

COMMUNICATOR 3000 Version G.20.00 of MPE V/E (Release 20)

COMUNICATOR 3000



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COMMUNICATOR 3000

Version G.20.00 of MPE V/E (Release 20)



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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:

A Use

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:

 ${A \choose B}$

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:

means that the following are allowed:

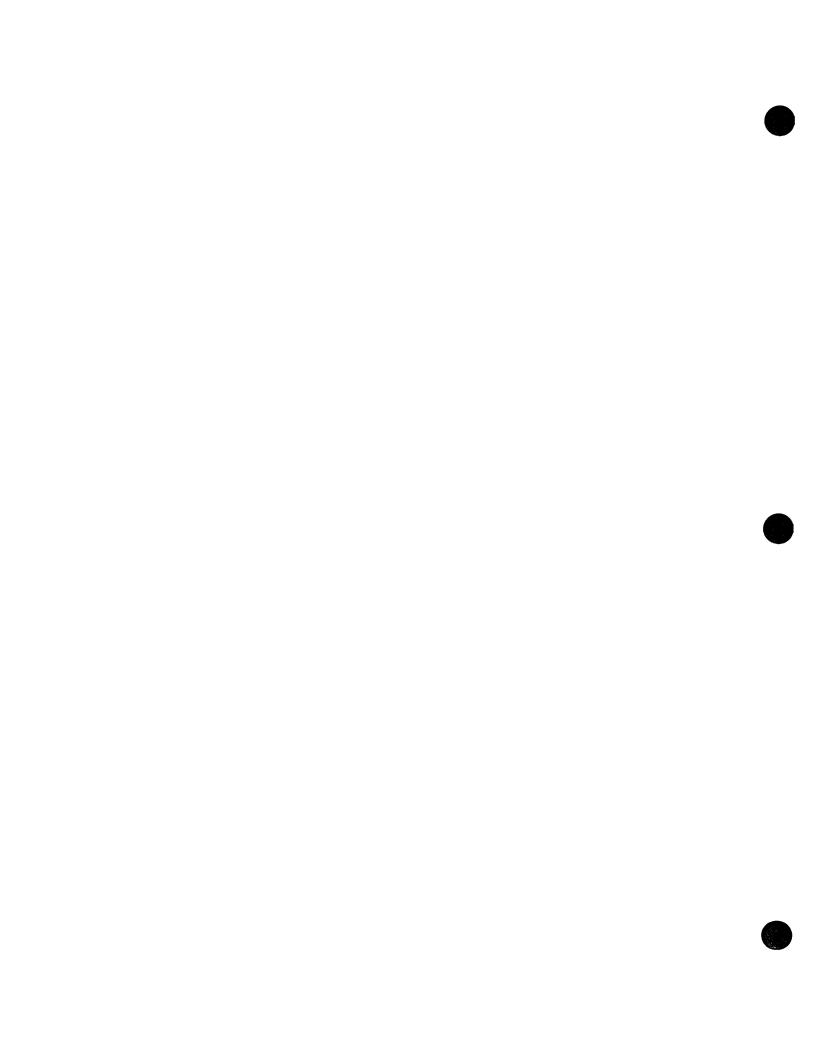
itema
itema,itemb
itema,itemb,itemc
itema,,itemc

CONVENTIONS (continued)

Δ	When necessary for clarity, the symbol Δ 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 the terminal's screen or 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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1

Release 20 Overview

by Gayla Kohlmoos Commercial Systems Division

This Hewlett-Packard software release is based on MPE V/E (G. 00. 00) and is referred to as Release 20 (G. 20. 00). This release of the *Communicator* describes enhancements that have been added to our existing software products. These new enhancements further extend the functionality and performance of MPE V/E based HP 3000 systems.

SYSTEM INFORMATION

Release 20 includes changes to the :STREAM command. These changes will allow you to schedule and reschedule jobs more consistently and flexibly. You will also notice that the algorithm for rescheduling jobs with the option DAY or DATE has been slightly modified.

ADDITIONAL SOFTWARE PRODUCTS

HP Search/V, a new product with this release, provides you with high-performance search capabilities. HP Search/V features include: fast, read-only access to files, wild card specifications in file sets, multiple search patterns, KSAM file supportability, and output redirection.

HP Browse/V, another new product being introduced with this release, can create a full-screen display of one or two files at a time. HP Browse/V contains the following features: quick, read-only access to most non-privileged files, access to KSAM files, scrolling, user-friendly interface, short learning curve for HP EDIT users, and an online Help Facility.



2

STREAM Command Changes

by Grace Liu Commercial Systems Division

With this new version of MPE, the :STREAM command will schedule and reschedule jobs more consistently and more flexibly. The algorithm for rescheduling a job with the option DAY or DATE has been slightly modified. However, the syntax of the command has not changed.

The following are new MPE error and warning messages:

```
Can't specify a date previous to the current date. (CIERR 6305)
```

There isn't that many days in this month. Last day of this month is assumed. (CIWARN 6335)

The following are modified MPE error and warning messages:

Expected a number between 31 and -31 inclusive for the day of month or day from end of month specification. (CIERR 6321)

Day from the end of month is greater than total number of days in month. First day of this month is assumed (CIWARN 6323)

ALGORITHM

There are no changes for AT and IN options.

Here are the new strategies in redirecting a scheduled job with DAY option to a future day, if the time or day has passed:

```
{dow}
DAY = {dom} [; AT=timespec]
{dem}
```

dow - Reschedule for the same time of next weekday.

dom - Reschedule for next month, same day and same time. If DOM specified is greater than total number of days in next month, last day of next month is assumed. Note: If DOM is greater than the total number of days in this month, and time or day hasn't passed yet, reschedule for the last day of this month.

dem - Reschedule for next month, same time. The day of month might be slightly different from this month, because it depends on the total number of days we have for the coming month. If the positive value of DEM is greater than the total number of days in the next month, the first day of the coming month is assumed.

Here are the new strategies in handling the DATE option. This option is specified in the format mm/dd/yy. It is an absolute date specification.

- 1. If the date specified is less than the current date, an error message is generated CIERR 6305.
- 2. If the date specified is equal to the current date but the time is passed, an error message is generated CIERR 6303.
- 3. If the date specified is equal to the current date and the time is not passed, the job is scheduled for the specified time.
- 4. If the date specified is greater than the current date, the job is scheduled for the specified date and time.

Example

The following are examples of : STREAM command usage. For these examples, assume that the current date and time are Monday, February 5, 1990, 12:00 p.m.

Current date: February 5, 1990

Weekday: Monday Time: 12:00 p.m.

:STREAM JOBFILE JOBFILE will be introduced immediately

:STREAM JOBFILE; AT=8:00 JOBFILE will be introduced at 8:00 a.m.

Tuesday, February 6.

:STREAM JOBFILE; AT=20:00 JOBFILE will be introduced at 8:00 p.m.,

Monday, February 5.

:STREAM JOBFILE; IN=,8

JOBFILE will be introduced in eight hours, at 8:00 p.m., February 5.

:STREAM JOBFILE; IN=1,8

JOBFILE will be introduced in one day plus eight hours, at 8:00 p.m., Tuesday, February 6.

:STREAM JOBFILE; DAY=MON; AT=8:00

Since the time specified (8:00 a.m.) is earlier than the current time, JOBFILE will be introduced at 8:00 a.m., Monday, February 12.

:STREAM JOBFILE; DAY=MON; AT=20:00

Since the time specified (8:00 p.m) is later than the current time, JOBFILE will be introduced at 8:00 p.m., Monday, February 5.

:STREAM JOBFILE; DAY=6; AT=20:00

Since the day of the month(6) is later than the current day of the month (5), the current month is assumed. JOBFILE will be introduced on Tuesday, February 6 at 8:00 p.m.

:STREAM JOBFILE; DAY=4

Since the day of the month is earlier than the current day (5), next month is assumed. Since no time was specified, JOBFILE will be introduced on Sunday, March 4, at 12:00 p.m.

:STREAM JOBFILE; DAY=31

Since there is no February 31, a CIWARN 6335 is given, and the job is scheduled for last day of this month February 28, at 12:00 p.m.

:STREAM JOBFILE; DAY=-2

The "-2" means the second to last day of the month, and since no time was specified, the current time is used. JOBFILE will be introduced on Tuesday, February 27, at 12:00 p.m.

:STREAM JOBFILE; DATE=2/5/90; AT=8:00

Since the date to run JOBFILE is given in a mm/dd/yy format, assume user does not want rescheduling. In this case, date is current, but time passed, so it is flagged as an error.

:STREAM JOBFILE; DATE=2/5/90; AT=20:00

The specified time is later than the current time, so this command is legal.

JOBFILE will be introduced on Monday, February 5, at 8:00 p.m.

:STREAM JOBFILE; DAY=-24; AT=8:00

The date is today, but the time has passed, so scheduled for same "DAY" of next month. JOBFILE will be introduced on March 8, at 8:00 a.m.

:STREAM JOBFILE; DAY=-24

User specifies a day but does not specify a time, a warning message is generated and the specified job will log on immediately.

:STREAM JOBFILE; DAY=32

Maximum number of day in a month is 31, same for DEM, value given couldn't be greater than 31, else will be flagged as an error.

:STREAM JOBFILE; DAY=-31

The "-31" means first day of this month. Since specified day is earlier than current day, JOBFILE will be introduced on March 1, 12:00 p.m.

:STREAM JOBFILE; DAY=-25

The "-25" means the twenty-fifth day from the end of the month which implies February 4. But February 4 is earlier than current day; therefore, the next month is assumed. JOBFILE will be introduced on March 7, 12:00 p.m.

ADDITIONAL SOFTWARE PRODUCTS



3

Introducing HP Search/V

by Jan Merrill Santa Clara Information Systems Division

HP Search/V is a general-purpose search utility for finding words and patterns in individual files or sets of files. The high-performance search capabilities of HP Search/V provide quick scanning of multiple files per search. HP Search/V supports a wide variety of file formats and allows background block indexing to speed up subsequent searches.

PRODUCT FEATURES

HP Search/V provides the following features:



- Fast, read-only access to files.
- Over 65,000 files can be accessed in one search.
- File sets can be specified with wildcards or indirect files.
- Multiple search patterns can be specified in each search.
- Pattern matching characters can be used to search for a string.
- Standard-numbered, COBOL-numbered, and unnumbered file formats are supported.
- KSAM files, including COBOL copy libraries are supported.
- Output can be redirected to a printer or file.
- Time spent on subsequent searches of the same files is significantly reduced with block indexing.

For more detailed information, refer to the related article in the "Technical Articles" section of this Communicator.

Introducing HP Browse/V

by Jan Merrill Santa Clara Information Systems Division

HP Browse/V is a powerful software development tool for HP3000 application developers. HP Browse/V can quickly create a full-screen display of one or two files at a time. Also, HP Browse/V provides extensive pattern search capabilities for locating strings within files.

PRODUCT FEATURES

HP Browse/V provides the following features:

- Quick, read-only access to most non-privileged files.
- Access to extremely large files almost instantly with no limitation on file size (number of records).
- Access to standard-numbered, COBOL-numbered, and unnumbered files.
- Access to KSAM files (including COBOL copy libraries), and fixed and variable record length files.
- Access to files whose record length is up to 1024 characters. Larger files can be browsed but only the first 1024 characters are displayed.
- Scrolling (Forward/Back and Left/Right), and the ability to jump to any location in the file.
- Ability to search for a string with pattern matching characters.
- Two windows to allow users to view two files simultaneously or two different locations in the same file.
- Friendly user interface through function key access to all commands and by keystroke access to the most commonly used commands.
- Short learning curve for HP EDIT users.
- Ability to print all or part of a file.
- Ability to output all or part of a file to another file, similar to the "cut and paste" function in HP EDIT.
- Extensive online help facility.
- User-configurable display and print environment.

For more detailed information, refer to the related article in the "Technical Articles" section of this Communicator.

TECHNICAL ARTICLES

SECTION

4

Introducing HP Search/V

by Jan Merrill Santa Clara Information Systems Division

HP Search/V is a general-purpose search utility for quickly finding words and patterns in individual files or sets of files.

This article describes the main features of HP Search/V. For more detailed information, refer to the HP Search/V User's Guide (P/N 36381-90001).

USER INTERFACE

The flexible user interface provides two methods of specifying searches. The user can run HP Search/V with or without specifying files, patterns, and options in the info string. HP Search/V prompts the user for files and patterns that are not specified in the info string. This user interface allows beginning users to request searches by merely running the program and answering prompts. More advanced users can include search options in the info string. In addition, HP Search/V automatically saves the last file list and pattern list for possible re-use in the next search.

If no output options are specified, the default output format is used. HP Search/V prints the fully-qualified name of the first file containing a pattern match. Then HP Search/V prints lines of text that contain one or more of the search patterns specified. Matching lines of text are displayed with line numbers (or record numbers for unnumbered files). For COBOL copy libraries, the library member name is displayed following the line number. For each subsequent file containing a match, HP Search/V displays the file name and matching lines. At the end of the search, HP Search/V prints the number of files searched and the number of matching lines found. The user can press Control-Y during the search process to receive a message on the progress of the search, or to cancel the search. If HP Search/V has started to search a file, the message indicates which file is being searched and the line number where the search was suspended.

SPECIFYING FILES

HP Search/V can search up to 65,536 files in one search. File sets can be specified by using the LISTF command wildcards (@, #,?) or an indirect file that contains file names or file sets. Indirect files can also point to other indirect files, up to 10 levels deep.

SPECIFYING SEARCH PATTERNS

Search patterns can consist of strings of characters or complex pattern-matching characters. Up to 8 different patterns can be specified per search, and each pattern can be up to 80 characters long. The user can enter the patterns in the command line or interactively, and can use indirect files. The LISTF command wildcards (@, #,?) are supported. In addition, complex patterns can be constructed from pattern fragments. Pattern fragments can contain groups of specific characters, pattern-matching characters,

ranges of characters, or choices of characters. The user can specify that zero, one or more occurrences of pattern fragments should be matched.

SPECIFYING OUTPUT OPTIONS

With each execution of HP Search/V, the file sets and search patterns input by the user are automatically saved (by default) in temporary files. In addition, the results normally output to \$STDLIST are also output to a temporary file. The temporary files can be used to repeat a modified version of the prior search without re-entering the file and pattern options.

HP Search/V provides several options to override the default output and to customize the search. Some of these options are:

- LIST indicates that the results of the search should be output to the file specified with this option.
- QUIET indicates that no output should go to \$STDLIST. This option can be used with the LIST option to suppress the output sent to the terminal while sending the output to a file.
- PATTERNLOG indicates that the list of patterns specified should be output to the file specified with this option.
- SEARCHLOG indicates that the list of files searched should be output to the file specified with this option.
- MATCHLOG indicates that the list of files containing matches should be output to the file specified with this option.
- USECASE indicates that a case-sensitive search should be done.
- COUNT indicates that HP Search/V should print only the names of the files containing a match and the number of matches found in each file, but not the matching lines.
- INDEX requests that the indexing file be created or updated (if necessary) to make subsequent searches
 faster.

SPEEDING UP SEARCHES

As mentioned above, HP Search/V contains an indexing facility that can be invoked as an option to improve the performance of subsequent searches on files. If the INDEX option is specified, HP Search/V will stream a batch job to create or update an index file. The index file contains pattern information to allow HP Search/V to skip sections of a file that do not contain a specified pattern. Once an index has been created, search time can be cut by as much as 75%.

Introducing HP Browse/V

by Jan Merrill Santa Clara Information Systems Division

HP Browse/V is a file browse utility with a powerful command set which enables the user to quickly view and move about a file. The product provides extensive pattern search capabilities for locating strings within files. HP Browse/V also allows the user to print all or part of a file.

This article describes the main features of HP Browse/V. For more detailed information, refer to the HP Browse/V User's Guide (P/N 36382-90001).

QUICK FILE ACCESS

With HP Browse/V, users can begin to browse extremely large files almost instantly because HP Browse/V does not "text in" files as text editors do. HP Browse/V can access ASCII and BINARY files such as:

- Fixed and variable record length files.
- Standard-numbered, COBOL-numbered, and unnumbered files.
- KSAM files, including COBOL copy libraries.
- Any size file, up to the MPE V file limit.
- For files whose record length is over 1024 characters, HP Browse/V displays the first 1024 characters.

FILE OUTPUT CAPABILITIES

The user can output the file being viewed to a printer or to another file by using the Print Text command. Several print options are available, including printing part/all of the file, printing headers and/or line numbers, printing with a specified file equation. Some print options can also be saved across HP Browse/V sessions.

CURSOR POSITIONING

HP Browse/V provides many commands for quickly positioning the cursor within the file being viewed. Some commands can be activated by pressing a key assigned to the command, as well as by pressing a function key. For example, to position the cursor at the last line of the file, the user can enter the ")" keystroke command or press the Bottom of File function key.

The user can scroll forward or backward through the file, and scroll left or right while viewing wide files. The user can go to a specific line/record number or to a specified location that has been previously "marked" with one of 9 special place markers. For example, the user could mark the beginning of each section in a long document and go to different marks in any order.

Most commands can be preceded by a count value which HP Browse/V uses as a multiplier for the command. To scroll backward 10 lines, the user can enter "10" and press the Scroll Backward function key. In this case, the count indicates the number of lines to scroll.

SEARCH CAPABILITIES

HP Browse/V provides a flexible pattern search capability that allows the user to define a search pattern that includes wildcard characters. Besides the ability to specify the same wildcard characters as the MPE LISTF command (@, #, ?), complex patterns can be constructed from pattern fragments. Pattern fragments can contain groups of specific characters, pattern-matching characters, ranges of characters, or choices of characters. The user can specify that zero, one or more occurrences of pattern fragments should be matched.

Once a pattern is defined, the user can search forward or backward in the text or request that HP Browse/V find all occurrences of the pattern and display them with line or record numbers.

When the cursor is positioned on a delimiter such as parenthesis, bracket or brace, the user can request HP Browse/V to find the matching delimiter. For example, by placing the cursor on a left bracket ("["), and pressing the Find Matching Delimiter function key, the cursor will be moved to the corresponding right bracket ("]") in the text.

DUAL-WINDOW FILE DISPLAY

The user can split the screen into two windows and display two portions of the same file or two different files. The size of each window can be changed, and either window can be closed and re-opened later. When one window is closed, the other window will expand to completely fill the screen. The Open File command can be used in either window to open a new file in place of the original file being viewed.

OTHER FEATURES

HP Browse/V has an extensive on-line help facility. From the Main Help menu, the user can select three categories of information. The Function by Topic category provides a general description of the product's functions arranged by topic. The Function Description option displays a concise listing of the functions and allows the user to select an individual function for retrieving a detailed description of the function. The Key Assignments option gives the user a list of functions and the keys assigned to the functions.

HP Browse/V allows users to set display and print options, and to save the options for subsequent sessions of HP Browse/V. Display options that can be customized include line number display, ignore case, forward/back scroll size, and left/right scroll size. The print options include lines per page, output device, and print header lines.

HP Browse/V provides the Execute MPE function to allow users to execute programs and MPE commands from an HP Browse/V session. Multiple commands can be entered while in the Execute MPE function.

HP Browse/V supports the viewing of text that contains 8-bit character sets.

5

MPE V/E PRODUCT RELEASES

The following table is a Historical/Current list of new products introduced for each MPE V/E version release for the HP 3000 Computer System. It also includes products added after this initial release of the Master Installation Tape (MIT).

MPE V/E Product Releases

V.UU.FF.	Name	Release	Product(s) Introduced/Added
E. 01. 00	V/R	R2548	V/P-Delta-1 equivalent HP DeskManager III
G. 03. 03	V-DELTA-3	R2827	Roll-in of V-Delta-2 NS/X. 25 LINK (HP24405) LU 6.2 API (HP30253) MIGRATION PLANNING TOOL (MIGRMPT) SCOPE (HP50641) HP 9145 Cartridge Tape Drive*
G. 03. 04 SUBSYS VUF = G. A 3. 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. A 3. 04 HPWORD SERVICES (HP27558) HPEDIT/V (HP30316) NSPAD (NSPAD)
G. A 3. 04	V-DELTA-4	R2840	Roll-in of V-Delta-3 HPWORD SERVICES (HP27558) HPEDIT/V (HP30316) NSPAD (NSPAD)
G. 03. 05	V-DELTA-5	R2902	Roll-in of V-Delta-4 HP SRC/V (HP30234) OpenView NS DIAG Monitor (HP32051) OpenView NS Core Software (HP32052) OpenView NS PERF Monitor (HP32053)

MPE V/E Product Releases (Continued)

V. UU. FF.	Name	Release	Product(s) Introduced/Added
G. B3. 05	V-DELTA-5	GB305 (FOS)	Post MR build of SUBSYS to include:
		GC305 - (SUBSYS) 11/89	BSP (HP32510) Resource Sharing (HP32597) Information Access (HP32596) Cooperative Services (HP32570) HP WordServices (HP27558) AGL (HP32122) HP DeskMon (HP27568) AdvanceMail Host (HP27504) New Wave Browsers (HP47950) HP Serial Network (HP32003A) Interactive Mainframe Facility (HP30250A) Network Services (HP32344A) Network Transport (HP32343A) NS X. 25 3000/V (HP24405A) NS XL Server (HP30041A) OV Core Software (HP32052) RJE/3000 (HP30248A) SNA/LINK (HP30246A) SNA IMF (HP30247A) Workstation Configurator (HP30239A)
G. A 3. 06	V-DELTA-6	cancelled	Not shipped - unsupported
G. 03. 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	Platform 1P	R3035	Roll-in of V-Delta-9 Series 6400 Model 1300H DDS

MPE V/E Product Releases

V.UU.FF.	Name	Release	Product(s) Introduced/Added
G. 20.00	Release 20	R3042	Roll-in of Platform 1P HP Search/V (HP36381A) HP Browse/V (HP36382A)

^{*}Product has been retrofitted on this version.

HP POWERPATCH MIT RELEASES

Hewlett-Packard now has a new software support service, HP PowerPatch. This service provides you with the ability to order current general-release FOS and workstation patches specifically designed for your system.

HP PowerPatch is provided to those of you who have AMS or RCS software support service agreement. With HP PowerPatch you will receive the most current set of patches available for your system.

If there is an HP PowerPatch tape available for your release, it should be ordered prior to performing the installation or update. Contact your Response Center. They will inform you if there is a current patch tape for the installation/update you are planning to perform. If there is an appropriate HP PowerPatch tape, you can install it at the same time as the installation/update. These patch sets will be revised periodically and are cumulative.

-a L

SUPPORTED RELEASES

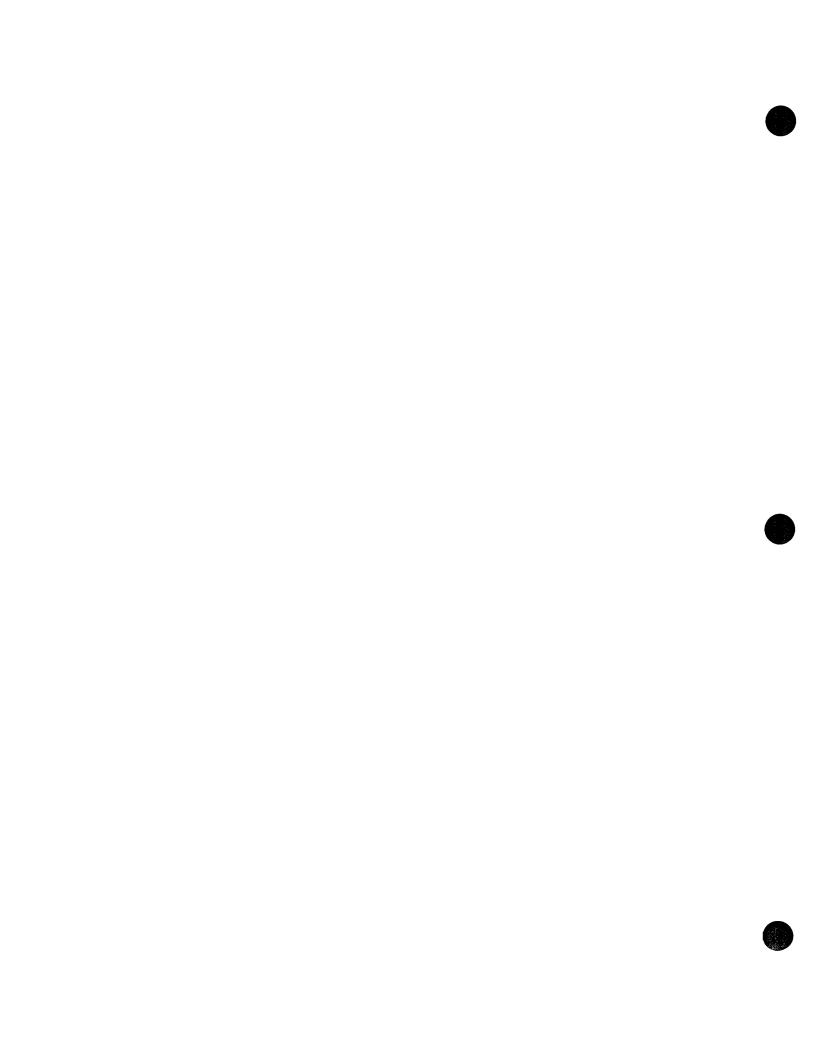
The following matrix provides information on the supported versions of MPE V/E. It lists the currently supported MITs and the SPUs they are supported on. The matrix also provides all known factory support termination dates. A version of MPE V/E will not have factory support after its support termination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

SUPPORTED MIT MATRIX

MITs	V.UU.FFs	Supported Systems	Support Termination Date
V/R	E. 01. 00	II, III, 30, 33	MAY 1, 1991
T-Delta-6	G.A1.06	37, 39, 4X, 5X, 6X	FEB 1, 1990
V-Delta-2	G.B3.02, G.C3.02, G.D3.02, G.E3.02	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	APR 1, 1990
V-Delta-3	G.B3.03, G.C3.03, G.D3.03, G.E3.03	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	JUL 1, 1990
V-Delta-4	G. 03. 04, G. B3. 04, G. C3. 04	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	OCT 1, 1990
V-Delta-5	G. A 3. 05, G. B 3. 05	37, 39, 4X, 5X, 6X, 70, Micro 3000 & 3000XE,LX,GX	SEPT 1, 1991
V-Delta-6	G. A 3. 06	No New Customer Products V-Delta-6 rolled into V-Delta-7	
V-Delta-7	G. A 3. 07	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	OCT 1, 1991
V-Delta-8	G. A 3. 08	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	JAN 1, 1992
V-Delta-9	G. A 3. 09	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	MAY 1, 1992
Platform 1P	G. 1 P . 00	37, 39, 4X, 5X, 6X, 70, Micro3000 & 3000XE,LX,GX	**MAY 1, 1992
Release 20	G. 20. 00	37, 39, 4X, 5X, 6X, 70, Micro 3000 & 3000XE,LX,GX	**JAN 1, 1993

^{*} DOD version (G. 03.04) will be supported indefinitely.

^{**} Support date dependent on actual first customer ship date of next platform or release.



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.

The content of the Subscription Services column only lists the Manual Update Services (MUS) that is provided for that particular manual since there are no material based services for each individual software product.

- FOS = Available with the Operating Software Material Based Services
- Indicates the Manual Update Services (MUS) for the product.

FOS SYSTEM MANUALS

General Information Manual	5953-7583	10/84		FOS
Fundamental 3000 Data Communication Handbook	5957-4634	6/84		FOS
EDIT/3000 Reference Manual	03000-90012	8/88		FOS 30093A+Q00
Using the HP 3000: An Introduction to Interactive Programming	03000-90121	4/79		FOS
MPE V Segmenter Reference Manual	30000-90011	11/82	8/86	FOS
MPE V Debug/Stack Dump Reference Manual	30000-90012	8/86		FOS 30093A+Q00
Compiler Library Reference Manual	30000-90028	11/76		FOS
QUERY/3000 Reference Manual	30000-90042	5/87		FOS
KSAM/3000 Reference Manual	30000-90079	8/86		FOS 32208A+Q00
MPE V File System Reference Manual	30000-90236	10/89		FOS 30093 A +Q00
MPE V System Operation and Resource Management Reference Manual	32033-90005	10/89		FOS
MPE V Commands Reference Manual	32033-90006	10/89		FOS
MPE V Intrinsics Reference Manual	32033-90007	10/89		FOS
MPE V System Utilities Reference Manual	32033-90008	10/89		FOS
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Manual Title	Part Number	Latest Edt/Inc		Subscriptio Services
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MPE V Storing and Restoring Reference Manual	32033-90133	6/87	10/88	FOS
MPE V System Backup and Recovery User's Guide	32033-90134	6/87	10/88	FOS
MPE V Security & Accounting	32033-90136	10/88		FOS
MPE V General User's Reference Manual	32033-90158	10/88		FOS
Data Entry and Forms Management System V/PLUS/	32209-90001 3000	10/89		FOS
Using VPLUS/V	32209-90004	8/86		FOS 99083B+Q00
FCOPY Reference Manual	32212-90003	12/90		FOS
Native Language Support Reference Manual	32414-90001	11/87	10/88	FOS
SORT-MERGE/3000 Reference Manual	32214-90002	9/81	9/84	FOS 30093A+Q00
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HP HI-LI Reference Manual	32424-90002	11/87		FOS
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HP GLANCE User's Manual	5959-9236	3/89		50733A+Q00
HP Security Management Guide	30392-90001	10/88		30392A+Q00
APS/3000 Reference Manual	32180-90001	11/86		32180A+Q00
APS/3000 Quick Reference Card	32180-90002	11/86		32180A+Q00
APS/3000 Pocket Guide Insert	32180-90003	11/86		32180A+Q00

Flexible Discopy/3000	32199-90001	8/80	32199A+Q00
OPT/3000 Reference Manual	32238-90001	11/86	32238A+Q00
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OPT Insert for MPE Pocket	32238-90003	11/86	32238A+Q00

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LAN/3000 and OfficeShare LAN/3000 Design Guide	5955-7689	11/85		
Making the LAN Connection: A Local Area Network Prim		9/84		
NetIPC3000/V Programmer's Reference Manual	5958-8581	7/90		32344A+Q00
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NS X.25 3000/V Link Guide	24405-90002	7/90		24405A+Q00
DSN/RJE 2780/3780 Emulator Reference Manual	30000-90047	2/82	7/83	30248A+Q00
Point-To-Point Workstation I/O Reference Manual	30000-90250	12/84	4/87	30239A+Q00
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LANIC Installation and Service Manual (Series 37	30242-90100 ')	5/85	
Getting Started With SNA Node Management	30246-90002	10/88	30246A+Q00
SNA Link Services Reference Manual	30246-90003	10/88	30246A+Q00
Installing and Troubleshooting SNA IMF Node Manager's Guide	30247-90002	1/85	30247A+Q00
MRJE User/Programmer's Reference Manual	30249-90001	4/88	30249A+Q00
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HP SNA Products: (w/binder)	30291-61005	8/90	30245A+Q00 30246A+Q00
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SNA IMF User/Programmer Reference Manual (w/binde	30293-61004 r)	12/90	

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DS/3000 HP 3000 to HP 3000 User/Programmer Reference	32185-90001 Manual	12/85	7/87	32185A+Q00 32189A+Q00
DS/3000 HP 3000 to HP 1000 User/Programmer Reference	32185-90005 Manual	12/85		32185A+Q00
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DSN/DS 3000 To 1000 Reference Manual	32190-90005	1/82		32190A+Q00
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NetDelivery Instrinsics Reference Manual	32346-90001	4/89		32346A+Q00

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NetDelivery Configuration Planning Guide	32346-90005	4/89	32346A+Q00
NetDelivery Utility Commands Reference Manual	32346-90006	4/89	32346A+Q00
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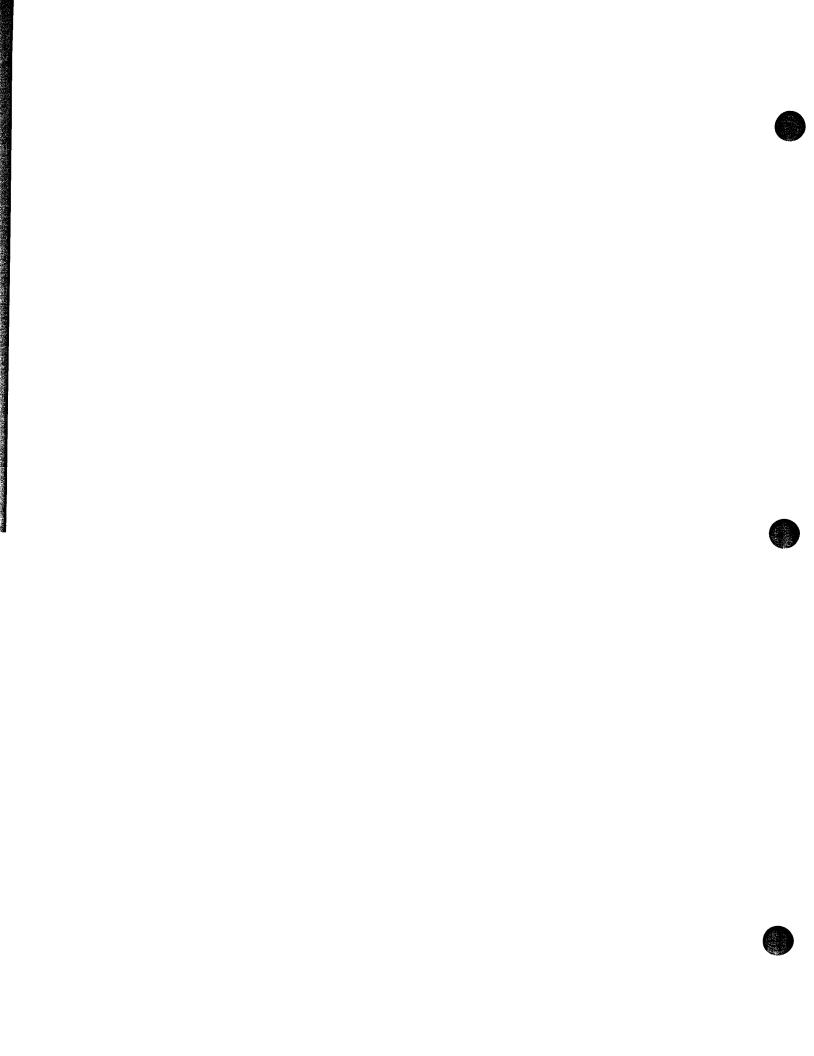
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HPWORD Administration	32120-90061	9/86	8/88	32120A+Q00
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IDS/FORM Reference Manual	36581-90002	2/85		36581A+ 36584A+
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HP Graphics Curator Update	36926-90007	11/86		32108A+Q00 36926A+Q00
TRANSFORM/3000 Reference Manual	99940-90001	11/86		99940A+Q00
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