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How to Set Up VNC from Windows to Fedora 14 Over the Internet

Nov27

2010 (<http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/>)

24 Comments (<http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/#comments>) Written by **Steve Jenkins** (<http://stevejenkins.com/blog/author/stevej/>)



Installing the VNC server in Fedora 14 is a little bit different than **I described it for Fedora 12** (<http://stevejenkins.com/blog/2010/03/set-up-vnc-from-windows-to-fedora-12-over-the-internet/>), so here are some updated instructions for setting up VNC in Fedora 14 and connecting to it via Windows over the Internet.

Step 1: Make sure SSH is Running

In all versions prior to Fedora 14, SSH is turned on by default. However, this is no longer the case with Fedora 14. Before being able to connect to your Fedora 14 box over a network, you must have physical access to the machine and explicitly enable SSH from the console. To do this, log in as root and do:

```
service sshd start
chkconfig sshd on
```

You should also make sure that your firewall settings (if any) allow remote access to port 22 (the default SSH port). I've also written a separate blog post on **steps you can take to secure SSH on your server** (<http://stevejenkins.com/blog/2010/11/how-to-install-denyhosts-to-block-ssh-attacks-on-rhel-6-centos-5-5-fedora-14/>).

Step 2: Install TigerVNC Server on the Remote Fedora 14 Box

The TigerVNC server package may have been installed by default on your Fedora 14 box when you installed the OS, but to make sure, become root (or sudo) and type:

```
yum install tigervnc-server
```

If it's already installed, Fedora will let you know. If it's not, it will be now!

Step 3: Configure Screen Resolutions, Port Number, and Users on the Remote Fedora 14 Box

The `/etc/sysconfig/vncservers` file controls which *users* are allowed to access your Fedora box via VNC, as well as what *ports* they will connect to, and what *screen resolutions* each of those users will use when connecting. As root (or with sudo), open the `/etc/sysconfig/vncservers` file with your favorite text editor and find the lines at the bottom that look something like this:

```
# VNCSERVERS="2:myusername"  
# VNCSERVERARGS[2]="-geometry 800x600 -nolisten tcp -localhost"
```

Uncomment those lines, then change "myusername" to your Linux username on the first line. On the second line, change the geometry to whatever screen resolution you'd like for your desktop when remotely connecting (to avoid seeing scroll bars, make sure it's smaller than the size of your local desktop), and then, for right now, remove the default **-localhost** option. We'll test your VNC connection without it first, and then add that option back later when we're sure VNC is working. Assuming your Linux username was **clyde**, those lines should now read:

```
VNCSERVERS="2:clyde"  
VNCSERVERARGS[2]="-geometry 1024x768 -nolisten tcp"
```

This tells the VNC server to set up VNC display port #2 (the default for remote access) to for clyde to connect with a screen resolution of 800x600.

Step 4: Configure the VNC Desktop Environment and Password

For the next step, you should be logged in to your Fedora box as the user whose desktop you'll want to access. If you're already logged in as root, and your username is **clyde**, type:

```
su - clyde
```

The hyphen is important, as it will load the local path for clyde, which we'll need for the next step. Now type:

```
vncserver
```

This will run the `vncserver` program, and will set up default versions of the necessary desktop environment files for whichever user ran the program (in this case, clyde).

The first time you run `vncserver`, it will look like this:

You will require a password to access your desktops.

Password:

Verify:

```
xauth: creating new authority file /home/stevej/.Xauthority
```

```
New 'server.hostname:1 (clyde)' desktop is server.hostname:1
```

```
Creating default startup script /home/clyde/.vnc/xstartup
```

```
Starting applications specified in /home/clyde/.vnc/xstartup
```

```
Log file is /home/clyde/.vnc/server.hostname:1.log
```

When it prompts you for a password, this will be your VNC password, which you'll use to connect to your remote desktop. If you choose, this can be different than your Linux account password. If you ever want to change your VNC password, just type **vncpasswd** while logged on as the user whose password you want to change.

The newly created files will be in the **.vnc** directory under the user's home directory (for our example, **/home/clyde/.vnc**). Using your favorite text editor, edit the **/home/username/.vnc/xstartup** file.

Go to the bottom of the file, comment out the **twm &** line, and then add a line that tells VNC to start your desktop of choice. If you want a GNOME desktop, the last two lines should read:

```
# twm &  
startx &
```

If you prefer a KDE desktop, they should read:

```
# twm &  
startkde &
```

Step 5: Start the VNC Server Service

To start and stop services, you'll need to be logged in as root. If you're still logged in as a different user, type **exit** to get back to the root user. Make sure any previous instance of `vncserver` service is stopped by typing:

```
service vncserver stop
```

If you get a **FAILED** message in reply, it's OK. That just means that the server wasn't running.

Now, start the service with all the settings you've entered with:

```
service vncserver start
```

You should get a success message that says something like:

```
Starting VNC server: 2:clyde
New 'server.hostname:2 (clyde)' desktop is server.hostname:2
```

```
Starting applications specified in /home/clyde/.vnc/xstartup
Log file is /home/clyde/.vnc/server.hostname:2.log
```

If you get a **FAILED** message, double-check the previous steps. Check for typos in the **/etc/sysconfig/vncservers** file, such as username, and make sure that you don't have any spaces in the screen resolution parameter.

Step 6: Allow sshd to Forward Ports (SELinux users only)

Check to see if you have SELinux enabled on your system with:

```
# sestatus
```

If you get a reply that says it's disabled, you can skip to the next step. If it is enabled, then you need to allow the sshd daemon to forward ports – otherwise, you'll only be able to connect over the local network. Tell SELinux that sshd can forward ports with:

```
# setsebool -P sshd_forward_ports 1
```

(Thanks to James Butler for pointing this out!)

Step 7: Configure Firewall Settings

If you have the Linux Firewall turned off on your Fedora 14 box, you can skip this step.

If you're using the built-in firewall on your Fedora 14 box, you'll need to tell it to allow incoming connections on the port you set up in Step 2 above. The number(s) you used in the **VNCSERVERS=** line(s) of the **/etc/sysconfig/vncservers** file determine which port numbers VNC will listen on. Our example used **VNCSERVERS="2:clyde"**, which means you'd need to open port 5902 in your firewall. If you set up other users and/or other ports, then you'll need to open those as well: **1=**port 5901, **2=** port 5902, **3=**port 5903, etc.

To add the appropriate port(s) to your firewall, edit the **/etc/sysconfig/iptables** file and add the following line:

```
-A INPUT -m state --state NEW -m tcp -p tcp --dport 5902 -j ACCEPT
```

If you're using additional ports for VNC, add a separate line for each.

The following line should already appear somewhere in your **/etc/sysconfig/iptables** file, but if it isn't there for some reason, now is a good time to add it so you can connect to your VNC server securely in a later step:

```
-A INPUT -m state --state NEW -m tcp -p tcp --dport 22 -j ACCEPT
```

Once you've added the appropriate line(s), restart your firewall with:

```
service iptables restart
```

Step 8: Configure Router Port Forwarding

If your network lives behind a router (and most home-based broadband users' networks do), and you only want to access your Fedora 14 desktop from inside the same local network, then you don't need to mess with port forwarding on your router and can skip to the next step.

If the **only** way you plan on connecting to your Fedora 14 desktop over the Internet is via a secure SSH tunnel (which is what I recommend), then you'll need to verify that you've properly forwarded port 22 (the default SSH port) on your router to the internal IP address of your Fedora 14 box. If you're able to SSH into your Fedora 14 box from outside your router, then you've already got things forwarded properly. Check your router's instructions (or the instructions for your router's firmware if you're using something like **DD-WRT** (<http://www.dd-wrt.com/>) or **Tomato** (<http://www.polarcloud.com/tomato/>)) on how to set up port forwarding.

If you would like to connect to your Fedora 14 desktop over the Internet **without** a secure SSH tunnel (and I would recommend doing this **only for testing and troubleshooting purposes** and only when first getting things set up), then you'll need to forward the appropriate VNC port(s) from your router to your Fedora 14 box (we used port 5902 in our example). Again, this is recommended only for testing purposes, as it is not a secure connection.

Step 9: Install a VNC Client on Windows

Because it's lightweight, stable, supports the secure connection we'll be setting up in a minute, and completely **FREE**, I recommend **TightVNC** client, which can be downloaded [here](http://www.tightvnc.com/) (<http://www.tightvnc.com/>). But there are many other good VNC clients available out there, including **RealVNC** (<http://www.realvnc.com/>), and an interesting one called **Terminals** (<http://www.codeplex.com/Terminals>), which allows you to set up multiple tabs in one application with both Windows RDC and Linux VNC connections, kind of like tabs in your Web browser.

So download and install the VNC client of your choice.

Step 10: Connect to your VNC Server

Open your VNC client and connect to the appropriate IP address of your Fedora 14 box and the port that you chose in `/etc/sysconfig/vncservers`.

If you're connecting from inside your network and the IP address of your Fedora 14 box is 192.168.1.100, then to connect to port #2 as in our example, you'd connect to **192.168.1.100:5902**.

If you're connecting from outside your network and want to connect to port #2 as in our example, then use your WAN IP and VNC port instead, as in **222.33.444.55:5902**.

You'll be prompted for the VNC password you set up in an earlier step, and the desktop you configured in `/home/username/.vnc/xstartup` should display.

If you are unable to connect, go back and carefully re-check each step. It's probably a very simple typo or a small thing you forgot.

Step 11: Connect to your VNC Server with SSH Tunneling

Now that you know your VNC server is running properly, it's time to secure things. This isn't necessary when connecting to your Fedora 14 box via VNC inside a trusted network. But if you want to connect over the Internet, you really should take this extra step, which will only take a couple of minutes to configure.

First, you'll need a Windows SSH client. I use **SecureCRT** (<http://www.vandyke.com/products/securecrt/>) (which is a commercial app with a free trial period), but you can also do it easily with a very popular freeware Windows SSH client called **PuTTY** (<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>).

The idea behind SSH tunneling is to establish a secure SSH connection between your Windows box and the remote Fedora 14 box, and then "tunnel" the VNC connection through your SSH connection. Don't worry... it's much easier than it sounds.

In SecureCRT: create a new connection to the IP address or hostname of your remote Fedora 14 box (or the external IP address of the router if you're connecting from outside the local network). Under the **Connection** category, set the protocol to **SSH2**. In the **SSH2** sub-category, use port 22, and be sure to use the username on the Fedora 14 box that you configured in `/etc/sysconfig/vncservers` (in our example, it was clyde). In the **Port Forwarding** sub-category, hit **Add...**, enter a descriptive name for the forwarded connection (such as **VNC**), then put the port number that corresponds to the number you set up in `/etc/sysconfig/vncservers` for that username in both port fields (in our example, both would be 5902). None of the checkboxes need to be selected. Save your new connection, then click **Connect**. A terminal window should appear, and you'll be prompted for your username and password. Use your Fedora account username and password (which may be different than the VNC password you set up).

In PuTTY: enter the IP address or hostname of your remote Fedora 14 box (or the external IP address of the router if you're connecting from outside the local network). Click the **+** next to the **SSH** sub-category, then click **Tunnels**. Enter the port number that corresponds to the number you set up in `/etc/sysconfig/vncservers` in the **Source port** field (in our example, it would be 5902), then enter **localhost:5902** (or a different port if applicable) in the **Destination** field, then click on **Add**. Scroll up and click on the **Session** category. Type in a name for the session in the **Saved Sessions** field then press **Save**. Click **Open** to establish the connection. A terminal window should appear, and you'll be prompted for your username and password. Use your Fedora account username and password (which may be different than the VNC password you set up).

You've essentially told your SSH client to "listen" for local connections to port 5902 on localhost (your Windows box), and then tunnel those connections over to port 5902 on the remote host (your Fedora 14 box) using your secure SSH connection.

Once your SSH connection is established (whether by SecureCRT, PuTTY, or some other client), open your VNC client viewer and connect to **localhost:5902**. The VNC client should establish the connection, prompt for the VNC password (which may not be the same as your Fedora account password), and then display the remote desktop.

Step 12: Securing Things and Tidying Up

To finish securing your VNC server, there are a few final steps you should take.

First, exit your VNC client (you can just close it), then exit your SSH tunneling session by typing **exit** from the command prompt. Re-connect to your Fedora 14 box with a standard (non-tunneling) SSH connection and become root. Edit the **/etc/sysconfig/vncservers** file and add the **-localhost** option to the **VNCSERVERARGS** line, so that it reads:

```
VNCSERVERARGS[2]="-geometry 1024x768 -nolisten tcp -localhost"
```

This option tells the VNC server not to accept remote connections from VNC clients without a secure tunnel.

Restart the VNC server with this new option by typing:

```
service vncserver restart
```

Next, if you forwarded port 5902 on your router (or any other ports for your VNC server) for testing purposes in Step 6 above, now would be a good time to undo that forwarding. You don't need those ports forwarded anymore now that you've got SSH tunneling working. You do, however, still need the VNC ports open on your Fedora box's firewall, so keep any **/etc/sysconfig/iptables** changes you made while setting up VNC.

Optional Step: Starting Multiple VNC Sessions

If you'd like to start multiple instances of the VNC server on your Fedora box, you can simply edit your **/etc/sysconfig/vncservers** file. Multiple instances are helpful if you want to allow multiple users to connect to the Fedora box via VNC. You can also set up multiple profiles for the same user, which is useful if you want to allow the same user to access the Fedora box from multiple remote systems that may have different screen resolutions.

If you'd like to set up an additional user (we'll use **joe** in this example), your **/etc/sysconfig/vncservers** file should include:

```
VNCSERVERS="2:clyde 3:joe"
```

```
VNCSERVERARGS[2]="-geometry 1024x768 -nolisten tcp -localhost"
```

```
VNCSERVERARGS[3]="-geometry 800x600 -nolisten tcp -localhost"
```

Notice that the **VNCSERVERS=** line has both users listed on the same line. This is important so that when the vncserver service starts, it will start for all users listed. Add a separate **VNCSERVERARGS=** line for

each new user, along with whatever arguments you want. Note also that by using the #3, your VNC server will now also be listening on port 5903 for that user, so set up your firewall, tunnel, and/or VNC client appropriately to listen and/or forward all the ports you want to use.

If you'd like to set up multiple profiles for the same user, your `/etc/sysconfig/vncservers` file should include:

```
VNCSERVERS="2:clyde 3:clyde"
```

```
VNCSERVERARGS[2]="-geometry 1024x768 -nolisten tcp -localhost"
```

```
VNCSERVERARGS[3]="-geometry 800x600 -nolisten tcp -localhost"
```

Now when clyde connects to the VNCSERVER on port 2 5902, he'll get 1024×768 desktop. If he connects on port 5903, he'll get a **separate** login instance on a **separate** desktop at 800×600. It's possible to be connected to both ports at the same time, and have two different desktops running.

Be sure to do a **service vncserver restart** after making any changes to `/etc/sysconfig/vncservers`. You should see output from **all** instances being started, such as:

```
Starting VNC server: 2:clyde
```

```
New 'server.hostname:2 (clyde)' desktop is server.hostname:2
```

```
Starting applications specified in /home/clyde/.vnc/xstartup
```

```
Log file is /home/clyde/.vnc/server.hostname:2.log
```

```
3:clyde
```

```
New 'server.hostname:3 (clyde)' desktop is server.hostname:3
```

```
Starting applications specified in /home/clyde/.vnc/xstartup
```

```
Log file is /home/clyde/.vnc/server.hostname:3.log
```

Congratulations!

You've successfully set up your remote Fedora box to accept VNC connections securely. Enjoy your new Windows to Fedora 14 VNC connection!

UPDATE: If you're trying to set up VNC on an RHEL 5.5 or a CentOS 5.5 box, I've made a new **blog post** (<http://stevejenkins.com/blog/2010/08/set-up-vnc-on-rhel-5-5-centos-5-5/>) that walks you through a couple additional steps.

Related posts:

1. **[Set up VNC from Windows to Fedora 12 Over the Internet \(http://stevejenkins.com/blog/2010/03/set-up-vnc-from-windows-to-fedora-12-over-the-internet/\)](http://stevejenkins.com/blog/2010/03/set-up-vnc-from-windows-to-fedora-12-over-the-internet/)**

2. **[Set up VNC on RHEL 5.5 / CentOS 5.5](http://stevejenkins.com/blog/2010/08/set-up-vnc-on-rhel-5-5-centos-5-5/)** (<http://stevejenkins.com/blog/2010/08/set-up-vnc-on-rhel-5-5-centos-5-5/>)
3. **[Dual Boot Windows 7 and Fedora 12 Linux with Dell Utility and Recovery Partitions](http://stevejenkins.com/blog/2009/12/dual-boot-windows-7-and-fedora-linux-with-dell-utility-and-recovery-partitions/)** (<http://stevejenkins.com/blog/2009/12/dual-boot-windows-7-and-fedora-linux-with-dell-utility-and-recovery-partitions/>)
4. **[How To Enable Root Login to GUI in Fedora 13](http://stevejenkins.com/blog/2010/09/how-to-enable-root-login-to-gui-in-fedora-13/)** (<http://stevejenkins.com/blog/2010/09/how-to-enable-root-login-to-gui-in-fedora-13/>)
5. **[Renewing a Self-Signed SSL Certificate on Fedora/CentOS](http://stevejenkins.com/blog/2010/08/renewing-a-self-signed-ssl-certificate-on-fedoracentos/)** (<http://stevejenkins.com/blog/2010/08/renewing-a-self-signed-ssl-certificate-on-fedoracentos/>)

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« [Product Review: ecobee Smart Thermostat](http://stevejenkins.com/blog/2010/11/product-review-ecobee-smart-thermostat/) (<http://stevejenkins.com/blog/2010/11/product-review-ecobee-smart-thermostat/>)
 » [Things I Do First on a Vanilla Linux System](http://stevejenkins.com/blog/2010/11/things-i-do-first-on-a-vanilla-linux-system/) (<http://stevejenkins.com/blog/2010/11/things-i-do-first-on-a-vanilla-linux-system/>)

23 Comments

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1.  **Mark**
 December 1, 2010 at 7:44 am | [Permalink](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-5764) (<http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-5764>)
 Thanks Steve for an excellent page!
 I had googled something about Windows VNC and Fedora 14, and there was your page; Just what was needed!
2.  **Steve Jenkins** (<http://www.stevejenkins.com/>)
 December 2, 2010 at 8:40 am | [Permalink](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-5818) (<http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-5818>)

You're welcome, Mark! Glad you got it up and running.



3.



Jay Rome

December 9, 2010 at 11:54 am | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6262\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6262)

This is a good article/how-to, however you forgot that on Fedora 14 you'll need to start the ssh service. Most will also want ssh on after they reboot: The following commands can be used:

```
#service sshd start
#chkconfig sshd on
```

4.



Steve Jenkins (<http://www.stevejenkins.com/>)

December 9, 2010 at 12:00 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6264\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6264)

Hi, Jay. Thanks for mentioning that. This howto was assuming that they already had already taken the necessary steps to get SSH running, but since it is such a major change from previous versions of Fedora, I'll edit the post to include that. Thanks!

5.



Bob Gustafson

December 14, 2010 at 1:18 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6625\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6625)

I am running Fedora 14 and have vnc running for user2 and user1. Your blog was helpful.

It is more convenient to be able to see 'my screen' (:0) rather than either user2 or user3's screens (sized differently for different clients).

I could do it with x0vncserver, but I would like to use the X server that is already running – to save on CPU cycles.

Have you worked this out?

6.



Steve Jenkins (<http://www.stevejenkins.com/>)

December 14, 2010 at 1:21 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6626\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6626)

Then your best bet would be to use vino. My systems default to runlevel 3, so I don't have an X server running on boot (like you – to save on resources). Vino will allow you to essentially connect to the console session. I haven't messed with it yet, but once I do I plan on writing a post about it. If you beat me to it, let me know!



7.

Bob Gustafson



December 14, 2010 at 6:02 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6638\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6638)

I DO have an X server running on boot. And I want to.

I just don't want to have 2 or 3 X servers running.

I could run x0vncserver, but that would be an additional one over the normal X server running my screen (as I understand it..)

8.

Bob Gustafson



December 14, 2010 at 6:12 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6640\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6640)

x0vncserver does work..

I have two screens on two different systems. All of a sudden, I had both screens the same. The mouse icon is better on the right screen though.

It took awhile to get oriented so I could click 'close' on the duplicate screen (left).

But I do have an 'extra' X server.

9.

Steve Jenkins (<http://www.stevejenkins.com/>)



December 14, 2010 at 6:20 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6641\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6641)

Cool! That's probably a better approach than using vino, since vino requires you to already be logged on to the :0 session on the remote machine. How is it on resource usage?

10.

Steve Jenkins (<http://www.stevejenkins.com/>)



December 14, 2010 at 7:03 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6643\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6643)

After a little more searching, I don't think there's currently a way to connect directly to the :0 session on Fedora without running some sort of additional server. An alternative to x0vncserver that you may want to try is x11vnc. I just installed it and had it working in about 5 mins.

What actually took the longest was rebooting my machine into runlevel 5. I probably could 😊 have just done "startx" but I wanted to match your setup exactly.

After the reboot I simply did "yum install x11vnc" and then ran "x11vnc -xkb" from the command line to test it out (the -xkb flag is required or it won't let you use the SHIFT key over the VNC client for some reason). I opened up port 5900 in the Fedora firewall and was able to connect with TightVNC client to hostname:0. Of course, this is not very secure and I plan to tinker with this

later to get it working over an SSH tunnel and with some additional password protection, but x11vnc is clearly another option for connecting to the :0 session. But it does flunk your “extra X-tra” requirement. Let me know if you find a solution that doesn’t, I’d be very interested to play with it!

11.

*Bob Gustafson*

December 15, 2010 at 10:44 am | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6673\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6673)

I signed up with tigervnc-users@lists.sourceforge.net (mailto:tigervnc-users@lists.sourceforge.net), sent my query, and got back the following reply from Henrique.

*> I would like to access my desktop remotely, but I am not overjoyed to
> have to run x0vncserver.*

*Make sure you have the
tigervnc-server-module
installed.*

Add these lines to the Screen section of your xorg.conf file:

Option "SecurityTypes" "VncAuth"

Option "UserPasswdVerifier" "VncAuth"

Option "PasswordFile" "/path/to/vnc/passwd/file"

and this line to the Module section:

Load "vnc"

*Set the password with vncpasswd. Restart X and remote with
vncviewer. All the above has worked for me for several Fedora
releases, except for the cases when the module is occasionally
broken.*

– Henrique

*I don't have an xorg.conf file and tigervnc-server-module is installed, but doesn't do anything. I'm
working on running Xorg -configure, but I need to start up in runlevel 1, (no X server running) to do
it. More soon.*

12.

*Bob Gustafson*

December 15, 2010 at 12:49 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6681\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6681)

There are a number of ways to get an xorg.conf file. What I did:

- 1) edit /etc/inittab to start at level 3 (instead of 5 which uses X)
- 2) reboot, login as root, execute Xorg -configure
- 3) edit /etc/inittab to start at level 5 (undo step 1)
- 4) reboot, login, su to root, edit xorg.conf.new as per Henrique, put it into /etc/X11xorg.conf

- 5) reboot
- 6) on another computer, use vncviewer to connect to x.x.x.x:5900
- 7) you should see a 'mirror' of your other screen

13. **Steve Jenkins** (<http://www.stevejenkins.com/>)



December 15, 2010 at 1:47 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6684\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-6684)

That's great news – I will certainly try that myself, too. Thank you for searching that out!

Because I moderate the comments, I think it blocks others from editing comments. But if you post a comment with an edit request, I can edit the comment and then delete the edit request comment.



14. **dbunic** / www.redips.net (<http://www.redips.net/>)



December 28, 2010 at 1:37 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-7433\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-7433)

Very good tutorial. I tried with System -> Preferences -> Remote Desktop in FC14 but that didn't work. With your steps I made connection to my Fedora PC at work through VPN ...

Thank you!

15. *peter*



January 26, 2011 at 6:19 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9084\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9084)

well it works for root, but not for any other users. what could i possibly have forgotten. my firewall is open for the respective ports as well.

16. *peter*



January 26, 2011 at 6:20 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9085\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9085)

to add to my comment. i am getting a blank/black screen for users other than root.

17. **Steve Jenkins** (<http://www.stevejenkins.com/>)



January 26, 2011 at 6:24 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9088\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9088)

Peter: Check Step 4 and make sure the `/home/{username}/.vnc/xstartup` file for each non-root user has the correct startup command on the last line, and that the `twm` line is commented out.

18. *James Butler*



February 1, 2011 at 6:39 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9391\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9391)

Steve, great tutorial and much needed since there is no documentation this good that comes with any of the vnc servers that I could find. I am using tigervnc on Fedora 14 accessing from Windows Server 2003, Windows XP, and Windows 7 computers. I was able to successfully connect and get logged into a desktop just on my local network. But when I tried to do it over the Internet using putty and tiger vncviewer, it would not connect. I was able to connect to my box via ssh with putty but then when I try to connect to localhost:5902 with tiger vncviewer is says connection refused. I setup putty with my wan ip of my router and added 5902 and localhost in ssh/tunneling section. Any suggestions?

19.

James Butler

February 2, 2011 at 3:34 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9438\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9438)

Well, I figured out what the problem was! SELinux!

To allow port connections through ssh, you have to allow sshd to forward ports. You do that like this: `setsebool -P sshd_forward_ports 1`.

You have to do this as the root user of course. Maybe you could add this detail to your tutorial.

20.

Steve Jenkins (<http://www.stevejenkins.com/>)

February 2, 2011 at 3:49 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9441\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-9441)

Ahh, James. Yes – that would do it. If you read my “What I do to a vanilla Linux server” article, you’ll see that one of the first things I do on a new box is disable SELinux. But I’ll add this info to the article to benefit anyone else who is running SELinux. Thanks!



21.

J.K.

February 23, 2011 at 6:50 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-10609\)](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-10609)

I would just like to say that this guide actually works. I’ve tried a lot of these ‘Set up VNC from Windows to Fedora’ guides and this one is the only one that works. Well, to be fair, for some reason, it didn’t work without SSH (TightVNC goes to :1 even though I use the :5902), but I’m not comfortable using it without SSH 2 anyways, so it all works out in the end.

You should put up PayPal donate button so I could really show my gratitude.

22.

Steve Jenkins (<http://www.stevejenkins.com/>)

February 26, 2011 at 8:30 pm | [Permalink \(http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-](http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-)

page-1/#comment-10781)

Thanks, J.K. I'm glad it worked for you. I appreciate the generous thought about the PayPal Donate button, but happy comments are all the payment I need.



23.



Julio (<http://xroadsistemas.com.br>)

March 3, 2011 at 10:37 am | **Permalink** (<http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-11033>)

Thanks Steve Jenkins.

Great tutorial, it's quick and works.

1. **Set up VNC from Windows to Fedora 12 Over the Internet | Steve Jenkins' Blog** (<http://stevejenkins.com/blog/2010/03/set-up-vnc-from-windows-to-fedora-12-over-the-internet/>) on **December 2, 2010 at 8:39 am** (<http://stevejenkins.com/blog/2010/11/how-to-set-up-vnc-from-windows-to-fedora-14-over-the-internet/comment-page-1/#comment-5817>)

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About Steve

Steve Jenkins (</blog/about/>) is an internet entrepreneur, all-around geek's geek, karate black belt, PADI rescue diver, and self-proclaimed technology Jedi and business samurai who is passionate about anything

that has blinking lights, a throttle, a trigger, or a Swiss movement. He enjoys listening to others' opinions before politely pointing out that they're completely wrong. | [Read more \(/blog/about/\)](#)

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