

Supported token-ring functions

Last Updated: 2021-05-08

A range of token-ring technologies that support speeds of 4 Mbps, 16 Mbps, and 100 Mbps are supported on the system.

These token-ring technologies support the IEEE 802.5 standard. The 100 Mbps token-ring input/output adapter (IOA) supports the High-Speed Token-Ring IEEE 802.5 standard. This standard specifies 100 Mbps operation.

The 100 Mbps token ring IOA:

Your system can use the Peripheral Component Interconnect (PCI) 100/16/4 Mbps Token-Ring Adapter to support faster networking. The IOA supports many protocols including TCP/IP and Systems Network Architecture (SNA). It is compatible with earlier devices, but does not support token-pipes or multilink. The adapter is also known as the 2744 IOA. The functions that the IOA introduces are as follows:

- **Automatic ring-speed sensing** (automatic sense) enables your system and the switch to find the highest common ring speed to use between them. The destination does not need to match this speed, because the switch manages the differences in speed.
- **Duplex mode negotiation** enables your system and the switch to agree on the duplex mode to use (half or full duplex). The available duplexing modes are dependent on the ring speed that you use. At 4 Mbps or 16 Mbps, you can use either half-duplex or full-duplex mode. At 100 Mbps, you must use full-duplex mode (the speed for each transmitting or receiving channel is 100 Mbps).

Early token release:

Only 16 Mbps rings that use half-duplex mode can use the early token release function. This function reduces the time that the next device on the same ring waits for a free token. Early token release enables the transmitting device to release the free token right after sending a frame. Thus, the next device receives the free token sooner and can thereby transmit a frame. This function is beneficial only in rings where the time to transmit a frame is shorter than the travel time of the frame.

Parent topic:

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