

97 - VNC for Linux and Windows

Regular VNC server:

Source: <http://www.uk.research.att.com/vnc/>
(or SuSE installation CDs)

Description:

The regular vnc server runs as a virtual x-server (Xvnc) in the background and need a local or remote viewer (vncviewer) to see and control it, including on the server's host.

Files and directories involved:

/usr/X11/bin/vncviewer	(as application)
/usr/X11/bin/vncserver	(server start script)
/usr/X11/bin/vncpasswd	(Created or changed using: vncpasswd)
/usr/X11/bin/Xvnc	(main vnc server daemon)
/usr/share/vnc/classes	(java applet classes for web-vncviewer)
~/.vnc	(user's own vnc server's configuration directory)
~/.vnc/passwd	(Password file for Xvnc server)
~/.vnc/xstartup	(Script run at startup of vncserver)

Note: This above startup file can be modified to start the whole kde or gnome by:
 - Not starting the xterm (comment it out)
 - Replacing the window manager (twm) with: startkde &

Controlling the vnc Server:

Starting the vnc server:

```
vncserver [:x-port No.] [options]
```

Typical vnc server start script:

```
#----- Cleanup old residues before starting the server -----
rm /root/.vnc/*.log /root/.vnc/*.pid /tmp/.X11-unix/X9
# Start the server on x-port 9, size 800x600 and title
vncserver :9 -alwaysshared -geometry 800x600 -name "Dozent Computer"
# Wait a bit to let the server initialize
sleep 3
# Start the local viewer
vncviewer localhost:9
```

Stopping the vnc server:

```
vncserver -kill :x-port (x-port=x-port where the vnc server is running)
```

Typical vnc server stop script:

```
# Standard way to kill the server
vncserver -kill :9
killall Xvnc
killall vncviewer
```

Start a full remote KDE3 session: (SuSE 8.2 only)

Enable the vnc service in /etc/xinetd.d/vnc (then rcxinetd restart)

Edit the file /etc/opt/kde3/share/config/kdm/kdmrc and change the following entry (in the[Xdmcp] section):

```
Enable=true (then restart the kdm (rcxdm restart) from a virtual console.
```

Start the session from another host with:

```
vncviewer servername:10 or :11
```

Starting of the vncviewer(application):

```
vncviewer [servername:x-portNo]
```

Starting the web-vncviewer(in Java-enabled Browser):

```
http://VNCserverHostname:580x (where x=x-port No.)
```

Programs involved:

- `vncviewer` - this is the Standard VNC viewer, or client, program for X.
- `vncserver` - this is a wrapper script which makes starting an X VNC server (i.e. desktop) more convenient. It is written in Perl, so to use the script you need that.
- `vncpasswd` - this program allows you to change the password used to access your X VNC desktops. The `vncserver` script uses this program when you first start a VNC server.
- `vncconnect` - this program tells a running instance of `Xvnc` to connect to a listening VNC viewer (normally the connection is made the other way round i.e. the viewer connects to `Xvnc`).
- `Xvnc` - this is the X VNC server - it is both an X server and a VNC server. You normally use the `vncserver` script to start `Xvnc`.

Special notes:

The server started without options will allow only one viewer at the time to view/control it. The latest viewer will then provoke the disconnection of the actual connected viewer. (not so nice!! .)

To prevent the new viewer to do so use the option:

```
-dontdisconnect.
```

To allow to connect more than one viewer at the time then use the option

```
-alwaysshared
```

If no x-port number is given (0 to 63) as option (eg. :4) then the `vncserver` will search for a new free x-ports and assign one. If for some reasons the server crashes without cleaning after itself then it may be necessary to do certain cleanup before restarting it otherwise junk files will accumulate and block certain x-ports numbers for future use.

A typical command to do that work could look like this:

```
rm ~/.vnc/*.log ~/.vnc/*.pid /tmp/.X11-unix/X9 (X9 is just an example)
```

Help/Documentation:

After installation (in SuSE Distribution) Help Html pages are located locally in:

```
/usr/share/doc/packages/vnc/index.html
```

Latest documentation is on Internet at:

```
http://www.uk.research.att.com/vnc/docs.html
```

Screen VNC server (from Hexonet)

Source: <http://www.hexonet.de/software/rfb/>
 ((c)2000 heXoNet Support GmbH, D-66424 Homburg)

Description:

This VNC server uses the already existing X-Server screen to allow sharing it with other hosts via their viewers (either the standard's `vncviewer` or the Hexonet's `xrfbviewer`) This server work in the same manner as the Windows VNC server from AT&T.

When started it presents a window which allows the user to enter the server's password and extra options and then shows as a small rectangular icon the desktop as long as it runs. From then on the vnc viewers can connect to it.

To reopen the options window: Right click the mouse on the server's icon and chose properties.

Note:

The version 06.1-21 of the `xrfbviewer` is having the problem of blanking the viewer (all black) when the viewer window is moved!!! Newer versions may have solved this problem. I didn't try them yet. The regular `vncviewer` from AT&T is working very good and should be used instead till the problem is solved.

Control of vnc server/viewer:

Starting the vnc server:

```
x0rfbserver [options]
```

Options:

<code>-shared</code>	Allow the session to be shared.
<code>-viewonly</code>	Ignore keystrokes and mouse movements.

Starting the vnc viewer:

```
xrfbviewer [OPTIONS] [[hostname]:x-port]
```

Options:

<code>-shared</code>	Allow the session to be shared.
<code>-viewonly</code>	Don't send keystrokes or mouse movements.
<code>-bgr233</code>	Use BGR233 pixel format.
<code>-spf</code>	Use the server's pixel format.
<code>-scale fact/div</code>	Scale by the specified factor and divisor.

Help/Documentation:

```
man x0rfbserver
```

```
man xplayfbs
```

```
man xrfbviewer
```

```
in browser: files:/usr/share/doc/packages/rfb/rfm_fbs.1.0.html
```

Files invoved:

Programs:

```
/usr/X11R6/bin/rfbcat
```

```
/usr/X11R6/bin/x0rfbserver (Main vnc screen server program)
```

```
/usr/X11R6/bin/xplayfbs (Playback vnc sessions)
```

```
/usr/X11R6/bin/xrfbviewer (Hexonet's vnc viewer...Buggy!!)
```

```
/usr/X11R6/bin/xvncconnect (Connects to waiting viewers)
```

Documentation:

```
/usr/share/doc/packages/rfb/rfm_fbs.1.0.html
```