

i) ifconfig - configure a network interface

Ifconfig is used to configure the kernel-resident network interfaces. It is used at boot time to set up interfaces as necessary.

After that, it is usually only needed when debugging or when system tuning is needed.

If no arguments are given, ifconfig displays the status of the currently active interfaces. If a single interface argument is given, it displays the status of the given interface only; if a single -a argument is given, it displays the status of all interfaces, even those that are down. Otherwise, it configures an interface.

ii) ping - send ICMP ECHO_REQUEST to network hosts

ping uses the ICMP protocol's mandatory ECHO_REQUEST datagram to elicit an ICMP ECHO_RESPONSE from a host or gateway. ECHO_REQUEST datagrams ("pings") have an IP and ICMP header, followed by a struct timeval and then an arbitrary number of "pad" bytes used to fill out the packet.

iii) netstat - Print network connections, routing tables, interface statistics, masquerade connections, and multicast memberships

Netstat prints information about the Linux networking subsystem. The type of information printed is controlled by the first argument, as follows

iv) traceroute - print the route packets trace to network host

traceroute tracks the route packets taken from an IP network on their way to a given host. It utilizes the IP protocol's time to live (TTL) field and attempts to elicit an ICMP TIME_EXCEEDED response from each gateway along the path to the host.