RECAP/

Troubleshooting commands

A number of software utility programs are available that can help network problems

Most of these utilities are provided by the operating sys as CLI commands.

Some are:

Ipconfig - displays IP config info

Ping - tests connection to other IP hosts

Netstat - displays network connections

Tracert - displays the route taken to the destination

Nslookup - directly queries the name server for info on a domain

Ipconfig

Used to display current IP configuration info for a host.

Ipconfig /all

Displays additional info including MAC address, IP address of the default gateway, and the DNS servers. Also indicates if DHCP is enabled, the DHCP server address, and lease information

IP addressing information is assigned dynamically then ipconfig /release will:

Release the current DHCP bindings

Ipconfig /renew

Will request fresh configuration from the DHCP server.

Ping

When a ping is sent to an IP address, a packet known as an echo request is sent across the network to the IP address specified. If the destination host receives the echo request, it responds with a packet known as an echo reply. If the source receives the echo reply, connectivity is verified by the reply from the specific IP address.