

Experiment 4: Networking Commands

1. Aim: Execute popular networking commands & understand their role in networking.

2. Tools Used: Computer with Internet Connection

3. Related Theory:

Command Prompt, officially called Windows Command Processor, is a command shell which is a software program that provides direct communication between the OS and the user. It is a command line interpreter which accepts text input (commands) from the user and converts it into functions that the OS would understand. Every system is connected to numerous different networks and systems through internal or external network channels. These network settings often run into issues and affect the system's working. Such network problems can be resolved using networking commands. These commands are specifically designed to troubleshoot network problems.

4. Laboratory Exercise:

Execute following networking commands in systems terminal (Command Prompt) and interpret their significance in computer networking.

- i. ipconfig, ipconfig /all
- ii. ipconfig /release, ipconfig /renew,
- iii. ipconfig /flushdns
- iv. arp -a
- v. systeminfo
- vi. ping (Try -c, -s, -t options)
- vii. nslookup
- viii. tracert
- ix. netstat
- x. route

Take the screenshot of each commands output.

5. Post-Experiment Exercise:

A. Conclusion

B. Questions

- a. Describe the use of each command executed above in brief with the help of suitable example.