Key Benefits

• **Automation.** Automating restarts helps to avoid common errors such as accidentally restarting from the beginning.

• **Minimize risk.** Reduces the input of checkpoint log information and restart log information, which helps to avoid errors.

• **Save time.** Prevent delays when restarting application programs that run in batch message processing (BMP) regions or Data Language/Interface (DL/I) batch mode.

Key Features

• **Restart on a different IMS database.** In a data sharing environment (IMSPlex) you can restart a failed IMS BMP on a different IMS system.

• **Batch backout manager.** Automate the back out activities after a batch program fails by providing initialization activities when an IMS batch job starts with checks to see if a batch backout is required from the last execution.

• **Batch log tracker.** Assists DLIBATCH processing by helping to ensure that logs are allocated and that databases are available before the batch program executes.

• **Retry BMP jobs.** Avoid deadlocks or running out of PI pool space by coding a special option that automatically retries BMP jobs with specified abended codes before they end.

• **Interactive System Productivity Facility (ISPF) interface.** List all jobs that are pending restarts and issue commands to restart them or to remove them from the system.

Overview

CA Mainframe Program Restart Manager™ for IMS for z/OS (CA Mainframe Program Restart Manager) helps save time, lower risk, prevent delays, and eliminate the errors that can occur when restarting certain IMS jobs. It also provides capabilities to enhance database performance and application management.

Business Challenges

IMS database administrators (DBAs) typically have to manually intervene when restarting IMS batch jobs. Manual intervention may result in several common errors. For example, the log for an abended batch job can be entered incorrectly in the //IMSLOGR DD statement, the checkpoint ID can be entered incorrectly, or the job can accidentally be started from the beginning, instead of being restarted. These common errors can have major consequences such as data loss.

Solutions Overview

CA Mainframe Program Restart Manager can automate the restart of application programs as long as a program has checkpoints and a restart logic. CA Mainframe Program Restart Manager records checkpoint information for each batch job in checkpoint tracking data sets. Later, if a failure occurs, and the step should be restarted, CA Mainframe Program Restart Manager finds the most recent checkpoint ID, allocates the appropriate log data sets to the IMSLOGR, and passes the checkpoint ID to IMS, so that IMS can perform a restart.

As a result, restarting a failed IMS batch job with CA Mainframe Program Restart Manager is exactly the same as starting a batch job for the first time. When you restart an IMS job, there are no job control language (JCL) changes, no looking up the log data set names and adding them to the job’s JCL, and no coding checkpoint IDs. All of the above are transparent to the application program.

Critical Differentiators

In addition to automatic restart, the CA Mainframe Program Restart Manager empowers you to proactively manage your mainframes:

• **Manage checkpoint calls.** Reduce the number of checkpoint calls recorded by IMS if the checkpoint frequency is too high.

• **Force abends for specified return codes.** Designate that specific non-zero return codes be processed as abends and retain checkpoint tracking data sets for later restart processing.
Critical Differentiators (cont.)

- **Change parameter values.** Make changes to certain BMP region, or DL/I batch job parameter values. For example, if you want to implement data sharing, automatically change the IRLM parameter to Y and specify an IRLMNAME.
- **Stop or hold BMPs.** Issue commands to either stop a BMP job or to put a BMP job on hold. When you are ready to resume, issue a command to automate the restart of the BMP.
- **Prevent automatic restart.** Bypass the program restart and start the job from the beginning.
- **Command control manager.** This common component helps you to issue IMS commands in sets and across all the IMS systems in an IMSPlex.

Related Products

CA Mainframe Program Restart Manager is part of the CA Database Management™ solutions for IMS for z/OS from CA Technologies that provide comprehensive support for IMS database and transaction management.