



Switched Fast Ethernet

It's rare to have the chance to design and install a completely new network from scratch without having to accommodate existing and often inferior hardware or cabling. Should you be so fortunate as to have this opportunity, here is a solution that combines 100 BASE T Fast Ethernet and Ethernet switching to create a high performance 16Mbps LAN.

The Network is centered around 100 BASE TX switches connected by a full-duplex 200 Mbps 100 BASE FX fiber backbone. The fiber backbone lets you extend the tight network diameter limitations of 100 BASE TX to meet the needs of networks that span multiple floors or buildings. This solution uses multimode fiber, which can support full-duplex switch-to-switch links of 2 km. If you need longer distances, a single mode 100 BASE FX modules that supports distances to 20 km full duplex is also available for the 100 BASE TX switch. All workstations and servers featured in this solution are high performance PCI-bus computers equipped with 10 BASE T/ 100 BASE TX adapter cards. The switch on the left connects five power users, which might be a workgroup of graphics, engineering or multimedia workstation, all sharing a single server. In this scenario each workstation and server has its own unshared, collision less connection to the switch.

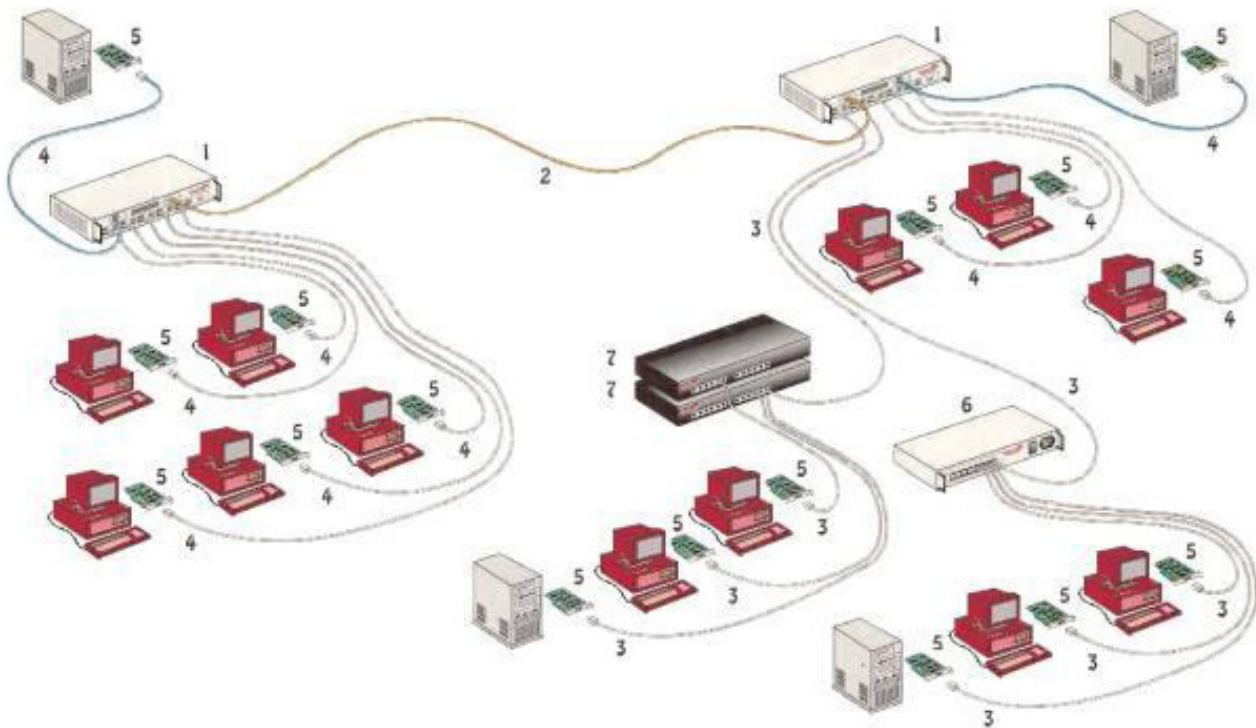
This allows you to configure each port for full-duplication operation, thereby doubling the available bandwidth to each node to 200 Mbps. The switch on the right connects another power user workgroup of three workstations sharing a single server. It also connect two workgroups of less bandwidth-hunger users, each with their own local server, via 100 BASE TX hubs. All nodes connected to a 100 BASE TX hub are in the same collision domain and are sharing a q100 Mbps half-duplex connection to the switch.

- » **Complies with IEEE 802.3u 100 BASE TX and 100 BASE FX Standards**
- » **Uses high performance 100 BASE TX switches for network segmentation**
- » **Incorporates a 100 BASE FX fiber backbone to cover multiple floors or buildings**



Switched Fast Ethernet

- » Accommodates both power users and less demanding workgroups
- » Switch-to-switch and switch-to-node connections can operate full duplex at 200 Mbps



Products:

1. 100 BASE TX Switch With 100 BASE FX and 100 BASE TX Modules
2. ST-to-ST 62.5/125 Fiber Optic Cable Assembly
3. Straight-Pinned Cat. 5 UTP Patch Cable, T568B
4. Cross-Pinned Cat. 5 UTP Patch Cable, T568B
5. 10 BASE T/100 BASE TX Adapter Card, PCI
6. 100 BASE TX Hub
7. Stackable 100 BASE TX Hub
8. Server