PERKIN-ELMER

OS/32 8.1

MULTI-TERMINAL MONITOR (MTM)

Software Installation Guide

TABLE OF CONTENTS

1 PRODUCT IDENTIFICATION

Product Title: OS/32 Multi-Terminal Monitor (MTM)
                                  R08-01 Software Package |

Sales Order Number:
                                  Group I License:
S71-017   3203   Processor |
                                  3205   Processor |

                                  Group II License:
S72-017   3210   Processor
                                  3220   Processor
                                  3220A   Processor
                                  3230   Processor
                                  7/32   Processor
                                  8/32   Processor

                                  Group III License:
S73-017   3240   Processor
                                  3250   Processor
                                  3250XP Processor
                                  3260   Processor |
                                  3200MPS Processor

Perkin-Elmer Part Number: 04-083 R10 |

2 GENERAL INFORMATION

The OS/32 Multi-Terminal Monitor (MTM) Software Package consists
of a program package (04-083) and a documentation package
(04-083M99).

The OS/32 Multi-Terminal Monitor (MTM) requires an OS/32 R08-01 |
environment in which to execute.   Refer to the OS/32 R08-01 |
Software Packaging Installation Guide, 04-082M95R16, for further |
information.

3 AVAILABLE PACKAGES

| The OS/32 Multi-Terminal Monitor (MTM) R08-01 Software Packages currently available are:

Order Number	Part Number	Package Description
S7x-017-ABB*	04-083M31R10	OS/32 Multi-Terminal Monitor (MTM) R08-01 Software Package Functional Programs (9-track 800 BPI Magnetic Tape) and Documentation Package
S7x-017-ABC*	04-083M71R10	OS/32 Multi-Terminal Monitor (MTM) R08-01 Software Package Functional Programs (9-track 1600 BPI Magnetic Tape) and Documentation Package
S7x-017-ABP*	04-083MD1R10	OS/32 Multi-Terminal Monitor (MTM) R08-01 Software Package Functional Programs (16Mb Disk) and Documentation Package
S7x-017-ABQ*	04-083MG1R10	OS/32 Multi-Terminal Monitor (MTM) R08-01 Software Package Functional Programs (16Mb Disk with IDC Format) and Documentation Package
S7x-017-ABU*	04-083MJ1R10	OS/32 Multi-Terminal Monitor (MTM) R08-01 Software Package Functional Programs (25Mb Disk) and Documentation Package
S71-017-ABW	04-083ML1R10	OS/32 Multi Terminal Monitor (MTM) R08-01 Software Package Functional Programs (Streaming Tape) and Documentation Package
S70-017-BCM	04-083M99R10	OS/32 Multi-Terminal Monitor (MTM) R08-01 Documentation Package

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*Where S7x will be one of the three license categories as defined in Section 1 of this document.

4 DOCUMENTATION

The OS/32 Multi-Terminal Monitor (MTM) R08-01 Documentation
Package, S70-017-BCM, consists of the following two manuals:

Part Number	Publication Title
48-043 F01 R03	OS/32 Multi-Terminal Monitor (MTM) Reference Manual
48-023 F01 R03	OS/32 Multi-Terminal Monitor (MTM) System Planning and Operator Reference Manual
48-075 R00	OS/32 Primer
04-083M95 R10	OS/32 Multi-Terminal Monitor (MTM) Packaging Installation Guide

5 FILE PROGRAM PACKAGE

In addition to the MTM program package files listed below the
package also contains the following general file:

INFORM.CSS   -   A restricted rights disclosure

Filename	Part Number	Rev	Program Description
ACTUTY.OBJ	03-150 M00	R02-01	OS/32 Authorized User Utility Program (object)
ACTUTY.TSK	03-150 M08	R02-01	OS/32 Authorized User Utility Program (image)
MTMLLE.OBJ	03-502 M00	R08-01	OS/32 Load Leveling Executive (object)
MTMLLE.TSK	03-502 M08	R08-01	OS/32 Load Leveling Executive (image)
MTMASST.OBJ	03-151 F06 M00	R08-01	OS/32 Multi-Terminal Monitor Assist Program (object)
MTMASST.TSK	03-151 F06 M08	R08-01	OS/32 Multi-Terminal Monitor Assist Program (image)

Filename	Part Number	Rev	Program Description
I MTMMAIN.OBJ	03-151 F01 M00	R08-01	OS/32 Multi-Terminal Monitor (MTM) Program (object)
I MTMSGN.MAC	03-151 F03 M09	R08-01	OS/32 Multi-Terminal Monitor (MTM) Sysgen Module (source)
I MTMSGN.CSS	03-151 F04 M09	R08-01	OS/32 Multi-Terminal Monitor (MTM) System Generation CSS (source)
I MTMPARMS.MAC	03-151 F02 M09	R08-01	OS/32 Multi-Terminal Monitor (MTM) Sysgen Parameters (source)
I MTMSTRUC.MLB	07-322 M00	R08-01	OS/32 Multi-Terminal Monitor (MTM) Macro Library
I EOU.CSS	03-342 F04 M09	R02-01	OS/32 Ease of Use (EOU) Program Development Procedures (source)
I EOU.OBJ	03-342 F05 M00	R02-01	OS/32 Ease of Use (EOU) Library File (object)
I EOU.TSK	03-342 F05 M08	R02-01	OS/32 Ease of Use (EOU) Environment Monitor (image)
I DISPMTM.HLP	03-342 F03 M08	R02-01	OS/32 Display Help Information (ASCII/Binary)
I SINGMTM.HLP	03-342 F02 M08	R02-01	OS/32 MTM Environment Help Information (ASCII/Binary)

6 UNPACKAGING AND INSTALLATION

6.1 Disk Unpackaging (16 and 25Mb)

The package files supplied on disk are labelled 'MTM'. There is no unpackaging procedure for disk packages as the software is immediately usable.

6.2 Magnetic Tape (800 and 1600 BPI) and Streaming Tape (1/4" cartridge)

The files are supplied on a magnetic tape in OS/32 Backup Utility format. The unpackaging procedure involves copying the files from tape to a user disk utilizing OS/32 BACKUP.

After selecting a disk onto which the files are to be copied, review the disk filenames to ensure that they do not conflict with the filenames in this package as listed in Section 5 above. Rename any conflicting filenames to some other appropriate name.

NOTE

The supplied files in this package must not be renamed because the MTM command substitution system (CSS) files require specific filenames as listed in this document.

To unpackage the files from the system console or the Multi-Terminal Monitor (MTM) terminal, mount the supplied MTM magnetic tape and run OS/32 BACKUP Utility via the following commands:

```
LOAD BACKUP
TASK BACKUP
START ,IN=dev1:,OUT=dev2:,LIST=dev3:,VERIFY
```

where:

    dev1   is the device name for the magnetic tape drive

    dev2   is the device name for the disk

    dev3   is the device name for the printer or list device

Note that all device names have the standard OS/32 format. They are dependent on the particular configuration of the user system and can be determined by entering the OS/32 command 'DISPLAY DEVICES' at the console or terminal.

NOTE

In running OS/32 BACKUP from an MTM terminal, the user must sign on to an account having bare disk access and the task account privilege enabled. Account 255 will always have these privileges.

For further information on BACKUP, see Chapter 5 of the _OS/32_
| _System Support Utilities Reference Manual_, Publication Number
| 48-031 R03.

6.3   Post-Installation Procedures

Before using the installed software, it is recommended that the following procedures be executed:

o   Using OS/32 BACKUP Utility, copy the software files for archiving.

o   After marking the disk on and setting the appropriate volume, enter the command substitution system (CSS) call:

    INFORM [_list-device;_]

Information regarding this product will then be displayed on the the system console by default, or to an optional device _specified in the CSS call._

APPENDIX A
FUNCTIONAL CHANGES

OS/32 Multi-Terminal Monitor (MTM) R08-01 is functionally equivalent to OS/32 MTM R08-01. Changes were required for compatibility with revised OS/32 R08-01 system data structures.

o Multiple MTMASSTs:

   The capability to have up to 10 MTMASST tasks servicing SVC 7 requests is added. The number is specified by the user at MTM system generation time. The default is 1.

o $DEFINE Enhancements:

   $DEFINE POSITION is added to return the position of a substring within a given string.

   $DEFINE SUBSTRING operator is added to return a specified portion of the given string.

   $DEFINE CURRENT operator is enhanced to return the current CSS account.

   $DEFINE DVOLUME operator is enhanced to return the CSS volume. If a CSS volume is not defined, a null condition is returned.

o CSS Volume:

   The VOLUME command is enhanced to allow an MTM user to specify a volume that contains CSSs. If CSS volume processing is enabled, the search order is as follows:

        Private Volume/Current Account
        CSS Volume/Current Account
        CSS Volume/CSS Account
        System Volume/System Account

o SET CSS Account:

   This command allows the user to specify an account to search for CSSs on. This command should be used in conjunction with the CSS Volume command. The format of the command is:

```
                 {P}     ; set CSS Account to current PRIVATE Account
        SET CSS {G}     ; set CSS Account to current GROUP Account
                 {S}     ; set CSS Account to current SYSTEM Account
              {acc#}  ; set CSS Account to specified Account
```

> NOTE: User must have EXTENDED ACCOUNT ACCESS,
> SET GROUP or SET PRIVATE privileges for
> their account in the AUF.

o $GOTO Label:

The $GOTO statement is enhanced to branch backwards. When searching for a label, the CSS file is searched from its current position til the end of file; if it is not found, the file is rewound and the search continues until the label is found. If the label is not found the second time, an end condition is generated. The $GOTO with a REWIND option rewinds the file before searching begins. Note that if a label appears more than once in a file, the branch may be different depending on where the $GOTO is issued.

o E-Task Relocation:

The MTM task is now a relocatable E-task.

o LLE/PSM Support:

The LLE algorithm to calculate a task's eligibility (3260, 3200MPS only) and the PSM algorithm to calculate priority have been changed not to penalize a task that performs I/O to a device under an IOP or performs indexed file I/O that does not require a physical disk access.

It is recommended that MTMSGN.CSS be used to build the MTM task. |
Further information can be found in the OS/32 Multi-Terminal |
Monitor System Reference Manual, publication number 48-023 R03. |

To link ACTUTY, MTMLLE, or MTMASST, the following link commands |
should be used: |

```
     TITLE program                                                 |
     ESTAB TASK                                                    |
     INCL program                                                 |
     MAP ,ADDR                                                    |
     BUILD program                                                 |
     END                                                          |
```


To link the Ease of Use (EOU) utility, the following link |
commands should be used: |

```
     TITLE EOU                                                    |
     ESTAB TASK                                                   |
     INCL EOU.OBJ                                                 |
     RES HELPR081.SEG,ACC=RE                                      |
     LIB F7RT51OS.OBJ                                             |
     MAP ,ADDR                                                    |
     BUILD EOU.TSK                                                |
     END                                                          |
```