



**COMMUNICATOR 3000**  
**MPE V Version G.23.00, Release 23**

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HP 3000 Computer Systems



# COMMUNICATOR 3000

Version G.23.00 of MPE V (Release 23)



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# CONVENTIONS USED IN THIS MANUAL

**NOTATION**                      **DESCRIPTION**

*nonitalics*                      Words in syntax statements which are not in italics must be entered exactly as shown. Punctuation characters other than brackets, braces and ellipses must also be entered exactly as shown. For example:

EXIT;

*italics*                              Words in syntax statements which are in italics denote a parameter which must be replaced by a user-supplied variable. For example:

CLOSE *filename*

[ ]                                      An element inside brackets in a syntax statement is optional. Several elements stacked inside brackets means the user may select any one or none of these elements. For example:

$\left[ \begin{array}{l} A \\ B \end{array} \right]$       User *may* select A or B or neither.

{ }                                      When several elements are stacked within braces in a syntax statement, the user must select one of those elements. For example:

$\left\{ \begin{array}{l} A \\ B \\ C \end{array} \right\}$       User *must* select A or B or C.

...                                      A horizontal ellipsis in a syntax statement indicates that a previous element may be repeated. For example:

[,*itemname*]...;

In addition, vertical and horizontal ellipses may be used in examples to indicate that portions of the example have been omitted.

A shaded delimiter preceding a parameter in a syntax statement indicates that the delimiter *must* be supplied whenever (a) that parameter is included or (b) that parameter is omitted and any *other* parameter which follows is included. For example:

*itema*[,*itemb*][,*itemc*]

means that the following are allowed:

*itema*  
*itema,itemb*  
*itema,itemb,itemc*  
*itema,,itemc*

# CONVENTIONS (continued)

$\Delta$  When necessary for clarity, the symbol  $\Delta$  may be used in a syntax statement to indicate a required blank or an exact number of blanks. For example:

```
SET[(modifier)] $\Delta$ (variable);
```

underlining When necessary for clarity in an example, user input may be underlined. For example:


```
NEW NAME? ALPHA
```

In addition, brackets, braces or ellipses appearing in syntax or format statements which must be entered as shown will be underlined. For example:

```
LET var[[subscript]] = value
```

shading Shading represents inverse video on the terminal's screen. In addition, it is used to emphasize key portions of an example.



The symbol  may be used to indicate a key on the terminal's keyboard. For example, **RETURN** indicates the carriage return key.

**CONTROL** *char*

Control characters are indicated by **CONTROL** followed by the character. For example, **CONTROL**Y means the user presses the control key and the character Y simultaneously.

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## An MPE V Update

*by Mary Ann Mercer and Ross Martin  
Software Technology Division*

### INTRODUCTION

MPE V continues to be supported and enhanced. Hewlett-Packard understands that MPE V customers are concerned about continued support for their systems, and to address this concern, the Software Technology Division (SWT) is investing in a variety of efforts to meet the needs of MPE V users. While no new hardware systems are planned for the MPE V platform, support and software development resources are being vigorously applied to the ongoing viability of the systems customers depend on. As evidence of HP's commitment to MPE V, numerous enhancements and quality improvements are available in Release 23 and Release 2P, scheduled to ship summer and fall of 1992, respectively. Customers can look forward to subsequent releases containing enhancements and fixes in the future. This article explains HP's plans for MPE V with a focus on Release 23. Enhancements and fixes to Release 23 also apply to Release 2P.

HP continues to take customer feedback seriously. The improvements incorporated into Releases 23 and 2P have been largely driven by customer input. Six of the top eight enhancements identified in the INTEREX System Improvement Committee's survey of enhancement requests for MPE V (published in the May '91 Interact issue), as well as additional enhancements requested through other sources will appear in Releases 23 and 2P.

In addition, the entire backlog of MPE V service requests has been evaluated and 35 of the 40 high impact/high visibility problems have been fixed. Reliability has long been one of MPE V's strengths, and these efforts will further increase the reliability of future MPE V versions. Release 23 will be available early this summer. If you have an urgent need for fixes or enhancements in this release, and have a software support contract, contact your Technical Consultant (formerly Systems Engineer). However, we strongly recommend you wait for the normal distribution of the next platform release (Release 2P, available fall 1992) so that you will receive additional fixes plus a support life of 48 months.

HP provides platform releases every 18 months. These releases are designed for maximum reliability, containing only problem fixes on top of the previous release functionality. Starting with Release 2P, platform releases will have a support life of 48 months, increased from 30 months, and receive future patches and retrofits. Platform releases are automatically distributed to everyone on a support contract.

Between platform releases, HP provides releases that include enhancements and fixes. These releases are available by request to customers on support contracts. The support life of these releases will extend three months past the next platform release or 12 months, whichever is longer. Release 23 falls into this category.

For customers currently on V-Delta-7, V-Delta-8, and V-Delta-9, it is easier to wait to update directly to Release 2P than to move to Release 1P first. The support life for these MITs have been extended to three months past the release of Release 2P so customers can remain on their current version and move directly to Release 2P upon availability, without the risk of remaining on an unsupported MIT.

This MPE V development and maintenance activity should make it clear HP is fully supporting MPE V. We will continue to provide the exceptional support HP is famous for, as long as customers need it. And when you are ready to migrate to MPE/iX systems for increased performance and functionality, we will make sure the migration remains simple for you.

## MPE V Enhancements

Descriptions of the major enhancements for Release 23, listed below are available online through the MPE HELP subsystem by using the NEW keyword. The information displayed when you type HELP NEW is a short description of the enhancements and how to find more information for each.

Releases 23 and 2P add many enhancements already present in MPE/iX thus making compatibility with MPE/iX even better.

- **The New DELETE Command for SPOOK5**  
SPOOK5 now allows wildcard spool file deletes by date, priority and USER.ACCOUNT. Date and priority wildcards allow >, <, =, >=, <=, and <> operators. USER.ACCOUNT allows either USER or ACCOUNT name or @.
- **SHOWOUT Enhancement**  
The SHOWOUT command now displays the completion percentage for active spool files.
- **New Items Available Through the JOBINFO Intrinsic**  
The JOBINFO intrinsic now returns job initiation information.
- **The Known Vendor Table**  
This new data structure will be available for third party developers to help them manage their data.
- **STORE/RESTORE Multiple Exclusion Filesets**  
STORE, RESTORE, and SYSDUMP file sets are more powerful. They now allow up to 9 exclusion file sets for each file set.
- **Improved RESTORE Performance for DDS**  
The MPE V DAT tape driver, STORE, and TurboSTORE now utilize the fast search capability of the DAT tape drives. The result is a significantly faster restore of individual files from a large DDS STORE or TurboSTORE tape. This feature is automatically enabled if using DDS tape drives and will work with STORE and TurboSTORE tapes created before this enhancement.
- **New Tape Creation Date Option for RESTORE**  
The tape creation date can now be displayed during a RESTORE with the new keyword TAPEDATE.
- **The New MPE V EXPLAIN Utility**  
HP EXPLAIN allows users quick, online access to explanations of MPE V system error messages. It can run on any terminal or PC (using a terminal emulator), and does not need any special capabilities.
- **MPE V MI Expansion**  
The Measurement Interface will be expanded to support the maximum number of processes on MPE V (from 628 to 1024 processes).

- **MPE V Console Revert**  
The logical console is now returned to ldev 20 if a user logs off with the logical console assigned to their terminal ldev if the ldev is a modem port.
- **The New Dispatcher Priority Oscillation Boost Property**  
The dispatcher now supports the priority oscillation boost property. This feature gives a system manager increased control over allocating CPU resources. Specifically, enabling oscillation on a subqueue will cause the dispatcher to favor longer transactions and help prevent these types of processes from being CPU "starved" when the system is very busy. Online reporting is an example of a long transaction.
- **Performance Improvement For COBOL Programs**  
Many large COBOL programs will show an increase in performance on Release 23 and 2P due to a change in the trap handling code on MPE V.
- **Job File Modification Date**  
As of Releases 23 and 2P, streaming a job will not cause the modification date in the job file label to be updated.
- **SUPPACCT.PUB.SYS Enhanced for Release 23 and 2P**  
FIELDJOB, extraneous error messages, and redundant commands have been eliminated, greatly improving efficiency and reducing paper usage. In addition, the SYS account has been set to LOCK access=ANY to improve consistency between MPE V, MPE/iX, and HP Desk.

Refer to Section 2 for a detailed description of all the fixes that have gone into Release 23, including 35 defect fixes.

## Additional Software Products

- **HP DeskManager 36570**  
Version B.05.00 is now available and includes the following major enhancements: ability to configure NS connections with adjacent computers; an increase in the number of master trucks running on a system; return-to-sender facility enhanced; the user interface now supports more functions; hooks are available for ISO7 support; and configurations of local systems can now be done in batch using MAILUTIL local data.
- **HP DeskManagerPlus 36567**  
Version B.05.00 is now available and includes all of the HP DeskManager B.05.00 enhancements plus the following major enhancements: routed messages can be indicated to require authorization/approval of a set of recipients; garbage collection can be run continuously with all other HP DeskManagerPlus processes; centralized administration is accommodated; and enhanced intrinsics have been developed for integration purposes.
- **HP COBOL II/V**  
This product was enhanced to output a new message at compile time if data has the potential of getting lost.

## Introduction

- **VPLUS Release 23 and 2P**  
This release has three new enhancements: native character pattern matching; new state codes; and a new intrinsic, VGETARBINFO.
- **Business Report Writer/V**  
This product adds frequently asked for enhancements: simplified dictionary maintenance; streamlined report development; suppressing repetition with greater flexibility; and much more.
- **HP GlancePlus/V**  
This product has a 60-day trial copy available.
- **HP LaserRX/MPE**  
This product has several exciting, new features: host access to data; service level support; scheduled log files adjusted as they become full; and log file analysis. greatly improve unattended system monitoring.

## Announcing MPE V Console Revert

*by Ralph Carpenter  
Software Technology Division*

### INTRODUCTION

With MPE V Release 23, any non-hardwired terminal which has received *system console* status (by use of the *CONSOLE ldev* command) automatically releases *system console* status when the user logs off or the terminal connection is lost.

### WHY WAS THIS CHANGE NECESSARY?

Currently, any MPE V terminal not connected via DS can be assigned *system console* status, by virtue of the user of that terminal -- assuming he has sufficient capability to do so -- entering the *CONSOLE ldev* command.

A problem can arise if the user of that terminal later logs off the system *without* entering another *CONSOLE 20* command to revert the *system console* status: The problem arises when the terminal in question happens to be connected via *modem* or *data-switch*.

This type of situation most likely occurs at a customer site where central administration of multiple HP 3000s is practiced. At such multiple-HP 3000 sites, a data switch is often used for occasional connections required between the operations center and the remote HP 3000 -- employing the *CONSOLE ldev* command. In such instances, console logging messages such as job start/stop, session logon/logoff, device ready/not-ready, etc. normally print on the remote console; but, occasionally the remote console operator might inadvertently end the session by logging off or by terminating the connection, without first entering a *CONSOLE 20* command. MPE V continues to attempt to print the console logging messages to the logical *system console*. Once the console logging I/Os begin encountering time-outs due to the connection being terminated, the result is exhausting MPE V's virtual memory space resulting in a system failure.

With Release 23, the logical console is dependent upon the *nature* of the terminal connection with *system console* status when that terminal logs off: If the logical console terminal is *not* hardwired, then the *system console* status reverts automatically to logical device 20 upon log off or upon connection termination (that is, *system console* status reverts to that of the physical system console *ldev* detected during execution of the system program INITIAL). On the other hand, if the terminal that acquired *system console* status is *hardwired*, that terminal will retain *system console* status in spite of a log off by the remote console operator. The net result of this enhancement is to eliminate a common cause of system failures which is caused by neglecting to type a *CONSOLE 20* command before logging-off from a non-hardwired terminal that had been assigned *system console* status.

## CAN A LOGGED-OFF TERMINAL KEEP CONSOLE STATUS?

There is only one condition under which a terminal can remain as the logical *system console* following the end of the session -- that is the case of a *hardwired* terminal.



# Announcing HP EXPLAIN

by Kathryn Jefferies  
Software Technology Division



## INTRODUCTION

HP is introducing a new utility, HP EXPLAIN, with available with Release 23 (G. 23.00) of MPE V. HP EXPLAIN allows users quick, online access to "cause and action" information for MPE V system error messages. It can run on any terminal, and does not need any special capabilities. You can display or print the explanation for one message, print an entire set of messages and their explanations, or you can perform a keyword search of all messages in the system catalog to find a particular message.

Three sets of messages are documented in this first release of HP EXPLAIN: Command Interpreter (CIERR messages), File System (FSERR messages), and the System Failure errors (SFERR messages). Additional sets will be added in subsequent releases.

## EXPLAIN Syntax

Run EXPLAIN.PUB.SYS with the new MPE V Command Interpreter command, EXPLAIN. You may issue this command from a session or job. You may not use it from a program or in BREAK. Pressing [BREAK] suspends execution.

If you enter the EXPLAIN command with no parameters, EXPLAIN prompts you with the EXPLAIN> prompt for utility commands until you enter the EXIT command.

If you enter the EXPLAIN command with any of the parameters described below, EXPLAIN will execute the command, then return control to the MPE prompt.

```
EXPLAIN [message type and number]
        PRINT [message type and number]
        FIND [message number] [search string]
```

### Parameters

message type and number	Displays information about a certain error message. The message type and number are the set or subsystem, such as Command Interpreter (represented by CIERR) and the message number (such as 83).
PRINT [message type and number]	Prints a message and its explanation on the system line printer (class LP).

## System Information

FIND [message number]  
[search string]

Displays all messages from the system catalog which contain the message number or search string specified.

## Examples

To see the explanation for the Command Interpreter error:

```
STREAM FILE MUST BE OF TYPE ASCII. (CIERR 83)
```

enter the following at the MPE prompt:

```
EXPLAIN CIERR 83
```

The utility displays the error and its explanation, then returns you to the MPE prompt. To print that same message on the system line printer (class LP), enter the PRINT command with the EXPLAIN command at the colon prompt:

```
EXPLAIN PRINT CIERR 83
```

## DISK SPACE USAGE

For Release 23, HP EXPLAIN uses approximately 2000 sectors of disk space on your system. The required disk space will increase with subsequent releases, as more sets of messages are added to HP EXPLAIN's catalog. If you need to reduce the number of sectors used by HP EXPLAIN, you can delete the explanation catalog.

### NOTE

If you delete the explanation catalog, HP EXPLAIN will still run, but you will no longer see explanations for the error messages. When you enter a message type and number, the following message will be displayed:

```
NO ADDITIONAL INFORMATION AVAILABLE FOR THIS MESSAGE.
```

We suggest that if you need to delete the catalog, first print the sets which contain the error explanations for Command Interpreter, File System, and System Failure then delete the catalog. To print these sets, enter the following commands:

```
EXPLAIN PRINT CIERR  
EXPLAIN PRINT FSERR  
EXPLAIN PRINT SFERR
```

Then delete the catalog by entering the following command:

```
PURGE CACAT000.PUB.SYS
```

# Clarification of STORE PACKED option

*by Yukihiro Umezawa  
Software Technology Division*

A new PACKED option of STORE was introduced in MPE V Release 22. This option is valid for magnetic tape devices but not valid for serial disk devices including cartridge tape drives such as HP 9140, HP 9144, HP 9145, and HP 35401.

With the PACKED option, STORE places all of the STORE/RESTORE data into one logical file. It helps magnetic tape devices to be streamed continuously and provides significant performance improvement over labeled tape STORE. Due to device characteristics, serial disc devices, including cartridge tape drives, do not receive much benefit from the PACKED option.

For more information about the PACKED option, refer to the article "New STORE O - PACKED" of *COMMUNICATOR 3000 Version G.22.00 of MPE V (Release 22)*.

# Improved RESTORE Performance for DDS

*by John Schimandle  
Software Technology Division*

## INTRODUCTION

Restoring single files or small groups of files from DDS tape devices was very time consuming. This enhancement utilizes the "fast search" capability of your DDS tape device and significantly reduces the time to restore single files or small groups of files. The performance improvement you see will vary, but in factory performance tests the restore for a single file at the end of a DDS cartridge took 48 minutes without "fast search" and 2 minutes with the "fast search" enhancement.

## NEW SYNTAX

"Fast search" is completely transparent to the user and is supported both in RESTORE and TurboSTORE. There are no syntax changes and "fast search" is automatically enabled for most tape formats and hardware configurations.

## SUPPORTED TAPE FORMATS

"Fast search" is supported on all STORE tape formats except for Packed Labeled Tapes. Packed Labeled Tapes are created only when the STORE command contains the keyword PACKED and the tape device file equation referenced contains the keyword LABEL. Here is an example of how you create a Packed Label Tape format.

```
file labtape;dev=tape;label  
store @.@.myacct;*labtape;packed
```

This example specified the file LABTAPE to be a labeled tape on device class TAPE. The PACKED keyword in the STORE command causes a Packed Labeled Tape format to be generated. "Fast search" is not supported for this tape format.

## SUPPORTED HARDWARE CONFIGURATIONS

All direct connect DDS tape devices support the new "fast search" capability. Remote DDS tape devices do not support "fast search". An example of a remote tape device specification is shown below. In this example "fast search" would be disabled.

```
file mytape;dev=remotenode#tape  
restore *mytape;@.@.myfiles
```

This example requests the tape to be mounted on device class TAPE on the remote node named REMOTENODE.

# New Items Available Through the JOBINFO Intrinsic

*by Robert Ross  
Software Technology Division*

## INTRODUCTION

The JOBINFO intrinsic has been enhanced to provide access to eight new items, mostly pertaining to the initiator of a job or session. Much of this information is also provided by the Security Monitor product when a job is streamed.

## NEW JOBINFO ITEMS

When JOBINFO is called using item numbers 41 through 47, the following information is returned about the user who initiated the job, rather than the job itself:

- Item 41 returns a DOUBLE value containing the Job or Session Number
- Item 42 returns a LOGICAL ARRAY containing the Job or Session Name
- Item 43 returns a LOGICAL ARRAY containing the User Name
- Item 44 returns a LOGICAL ARRAY containing the Account Name
- Item 45 returns a LOGICAL ARRAY containing the Logon LDEV #
- Item 46 returns a LOGICAL value containing the Job Initiation Date
- Item 47 returns a DOUBLE value containing the Job Initiation Time

The other new JOBINFO item number will let the caller find out whether a job or session is in QUIET mode, and pertains to the job/session itself, rather than the initiating job or session:

- Item 40 returns an INTEGER value defined as:
  - 0 = The job/session is NOT in Quiet mode
  - 1 = The job/session IS in Quiet mode

## ITEM NUMBERS NOT SUPPORTED ON MPE V

Calling JOBINFO with item numbers 37, 38 or 39 is not supported on MPE V.

# Introducing the Known Vendor Table

*by Robert Ross  
Software Technology Division*

## INTRODUCTION

Beginning with Release 23 of MPE V, there will be third-party support of a new data structure called the "Known Vendor Table". This table will be stored in a data segment pointed to by a System Global Extension cell. It will be available on a global "first-come, first-served" basis for any vendor who would like to use it to store a word of information - usually a data segment number that the vendor has set up for sharing information among multiple users or processes.

## WHY A KVT?

Software developers do not have any standard way of storing and quickly finding global and/or local information for any or all of their users. The KVT allows any vendor to register and get an assigned number along with the code routines to access the KVT. This number would be an offset into the KVT data segment, and the routines would handle KVT initialization, vendor setup and takedown, locking, and reading and writing information into the vendor's buffer (data segment).

## HOW TO GET STARTED USING THE KVT

The vendor numbers will be assigned numerically as they are requested. To register for a vendor number, and find out how to get the routines to use the KVT, contact:

Stan Sieler  
Allegro Consultants, Inc.  
2101 Woodside Road  
Redwood City, CA 94062

Voice.: (415) 369-2303  
Fax...: (415) 369-2304

# Announcing MPE V MI Expansion

by *Ralph Carpenter*  
Software Technology Division

## INTRODUCTION

The MPE V Measurement Interface has been expanded with MPE V Release 23. The expansion consisted of increasing the maximum number of *measurable* processes, or *pins*, from the current 628 to MPE V's maximum *configurable* number of PCBs -- 1024.

## MORE MEASURABLE PINS...SO WHAT?

What does the ability to measure more *pins* mean to you as a system manager? The answer is with the Expanded MPE V Measurement Interface facility, you no longer need to lower the configured maximum number of *pins* simply to run your favorite performance tools -- **GlancePlus/V** or **LaserRX/MPE** -- along with your application load. This simple fact can mean great savings to you in hours of down-time, as well as in time saved you would otherwise have spent trying to duplicate the exact application load conditions your system was experiencing prior to the shut-down.

Should your system demonstrate unusual behavior (such as a slow-down) and you're not really sure of the cause for the behavior -- AND your system is one that needs every one of those 1024 *pins* because it is a heavily used system...*then* you can simply run one of HP's revised performance tools and determine what is causing the problem, right then and there, without having to wait for assistance.

With this expanded facility HP has available enhanced versions of your favorite HP performance tools -- **GlancePlus/V** and **LaserRX/MPE**. Contact your HP Sales Representative or your HP Professional Consultant if you need more information on these tools.

## COMPATIBILITY ISSUES

With the introduction of the MPE V Measurement Interface Expansion, the number of measurable *pins* was increased, requiring neither a change to application programmatic interfaces nor to key data structures. Thus, existing performance tools will continue to execute as they do currently, even with the MPE V Measurement Interface Expansion installed.

The expansion was accomplished using two additional Extra Data Segments, and six previously unused pointer cells within the "MEASINFOTAB" Extra Data Segment. Those of you familiar with the current pointer cell approach will not be surprised by the fact that a similar approach was used for these newly added Extra Data Segments.

Although current versions of MPE V performance tools require re-configuring the maximum number of PCBs below 628, they will continue to operate as they do today, reporting correct information on the first 628 processes. Of course, installing the revised performance tools from HP will lift this restriction.

## DETAILS OF THE EXPANSION

Here are the details of the MPE V Measurement Interface Expansion for those of you that already know how the existing MPE V Measurement Interface works:

To start gathering process-level statistics, the performance application must first call the MPE V procedure `STARTSTATISTICS` with the parameter `CLASSMASK` set to the value `1` for process-level statistics, or the value `%10` for miscellaneous process-level statistics.

Once `STARTSTATISTICS` has returned a condition code indicating no error to the performance application, the system will begin gathering its statistics according to the requested `CLASSMASK` parameter. The performance application may sample the collected data from time to time. This data sampling is done by copying information from the allocated Extra Data Segments into your program's data area (an explicitly allocated Extra Data Segment is recommended for this purpose). There are process-level counters maintained for every active process -- these are described in the MPE V Tables Manual. Also described there are the locations of the process-level Extra Data Segment and miscellaneous process-level Extra Data Segment within the `MEASINFOTAB` Extra Data Segment, number `%73 - (59)`.

The process-level and miscellaneous process-level pointer cells currently consume three locations each within `MEASINFOTAB`:

```
MEASPROCXDSBANK = MEASINFOTAB(%21) ... process counters, 1st XDS
MEASPROCXDSBASE = MEASINFOTAB(%22)
MEASPROCXDSNUM  = MEASINFOTAB(%23)
```

```
MEASMPROCXDSBANK = MEASINFOTAB(%32) ... misc process counters, 1st XDS
MEASMPROCXDSBASE = MEASINFOTAB(%33)
MEASMPROCXDSNUM  = MEASINFOTAB(%34)
```

and the newly-assigned cells occupy the following locations:

```
MEASMPROCXDS2BNK = MEASINFOTAB(%40) ... misc process counters, 2nd XDS
MEASMPROCXDS2BSE = MEASINFOTAB(%41)
MEASMPROCXDS2NUM = MEASINFOTAB(%42)
```

```
MEASPROCXDS2BANK = MEASINFOTAB(%43) ... process counters, 2nd XDS
MEASPROCXDS2BASE = MEASINFOTAB(%44)
MEASPROCXDS2NUM  = MEASINFOTAB(%45)
```

For *pins* 1-628, the counters are maintained in the first pair of Extra Data Segments -- both for process-level and miscellaneous process-level counters. For *pins* 629-1024, the two sets of counters are maintained in the second pair of Extra Data Segments.

All of the MPE V Measurement Interface's Extra Data Segments will be maintained as long as the application program that called `STARTSTATISTICS` is executing; the Extra Data Segments are de-allocated, and the counter modifications cease automatically upon the termination -- normal or abnormal -- of the originating performance application program. This behavior is unchanged between the current Measurement Interface and the Expanded Measurement Interface -- except now there are two additional segments subject to deallocation.

This information -- and much more -- is available to you in the new *MPE V Release G.23 Tables Manual*, part number HP 32033-90147. Order this product through your HP Sales Representative for complete details.



## PERFORMANCE TOOLS

GlancePlus/V and LaserRX/MPE are available from your HP Sales Representative under the following product numbers:

- GlancePlus/V: HP 50733B. Specify the appropriate option for the model of the system you intend to monitor:
  - Opt. 310 -- Micro 3000
  - Opt. 320 -- Series 39-58
  - Opt. 330 -- Series 64-70
- LaserRX/MPE: HP 50700B. Specify the appropriate option for the number of systems you intend to monitor:
  - Opt. 001 -- 1 to 3 systems
  - Opt. 002 -- 4 to 10 systems
  - Opt. 003 -- 11+ systems
  - Opt. 004 -- 1 system only
  - Opt. 005 -- analyzer software only

# STORE/RESTORE Multiple Exclusion Filesets

by Yukihiro Umezawa  
Software Technology Division

## INTRODUCTION

A new feature has been added to STORE/RESTORE and TurboStore allowing you to specify multiple exclusion filesets. A maximum of nine filesets can be specified as exclusion filesets against each fileset to be stored or restored. It is also available in indirect files. This feature has been offered on MPE/iX TurboStore although it is not available on MPE/iX CMSTORE program.

This feature may be used to save some resources for the system backup by excluding several accounts which you do not need to store. Or it may be used to eliminate the indirect file which was created in order to exclude several unwanted filesets by specifying a big list of wanted filesets.

## STORE AND RESTORE SYNTAX CHANGE

The syntax change of STORE/RESTORE for filesets specification:

```
STORE [{fileset} [,fileset]] [,...]]  
      [{!indirectfile          }]  
      :
```

```
RESTORE [restorefile]  
        [;{fileset [,fileset] [,...]]]  
        [;{!indirectfile          }]  
        :
```

The fileset parameter has the form:

```
filesto(re)store[-filestoexclude[-filestoexclude[-...]]]
```

Both filesto(re)store and filestoexclude may be fully qualified in the form:

```
filename[.groupname[.accountname]]
```

The characters @, #, and ? can be used as wildcard characters in filename, groupname, and accountname.

## EXAMPLE

The following is the example of the usage of the new feature:

```
:STORE @.pub.sys-NMLG@.@.-LOG@.@.          ,&  
:      @.@.-@.pub.sys-@.@.support-@.@.hp@-junk@.@.-temp@.@.;&  
:      *TAPE;SHOW
```

# New Tape Creation Date Option for RESTORE

*by John Schimandle  
Software Technology Division*

## INTRODUCTION

The RESTORE command has a new keyword, TAPEDATE, which displays the tape creation date. This enhancement has been added to both STORE and TurboSTORE so that every customer can use this feature. The tape creation date has always been part of every STORE tape, so you can use this new feature with any STORE tape. Displaying the tape creation date is an excellent way to verify you have mounted the correct tape.

## NEW SYNTAX

The new keyword, TAPEDATE, can be placed anywhere after the first two semicolons in the RESTORE command

```
RESTORE [tapedevice];[filestorestore] [[;option] ...]
```

option - one of the many optional RESTORE keyword options. See the online help text for all options. This enhancement adds the keyword TAPEDATE.

The date is displayed in the same format as returned by the FMTDATE intrinsic.

```
FRI, JAN 6, 1989, 7:39 AM
```

## EXAMPLE

```
RESTORE *tape;@.pub.sys;tapedate
```

```
TurboSTORE HP30167A.00.11 (C) Hewlett-Packard Co., 1987.
```

```
RESTORE *TAPE;@.PUB.SYS;TAPEDATE
```

```
THU, NOV 23, 1972, 3:52 AM
```

```
Tape Creation Date: THU, NOV 23, 1972, 2:39 AM
```

```
WILL RESTORE      4 FILES;  NUMBER OF FILES ON TAPE =      4
```

```
FILES RESTORED:      4
```

# SHOWOUT Enhancement

*by Richard A. Santos  
Software Technology Division*

The SHOWOUT command has been enhanced to make it easier to monitor the progress of files as they are printed. A new column, DONE, has been added to display the percent of the file that has completed printing. That is, the percent that is shown is actually the percent of the file that has been sent to the printer. Therefore, if the printer has a large buffer the percent displayed will reflect what has been sent to the printer and may be larger than what has actually been printed by the printer.

With this new feature it will be easier to determine when the current file being printed will be finished. Situations such as trying to process a high priority print request or preparing to do a full backup will be made a lot easier by knowing approximately how much time is required to finish printing the current file. Also, you will be able to detect a paper out or paper jam situation on a remote printer quickly by noticing that the current file being printed is not progressing.

Example of the new SHOWOUT report:

```
:showout
DEV/CL  DFID      JOBNUM  FNAME      STATE FRM SPACE RANK PRI  #C DONE
LP      #04      #J2     $STDLIST  OPENED          2048      8   1
LP      #0140    #J4     $STDLIST  OPENED          2048      8   1
LP      #09982   #J257   $STDLIST  READY           48       D 1   1
LP      #09983   #J259   $STDLIST  READY           44       D 1   1
DUMPLP #09881   #S'16   COVER     READY          2880     D 1   1
20      #09537   #S1268  $STDLIST  OPENED
22      #09681   #S1276  $STDLIST  OPENED
133     #010249  #S1349  $STDLIST  OPENED
134     #010258  #S1352  $STDLIST  OPENED
6       #05      #J16    $STDLIST  ACTIVE          2048      8   1  %32
```

13 FILES:

```
  1 ACTIVE
  3 READY; INCLUDING 3 SPOOFLES, 3 DEFERRED
 10 OPENED; INCLUDING 6 SPOOFLES
  0 LOCKED; INCLUDING 0 SPOOFLES
  9 SPOOFLES: 15260 SECTORS
```

OUTFENCE = 6

# The New DELETE Command for SPOOK5

by Dan Clavin  
Software Technology Division



## INTRODUCTION

The Spook5 utility has a new command, DELETE, which allows the user to remove spool files similar to the current PURGE command but adds spool file wildcard options, DATE specification, and PRI specification. The spool file(s) can now be deleted by qualifying the READY date and the priority with relation operators (=, <, >, <=, >=, <>). The DATE is in a MM/DD/YY format, where MM is the integer month, DD is the integer day, and YY is the two-digit year (91 for 1991). The PRI option is an integer value from 1 to 13. Please note that if both the DATE and PRI options are given, both conditions must be satisfied for the spool file to be deleted.

## NEW DELETE Command

A new command has been added to the Spook5 utility.

- Deleting spool files with wildcards (user, user.account, user.@, @.account, @.@, \*)
- Deleting spool files that meet a spool file ready date condition (DATE)
- Deleting spool files that meet a spool file priority condition (PRI)
- Deleting spool files with any combination of wildcard user.account, DATE option, and PRI option.

## DELETE Command Syntax

The syntax of the new command:

```
DE[LETE] usac {; {D[ATE] <relop> mm/dd/yy } {, P[RI] <relop> output} }
```

```
usac    --> user
         user.account
         @
         user.@
         @.account
         @.@
         *
         dfid [, dfid] [...]
```

```
<relop> --> valid relational operators (=, <, >, <=, >=, <>)
```

```
mm/dd/yy --> valid date in format of: mm (1-12), dd (1-31), yy (0-99)
```

## System Information

output --> valid priority value (1 - 13)

Capabilities: System Managers (SM) or System Supervisors (OP) can delete and spool file(s).

Account Managers (AM) can delete any spool file(s) in that logon account.

Standard Users (IA, BA) can delete any spool files that they created.

NOTE: The "usac" is the same syntax as the specification allowed on the existing Spook5 ALTER command. In addition the capability checks are also completed for the DELETE command consistent with the capability verification done with ALTER.

Please also note that because the DATE yy (year) parameter is limited to 2 digits, certain assumptions were made regarding yy values of the year 2000. The yy value of "72" is considered to be the birthyear of MPE, so any yy value less than "72" ("0 - 71") is considered to be the next century ("2000 - 2072"). A DATE value of "7/1/2" is July 1, 2002 and a DATE value of "5/1/74" is May 1, 1974.

## DELETE Command Examples

Here are a few examples of it's use:

\* This first example will to delete all ready or locked spool files owned by the  
\* user MANAGER.SYS which also have a ready date of 12/2/91 or after.  
\*

> DELETE manager.sys; DATE >= 12/2/91

#FILE	#JOB	DEV/CL	SECTORS	OWNER	DATE	PR
#0408	#J93	LP	36	MANAGER.SYS	11/15/ 0	8
#0409	#J97	LP	36	MANAGER.SYS	11/17/71	8
#0446	#S27	LP	32	MANAGER.SYS	11/25/92	8
#0464	#S37	LP	32	MANAGER.SYS	12/ 2/91	8
#0471	#S42	LP	32	MANAGER.SYS	12/ 4/91	8
#0472	#S42	LP	48	MANAGER.SYS	12/ 4/91	8

>

\* This example will delete all ready or locked spool files under this account  
\* that have a spool file priority less than 8.  
\*

> DEL @; PRI < 8

#FILE	#JOB	DEV/CL	SECTORS	OWNER	DATE	PR
#0474	#S43	LP	32	MANAGER.SYS	12/13/91	4

>

\* This example will delete all ready or locked spool files owned by all users  
 \* in all accounts that have a ready date less than January 1, 2000 (but  
 \* greater than 1972, MPE's birth year) and that have a priority of less  
 \* than or equal to 3. As the SHOW command displays, the files not deleted  
 \* did not meet both conditions specified on the DELETE command (PRI).  
 \*

> DEL @.@; DATE < 1/1/0, PRI <= 3

#FILE	#JOB	DEV/CL	SECTORS	OWNER	DATE	PR
#0480	#S44	LP	32	OPERATOR.SYS	12/13/91	3
#0487	#S48	LP	32	NOCAP.SYS	12/13/91	2
#0383	#J82	LP	108	ZUSER.QASYS	11/14/91	1
#0394	#J85	LP	108	ZUSER.QASYS	11/14/91	1
#0477	#S43	LP	32	MANAGER.SYS	12/13/91	1
#0478	#S43	LP	32	MANAGER.SYS	12/13/91	1
#0483	#S46	LP	32	MGR.TEST	12/13/91	1

> SHOW @.@;@

#FILE	#JOB	FNAME	STATE	DEV/CL	PR	COP	RFN	OWNER
#0476	#S43	TEST	READY	LP	11	1		MANAGER.SYS
#09	#J4	\$STDLIST	READY	LP	8	1		SMGR.TEST
#0475	#S43	TEST	READY	LP	8	1		MANAGER.SYS
#0484	#S46	AM	READY	LP	8	1		MGR.TEST

#FILE	LDEV	LABEL	SECTORS	LINES	TIME
#0476	%1	%2437513	32	4	9:23 12/13/91
#09	%1	%2471550	40	55	16: 7 11/18/91
#0475	%1	%2437453	32	3	9:23 12/13/91
#0484	%1	%2472020	32	3	9:42 12/13/91

>

# Additional MPE V Release 23 Fixes and Enhancements

*by Steve Smead  
Software Technology Division*

## INTRODUCTION

This article describes additional Release 23 enhancements as well as major fixes that will affect both system managers and program developers alike.

- Modification Date No Longer Updated When Job STREAMed
- The Dispatcher Now Recognizes EQ MIN/MAX Parameters Set Via The TUNE Command
- The New Dispatcher Priority Oscillation Boost Property
- SHOWQ Command Change
- TUNE Command Changes
- Performance Improvement For COBOL Programs
- Corrupt Message Files Will No Longer Fail The System
- MPE V Tables Manual Has Been Updated
- SUPPACCT.PUB.SYS Enhanced for Release 23

## **JOB FILES NO LONGER HAVE THEIR MODIFICATION DATE UPDATED WHEN STREAMED**

A change was made in the STREAM command executor in V-Delta-4 to support the Security Monitor product. Unfortunately, this change introduced a side-effect that was felt by both customers who purchased the Security Monitor product and by those who did not. The side-effect was that beginning with V-Delta-4, the modification date in the file label of a job file would be updated when a job was streamed. The impact of this problem was felt in the following ways:

- 1) Partial backups got substantially bigger because job files would show up as modified, hence they would be backed up on partial dumps even though the files did not change.
- 2) Third party security products began reporting modifications to job files that were not actually happening.

This side-effect has been corrected in Release 23. Modification dates for job files will not be updated when a job is streamed regardless of whether or not the Security Monitor product is being used.



## **DISPATCHER RECOGNITION OF EQ MIN/MAX PARAMETERS SET IN THE TUNE COMMAND**

The MPE V dispatcher has never recognized the ES subqueue filter value and has always used the DS subqueue filter value for processes in both the DS and ES subqueues. This has presented a problem for customers who partially overlap the ES subqueue with either the CS or DS subqueues because there was no way to reduce the filter value for only those processes in the ES subqueue. The result would be processes in the ES subqueue having their priorities decayed much slower than processes in the CS subqueue because the default filter value for the DS subqueue is 1000ms while the CS subqueue filter value ranges between 0 and 300ms. If the subqueue priority ranges for the ES and CS subqueues overlapped, the impact of the ES subqueue processes on the response times of interactive CS subqueue processes was much greater than a system manager would expect. Customers who were aware that the ES subqueue filter value was ignored dropped the filter value on the DS subqueue knowing this would affect processes in the ES subqueue, but this would likewise affect the decay rates of processes executing in the DS subqueue.

On Release 23, the dispatcher now recognizes both the DS and ES subqueue filter values. Customers who reduce the DS subqueue filter value to speed up the rate of decay on ES subqueue process priorities should change their SYSSTART files, start-up UDCs, and/or start-up jobs to reduce the ES subqueue filter value via the TUNE command and leave the DS subqueue filter at the default.

## **INTRODUCING THE NEW DISPATCHER PRIORITY OSCILLATION BOOST PROPERTY**

The boost property can now be specified as either "decay" or "oscillate". The default boost property is decay and it is identical to the current boost algorithm. Processes begin their transactions at the base of their scheduling queue (CS, DS, or ES), and decay towards the limit of the scheduling queue as they consume CPU. Currently (and with the decay boost property), a process is reset to the base of the queue only when it completes a Dispatcher transaction. Dispatcher transactions are considered complete when the process blocks on a terminal read wait, a parent or child wait, pauses for more than one second, or indicates end of transaction in a call to the IOWAIT intrinsic.

Longer transactions (transactions that require more CPU to complete) will therefore decay to the limit of the scheduling queue and remain there. Given a large amount of activity at the base of a scheduling queue, processes at the limit of the queue will receive minimal CPU time and their transaction times will increase. For most production environments, this is desirable in that longer batch-type transactions have a minimal impact on the response times of processes performing shorter transactions. In some cases, however, a system manager may want longer transactions to get more CPU time at the expense of short transaction response time. It is this situation the oscillate boost property will address in providing a means of implementing this CPU scheduling policy.

When the oscillate boost property is specified via the TUNE command, processes are reset to the base of their scheduling queue once their priority decays to the limit of the queue. Processes will also be boosted to the base of the queue when they complete their transactions. A system manager can specify the oscillate boost property for each of the three user scheduling queues (CS, DS, and ES). The oscillate boost property allows longer transactions to be reset to the base of the queue so they can continue to compete for CPU and complete long transactions sooner. Specification of the oscillate boost property will prove helpful if processes of different transaction lengths are in the same scheduling queue and the shorter transactions receive excellent response time, while the longer transactions have much longer response times.

The oscillate boost property can also prove useful when scheduling queues are overlapped to allow batch processes to compete with interactive processes. Typically, when the CS and DS/ES queues are overlapped, it is done so the batch processes might compete with the longer transaction interactive processes. There are two distinct problems that may arise from this overlap. The longer transaction CS processes may suffer a great deal when they lose the CPU to the batch jobs at the top of the DS queue. It is also possible that the batch jobs do not receive much of a gain from the TUNEd overlap, because they quickly decay past the region of overlap and do not receive sufficient CPU. The oscillate boost property can be used to ensure the longer transaction CS processes do not remain at the bottom of the CS queue for an extended period of time, and can also be used in the DS/ES queue to ensure that the batch jobs are boosted back into the region of overlap. It may also be necessary to adjust the quantum (or filter values) of the queues so the boosting occurs with proper frequency. The quantum determines how rapidly the priority of a process decays. The priority of a process will decay more rapidly with a smaller quantum, and less rapidly with a larger quantum.

## SHOWQ COMMAND CHANGES

The SHOWQ command has been enhanced to report the boost property (OSCILLATE or DECAY) on each of the subqueue status lines. See the TUNE command and the Dispatcher Communicator article for more information on boost properties.

## Examples

```
:SHOWQ
```

```
  DORMANT
Q  PIN   JOBNUM
```

```
  RUNNING
Q  PIN   JOBNUM
C  M96  #S470
```

```
...
```

```
CQ MINQUANTUM=0, MAXQUANTUM=300, BASEPRI=152, LIMPRI=200, DECAY
DQ MINQUANTUM=1000, MAXQUANTUM=1000, BASEPRI=202, LIMPRI=238, DECAY
EQ MINQUANTUM=200, MAXQUANTUM=200, BASEPRI=180, LIMPRI=220, OSCILLATE
MINIMUM CLOCK CYCLE=1000
```

## TUNE COMMAND CHANGES

The TUNE command now supports oscillation for the three circular dispatcher subqueues.

The TUNE command adjusts priorities, quantum and boost properties for the dispatcher circular queues. For more information please read the Dispatcher article in this Communicator.

OSCILLATE is a new boost property for Release 23. DECAY was the only boost property supported prior to Release 23, and is the default. Both boost properties cause a process's priority to decay from the base value to the limit. The rate of decay is inversely related to the quantum. Whenever a dispatcher

transaction (e.g. a terminal read) completes, the process's priority is boosted back to the base value. DECAY allows a process's priority to remain at the limit until a transaction completes or the process is preempted. OSCILLATE causes the process's priority to jump to the base value as soon as the limit is reached.

## Command Syntax

```
aTUNE [minclockcycle]b a{CQ}b a[[;]{DQ}=[base][,[limit][,[min][,max][,[{DECAY
}]]]]]b a{EQ}                                {OSCILLATE}b a[[;]...]b
```

## Example

```
:TUNE eq=180,220,,,oscillate
```

### CAUTION

Misuse of the TUNE command can significantly degrade system operating efficiency.

## PERFORMANCE IMPROVEMENT FOR COBOL PROGRAMS

The Run Time Monitor (RTM) migration tool was introduced in V-MIT. This program required some changes in MPE's loader and abort processing code. The change in the abort processing code resulted in a significant performance degradation for large COBOL programs from the abort code having to check if prior stack markers were from the RTMSL segment. This check required a procedure call to loader routines that locked the LST SIR and traversed the LST Table looking for the RTMSL segment. This added CPU overhead as well as resource contention for the LST SIR. Because large COBOL programs (i.e. stack size > 16K words) frequently encounter arithmetic traps during address calculations, they slowed significantly after VMIT and increased system resource contention for the LST SIR and for the CPU. This overhead would be incurred regardless of whether or not the Run Time Monitor was enabled - the Run Time Monitor is only enabled while collecting data for an upcoming MPE/iX migration.

This problem has been alleviated in Release 23. The loader and the abort processing code now communicate whether or not RTM is enabled and if not, the abort processing code does not call the loader routine to search the LST for RTMSL segments. Before Release 23, the work-around for the above

problem was to recompile large COBOL programs with the BIGSTACK compiler option which would use logical arithmetic for addressing rather than integer arithmetic and thus avoid the ABORT traps. The logical addressing, however, is slower making this work-around less than ideal. Beginning with Release 23, COBOL programs recompiled with the BIGSTACK option to overcome the RTM performance problem should be recompiled without the BIGSTACK option.

## **CORRUPT MESSAGE FILES WILL NO LONGER FAIL THE SYSTEM**

Beginning with Release 23, system failures 6601, 6602, and 6603 will no longer occur when the file system encounters a corrupt message file. Instead, the EOF is reset to zero when message file corruption is detected and an FSERR 105 is returned to the user.

## **MPE V/E TABLES MANUAL HAS BEEN UPDATED**

The MPE V/E Tables Manual has been updated and expanded to document internal MPE data structures through Release 23. The Part Number for the Tables Manual is 32033-90147.

## **SUPPACCT.PUB.SYS ENHANCED FOR RELEASE 23**

The stream job that the installer invokes to set the system's accounting structure defaults (SUPACCT.PUB.SYS) has been enhanced. With Release 23, FIELDJOB has been eliminated and the SYS account now has its default access rights explicitly set to allow LOCK access to ANY user. For any system that has had HPDESK installed, the SYS account has already been set up to provide this capability. This change should not have any adverse effects and will synchronize MPE V and MPE/iX in this regard. SUPACCT has also been cleaned up to eliminate redundant commands, and to correct a number of improper error conditions. This change reduces the output of this job by approximately one third for easier review.

# Enhancement to FCOPY

by Karen Lacey  
Software Technology Division

## INTRODUCTION

A new version of FCOPY, A.05.01, is being released with MPE V Release 23 (G.23.00).

In this new version, the functions of FCOPY have been enhanced so that copying access control definitions (ACDs) is a default of the product. You no longer need to specify COPYACD to transfer ACDs to the *tofile*. In addition, a new function, NOACD, has been added. Use this function when you do not want the ACDs in the *fromfile* copied to the *tofile*.

## Examples

Either of the two examples below will copy existing ACDs to the *tofile*:

```
>FROM=ACDFILE;TO=NEWFILE;NEW  
or  
>FROM=ACDFILE;TO=NEWFILE;NEW;COPYACD
```

The example below will not copy existing ACDs to the *tofile*:

```
>FROM=ACDFILE;TO=NEWFILE;NEW;NOACD
```

Access control definitions are described in the MPE V Commands Reference Manual (32033-90006) under the ALTSEC command.

# Announcing MPE V Release 23 Fixes

*by Dan Clavin  
Software Technology Division*

## INTRODUCTION

This article provides a table of the fixes that have gone into the Release 23 of MPE V. This table provides an SR number, along with a short description of what the fix is about; more detail regarding the fix SR can be obtained from the Software Release Bulletin.

## Release 23 Fix Descriptions

SR Numbers	Description of Fix
5000-615203	PDISABLE around PCB Mapping DST word update and ADDTOLOCALITY call in BUILDSEGMAP subroutine. Prevents system hangs.
5000-538207	Do not allow device password changes using the prompting format in a job. Prevents SF 206's.
5000-605642	Replace SF6601, 6602 and 6603's that occur in IPC as a result of a corrupt MSG file with FSERR 105's. Reset the EOF's to 0 and the block counts when a corrupt MSG file is found.
1650-052936	When unloading/loading SL file named RTMSL.PUB.SYS, set SYSGLOBX (32) 10:1. LOADBIT Check SYSGLOBX (32) 10:1. If set call SEG'FROM' RTMSL; otherwise, don't.
1650-049544	After 16383 Session numbers the counter starts with 1 again
4700-979088	Changed until terminator in family to BROTHERINFO <>0.
5000-615468	Change PUTJMAT to prevent duplicate J/S #s.
5000-539270	Fix REPLY problems introduced in PATCH BV50.
1650-048686	If caller lacks PM and a global 4701-014167 file, then immediately return "undefined file" message and do not call FCHECK and FGETINFO. Prevents SF59s.
5000-274175	MOUNT now calls REQSTATUS correctly. Prevents various private volume problems.

SR Numbers	Description of Fix
4700-923748	Set unused FOPTION bits (0:2) to 0 in FOPEN so they cannot be set in FLAB.
5000-594531	Modified SDISCIO control code 3 to block the process and wait for any pending I/O to complete.
5000-612663	Modified procedure UPDATESEGTAB
5000-613828	Initialize variable SLXTYPE. DV11 Prevents SF 617s.
5000-568055	Modified STORE'IOQ procedures semaphoring of the IOSTATXD5. DV30 Prevents SF 16s.
1650-137448	Change LOCK'CB to put DS servers on high PRI BREAK QUEUE in BREAK mode. DV05
5000-612309	Close invalid USL file after USLERR: label and reset appropriate variables/flags. Keeps the SEGMENTER from erroneously purging a USL file after an FSERR.
4700-880112	Add ability to display tape creation date.
4701-031971	Add ability to display tape creation date.
5000-478586	Add check to see if console switched to session's \$STDIN at session logoff.
5000-605964	Correct bug in TURBOSTORE to write progress messages to \$STDLIST versus SYSLIST in interactive mode.
1650-124933	Allow PASSWORD command to be executed programmatically via the COMMAND intrinsic as stated in the manual.
4700-833756	Fix SADUTIL to work with 7962 and 7963 disks type 3 subtype 14/15.
4701-039545	Fix to FOPEN to return correct behavior when a KSAM key is opened with a lockword specified when no lockword exists.
1653-000414	Fix to FCONTROL to correct change from BV96 to handle bad DAT media correctly when control codes 50 & 51 are used.
1650-164863	Change to FINDSLSPACE to use logical arithmetic to avoid integer overflows that cause extent boundry check to fail which leads to SL corruption.
4701-007278	Correct ASS'JMAT & ASS'JIT decloration in MESSAGE and ALLOCATE from 0. (8:8) to 0 to pick up the correct table index values on systems with large I/O configurations.
5000-614339	In NLSUTIL, ADDS %4000 to cause stack expansion before disabling interrupts preventing SF 640.

System Information

SR Numbers	Description of Fix
-----	-----
1650-110536	Change scan to terminate on space fill at end of buffer that resulted in SF 10 if COMMAND.PUB.SYS is corrupted. Added check for bad FREADDIR status. Corrected error in lockword formatting.
4700-785774	Fix so that the file LAST MODIFIED date does not change on a job file when the STREAM command is used against the file.
4701-028928	Fix to clear out the ACB'ERROR indication in FILEIO to keep from reporting incorrect errors on subsequent File System Intrinsic calls.
5000-447417	Fix the dispatcher so it uses the EQ quantum set by the TUNE command.
9999-203264	Enhance SHOWOUT command to display percent file has printed.
5000-577247	Modify DPAN5 to allow a dump to be read in from type 4 devices (BLITZ Discs).
4701-010629	Prevent UNLOC'ACB calls for PORT files in KSAM Intronics which lead to SF50/SF59.
5000-404921	Generate the correct error number to be reported when the stack cannot be expanded.
4700-047340	Fix FSERR 43 and abort when SORT is run from a job file with long records.
4701-052977	Add capability to handle multiple
5000-589614	exclusion list.
5000-569186	Rewrite IMI case to not thread into MAKE PRESENT QUEUE and not impede. Prevents SF 613s, 616s, and job hanges in the "INTRO" state.
4701-054791	Provide oscillation mechanism for priority boosting. SHOWQ changed to report if oscillation is enabled. Update declarations w/oscillation enable words.
4701-051052	Add entry for new "EXPLAIN" command.
4701-055228	Add fast search capability to DDS driver.
4701-049676	Fix interleaved restore to not corrupt data files.
4701-049684	Add capability to use fast search on DDS devices.
5000-581868	Allow CREATEPROCESS to be called w/o options. Prevents unnecessary SF10 with PMBC microcode.
4701-009308	Change how UCOP calls ATTACHIO.
5000-237057	Add DELETE command for wildcard purge.



SR Numbers	Description of Fix
-----	-----
5000-171512 5000-201673	Add new return values to JOBINFO intrinsic.
5000-525295	MI enhancement - Add data structure support.
4701-064667	STORE error S/R 6217 during RESTORE.
4701-063867	Add FAST SEARCH for unpacked labelled tapes.
4701-055145	Eliminate error handling of status checking. Prevents 7980 tape drive hangs.
5000-586081	Add ASSEMBLE to ALLOCATE buffers. Prevents STORE/RESTORE error 6217s.
4701-063859	Add FAST SEARCH for unpacked labelled tapes.
4701-067264	Commentary - only change.
4701-063537	Loader to use temp LST entries for type 7 and 8 during initial creation.
4701-072918	Add System Failure one liners as set46.

Please refer to the SRB for more detail on any of these fixes for Release 23.

# MPE V 1P Through Release 23 Cumulative Fix Table

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## INTRODUCTION

This article contains a cumulative listing of all the fixes for MPE V that have been included in the releases from Platform 1P to the present Release 23. This table of fixes offers the SR number and a one-line description that is obtained from the SR. For more detailed information, please reference the Software Release Bulletin for MPE V.

## Platform 1P (G.1P.00)

Product	SR Number	Brief Description
HP30167	4700-841593	TURBOSTORE loops creating list file with parallel option, msg S/R 1168
HP30167	4700-414557	TURBOSTORE: process tremendously slowed with a large number of files
HP30167	5000-416255	TURBOSTORE is failing with "FILE # COULD NOT BE FOUND".
HP32002	1650-076513	RELOAD/SPREAD skips the USER FILE section, then hits SF722
HP32002	5000-488692	DISKED5 fails when extent size > 32767
HP32002	5000-444703	SIR deadlock between FI and FMAVT
HP32002	4700-863779	SF16 while executing :SHOWALLOW command. Problem introduced in VD2.
HP32002	5000-090373	Deferred scheduling of STREAM jobs not working according to documentation
HP32002	4700-851196	Various SFs due to JOBINFO overwriting one memory location with ERROR
HP32002	4700-909358	New DS error messages in Catalog
HP32033	4700-745364	DISABLE-UNDO problem - Intermittent I/O failures / Potential data loss.

HP32231 5000-480947 SDF hangs - cannot dump to a 9140 on V-Delta-3 and later  
mits

## Release 20 (G.20.00)



Product	SR Number	Brief Description
HP30167	4700-918300	TurboStore VUF for Release 20 should be A.00.09
HP32002	4700-812909	Incorrect timestamp (DATE) in user logging log file
HP32002	5000-446922	SPOOK5 Causes SF614 when a corrupt Spool file is read.
HP32002	4700-849679	RECOVER5 SF if file has 1 extent and last extentsize <> extent size
HP32002	4700-886978	ER:PWD is requesting the reservation of a block of 100 file codes.
HP32002	4700-886960	Enhancement to add new file codes for OSI/XL FTAM
HP32002	4700-863258	Enhancement to add new file codes for OSI/XL FTAM
HP32002	1650-101436	IPC timed reads are hanging because first entry of TRL is corrupted
HP32002	4700-820928	sf614 caused by FMAVT overflow into memory region header.
HP32002	5000-467258	Trying to APPEND in SPOOK; SF59 because FCB is no longer present
HP32002	5000-521070	FSERR 118 when reading ANSI labelled tape with variable length records
HP32202	5000-537993	FREADC returns len. of rec. instead of TCOUNT when deleted rec. skipped.
HP32002	5000-461962	PROGRAMMATIC LOGON FROM DSCOPY STOPS LISTF ON CONSOLE AT LOGOFF
HP32002	5000-510388	Purgeuser across accounts does not work correctly with Command.pub.sys
HP32002	4700-856450	System hang after installation of BV92 fix
HP32002	5000-504977	SF311 BECAUSE A SUBS %272 IS DONE IN LISTACD WITH NO ADDS %272
HP32002	5000-443796	SF16 while executing :SHOWALLOW command. Problem introduced in VD2.

## System Information

- HP32002 1650-054528 Fix status about loader error #40 and multiple error #41's
- HP32002 4700-767319 Max stack size, STACK'LIMIT, is defined as #31223 not #31232 in KERNELD
- HP32202 4700-659771 SF 10 caused by KSAM aborting during the open of a KSAM file.
- HP32002 5000-487637 VOLUME TABLE DESTROYED DUE TO SECTORS MARKED FREE IN INITIAL/COLDSTART.
- HP32002 4700-807107 SF10 can result if unterminated (no CR) byte array is passed to LOADPROC
- HP32002 5000-449298 SF618 in RecoverOC: trying to delete a DRQ that has already complete
- HP32002 5000-543025 Two processes using \$SCR keyword, 2nd FOPEN will fail (FSERR90)
- HP32002 4700-852111 Error 3 - CHANNEL PROGRAM ABORT CPVA %160004 or %100000 on V-Delta-5
- HP32002 4700-868752 "ENV=" without an envfile returns an error
- HP32002 5000-404921 "FSERR 177 TOO MANY EXTRA DATA SEGMENTS FOR THIS PROCESS" is wrong
- HP32002 4701-053561 KSAM does not return FSERR177 when the stack cannot be expanded.
- HP32002 4700-898684 Opened wrong labeled tape file using sequence # over multi volume set.
- HP32002 4700-901900 SF 311 caused by ADDS instruction done before buffer allocation
- HP32002 5000-540963 FSERR 118 and possibility of missing records with labelled tape on VD5
- HP32002 5000-547349 Use of 0 or #o0 as a DFID with a SPOOK command will cause problems
- HP32033 4700-805754 Vd4 changes to CS80 status logging causing problems for HP Predictive.
- HP32033 4700-921320 Sessions or Jobs using Tape Drives will hang after System Powerfail.
- HP32033 4700-805515 Data lose during DBLOGGING
- HP32033 1650-090191 POWERFAIL: ININ is looping if 2 INP's configured in sys with VTERM

HP32050 4700-916874 SYSDUMP saves TEMPSL as permanent disc file

HP32050 4700-849638 Change the SEGMENTER version number for VD10.

HP32050 1650-086439 SL disappears when using CLEANSL command.

HP32050 5000-488239 Segmenter gives error when working with USL files and preparing them

HP32212 4700-773978 FCOPY to temp file w/ same name as perm file fails with FILE EXISTS

HP32214 5000-463893 MERGE gives an Integer Overflow, then aborts on VD5.

## Release 21 (G.21.00)

Product	SR Number	Brief Description
HP30167	5000-543850	RESTORE does not update Group/Acct sectors when using COPYACD.
HP32002	5000-526111	SPOOK deletes wrong file if "ALREADY EXISTS" is asked twice.
HP32002	4700-929901	Initial aborts after IOMAP during LOADs from ctape drives
HP32002	1650-110551	Difference between %320 and CCTL to a laser jet printer
HP32002	5000-471029	Enh. req. to increase the # of users/logging process beyond 256.
HP32002	4700-877464	Enhance Store/Restore to perform faster for labeled tapes.
HP32002	5000-478552	INITIAL PUTS TOO MANY TABLES IN BANK,OUT OF PCB,SWAPTABLE ENTRIES ETC.
HP32002	5000-601773	SPECIAL 'SPOOL'CLOSE does not relink or lock around altered ODD entry.
HP32002	5000-591842	Labeled tape code generating erroneous error msg.
HP32002	4700-915561	Sysdump prints garbage characters.
HP32002	5000-523225	LISTLOG truncates last char. if file,group,& acct are each 8 characters
HP32002	5000-504522	Reading an 19B record from 20B msg file overwrites 21st byte of buffer
HP32002	9999-203480	Merging of file lockwords

## System Information

HP32002 1650-082982 FFILEINFO # 49 RETURNS 0

HP32002 4700-699819 sf 617: User logging process terminated without waiting for processes.

HP32002 4700-944793 misleading error message "misssing dadconf"

HP32002 5000-518589 SF311. Internal interrupt while LISTDIR5 reads PV directory entry.

HP32002 5000-534255 SF679 after attempted release of allocated program.

HP32002 5000-145326 FSERR54 when using fully qualified formal file designator.

HP32002 5000-476507 Able to write different densities to the same volume set with ADDF.

HP32002 4700-674093 SD 16 in IOMOVE called by FREAD.

HP32002 4700-650085 DFS Map left inconsistent after SF during device ACD creation

HP32002 5000-183897 Security enhancement suggestions for KSAM files

HP32002 5000-488163 FLABELINFO gives FSERR 73, bounds violation, if itemnums are all zeros

HP32002 5000-551788 Tape label can be corrupted if tape mounted when not expected.

HP32002 4700-917906 Tape label can be corrupted if tape mounted when not expected.

HP32002 5000-555235 SUSPENDSPOOL;FINISH during 2680 warmup deletes file & no data prints.

HP32002 5000-479709 System hang - appears that spooler process is looping and hogging CPU

HP32002 5000-285825 Altspoolfile can cause 2 files to be "active" at same time on same ldev

HP32002 4700-884056 Request for easy way to determine FILE disposition.

HP32002 4700-903815 Enhancement to force FCLOSE to purge a file regardless of any File Eqn.

HP32002 5000-275214 Enhancement to add duplex mode printing

HP32002 1650-113308 LMAP gives wrong logical segment number (if > %377)

HP32002 4700-935981 Improve the Loader area to provide OPT and GLANCE with needed data.

HP32002 5000-583351 Store handles Bad Tapes differently (label vs unlabel)

HP32002 4700-942227 Recoverable tape errors at EOT forcing rejection of entire reel of tape.

HP32002 4700-906925 TTPCL18 and TTPCL18P has status checking because of wrong VFC

HP32002 5000-554535 DISC RPS CAN'T BE ENABLED ON BLITZ(C220X) DISCS ON VD8,VD9

HP32002 5000-539908 SF59 when FCLOSE encounters a KSAM AFT with a -1 in the IOQX word.

HP32002 4700-945550 INITIAL aborts during load from V-Delta-5 + with a 7911 system disc.

HP32002 1650-015073 Copy command in SPOOK5 caused SF16 (DST violation)

HP32002 1650-042218 I/O STAT 53, SP ERR 361, serial prntr w/ HEADOFF, special forms, REPLY N

HP32002 4700-933648 HPVOLINFO calculation of overhead is negative for system volume

HP32033 4700-870865 Micro 3000s hang after a dump/warmstart is done

## Release 22 (G.22.00)

Product	SR Number	Brief Description
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HP30167	4701-010439	Enhance TURBO Store/Restore to perform faster for labeled tapes.
HP32002	4700-829945	The MI needs to capture a subset of terminal activity
HP32002	4701-010538	STORE displays wrong ldev number in (S/R 9018).
HP32002	5000-615435	FOPEN Bug: Not reinitializing FCOMTRIED - SIR hangs similar to CV23.
HP32002	5000-606111	SF10: SCAN statement in JOBINFO for JOBSTEP does not terminate correctly
HP32002	4701-011429	New NS Error Message
HP32002	5000-460584	SIR deadlock caused by trying to log event #41: LST locked out of order
HP32002	5000-597088	Hang from DOLOG41 calling PROCFILE when caller holds lower ranked SIRs.

System Information

HP32002 5000-612663 CST VIOLATIONS OR SL STAYS LOADED; UNINITIALIZED VAR IN  
LOAD PROCESS

HP32002 5000-613828 SF617 caused by LSTT expansion, but LST is full. LOAD  
PROCESS REL' RESOURC

HP32002 5000-568055 SF16 - IOSTATS disabled while another process is in  
STORE'IOQ.

**Release 23 (G.23.00)**

Product	SR Number	Brief Description
HP30167	5000-605964	TURBOStore progress msgs --> SYSLIST instead of \$STDLIST of session.
HP30167	4701-031971	RESTORE should show date tape was created.
HP30167	4701-049684	Enhance TurboStore to use fast search capability of DAT tape drive
HP30167	4701-063867	Enhance TurboStore to use fast search for UNAPCKED LABELED tapes
HP30167	4701-064667	STORE error S/R 6217 during RESTORE.
HP30392	5000-538207	SF206 running SECCONF from a job and changing device passwords.
HP32002	5000-404921	"FSERR 177 TOO MANY EXTRA DATA SEGMENTS FOR THIS PROCESS" is wrong
HP32002	5000-612663	CST VIOLATIONS OR SL STAYS LOADED; UNINITIALIZED VAR IN LOAD PROCESS
HP32002	5000-613828	SF617 caused by LSTT expansion, but LST is full. LOAD PROCESS REL' RESOURC
HP32002	5000-568055	SF16 - IOSTATS disabled while another process is in STORE'IOQ.
HP32002	5000-478586	ER: have logical console switch back to physical console LDEV on logoff
HP32002	5000-615468	STARTDEVICE & PUTJMAT need to prevent duplicate J/S numbers.
HP32002	1650-124933	Enhance mpe security monitor command password to be exec. by a program



HP32002 1653-000414 STORE looping on I/O error writing to DAT.

HP32002 4701-007278 SF206 due to an invalid data declaration in FORMSG.

HP32202 4701-039545 FOPEN on KSAM key file now works if no lockwork required but specified.

HP32002 5000-614339 SF640 due to NLIOUTIL disabling interrupts and getting stack overflows.

HP32002 1650-049544 After 16383 Session numbers the counter starts with 1 again

HP32002 4700-923748 FOPEN should set unused FOPTION bits to 0.

HP32002 4700-880112 RESTORE should show date tape was created.

HP32002 1650-052936 Since V-MIT with RTM "ABORT" calls "LOADER1", perf degradation for COBOL

HP32002 5000-605642 SF6603 from DELETEBLOCK for corrupt message file, request 2.0 fix on V/E

HP32002 1650-048686 PRINTFILEINFO with negative filenumber in user mode can cause SF59

HP32002 4701-014167 PRINTFILEINFO with negative filenumber in PRIV mode can cause SF59

HP32002 5000-615203 LOADER1/LOAD window updating SLL w/ LSTT seg causes DSP/SWAPIN inf loops

HP32002 5000-274175 MOUNT of PV code calls REQSTATUS with devlist(2).(0:8) should use (8:8)

HP32002 5000-539270 With patch BV50, user associated to a device can reply 0 or Y/N

HP32002 5000-594531 I/O Aborted Externally when shared SDISC file is closed.

HP32002 4700-979088 FAMILY does not traverse the process tree correctly.

HP32002 1650-137448 Session hang - CI and son deadlock.

HP32002 5000-237057 Enhancement Reequst to allow purges of spoolfiles by date

HP32002 9999-203264 Enhance SHOWOUT to show proportion of active spoolfile remaining.

HP32002 4700-785774 Streaming jobs on V-Delta 4 as AM,SM or Creator will change Mod date.

HP32002 1650-110536 SF10 PERFORMING A SHOWCATALOG AND ENTRY IN COMMAND.PUB.SYS IS CORRUPTED

System Information

- HP32002 5000-447417 Dispatcher doesn't seem to properly decrement process priorities.
- HP32002 4701-028928 After install of MPECV33, Fortran programs fail w/FSERR 42 writing tape
- HP32002 4701-010629 SF50,59 from calling FFINDBYKEY with file number of an RFA file
- HP32002 5000-577247 DPAN5 does not work with C2203A disc drives (type 4 drives).
- HP32002 5000-589614 Enhancement request for STORE to have >1 fileset exclusion
- HP32002 4701-052977 RESTORE is slow with patterns for candidates
- HP32002 4701-054791 SR to track oscillating dispatch queue enhancement on MPE V.
- HP32002 4701-009308 IOQ's not returned to free list if \$STDLIST can't be allocated at logon.
- HP32002 5000-569186 Jobs hang in INTRO: GETDATASEGCHANGESTATE does not thread MPQ correctly.
- HP32002 5000-581868 SF10 occurs with PMBC if ITEMS,ITEMNUMS parms not passed to CREATPROCESS
- HP32002 4701-051052 Add "EXPLAIN" command to run EXPLAIN.PUB.SYS utility
- HP32002 4701-049676 Enhance Store/Restore to use fast search capability of DAT tape drive
- HP32002 5000-525295 Request for a 1024 pcb limit for Measurement Interface.
- HP32002 5000-171512 Enhance JOBINFO intrinsic to give id of user who streamed the job.
- HP32002 5000-201673 Enhance the JOBINFO intrinsic to indicate whether a process is quiet.
- HP32002 4701-063859 Enhance Store/Restore to use fast search on unpacked labeled tapes
- HP32002 5000-586081 STORE error S/R 6217 during RESTORE.
- HP32002 4701-063537 When the Loader Segment Table (LST) is full, can't do LOADPROCs.
- HP32002 4701-072918 Add System Failure messages to catalog.pub.sys
- HP32033 4701-055145 7980A hangs when using spanning reels with TurboStore
- HP32033 4701-067264 Correct procedure comments for NEWPORTSTATUS of 89 (PORTS)

- HP32033 4701-055228 Turbostore can corrupt files during restore when encountering EOFs
- HP32050 1650-164863 Adding patches to make sl>32k can cause SF10 and others failures.
- HP32050 5000-612309 USL command in Segmenter leaves non USL files open after error.
- HP32214 4700-047340 Stream files with record length > 133 bytes will abort against LIST file
- HP32231 4700-833756 SADUTIL (rev 3.13 and 3.14) do not work correctly with 7962B or 7963B.

Please refer to the SRB for more detail on any of these fixes.



## HP DeskManager 36570 B.05.00

*by Stuart Craig  
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The latest version of HP DeskManager (B.05.00) is now available and includes the following major enhancements:

### TRANSPORT

The following enhancements have been made to the transport system provided by HP DeskManager:

#### Network Services (NS) Transport

The ability to configure NS connections with adjacent computers, and to utilize the new NS Transport mechanism. Fully qualified NS Node names can be used to identify remote systems. It is no longer necessary to store passwords of remote systems on the local database, thus improving system security and reducing the administration involved with changing passwords. New operator commands exist to enable and disable NS Slave trucks, and MAILSTATUS now shows receiving truck status.

Optionally, the IP Address of the remote computer can be specified. It is included to allow customers to improve security, as it can be used to check to ensure against unauthorized applications "masquerading" as Master Trucks.

The following UDCs for NS & DS transport are modified:

- MAILON Starts the NS slave process in addition the the DS slave and other processes.
- MAILSLAVEON Starts the NS slave monitor in addition to enabling the DS slave.
- MAILSLAVEOFF Stops the NS monitor process and disables the DS Slave.

The following UDCs have been added:

- MAILNSSLAVEON Starts just the NS slave monitor process.
- MAILNSSLAVEOFF Stops just the NS slave monitor process.
- MAILDSSLAVEON Enables just the DS slaves.
- MAILDSSLAVEOFF Disables just the DS slaves.

The MAILSTATUS UDC includes an extra line to show whether the NS transport subsystem for receiving mail is running. In addition, there will be one line for each incoming NS Slave Truck, identifying the sending computer and mailnode being serviced.

**NOTE**

Communication via NS transport is available only between one HP DeskManager/DeskManagerPLUS version B.05.00 system and another. DS communication must continue to be used to link HP DeskManager/DeskManagerPLUS B.05.00 to pre B.05.00 versions of the product.

## Enhanced Transport Controls

The limit on the maximum number of Master Trucks running on a system has been increased from 8 to 36. To complement this increase, the ability to start and stop additional Master Trucks is provided, thus allowing the number of concurrent Master Trucks to be adjusted dynamically without the need to restart the entire Transport system. Two new operator commands, STARTMTRUCKS and STOPMTRUCKS are available for this purpose.

Previously, if a Master Truck hung while sending to a remote node, messages for that node were blocked until the transport system was restarted. With DeskManager B.05.00, once a hung Master Truck has been identified, the ability to disable it and release the associated mailnode and computer, and to "schedule around" the hung truck is provided using a new operator command, DISABLEMTRUCK.

## Return-to-sender facility

DeskManager B.05.00 features a new mechanism, available by default, to control what is returned to the sender of a message when it is found that one or more names in the Distribution List are unable to be resolved. The default is to return the original message to the sender with an informative message attached giving the reason for non-delivery.

## USER INTERFACE

The following enhanced functionality is available with the DeskManager B.05.00 release:

### New Script functions

DeskManager B.05.00 introduces formal support for some previously unsupported Script Active functions and Directives, and introduces some new capabilities. The result of this is better integration of applications and the ability to do more sophisticated operations.

New (or previously unsupported) Script Directives:

- &AB - allows abbreviations of commonly used commands to be set up.
- &BREAK - enables and Disables the Break key.

- **&CALLFATHER** - forces the HP DeskManager User Interface program to suspend and activate its father process. This is to allow data passing where HP DeskManager is invoked as a son process, rather than the other way around. The father process calling HP DeskManager is able to use the application umbrella as if it were a son of the HP DeskManager User Interface.
- **&NOECHO** - provides the same function as **&ECHO 0**. That is it disables echo of each script command as it is executed
- **&STORE** - allows the archiving of a complete folder to an MPE file in internal HP DeskManager format.
- **&RESTORE** - provides the reverse function of **&STORE**
- **&SIGNON** - provides the means to set up a Script which is automatically executed each time the user signs on.
- **&DPAGELNGTH** - allows setting of page length for diary displays, in the same way **&PAGELENGTH** is used for other parts of the product.
- **NOCLOSEBRAC** - provides a means to allow the usage of "(" characters in following active functions (for example within escape sequences). This option prevents the parsing algorithm from supplying erroneously a matching ")" which could invalidate the sequence.

New (or previously unsupported) Script Active functions:

- **<CREATED {item}>** - returns the date that an item was created, in days relative to the current date.
- **<ATTDATE {item}>** - returns the date that an item was attached to its parent item, again in days relative to the current date.
- Provide variable substitution with the + string facility.
- **<MPEXL>** - returns true (1) if the processor on which the script is running is an MPE/XL machine, otherwise it returns false (0).

An example of the use of some of these new script capabilities would be a script to delete messages from the in tray which are older than a certain age.

## User Password Controls

HP DeskManager B.05.00 introduces controls which allow the Systems Administrator to enforce the usage of passwords with the following new functions:

The Administrator may use a new Passwords screen in MAILCONFIG to

- ensure users set a password.
- specify a minimum length and minimum composition requirements.

- set expiry dates on passwords to ensure users change their passwords after a specified time.

**NOTE**

The new password controls will not apply when HP DeskManager is run as a batch job, or for HP DeskManager Intrinsic users. Current versions of HP AdvanceMail and HP NewWave Mail also do not provide support for the new controls.

## Hooks for ISO7 Support

DeskManager B.05.00 includes an extension to the previous converter mechanism, whereby character set converters can be integrated, thus allowing specially written converter programs to handle the translation issues. This functionality will be particularly useful for customers wishing to use ISO7, a variant of ASCII, whereby certain characters are interpreted and displayed as country-specific characters. The mechanism allows converters to be integrated with the DeskManager User Interface, providing:

- The permanent conversion of "Text Compatible" items, such as TEXT and HPSLATE in the Work Area to an alternative character set.
- The temporary conversion of TEXT items as they are read or printed in any area.

## CONFIGURATION AND ADMINISTRATION

The following enhancements have been made to configuration and administration for the DeskManager B.05.00 release:

### Local system data configuration in batch

It is possible to configure in batch using MAILUTIL local data that can currently only be accessed via MAILCONFIG. New transactions have been introduced to allow configuration of (for example) local user passwords, capabilities, computer/gateway details, etc.

**NOTE**

With HP DeskManager B.05.00, the batch transaction formats used by MAILUTIL and \*ADMIN have been enhanced over those used in release B.03.R0. In particular, the width of transaction records has been extended from 72 to 80 characters. As a result, this causes problems with text editors, such as TDP and EDIT/3000, which keep line numbers in these columns. The solution is to save such files as unnumbered by using the "k fname,unn" option within TDP and EDIT/3000, for example.



## MISCELLANEOUS ENHANCEMENTS

- A new command, LOOKUP is available at any prompt in DeskManager, so that the user can search the directory independently from sending a message or creating a Distribution List. The user may scan down the directory of names or may supply a name and have alternatives supplied if the name is non-unique. Extra user information will also be returned, if configured by the System Administrator.
- Enhanced editing of distribution lists of Replies and Replies-to-all, which allows the creator of the reply to add his own name and also CCs and BCCs to the Distribution List.
- When the user enters a Distribution List name at one of the TO.. prompts, HP DeskManager B.05.00 offers the choice of retaining categories within the list, or the (pre B.05.00) action of giving them all the category of the current prompt. The User Profile is used to select whether the choice is offered.
- If selected from the User Profile, then any extra user attributes which may have been configured (such as job title, extension number, company site) can now be displayed when adding names to distribution lists.
- The display of messages is altered so that the original creator of a forwarded message can be displayed without the user opening the message and reading the individual parts. This feature is selectable from the User Profile.
- The List command has been extended, and now includes:  
LIST NEW  
  
LIST URGENT  
  
LIST PRIVATE  
  
LIST FROM <Creator name>
- The PASSEDIT password program will run in batch mode, thus allowing further improvement to centralized administration.
- Support for the removal of a sort-chain from the Global Database significantly improves the performance of the batch-update mechanics when manipulating user names.
- VT LAN performance for terminal users improved.
- MAILSTREAM enhanced to support date and times.

# HP DeskManagerPLUS 36567 B.05.00

*by Stuart Craig  
Pinewood Information Systems Division*

The latest version of HP DeskManagerPLUS (B.05.00) is now available and includes all of the enhancements included in HP DeskManager B.05.00 plus the following major enhancements:

## TRANSPORT

The following enhancements have been made to the transport system provided by DeskManagerPLUS B.05.00:

### NS Transport Data Compression

The Administrator can specify in the configurator, that data will be compressed before it is transmitted over an NS link between two HP DeskManagerPLUS systems, to provide an opportunity to reduce line utilization and consequently data communications costs.

## USER INTERFACE

The following enhanced functionality is available with the DeskManagerPLUS B.05.00 release:

### Routing & Authorization

DeskManagerPLUS allows users to indicate in an HP DeskManager message that its contents require the authorization/approval of a defined set of recipients, in a specified sequence. Each recipient can approve the request, in which case it is sent to the next on the list, or can reject it, in which case it is returned to the originator. This approval/rejection is password controlled. Routed messages can be tracked by the originator, using the pending tray. Designates and stand-ins (that is a deputy that a user can nominate, to whom routed messages should be autoforwarded in his absence) can approve or reject by proxy.

<b>NOTE</b>
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Routed messages will not be recognized by HP DeskManager systems that have software prior to B.05.00. The effect of this is that routed messages will become blocked along the route, since the receiving system does not apply any more processing to these items than to standard messages. It is important, therefore, that all HP DeskManager systems in a network are upgraded to HP DeskManagerPLUS version B.05.00 before Routing and Authorization is fully implemented. Routed messages sent to Regular HP DeskManager version B.05.00 (that is non-DeskManagerPLUS) can be actioned (so blocking can be avoided), but cannot be originated on those systems.

**NOTE**

Current versions of HP Advancemail and HP NewWave Mail do not provide support for the Routing & Authorization capabilities of HP DeskManagerPLUS.

## CONFIGURATION AND ADMINISTRATION

The following enhancements have been made to configuration and administration for the DeskManagerPLUS B.05.00 release:

### High Availability Maintenance/Garbage Collection

It is possible to run garbage collection continuously, and fully concurrently with all other HP DeskManagerPLUS processes, thus improving system availability over previous versions of HP DeskManagerPLUS. Two new facilities are provided to achieve this:

- **WASTE BIN EMPTIER**

This is intended to run at discreet times, for example at the end of each day, to release users' waste baskets for deletion by the other component, the Garbage Collector. The effect of the bin emptier is similar to that of the existing maintenance program, in that when users sign on again afterwards, their waste bins would appear empty, however the contents still exist in the database (until the Garbage Collector is run).

- **GARBAGE COLLECTOR**

This may be run continuously and fully concurrently with the rest of the system and will physically delete garbage from the database, including emptied waste baskets, releasing space in the ITEM-HEADER, ITEM-STRUCTURE and ITEM-CONTENT datasets.

The previous method of operation (MAILMAINT) will still be available with this version of HP DeskManagerPLUS, and will be the default mode of operation.

### Centralized Administration

This release of HP DeskManagerPLUS provides extensions to the \*ADMIN server to allow local data (users, routing information, etc.) to be added, modified and deleted from another (remote) system. It is also possible to configure in batch using MAILUTIL local data that can currently only be accessed via MAILCONFIG. New transactions have been introduced to allow configuration of (for example) local user passwords, capabilities, computer/gateway details, etc.

**NOTE**

With HP DeskManagerPLUS B.05.00, the batch transaction formats used by MAILUTIL and \*ADMIN have been enhanced over those used in release B.03.R0. In particular, the width of transaction records has been extended from 72 to 80 characters. As a result, this causes problems with text editors, such as TDP and EDIT/3000, which keep line numbers in these columns. The solution is to save such files as unnumbered by using the "k fname,unn" option within TDP and EDIT/3000, for example.

## **HP DESKMANAGER INTRINSICS B.05.00**

HP DeskManager Intrinsic provide a programmatic interface to HP DeskManager's mailing, Diary and directory functions. The intrinsic have been enhanced to integrate correctly with the DeskmanagerPLUS B.05.00.

**NOTE**

HP DeskManager Intrinsic is now a component of HP DeskManagerPLUS, and as such, can no longer be purchased separately.

## **HP DESKMON**

HP DeskMon provides the Administrator with the ability to monitor several HP DeskManager systems from a central point. This release of HP DeskMon has been produced primarily to ensure that it is consistent with HP DeskManagerPLUS B.05.00.

**NOTE**

HP DeskMon is now a component of HP DeskManagerPLUS, and as such, can no longer be purchased separately.

## **HP SCHEDULE**

HP Schedule is a component of HP DeskManagerPLUS which allows users to schedule meetings with other users, and book resources such as rooms and cars. This release of HP Schedule has been produced primarily to ensure that it is consistent with HP DeskManagerPLUS B.05.00.

**NOTE**

HP Schedule is now a component of HP DeskManagerPLUS, and as such, can no longer be purchased separately.

## **DCA CONVERTERS**

The DCA FFT and RFT converters are included with this release of HP DeskManagerPLUS.

**NOTE**

The DCA FFT and RFT converters can no longer be purchased separately from the HP DeskManagerPLUS product.

# HP File/Library 27520 B.05.00

*by Stuart Craig  
Pinewood Information Systems Division*

In this release of HP File/Library there are no major or minor enhancements. Primarily this release has been produced to allow the new release of HP DeskManager and HP DeskManagerPLUS (B.05.00) to integrate correctly with the product.

# HP Word Intrinsic A.01.06

*by Stuart Craig  
Pinewood Information Systems Division*

HP Word Intrinsic A.01.06 contains no changes to the product itself. The only changes are in the installation process, which has been fully automated such that no manual steps are required.

## **INSTALLATION STRATEGY**

HP Word Intrinsic A.01.06 is installed via the AUTOINST process. No manual steps are required. Specifically, it is no longer necessary to allocate a Resource Identification Number (RIN) manually for a first time installation. This is now done programmatically if necessary and configured automatically.

# HP Listkeeper A.03.20

*by Stuart Craig  
Pinewood Information Systems Division*

This release of HP Listkeeper contains no changes to the product itself. The only changes are in the installation process, which has been fully automated such that no manual steps are required.

## INSTALLATION STRATEGY

HP Listkeeper A.03.20 is installed via the AUTOINST process, which requires no manual steps to be performed. The correct version for MPE V or MPE/iX will be installed automatically.



# HP COBOL II/V Enhancement

*by Jan Merrill  
Systems Technology Division*

This version of the HP COBOL II/V compiler was enhanced to output a new message at compile time if the definition of sort or merge files in the program indicates that data may be lost. The enhancement can help your programs more fully conform to the ANSI Standard.

## NEW MESSAGE FOR SORT/MERGE FILES

The compiler outputs the new Questionable message 323, "Record size of FD <file-name> conflicts with the SD," if one of the following situations is detected:

With USING file(s):

For a sort or merge file (SD) with fixed length records,

- the largest record size of a USING file is greater than the largest SD record size.

For a sort or merge file with variable length records,

- the largest record size of a USING file is greater than the largest SD record size or
- the smallest record size of a USING file is less than the smallest SD record size.

With GIVING file(s):

For a GIVING file with fixed length records,

- the largest record size of a GIVING file is less than the largest SD record size.

For a GIVING file with variable length records,

- the largest record size of a GIVING file is less than the largest SD record size or
- the smallest record size of a GIVING file is greater than the smallest SD record size.

The following paragraphs describe examples of this new enhancement.

If the record size of an input file specified in the USING phrase is 50 bytes and the SD record size is 40 bytes, the compiler will output error 323 because only 40 bytes of each 50-byte record will be sorted.

If the record size of an input file specified in the USING phrase is 50 bytes and the SD specifies records varying from 30 to 40 bytes, the compiler will output error 323 because only 40 bytes of each 50-byte record will be sorted.

## Additional Software Products

If the record size of an output file specified in the `GIVING` phrase is 30 bytes and the `SD` record size is 40 bytes, the compiler will output error 323 because data may be lost when the `SORT` outputs 40-byte records to 30-byte records in the output file.

To better implement the ANSI Standard, the compiler compares the `USING` file(s) to the `SD` file, and compares the `SD` file to the `GIVING` file(s). Because the compiler does not compare the `USING` to the `GIVING` files, the compiler outputs error 323 if the record sizes of the `USING` and `GIVING` files are the same and the `SD` record size is larger, although this case does not cause data loss.

You may receive error 323 in other cases that will not cause data loss. The error is a Questionable so that you can determine whether the data loss will impact the execution of your program. If not, you can ignore the message. To modify your program to conform to the ANSI Standard and to eliminate the message, you can change the record length of the `USING` and `GIVING` files to match the record length of the `SD`. Another alternative is to add or change the `RECORD` clause of the `SD` or `GIVING` file to specify variable length records that pass the new checking.

# VPLUS Enhancements for Release 23

by Cory Cooper  
Commercial Systems Division



Three new enhancements have been added to VPLUS. These enhancements are: native character recognition for the MATCH statement, new state codes for the \$STATE table, and the VGETARBINFO intrinsic.

## Native Character Pattern Matching

VPLUS has been enhanced to allow native character pattern matching as an option for VPLUS MATCH statements. The VPLUS intrinsics and FORMSPEC have been enhanced to allow the application writer the option of choosing the Native Language Support (NLS) native character pattern matching facility instead of the existing VPLUS (Native 3000 only) pattern matching facility.

A new field has been added on the Terminal/Language Selection Menu to enable native character recognition for the existing MATCH statement. The field is named "Native character pattern matching", and will allow 'Y' or 'N' as input. A 'Y' or 'y' value will enable native pattern matching. This field defaults to 'N' for new forms files; it defaults to blank for existing forms files.

## New State Codes Added

The following new valid postal abbreviations have been added to the \$STATE table for FORMSPEC edits:

AP: Area Pacific  
AA: Area Americas  
AE: Area Europe  
FM: Federated States of Micronesia  
MH: Marshall Islands  
MP: Northern Mariana Islands  
PW: Palau

## New VGETARBINFO Intrinsic

A new VPLUS intrinsic has been added to retrieve the VPLUS ARB field mapping information. The intrinsic is named VGETARBINFO and is callable as follows:

```
CALL "VGETARBINFO" USING VPLUS-COMAREA,
                        ARB-INFO-BUF,
                        INFO-BUF-LEN.
```

Record VPLUS-COMAREA. << use existing definitions >>

Record ARB-INFO-BUF:  
Record ARB-INFO-HEADER:

```
2 byte integer NUM-OF-ENTRIES;    << input only >>
2 byte integer ENTRY-LEN;        << input only >>
16 byte array FORM-NAME;         << input only >>
```

Additional Software Products

16 byte array FILLER;                    << reserved for future use >>  
2 byte integer NUM-ARB-FLDS.           << output only >>

Table of record ARB-INFO-DETAIL:

2 byte integer FIELD-NUM;               << input only >>  
10 byte array ARB-DATA-TYPE;           << output only >>  
2 byte integer ARB-DATA-LEN;           << output only >>  
2 byte integer ARB-BUF-OFFSET.         << output only >>

2 byte integer INFO-BUF-LEN.         << total 2 byte word length of >>  
   << ARB-INFO-BUF, minimum valid >>  
   << length is 27.                     >>

NUM-OF-ENTRIES indicates number of ARB-INFO-DETAIL table entries and must be zero or greater; if number of entries is zero then the intrinsic returns immediately to the application (i.e., does a no-op).

ENTRY-LEN indicates size of ARB-INFO-DETAIL table entries (in 2 byte words), and must be equal to the value of 8.

FORM-NAME contains left justified, upshifted form name of 1 to 15 characters, blank terminated.

FILLER is reserved for future use and should be initialized to 16 blanks.

NUM-ARB-FLDS at output indicates the number of ARB fields defined for the specified form; values for NUM-ARB-FLDS range from zero, i.e., no active ARB fields in specified form ARB (all are "filler"), to 128, i.e., maximum number of fields in any one form. (Note: if this intrinsic is called for a form with zero active fields in the form's ARB, the intrinsic will continue to process all ARB-INFO-DETAIL entries, returning \$NOTARBFLD for each entry.)

FIELD-NUM is ARB-INFO-DETAIL table key and contains field number assigned by FORMSPEC.

ARB-DATA-TYPE at output contains field type conversion notation from FORMSPEC, e.g., CHAR, DINT, SPACK2, or token \$NOTARBFLD which indicates that the requested field does not exist within the ARB.

ARB-DATA-LEN at output contains ARB field length in bytes (not updated if field does not exist in ARB).

ARB-BUF-OFFSET at output contains zero relative byte offset of the ARB field (not updated if field does not exist in ARB).

# **BUSINESS REPORT WRITER/V Enhancements**

*by Mary Wernette  
Software Technology Division*

This release of HP Business Report Writer/V on Release 23 adds several of the most frequently requested enhancements, as well as fixes a number of defects.

## **DICTIONARY MAINTENANCE MADE SIMPLE**

Now you can modify BRW dictionaries much more easily!

BRW has always provided a set of conversion programs to take other dictionary formats and convert them into BRW's dictionary format. But, until now, there was no provision for modifying a BRW dictionary. You needed to modify the original dictionary, such as a system dictionary, then run the conversion program again. This created quite an obstacle for those needing to maintain both dictionaries. And, in the case where the original data dictionary is no longer available, the task is impossible!

A new utility, `RDICUSER.PUB.SYS`, is now available as part of the BRW product. The utility takes a BRW data dictionary, `RDIC`, and generates a script file that can recreate the dictionary via the `RGENDIC.PUB.SYS` program.

The intent of `RDICUSER` is to simplify maintenance of BRW data dictionaries. Some customers have told us that they often exchange BRW dictionary files and reports with other users. They usually don't get the original source to the dictionary file or may misplace it over time. With `RDICUSER`, you can decompile the dictionary file into a script file, edit that file, then recreate `RDIC` from the modified script file.

The syntax of script files is fully documented in the User- Generated Source File section of the **BUSINESS REPORT WRITER/V Reference Manual**.

To use `RDICUSER`, you run `RDICUSER.PUB.SYS` and answer two prompts. The first prompt is for the BRW data dictionary name; the default is `RDIC.PUB`. The second prompt is for the output script filename; the default is `GENDEF`.

## **STREAMLINED REPORT DEVELOPMENT**

A report developer can now test and debug a report with a limited amount of data, instead of running the whole report. This saves precious development time and paper.

Two JCWs have been created, `BRWLINELIMIT` and `BRWRECORDLIMIT`, which allow developers to test reports with only a subset of data from the full report.

## **SUPPRESS REPETITION ON ANY LINESSET**

A large number of you have requested greater flexibility in suppressing repetition. Now, you can suppress repetition on ANY lineset, not just the Detail lineset.

## **NEW JCWS ADD FUNCTIONALITY**

The following four JCWs may be optionally set by the user to expand the functionality of BRW.

### **BRWLINELIMIT**

Used in REXEC, this JCW together with BRWRECORDLIMIT provide a 'sample values' feature for BRW. They let users test reports with only a subset of the data from the full report.

BRWLINELIMIT provides a value from 1 to 32000, and will place a limit on the number of lines written to the report file. If BRWLINELIMIT is used without BRWRECORDLIMIT, then BRW will complete the full data access portion of the report, but will quit early when printing the result.

### **BRWNULLCCTL**

Used in REXEC, this JCW protects us from potentially introducing an incompatibility problem. Previously, the default CCTL code used by BRW was a binary zero. Because binary zeros in ASCII files cause problems on the PC, the default CCTL code is now a blank (Hex 20). If switching from binary zero to blank causes undesired results, you may simply go back to the binary zeros by setting BRWNULLCCTL to 1.

### **BRWRECORDLIMIT**

Used in REXEC, this JCW together with BRWLINELIMIT provide a 'Sample Values' feature for BRW. They let users test reports with only a subset of the data from the full report.

BRWRECORDLIMIT provides a value from 1 to 32000, and will place a limit on the number of records written to a BRW workfile.

Note: If a BRW report only references one source table, or if all JOINed tables are tuned to use keyed access, there is only one workfile. More complicated reports will have multiple workfiles. Since each workfile is limited to N records, the joins and selection criteria applied on later workfiles may cause the final access table to have less than N records.

### **BRWWARNSTDLIST**

Used in REXEC, this JCW when set to 1 causes warning and spool file continuation messages to be printed to STDLIST instead of the report file device. Some customers have expressed annoyance with runtime warning messages and spool file continuation messages being printed to the same place as the report output.

# HP GLANCEPLUS/V 60-DAY TRIAL SOFTWARE

*by Jim Jen  
Software Technology Division*

HP GlancePlus/V, Hewlett-Packard's powerful and easy-to-use performance tool, has been enhanced to monitor the full 1024 process maximum allowed on MPE V systems. A one-time, 60-day trial copy which includes this enhancement is now available to you with the installation of MPE V Release 23. For more information, see file GLREADME in the PUB.SYS group after you have installed this release.

GlancePlus/V enables you to maximize system performance by quickly pinpointing system bottlenecks. It is also key in understanding the effects of migrating from an MPE V to an MPE/iX environment. Your investment in GlancePlus/V is protected when you migrate to MPE/iX systems; a full trade-in credit for GlancePlus/V can be applied towards your GlancePlus/XL purchase. The consistent interface of the two GlancePlus products also insures that no retraining is required in moving from one to another.

Installing the GlancePlus/V trial copy is a simple, quick procedure. It is important not to begin the installation until you are ready to use it. The 60-day trial period begins at installation and only one trial is allowed on each system. Even if you are not currently interested in this trial, it is recommended you keep the trial copy files on your system to aid the Response Center in critical problem diagnosis. The three trial copy files are GLREADME, GLTRUCK, and GLUNPACK in the PUB.SYS group.

# HP LaserRX/MPE Enhanced

*by Gerry Wade  
Software Technology Division*

This release of LaserRX/MPE has several exciting new features. The "B" version added major new functionality over the original "A" version. Even more enhancements have been made with this release.

## UPDATES SHIPPED WITH MPE V

Beginning with MPE/ix Release 4.0 and MPE V Release 23, the LaserRX/MPE Collection Software may be updated using standard MPE update procedures. Customers with support for LaserRX/MPE, part number 50700B, will receive the LaserRX/MPE Collector software update along with their other HP3000 product updates. The LaserRX update will be installed by the AUTOINST program.

### CAUTION

A New Group and User will be added to the SYS account as part of the LaserRX/MPE product support. If they already exist then they will have their capabilities altered as follows:

```
NEWGROUP SCOPE;CAP=IA,BA,PH,DS,MR,PM  
NEWUSER SCOPE;HOME=SCOPE;CAP=GL,ND,SF,IA,BA
```

The group will be added only if the LaserRX/MPE product is being installed. Since the SCOPE.SYS group requires PM capability, you will probably want to add a password to this group. The user will be added to every system regardless of whether the LaserRX/MPE product is being installed. Existing passwords and access restrictions will not be altered.

## HOST ACCESS TO DATA

Access to LaserRX log file data is now available on the HP3000. The EXTRACT program has a new EXPORT command which will produce ASCII or BINARY files of LaserRX performance data. Flexible output formatting allows easy generation of custom reports and transfer of data to other analysis packages.

## SERVICE LEVEL SUPPORT

The Performance Data Collector now allows you to specify a target response time for each LaserRX application. The percentage of terminal transactions which meet this target is then available as a measure



of service level agreements. The service level agreement percentage is available using the host export facility.

## **SCHEDULED LOG FILE ADJUSTMENTS**

As LaserRX log files become full they are adjusted by rolling out the oldest 25% of the data. If log files are large then this process may take place during undesirable times. Now the Data Collector will examine each log file at a user defined time each day and, if it predicts that the log file will fill in the next 24 hours, adjusts it at that time. This allows scheduling log file adjustments at off hours, avoiding any possible impact on critical processing.

## **LOG FILE ANALYSIS**

The UTILITY program has been enhanced to process performance alarms against LaserRX log file data. This can be used to identify times which bear closer analysis. It can also be used in a periodic batch job to scan the latest log file data and take actions automatically if system or application performance met user defined criteria.

# HP GlancePlus Pak for MPE V

*by Jim Jen  
Software Technology Division*

HP GlancePlus Pak for MPE V is an exciting new performance tool offering from Hewlett-Packard. Now you can get the online diagnostic capabilities of HP GlancePlus and the long term performance trending all for one low price. HP GlancePlus Pak for MPE V combines HP GlancePlus/V and the patented performance data collection software from HP LaserRX into a single package. Here is what you get:

*HP GlancePlus Pak for MPE V =*

*HP GlancePlus/V (Powerful but friendly online diagnostic tool)*

*+ Performance Collector (Host portion of HP LaserRX/MPE)*

*Patented SCOPE program efficiently logs performance metrics for GLOBAL, APPLICATION, PROCESS, and DISC SPACE*

*Selected data can be easily exported for further analysis on the HP 3000 or other systems. A variety of formats makes it easy to move data into popular spreadsheet and graphics packages or into your own analysis programs.*

*Log file monitoring is provided by applying the performance alarming techniques against existing log files. You may create a batch job to periodically scan a system's logs and then notify you if there is anything out of the ordinary which requires your attention.*

## Compatibility with HP GlancePlus/V

HP GlancePlus Pak for MPE V includes the current HP GlancePlus/V software. If you buy HP GlancePlus Pak for MPE V then you do not need to purchase HP GlancePlus/V. Current owners of HP GlancePlus/V may elect to upgrade to HP GlancePlus Pak for MPE V at any time for a very low cost and with no change in monthly support costs.

## Compatibility with HP LaserRX/MPE

If you currently own HP LaserRX/MPE then you can use it to analyze the data collected by HP GlancePlus Pak for MPE V as long as you don't exceed the number of analyzed systems in your HP LaserRX license.

You do not need to own the HP LaserRX/MPE Analyzer Software in order to utilize the trending performance data collected by HP GlancePlus Pak for MPE V. This means that you can start analyzing your system's performance trends or billing for system resources with your investment in HP GlancePlus Pak. (The HP LaserRX Analyzer software may be easily added at a later time if desired).

A new option has been added to HP LaserRX/MPE which will allow you to purchase just the Analyzer Software. The license on this new option is to analyze an unlimited number of systems but it does not include the data collection software. You may purchase HP GlancePlus Pak for MPE V today and add the Analyzer software later. You may also use this option to add a second analysis station to an existing LaserRX package.

## Have it Your Way

You now have even more flexibility in purchasing exactly the performance tool capabilities you need, when you need them. All tools are compatible with each other.

**HP GlancePlus/V** (P/N 50733B)  
The Premier On-line Diagnostic Tool

**HP GlancePlus Pak for MPE V** (P/N B2954A)  
Online Diagnostic plus long term trending data collection.

**HP LaserRX/MPE Analyzer** (P/N 50700B Opt 005)  
Easy analysis of trending data using a state of the art interactive graphical user interface on a Personal Computer. It utilizes a top down methodology for performance management which helps you quickly isolate important data in the log files without losing sight of the big picture.

**HP LaserRX/MPE Product** (P/N 50700B Opt 001, 002, 003, or 004)  
Combines long term trending data collection and HP LaserRX/MPE Analyzer software in packages for different numbers of total systems.

**RX Forecast** (P/N B1764B)  
Statistical data projection tool allows predictions of future system performance based on existing trending data.

Buy only as much capability as you need, add more easily as you need it. Have it your way!

For more information see the articles in this publication on HP GlancePlus/V and the Performance Data Collector for HP LaserRX/MPE or call your sales representative and ask about:

Part Number:           **B2954A    HP GlancePlus Pak for MPE V**



## MPE V HARDWARE SUPPORT

Knowing that the MPE V operating system is actively supported and enhanced, customers often ask, "How long can we expect the hardware to be supported?" HP projects a product's support life based on a rigorous evaluation of many variables, resulting in a Guaranteed Minimum Support (GMS) date. The GMS date is the most conservative estimate for ending contractual support and is often extended when it is determined that HP is able to maintain its high standards of support for that product. This information is typically available upon request 12 months before the occurrence of the GMS date.

All of the products listed below are subject to support-life extensions. If you would like more information regarding which products are affected by this policy, please contact your local HP field representative.

### Guaranteed Minimum Support Dates

Product	GMS Date
Micro 3000	AUG 1, 1993
Micro 3000LX	JAN 1, 1997
Micro 3000GX	DEC 31, 1997
Series 37	DEC 1, 1992
Series 37XE	JAN 1, 1996
Series 39A	JAN 1, 1994
Series 39B	JAN 1, 1994
Series 40	JAN 1, 1994
Series 42	JAN 1, 1994
Series 44	JAN 1, 1994
Series 48A	JAN 1, 1994
Series 48B	JAN 1, 1994
Series 52	JAN 1, 1995
Series 58	JAN 1, 1995
Series 64A	MAR 1, 1996
Series 64B	MAR 1, 1996
Series 68	MAR 1, 1996
Series 70	MAR 1, 1996

Contractual support is no longer available for Series II, Series III, Series 30, and Series 33. HP support for these products are on a time and materials basis and are on "best effort" offering only.



# PRODUCT RELEASE INFORMATION

SECTION

5

## MPE V PRODUCT RELEASES

The following table is both a historical and current list of new products introduced for each MPE V version release for the HP 3000 Computer System. It also includes products added after various releases of the Master Installation Tape (MIT).

MPE V Product Releases

V.UU.FF.	Name	Release	Product(s) Introduced/Added
G.03.04	V-DELTA-4: Legally Evaluated by Dept. of Defense	R28C2	Roll-in of V-Delta-3 The Legally Evaluated DOD release SUBSYS VUF = G.A3.04 HPWORD SERVICES (HP27558) HPEDIT/V (HP30316) NSPAD (NSPAD)
G.A3.07	V-Delta-7	R2927	Roll-in of V-Delta-5 and V-Delta-6 HPWORDTEXT/PC (HP27566) HP GLANCE/V (HP50733) HP BRW-Desk/V (HP35365) HP Predictive (HP51467) HP Network Predictive (HP51468) HP Desk NewWave Browsers (HP47950)* AdvanceMail Host (HP27504)*
G.03.08	V-DELTA-8	R2944	Roll-in of V-Delta-7 HP CDINSTAL (HP32437) HP-IB CD-ROM (HPC1707) HP LaserRelease MICRO 3000RX
G.A3.09	V-DELTA-9	R3010	Roll-in of V-Delta-8 HP X.400/3000 Products (HP32056A) NewWave Office (B1720A) (Incorporation of General Release Patches)
G.1P.00 G.1P.10 G.1P.20	Platform 1P	R3035	Roll-in of V-Delta-9 Series 6400 Model 1300H DDS Roll-in of HP GlancePlus/V (HP50733)* Roll-in of DeskManagerPLUS (HP36567)*

MPE V Product Releases (continued)

G.20.00	Release 20	R3042	Roll-in of Platform 1P HP Search/V (HP36381A) HP Browse/V (HP36382A)
G.21.00	Release 21	R3114	Roll-in of Release 20 VPLUS/Windows (HP36393A)
G.22.00	Release 22	R3140	Roll-in of Release 21 Various Enhancements and Fixes No new products
G.23.00	Release 23	R3215	Roll-in of Release 22 Various Enhancements and Fixes 6 of the top 8 SIC requested enhancements fixed 35 of the top 40 high impact problems fixed HP EXPLAIN

\*Product has been retrofitted on this version.





## SUPPORTED RELEASES

The following matrix provides information on the supported versions of MPE V. It lists the currently supported MITs and the SPUs they are supported on. The matrix also provides all known factory support termination dates. A version of MPE V will not have factory support after its support termination date.

### SUPPORTED MIT MATRIX

MITs	V.UU.FFs	Supported Systems	Support Termination Date
V-Delta-4	G.03.04	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	*
V-Delta-7	G.A3.07, G.B3.07	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	***DEC 1, 1992
V-Delta-8	G.A3.08	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	***DEC 1, 1992
V-Delta-9	G.A3.09	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	***DEC 1, 1992
Platform 1P	G.1P.00, G.1P.10 G.1P.20	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	** SEP 1, 1993
Release 20	G.20.00	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	***DEC 1, 1992
Release 21	G.21.00	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	***DEC 1, 1992
Release 22	G.22.00	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	***DEC 1, 1992
Release 23	G.23.00	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX,RX	***JUN 1, 1993

\* DOD version (G.03.04) is only for customers who require DOD "C2" certification from the U.S. Government. This version will have continuing support unless a need for a future certified version becomes necessary.

\*\* Or twelve months after the actual first customer ship date of Platform 2P.

\*\*\* Or three months after the actual first customer ship date of Platform 2P.



# CATALOG OF USER DOCUMENTATION

SECTION

6

This section contains a list of customer manuals for the HP 3000 Computer System.

If your contract includes Material Based Services for your appropriate operating system and software services, you will receive both software and manual updates. For additional copies of manual updates, Manual Update Services (MUS) can be ordered.

As of this release the subscription services column of this catalog has been removed. Contact your SE for specific information about subscription services.

Manual Title	Customer Order No.	Latest Edition	Current Update
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## FOS SYSTEM MANUALS

General Information Manual	5953-7583	10/84	
Fundamental 3000 Data Communication Handbook	5957-4634	6/84	
EDIT/3000 Reference Manual	03000-90012	8/80	
Using the HP 3000: An Introduction to Interactive Programming	03000-90121	4/79	
MPE V Segmenter Reference Manual	30000-90011	11/82	8/86
MPE V Debug/Stack Dump Reference Manual	30000-90012	8/86	
Compiler Library Reference Manual	30000-90028	11/76	
QUERY/3000 Reference Manual	30000-90042	5/87	
KSAM/3000 Reference Manual	30000-90079	8/86	
MPE V File System Reference Manual	30000-90236	10/89	
MPE V System Operation an Resource Management Reference Manual	32033-90005	10/89	
MPE V Commands Reference Manual	32033-90006	10/89	
MPE V Intrinsic Reference Manual	32033-90007	10/89	
MPE V System Utilities Reference Manual	32033-90008	10/89	
HP 3000 Guide for the New User	32033-90009	1/86	
HP 3000 Guide for the New System Operator	32033-90021	4/86	
MPE Quick Reference Guide	32033-90023	10/89	
MPE V Storing and Restoring Reference Manual	32033-90133	6/87	10/88
MPE V System Backup and Recovery User's Guide	32033-90134	6/87	10/88
MPE V Security & Accounting	32033-90136	10/88	
MPE V TABLES Manual	32033-90147		
MPE V General User's Reference Manual	32033-90158	10/88	

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Data Entry and Forms Management System V/PLUS/3000	32209-90001	7/86	11/87
Using VPLUS/V	32209-90004	8/86	
FCOPY Reference Manual	32212-90003	12/90	
Native Language Support Reference Manual	32414-90001	11/87	10/88
SORT-MERGE/3000 Reference Manual	32214-90002	9/81	9/84
TurboIMAGE Database Management System Reference Manual	32215-90050	12/85	
HP Hi-Li Reference Manual	32424-90002	11/87	

### SUBSYSTEM MANUALS

HP GlancePlus/V User's Manual	50733-90002	2/91	
HP Security Management Guide	30392-90001	10/88	
APS/3000 Reference Manual	32180-90001	11/86	
APS/3000 Quick Reference Card	32180-90002	11/86	
APS/3000 Pocket Guide Insert	32180-90003	11/86	
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OPT/3000 Reference Manual	32238-90001	11/86	
OPT Pocket Guide	32238-90002	11/86	
OPT Insert for MPE Pocket Guide	32238-90003	11/86	

### DATA COMMUNICATIONS MANUALS

LAN Cabling and Accessories Installation Manual	5955-7680	1/86	
LAN Link Troubleshooting Manual	5955-7681	10/86	
LAN/3000 and OfficeShare LAN/3000 Design Guide	5955-7689	11/85	
Making the LAN Connection: A Local Area Network Primer	5957-4624	9/84	

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NS X.25 3000/V Link Guide	24405-90002	7/90	
DSN/RJE 2780/3780 Emulator Reference Manual	30000-90047	2/82	7/83
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ATP for Meridian SL-1 Interface Supplement to the ATP Installation Manual	30144-90016	4/86	
Workstation Configurator Reference Manual	30239-90001	10/89	
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Installing and Troubleshooting SNA IMF Node Manager's Guide	30247-90002	1/85	
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SNA NRJE Node Manager's Guide (w/binder)	30292-61000	4/90	

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DSN/DS 3000 Reference Manual	32190-90001	9/82	
DSN/DS 3000 To 1000 Reference Manual	32190-90005	1/82	
DSN/X.25 For the HP 3000 Reference Manual	32191-90001	2/84	
DSN/MRJE Multileaving Remote Job Entry	32192-90001	8/84	
DSN/MTS Multipoint Terminal Software Reference Manual	32193-90002	8/82	2/84
NS3000/V User/Programmer Reference Manual	32344-90001	7/90	
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HP System Dictionary Intrinsic Reference Manual	32254-90002	12/86	8/87
HP System Dictionary Utilities Reference Manual	32254-90003	12/86	11/87
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HP System Dictionary COBOL Definition Extractor Reference Manual	32255-90001	12/86	11/87
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<i>VISOR Reference Information</i>		(10/88)	
TURBOIMAGE DBchange/V User's Guide	36020-90001	1/87	
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HP Business BASIC Programmer's Guide	32115-90003	8/86	7/87
BASIC/V to HP Business BASIC Conversion Guide	32115-90004	8/86	9/87
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HPConvert/DCA Document Conversion Guide	27509-90001	12/85	
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HPSPELL Quick Reference Guide	36561-90003	11/84	
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IDS/FORM Reference Manual	36581-90002	2/85	
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HP Graphics Curator Update	36926-90007	11/86	
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HP LaserRX/MPE: A Journey of Discovery	50700-90026	1/91	
TRANSFORM/3000 Reference Manual	99940-90001	11/86	
TRANSFORM/3000 IBM S/36 OCL Translation	99940-90002	11/86	
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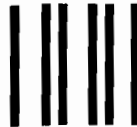
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