up each one and read the descriptions and look at the examples.

One quick example on how to block www.microsoft.com

Open up the bannedsitelist with a text editor. After the listed examples in the file, enter in **microsoft.com** You do not need the www. Now save the changes to the file and then have Dans Guardian re-read the configs by typing in **dansguardian -r** at the prompt. Now test it out by putting www.microsoft.com into your browsers address bar, you should get an "Access Denied" html page.

Once you feel like you can move around in the DG files and you have a basic understanding of them, you may want to get the webmin program and install the dansguardian module to be able to access the server from any machine on the network while using a slick gui. This saves me tons of time.

There is much much more to all this but for a newbie, this is all that you need in order to get Dans Guardian up and running with Suse9.

To supplement this guide with a little more detail in some areas, make sure that you get the DansGuardian 2.2.x Detailed Installation Guide from

<http://dansguardian.org/downloads/detailedinstallation2.html>

Gary Lamprecht
Systems Administrator
Tim O'Neill Motorworld
test at timoneillchevy dot com

Please send any comments or suggestions regarding this guide to test at timoneillchevy dot com