VNC Access Instructions

How to use VNC to access the CSE EDA tools

Version 2018-09-07

2018: Lena Peterson, Andreas Torstensson

Chalmers University of Technology

1 Introduction

Starting in the fall of 2018 we will run all electronic-design automation (EDA) tools on a separate Linux server called `heffalump.ita.chalmers.se`. The computers in the two labs, 4220 and 4225, have been replaced and now only run Windows 10. These instructions assume that you are sitting at one of the lab computers. In case you are trying to access `heffalump` from another computer the exact steps may be a bit different.

VNC stands for virtual network computing. It is a platform-independent tool for screen sharing. You will run the entire EDA tools on `heffalump`; the only thing that will happen on the PC you are sitting at in the lab is that screen output is shown there and when you use the key board or mouse these interactions will be forwarded to `heffalump`.
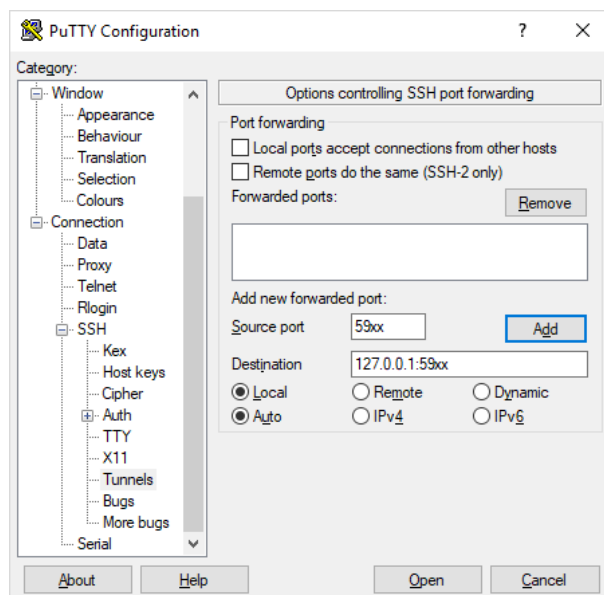
In VNC nomenclature the client software is run on your lab PC, the server software is run on `heffalump`. The client is allowed to control the server. The server sends rectangles from its frame buffer (that is the graphics) to the client and the client sends mouse clicks etc to the server.

VNC uses a special TCP port for setting up the control and for the sending of graphics and commands. The default (which we also use) is PORT 5900 + N, where N is a unique number that each user is assigned. You will receive your specific number and the related VNC password that goes with it from us. The instructions below assume that you have received this information.

2 Connecting to the `heffalump` server

Log into the PC in the lab with your CID and usual password.
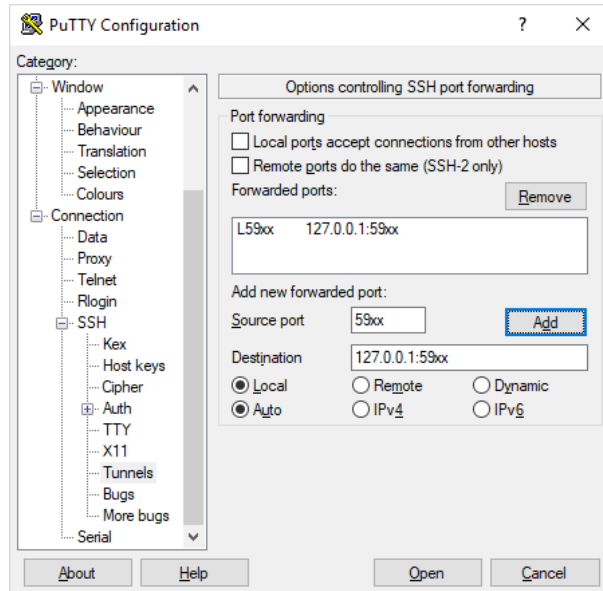
Start the PuTTy application on the PC.

In the PuTTY application open the configuration window.

Go to **Connection → SSH →Tunnels**.

Input Source port and Destination with your designated port (59xx in picture).
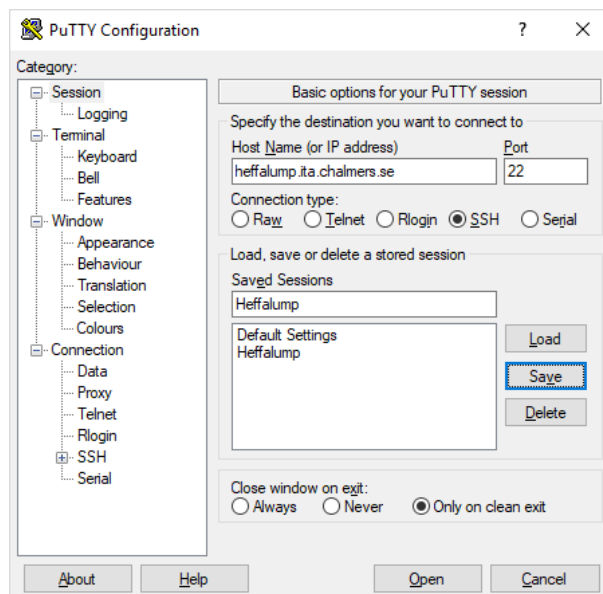
Click add.

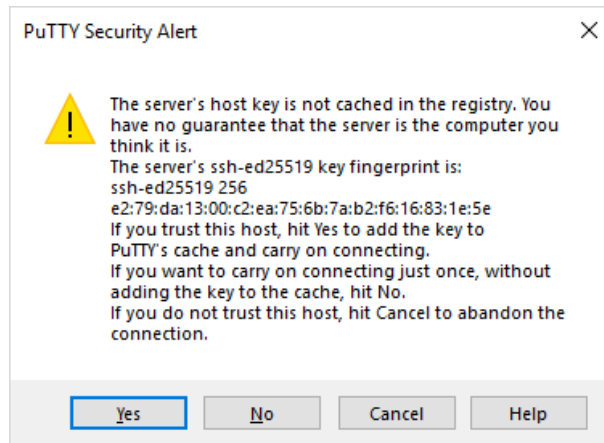After you have pressed add it should look like this:

Still in the configuration window, return to the session page; it is at the top so you may have to scroll up.

Add destination as shown below, give the session a name (here we called it Heffalump) and save it by pressing the Save button.

Saving it will allow you to load it again as long as you use the same computer.
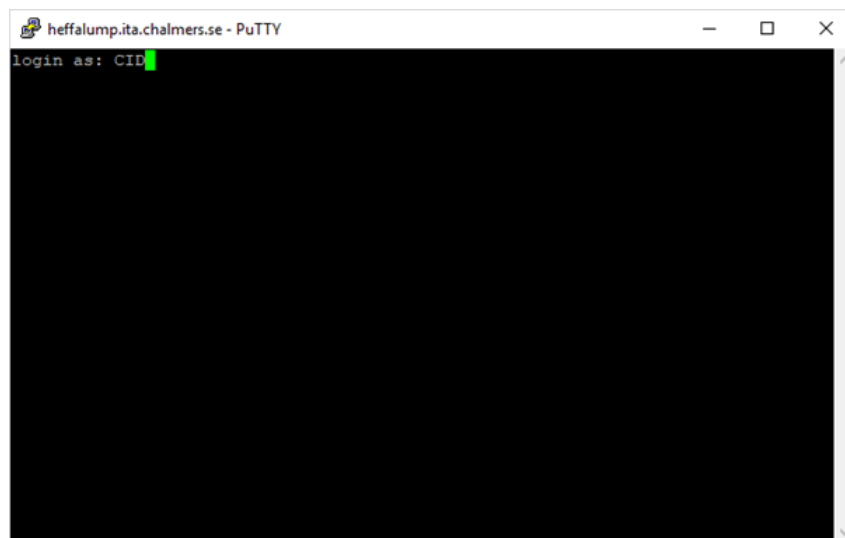

Thereafter you need to accept the server's key in the security alert by pressing "Yes" in the pop-up window that appears:
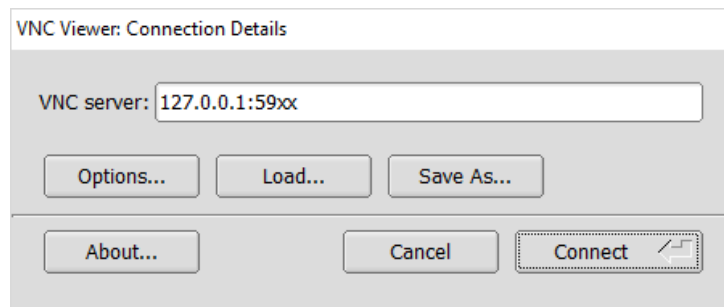
A login window from heffalump appears next.

Input your CID to login, use your CID password when prompted.

Leave this window open until you are done using VNC, it maintains your connection to the server. If you accidentally close this window, you will have to reopen PuTTy, load or reenter your settings and then open the connection again. Note that you do not have too worry much if this happens while you use any EDA tools, since the EDA tools will not shut down due to your losing the VNC connection.
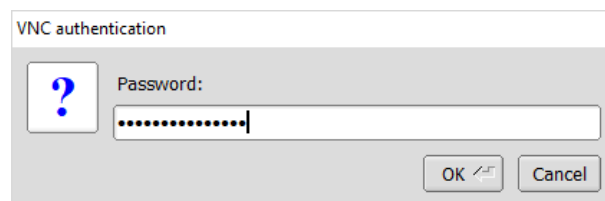

In Windows, start the "Tiger VNC Viewer" application.

In the "Tiger VNC Viewer" input the tunnel destination from PuTTy as shown below, using your designated port, and press "Connect".

Input your VNC password in the VNC password prompt that appears next. (This is the only place where the VNC password is used, other places use the CID password).

You should now arrive at a login screen, It should show your name as well as your CID. Use your CID password to log in.

When logged in you should now see the Linux desktop, from here you can access the Terminal and other applications. You can re-size the window if you want it larger or smaller. If you close this window you will have to repeat the steps starting with launching the "VNC Viewer".

If the resolution does not automatically update when you re-size the window, opening **system → display** on the top bar usually fixes it. If it does not, select an appropriate resolution (for example 1920 when maximized) and apply.