

Step 1: Check These Resources

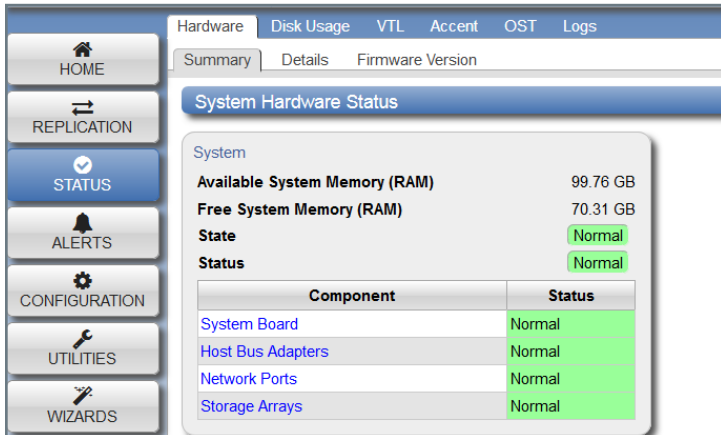
LEDs on the hardware components

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



Status on the DXi GUI

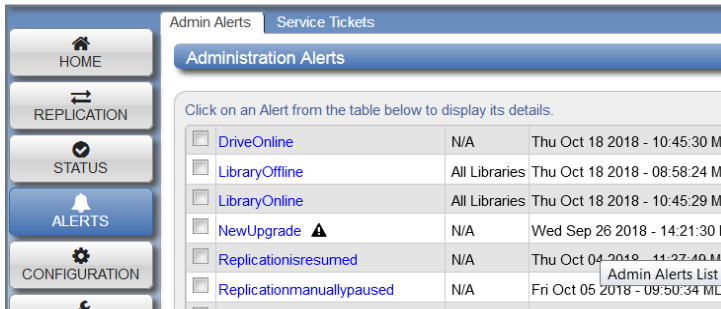
Note error conditions, including low space and dedup backlog.



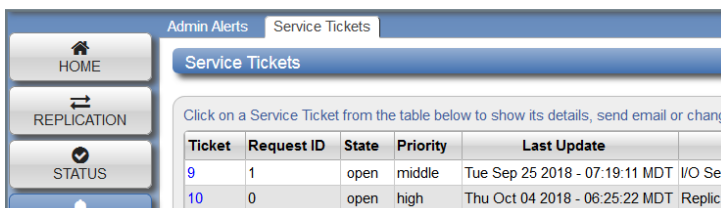
Alerts

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.



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



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:
 - DXi 3.1 and earlier systems, log in as **root**.
 - DXi 3.2 and later systems:
 - Login as **ServiceLogin** using the SSH/CLI Service password from the customer.
 - To get root-level access, enter: `sudo -i sh`
3. To gather logs, enter the appropriate command:
 - System logs (all DXi systems):
`/opt/DXi/scripts/collect`
 - Storage array logs (DXi6802, DXi6900, DXi6902, DXi8500, and DXi9000 – 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 (DXi6700):
`/opt/DXi/3ware/3wcollect`
 - Storage array logs (DXi4600, DXi4700, DXi4701, DXi4800, DXi6802, DXi6900, DXi6902, DXi9000):
`/opt/DXi/scripts/DELLcollect`

(Continued on page 2)

Step 2: Collect Support Data (continued)

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 (see Step 3)

DXi Service Menu

1. SSH to the DXi system.
2. Log in:
 - DXi 3.1 and earlier systems, log in as **root**.
 - DXi 3.2 and later systems:
 - Login as **ServiceLogin** using the SSH/CLI Service password from the customer.
 - To get root-level access, enter:
`sudo -i sh`
3. Enter:
`/opt/DXi/scripts/service.sh`
4. Select **More Tools**.
The **Service menu** is different for each DXi system. For example, for DXi9000 systems:
 - To collect the system collect log, select **Dell Collect**.
 - To collect the storage array (RBOD) logs, select **NetApp Collect**.

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 DXi4600, DXi4700, DXi4701, DXi4800, DXi6802, DXi6900, DXi6902, DXi8500, and DXi9000 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 at the bottom of the left menu.

Command Line

- Enter: `/DART/dbexport`

Step 3: Transfer Files Using FTP

Upload the collect log, storage array log, DSET report, and dbexport file to Quantum.

Non-Quantum Employees

Quantum Service Partners and Third Party Maintainers (TPMs) need to contact Quantum Technical Support for instructions on transferring files to Quantum. Quantum Technical Support will send an email with detailed instructions on how to upload the log files to a specific directory.

Quantum Employees

Quantum employees need to follow the instructions on one of the following websites to create a directory to transfer log files:

- **ftp** (for most customers): <http://srscratch/anon.html>
- **sftp** (for customers that require more security) <http://srscratch.quantum.com/CSFTP.html>

After following the instructions on one of the above websites, an email will be sent with detailed instructions on how to upload log files to the specific directory.