



Cerner Corporation

Cerner Takes Business Service Management Approach to Ensure Availability of Critical Healthcare Systems

Geography

Kansas City, Missouri

Industry

Information Technologies

Business Need

Link IT components to the goals of the business to ensure availability of applications that support healthcare systems

Solution

Cerner chose to expand on their relationship with BMC to help their customers better understand how infrastructure events impact health and patient care.

Results

- > Increased the value that the IT organization delivers to business operations
- > Increased the value of existing IT investments with real-time service impact and event management, enabling Business Service Management
- > Enhanced the efficiency and effectiveness of enterprise management through built-in automation providing corrective responses
- > Reduced the impact of IT problems on business and IT services

Cerner, a BMC Partner, understands the real-time impact technology has in the healthcare industry. That’s why they chose to implement Business Service Management (BSM) solutions from BMC, including the BMC® Service Impact and Event Management solution. Cerner’s implementation of this solution helps healthcare professionals understand how infrastructure events affect them — and reduce the impact of IT problems on patient care.

CHALLENGE

Cerner’s mission is to connect the appropriate persons, knowledge, and resources to achieve optimal healthcare outcomes. The company’s vision of proactive healthcare management drives innovation in the development of effective IT solutions.

“At Cerner, we understand that running a hospital is literally a life and death situation. If an emergency room can’t admit patients because of a problem with an IT system, if the pharmacy falls behind in filling prescriptions when a server crashes, or if a radiology system goes down and delays diagnosis, people’s lives can be affected,” said Victor Treutel, Senior Architect, Enterprise Systems Management, Cerner Corporation.

Cerner is dedicated to helping healthcare professionals provide exemplary healthcare by maximizing their IT investment. Many times, healthcare facilities are running disparate applications that don’t interact well together. Cerner has made great inroads into this problem with a very unique system.

“Optimizing our customers’ IT environment is critical to their existence. The Cerner Millennium™ suite consists of more than fifty healthcare solutions with a common, three-tier architecture – everything from patient accounting and practice management to radiology, pharmacy, and laboratory. As a result, the technology around Millennium is very complex. It’s a client server architecture that extends capabilities to healthcare professionals that many of them have never had before,” stated Treutel.

“Millennium allows all of our applications to fit into a common architecture. So whether a client has one or thirty of our applications, they have one common set of code in the back end — one database,” stated Treutel.

“While our applications have a single database and integrated architecture that allows hospitals to save time and money by managing their patient, financial, and operational aspects in a consistent manner, most hospitals do not have the level of IT sophistication and support capabilities you find in technology-savvy enterprises. Healthcare IT organizations are stretched on resources and expertise,” explained Treutel.

“The BSM approach delivered by BMC has helped us differentiate ourselves from our competitors by transforming the way healthcare IT systems function — much more efficiently.”

Victor Treutel
Senior Architect, Enterprise Systems Management
Cerner Corporation

Key Products Used

> [BMC® Performance Manager](#)

> [BMC® Event Manager](#)

> [BMC® Service Impact Manager](#)

In the past, Cerner provided its clients with information on infrastructure-related events, such as notification when a message queue filled up or an application process went down. This management was performed utilizing BMC® Performance Manager solutions (formerly BMC® PATROL®) and a custom-developed knowledge module.

“Managing with these methods alone, there was no way to show how an event affected people in the healthcare organization. For example, if BMC Performance Manager saw a message queue filling up, there was no way to tell whether the effect of that problem was keeping a pharmacist from dispensing medication, a radiologist from performing an X-ray, or a physician from performing a surgery. We simply had no way to connect IT events with their impact on the healthcare environment,” said Treutel.

Cerner’s challenge was to find a way for healthcare professionals to understand how infrastructure events affect them, and reduce the impact of IT problems on business and IT services.

CUSTOMER’S PERSPECTIVE

“Our customers are in the healthcare business and they face new challenges daily. For them, every day is mission critical. When their IT systems go down, they don’t just lose business — lives are at stake. It’s up to us to help them understand how IT events will affect patient care,” said Treutel.

SOLUTION

Cerner chose to expand on their relationship with BMC by using Business Service Management (BSM), the most effective approach for managing IT from the perspective of the business, to help their customers better understand how infrastructure events impact health and patient care.

“In 2003, our longtime management partner BMC introduced Business Service Management, including the Service Impact and Event Management solutions. BMC® Service Impact Manager filled a major gap in our systems management solutions,” explained Treutel.

BMC Service Impact Manager literally shows the real-time impact of IT problems on business services through real-time service views, dashboards, and reports. The solution extends the value of existing IT tool investments with real-time service impact management and enables BSM.

“Now, for the first time, we are able to link events in a customer’s IT environment to their impact on people using the applications. With BMC Service Impact Manager supporting a larger BSM approach, we can tell who a problem is impacting, what assets are affected, and where a problem is occurring – including location, department, users, applications, and even the function of the application being affected,” stated Treutel.

BMC® Event Manager is also a key contributor to BSM. This tool detects IT problems and concentrates on the fastest resolution before there is an impact on critical IT services. Built upon a highly scalable architecture, BMC Event Manager receives events from IT components and translates them into information to solve the problem faster by filtering, prioritizing, enriching, correlating, and automatically handling events according to business and operations priorities. It also automates corrective actions, integrates diverse technologies (frameworks), and interoperates with other management applications.

“It’s really exciting for us to be able to provide this level of detail instantly, in a way that’s easy for hospital administrators and users to understand. The benefits are big. By being able to see exactly who is impacted and how, IT administrators can easily prioritize what needs to be fixed when something goes wrong. Yesterday, they simply saw the events on the screen and had to understand the difference between a malfunction with medication dispensing and a fax queue. Now, if an important service is threatened, the administrator can respond proactively and instantly,” elaborated Treutel. “BSM gives IT organizations more knowledge and increases the efficiency of the operations people, while also providing a way for users or business managers to understand what’s working and what’s not. By implementing BSM with our Millennium suite of solutions, we’re making our solutions more reliable and helping healthcare providers ensure they can connect the appropriate persons, knowledge, and resources at the appropriate time and location to achieve the optimal health outcome,” concluded Treutel.

CUSTOMER'S PERSPECTIVE

"In the healthcare industry, Business Service Management means that everyone involved has the ability to really understand the impact of an IT component or an IT failure within their organization. BMC has made it possible for us to take raw IT data and deliver it to our customers so they understand just how it is impacting their ability to deliver healthcare," stated Treutel.

CUSTOMER'S FINAL WORDS

"Through the years, one of the real strengths of Cerner's relationship with BMC has been our ability to communicate and work together to develop solutions. We feel our relationship is crucial to our ability to deliver our Millennium offering to our clients. BMC understands systems management technology and they understand what challenges we face. Without BMC products, our clients would be running blind. The Business Service Management approach has been a natural evolution. It is an integral factor in where we are going with our business. We see our relationship with BMC continuing to flourish because we are both growing in the same direction and that helps us meet our customers' needs," stated Treutel.

About Cerner Corporation

Cerner Corporation is the leading supplier of information technology to the healthcare industry, helping more than 1,500 clients worldwide eliminate error, variance, and waste in the healthcare process.

About BMC Software

BMC Software delivers the solutions IT needs to increase business value through better management of technology and IT processes. Our industry-leading Business Service Management solutions help you reduce cost, lower risk of business disruption, and benefit from an IT infrastructure built to support business growth and flexibility. Only BMC provides best practice IT processes, automated technology management, and award-winning BMC® Atrium™ technologies that offer a shared view into how IT services support business priorities. Known for enterprise solutions that span mainframe, distributed systems, and end-user devices, BMC also delivers solutions that address the unique challenges of the midsized business. Founded in 1980, BMC has offices worldwide and fiscal 2006 revenues of more than \$1.49 billion. Activate your business with the power of IT. www.bmc.com.



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