

5. Get a summary view of the routing table now or at any time in history

In a large multi-AS network with hundreds of routers, multiple IGP domains, and multiple BGP border routers, how do you get an overview of your network's routing state? The following example questions are difficult (or impossible in some cases) to answer quickly without Route Explorer:

- Which IGP prefixes and links are down right now and which routers are involved?
- Is one of my customers or peers (if I am an ISP) flooding me with unexpected routes or has one of my providers (if I am an enterprise) withdrawn all his routes?
- Which BGP next hops are there from my network and how many routes is each BGP peer advertising to me?
- Can I get a list of all LOCAL-PREF values used in my network to make sure they conform to my routing policy and traffic engineering goals?
- What MED values are being advertised to me and do they conform to my policy?
- Can I see a list of all communities advertised and a distribution of routes with those communities?
- What are my neighboring ASes or second hop neighboring ASes and how many Internet routes are going through each?
- What are all routes learned from a particular route reflector in my network?

Route Explorer's RIB Browser can answer these and many other questions. Figure 11 shows an example of the RIB Browser in use in an IGP domain.

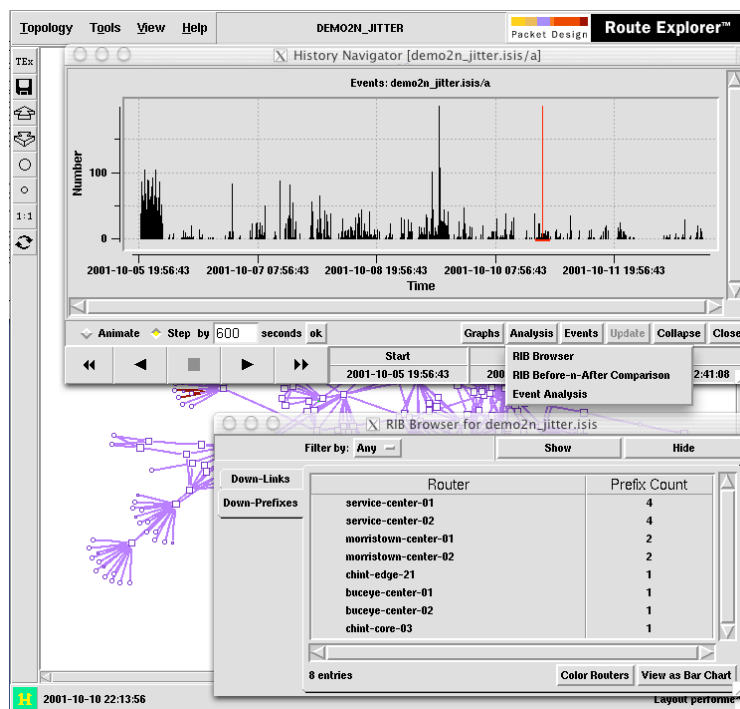


Figure 11

HOW TO:

1. Open the “DemoJitterISPOct01” topology
2. Open history navigator: click Tools->History Navigator
3. Display the Networks timeline: Click on “Graphs” button in History Navigator
 - a. Select the “Networks” button.
 - b. Resize the History Navigator if necessary to display both the events and networks timelines.
4. Drag the cursor near time 2001-10-10 22:00:00.
5. Click on “Analysis” drop-down menu and select “RIB Browser”
6. Resulting summary tables can be:
 - a. Filtered (use the “Filter By” drop-down),
 - b. Sorted (click on the column heading)
 - c. Viewed as bar graphs (click on “View as Bar Chart”)