

HIG's Remote Desktop Services (RDS) on Linux

2015-03-16 Göran Sandström, Mikael Zewgren, Version 1.0

About RDS

Remote Desktop Services is a way of working on a computer (server) on the campus network regardless of your geographic location.

You are logged onto a server at the University of Gävle as if you would have been sitting by it. You see what is shown on the server's display on your own monitor as well as mouse movements and keyboard keystrokes on your local machine are sent to the server.

System Requirements

PC, Mac, iPad and Android

Remote Desktop Services works directly with Windows 8 and Windows 7 without any installations. With Microsoft's free downloadable application "Microsoft Remote Desktop" full RDS functionality is obtained also on Mac computers and tablets (iPad and Android).

Linux

Microsoft has not released any application for Remote Desktop for Linux, but there are several applications available with support for the Remote Desktop Protocol (RDP).

When connecting from the University of Gävles network on campus, most applications will work. We have tested, for example, Remmina, krdc and xfreerdp.

When connecting from a network outside the campus traffic must pass through a Remote Desktop Gateway. The support for this feature has long been flawed in Linux but is now included in the latest FreeRDP. The instructions below focuses on FreeRDP and Remmina in Ubuntu 14.10.

Using Linux and Microsoft Remote Desktop

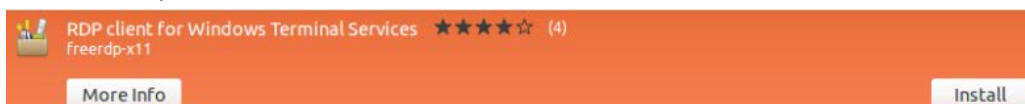
Installation

Install the latest version of Ubuntu, update and install FreeRDP/Remmina 1.2 or later. References:

<http://www.jonwitts.co.uk/archives/554>

<https://github.com/FreeRDP/Remmina/wiki>

- Install Ubuntu 14.10
- Install freerdp-x11



- Update with

```
sudo apt-get update
sudo apt-get dist-upgrade
```

- Reboot
- Install/update to the latest version of Remmina and FreeRDP through PPA

```
sudo apt-add-repository ppa:remmina-ppa-team/remmina-next
sudo apt-get update
sudo apt-get install remmina freerdp-x11 remmina-plugin-rdp
sudo apt-get upgrade
```

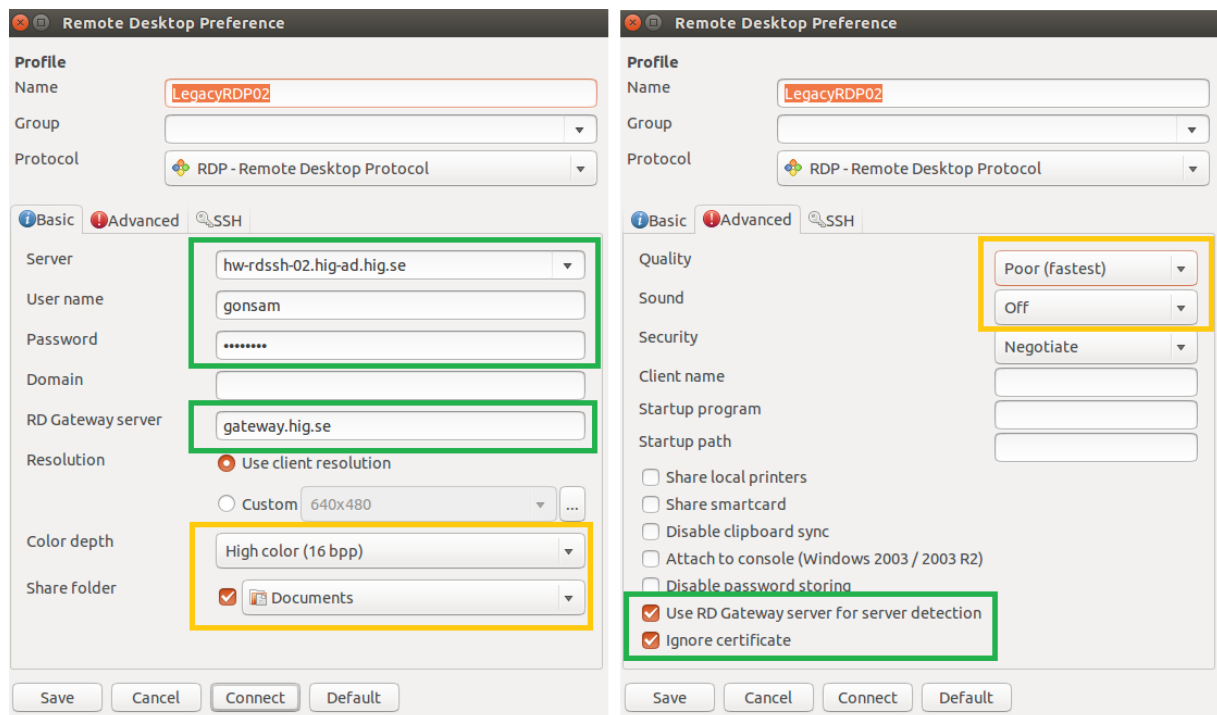
- Verify that the versions of FreeRDP and Remmina are minimum 1.2.0 as shown below:

```
xfreerdp --version
This is FreeRDP version 1.2.1-dev (git n/a)
```



Connect to RDS through GUI in Remmina

Skapa ny profil i Remmina med inställningar enligt bilden nedan:

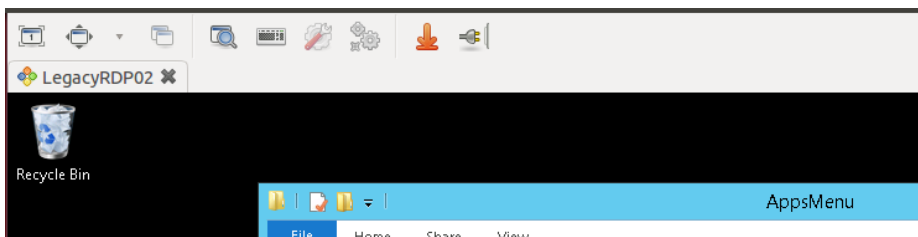


Yellow fields are optional settings for quality and extra functionality. Select Share folder to copy files between your local computer and the server. Read More under [Storage](#). You will of course replace gonsam in the above example with your username.

There are three servers in our farm. They are called hw-rdssh-02.hig-ad.hig.se, hw-rdssh-03.hig-ad.hig.se and hw-rdssh-04.hig-ad.hig.se and the RD Gateway is called gateway.hig.se

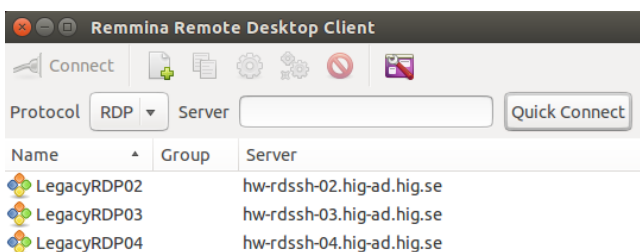
In addition there is a farm for graphics-intensive applications with the servers hw-rdssh-05 and hw-rdssh-06.

With Remmina you get a handy overview of the connection and can switch between full screen and windowed mode.



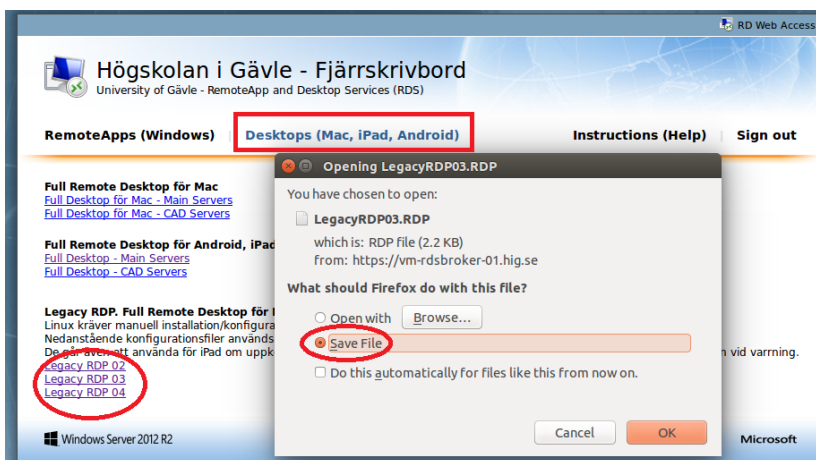
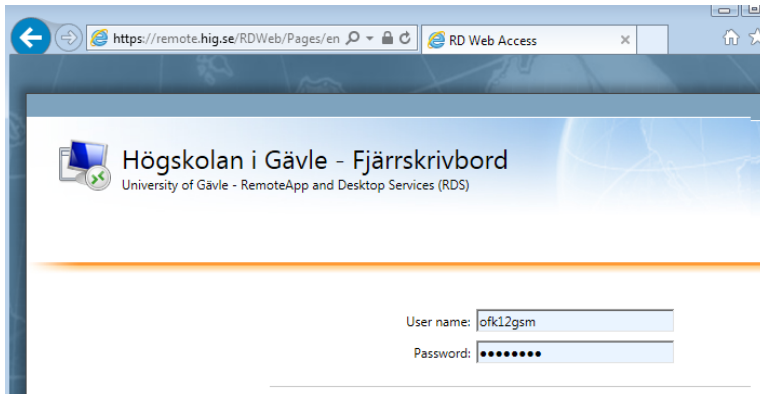
Failed Connection

If you are connecting from a network on campus Remmina handles redirects to one of the servers in the farm. However, they fail this at an external connection through the Remote Desktop Gateway in the current version of Remmina. One must therefore try to connect to all servers in the farm to see which one will be logged on without redirection. It will work against one of the three servers and fail against two of them. The easiest way is then to have three ready-made profiles for each of the servers:



Connect to RDS with FreeRDP from command line

Open Firefox and go to the website <http://remote.hig.se>. Log in with your username and password that you have at the University of Gävle.



Select the "Desktop (Mac, iPad, Android)" tab and download the three RDP files at the bottom of the page.

Go to the download folder and start FreeRDP with the RDP file, username and password

```
cd ~/Downloads
xfreerdp LegacyRDP02.RDP /u:<username> /p:<password> /cert-ignore
```

Alternative connection

You can also specify the connection manually. Example:

```
xfreerdp /v:hw-rdssh-02.hig-ad.hig.se /g:gateway.hig.se /u:<username>
/p:<password> /cert-ignore /size:1024x768 /sound:sys:alsa /gateway-usage-
method:detect +clipboard +homedrive
```

<https://github.com/awakecoding/FreeRDP-Manuals/blob/master/User/FreeRDP-User-Manual.markdown>

The three servers are called "hw-rdssh-02.hig-ad.hig.se", "hw-rdssh-03.hig-ad.hig.se" and "hw-rdssh-04.hig-ad.hig.se" and the Remote Desktop Gateway is called "gateway.hig.se".

Failed Connection

If you are connecting from a network on campus FreeRDP handles redirects to one of the farm servers. However, they fail this at an external connection through the Remote Desktop Gateway in the current version of FreeRDP. One must therefore try to connect to all servers in the farm to see which one will be logged on without redirection. It will work against one of the three servers and fail against two of them.

```
xfreerdp LegacyRDP02.RDP /u:gonsam /p:**** /cert-ignore
xfreerdp LegacyRDP03.RDP /u:gonsam /p:**** /cert-ignore
xfreerdp LegacyRDP04.RDP /u:gonsam /p:**** /cert-ignore
```

Network storage and access from the remote computer to your local disks

You can copy and open documents located in your local computer from the RDS server. This applies to both fixed disks and USB flash drives that are connected during the session. It is, however, lower performance from these devices. The primary way to work with data is to have it stored on HiGs network storage, such as your home directory H. See photo below.

We recommend that you copy your local documents to H before working with them. In this way, the application is not affected if your remote desktop connection is temporarily interrupted.

