The Border Gateway Protocol or BGP is at the core of the modern Internet. Large corporate and government enterprise networks are increasing their use of BGP to interconnect different administrative and country specific regions. This geographic span adds further to the complexity of a BGP network when calculating and planning for network latency. Network design engineers need a reliable and cost effective means to test the routers’ ability to handle BGP transactions accurately while simulating network latency with their applications.

The BGP-EDS Ethernet delay simulator is a product used to apply traffic rules on packets flowing out of the egress port for the intended packets matching source address and destination address. Dynamic Routing protocols like BGP are used for the route and can be applied to an Interior Gateway Network as well as an Exterior Gateway Network.

The user can specify the source and destination IP addresses either as a single IP or with the subnet mask (CIDR Addresses) for which the traffic rules apply as a whole. The BGP-EDS system acts as a BGP router by which it chooses the best and valid destination using a best path selection algorithm. Dynamic routing allows the router to take individual routing decisions for a network before routing and thus reduces the overhead for a network engineer. The product is dynamic enough to support and scale a multiple number of 10/100/1000 copper or fiber interfaces. We now also support 10GbE fiber interfaces.

The BGP-EDS allows user to perform network bandwidth and delay simulation (simulate slow/congested links between nodes) on any connection from device to any remote node on the local LAN or remote over Internet. The BGP-EDS network delay simulator is meant to provide a real experience of a Wide Area Network, during application development testing over a LAN environment. Users can install the BGP-EDS at nodes where performance related development and testing is required. Network characteristics such as Network delay, Packet loss, Packet corruption, Disconnections, Packet re-ordering, Jitter, etc. would only apply to connections according to filter criteria concerning source and destination IP addresses.

The BGP-EDS is managed via an integrated Graphical User Interface(GUI) with security provisions and restrictions for multiple users. The unit is housed in a sturdy 2U front load enclosure with an integrated 90-240V 50/60Hz power supply. The BGP-EDS has a 3-Year warranty and 24hour turnaround on most repairs.

EAST COAST DATACOM, INC.
Typical Application
Used to apply traffic rules on packets flowing out of the egress port for the intended packets matching source address and destination address. BGP is used for the route and can be applied to Interior Gateway network as well as an Exterior Gateway Network.

Data Interface
10/100/1000, 10GbE, copper or fiber up to 12 ports

Data Rates
300bps - 10GbE in 1bps increments, bi-directional or split speed

Traffic Simulation sub-system
- Handle Traffic Bandwidth Control and Shaping.
- Add, Edit and Deletion of profiles.
- Profile is applied for source IP and destination IP pair or ranges of source IP and destination IP(by selecting the subnet mask).
- Each IP Address maintains its own profile of Bandwidth Shaping.
- Change the profile applied on particular source and destination IP pair.
- Shows list of applied profiles with source IP and destination IP.
- Enable, disable and remove the traffic simulation parameters applied on source and destination IP.

Border Gateway Protocol (BGP) sub-system
- Perform Routing Decision Dynamically based on number of networks available at that instant.
- Assign router ID for a BGP router.
- Adding and deleting Neighbors, Networks to and from the System.
- Forwarding Packets based on routes created dynamically.
- Show List of neighbors added to a BGP router and also shows BGP routing table.
- View Routes Advertised to/by Neighbors.
- Assign Preference(Weight) to a particular path from list of available Multiple paths

Interfaces Settings
- Able to Detect and Configure Scalable number of network interfaces.
- Add, Edit and deletion of interfaces configurations.
- Show Status of connected/available Network Ports.
- Show port speed, port type(management or router),MAC address, IP address of each ports.
- Show whether Traffic Shaping Profile is active for a particular interface at that instant.

Web Browser Compatibility
FireFox, Google Chrome

Power Source
AC Mains: 90-240VAC @ 10%, 50/60Hz

Environmental
Operating Temperature....32º to 104º F (0º to 40º C)
Relative Humidity.........5 to 85% Non-Condensing
Altitude..................0 to 10,000 feet

Dimensions
Height ........ 3.35 inches (88.90 mm)
Width .......... 17.20 inches (436.88 mm)
Length ....... 14.50 inches (368.30 mm)

Warranty
Three Years, Return To Factory

Regulatory Approvals
UL, CSA, CE, CCC, FCC and RoHS

ORDERING INFORMATION
Main Unit Part Number: 232000
Model: BGP-EDS_1/10GbE
Description: BGP based Ethernet Delay Simulator

Part Number: 226000
Model: 4-Port 1G Copper
Description: 4-Port 10/100/1000 Copper Interface

Part Number: 226007
Model: 2-Port 10GbE SFP+
Description: 2-Port 10GbE SFP+ Interface

EAST COAST DATACOM, INC.
245 Gus Hipp Boulevard, STE 3 • Rockledge, FL 32955-4812 U.S.A.

TEL: (321) 637-9922     WEB SITE: www.ecdata.com      FAX: (321) 637-9980