SamsungSDS automates data center operations

With the deployment of HP Server Automation Software, SamsungSDS increased its server to administrator ratio by 65% while reducing failure rates by 62%, creating a complete system for customer-oriented services that is high-quality yet low-cost.

SAMSUNG SDS

SamsungSDS began the automation of processes in their data center operations with the objective of achieving high-quality, yet low-cost operations. Their major goals include eliminating operational inefficiencies, enhancing operational productivity and minimizing human errors to achieve a fault tolerant service. The deployment of HP Server Automation software helped them realize their system management and operation automation goals. By automating its data centers, SamsungSDS improved the operations standard of their IT services, increased operation productivity while reducing operation costs.

HP customer case study:
SamsungSDS chose HP Server Automation software for automating the management of the servers in its data centers

Industry:
MDI (Service)

Objectives

- To create high-quality yet low-cost IT service
- To eliminate operational inefficiencies and minimize human error
- To increase response to future changes and maximize customer satisfaction

Approach

- Standardization of processes and tasks through deployment of ITSM and establishment of operational standards
- Implementation solution: Deployment of HP Server Automation software
- Business automation: Create, apply and expand automation of processes

Business technology improvements

- Enhanced IT service operation through a global standard process
- Reduced failure rate by 62%
- Eliminated operation administrator accidents

Business outcomes

- Enhanced IT service operation productivity and reduced operation costs
- Increased server to administrator ratio by 65%
- Decreased installation patch times by 50%
- Reduced overtime work hours by 20%
- Achieved source of profit through development of new service models
- Strengthened global IT infrastructure governance system

Since its foundation in 1985, Samsung Data Systems (SamsungSDS) was in charge of all computing divisions of affiliate companies of conglomerate Samsung Group. Through an integrated offering of IT services coupled with years of experience from various projects, SamsungSDS provided services such as system integration, IT outsourcing and more. In 2008, SamsungSDS posted a record US$2 billion in revenue, cementing its position as the top company in the Korean IT service market. The company is recognized for providing good and reliable customer service by understanding customers and underlying industrial insights. It has won the Corporate Award for six consecutive years and the All Star Corporation Award in 2009. Despite its achievements, SamsungSDS continued to strive and further strengthened their five key strengths: Leadership, Technology, Development, Management and Innovation.

Customer solution at a glance

Provide HP Server Automation Software to automate system management tasks.

Primary software

- HP Business Service Automation Suite
- HP Server Automation Software

HP Services

- System architecture configuration consulting
- System implementation and testing

Business Issues

With a complex infrastructure and multiple applications, companies who invested massively in IT in the past began to face various return-on-investment (ROI) issues, requiring an aggressive method to reduce their operations costs, while not sacrificing the quality of service. SamsungSDS, which operates more than 30 data centers, was under increasing pressure from its customers to give more for less.

Lee Jae Woong, Head of the SamsungSDS System Management & Control (SMC) team said, "The customer's aggressive requirements included increasing work productivity, quality of service while reducing costs. We focused our efforts on resolving issues, reducing errors such as system failures and promoting operational efficiency."

SamsungSDS began their drive to improve efficiencies in their data centers by searching for a methodology to strengthen their support for Samsung Group's global competitiveness through a push to provide a stabilized, high-quality IT infrastructure. Traditionally, with entire servers dedicated to specific companies, there would be unused computing power, leading to waste. SamsungSDS aggressively promoted a utilitarian model, where its customers paid only for the computing power they used. This model required a drastic shift in operations methodology.

Lee said, "We conducted processes checks on our customers' requirements, with pre- and post-change evaluations in order to reach our goal of a distributed, manager server environment and we reached the conclusion that in order to meet demand for high-quality, yet lower-cost services, automation is the way to go." He added, "We decided to advance our data center operations through an IT Service Management (ITSM) system. Furthermore, we require our servers to promote the idea of a 'Global One Center', integrating all our data centers that are located worldwide into one logical system, with support for advancements such as cloud computing."

Business Approach

The implementation of HP's solution began with a pilot project, targeting the financial affiliates of Samsung Group. This helped to clarify the standardization outline and its customers' requirements. Once the requirements of the pilot project had been established, SamsungSDS conducted detailed reviews of automation solutions

of HP, IBM and BMC. The evaluation covered the completeness of each solution's technological framework, functionality, and future technological roadmap. In the end, SamsungSDS chose HP Server Automation solution, which is embedded in the technology framework of HP Data Center Automation Center, a core element in HP's Business Technology Optimization (BTO) strategy. Based on Opsware technology, it is highly regarded as a solution that ensures quality compliance and is cost effective, especially in a complex environment. Functions include the automation of overall operation life cycle of software and servers, including bare metal provisioning, patch management, software installation, configuration management , code distribution, compliance as well as management for a wide variety of operating systems.

Immediately after selecting HP's solution, Samsung began implementing automation of its processes, focusing on system administrator (SA) task automation and operator (OP) task automation. Work processing automation systemized service support, service delivery and IT infrastructure management to enable processing without operator input. In addition, the ability to establish a baseline of its servers and establish configuration standards helped to reduce time consumed for standards conformity and expanded resource information accuracy to 100%. As a result of SA and OP task automation, hours put in by administrators and operators have been drastically reduced, while SamsungSDS's configuration of tasks increased security through regular inspection of security weak points and eliminated human errors.

Outcomes

In the past, for SamsungSDS, automation meant initiating task scripts manually on each server, which brought marginal improvements in their processes. With the implementation of HP Data Center Automation Center, the impact was more pronounced. It enhanced the quality of operations by strengthening management of SamsungSDS's entire server capacity. Less time spent on simple and repetitive tasks meant more time can be spent on critical works.

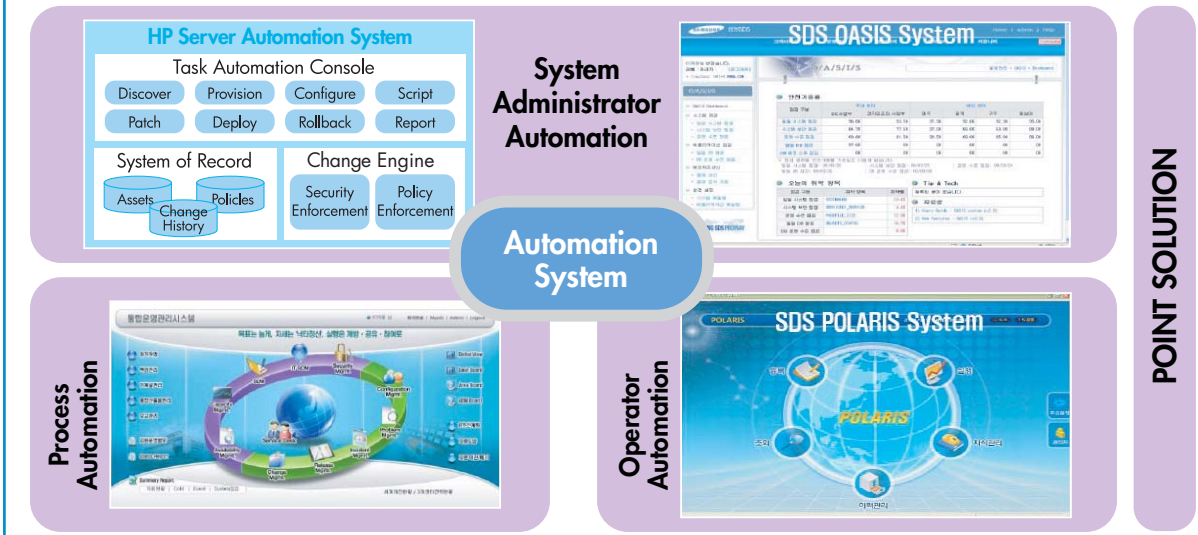
From a closer perspective, reduction of operation costs enhanced productivity – the server to administrator ratio increased by 65%, as compared to numbers prior to the start of the pilot project. Patching and installation times were reduced by 50% while overtime work time was reduced by 20%. This resulted in increased satisfaction of employees and improved quality of services. Additionally, tasks that used to be delegated to vendors, such as inspection of server security, can now be done in-house now that employees are freed from mundane and repetitive tasks that have been automated; resulting in savings for SamsungSDS.

The level of quality that users can expect from SamsungSDS IT services has also been raised, as the error rates has been reduced by 62% compared to before the start of the pilot project. All in all, through the automation of tasks, SamsungSDS prevented 97 cases of failures within two years because security checking was executed at 100% of expected levels and detailed tasks management functions, such as analysis of security weak points was now automated and strengthened. Less time was spent on operating system installation and patching – hours now as compared to days in the past – meant less down time, enhancing the user experience. In addition, there have been zero operational accidents with the automation of the process.

Integration of Global Operations

SamsungSDS began automation of its data centers, starting with the financial affiliates of Samsung Group. Within two years, the automation of its data centers was expanded to include data centers in Gwachon and Gumi in Korea, England, New Jersey, USA, Beijing, China and Singapore. The implementation of HP's automation solution included several large-size data centers in Korea and worldwide, with a firm focus on SamsungSDS's idea of the 'Global One Center'. This involves integrating, standardizing and efficiently integrating worldwide data center operations as a logical singular system to enable SamsungSDS to control in real-time the operation and resources from a central, remote location. With HP's solution, SamsungSDS can now perform integrated management of worldwide IT resources from a master center.

SamsungSDS has achieved automation of operations in its data centers from operations to management and it plans to extend their automation capabilities in the future to include higher level service automation and implementation of cloud computing applications.



"Standardization is key; SamsungSDS plans to expand server automation as well as its storage-network."

Lee Jae Woong
Head of SamsungSDS
SMC team

Why data center automation?

We decided to promote data center automation in response to our customers' demands for high quality service at lower cost. Automation also allows us to aggressively respond in a rapid changing environment, increasing the satisfaction and productivity of our customers.

Why HP?

We compared various solutions offered by HP, IBM and BMC, looking closely at areas such as solution architecture, future roadmap and functionality to see if it supports our goal of the Global One Center. We chose HP Server Automation for its comprehensive technological framework that includes a roadmap not just for server automation, but also for network and storage solutions. Overall, we are very satisfied with the integration operation.

What are the keys to successfully automate a data center's operations?

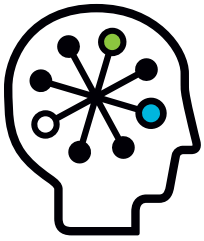
We are able to achieve success because we are open to change, such as breaking away from the traditional framework and operation method, applying innovative processes that enable us to analyze task execution efficiency, resulting in the standardization of all possible tasks and the adoption of global standards.

What are the benefits of data center automation that you have experienced?

We were able to enhance the quality of operations by strengthening management for our equipment and increase operation productivity. A major concern for an administrator in terms of system management is the reduction of manpower. This was achieved for us through the automation of tasks to manage system failures, statuses, security and patching. It created an environment where employees can focus on more valuable tasks. Another benefit included our being able to equip ourselves with a variety of operating systems that allowed us to offer a more diverse set of operations and application support with the same hardware.

What will be SamsungSDS's focus in relation to data center automation in the future?

We plan to extend our use of automation to the network and storage areas by utilizing HP's Network Automation and Storage Essentials software. This would be a great complement to Server Automation which is currently installed on thousands of servers in our data centers. In the future, we also plan to link with service automation and cloud computing to aggressively promote the advancement of tasks in the data center. Ultimately, we plan to focus on providing high-quality and low-cost service to customers to help them strengthen their business competitiveness through effective, low-cost, reliable IT solutions.



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