

10 GIG: When Is It Right?

By Larry Chaffin
SARCOM National Director of Professional Services





Think of being able to replace a network that uses ATM Switches and SONET Multiplexers that run on an OC-48 SONET Ring, with more cost effective network made up of 10 Gigabit Ethernet Switches... sounds good, right? Now think about the fact that you can move from 2 Gigabits per second to 10 Gigabits per second. What IT department would turn this idea down?

With the current advances in network equipment this is an advance that some companies are using now, but when is it right? Companies now are using this technology to drive more efficient WAN and MAN networks. This is enabling companies to use a common and consistent technology end-to-end in a network, which would be Ethernet. But when should a company make the investment to use a 10 Gigabit network to support the LAN?

Computing is moving faster and faster each day with applications needing more and more bandwidth. Computers are now coming with Gigabit Ethernet cards to make it faster for the users to upload data. But if the infrastructure will not support the bandwidth, then the advances in computers are meaningless. New network switches that have been developed support gigabit to the desktop and also provide 10 Gigabits to the LAN. That is correct. From a switch, the network can run speeds of 10 Gigabit.

In the money and stockholder world that we live in, many IT Managers struggle with the concept of when it is a good idea to make the move and upgrade your equipment. A value added ROI, or Return on Investment, is a key part in determining when to make the move to purchase new equipment. In the ROI, a detailed assessment of the current bandwidth used in the network will provide

some relevance to decision makers on the validity of the request.

There could be many different items in your ROI, so we will just look at one application that could make the difference. Desktop clients are now becoming more and more prevalent in the VOIP community. With a desktop client on a laptop computer, a user will have no boundaries in which he or she can work. It negates the whole idea that everyone has to be at a desk to work and answer a phone. But with this comes needed bandwidth as the user will not only be working on the laptop or desktop, but making phone calls as well.

Most desktop clients, as those from Nortel Networks and Cisco Systems, will utilize many other added features that will need bandwidth. These could be instant messaging, file transfer, desktop or web meetings, video desktop conferencing and desktop video. When you look at a normal company, VOIP at the desktop provides a great ROI for most companies. It can eliminate the need for desktop phones, groups of people to provide service for them, and the investment needed for people and hardware.

SARCOM is currently able to provide an array of routers and switches from ProCurve Networking and Cisco Systems that will enable a network and provide the bandwidth needed to the users. SARCOM can also provide collaborative services to the desktop such as desktop clients for VOIP and video solutions. SARCOM's expert staff is able to provide a real world ROI, design and implementation plans – it is a winning combination for any IT executive.