

# Troubleshooting Series

## SSH Connectivity Issues

Problem Statement → You are not able to SSH/login to a server, how will you troubleshoot?

What is SSH? — Networking Protocol used to access remote server in unique way.

### Steps for Troubleshooting —

- ① Try 'ping' command.  
This is in-general direction for troubleshooting of any network problem.

PING → @Command used to check reachability of host.

Example \$ ping 192.168.3.11

- ② It is kind of echo request to send and receive network packets.

### ② Permissions for accessing server →

- ① Is server IP correct? → confirm on IP address you're using.

- ② SSH key file — are you using valid key file?

- ③ Is this key injected on server? Read about private & public access keys.

## (ii) File permissions of key file

→ Use `$ ls -l` to check file permissions

→ Use `$ chmod` to set permissions.

Example - `chmod 400 mykey.pem`

## ③ Check SSH port permissions.

Remote server should allow local machine traffic on Port 22. Check Remote server Networking Rules.

## ④ There is possibility that an organisation is using port other than 22 for SSH. Check for permissions/Configurations for that port in that case.

## ⑤ Is your local machine traffic reaching to remote host?

Ensure the network firewall you're behind is allowing traffic on Port 22 from your machine.

## ⑥ Check SSH daemon state.

SSH daemon → A background process helpful in establishing a secure connection to remote host.

Check the state of SSH daemon if it's in RUNNING state.

Example - `$ sudo systemctl restart sshd`

NOTE - Any example commands may vary basis operating system.

YouTube Channel - MS Deep Singh

Happy Learning 😊