



# IBM IMS Hardware Data Compression – Extended Version 2

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## **Highlights**

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***Replaces and extends the dictionary creation and Segment Edit/Compression Exit routine creation utilities of IMS***

***Provides HDC enhanced analysis capability including extended reporting and multiple input sources***

***Offers dictionary archival and evaluation services***

***Includes an expanded range of dictionary implementation capabilities such as generic, enterprise and custom***

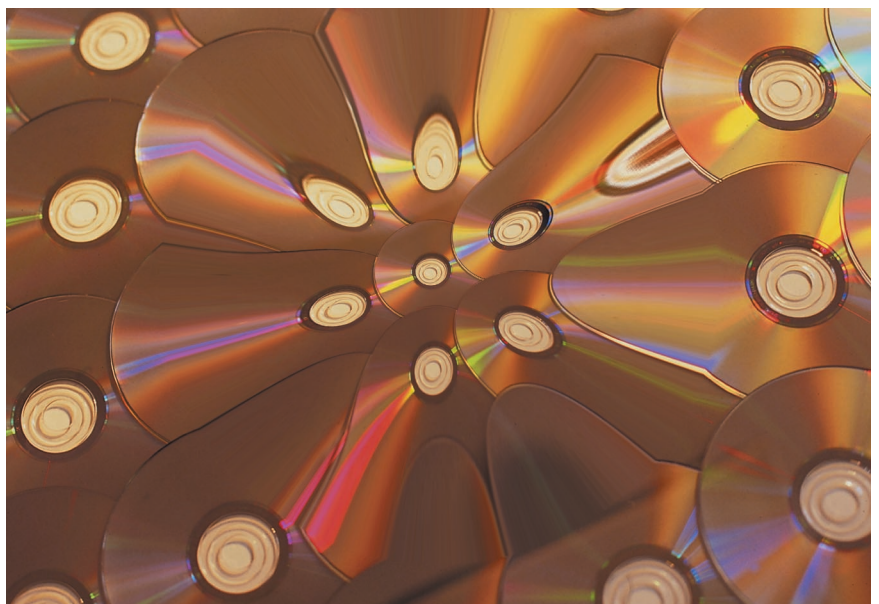
***Offers powerful Examine feature for analysis of various dictionary/database combinations and evaluation of in-service dictionaries***

## **Overview**

IBM IMS™ HD Compression - Extended is a productivity aid for implementing Hardware Assisted Data Compression (HDC). IMS HD Compression - Extended extends IMS basic HDC support with extended utilities that ease compression implementation and provide additional flexibility and function.

Extended functions not only build and analyze dictionaries, but also provide the platform to analyze, examine and manage compression performance.

IMS HD Compression - Extended enables IMS users to improve database performance and reduce CPU usage, DASD storage requirements and database I/O.



## Compression dictionaries

To utilize the HDC capabilities, MVS requires that compression dictionaries be provided. IMS HD Compression - Extended provides a generic dictionary and the capabilities to create custom and enterprise dictionaries.

- The generic dictionary provides the means for good compression immediately with minimal effort.
- The enterprise dictionary is created to maximize compression of similar enterprise databases.
- The custom dictionary is created to maximize compression of a specific database. IMS HD Compression - Extended links these dictionaries with MVS services to create IMS Segment Edit/Compression Exit routines.

## Major functions

IMS HD Compression - Extended is designed around the activities needed to implement compression and provides an easy-to-use ISPF frontend to operate and interactively build and submit JCL.

- The Analyze function reads sample data from a specific database, simulates a dictionary and reports potential compression statistics. Data sources for input include: IMS Image Copy Extensions, IMS HP Unload, DEDB Unload, IMS Unload and user-supplied QSAM files.
- The Build function uses the same input sources as the Analyze function to build, verify and archive a compression dictionary. Linking this dictionary to the Base Exit Routine, it creates the Edit/Compression Exit Routing necessary for compression and updates the DBDGEN source.

- The Compress function provides JCL to assist in compression implementation. This function uses the new Edit/Compression Routine defined in the DBDGEN to allow the user to reload (and compress) a database after building the Reload JCL.

- The Examine function enables the user to evaluate various combinations of dictionaries and databases and monitor installed dictionary performance. It examines the effectiveness of HDC routines as the content database changes and evaluates the effectiveness of the generic dictionary or an enterprise dictionary when used on a database other than the database used to create the dictionary. These queries are executed using a "What if" analysis.

All functions are ISPF menu-driven with extensive Help facilities and a complete Tutorial. This information guides the user through all steps needed to analyze, build, implement and evaluate database compression.

## Major advantages of IMS HD Compression - Extended

IMS HD Compression - Extended expands the basic support capabilities of IMS and provides new functions. It offers the flexibility to implement compression tailored to the needs of the customer by offering a range in dictionary choice. New Examine, Analyze, and Dictionary functions, an ISPF frontend, and extended database input support allow database administrators and system programmers to quickly tap into compression savings by reducing database DASD requirements and I/O while minimizing CPU overhead.

## System Considerations

IMS HD Compression - Extended requires the MVS 4.3 and can be used in the following TSO, ISPF, and IMS environments IMS 5.1 or later, TSO/E 1.3 or later, or ISPF/MVS 3.1 or later.

IMS HD Compression - Extended is supported on any processor capable of operating MVS 4.3. The ES Hardware Data Compression hardware need not be attached, but if attached will improve compression performance by executing data translation using hardware rather than software instructions.

## For more information

Please contact your IBM marketing representative, an IBM Business Partner or 1-800-IBM CALL within the U.S. Also visit our Web site at [ibm.com/software/data/db2imstools](http://ibm.com/software/data/db2imstools).

When ordering IMS HD Compression - Extended, please specify program number 5655-E02.



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