**Terminologies, Concepts, and Technical Communication**

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| Term | What is it | What does it do | Where is it found | Example |
| 1. OS (Operating System) | An interface between the user and hardware | Controls the hardware. | Computers Smartphones | Windows Linux Mac |
| 1. DNS | Domain Name System/ software  Phone book of the internet | An internet service that translates domain name into IP addresses | DNS server  Computers/ cmd  ipconfig /all  smartphones | [youtube](http://Www.youtube.com/)  Amazon |
| 1. Server | Software or hardware device | Provide services to other devices or software application | Server room /rack | Web server  print server |
| 1. Server Manager | A tool | Helps IT manage both local and remote windows-based servers from their desktops | Computers  admin tools | DNS Server |
| 1. Task bar | Element of windows operating system | Displays icons for all open applications and files | Located at the bottom of the screen | Clock  taskbar settings |
| 1. DNS Server | Database of public IP addresses and host-names | It is the library where DNS information is stored | Routers  computers  smartphones  cmd ipconfig /all | Google |
| 1. Network Card | Network Interface  Hardware | Provides network connection for devices | motherboard | Computers  servers |
| 1. MAC address | Is the physical address/ hardware address | Uniquely identifies every device on a network | System settings | 12 digit number  00-B0-D0-63-C2-26. |
| 1. Power shell | Command line shell/ scripting language | For system configuration and admin tasks | Windows  Linux  macOS | Shutdown.exe |
| 1. ipconfig | Command line tool | Display TCP/IP of the network adapter and used for troubleshooting issue | cmd | Ipconfig /all |
| 1. TCP/IP | Communication protocols | used to interconnected network devices on the internet | Transport layer  cmd ipconfig /all | FTP  email |
| 1. Internet browser | Application software | To access and view websites | Browser app in desktop or taskbar | Google  internet explorer  Microsoft edge |
| 1. DHCP | Client/Server protocol | Automatically assigns IP addresses to network devices | Settings  Network and Internet | DNS Server |
| 1. Control Panel | Component of Microsoft Windows | To change and view system settings | Start Menu | Mouse settings  Display |
| 1. Network And Sharing center | Control Panel app | View network connection | Control panel | Wireless settings |
| 1. Internet Protocol (IP Address) | An internet protocol | Unique identifier for a device on a network | Cmd ipconfig /all  ISP  computers  smartphones | Set of four numbers  192.158.1.38. |
| 1. CMD | Command line application Windows command processor | Allows users to give commands to the computer | Start Button  type cmd in the search results | Ping  Netstat |
| 1. VM | Virtual Computer  Software | Uses software instead of physical computer to run programs and apps, emulates the hardware of a computer | VirtualBox Website | Vmware workstation |
| 1. Subnet Mask | Four octet number | Used to divide an IP address into 2 parts host bits and network bits | Computers/control panel  smartphones | 255.255.255.0 |
| 1. Netstat | Command line utility  Network Statistics | Troubleshooting  Configuration  Identify incoming and out coming network | cmd | List of all TCP ports |
| 1. Default Gateway | Hardware | Device that connects two networks with different protocols or two devices with different interfaces | Computers  smartphones | Wireless internet connection |
| 1. DHCP Server | A server or a router | Holds the network information | Home router | DNS |
| 1. Ping | Command line utility | Test to see if network device is reachable | cmd | Ping an IP address if the ping is successful it means it is on |
| 1. Loopback address | Address | An IP address that specifies the local computer  used for testing purpose | Computers | Loopback adapter |
| 1. Routers | Network device | Forward data packets between computers | Physical locations | Google Wifi |
| 1. IOS | Mobile Operating System | System that runs on mobile devices | smartphones | IPhone  IPad |
| 1. VLANs | Virtual Network technology | Connect devices geographically | switches | Create segments inside an organization to improve network security |
| 1. Switches | Hardware | Device that connects multiple devices together on a network and forward packets between | Physical locations | Joystick switches |