

CA Database Analyzer™ for IMS for z/OS



At a Glance

CA Database Analyzer™ for IMS for z/OS (CA Database Analyzer) provides important capabilities to help your organization verify database integrity, prevent data loss, anticipate and correct space and pointer issues, and tune randomizers before they impact IMS data availability.

Key Benefits/Results

- **Improve IMS data integrity.** Scan, analyze and monitor IMS database pointers to prevent data loss.
- **Pinpoint and fix corrupt data.** Perform efficient repair activities that mitigate outages before they occur and affect business operations.
- **Reporting.** Track space usage, analyze data placement and plan reorganizations before they impact SLAs.

Key Features

- **Integrity checking.** Checks control information and pointers for accuracy.
- **Database Space Analyzer.** Monitors the condition of IMS database data sets and detects when extents are full and you will run out of space.
- **Randomizer modeling.** Evaluates and reports on performance profiles for randomizers and partition selection exits.
- **Display and correct data.** Provides both display and change functionality.
- **Reporting.** Produces reports for tuning the database design, optimizing block sizes, monitoring data set usage, indicating when a reorg is needed, and understanding randomizer performance and DBD structures.
- **Database support.** Supports Full Function, HALDB and Fast Path DEEDB databases.

Business Challenges

In today's business environment where IMS databases are frequently used 24 hours a day, seven days a week, there is a shrinking window of opportunity to implement database validation processes. Hardware and software errors can result in data corruption within an IMS database. Detecting errors quickly is crucial to maintaining data integrity, availability and accuracy. Early detection allows database administrators (DBAs) to find, display and correct problems before they impact business operations.

Some high-performance IMS database types require the use of a randomizing routine to determine where segments should be inserted into the database and how to retrieve them. If a randomizer routine must be changed to improve performance, the database must be reorganized. The data is often unavailable for business processing while this takes place. To minimize these outages and help ensure proper performance, the randomizing routine must be tested and tuned before it is put into operation.

Solution Overview

With robust IMS analysis and monitoring capabilities, CA Database Analyzer helps you protect database integrity and delivers insights to help your staff quickly discover corrupt databases, analyze their organization and tune performance, thus maximizing the effectiveness of your database management personnel.

Detailed information on bad pointers is provided, including the location of the pointer and the target of the pointer that is incorrect. Partial chains and chain reconstruction information are also provided.

Statistical (hash checking) methods are used to check pointers with minimal overhead.

Full analysis checks a single database, the data set groups of a database, an index, an index and its related database, or the databases and indexes in a logically related set.

Critical Differentiators

CA Database Analyzer offers a host of features, including:

- **Control Block Validity Manager.** Augments database integrity by checking IMS control block information. Maps DBD, PSB and ACB objects to create an easy-to-understand depiction of the entity. You can disassemble and compare DBD, PSB and ACB objects between libraries or IMS systems and produce cross-reference reports. You can also decode Message Format Services (MFS) control blocks.
- **Database Space Analyzer.** Detects when extents are full or you will not have enough space on the volume to allow the data set to allocate another extent. Checks for performance problems that can occur because of fragmentation and control interval (CI) and control area (CA) splits.
- **IMS Information Repository (IIR).** Results can be stored in the IIR. You can access this stored information to determine trends, compare threshold values to trigger actions or do historical reporting.
- **Command Control Manager.** This common component helps you issue IMS commands in sets and across all the IMS systems in an IMSplex.

Related Products/Solutions

- **CA Database Copier™ for IMS for z/OS and CA High Performance Recovery for IMS for** can use CA Database Analyzer for simultaneous pointer checking.
- **CA Database Organizer™ for IMS for z/OS** can create a root keys file for randomizer modeling.

For more information, please visit [ca.com/ims](https://www.ca.com/ims)

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