Introduction to Debian RDP Server[How to Install XRDP Server]

If you wish to use RDP on a **Debian Linux Server**, using an **XRDP**service can be your solution. This article introduces this service and its related terms and concepts.

What is a Debian RDP Server?

As you may already know, one of the most significant problems for Linux users is working with **Remote Desktop** (RDP) Services. Since Linux servers don't have a pre-installed DE (Desktop Environment), an implementation of Microsoft RDP is used for providing a fully RDP-compatible experience. Therefore, a Debian RDP server is working with an open-source Remote Desktop Protocol server named XRDP. XRDP provides a graphical login to a remote machine via Microsoft Remote Desktop Protocol (RDP). It can also support two-way clipboard transfers (such as files, text, and bitmap), audio redirection, and drive redirection. But in order to know the Debian RDP Server well, let's talk about the RDP, Debian, and XRDP in more details:

What is the RDP Protocol?

The Microsoft RDP Protocol provides remote display and allows users to control their remote desktops as if they were working on it locally. The basic function of RDP is transmitting an output device from the remote server to the client, and the input device (keyboard/mouse) from the client to the remote server. This connection is extremely asymmetric, and by default is encrypted via RSA's RC4 block.

If you wish to connect to a Debian or Ubuntu machine from a Windows desktop, you need to utilize an RDP connection. This connection will be established via **XRDP**. This connection doesn't need any configuration but you will be asked to use your Linux credentials for connecting.

READ: [TeamViewer vs RDP: Choosing Your Remote Desktop Solution](#)

What is Debian Linux?

Debian is an open-source and free software which was first introduced by [Ian Murdock](#). This software is a Linux distribution developed by the community-supported Debian Project. This is a Unix-like operating system based on the Linux kernel that numerous packages run on it. Debian GNU/Linux is:

- **Dynamic**: As Debian is an open-source distribution, over a thousand volunteers work on it, constantly. They contribute new and improved code for evolving Debian, rapidly.
- **Redistributable and Free to Use**: For the development of Debian, no fee or payment for consortium membership is needed. Also, all formal packages of Debian GNU/Linux are free to distribute, and Debian FTP archives carry approximately 930 software packages which are distributable under specific terms.
- **Full-featured**: At present, Debian includes more than 58000 software packages. You can select which packages to install by a list, descriptions, and tools provided by Debian. These packages include precompiled software that also comes with a package manager (APT), and other utilities for an easy installation.

  As we mentioned before, Debian/Linux servers **don't have** a pre-installed Desktop Environment. So, you have to install a DE in your Debian repositories. One of these DEs is XRDP.

What is the XRDP Server?

XRDP is one of Remote Desktop Server's implementations that enables Debian and other operating systems other than Windows to connect to another desktop, remotely. This is an open-source and UNIX-like package that works by bridging graphics from X Windows System to the client and vice versa. For connecting to Debian, XRDP requires the XORG module, which allows the X server to act like X11rdp.

In order to have a good experience with Debian RDP Server, you need XRDP and XORGXRDP. Because XRDP depends on XORGXRDP, installing XRDP is enough. This implementation primarily targets GNU/Linux and is tested on PowerPC, SPARC, X86, and X86_64.

READ: [How to Connect to a Windows VPS From Linux?](#)

How to install XRDP Server on Debian?[Debian RDP server setup]

In order to install the XRDP package , run the following command:

```
$ sudo apt install xrdp
```

Once the installation of this Debian repository completes, the XRDP service will start automatically.

You can verify that the service is running by entering:

```
$ sudo systemctl status xrdp
```

This code will show an output like below:

```
Output
```

```
Xrdp.service – xrdp daemon
```

```
Loaded: loaded (/lib/system/xrdp.service; vendor present: enabled)
```

```
Active: active (running) since Fri 2020-10-30 08:09:10 UTC; 4s ago
```

```
. . .
```

In this stage, you have to add the XRDP user to the group "ssl-cert" group:

```
$ sodu adduser xrdp ssl-cert
```

Restart the XRDP service for changes to take effect:

```
$ sodu systemctl restart xrdp
```

✅ Now, XRDP is successfully installed on your Debian System and is ready to use.

Conclusion

This article covered the RDP Debian Server. We explained how to install XRDP on a Debian system. Now, you can connect to your remote desktop and manage it through a graphic interface from Windows, Linux, or macOS.

Note: This is a PDF version of our web page, you can also read this article in the following address:

https://www.routerhosting.com/debian-rdp-server/

FAQ about Debian RDP Server:

- How can I access RDP in Debian?

  In the Windows Search bar, type "remote". Then, click on "Remote Desktop Connection". RDP client will be opened.

- Can you RDP from Linux (Debian or other distributions) to Windows?

  Yes. In order to connect from Linux OS to Windows computers and servers, you need to use an RDP client. this client can be FreeRDP, Remmina, Vinagre, TingerVNC, TeamViewer, RealVNC, NoMachine, KRDC, X2Go, or rdesktop.

- What port does XRDP use?

  On all interfaces, XRDP listens on port 3839/TCP by default. So make sure your firewall accepts connection to 3839/TCP from your location.

- Is XRDP encrypted?

  Yes. It supports all three encryption levels by using xrdp.inifile.