



IBM IMS Fast Path Tools

Highlights

- ***Provides an efficient and easy way to create Job Control Language (JCL) to unload, reload, restructure and analyze your IMS Fast Path Data Entry Database (DEDB)***
- ***Helps you analyze, maintain, tune and migrate your DEDB to a DEDB with better database definition***
- ***Boosts system availability by allowing you to perform a variety of key functions without having to take your IMS database off-line***
- ***Shortens the recovery time after an emergency restart (ERE) failure using DEDB Fast Recovery***

Improving system availability and performance

The heart of your IT architecture, your DEDB system provides employees throughout the organization with a variety of core functions. Maintaining the high availability of this major asset is crucial to the success of your company.

That's why IBM IMS™ Fast Path Tools are so important. IMS Fast Path Tools improve performance and availability by streamlining database administrator (DBA) tasks. If you're an IMS Fast Path DBA, your job just got easier.

IBM IMS Fast Path Tools include IBM IMS High Performance Fast Path Utilities for z/OS®, Version 3.1 and IBM IMS DEDB Fast Recovery for z/OS, Version 2.2.

IMS High Performance Fast Path Utilities

IBM IMS High Performance Fast Path Utilities for z/OS, Version 3.1 is composed of IBM Fast Path Advanced Tool, IBM Fast Path Basic Tools and IBM Fast Path Online Tools.

Fast Path Advanced Tool

Fast Path Advanced Tool (formerly High Performance Fast Path Reorganization Tool) delivers the following functions:

- *ANALYZE provides comprehensive DEDB integrity verification of all IMS pointer values, free space element chains, VSAM control fields and space utilization in DEDBs. It also supplies the analysis information required to effectively manage the DEDB space utilization, performance characteristics and physical attributes.*
- *CHANGE allows you to restructure multiple DEDB areas in virtually a single step. You can also include a generation step of new DEDB areas in the change process.*
- *DMACPRT provides the contents of the DMAC blocks for multiple DEDB areas and the DMAC dump. DMACPRT maps the global section and the local section in the DMAC with offset, label and values. DMACPRT also provides the dump that is specified by the DMAC length, EQE list, CUSN and RBA.*

- *EXTRACT* allows you to extract segment data from multiple DEDB areas with selected criteria and write them to QSAM data sets. By specifying which segments to extract, you can compare data against supplied values. It supports more than one comparison per segment type, along with the ability to write a subset of the matching segment's data to the output file. *EXTRACT* gives you the option to write output data in a format compatible with the *RELOAD* function. In addition, you can use *EXTRACT* to help satisfy data reporting requirements and extract data to populate test databases.
- *RELOAD* allows you to reload multiple DEDB areas from the QSAM data sets. You can also include a sort step and a generation step of new DEDB areas in the reload process.
- *UNLOAD* allows you to unload multiple DEDB areas to QSAM data sets. You can also include a sort step in the unload process.
- *Quickly and easily develop a standard driver for unloading, reloading, reorganizing, analyzing and extracting multiple DEDB areas in a single step.*
- *Perform the analysis step and take the image copy data sets during those functions.*
- *Concurrently use the DEDB areas through the IMS standard database recovery control (DBRC) interface to help improve the integrity and dynamic allocation of databases.*
- *Improve performance (elapsed time and CPU time) by using the data space for the IOVF and SDEP part, using a fast I/O call against DEDB areas, concurrently processing multiple DEDB areas and reducing the time used for I/O with the use of internal sort.*

Fast Path Basic Tools

Fast Path Basic Tools can help you analyze, maintain, tune and migrate DEDBs without bringing up an IMS online system environment. These powerful tools, which offer numerous utilities and functions, are DEDB Unload/Reload, DEDB Pointer Checker and DEDB Tuning Aid.

Fast Path Advanced Tool helps improve JCL ease of use and enables you to use the same JCL statements for various functions just by changing the control statements. Using this tool, you can:

DEDB Unload/Reload has the same function as Fast Path Advanced Tool and provides utilities that:

- *Produce a DEDB Database Definition Record from a DMB member in the ACB library without rerunning DEDB Unload when the data set is lost.*
- *Provide application interfaces to produce/retrieve unloaded segment records. With the interfaces, the application program need not be concerned about the format of the record or the I/O operation of the data set.*
- *Convert data from various formats of unload files onto an IMS Full Function or Fast Path DEDB Database.*
- *Convert a HD unloaded file to a DEDB unloaded segment file.*
- *Include a Randomizing Module Interface that supports up to 16 different DEDB databases.*

DEDB Pointer Checker has the same function as Fast Path Advanced Tool. DEDB Tuning Aid is a comprehensive tuning utility for DBAs and technical

support staff who are directly involved in database management, maintenance and performance management. DEDB Tuning Aid tests all database changes before beginning the time-consuming unload/reload process and shares a common report generation module to help simplify tuning evaluation and comparison. None of these functions influences or impacts IMS system performance or database availability.

Fast Path Online Tools

Fast Path Online Tools is the perfect extension to the Fast Path Basic Tools for an online IMS environment. It contains DEDB Online Pointer Checker, DEDB Online Data Extract, DEDB Online Area Extender, DEDB Online Expert Reorganization and DEDB Online DMAC Print. These tools allow you to boost system availability by performing a variety of key functions without having to take your IMS database offline.

DEDB Online Pointer Checker provides the same function as the ANALYZE of the Fast Path Advanced Tool by collecting pointer verification data from a DEDB area while that area is online and being updated by users and passes to report them to DEDB Pointer Checker included in the Fast Path Basic Tools.

DEDB Online Data Extract provides the same function as the EXTRACT of the Fast Path Advanced Tool and offers an online area that is an easy-to-use, flexible tool for extracting data from a DEDB area while the area is online. To ensure a consistent view of the data, it functions in read-only mode and uses locking protocols. It provides an alternative to writing customized batch message partition (BMP) application programs.

DEDB Online Area Extender Utility allows you to extend the size of the DEDB area dynamically, without taking the DEDB area offline. By providing an alternative to taking the DEDB offline, this utility is very helpful in environments where database availability is crucial. It also lets you specify which portion of the DEDB you want to expand: IOVF, SDEP or both.

DEDB Online Expert Reorganization Utility allows you to reorganize a set of UOWs in a DEDB area on the basis of a ranked set of UOWs. It can run DEDB Online Pointer Checker after the subset of UOWs have been reorganized and can produce reports that contain the space statistics of each UOW that has been reorganized.

DEDB Online DMAC Print Utility provides the same function as the DMACPRT of the Fast Path Advanced Tool. It reports the contents of the DMAC blocks used by IMS Online for multiple DEDB areas and the DMAC dump.

IMS DEDB Fast Recovery

IMS DEDB Fast Recovery, Version 2.2 assists technical support personnel in operating and maintaining the data integrity of IMS databases. It is designed as a fast alternative to ERE failure recovery.

IMS DEDB Fast Recovery corrects the online log data sets (OLDS) by invalidating the logging for transactions that did not reach the synchronization point and recovers the DEDB areas that were active when IMS failed. DEDB Fast Recovery can significantly reduce the time needed to recover DEDBs after an IMS failure. In addition, it does not interfere with the execution of other active IMS subsystems in the same data sharing environment and eliminates the need to run the IMS Log Recovery utility.

System requirements

IBM IMS High Performance Fast Path Utilities Version 3.1 supports IMS Version 8 and later and IMS DEDB Fast Recovery Version 2.2 supports IMS Version 8 and later. IBM IMS High Performance Fast Path Utilities Version 3.1 requires:

Fast Path Advanced Tool requires:

- *IMS High Performance Image Copy for z/OS, Version 4 (5655-N45) or later to take an Image Copy.*

Fast Path Basic Tools requires:

- *IMS High Performance Image Copy for z/OS, Version 3 (5655-K96) or later to take an Image Copy.*

Fast Path Online Tools requires:

- *IMS Version 8 Release 1 Database Manager (Program number: 5665-C56) APAR PK15110 for one input DD statement APAR PK25289 for AREA=ALL option*
- *IMS Version 9 Release 1 Database Manager (Program number: 5665-J38) APAR PK15111 for one input DD statement APAR PK25294 for AREA=ALL option*

When ordering the IMS Fast Path tools, please specify the following program numbers:

- *IBM IMS High Performance Fast Path Utilities, Version 3.1: 5655-R05*
- *IBM IMS DEDB Fast Recovery, Version 2.2: 5655-E32*

For more information

Please contact your IBM marketing representative, an IBM Business Partner or call 1 800 IBM-CALL within the US.

Also visit our Web site at ibm.com/software/data/db2imstools.



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