

Direct and Reverse Connections

Direct Connections->

For example you in a country and your friend is in our country and now your friend wants to you to fix some problem in his laptop. so what we can do is we can remotely connect to his computer using command shell or terminal. This type of connection is achieved by something known as direct connection

In direct connection first we create a socket in our laptop which basically means to open the line of communication between computers then we will bind our port and host to the socket and send the request to our friend on his id address. If he accept our request then we will be able to remotely access his laptop using our command prompt and fix his problem

So for direct connections we require the ip address of our laptop as well as ip of our friend laptop

Problem With Direct Connections

- 1) It is difficult to get IP address
- 2) Even if we get his ip address the ip address is dynamic so its always changing
- 3) Even we could get regular updates to the dynamic IP address the computer has bunch of firewalls which makes it impossible to get to his computer

Reverse Connections

To understand the reverse Connections i thing the best is we take the example of a hacker trying to access his victim without his knowledge. in reverse connection instead of trying to initiate or start the connection from his computer, the connection is initiated from the victim's computer. so what hacker do is that they create a python file called reverse shell and in that file the ip address and port number of hacker is stored and they send this file to victim via mail and when the victim open up this file it creates a reverse connection to the hacker computer. Now because the victim is started this connection the hacker has not to worry about the ip address of the victim computer. So even if the ip address is dynamic it does not really matter because every time the ip address changes the file installed on the victim laptop calibrates accordingly but there is still one more problem to solve and that is the hacker laptop still has a dynamic ip address so the address store in the file will be useless after some time. to mitigate this problem hackers create the server and they store the ip address of the server in the reverse shell file because the ip address of the server remains static.

Server

- 1) Remote computer or a laptop which is never turn off.
- 2) where you can store files or host websites
- 3) It has a static address
- 4) You need internet to access this remote computer

How to create a server?

▶ Basics of Networking - 5 - Create an online server using Digital Ocean

<https://m.do.co/c/c2cf5bc2a760>