IBM 4560-SLX Tape Library



# **Pulling all tape drive and 4560 logs**

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## **1** Introduction

This document describes on how to pull dump logs from the 4560-SLX library and all installed tape drives. This document is discussing log pulling from a Microsoft<sup>®</sup> Windows<sup>®</sup> based host computer to which the library is attached to.

## 2 When to pull logs

- Library logs have to be pulled at the point of failure as else vital information is lost
- Tape drive logs should be pulled as soon as the operation completes after the failure has occurred

This means that in any case the failure has to be reproduced in order to obtain useful logs that can be analysed.

# 3 Tape drive logs

This section describes very briefly what tool to use for pulling drive logs. Where necessary, tape drive serial numbers or file names containing tape drive serial numbers have been anonymised.

The IBM 4560-SLX can accommodate these tape drives:

- LTO Gen 1
- LTO Gen 2
- SDLT320
- SDLT600

#### 3.1 LTO Gen 1 (Ultrium TD1) logs

The logs for the LTO Gen 1 drive sled has to be pulled with the LTT tool which is available via the System x support document <u>MIGR-5074168</u>.

- **Note:** Depending on the backup application in use, it may be necessary to stop and / or disable the associated Windows services in order to complete the tape drive log pulling successfully. For more information review the backup application User Guide or contact the relevant software support.
  - Install the LTT tool from the System x support document <u>MIGR-5074168</u>
     Note: For Windows NT 4.0 with Service Pack 6 or a higher Windows version the ASPI layer software does not need to be installed.

2. Once the installation is complete, launch the LTT software either via its desktop icon "HP StorageWorks Library and Tape Tools" or via the menu "Start / Programs / HP StorageWorks Library and Tape Tools / HP L&TT"

	*	Windows Update			
e in		Programs	•	Accessories	
		Documents	•	Outlook Express	
ervel	5	Settings	,	HP StorageWorks Library and Tape Tools	eck
S S		Search	•]	🗒 HP L&TT Readme	
20	2	Help		MP L&TT Report Viewer	
N S	<u>.</u>	Run		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Wind	Ì	Shut Down			
1	Start	🛃 🥭 🗊			

3. In the following window run the software with its default values as shown below by clicking on "Continue"

np L&TT - Startup								
6	hp StorageWorks library and tape tools - Version 4.5 SR1 CAUTION: Running this application while other software is accessing the storage devices can cause unpredictable results and adversely affect the operation of the storage software.							
	Please stop ar application.	ny storage applications before	e continuing, or exit this					
- 1/0 Option Select the on 'Help' then LTT	s e Scan mode and I/( for more information. will be able to make	) mode. Use the default I/O mode unles Note that ASPI is not supported on Wir use of it.	ss you experience problems. Click Idows 2003 but if already installed					
-Scan I	Mode Hardware Scan	C Saved/Manual Scan						
-1/0 M	ode NT Miniport	C ASPI	Help					
Skip this	dialog in the future	Continu	Le Exit now					

4. Once the software has completed scanning for hardware devices, select the tape drive from the left side



5. Wait until the software shows the "Drive Information", then click on the "Support" icon on the top of the menu



6. In the "Support Ticket" window click on "Extract Device Data"

စြာhp StorageWorks library and tape tools - 4.5 SR1		
File View Function Options Utilities Help		
Identity Firmware Health Test	Xiling         Image: Support         Image: Support<	
Scan By Product By Connection Instructions	Support Ticket	
Support Ticket	Generate Support Tickets from Device	
The support ticket is a detailed log of information for your storage product. The information provided by the support ticket can be used to diagnose problems and may be requested by HP support personnel.	Extract Device Data	
To generate a support ticket, you first need to extract the device data. After extracting the device data for the first time you will have the option to refresh the data. It is advised that you refresh this data only when needed (Hint: Refresh the device data if, between two support tickets, you ran a test or loaded/unloaded a cartridge	Save Support Ticket Send Support Ticket by Email	
from the device).	Support Resources on the Web:	
After a support ticket is generated, you can:	Media Supplies: http://www.hp.com/go/storagemedia	
<ul> <li>View it.</li> <li>Save it.</li> <li>Send it via email to an HP support provider.</li> </ul>	HP Library & Tape Tools: http://www.hp.com/support/tapetools	:
The support ticket can be exported to HTML format so	Performance Troubleshooting: http://www.hp.com/support/pat	
that it can be easily shared, viewed, and printed by others.	HP Services & Support: http://www.hp.com/go/support	
For further information, see the L&TT user guide or online help.		

**Note:** The "Extract Device Data" button is available the first time a ticket is pulled from a specific drive. If a new ticket is to be pulled click on the button "Refresh Device Data"

7. Click on the "Save Support Ticket"

⊚hp StorageWorks library and tape tools - 4.5 SR	1 📃	×
File View Function Options Utilities Help		
Identity Firmware Health Test	Xillity         Support         Frontpanel         Dev Perf         Sys Perf         Troubleshoot         Help	
Scan By Product By Connection Instructions	Support Ticket	
Support Ticket	Generate Support Tickets from Device	
The support ticket is a detailed log of information for your storage product. The information provided by the support ticket can be used to diagnose problems and may be requested by HP support personnel.	Refresh Device Data View Support Ticket	
To generate a support ticket, you first need to extract the device data. After extracting the device data for the first time you will have the option to refresh the data. It is advised that you refresh this data only when needed (Hint. Refresh the device data if, between two support lickets, you ren a test or loaded fundanded a cartifictor	Save Support Ticket	
from the device).	Support Resources on the Web:	_
After a support ticket is generated, you can:	Media Supplies: http://www.hp.com/go/storagemedia	
<ul> <li>View it.</li> <li>Save it.</li> <li>Send it via email to an HP support provider.</li> </ul>	HP Library & Tape Tools: http://www.hp.com/support/tapetools	
The support ticket can be exported to HTML format so	Performance Troubleshooting: http://www.hp.com/support/pat	
inat it can be easily shared, viewed, and printed by others.	HP Services & Support: http://www.hp.com/go/support	
For further information, see the L&TT user guide or online help.		•

8. Answer the following question with respect that the tape drive is part of a library with "Yes"

File View Function Options Utilities Help Identity Firmware Health Test	Utility Support Frontpanel Dev Perf Sys Perf Troubleshoot He	
Scan         By Product         By Connection         Instructions           Support Ticket	Support Ticket   Generate Support Tickets from Device	
Support ticket can be used to may be requested by HP supp To generate a support ticket, the device data. After extract first time you will have the opt is advised that you refresh th (Hint: Refresh the device data tickets, you ran a test or loade from the device).	rt of a library. Generating a Support Ticket through the library's Support is the preferred method for this drive. ne library in the device map to switch to the library's Support Ticket continue?	
After a support ticket is generated, you can. <ul> <li>View it.</li> <li>Save it.</li> <li>Send it via email to an HP support provider.</li> </ul>	Media Supplies: http://www.hp.com/go/storagemedia HP Library & Tape Tools: http://www.hp.com/support/tapetools	
The support ticket can be exported to HTML format so that it can be easily shared, viewed, and printed by others.	Performance Troubleshooting:         http://www.hp.com/support/pat           HP Services & Support:         http://www.hp.com/go/support	
For further information, see the L&TT user guide or online help.		
ave now the dump file	2   x	

Save Ticket in	n File	? ×
Save in: 🔂	🖬 🛨 🛨 🔽	•
, File name:	et 20080902 113507 ((((((0)))))) (a)	ave
r lie Hame.		1VC
Save as type:	L&TT SupportTicket Files (*.lzt)	ncel

9.

10. All dump files are stored in the LTT installation directory in the logs sub directory



11. Submit all log file(s) to the IBM technical support for review

# 3.2 LTO Gen 2 ( Ultrium TD2 ) logs

The logs for the LTO Gen 2 drive sled has to be pulled with the with the ITDT tool which is available via the ftp site <u>ftp://ftp.software.ibm.com/storage/ITDT/Current</u>.

- **Notes:** 1. Depending on the backup application in use, it may be necessary to stop and / or disable the associated Windows services in order to complete the tape drive log pulling successfully. For more information review the backup application User Guide or contact the relevant software support.
  - 2. The preferred tool is the non-graphical version. This tool will be discussed in this section. The graphical version ( GE version ) requires Java Runtime Environment to be installed on the Windows computer.
  - If the ITDT tool does not show the tape drives in the library and the IBM LTO Windows device drivers are installed, then follow the instructions per Retain tip <u>H195744</u> per support document <u>MIGR-5081290</u>.
  - 1. Unpack the itdtinst file into an empty directory, e.g. C:\itdt
  - 2. When running the software the first time, read through the License Agreement and accept it

3. Enter **S** for in order to scan for tape drives and press the [ENTER] key

```
IBM Tape Diagnostic Tool Standard Edition - V2.0.0 Build 006
Entry Menu
[S] Scan for tape drives
[H] Help
[Q] Quit program
Notes:
- During a test, user data on the cartridge will be erased!
- Make sure no other program is accessing the devices used by ITDT!
- A device scan may take several minutes in some cases!
- Q + Enter will always close this program.
- H + Enter will display a Help page.
```

- <[H] Help | [Q] Quit | Command > S\_
- 4. Once the scan is complete, select the tape drive from the list by entering its number for example 0 pressing the [ENTER] key

<b>Note:</b> The tool allows to select only one device at any t	ime	
---	-----	--

II	BM Tap	pe Di	agnost.	ic To	ol Standard E	dition - Devi	ce List	
	Host	Bus	ID	LUN	Mode 1	Serial	Ucode	Changer [#]
0 1 2 3 4 5 6 7 8 9 10 1	5 5 5	0 0 0	1 2 6	0 0	ULTRIUM-TD2 ULTRIUM-TD2 4560SLX	B2462301040	53Y2 53Y2 0429	B2462301040 B2462301040
+	+		+	++		-+	+	++-+
[S] So [E] Er	can hcrypt	ion	CT CW	Test   Full	[D] Write [U]	Dump Tape Usage	[F] Fir [I] Manu	mware Update ual Inspect

5. An **X** will appear in the furthest right column. Now enter **D** for pulling a tape drive log and press the [ENTER] key

Note: ITDT v1.x tool calls these dumps "Firmware Dump"

	IBM Tape Diagnostic Tool Standard Edition – Device List								
	.Ho	st <sub>.</sub> Bu	s ID	LUN	Model	Serial	Ucode	Changer [#	
0 1 2 3 4 5 6 7 8 9 1 1	0 1		126	0 0	ULTRIUM-TD ULTRIUM-TD 4560SLX	2 2 B24623	53¥2 53¥2 301040 0429	B2462301040 X B2462301040	
	Scan			[] Test		] Dump	[F] Fir	mware Update	
<[H]	Help	61 ¦ مەربىلە	l Quit	Line	#   Comman	l lape Usaq d > D_	je II nan	ual inspect	

- 6. Wait until the tool has completed pulling the dump files. The dumps are stored in the output directory
- 7. Quit the ITDT tool by entering **Q** and pressing the [ENTER ] key

Model:	ULTRIUM-TD2	Serial No:
Host:	++ ++ ! 5   ID:   1	Microcode:   53¥2
Bus :	0   LUN: 0	Changer: 2B2462301040
Files:	.a.gz b.gz	+ Two dump files were generated   .a.gz - before "Force Dump"   .b.gz - after "Force Dump" +
Log:	+ ¦blz	+ +   Status:   PASSED

- <[H] Help | [Q] Quit | Command > Q\_
- 8. Submit all files from the output directory to the IBM technical support team for review and delete them afterwards

🔁 C:\itdt\output	
File Edit View Favorites Tool:	s Help
🔄 Back 👻 🤿 👻 🔂 🎯 Search	Pa Folders 🛞 🖺 🕾 🗙 ᡢ 🗐 🎟 •
Address 🗀 C:\itdt\output	<b>_</b>
output	metro.log
Select an item to view its description.	

#### 3.3 SDLT320 and SDLT600 logs

The logs for the SDLT320 and the SDLT600 tape drive sled has to be pulled with the xTalk tool which is available via the System x support document <u>MIGR-5073759</u>

- **Note:** Depending on the backup application in use, it may be necessary to stop and / or disable the associated Windows services in order to complete the tape drive log pulling successfully. For more information review the backup application User Guide or contact the relevant software support.
  - 1. Install the xTalk tool from MIGR-5073759

2. Launch it via the "Start / Programs / Quantum / xTalk Management Console"



3. Once xTalk has been launched it shows all tape drives it can find



4. Select the tape drive for which a log has to be pulled

5. Click in the "2. Select a Test/Task" window on "Display\_Drive\_Information", and click on "Run"

File Edit View Tests Co	mmands Help	
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Save Rescan Inqui	rv Ready MAM FA Data Trace Abort	Run
1. Select a Device	2 Select a Test/Task	3 Click Bu
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SDLT600	Load_Tape	
	Ouick Write Read	
	SCSI_Interconnect	
	Small_Buffer_Write_Read	
	System_Level	
	Timed_Performance	
	Write_Read_FullTape	
	Write_Read_MediumTest	
	Collect_Failure_Analysis_Data	
	Display_All_Log_Pages	
	Display_Drive_Information	
Then select "Display I	<b>Log Page 7 Data</b> ", and click on " <b>Run</b> "	•
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Talk Management Cor File Edit View Tests Co	mmands Help	
Image: State	nsole mmands Help	
File Edit View Tests Co	mmands Help	Run N
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*Talk Management Cor         File       Edit       View       Tests       Cor         Save       Rescan       Inquir         Save       Rescan       Inquir         1. Select a Device       Model       Serial Nun         SDLT320       SDLT600	nmands Help  Ready MAM FA Data Trace Abort  Select a Test/Task  Drop_Out_Screen Load_Tape	Run 3. Click 'f Ru
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7. Once all information has been collected, save the output by clicking on the "Save" button

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<u>F</u> ile	<u>E</u> dit	⊻iew	<u>T</u> ests	⊆ommar
Sav	ve z	Resc	an I	nquiry
-1 <u>5a</u>	ver ciect	a Devic	e :	
Mod	el		Serial	Number
<b>1</b>	DLT32	20		

8. Enter a meaningful file name and select a location for saving the log file

Save xTalk Lo	og File	? X
Save jn: [	My Documents 💽 🕝 🏂 📂 🖽	-
File <u>n</u> ame:	sdlt320_log_page_7	ive
Save as <u>t</u> ype:	Log Files (*.txt)	ncel

9. Submit the log file(s) to the IBM technical support for review

#### 4 4560-SLX Library Logs

This section discusses how to pull 4560-SLX Library Logs. These logs are different from the ones that are to be pulled from the Fibre Channel card. For details on how to pull the Fibre Channel logs refer to chapter <u>5 4560-SLX Fibre Channel Option Logs</u>.

#### 4.1 Pulling logs with the Neocenter software

The Neocenter software only runs in a Windows environment. It requires that the host computer is equipped with a physical RS-232 DB-9 serial port.

Download and install the latest IBM 4560 SLX Windows Utility (Neocenter software) from the IBM System x support document <u>MIGR-5080918</u>.

1. Install the Neocenter software

2. Attach the RS-232 to RJ11 communication cable (FRU 24P7355) to the host computer on which the Neocenter software has been installed



3. Attach the RJ-11 connector of the RS-232 to RJ11 communication cable to the RS-232 port of the Library Controller Card



4. Launch the Neocenter software



5. Click on the Connect menu item, select the correct physical serial port, and click on the OK button

Ountitled - NeoCent	ter							_ 🗆 🗙
File View Connect	Upload	Download	Configure	Info	Diag	Post-Process	Partitioning	Help
	Se	erial Port S	Gettings					
		Port	ē 💌			ОК		<u> </u>
		Baud	Auto 💌			Cancel		
		Data	8 💌					
		Parity	None 💌					
		Stop Bits	<b>1 v</b>					
Ready			1	Vot Co	nnecte	4		

6. The connection can be verified by clicking on the Info menu item. This will show some basic library information



- 7. Click on the Upload menu item
- 8. In the following dialogue box click on the button left to "Special Trace"
- 9. In the "Binary File" field enter the location and name of the log file. For example, C:\Program Files\NeoCenter\4560\_special.bin

Upload Data From Library	×
Type C System Trace Non-Volatile Trace Special Trace C Servo Trace	Select Module Master Slave Partition Number:
Binary File: eoCenter\456	60_special.bin Browse
Database File:	Browse
Post-Processed File:	Browse
🔲 Display Post-Processed File	
ОК	Cancel

- 10. Click on the OK button
- 11. Wait until the software has completed uploading the log

12. Once the log has been uploaded click on the OK button confirming that the upload is complete

-	1										
QU	ntitled	l - NeoCer	nter							_ [	IJ×
File	View	Connect	Upload	Download	Configure	Info	Diag	Post-Process	Partitioning	Help	
D											
				Upla				×			
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					0	К					
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Read	ly 🛛				l	Jploadi	ng Dat	а	COM2	115200	٤ //

13. Close the Neocenter software and open the directory into which the binary file has been stored



14. Make the binary file available to the IBM technical support team

#### 4.2 Pulling the logs via the the web interface

In order to pull the logs the following is required:

- An up-to-date web browser
- JRE (Java Runtime Environment) v5 (a.k.a. v1.5) or higher
- An Ethernet connection to the Library controller card
- The level 2 access password, which per default is the digit 2
- 1. Open up the web browser and point it to the 4560-SLX IP address

2. Once there enter the level 2 password, which per default is the digit 2

🥹 Mozilla Firefox	<u>- 🗆 ×</u>
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp	0
~      ~	
🏶 Getting Started 🔂 Latest Headlines	
Login to the Web TLC	<u> </u>
<ul> <li>Check to prevent other users from initiating any "Level 2" operations with the Library for the duration of your session.</li> <li>Check to disable frames.</li> </ul>	
Enter a Password: *	
Login	
Applet Login started	

3. Click on the top menu list on the entry History, scroll down until the area titled "Download a Binary File…", is displayed

4. Download the Library Special trace file (363712 bytes)



- 5. Once saved, open up the directory into which the binary file has been saved
- 6. Make the binary file available to the IBM technical support team

# 5 4560-SLX Fibre Channel Option Logs

The pulling of the Fibre Channel Option Logs ( in short FCO logs ) can either be done via the cards serial port or via the LAN. It is required that the terminal program can capture the displayed text in a text file.

**Note:** In order to pull the Fibre Channel Option Card (FCO) logs, the FCO must be installed in the library:



## 5.1 FCO ports



The port highlighted in green is the 10/100 Ethernet port The port highlighted in blue is the RS-232 port

#### 5.2 Pulling FCO logs via serial port

Requirements

- The host computer must be equipped with a physical RS-232 DB-9 port
- The RS-232 to RJ11 communication cable (FRU 24P7355)



• A Terminal program that allows for capturing text output, e.g. Windows HyperTerminal

**Note:** The port settings for pulling the logs via the serial port are as follows:

- bits per second 115,200
- Data bits 8
- Stop bit 1
- Parity None
- Flow control None

#### 5.3 Pulling FCO logs via Ethernet

In order to pull the FCO logs successfully via Ethernet the connection to the FCO adapter must be established by using the telnet protocol. The default telnet password is password

**Note:** The factory default IPv4 address of the FCO card is:

10.0.0.1 and subnet mask 255.255.255.0

This address will only work, if it has not been changed. If it has been changed then use the current IPv4 address and subnet mask.

If the changed IPv4 address is unknown, then pull the logs via the FCO card's serial port.

#### 5.4 Pulling the FCO logs

**Note:** The port settings for pulling the logs via the serial port are as follows:

- bits per second 115,200
- Data bits 8
- Stop bit 1
- Parity None
- Flow control None
- 1. Connect to the 4560-SLX library either via the serial port or LAN. The default Telnet password is password
- 2. If no menu is displayed press the [ENTER] key once so that the main menu is displayed



- 3. Select the menu entry Utilities Menu
- 4. In the Utilities Menu select the entry Debug Log Enable

OVERLAND FC-to-SCSI Router Administrator					
System Menu D Utilities Menu A Hardware Information C Debug Log Enable U Ev Shutdown/Restart					
Menu Selection Help Used for debug only. Use Enter key or Select button to toggle each option, and save the changes.					
Note: The debug information shows up in Debug Log window. Turn off all options in normal operation as it may impact performance.					
Board Temp: 97°F ( 36°C) Thu Jan 01 01:33:48 1970					

5. Set all shown entries to Yes

OVERLAND FC       Debug Log Enable Save Changes       istrator         In       YES         Out       YES         Wem       YES         ExtCopy       YES         ExtCopy1       YES         FC       YES         FCa       YES         FCb       YES         FCb       YES         FCb       YES         FCb       YES         Misc1       YES         Misc2       YES
Menu Selection Help Used for debug only. Use Enter key or Select button to toggle each option, and save the changes.
Note: The debug information shows up in Debug Log window. Turn off all options in normal operation as it may impact performance.
Board Temp: 95°F ( 35°C) Thu Jan 01 01:34:06 1970

- 6. Press the [ ESC ] button and confirm by selecting Yes and pressing the [ ENTER ] key, that the debugging is to be enabled
- 7. Press the [ ESC ] button once the card has confirmed that the configuration has been changed

OVERLAND FC-to-SCSI Router Administrator						
System Menu D Utilities Menu A Hardware Information C Debug Log Enable CONFIG DONE						
Menu Selection Help Used for debug only. Use Enter key or Select button to toggle each option, and save the changes.						
Note: The debug information shows up in Debug Log window. Turn off all options in normal operation as it may impact performance.						
Board Temp: 95°F ( 35°C) Thu Jan 01 01:34:13 1970						

- 8. If not returned to the main menu press the [ESC] button until it is displayed
- 9. Reproduce the failure

10. Configure the terminal program now such, that it captures all text displayed. In the Windows HyperTerminal tool this is done by selecting the menu Transfer / Capture Text...

V 1		<u>^</u>
🍓 4560 FCO - HyperTerminal		
File Edit View Call Transfer Help		
🗅 🚘 👩 🔏 💼 🎦 🛛 Send File		
Receive File		
Capture Text		
Send Text File <sup>N</sup>	to-SCSI Router Administrator	
Capture to Printer		
	Display Devices Address Mapping Configuration Menu Utilities Menu Event Log Menu Shutdown/Restart	
System utilities.	-Menu Selection Help	
Board Temp: 95°F ( 35°C)	Thu Ja	an 01 01:34:31 1970
Creates a file of all incoming text		

- 11. In the pop-up window select enter the target drive, directory, and file name as appropriate and then click on the "Start" button
- 12. Now press the key combination [ CTRL+E ]
- 13. This switches over to the "OVERLAND FC-to-SCSI Router Administrator"

· · · · · · · · · · · · · · · · · · ·						
	OVERLAND FC-to-	-SCSI Ro	outer Ac	lmir	nistrator	
01/01 01:16:49	CONFIG CHANGED	Reason	Code:	15	SegNum:	1
01/01 01:16:49	CNTLR PARAMS SET					
01/01 01:16:50	CONFIG CHANGED	Reason	Code:	47	SeqNum:	2
01/01 01:17:38	ROUTER SHUTDOWN					
01/01 01:22:54	POWER UP					
01/01 01:23:04	FW UPDATE DONE	QD11est	1	4.5	1521R01	
01/01 01:23:10	CONFIG CHANGED	Reason	Code:	15	SeqNum:	1
01/01 01:23:10	CNIER PHRHMS SET	<b>D</b>	<b>.</b> .		o 11	0
01/01 01:23:10	CUNFIG CHHNGED	Reason	Code:	47	SeqNum:	2
	CUNFIG CHHNGED	Reason	Code:	12	SeqNum:	3
	CNILK PHKHMS SEI	D	e	10	e	,
01/01 $01:32:0101/01$ $01:22:01$	CUNFIC CHHNGED	Keason	code:	19	Seqnum:	4
01/01 $01.32.0101/01$ $01.32.30$	CONETC CHONCED	Daacan	Codo	15	Soallum	5
01/01 01.32.39		neason	coue.	тJ	Sequum.	J
01/01 $01.32.37$	CONETS CHONSED	Roason	Codo	15	SociNum	6
01/01 $01.34.1201/01$ $01.34.12$	CNTLR PARAMS SET	neuson	coue.	10	Jeqnum.	0
01701 01.04.12						
Event Log: Use	up/down a <del>rr</del> ows, F	Page <mark>U</mark> p,	PageDow	ın,	End, Home,	Dump, ESC
Board Temp: 95°	F ( 35°C)				Thu Ja	01 01:35:17 1970
bour d'remp. 50					rna va	1 01 01.00.11 1/10

14. Press the key [ p ], this will collect the first set of logs

15. Press the [ESC] key and then in the next window the key [p]



16. Press the [ESC] key and then in the next window the key [p]

		o-SCST Routor Odministrator	
Firmware revision:	ODITest1	LAN Connection:	Installed
Board revision:	R	LAN Firmware Revision	υp u2 β
CPLD revision:	00A1	LAN Firmware Version:	M200R01
Loader revision:	7.010	LAN Firmware Build Time:	Jun 15 2001 16:37
Serial Number:	00501300218H	Ethernet Physical Hddress:	00-50-13-00-21-8a
Backnlane Tune ID:	7	Default TP Address:	
Controller ID:	A Primary	Subnet Mask:	255.255.255.000
Data Memory:	64 MB	Default Mask:	255.255.255.000
Butter SDRHM ECC:	Un	Gateway:	
VCC:	5.11 V	FTP Firmware Unload	Enabled
2.5V(Å):	2.49 V	Telnet timeout:	0 minutes
2.5V(B):	2.49 V	SNMP_Traps:	Disabled
BUFFER:	3.29 V	SNMP Event Filter:	
UN_DUHRD TEMF.	JU U	SNMF Trap Filter.	WHRN
HW Info: Use up	o/down a <del>rr</del> ows,	PageUp, PageDown, End, Home,	Dump, ESC
Board Temp: 97°F (	(36°C)	Thu Jar	n 01 01:35:33 1970

	OVERLAND FC-to-SCSI Router Ad	dministrator		
HOST	Active Port FC Speed: 16b/s Curr	rent = 16b/s		
	GBIC Receive Status: No signal			
	Node WWN = 100000501300218Å			
	Loon TD: SNET Thactive			
	FC Addr = none AL_PA = none			
CHON 0	Router LUN: SOFT Current = 2			
CHHN 0	Bus Speed: 160			
011011 4	Domain Validation:Enabled			
CHHN I	Initiator IV: 7 Bus Speed: 160			
	Domain Validation:Enabled			
ROUTER	Scan Delay: 0 ExtCopy: ENABLED			
CAPI	Version = 3.2			
CFG I	CFG Info: Use up/down arrows, PageUp, PageDown, End, Home, Dump, ESC			
Board T	Temp: 95°F ( 35°C)	Thu Jan 01 01:35:40 1970		

17. Press the [ESC] key and then in the next window the key [p]

- 18. Press the [ ESC ] key. When back in the main menu, stop any text capturing. In HyperTerminal this is done via its menu Transfer / Capture Text / Stop
- 19. In the FCO main menu select the Utilities Menu and press [ENTER]
- 20. Select the menu entry Debug Log Enable and press [ENTER]
- 21. Change all settings back to No

OVERLAND FC       Debug Log Enable Save Changes       istrator         In       N0       N0         Out       N0         Hem       N0         ExtCopy       N0         FC       N0         FC       N0         FC       N0         FC       N0         FC       N0         FC       N0         Misc       N0         Misc1       N0         Wisc2       N0         Vised for debug only.       Use Enter key or Select button to toggle each option, and save the changes.         Note: The debug information shows up in Debug Log window.         Turn off all options in pormal operation as it may impact performance
Board Temp: 95°F ( 35°C) Thu Jan 01 01:36:12 1970

- 22. Press [ ESC ] and confirm that the changes are to be saved
- 23. Once the configuration has been changed press the [ESC] button again
- 24. Close the connection to the 4560-SLX FCO adapter
- 25. Make the 4560-SLX FCO log file available to the IBM technical support team

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