Computer Automation SyFA System

New Product Announcement

In April 1978, the Commercial Systems Division of Computer Automation announced the SyFA Virtual Network, described as "a new network architecture that eliminates system boundaries on intra-network communications and concurrently supports all major communications protocols."

Specifically, the SyFA Virtual Network will concurrently support the SNA/SDLC, X.25, and bisynchronous protocols. It allows a user to geographically distribute his data base, yet retain the ability to directly access any data base from any SyFA Information Station in the network. Not only can the user configure SyFA Information Stations and SyFA processors into the network, but since all major protocols are supported, he can easily interface such equipment as IBM 3270 terminal clusters, IBM 3790 (SNA/SDLC) systems, Bell System Dataspeed 40/4 clusters, or X.25-compatible processors and devices, according to CA. One or more host mainframe installations can be interfaced to the Virtual Network at various hierarchical levels. Any mainframe that supports SNA (3790), X.25, or bisync communications can be interfaced.

A SyFA Virtual Network consists of a Virtual Network Controller and up to 31 SyFA systems, each containing a microcomputer-based Distributed Data Base Processor. The Network Controller controls the total network and is based on a version of CA's LSI-4/90 microcomputer. The Distributed Data Base Processor serves as an interface between the SyFA CPU and the Virtual Network. Each Virtual Network Controller interconnects up to 31 SyFA Network Processors (a SyFA system with a Distributed Data Base Processor added) and 992 SyFA Information Station Terminals to geographically distributed data bases with a capacity of up to 74.4 billion bytes of on-line storage. Access to all mainframe data bases is also provided for. Since multiple Virtual Networks can be interconnected, the total number of terminals, processors, and on-line storage capacity that can be configured is essentially unlimited. Should a SyFA Information Station fail, the rest of the network will be unaffected. If a Network Processor fails, all other processors and attached peripherals will continue normal operation. Additional reliability can be obtained by installing an optional backup Virtual Network Controller.

Virtual Network communications (between the Network Controller and SyFA Network Processors) utilize the X.25 protocol at transmission speeds up to 56K bits per second. In addition to this X.25 channel, each SyFA System has another synchronous communications line available that can be used in various forms for concurrent communications (interactively or in batch mode) with a mainframe system or other distributed installations.

The basic price for a single SyFA System can range from \$29,000 to over \$150,000. The additional cost to configure a Virtual Network includes \$31,500 for the Virtual Network Controller and \$7,500 for each Distributed Data Base Processor. The optional backup Network Controller is priced at \$20,000. The basic Network Controller will control 15 SyFA Systems. However, each controller can be expanded to accommodate up to 16 additional systems in increments of 4, with each incremental addition costing \$4,000. Thus, a 31-system Virtual Network Controller will sell for \$47,500.

All necessary control software and operating systems are included in the above prices. Communications emulators carry a one-time charge for the entire network, ranging in price from \$1,500 to \$7,500. All Virtual Network components are field-installable.

First deliveries are scheduled for the third quarter of 1978.