

Experiment 5

Aim of the experiment: To perform Desktop Virtualization using VNC.

Requirements:

- VM Ware Workstation
- VNC Viewer
- VNC Server

System Configuration:

- Windows Operating System
- RAM 8 GB
- Storage Capacity 1 TB

Theory:

VNC works on client/server model -

- **VNC Viewer (or client):** It is installed on the local computer and connects to the **server** component, which must be installed on the remote computer. The **server** transmits a duplicate of the remote computer's display screen to the **viewer**.
- **VNC Server (or server):** VNC uses the Remote Frame Buffer (RFB) protocol to transmit screen pixel data from one computer to another over a network and send control events in return. VNC Viewer gathers your input (mouse, keyboard, or touch) and sends it for VNC Server to inject and actually achieve remote control.

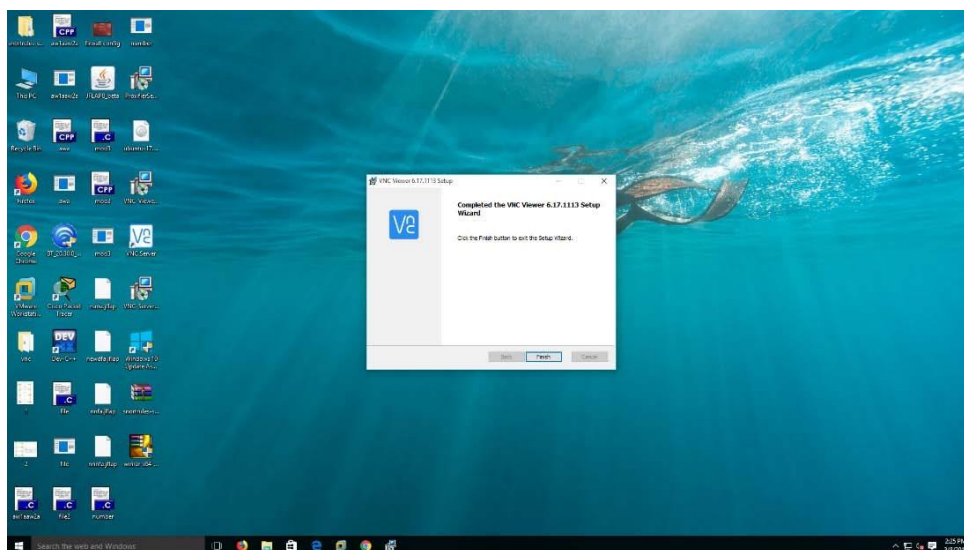
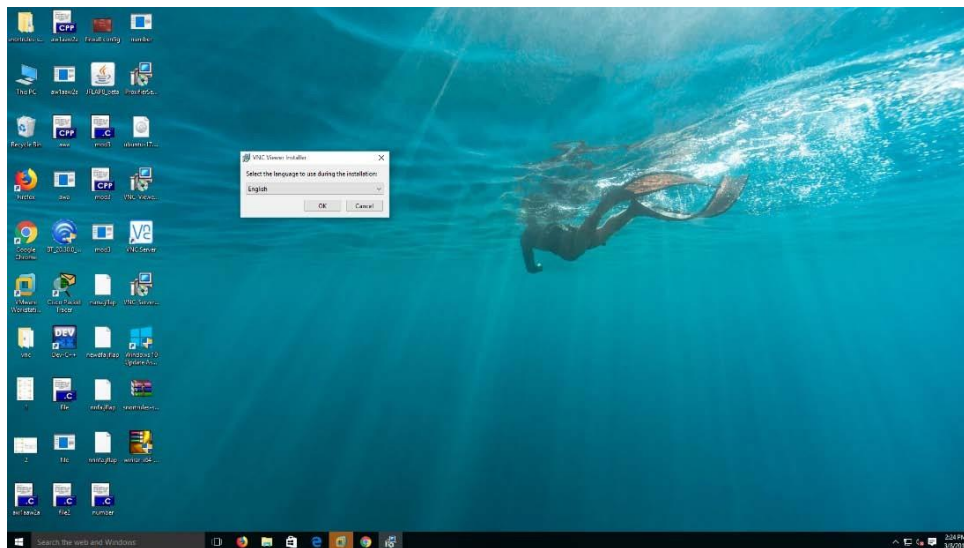
Desktop Virtualization: Desktop virtualization is a virtualization technology that separates an individual's PC applications from his or her desktop. Virtualized desktops are generally hosted on a remote central server, rather than the hard drive of the personal computer.

Steps for Desktop Virtualization:

Step 1: Download VNC Server and VNC Viewer from the official website www.realvnc.com. And then install it in your **host machine** as well as **virtual machine**.

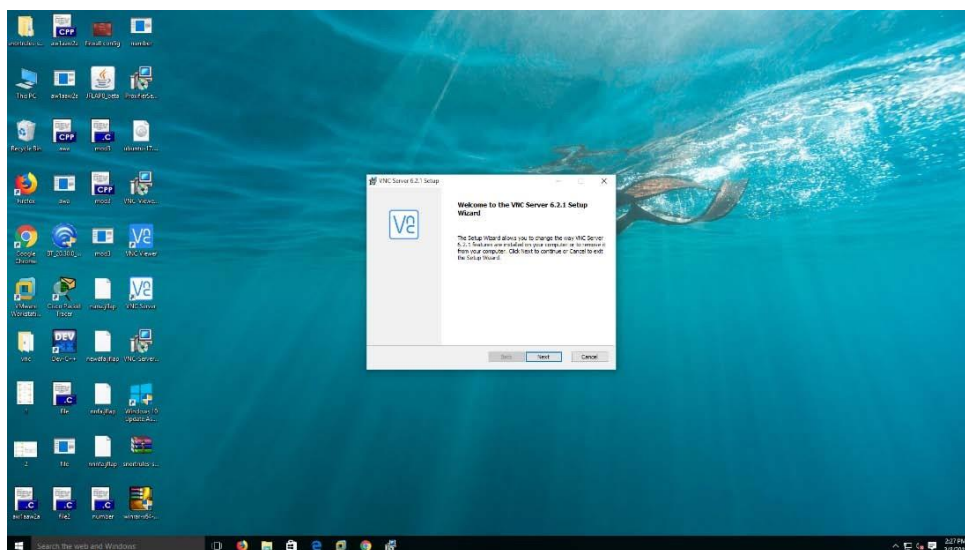
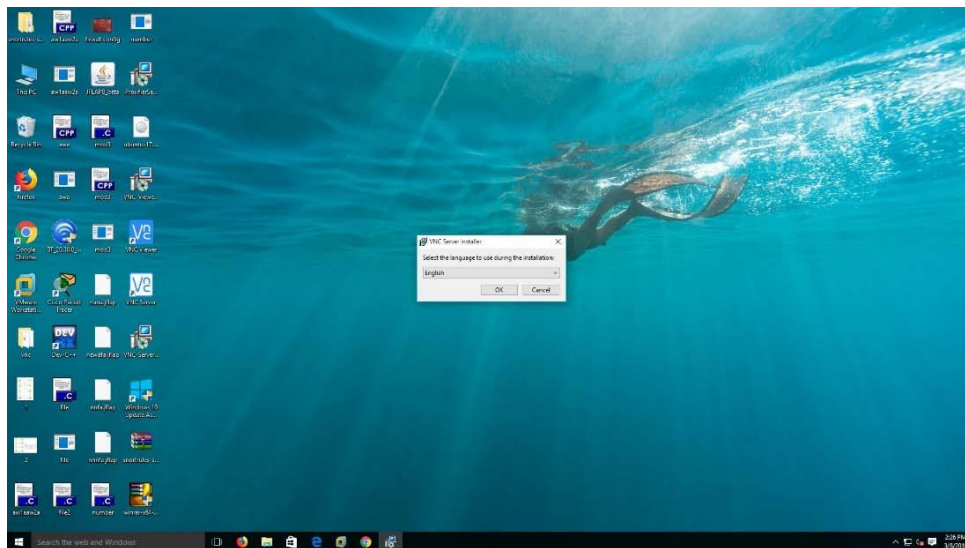
Installing VNC Viewer

- Open the VNC Viewer installation file and complete the installation wizards to successfully install VNC Viewer.

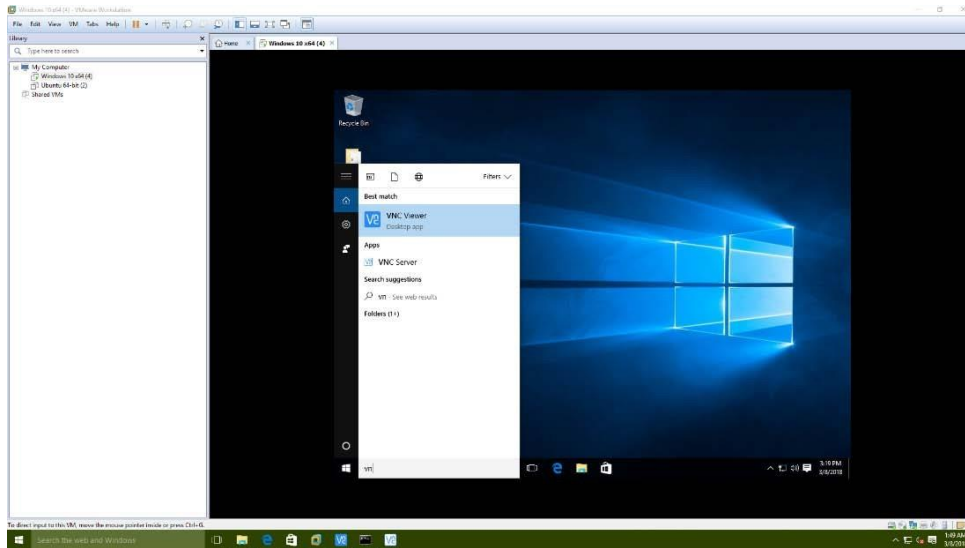


Installing VNC Server

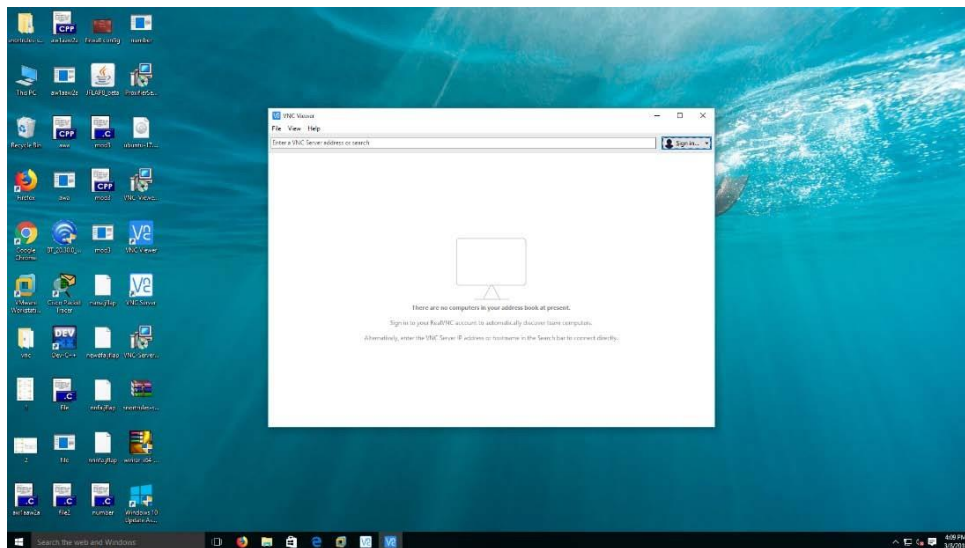
- Open the VNC Server installation file and complete the installation wizards to successfully install VNC Server.



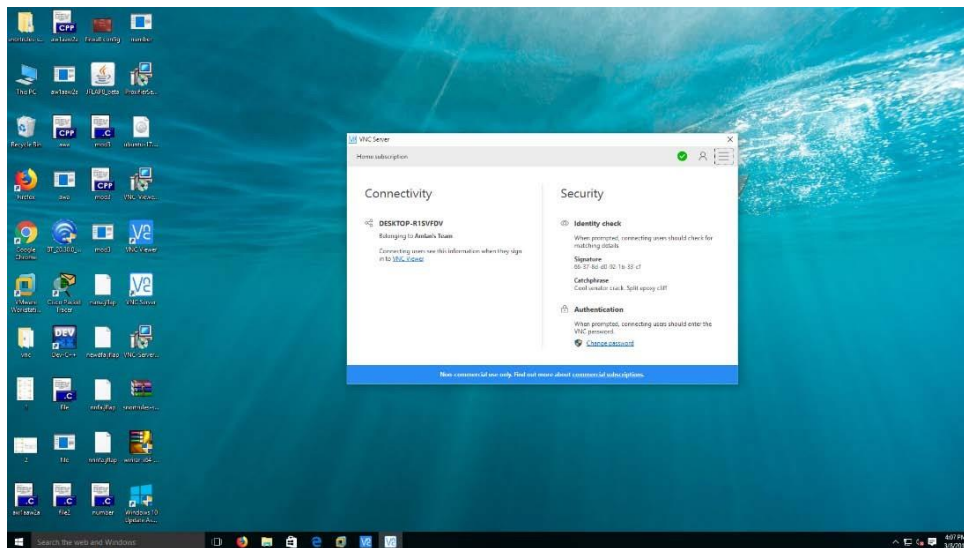
Step 2: Open VNC Server and VNC Viewer to see if it has any account already which is created. If not, then it's ok to use, but if it has then we have to remove those accounts and create new accounts.



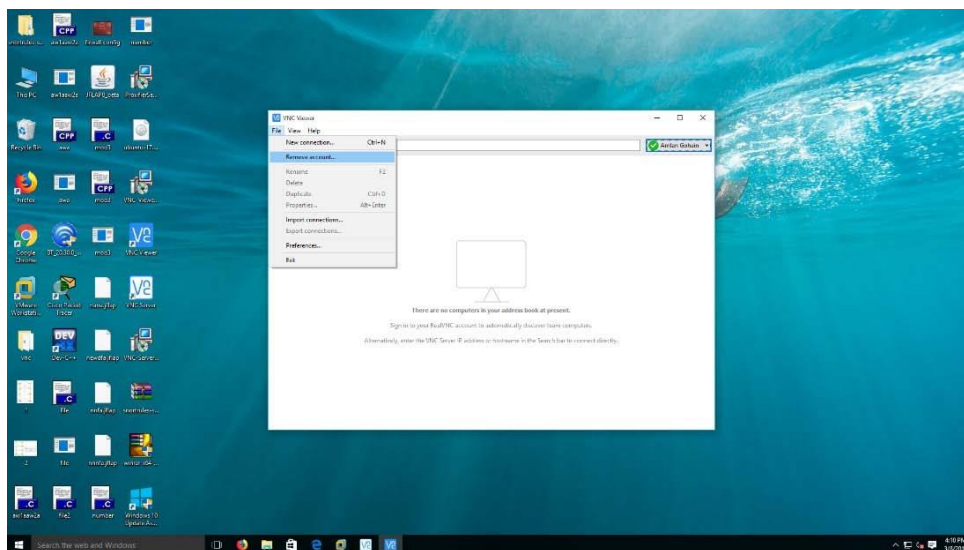
- **VNC Viewer**



- **VNC Server**



Step 3: If an account already exists in VNC Viewer then click **files** and click **remove account**.



Step 4: Click on the **login** option that will appear at the top of the panel. The webpage of **realvnc** will appear. Now you can create your account here.

- Firstly, enter your **e-mail address** and click **I'm not a robot** then click **next**.

Sign up or sign in

Please enter your email

We'll check to see if we already know you.

Email address

[Privacy policy](#)

☐ I'm not a robot

[If you can't see our reCAPTCHA above, please contact support.](#)

[NEXT](#)

ACCOUNT BENEFITS

Automatic discovery
Automatically discover, seamlessly connect to, and centrally manage your remote computers with VNC Connect installed.

Address book sharing
Invite people you trust in to your team to securely share remote access.

Backup and sync
Sign in to VNC Viewer on all the devices you connect from to automatically backup and sync your address book.

Remote sign out
Sign out from VNC Viewer on lost or stolen devices to help prevent unauthorized remote access.

- Fill up the form with the required details and then click **submit**.

officialsaurav97@gmail.com [Change email](#)

Choose a password

Minimum 8 characters. Please make your password difficult to guess, and do not re-use a password from another online service.

First name Last name

I plan to use VNC Connect for:

☐ business use ☐ personal use

Phone number

Optional. Please include your country code, e.g. +1-800-555-0199 for the US.

Country

☐ I've read and accept the [T&Cs](#)

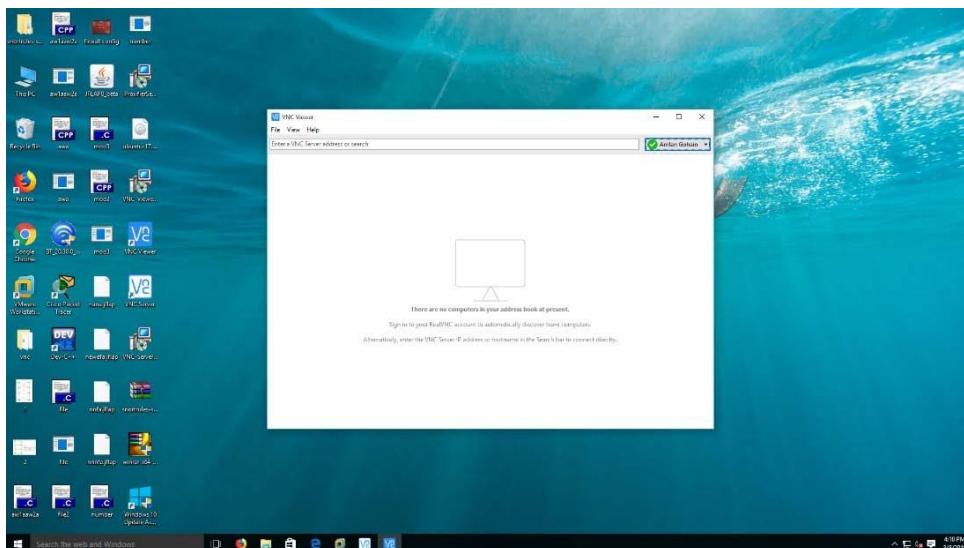
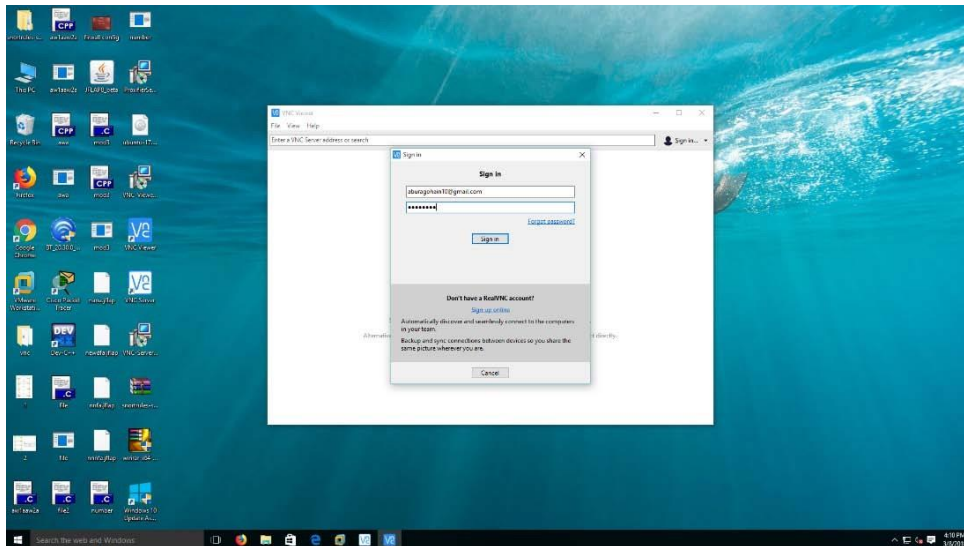
☐ Keep me up-to-date with RealVNC® news

We'll send you a verification email. Please follow the instructions there to get full access to your account.

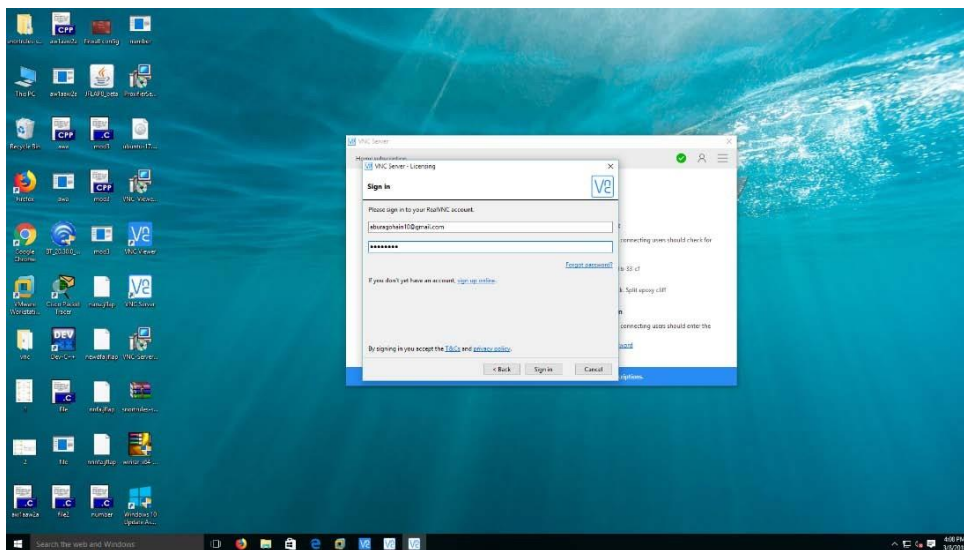
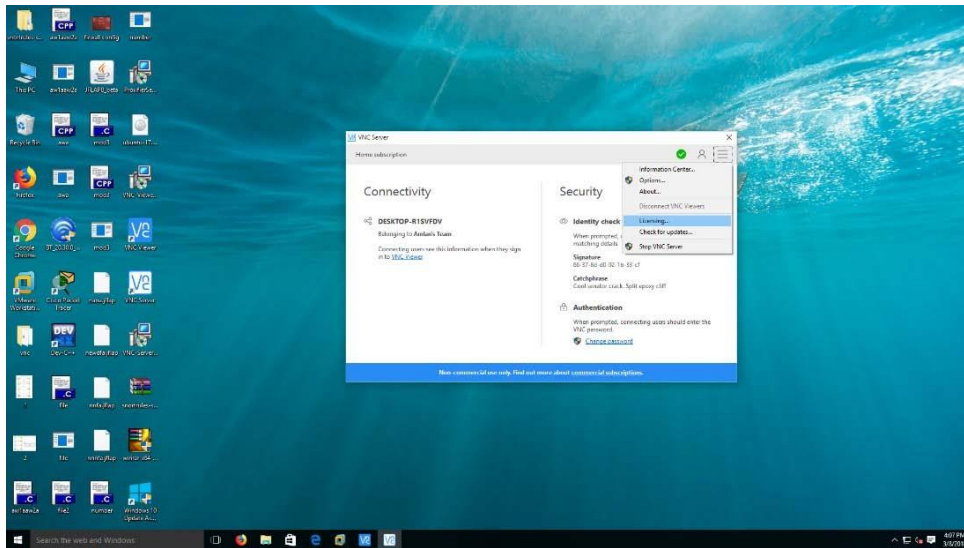
[SIGN UP](#)

Step 5: Now log in with your account in both **VNC Server** and **Viewer**.

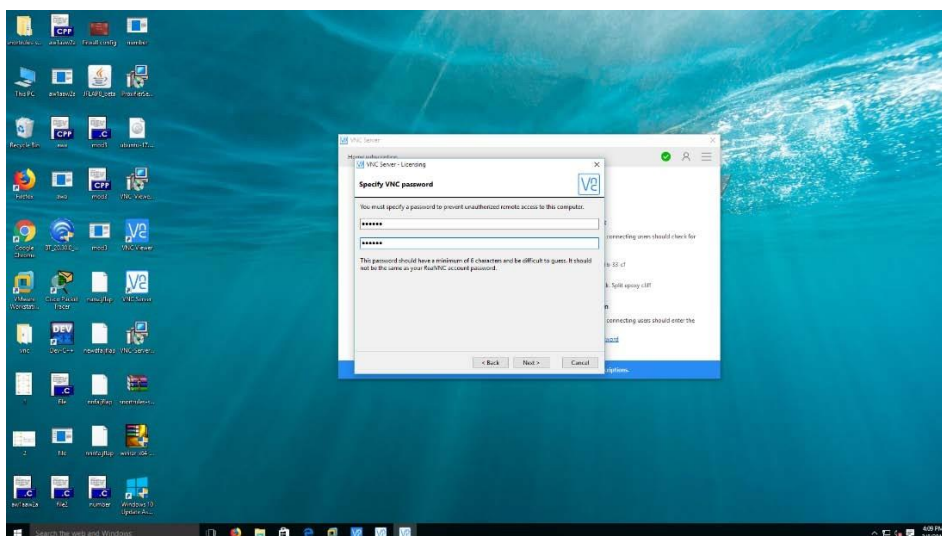
- Logging in to the **VNC Viewer**.

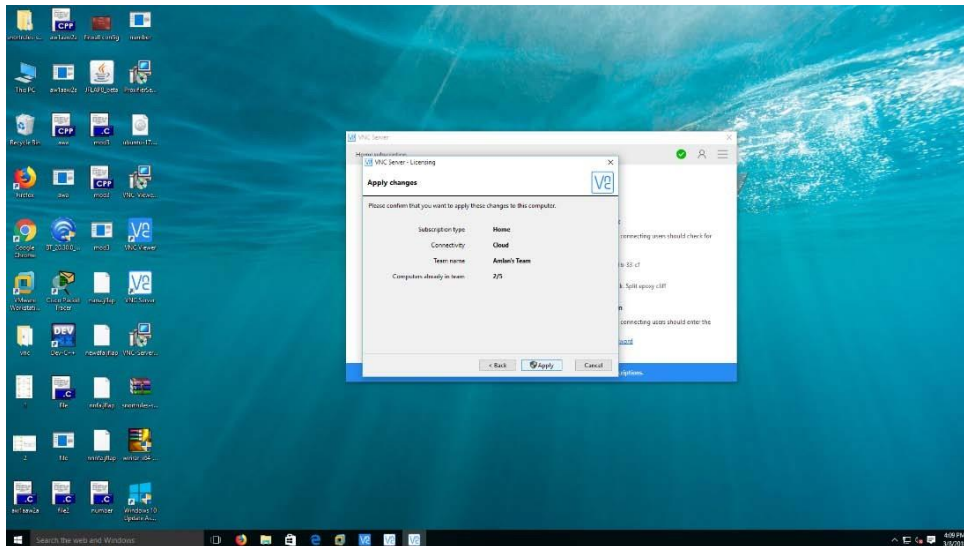


- Similarly logging in to the **VNC Server**.
NOTE -If an account is already present, then click the **option** box. Click **licensing**, a **licensing wizard** will appear. Click **next** and then **sign in**.



- After **signing in** give a **password** for the **VNC Server** and **apply** the changes.

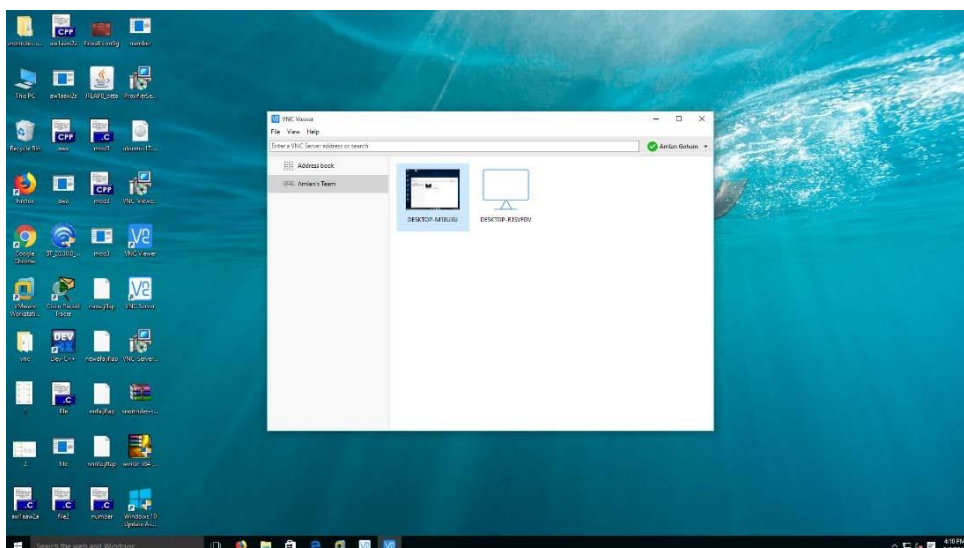




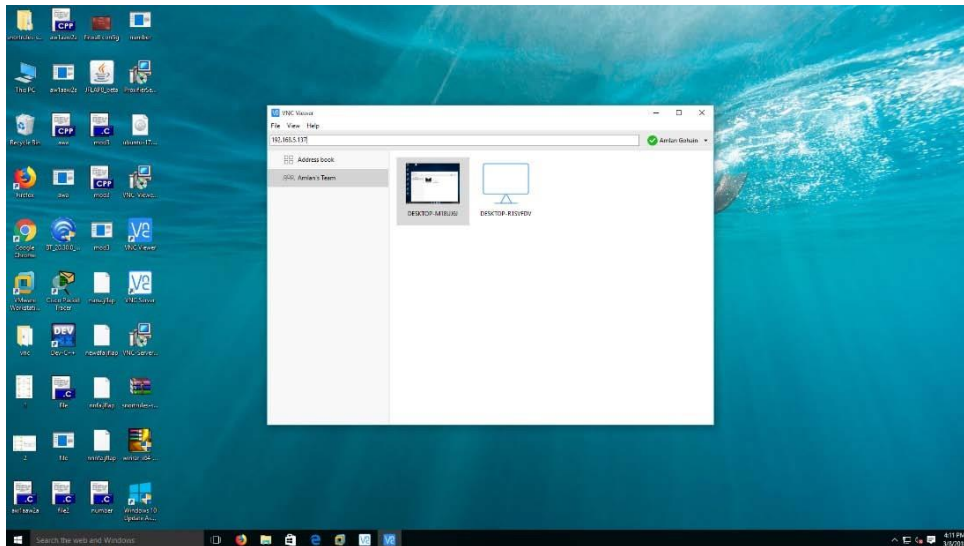
Step 6: Now we are ready to connect our VNC Viewer to other VNC Servers. Also we can share our VNC Server with other.

Step 6.1: Connecting our VNC Viewer of your machine with VNC Server of some other system.

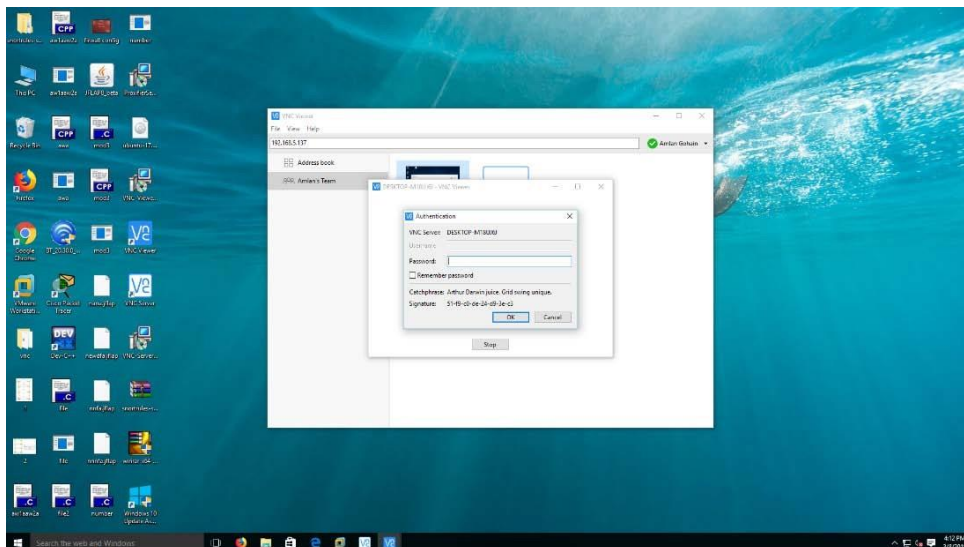
- Open **VNC Server** in any **other machine**. And, then open **VNC Viewer** in your **machine**. Now **sign in** in both **VNC Server** and **VNC Viewer** with your account.



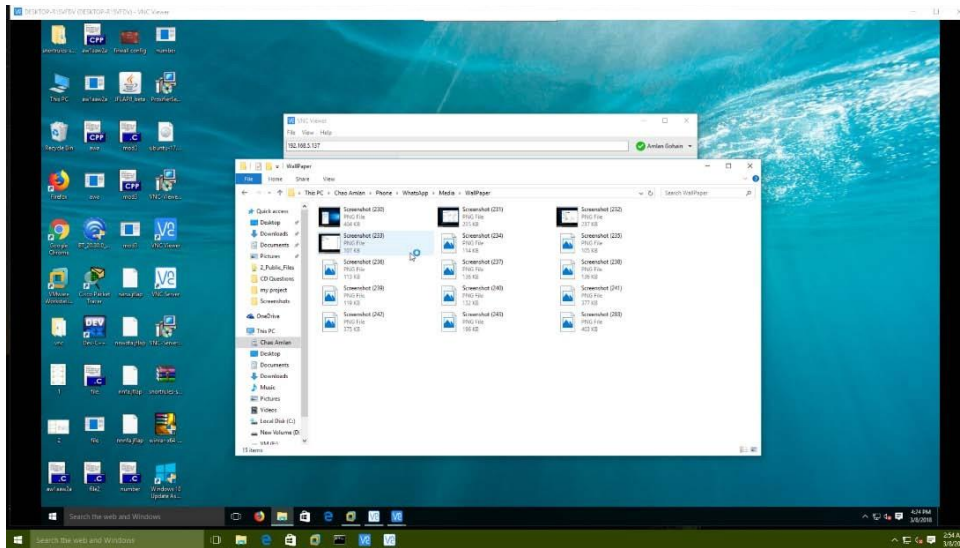
- Now enter the **IP address** of the machine in which you have opened the **VNC Server** in your **VNC Viewer**. And press **enter**.



- **Authentication Wizard** will appear, enter the **password** of the server to which you are trying to connect and press **OK**.

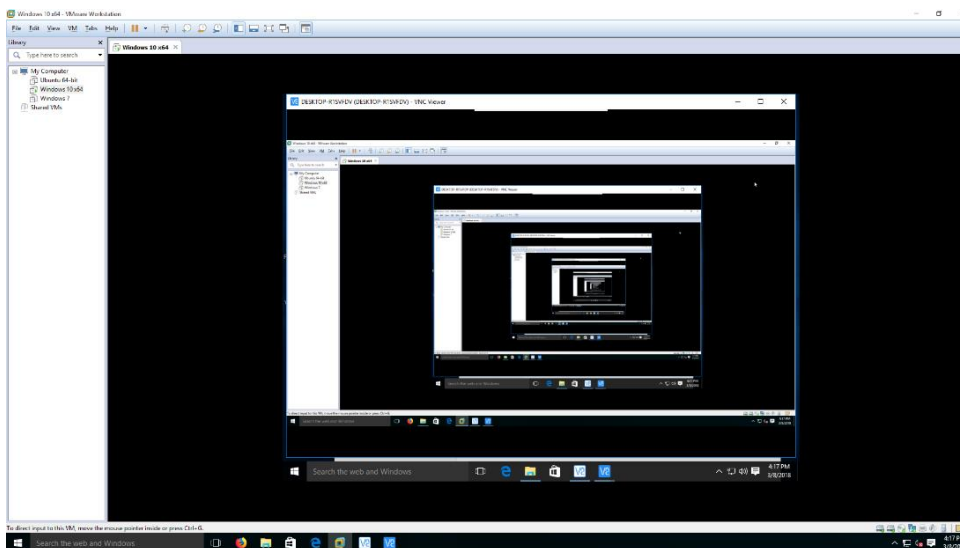


- Now as you have logged in you can explore the other machine.



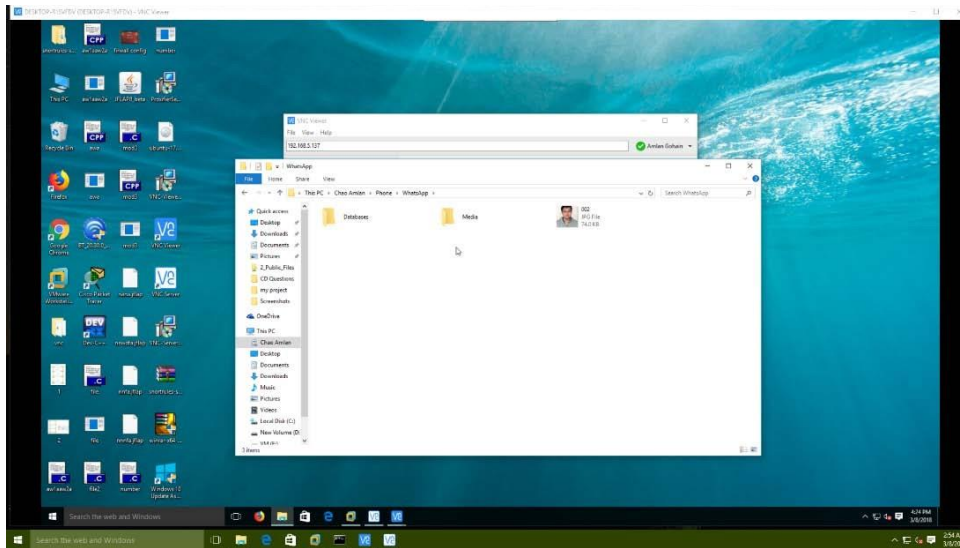
Step 6.2: Connecting our VNC Viewer of your host OS with VNC Server of guest OS.

- Open the **VNC Viewer** and **VNC Server** in your **host OS** and **guest OS** respectively. Then sign in with your account in both **VNC Viewer** and **VNC Server**. And then follow the same as in **step 6.1**.



Step 6.3: Connecting our VNC Viewer of your guest OS with VNC Server of host OS.

- Open the **VNC Viewer** and **Server** in your **guest OS** and **host OS** respectively. Then sign in with your account in both **VNC Viewer** and **Server** and follow the same as in **step 6.1** and **step 6.2**.



Step 6.4: Connecting VNC Viewer with VNC Server of two different host OS.

- Open the **VNC Viewer** and **Server** in the two different **host OS** respectively. Then sign in with your account in both **VNC Viewer** and **Server** and follow the same as in **step 6.1** and **step 6.2**. In this case, you may get low resolution.

