CA Secondary Index Builder for IMS for z/OS

At a Glance
CA Secondary Index Builder for IMS for z/OS (CA Secondary Index Builder) builds multiple indexes in a single job step, builds or rebuilds indexes without reorganizing the underlying database and eliminates the need to image copy indexes.

Key Benefits/Results

- **Save time.** By decreasing the time it takes to build or rebuild primary and secondary IMS indexes you have greater control over both creation and reconstruction of indexes.
- **Shorten the reorganization and recovery process.** Eliminating the need to image copy and restore indexes can get databases back online faster.

Key Features

- **Index support.** Build HIDAM and PHIDAM primary indexes. Support also includes IMS secondary index creation, including sparse indexes, non-unique secondary indexes, and shared secondary indexes.
- **HALDB support.** CA Secondary Index Builder supports HALDB secondary indexes with fully randomized keys and partition high-value keys.
- **Recreating Indexes.** Allows indexes to be removed from the image copy process by recreating them from a previously recovered primary database. Using the DBRC option NONRECOV for indexes also saves time by preventing unneeded log records being written during application processing.
- **Database support.** Supports Full Function databases, including all HALDB types.

Business Challenges

Primary indexes are required on some IMS database types and every time these databases are loaded, reorganized or recovered, these primary indexes must be built. In addition, secondary indexes are often required for efficient access to IMS data.

The standard utilities that are provided with IMS require the database to be reorganized to create a secondary index. The downtime caused by the reorganization restricts the ability to add needed secondary indexes and wastes system resources. When IMS databases are unavailable, application performance, end-user productivity and, ultimately, business operations are negatively impacted.

Solution Overview

CA Secondary Index Builder gives you greater control over both creation and reconstruction of indexes, improves database performance and availability, and accelerates the building of IMS Full Function and HALDB primary and secondary indexes.

CA Secondary Index Builder is a replacement for the standard IMS index utilities, with faster processing and increased data availability. You can create new secondary indexes and rebuild a corrupted HIDAM or PHIDAM primary index without the outage standard utilities need to reorganize the database.

Critical Differentiators

- Builds or rebuilds multiple indexes in a single job step without requiring reorganization of the underlying database, and removes the need to image copy indexes.
- Simplifies the process for creating and rebuilding indexes with an extract function that scans the database and creates a work file from which to build the indexes. The index build function reads the input files created by a database reload or extract function and builds one or more indexes from a single input file.
Critical Differentiators (continued)

- The index create function simplifies the process further and is equivalent to an index extract followed by a series of index builds. It performs a single pass of the database and builds each of the secondary indexes, reducing the overall time it takes to build a full set of indexes after a reorganization or recovery. For HALDBs, index create builds an ILDS, secondary indexes, and a primary index in a single step to speed up recovery processing.

- **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 Organizer™ for IMS for z/OS.** Integration automatically rebuild indexes after reorganization.

- **CA High Performance Recovery for IMS for z/OS.** Integration automates the index rebuilding after a recovery.

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