

CA Fast Load for DB2 for z/OS (CA Fast Load) is a high-speed utility that helps you load large amounts of data into DB2 tables.

### Overview

Conventional load utilities are slow and the data in the target table space is typically unavailable during the load process. CA Fast Load is a high-speed utility that is designed to load data with little to no impact on system performance. The speed is accomplished by using advanced, concurrent data-processing techniques and high-speed I/O mechanisms. It provides extensive formatting and data conversion options to make the loaded data available for immediate use by other applications.

## Business value

The high-speed performance of CA Fast Load helps Database Administrators (DBAs) to quickly load data, thereby reducing the amount of time that data is unavailable. The ability to load data, reorganize data and create image copies in a single process facilitates a proactive response to individual database management situations.



### **Features**

#### Mainframe 2.0

CA Fast Load has adopted key Mainframe 2.0 features that are designed to simplify your use of CA Fast Load and enable your staff to install, deploy and maintain it more effectively and quickly.

- CA Mainframe Software Manager™: CA Mainframe Software Manager (CA MSM) automates
   CA Fast Load installation, deployment and maintenance and removes SMP/E complexities.
  - The Software Acquisition Service enables you to more easily move product installation packages and maintenance from CA Support Online directly to your mainframe environment and prepare them for installation.
  - The Software Installation Service standardizes CA Fast Load installation, which includes a new, streamlined Electronic Software Delivery (ESD) method that allows CA Fast Load to be installed using standard utilities. This service also provides standardized SMP/E product installation and maintenance via APARs and PTFs, and simplifies SMP/E processing through an intuitive graphical user interface and an intelligent Installation Wizard.
  - The Software Deployment Service enables you to more easily deploy CA Fast Load in your mainframe environment.
  - CA MSM Consolidated Software Inventory (CSI) updates and infrastructure improvements add flexibility to CA MSM processing of CSIs and enable CA MSM to more effectively utilize CPU and system memory.
- Installation Verification Program (IVP) and Execution Verification Program (EVP): As part of qualification for inclusion in the set of CA Technologies mainframe products released every May, CA Fast Load has passed stringent tests performed through the IVP and EVP to find and resolve interoperability problems prior to release. These programs are an extension of our ongoing interoperability certification initiative launched in May 2009.
- Best Practices guide: This guide provides information on CA Fast Load installation, initial
  configuration and deployment to shorten the learning curve for staff who are responsible for
  the installation and management of this product.



#### Release r14.5 and r15

- DB2 10 support: CA Fast Load runs in DB2 10 NFM (New Function Mode) with a converted catalog and in DB2 10 CM (Conversion Mode).
- DB2 10 TIMESTAMP support: CA Fast Load can now process the DB2 10 TIMESTAMP WITH TIME ZONE and TIMESTAMP(precision) data types.
- DB2 10 new column type support: The DB2 10 ROW BEGIN, ROW END, and TRANSACTION START ID column types are now supported.
- DB2 9 new column type support: The DB2 9 ROW CHANGE column type is now supported.
- DB2 9 Large Block Interface support: DB2 9 Large Block Interface (LBI) support is now provided.
- DB2 9 clone support: DB2 9 cloned objects are now supported.
- DB2 9 Universal Table Space (UTS) support: CA Fast Load now provides native support for Universal Table Spaces (both partition-by-growth and partition-by-range) that do not contain LOBs.
- **DB2 9 compressed index support:** DB2 9 compressed indexes are now supported.

#### Release r14

- New data types support: BIGINT, BINARY, DECFLOAT, and VARBINARY data types are now supported.
- New index page size support: Index page sizes greater than 4 KB (8 KB, 16 KB, and 32 KB) are now supported. This increases the number of index entries per page, and reduces the number of pages needed and page splits for large insert processes.
- Universal tablespace support: Universal Tablespace (UTS) support is now provided.
- Specify the rounding mode to use with DECFLOAT: You can specify the rounding mode to
  use with the DECFLOAT data type.
- Specify the floating point number format: You can specify whether to use Hexadecimal
   Floating Point (HFP) format or Binary Floating Point (BFP) format for floating point numbers.
- Specify the store clock format for TIMESTAMP data: You can specify that TIMESTAMP data is in store clock format. This format has the same structure as the Time-of-Day (TOD) clock, which adds a one in bit position 51 every microsecond to show the number of microseconds since January 1, 1900 at 12:00 a.m. (Coordinated Universal Time).
- Specify a Julian date format: You can specify a Julian date format.



#### Other key features

CA Fast Load provides:

- Increased data availability: CA Fast Load provides a broad range of features that help reduce database downtime and minimize the impact on database performance and system resources.
  - Multitasking for maximum performance: CA Fast Load helps optimize performance through multitasking during the build and load phases. When loading a partitioned table space from multiple input files, each partition can be treated as a separate task so that partitions are loaded simultaneously. The concurrent-processing capability increases the data-loading speed and reduces the impact on the availability of the databases.
  - Partition independence: CA Fast Load increases data availability by supporting partition independence. This allows you to load one or more partitions of a table space while providing access to those partitions that are not being loaded. This capability reduces the impact on database availability.
  - Flexible discard record handling: CA Fast Load offers multiple alternatives to handle discard record handling. You can choose to skip the discard processing, perform it before or after the data load or leave data in read-only mode during RESUME YES loads.
  - Error option handling: CA Fast Load provides an IGNORE-ERROR parameter that omits specified error types from SYSMAP and SYSERR. IGNORE-ERROR accepts codes for many error conditions, such as data value too large, data field not numeric, data field too large, invalid data found and many others. While the errors are handled by CA Fast Load, they are not logged to SYSMAP and SYSERR, which helps prevent the error data sets from containing unneeded or unwanted error messages.
  - Duplicate record handling: An index task is only started for unique indexes to check for duplicates. The NO-DUPLCHECK keyword enables you to bypass checking unique indexes for duplicates. This process provides flexibility in handling duplicate records.
- Maximize DBA productivity: CA Fast Load provides various features that help to simplify
  the efforts involved in formatting data files when loading them back into the target
  environment.



- Flexible sort options: If the data is already in a clustering index sequence, it is not necessary to sort it before the load phase. By specifying whether the data should be reclustered, CA Fast Load can bypass sorts, providing a significant performance advantage. If sorting is needed, you can specify sort options to dynamically allocate sort work data sets, even when multitasking. CA Fast Load also provides the flexibility to sort the data by OBID if a table space is segmented and the tables do not have clustering indexes.
- Flexible field selection criteria: CA Fast Load allows you to specify the location and format of the columns in the target table and the criteria that provides the conditions for loading the columns with NULL, DEFAULT or INITIAL values. Multiple column selection and full Boolean logic are supported for NULLIF, DEFAULTIF, WHEN and CNVERR clauses. You can use AND/OR connectors, specify column names within the expression and specify data positioning. These features help eliminate tasks that would otherwise be needed to prepare the data for loading, thereby saving time and effort.
- Update DB2 catalog statistics: CA Fast Load can collect IBM Runstats or CA Database
   Analyzer™ for DB2 for z/OS statistics and update the DB2 catalog. Updated statistics
   supply both you and the DB2 optimizer with data to help you make informed decisions
   and increase efficiency.
- Compatible with IBM-syntax: CA Fast Load provides compatibility with IBM utility syntax, enabling organizations to use existing IBM utility JCL to run CA Fast Load with only minor changes. CA Fast Load also allows LOG NO and ENFORCE NO syntax in order to help enable compatibility with the IBM load utility. ENFORCE CONSTRAINTS is also supported by calling upon CA Fast Check\* for DB2 for z/OS (CA Fast Check), if available, in your environment.
- Easy-to-use online interface: CA Fast Load provides an online interface to generate and submit the jobs. This interface provides an easy method of generating utility job streams quickly and without error.
- Comma-delimited input file support: CA Fast Load provides the ability to load a comma-delimited input data set.
- Large object support: CA Fast Load supports spanned records. The entire row that is being loaded, including the LOB, can be greater than 1 block (32 KB).



- Integration with other products from CA Technologies: CA Fast Load is designed to work in concert with other CA Database Management Solutions for DB2 for z/OS. The tight integration across the products helps simplify database administration efforts and improve DBA productivity.
  - CA Fast Unload<sup>®</sup> for DB2 for z/OS (CA Fast Unload): CA Fast Unload can generate load control cards that allow you to reload the data using CA Fast Load. CA Fast Unload output records can be used as input to CA Fast Load with the option INPUT-FORMAT UNLOAD.
  - CA Quick Copy for DB2 for z/OS (CA Quick Copy): CA Fast Load can call CA Quick Copy to create up to eight image copies during the CA Fast Load execution. This process eliminates the need to perform image copies in separate phases.
  - CA Rapid Reorg® for DB2 for z/OS (CA Rapid Reorg): CA Rapid Reorg understands CA Fast Load output, allowing DBAs to perform a load and reorganization in one step. CA Fast Load provides CA Rapid Reorg with a SYSREC data set after it finishes the load job.
  - CA Fast Check: During the load process, CA Fast Load integrates with CA Fast Check, enabling DBAs to check the rows for both user- and DB2-defined RI and Table Check constraints.

# Delivery approach

CA Services provides a portfolio of mainframe services delivered through CA Technologies internal staff and a network of established partners chosen to help you achieve a successful deployment and get the desired business results as quickly as possible. Our standard service offerings are designed to speed deployment and accelerate the learning curve for your staff. CA Technologies field-proven mainframe best practices and training help you lower risk, improve use/adoption and ultimately align the product configuration to your business requirements.

## Benefits

CA Fast Load is a high-speed utility that is designed to load data with little to no impact on system performance. The high speed of CA Fast Load helps DBAs to quickly load data, thereby reducing the amount of time that data is unavailable. The ability to load data, reorganize data and create image copies in a single process facilitates a proactive response to individual database management situations.



What's more, CA Fast Load provides such advanced capabilities as multiple input and output formats, multitasking and OBID conversions. It provides extensive formatting and data-conversion options to make the loaded data available for immediate use by other applications.

# The CA Technologies advantage

CA Technologies has 30 years of recognized expertise in robust, reliable, scalable, and secure enterprise-class IT management software. CA Fast Load for DB2 for z/OS is a key component of the Mainframe 2.0 initiative from CA Technologies to change the way the mainframe is managed forever by helping you maximize the value of our mainframe products and by providing a simplified experience and innovative solutions that deliver value quickly and flexibly.

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