

# Inform

## Fujitsu Software BS2000 Service Pack 23.2 - Innovations

### General information about Service Pack 23.2

This document provides information about the innovations in Service Pack 23.2. The functional enhancements are released for BS2000 OS DX V1.0B configurations and are partly also available in OSD/XC V11.0B configurations. An overview of the versions of the BS2000 software products released in the individual configurations is available in the document [Inform Software Configuration BS2000 OS DX V1.0B](#).

The current service pack with the expanded products and revised documentation is displayed on the BS2000 manual server, including a release notice for the service pack.

Detailed information on the new features of the individual products can be found in the corresponding release notices and manuals. As usual, the content of the service pack is described in the delivery letter.

### Innovations with Service Pack 23.2

Release: November 30, 2023

Product / component	Significant enhancements
General information	<ul style="list-style-type: none"> <li>• Release of the new OS DX Operating System Package V1.0B with the new BS2000 version 21.0B</li> <li>• Introduction of the new CLIP subsystem</li> <li>• Realisation of numerous functional enhancements and change requests</li> <li>• Rebasing of the openssl versions in selected software products</li> <li>• Support of the option for the new library version 2 of C++</li> </ul>

Product / component	Significant enhancements
BS2000 V21.0B	<ul style="list-style-type: none"> <li>• Output of further information of an ISAM file: Introduction of a counter indicating the number of free bytes in the index blocks of index level 1, the highest index level and the number of all index blocks of index level 1 of an ISAM file</li> <li>• Sending SYSLST/SYSOUT files by e-mail with suffix .txt: Opening the e-mail attachment with the standard test editor on a Windows system without having to select the editor</li> <li>• Possibility of executing the WAIT-EVENT command when the program is loaded without its termination</li> <li>• Abort the wait state of the /WAIT-EVENT *PERIOD/*DATE command in dialogue mode using the [K2] key</li> <li>• Acknowledgeable output of message NKR0150 with extended message text on the console if a path failure was detected in NKR</li> <li>• New command FIND-CMD-OUTPUT for filtering SYSOUT outputs according to a string: controllable output of the lines that contain the specified search string</li> <li>• Improvement of the information function LIST-NODE-FILE in Net-Storage: Files that are not imported into BS2000 can now be selected for display</li> <li>• Improved performance when accessing SAM node files: introduction of an OPEN mode ensures purely sequential processing without repositioning</li> <li>• Performance improvements in SLED</li> <li>• Provision of an additional column per task with the SHOW-ADDRESS-SPACE-STATUS command to display the maximum size of class 5 and class 6 memory below 2GB in the user address space during the runtime of the specified task (only on SU x86)</li> <li>• New command SET-SERSLOG-READMARK for pseudo-close of the SERSLOG: Sets a "read marker" at the current end of the SERSLOG file; logging is continued without interruption after the read marker; read access to the content of the SERSLOG file before the read marker is then possible without having to close the SERSLOG file beforehand</li> </ul>
BS2000 V21.0B – CLIP V21.0B	<ul style="list-style-type: none"> <li>• New subsystem CLIP (Common Logging Interface Provider) for real-time export of security relevant BS2000 events (SATLOG) via SYSLOG protocol for integration into SIEM systems</li> </ul>
BS2000 V21.0B – DAMP V21.0B	<ul style="list-style-type: none"> <li>• Possibility of defining global variables with the keyword GLOBAL before the variable declaration</li> <li>• New statement RELOAD-PROGRAM-OBJECTS to load objects from the assigned PRODAMP library back into DAMP</li> <li>• New statement CANCEL-PRODAMP-PROGRAM to unload a PRODAMP program</li> </ul>
BS2IDE Release 2.17.0 <sup>1</sup>	<ul style="list-style-type: none"> <li>• New guided dialogue for easy execution of BS2000 procedures with parameters in the BS2000 Explorer</li> <li>• Improved support for entering procedure parameters when editing BS2000 procedures in the SDF Editor</li> <li>• Sorting of files in the BS2000 Explorer according to table columns</li> <li>• Passing on a user-specific breakpoint name to AID</li> <li>• Improved performance in terminal mode and in the BS2000 debugger</li> </ul>
HSMS V12.0E / ARCHIVE V12.0E	<ul style="list-style-type: none"> <li>• New LIST-SAVE-FILE statement to list the contents of a backup file previously created with HSMS on private disk, shared disk or Net-Storage</li> <li>• New operand DIALOG-FILE-SELECT for RESTORE-NODE-FILES offers the possibility to output a dialogue with a list of path names that can be selected for restore via PATH-NAMES and other operands</li> <li>• Consistent format of headers when restoring files or JVs with RESTORE-FILES</li> <li>• New options for deleting a backup file</li> <li>• Reduction of the number of assembly requests for an input tape with REORGANIZE-VERSION-BACKUP</li> </ul>
INETSERV V3.4B11 – TCP-IP-SV V3.3A11	<ul style="list-style-type: none"> <li>• Introduction of multi-factor authentication for POSIX OpenSSH access using a time-based one-time password algorithm: Support of this algorithm according to RFC 6238 by common authenticator apps, which represents a time-based one-time password procedure</li> </ul>

Product / component	Significant enhancements
ONETSERV V21.0B	<ul style="list-style-type: none"> <li>Advanced security settings for rejecting unencrypted connections and defining access rules to BS2000</li> <li>Display of the real processor name for stunnel connections</li> <li>Extension of the netstat program with the netstat -tpo function to display the current stunnel connection</li> <li>New mode for the syntax check of BCAM commands: Possibility that an output only appears on the screen if syntax errors exist</li> <li>Extension of the help text for message BCA0777 for a better understanding of the associated errors</li> <li>Extension of the SHOW-PROCESSOR-ATTRIBUTES command to include the value *OWN in the PROCESSOR-NAME operand in order to display information on the processor name.</li> <li>Documentation of SECURE-CONNECTION in SATLOG to track which IP address was used for login attempts</li> </ul>
openFT V12.1C60	<ul style="list-style-type: none"> <li>Support for 3K and 4K long RSA keys in openFT on BS2000</li> <li>Implementation of an openFT Administrator role for a complete group of users in Linux</li> </ul>
openSM2 V21.0B – SM2-Web V21.0.5	<ul style="list-style-type: none"> <li>Management of active rules for all users who trigger an action (e. g. procedure, e-mail, event, etc.) and thus possibly disrupt ongoing operations</li> </ul>
POSIX V21.0A49	<ul style="list-style-type: none"> <li>The command ipcs offers new options -T and -A for the display of time information with date</li> <li>The printf command allows the specification of ll for the conversion characters d, u, o, x and X</li> <li>The new -N option of the fsexpand command allows "compactification" to be suppressed</li> <li>Ensuring expiry capability in the event of timestamp overflow in January 2038</li> </ul>
SHC-OSD V15.0C – StorMan V10.2.0	<ul style="list-style-type: none"> <li>Linking of storage systems in the StorMan interface via their DNS names instead of the IP address</li> </ul>
TIAM V13.3B	<ul style="list-style-type: none"> <li>Logging of a faulty return code from BCAM to TIAM to CONSOLE and SERSLOG - Introduction of the new message TIA1001</li> </ul>

<sup>1</sup> BS2IDE Release 2.17.0 is available for download from the release of the Service Pack under <https://bs2000.ts.fujitsu.com/bs2ide/> via the personal access data.

**Contact**

Fujitsu  
 BS2000 Services  
 E-mail: [bs2000services@fujitsu.com](mailto:bs2000services@fujitsu.com)  
 Website: <https://www.fujitsu.com/de/bs2000>  
 2023-11-30 EM EN

© Fujitsu 2023. All rights reserved. Fujitsu and Fujitsu logo are trademarks of Fujitsu Limited registered in many jurisdictions worldwide. Other product, service and company names mentioned herein may be trademarks of Fujitsu or other companies. This document is current as of the initial date of publication and subject to be changed by Fujitsu without notice. This material is provided for information purposes only and Fujitsu assumes no liability related to its use.