



**Transmittal Document**

SVR4 MP-RAS

NFS OE

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**NCR PROPRIETARY**  
Use pursuant to Company instructions



## NCR 3520 Entry Level Server Operating System Installation Notes

ELS MP-RAS RELEASE 3.02.05.00

D370-XXXX-0000

| Revision | Date       | Change Information |
|----------|------------|--------------------|
| A        | 09/02/2009 | Initial Release    |

### **Read This Document Before Attempting To Install MP-RAS Or Use This Product!**

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*Table of Contents*

|     |   |   |
|-----|---|---|
| 1.0 | INTRODUCTION .....                          | 5 |
| 2.0 | MP-RAS SUPPORTED INSTALLED COMPONENTS ..... | 3 |
| 3.0 | MP-RAS SUPPORTED EMBEDDED COMPONENTS .....  | 4 |
| 4.0 | MP-RAS TECHNICAL LIMITATIONS: .....         | 5 |
| 5.0 | SETUP BIOS SETTINGS .....                   | 5 |
| 6.0 | ELS INSTALLATION PROCEDURES .....           | 8 |
| 7.0 | PATCHES .....                               | 6 |
| 8.0 | RESTRICTIONS .....                          | 7 |

## 1.0 Introduction

Always refer to the documentation that comes with your operating system software, and check with your operating system software sales representative for general information about your operating system's features and functions.

This document does not cover detailed information on the Unix MP-RAS 3.02.05 features or about installing the product. Refer to documents such as the *NCR UNIX SVR4 MP-RAS Product Overview*, *Installing NCR UNIX SVR4 MP-RAS Release 3.02.02*, and *NCR UNIX SVR4 MP-RAS Release Notes* for this type of information.

This document lists specific requirements for installing the MP-RAS operating system on the **NCR 3520 server**. *The operating system uses factory-default settings unless a variation is listed below.*

## 2.0 D370-0767-0000 – ELS (ENTRY LEVEL SERVER) CORE Release 3.02.05

### New Platform Support

In order to obtain the ELS CORE CD, you must order D370-0767-0000. The ELS CORE CD supports the following new platform:

- NCR 3520 / Dell PowerEdge T-410

### New Hardware Enabling

To begin an installation, the new hardware platform must be booted from the ELS CORE CD for MP-RAS 3.02.05.

### Gigabit Ethernet Enhancements

The `bnx` package has been released to provide support for the new Broadcom Gigabit chipsets.



### 3.0 MP-RAS SUPPORTED HARDWARE ADAPTERS & PERIPHERALS

| Feature                       | Product Description   |
|-------------------------------|---|
| <b>Processors</b>             | All available Quad Core XEON processor options; one or two sockets.   |
| <b>Memory</b>                 | Maximum of 4GB. Choose from F100, F101, F104, F105, depending upon number of processors configured.   |
| <b>Removable Media Drives</b> | 3538-K561: 1.44MB Floppy Drive (optional)<br>F595: DVD-RW Drive, SATA (required)  |
| <b>Tape Backup Unit</b>       | F568: DAT72 Tape Backup (optional)  |
| <b>RAID Configurations</b>    | F282: PERC6/i Controller, 3-HDD, RAID 1<br>F283: PERC6/i Controller, 3-6 HDD, RAID 5<br>F284: PERC6/i Controller, 4-6 HDD, RAID 10<br>F286: PERC6/i Controller, 2 & 2 HDD, RAID1/RAID1<br>F287: PERC6/i Controller, 2 & 3-4 HDD, RAID1/RAID5  |
| <b>Hard Disk Drives</b>       | 3.5", 15k rpm SAS Disk Drives. Choose from F327, F328, F329, F330 only.   |
| <b>Ethernet Controllers</b>   | Dual Embedded Broadcom NetXtreme II 5716 Gb Ethernet<br>F373: Intel® PRO 1000PT Single Port Server Adapter, Gigabit NIC, Cu, PCIe x1<br>3538-K375: Intel® PRO 1000PT Dual Port Server Adapter, Gigabit NIC, Cu, PCIe x4<br>F376: Intel® PRO 1000PT Quad Port Server Adapter, Gigabit, Optical PCI-Ex4 |
| <b>Interface Devices</b>      | F461-F478: USB Keyboards and Mice   |
| <b>Management Devices</b>     | F398: iDRAC6 Express (no dependency on MP-RAS)<br>F399: iDRAC6 Enterprise (no dependency on MP-RAS)   |

#### 4.0 MP-RAS Technical Limitations:

- 6GB max physical memory (Only 4GB Usable)
- 2GB max individual file size
- File system limitations (ufs and s5 max 2GB, vxfs max 1TB)

#### 5.0 Setup BIOS Settings

- "OS Install Mode" set to Off.  
A setting of On limits the system's access to memory above 256 MB.
- "System Security" "NMI Button" set to Enabled  
A setting of Enabled allows a memory dump to be forced on a hung system.
- System Default IRQ assignments must be limited to using 5, 10, 11 for all devices except SATA which should be assigned 14 and 15.
- Remote console should be disabled unless you have the iDRAC Enterprise card installed.

#### 6.0 NCR UNIX SVR4 MP-RAS Installation Procedures

##### 6.1 Booting From the CORE CD-ROM

This procedure is necessary if you are performing a full installation of UNIX MP-RAS.

To install UNIX MP-RAS on the server, follow this procedure:

1. Boot the system with the ELS CORE CD-ROM
2. At the point in the installation where you must select the install media device select CD-ROM.
3. Follow on screen prompts.

##### 6.2 Moving of Add-in Adapters

It is recommended that any add-in adapter remain in the slot it was in when the software was installed. Moving an adapter to a different slot after software installation may result in IRQ conflicts or node renumbering, which may require a re-installation of the associated software driver.

### 6.3 Set up for the PERC Controller

Prior to the RAID configuration of the drives/LUNs.

1. Enter the Configuration Menus (Control-M) during POST.
2. Configure the Virtual Disks and Raid types.
3. After writing the changes to the PERC's NVRAM, the monitor displays a message; *The RAID configuration has changed. The system must be rebooted.*
4. Reboot the system and continue with the installation process.

### 6.4 RAID Controller Write Back Cache Is Not Supported

File corruption may occur after an MP-RAS shutdown when Write Back Cache is enabled on The PERC. The PERC must be configured using Write Through Cache.

This can be verified as follows:

1. Enter the Configuration Menus (Control-M) during POST.
2. Select Virtual Disks from the first menu screen.
3. Select F2, Operations
4. Verify the Write Policy = WRTHRU.
5. Repeat for each Virtual Drive.

## 7.0 Patches

Below is the URL for the patches for MP-RAS ELS:

[http://www3.ncr.com/support/mp\\_ras\\_els-30200/alphabetical\\_list.shtml](http://www3.ncr.com/support/mp_ras_els-30200/alphabetical_list.shtml)

## 8.0 Restrictions