ATTACHMENT C

7-XP / X-LINK configuration with multiple ATs

The X-LINK System accelerates the movement of data through the system and provides the ability for multiple AT class systems to share files.

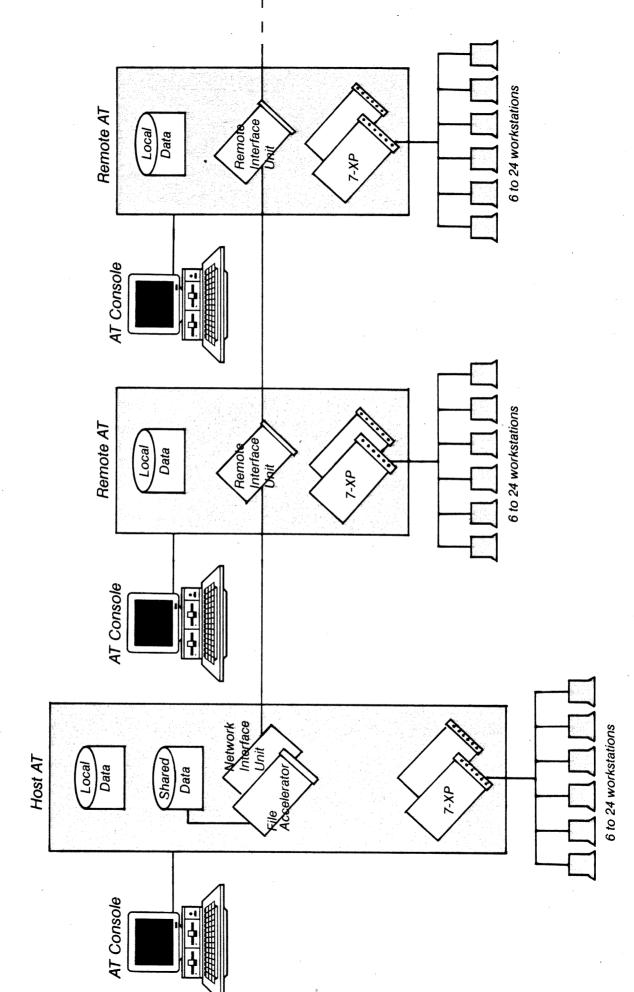
This file handling is supported in the host cluster by the X-LINK File Accelerator (a full slot board) and the X-LINK Network Interface Unit (a piggy-back on the File Accelerator). The X-LINK Remote Interface Unit (a half slot board) is installed in all other clusters. Shielded twisted-pair cable (up to 1,000 feet total length) connects the Network Interface Unit to Remote Interface Units.

The X-LINK Network runs at 2Mbits per second to pass file records between the host cluster and other clusters. The physical limitation of X-LINK is thirty-two clusters, however, the performance limitation due to traffic on the link is typically six clusters. Individual clusters can be powered down and back up without affecting any of the other clusters. Of course, the host cluster must be powered up if shared files are to be accessed.

Six clusters, each with one 7-XP, would support up to forty-two users. With four 7-XPs in each cluster, up to one hundred forty-four (144) users could be connected. Applications with intense activity to shared files would be limited by performance to fewer than 144 concurrent users.

The File Accelerator increases the performance of the file I/O of the AT system and is mandatory for the file handling in the network. The multiple requests arriving from the different systems are queued and processed using the elevator disk seek optimization feature. A large block of the data is cached with each disk read. Succeeding read requests will find the data in cache memory and will not have to wait on the disk. The more load requests that are placed on the File Accelerator, the more efficiently it can process the requests and get the data back to each cluster.

The variety of configurations using the X-LINK System is virtually unlimited. The flexibility of tying two or more clusters together allows you to respond to any and all requests for your application software. To support departmental computing, each department may have its own system while data sharing can occur between departments.



IBM ATs or compatibles with up to twenty-four 7-XPs