



BMC automated mainframe cost management saves money and lowers MLC costs for Insurance Company

BMC rightly identified the need for enterprises of all sizes to focus on transformation with Digital Enterprise Management (DEM)¹. This can take on many different forms including a focus on automating tasks for managing and controlling licensing costs. Here is one example of how this plays out to the benefit of a mid-sized insurance firm.

Mainframe software license charges (MLC), for both system and applications, have been tied directly to consumption, measured in peak MSUs² or MIPS³ since the early days. MSU (or MIPS) consumption ties to workloads and performance, which determine the ability to meet service level agreements (SLAs). MSUs are also used to calculate software licensing charges as a measure of the level of mainframe usage or computing consumed.

Associating the actual MSU usage by individual workloads has been a very difficult task. Managing mainframe software MLC costs, let alone predicting them, has never been easy. Even in the days of disciplined workloads, calculating the total number of MSUs consumed by any particular combination of workloads at any particular time was the source of Sys Admin nightmares. Even the best efforts by both vendors and customers, end up relying on manual efforts that are time-consuming, frustrating and typically unreliable. In today's world of mobile computing, with unpredictable workload volumes, where some 90% of transactions end up involving mainframes, the variation is even less predictable. Even relatively small mainframe operations experience dramatic swings in MIPS consumption, driving up costs.

The efforts of one mainframe vendor are changing all that. BMC's MLC cost management solutions provide the first real opportunity to automatically manage and control MSU peaks. They also provide tools to identify jobs and tasks to tune.

We interviewed the Technical Services Manager of a mid-sized insurance holding company. Using BMC products, Intelligent Capping for zEnterprise® (iCap) and Cost Analyzer for zEnterprise (Cost Analyzer), he can now control MSU peaks, eliminate peak surprises and identify where to concentrate tuning efforts. He reduced peaks from 90 to 75 MSUs, eliminated an annual 'true-up' bill in 6 months and plans to further reduce peaks to 63 MSUs.

¹ See our blogs on DEM at: <http://tinyurl.com/hurfzqxg>, and <http://tinyurl.com/ptakassociates-bmcmfmlcmgt>

² A million service units (MSU) is a measurement of the amount of processing work a computer can perform in one hour – typically used for mainframes.

³ Million instructions per second, a measure of a computer's central processing unit performance.



The Corporate Data Center

The insurance company's mainframe is the responsibility of a centralized corporate IT group with SLA commitments to support delivery of shared corporate services (e.g. Human Resource management, networking, billing, invoicing, etc.) to owned companies. Local IT groups within the various entities' handle all other applications.

The company runs a variety of BMC's DB2, IMS and MainView products to manage and control a relatively small z/OS-based 90 MSU (728 MIPS) mainframe. Other vendor products are also installed. Billing usage is determined using a 4-hour rolling average of MSU peaks. They pay a fixed z/ monthly charge based on usage by z/OS components. Usage of other IBM® software (IMS™, DB2®, CICS®, MQ®), is covered by a fixed monthly amount defined in an Enterprise Licensing agreement (ELA) based on an estimated peak MSU. They true-up the difference between the actual and estimated MSU usage once per year. This charge has historically ranged between \$30K and \$50K. Annual MLC charges run in the neighborhood of \$1.6M. Changes in workloads prevented more accurate forecasting, making budgeting for the true-up charge and cost management very difficult. Efforts at manual tracking and using other products to control peaks were unsatisfactory.

Our manager was convinced that intelligent capping of peak load MSUs would reduce MLC costs. He also suspected more could be done to further reduce 4-hour rolling average MSU peaks. Better cost control and operations management was possible with more data and detailed insights to identify specific workloads, jobs and tasks for tuning efforts.

One Insurance Company's Experience

BMC's MLC Cost Management products changed all that. Our Technical Services Manager learned about BMC's MLC cost control solutions for the mainframe at a BMC seminar. Within four months, they had purchased and installed Cost Analyzer and iCap. The results were everything expected.

Cost Analyzer allowed LOB managers to identify workloads driving up peak consumption. These could be managed to reduce peak overruns. An update provides even more insight and control. We'll discuss later.

For iCap, the goal was to reduce the average peak from 90 to 75 MSUs. There are three operational modes for iCap:

1. Observe – a learning mode that monitors and collects operational data on workloads.
2. Message – extends Observe to analyze data and send alerts to recommend changes (using customer specified parameters) to control MSUs and manage costs.



3. Manage – monitors, analyzes and automatically implements recommended changes.

For the first two weeks after installation, adjustments were made manually based on automatic alerts from iCap. After that, they switched to automatic Manage Mode. The product ran for the second ½ of the fiscal year. At the first post-installation true-up, the charge was zero. With iCap running, they NEVER exceeded the 75 MSU cap. Cap management allowed them to compensate for the first six months (pre-MSU capping) of consumption over-runs. This was a major advance in cost control and savings.

As a result, plans are to progressively lower the cap from current 75 MSU to 62 or 63 MSUs within 4 years. With the latest installed version of Cost Analyzer software, the manager can drill-down for additional detail on the workloads driving MIPs consumption. This allows identification of the specific jobs and tasks to tune to further reduce the load.

Capping consumption and insight into workload group operations will provide even more significant savings in the future. With the knowledge already gained, along with the control available with iCap, they can negotiate better multi-year peak and sub-capacity licensing and billing terms with vendors. The more detailed data and control works with virtually any mainframe software (BMC, CA Technologies, IBM, etc.). They anticipate savings from controlling the cap to exceed \$140,000 over 48 months, an estimated 8.75% of their MLC costs.

Advice

Our manager strongly advises potential users to leverage BMC's expertise in the implementation process. Not because the process is particularly complex, it isn't. But because they found the BMC support was excellent beyond expectations. Time spent with them before, during and post-installation reduced the time to learn and benefit from the products. His team rapidly acquired useful insights into reports and data in formal and informal sessions with BMC staff. As a result, they quickly developed expertise at using the products to get optimum results.

Conclusion

In this manager's experience, BMC products and support more than met his expectations and needs with these products. He expects to see additional benefits well into the future even as his workloads shift and change over time. He found working with BMC support staff accelerated time-to-value, while dramatically increasing team expertise and ability to use the new products. He recommends the combination of Intelligent Capping and Cost Analyzer along with use of BMC's support services.

Sounds like an all-around win to us.



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