BMC Software, Inc.

Technical Disclosure Publication Document

Author

Randy Dean Clawson

Application Inventory Batch Request Automation

Posted:

December 17, 2021

Overview

This document describes the following processes to automate the generation of batch requests for Date and Time Simulation products, such as BMC Compuware Xpediter/Xchange:

1. Create an *Application Inventory* of all application programs that request TIME services.

2. Generate simulated date and time batch requests for all programs in the created *Application Inventory*.

Background

An *Application Inventory* is a list of each instance for which the date and time was exchanged in an application program, containing the offset of each TIME service request. This *Simulated Activity Log* can be viewed online or as a report.

It is created by entering a Job Pattern request for an entire application: Jobname=*Prefix**, Stepname=*, Procstep=*, Program=*, where *Prefix* is the application's prefix, and subsequently executing the application's job stream.

This inventory is stored in a Journal File. A record is created for every date and time request that is satisfied.

The *Extended Batch Facility* is a stand-alone job that adds, deletes, and lists simulated date and time requests from a sequential input file with a fixed layout.

Solution

By adding information to a Journal Type record to identify all request types, request formats, pattern types, requested date and time, or offset, etc., it is possible to automate the generation of simulated date and time batch requests. Figure 1 depicts information added to a Journal File. These requests are input to the *Extended Batch Facility*. These requests can be saved, manipulated, and reused for future testing. This process qualifies the request for the entire Job Pattern: Jobname, Stepname, Procstep, and Program. Doing so eliminates date and time substitution for a job executing unless it matches the entire job pattern.

Job XGLOGEBF executes program XGBJRINV to extract records from the Journal file, sorts the records by Type and Format of request, and executes program XGBJREBF to build the Simulated Date and Time Batch Request file, eliminating any duplicate job patterns. Figure 2 depicts a visual flow of this process.

Time savings from running this process once for each application, saving these batch request files, modifying dates and times, and running the Extended Batch Facility prior to System or Quality Assurance testing can be enormous.

Figure 1. Fields added to a Journal Record

Request Type
Batch
Jobclass
DB2 Distributed Data Facility (DDF)
Cope
Execution Date and Time
CICS
IMS

Request Format
Date Time
Offset

Pattern Type
Set
Hold
Active
CICS Permanent

Requested Date and Time Fields
Requested Date and Time
Requested Offset (Days, Hours, Minutes)
Requested Beginning Execution Date and Time
Requested Ending Execution Date and Time
Requested Execution Offset (Days, Hours, Minutes)
Requested IMS IOPCB Date and Time
Requested IMS MVS Date and Time

Other
Subsystem ID
CICS Applid
CICS Asynchronous Request (Y/N)
Global Hold Date Time Option (Y/N)
Offset Identification (Positive or Negative)

Figure 2. Application Inventory Batch Request Automation Flow