VNC over SSH

eNOTE: The X2Go Client is an easier alternative to VNC over SSH

This example is one method of setting up a secure VNC session tunneling over SSH. It assumes a VNC server has been installed on the remote system.

First SSH into the remote system configure the VNC session and start VNC server

- Run the command vncpasswd to create a VNC session password. It is separate than your login password, but can be set the same
    - The vncpasswd command can also change/reset an existing password
    - The vncpasswd command will create a ~/.vnc directory if it does not exist
    - If needed, edit the file ~/.vnc/xstartup
        - #!/bin/sh

          unset SESSION_MANAGER
          unset DBUS_SESSION_BUS_ADDRESS
          gnome-session &
    - Start vncserver

        -
            - Add user to /etc/tigervnc/vncserver.users
                - Start vncserver for user port: sudo systemctl start vncserver@:x
                - (optional) Set the vncserver to start on system (re)boot: sudo systemctl enable vncserver@:x
        -
            - Check if any VNC ports are in use using the command 'vncserver -list' . Any active VNC ports will be listed like :1 or :2. By default VNC runs on port in the range 590x
                - Each VNC session runs on a unique port so to start on port 5902 use the command:
                    - vncserver :2 -localhost no
                    - NOTE: if VNC session is already running on port :2, try a higher port number like :7 or :8
                - The VNC server can be stopped with the command:
                - vncserver -kill :2
                - The VNC session resolution can be set using the -geometry option. Stop vncserver before starting a new session.
                    - vncserver -kill :2
   - vncserver :2 -localhost -geometry 1280x1024

macOS

After the vncserver is running, on the Mac open the Teminal app in the Applications Utilities folder

Create a SSH tunnel to remote VNC session using the command:
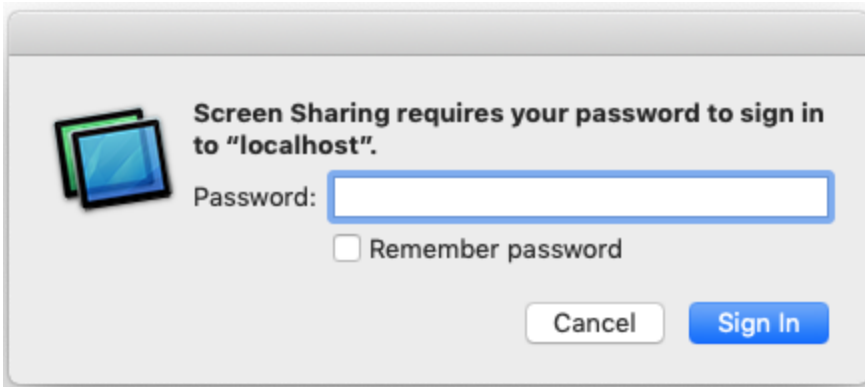
```
ssh -L 8888:127.0.0.1:5902 <username>@<servername>.ae.utexas.edu
```

- 8888 is the local port number
- 5902 is the remote VNC session port created above

Select "Connect to Server..." under the Go menu in the Finder. Enter the server name:
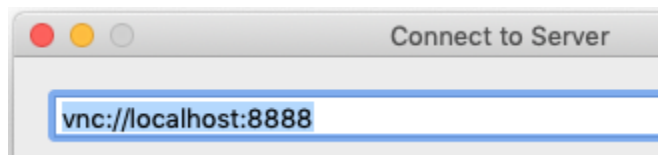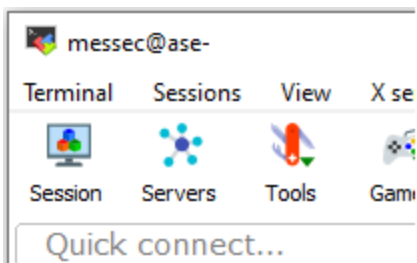

Enter your VNC session password

Windows

Download and unzip [MobaXterm Home Edition (portable edition)](#)
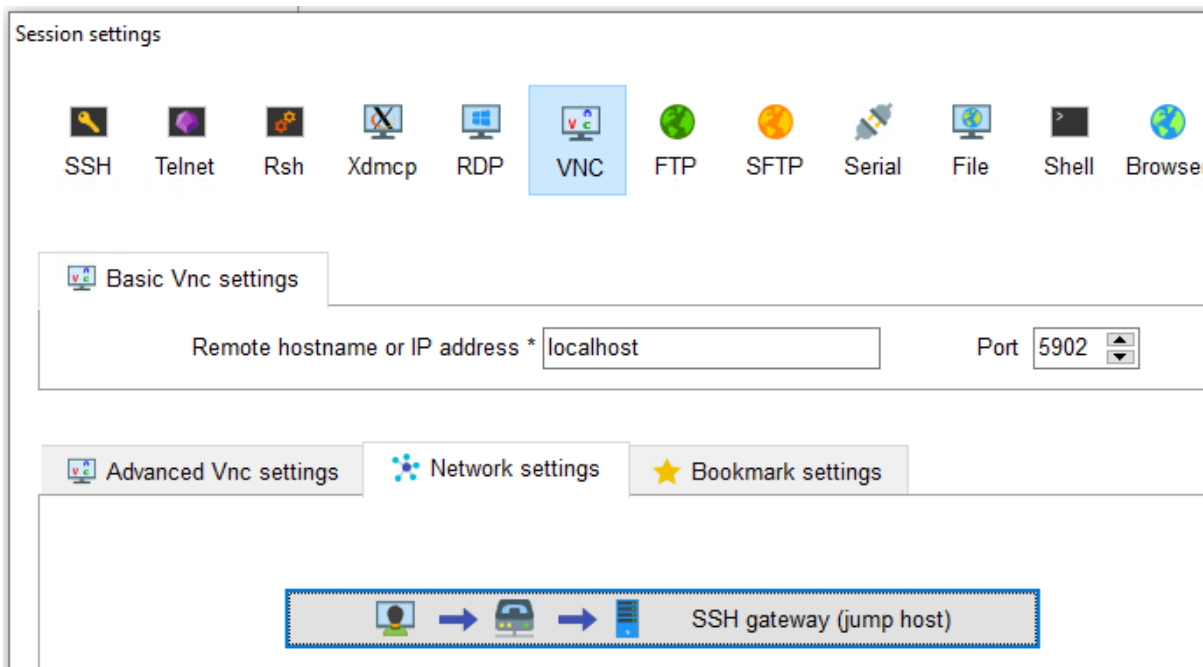
Open MobaXterm and start local terminal

After the vncserver is running, in MobaXterm select the Session icon to configure the VNC session

Select VNC and enter localhost in the remote hostname and select the port the vncserver was started on like 5902 in the set above

Select SSH gateway (jump host) under the Network settings

In the SSH jump host enter the remote system name and your logon name

MobaXterm jump hosts configuration ✕

Define one or several SSH jump hosts

(Jump through one or several SSH servers in order to reach your end-server)

Gateway host	Username	Port	☐ Use SSH key
ase⬛⬛⬛⬛⬛.ae.utexas.	⬛⬛⬛⬛	22 ⬆⬇	

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Select the Bookmark settings and change the session name from localhost to the remote system name

Session settings

SSH   Telnet   Rsh   Xdmcp   RDP   **VNC**   FTP   SFTP   Serial   File   Shell   Brow

Basic Vnc settings

Remote hostname or IP address * `localhost`   Port `5902` ⬆⬇

Advanced Vnc settings   **Network settings**   ⭐ **Bookmark settings**

Session name: `ase⬛⬛⬛⬛⬛`   ☑ Lock terminal title   Session Icon 🖥️

When you connect (execute) the session, it will first ask for your remote system password, then ask for your vncpasswd

MobaXterm

Terminal Sessions View X server Tools Games Settings

Session Servers Tools Games Sessions View S

Quick connect...

3. mess

User sessions

ase

Rename session
Edit session
Delete session
Duplicate session
Save session to file

Create a desktop shortcut

Execute

Sessions

Tools

MobaXterm ✕

Please enter your password for ▓▓▓▓▓ on ase▓▓▓▓▓▓▓▓ae.utexas.edu

[   ]

☐ Show password

✓ OK   ✗ Cancel

MobaXterm ✕

Please enter your password for localhost

[••••••••]

☐ Show password

✓ OK   ✗ Cancel