



NEC BIGLOBE, Ltd.

» BIGLOBE Adopts BMC Atrium Orchestrator to Replace Procedure Sheet-Based Operations with Fully Automated Incident Handling

BEFORE

- » Productivity was hampered by the manual handling, especially in view of medium term plan to double or triple business
- » Provisioning and other integration areas had been fairly extensively automated through in-house development, but incident handling had been neglected
- » Time-consuming manual fault isolation

AFTER

- » Pilot phase of automated incident handling system reduced incident handling time (approx. 120 hours/month) by 30 percent
- » BMC Atrium Orchestrator deployment brought outstanding versatility and re-usability
- » Target for incident handling man-hour reduction for first half of 2011 set at 800 hours. Eventual goal is complete automation of two-thirds of all incident handling



www.biglobe.ne.jp

GEOGRAPHY

Japan

INDUSTRY

Information Technology

SOLUTIONS

BMC Atrium Orchestrator

BMC Remedy IT Service
Management Suite

When manual processes posed a constant threat to business productivity, the question for NEC BIGLOBE, Ltd (BIGLOBE) was how they could effectively deal with network device incidents each month — especially when business volume doubled or tripled. In order to provide quick incident responses, BIGLOBE settled on implementing an automated incident handling system with a combination of BMC Atrium Orchestrator and BMC Remedy ITSM. In the pilot phase alone, the automated system not only improved incident handling efficiency by 30 percent, the company also shaved off a considerable number of in-house development work hours.

A BURGEONING CUSTOMER BASE

Even as the demand for Internet access continues unabated throughout the world, the challenges facing Internet Service Providers (ISPs) make their way to the forefront as the customer base surges.

BIGLOBE is no exception. As a member company of NEC group, one of Japan's leading IT companies, BIGLOBE is one of the largest ISPs in Japan and serves over 2.83 million users as of the end of June, 2011. The company offers three types of business services — Internet services, broadband media, and platform services. All of these services are provided on the BIGLOBE Service Platform — an IT platform that runs 24/7 year-round — designed to deliver high-quality cloud services that are not only highly reliable, stable, and flexible, but also eco-friendly with a wealth of energy-saving features. In April 2010, BIGLOBE deployed BMC Atrium Orchestrator and BMC Remedy IT Service Management (ITSM) as solutions for automating the handling of incidents occurring on this IT platform.

MANUAL INCIDENT HANDLING WORKLOAD BECOMES UNSUSTAINABLE

BIGLOBE views customer satisfaction as a key priority. So when the company realized that it was a challenge to respond quickly to network device incidents when it doubled or tripled its business, immediate action was required. BIGLOBE's IT infrastructure consists of a multitude of network devices, including more than 10,000 physical and virtual servers. The company's manual processes were forcing the IT staff to deal with incidents manually.

"We had people at the task around the clock," said Akiyoshi Mitsuma, a manager in the Service Operation Management Group, Platform System Division. "When we wanted to double or triple our business, we faced a challenge as we had already reached the limits of manual incident management. That's why streamlining the process through automation was a major imperative for us."

The Service Operation Management Group in BIGLOBE's Platform System Division is responsible for everything from design to integration and operation, to the monitoring of the company's networks, operating systems, middleware, and other IT infrastructure.

"Our IT infrastructure supports all the services we offer both consumers and enterprises," explained Akira Nakajima, group manager of the Service Operation Management Group, Platform System Division. "Those services need to be running 24 hours a day, 365 days a year, and we are responsible for the operation and monitoring of the IT infrastructure to ensure uninterrupted operation."

Each service system had its own incident handling procedures, but with infrastructure changing by the day, there were a huge number of handling methods. "Resolving any one incident involved checking out multiple procedure sheets. So the more incidents, the more procedure sheets needed to be checked, and the greater the risk of making mistakes, putting a heavy burden on our operators," said Nakajima. "We clearly had to remedy this situation."

"BMC Atrium Orchestrator helped us save to considerably shorten automation function release cycles compared with the time that in-house development of the same functions would have required."

**AKIYOSHI MITSUMA, MANAGER
SERVICE OPERATION MANAGEMENT GROUP,
PLATFORM SYSTEM DIVISION**

"When considering the automation of operations, it makes more sense to start with operations that can be easily automated, proceeding by trial and error and gradually expanding range of automation, rather than analysing similar incidents and precisely designing and developing for the whole range," said Mitsuma. "In this respect, we felt that if there was a platform that could help unify and manage updates of workflows defined by people near the operational front line, we wanted to use it. We decided that we stood to gain by using a package that included continued maintenance by the solution vendor and would enable us to deploy automations faster than if we developed everything from scratch."

HIGH SCORES FOR OPERABILITY, SCALABILITY, AND FLEXIBLE LICENSING SYSTEM

BIGLOBE started looking at available solutions from the end of 2009, and at the start of 2010 chose four products for the comparison of basic features. By April 2010, the company had narrowed the field to two products, and after testing incident handling on a workflow that it had created for the purpose, it chose BMC Atrium Orchestrator, which worked very smoothly with the already deployed Remedy ITSM. In September of that year, the ISP began the design of an incident handling automation system, to handle alarm-driven incidents originating from the monitoring system. Procedure sheets were available, but these did not include the unwritten assumptions and rules used by system engineers, making systemization difficult. In November, BIGLOBE installed BMC Atrium Orchestrator and began to evaluate it. In April 2011, BIGLOBE launched the pilot operation of an automated incident handling system that combines BMC Atrium Orchestrator with BMC Remedy ITSM.

During the pilot phase, when a component of BIGLOBE's IT infrastructure breaks down, the automated incident handling system automatically responds to the incident according to the method pre-configured in BMC Atrium Orchestrator. More specifically, the system automates the whole process from initial fault isolation actions to the creation and update of tickets for ongoing incidents on the incident system, and actions to resolve incidents.

Up to then, if an alert was issued for a certain item of equipment in the previous system, the system operators would deal with the alert according to the predetermined procedure sheet, according to Mitsuma. "However, with the deployment of BMC Atrium Orchestrator, system operators do not need to respond to these alerts because the system is now capable of handling them automatically," he added. "Currently we have only enabled the most basic resolution — automatic isolation followed by automatic re-launching of the process concerned in response to an alert — but moving forward, we're planning to expand the scope of automation to encompass more complex responses with the aim of reaching our target for the first half of this fiscal year of saving 800 man-hours."

"We chose BMC Atrium Orchestrator for its easy operability, flexible scalability, and full complement of required features," said Nakajima. "Other major factors influencing our decision were the flexibility of the licensing system and the high level of integration with BMC Remedy ITSM."

COMPLETE AUTOMATION OF 30 PERCENT INCIDENT-HANDLING WORKLOAD

The introduction of BMC Atrium Orchestrator and BMC Remedy ITSM has helped BIGLOBE automate the handling of incidents that was previously handled manually using procedure sheets. Currently 30 percent of the incident workload has been completely automated.

"We now know from the pilot operation that we can automate 30 percent of our operations, but this is only the beginning," said Nakajima. "We're aiming to expand the scope of automation until we've automated two thirds of all incident handling."

"BMC Atrium Orchestrator helped us to considerably shorten automation function release cycles compared with the time that in-house development of the same functions would have required," said Mitsuma. "One key benefit of deploying BMC Atrium Orchestrator is that engineers near the front line can make little improvements to the system by themselves. And since we have outsourced new feature releases and usability improvements to the BMC team, we also benefit from a reduced workload and development time savings."

PLANS FOR WIDE-REACHING AUTOMATED INCIDENT HANDLING

According to Mitsuma, BIGLOBE aims to fully automate its IT environment using BMC Atrium Orchestrator through both short-term and long-term initiatives. Currently only the simplest incident resolution has been enabled, as the system is still in the pilot phase, but BIGLOBE plans to expand the scope of automation to encompass more complex responses.

"To further enhance the benefits of automation, we need to create all sorts of incident handling components and patterns, and manage them as standard parts that can be easily reused," said Mitsuma. "To this end, we now need to consider expansion and enhancement of functions, such as a database for IT infrastructure configuration management such as CMDB."

"We're on course to achieve our target for the first half of 2011 of saving 800 hours per month with BMC Atrium Orchestrator, and our next big target—automation of two thirds of all incident handling—is looking increasingly feasible. We feel that we can make a big contribution to management through this initiative."

**AKIRA NAKAJIMA, GROUP MANAGER
SERVICE OPERATION MANAGEMENT GROUP,
PLATFORM SYSTEM DIVISION**

BIGLOBE is also prioritising the automation of incident responses that require only simple procedures to be completed, with plans to expand the scope of automated incident handling. For example, one plan is to enable the automated alerts via simple messaging, by developing a system for making automatic phone calls as well as sending email notifications and integrating this system with BMC Atrium Orchestrator by the end of September 2011.

To meet the needs of customers in the near future, BIGLOBE is already developing a cloud hosting platform in the form of Infrastructure-as-a-Service (IaaS). "Rather than simply offering infrastructure we want to provide a typically well-furnished BIGLOBE service by offering incident response automation functions built with BMC Atrium Orchestrator as optional services customers could choose directly. We think this will lead to business growth," said Nakajima.

ABOUT NEC BIGLOBE

NEC BIGLOBE, Ltd. (Established in July, 2006, based in Tokyo) is a member company of NEC group, one of Japan's most powerful IT companies. The company is one of the largest Internet service providers in Japan, it offers a variety of networking services, content and applications, and had 2.83 million service users as of the end of June, 2011. BIGLOBE consists of three business functions – Internet services, broadband media, and platform services. As a cloud-era Internet service partner, BIGLOBE works with the NEC Group and alliance partners to address the increasingly complex needs of customers. As an Internet Service Provider (ISP), BIGLOBE offers consumers a service that caters to every member of the family, enabling safe connection to the Internet from home and elsewhere. With its broadband media business, BIGLOBE offers a diversity of search services and attractive content tailored to the communication styles of its users. BIGLOBE also offers practical solutions from its platform services portfolio to help businesses seeking to expand.

BUSINESS RUNS ON I.T. I.T. RUNS ON BMC SOFTWARE.

Business thrives when IT runs smarter, faster and stronger. That's why the most demanding IT organizations in the world rely on BMC Software across distributed, mainframe, virtual and cloud environments. Recognized as the leader in Business Service Management, BMC offers a comprehensive approach and unified platform that helps IT organizations cut cost, reduce risk and drive business profit. For the four fiscal quarters ended March 31, 2011, BMC revenue was approximately \$2.1 billion. Visit www.bmc.com for more information.

