

## Using RealVNC on the EECAD Linux computers for Online, In-Person(Sync) and Hybrid classes.

These EECAD lab servers can be accessed from the ASU Campus wifi and from off-campus. (Please make sure the ASU VPN client and any other VPN software has been **turned off**)

**eecad100.eas.asu.edu (US locations only)**  
**eecad101.eas.asu.edu (US locations only)**  
**eecad102.eas.asu.edu (International and US access)**  
**eecad103.eas.asu.edu (International and US access)**  
**eecad104.eas.asu.edu (International and US access)**

An additional 56 EECAD lab computers are available for remote access. (US locations only)

If any of these are computers are not available please try the next number.

**eecad1.eas.asu.edu → eecad56.eas.asu.edu (US locations only)**

(1) The **ASU VPN client is not needed** to connect to these computers. Please turn off the VPN client and any other VPN software you may have running

(2) Please use the RealVNC viewer to connect to the EECAD servers as described below, VNC is required for programs like HFSS that use 3-D graphics.

(3) Download RealVNC viewer for your type of computer:

**<https://www.realvnc.com/en/connect/download/vnc/>**

Run the RealVNC client installer as needed for your type PC or mobile device.

(4) SSH to one of the EECAD computers using your ASURITE username, for example - eecad100.eas.asu.edu and start the VNC server by typing "**vncserver**" in a terminal window.

You may use putty or similar SSH client on windows

**<https://www.putty.org>**

On a Mac or Linux PC you can SSH directly from a terminal window:

**ssh -Y bobsmith@eecad100.eas.asu.edu**

When you are connected to eecad100 in the SSH terminal then type **vncserver** in the SSH command prompt.

**[bobsmith@eecad100 ~]\$ vncserver**

You will see the following output in the SSH window:

-----  
**[bobsmith@eecad100 ~]\$ vncserver**  
VNC(R) Server 6.6.0 (r41938) x64 (Sep 19 2019 16:09:45)  
Copyright (C) 2002-2019 RealVNC Ltd.

OS: Red Hat Enterprise Linux Workstation 7.7, Linux 3.10.0, amd64

Running applications in /afs/asu.edu/users/s//a/slapora/.vnc/xstartup

VNC Server catchphrase: "Point oregano empire. Melon satire game."  
signature: 7e-95-f2-8a-5b-f4-91-d7

Log file is /afs/asu.edu/users/s//a/slapora/.vnc/eecad105.eas.asu.edu:1.log

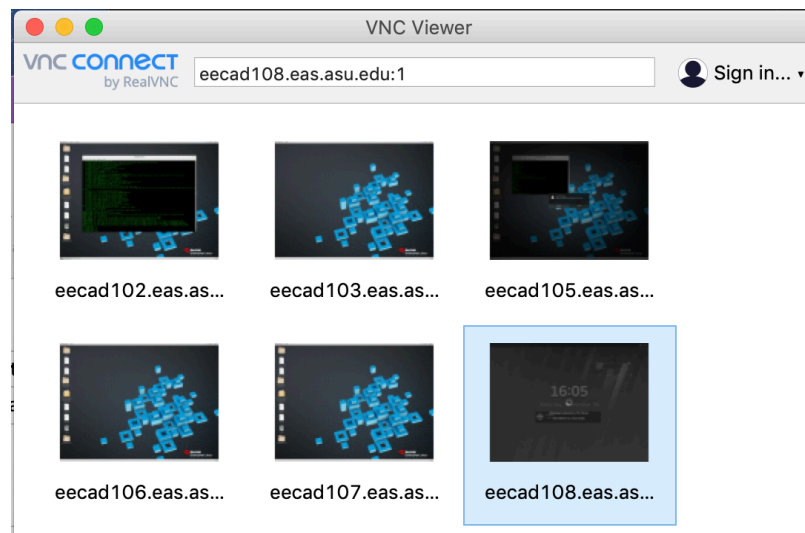
New desktop is **eecad100.eas.asu.edu:1** (149.169.31.7:1)

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(5) Back on your PC start the RealVNC Viewer.

Enter the hostname and port number seen above **eecad100.eas.asu.edu:1** when you started the vncserver on eecad100 (or other) server.

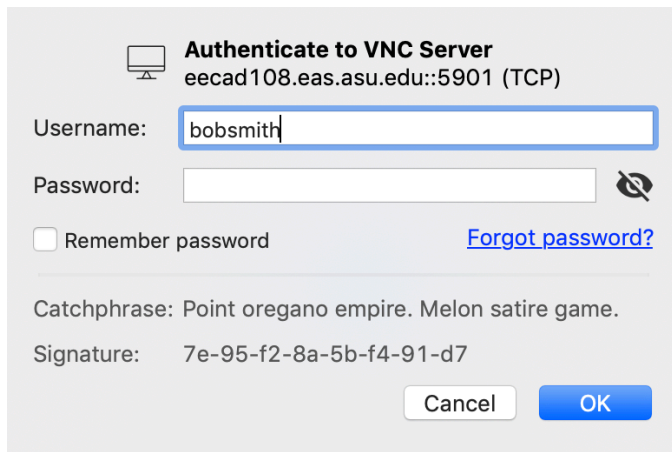
The port number is the number at the end of the hostname after the colon :1 is this example



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NOTE: Keep track of the desktop address and port number shown on the last line of output, for this example we are using the desktop and port -- **eecad100.eas.asu.edu:1**

Enter your ASURITE username and password in the Authentication window:

A VNC authentication dialog box titled "Authenticate to VNC Server" with the address "eecad108.eas.asu.edu::5901 (TCP)". It contains fields for "Username:" (filled with "bobsmith") and "Password:". Below the password field is a checkbox for "Remember password" and a link for "Forgot password?". A "Catchphrase:" field displays "Point oregano empire. Melon satire game." and a "Signature:" field displays "7e-95-f2-8a-5b-f4-91-d7". At the bottom are "Cancel" and "OK" buttons.

**Authenticate to VNC Server**  
eecad108.eas.asu.edu::5901 (TCP)

Username: bobsmith

Password:

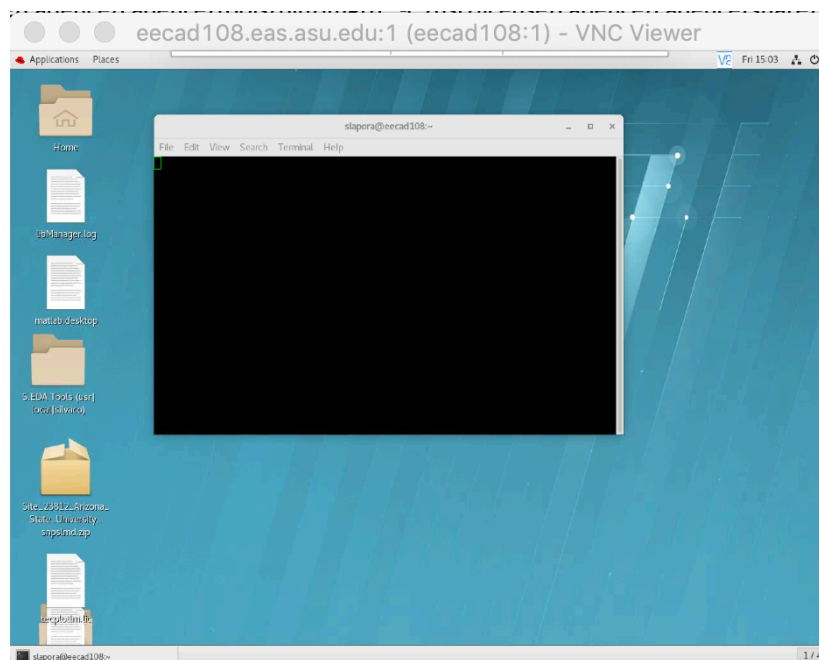
☐ Remember password [Forgot password?](#)

Catchphrase: Point oregano empire. Melon satire game.

Signature: 7e-95-f2-8a-5b-f4-91-d7

Cancel OK

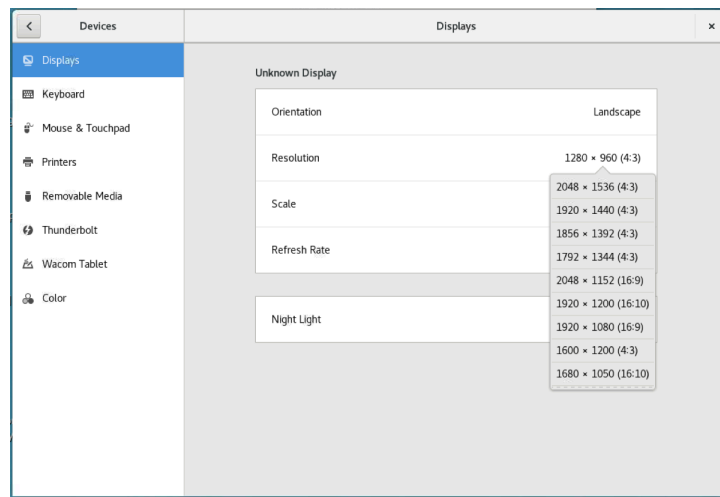
(6) When you successfully connect you will see the VNC desktop view of the EECAD server you are connected to.



The VNC server will continue to run with your desktop and application still running even if you disconnect, you can reconnect to the same desktop later using the VNC server address in your ReaVNC viewer.

You can logout from the Redhat desktop from the menu in the upper right corner and your VNCserver session will logout and shutdown your VNC server session. Otherwise just exit the VNC window if you would like to re-connect to you VNCserver session later to check on a long simulation

If you would like to adjust the screen resolution open the settings app in the upper right corner and choose Devices -> display -> resolution



(7) There are limited license seats for VNC Server on each EECAD server so please use the logout command when you are finished or

if you accidentally have more than one vncserver session running check and kill as shown below:

To check for running VNC desktops on the current EECAD computer - type at the SSH shell prompt:

```
[bobsmith@eecad100 ~]$ vnclicense -check
```

```
Licensed desktops:: 8
```

```
Running desktops: 6
```

```
bobsmith: 1
```

```
johnsmith: 1
```

```
janesmith: 1
```

```
jillsmith: 1
```

```
jillsmith: 1
```

To kill a desktop session, enter the command below replacing the :1 with the current port number you are using. Most likely :1 through :60

```
[bobsmith@eecad100 ~]$ vncserver -kill :1
```