FUJITSU Software BS2000 Support for ETERNUS DX500 S3/DX600 S3

October 2017

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 controllers of the ETERNUS
[1] DX500 S3/DX600 S3 Family under the BS2000 operating system.

*2 The release level is of: October 2017.

*1 Changes to release level July 2014 are marked with *1
*2 Changes to release level March 2017 are marked with *2

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 controllers ETERNUS DX500 S3/DX600 S3 of the Fujitsu company can be used as peripheral systems 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):

*2 - Equivalent Copy (EC), QuickOPC and SnapOPC+
- Remote Replication via Remote Equivalent Copy
*2 - Storage Cluster Option (SCO)
- Virtual Provisioning

Additionally, the release notices of BS2000 OSD/BC, BS2000 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 DX500 S3/DX600 S3 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 an ETERNUS DX500 S3/DX600 S3 disk controller to a BS2000/OSD environment can be obtained by Fujitsu Server Connection Guide V06 (P3AM-5672-06ENZ0).

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

2 Software-Extensions

*2 QuickOPC and Storage Cluster Option (SCO) at ETERNUS DX S3 are supported in
*2 BS2000 at ETERNUS DX S3 with OSD/BC as of V10.0A resp. OSD/XC V10.0A and
*2 SHC-OSD as of V13.0A.

3 Technical Information

3.1 Software-Configuration

Support is granted for:

	S-Server	as of BS2000 OSD/BC V7.0B, correction package 2/2013
	SQ-Server	as of BS2000 OSD/XC V4.1, correction package 2/2013
*1	SE Server	as of BS2000 OSD/XC V9.5, correction package 2/2015

*2 Support of SCO in BS2000 is granted for

*2	S-Server	as of OSD/BC V10.0A, correction package 2017
*2	SE Server	as of OSD/XC V10.0A, correction package 2017

*2
*2 At S -Server or SU /390 with OSD/BC V10.0A resp. OSD/XC V10.0A the switchover of
*2 a storage cluster while running i/o may cause temporary error messages (EXC0857,
*2 NKVD014) for volumes of this cluster. Optional corrections are available in OSD/BC
*2 V10.0A and OSD/XC V10.0A to avoid / reduce NKVD014:
*2 A0611672 (NKV)
*2 A0611677 (BS2000-GA)

The lowest version of the Storage Host component is SHC-OSD V10.0A02.
*2 Support of QuickOPC or SCO requires SHC-OSD as of V13.0A

*1 3.2 Product use

*1
*1 Recommended procedure in case of firmware update on ETERNUS DX
*1
*1 Before starting any Concurrent Firmware update, the timeout value must be set on
*1 BS2000 systems to 150 seconds for all concerned disks and reset to value *DEFAULT
*1 after completion (command /MODIFY-IO-UNIT ,TIMEOUT=…).
*1
*1 The Concurrent Firmware Update for storage systems connected to BS2000 servers
*1 should definitely be done in „online / **automatic mode**“.
*1 If the update in „online / **operator intervention mode**" is unavoidable for technical
*1 reasons, make sure that all disks of the already updated CM are reconnected to BS2000
*1 before you update the next CM. The availability must be ensured in cooperation with the
*1 BS2000 system administration and/or the BS2000 HW service (possibly connected
*1 remotely).

3.3 Discontinued functions (and those to be discontinued)

none

3.4 Restrictions

After a voltage breakdown of an ETERNUS DX, Fibre Channel paths on S-Servers might not become ‚available' under certain circumstances (command "/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 BS2000 OSD/BC resp. BS2000 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.

Connectable BS2000 Servers:
*1 SE700(B), SE500(B), SE300(B), S210, S175, SQ210, SQ200

The supported FC Switches are listed in the release notices of BS2000 OSD/BC.

4.1 X2000 Requirements

	SQ-Server:	X2000 as of V5.2A0802
*1	Server Unit SU300:	X2000 as of V6.1
*1	Server Unit SU300B:	X2000 as of V6.2

4.2 Special Functions

In order to use EC, REC, SnapOPC+ with ETERNUS DX500 S3/DX600 S3, the corresponding Firmware licenses must be installed in the storage system.

In order to use Thin Provisioning Functionality and/or Automated Storage Tiering (AST), the ETERNUS DX Firmware-License ’Thin Provisioning Feature‘ is mandatory in the Storage-System.

5 Firmware-Levels

5.1 ETERNUS DX500 S3/DX600 S3 Storage-Systems

Storage Firmware: for BS2000 generally available levels as of V10L60.

5.2 Brocade FC-Switches

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