

Only for dummies

Remote Desktop In OpenSUSE 10.3

Remote access to Linux GUI Environment from Windows Client

Tedy Tirtawidjaja
5/14/2008

In Microsoft Windows environment we know Remote Desktop application for remote access to Windows server. In Unix/Linux environment we can use some protocol to access the server from any other client. The well known remote access protocol are rLogin, Telnet, SSH. But the limitation of these protocol is we only get the command line environment, we cannot get the graphical environment of the UNIX/Linux server by using those protocol. It's different when we use Remote Desktop to access the Windows server remotely, Remote Desktop gives us the whole graphical environment of the server

This document will show you how to access Linux server graphical environment from Windows client. To access graphical environment of Linux server from Windows client we need special tool, we cannot use the Windows build in Remote Desktop. In this document I choose VNC-Viewer as tool. So please download the VNC-Viewer first from the Internet and install it to your Windows machine.

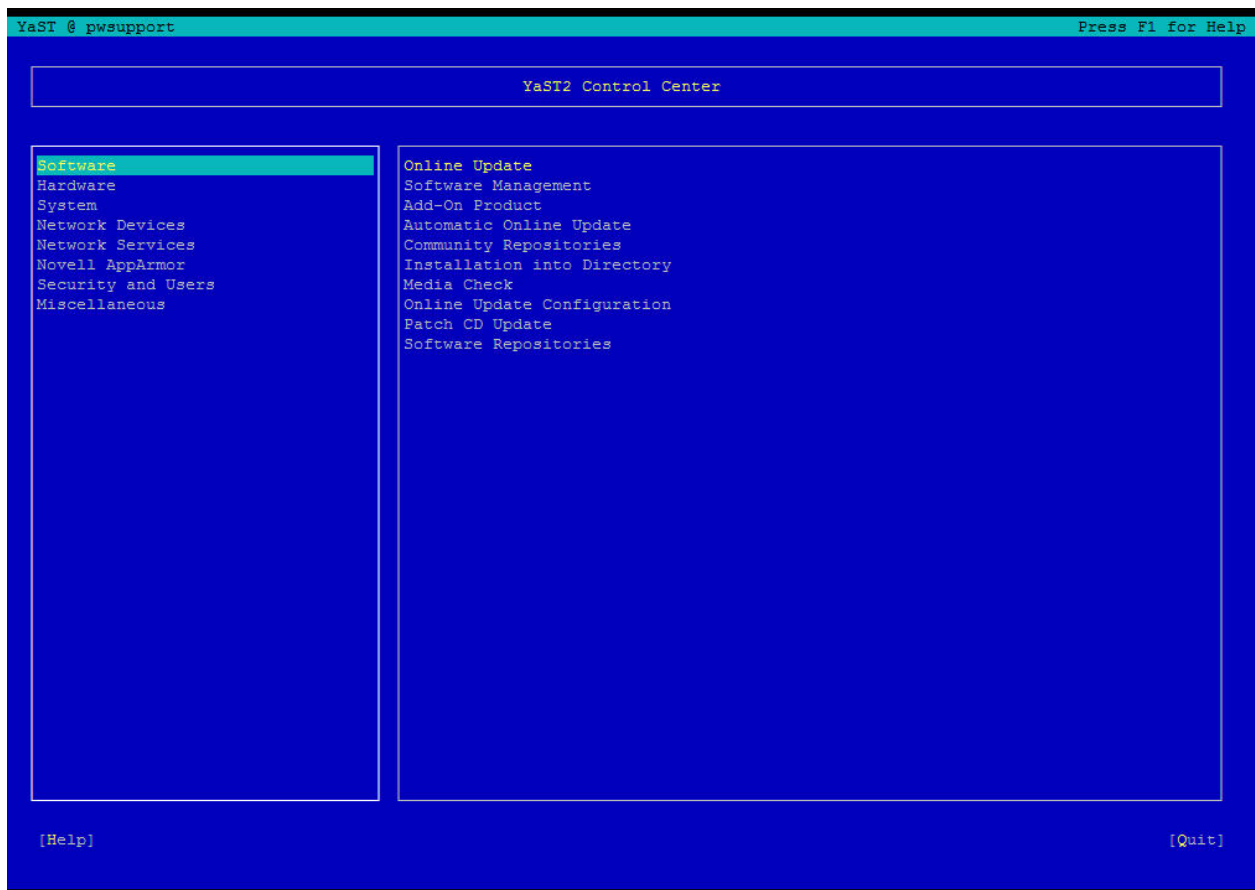
The next explanation will explain to you how to configure Linux server (this example use server which powered by OpenSUSE 10.3). We need to config the OpenSUSE 10.3 to allow Windows client access remotely using VNC-Viewer.

I can connect to OpenSUSE 10.3 only using SSH protocol, I don't have monitor and keyboard), so the example below show you how to configure using command line interface. Here the steps to configure it :

1. Open **YaST Control Center** by using this command :

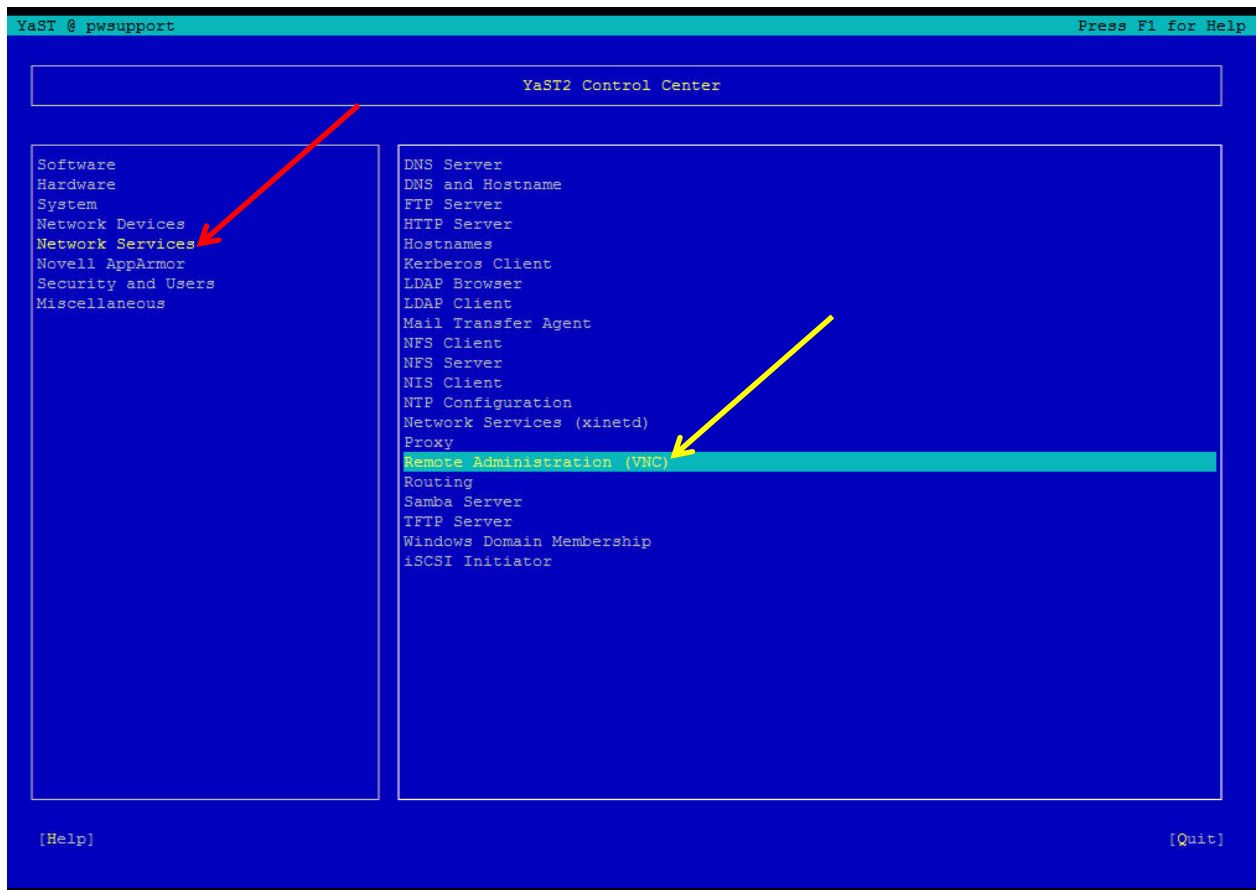
```
pwsupport:/ # yast
```

You will get the “blue menu” like this picture :

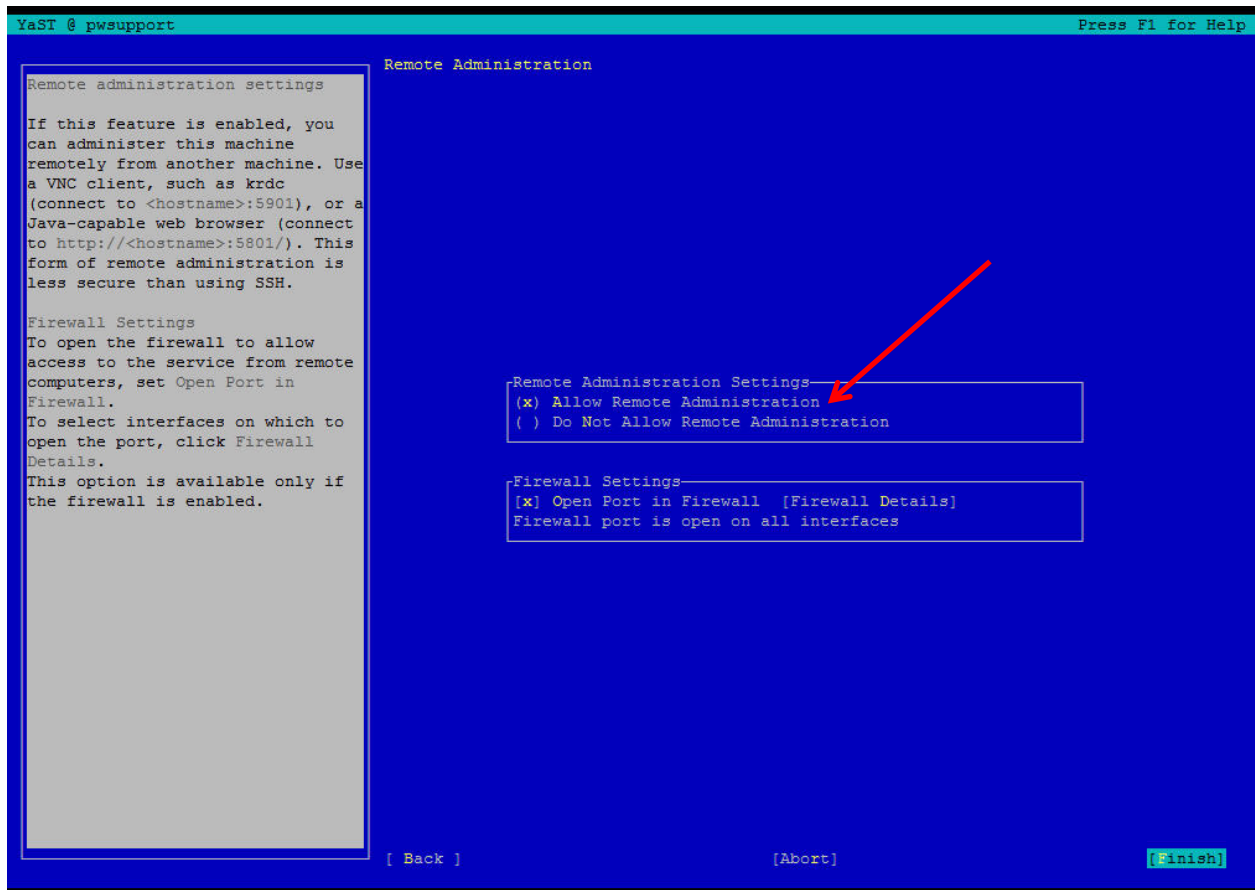


YaST is special tools in OpenSUSE distro that help user to do some configuration easily. You can use some key on your keyboard to using navigation of this menu : Tab, Enter, Left/Right/Up/Down Arrow.

- Using Down Arrow key on your keyboard, go to the **Network Services** menu on the left column menu (see the red arrow on the below picture). After that using your Tab key, move the cursor to the right column menu and choose **Remote Administration (VNC)** (see the yellow arrow). Press Enter key if your cursor already on the top of **Remote Administration (VNC)** menu.



3. If you press Enter key on the **Remote Administration** menu in the previous steps, you will see the display like below figure :



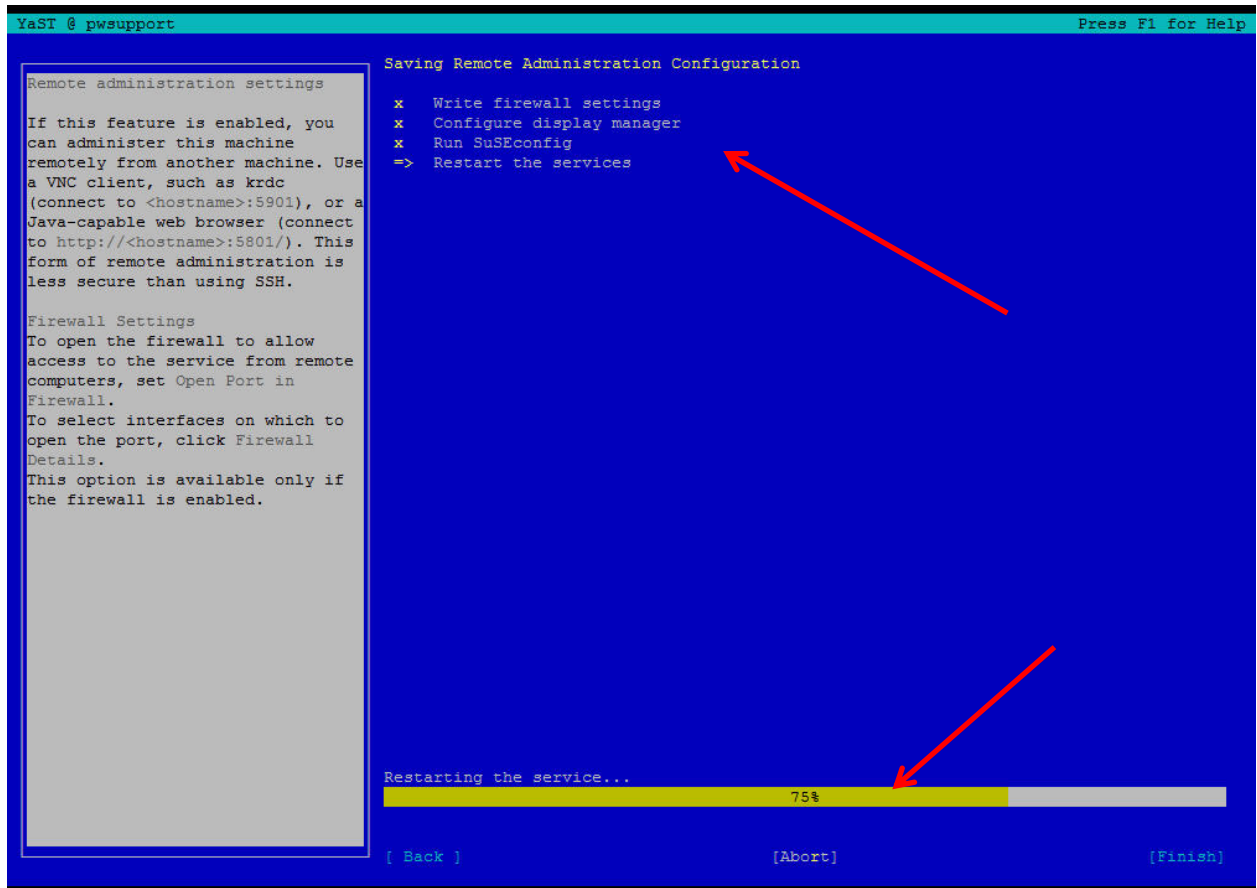
To allow remote user to access graphical environment remotely, the **Remote Administration Settings** must be set to Allow mode (*see the red arrow in the figure above*). If your configuration still in the **Do Not Allow Remote Administration**, change it immediately. Use your Up/Down Arrow on your keyboard to do that.

The other setting that must be correctly configured is Firewall setting. You must choose the option **Open Port in Firewall**. This option must be configured whenever your Firewall was activated before. If your machine doesn't use Firewall, **Open Port in Firewall** option has been disabled (you aren't able to change it).

After that please press Enter key on the Finish option (*see the yellow arrow in the figure above*).

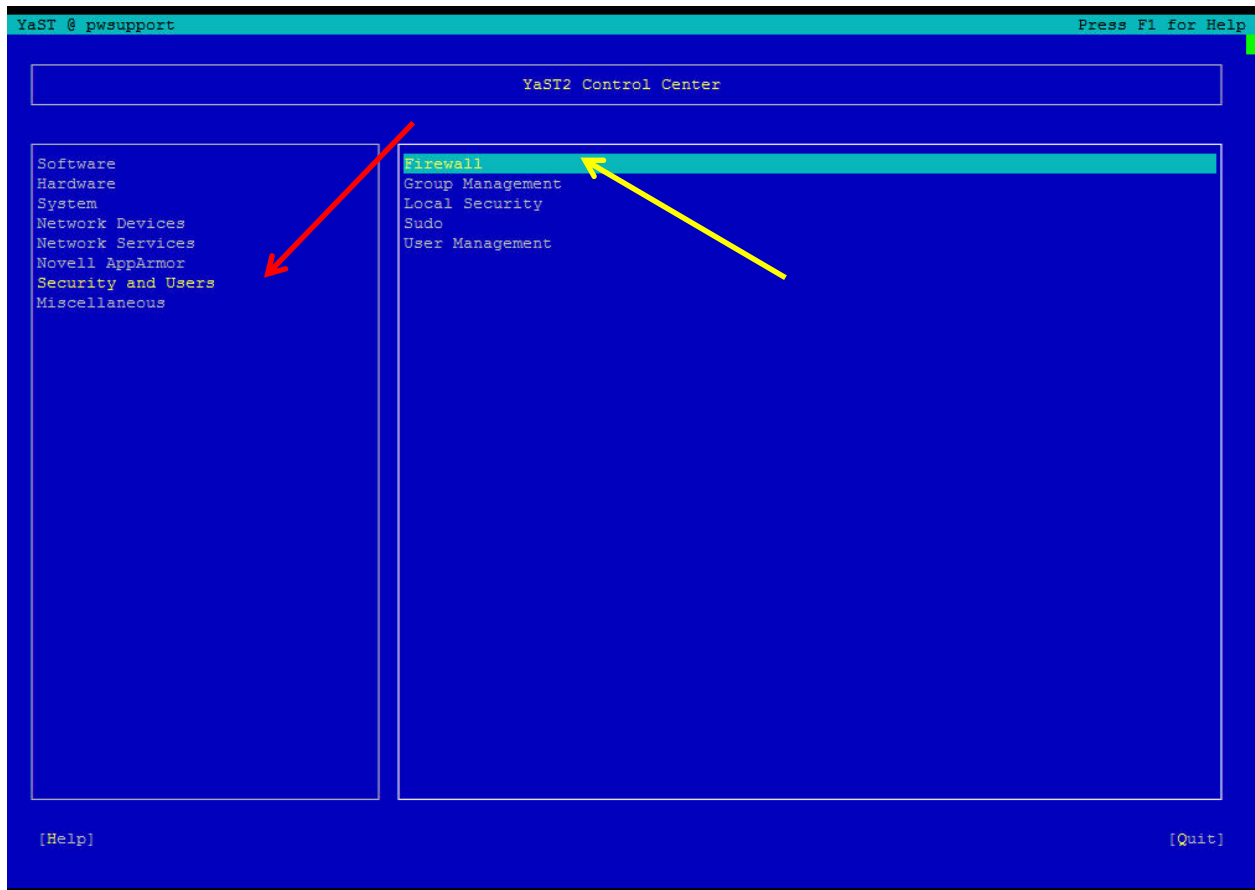
****REMEMBER : to jump from each menu, please use Tab key on your keyboard ****

- Whenever you press Enter key on the **Finish** option, system will save all the configuration that you have made. See the display that appears after you press **Finish** (*the progress is shown by red arrow*).

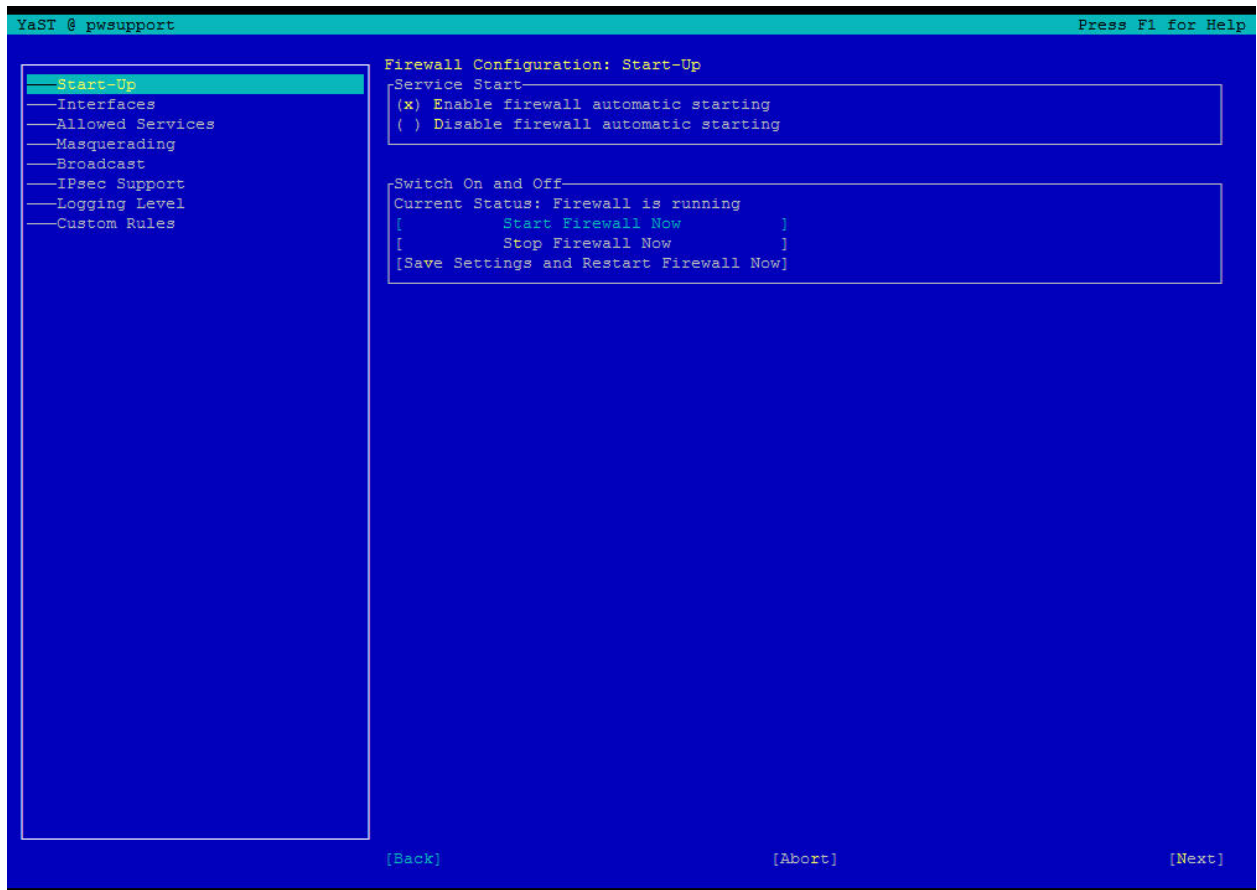


When the process completed, YaST will shown you the main menu as you can see on the Step 1.

5. On the YaST2 Control Center main menu, please go to **Security and Users** on the left column (see the red arrow). Go to **Firewall** option on the right column (see the yellow arrow).

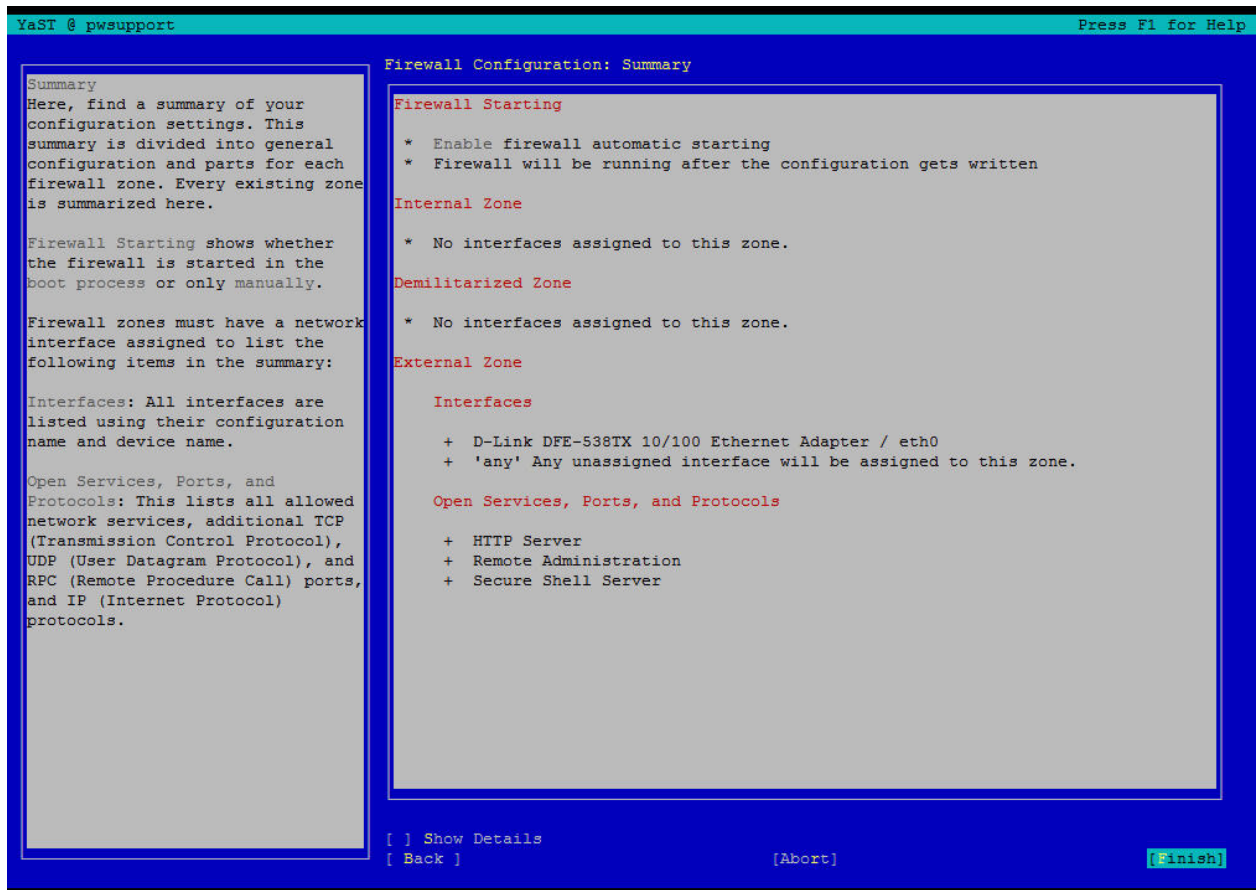


6. In this menu you can specify whether you want to activate Firewall or not. It's related to the permission for using remote desktop to your server.



As usual, you can use some key on your keyboard to make changes on the available menu. Click **Next** to finished the configuration.

7. The below picture shown **the Firewall Configuration Summary**. You can check it first before use the configuration permanent.



The screenshot shows the YaST Firewall Configuration Summary screen. The window title is "YaST @ pwsupport" and "Press F1 for Help". The main content is divided into two panes. The left pane contains a "Summary" section with the following text:

```
Summary
Here, find a summary of your
configuration settings. This
summary is divided into general
configuration and parts for each
firewall zone. Every existing zone
is summarized here.

Firewall Starting shows whether
the firewall is started in the
boot process or only manually.

Firewall zones must have a network
interface assigned to list the
following items in the summary:

Interfaces: All interfaces are
listed using their configuration
name and device name.

Open Services, Ports, and
Protocols: This lists all allowed
network services, additional TCP
(Transmission Control Protocol),
UDP (User Datagram Protocol), and
RPC (Remote Procedure Call) ports,
and IP (Internet Protocol)
protocols.
```

The right pane is titled "Firewall Configuration: Summary" and contains the following configuration details:

```
Firewall Starting
* Enable firewall automatic starting
* Firewall will be running after the configuration gets written

Internal Zone
* No interfaces assigned to this zone.

Demilitarized Zone
* No interfaces assigned to this zone.

External Zone

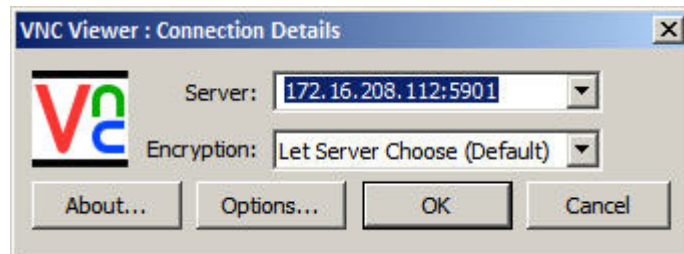
Interfaces
+ D-Link DFE-538TX 10/100 Ethernet Adapter / eth0
+ 'any' Any unassigned interface will be assigned to this zone.

Open Services, Ports, and Protocols
+ HTTP Server
+ Remote Administration
+ Secure Shell Server
```

At the bottom of the screen, there are navigation options: "[] Show Details", "[Back]", "[Abort]", and a highlighted "[Finish]" button.

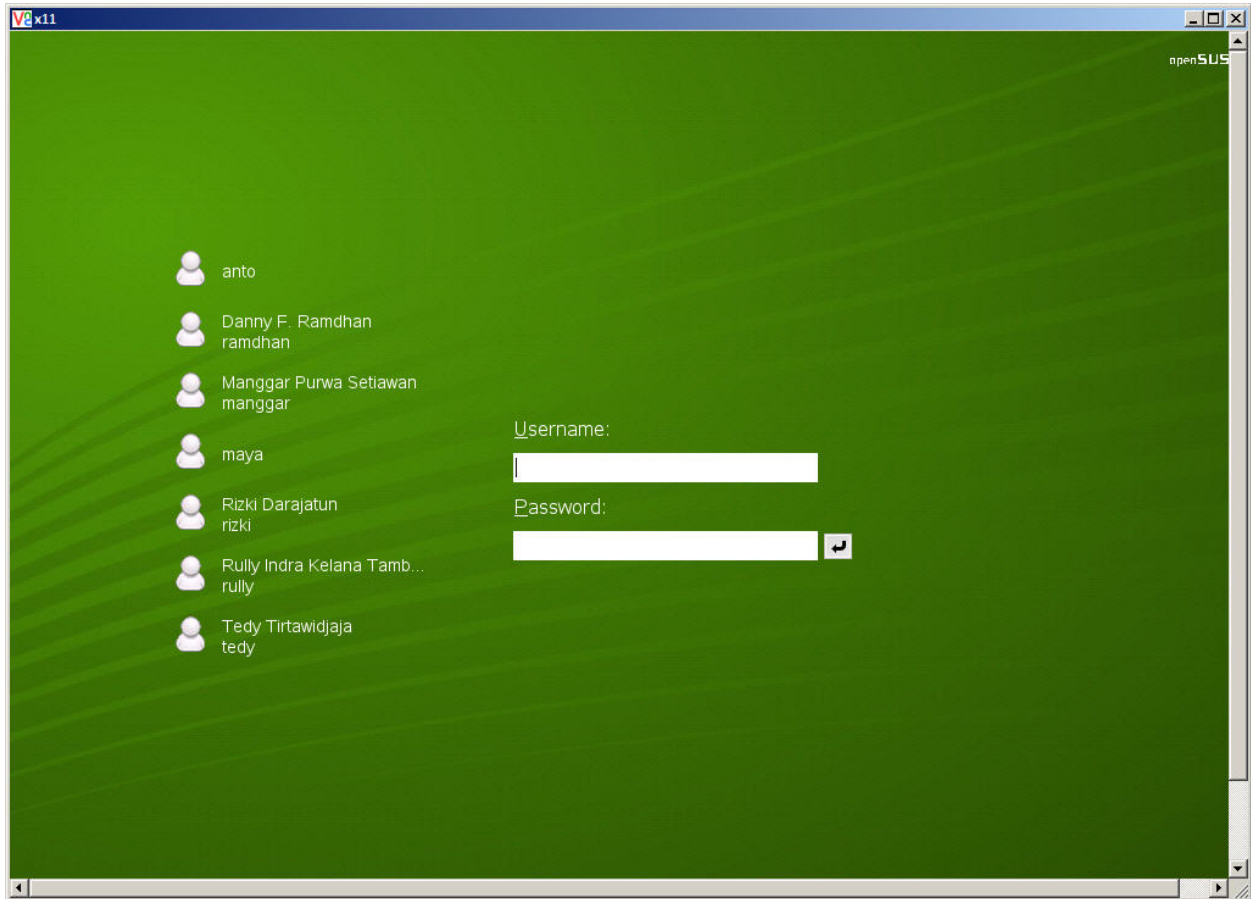
Click **Finish** to save the configuration.

8. Open your VNC Viewer and enter your server's IP address (using port **5901**). See the following example :



For Encryption type choose **Let Server Choose (Default)**. After that, click **OK** button.

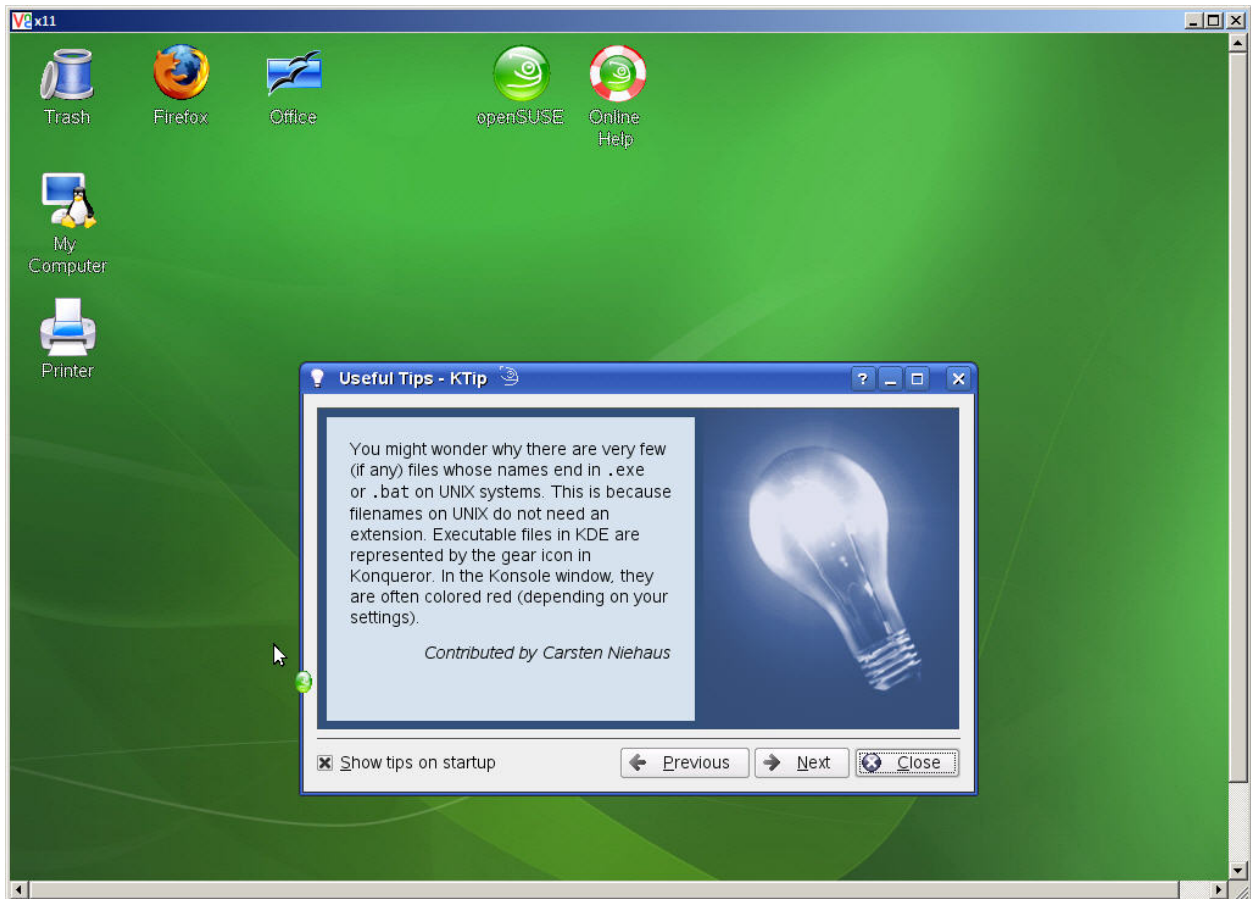
9. If your server running well, you will get the remote display like shown on the below figure :



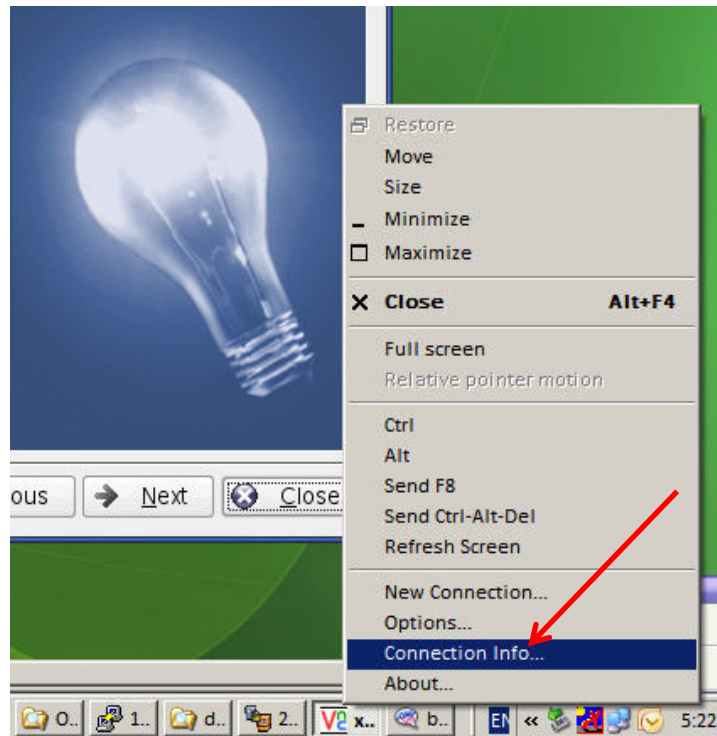
When you've see the login display of your server (like shown above), it's mean that you successfully follow all of the instruction in this document. Congratulations!

Right now you can use your graphical environment of your Linux server remotely...really same display when you sit down in front of your server's monitor.

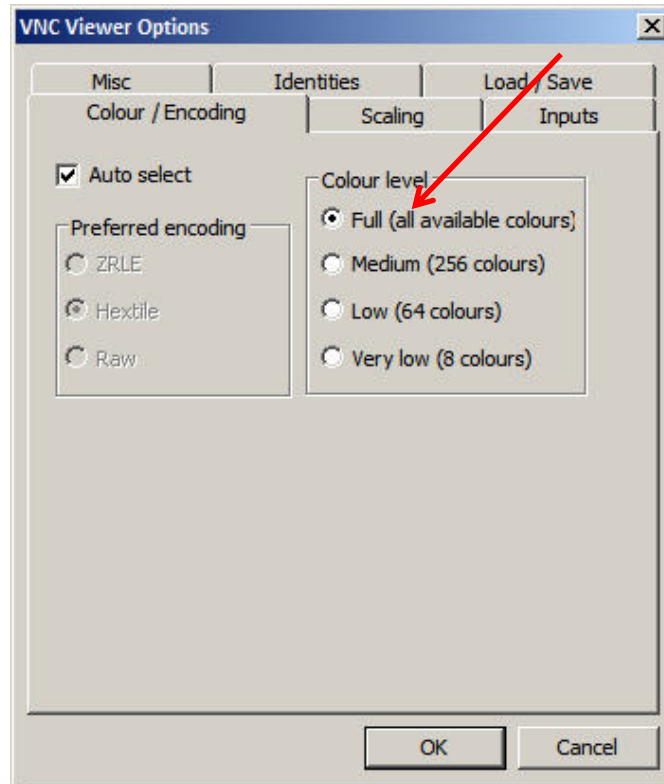
10. Here the display that appear after I logged in into my Linux server.



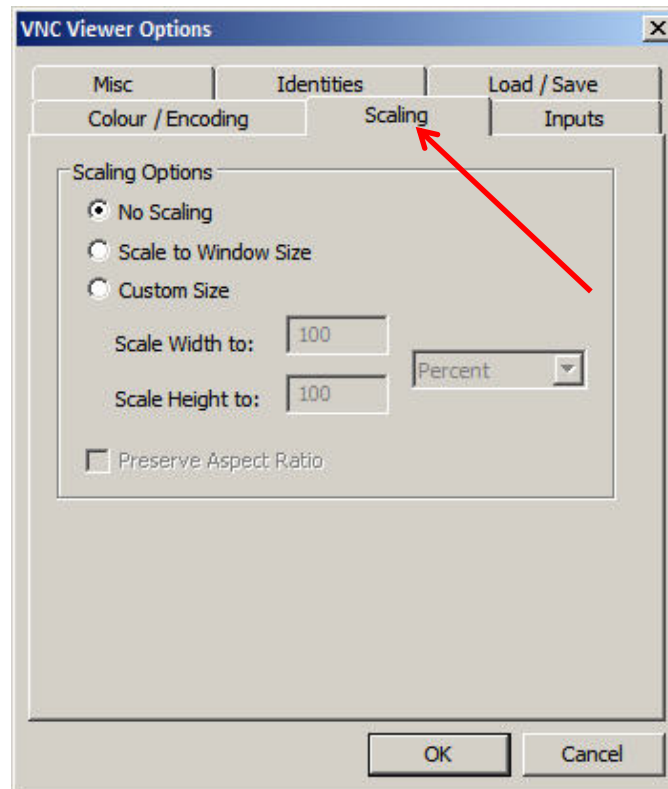
11. We can do some configuration regarding the display of the remote server. The way to do this is right click on the taskbar and choose **Connection Info** (see the red arrow on the below figure).



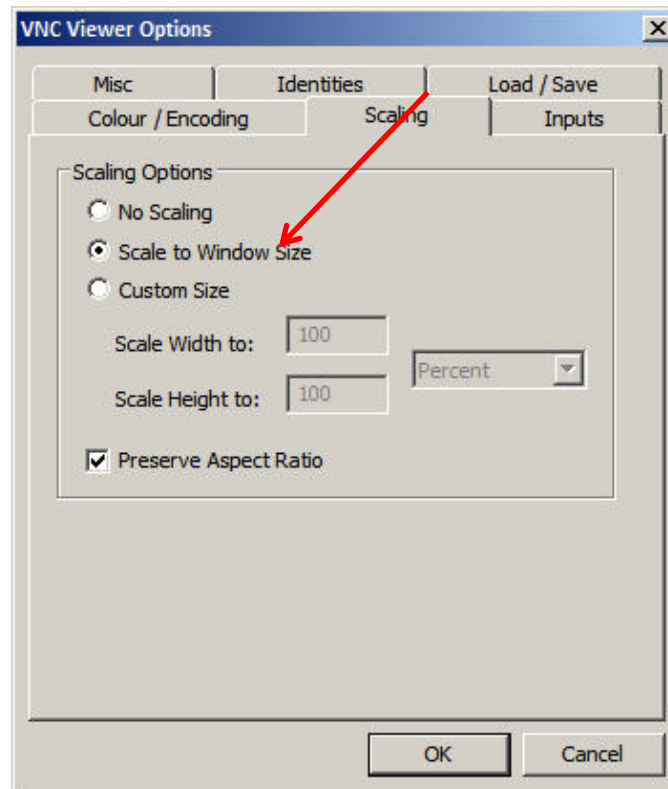
12. One thing that you can configure on the VNC Viewer Options is **Color level** of your server's remote display (*see the red arrow below*). For slow network connection, you should choose the low colour level. But it's depends on your flavour. See the following figure :



13. The other options that you can configure is how big your remote display. Choose Scaling on the top menu (see the red arrow on the below figure).



14. To make my remote display appear fit on my Windows screen, I prefer to choose **Scale to Window Size** (see the red arrow on below figure).



15. Using **Scale to Window Size** option, VNC will set the desktop of my remote server appear completely in its window. See the following figure and compare it with the other one on the step 10. In the below figure, you can see whole desktop can show completely (menu, taskbar, main menu, some shortcut).

