Routing

Overview

While the ISDN Internet Router includes a standard routing table, this feature can be completely ignored if you do not have a router in your LAN.
If you DO have a router, it is necessary to configure BOTH the Router and the Routing table in the ISDN Internet Router correctly, as described in the following sections.

Router Configuration

It is essential that all IP packets for devices not on the local LAN be passed to the ISDN Internet Router, so that they can be forwarded to the Internet. To achieve this, the Routers must be configured to use the ISDN Internet Router as the *Default Route* or *Default Gateway*.

Local Router

The local router is the Router installed on the same LAN segment as the ISDN Internet Router. This router requires that the *Default Route* is the ISDN Internet Router itself. Typically, routers have a special entry for the *Default Route*. It should be configured as follows.

Destination IP Address	Normally 0.0.0.0, but check your router documentation.
Network Mask	Normally 0.0.0.0, but check your router documentation.
Gateway IP Address	The IP Address of the ISDN Internet Router.
Metric	1

Other Routers

Other routers must use the ISDN Internet Router's *Local Router* as the *Default Route*. The entries will be the same as the ISDN Internet Router's local router, with the exception of the *Gateway IP Address*.

- For a router with a direct connection to the ISDN Internet Router's local Router, the *Gateway IP Address* is the address of the ISDN Internet Router's local router.
- For routers which must forward packets to another router before reaching the ISDN Internet Router's local router, the *Gateway IP Address* is the address of the intermediate router.

Routing Example

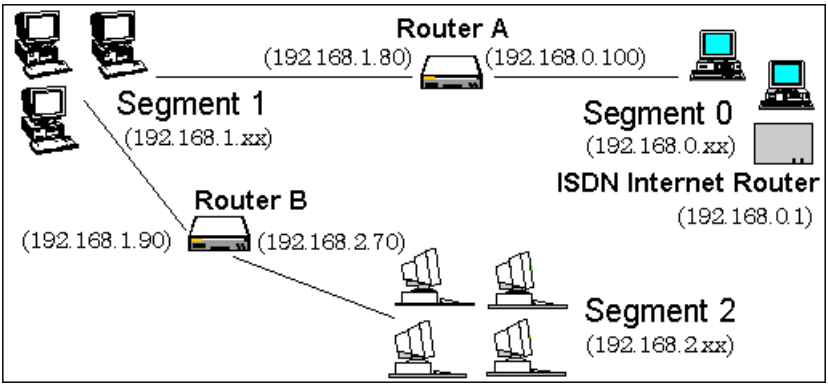

Figure 1: Routing Example

For the LAN shown above, with 2 routers and 3 LAN segments, the required entries would be as follows.

For the ISDN Internet Router's Routing Table

The ISDN Internet Router requires 2 entries as follows.

Entry 1 (Segment 1)	
Destination IP Address	192.168.1.0
Network Mask	255.255.255.0 (Standard Class C)
Gateway IP Address	192.168.0.100 (ISDN Internet Router's local Router)
Entry 2 (Segment 2)	
Destination IP Address	192.168.2.0
Network Mask	255.255.255.0
Gateway IP Address	192.168.0.100

For Router A's Default Route

Destination IP Address	0.0.0.0
Network Mask	0.0.0.0
Gateway IP Address	192.168.0.1 (ISDN Internet Router's IP Address)

For Router B's Default Route

Destination IP Address	0.0.0.0
Network Mask	0.0.0.0
Gateway IP Address	192.168.1.80 (ISDN Internet Router's local router)

Routing Table Entries

On the LAN tab, routing entries will appear as in the example screen below.

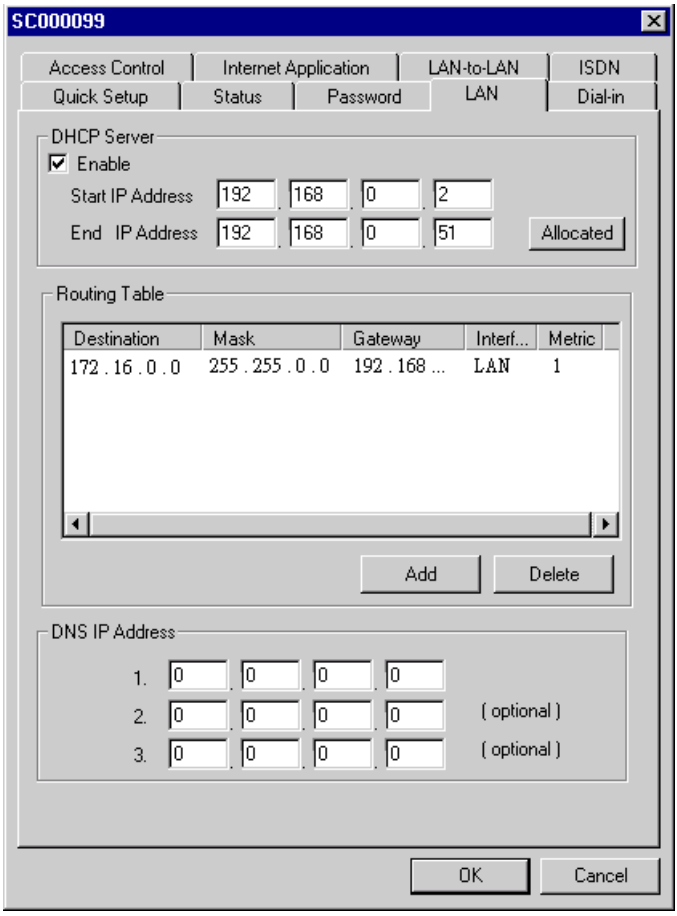

Figure 2: LAN Tab

Operations

To delete an existing entry:

- Select the desired name from the list.
- Click the ***Delete*** button.

To create a new entry:

- Click the *Add* butto.
- Enter data as shown below.
- Click OK to save.

Routing Table Data

An entry in the routing table is required for each LAN segment on your Network, other than the segment to which this device is attached. The data for each entry is as follows.

Destination IP Address	The network address of the remote LAN segment. For standard class "C" LANs, the network address is the first 3 fields of this *Destination IP Address*. The 4th (last) field can be left at 0.
Network Mask	The Network Mask used on the remote LAN segment. For class "C" networks, the standard Network Mask is 255.255.255.0
Gateway IP Address	The IP Address of the Router on the LAN segment to which this device is attached. (NOT the router on the remote LAN segment.)
Metric	The number of routers which must be navigated to reach the remote LAN segment. The default value is 1.