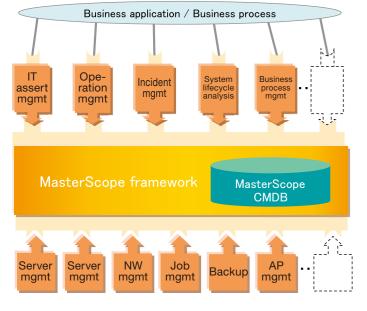
### Improving scalability by sharing infrastructure

MasterScope shares infrastructure performance as "MasterScope frame work". It realizes the simple operation management by easy install, reducing effort for implementation and operation with integrated viewer. Moreover, reinforced integration among Master-Scope products makes system scalability and feature scalability more trouble-free. It results in realizing step-by-step implementation according to customer's demand.



### **Available Platform**

Windows Server 2003 SP2 (x86)

Windows Server 2008 SP2 (x86)

RedHat Enterprise Linux 4.0 (x86)

\*Please contact us for the other platform environment

# **Operating Environment**

	System memory	Remaining disk
Viewer function	More than 64MB (Recommended more than 128MB)	More than 100MB
Manager function (Windows)	More than 64MB (Recommended more than 128MB)	More than 1GB
Agent function (Windows/Linux)	More than 32MB (Recommended more than 64MB)	More than 300MB

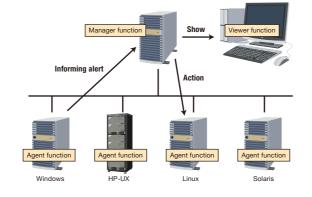
Note: It's not included the area for data file etc which is made after installation

### **Product Portfolio**

Function	Function explanation
Managerfunction MasterScope MCO Base Manager	Unified management of monitoring information collected by monitoring targets, reporting to the viewer, order to take an action and restriction Service process monitoring, service message monitoring, performance monitoring, knowledge management, recovery performance, reporting function, log monitoring, event correlation function.
Agentfunction MasterScope MCO Base Agent	Monitoring the target and report. Take an action after the order. Service process monitoring, performance monitoring, recovery function, log monitoring.
Viewerfunction MasterScope MCO View	Monitoring terminal
Scenario Control(option) MasterScope MCO Workflow Manager MasterScope MCO Workflow Agent	Automatically defining operation work flow and performing.  Monitoring the performance condition
Manager Duplication(option) MasterScope MCO HA Option Agent	Option for Implementing manager duplicating structure.
Provisioning solution package MasterScope MCO Provisioning solution package	Solution which realizes autonomous provisioning of 3 layers system (Web, AP, DB) by cooperation with SigmaSystemCenter (SSC).
Failure analysis solution package MasterScope MCO Failure analysis solution package	Solution which enables to automate identifying failure cause and analyzing the range of influence by cooperation with MasterScope Smarts product.

\*MCO: MISSION CRITICAL OPERATIONS

# **Configuration Example**



NEC Corporation. IT Platform Global Business Development Division

# MasterScope MISSION CRITICAL OPERATIONS

# Empowered by Innovation



# MasterScope MISSION CRITICAL OPERATIONS **Integrated operations** management software

Enables to operate system steadily and efficiently from operation point of view. Integrated management of unified system, which leads speedy decision & action for incident.

# **Appeal Points**

### Integrated monitoring with simple GUI

Reduces the management workload getting more complicated by simple and integrated management with user-friendly unified console for various servers, applications, networks, etc including virtual environment.

# **Support for speedy decision**

Offers not only reporting "what is happened" but also navigates to "what you should do" for incidents. Prompt recovery of failure can be achieved by combination of NEC's unique know-how for dealing with failure and customer's know-how accumulated by daily operation.

### **Automatic operation** according to customer's policy

Great support for operator by automating operation as specified by customer's policy which is suitable for customer's efficient system operation

### **Features**

# Simple viewer



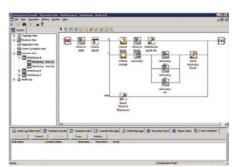
It is troublesome to grasp the incident situation at complicated system. GUI (Graphical User Interface) with little mistakes implemented by ergonomics greatly realizes to reduce workload of misleading management

### Recovery support



There are many problem roots concealed under OS, database, application, etc. For avoiding these problems, NEC supports suitable action by using not only customer's know-how accumulated by daily operation but also the knowledge database developed by NEC's system operation know-how

### **Automatic operation**

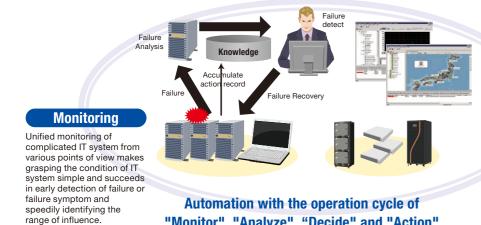


Improves performance efficiently by automatic operation of action flow registered in advance. 12 types of workflow template NEC examined enable to automate the optimization of resource without complex condition-definition.

# **Integrated managment from operation view point** and knowledge-based support for uninterrupted and optimized system running

## **Operation Image**

Catches sign and information of failure by monitoring thresholds of server resource's performance information, logs and alive processes. System abnormal situation is indicated on monitoring viewer by color, sounds, mail, and flashlight so that operator can concentrate on daily work without sticking to the monitoring target.



# Analysis/Decision

When some incident occurs, Mission Critical Operations analyzes autonomously based on incident pattern implemented in advance. It navigates by informing not only "what happened" but also "what needs to be done next" and reduces the time for detecting cause

### Action

Enables to register scenario of failure recovery operation and automate its operation flow. This results in reducina mistakes by manual operation and improving operation efficiently

# Quick failure analysis by integrated management

Integrated management of operating condition of whole system enables to detect the root cause of failure immediately.

"Monitor", "Analyze", "Decide" and "Action"

### Easy to grasp whole system condition

Grasping the whole system condition can be easily realized by unified monitoring with integrated console covering multi-vendor /multi-platform server, OS, application, and network without changing management viewer depending on the systems. Real-time report of incident by color, sound, e-mail, flashlight etc enables prompt detection. In addition, high-quality IT service management based on ITIL is realized by the combination with MasterScope ServiceManagaer (reinforce is planned in the future).

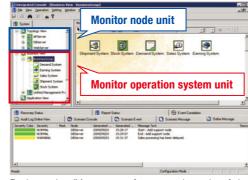
### Visualizes failure impact on operation

Receives the messages occurred on network or server using event log/syslog/application log etc, classifies into operation system units and shows them as tree structure. It enables to identify the range of influence speedily.

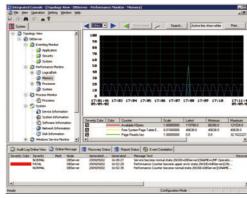
### Catches the failure warning

Prevents failures before abnormal situation occurs by monitoring the operation condition of each servers (CPU/remaining memory etc) and detecting performance deterioration at early stage by finding threshold excess.

Uniformed management view for monitoring application's detailed information is also available by integration with application management product.



Business view (Management from operation point of view)



Topology view (monitoring performance)

# **MasterScope MISSION CRITICAL OPERATIONS**

## Clarifies "what need to do for incident"

Navigate by informing not only "what happened" but "how to deal with it" when failure occurs.

### Accumulates and utilizes daily opeartions know-how

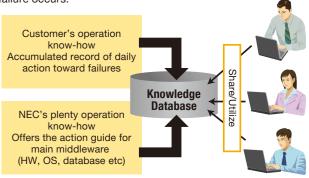
The time for action can be reduced by accumulating/sharing the daily operation action record as their knowledge. Besides this record, easy customization according to the environment such as using operation manual and the applicable page at web site etc is available at incidents. As customer uses the system, operation management level can be developed.

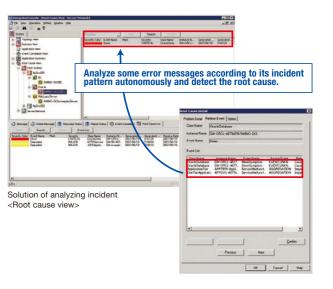
### Action guide for main middleware

Offers the product knowledge defining monitoring implementing category and action plan of main middleware products such as OS, database, groupware, application server etc. This enables to utilize technical information collected by NEC's implementing experience and support to decide the action greatly for system recovery.

### Correlation analysis for quick root cause detection

Rapid detection of root cause without investigating/analyzing enormous mounts of messages can be realized by reporting the message informing the root cause identified after correlation analysis associating some error messages. Analysis rule can be optionally defined according to customer's system environment. Moreover, for the incident of network, which is difficult to be analyzed, with the failure analysis engine implemented in EMC's resource management product "Smarts", customer can analyze the cause without any misleading implementation nor operation for changing the system. Consequently, reduction of the time for recovery is expected.





# Prompt and steady action for incident

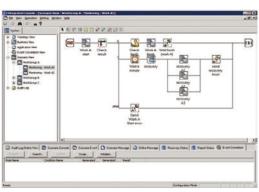
Automatic performance of action flow. Reduces the mistakes caused by manual operation and improves performance efficiently.

### Automates the action flow with scenario restriction

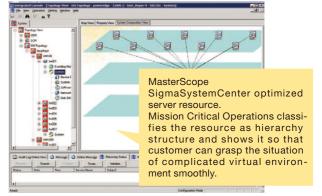
Automatic operation is achieved by the action flow registered for incident in its workflow beforehand. The workflow can be effortlessly defined by deploying GUI parts. With GUI, the action flow progress is obviously recognizable so even if the action is in abnormal condition, it can be immediately dealt with. If daily operation schedule is registered in advance, automatic operation is also available.

### Optimizes resource

The integration with "MasterScope SigmaSystemCenter", which optimizes IT resource according to failure or workload valance, enables to automate not only optimizing resource at Web 3 layers modeled system but also the monitoring implementation. It realizes automatic operation of the action for adding spare server, rebooting server, changing implementation information etc, based on examined workflow after correlation analysis of failure which the application management product detects.



Scenario restriction viev



Provisioning solution visualizing virtualization system as well