

**Read Before Installing
MPE/iX Release 6.5
Non-Platform Software Release (C.65.00)**

HP 3000 MPE/iX Computer Systems



**Manufacturing Part Number: 30216-90292
E0300**

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Preface

Removal of Support for Servers and HP-IB in MPE/iX

In order to streamline the development and test of future MPE/iX releases, the PBA-IB HP-IB Device Adapter (A1747A) and old CIB I/O based HP 3000 Servers will not be made to work with MPE/iX Release 6.5 and later releases. MPE/iX Release 6.5 is projected to begin shipping during the first half of 2000. The PBA-IB HP-IB Device Adapter was discontinued in May 1999 and has an end of support date of November 1, 2001. The following old CIB I/O (also known as CIO) based HP 3000 Servers will have completed their end-of-support well before November 1, 2001:

- the 925/935/949 family
- the 920/922/932/948/958 family
- the 950/955/960/980 family

HP-IB and the above HP 3000 Servers will continue to be supported through their end-of-support date on MPE/iX Release 5.5 (which has a projected end-of-support date of November 1, 2000) and Release 6.0 (which has a projected end-of-support of November 1, 2001).

NOTE If you are running MPE/iX on one of these older systems, or on a system with any of these older cards or peripherals, you must **not** update that system to Release 6.5.

Customers wishing to replace their HP-IB I/O cards and peripherals should consider SCSI or LAN connected peripherals. Customers wishing to replace the above older HP 3000 Servers as they complete their support life should consider the 9x8 or 9x9KS HP 3000 Servers.

Discontinuance of High Availability Fiber Link Disk Drives

In May 1993, Hewlett-Packard Company introduced a family of High Availability Fiber Link disk arrays. Those Fiber Link (HP-FL) disk arrays were discontinued in August of 1997, along with other standalone Fiber link disk drives. The Fiber Link disk arrays were HP's first RAID devices built for high availability, high performance, high capacity and distances up to 500 meters. Since 1993, HP has embraced new disk array technologies, EMC disk arrays, High Availability Model 10 and 20 disk arrays and AutoRAID.

CSY is also moving to new processor technologies, like the N-class computers. These new computers call for new I/O cards, devices drivers and I/O backplanes. MPE/iX is also changing. MPE/iX 6.5 is the first HP 3000 operating system to support these new I/O requirements. Therefore, MPE/iX 6.5 will not support Fiber Link disk I/O system drivers, I/O cards, and Fiber Link disks. The last release of MPE/iX to support HP-FL drivers and disk will be MPE/iX 6.0.

The following is a partial list of products not carried forward in MPE/iX 6.5:

Part #	Description of Obsolete Part
C2258HA	1/02 High Availability FL disk array
C2254HA	4/99 High Availability FL disk array
C2252B	4/99 High Availability FL disk array
C2258B	1/02 High Availability FL disk array
C2252HA	4/00 High Availability FL disk array
C2254B	4/99 High Availability FL disk array
C2259B	1/02 High Availability FL disk array
C2259HA	1/02 High Availability FL disk array
C2201A	8/97 FL disk
C2204A	8/97 FL disk
A1748A	PBA FL Chan-span card with HP-FL adapter
A28616A	PBA FL NIO Optic interface card
A27115A	CIO Fiber Optic interface card

Important Support Changes in MPE/iX 6.5

by Gary Robillard
CS-R&D

Product Overview

HP Predictive Support provides proactive hardware support and helps increase the uptime of your systems by monitoring system memory and disk/tape drives.

When the HP Predictive Support software detects a potential problem, it sends a message to the HP Response Center. The Response Center portion of the system screens the data and forwards problems requiring further analysis to a Response Center Engineer. If action is needed at your site, the Response Center Engineer and the account Customer Engineer will work with you until the problem is resolved.

This proactive hardware support is provided as part of the HP Hardware and Software Support Agreement.

Predictive Support Changes for MPE/iX Release 6.5

The Predictive Support Monitor (PSMON.PRED.SYS) startup model has been changed. On previous versions of MPE, PSMON was automatically started by the Diagnostic system monitor (DIAGMON.DIAG.SYS), which was part of the sysdiag diagnostic system. The Support Tools Manager (STM) has replaced the sysdiag diagnostic system on MPE/iX 6.5. A new job named JPSMON.PRED.SYS was created to start PSMON.

Predictive Support relies on a sysdiag diagnostic library, and because of this, there is currently no way to have PSMON started by the STM diagnostics. PSMON is now launched by streaming the job JPSMON.PRED.SYS. If you want Predictive Support to monitor your system, JPSMON.PRED.SYS must always be running.

WARNING **If JPSMON.PRED.SYS is not running, Predictive Support will not perform its daily scheduled run to monitor your system.**

To determine if JPSMON is running, you can use the MPE/iX SHOWJOB command, as follows:

```
:SHOWJOB JOB=PSMON,MANAGER.SYS
```

You should see one active job.

The installation job for Predictive Support will attempt to place a "STREAM JPSMON.PRED.SYS" command in the system startup file (SYSSTART.PUB.SYS), after the STREAMS command. If this fails, then you should manually add a line to SYSSTART.PUB.SYS to stream the JPSMON.PRED.SYS job.

NOTE The sysstart must have a creator of MANAGER.SYS in order to be automatically executed during system startup. Additionally, the first line of sysstart should be the STARTUP directive.

You should insure that there is a "SPOOLER LP;OPEN" and a "STREAMS 10" command before the "STREAM JPSMON.PRED.SYS" command in the sysstart file. Also recognize that for your

system, the line printer might have a different class name than “LP”, and your streams device might have a logical device number other than 10.

Here is an example of what the lines in `sysstart.pub.sys` might look like:

```
Startup
Limit 20,60
Jobfence 7
Spooler lp;start
Streams 10
Continue
Stream jstrtlan.sysmaint.sys
Continue
Stream jpsmon.pred.sys
**
```

HP Predictive supports the following new peripherals:

DGHS04Y	4GB SCSI Disk Drive
ST32272WD	2GB SCSI Disk drive
ST34572N,W,WC,WD	4GB SCSI Disk Drives
ST34573N,W,WC,WD	4GB SCSI Disk Drives
DGHS09Y	9GB SCSI Disk Drive
ST39102LC	9GB SCSI Disk Drive
ST39173N,W,WC,WD	9GB SCSI Disk Drives
ST39175WC,LC,LW	9GB SCSI Disk Drive
ST118273N,W,WC,WD	18GB SCSI Disk Drives
ST318203LC	18GB SCSI Disk Drive
ST318275LC,LW,WC	18GB SCSI Disk Drives
ST136475LW,WC	36GB Disk Drives
DLT4000	SCSI Digital Linear Tape
DLT7000	SCSI Digital Linear Tape

The following peripherals are no longer supported:

Any HPIB or FLEX Interface Disk, including but not limited to:	
HPC2200A	335MB HPIB Disk
HPC2202A	670MB HPIB Disk
HPC2203A	670MB HPIB Disk
HPC2281A	335MB HPIB Disk
HPC2282A	670MB HPIB Disk
HPC2201A	670MB Flex Disk
HPC2204A	1.34GB Flex Disk

The following SCSI disks are no longer supported:

HPC2460x	420MB Disk
HPC2461x	673 MB Disk
HPC2462x	1.36GB Disk
HPC2470x	234MB disk mechanism
HPC2471x	328MB disk mechanism
HPC2472x	422MB disk UPGRADE KIT
HPC2473x	673MB Disk UPGRADE KIT
HPC2474R	1.36GM C3 UPGRADE KIT
HPC3010M1	2GB SCSI Disk (As of April 30, 2000)

1 Information You Need Before Installing MPE/iX 6.5 Release

Release Notes

Before beginning installation or update, please review this section which includes information about the following CR topics.

- FSCHECK
- TERMDISM
- SYSGEN
- NSINFO

FSCHECK.MPEXL.TELESUP CR#s JAGac40897 and JAGac40344

There are two harmless outstanding issues regarding the FSCHECK utility. The first is documented by problem report number JAGac40897; the FSCHECK version number has not been updated from 6.0, even though internal updates have been made to the utility.

The second problem is documented by problem report number JAGac40344, an extraneous error message is displayed at the end of the output of the FSCHECK HELP command. This error message can simply be ignored. In both cases, there is no action required on the behalf of the user. This information is provided on a “for your information” basis, and can safely be ignored.

TERMDISM CR# JAGac86424

There is a harmless outstanding issue regarding the output of TERMDISM that is documented in CR# JAGac86424.

When you run `nmmain, t` the output contains the following message:

```
MPE iX Terminal I/O 32022C                               module versions:
NM program file: TERMDISM.DIAG.SYS                       ** NOT INSTALLED **
CM program file: TTUTIL.PUB.SYS                           Version: C0300000
NL procedure:     TIO_ATSM_VER                            Version: C0300009
NL procedure:     TIO_APSM_VER                            Version: C0300002
```

This error can simply be ignored and no action is required on behalf of the user. This problem will be fixed in a later release.

SYSGEN Cannot Handle 3300 Sessions CR# JAGac86675

MPE/iX 6.5 release allows a maximum of 3300 terminal connections. However, there is still a limit in SYSGEN of 3010 for Maximum Sessions. As a result, the maximum number of terminal connections is 3010 for MPE/iX Release 6.5.

A patch will be provided if a customer needs it. A patch will be submitted to a future release.

NSINFO Call Returns NSstatus 3 and Produces Error on CONSOLE CR# JAGac78784

There is an outstanding issue regarding NSINFO when it is called with option 1(nodelen), 2(nodename), & 38 (ip address). An error is displayed on the console:

```
** NS/3000 INTERNAL ERROR IN ENV; Job: #S263; PIN: 85  
- Error: 5; item without itemnum in ENV call  
- (Qualifier Type = 16) Error : 2
```

This error will not appear when these options are used separately.

A fix to this error will be available in a future patch. Refer to the CR text for more details.

Files Associated with Obsolete Products: Resource Sharing, CCSY Access Server, CCSY Access SQL, Cooperative Services/XL

*by Sue Meloy
CS-R&D*

The following products are obsolete and no longer being shipped:

- B1718A Resource Sharing
- B3160A CCSY Access Server
- B3162A CCSY Access SQL
- 32571A Coop. Services/XL

Files associated with these products may still exist on your system. The following files are installed by these products and can be removed if you wish to clean up your system. Since some of these files may be accessed by networking software, stop network services on the system before removing the files.

After removing the files, stream JCONFJOB.NET.SYS to rebuild the network services

configuration files, then restart the networking software.

Files related to B1718A Resource Sharing	
CDM000.PPC.SYS	JROOTCON.PPC.SYS
CPDMG000.PPC.SYS	PDSMAST.NET.SYS
CRCDG000.PPC.SYS	PDSSERV.NET.SYS
DISCMGR.PPC.SYS	PDSFILE.NET.SYS
RESMGR.PPC.SYS	RSUDC.PPC.SYS
PDBAKUP.PPC.SYS	RSCONF.PPC.SYS
DISCSCAN.PPC.SYS	README.PPC.SYS
PDSERVER.PPC.SYS	NOTICE.PPC.SYS
PDDIAG.PPC.SYS	CLC000.PPC.SYS
ROOTCONV.PPC.SYS	NWOLC.PPC.SYS
NBMON.PPC.SYS	CPDDG000.PPC.SYS
PDXL.PPC.SYS	QDIAG000.PPC.SYS
TRACEMAP.PPC.SYS	PPCDIAG.PPC.SYS
JPDINSTL.PPC.SYS	PPCDIAGC.PPC.SYS
JDISCAN.PPC.SYS	

Also, modules HP32589_01 and NWOLC_01 in XL.PUB.SYS and segment PPCDIAG in SL.PUB.SYS are installed by this product.

Files Related to B83160A Access Servers	
HDPMC000.PPC.SYS	ADMENUS.PPCUTIL.HPOFFICE
HDPHC000.PPC.SYS	DHDPGINP.PPCUTIL.HPOFFICE
ADFRM000.PPC.SYS	DHDPMODS.PPCUTIL.HPOFFICE
TRFRM000.PPC.SYS	DHDPMAP.PPCUTIL.HPOFFICE
HDSP.PPC.SYS	SSAMPL1.PPCUTIL.HPOFFICE
DICINIT.PPC.SYS	SSAMPL2.PPCUTIL.HPOFFICE
DICTCONV.PPC.SYS	SHDPDIC.PPCUTIL.HPOFFICE
HDSPNS.PPC.SYS	SHDPENV.PPCUTIL.HPOFFICE
ADMIN.PPC.SYS	SDIAGDB.PPCUTIL.HPOFFICE
TRANS.PPC.SYS	JDICTCHG.PPCUTIL.HPOFFICE
HDPBATCH.PPC.SYS	JDICTCLN.PPCUTIL.HPOFFICE

Files Related to B83160A Access Servers	
HDPUTIL.PPC.SYS	HDSPMAST.NET.SYS
HDPLOAD.PPC.SYS	HDSPFILE.NET.SYS
HDPUNLD.PPC.SYS	HDSPSERV.NET.SYS
ENVINIT.PPC.SYS	ALLDBIN.PPCUTIL.HPOFFICE
XL.PPC.SYS	SAMPL1IN.PPCUTIL.HPOFFICE
WHATSNEW.PPC.SYS	SAMPCMD.PPCUTIL.HPOFFICE
ACUDC.PPCUTIL.HPOFFICE	JINSTHDP.PPCUTIL.HPOFFICE

Files Related to B3162A CCSY Access SQL	
IASOLID.PPC.SYS	IAGRANT.PPC.SYS
IASOLIDV.PPC.SYS	IACAT000.PPC.SYS
IASOLIDC.PPC.SYS	IASQLDAD.PPC.SYS
JIASOLID.PPC.SYS	IASQLSVR.PPC.SYS
IASQLSN2.PPC.SYS	SQLFILE.NET.SYS
IASQL.PPC.SYS	SQLMAST.NET.SYS
IASQLSN1.PPC.SYS	SQLSERV.NET.SYS

Files Related to 32571A Coop. Services/XL	
HCS.PPC.SYS	HCSERVER.PPC.SYS
SHCSAMP.PPCUTIL.HPOFFICE	HCSMAST.NET.SYS
SAMPXEQ.PPCUTIL.HPOFFICE	HCSSERV.NET.SYS
JHCSAMP.PPCUTIL.HPOFFICE	HCSFILE.NET.SYS

Important Information for Hardware and Software Products

The following articles are included in this section:

- DVD Supported on HP 3000
- Year 2000 Patches
- Hewlett-Packard NetWorker ClientPak for MPE/iX

DVD Supported on the HP 3000

The embedded CD-ROM shipped with many HP 3000 servers has come to the end of its life. However, many customers purchased HP 3000s with CD-ROMs to take advantage of system update material and manuals that are available on CDs. The A3715A, a 12x CR-ROM, is being replaced by the new DVD-ROM. The DVD-ROM supports usage of the older CD-ROM disks.

Customers wishing to take advantage of DVD-ROM for updates, can simply add a DVD-ROM to their HP 3000 system. For customers in support contracts, who have older CD-ROMs, your CD-ROM will be replaced with a DVD-ROM, if there are no CD-ROMs available. The DVD-ROM drive unit has a 32X CD-ROM transfer rate. The DVD-ROM is supported in the following packages:

Product Numbers

0950-3398	DVD-303 SCSI Slot-Load DVD-ROM Drive Unit
A5220A	Embedded Product Number.
C4318SZ opt 108	Highlander Factory Rack
C4314A	Highlander Deskside Standalone
C4315A	Highlander Field Rack

Year 2000 Patches

In the course of more rigorous testing, HP has identified some minor areas which require additional patches. As a result, some fixes have been included on MPE/iX 6.0 and later to correct these problems, but additional patches may be required. Please refer to the web sites listed below for additional information about Year 2000 and for a list of required patches.

For more information on the Year 2000 and required patches, see the Year 2000 web sites at the following URLs:

<http://jazz.external.hp.com/year2000/patches.html>
<http://www.hp.com/year2000>

DLT7000 and Legato Storage Node Usage

Legato Storage Node and DLT libraries are now supported beginning with MPE/iX 5.5 with express 7 and MPE/iX 6.0 with express 1 plus patches. With Legato Storage Node software (B6266AA), the HP 3000 supports FWD SCSI connected DLT libraries with DLT7000s or DLT8000s directly connect to the HP 3000.

DLT7000 support is beginning with MPE/iX 5.5 Express 7 and MPE/iX 6.0 Express 1, no additional patches are required. DLT8000 require patch MPEKXU0A FOR MPE/iX 5.5 Express 7 AND MPEKXU0B FOR MPE/iX 6.0 Express 1. Legato Storage Node is supported in MPE/iX Express 7 and MPE/iX 6.0 Express 1 with no additional patches required.

DLT7000/8000 are also supported in MPE/iX 6.5 with no patches.

The following table provides a list of the Tape Libraries and their part numbers.

Product #: Arrays	Description	Release	Patch	Date Available	Comments
A5583A	HP SureStore E Tape Library 2/20 (Rack)	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 2 drives 20 slot DLT 8000 Library
A5584A	HP SureStore E Tape Library 2/20 (Desk)	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 2 drives 20 slot DLT 8000 Library
A5585A	HP SureStore E Tape Library 4/40 (Rack)	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 4 drives 40 slot DLT 8000 Library
A5586A	HP SureStore E Tape Library 4/40 (Desk)	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 4 drives 40 slot DLT 8000 Library
A5587A	HP SureStore E Tape Library 6/660 (Rack)	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 6 drives 60 slot DLT 8000 Library
A5588A	HP SureStore E Tape Library 6/660 (Desk)	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 6 drives 60 slot DLT 8000 Library
A5597A A5599A A5618A	HP SureStore E Tape Library 20/700 DLT8000 Drive for Library 20/700 DLT7000 Drive for Library 20/700	MPE/iX 5.5 Exp 7+ MPE/iX 6.0 Exp 1+	MPEKXU0	Oct-99	HP 20 drives 700 slot DLT 8000 Library

Support Tools Manager (STM)

Known Problems with the New On-line Diagnostic System (Support Tools Manager or STM)

- The CSTM map (map) command may show the first device as “unknown” after booting the system. To correct this, execute the CSTM remapsystem (rs) command and wait the indicated number of minutes for the command to complete.
- The CSTM map (map) command may show any C2300 Disk Array as “unknown”. To correct this, execute the CSTM remapsystem (rs) command and wait the indicated number of minutes for the command to complete.
- Menu user interface (MSTM) is not available on this release.

System Updates

The MPE/iX 6.5 system must be rebooted after an update to ensure that the Support Tool Manager diagnostic system is launched. Failure to do so will eliminate I/O error logging, memory logging and memory page deallocation functions from your system. This will have hardware support implications.

2 Disk Space Requirements

This chapter contains information on disk space requirements related to MPE/i/X Release 6.5.

The combined System Load Tape (SLT) and Fundamental Operating system (FOS) disk space requirements shown in Table 3-1 are the minimum for any system software version. The table shows the amount of non-contiguous disk space sectors required for the three operating system components (SLT, FOS, SUBSYS) of the currently supported versions of the operating system software.

During the modification process, some files are duplicated temporarily, and sometimes older versions of files are retained temporarily. As a result, the peak amount may be greater than the final amount. You must have the peak amount available to successfully modify your system.

Ensure that you have enough room on LDEV1 for all the SLT files. The FOS files do not have to go onto LDEV1.

For procedures for estimating the disk space required for your system, refer to “Estimating Disk Space” in the *System Software Maintenance Manual*.

Disk Space for System Software

NOTE The disk space values listed in this table are maximum estimated values only. The actual amount of disk space used on your system will vary.

Table 2-1. Disk Space Requirements in K Sectors for MPE/iX System Software

System Software Components	Version						
	5.5	C.55.07		6.0		C.65.00	
		Peak	Net	Peak	Net	Peak	Net
SLT only *	1,268	n/a		n/a	1,274	NA	1,703
SLT and FOS	2,092	3,767	2,349	2,821	2,533	3,927	3,588
SLT, FOS, Full SUBSYS	3,170	4,980	3,704	3,926	3,489	4,715	4,340
* Provided for reference only. An operational system requires the SLT and FOS files at a minimum.							