

DXi-Series Log Location and Description

(DXi4500, DXi4600, DXi4700, DXi4701, DXi6500, DXi6700, DXi6802, DXi6900, DXi6902, DXi7500, DXi8500)

With the DXi systems, there are two main types of log files:

- **System Logs:** contain information related to the DXi system.
- **Storage Array Logs:** contain information related to the storage arrays.

System Diagnostics File

DXi system logs are constantly updated and stored on the DXi system. You can access and review logs from the DXi system, or you can collect a snapshot of the system logs at a given point in time.

After the collect zip file is uncompressed, the system diagnostics file contains the following folders and files inside `scratch\collect\node1-collection`. The location on the system is also listed for your reference.

app-info

◦ /tsunami.log

(On system: `/var/log/DXi/tsunami.log`)

- Includes information about truncation, tape states, space reclamation, and firmware issues.
- Logs roll over when files reach about 200 MB. The older files are saved in separate files, for example `tsunami.log.x`.

◦ /tsunami_trace.log

(On system: `/var/log/DXi/tsunami_trace.log`)

- Includes different information, specifically for replication, deduplication, and space reclamation. Has rollover files.

◦ /srvcLog.hist

(On system: `/var/log/DXi/srvcLog.hist`)

- Includes a history of RAS ticket events, including the time stamp and event type.

◦ /service.log

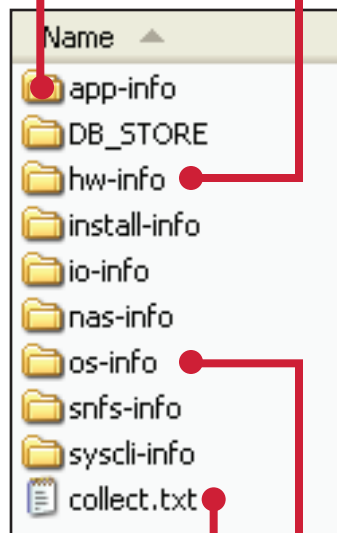
(On system: `/var/log/DXi/service.log`)

- Includes a log of all activities performed in the `service.sh` script.

◦ /healthcheck-missingtags

(On system: `/snfs/healthcheck/missingTags`)

- Includes a list of tags missing from the block pool.



hw-info

◦ /current.config

(On system: `/opt/DXi/hwdetect/current.config`)

- Is created on a system boot or reboot and includes the current configuration of the system.

◦ /factory.config

(On system: `/opt/DXi/hwdetect/factory.config`)

- Is the output from running a factory detect from `service.sh` and updates the factory config file.

◦ /changes.diff

(On system: `/opt/DXi/hwdetect/changes.diff`)

- Shows the differences between the `factory.config` file and the `current.config` file on a boot or reboot.

os-info

◦ os-info/messages

(On system: `/var/log/messages`)

- Includes information about the operating system and StorNext filesystem issues.

collect.txt (not saved on system)

Up to 5 logs are saved under `/scratch/collect`, but the last log created is the one that downloads.

- Includes high-level info of the system and its components, including the system serial number and host name, and the code version. This file is useful when quickly verifying the system's configuration.
- Lists the location of the logs being collected.

Note: The `collect.txt` lists the location of the system logs within the diagnostics file and on the DXi system.

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 a DXi system.

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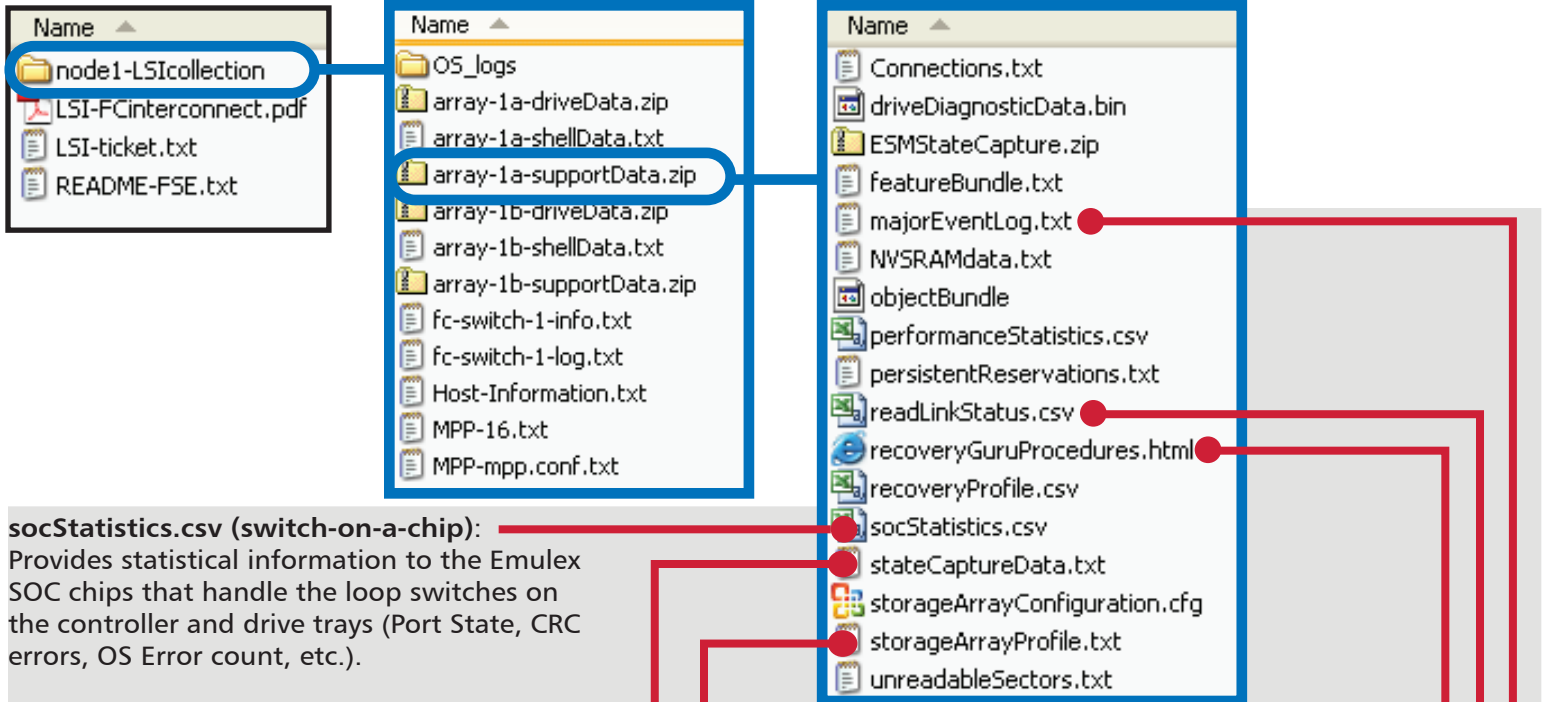
(DXi4500, DXi4600, DXi4700, DXi4701, DXi6500, DXi6700, DXi6802, DXi6900, DXi6902, DXi7500, DXi8500)

Storage Array Diagnostics File

You can collect a snapshot of the storage array logs at a given point in time.

Example for DXi7500 and DXi8500 LSI Arrays

Location: \LSIcollect-SerialNumber\node1-LSIcollection\array-1a-supportData.zip



socStatistics.csv (switch-on-a-chip):

Provides statistical information to the Emulex SOC chips that handle the loop switches on the controller and drive trays (Port State, CRC errors, OS Error count, etc.).

stateCaptureData.txt:

Provides the current state of the controller and drives. This log shows the output of a series of controller shell commands.

storageArrayProfile.txt:

Provides the current physical and logical configuration for the storage array.

recoveryGuruProcedures.html:

Lists detected storage array problems, possible causes, and possible solutions.

readLinkStatus.csv:

Lists diagnosed drive-side channel errors (ESM, SFP, Drives, Link Failures, Loss of sync or signal, Invalid CRC errors, etc.)

majorEventLog.txt:

Includes a detailed record of events occurring on the storage array.

The majority of cases will use these files from the support bundle while troubleshooting.

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