

## 3Com® SuperStack® 3 Switch 4400: Supporting IP Telephony

### APPLICATION BRIEF

#### The Problem—Ensuring Quality Voice Communications

An IP-based telephony system offers many clear benefits, including lower costs, simpler configuration and modification, and more efficient messaging by combining e-mail and voice mail in one system. To deliver high audio quality, voice traffic should be uncompromised by bandwidth competition with other network traffic.

Lost or delayed packets can affect the quality of an IP telephony-based conversation. If a packet gets lost because of over-congestion somewhere in the network, it can cause a “clip-like” sound on the telephone line. Delayed packets also can degrade sound quality. The time lag in communication becomes noticeable when latency exceeds 250 ms.

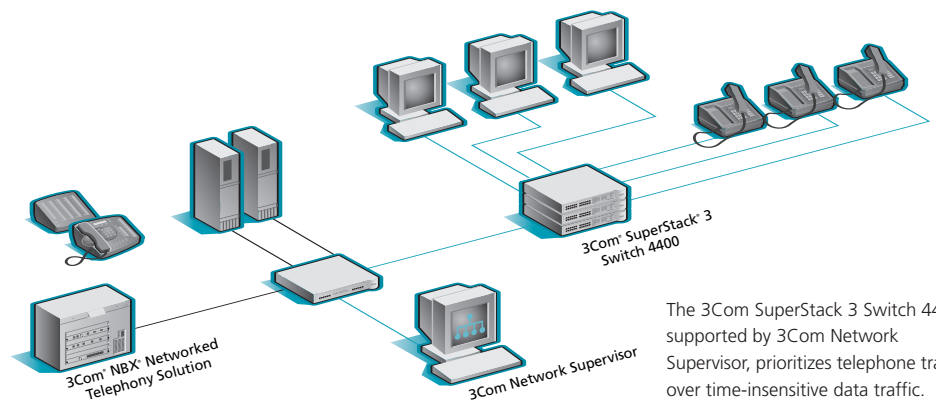
#### The Solution—Traffic Prioritization

To support crystal-clear voice quality, the 3Com® SuperStack® 3 Switch 4400 works effortlessly with 3Com networked telephony products, automatically identifying traffic and prioritizing it above time-insensitive data traffic.

can prioritize all of these traffic types, ensuring high-quality voice communications by minimizing latency and packet loss.

The 3Com NBX® Networked Telephony Solution and NBX 100 Communications System can operate at Layer 2 (Ethernet) or Layer 3 (IP). Depending on the selected mode, these systems will use ARP, UDP Port 2093, DiffServe Code Point 46, or Ethernet Type 0x8868. The SuperStack 3 Switch 4400

In addition, using its advanced Layer 4 capabilities, the Switch 4400 can prioritize network traffic for third-party IP telephony systems. By manually configuring traffic in the UDP and TCP port ranges of these systems—using 3Com Network Supervisor management software—the Switch 4400 can assign priority in much the same way it supports NBX networked telephony solutions.



The 3Com SuperStack 3 Switch 4400, supported by 3Com Network Supervisor, prioritizes telephone traffic over time-insensitive data traffic.

#### Want to know more?

For further information on this 3Com SuperStack 3 Switch 4400 feature and its use, please refer to this entry in 3Com Knowledgebase:

<http://knowledgebase.3com.com>, Solution ID: 2.0.72839385.3221790