MacDFT: Description (Discontinued)

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Security: Everyone

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Article Change History

02/12/93 - UPDATED
- KMW now Andrew Corporation.

06/15/93 - RETITLED
- To show MacDFT is a discontinued product.

For information on currently shipping SNA products from Apple Computer, search under SNA•ps.

Overview
MacDFT is the first complete 3270-based product from Apple Computer for the Macintosh II. It makes use of several Macintosh Coprocessor Platform (MCP) cards, such as, the Apple Coax/Twinax card and the TokenTalk card. These cards run the multitasking operating system named A/ROSE.

The software portion of MacDFT consists of three types of device drivers for the MCP cards. Two of the drivers support support CUT or DFT coax connections to 3X74 Control Units using the Caox/Twinax card. The third driver supports DFT over Token Ring with attachments to 3174 Token Ring adaptor equipped controller or Token Ring Interface Couplers (TICs) found on Front End Processors (FEPs).

The first version (September 1989) of the MacDFT terminal emulator (Version 1.0), which will ship with the Apple Coax/Twinax card, can operate as a CUT mode terminal with one session per Macintosh. A later version (December 1989,Version 1.1), to be sold as a separate product, will implement a DFT mode terminal with up to five (5) sessions per Macintosh. The sessions will be configurable via a Control Device (CDEV) in the Control Panel, which will also support communications with the cluster control unit via both the Coax/Twinax card and the TokenTalk NB card.

The MacDFT software supports IBM's IND$FILE host file transfer system in both CUT and DFT mode. The files can be sent to Time Sharing Option (TSO) or

Conversation Monitor System (CMS). File modes supported are text, MacBinary, and binary.

MacDFT is the first product from Apple that makes use of the Apple 3270 Application Program Interface (API). The MacDFT terminal emulator is written around calls to the API boundary and therefore has no hardware or connectivity dependencies. MacDFT, combined with the API, enables Apple to have "one application with many drivers" as an architected solution. The MacDFT application operates over Coax Type A media attached to IBM 3X74 cluster control units or compatibles. The MacDFT product is also intended to be used in conjuction with the Apple Token-Ring card. A Macintosh on a Token Ring network will be able to receive 3270 data streams from a LAN-based 3174 or a 37X5 Communications Controller or Front End Processor (FEP).

MacDFT product elements

The MacDFT product is shipped in two packages. The hardware is referred to as the Apple Coax/Twinax card.

The software (Version 1.0) shipping in September includes:

CUT-only CDEV Driver
MCP Multi-tasking OS (Apple A/ROSE)
MacDFT Terminal Emulation with file transfer
Apple 3270 API (included with MacDFT application)

The software shipping in December includes:

CUT/DFT CDEV Driver supporting Coax/Twinax and TokenTalk cards)
MCP Multi-tasking OS (Apple A/ROSE)
MacDFT Terminal Emulation with file transfer
Apple 3270 API (included with MacDFT application)

MacDFT application functions

By December, the MacDFT application (Version 1.1) will support the following 3270 workstation features:

CUT terminal emulation (LU type 2 only)
DFT terminal emulation (LU type 2 only)
Multi-session terminal emulation using Token Ring
(PU type 2 services with multiple LU type 2s)
File transfer to the host using the IBM PC file transfer standard
IND$FILE in TSO and CMS environments.

When MacDFT is used as a CUT, DFT or Token Ring mode terminal, it provides:

A C-DEV Driver that has three modes of operation:

A 3270 CUT driver, which supports one 3278/79 session.

A 3270 DFT driver, which supports up to 5 3278/79 sessions.

A 3270 Token Ring driver, which supports PU type 2 as a downstream PU on the ring and up to five (5) 3278/79 sessions per workstation.

Implemented using the Apple 3270 API.

Multifinder compatibility, with support for background processing.

Emulation of 3278/79 screen sizes: 24x80, 32x80, 43x80, and 27x132, corresponding to display models 2, 3, 4, and 5. The user can select the model number. Alternate screen size support is provided by the Apple 3270 API. This includes notification to the application if the host application changes screen size, so that the Macintosh application can make the appropriate changes.

Support for the IBM 87-key typewriter keyboard, which maps to the Macintosh extended keyboard.

An autokey feature to allow storage and playback of host application sequences such as logon sequences.

Print screen and save screen to disk file.

Copy and paste into and out of 3270 screens.

Copy table.

Color support that includes:
- Monochrome (2 color)
- Base Color (red, blue, green, white)
- Extended Color (red, blue, green, white, yellow, turquoise, pink)

Attribute support that includes:
- Protected/unprotected fields
- Normal/intensified display
- Alphanumeric/numeric data
- Auto skip
- Modified data tag

Extended attributes:
- Normal
- Blink (blink attributes are provided on the Macintosh using italics on a monochrome display and using color on an RGB display)
- Field outlining
- Reverse video
- Underline
- Extended color

File transfer that uses the IND$FILE file transfer protocol. The IND$FILE protocol sends full or partially full screens from the CUT presentation space to the host; the screen information is then processed by the IND$FILE host application. When MacDFT is used as a DFT or Token Ring mode terminal, it

provides file transfer via the Destination/Orgin (DO) Structured Field file transfer protocol. This protocol relies upon 'pass-thru-data' API service requests to transfer data to and from the host.

MacDFT unsupported functions

The CUT and DFT device drivers used by MacDFT do not support the following features:

Standard attributes
- Light pen detectable/undetectable

Extended attributes
- Programmed symbols including APL
- Background color
- Transparency

Graphics
- GDDM
- Program symbols
- All points addressable (APA)
- Non-Roman (Kanji)

Keyboards
- Data entry
- ASCII
- Text
- 102-key typewriter
- Keyboard RPQs

Miscellaneous
- Entry assist
- Explicit partitions (DFT)
- Magnetic readers
- Convergence feature

Special Information

MacDFT software does NOT emulate 5250 terminals even though the hardware MCP card has that capability. KMW Systems of Austin, Texas (now Andrew Corporation) announced on June 12,1989 at the Apple N & C Product rollout that they will ship a product ApLink which is 5250 terminal services with file transfer which uses the Apple Coax/Twinax MCP card.

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