# Read Before Installing MPE/iX Release 7.5 PowerPatch 3 Software Release (C.75.03)

# HP e3000 MPE/iX Computer Systems

**Edition 3** 



Manufacturing Part Number: 30216-90360 E0706

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## Contents

1. Information You Need Before Installing MPE/iX 7.5 PowerPatch 3	
Predictive Changes SYSSTART during UPDATE	5
Host-Based DTC Management Features	6
Samba 2.2.8a / SMBMXG3C	8
Migrating from Samba 2.0.7	8
Migrating Back to Samba 2.0.7	9
WebWise Apache in FOS	0
Migrating from Previous Versions of Apache	0
Migrating from WebWise A.01.00	0
Customers Currently using the HAFO Product on 6.5, 7.0 and 7.5	1
"Relocation Failed" Possible during System Boot	2
Important CR Information	3
CR# JAGad62997 / 8606193787	
CR# JAGae78289 / 8606315566	3
CR# JAGaf58821 / 8606398856	4

## 2. Patch Information for MPE/iX 7.5 PowerPatch 3

Contents		

## 1 Information You Need Before Installing MPE/iX 7.5 PowerPatch 3

## Predictive Changes SYSSTART during UPDATE

Due to some customer sites having multiple startup directives in SYSSTART.PUB.SYS, the job that installs Predictive has been modified to recognize this. Previously, this Predictive job would just add the "STREAM JPSMON.PRED.SYS" line to the end of SYSSTART. Now, the job modifies the SYSSTART file as follows:

- 1. Gather STREAMs device and printer queue for STREAMs and OPENQ commands if needed.
- 2. If SYSSTART.PUB.SYS does not exist, a new SYSSTART file is created on ldev 1 with the following contents:

```
STARTUP

**
WARMSTART
OPENQ LP
STREAMS 10
STREAM JPSMON.PRED.SYS

**
COOLSTART
OPENQ LP
STREAMS 10
STREAMS 10
STREAM JPSMON.PRED.SYS

****
```

- 3. If a WARMSTART, COOLSTART, RELOAD or UPDATE section exists and has commands, AND there are no other STREAM commands AND there are no STARTSESS to OPERATOR. SYS commands, then do not modify the SYSSTART file.
- 4. If there are STARTSESS commands but no STARTSESS to OPERATOR.SYS, then do not modify the SYSSTART file.
- 5. The command STREAM JPSMON. PRED. SYS is removed from the STARTUP section and added to the WARMSTART and COOLSTART sections. If no WARMSTART and COOLSTART sections exist, they are created and contain these commands:

```
**
WARMSTART
OPENQ LP
STREAMS 10
STREAM JPSMON.PRED.SYS
**
COOLSTART
OPENQ LP
STREAMS 10
STREAM JPSMON.PRED.SYS
```

If the file NOSYSST.PRED.SYS exists, it prevents the Predictive job from doing any SYSSTART file processing during installation. Therefore, if you do NOT want the "STREAM JPSMON.PRED.SYS" command added to your SYSSTART file, create the NOSYSST.PRED.SYS file with a build command.

```
BUILD NOSYSST.PRED.SYS; DISC=1
```

## **Host-Based DTC Management Features**

As you may be aware, the Open View DTC Manager (OVDTCMgr) application on the PC was discontinued October 2002. In MPE/iX 7.5 Power Patch 2, the DTS subsystem has been enhanced to provide functionality needed to continue support of the DTC connectivity required by the HP e3000 users. The features added to the DTS subsystem had previously been available when the OVDTCMgr platform managed the DTCs and PC-Based Management was configured on the HPe3000, but not when the HP e3000 host managed the DTCs and Host-Based Management was configured.

These enhancements required changes to the data structures for the DTS subsystem in the NMCONFIG file and some NMMGR screens. These enhancements have been designed to minimize the additional steps you need to do to install and migrate to this release. This article describes some features and behaviors of this version of the DTS subsystem that you should know about before you install this release. These important features and behaviors are the following:

- Although it is now an unsupported configuration, the OVDTCMgr platform will still be able to manage the DTCs for connection to the HP e3000. HP recommends that you migrate your DTS configuration to Host-Based management at the earliest opportunity.
- When you reboot your system after updating with this release, DTS will recognize that the data in the DTS subsystem of the NMCONFIG file is in the old format but will still create a valid DTS configuration. DCC will display the following warning message.

```
DCC WARNING P-L, NMCONFIG is previous version. Run NMMGRVER. (DCCWARN 52)
```

The DTS configuration created will be identical to what was created prior to the update.

- In NMMGR, if you press the **[DTS]** key at the Main screen and attempt to display the DTS configuration before running NMMGRVER, instead of going to the DTS configuration screen, you will see a screen that informs you that the DTS subsystem has been updated. The actions you can take are described later in this article.
- You will use the version of NMMGRVER installed with this release to update the NMCONFIG file to the latest format and then perform a DTS Shutdown and Restart.
- After using NMMGRVER to migrate the configuration file to the latest format, DTS Dynamic Configuration will be disabled until a DTS Shutdown and Restart or system reboot is performed.

Use one of the following two processes described below to update the NMCONFIG file so that NMMGR will allow you to make new changes to the DTS configuration and to re-enable DTS Dynamic Configuration.

1. Run NMMGRVER from the Command Interpreter.

You can run NMMGRVER from the CI as you have on earlier releases to update the format of the NMCONFIG file:

a. Run  ${\tt NMMGRVER}$  to update the  ${\tt NMCONFIG}$  file to the latest format:

```
:run nmmgrver.pub.sys
Utility to convert NM configuration files to be compatible with NMMGR B.07.06.
Fileset to be scanned? NMCONFIG.PUB.SYS
(Enter the file name of your NM configuration file. Then confirm the conversion.)
OK to convert NMCONFIG.PUB.SYS? Y
```

b. Perform a DTS Shutdown and Restart:

```
:dtccntrl func=shutdown forced=y
:dtccntrl func=restart
```

2. Run NMMGRVER from within NMMGR.

You can run NMMGRVER from within NMMGR to update the NMCONFIG file and continue with changes to the DTS configuration without leaving NMMGR:

a. Run NMMGR and press the [DTS] key at the Main NMMGR screen, you will see a screen that informs you that the DTS subsystem has been updated. Press the F1 [Do Convert] key. This key will launch NMMGRVER and you will see:

```
Utility to convert NM configuration files to be compatible with NMMGR B.07.06. Fileset to be scanned? NMCONFIG.PUB.SYS

(Enter the file name of your NM configuration file. Then confirm the conversion.)

OK to convert NMCONFIG.PUB.SYS? Y
```

- b. Note the dialog on the screen to verify that the conversion was successful and enter[Return] to return to NMMGR.
- c. Press the [Prior Screen] key to return to the Main NMMGR screen and then press the [DTS] key to resume your DTS configuration changes.
- d. Validate the NMCONFIG file and exit NMMGR.
- e. Perform a DTS Shutdown and Restart in order for the configuration changes to take:

```
:dtccntrl func=shutdown forced=y
:dtccntrl func=restart
```

After you run NMMGRVER and if your system is using Host-Based Management, your data will be converted to the equivalent configuration in the new format. If your system is currently using PC-Based Management, you will see no changes to your configuration.

For more information on the features and behaviors of these enhancements, see the article e" Enhanced Host-based DTC Management Functionality" in the *Communicator for MPE iX Release 7.5 Power Patch 2*.

Complete documentation and information to help you migrate your configuration to Host-Based Management can be found in the updated *Configuring and Managing Host-Based X.25 Links* manual that is available online from:

http://www.docs.hp.com/mpeix/onlinedocs/36939-90057/36939-90057.pdf

### Samba 2.2.8a / SMBMXG3C

### Migrating from Samba 2.0.7

Users of Samba 2.0.7 need to be aware of the following issues before installing Samba 2.2.8a. For complete information about Samba 2.2.8a, please see <a href="http://jazz.external.hp.com/src/samba/">http://jazz.external.hp.com/src/samba/</a> (or <a href="http://www.user.hp.com/src/samba/ReadME.mpe">/www.user.hp.com/src/samba/ReadME.mpe</a> after this patch has been installed).

#### Streamlined Installation Layout (Some Files Have Moved)

Previous versions of Samba installed a few files into the SAMBA. SYS group and the remaining files into the SAMBA account. Starting with Samba 2.2.8a, all files are now installed into the SAMBA account in a version-specific group, i.e. SMB228A. SAMBA. The Samba 2.2.8a installation script does not modify any of the old Samba files in the SAMBA. SYS group.

The Samba 2.2.8a installation script modifies the /usr/local/samba symbolic link to point to the new /SAMBA/SMB228A file location. A new symbolic link of /SAMBA/CURRENT is created to point to the same location.

If you have any jobs, UDCs or command files, etc that refer to the old SAMBA. SYS files, you must modify these old references to point to the new file locations. Use either of the symbolic links to do this. That is, instead of SMBD. SAMBA. SYS, you can refer to SMBD. CURRENT. SAMBA or /usr/local/samba/SMBD or /SAMBA/CURRENT/SMBD.

#### Existing 2.0.7 Configuration Files are Compatibles with 2.2.8a

Your existing 2.0.7 configuration files are compatible with 2.2.8a. Copy them from the old /SAMBA/SMB207/lib location to /usr/local/samba/lib or /SAMBA/CURRENT/lib.

In order to take full advantage of the new 2.2.8a functionality, it is recommended that you use /usr/local/samba/lib/samp-smb.conf as a template for creating a new smb.conf file.

#### New "Full-Power" Model Enabled by Default

Previous versions of Samba for MPE required manually adding PM capability to the MGR. SAMBA user in order to enable "full-power mode" where Samba can authenticate against traditional MPE user and account passwords of the format USERPW, ACCTPW. This functionality is now enabled by default starting with Samba 2.2.8a.

Full-power mode is the recommended mode of operation. Besides the convenience of authenticating against traditional MPE passwords, full-power mode also enables Samba to setuid() to the authenticated user so that all file accesses occur with the authenticated user's access rights

Full-power mode under Samba 2.2.8a is enabled for Samba program files if they are owned by MANAGER.SYS but reside in the SAMBA account. The full-power program files are currently NMBD, SMBD, and SWAT. Since PM capability on the MGR.SAMBA user is no longer required for full-power mode, it is removed by the Samba 2.2.8a installation script.

## Migrating Back to Samba 2.0.7

If after installing Samba 2.2.8a, you decide that you want to migrate back to Samba 2.0.7, perform the following steps:

:HELLO MANAGER.SYS :PURGELINK /usr/local/samba :NEWLINK /usr/local/samba,/SAMBA/SMB207 :ALTUSER MGR.SAMBA;CAP=+PM

(if you were previously using Samba 2.0.7 in full power mode)

## WebWise Apache in FOS

For MPE/iX 7.5, WebWise server has been updated to version A.03.00 and replaces Apache in FOS as a no-extra-cost bundled product.

## **Migrating from Previous Versions of Apache**

The /APACHE/PUB/JHTTPD job stream file from previous versions of Apache is not compatible with HP WebWise MPE/iX Secure Web Server. You must manually create a new JHTTPD job stream file buy using the WebWise /APACHE/PUB/JHTTPD.sample template.

The /APACHE/PUB/conf/httpd.conf configuration file from previous versions of Apache may or may not be compatible with WebWise, depending on the previous Apache version:

- 1.3.4 -- NOT compatible. You must use /APACHE/PUB/conf/httpd.conf.sample as a template to create a new httpd.conf file.
- 1.3.9 -- compatible, but SSL functionality will not be enabled. To enable SSL functionality, you MUST use /APACHE/PUB/conf/httpd.conf.sample as a template to create a new httpd.conf file.
- 1.3.14 -- compatible, but SSL functionality will not be enabled. To enable SSL functionality, you MUST use /APACHE/PUB/conf/httpd.conf.sample as a template to create a new httpd.conf file.

In addition to updating /APACHE/PUB/conf/httpd.conf, it is strongly recommended to update all of the configuration files in the same directory by using the corresponding \*.sample files.

## Migrating from WebWise A.01.00

HP WebWise MPE/iX Secure Web Server version A.03.00 was designed to be a drop-in replacement for Apache, and does not attempt to upgrade or migrate any files from the WebWise A.01.00 /APACHE/SECURE directory tree.

You must manually use the A.03.00 \*.sample files in the /APACHE/PUB/conf directory tree to create new standard configuration files, and then propagate any local customization that you made in the A.01.00 /APACHE/SECURE/conf directory tree.

You will need to copy your server key and certificate from the old A.01.00 locations of /APACHE/SECURE/conf/ssl.key/server.key and /APACHE/SECURE/conf/ssl.crt/server.crt to the new A.03.00 locations of /APACHE/SECURE/conf/ssl.key/server.key and /APACHE/SECURE/conf/ssl.crt/server.crt.

Any A.01.00 CGI applications in /APACHE/SECURE/cgi-bin or any data content in /APACHE/SECURE/htdocs can either be moved to the corresponding A.03.00 directories in /APACHE/PUB, or left in place after adjusting the new A.03.00 configuration files to refer to the old A.01.00 locations.

WebWise A.01.00 accessed web page content as the user SECURE.APACHE, but WebWise A.03.00 accesses web page content as the user www.APACHE. This is the same user as used by Apache A.02.00.

## Customers Currently using the HAFO Product on 6.5, 7.0 and 7.5

Before the creation of the MPEMXG9 and MPEMXH5 patches, the use of HAFO was only supported for customers using the XP256 SCSI Disk Array. With these patches, included in C.75.03, there are significant changes to the HAFO product including the format of the HAFOCONF configuration file. If you are updating from 6.5 OR, have not previously installed MPEMXG9 and MPEMXH5 (or superseding patches), then you will lose your HAFO configuration unless you follow the steps outlined below.

(The following text is extracted from the new "High Availability FailOver/iX Manual" for 7.0 and 7.5 which can be found at: http://docs.hp.com/en/mpeixall.html#MPE/iX%20High%20Availability).

The structure of the HAFOCONF file used by the 7.0 & 7.5 version (now supporting a number of HP Fibre Channel storage arrays) has changed from that used by the 6.5 version (for use with XP256 only). **BEFORE UPDATING** to 7.0 or 7.5, you should dump the output of the SYSGEN ha> LISTCONF to an ASCII file.

Then, edit the file down to just the lines that list your LDEVs along with their primary and alternate paths. This list, with "AD" inserted, can then be used as the core of an input file for SYSGEN on 7.0/7.5 to create a new HAFOCONF:

For example, a file containing the following commands, passed to SYSGEN as input, would create a HAFOCONF file with Ldevs 450-453 using the HBA pair at 0/6/2/0 and 0/6/2/1. These commands also perform the necessary "hold" and "keep" commands to make this change permanent.

```
permyes on
io
ha
ad 450 0/6/2/1.3.3 0/6/2/0
ad 451 0/6/2/1.3.4 0/6/2/0
ad 452 0/6/2/0.3.5 0/6/2/1
ad 453 0/6/2/0.3.6 0/6/2/1
exit
hold
exit
keep
exit.
```

Any MPE/iX Customer using the HAFO product after installing C.75.03 must refer to the 7.0 and 7.5 HAFO manual rather than the 6.5 version.

## "Relocation Failed" Possible during System Boot

by Jim Hawkins, MPE/iX Lab

With patch MPEMXQ3 (or superseding patches and Power Patches) a "PDC relocation failed" message may appear on the system console soon after performing an ISL> START on A-Class and N-Class systems. After the message appears, the system boot-up will proceed without interruption and the system will function normally.

Example console output from A-Class:

If this message appears the changes made in MPEMXQ3 will not take effect on your system. This message typically appears only after a "TC" reboot. After an "RS" reboot the PDC relocation should always be successful. Therefore those wishing to enable MPEMXQ3 may do so by performing an RS Reboot

## **Important CR Information**

Please take note of the updated CR information.

#### CR# JAGad62997 / 8606193787

#### Shut4 20 Min Hang on Shutdown due to tepsip not Terminating

If the Support Tools Manager (STM) is not shutdown prior to doing a = SHUTDOWN, then the =SHUTDOWN will pause for 5 minutes or longer between the Shut4 and Shut6 messages, for example:

```
Shutdown of system processes begins (Shut 4) /*5 minute or longer pause */
Shutdown of operating system complete. (Shut 6)
```

To avoid this delay, shutdown STM before the network is stopped by running the stmshut.diag.sys program, and check that the diagmon programs are no longer running.

```
:run stmshut.diag.sys
:run sh.hpbin.sys
ps -e -o args | grep -i stm
:nscontrol stop
evit
```

If diagmond, diaglogd, memlogd or cclogd are listed, then see article "STMSHUT sometimes unable to completely close daemon" below, for information about how to manually shutdown the diagnostic monitor.

Once the diagnostic monitor is no longer running, proceed to stopping the network and shutting down the system.

```
nscontrol stop
:netcontrol stop
=SHUTDOWN
```

#### CR# JAGae78289 / 8606315566

#### :STMSHUT sometimes unable to completely close daemon

During certain installations of the PowerPatch, an installation job has been found to fail due to the inability of the diagnostic monitor to completely shutdown. The symptom of the problem is that the job I0231900 will abort, which will trigger the installing tool (usually HPINSTAL) to systematically abort. Within the spoolfile of this jobstream, the following failure text is seen:

```
:purge /usr/lib/libmcats.sl
EXCLUSIVE VIOLATION: FILE ACCESSED EXCLUSIVELY (FSERR 91)
Unable to purge file "/usr/lib/libmcats.sl". (CIERR 384)
REMAINDER OF JOB FLUSHED.
```

This condition can be resolved, and the installation can be resumed, by following these steps (user entries are in bold below):

1. Kill the diagmond daemon.

```
From MANAGER.SYS,
    :run sh.hpbin.sys
    $ ps -ef | grep diagmond
```

The above command should return a line similar to this:

```
0 65584 1 0 Jan 01 1:10 /usr/sbin/stm/uut/bin/sys/diagmond
```

Note this number. It is the pid number of the process that needs to be killed. Issue the kill command for this pid:

```
$kill 65584 (for pid# 65584)
```

Now, verify that the process has been aborted, by repeating the 'ps' command:

```
$ ps -ef | grep diagmond
```

There should not be any entries returned. Merely a line-feed. If the entry is still showing, use this kill command:

```
$kill -9 65584 (for pid# 65584)
```

2. Resume the installation. Simply run the installer program again. Make sure you are in the INSTALL group, and issue the run command.

```
:run hpinstal
```

The installation process will detect where it left off, and will resume from that point.

### CR# JAGaf58821 / 8606398856

#### **HAFO Errors while Booting**

As a result of the inclusion of MPE/iX Patches MPEMXG9 and MPEMXL5 in C.75.03, the FOS High Availability FailOver product components are automatically installed on all systems. This may, temporarily, result in non-harmful error messages being printed on the system console during system boot activities.

Specifically, after ISL>START, the MPE/iX OS will attempt to open configuration files, if a HAFOCONF file is not part of the configuration group then the system will report this via the following error messages:

These errors can be ignored if you are not using the HAFO product. They may also be easily eliminated by creating a dummy HAFOCONF file in the current system configuration group with the SYSGEN utility. The following is an example of the SYSGEN commands that will create a HAFOCONF file in the current configuration group, user input in bold type:

```
CSYLE18<PUB.SYS>:sysgen
sysgen> io
    io> hold
    io> exit.
```

```
sysgen> keep
    keeping to group CONFIG.SYS

Purge old configuration (yes/no)?y
    ** configuration files successfully saved **
sysgen> exit
```

For more information on HAFO please refer to the  $High\ Availability\ FailOver/iX\ Manual$  for MPE/iX 7.5, which is located at: http://docs.hp.com/en/mpeix-all.html#MPE/iX%20High%20Availability.

Information You Need Before Installing MPE/iX 7.5 PowerPatch 3 Important CR Information

# 2 Patch Information for MPE/iX 7.5 PowerPatch 3

The following table provides a list of patch index numbers and a description of the patch.

Patch Index	KPR Number	Description
	•	
ACCHDA7A	8606-377853	GENERAL FIXES FOR ACC COMMON ON MPE/IX 7.5 (D0) PATCH
	8606-302747	
	8606-239912	Supersedes: ACCHD86A ACCHD24A ACCGDX8A
	8606-292154	
	8606-279496	
	8606-298352	
	8606-309694	
	8606-344129	
	8606-359842	
	8606-359806	
ARMMX56B	8606-214147	ARMSERVER ALIGNMENT TRAP
	8606-212870	
BBXMXA3C	8606-268101	BUSINESS BASIC/IX COMPILER A.00.24: FIX BUGS IN SELECT
	D500-154029	
COBMXJ7C	8606-315718	COBOL II/IX OPTIMIZE=1 CAN CAUSE DATA CORRUPTION
		(BLANKED BYTE)
		Supersedes: COBMXBOC
G017777003	0.606 264650	
CONHD98A		GENERAL FIXES FOR NIO CONSOLE ON MPE/IX 7.5 (D) PATCH
	8606-358255	
	8606-339405	Supersedes: CONHD91A CONHD69A CONGDU3A
	5003-164293	
	8606-214376	
	8606-343182	

Patch Index	KPR Number	Description
DCCHD72A	8606-348848	GENERAL FIXES FOR DCCONFIG ON MPE/IX 7.5 (C) PATCH
	8606-319268	
	8606-262891	Supersedes: DCCHD39A DCCGDX5A
	8606-164838	
	8606-193876	
	8606-293229	
	8606-325820	
DTCGDU4A	8606-124212	7.5 DTC HOST DOWNLOADS, EQUIVALENT TO ODMGDB6, OV
	8606-179267	DTCMGR A1440E00
DTSHDC3A	8606-386429	DTS 7.5 - ACCUMULATED FIXES ("F" PATCH)
	8606-376388	
	8606-380140	Supersedes: DTSHDB2A DTSHDB0A DTSHD80A DTSHD53A
	8606-361562	DTSHD37A
	8606-308473	
	8606-319268	
	8606-335666	
	8606-290518	
	8606-222556	
	8606-295732	
	8606-303876	
	8606-293229	
	8606-286687	
	8606-389429	
EDTMXF7C	8606-284606	HP EDIT A.02.36: FIX PROBLEM WITH SPOOL FILE DISPLAY
		AND SAVE.
FRIMX47E	8606-215725	FIX FOR RPCD AND FIX FOR DBOPEN() SYMBOL IN DCEXL
	8606-232661	
FTPHDG4A	8606-420106	GENERAL FIXES FOR FTP FOR 7.5 RELEASE (G PATCH)
	8606-412062 8606-405040	Supersedes: FTPHDF4A FTPHDE8A FTPHD75A FTPHD71A
		<u> </u>

Patch Index	KPR Number	Description				
	8606-407731		FTPHD68A	FTPHD48A	FTPHD44A	FTPHD09A
	8606-364051		FTPGDY9A	FTPGDW4A	FTPGDU2A	
	8606-364100					
	8606-364115					
	8606-364124					
	8606-395344					
	8606-397385					
	8606-397749					
	8606-358525					
	8606-348971					
	8606-392384					
	8606-340675					
	8606-265669					
	8606-338048					
	8606-343050					
	8606-344454					
	8606-331712					
	8606-277230					
	8606-328875					
	8606-299250					
	8606-289803					
	8606-273530					
	8606-124994					
	8606-224234					
	8606-230026					
	8606-231617					
	8606-250162					
	8606-250495					
	8606-256482					
	8606-267935					
	8606-269614					
	8606-269712					
	8606-270473					
	8606-276240					
	8606-281685					

Patch Index	KPR Number	Description
	8606-284297	
	8606-287785	
	8606-293906	
	8606-294908	
	8606-297039	
	8606-299646	
	8606-299968	
	8606-300719	
	8606-300832	
	8606-302727	
	8606-310306	
FWSLXT5D	8606-201006	PROVIDE REV. 3728 FIRMWARE FILE FOR 28696A FW SCSI DEVICE ADAPTER
INTHD64A	8606-325249	GENERAL FIXES FOR INTERSRV PRODUCTS ON MPE/IX 7.5 (C)
	8606-183008	
	8606-230083	Supersedes: INTHD61A INTGDY3A
	1653-202150	
	8606-326191	
ITOED07D	4701-401919	PROVIDE 5.5 FUNCTIONALITY IN XL.PUB.SYS FOR 6.0 & 6.5 HP3000 ITO AGENT
LNKMXE3A	8606-287479	LINKEDIT A.06.24: FIX FOR SILENT TRUNCATION OF LONG INFO STRING.
MIRMXP7C	8606-351194	MIRVUTIL CONTIGVOL IMPROVEMENTS; SA2188 DURING
	8606-362119	SHOWUSERLOG COMMAND
MPELXT0C	5003-345553	NEW PATCH TO INCLUDE MPEJXV9(5.5), MPEKXL0(6.0), AND
	4701-383950	MPEKXX4(6.5).
MPELXT1D	8606-194199	NETWORK SPOOLER: 2 FIXES FOR PJL SYNTAX ERRORS, NMS
	8606-180352	9621

Patch Index	KPR Number	Description
MPEMX02D	8606-217821	SYSTEM HANG DUE TO 2-WAY DEADLOCK BETWEEN NETWORK SOCKET SEMAPHORES
MPEMX54C	8606-237023	POSSIBLE PROBLEMS WITH FILES CREATED WITH MKNOD COMMAND.
MPEMX85D	8606-262297	SHADOW ERROR -38 AND -19 DURING ONLINE PARTIAL BACKUPS  Supersedes: MPEMXL1A MPEMXJ6C MPEMXK1C MPEMXH6C  MPEMXB6B MPEMX93C MPEMX64C
MPEMX91C	8606-245702	LABELED TAPES CAUSE AUTOLOADER TO SKIP TAPES BETWEEN JOBS
MPEMX94B	8606-244832	CIERR 981 IF SHELL EXIT CMD IS LAST RECORD IN JOB'S VARIABLE RECORD
МРЕМХА5В		SA1458 DURING CREATEPROCESS DUE TO PROBLEMS HANDLING POSIX ENVIRON Supersedes: MPEMX86B
MPEMXB1B	8606-276005	:SHUTDOWN SYSTEM; RESTART CAN RESULT IN SA 1047 AFTER SHUT 6 ON 9X9,99X
MPEMXB3C	8606-278180	SA2216 FROM RUNNING OUT OF XM COPYFWD ARRAY ELEMENTS DURING CHECKPOINT
MPEMXC6B		SA1740 OR NEWMIRRSET FAILS; MIRVUTIL HANGS ON FILL_DISC_WAIT CONDITION
MPEMXD8B	8606-288647	ALLOW LISTING OVER 100 SOMS WITH VERSION.PUB.SYS Supersedes: MPEMXC2B
MPEMXD9B	8606-288751	BX00 0127 DEAD HALT INSTEAD OF SYSTEM ABORT ON 9XX SERIES SYSTEMS

Patch Index	KPR Number	Description
MPEMXE2B	8606-288084	ARRAYLOG -E REPORTS ERROR NUMBER : 50 AND HLIO CHAIN TABLE LEAKS.
MPEMXE6C	8606-292571	IMPROVED INTERNAL ERROR MESSAGES (SYSCAT)
MPEMXF6C	8606-267267	RESTORE/COPY OF LARGE AMOUNTS OF DATA CAN CAUSE VSM TABLE EXHAUSTION
MPEMXF9B	8606-296911	SA1047 WHEN USING PTRACE FACILITY TO DEBUG AN APPLICATION
MPEMXG0C	5003-454843	SA775 WHEN LOAD_SOM ENCOUNTERS A MALFORMED NMXL FILE Supersedes: MPEMX90D
мремхн2С	8606-308481	SYSTEM ABORT 16 WHEN BOOTING FROM A NEW STAGE WHICH DOESN'T CONTAIN NL
МРЕМХН9С		PROBLEMS WITH SPOOLFILES CREATED WITH POSIX APPS (FSERR 105, SA514)
MPEMXJ0C	8606-314612	HPSPOOLID GIVES WRONG SPOOLFILE ID IF DUPLICATE JOB NUMBER IN SPOOLER
MPEMXJ1C	8606-300920	SADPATCH DOES NOT ACKNOWLEDGE THE CORRECT HP DIAGNOSTIC PASSWORD
MPEMXJ3B	8606-304075	SCSI MODE PAGE ENHANCEMENTS FOR FUTURE TAPE SUPPORT
MPEMXJ4B	8606-315020	SA1516 (OR OTHER ABORTS) USING NON-POSIX PROGRAM AS CGI IN APACHE
MPEMXJ5A	8606-318190	SA1334 INFO = #610 FROM FIBRE CHANNEL TIMER ENTRY RECORD

Patch Index	KPR Number	Description
MPEMXJ9A	8606-316579	CANNOT CREATE STREAMS, FIFO OR DEVICE LINK FILES ON  USER VOLUME SET  Supersedes: MPEMXD1A
MPEMXK0C	8606-193185	CPUS MAY FAIL TO LAUNCH DURING BOOT ON MULTIPROCESSOR SYSTEMS
MPEMXK5B	8606-321376	OPENLOG AND CLOSELOG RECORDS INCORRECT ON 7.5 AND 7.0 WITH MPEMX24
MPEMXK9A	8606-331019	HAFOERR 16 WHEN DOING AN AD WITH UNEQUAL STRING LENGTH PATH IDS Supersedes: MPEMXG9C
MPEMXL0A	8606-332175	NATIVE FIBRE CARD CHIP FREEZES - SAME AS HPUX CR 8606235253 Supersedes: MPEMXK4A MPEMXE4A
MPEMXL6B	8606-337965 8606-297155 8606-302492 8606-327251 8606-146338 8606-334232 8606-214092	OS DAT/DEBUG MACRO FIXES AND ENHANCEMENTS
MPEMXL8A	8606-339373	SA732 OR SYSTEM HANG ON UNIPROCESSOR A/N USING NATIVE FIBRE CHANNEL
MPEMXL9C	8606-335372	ENHANCEMENT TO REDUCE PER PROCESS VSM OBJECT/TABLE USAGE BY AIF:PE
MPEMXM0A	8606-325444	SA1050 WHEN ABORTING AN I/O REQUEST QUEUED TO SE OR F/W SCSI DAM

Patch Index	KPR Number	Description
MPEMXM4A	8606-332711	SR6/SR7 REDUCTION ENHANCEMENT: SWITCH TO CM NAME CACHE
MPEMXM6A	8606-332724	SR6/SR7 REDUCTION ENHANCEMENT: BREAK UIT AND NOTIFY QUEUE PORT
MPEMXM7A	8606-338470	DAT FAILS TO OPEN DTOD DUMP WHEN LIMIT IS A MULTIPLE OF 4096MB
MPEMXM8A	8606-344983	HFS DIRECTORY CAN BE CORRUPTED AFTER SF OR INCOMPLETE SHUTDOWN
MPEMXN0A	8606-325114	HANG OR SA1516 FOLLOWING CM STACK OVERFLOW IN FILE COMMAND
MPEMXN5A	8606-163342	SA1458 CAUSED BY THE GLB_MI_ON AND IO_CLASS_FLAG INCONSISTENCY Supersedes: MPEMXN9A
МРЕМХРЗА	8606-319501	SA614 WHEN POSIX APP WRITES PAST LIMIT OF FIXED-LENGTH RECORD FILE
MPEMXP6C		VOLUTIL CONTIGVOL IMPROVEMENTS; SA2188 DURING SHOWUSERLOG COMMAND
мремхр9а	8606-361100	COMMAND INTERPRETER ENHANCEMENT : ENABLING USER FUNC'S  TO RETURN VALUE  Supersedes: MPEMXD6B
MPEMXR0A	8606-291445	SA1007 OR SA0 WHEN THERE IS LRU CONTENTION BY FILE OPENS Supersedes: MPEMXR6A MPEMXN6B MPEMXQ1C
MPEMXR3B	8606-381480	SCSI DISC ARRAY DRIVER CHANGES TO ACCEPT NEW XP FIRMWARE BEHAVIOR Supersedes: MPEMXQ4B MPEMXM9A MPEMXM2C MPEMXL5B

Patch Index	KPR Number	Description
		MPEMXK7B MPEMXH5C MPEMXH0B MPEMXG4B
		MPEMXE1A MPEMXF8B MPEMXE7A MPEMXE8B
		MPEMXA1C MPEMXD5B MPEMXA8B MPEMXD2A
		MPEMXC8A MPEMXA7B MPEMX61B
MPEMXT5B	8606-386360	SA817, PROCESS HANG FROM AVR PROCESS WHEN HANDLING
	8606-395031	DISK AVR REQUESTS
		Supersedes: MPEMXQ6C MPEMXN8C MPEMXG1C MPEMX92C
MPEMXU1A	8606-393132	ENHANCEMENT TO MPE NETWORK SPOOLER TO WORK WITH
		NON-PCL PRINTERS
MPEMXU5C	8606-401785	FSCHECK ERROR HEADER RECORD MAIN_REC COUNT DID NOT
		MATCH ACTUAL COUNT
		Supersedes: MPEMXT1B
MPEMXU9A	8606-407815	XM RECOVERY FAILS LEADING TO INABILITY TO ACCESS ANY
		DATABASES/KSAM
MPEMXV2A	8606-409076	CATALOG.PUB.SYS CHANGES FOR VOLINFO, DEVINFO,
	8606-409078	SPOOLINFO
	8606-409079	Supersedes: MPEMXU6A MPEMXQ0A
MPEMXV5A	8606-406692	FREADDIR ON LARGE KSAM64 FILE CAN PRODUCE FSERR 175.
		Supersedes: MPEMXPOA
MPEMXV7D	8606-355468	SYSTEM HANG OR SLOW PERFORMANCE DURING SORT OF A LARGE
		FILE
		Supersedes: MPEMXT0A MPEMXR9A MPEMXQ3A MPEMXR4A
		MPEMXP5A MPEMXC7B MPEMXK3C MPEMXM1A
		MPEMXL2B MPEMXE5C MPEMXA9C MPEMXB2C
		MPELXV3C MPEMX81B MPEMX99C MPEMX76C

Patch Index	KPR Number	Description
MPEMXW0A	8606-225083	APPLICATION HANG WHILE THREADED PROCESSES ARE
		ACCESSING PLFD ENTRIES
NMCHD36A	8606-319268	GENERAL FIXES FOR NMMGR ON MPE/IX 7.5 (D) PATCH
	8606-264154	
	8606-255163	Supersedes: NMCHD17A NMCGDY2A NMCGDU6A
	8606-252900	
	8606-268698	
	8606-234603	
NMSHD79A	8606-351808	GENERAL FIXES FOR NMS/IX ON 7.5 (E PATCH)
	8606-339405	
	8606-319268	Supersedes: NMSHD70A NMSHD35A NMSGDV1A NMSGDU5A
	8606-195035	
	8606-207282	
	8606-274274	
NRCMXT8C	8606-392040	SUPPORT TOOLS UPDATE - MIRRINFO, FWSCSI AND XMTIME
		Supersedes: NRCMXR1C NRCMXN4C NRCMXH1C NRCMXB8C
NSFHD14A	8606-294605	GENERAL FIXES FOR FOS ONLY NS SERVICES ON MPE/IX 7.5
	8606-307516	(01 PATCH)
	8606-400801	
	8606-403921	
NSRGDU7A	8606-147395	GENERAL FIXES FOR DOMAIN NAME SERVICE ROUTINES ON 7.5
		(A0 PATCH)
NSSHD12A	8606-294605	GENERAL FIXES FOR SUBSYS ONLY NS SERVICES ON MPE/IX
	8606-307516	7.5 (01 PATCH)
	8606-400801	
	8606-403921	
NSTHDH2A	8606-432598	GENERAL FIXES FOR NS TRANSPORT ON MPE/IX 7.5 (B2)
	1653-296426	PATCH

Patch Index	KPR Number	Description				
	8606-106004	Supersedes:	NSTHDG1A	NSTHDE2A	NSTHDD3A	NSTHDC9A
	8606-174426		NSTHDC2A	NSTHDB1A	NSTHDA1A	NSTHD84A
	8606-174449		NSTHD83A	NSTHD22A	NSTHD06A	NSTHD02A
	8606-200275		NSTGDW6A			
	8606-217960					
	8606-232667					
	8606-241875					
	8606-249651					
	8606-254218					
	8606-257335					
	8606-267660					
	8606-269347					
	8606-272847					
	8606-285610					
	8606-286850					
	8606-297205					
	8606-297985					
	8606-302842					
	8606-311133					
	8606-313326					
	8606-340728					
	8606-344330					
	8606-349406					
	8606-362866					
	8606-373941					
	8606-374750					
	8606-378129					
	8606-381067					
	8606-383055					
	8606-388358					
	8606-428810					

Patch Index	KPR Number	Description
ODIMXT9E	8606-390787	BAD GSP LOG ENTRIES ON SMALL MEMORY A/N CLASS SYSTEMS
	8606-349534	WITH ODIMXQ2
	8606-344345	Supersedes: ODIMXQ2C ODIMXN2C ODIMXL3C ODIMXE9C
	8606-362660	ODIMX96C
	0.50.5 04.00.50	
ODMHD45A		OVDTCMGR PC BASED 14.4 PATCH E00 WITH HOST-BASED
		MIGRATION TOOL
	8606-124212 5000-716183	
	5000-710183	
	1653-228684	
	1653-231787	
	5003-360669	
OSPMXQ7D	8606-329232	REMOVE DEPENDENCY ON DISK MODEL #S IN OEM1/DSM1
	8606-352999	RULESETS
	8606-324293	Supersedes: OSPMXH3C OSPMXF4C
	8606-204551	
	8606-321877	
	0.505 005044	
PARMX97C	8606-225011	PASCAL/IX LIBRARY A.05.05.04: FIX TRAP ON OPENING PIPE
PBTHD88A	8606-344129	GENERAL FIXES FOR PCI 100BASE-T ON MPE/IX 7.5 (A0)
	8606-337334	PATCH
PTDHDG0A	8606-410933	GENERAL FIXES FOR TELNET ARPA SERVICES ON 7.5 (G
	8606-398859	PATCH)
	8606-390714	Supersedes: PTDHDE5A PTDHDD8A PTDHDD2A PTDHD27A
	8606-388075	PTDGDX9A PTDGDT9A
	8606-362842	

Patch Index	KPR Number	Description
	8606-389773	
	8606-318942	
	8606-250491	
	4701-422436	
	8606-264334	
	8606-259714	
	8606-175456	
	8606-250349	
	8606-219917	
	8606-219640	
	8606-174457	
	8606-286302	
	8606-297984	
	8606-410286	
RPGMXJ8C	8606-320424	RPG/IX A.00.21 CUMULATIVE PATCH
SCOMXQ8C	8606-370484	CPU QUEUE SHOWS HIGH VALUES
	8606-335213	
		Supersedes: SCOMXN1C SCOMXK8C SCOMXH4C SCOMXD7C
SMBMXG3C	8606-304287	SAMBA 2.2.8A FOR MPE 6.5, 7.0, AND 7.5 TO SUPPORT ENCRYPTED PASSWORDS
SMBMXR5C	8606-383180	SAMBA 2.2.8A FIXES FOR CAN-2004-0815 Supersedes: SMBMXP8C
SMLHDC1A	8606-386623	SENDMAIL 8.13.1 A.02.00 FOR MPE/IX 7.5 (C) PATCH Supersedes: SMLHD16A SMLHD04A
SNMHD30A		GENERAL FIXES FOR SNMP ON MPE/IX 7.5 (B PATCH)
	8606-272894 8606-248966	Supersedes: SNMGDT6A
	<del>-</del>	

Patch Index	KPR Number	Description
STRHDE1A	8606-317293	GENERAL FIXES FOR STREAMS/IX ON MPE 7.5 RELEASE (E
	8606-245179	PATCH)
	8606-245307	Supersedes: STRHDB6A STRHDA5A STRGDX6A STRGDU8A
	8606-252710	
	8606-212542	
	8606-134134	
	8606-322326	
	8606-384928	
TIXMXD0A	8606-284008	GB FILE LEFT OPEN EVEN NO ACCESSOR TO THE DATABASE.
		Supersedes: TIXMXA4A
TSMHD38A		TERMDSM PATCH FOR MPE/IX C.75.00 (B PATCH)
	8606-286262	
		Supersedes: TSMGDV2A
VGCHDH3A	8606-432182	GENERAL FIXES FOR NIO VG-BT DRIVER ON MPE/IX 7.5 (A0)
		PATCH
77D1 1 V 4 0 E	0606 131060	VPLUS WITH ARB ENABLED RETURNS YEAR '00' AS 'A0' AND
VPLLLAGE	8000-131908	'10' AS 'B0', ETC
		IV AD DV , LIC
WBWHD97A	8606-356558	WEBWISE SECURE WEB SERVER A.04.00 (APACHE/IX 1.3.31)
.,2,,110,,11		FOR MPE/IX 7.5
	1100 000101	Supersedes: WBWHD82A
		Superseded. Walliadan

 ${\tt XPMMX65C\ 8606-249488\ FIX\ TO\ HP\ SURESTORE\ E\ RAID\ MANAGER\ XP\ (RM)\ UTILITIES\ FOR\ ERR\ 242}$