FUJITSU Software BS2000 Support for ETERNUS AF650 S2

April 2018

Release Notice

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1 General

This Release Notice is a summary of the major extensions, dependencies and operating information with respect to connections of Fujitsu disk controller of the ETERNUS[1] AF650 S2 under the BS2000 operating system.

The release level is of: April 2018.

This and further ongoing release notices are contained in the SoftBooks-DVD and available online by http://manuals.ts.fujitsu.com.

If one or more previous versions are skipped when this product version is used, the information from the Release Notices (and README files) of the previous versions must also be noted.

The disk controller AF650 S2 of the Fujitsu company can be used as peripheral system in a BS2000 environment.
The functions supported by BS2000 comprise, among conventional I/O functions, the following features (managed and monitored in BS2000 by SHC-OSD):
- Equivalent Copy (EC), QuickOPC and SnapOPC+
- Remote Replication via Remote Equivalent Copy
- Storage Cluster Option (SCO)
- Virtual Provisioning

Additionally, the release notices of OSD/BC, OSD/XC and SHC-OSD have to be taken into account (depending on the installed hardware and software):

1.1 Ordering

The purchase can be ordered via your local distributors or the manufacturer company Fujitsu.

1.2 Delivery

Delivery and Installation are carried out by the manufacturer company Fujitsu.

1.3 Documentation

The documentation for the ETERNUS AF650 S2 disk controller is provided by the supplier Fujitsu.

For information about the use of SHC-OSD, please refer to the corresponding manual and release notice.

Information about the connection of this disk controllers to a BS2000/OSD environment can be obtained by Fujitsu Server Connection Guide V08 (P3AM-5672-08ENZ0).

[1] 'ETERNUS' is a registered trademark of Fujitsu

2 Software-Extensions

ETERNUS AF650 S2 is supported in BS2000 as of OSD/XC V10.0A and as of SHC-OSD V13.0B in full functionality of SHC-OSD.

3 Technical Information

3.1 Software-Configuration

Support is granted for SE Server. The respective current correction level of BS2000 must be used. At least required is:

- OSD/XC V10.0
  as of correction package 2017, release date June 2017
- OSD/XC V11.0
  as of release date July 2017

At SU /390 with OSD/XC V10.0A the switchover of a storage cluster while running i/o may cause temporary error messages (EXC0857, NKVD014) for volumes of this cluster.
BS2000 OSD/XC V10.0 requires optional fixes to use the Storage Cluster Option with SU /390:

A0611672 (NKV)
A0611677 (BS2000-GA)
A0612287 (BS2000-GA)

The lowest version of the Storage Host component is SHC-OSD V13.0B.

3.2 Product use

Recommended procedure in case of firmware update on ETERNUS AF650 S2

Before starting any Concurrent Firmware update, the timeout value must be set on BS2000 systems to 150 seconds for all concerned disks and reset to value *DEFAULT after completion (command /MODIFY-IO-UNIT ,TIMEOUT=…).

The Concurrent Firmware Update for storage systems connected to BS2000 servers should definitely be done in „online / **automatic mode**".
If the update in „online / **operator intervention mode**" is unavoidable for technical reasons, make sure that all disks of the already updated CM are reconnected to BS2000 before you update the next CM. The availability must be ensured in cooperation with the BS2000 system administration and/or the BS2000 HW service (possibly connected remotely).

3.3 Discontinued functions (and those to be discontinued)

none

3.4 Restrictions

After a voltage breakdown of an ETERNUS AF650 S2, Fibre Channel paths on SU /390 might not become ‚available' under certain circumstances ("/SHOW-DEVICE-CONFIGURATION" reports „N.OP."). In this situation, the affected Fibre Channels must be detached and subsequently be attached again. VM2000-configurations must use Monitor-VM and parameter SCOPE=*VM2000-GLOBAL.

3.5 Procedure in the event of errors

In case of Hardware- or Firmware-errors, please contact the Fujitsu Service Desk.
If a general error occurs in BS2000, please pay attention to the regarding instructions in the OSD/BC resp. OSD/XC release notice. In the case of SHC-OSD problems, please refer to corresponding SHC-OSD manual.

4 Hardware-Requirements

This GA comprises exclusively FibreChannel connections via FC-Switch.

Connectable BS2000 Servers:
SE Server

The supported FC Switches are listed in the release notices of OSD/BC.

4.1 X2000 Requirements

SE-SW as of V6.2

4.2 Special Functions

The respective hardware licenses are necessary for the “Thin Provisioning”, “Automated Storage Tiering” and “Storage Cluster Option” functions. These are configured in the storage system resp. in ETERNUS SF.

In order to use replication functions, all the storage systems which employ them require corresponding hardware and software licenses.
The "Hardware Advanced Copy" license is required on the storage systems.
The software licenses for managing the replication functions are controlled using the SHC-CM-LR and SHC-CM-RR products.

5 Firmware-Levels

5.1 ETERNUS AF650 S2 Storage-Systems

Storage Firmware: for BS2000 generally available levels as of V10L80.

5.2 Brocade FC-Switches

An FOS level as of v7.2.0a, released by FTS, has to be used.