



Multia Enterprise Client

Service Information Addendum

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This addendum provides updates to *Multia MultiClient Desktop Service Information* (EK-MULTS-IN. C01) as a result of the release of the Multia Base Software Version 3.2 for Intel-based models.

Revision/Update Information:	This is a new document.
Operating System and Version:	Windows NT Workstation V3.5
Software Version:	Multia Base Software V3.2 (Intel) Multia Base Software V3.1 (Alpha)

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Preface

Audience

This document is for Digital service personnel and qualified self-maintenance customers.

For More Information

For more information, refer to the:

- Multia Version 3.2 *System Administrator Information* (AA-QPNWB-TE).
- Multia InfoCenter on the World Wide Web at <http://www.digital.com/info/multia>.

Updates to Multia Service Information

Updates to Chapter 1, Multia System Description

The following lists the updates to Chapter 1:

- The Multia MultiClient Desktop is now known as the Multia Enterprise Client.
- The current Intel-based models use Multia Base Software Version 3.2 or earlier.
- The System Administrator Kit now includes another software option: RUMBA for AS/400 systems (5250 emulator).

Updates to Chapter 2, Troubleshooting Alpha-Based Models

Under the "Accessing the Windows NT Event Logs" section, use the following numbered steps to start the event viewer:

To start the Event Viewer

1. Open the Status application from the Application Manager.
2. Choose the Multia icon to display a pulldown menu.
3. Choose MS Diagnostics.
4. In the Windows NT Diagnostics dialog box, choose Tools on the menu bar.
5. Choose Event Viewer.
6. Use the Log menu of the Event Viewer to select the log you need to view.

Updates to Chapter 5, BIOS Setup Utility (Intel-Based Models)

Under the "Main Menu Options" section, the only language supported is English.

Under the "Power Options" section, replace the table for the power options settings with the following:

Menu Fields	Settings	Comments
APM	Enabled Disabled	Allows Advanced Power Management (APM) software to better manage power savings. Leave this feature disabled.
Power Savings	Customize Enabled Disabled	Select Customize if you want to make your own selections in the other menu fields. Select Enabled to set power management options to the default values (shown in bold in this table).
Standby Timeout	2 min. 15 min. 30 min 1 hr. 2 hr. 3 hr. 4 hr	Specifies how long the desktop must be inactive before a partial power shutdown takes effect. In a partial power shutdown, the monitor and CPU are set to power management. Any mouse or keyboard activity quickly returns the desktop to operation. You must enable Power Savings to use this option.
Suspend Timeout	Disabled 2 min. 15 min. 30 min 1 hr. 2 hr. 3 hr. 4 hr	Specifies how long the desktop must be inactive before a maximum power shutdown takes effect. In a maximum power shutdown, the monitor, CPU, and hard disk are powered down. Any mouse or keyboard activity quickly returns the computer to operation. You must enable Power Savings to use this option. Note The Suspend Timeout is disabled by default. Enabling the Suspend Timeout may lead to unexpected system behavior.
Fixed Disk Timeout	Disabled 1 min to 5 min 10 min 16 min	Specifies how long the fixed disk drive must be inactive (motor off) before standby mode takes effect.
CRT	On Off in Standby	Enables or disables the monitor display during standby mode.

Updates to Chapter 6, Removing and Replacing FRUs

Under the "To Replace the Intel Processor" section, the last jumper setting on the photograph in step 3 now reads:

W7 ON (3 to 2)

Updates to Chapter 7, Restoring Multia Software

Insert "Backing Up a Multia Client's File System" Section

Insert the following section before the "Restoring Multia Software on a Corrupted Desktop" section:

Backing Up a Multia Client's File System

Multia Version 3.2 and later provides an RMF backup utility that lets you back up a Multia desktop's complete file system. You can then restore the complete file system by performing an RMF restore procedure. This makes it possible to

- Fully restore a desktop's software, including any applications you have installed.
- Create a customized software setup on one Multia desktop. Then back up the file system and install it on as many Multia desktops as you want.

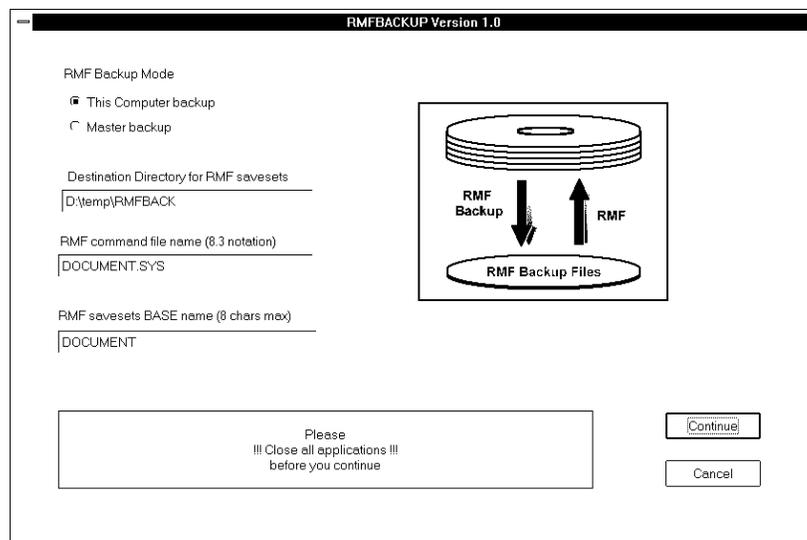
To back up a desktop's file system

You must perform this procedure at the desktop you are backing up.

1. Start the RMF Backup utility.
 - a. Press Ctrl + Esc to display the Task List.
 - b. In the New Task box, enter `rmfback.exe` and choose Run.

The desktop displays the RMF Backup window.

Note: If the desktop cannot find the file `rmfback.exe`, enter the full path `D:\multia\system\rmfback.exe` in the New Task box.



2. Complete the RMF Backup dialog box.
 - a. Choose This Computer backup if you are making backup files for this desktop only. Choose Master backup if you are making a master backup file system to install on many Multia desktops.
 - b. Specify a destination directory where you want to store the backup files. You can specify a directory on a network drive or a local disk drive attached to the desktop.
 - c. Specify an RMF command file name, using 8.3 notation.
Example: `MULTIA02.SYS`
You need this file name when restoring the file system.
 - d. Specify a base file name of up to 8 characters for the backup files.
Example: `DOCUMENT`

The RMF Backup utility numbers the backup files by adding a file name extension. In this example, the backup files will be named DOCUMENT.001, DOCUMENT.002, and so on.

- e. Choose Continue.

The RMF Backup utility creates the specified RMF command file and backup files.

Replace "Restoring Multia Software on a Corrupted Desktop" Section

Replace the "Restoring Multia Software on a Corrupted Desktop" section with the following update information:

Restoring Multia Software or a Complete File System

The Multia CD-ROM provides Remote Maintenance Facility (RMF) software that lets you

- Restore the Multia software on a desktop to its initial factory state. When you restore a desktop to its initial factory state, any user files on the local hard disk are lost. If you want to save these files, back them up before performing this procedure.

Multia Version 3.2 or later

- Restore a desktop's backed up file system, including Multia software and any user files and applications.
- Install the backed up file system from one Multia desktop on a number of Multia desktops.

You perform the selected procedure at the desktop on which you are restoring files.

Each procedure begins by downloading RMF software from the Multia CD-ROM. If the CD-ROM is mounted or installed on a remote system, you must set up MOP or BOOTP and TFTP servers to handle this process.

With Multia Version 3.2 or later, you can mount the CD-ROM in a drive attached directly to the affected desktop. In this case, you do not need MOP or BOOTP and TFTP servers.

Refer to the section for your Multia desktop model:

- Intel-based models
- Alpha-based models

Replace "Restoring Intel-Based Models" Section

Replace the "Restoring Intel-Based Models" section with the following updated information:

Restoring Intel-Based Models

Prerequisites

- **Multia for Intel CD-ROM and RMF diskette**
Use the CD-ROM that matches the current Multia Base Software version installed on the desktop. You create the diskette by running a `mkf1p.bat` command file provided on the CD-ROM.
- **MOP server or BOOTP and TFTP servers**
If the CD-ROM is mounted on a remote system, you must use servers on a host system or Multia-based servers accessible in the Customize Multia window, Services dialog box. Sample `moptab` and `bootptab` files are in `D:\WINNT35\SYSTEM32\DRIVERS\ETC`.
With Multia Version 3.2 or later, you can mount the CD-ROM on a drive directly attached to the affected desktop. In this case, you do not need MOP or BOOTP and TFTP servers.

Creating an RMF Diskette

1. Mount or install the Multia CD-ROM on an accessible host.
2. Log in to a Multia desktop or Windows NT system that has a diskette drive.
Connect to the CD-ROM drive from a system that has a diskette drive.
3. Open a command window and change the default directory to the following directory on the CD-ROM:

```
\Vnnn\RECOVERY\MAKERMF
```

where *nnn* is the Multia version number (032 for Version 3.2)

4. Insert a floppy diskette, then run the `mkf1p.bat` command file. For example, if the V3.2 CD-ROM is on the G drive:

```
G:\V032\RECOVERY\MAKERMF> mkf1p
```

```
+-----+
+   This command file builds a Multia RMF floppy   +
+-----+
```

```
+
Insert new disk for drive A:
and press ENTER when ready...
The type of the file system is FAT.
Verifying 1.44M
Format complete.
```

```
1457664 bytes total disk space.
1457664 bytes available on disk.
```

```
512 bytes in each allocation unit.
2847 allocation units available on disk.
```

```
Volume Serial Number is 44AD-F54A
```

Format another (Y/N)? **N**

G:\V032\RECOVERY\MAKERMF\MKBT.EXE, Wrote bootsect.flp to boot record on
diskette A:

PKUNZIP (R) FAST! Extract Utility Version 2.04g 02-01-93
Copr. 1989-1993 PKWARE Inc. All Rights Reserved. Shareware Version
PKUNZIP Reg. U.S. Pat. and Tm. Off.

| 80486 CPU detected.
| XMS version 2.00 detected.
| DPMSI version 0.90 detected.

Searching ZIP: RMF1.ZIP

Inflating: a:/IO.SYS
Inflating: a:/MSDOS.SYS
Inflating: a:/COMMAND.COM

PKUNZIP (R) FAST! Extract Utility Version 2.04g 02-01-93
Copr. 1989-1993 PKWARE Inc. All Rights Reserved. Shareware Version
PKUNZIP Reg. U.S. Pat. and Tm. Off.

| 80486 CPU detected.
| XMS version 2.00 detected.
| DPMSI version 0.90 detected.

Searching ZIP: RMF2.ZIP

Extracting: a:/DOS/
Extracting: a:/RMF/
Inflating: a:/AUTOEXEC.BAT
Inflating: a:/CONFIG.SYS
Inflating: a:/DOS/CHKDSK.EXE
Inflating: a:/DOS/FDISK.EXE
Inflating: a:/DOS/FORMAT.COM
Inflating: a:/DOS/HIMEM.SYS
Inflating: a:/DOS/SYS.COM
Inflating: a:/DOS/COMMAND.COM
Inflating: a:/DOS/MSCDX.EXE
Inflating: a:/DOS/SMARTDRV.EXE
Inflating: a:/DOS/ANSI.SYS
Extracting: a:/RMF/EXE/
Extracting: a:/RMF/CONFIG/
Extracting: a:/RMF/NET/
Extracting: a:/RMF/FLP/
Inflating: a:/RMF/EXE/RMFMAIN.BAT
Extracting: a:/RMF/EXE/CLR.TXT
Inflating: a:/RMF/EXE/PKUNZIP.EXE
Inflating: a:/RMF/EXE/DISKS.EXE
Inflating: a:/RMF/EXE/DRVCNT.EXE
Inflating: a:/RMF/EXE/BOOTBLK.EXE
Inflating: a:/RMF/EXE/SECT.EXE
Inflating: a:/RMF/EXE/RESTART.EXE
Inflating: a:/RMF/EXE/STARTDRV.EXE
Inflating: a:/RMF/EXE/ORDER.EXE
Inflating: a:/RMF/EXE/MOPFTP.EXE

```
Inflating: a:/RMF/EXE/BOOTPCL.EXE
Inflating: a:/RMF/EXE/STRIPMOP.EXE
Inflating: a:/RMF/EXE/PARMS.EXE
Inflating: a:/RMF/EXE/CHECKLOG.EXE
Inflating: a:/RMF/EXE/GETTIME.EXE
Inflating: a:/RMF/EXE/REPORT.BAT
Inflating: a:/RMF/EXE/BANNER.EXE
Inflating: a:/RMF/EXE/TRAILER.EXE
Inflating: a:/RMF/EXE/STATBOX.EXE
Inflating: a:/RMF/EXE/MOPIFY.EXE
Inflating: a:/RMF/EXE/EDR.EXE
Extracting: a:/RMF/EXE/UNMOP.BAT
Inflating: a:/RMF/EXE/UNZIP.BAT
Inflating: a:/RMF/EXE/MINICAM.SYS
Inflating: a:/RMF/EXE/CDROM.SYS
Inflating: a:/RMF/EXE/ASPICAM.SYS
Inflating: a:/RMF/EXE/SCSIDISK.SYS
Inflating: a:/RMF/CONFIG/CONFIG.SYS
Inflating: a:/RMF/CONFIG/MSDOSLDR.DAT
Inflating: a:/RMF/CONFIG/NTSECT.RAW
Inflating: a:/RMF/CONFIG/BOOTNT.INI
Inflating: a:/RMF/CONFIG/BOOTDOS.INI
Inflating: a:/RMF/NET/HOSTS
Inflating: a:/RMF/NET/DLLNDIS.EXE
Inflating: a:/RMF/NET/NETBIND.COM
Inflating: a:/RMF/NET/PROTMAN.DOS
Inflating: a:/RMF/NET/PROTMAN.EXE
Inflating: a:/RMF/NET/PROTOCOL.INI
Inflating: a:/RMF/NET/SCHK.EXE
Inflating: a:/RMF/NET/TCPIP.EXE
Inflating: a:/RMF/NET/PWTCP.INI
Inflating: a:/RMF/NET/TFTP.EXE
Inflating: a:/RMF/NET/MDC21X4.DOS
Inflating: a:/RMF/FLP/README
Inflating: a:/RMF/FLP/MKFLP.BAT
Inflating: a:/RMF/FLP/MKBT.EXE
Inflating: a:/RMF/FLP/BOOTSECT.FLP
Extracting: a:/RMF/FLP/RMF1.ZIP
```

mkflp: SUCCESS creating RMF diskette!!!

Please Remove the diskette and Press any key to exit

To restore an Intel-based Multia desktop to its initial software state

1. Mount or install the Multia CD-ROM on an accessible host.
or
(Multia Version 3.2 or later) Mount the Multia CD-ROM in a drive attached to the desktop. Then skip to step 4.
2. Set up the moptab file or bootptab file.
 - **For a BOOTP server**, specify the correct Multia RMF command file in the bootptab file.
Syntax
bf=*path*\QSRMF.SYS
path is the network path to the file. For example, if you have mounted the Multia Version 3.2 CD-ROM on your E drive, you would specify
bf=E:\V032\files\RMF\QSRMF.SYS
 - **For a Multia MOP server**, simply add the location of the Multia CD-ROM's RMF files to the home directory (HD) in the moptab file.
 - **For an OpenVMS MOP server**, add the location of the Multia CD-ROM's RMF files to the definition of the MOM\$SYSTEM logical.
3. **If you use host-based servers**, make sure the servers are running.
If you use Multia servers, start them as follows:
 - a. If the Multia CD-ROM is mounted or installed on a remote network drive, use the Windows NT Control Panel to specify a startup account with administrator privileges for the MOP or TFTP server.
You can omit this step if the CD-ROM is on a local drive.
 - b. Start the MOP server (page 81) or BOOTP and TFTP servers (page 83) from the Services dialog box of the Customize Multia window.
4. Insert the RMF diskette, then restart the desktop. The RMF procedure starts automatically and prompts you for
 - a. Whether to partition the disk.
If you answer No, the RMF software overwrites existing files on the disk.
If you answer Yes, the RMF software partitions the disk and installs new files. All existing files on the disk are erased.
 - b. The file transfer method: MOP, BOOTP, or local CD-ROM drive (Multia Version 3.2 or later).
 - c. The RMF command file name.
If you are restoring the desktop to an initial software state, use the default QSRMF.SYS.
If you are installing or restoring a customized file system (Multia Version 3.2 or later), use the command file name specified when the file system was backed up.When the procedure is complete, the software displays a message telling you to restart the desktop.

When you restart the desktop, it displays the Multia startup screen. At this point, the desktop is in its initial factory state. To restore the desktop's previous configuration, enter the desktop's key.

Using the RMF Menu Item Instead of the RMF Diskette

The OS Loader menu that appears during the desktop's power-up sequence includes a Multia Remote Maintenance Facility (RMF) menu item for starting an RMF restoration. However, Digital recommends that you use an RMF diskette instead of the menu item in most cases. You cannot start an RMF procedure from the menu if you have converted the desktop's system drive to the NTFS file format.

Update "Configuring a BOOTP Server" Section

The first item in the bulleted list now reads:

- For Intel-based models

The RMF bootfile is RMFV nnn M.COMD, where nnn is the Multia version. For Multia Version 3.1, the RMF bootfile is QSRMF.SYS.

Update "Specifying a Multia or TFTP Startup Account" Section

- The title of this section is now "Specifying a Startup Account for a Multia Service".
- Replace the first paragraph of the section with:

If you plan to use a Multia service to access files on a remote network drive, you must create a startup account for the service.

Create a startup account for...	If...
Multia MOP or TFTP server	The Multia CD-ROM is mounted or installed on a remote network drive.
Multia configuration server	You specify a remote drive for storing your Multia configuration files.

Create the account on the administrative desktop that runs the server.

- Step 4 is now:

In the Services dialog box, select the service: Multia MOP Server, Multia TFTP Server, or Multia Configuration Server.

Updates to Appendix B, Pinouts

Under the "System Board Jumpers (Intel-Based Models)" section, the W7 jumper setting is now **ON (3 to 2)**.