

## Basic IPv6 Commands Linux/Win

	Linux	Win
<b>Allgemeines</b>		
Kommando	<b>ip</b>	<b>netsh</b>
IPv6/IPv4	<b>ip -6</b> → IPv6 <b>ip -4</b> → IPv4	<b>netsh int ipv6</b> → IPv6 <b>netsh int ip</b> → IPv4
Hilfe	<b>man ip</b> .. und an (fast) beliebiger Stelle " <b>help</b> " verwenden, z.B.: <b>ip -6 help</b> <b>ip -6 address help</b> <b>ip -6 route help</b>	an (fast) beliebiger Stelle "?" verwenden, z.B.: <b>netsh int ipv6 ?</b> <b>netsh int ipv6 show ?</b> <b>netsh int ipv6 add ?</b>
<b>Informationen</b>		
Interface (OSI 2)	<b>ip -6 link show [dev device]</b>	<b>netsh int ipv6 show interface [IFNumber] \ [level=verbose]</b>
IPv4 → ARP IPv6 → NDIS	<b>ip -6 neighbor show [ dev device ]</b>	<b>netsh int ipv6 show neighbors [IFNumber]</b>
Adressen	<b>ip -6 address show [dev device]</b>	<b>netsh int ipv6 show address [IFNumber] \ [level=verbose]</b>
Mcast Adressen	<b>ip -6 maddress show [dev device]</b>	<b>netsh int ipv6 show joins [IFNumber] \ [level=verbose]</b>
Routing Tabelle	<b>ip -6 route show [dev device]</b>	<b>netsh int ipv6 show routes [level=verbose]</b>
<b>Adress Manipulation</b>		
IPv6 Adr. zufügen	<b>ip -6 address add \ IPv6Address/Length dev device</b>	<b>netsh int ipv6 add address \ IFNumber IPv6Address</b>
IPv6 Adr. löschen	<b>ip -6 address delete \ Ipv6Address/Length dev device</b>	<b>netsh int ipv6 delete address \ IFNumber IPv6Address</b>
<b>Route Manipulation</b>		
Default Route anlegen	<b>ip -6 route add default via NextHopIPv6 \ [dev device]</b>	<b>netsh int ipv6 add route ::/0 \ IFNumber [NextHopIPv6]</b>
Route anlegen	<b>ip -6 route add to IPv6Prefix/Length \ via NextHopIPv6 [dev device]</b>	<b>netsh int ipv6 add route IPv6Prefix/Length \ IFNumber [NextHopIPv6]</b>
Route löschen	<b>ip -6 route add to IPv6Prefix/Length \ via NextHopIPv6 [dev device]</b>	<b>netsh int ipv6 delete route IPv6Prefix/Length \ IFNumber [NextHopIPv6]</b>
<b>IPv6 Konfiguration dauerhaft speichern</b>		
	editieren der Datei <b>/etc/network/interfaces</b>  Beispiel: # Schnittstelle iface eth0 inet6 static address fd00:0:0:1::a netmask 64 gateway fd00:0:0:1::1 # Routen up ip -6 route add to fd00:0:0:2/64 \ via fd00:0:0:1::2 dev eth0	.. als letzten Parameter der Kommandozeile kann [store=] <b>persistant</b> verwendet werden um die Konfiguration dauerhaft zu machen – ist aber schon die default Einstellung  Für store ist ausser persistant noch die Einstellung <b>active</b> möglich: die Einstellungen sind nur bis zum nächsten Reboot aktiv.