

EMC² Knowledge Base Article

ControlCenter 5.2-SP5: Storage Agent for Symmetrix is crashing every 15-20 minutes

ARTICLE ID:	emc180635
PRODUCT:	EMC ControlCenter 5.2 Service Pack 5 (SP5)
PRODUCT:	EMC Solutions Enabler 6.4.2

Introduction

An issue has been observed in a ControlCenter 5.2-SP5 environment where the Storage Agent for Symmetrix (5.2.0.5.86) is crashing every 15-20 minutes even though the system has sufficient Symmetrix gatekeepers and they are assigned correctly. This issue was observed in a Symmetrix environment with Solutions Enabler 6.4.2, but could occur in other ControlCenter/Symmetrix environments.

Symptoms

The following conditions, events or system behaviors may be observed with this issue:

- ControlCenter **egsagent_fatal.log** file contains message similar to the following:

```
Thread 2304 (failed thread) :
Logical addr Function
0001:00049514 (storbase.dll) emcSymDevShow
Application Exception:
prD: 1464
Module: C:\ecc\exec\EGS520\egsagent.exe
When: Feb 19 2008 14:46:37
Exception code: C0000005 ACCESS VIOLATION
```

- Storage Agent for Symmetrix **egs.log** file contains message similar to the following:

```
EGS 14:29:12 C P D 4440 (40.46 ME -96.000000K) [SymmHandle: :SymmHandle] => _I
"Failed to
open
- SymAPI_db.bin file, will wait and retry.
EGS 14:46:37 C P F 2304 (46.83 ME 10400.000000K) [DoSymDevicesTask::Execute] =>
_I WARNING: The
- number of devices to be processed (2271) for Symmetrix=xxxxxx does not match the no.
of
- QOS records retrieved (2227).
EGS 14:46:37 C P F 2304 (46.83 MB) [DoSymDevicesTask::Execute] => _IProcessing 0 to
1000
of 2271
-. devices for Symmetrix=xxxxxxx.
SDK 14:46:37 SDK 1 P E 2304 (46.92 MB 92.000000K)
swrx_exceptionhandler::UnhandledExceptionFilter => F
atal exception occurred on this thread. Process is now terminating. Refer to file
- 'C:\ecc\exec\EGS520\egsagent_FATAL.LOG'
```

Cause

The Solutions Enabler **symapi_db.bin** file has been damaged and the ControlCenter Storage Agent for Symmetrix is unable to open it.

Instructions

To repair the Solutions Enabler **symapi_db.bin** and address this issue, do the following:

1. In the ControlCenter Console, check the **Agents** view to see which hosts have the Storage Agent for Symmetrix agents installed, and which host has the Primary Symmetrix Agent.
2. Stop all non-Primary Symmetrix Agents. To do this, right-click on each agent and select **Stop**. If there are no non-Primary Symmetrix agents for the Symmetrix, go to the next step.
3. On the host that has the Primary Symmetrix Agent installed, do the following:
 1. From the ControlCenter Console, right-click the Primary Symmetrix Agent and select **Stop** to stop the agent.
 2. From the command line, change to the **\bin** directory:

<drive>\Program Files\EMC\Symcli\bin

3. From the **\bin** directory, run a **syndg list** command to list the names of the Symmetrix device groups, and proceed as follows:
 - If no device groups are returned, rename the **symapi_db.bin** file to **symapi_db.bin.old**, and go to the last step of these instructions. The **symapi_db.bin** file is found in the following directory:
4. For each of the device groups found in the **syndg list** command output, run a **syndg export** command to export the device group to a flat file. The syntax for this command is as follows:

syndg export <device group name> -f <file name you want created>

5. Once all the Symmetrix device groups are exported to flat files, rename the **symapi_db.bin** file to **symapi_db.bin.old**. As mentioned above, the **symapi_db.bin** file is found in the following directory:

<drive>\Program Files\EMC\Symapi\db

6. Recreate the **symapi_db.bin** file without the device groups. To do this, run a **symcfg discover** command from the **\bin** directory:

<drive>\Program Files\EMC\Symcli\bin symcfg discover

IMPORTANT: Before running the **symcfg discover** command, see the [CAUTION](#) section at the end of this article.

7. Run a **syndg import** command for each of the device groups found in the **syndg list** command output that were exported to flat files. This will recreate the old device groups in the new **symapi_db.bin** file. The syntax for this command is as follows:

syndg import <device group name> -f <file name created by **syndg export** command>

8. Restart the Primary Storage Agent for Symmetrix.
9. After the Primary Storage Agent for Symmetrix starts successfully, restart all other Symmetrix Agents.

CAUTION! Considerations for running the symcfg discover command

Running the **symcfg discover** command with no options or arguments will do the following:

- Scan all SCSI buses in the environment.
- Collect information about all the arrays and devices found.
- Rebuild the database with the collected device information and parameters from all local and remotely attached devices.

Running such a complete discovery using the **symcfg discover** command may not be desired in larger environments or environments that have both Symmetrix and CLARiiON arrays. If a complete discovery of the entire environment is not desired, you can use the following command options:

-symmetrix: Using the **-symmetrix** option with the **symcfg discover** command will limit the discovery to Symmetrix arrays only.

-sid: Using the **-sid** option with the **symcfg discover** command will limit the command to a specific Symmetrix array.

The **Solutions Enabler Symmetrix Array Management CU Product Guide** available on the Symmetrix Documentation page of the EMC Online Support site contains the complete instructions and options for using the **symcfg discover** command.