# Integrated Operational Management Middleware Adopting a New Framework, "WebSAM Ver. 6"

YATA Yasuhiro, UENO Kazuya

#### **Abstract**

The WebSAM Framework is the first in the industry to realize integration of various functions necessary for system operational management, such as configuration information, operation information and license information using the "WebSAM CMDB," a database that unifies various system operational management information regarding servers, networks, storage and applications.

A dramatic reduction in costs can be expected from the building phase to the operating phase of the operational management environment with the adoption of this framework.

# Keywords

operational management middleware, operational management platform, framework, CMDB, ITIL, integrated installer

#### 1. Introduction

The integrated operational management middleware, being developed by NEC, "WebSAM", was announced in November 2005 as "WebSAM Ver. 6" after undergoing functional improvements intended to realize operational management from a management perspective.

The innovative renewal of architecture for an operational management product was realized for the "WebSAM Ver. 6," establishing the "WebSAM Framework" as the next-generation operational management platform.

This paper introduces the product, which was exhibited at our booth in the Platform Zone during iEXPO2005 and where the "WebSAM Framework" received favorable evaluations.

# 2. What WebSAM Framework Is

The WebSAM Framework is an operational management platform that centrally manages databases for the operational management information of the system, by integrating functions that are commonly used for operational management.

The message management function, license management function or installation management function, for example, are all such functions. It became possible to dramatically reduce the product development costs by sharing these functions (**Fig. 1**).

# 3. Features of WebSAM Framework

It offers a centralized database that unifies various types of system information on servers, networks, storage, etc., as the "CMDB." Furthermore, the formats and setting methods for information on configurations relating to various platforms have also been unified.

Due to these developments, a dramatic reduction in the manhours for the operations manager is possible since administrative work, such as license management and user management, can be centralized and improvement in the maintainability of various platforms can be sought (**Fig. 2**).

# 3.1 Configuration Information Centralizing Function

A database (CMDB) that centrally manages information on system configurations from servers, networks, storage, applications, etc., collected by the WebSAM product, is provided.

It becomes possible to centralize the comprehension of system configurations, leading to the execution of more efficient administrative work and improved operability.

Furthermore, it will also be possible to realize the ITIL process in an efficient and effective manner, through collaboration with the configuration management function of the WebSAM ServiceDesk, which provides support for the improvement of operational process for IT operations based on the ITIL.

# 3.2 Integrated Installation Function

A function that centrally manages the implementation of the WebSAM products is provided. The work required at the time the systems are built is reduced and efficient implementation is made possible by providing functions that execute installations to nodes at remote locations or perform the management of configurations.

Offering an operational management platform capable of improving management efficiency and quick responds to new technologies. •System operational management information centrally managed by WebSAM CMDB. •Functions that are commonly used for operational management are integrated. Business applications / business processes Business System Business IT asset Incident operational life-cycle management management analysis management management WebSAM Framework License Log output Message **Process** management management management management WebSAM Operational Configuration **CMDB** Communication Installation information information board & management management management integrated GUI

Fig. 1 Operational management platform architecture "WebSAM Framework."

Job

management

Server

management

Storage

management

Network

management

**Application** 

Backup

management management

Maintainability of the system is improved since comprehension of the overall status and change management can be performed accurately and efficiently due to centralized operational information. WebSAM CMDB: Database created by extending the configuration management database concept of ITIL. WebSAM Framework Centralized Individual operational management middleware management of WebSAM CMDB operational management AP STRG information NW MG Server Network Configuration information Storage Operation information Application Performance information Configuration information of ITIL Failure information **Expanded information** CMDB: Configuration Management Data Base, SV:Server, NW:Network, AP: Application, STRG: Storage, MG: Management

Fig. 2 Feature (1): Centralizing management of operational management information with WebSAM CMDB.

# Integrated Operational Management Middleware Adopting a New Framework, "WebSAM Ver. 6"

Reduce the load on the system management work that tends to become decentralized and complex by integrating functions that are commonly used for operational management.

#### WebSAM Framework Common agent Integrated installer OUnify agents to use Automatically determines resources effectively the necessary functions and reduce management and remotely installs all in one go. WebSAM CMDB Integrated license management Integrated GUI OThe license is easily Overall and detailed comprehended and managed information is easily from a broad perspective to comprehended for more Unification of configuration make effective use possible efficient management information and settings for the entire system. by enhancing seamless collaboration among O Simplification and increased efficiency products of managing configuration information is possible with increasingly complex systems.

Fig. 3 Feature (2): Integrating common functions of operational management.

# 3.3 GUI Shortcut (Event-Linked) Function

A function is provided that calls out the GUIs of products according to the detected events with shortcuts on the system monitoring screen, thus providing an operational perspective by using the integrated operational management product (Web-SAM MCOperations).

This realizes the integration of system monitoring, making it possible not only to efficiently monitor operations but also provide appropriate responses in a rapid manner whenever problems occur (**Fig. 3**).

# 4. Conclusion

Many people stopped by our WebSAM booth and experienced the superior qualities of WebSAM Version 6 during the iEXPO2005.

Although the framework has been completed for only some of the products at this point, we intend to sequentially increase our complement of products compatible with the framework. We ask for your continued support as we carry on our work on the operational management middleware, WebSAM.

# **Authors' Profiles**

YATA Yasuhiro
Assistant Manager,
Middleware Department,
Mission Critical Systems Division,
NEC Soft, Ltd.

UENO Kazuya Manager, IT Solution Division, Keyware Solutions Inc.