Understanding Storm Control on EX-series Switches

A traffic storm is generated when messages are broadcast on a network and each message prompts a receiving node to respond by broadcasting its own messages on the network. This, in turn, prompts further responses, creating a snowball effect. The LAN is suddenly flooded with packets, creating unnecessary traffic that leads to poor network performance or even a complete loss of network service. Enable storm control to permit the switch to monitor traffic levels and drop packets when a specified traffic level is exceeded, thus preventing packets from proliferating and degrading the LAN.

The level of broadcast and unknown unicast traffic is a percentage of the total available bandwidth of the port. For example, if the level is set to 10 percent storm control is applied such that the traffic is allowed at an average rate of 10 percent of the bandwidth.

Broadcast, multicast, and unicast packets are part of normal LAN operation, so to recognize a storm, you must be able to identify when traffic has reached a level that is abnormal for your LAN. Suspect a storm when operations begin timing out and network response times slow down. As more packets flood the LAN, network users might be unable to access servers or e-mail.

Monitor the percentage of broadcast and unknown unicast traffic in the LAN when it is operating normally. This data can then be used as a benchmark to determine when traffic levels are too high. You can then use storm control to set the level at which you want to drop broadcast traffic, unknown unicast traffic, or both.

Related Topics

- Example: Configuring Storm Control to Prevent Network Outages on EX-series Switches