

### **Description**

Command Console is a feature-rich, graphical user interface (GUI) and remote management program for StorageWorks controllers. It provides an extremely user-friendly method of monitoring, configuring, and troubleshooting a large number of storage subsystems.

Command Console can be connected to your StorageWorks controller in several ways. Once connected, the program issues commands and interprets the responses sent by the controller. The user interface displays the logical and physical layout and status of a selected subsystem in graphical form.

### **Features**

Following are the major features of Command Console:

- Direct, serial port connection
- Host port SCSI bus virtual terminal connection
- Network connection via TCP/IP protocol. Both TCP/IP and SNMP fault notification protocols.
- Graphical view of the controller and its physical and logical storage elements
- Easy, graphical configuration of the storage system
- High and low-level status monitoring of the storage subsystem using colored icons
- Remote fault notification by pager
- A controller firmware download facility.
- Automatic event logging in Windows NT 3.51
- User and feature access protection

### **Program Modules**

Command Console consists of two program modules:

- **Command Console Client**—Command Console Client is the GUI portion of Command Console. Client is a 32-bit application designed to run on Microsoft Windows NT<sup>®</sup> 3.51 and Windows 95<sup>®</sup> systems.
- **Command Console Agent**—Command Console Agent is a host agent program that works with Client for network connectivity. Agent is available for Windows NT<sup>®</sup> 3.51 and Digital UNIX<sup>®</sup> host systems.

### **RAID Support and Terminology**

Command Console provides graphical configuration support for the following RAID configurations:

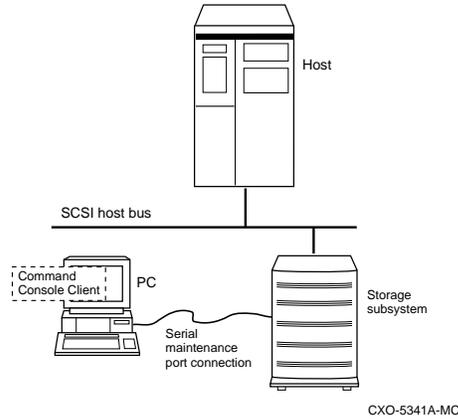
- RAID 0—disk striping.
- RAID 1—disk mirroring
- RAID 10/0+1—striped mirroring
- RAID 3/5—striped parity RAID

### **Connection Options**

You can connect Command Console to your storage subsystem in three ways:

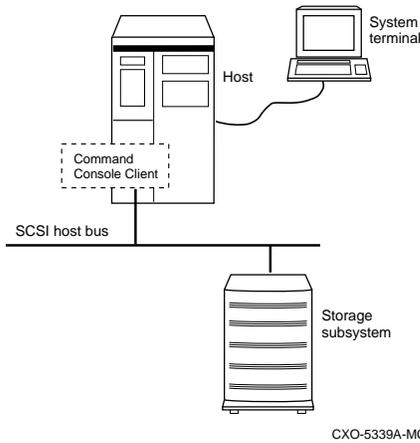
#### **Direct Serial Port Connection**

The simplest connection to the storage subsystem is a direct, cable connection from the maintenance terminal running Command Console Client to one of the subsystem controller's serial maintenance ports.



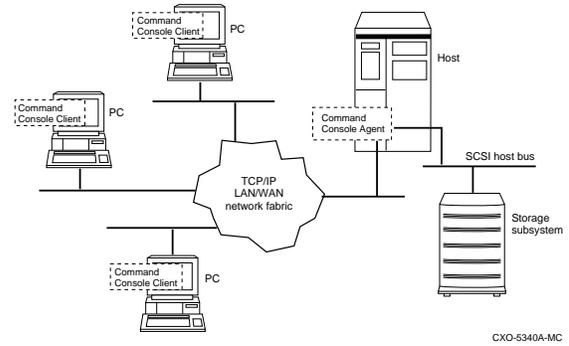
**Host-Bus SCSI Connection**

You can connect to your storage subsystem using the host SCSI bus by running Command Console Client on your host system.



**Network Connection**

Command Console has sophisticated networking capabilities. If the maintenance terminal you are running Client on has a TCP/IP network connection, you can connect the program to your storage subsystem via the network. To connect this way, you must run the Command Console Agent program in your host.



Agent acts as Client's assistant in controlling your storage subsystem. Commands sent from Client are received by Agent and are routed to the storage subsystem via the subsystem's SCSI host bus. Subsystem status is transmitted back to Client from Agent via the network connection. Agent can also be used for access protection.

You can run up to 32, concurrent, Client stations at a time. You can connect concurrently to up to 128 host systems, each with up to 32 storage subsystems for a maximum of up to 4096, concurrent, subsystem connections

Using a network connection, you can configure and monitor your storage subsystem from anywhere on your LAN. If your LAN has WAN or Internet connectivity, you can monitor your subsystem with TCP/IP network reliability from anywhere in the world.

**Error Handling**

Command Console provides passthrough error information for all types of controller problems.

If Client is used on a system running Windows NT 3.51, the program makes full use of NT's event logging facility.

**Access Protection**

Command Console provides three levels of access protection, all on a subsystem-by-subsystem and user-by-user basis:

- "Good/bad" status monitoring.
- Detailed status and operating information monitoring
- Active, configuration access

### **Minimum System Requirements**

Following are the minimum system requirements for Command Console Client:

Architecture	Intel 486/66 MHz with 16 MB memory and 10 MB free disk space, CD-ROM drive
Operating System	Windows NT 3.51 (build 1057 or later) or Windows 95 (build 950 or later)
Program Size	All programs and files <5 MB
Monitor	15", VGA
Input Devices	Keyboard, mouse
Modem	Hayes-compatible
SCSI Adapter	FWD (6-port controllers) or FWSE (2-port controllers) (for connection via SCSI only)
Serial Port	(for connection via serial port only)
Network Adapter	TCP/IP-compatible network card (for network connection only)
Controller Compatibility	StorageWorks 2 or 6-port controllers running operating firmware Version 3.0 or higher.

### **Pager Fault Notification**

Command Console offers the capability to notify up to three, numeric pagers, in user-specified shifts, when subsystem faults occur. Pager information consists of both subsystem identification and fault category codes.

### **Controller Hardware/Firmware Compatibility**

Command Console is compatible with StorageWorks 2 and 6-port controllers running Version 3.0 or higher of the HSOF firmware.

### **Enclosure Hardware Compatibility**

Command Console provides specific, graphical representations for StorageWorks 7 and 24-device pedestal enclosures. StorageWorks data center cabinets are supported with generic shelf views.

### **Distribution Media**

Command Console is distributed via CD-ROM.

### **Ordering Information**

Command Console is bundled with certain StorageWorks controller products. You can also obtain the product directly through your StorageWorks sales representative.

### **Software Licensing**

Command Console is furnished under license only. For more information on licensing terms and policies, contact your StorageWorks sales representative.

### **Software Warranty**

Command Console is furnished with a limited warranty. For more information on warranty terms, contact your StorageWorks sales representative.