

# Novell IPX Protocol - Cisco Troubleshooting

>ping ipx 310.0000.40d0.8481

(IPX Ping command - 100 byte datagram)

>show ipx interface

(Provides information on all IPX interfaces)

>show ipx route

C - Connected primary network,

c - Connected secondary network,

S - Static, F - Floating static, L - Local (internal),

W - IPXWAN, R - RIP (IPX), E - EIGRP, N - NLSP,

X - External, A - Aggregate

(Shows the state of the NetWare network)

>show ipx servers

(Displays all servers known to the router through SAP advertisements)

>show ipx traffic

(Information about IPX packets retransmitted / received)

>trace [protocol] [destination]

(To trace the IPX packet through the network to its destination and measure roundtrip delays)

>sh ipx interface

Ethernet0 is up, line protocol is up

IPX address is 172D16D1.0000.0c34.9c38, NOVELL-ETHER

Delay of this IPX network, in ticks is 1 throughput 0 link

IPXWAN processing not enabled on this interface.

**IPX SAP update interval is 60 seconds**

IPX type 20 propagation packet forwarding is

Incoming access list is not set

Outgoing access list is not set

IPX helper access list is not set

SAP GNS processing enabled

SAP Input filter list is not set

SAP Output filter list is not set

SAP Router filter list is not set

Input filter list is not set

Output filter list is not set

Router filter list is not set

Netbios filter list is not set

N

By default, Cisco IOS software treats network -2 as the **default route** for NLSP and RIP. You should ensure that your IPX network does not use network -2 as a regular network

## Novell Access Lists

Standard access lists: **800-899** (source / destination address only)

>access-list 800-899 permit|deny

net[.source-address] [source-mask] net[.dest-address] [dest-mask]

Extended access lists: **900-999** (source / destination network and node, IPX protocol (SAP, SPX, ...), IPX socket)

>access-list 900-999 permit|deny protocol

net[.source-address] [source-mask] source-socket

net[.dest-address] [dest-mask] dest-socket [log] [time-range]

SAP access lists: **1000-1099** (permit / block SAP packets)

>access-list 1000-1099 permit|deny network[.address]

A list is applied to an interface with the **access-list** command

## IPX Protocol Names and Numbers

-1 Wildcard; matches all

0 Undefined

1 Routing

4 SAP

5 SPX

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