

The DTC Management Products

Technical Data

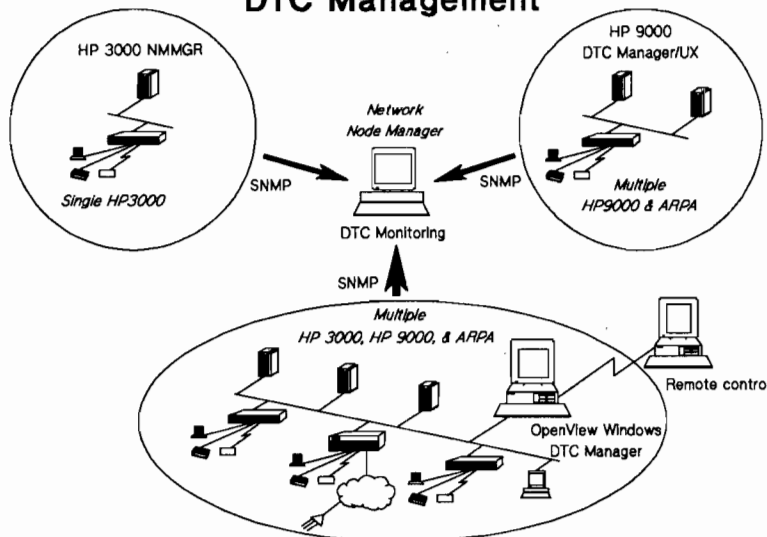
Product Numbers
HP J2120A, D2355A,
32054E #201

Introduction

The DTC solution consists of a scalable family of multivendor terminal servers, and a scalable family of network management products. The DTC products are configured and managed with the use of a DTC Manager application that can run on three different platforms: HP 3000/900, HP 9000/800, or PC OpenView Windows.

- With the DTC host-based management, a simple terminal connected locally or remotely to the HP 3000/900 or HP 9000/800 system is used to manage DTCs. It provides a user interface similar to other system administration tools.
 - The HP 3000/900-based DTC management software provides a means to configure DTCs for use in HP 3000/900 standalone environments.
 - The HP 9000/800-based DTC management software provides a means to configure DTCs in HP 9000 standalone or multisystem Telnet-TCP/IP environments.
- The HP OpenView (PC-based) DTC Manager software provides an easy-to-use graphical user interface to manage DTCs. It is possible to integrate other management applications of network elements (such as HP X.25 Switches and PADs) on the same OpenView Windows workstation.

DTC Management



HP OpenView DTC Manager provides a means to configure DTCs for use to connect to HP 3000/900 or HP 9000/800 systems and to other systems in multivendor environments. It provides powerful network management features for complex network topologies.

In both host-based and PC-based environments, the DTC software is downloaded from the management platform, allowing easy distribution and control of the DTC software.

Key Features

HP 3000-based DTC management

- End-user access to single HP 3000/900
- ASCII user interface
- Configuration and fault management

HP 9000-based DTC management

- End-user access to Telnet-TCP/IP systems
- ASCII user interface
- Configuration and fault management

HP OpenView DTC Manager

- End-user access to multiple HP or non-HP systems
- Easy-to-use, intuitive, graphical user interface based on HP OpenView Windows
- Configuration, fault, performance, and security management
- Integration with other HP OpenView/DOS applications
- Remote DTC management through modems, X.25 PADs and extended LANs

Note that when DTCs operate in extended LAN environment based on IP routers, a management platform is required per LAN segment. However, the bridging capability of routers can be used if preventing the above situation is critical.

DTC SNMP agent

Besides the services provided by the DTC management platforms, the DTC-based SNMP agent allows customers to take advantage of

SNMP-based management applications such as the HP OpenView Network Node Manager (HP-UX) or other HP SNMP manager applications.

The following features are available with Node Manager:

- Automatic discovery of DTCs.
- Status/Colors management. The DTCs are automatically polled on a regular basis and the status color is reflected on the map.
- MIB loader/browser. It provides display of MIB values in text or graphical form and the capability to modify them if permitted by the DTC.
- MIB application builder. It enables users to build applications dealing with DTC MIB objects
- Historical data reporting for troubleshooting and network planning.

The DTC SNMP agent will be supported on all DTC hardware and is configurable from all the DTC management platforms.

HP 3000-based Management

For terminal and printer connections to a single HP 3000/900 or where X.25 communication (PAD support and system-to-system) to a single HP 3000/900 is needed, the DTC can operate under HP 3000/900 based management (NMMGR and TermDSM utilities).

DTC management functions are available to ease the configuration, maximize network uptime, and reduce operating costs. Please refer to the table attached at the end of this document for detailed information.

PC-based management may also be used in this configuration to take advantage of the more sophisticated management tools.

The HP 3000/900 DTC management software is part of the MPE/iX Fundamental Operating System.

HP 9000-based management

For terminal and printer connections to a single HP 9000/800 host or multiple HP or non-HP TCP/IP hosts, the DTC can operate under HP 9000/800 based management (HP DTC Manager/UX).

The HP DTC Manager/UX product supports access to multiple UNIX® systems (switching capability) multisession, symbolic system addressing using ARPA DNS and provides a routable TCP/IP implementation that guarantees access through IP routers.

DTC Management functions are available to configure the majority of DTC parameters without resetting the DTC, maximize network uptime, and reduce operating costs.

The HP DTC Manager/UX software runs on HP 9000/800 systems with HP-UX release 9.0 or later, and ARPA Services/9000.

- * Most of the management tools are available from a command line interface

PC-based management

The DTC must operate under HP OpenView Workstation (PC) management in the following cases:

- When local access is required to multiple HP and non-HP systems
- When remote access to multiple HP 3000 systems through X.25 is required
- When remote access to HP 9000 or other TCP/IP systems through X.25 is required
- When Telnet-TCP/IP Access to HP 3000/900 systems is needed

Using the HP OpenView DTC Manager, the network administrator can easily and quickly configure up to 150 DTCs in a flexible manner, centrally isolate and resolve problems occurring on DTCs, and secure access to information. These features help the network administrator to greatly increase the network uptime. In addition, the HP OpenView DTC Manager reduces learning time of users by providing an easy-to-use graphical interface based on HP OpenView Windows.

Easy-to-use OpenView standard menus allow quick access to extensive DTC management functions, including configuration and problem isolation, as well as problem resolution of HP DTCs. Please refer to the table attached at the end of this document for detailed information.

The HP OpenView DTC manager is supported on all Hewlett-Packard 386/486 PCs, IBM PS/2-55 and model 50, and Compaq DeskPro 386/20 PCs.

HP OpenView DTC Manager is currently supported with the following software stack:

- HP OpenView Windows B.01.01
- MS-DOS® version 6.0
- Microsoft® Windows 3.1
- HP ARPA and Network Services/DOS B.00.00

- * For a complete software matrix refer to the "HP OpenView DTC Manager Installation and Upgrade Guide"

Application Integration

HP OpenView DTC Manager uses MS-Windows 3.1 protected mode which allows many HP OpenView applications to run concurrently on the same HP OpenView workstation. DTC Manager has been tested running the following applications concurrently:

- HP OpenView Switch/PAD manager (HP J2107A)
- HP OpenView System manager (HP 36936A)

Running the above applications concurrently is only supported on a 386-based PC or above, and it should be noted that the PC memory should be increased by approximately 2 MB per application.

Various permutations of applications have been tested, for a complete list of tested configurations and note on how to install them, you can order the following HP documentation: D1825-90093

HP AdvanceLink for Windows (Part of the bundle HP 32054E) may be used to access an HP 3000/900 system console port from the HP OpenView workstation.

Ordering Information

DTC manager running on an HP 3000/900:

Nothing to order.
Integrated with the MPE/iX operating system (FOS).

DTC manager running on an HP 9000/800:

HP J2120A HP DTC Manager/UX

AA0 ¼-inch cartridge tape

AA1 ½-inch magnetic tape (1600 bpi)

AAH Software on DAT cartridge tape

AA4 QIC

AAU CD-ROM certificate only

OCC Update to latest version

DTC manager running on the HP OpenView Windows platform:

HP 32054E opt 201
 HP OpenView Windows Workstation (PC) preconfigured with the DTC Manager application software including integrated Ethertwist connection

- ABA --> ABZ** Localization options (must order one)
- 101** Network connection options ThinLAN connection
- 102** ThickLAN connection

HP D2355A DTC manager application software for an HP OpenView Windows (PC) workstation

D1824E #201 Update of an existing HP OpenView Windows Workstation with the latest revision of software and DTC manager application

- The HP OpenView Windows workstation (HP 32054E) is an especially configured HP Vectra, with PC software already installed. It includes 4 Mb of memory, HP portable DeskJet printer, and MS-DOS, MS-Windows, HP ARPA and Network Services/DOS, HP OpenView Windows, HP AdvanceLink for Windows

Network Management Table

Network Management	HP DTC Manager/UX	NMMGR and TermDSM	HP OpenView DTC Manager
Platform	HP-UX systems	MPE/iX systems	PCs
Connectivity Access to	TCP/IP systems	Single HP 3000	Multiple systems
User interface	ASCII	ASCII (VPlus)	Graphical (OpenView)
Management tools:			
Integration of other OpenView/DOS applications	n/a	n/a	yes
Powerfail recovery	n/a	n/a	yes
Remote Access through PAD 233Xs modems* or IP routers	yes	yes	
Backup/restore function	yes	yes	yes
Centralized support of multiple DTC versions	no	no	yes
Retrieval of and identification of a physical port by its name	no	no	yes
• Contact your local Response Center for list of recommended modems			
DTC Functions:			
Support of DTC16, DTC48 and DTC72MX	yes	yes	yes
Support of DTC16TN	yes	no	yes
Support of DTC16iX	no	yes	yes
Support of DTC16MX	yes	yes	yes
Access to HP 3000 S900	no	yes	yes
Access to TCP/IP systems	yes	no	yes
Access to non-HP systems via extended switching	no	no	yes
Access to multiple systems	yes	no	yes
DTC/X.25 support	no	yes	yes
Telnet/iX support	no	no	yes
Maximum number of DTCs	150	24	150
Maximum numb. of X.25 cards	n/a	60	60
Configuration management:			
Automatic default configuration	yes	yes	yes
Serial ports	yes*	yes	yes*
System switching	yes*	no	yes*
DTC nodename, LAN and IP address	yes	yes	yes
User welcome message	no	no	yes*
Inactivity timer	no	no	yes*
Domain Name Server (DNS) addressing for DTC traffic	yes*	no	yes*
IP router addressing for DTC traffic.	yes*	no	yes*