

Step 1: Check These Resources

LEDs on the hardware components

Perform visual inspection, noting any alarms, LEDs, and any other abnormal condition indicators.



Status on the DXi GUI

Note error conditions, including low space and dedup backlog.

Alerts

Note alerts and service tickets.

Admin Alerts are generated when the condition of the system has changed, such as going from the offline state to the online state.

Alert	Last Update	
<input type="checkbox"/> HardwareMonitor	Fri Sep 21 2012 - 12:03:46 MDT	The E
<input type="checkbox"/> NetworkConfiguration	Fri Sep 21 2012 - 08:08:12 MDT	WARN
<input type="checkbox"/> Replication	Fri Sep 21 2012 - 12:07:42 MDT	Syste
<input type="checkbox"/> SystemReboot	Fri Sep 21 2012 - 07:08:17 MDT	WARN
<input type="checkbox"/> SystemShutdown	Fri Sep 21 2012 - 11:03:01 MDT	WARN

Service Tickets are generated when an event is detected and the system determines that it needs attention.

Ticket	Request ID	State	Priority	Last Update
1	1026502338	open	high	Fri Sep 21 2012 - 11:22:08

WARNING: Never edit any log file with vi on the system. Large files such as the tsunami.log may consume all the swap memory and crash the system. Instead, use the less command to review log files on DXi systems.

Step 2: Collect Support Data

The technical support team uses the following support data to troubleshoot problems:

- DXi System and Storage Array Logs
- Dell System E-Support Tool (DSET) Report (page 2)
- DXi Advanced Reporting Logs (page 2)

DXi System and Storage Array Logs

There are two main types of files that contain log files:

- **System Diagnostics file:** Contains system logs. These are also called collect logs and are a main troubleshooting resource. Gather these logs at the start of all calls, and before and after doing hardware replacement / software adjustment.
- **Storage Array Diagnostics file:** Contains storage array logs. These are also collectively called **Storage Array Logs**.

Gather these logs at the start of all calls. You can collect system diagnostics files and storage array diagnostics files using these methods:

- DXi GUI
- Command Line
- DXi Service Menu (page 2)

DXi GUI

- Utilities > Diagnostics > System Diag File > Generate New or Download Current
- Utilities > Diagnostics > Storage Array Diag File > Generate New or Download Current

Command Line

1. ssh to the DXi system.
2. Log in as root.
3. To gather logs, enter the appropriate command:
 - System logs (all DXi systems):
`/opt/DXi/scripts/collect`
 - Storage array logs (DXi6802, DXi6900, DXi6902, DXi7500 and DXi8500 – LSI and Dell Hx00 RAID cards and metadata module):
`/opt/DXi/scripts/LSI/LSIcollect`
 - Storage array logs (DXi6802, DXi6900, DXi6902, DXi8500 Dell Hx00 RAID cards and metadata module only):
`/opt/DXi/RAID/Hx00collect.sh`
 - Storage array logs (DXi6500 and DXi6700):
`/opt/DXi/3ware/3wcollect`
 - Storage array logs (DXi2500-D, DXi4500, DXi4600, DXi4700, DXi4701, DXi6802, DXi6900, and DXi6902):
`/opt/DXi/scripts/DELLcollect`

Notes:

- Collecting the logs can take anywhere from 20 minutes to 1 hour.
- Upon completion, the log location will be displayed on the command line console.
- FTP the file to Quantum: `ftp gps.quantum.com` (see page 2)

Step 2: Collect Support Data (continued)

DXi Service Menu

1. Log in as root, then ssh to the DXi system node and enter the following command:
`/opt/DXi/scripts/service.sh`
2. Select **More Tools**.
The **Service menu** is different for each DXi system. For example, for DXi6500 and DXi6700 systems:
 - To collect the system collect log, select System > Gather System information for Diagnostics.
 - To collect the storage array logs, select RAID Collect > Gather Array information for Diagnostics.

Dell System E-Support Tool (DSET) Report

The Dell System E-Support Tool (DSET) report is used to report hardware issues with Dell components. The DXi2500-D, DXi4500, DXi4600, DXi4700, DXi4701, DXi6802, DXi6900, DXi6902, and DXi8500 are the DXi products that use a Dell server node.

DXi GUI

- Select **Utilities > Diagnostics > DSET**. The DSET report is saved as a zip file.

Command Line

- Enter: `/opt/dell/dset/dellsysteminfo.sh`

DXi Advanced Reporting Logs

This tool combines comprehensive performance data logging with powerful visual reporting and analysis tools to help identify potential problems and optimize system operation.

DXi Advanced Reporting GUI

- Select the **DB Export** button (DXi Advanced Reporting 2.1 software and later)

Command Line

- For DXi Advanced Reporting version 1.x, from the command line, enter:
`/hurricane/statistics/dbexport`
- For DXi Advanced Reporting version 2.x, from the command line, enter: `/DART/dbexport`

Step 3: Transfer Files Using FTP

You need to upload the collect log, storage array log, DSET report, and dbexport file to Quantum's FTP site, to the directory that Tech Support created for you. The example below shows how to use the CLI to FTP files to Quantum. If you downloaded the log files to your laptop, you can also use an FTP client to transfer them to Quantum.

1. From the CLI, enter:
`lftp anonymous@gps.quantum.com`
2. In a browser, enter:
`ftp://gps.quantum.com/incoming/<directory>`

Username: **anonymous**
Password: **email address**

3. At the command prompt, enter:
 - a. `cd incoming`
 - a. `mkdir [service request number]`
 - b. `cd [service request number]`
 - c. `put [filename].zip`