

# Connecting to archer.ttu.edu and Linux on Windows

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27-Jan-2017


# Access to archer and Linux environment

- Remote access to archer: direct access from TTU campus and through ssh-tunnel from outside.  
<https://techannounce.ttu.edu/Client/ViewMessage.aspx?MsgId=194705>
- Mac OSX needs
  - **Xquartz** for X11 window
- Windows need
  - **Xming** for X11 window and **Putty** for “terminal”
- For C++ coding and Linux environment
  - Mac: **Xcode**
  - Windows: **VMWare Workstation Player 12** and **CentOS7**
- All free software

# Mac

# Mac - XQuartz

[1] Google: "xquartz" <https://www.xquartz.org>

Download	Version	Released	Info
 <a href="#">XQuartz-2.7.9.dmg</a>	2.7.9	2016-05-05	For OS X 10.6.3 or later

(Additional: "xcode" from Apple store- not right now. It is large and takes time to download)

[2] Open a terminal window



Search for "terminal"

[2.1] at TTU, in a terminal window,  
ssh -X [yourname@archer.ttu.edu](#)

[2.2] outside TTU, use two terminal windows.  
ssh -L 2222:archer.ttu.edu:22 [eRaideName@ssh.ttu.edu](#)  
ssh -p 2222 -X -Y yourname@localhost

← for first connection (tunneling)  
← second, third, ... connection

# Windows

You need to install putty and xming on your laptop and configure putty for two types of connection- A) from inside and B) from outside of TTU.

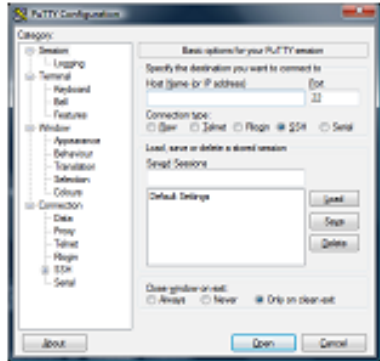
For daily use, 1) double-click Xming to start first and then 2) start ssh from putty.

For connection from outside TTU, you need two ssh connections: one for ssh tunneling and second for actual work.

# Windows – PuTTY & Xming

Google: “putty”

<http://www.putty.org>



## Download PuTTY

PuTTY is an SSH and telnet client, developed originally by Simon Tatham for the Windows platform. PuTTY is open source software that is available with source code and is developed and supported by a group of volunteers.

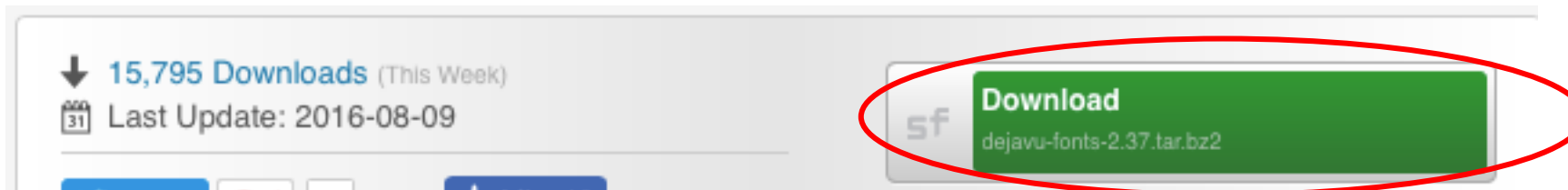
You can download PuTTY [here](#).

**A Windows MSI installer package for everything except PuTTYtel**

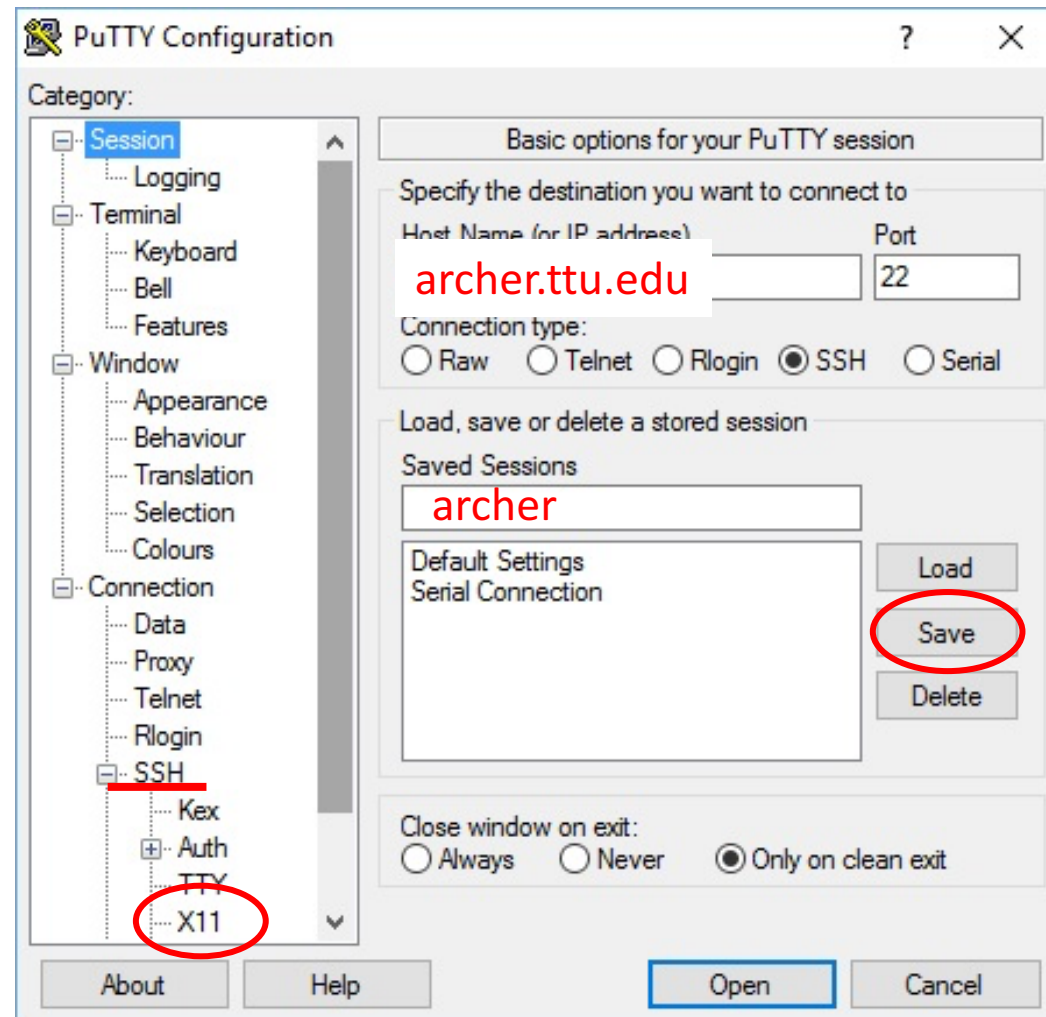
Installer: [putty-0.67-installer.msi](#) (or by FTP) (signature)

Google: “xming”

Download two software:  
Putty and Xming



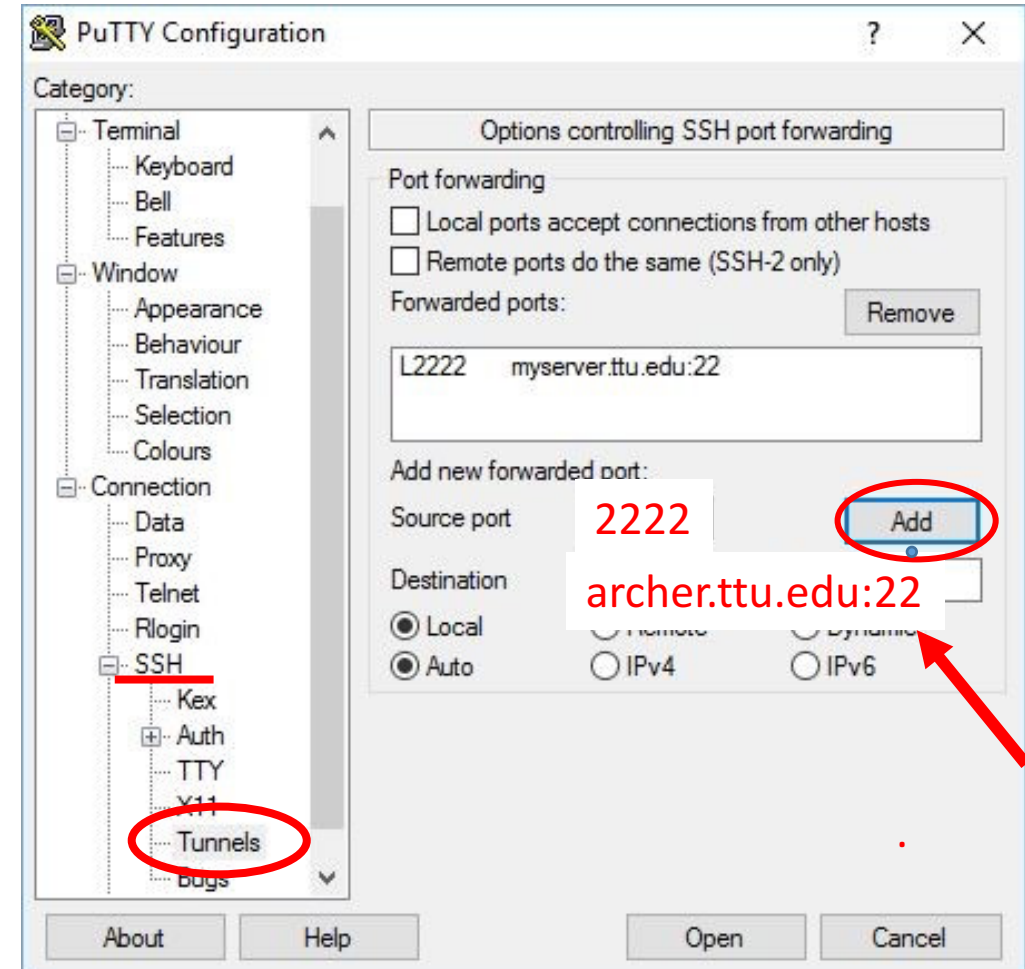
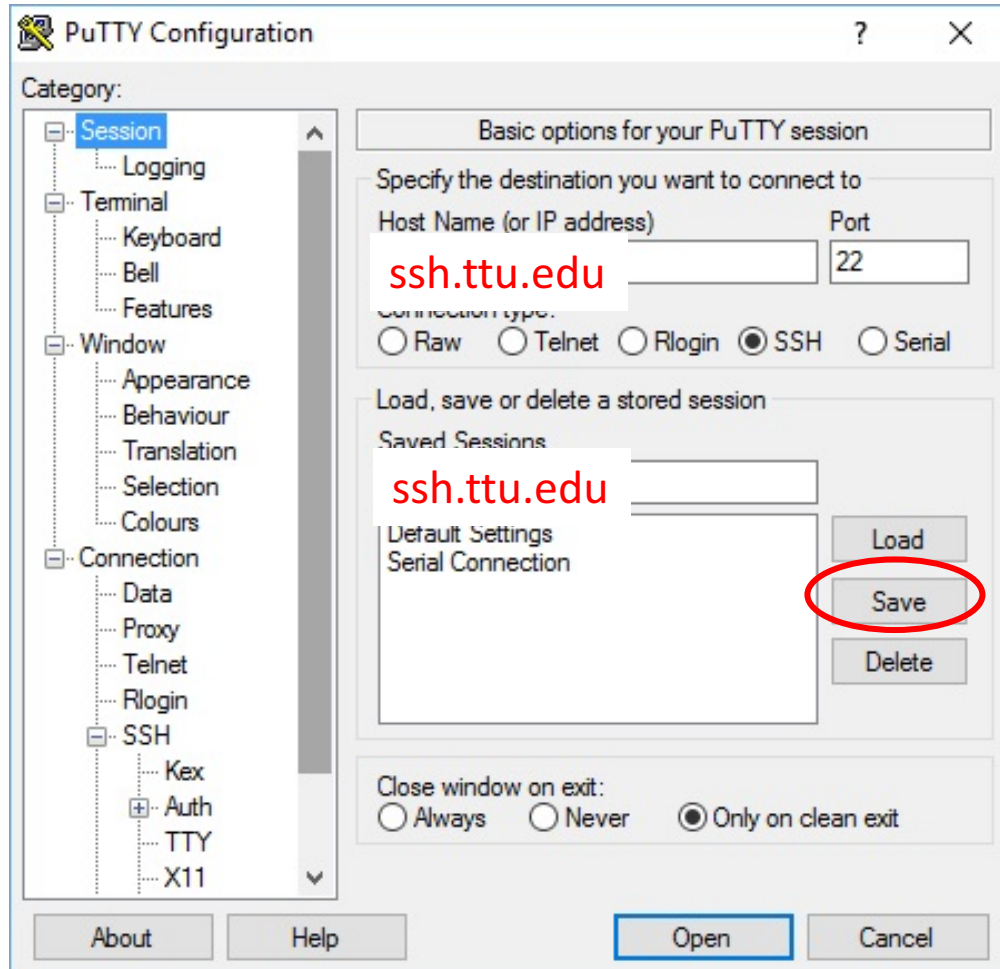
# [1] configuration for connection at TTU



- 1) Click “Enable X11 forwarding”
- 2) Xdisplay location: “localhost:0”

## [2] Windows – configuration for outside-TTU : Two step procedure.

### [2.1] Step-1: for ssh tunneling





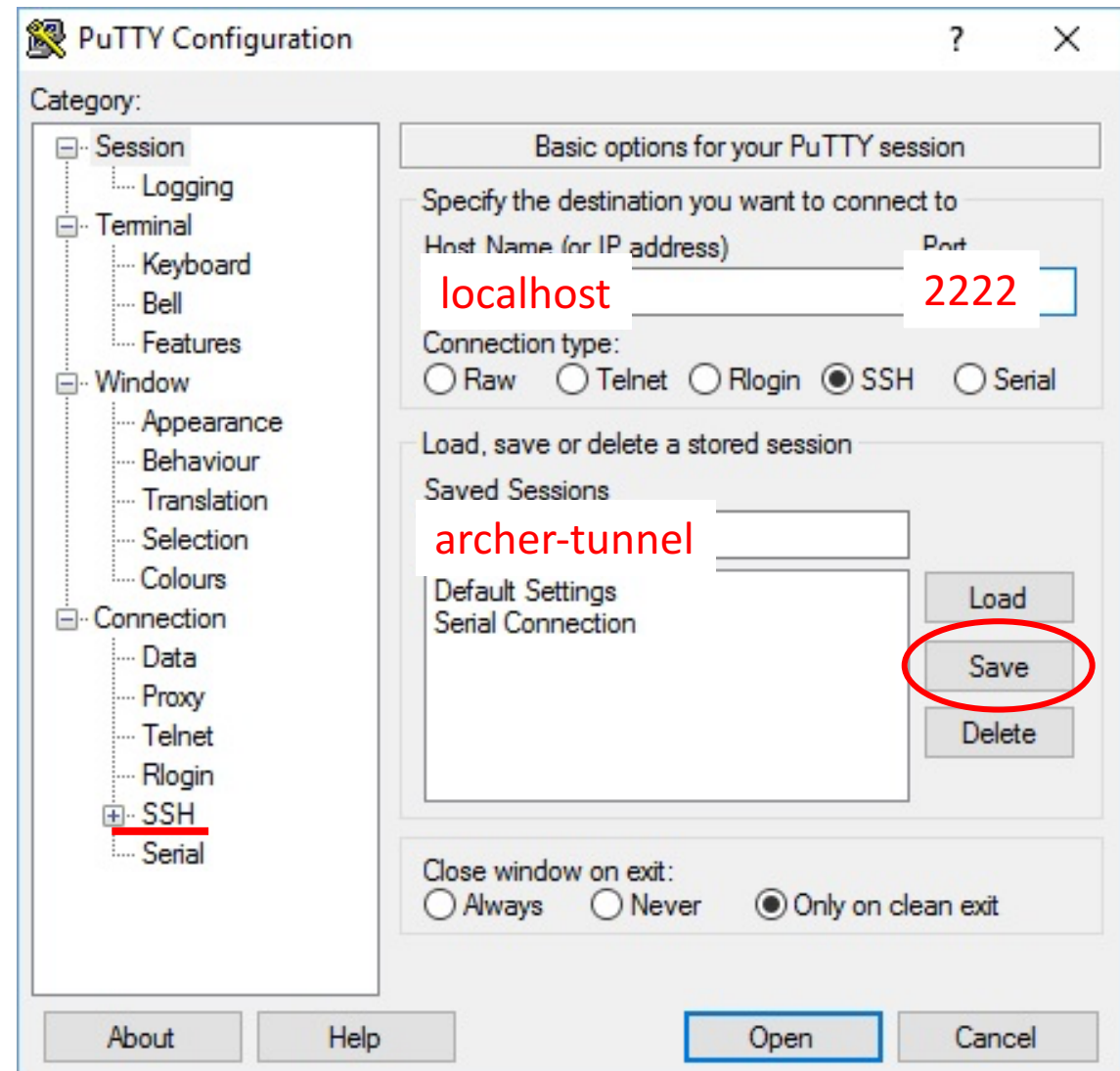
Windows- Outside TTU

[2.2] Step-2: Open terminal window(s)

In SSH → X11

- 1) Click “Enable X11 forwarding”
- 2) Xdisplay location: “localhost:0”

X11 software, e.g. gnuplot, xclock, works only from this terminal, not from the ssh-tunnel window at step-1.



# Linux on Windows

<http://www.vmware.com/products/player/playerpro-evaluation.html>



VMware Workstation 12.5 Player for Windows 64-bit  
✓ Download Now »

VM and CentOS work as one of Windows application programs, like PowerPoint and Word, in the Windows environment. You may start/stop or remove as you want.

To install, follow the following steps.

- 1) VM download
- 2) CentOS download
- 3) Install CentOS in VM

<https://www.centos.org/download/>



Get "DVD ISO" version

[https://kb.vmware.com/selfservice/microsites/search.do?language=en\\_US&cmd=displayKC&externalId=1002](https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1002)

CentOS installation