

Fujitsu Software BS2000 SPACEOPT V21.0

Disk Optimizer

Topics



Product characteristic

FUJITSU Software BS2000 SPACEOPT provides system administrators with an efficient tool for optimizing disk space usage during online operation. SPACEOPT reduces file fragmentation (fewer extents) and creates the largest possible contiguous storage areas within the volume.

With minimal outlay SPACEOPT generates the following benefits:

- Faster file access thanks to reduced fragmentation
- Significantly higher volume utilization levels.

How SPACEOPT works

SPACEOPT operates on a volume-specific basis. Jobs can be specified for individual volumes of a pubset or for an entire pubset.

SPACEOPT is deployed during live operation, so no additional service window is required.

The optimum time to run SPACEOPT is during off-peak periods with low system activity, since a higher I/O load can be generated depending on the degree of fragmentation of the volumes.

Files that are open at the time of the run are also defragmented.

SPACEOPT is implemented as a DSSM subsystem.

A server task generated via DSSM acts as the carrier task and manages all the SPACEOPT jobs. The individual volumes are processed in subtasks (one per volume) which are initiated and managed by the carrier task. The number of active subtasks per pubset is configurable.

SPACEOPT commands

Some selected commands provide an overview of SPACEOPT's functionality:

ADAPT-PUBSET-SIZE

The size of one or more volumes of a pubset is adapted without data loss to the capacity of the disks that make up the volume.

The VMAX and Eternus DX disk systems are supported.

Example applications:

- Restoring volumes to higher-capacity disks using FDDRL
- Migrating pubsets using DRV.

CANCEL-SPACEOPT-JOB

Jobs can be aborted prior to completion. The degree of reorganization reached up to that point is retained.

CLEAR-VOLUME

Enables a volume to be emptied provided the relevant criteria are met (e.g. no files with extents on the volumes must be open).

This function can be used to prepare for targeted removal of a volume from a pubset.

REDUCE-FILE-EXTENT-NUMBER

Selectively reduces the number of extents of one or more files.

SHOW-FREE-ISAM-SPACE

Reports the number of free pages in an ISAM file. This information can be used as a basis for deciding whether the file needs to be reorganized.

SHOW-SPACEOPT-JOB-STATUS

Provides status information relating to jobs that have not yet completed.

SHOW-SPACEOPT-SPACE-ALLOCATION

Provides information used to assess the allocation and fragmentation levels of individual pubset volumes or pubsets. Based on this, the system administrator can make a more informed decision on the need for reorganization or use the function to check on the success of a currently running SPACEOPT job.

Excluded files

In any system there are files which must be excluded from a reorganization on account of their special function. Included in this category are system initialization files which must always reside at precisely defined storage locations. These files are automatically excluded from a reorganization run. Files with the following attributes are also excluded from any reorganization:

- locked files,
- files in NOCLOSE or REPAIR NEEDED status,
- cached files,
- files involved in a CCOPY session.

Users also have the option to specify files of their own that they want to be excluded from a reorganization run.

Data center automation

Data center automation is supported by the following functions:

- Monitoring of SPACEOPT jobs by MONJVs
- Writing of accounting records
- Logging of extent relocations with SAT.

When used in combination with DAB, SPACEOPT also allows ADM-PFA caching during reorganization runs.

Technical Details

Requirements

Technical Requirements Hardware	BS2000 business server
Technical Requirements Software	FUJITSU Software BS2000 OS DX V1.0
User Requirements	A knowledge of data management and pubset management under BS2000

Installation

Operating Mode	Interactive and batch operation
Implementation Language	SPL
User Interface	Commands in English, message texts in English/German
Installation	See Release Notice

Documentation and Training

DocumentationS	SPACEOPT User Guide See Manuals
Training	See course offer at: Courses (German)

Purchase and Delivery

Conditions	This software product is supplied to the customer under our conditions against a single payment or installments.
Order and Delivery	This software product may be obtained from your local Fujitsu regional office.

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