

5.9.5 arp and netstat Facts

The following table lists several commands that you can use on a Windows system to gather information about network connections.

Tool	Option(s)
arp	arp -a shows the IP address-to-MAC address mapping table (the address cache).
netstat	netstat shows the active connections.
	netstat -a shows detailed information for active connections.
	netstat -r or route print shows the routing table of the local host.
	netstat -s shows TCP/IP statistics.
arp table	arp tables allow a system to build frames targeting remote MAC addresses.

Local computers have a cache of recently used IP addresses and their corresponding MAC addresses. When a computer needs to contact another computer on its own subnet, it first checks its cache for an entry of the IP address. If the entry is found, the corresponding MAC address is used to communicate with the destination computer. The cache can cause problems if the MAC address for a computer has recently changed (for example, if the network interface card has been replaced). To correct a problem, use the **netsh** command to clear the ARP cache.