Knowledge Base Article: 000483583

Dell EMC Unity: How to gather Service Data from a Dell EMC Unity array (User Correctable) (000483583)

Primary Product : Dell EMC Unity Family

Product : Dell EMC Unity 300,Dell EMC Unity 300F,Dell EMC Unity 350F,Dell EMC Unity 380,Dell EMC Unity 380F,Dell EMC Unity 400,Dell EMC Unity 400F,Dell EMC Unity 450F,Dell EMC Unity 480,Dell EMC Unity 480F,Dell EMC Unity 500,Dell EMC Unity 500F

Version: 20 **Article Type:** How To **Audience:** Level 30 = Customers **Last Published:** Tue Nov 13 08:31:59 GMT 2018

Summary: This article describes how to gather Service Data (Unity logs), which contains the basic logs and configuration information needed for Dell EMC Support to diagnose most issues on the array.

Instructions:

There are a number of methods to gather Service Data files from a Dell EMC Unity array, which include:

Unisphere (recommended method)

1. Launch Unisphere by entering the SP management IP address and then login.
2. Under the System heading on the left-hand-side toolbar, select 'Service'.
3. The Overview screen will come up first. Select 'Service Tasks', which is located just under the blue EMC Unisphere bar at the top of the page.
4. The 'Collect Service Information' option should be selected by default, so ensure this is still highlighted and click on the nearest Execute button in the Storage System Pane (the correct Execute button should be the top one of the 3 Execute buttons on this screen).
5. The 'Collect Service Information' window should open, which has two options in the task-bar at the top, to generate new Service_Data and to download the Service data.
6. To generate new Service_Data, click on the **+** icon. It will take several minutes to generate the Service_Data file and the task will display the progress percentage. Once the Service data completes, a file save box will open up to select where the file should be downloaded to.
7. If an older Service Data file is needed, select the relevant file and then click on the download button (located above the 'Time Created' column).
   Note that the Service Data contains information from both SP, but the collection process is handled by whichever SP is acting as the Primary and it is from this SP that the file will be downloaded.
   The SP that is acting as the Primary is shown on the “Service Tasks” Unisphere page (as detailed above). Towards the bottom of the page, there is box for each SP, which lists the current status and mode. One of the two Storage Processors will be listed as: (Primary).

Unisphere CLI (UEMCLI)

The UEMCLI of at least the same software revision as the Unity array should be installed on the client computer.
To create a new Service Data file via UEMCLI, use the following command:
uemcli -d <*Unity management IP*> **-u service -p** <*service password*> **/service/system collect -serviceInfo**
It can take a while for all the necessary information to be pulled together into a single Service Data archived file, so leave at least 15 minutes before attempting to download it.
To download the most recent Service Data file via UEMCLI, to the current directory, use the following command:
uemcli -d <*Unity management IP*> **-u service -p** <*service password*> **-download serviceInfo**
Alternatively, to browse through the available Service_Data files and download specific files, the SSH download method can be used (see below).
Reference document on **support.emc.com**: Unity Family Unisphere CLI User Guide

Service Commands (svc_x commands)

To create a new Service_Data file via SSH:

Open a SSH tool (like PuTTy) and connect to Unity management IP.
Log in as the service user (i.e. username: ‘service’).

Run the command: **svc_dc**
Wait for the Service Data collection to complete, which can take over of 15 minutes.
The SSH session can then be closed.

To download Service_Data files via SSH File Transfer Protocol:

Use a third party tool, like FileZilla or WinSCP, to connect to Unity management IP (username: 'service').
Change remote directory to: **/EMC/backend/service/data_collection**
Copy the relevant Unity service_data tar file (or files), to the local computer.
The Service Data file should contain the latest Unity Performance Archive file (UPA), which has one whole hour of performance data (file suffix: .archive). To retrieve older UPA files, change remote directory to:
/EMC/backend/metricsluna1/archives/.
Reference document on **service.emc.com**: "Dell EMC Unity Family Service Commands"

Notes:

The Service_Data file has Block and File information for both SP (unlike SPcollect files on a VNX Series array).
Service data files have names in the following format, which contains the array model and serial number:

Unity_500_service_data_FNM00160100999_2016-03-31_23_59_59.tar

The filename also has the GMT/UTC date and time from when the Service Data collection process was triggered, listed in the format:

Year-Month-Day_Hour_Minute_Second.

The Service Data file contains the most recent UPA file (Unity Performance .Archive), which contains the most recent whole hour of archived statistics. The Unity array stores more performance information than that, but any additional UPA files will need to be gathered separately from the Service_Data. This should be done as soon as possible after an issue to avoid the files being overwritten. See article 491175.
UPA files look like: _default_20160623_080000.archive - the date (red) and time (in GMT) for the first data point (blue) in the archive. Collect the UPA files that cover the time of the problem.

For a recent one-off event, just the most recent Service_Data is normally needed, but for an ongoing problem, it can help to supply older files as well, such as the first Service_Data file after the issue began.

For VNXe series arrays, refer instead to the following article for Service_Data gathering: How to collect service data (logs) from the VNXe

Note: This article has been promoted as HVC on DELL EMC Community Network (DECN):
https://community.emc.com/docs/DOC-60047

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