

# show ipv6

This chapter describes the outputs of the show ipv6 command.

- show ipv6 chunks all-vrf, on page 1
- show ipv6 interface summary, on page 2
- show ipv6 neighbors, on page 2
- show ipv6 neighbors vpp, on page 3
- show ipv6 pool summary, on page 4
- show ipv6 pool verbose, on page 4
- show ipv6 route, on page 6

## show ipv6 chunks all-vrf

Table 1: show ipv6 chunks all-vrf Command Output Descriptions

Field	Description
VRF Name	Displays the configured VRF name.
Peer Address	Displays the peer IP address.
chunk-id	Displays the chunk ID.
chunk-size	Displays the chunk size.
start-prefix	Displays the starting IPv6 prefix of the pool.
end-prefix	Displays the ending IPv6 prefix of the pool.
used-prefixes	Displays the number of IPv6 prefixes currently in use.

## show ipv6 interface summary

Table 2: show ipv6 interface summary Command Output Descriptions

Field	Description
Intf name	Interface name
Intf Type	Interface type
Description	
Router Advertisement	Displays whether the system is sending router advertisements. Options are either enabled or disabled.
IP State	Displays the IP state (UP/DOWN) and binding detail
MTU	The subscriber's Maximum Transmission Unit (MTU) size in octets.
MRU	The subscriber's Maximum Receive Unit (MRU) size in octets.
IPv6 Link-Local Address:	Displays the IPv6 link-local address
IPv6 Global Unicast Address:	Displays the ipv6 Global Unicast Address address

# show ipv6 neighbors

#### Table 3: show ipv6 neighbors Command Output Descriptions

Field	Description
Address	IPv6 address from table
Туре	Interface type:
	Broadcast (Ethernet)
	• Loopback
Link address	MAC address

Field	Description
Flags	One of the following flag codes:
	• I = Incomplete
	• R = Reachable
	• M = Permanent
	• $S = Stale$
	• $D = Delay$
	• $\mathbf{P} = \mathbf{Probe}$
	• $F = Failed$
Interface	Interface name

# show ipv6 neighbors vpp

Table 4: show ipv6 neighbors vpp Command Output Descriptions

Field	Description
Time	Time at which the ARP/neighbor entry is added in VPP.
IP Address	IPv6 address from table.
Flags	One of the following flag codes:
	• I = Incomplete
	• R = Reachable
	• M = Permanent
	• $S = Stale$
	• $D = Delay$
	• $\mathbf{P} = \mathbf{Probe}$
	• $F = Failed$
Ethernet	Ethernet Address of the neighbor VPP.
Interface	Interface name
Slot/Port	Slot or port number of the neighbor VPP.

## show ipv6 pool summary

Table 5: show ipv6 pool summary Command Output Descriptions

Field	Description
Туре	Identifies the type of IP address pool.
	(P) - Public: Indicates that the pool is comprised of public IP addresses.
	(R) - Private: Indicates that the pool is comprised of private IP addresses.
	(S) - Static: Indicates that the pool is comprised of statically assigned IP addresses.
	(E) - Resource: Indicates that the pool is comprised of resource IP addresses.
	(N) - NAT: Indicates that the pool is comprised of NAT IP addresses.
State	Identifies the state of the IP address pool.
	(G) - Good: Indicates that the pool is ready to provide addresses.
	(D) - Pending Delete: Indicates that the pool is in the process of being deleted.
	(R) - Resizing: Indicates that the pool is in the process of being resized.
	(I) - Inactive: Indicates that the pool is not being used.
Priority	Specifies the priority use of a public or private pool. Pools with lower priority numbers are used first.
Busyout	Indicates whether or not the pool has been configured for busyout.
Pool Name	Identifies the name of the IP address pool.
Start Prefix	Identifies the starting IPv6 prefix of the pool.
End Prefix	Identifies the ending IPv6 prefix of the pool.
Used	Specifies the number of IP addresses currently in use.
Avail	Specifies the number of IP addresses currently available for use.
Total Pool Count	Specifies the total number of IP address pools in the summary.

## show ipv6 pool verbose

Table 6: show ip pool verbose Command Output Descriptions

Field	Description
Pool Name	Name of the IPv6 pool.
Group Name	Identifies the group to which the IP pool belongs.

I

Field	Description
Pool Type	Specifies the Type of IPv6 pool (Public, Private, Static, Resource) and its Priority (0 = highest, 10 = lowest).
Pool Status	Identifies the status of the group.
	Good: Indicates that the pool is ready to provide addresses.
	Pending Delete: Indicates that the pool is in the process of being deleted.
	Resizing: Indicates that the pool is in the process of being resized.
	Inactive: Indicates that the pool is not being used.
Start Prefix	Identifies the starting prefix of the pool.
End Prefix	Identifies the ending prefix of the pool.
Total Prefix	Total number of IPv6 prefixes with Used and Free sub-categories.
Used Prefix	
Free Prefix	
Pool Address Type	Type of IPv6 address pool.
Configured Prefix	
Busy-Out Range	Range of IPv6 addresses that have been busied out.
Total Busy-Out usage	
Used	Number of busy-out ranges currently being Used or Free.
Free	
Nexthop Forwarding Address	Identifies the IP address of the next hop gateway where a subscriber that is assigned an IP address from this pool is forwarded.
	Status = Enabled or Disabled
Suppress-Switchover-ADVS	Identifies if the ability to suppress corresponding gratuitous ARP generation when a line card switchover occurs is enabled or disabled for this pool.
	Status = Enabled or Disabled
Allow-Static-Allocation	Indicates whether IP pool configured to allow static allocation of IP address or not.
	Status = Enabled or Disabled
Duplicate-Addr-Detection	Indicates whether or not a unicast IPv6 address will initiate an internal test for the uniqueness of its address using ICMPv6 type 135 and 136 messages.
	Status = Enabled or Disabled

Field	Description
Group Available Threshold Clear	Specifies the low threshold IP pool utilization percentage that must be met or passed within the polling interval to generate an alert or alarm.
	Clear: Specifies the high threshold IP pool utilization percentage that maintains a previously generated alarm condition. If the utilization percentage rises above the high threshold within the polling interval, a clear alarm will be generated.
	Status = Enabled or Disabled
Pool-Free Threshold Clear	Specifies the low threshold IP pool utilization percentage that must be met or exceeded within the polling interval to generate an alert or alarm.
	Clear: Specifies the high threshold IP pool utilization percentage that maintains a previously generated alarm condition. If the utilization percentage rises above the high threshold within the polling interval, a clear alarm will be generated.
	Status = Enabled or Disabled
Pool-Used Threshold Clear	Specifies the high threshold IP pool utilization percentage that must be met or exceeded within the polling interval to generate an alert or alarm.
	Clear: Specifies the low threshold IP pool utilization percentage that maintains a previously generated alarm condition. If the utilization percentage falls beneath the low threshold within the polling interval, a clear alarm will be generated.
	Status = Enabled or Disabled

# show ipv6 route

### Table 7: show ipv6 route Command Output Descriptions

Field	Description
Destination	Designating ipv6 address prefix/length
Next hop	Address of the directly connected next hop interface
Protocol	Connected
	Unconnected
Prec	Number of precedence bits set
Cost	Number of router hops to destination address
Interface	Name of the next hop interface
Total Route Count	Total number of routes
	Number connected
	Number of static routes