

Netsh Commands

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Interface Configuration

Configure an IPv4 address with subnet mask and default gateway. Omitted netmask implies classful addressing.

```
netsh int ipv4 set address "Local Area Connection" static 192.168.1.3 255.255.255.0 192.168.1.1
```

Remove an IPv4 address and default gateway from an interface.

```
netsh int ipv4 del address "Local Area Connection" 192.168.1.3 192.168.1.1
```

You can add more than one IP address to an interface. Additional addresses don't show up in `ipconfig` without `/all`.

```
netsh int ipv4 add address "Local Area Connection" 192.168.1.4
```

Add a global unicast IP with prefix. Prefix is optional and defaults to /64.

```
netsh int ipv6 set address "Local Area Connection" 2001:beef::1/64
```

Add a link-local IP to an interface. See the similarity to above?

```
netsh int ipv6 add address "Local Area Connection" fe80::6
```

Delete the IP. Remove a link-local IP the same way.

```
netsh int ipv6 del address "Local Area Connection" 2001:beef::1
```

Set an IPv6 default route.

```
netsh int ipv6 add route ::/0 "Local Area Connection" fe80::3
```

Delete the default route.

```
netsh int ipv6 delete route ::/0 "Local Area Connection" fe80::3
```

Reset Configuration

Reset interface configuration completely (requires restart):

```
netsh int ipv6 reset all
netsh int ipv4 reset all
shutdown -r -t 0
```

Verification (“show commands”)

netsh has several commands that are very similar to `ipconfig`, `route print` (`netstat -r`), `netstat -a`, and `getmac`.

Poke around `netsh int ipv4 show ?` and you'll find lots of interesting stuff.

Shows the ARP table for IPv4 (similar to `arp /a`), neighbor table for IPv6.

```
netsh int [ipv4|ipv6] show neighbors
```

What are the ephemeral ports on your machine?

```
netsh int [ipv4|ipv6] show dynamicportrange [udp|tcp]
```

What multicast groups are you joined to?

```
netsh int [ipv4|ipv6] show joins
```

Other interesting facts about your interface:

```
netsh int [ipv4|ipv6] show interfaces
```

If you don't mind the typing, you can specify the interface on most "show" commands. Consider renaming the interface to one word.

```
netsh int [ipv4|ipv6] show addresses "Local Area Connection"
```