

A COMMON LANGUAGE FOR GLOBAL IT SERVICES

BMC software helps Dell IT improve capacity planning and reduce the creation of application trouble tickets by four times

Streamlining IT operations is a continuous process at Dell. The Dell IT group is constantly searching for ways to reduce the costs of running its IT infrastructure and to reallocate personnel from routine management tasks to more innovative projects. Recently the Dell IT group evaluated new ways to simplify the labor-intensive processes of capacity planning and responding to trouble tickets.

Like many large enterprises, Dell is virtualizing more and more of its infrastructure to improve the utilization of servers while also containing power, cooling, and real estate costs. Until recently, though, selecting the right servers for virtualization was a difficult task. "When we first began to virtualize several years ago, it required too much time and energy to identify which application servers were the best candidates for virtualization," says Joshua David, IT manager of global monitoring engineering and operations at Dell. "In some cases, we had to log into each server to collect data. But the data was not in a standard form, so it was difficult to analyze. We needed a way to better detect the right candidates for virtualization and then to forecast accurately the server and storage resources we'd need to run those applications in a virtualized infrastructure."

David's group is also tasked with monitoring performance for numerous application servers. His team found that monitoring applications and attending to trouble tickets had become an enormous drain on resources that kept engineers from revenue-producing projects. "In the past, we used multiple monitoring tools for different IT stacks," says David. "When an application encountered some difficulty and breached a predetermined threshold, the monitoring

tool sent an alert. In many cases, though, we received multiple tickets for the same root cause. If a database went down, for example, we could receive several alerts from the multiple applications drawing on that database. We were receiving millions of alerts per year. We needed a way to substantially reduce the number of alerts that were generated."

DELL SELECTS BMC SOFTWARE TO STREAMLINE CAPACITY PLANNING AND TROUBLESHOOTING

The Dell IT group selected BMC software to address the challenges it was facing. "BMC software tools provide the features and capabilities we need, and they are easy to integrate with our existing software portfolio," says David. "We had used BMC software in the past, so learning to use new applications was fast and straightforward."

The Dell IT group collaborated with BMC consulting services to deploy the new applications in the Dell environment. All BMC software currently runs on Dell PowerEdge servers. "One of the goals of this project was to reduce our administrative burdens, and by working with both Dell and BMC service



CUSTOMER PROFILE

COUNTRY: United States

INDUSTRY: Technology

FOUNDED: 1984

NUMBER OF EMPLOYEES: 83,000

WEB ADDRESS: www.dell.com

CHALLENGE

Streamline IT operations by improving capacity planning for virtualized servers and by reducing the number of application trouble tickets received by IT administrators.

SOLUTION

With help from Dell Global Infrastructure Consulting Services and BMC Services, the Dell IT group deployed a collection of BMC® software products on Dell™ PowerEdge™ servers to improve capacity planning and reduce the number of trouble tickets.

BENEFITS

Run IT Better

- Reduced the number of trouble tickets by four times
- Enabled Dell IT to identify the best server candidates for virtualization

Grow IT Better

- Facilitated accurate capacity planning for virtualized environment



“BMC CAPACITY MANAGEMENT ESSENTIALS PROVIDES A MORE ACCURATE ASSESSMENT OF HOW OUR NEEDS WILL CHANGE AS WE ADD USERS. WITH BETTER PLANNING, WE CAN CREATE MORE ACCURATE BUDGETS AND AVOID UNNECESSARY SPENDING.”

Joshua David, IT manager, Global Monitoring engineering and operations, Dell

groups, we were able to substantially decrease the time and energy required for deployment,” says David. “Meanwhile, the Dell hardware gives us the reliability we need to run these management applications reliably and consistently, without having to worry about serious hardware problems.”

BMC TOOLS HELP DELL PLAN FOR VIRTUALIZATION AND ASSURE HIGH PERFORMANCE

BMC Capacity Management Essentials and BMC Performance Assurance for Servers help to address the group’s virtualization challenges. “The BMC software helps us identify good candidates for virtualization and plan for accommodating those virtual servers in our physical environment,” says David. “We can easily view utilization of CPU, memory, and I/O of candidate servers from a single dashboard to determine whether they are currently underutilized. We can also assess the resources we will need for these servers in the virtualized environment.”

In addition, the BMC tool set can help Dell plan for short- or long-term changes. “We can capture detailed data to understand how particular short-term programs might affect usage,” says David. “For example, if we run a Web promotion, usage for a particular application might increase. We can compare the increased usage to a baseline so we have a better sense of how these promotions affect our infrastructure. As a result, we can be sure to have the correct level of resources available for future promotions.”

The Dell team can now better plan for long-term user growth as well. “Without this tool set, we can only provide rough estimates of future use,” says David. “BMC Capacity Management Essentials provides a more accurate assessment of how our needs will change as we add users. With better planning, we can create more accurate budgets and avoid unnecessary spending.”

The BMC toolset keeps virtualized applications running at peak performance. “Once the servers are up and running, BMC Capacity Management Essentials and BMC Performance Assurance for Servers help us analyze application performance, find any potential problems, and target additional opportunities for optimization,” says David. “For example, we found that running a weekly virus scan on manufacturing application servers increased utilization to 70 percent and resulted in sluggish application performance. We rescheduled the scan to run at night. As a result, we were able to maximize performance during working hours.”

The BMC toolset has also helped protect applications from potential problems. “We used BMC software to avoid a problem with a manufacturing application,” says David. “The application was running across multiple servers and duplicated across two stacks. We used the BMC tools to run predictive analyses for multiple growth patterns. We found an issue with one server, on just one half of the stack. If we hadn’t resolved this issue, the application would have hit resource limits early. Instead, we identified the cause and were able to resolve the issue in a controlled manner, without any impact on service.”

HOW IT WORKS

HARDWARE

- Various generations of Dell™ PowerEdge™ servers with Intel® Xeon® processors

SOFTWARE

- BMC® Capacity Management Essentials
- BMC Impact Manager
- BMC Performance Assurance for Servers

SERVICES

- Dell Global Infrastructure Consulting Services

“BMC IMPACT MANAGER PLAYS A KEY ROLE IN HELPING US REDUCE THE NUMBER OF TROUBLE TICKETS GENERATED...WE HAVE REDUCED THE NUMBER OF TROUBLE TICKETS BY FOUR TIMES, FROM AN ESTIMATED 3.6 MILLION TO 960,000. AS A RESULT, WE CAN SAVE OUR GROUP SUBSTANTIAL TIME, RESOURCES, AND MONEY.”

Joshua David, IT manager, Global Monitoring engineering and operations, Dell

BMC SOFTWARE HELPS DELL CUT TROUBLE TICKETS BY FOUR TIMES

To reduce the creation of trouble tickets for application problems, the Dell team deployed BMC Impact Manager software. “BMC Impact Manager plays a key role in helping us reduce the number of trouble tickets generated,” says David. “It eliminates duplicative trouble tickets and then helps us prioritize trouble tickets based on their business impact. With BMC Impact Manager, we have reduced the number of trouble tickets by four times, from an estimated 3.6 million to 960,000. As a result, we can save our group substantial time, resources, and money.”

DEALING WITH A SINGLE VENDOR SIMPLIFIES IT AND SAVES DELL MONEY

The Dell team sees the value in working with a single vendor for so many IT management tools. “BMC provided all of the tools we needed,” says David. “Having to deal with a single vendor to receive all of our Business Service Management needs helps us simplify IT and reduce support costs.”

The Dell team can also maximize their utilization of each tool. “When you buy tools from multiple vendors, there is often overlap in functionality, so you wind up using only a small part of each tool,” says David. “The BMC tools complement one another well. By selecting a suite of BMC tools, we can be sure to maximize the use of each tool. In the end, that helps us reduce costs compared with buying tools from multiple vendors.”

In addition, the Dell-BMC relationship is helping both companies develop tools that meet the emerging use cases of large enterprises. “We have also fostered a close relationship with BMC—the BMC team listens to our product requests and suggestions, and they integrate solutions for our use cases into their tools,” says David. “That’s a tremendous benefit for us, and it will benefit other enterprises as well.”

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