

```
C:\Users\Lab-2\Documents\distance.exe

Enter the number of nodes : 3

Enter the cost matrix :
0 2 7
2 0 1
7 1 0

For router 1
node 1 via 1 Distance 0
node 2 via 2 Distance 2
node 3 via 2 Distance 3

For router 2
node 1 via 1 Distance 2
node 2 via 2 Distance 0
node 3 via 3 Distance 1

For router 3
node 1 via 2 Distance 3
node 2 via 2 Distance 1
node 3 via 3 Distance 0

-
```

EXPERIMENT NO: 6

NAME OF THE EXPERIMENT:Demonstrate the downloadin and Installation of open source network tools

AIM: Installation of Wireshark.

Program:

Wireshark is a network packet analyzer. A network packet analyzer will try to capture network packets and tries to display that packet data as detailed as possible.

You could think of a network packet analyzer as a measuring device used to examine what's going on inside a network cable, just like a

voltmeter is used by an electrician to examine what's going on inside an electric cable (but at a higher level, of course).

In the past, such tools were either very expensive, proprietary, or both. However, with the advent of Wireshark, all that has changed. **Wireshark is perhaps one of the best open source packet analyzers available today.**

Here are some examples people uses Wireshark for:

- Network administrators use it to **troubleshoot network problems**
- Network security engineers use it to **examine security problems**
- Developers use it to **debug protocol implementations**
- People use it to **learn network protocol** internals

Features:

The following are some of the many features Wireshark provides:

- Available for **UNIX** and **Windows**.
- **Capture** live packet data from a network interface.
- Display packets with **very detailed protocol information**.
- **Open and Save** packet data captured.
- **Import and Export** packet data from and to a lot of other capture programs.
- **Filter packets** on many criteria.
- **Search** for packets on many criteria.
- **Colorize** packet display based on filters.
- Create various **statistics**.

Installation of Wireshark:

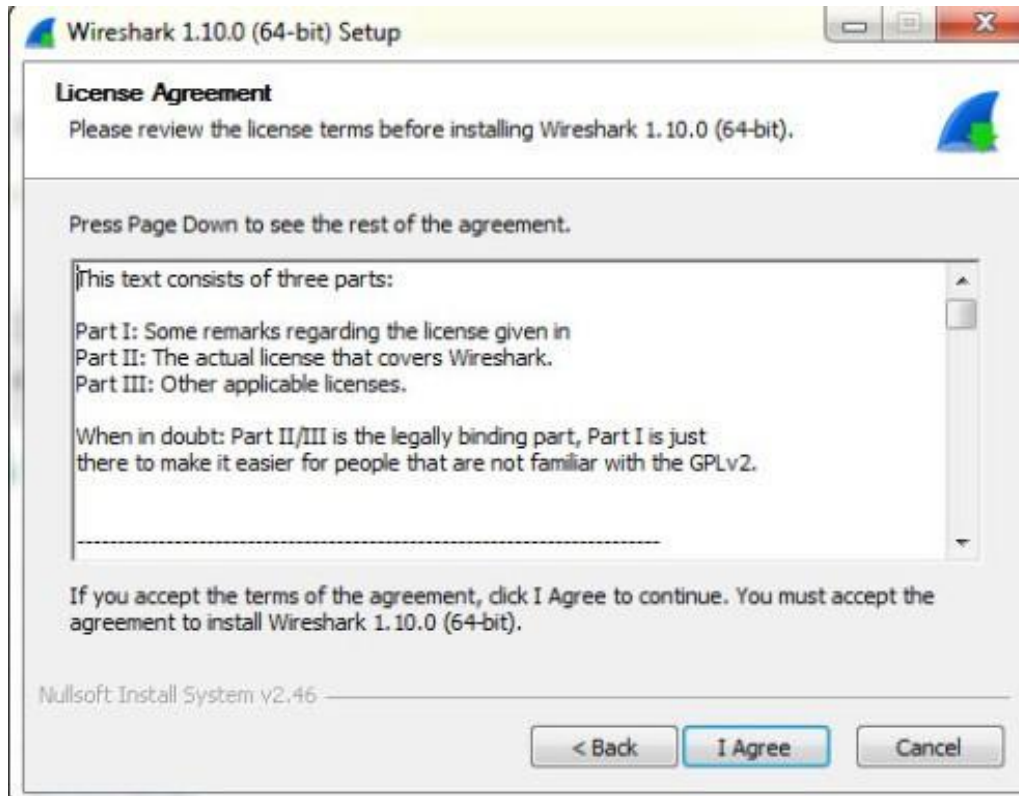
Step1 -Download Wireshark from

<http://www.wireshark.org/download.html>

Step 2 – Click on install and then click on Next.

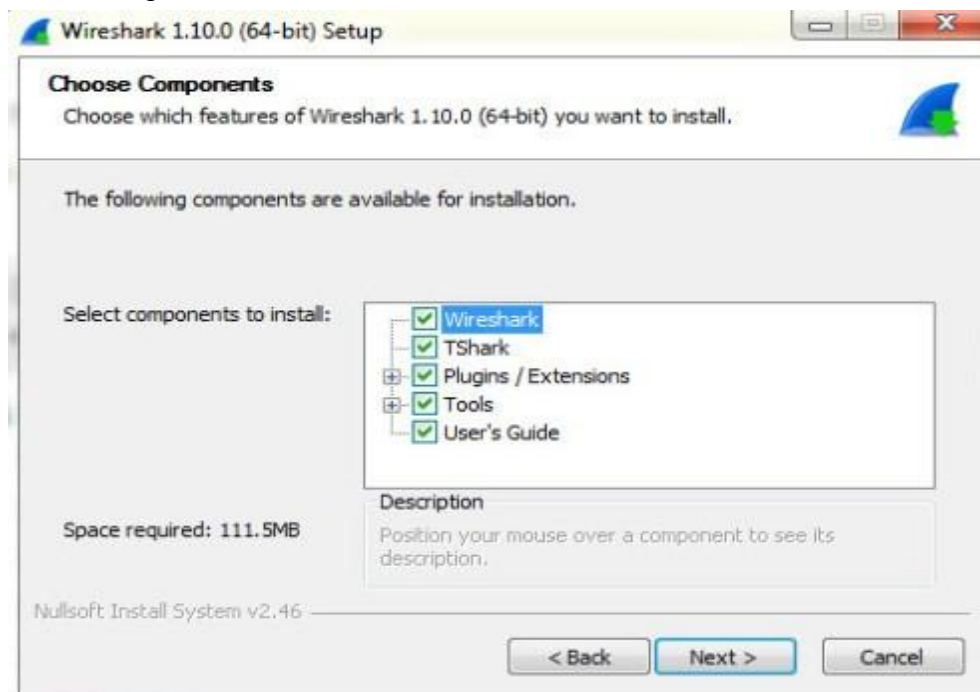


Click on I Agree button.

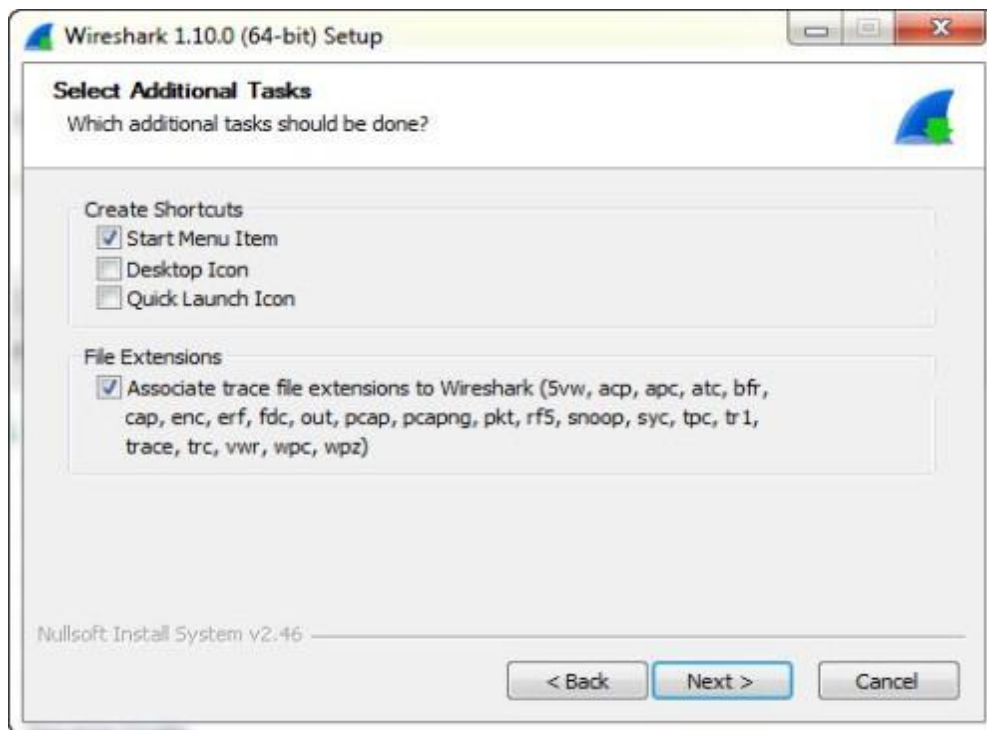


Next Disk space needed is 112 mb

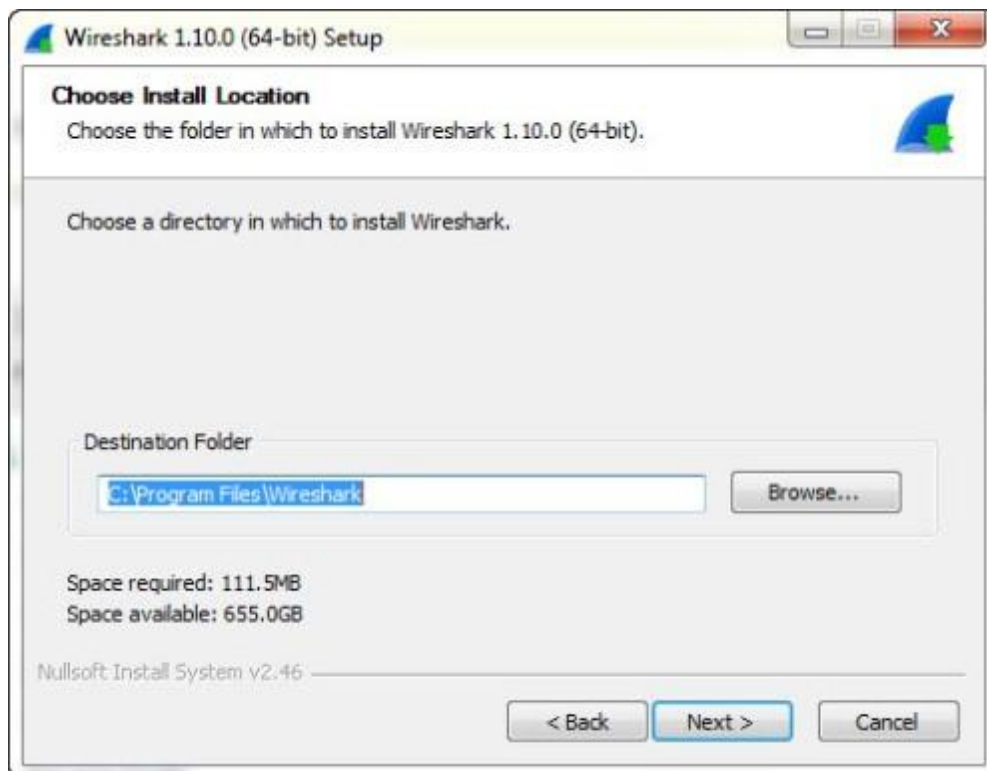
Next Disk space needed is 112 mb



Next Choose if Start Menu or Desktop Icon is preferred

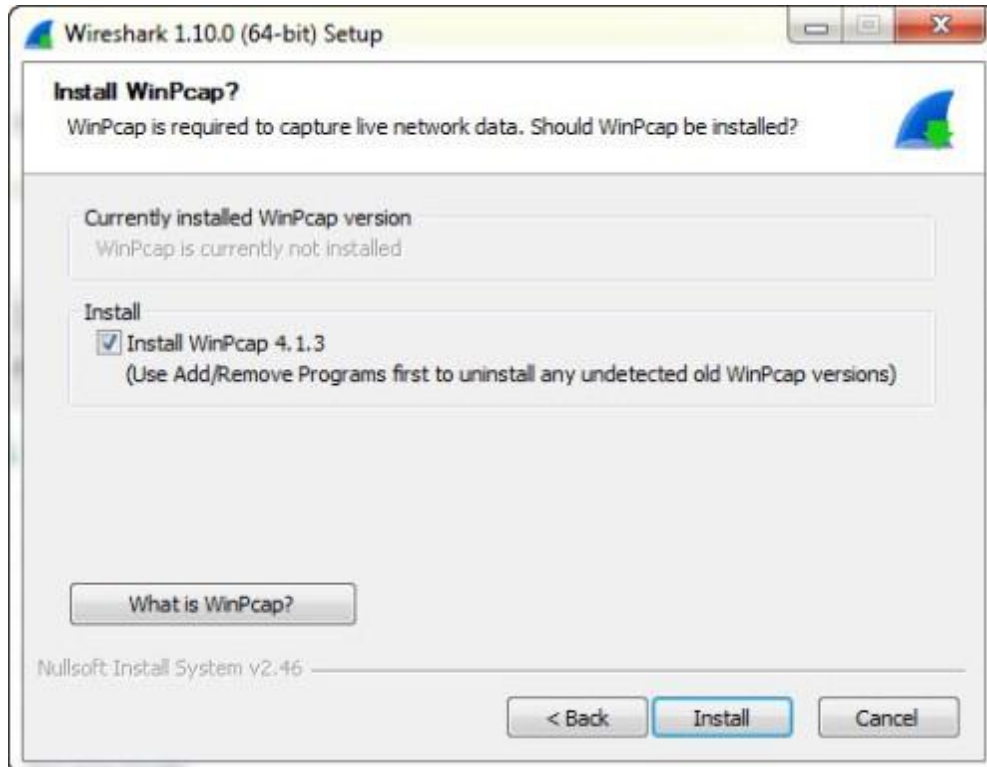


Next By default it installs into the directory c:\ Program Files\ Wireshark

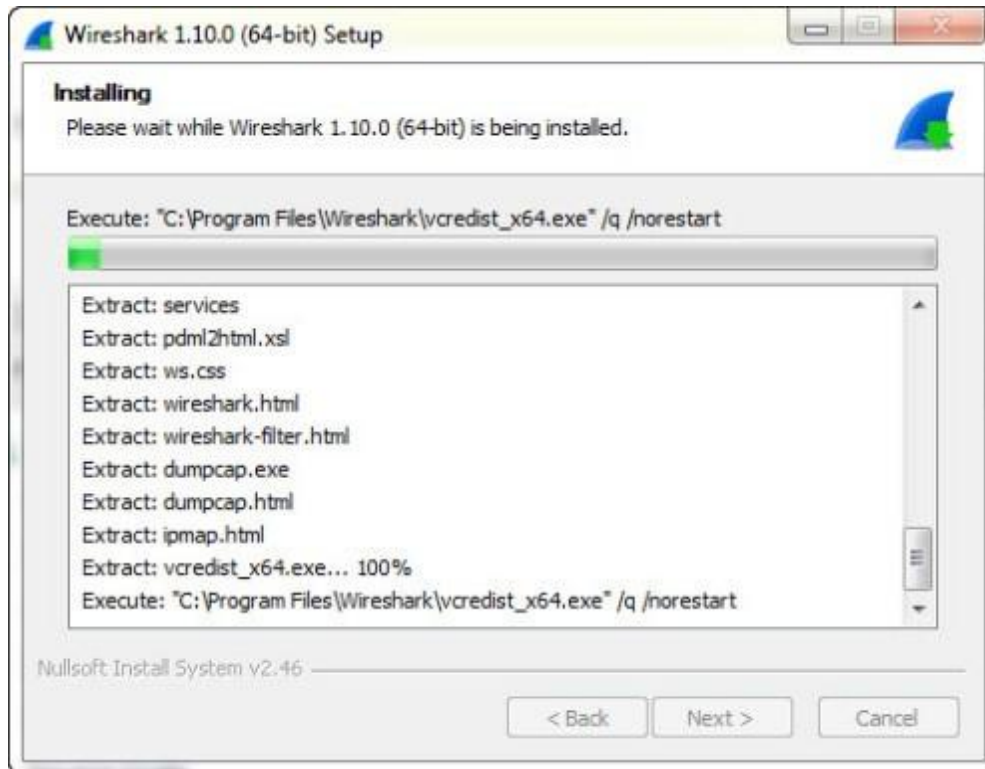


WinPcap enables packet capture right from a network adapter and presents it to Wireshark before any processing is done by the OS. WinPcap (or a similar capture engine) must be installed on a Windows OS in order to capture packets.

Install WinPcap – as Wireshark won't work otherwise. Click Install.



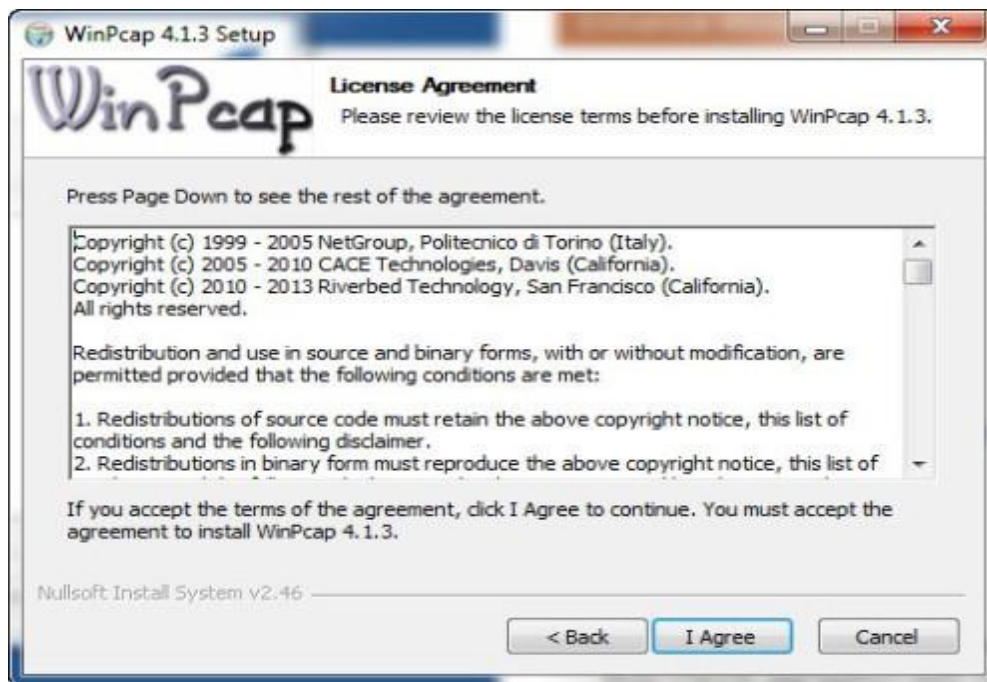
Wait for the files to extract....



Step 2 – Install WinPcap. Wireshark won't work unless WinPcap is installed. Watch out for a second install to be launched. If you're not looking for it, you could miss it. click Next



Click on I Agree button.



Click on Install button.



Click on Finish.

That's it! Wireshark will now completely install for you

