

# Cisco CCIE Enterprise Infrastructure Commands Sheet

Practical commands for routing, campus validation, policy checks, overlays, VPNs, and automation-aware operations.

<b>Best for</b> Command recall before labs and review sessions	<b>Focus</b> What each command does and when to use it	<b>Use with</b> Use with ports sheet and cheat sheet
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## 1. Interface and health checks

<b>show ip interface brief</b>	Fast IP and line protocol status review.
<b>show interfaces</b>	Detailed counters, drops, duplex, speed, and queue information.
<b>show logging</b>	Recent events often reveal the fault domain quickly.
<b>show version</b>	Platform baseline and software context.

## 2. Switching and campus validation

<b>show spanning-tree</b>	Root roles, port states, and loop prevention behavior.
<b>show interfaces trunk</b>	Validate trunk state and allowed VLANs.
<b>show etherchannel summary</b>	Check bundling state and consistency.
<b>show mac address-table</b>	Confirm local forwarding and learning.
<b>show vlan brief</b>	Quick segmentation snapshot.

## 3. Routing and overlay checks

<b>show ip route</b>	Best-path and route-source truth.
<b>show ip ospf neighbor</b>	OSPF adjacency state.
<b>show bgp ipv4 unicast summary</b>	BGP peering health at a glance.
<b>show lisp session / show lisp</b>	Fabric-related control-plane checks on supported devices.
<b>show sdwan control connections</b>	Useful SD-WAN health view on supported platforms.

## 4. Policy and security checks

<b>show access-lists</b>	ACL logic and hit counts.
<b>show aaa servers</b>	Back-end AAA visibility on supported gear.

<b>show crypto ikev2 sa</b>	Check IKEv2 control-plane establishment.
<b>show crypto ipsec sa</b>	Verify IPsec data-plane state.
<b>show device-tracking database</b>	Helpful for endpoint/IP-to-MAC visibility on supported platforms.

## 5. Automation-aware tools

<b>show netconf-yang sessions</b>	Validate model-driven management sessions.
<b>show running-config   section</b>	Filter exactly the block you need.
<b>curl / REST client</b>	Test APIs outside the device CLI.
<b>copy running-config startup-config</b>	Save only after full validation.
<b>compare intended vs actual</b>	The real expert move is not one command; it is disciplined state comparison.