Data Sheet

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FDDRL (BS2000/OSD) Version 16.0

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Fast Disk Dump and Reload

FDDRL is a physical data backup and restore product for magnetic disks in BS2000 format. FDDRL runs as a subsystem under BS2000.

In a physical data backup run using FDDRL, all the data required for an operational and consistent pubset (disk label, file catalog, files, paging files, IPL capability) is saved; this also is the case with private disks (DUMP).

All disks of a pubset can be saved or restored with one statement (DUMP-PUBSET resp. RELOAD-PUBSET). Similarly, several private disks can be collected as a "disk set" and thus saved as a whole with one statement.

For dump/restore runs to/from tape it is also possible to use magnetic tape cartridges (MTCs), as well as the mounting aids supported by BS2000 (stackers, ROBAR).

For reduction of the tape volumes used for physical disk backup along with the huge capacity of modern tape cartridges, FDDRL stores several disks of a pubset or of a disk set on one "tape set" (backup tape with continuation tapes).

FDDRL exploits the high data rates of modern tape cartridges by processing two disks in parallel towards one tape (multiplexing) with backup and respectively with reload.

When the MAREN tape management product is used, the backup tapes generated by FDDRL are archived by MAREN, and can be differentiated by storage locations. The saved data can be used to restore the same disk volume on another disk of the same type (RELOAD). If the copy function (COPY) is used, the backup copies can be used directly as replacement disks.

FDDRL offers the user a modern SDF interface. In a single FDDRL run, several tape units can be used side by side by means of parallel subtasks in order to reduce backup times. Tapes generated with earlier FDDRL versions can be used with this version to restore data.

For backup runs the user can choose three tape formats with different compatibility and performance: V13-Format with small tape blocks, V15-Format with big tape blocks or V16-Format with big tape blocks and several disks on a tape set with multiplexed operation.

To reduce outage times due to backup activities, FDDRL supports backup from mirrored disks split-off during operation.

Functional Description

FDDRL offers the following functions:

- DUMP: backs up disk data (single disks or all disks of a pubset or a disk set of several private disks) to magnetic tapes or cartridges.
- RELOAD: rewrites data saved on magnetic tapes to a magnetic disk or to several disks (for a pubset), each disk of the same type as the corresponding backup disk.
- COPY: copies disk data to a second magnetic disk of the same type.

Disks must be in BS2000 format, i.e. initialized by VOLIN. Backup tapes or cartridges used by FDDRL must be labeled in accordance with DIN 66029; this can be done with the INIT function under BS2000.

If the backup-up disk on tape and the magnetic disk do not match during a RELOAD operation, the attributes of the backed-up disk are displayed.

If mirrored disks exist split-off for an imported pubset, the pubset can be backed up from these mirrors as from the original disks.

Program Description

An entry in the subsystem catalogue is required for FDDRL. Like other programs for manipulating magnetic disks, FDDRL may be used only by operators with TSOS privilege.

FDDRL is started with the START-FDDRL statement. All statements for an FDDRL run can be entered before the run is initiated.

An FDDRL run can be executed in dialog or batch mode or as a procedure. During the FDDRL run, status messages are output to report on the progress of the backup and indicate the time frame. In addition, a log is generated once all the statements have been completed.

The run is monitored by the monitor task. Several subtasks with a selectable maximum number are also possible, offering parallel processing for a number of disks, one per subtask. With V16-Format, each parallel subtask processes several disks as a disk set or as a subset of the pubset.

The customer can modify the priority of FDDRL processing either to optimize the overall FDDRL run time or to prevent the performance of applications running in parallel from being degraded (poorer response times).

When FDDRL is used in combination with the MAREN tape management product, they work together to coordinate requests for free tapes, assign tape release dates and administer the FDDRL backups in the tape archive (MAREN catalog). Management functions in this archive include administering the date of the FDDRL backup, the saved disk volume or pubset, and the correct sequence of the data media (tapes or cartridges) used in a disk backup. Output tapes (scratch tapes) can be requested by their storage location, input tapes can be specified by their MAREN file name.

When supplemented with the add-on product FDDRL-OS, FDDRL can also back up and restore non-BS2000 disks which are used by UNIX systems or WINDOWS-NT and have a connection to BS2000 (see separate data sheet).

Technical data

Hardware

BS2000/OSD Business Server/Business Server SX Series

Software

BS2000/OSD-BC V6.0 or higher or OSD/XC V2.0 or higher

optional: MAREN

Operating mode

Batch and interactive

Implementation language

Assembler

User interface

Statements, English
Message texts, English/German (optional)

Installation

By the user, in accordance with the user guide

Documentation

FDDRL User guide

Training

See course offer at:
http://www.fujitsu-siemens.com/training

Conditions

This software product can be purchased by the customer against a single payment or leased in accordance with the conditions for the use of software products.

Warranty

Class:	A
Delivery format:	Machine language

Ordering and delivery

This software product may be obtained from your local Fujitsu Siemens Computers regional office.

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Company stamp