IDC
Analyze the Future

I D C A N A L Y S T C O N N E C T I O N

Tim Grieser
Program Vice President, Enterprise System Management Software

Controlling Mainframe Monthly Licensed Software Costs: What's the Best Approach?

July 2015

The mainframe plays a critical role in large-scale commercial and financial organizations and is increasingly supporting users who are generating transactions using handheld and mobile devices to access its data. However, with this kind of increased usage and visibility, the question of mainframe costs continues to be a concern for IT organizations. A key element in the cost equation is software, especially when licensed according to monthly usage pricing models. IT organizations need to be able to understand the factors that are driving software costs and be able to identify strategies for cost reduction.

The following questions were posed by BMC Software to Tim Grieser, program vice president of IDC's Enterprise System Management Software service, on behalf of BMC's customers.

Q. The mainframe is often regarded as a "high cost" platform in terms of ongoing operational costs. Can you point to specific factors that contribute to this perception?

A. The mainframe provides many high-volume and large-scale transaction and database processing capabilities essential to running key applications for large commercial and financial corporations. However, IT managers interviewed by IDC often cite high mainframe costs as a major concern for IT organizations and are looking for ways to achieve cost reduction. One of the largest cost items — often identified as the largest single operational expense — is software, especially software licensed under monthly pricing models. Some pricing models have variable recurring monthly charges based on processor usage (MIPS/MSUs) consumed by licensed products during a month. Such usage-based charging is subject to potentially large variations, with unpredictable monthly costs especially during peak periods, which can have a negative impact on business results and profitability. Monthly licensed software costs can run as high as one-third of total mainframe operational costs.

Q. What steps can IT organizations take to contain or reduce licensed software costs?

A. It is important for IT organizations to realize that they do not need to accept the status quo regarding ongoing system licensing costs. There are a number of strategies that can be followed to reduce them. The methods can include reducing processor usage (MIPS/MSUs) and optimizing usage patterns to avoid driving up processor usage during peak intervals. For example, in some cases it is possible to take advantage of applications or utilities that run on specialty processors to offload processing from standard processors, thus reducing MIPS/MSUs consumed. Another approach consists of optimizing the scheduling and

deployment of instances of licensed software to stay within limits specified in contractual license terms — especially regarding processor usage. Other options involve understanding what drives peak usage and taking such actions as workload capping or optimizing subsystem placement to reduce peaks. Monthly licensed software is a key target for mainframe cost reduction.

Q. What are some of the specific factors driving monthly software licensing costs?

A. Software licensing comes in a number of variations and can be highly complex in terms of how monthly charges are determined. Some mainframe vendors provide reporting tools that analyze customer usage based on SMF data and are used to report results for monthly billing purposes. Other licensing models charge for such items as the concurrent use of multiple product instances. Another example is the requirement for some licensed products to co-reside with others to achieve needed cross-product communication, again driving up licensed software costs. Increased workload volumes as organizations scramble to better support digital business can further increase costs.

Q. What can be done to control monthly software licensing costs?

A. Optimizing software license costs in this type of environment requires the ability to understand the factors that make up the software cost basis, understand capabilities that can be used to control workloads, track software product deployment and utilization, and make ongoing decisions that can effectively lower peak utilizations, such as scheduling work for off-peak periods or implementing workload capping. A key objective is to reduce the highest four-hour rolling average MIPS/MSU consumption observed during a month in order to minimize charges based on a sub-capacity model. Reducing peak four-hour MIPS/MSU consumption can result in significant cost savings.

Q. What are some challenges facing IT organizations as they work to reduce monthly software licensing costs?

A. Clearly, licensed software costs are widely recognized as a major challenge for IT operations and are closely watched by the IT organization and by company financial management. IT organizations need to be able to track and analyze the costs coming from mainframe licensed software products and be able to understand the opportunities that can be leveraged and the trade-offs that can be made to reduce costs. However, these actions typically require users to have detailed knowledge of mainframe architecture and operating environments. These skill sets are becoming increasingly rare and expensive, often needing to be engaged from third-party service providers.

The growing demands of digital business require unprecedented levels of performance, availability, and agility with rapid response to any slowdowns or incidents. Methodology and tools are needed to move up from reporting basic mainframe monitoring data and product licensing information to provide structured analysis of where monthly software costs are being incurred and to provide assessments of the impact of potential optimization moves. Ideally, this would provide a structure and user interface convenient to the non-expert user, reducing the need for detailed mainframe skills. Moreover, the use of automation to apply optimization to live production environments is a growing trend that further leverages IT staff and can reduce the need for mainframe-specific knowledge. This approach is consistent with today's focus on IT operations analytics, which is increasingly bringing IT optimization capabilities to a non-expert user community.

©2015 IDC

ABOUT THIS ANALYST

Tim Grieser, program vice president, Enterprise System Management Software, is responsible for system management software research in IDC's Enterprise System Management Software program. His coverage includes software for managing systems and applications across a wide variety of platforms. Key focus areas are ebusiness and distributed application performance and availability, especially Web application response time from the end-user perspective.

ABOUT THIS PUBLICATION

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

COPYRIGHT AND RESTRICTIONS

Any IDC information or reference to IDC that is to be used in advertising, press releases, or promotional materials requires prior written approval from IDC. For permission requests, contact the IDC Custom Solutions information line at 508-988-7610 or gms@idc.com. Translation and/or localization of this document require an additional license from IDC.

For more information on IDC, visit www.idc.com. For more information on IDC Custom Solutions, visit http://www.idc.com/prodserv/custom_solutions/index.jsp.

Global Headquarters: 5 Speen Street Framingham, MA 01701 USA P.508.872.8200 F.508.935.4015 www.idc.com