DATA PACKER/IMS™

Save space and time with up to 50% faster database reorganization for IBM® IMS™

PRODUCT DESCRIPTION

DATA PACKER/IMS reduces database reorganization and image copy run times by 30%-50%, allows you to select the best compression method to match your data, and delivers features that ensure data integrity.

BUSINESS CHALLENGE

While new IMS database development is scarce, existing IMS databases continue to grow. If you have web-enabled IMS databases, you have probably seen them grow significantly. Traditional full-function databases are limited to 4 GB (VSAM) or 8 GB (OSAM). Once you reach those size limits, you have just a few options—convert from VSAM to OSAM; migrate databases to BMC Partitioned Database Facility, HALDB, or Fast Path; or compress IMS data.

BMC SOLUTION

DATA PACKER/IMS is a time-saving and cost-saving IMS compression utility for full-function and Fast Path data entry databases (DEDBs). By recognizing uncompressed data without expanding it, DATA PACKER/IMS ensures integrity and protects the data from corruption. In addition, it does not double compress data. It performs extensive data integrity checks and verifies that the expanded data retrieved from compressed databases matches the originally stored data.

Save time   **Lower cost**   **Boost performance**

KEY FEATURES

- **Performs expansion or compression of batch files** while bypassing DL/I processing using the Callable Interface to simulate an IMS environment

- **Enables you to make smarter decisions** by comparing current compression techniques with DATA PACKER/IMS techniques

- **Uses the Callable Interface** to test all compression techniques with batch processes for trial compression and registering batch file records

KEY BENEFITS

- **Boosts performance** with efficient free-space utilization

- **Reduces elapsed time and I/O activity** for sequential batch IMS applications

- **Improves online IMS application response time** through efficient use of IMS buffers and virtual storage

- **Lowers costs** by reducing DASD requirements for full-function databases and DEDBs by 30% to 80%

PRODUCT DETAILS

Multiple compression options: Because not all compression methods achieve the best possible compression results for a given data record, DATA PACKER/IMS offers several data compression techniques. Compression is performed on a segment type basis, which means you can use several compression techniques within the same database. Compression options include:

- Static Huffman (default) – Needs no external tables; yields good compression percentages/low CPU overhead

- Custom Huffman – Builds compression tables customized to your data; yields excellent compression percentages with low CPU overhead. Provides comparison reports that flag the added, changed, or deleted source statements

- Hybrid – Exploits Huffman compression algorithms and algorithms that are used for packed-decimal, numeric character, and repeating-character data; compression percentages are similar to Static Huffman, but Hybrid is generally more efficient in elapsed and CPU time

- Shared Table – Builds customized Huffman tables you can name and assign to selected segments

- Basic Character – Minimizes repetitive character sequences and does not require external tables; uses the least amount of CPU

- Extended Character – Recognizes repeated character strings and reduces them to a smaller symbol; greater compression percentages are realized on segment sizes larger than 600 bytes

- Hardware – Uses Ziv-Lempel compression to exploit the Hardware Compression facility of some processors; best used with segment sizes larger than 200 bytes

- Custom Hardware Dictionary – Uses Ziv-Lempel compression to exploit the Hardware Compression facility of some processors and enables you to create custom dictionaries for use with hardware-assisted compression

Predict compression results: DATA PACKER/IMS incorporates an easy-to-use trial utility that allows you to preview the effects of data compression on your databases using several different input files. You can create a batch job stream by coding the appropriate command statements or use the trial utility to generate the JCL. This utility produces reports that help you analyze which segments should be compressed and which technique would yield the most effective compression. With full-function databases, you can run the Space Estimation utility to estimate actual DASD savings obtained by segment compression. Statistics are produced on space savings for segments, records, and blocks.

Improve resource management: DATA PACKER/IMS incorporates these features to help manage resources efficiently:

- Decreasing the physical number of I/Os needed to process the data improves response time

- Reducing segment splits and related I/O with the Minimum Segment Length and Fixed Pad Segment features

- Allows more database segments to be kept in the IMS buffer pools without increasing virtual storage allocation

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ⓘ FOR MORE INFORMATION

To learn more, please visit **bmc.com/ims**

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