A Business Operation and Management Software Suite

November, 2015

NEC Corporation,
Cloud Platform Division,
MasterScope Group
NEC brings together and integrates technology and expertise to create the ICT-enabled society of tomorrow.

We collaborate closely with partners and customers around the world, orchestrating each project to ensure all its parts are fine-tuned to local needs.

Every day, our innovative solutions for society contribute to greater safety, security, efficiency and equality, and enable people to live brighter lives.
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1. Concept of MasterScope
Changes of the environment for IT system management

Demands for more than comparable service quality, Response to compliance needs and complexity of IT environment make load of operations manager bigger.

**Farm enterprise**
- Cost reduction
- Response to Compliance

**User**
- Demands for more than comparable services

**IT system operating division**
- Load growth by responding problems occurred one after another

**Rapid changes on IT environment**
- Legacy system to open system
- Multivendor products
- Complexity of system linkage
- Increasing servers and client PCs
- Complexity of network environment
- Rapidly evolving IT technology

- Difficulty in grasp of distributed system’s configuration
- Rapid increase of management targets
- Difficulty in management of multivendor
  - Management method is various
- Extent of the impact is ambiguous
- Shortage of employee for the open system
  - Increased 24H365D system operation
- Increasing system management man-hour
  - Lots of PCs and large networks

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Orchestrating a brighter world
Concept of MasterScope

1. **Easy to visualize** the system and its risk
   - Friendly GUI for various functionality

2. **Simple Decision**
   - Corporate Management
     - Integrated Management
     - Service Level Management
     - Asset Management
     - IT Overall Control Support
   - Navigate appropriate decision
     - Support with system management knowledge

3. **Simple Visualization**
   - System Management
     - Server Management
     - Storage Management
     - Network Management
     - Application Management
   - By autonomic operation, to improve it for comfortable management
     - Automatic resource optimization with various workflow template
By going back to basics of operation management, we pursue "simple". There're 3 keywords to efficiently realize the entire control.

**Visualizes** system risks and current status easily
Easy to use and understand GUI for highly multiple functions

**Navigates appropriate** Decision
Supports by knowledge consolidated system operation know-how

**Improves** to the comfort operation by autonomic operation
Automates optimization of entire resources by the various scenario operations
MasterScope is a series of Integrated System Management Software products which enables simple operation and supports controlling whole IT system.

### Corporate Management

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### Operations Management

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### System Management

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*System Manager is included in MISSION CRITICAL OPERATIONS
MasterScope offers integrated system management for Network, Hardware, and Application layer.

**Target Monitoring layer**

- **Application Performance / Service Level**
  - Performance or service level (mail, Web, DNS etc)

- **Log**
  - Logs from OS or applications

- **Service and process**
  - Windows service, process activation and/or alive status

- **Resource**
  - OS level performance, (CPU, memory, disk capacity etc).

- **Network**
  - Alive status of servers by ICMP (plus SNMP trap monitoring)

- **Hardware failure**
  - Hardware failures (HDD, fan, temperature etc)

- **Storage**
  - Storage operation status or configuration management

**Details**

- Logs from OS or applications
- Windows service, process activation and/or alive status
- OS level performance, (CPU, memory, disk capacity etc).
- Alive status of servers by ICMP (plus SNMP trap monitoring)
- Hardware failures (HDD, fan, temperature etc)
- Storage operation status or configuration management

**Product lineup in MasterScope**

- Application management “Application Navigator”
- Server management “SystemManager”
- Network management “Network Manager”
- Each HW vendor’s tool (ESMPRO for EXPRESS Server)
- Storage management “iStorageManager”

*System Manager is included in MISSION CRITICAL OPERATIONS*
MasterScope supports simplified system operation

MasterScope is the operation management software to realize simplified system operation and support entire system control.

Easy operation

Rich functionality

Easy installation

Practical accomplishment is 2,000 systems per year

Supports nonstop business

Safe operation by autonomic protection

Reduction of operation cost

Streamlined operation

Expands business

Safe and Secure expansion

Safety

Efficiency

High Reliability
2. History and Achievement
MasterScope has been implemented in various kinds of customers’ systems. This is supported by our continuous challenges to anticipate IT trends / user-needs and realize the “simple operations”.

- Anticipate users’ needs based on the IT trends
- Knowledge DB Provisioning operation
- Operation mgmt with business view point
- Renovate Operation mgmt framework [MasterScope Framework]
- Internal control
- Green IT Eco
- Cloud Data Center
- Simple and integrated operation
- Continuous challenge to “Simplify” operation mgmt

1990s 2006 2007s 2009s
MasterScope Achievement

- MasterScope has **10 years history** and implemented in total **300,000 system**.

- MasterScope covers **various type of business / customer** (Manufacturing, Financial industry, Government, Education, Retail.. etc)
3. (Reference) Each Product Introduction
MISSION CRITICAL OPERATIONS (MCO) monitors entire IT infrastructure to identify the cause of failures, allowing faster time to recovery. This software helps to improve your operation by automating performance and availability monitoring. It provides an integrated view into your system health that makes you prevent stoppage of a service.

**Functions**

- Enables to monitor process, services, logs by each nodes.
- Displays the server performance graphically and alerts if it exceeds their thresholds.
- Provide NEC unique know-how and customer’s system symptoms of the past issues.
- Optimizes your daily operations by defining workflow templates.

Integrates each MasterScope products’ functions into one consol.  
- Server Management  
- Business point of view management  
- Application Management  
- etc.

(*) Application management function is produced by MasterScope Application Navigator.
Realizes simple and integrated monitoring for multi-platform servers

SystemManager centralizes individual monitoring activities and improves rationality of operators. Functions required for server management are provided for all-in-one. It also has strong advantage on expandability, which is good compatibility with multi-vender platforms and perfect collaboration with MasterScope family.

Functions

- Monitoring of operational status and failure of various servers (Service, Process, Performance, Logs, File directory, configuration etc).
- Simple setup and easily understandable GUI.
- Report function offers quick notifying admins by email and warning lights.
Support stable and cost-effective management for a network of any size.

**Network Manager** enables implement automation for network fault, performance, and availability. It also can create back-up configuration files of network devices and provide software update status. Administrators can easily manage any scale of network, even under multi-vendor environment. It supports flexible management for customer’s system, and actualizes stable operation of networks.

**Functions**

- Node Management (Network map, Graphical panel view)
- Failure Management (Detailed monitoring of network failures)
- Performance Monitoring (Performance reports, Collecting and analyzing traffic data)
- Configuration File Management (Manage configuration files of multivendor products)
- Software Management (Upgrade firmware easily and quickly)
Realizes integrated monitoring for various application performance status

Application Navigator enables to see and comprehend the overview of the failure and warning which are not visible by the performance monitoring of Server. This results in not only reduction in operation control man-hours but also helps realizing a better stable Application system.

**Functions**

- Monitoring of operational status and failure of Application (Performance, Service Process, and message monitoring).
- Improvement in operations through knowledge

![Diagram](image)
Provides simple, automated operations of daily batch processing

**JobCenter** enables scheduling of tasks, such as routine processing and backups, as well as load balancing, and secure automated operation for streamlined operation and reduced human error.

### Functions
- JOB execution monitoring, operation and definition by simple GUI
- Share the job network with multi vendor platform
- Flexible scheduling by a calendar
- Outputs logs of execution or change of Job as a compliance.

### Scheduling

**Monitoring execution**
**DeploymentManager** enables implement automation for network fault, performance, and availability. It also can create back-up configuration files of network devices and provide software update status. Administrators can easily manage any scale of network, even under multi-vender environment. It supports flexible management for customer’s system, and actualizes stable operation of networks.

**Functions**

- Distributes software resources to a client system. (Installs OS, HDD copy, application)
- Manage status updates of BIOS/FW, application of service package or patch
- Maintenance for backup and restore of system environment

**Reduce the cost of installation, maintenance for system failures**
Realize simple and integrated system operation

If you have any questions about MasterScope, please contact below by e-mail

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