Cisco Switch Troubleshooting Cheat Sheet

**show ip interface brief** – See Layer 1, Layer 2, and Layer 3 interface status of all interfaces on the switch.

**show mac address-table** – See all MAC addresses known to the switch. Filter the output with one of the following variations:

- `show mac address-table dynamic` - Display only learned MAC addresses.
- `show mac address-table vlan <vlan id>` - Show results for only the specified VLAN.
- `show mac address-table | include xxxx` – Search table by MAC address. Digits must be lower-case.

**show spanning-tree** - Verify that spanning-tree is working as expected – root bridge is correct, designated ports are correct, backup ports are blocking instead of forwarding, etc. Filter results by specifying a particular VLAN using the `show spanning-tree vlan <vlan id>` command.

**show cdp neighbors** – See all Cisco devices attached to the switch you're logged in to. For more information use `show cdp neighbors detail`.

**show interface** – Show detailed information about a single interface, including speed/duplex, interface error counters, etc. Filter by using `show interface <type> <identifier>`.

**show running-config** - Shows the active configuration of a Cisco switch. Filter using one of the options below:

- `show running-config | begin` - Start the output at a specific point within the configuration. For example, "show running-config | begin dhcp" will jump to the dhcp section of the running-config.
- `show running-config | include` - Show all configuration lines containing a specific phrase.
- `show running-config interface <type> <identifier>` - Show the configuration of a specific port.

**show log** – Show the switch’s event log, including hardware, software, interfaces, and more.