PATTON ACCESS

ADDING A DEFAULT GATEWAY TO THE 2800
AND REMOVING A ROUTING ENTRY

This note will show how to add a default gateway to the 2800 as well as removing a route. The IP Routing information contained in the routing table tells the 2800 where to send IP datagrams. Specifically, the IP address, subnet mask, next hop router, and interface for each network interface. The default gateway is a static route which the 2800 will use if it cannot find any other routes. It is also know as the gateway of last resort.

To add the Default Route

To reach the IP routing configuration screen on the HTTP WEB management system, click on the following links:

Click on the **IP** link -> **Routing Info...**

The 2800's routing table will be shown:

Default Route (always 0.0.0.0)

Gateway IP Address

Use these entries to add the Default Route

Netscape

File   Edit   View   Go   Communicator   Help

IP ROUTING INFORMATION

Destination	Mask	Gateway	Cost	Interface	Protocol	State
0.0.0.0	0.0.0.0	209.49.110.1	1	1	user(2)	active(2)
209.49.110.0	255.255.255.0	0.0.0.0	1	1	local(1)	active(2)
209.49.110.110	255.255.255.255	209.49.110.101	2	1	rip(4)	active(2)
209.49.110.112	255.255.255.255	209.49.110.101	2	1	rip(4)	active(2)
209.49.110.113	255.255.255.255	209.49.110.101	2	1	rip(4)	active(2)
209.49.110.114	255.255.255.255	209.49.110.101	2	1	rip(4)	active(2)
209.49.110.115	255.255.255.255	209.49.110.101	2	1	rip(4)	active(2)
209.49.110.116	255.255.255.255	209.49.110.101	2	1	rip(4)	active(2)

Add a route:

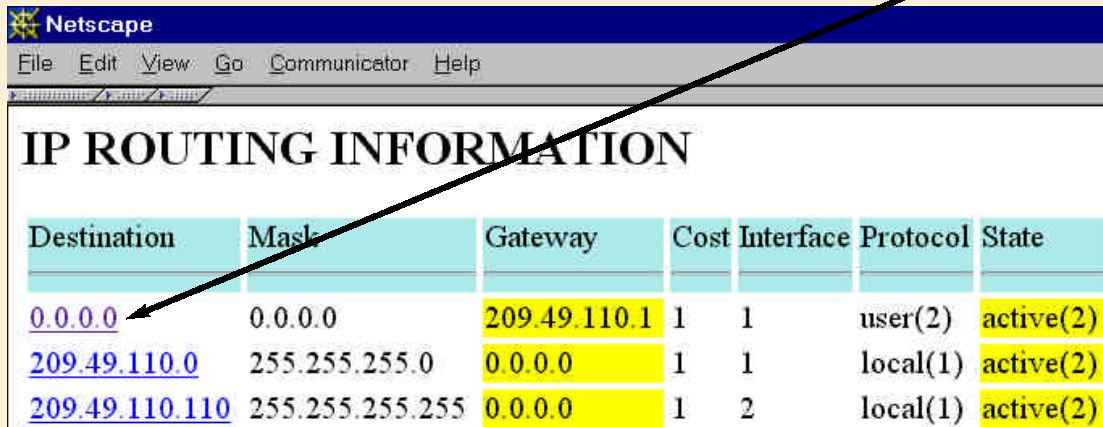| Destination	Mask	Gateway	
0.0.0.0		0.0.0.0	Add Route
0.0.0.0	0.0.0.0	0.0.0.0	Add Route

To add a default gateway into the 2800:

- Enter in 0.0.0.0 for the <u>Destination</u>
- Enter the IP address for the <u>Gateway</u>; this address is the IP address of the next hop.
- Click on <u>Add Route</u>

Now the 2800 will use this address to forward IP datagrams when no other route exists. Be sure to permanently save the new configuration by submitting <u>Record Current Configuration</u> on the 2800 home page.

The IP Routing Table

Removing a route is a two-step process. First, while in the IP Routing Information, click on the destination route you wish to remove or modify. In this example, we will show how to remove the <u>default gateway.</u>

After clicking on the destination link, the page will be displayed showing the parameters for that route.

The **Mask** is used with the destination to define the address space which will be forwarded to the gateway.

The **Interface** is the physical interface that the gateway is attached.

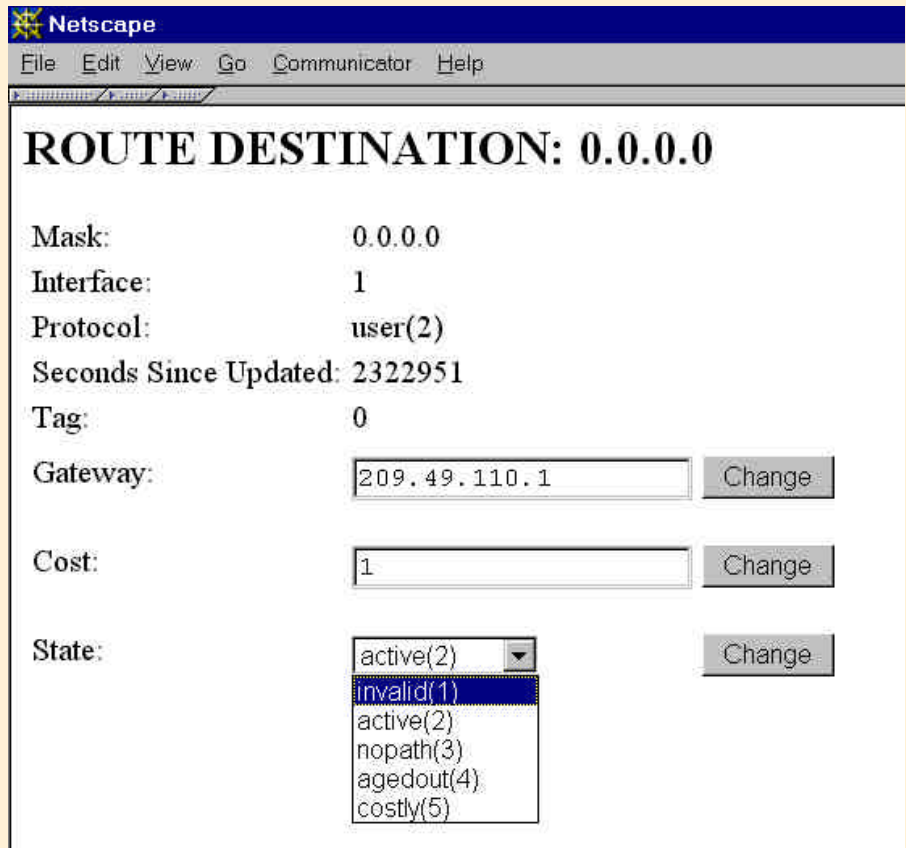The **Protocol** indicates how the route was learned. The options are:

user   Added through user entry, typically a static route

local   Added by O/S to support an interface

icmp   Added by reception of an ICMP packet

rip   Added by reception of a RIP packet

radius   Provided in a RADIUS response packet

Seconds Since Updated indicates how long the route has been installed

The **Tag** value displays the tag that was sent with the route. This value will show either the tag value as included in a RIP packet or the Session-ID if the route was installed by RADIUS.

The **Gateway** identifies the next-hop for packets using this route.

The **Cost** value is the metric associated with this route.

The **State** identifies the status of this route. Status can dynamically change depending on updates to the routing table. The values are:

Invalid   This setting is used to remove a route from the routing table.

Active   This identifies that the route is good <u>and</u> is in use.

Nopath   Identifies that there is no physical interface associate with the gateway.

Agedout   Identifies that the route is going to be removed from the route table. Typically seen when running RIP, agedout signifies a route with a metric of 16 and will be removed.

Costly   Identifies that a route is good but that a better currently exists in the routing table. The active route (see above) will be used instead of this route.

Removing a Route

To remove this route from the 2800, set the state to **<u>invalid(1)</u>** and click on the Change button. This will remove the route from the routing table. It will return you to the routing table showing the route with a metric of 16 and a state of agedout.