

Automic[®] Workload Automation

Accelerating Fiserv DNA Processing Through Enhanced Automation

Executive Summary

This white paper details the enhancements that an institution running Automic[®] Workload Automation in conjunction with Fiserv DNA (DNA) can realize, and shows why CA Technologies, A Broadcom Company, provides the best solution for these enhancements. CA Technologies is a leading provider of innovative enterprise scheduling and automation products that have automated application business processes, improved efficiency, and significantly reduced IT operating expenses for companies worldwide.

Challenge

DNA is a powerful financial transaction processing and reporting tool for banks and credit unions. DNA ensures data for loans, consumer accounts, savings accounts, checking accounts, and credit cards are processed accurately on a daily basis.

If your institution is like others, your daily business batch cycle in DNA consists of 30, 40, 50 or more jobs that must be run in the correct sequence. Parameters for many of the jobs must be entered manually.

Opportunity

As batch jobs are added to the nightly work, the institution's IT operations staff is challenged on how to best use their server resources to minimize the overall run time of these jobs. In addition, this process is open to potential data-entry errors.

Another layer of complexity is added when the batch cycle depends on information from other software applications; for example, loan rates. Steps in the DNA cycle must be coordinated with steps in the other software applications as well as data transfers.

Benefits

Now imagine if you could make your daily business batch cycle more efficient by doing the following:

- Run DNA jobs directly, eliminating the need to copy and release queues for each batch cycle
- Automatically run DNA jobs at the optimum time using sophisticated scheduling
- Run multiple DNA jobs at the same time in parallel from one batch station
- Eliminate potential data entry errors by automatically retrieving parameters from your enterprise databases
- Automatically check the results from one step to ensure data integrity before continuing to the next step
- Alert production analysts to problems the instant they occur
- Coordinate processing steps across all software applications
- Automatically distribute output files to vendors
- Perform all operations from one GUI client

NOTE: If you have not yet purchased DNA or are just starting a DNA implementation, we discuss at the end of this paper the significant benefits of adopting Automic Workload Automation as early as possible in the implementation cycle.

DNA Terminology Versus Our Terminology

To talk about DNA and Automatic Workload Automation, it's important to understand the overlapping terminology used by the two products. In DNA, jobs are called *applications*, and a series of jobs is called a *template*. To run a template, you make a copy called a *queue*. Within our platform, we refer to *jobs* instead of applications, and a series of jobs is called a *process flow* instead of a template. Queues perform a workload management function.

Run DNA Jobs Directly

In a typical DNA implementation, you build templates that run DNA applications in the correct sequence. For each batch processing cycle, you copy the template to a DNA queue, verify parameters and run the queue. Each of the steps in the batch processing cycle is manual and therefore subject to human error. With our platform, you can eliminate the potential for human error by automating these manual steps within a DNA environment.

To give you more flexibility in running the DNA applications, you use jobs to run the applications. To create the equivalent of a template, you add Automatic Workload Automation jobs to one or more process flows. You then schedule the process flow to run at the appropriate times. There is no need to copy templates to queues or manually run the queues.

There are two distinct advantages of using process flows to augment templates:

- Process flows can run jobs sequentially as well as in parallel, in any combination, from one single batch station. The more jobs you can run in parallel, the shorter you can make your batch-processing window.
- Process flows can include jobs from any application, not just DNA jobs. The jobs can be mixed in any order. By including jobs from other applications, you can fully automate your entire IT batch processing cycle.

Automating File Loader

File Loader loads data from files into the DNA system. This is a required function in DNA that is run manually and therefore subject to error. Automatic Workload Automation can fully automate File Loader using an additional SQT available from Fiserv. One key to full automation is the ability to capture the File Load number and use it in subsequent processing. By fully automating this process, a common source of errors is eliminated.

Automating Statement and Cycle Jobs

Automatic Workload Automation can automate the execution of statement and cycle jobs, including passing in the appropriate sets of cycle codes as parameters. This is a critical function for full automation of DNA.

Automatically Run DNA Jobs Using Sophisticated Scheduling

Our platform's sophisticated job scheduling capabilities allow you to run your DNA batch processes at the most efficient times and with the flexibility to accommodate any exceptions. The sophisticated scheduling means you can automate all batch processing and free valuable staff to work on other projects.

Run Multiple DNA Jobs at the Same Time from One Batch Station

One of the easiest ways to shorten the overall batch-processing window is to run multiple DNA queues at the same time. With DNA, this can be accomplished by running each queue from a separate batch station. However, with the enhancements from CA Technologies, you can run the equivalent of multiple queues simultaneously on one batch station. All jobs are processed through a single master, and you can monitor all jobs from a single explorer window, reducing hardware requirements making it easier for your operations staff to monitor the batch processes.

Eliminate Data Entry Errors

No matter how rigorous your procedures and thorough your data checks, if you are entering parameters manually, you are subject to human error. Like other applications, DNA is no exception. Entering parameters manually before running queues is a source of errors that may not be caught until the queue has completed processing. Automatic Workload Automation automates parameter entry, ensuring successful runs every time.

Automatic Workload Automation includes powerful features that can retrieve parameter values directly from your corporate databases. For example, certain calculations require the current interest rate. This can be retrieved at the time of execution, ensuring these calculations are correct.

Many queues in DNA run against a posting date. In DNA, this date is established at the time you copy the queue. If you are running several queues at different times of the day, you have to be careful not to bump the posting date until after all the queues have completed. Our platform means you can retrieve the correct posting date at any time, freeing you to initiate jobs at the most efficient time of the day.

A DNA template runs a series of applications, collecting error information that is presented in a report generated at the end of the template processing. Non-fatal errors may occur that do not stop processing but result in bad data. You may not know about the error until the template completes processing.

By running DNA processes as jobs and process flows, Automatic Workload Automation can check data integrity, report output at each step and stop processing if there is a problem. When the problem is corrected, you can begin processing at the point of failure, without having to rerun the entire process flow. If you are working in a tight batch window, this can make the difference between completing processing on time and running into the next batch processing cycle.

Alert Production Personnel

To ensure problems are addressed as soon as they are detected, Automatic Workload Automation can send out notifications through email, pager, or any other type of device. Messages can be generic or tailored to each job. System logs can be attached to emails to provide personnel with detailed information. It is also possible to integrate with third-party notification utilities such as NotePage's PageGate.

Coordinate Processing Steps Across All Software Applications

Like most major applications, DNA is mainly focused on its own internal jobs and processes. But such applications often depend on data from other external software products as well. In addition, output from certain jobs may have to be distributed to outside sources and vendors.

Automic Workload Automation process flows can run any software application in your enterprise, making it easy to coordinate run times across all software applications. For example, you can run loan rate calculations at the beginning of the batch-processing window and store the results in tables where the platform can retrieve them. You can also schedule data transfers, such as FTPs, to ensure the transfers occur immediately after the data is generated.

Automatically Distribute Output Files to Vendors

Many DNA queues produce output files that may have to be sent to vendors; for example, credit card companies and statement printing services. Automic Workload Automation can assist in this process by incorporating the send procedures into the job flow, ensuring the files are sent the instant they are available.

Perform All Operations from One GUI Client

In our platform, you perform all administrative, development and operations tasks from a single Web-accessible GUI client. The single client makes it easy to move from one task to another without having to log into another session. Access to the client and to all functions in the client are security controlled, making it possible to tailor each user's view of Automic Workload Automation to their specific needs.

Benefits of Early Implementation

If you are considering purchasing DNA or have just purchased it, you are aware that implementation is an important and major undertaking. You can greatly reduce your implementation costs by using Automic Workload Automation from the beginning of the project.

It is easy to think of our platform as just a job-scheduling tool that automates processes within DNA, but it is a powerful development tool that you can also use to:

- Automate testing
- Reduce testing hardware requirements in development and test environments
- Eliminate redundant scripting and script maintenance
- Document workflows and procedures
- Maintain a history and audit trail of production runs
- Automate migration from development to test to production environments
- Reduce training
- Improve output distribution

Automic Workload Automation automatically keeps a history of every job run, the parameters that were used and the output generated at each step. These records are readily available for viewing online and can be printed easily. Automic Workload Automation also keeps a complete audit trail of modifications made, who made them and the time they were made.

Document Workflows and Procedures

One of the most critical aspects of a DNA implementation is documentation of the workflows and procedures. Automic Workload Automation provides tools that make documentation an integral part of the development process. Our platform can display process flows and their jobs graphically, giving you a visual representation of the business process executed. By printing the graphic displays, you have a processing diagram for the process flow. To provide additional information, you can enter written documentation for each process flow and job directly in the platform. The documentation can explain the function of the process flow or job and provide information and procedures to operators in case of a problem.

Automate Migration

One of the more error-prone tasks is migrating procedures and processes from a development environment to a test environment, and subsequently to a production environment. The export and import utilities in Automic Workload Automation make migration an error-free, repeatable and reliable process. Variables such as database logins, printers and paths can be mapped when moving jobs and process flows into a new environment, eliminating potentially erroneous code changes and reducing the time to deliver new enterprise solutions.

If you have already created many of the DNA templates, Automic Workload Automation further simplifies implementation by selectively importing DNA applications directly into the platform and automatically creating corresponding jobs for each application. It then takes only a few minutes to add the jobs to a process flow to model, and in many cases improve, the job flow represented by the original templates.

Automic Workload Automation Increases the Return on Your DNA Investment

You purchased DNA as the processing engine of your financial institution. This was critical if your institution was going to remain competitive in these challenging times. Now it's time to take the next step and accelerate your ROI by improving the efficiency of manual operations and steps within your DNA batch processing cycle. By using process flows, parallel processing, automated parameter entry and notifications, you will eliminate data entry errors, shorten the batch processing cycle and free staff to work on other projects. By running all jobs from one Automic Workload Automation batch station, you will reduce hardware costs. If you are just beginning an implementation, you can shorten the implementation process, saving time, money and resources.

For more information, please visit ca.com/automation.

Broadcom, the pulse logo, Connecting everything, CA Technologies, the CA technologies logo, and Automic are among the trademarks of Broadcom and/or its affiliates in the United States, certain other countries, and/or the EU.

Copyright © 2019 Broadcom. All Rights Reserved.

The term “Broadcom” refers to Broadcom Inc. and/or its subsidiaries. For more information, please visit www.broadcom.com.

Broadcom reserves the right to make changes without further notice to any products or data herein to improve reliability, function, or design. Information furnished by Broadcom is believed to be accurate and reliable. However, Broadcom does not assume any liability arising out of the application or use of this information, nor the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.