Top Commands for IT Support Technicians (2025 Edition)

Reference Guide: IT Support Commands (PDF)

1. Network Diagnostics

- ipconfig / ifconfig / ip addr show: Check network configuration.

- ping <hostname or IP>: Test connectivity.

- tracert / traceroute: Trace packet routes.

2. File System Navigation

- dir (Windows): List files and directories.

- ls (Linux/macOS): View directory contents.

- cd <directory>: Change directory.

3. Process Management

- tasklist / taskkill (Windows): View and terminate processes.

- ps aux / top (Linux/macOS): Monitor processes.

4. Disk Management

- diskpart (Windows): Manage disks and partitions.

- df -h / du -sh (Linux/macOS): Check disk usage.

5. System Information

- systeminfo (Windows): Detailed system specs.

- uname -a (Linux/macOS): Kernel and OS details.

6. Remote Access

- mstsc (Windows): Remote Desktop Connection.

- ssh user@hostname (Linux/macOS): Secure remote login.

7. Package Management

- winget install <package> (Windows): Install applications.

- sudo apt install <package> (Linux): Install software.

8. Troubleshooting Tools

- sfc /scannow / chkdsk /f (Windows): System file and disk repair.

- dmesg (Linux/macOS): View system logs.

9. Advanced Networking

- netstat -tuln (Linux): View active ports.

- nslookup <hostname>: Resolve DNS queries.

Checklist: Practice Commands

1. Basic Commands

   - Use ping to check connectivity to a website.

   - List all files in a directory with ls -lah or dir.

   - Navigate to a directory using cd.

2. System Diagnosis

   - Run ipconfig /all to view network configurations.

   - Use tasklist to identify high CPU usage processes.

3. Disk and File Management

   - Check free disk space with df -h or diskpart list disk.

   - Find large directories using du -sh *.

4. Networking Tools

   - Trace packet routes with tracert google.com.

   - Diagnose DNS issues using nslookup.

5. Remote Access

   - Log into a remote server with ssh user@hostname.

   - Connect to a remote Windows machine using mstsc.

6. Troubleshooting

   - Repair system files using sfc /scannow.

   - View system logs with dmesg | grep error.