A UNIFIED MAINFRAME DEVOPS STRATEGY

The ongoing trend toward a digital economy accelerated rapidly in 2020. What until recently was a convenience—the ability to work, communicate, and perform business and financial transactions using online and mobile applications—is now, for many, a necessity. And this trend shows no signs of slowing.

For organizations with the mainframe at the heart of their hybrid IT ecosystems, this has meant rising transaction volumes, more dynamic workloads, and a greater-than-ever pressure to get more done, faster, without sacrificing quality or security. In this business climate, organizations can no longer afford to treat mainframe application development, security, operations, and database management as separate siloes, each with its own practices, toolsets, and priorities.

As customer demand for innovation increases, so does the need for modernized application development that utilizes DevOps and Agile methodologies. This approach includes integrations with different technologies throughout the IT ecosystem to create a mainframe-inclusive DevOps toolchain. As these integrations are built into the software delivery pipeline, the role of security in the application development lifecycle increases in breadth and importance. These new applications, integrations, and security considerations affect workload characteristics, demanding a more proactive approach to operations, including automated probable cause analysis and remediation. And, of course, the effects of these applications and integrations on production database performance must be considered. To maximize the effectiveness of the platform, your approach to the mainframe must transcend these key areas with a thoughtful strategy built on communication, connectivity, and integration.

A Complete Approach to Mainframe Management

The combination of BMC Automated Mainframe Intelligence (AMI) solutions and the BMC AMI DevX portfolio addresses the mainframe environment holistically, enabling customers to develop high-quality software faster, address security earlier in the application delivery lifecycle, connect Operations with applications as they move through the DevOps pipeline, and make sure that changes impacting their systems of record are tested earlier in the application lifecycle.

Today, we released several enhancements that build upon this strategy, including:

VS Code Integration

Developers can work more efficiently and innovate faster using development environments with which they are comfortable. Thanks to a new integration with BMC AMI DevX Code Pipeline, developers can edit source code using Visual Studio Code, then compile on the mainframe with a simple right click. This integration helps to further modernize the mainframe, giving developers another option with which to work on the platform using their preferred tools and environments.

DevOps-Enabled Database Management

Code quality and development efficiency are improved when developers are able to make database changes, themselves. But what if these changes negatively affect database performance in the

production environment? BMC AMI SQL Performance for Db2$^{®}$ enables shift left of SQL quality control with a new Jenkins plugin that checks SQL early in the software delivery lifecycle, helping improve efficiency and performance quality across development, QA, and production environments.

Insight with Probable Cause Analysis

Efficient and effective system monitoring relies not only on notification of issues, but the quality of the response to those issues. Time spent assessing and troubleshooting possible causes can lead to further issues and increased downtime. BMC AMI Ops Insight now uses multivariate analysis to make systems management proactive, rather than reactive. Using machine learning (ML) to analyze the interplay between a variety of metrics, BMC AMI Ops Insight provides the earliest possible notification of potential problems, along with probable cause analysis that helps pinpoint trouble areas for fast proactive remediation.

United Security and Operations Workflows

For true protection against security threats, incidents must be responded to quickly and efficiently. Having outdated or unclear notification and responses processes can be costly. A new integration between BMC AMI Security and the BMC Helix ITSM solution allows you to automate security incident response flows, providing cross-platform visibility and clearly-defined processes to ensure that incidents are handled quickly and by the right teams.

Keeping Pace with the Digital Economy

The mainframe remains a critical piece of the IT environment, acting as the workhorse of the modern

digital economy. To continue to survive and thrive in this environment, your organization must modernize its mainframe tools and processes, breaking down siloes that promote inefficiency and hinder innovation by adopting a DevOps approach to software development, AI/ML-powered Ops, and the latest advancements in security and data management tooling. Digital demand is accelerating rapidly—make sure you're prepared to accelerate at the same pace.