CA Bind Analyzer™ for DB2 for z/OS (CA Bind Analyzer) helps you reduce resource contention during the bind process and coordinates successful application preparation by determining if a program being recompiled has any SQL changes.

Overview

Because the bind process requires access to the DB2 catalog, problems with locking and contention can occur. CA Bind Analyzer helps you avoid this by performing plan and package binds only when they are needed. By determining if a program being recompiled has any SQL changes, CA Bind Analyzer helps avoid unneeded binds.

Business value

CA Bind Analyzer reduces catalog contention and helps enhance developer productivity. This product is designed to stabilize application performance by avoiding unnecessary binds, which enables an application to retain its critical, well-tuned access paths. CA Bind Analyzer also provides the capability to synchronize, compare and rebuild DBRMs, increasing developer productivity.
Features

Mainframe 2.0

CA Bind Analyzer has adopted key Mainframe 2.0 features that are designed to simplify your use of CA Bind Analyzer 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 Bind Analyzer 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 Bind Analyzer installation, which includes a new, streamlined Electronic Software Delivery (ESD) method that allows CA Bind Analyzer 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 Bind Analyzer 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 mainframe products from CA Technologies released every May, CA Bind Analyzer 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 Bind Analyzer installation, initial configuration and deployment to shorten the learning curve for staff who are responsible for the installation and management of this product.

What’s new in release r14.5 and r15

- **DB2 10 support**: CA Bind Analyzer runs in DB2 10 NFM (New Function Mode) with a converted catalog and in DB2 10 CM (Conversion Mode).
- **DB2 10 EXPLAIN table creation:** EXPLAIN table auto-creation now supports the new DB2 10 format for the PLAN_TABLE and DSN_STATEMNT_TABLE during the EXPLAIN if the EXPLAIN tables are not present and must be created.

- **CLOB text statement retrieval:** DBRM rebuild and catalog compare functions exploit CLOB statement text retrieval from a DB2 10 catalog.

- **Enhanced report:** The Explain Access Path Analysis report (short format) has been enhanced to display new PLAN_TABLE options.

**Other key features**

CA Bind Analyzer provides:

- **Product components:** CA Bind Analyzer provides enhanced processing to both the precompile and the bind step for the application build JCL. This processing can identify when a DBRM change has occurred, generate the appropriate bind cards and perform the bind. The DBRM comparison can detect significant SQL changes or whether a precompiler option has changed.
  - **Precompile Step:** A JCL front-end replacement for the DB2 precompiler step provides additional functionality while continuing to make full use of the IBM DB2 precompiler. This additional functionality includes saving a copy of the DBRM from the previous precompile and comparing it to the DBRM created in the current precompile. The comparison result can be tested directly using the JCL condition code.
  - **Bind Step:** CA Bind Analyzer integration in the Bind Step helps to ensure that a bind is performed only when the Precompile Step has detected a significant change and the application build steps have been successful. When a build error has occurred, the previous DBRM is restored in the DBRMLIB and the bind is not performed.

- **DBRM processing facilities:** CA Bind Analyzer provides capabilities to synchronize compare and rebuild DBRMs, increasing developer productivity.
  - **DBRM synchronization:** CA Bind Analyzer restores the DBRM to its value prior to the Precompiler Step when an application build error has occurred. Once the application build errors have been corrected and the build is repeated, DBRMs changes can once again be detected. This avoids redundant and missed binds when one or more application build errors have been encountered prior to the application being successfully built.
  - **DBRM Compare Reports:** The DBRMLIB to Catalog compare facility performs bind analysis of DBRMs existing in a DBRMLIB and the catalog. The DBRMLIB compare facility compares the DBRMs in two libraries, with each facility producing detailed reports that identify the changes to the DBRMs and generate bind statements when
differences have been detected. These reports can assist in the migration process of moving an application from one stage to the next.

— **DBRM rebuild**: The DBRM Rebuild feature recreates a lost DBRM from the catalog when the DBRM has been bound and is still present in the catalog.

— **Bind Card modeling**: Newly created DBRMs can automatically be bound in the catalog by making use of an existing model DBRM as a template. This eliminates the need to resort to manual steps when binding a DBRM for the first time and can assist in ensuring that site standards are followed.

### Reports:

CA Bind Analyzer produces detailed reports, helping you to understand information about your DBRMs, as well as the impact changes have on your DB2 environment.

— **DBRM dependency analysis report**: This report identifies all plans and packages affected by changed DBRMs. When DBRMs change, the plans and packages fall out of synchronization with the load module and must be rebound.

— **DBRM data set dependency list report**: When the specified DBRM is not in the current DBRMLIB that is being processed by the precompiler, CA Bind Analyzer can produce a report of other DBRMLIBs that contain the DBRM. The DBRM Data Set Dependency List provides an easy way to identify actual references where DBRM and DBRMLIB dependencies exist.

— **Compare explain versions report**: This report compares and reports on the differences in host variables and SQL statements between previous and current DBRMs. If CA Plan Analyzer for DB2 for z/OS is available, access paths are compared and differences included in the report.

— **DBRMLIB compare report**: The DBRMLIB Compare Report lists all the DBRMs in the old DBRMLIB and the new DBRMLIB that match a specified member mask. This report is generated automatically whenever you execute the DBRM compare facility.

— **Catalog compare report**: The Catalog Compare Report lists all the DBRMs in the DBRMLIB and catalog that match the member mask you specify. This report is generated automatically whenever you execute the catalog compare facility.

— **SQL Compare Report**: The SQL Compare Report shows the differences in host variable and SQL statements between DBRMs.

### Integration with CA Plan Analyzer:

CA Bind Analyzer interfaces seamlessly with CA Plan Analyzer to improve your productivity and provide additional information.

— **Access path comparison**: Using the interface to CA Plan Analyzer, you can compare and report on the differences between versions of DBRMs down to the access path level.
— **Enhanced explain processing:** If you have a CA Plan Analyzer license, CA Bind Analyzer can generate the required statements and then invoke CA Plan Analyzer to perform the Enhanced Explain processing during bind processing.

### 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 Bind Analyzer is designed to perform plan and package binds only when they are needed. This reduces catalog contention and helps enhance developer productivity. What's more, CA Bind Analyzer also helps stabilize application performance by avoiding unnecessary binds, which enables an application to retain its critical, well-tuned access paths.

### The CA Technologies advantage

CA Technologies has 30 years of recognized expertise in robust, reliable, scalable, and secure enterprise-class IT management software. CA Bind Analyzer 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.