

## 9. Place important end-to-end service routes on a watch list and receive alerts when they reroute

There may be service paths of high importance in your network such as a VoIP path between an IP PBX and a PSTN media gateway that cannot tolerate increased delay resulting from a possible rerouting due to link failures. There may be other high traffic paths between ASes in your multi-domain network that normally traverse your own transport network, but may on occasion be rerouted via a transit provider that could be costing you extra money or may be traversing a low bandwidth link.

The only way to monitor these situations until now has been with application level polling or “traceroute”. These methods are either costly in terms of traffic added to the path or in the delay incurred by the polling cycle. Route Explorer can watch end-to-end paths and alert you instantly and without network overhead.



**Figure 18**

The end-to-end path illustrated in Figure 18 at left gets rerouted when a link fails, to the route on the right. The number of hops has increased by one but the extra hop is going over a slower link with the path latency having increased. Route Explorer can watch this end-to-end path and others including ones that span AS boundaries, and send an alert when it reroutes – either due to a link outage or a metric change. Figure 19 illustrates the alert configuration.

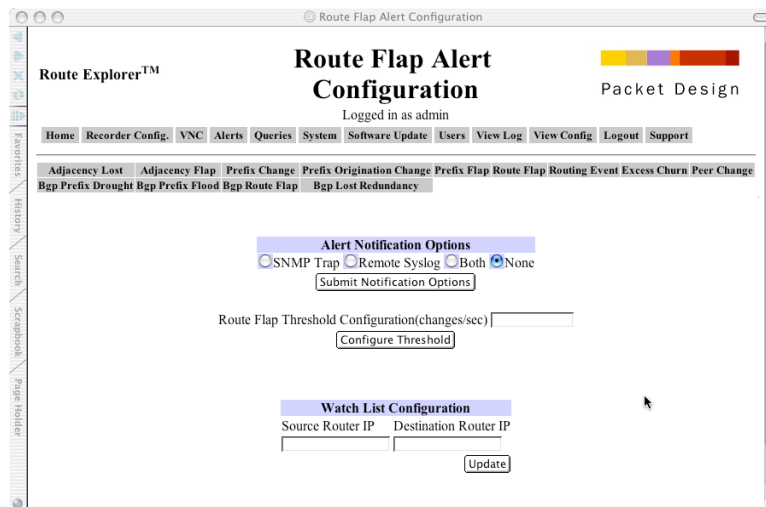


Figure 19

**HOW TO:**

1. To enable watching the end-to-end routes, use the IGP Route Flap alert
2. Select Route Flap in the Alerts page of the Route Explorer Admin page
3. Select the alert notification options (SNMP and/or Syslog)
4. Enter the flap frequency – normally 1 per second
5. Because the total number of end-to-end routes in even a small router network can be very large, Route Explorer requires the use of the watch list associated with this alert. Enter the source and destination router for the end-to-end path to watch and click “update”
6. To see the alert from Route Explorer, you must also enable it in your SNMP manager, or view it on your Syslog server