HP StorageWorks One-Button Disaster Recovery (OBDR) Solution Current Release Notes Updated: June 08, 2006

The following Release Notes contain general information, and solutions for known issues, with HP's One-Button Disaster Recovery (OBDR). Please click on the appropriate heading to go directly to that section in these Release Notes.

Hardware

HP Data Protector Express (DPX) Symantec Backup Exec Computer Associates ARCserve / BrightStor Yosemite TapeWare HP Data Protector



Hardware:

GENERAL

Make sure your server and HBA have the latest ROM and/or BIOS. In many cases, this can resolve issues that prevent booting from tape.

Click <<u>here></u> to access the HP Software and Driver Downloads web page.

When performing an OBDR restore, make sure that the hard drive being restored is the same size or larger than the original failed hard drive.

ProLiant SERVERS

If the ProLiant server does not boot from the HP tape drive, verify that the SCSI controller port, where the tape drive is attached, is first in the Boot Control Order (BCO) listing in the server's ROMbased setup utility (RBSU). RBSU is accessible via the <F9> function key at the end of Power-On Self Test (POST).

Installing 3rd party drivers during the restore process: If you have a ProLiant server without a floppy drive, you will not be able to load additional 3rd party drivers during the Microsoft Windows 2000 install portion.



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<u>Problem:</u> Currently, the ML110 G3 SATA system ROM does not automatically place the tape drive first in the Boot Control Order. The server does not boot from the tape drive during the OBDR restore process.

<u>Solution:</u> When restoring the ML110 G3 SATA server using the manual method to invoke OBDR, please follow these instructions:

- 1. Insert the disaster recovery tape into the HP tape drive
- 2. Hold down the eject button
- 3. Power cycle the external tape drive
- 4. Release the eject button as soon as the LEDs flash
- 5. Turn on the server

<u>Note</u>: To place an internal tape drive into OBDR mode, insert the disaster recovery tape and power cycle the server

- 6. Press **<F10>** to go to the BIOS Setup Utility
- 7. Select BOOT from the menu at the top of the page
- 8. Select Hard Disk Drive
- 9. Check the Boot Order to see if the SCSI device is listed first and the hard disk drive is listed second
- 10. If the hard disk drive is listed first, change the boot order to make the SCSI device first and the hard disk drive second
- 11. Save the changes
- 12. The server will now boot from the tape drive and restore your files using the OBDR process

When restoring the ML110 G3 SATA server using the <F8> function key to invoke OBDR, please follow these instructions:

- 1. Insert the disaster recovery tape into the HP tape drive
- 2. Turn on the server
- 3. Press <F8> when prompted to go to the Configuration Options Menu
- 4. Select 1 to place the tape drive into OBDR mode
- 5. When the server reboots, press **<F10>** to go the BIOS Setup Utility
- 6. Follow steps 7-12 shown above to complete the OBDR process

Note: You cannot invoke OBDR using the $\langle F8 \rangle$ function key if the tape drive has a USB connection. Currently, $\langle F8 \rangle$ only works on SCSI tape drives with this server. This should be fixed in the next ROM update for the ML110 G3.



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HP TAPE DEVICES

• DAT Autoloader:

When performing an OBDR restore with the DAT autoloader, it is best to remove all tape media with the exception of the bootable tape. Place the bootable tape in Slot 1. This will prevent any time outs due to the mounting of multiple tape media cartridges.

• SDLT 600 tape drive:

Invoking OBDR remotely, using the <F8> function key and HP's iLO / RILOE technology on ProLiant servers, <u>does work</u> if the SDLT 600 is connected to an U320 SCSI controller.

Invoking OBDR remotely, using the <F8> function key and HP's iLO / RILOE technology on ProLiant servers, <u>does not work</u> if the SDLT 600 is connected to an U160 or Smart Array SA6x SCSI controller.

OBDR can always be invoked by holding the eject button on the tape drive and power cycling the drive (if external tape drive) or the server (if internal tape drive)





HP Data Protector Express (DPX)

For Windows and Linux Operating Systems:

The firmware for the embedded U320 SCSI controller on the following ProLiant servers needs to be a minimum of 5.05.19

ML350 G4: Download system ROM dated 8/16/2005 or later

ML370 G4: Download system ROM dated 12/23/2005 or later

ML570 G3: Download system ROM dated 10/25/2005 or later

The firmware for a single channel (374654-B21) or dual channel (268351-B21) U320 SCSI HBA needs to be a minimum of 5.05.20

For Linux Operating Systems Only

The following CCISS driver is required for a ProLiant server containing a Smart Array SA6x RAID controller (embedded and HBA):

RHEL3 minimum version 2.4.60-8

SUSE8 minimum version 2.4.60-8

RHEL4 minimum version 2.6.10-8

SUSE9 minimum version 2.6.10-8

The following non-RAID drivers are required for LSI U320 controllers (embedded and HBA):

RHEL3 minimum version 2.06.24-4

RHEL3 minimum version 2.06.27 (when using an Ultrium 215 or 230 tape drive)

SuSE8 minimum version 2.06.24-4

SuSE8 minimum version 2.06.28 (when using an Ultrium 215 or 230 tape drive)

RHEL4 minimum version 3.02.56-4

RHEL4 minimum version 3.02.61 (when using an Ultrium 215 or 230 tape drive)

SuSE9 minimum version 3.02.56-4

SuSE9 minimum version 3.02.61 (when using an Ultrium 215 or 230 tape drive)





Problem: Some ProLiant servers, such as the ML110 G2, ML110 G3, and ML150 G2, running **Red Hat Enterprise Linux 3 Update 4 or 5**, fail to boot after OBDR completes restoring.

Solution: To fix this problem:

- 1. Boot from CD1 of RHEL3
- 2. Type: linux rescue [ENTER]
- 3. Answer a few questions (English, US, No network interface, Continue)
- 4. At a shell prompt, type: chroot /mnt/sysimage
- 5. Then type: grub-install /dev/sda (Substitute /dev/sda with the first (bootable) drive. Use /dev/hda for an IDE drive.)
- 6. Remove the CD and reboot.

This problem can also be fixed by upgrading to Red Hat Enterprise Linux 3 Update 6

Problem:	Open Windows Management Instrumentation (WMI) files are not backed up which results in WMI being restored incorrectly. Some menu items are missing in the <i>Categories</i> pull down menu in the <i>Survey</i> tab of <i>HP</i> Insight Diagnostics
<u>Solution:</u>	 Windows Management Instrumentation can be recovered as follows: 1. That WMI Control Properties Dialog box allows users to backup/restore the WMI database through the Backup/Restore tab 2. Backup the WMI database, using the <i>Back Up Now</i> button, before creating the OBDR bootable tape
	 Create the OBDR bootable tape After OBDR has completed, restore the WMI database using the <i>Restore Now</i>
	5. Restart the WMI

6. The missing items from the *Categories* pull down menu in the *Survey* tab will be restored after the HP Insight Diagnostics page is launched





Symantec Backup Exec:

- <u>Problem:</u> If, during the restore process, Windows Text Mode Setup states there are no hard drives attached to your server, then Backup Exec did not successfully load the Controller Driver. Servers containing hardware that do not have an available "inbox" Microsoft driver will need to have the correct driver manually installed.
- Solution: Load the correct controller driver onto a floppy disk.

When the tape drive is booting, Windows will ask you to press <F6> to add drivers for hardware. Press <F6> and wait until you are prompted to insert your manufacturer's driver disk. Make sure that the driver being loaded is the correct one for the controller that your hard drives are attached to.

Note: This occurs very quickly after the blue Text Mode Setup screen appears after detecting existing hardware.

- <u>Problem:</u> You are asked for the Service Pack 3 CD during the OBDR restore process when using a DAT40x6 autoloader.
- <u>Solution:</u> Manually load the tape media into the drive via the front panel.



<u>Problem:</u> Following the first phase of an OBDR recovery, the requested reboot results in a blank screen. This is applicable only with Microsoft Windows 2000 operating system

Solution:	Deselect Let IDR automatically partition the boot and system drive
	(Windows 2000 only) when creating the IDR boot media (Figure 1).

Figure 1

elligent Disaster Recov	ery Preparation	Wizard		
Select Computers to P SCSI driver information	rotect n will be stored on t	he bootable image	í.	
Enter all compute (Windows NT4.0	r names from which only).	n SCSI driver inforr	nation will be gathe	red
system.	paters must be run	ning the same ver	Add	s operaung
\\JUPITER			Browse	
			<u>D</u> elete	
Let IDR auto	matically partition th	e boot and system	n drive (Windows 20	000 only).
	(Deek		Canad	Li ala
		<u>Next</u>		пер

There are currently no plans for Symantec to address this issue by way of a patch or hot fix in the current or previous versions of the Backup Exec. This issue may be resolved in a future major revision of the software





Computer Associates ARCserve / Brightstor:

- <u>Problem:</u> If, during the restore process, Windows Text Mode Setup states there are no hard drives attached to your server, then ARCserve did not successfully load Controller Drivers. Servers containing hardware that do not have an available "inbox" Microsoft driver will need to have the correct driver manually installed.
- Solution: Load the correct controller driver onto a floppy disk

When the tape drive is booting, Windows will ask you to press <F6> to add drivers for hardware. Press <F6> and wait until you are prompted to insert your manufacturer's driver disk. Make sure that the driver being loaded is the correct one for the controller that your hard drives are attached to.

Note: This occurs very quickly after the blue Text Mode Setup screen appears after detecting existing hardware.



HP Data Protector



Yosemite TapeWare:

Problem:	A Blue Screen Error may occur when performing a disaster recovery using TapeWare version 7.0 SP2C or earlier. This error will only be seen on servers with Hot Plug PCI slots and running Windows Server 2003.
Solution:	Install Service Pack 7D to correct this problem. This Service Pack can be found at: <u>www.yosemitetech.com/support/packs/</u>
Problem:	Performing an OBDR restore using TapeWare7.0 on Linux Red Hat Advanced Server 2.1 with a DAT72x6 autoloader may not complete after the first reboot.
Solution:	Manually load the tape into the drive via the front panel of the Autoloader.
Problem:	In the unlikely event that a slotted PCI U320 and a slotted PCI U160 are in the same system, you may receive a message during the OBDR restore process: "No SCSI/ATAPI devices were available to boot from.
Solution:	Temporarily remove the slotted U160 controller. Reinstall after the restore is complete.
Problem:	After performing a Windows based OBDR restore, you received an error message stating that one of more services will not start.
Solution:	At the RUN prompt type > MSDTC – resetlog



HP Data Protector



- <u>Problem:</u> At the beginning of the OBDR restore process, you receive the following error message: **Can't load BDOS kernel file: C:\IBMDOS.COM System halted.**
- <u>Solution</u>: TapeWare does not support OBDR in a mixed controller environment (i.e. U160 and U320 SCSI controllers in the same server or 2 SCSI controllers from different vendors in the same server.)

A potential workaround is to remove one of the SCSI controllers prior to initiating the OBDR restore process. You may install the removed controller after the OBDR restore process has been completed.

- <u>Problem:</u> OBDR does not work on a ML330 G3 server with the tape drive connected to an U320 HBA controller when using TapeWare 7.0.
- Solution: There is a compatibility problem between the embedded BIOS on the ML330 G3 server and the BIOS on the U320 HBA controller. You must use Symantec Backup Exec or CA ARCserve 11.5 for Windows 2000 or Windows Server 2003. You can also use HP Data Protector for Windows 2000.





HP Data Protector:

<u>Problem:</u>	When performing a disaster recovery with DP5.1 and a DAT autoloader, automatic remount of the tape after the safe mode stage may not occur. The system may hang in the safe mode after the prompt: "Press any key to exit DR mode". This occurs because the boot tape media was not automatically mounted into the drive. Therefore, disaster recovery has no tape media to read from.
<u>Solution:</u>	Manually mount the tape from the front panel of the autoloader. Reboot. The disaster recover will now finish.
Problem:	Data Protector currently does not support OBDR with Windows Server 2003
Solution:	Future support is not planned at the present time. You may use HP Data Protector Express (DPX), Symantec Backup Exec or CA ARCserve for OBDR support with Windows Server 2003.

