Internet Of Things

Virtual Network Computing

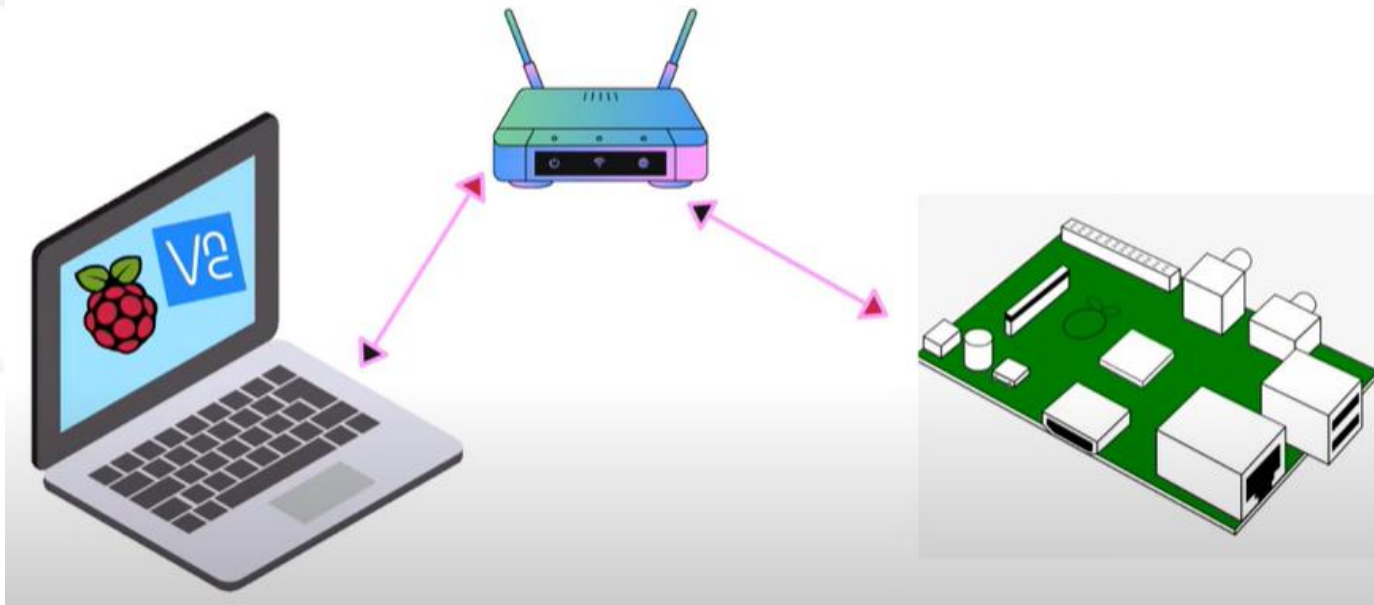*Prepared by:*

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Introduction

- **Sometimes it is not convenient to work directly on Raspberry Pi**

- **Virtual Network Computing (VNC) facilitates remote desktop sharing**

- **This is a form of remote access on computer networks**

What is VNC

- **VNC is a graphical desktop sharing system**
- **It allows you to remotely control the desktop interface of Raspberry Pi from another computer**

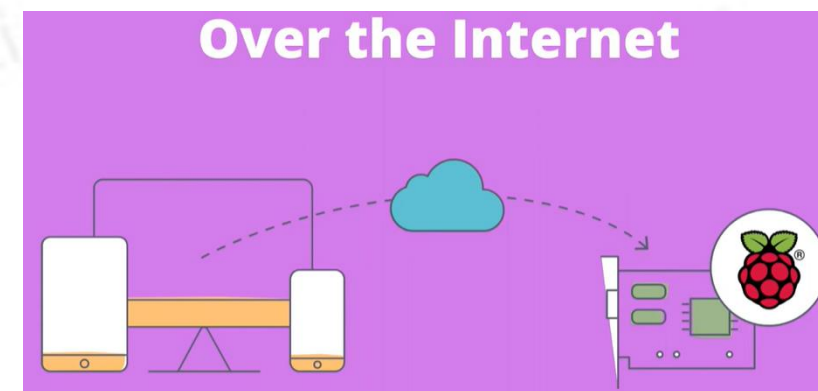**Visual display of Raspberry Pi**

Control Raspberry Pi Remotely

What is VNC

- **You will see the desktop of Raspberry Pi inside a window in your computer once the VNC is connected**

- **you can access your Raspberry Pi remotely within your local network or over the internet**
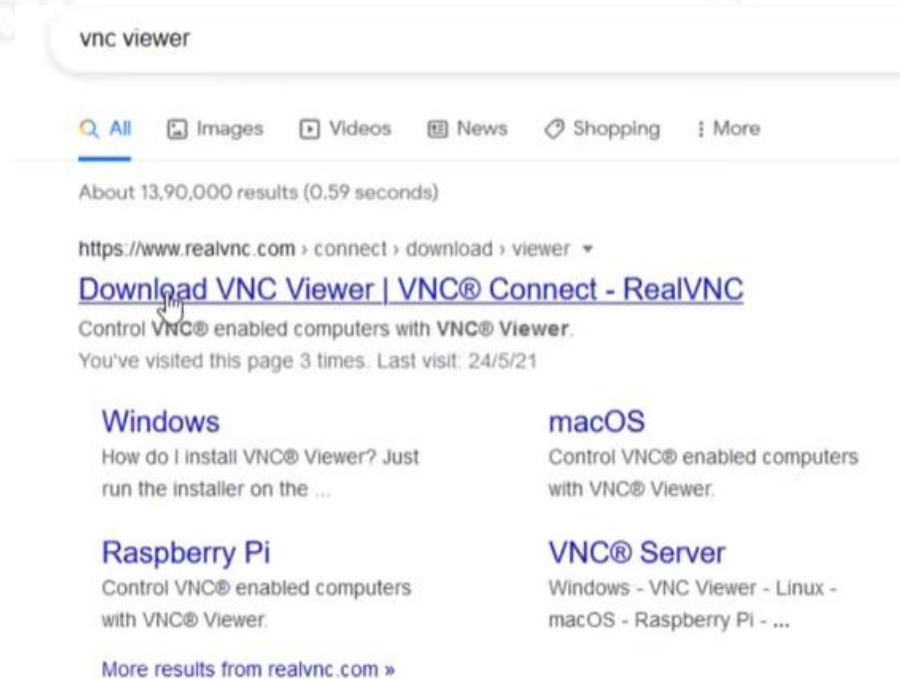
VNC

- **You default, install VNC viewer on your computer default, you have to enable VNC in your Raspberry Pi**

- **By default, VNC is installed on Raspberry Pi**

- **We will learn how to install VNC viewer on our computer and enable it in Raspberry Pi**

Installing VNC viewer

- **Search for "VNC viewer" on google**

- **Click on download from realvnc webpage**

Installing VNC viewer

- **Select appropriate OS then click download**

VNC® Connect consists of VNC® Viewer and VNC® Server

Download VNC® Viewer to the device you want to control from, below. Make sure you've installed VNC® Server on the computer you want to control.
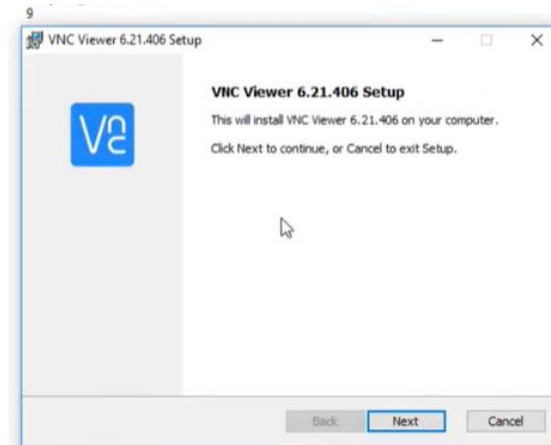
| Windows | macOS | Linux | Raspberry Pi | iOS | Android | Solaris | HP-UX | AIX |

Download VNC Viewer

SHA-256: 6d2637db19c0c57d9375dddc15d24dd72e461a45a47fd5c017d529b8b7135599

EXE x86/x64 ▾

- **Run the downloaded installation file**

VNC-Viewer-6.21.406-Windows

VNC Viewer 6.21.406 Setup

VNC Viewer 6.21.406 Setup

This will install VNC Viewer 6.21.406 on your computer.

Click Next to continue, or Cancel to exit Setup.

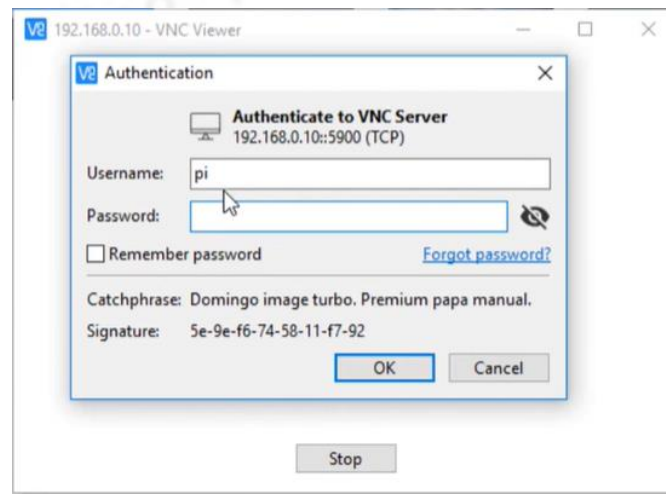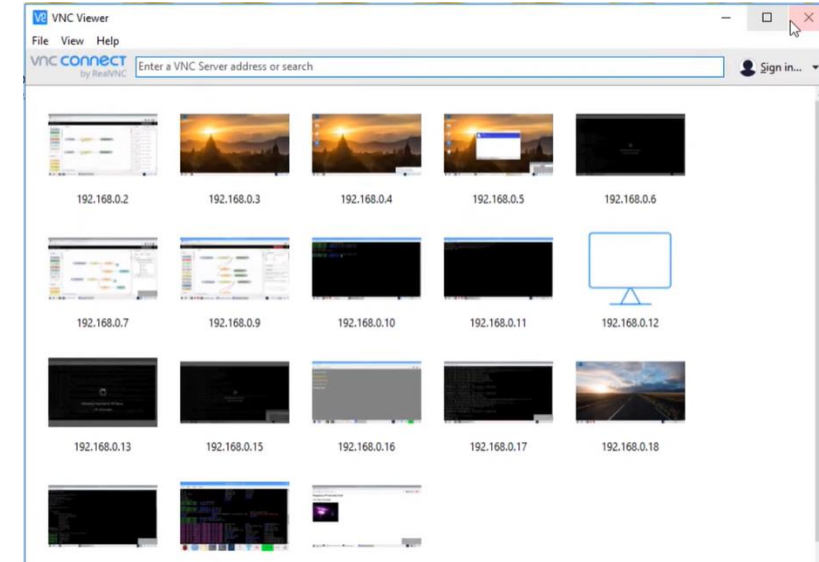Back   Next   Cancel

Enable VNC on Raspberry Pi

- **On your Raspberry Pi, open Raspberry Pi configuration**

- **Go to interfaces tab and enable VNC**
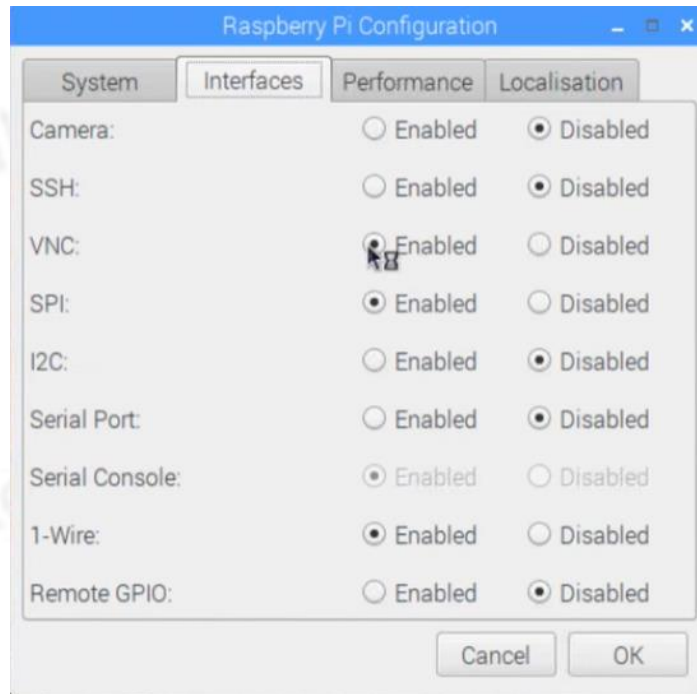
Connect to Raspberry Pi remotely

- **Open VNC viewer on your computer**
- **Enter the Raspberry Pi IP address**
- **You can check the IP address using "ifconfig" command on terminal**
- **Finally, enter the username and password for your raspberry Pi**

Raspberry Pi Configuration

- **We can access raspi-config tool in two ways**
  - **Through terminal**
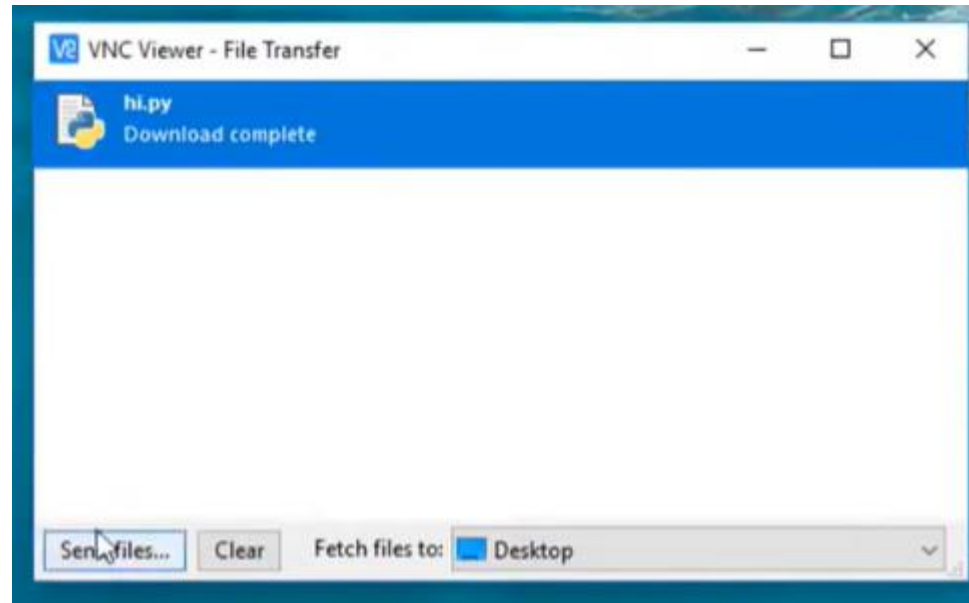 - **Raspberry Pi configuration GUI**
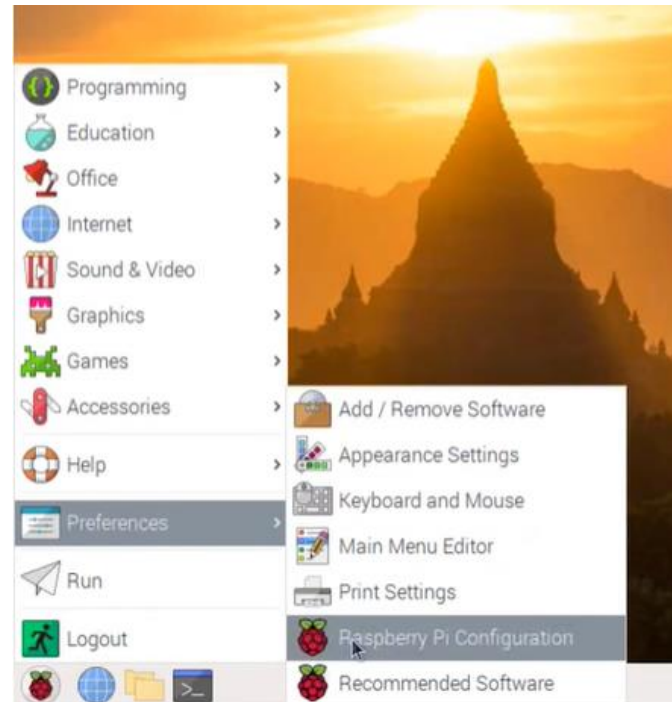
Remote file transfer

- **We can transfer files from Raspberry Pi to your computer or from your computer to Raspberry Pi using VNC**

- **To transfer file from Raspberry Pi, VNC should be connected**

- **Right click on VNC icon then select file transfer**

- **Select the file then press send files**
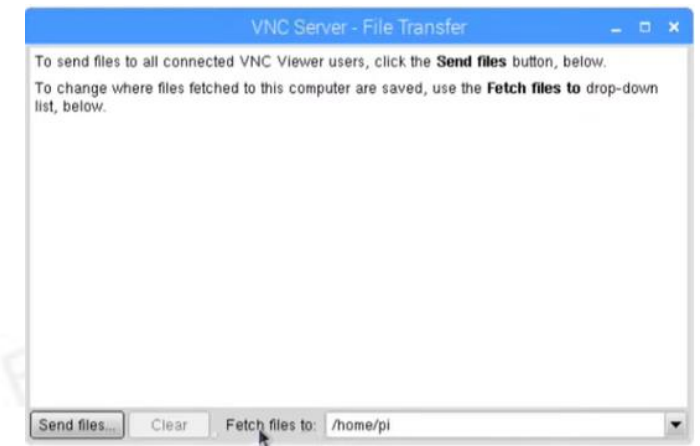
Remote file transfer

- **Same way, you can send files from your computer**
- **Click send files in VNC viewer file transfer window**
- **Select the file and send it**

Any Questions???