

# IPv6 CLI commands

## IPv6 Commands

Below are the most important helpful commands for checking and diagnosing the IPv6 environment

### Windows 8 / 10

Command	Function
<b>ipconfig /all</b>	displays all interface details
<b>ping ::1</b>	Test IPv6 protocol host internally (localhost)
<b>netsh interface ipv6 show interface</b>	Interface status (all) and IPv6 addresses
<b>netsh interface ipv6 showaddress</b>	IPv6 addresses including validity displays
<b>netsh interface ipv6 show privacy</b> <b>netsh interface ipv6 show global</b>	See <a href="#">IPv6 Configuration and Privacy Extensions</a>
<b>netsh interface ipv6 show route</b> <b>route print -6</b>	Show IPv6 routing table
<b>netsh interface ipv6 show neighbors</b>	Mapping IPv6 addresses to MAC addresses
<b>netsh interface ipv6 show destination</b>	Destination cache incl. PMTU values
<b>netsh interface ipv6 dump</b>	show all changes
<b>netsh interface ipv6 reset</b>	reset all changes

### Linux

Command	Function
<b>ifconfig -a</b> <b>ifconfig eth0   grep inet6</b>	displays all interface details ETH0 only IPv6 addresses
<b>ping6 ::1</b>	Test IPv6 protocol host internally (localhost)
<b>ip -6 address show</b> <b>ip -6 maddr show</b>	Interface status (all) and IPv6 addresses show multicast groups
<b>netsh interface ipv6 showaddress</b>	IPv6 addresses including validity displays
<b>ip -6 route show</b> <b>route -A inet6 -n</b>	Show IPv6 routing table
<b>ip -6 neighb show</b>	Mapping IPv6 addresses to MAC addresses

<b>ip -6 route get to {ipv6_addr}</b>	Destination cache incl. PMTU values
<b>test -f /proc/net/if_inet6 &amp;&amp; echo</b>	check if IPv6 is active

## macOS since 10.7

Command	Function
<b>ifconfig -a</b> <b>ifconfig -L</b>	displays all interface details shows the period of validity of the addresses
<b>ping6 ::1</b> <b>traceroute6 {ipv6-host}</b>	Test IPv6 protocol host internally (localhost)
<b>netstat-f inet</b>	show all IPv6 connections
<b>netstat -g</b>	show multicast groups
<b>netstat -rnf inet6</b>	Show IPv6 routing table
<b>ndp -a</b>	Mapping IPv6 addresses to MAC addresses
<b>dscacheutil -flushcache</b>	clear DNS cache
<b>nettop -n -m route</b>	View routing statistics in real time
<b>nettop -n</b>	Show TCP & UDP sockets in real time

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