

BMC streamlines job management to address the devops need for speed

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BMC's Control-M batch job manager is one of the leading enterprise job managers in the industry. It is widely used by enterprises to schedule, run and orchestrate the regular computational processes needed to operate the business. After adding support for Hadoop in 2013, Control-M is continuing to modernize with the addition of Workload Change Manager, which aims to make creating and verifying batch jobs and workflows easier for developers. The goal, of course, is to help enterprises to speed up their cycle times, delivering software to production more frequently.

The 451 Take

BMC's proposition to speed up the batch job process cycle squares with what we tend to see in the mainstream wilds of IT. Cloud and devops are creeping into these shops at a steady pace. These shops often have sophisticated batch job processing at their center - submitting inventory orders, processing HR files, supply chain analytics, or otherwise nightly updating the enterprise state machine to drive decisions and actions in the next business day. These processes are ensconced in very tightly wound 'legacy' layers like mainframes, batch job processes and relational databases. Businesses need to evolve new application layers on top of these core legacy layers, so enterprises are looking at ways to 'pace layer' these services by layering RESTful APIs or, as is the case here, adding self-service interfaces for interacting with batch job management. Speeding up all aspects of the enterprise IT process certainly seems advisable - in our recent devops market study that looked at the early 'mainstream' devops market, we found that half of respondents wanted to deploy their software to production more often, pointing toward the need to speed up the entire application development pipeline.

Context

BMC has long been a big player in systems management, spanning both mainframe and 'distributed' (what mainframe people call the post-mainframe world of x86, Microsoft, Linux and cloud). The company's revenue is split roughly 40% mainframe and 60% distributed – a mix closely tracked by watchers when the company was public. It went private in September 2013 in a \$6.9bn deal with Bain Capital, Golden Gate Capital, GIC Special Investments and Insight Venture Partners.

Control-M is one of the more widely used batch job managers, and seems to have been growing rapidly in recent years. When last we spoke with the company, BMC said Control-M revenue had grown at more than double the average industry growth rate.

Products

Workload Change Manager is targeted at developers who are the front end for Control-M. That is, these developers are packaging jobs to be run and sending them to the IT operations staff members, who execute and monitor the jobs. Previously, the job building and error handling was largely a manual and confusing process. As demonstrated by BMC, developers creating and submitting jobs would need to wade through dense reports to try and decipher how to fill out the numerous fields that make up a job definition. The new Workload Change Manager console addresses this by giving real-time documented feedback on invalid job parameters, and gives the developers a graphical tool to build jobs. BMC said that in its studies of customer use, about 40% of problems (as represented by service desk tickets filed when a batch job went wrong) arose from validation errors and other trivial problems that are now resolved by the error checking in Workload Change Manager. Operations staff can create and bundle these job specification and validation rules into what Control-M calls 'Site Standards.'

In addition to a track changes feature for jobs, Workload Change Manager has some basic collaboration features, giving the developers and operations staff more of a chance to talk with each other in the actual tool, rather than in email, over the phone or through helpdesk tickets. Taken at a high-level, the new console and functionality sets up developers to operate on more of a self-service basis with the batch job system.

Once the developers have built their jobs and validated the input, they can submit the jobs to operations for running. The point of the new console is, of course, to also speed up and 'back-and-forth' the results. This reporting adds to the overall goal of using self-service to speed up

cycle time.

Much like with software-defined networking, a naive reaction is to ask 'Didn't it have all these features already?' In SDN, the idea of fully automated networking configuration and policy settings with little to no human intervention as something to pop champagne over seems sort of silly to developers acclimated to using Chef and Puppet to automate servers and application stacks. But in both networking and batch job management, self-service automation and hygienic features like sane error messages are not always readily available. To move at devops speed, however, these levels of automation, verification and information-rich feedback loops are needed. Otherwise, the time it takes for people in the application pipeline to finish their jobs slows down the overall process. At that point you can kiss your weekly, if not monthly, deploys to production goodbye.

Customers

When we last spoke, BMC said it had more than 3,000 customers for Control-M. These are typically larger enterprises that need to run nightly or weekly batch jobs - for example, to re-compute an insurance company's books to determine how much insurance it can sell the next day. Retailers use batch job management to run reports on inventory and sales, and there are numerous other examples all revolving around collecting large amounts of data to process, and then 'deciding' on next steps in the business based on the result of crunching that data.

While Workload Change Manager has been released, it hasn't been officially announced yet. However, BMC has highlighted several early customers of Workload Change Manager. One company in the HR space was running about 100,000 jobs a day, and was plagued with handling errors in the job-definition phase, all done manually. After putting Workload Change Manager in place, it was able to potentially increase processing by 80%.

Competition

IBM with Tivoli Workload Scheduler and Platform LSF for HPC scenarios, and CA Technologies with Workload Automation AE (née AutoSys) have competitive products and suites for doing batch job management. There are also smaller companies like Automic and its ONE Automation software suite. Often, operating systems and other platforms have job and task scheduling built in - for example, Microsoft Windows, cron and Unix. These bundled schedulers are by no means as sophisticated as dedicated job management suites, but suffice for 'lower end' uses.

In the Hadoop management area, which Control-M recently entered, vendors specializing in 'big data' like Cloudera (now with \$1.04bn in total venture funding after closing a whopping \$900m F

round), MapR, Pivotal and Hortonworks compete for oxygen. As we noted in our last coverage of Control-M, with its acquisition of Infochimps, it wouldn't be surprising to see CSC look through its enterprise rolodex for companies that wanted to modernize their batch job management capabilities. The interest around Amazon Redshift (which embeds Actian's ParAccel) is another 'full stack' approach that's emblematic of new approaches for solving big-data job processing problems.

SWOT Analysis

Strengths

BMC has a strong base in this market. With a strong position in the market and more than 3,000 enterprise customers, BMC Control-M is widely used and considered a mature platform.

Opportunities

As our devops study found, businesses are feeling the need to speed up their IT processes and services, usually represented by deploying applications to production more frequently. Core infrastructure (like batch job management) that can help enable rather than hinder that acceleration will be valuable to enterprise IT shops.

Weaknesses

BMC's offerings have a reputation for being complex and expensive. While Control-M is modernizing by adding in functionality like Hadoop, net-new methods for doing batch job management may be more attractive to new and existing users. Shaking the 'legacy' mantle is always hard, and is the challenge ahead for Control-M.

Threats

Existing batch job managers are surely seeing these same opportunities, and improving the self-service and validation dynamics of their offerings is far from an impossible task. Additionally, newer ways of accomplishing the same ends of batch jobs are emerging in the cloud and big-data space.

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