Introduction of MasterScope Operations Management Software Suite

March, 2018

NEC Corporation

\Orchestrating a brighter world

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.

Agenda

1. NEC Profile

2. Introduction of MasterScope Portfolio

3. Monitoring Software Suite

4. Management Software Suite

5. Automation Software Suite

\Orchestrating a brighter world   **NEC**
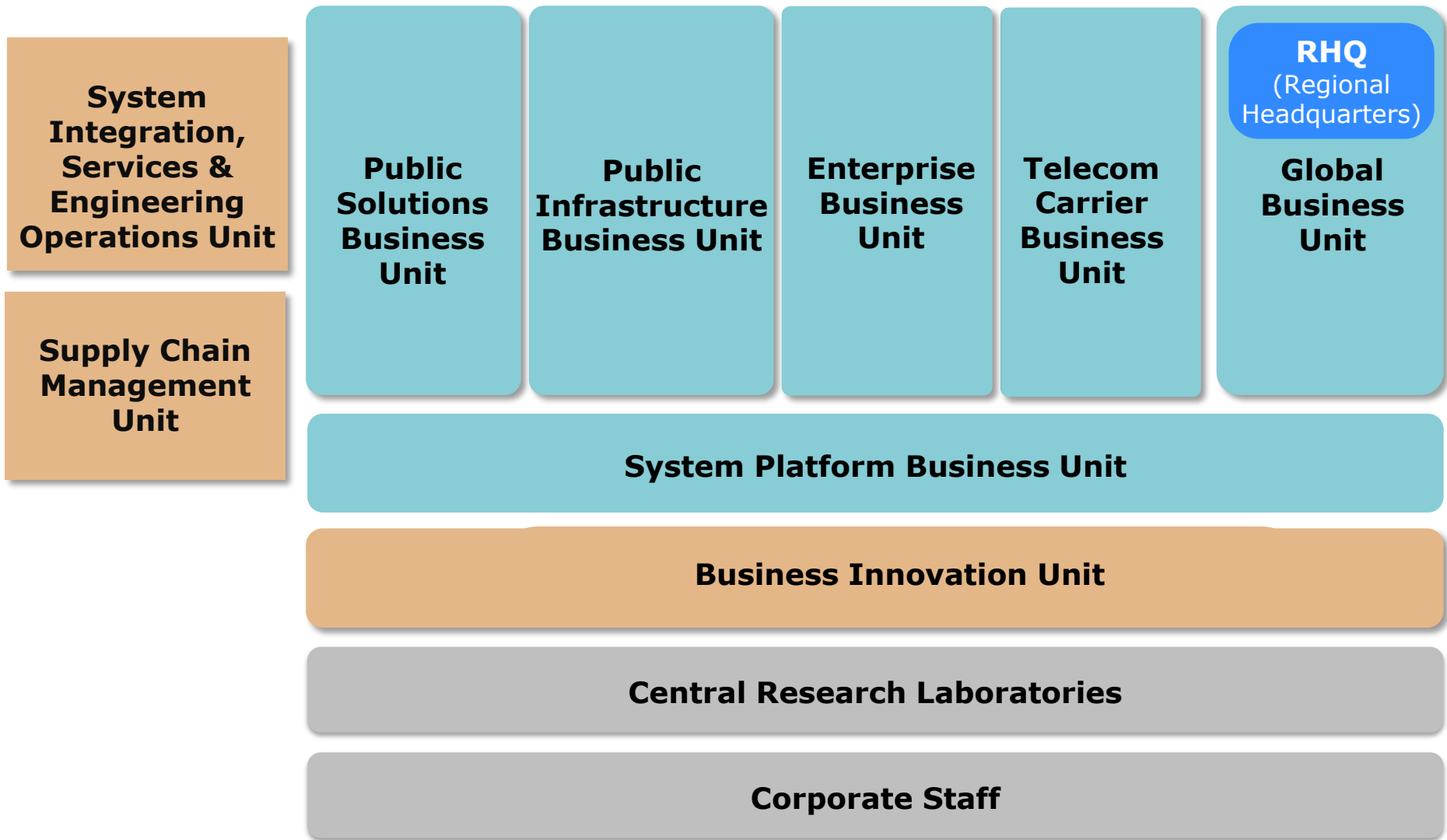
1. NEC Profile

NEC Profile

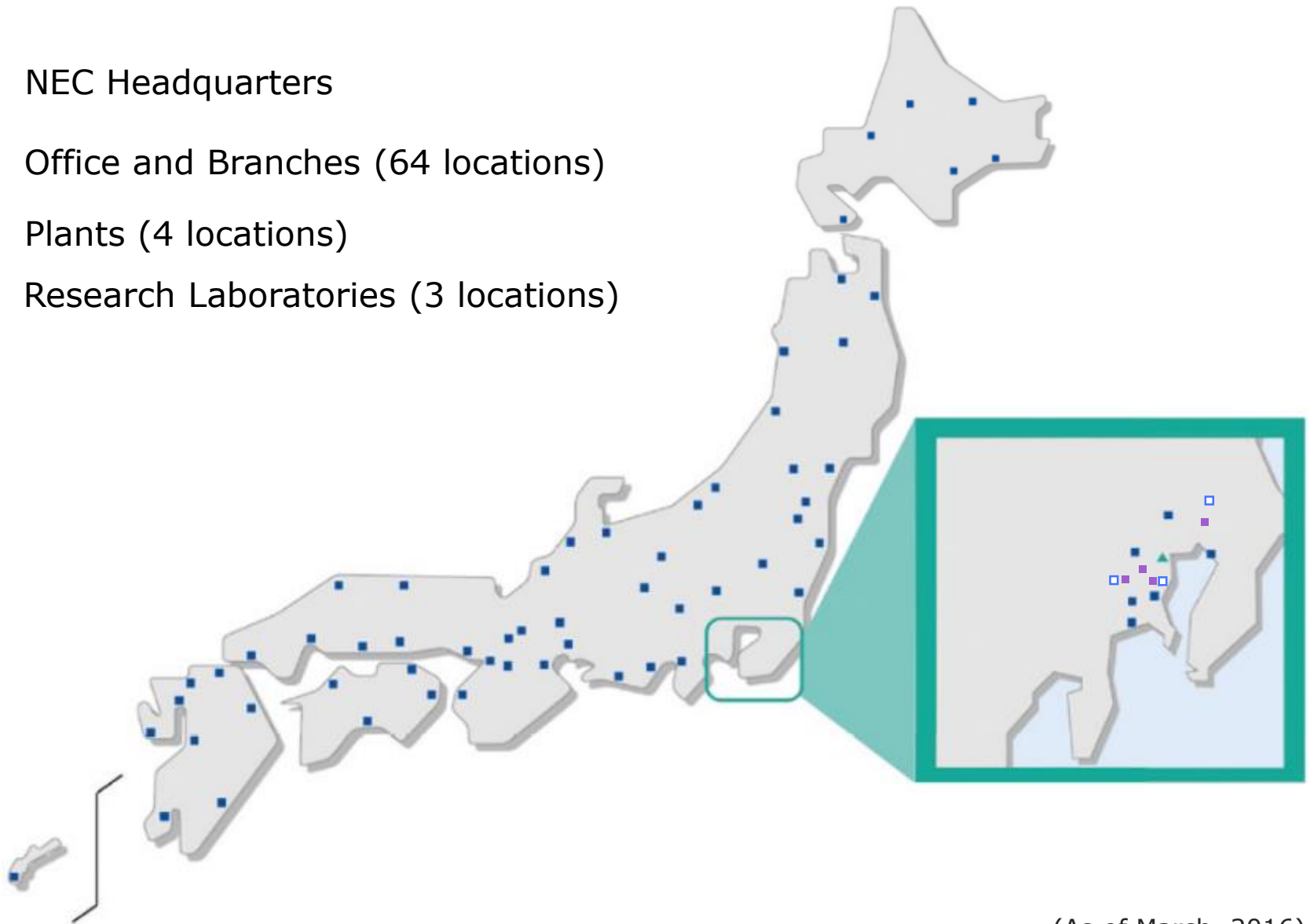| Company Name	NEC Corporation
Address	7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
Established	July 17, 1899
Capital	¥ 397.2 billion - As of Mar. 31, 2017 -
Consolidated Net Sales	¥ 2,665 billion - Fiscal year ended Mar. 31, 2017 –
Operations of NEC Group	Public, Enterprise, Telecom Carrier, System Platform, Others

Employees	NEC Corporation
	    21,444 - As of Mar. 31, 2017 -
	NEC Corporation and Consolidated Subsidiaries
	    107,729 - As of Mar. 31, 2017 –

\Orchestrating a brighter world   **NEC**

Organization Chart

System Integration, Services & Engineering Operations Unit	**Public Solutions Business Unit**	**Public Infrastructure Business Unit**	**Enterprise Business Unit**	**Telecom Carrier Business Unit**	**RHQ** (Regional Headquarters) **Global Business Unit**
Supply Chain Management Unit					

System Platform Business Unit

Business Innovation Unit

Central Research Laboratories

Corporate Staff

(Apr 1,2017)

\Orchestrating a brighter world   **NEC**

NEC's Branch Network Spreads across Japan

▲ NEC Headquarters

■ Office and Branches (64 locations)

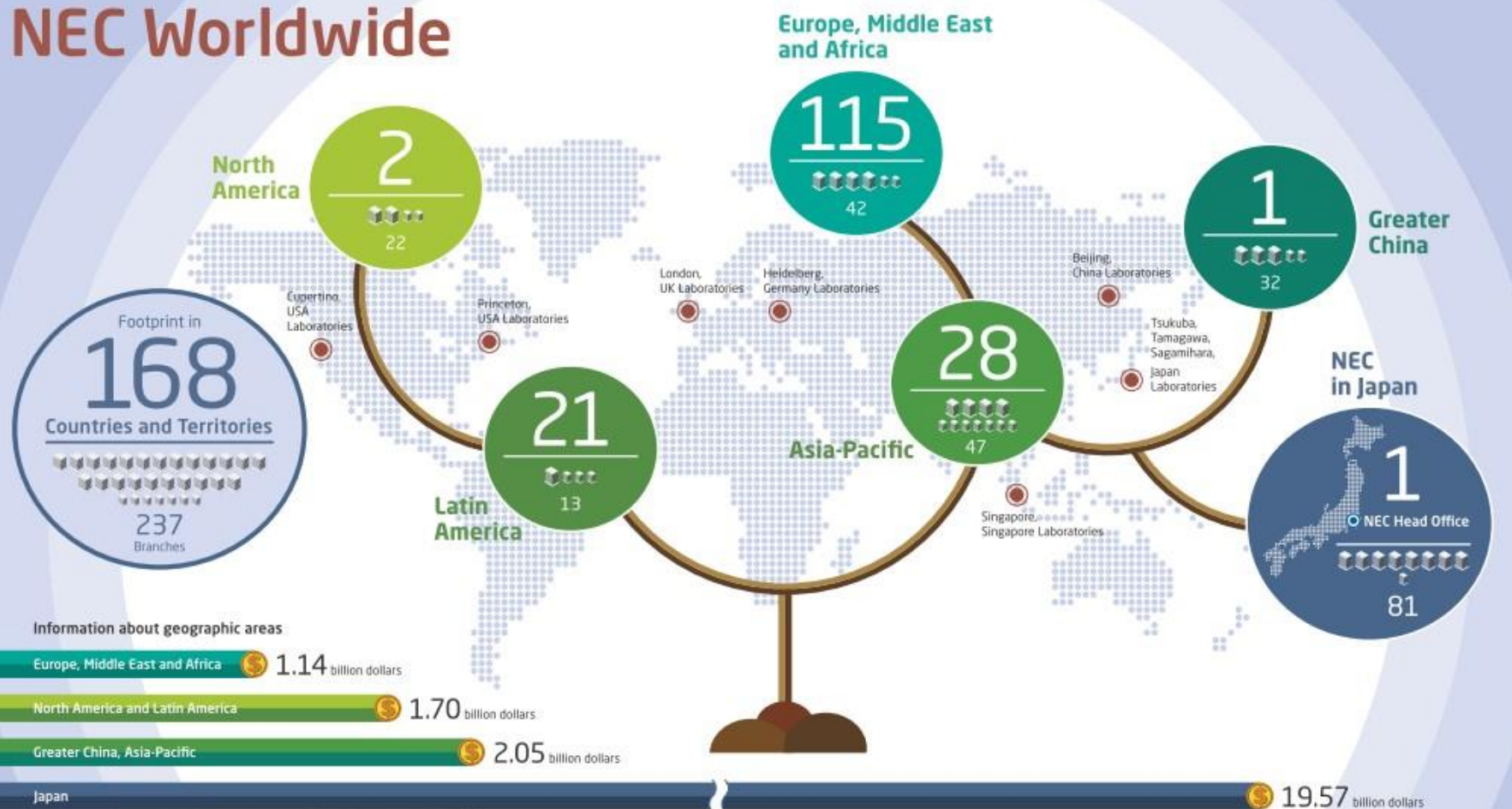■ Plants (4 locations)

☐ Research Laboratories (3 locations)

(As of March, 2016)

Orchestrating a brighter world   NEC

Proportion of Sales by Operating Segments

Segment sales 2014

24.46 billion dollars in FY2014 sales
*U.S. dollar amounts are translated from yen, for convenience only, at the rate of 120yen=U.S.1dollar. (Year ended March 31, 2015)

Public Business
28%
6.85 billion dollars

Telecom Carrier Business
25% 6.17 billion dollars

Enterprise Business
9% 2.25 billion dollars

Others
13% 3.12 billion dollars

System Platform Business
25% 6.07 billion dollars

Submarine Cable
5
times around Earth's Equator
Total Length of Optical Submarine Cable laid by NEC, over 200,000km.
NEC connects "This Moment of the World"

Satellite Systems
69
Number of satellites which NEC has been engaged in the development

Public Business
Government, Public, Healthcare, and Media

Telecom Carrier Business
Telecom Carriers

Enterprise Business
Manufacturing, Finance, Retail, and Services

System Platform Business
Hardware, Software, Enterprise Network Solutions, and Services

\Orchestrating a brighter world NEC
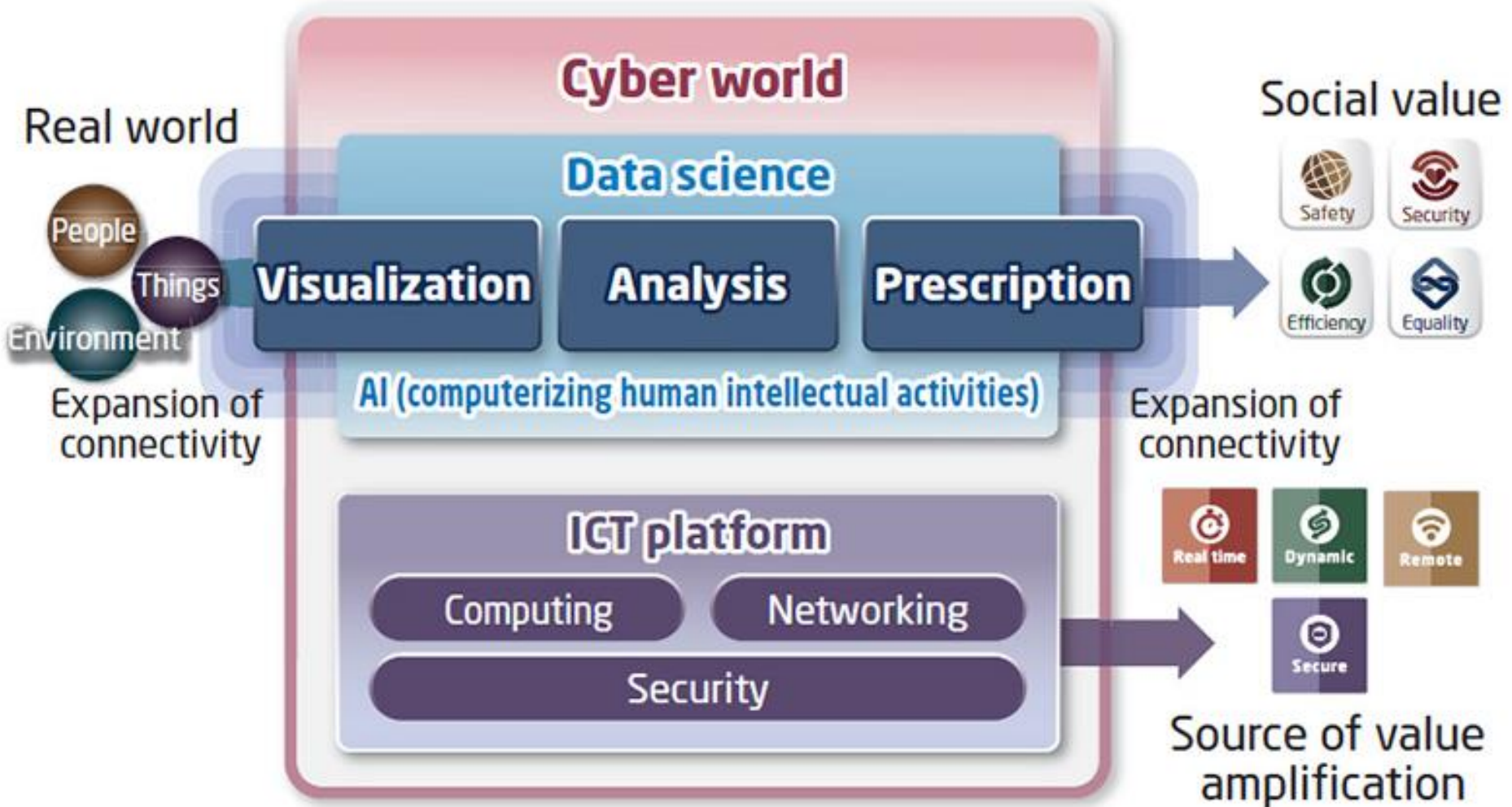
What technology will drive social value creation ten years from now?

\Orchestrating a brighter world **NEC**
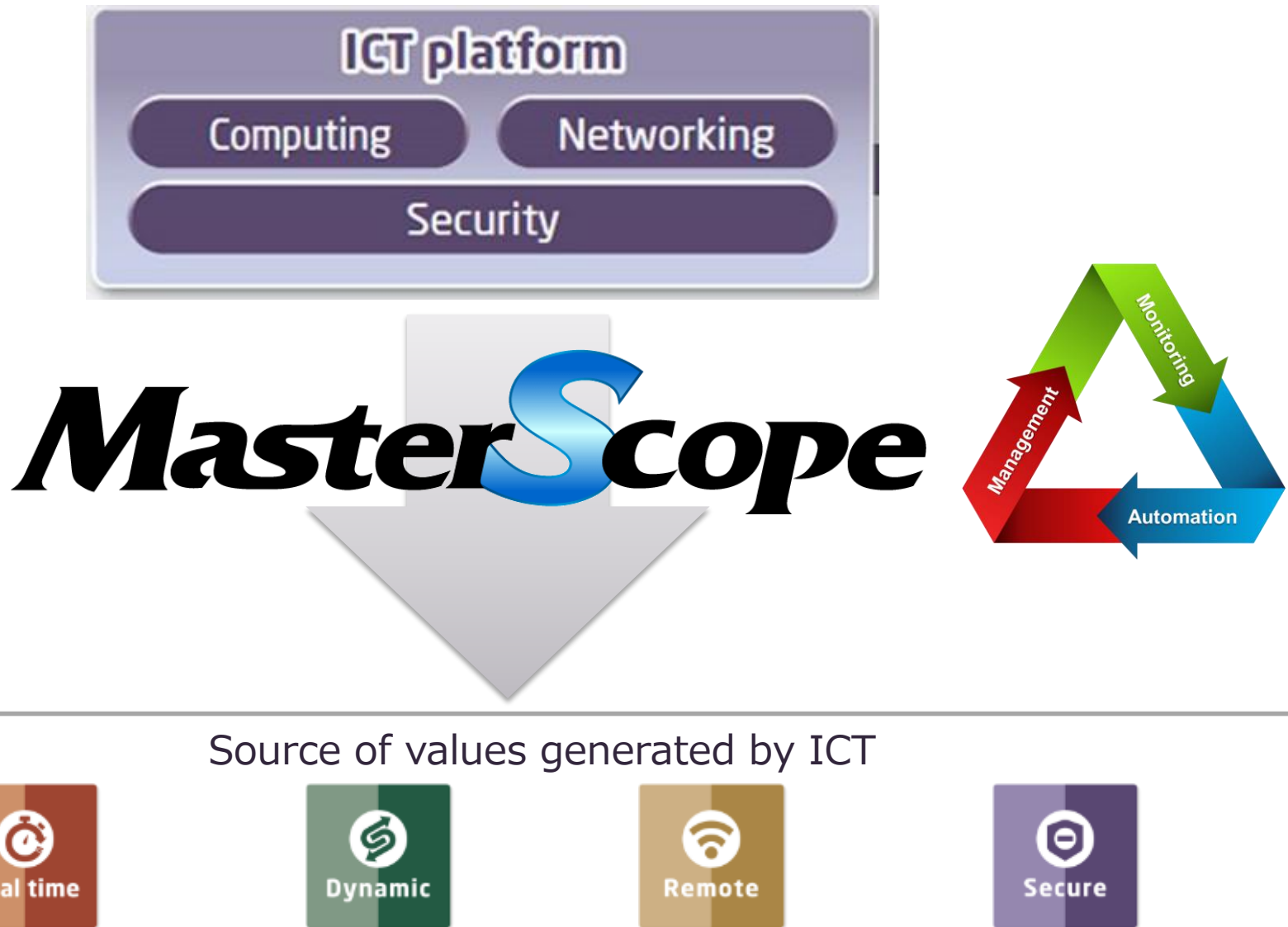
2. Introduction of MasterScope Portfolio

What Is MasterScope?

MasterScope is NEC's integrated operations management software brand that leverages the expertise and advanced technologies cultivated by NEC over many years. NEC delivers more than 3,000 MasterScope systems to customers annually.
MasterScope provides end-to-end support for systems encompassing ICT infrastructure to applications, and meets our customers' needs for easy-to-operate products.
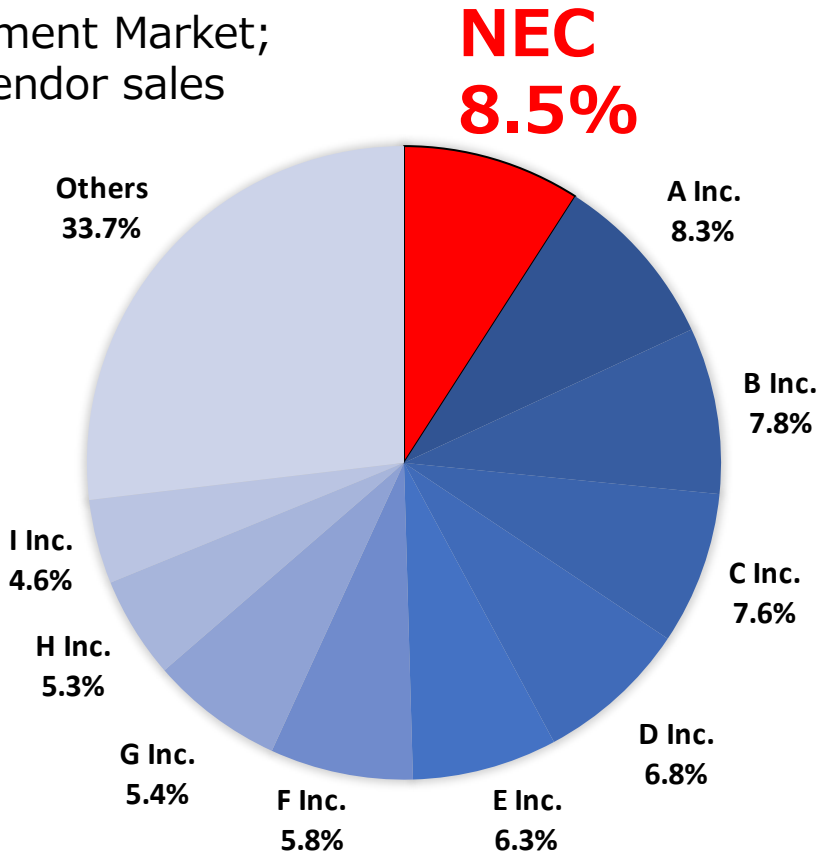

MasterScope

Automation — Optimize Operating Efficiency
- Job Scheduling and Automation
- Virtualization Management
- Backup and Software Distribution
- Cloud Management

Management — Continuous Improvement
- IT Process Management
- Remote PC Operation

Monitoring — Maintain System Stability
- Integrated Monitoring
- Network Monitoring
- System Monitoring
- Application Performance Monitoring

Orchestrating a brighter world NEC

NEC was chosen as **No.1 vendor** in IT System Management Market.

"ITR Market View: IT System Management Market2017" awards NEC as No.1 vendor in IT System Management Market for the third consecutive year. [FY2014 - FY2016]

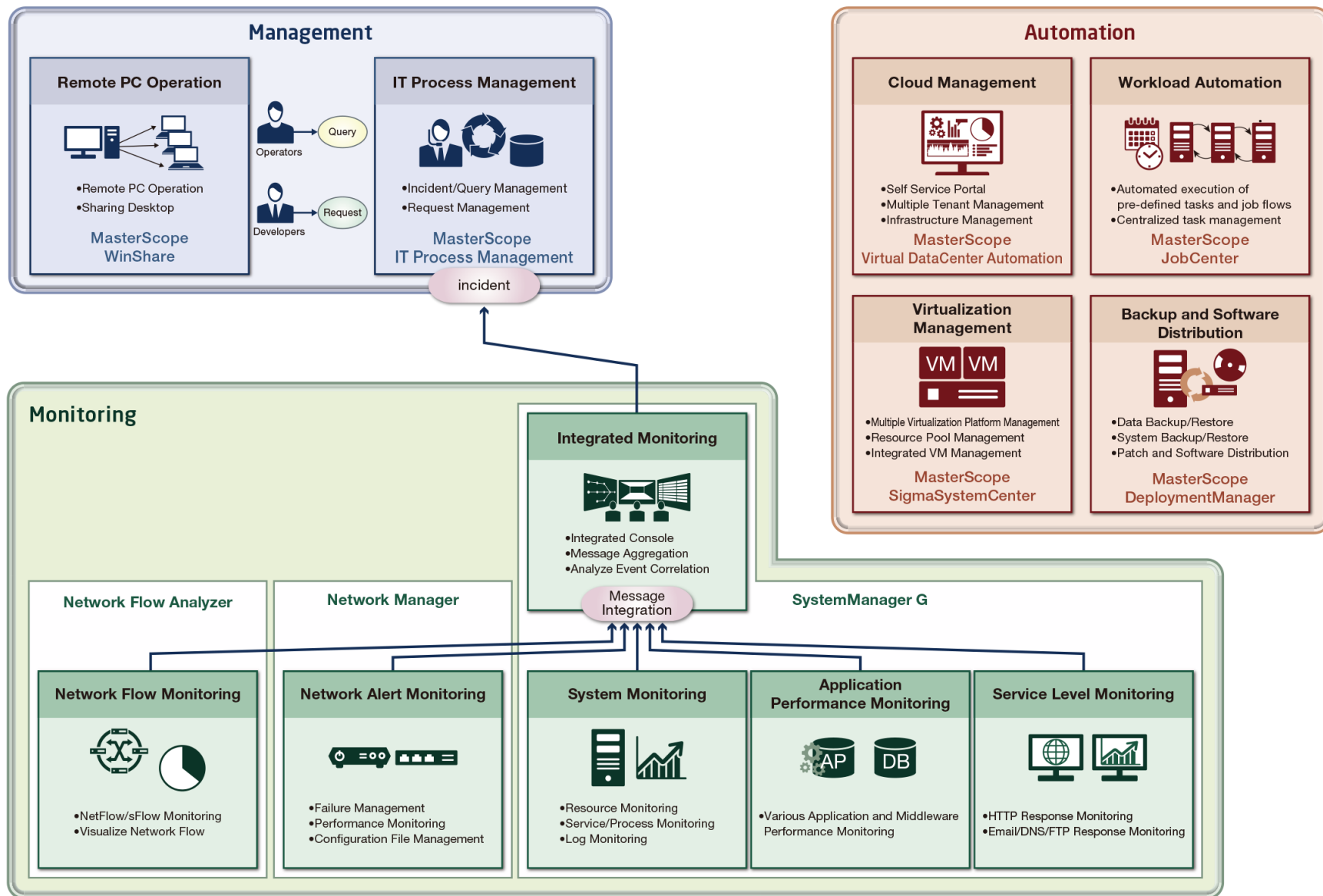**NEC's Software**   **WebSAM**   CLUSTERPRO, iStorage HS Series

- IT System Management Market; Market shares of vendor sales in FY2016

**NEC
8.5%**

Others
33.7%

A Inc.
8.3%

B Inc.
7.8%

C Inc.
7.6%

D Inc.
6.8%

E Inc.
6.3%

F Inc.
5.8%

G Inc.
5.4%

H Inc.
5.3%

I Inc.
4.6%

Source :
ITR "ITR Market View;
IT System Management Market 2017"

\Orchestrating a brighter world   **NEC**

Lineup of MasterScope Series

Management

Remote PC Operation

- Remote PC Operation
- Sharing Desktop

MasterScope WinShare

Operators → Query

Developers → Request

IT Process Management

- Incident/Query Management
- Request Management

MasterScope IT Process Management

incident

Automation

Cloud Management

- Self Service Portal
- Multiple Tenant Management
- Infrastructure Management

MasterScope Virtual DataCenter Automation

Workload Automation

- Automated execution of pre-defined tasks and job flows
- Centralized task management

MasterScope JobCenter

Virtualization Management

- Multiple Virtualization Platform Management
- Resource Pool Management
- Integrated VM Management

MasterScope SigmaSystemCenter

Backup and Software Distribution

- Data Backup/Restore
- System Backup/Restore
- Patch and Software Distribution

MasterScope DeploymentManager

Monitoring

Integrated Monitoring

- Integrated Console
- Message Aggregation
- Analyze Event Correlation

Message Integration

Network Flow Analyzer

Network Manager

SystemManager G

Network Flow Monitoring

- NetFlow/sFlow Monitoring
- Visualize Network Flow

Network Alert Monitoring

- Failure Management
- Performance Monitoring
- Configuration File Management

System Monitoring

- Resource Monitoring
- Service/Process Monitoring
- Log Monitoring

Application Performance Monitoring

- Various Application and Middleware Performance Monitoring

Service Level Monitoring

- HTTP Response Monitoring
- Email/DNS/FTP Response Monitoring

Orchestrating a brighter world **NEC**

MasterScope products have been supported by many customers since 2000.

- Even for those customers who have 4,000 servers and 3,000 devices in their systems, we have been supporting their smooth and stable operation with MasterScope products.
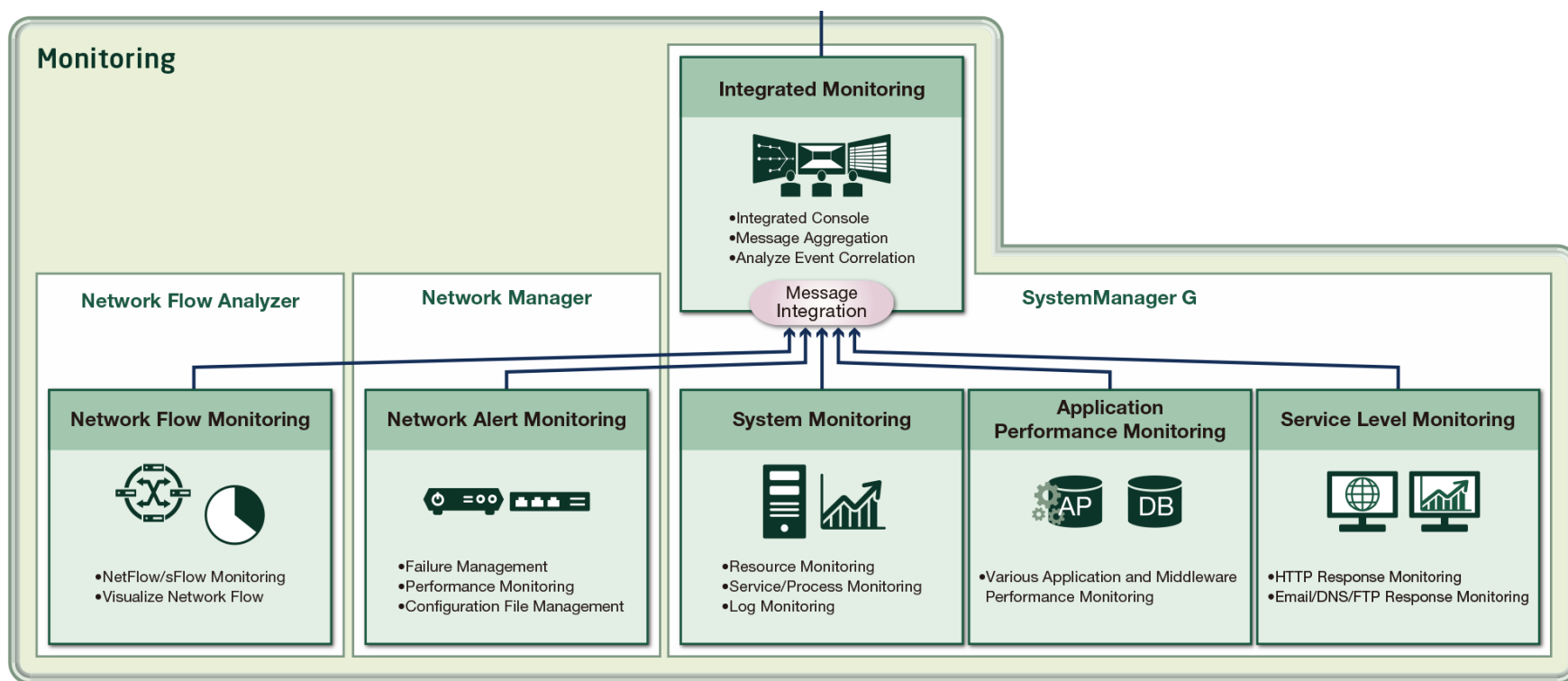
MasterScope

ANA
Airline

Canon
キヤノンマーケティングジャパン株式会社
ICT

RICOH
ICT

NTT DaTa
株式会社NTTデータ東海
ICT

長崎市
NAGASAKI CITY
Public

徳島大学
The University of Tokushima
University

meiji
Manufacture

青森銀行
Personal Main Bank AOGIN
Finance

AMADA

arkray

sysmex

TANAKA

\Orchestrating a brighter world **NEC**

3. Monitoring Software Suite

Orchestrating a brighter world

NEC

Monitoring

Integrated Monitoring

- Integrated Console
- Message Aggregation
- Analyze Event Correlation

Message Integration

Network Flow Analyzer

Network Manager

SystemManager G

Network Flow Monitoring

- NetFlow/sFlow Monitoring
- Visualize Network Flow

Network Alert Monitoring

- Failure Management
- Performance Monitoring
- Configuration File Management

System Monitoring

- Resource Monitoring
- Service/Process Monitoring
- Log Monitoring

Application Performance Monitoring

AP DB

- Various Application and Middleware Performance Monitoring

Service Level Monitoring

- HTTP Response Monitoring
- Email/DNS/FTP Response Monitoring

Orchestrating a brighter world   NEC

Which Level of Monitoring Is Efficient? (an example scenario)

Suddenly I cannot access the ERP system. Shipping deadline is very tight and I need to place an order right now.

Network? Server A?

Find out the failure point is **Server A**

Server A

Why an error occurred in Server A?

Monitoring Level 2
- Monitor application logs
- Monitor server resource, etc.

Working Fine!!

Server A

Monitoring Level 3
- Monitor which application has high CPU usage
- Monitor which process is running abnormally in that app

Find out CPU usage is abnormally high in Server A

Detect the root cause and take required actions

\Orchestrating a brighter world   **NEC**
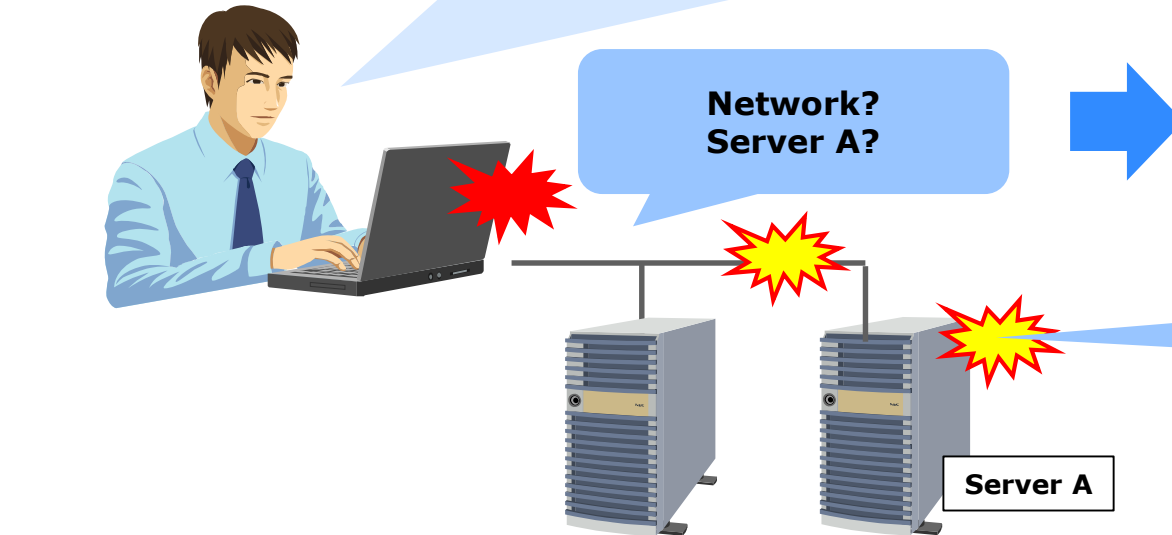
MasterScope family offers integrated products for system management of network, hardware, and application layer.

Monitoring Layer	Monitoring Level & Description	MasterScope Products	Monitoring Items Example
Service	**Monitoring Level 3** · **Service response monitoring** · **Performance monitoring for application** · **Performance monitoring for middleware in deeper level**	**MasterScope SystemManager G**	· Monitor response time of Web page · Monitor threshold of Oracle table space
Application Middleware			
OS	**Monitoring Level 2** · **Application log monitoring** · **Syslog monitoring** · **Service/process monitoring** · **Resource monitoring**		· Resource monitoring of Virtual platform (VMware vSphere) · Alive monitoring of processes (such as Oracle/business application) · Log monitoring of applications · OS resource monitoring (such as CPU, memory)
Virtual Platform			
Server	**Monitoring Level 1** · **Hardware failure monitoring** · **Alive monitoring** · **Traffic monitoring**	**Integrate with HW monitoring software of the other HW vender**	· Monitor failure of HDD · Monitor temperature · Monitor RAID · Monitor Controller
Storage		**MasterScope Network Manager**	· Monitor failure/defect of network device · Check ping availability
Network		**MasterScope Network Flow Analyzer**	· NetFlow/sFlow monitoring · Visualize Network flow

\Orchestrating a brighter world   **NEC**

Monitoring Level 1

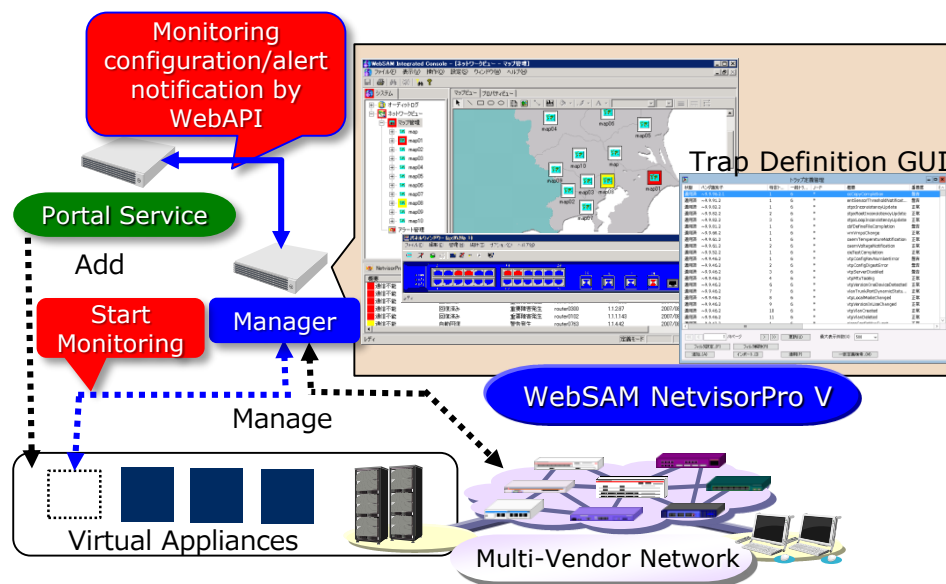Network Monitoring

Orchestrating a brighter world **NEC**

Product Overview

- Monitors network performance and failures independent of vendors.
- Supports various management for configuring and operating each network devices to achieve TCO reduction.

Benefits & Features

- Capture various types of failures
  - via alive status, SNMP, SYSLOG monitoring and devices' information auto-gathering by event-driven access.
  - display content of SNMP trap and SYSLOG, and notify administrator by email and signal light.

- Unify management of configuration change
  - for multi-vendor devices, many features are available including the backup and generation management of configuration files, and the batch updating of configuration files and software.

- WebAPI for automated configuration
  - WebAPI for adding and deleting configuration, and alert management is supported.
  - Systems in cloud DC such as service portal can use this feature to start/stop monitoring when virtual appliances are added/deleted.

- More supported network devices
  - Enhanced multi-vendors support

http://www.nec.com/masterscope/networkmanager/

MasterScope

Monitoring configuration/alert notification by WebAPI

Portal Service

Add

Start Monitoring

Manager

Manage

Virtual Appliances

Trap Definition GUI

WebSAM NetvisorPro V

Multi-Vendor Network

NEC Advantage

- The Benefit of NEC network devices over other network devices are that we provide configuration management, firmware deployment, and front panel display.
- SYSLOG's knowledge database for troubleshooting.
- Automated configuration using WebAPI.

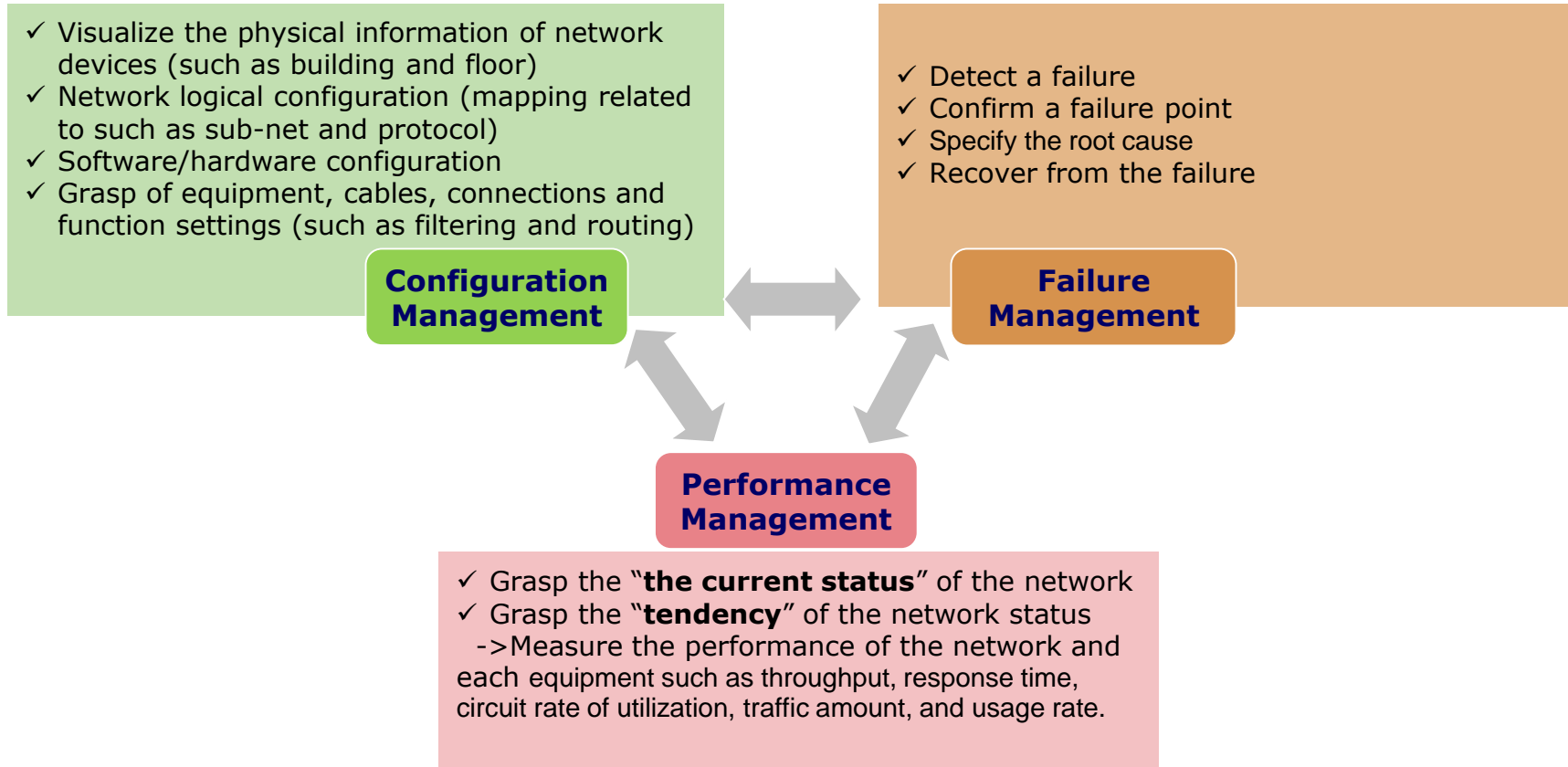| OS/Manager :	Windows	
Hypervisors :	VMware Hyper-V	*For more details on supported platforms, please contact your local NEC sales representative.

Orchestrating a brighter world **NEC**

MasterScope Network Manager

Master Scope

Visualize the physical information of network devices (such as building and floor)
- Network logical configuration (mapping related to such as sub-net and protocol)
- Software/hardware configuration
- Grasp of equipment, cables, connections and function settings (such as filtering and routing)

Configuration Management

- Detect a failure
- Confirm a failure point
- Specify the root cause
- Recover from the failure

Failure Management

Performance Management

- Grasp the "**the current status**" of the network
- Grasp the "**tendency**" of the network status
  ->Measure the performance of the network and each equipment such as throughput, response time, circuit rate of utilization, traffic amount, and usage rate.

Network Manager supports users running this network management cycle with a single integrated product.

\Orchestrating a brighter world **NEC**

MasterScope Network Flow Analyzer

Product Overview

- Visualize application traffic to solve network administrator's problems.
- Support NetFlow, sFlow, NetFlow Lite, and IPFIX* to visualize application traffic.
- Provide analytics from different points of view to support stable operation of network.

Benefits

- Streamline capacity planning and failure investigation based on recording and visualizing application traffic
- Facilitate operations and reduce manpower by dashboard
- Prevent failures by monitoring application traffic

Features

1. Visualize application and traffic
- Realize capacity planning and make failure investigation efficient by visualizing traffic of application or traffic between server and client using NetFlow/sFlow/NetFlow Lite(Cisco)/IPFIX(VMware vSwitch) analysis.

2. Provides flexible dashboard
- Enable instant confirmation of required information by locating graphs, etc. easily. Detailed information can be drilled down from dashboard.
- Default monitoring settings give a quick start.

3. Realize user-friendly visibility
- Provide high visibility, displaying by division unit, or service/application name such as YouTube.
- With other failure monitoring software, details of events and traffic status are stored automatically when a failure occurs.

http://www.nec.com/masterscope/networkflowanalyzer/

MasterScope

Monitoring with web browser

Network administrator

Command linkage

Network Flow Analyzer

NetFlow, sFlow, NetFlow Lite, IPFIX packets

Flow data (CSV)

Switch, Router

Analyze communication status such as source and destination, between two points, application, specified servers, and then visualize network utilization status.

Failure monitoring software

Since who is transmitting what kind of data can be displayed as a graph in a time series, an increased communication type can be recognized to understand the cause of network delay.

NEC Advantage

*IPFIX: Internet Protocol Flow Information Export

Multiple filtering rules make analysis easier and flexible. Detailed flow data both before and after a failure required to investigate its cause can be extracted accurately and securely.

OS :	Linux	*For more details on supported platforms, please contact your local NEC sales representative.
Hypervisors :	VMware Hyper-V	

\Orchestrating a brighter world NEC

Monitoring Level 2-3

From OS Level Monitoring to Application Level Monitoring

Orchestrating a brighter world **NEC**

MasterScope SystemManager G

Product Overview

- An all-in-one integrated monitoring product that covers all systems. A range of expanded functions are available simply by registering a new license. This allows you to flexibly raise the monitoring level or scale out your system according to your needs.
- It intelligibly notifies events and an extent of impact to administrators and assists prompt response.

Benefits

- Enjoy robust support for monitoring operations, from failure detection to visualization and handling, through integrated monitoring of the entire system.
- Realize stable system operation and better operational efficiency.

Features

- ● Integrated monitoring including on-premises and cloud
  - It realizes integrated management of information such as configuration, failure, and performance in multi-platforms.
  - It offers hybrid cloud monitoring by linkage with cloud service (Amazon CloudWatch) in addition to on-premise.
- ● Various monitoring methods realize precise server operations
  - Failures can be detected in real time by output log of server and application's operational status, and monitoring threshold of performance data.
  - Unskilled operators can troubleshoot by accumulating past failure information and its recovering method to knowledge database.
- ● Make operations efficient by automation of monitoring setting and recovery
  - From installation to initial monitor settings are automated.
  - Prevent overlook of failures by various notifications.
  - Triggered by message occurrence, commands can be executed in management servers or monitoring target servers. Recovery flow automates and makes operations efficient.

http://www.nec.com/masterscope/networkflowanalyzer/

Management server — **System Administrator**

Display intelligibly!

Remote monitoring agent

Detect — Notify by email, etc.

Easy to recognize what was happened, how to solve it, which applications are influenced.

Detect

Agent

Business system — Business system

Failure occurred

Monitoring target server

Monitoring console

It supports isolation of failure range by displaying detected failure information based on rules. （Option）

Business ↕ Infrastructure	Integrated monitoring
Service level monitoring	
Application monitoring	
Log monitoring	Server monitoring
Service monitoring	
Process monitoring	
Resource monitoring	

NEC Advantage

- Administrator can monitor servers and networks including virtualized and cloud environment in an integrated way.
- SystemManager G analyzes collected performance information in real time with NEC's unique analyzing technologies, helping administrator detect silent failures.

OS/Manager : Windows HP-UX

OS/Agent : Windows Linux Solaris HP-UX AIX

Hypervisors : VMware Hyper-V

*For more details on supported platforms, please contact your local NEC sales representative.

Orchestrating a brighter world **NEC**

MasterScope SystemManager G – easy function expansion

A range of expanded functions are available simply by registering a new license. This allows you to flexibly raise the monitoring level or scale out your system according to your needs.

Basic functions

Management functions

- **Reporting function**
- **Message management**
- **Command execution**
- **Schedule control**

Monitoring functions

- **Performance monitoring**
- **Log monitoring**
- **Process/service monitoring**
- **Service port monitoring**
- **File capacity monitoring**

Expanded functions (options)

Message classification display function

- Classification and display of failure messages like folder sorting in mailers

Event correlation analysis function

- Detection of complex failures by combining multiple rules

Manager hierarchization function

- Integrated management by bundling multiple Managers

Middleware monitoring

- Performance monitoring peculiar to applications Example: Table area, GC rate, heap

Hypervisor monitoring

- ESXi performance and log monitoring

Cloud monitoring

- Monitoring of cloud environments such as AWS

Customizable performance monitoring

- Threshold monitoring of user-specified command results

Service level monitoring

- Monitoring of external responses

No need to install additional modules. Functions can be expanded simply by registering a license.

Higher monitoring level and expanded range of monitoring targets

\Orchestrating a brighter world   NEC

4. Management Software Suite

MasterScope WinShare
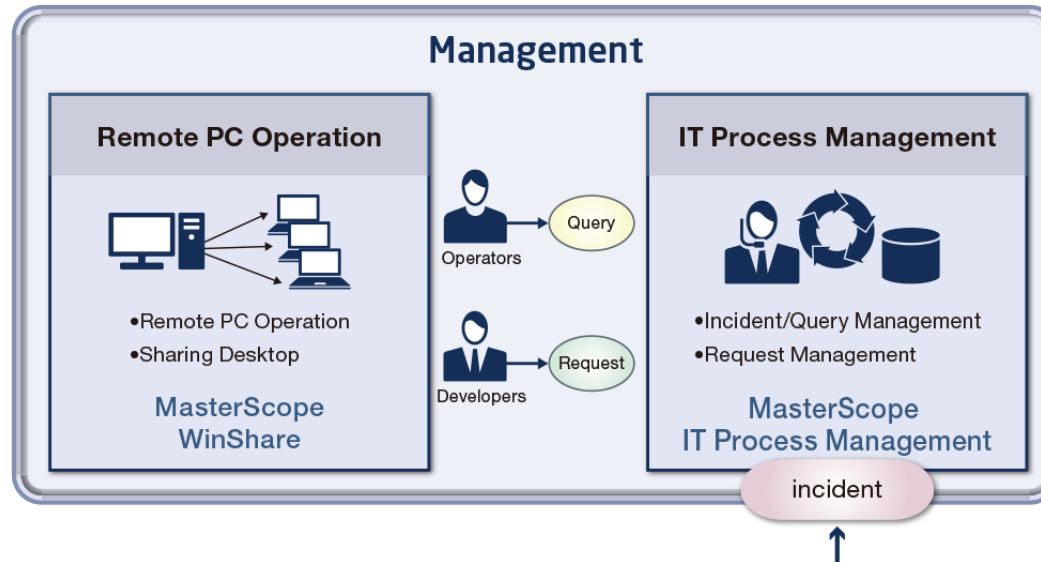
Product Overview

- MasterScope WinShare is a remote access and operation software solution. It enables you to operate PCs, servers, and other Windows-embedded devices such as POS terminals in remote locations by simply and securely displaying those screen images onto your computer.
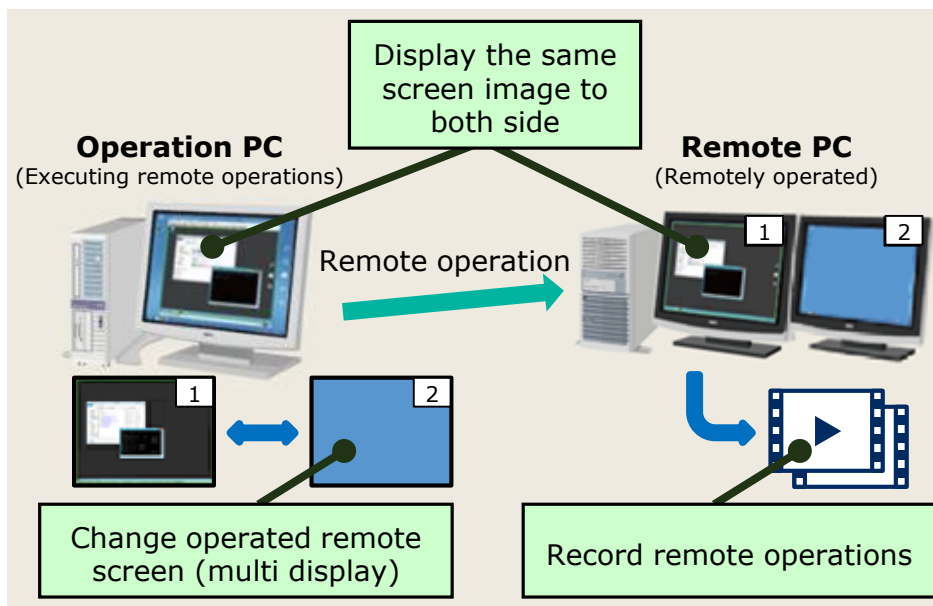
Benefits

- Efficient remote maintenance
  - The remote operation function and power control function assure quick recovery without having to go to actual site.
- Efficient communication
  - Both sides can share the remote operation screen. This software can be used to provide support for users in remote locations and for educational purpose as well.
- Simple and secure
  - Users can remotely operate their office PCs without complex configuration and do their daily work regardless of where they are.

Features

- Power control
- Retrieving logs, encryption, concentration
- Encryption of communication contents
- User authentication, access host control
- File transfer
- Setting operation right (operable/read only)
- Recording remote operation screen
- Multi display support

http://www.nec.com/masterscope/winshare/

Display the same screen image to both side

Operation PC
(Executing remote operations)

Remote operation

Remote PC
(Remotely operated)

Change operated remote screen (multi display)

Record remote operations

NEC Advantage

WinShare supports remote power control which isn't supported by competitors' products or "Microsoft Remote Desktop." WinShare also supports embedded devices (Windows Embedded OS).

| OS : | Windows | *For more details on supported platforms, please contact your local NEC sales representative. |
| Hypervisors : | VMware Hyper-V | |

\Orchestrating a brighter world **NEC**

MasterScope IT Process Management

Product Overview

MasterScope IT Process Management is an ITIL-based IT service management software that offers standardized IT operation processes, improves service levels, and reduces TCO by facilitating efficient communication between different departments. It can be easily adopted and deliver immediate results.

Benefits

● Increase team efficiency and productivity
- Allow access to a unified database without the mess of email, spreadsheets, and paper documents
- Make the acquisition of the project status and tracking work progress very easy
- Share know-how by the incident database accumulated over time
- Help team members accomplish tasks in order and reduce input errors

● Enhance project control
- Ensure to meet deadlines, balance team workload, and monitor service level such as time to first response time

Features

● Visualized project status and work progress
● Incident management by self-service portal and email
● Document management
● Application management
● Infrastructure management
● Announcement
● Report
● Integration with monitoring system, configuration management system, and authentication system

http://www.nec.com/masterscope/itprocessmanagement/

A comprehensive overview of the work progress and project status

Incident Management
Problem Management
Change Management
Release Management

CMDB

Monitoring System
Configuration Management System
Authentication System

NEC Advantage

- Templates implemented based on our extensive experience in system operation provides a quick start. (adopted in manufacturing, financial services, distribution, public services, etc.)
- Intuitive interfaces require little training.

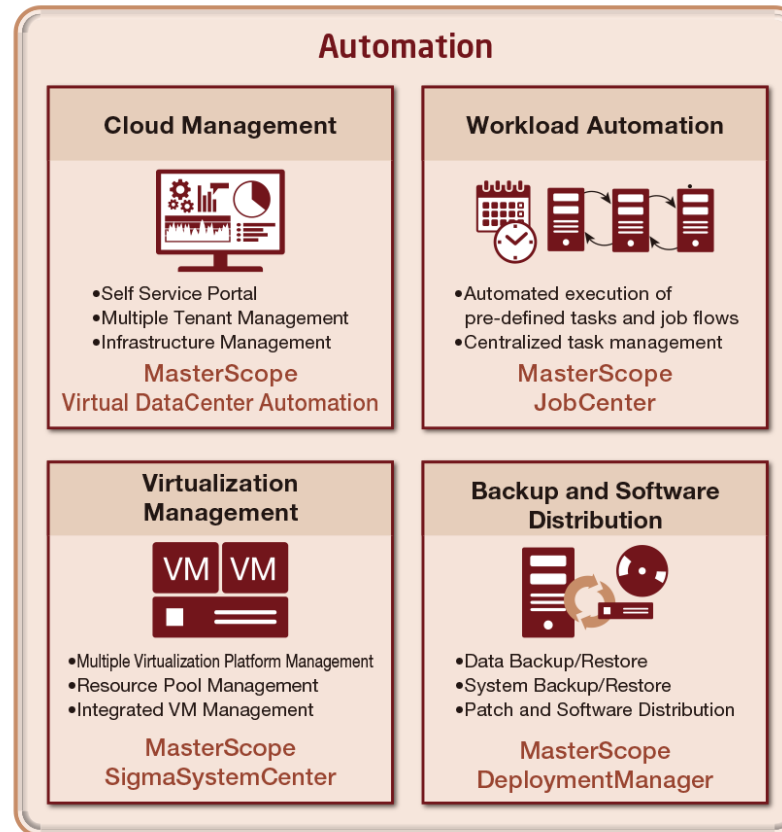| OS: | Windows Linux | *For more details on supported platforms, please contact your local NEC sales representative. |
| Hypervisors : | VMware Hyper-V | |

Orchestrating a brighter world   NEC

5. Automation Software Suite

MasterScope

Automation

Cloud Management

- Self Service Portal
- Multiple Tenant Management
- Infrastructure Management

**MasterScope
Virtual DataCenter Automation**

Workload Automation

- Automated execution of pre-defined tasks and job flows
- Centralized task management

**MasterScope
JobCenter**

Virtualization Management

- Multiple Virtualization Platform Management
- Resource Pool Management
- Integrated VM Management

**MasterScope
SigmaSystemCenter**

Backup and Software Distribution

- Data Backup/Restore
- System Backup/Restore
- Patch and Software Distribution

**MasterScope
DeploymentManager**

\Orchestrating a brighter world   **NEC**

MasterScope Virtual DataCenter Automation

Product Overview

●Provides integrated management of Data Center distributed in a wide area and automates the operational process of IaaS platform, accelerating the delivery of infrastructure and minimizing operational costs.

Benefits

●Effective use of ICT resources in a multivendor environment
●Short delivery time of IT system, accelerate management.
●Highly reliable cloud environment

Features

●**Multi Datacenter Management** - Integrated management of DCs distributed in a wide area
●**Self-service Portal** including **Monitoring** – System administrators and service users can monitor own virtual machines and service status
●**Unified Orchestration** - Automatic and efficient cloud operation by integrated control of virtual server and virtual network
●**Resource Pool Management** - integrated cloud resource management

http://www.nec.com/en/global/prod/masterscope/vdcautomation/
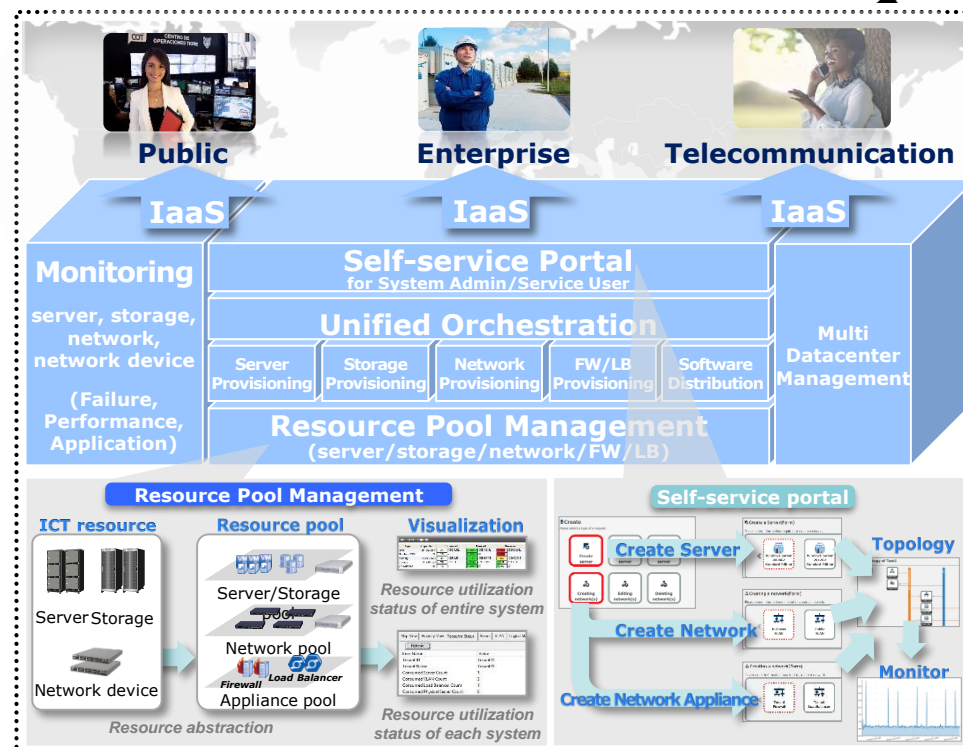
NEC Advantage

Based on experience in NEC's commercial cloud infrastructure service, it can operate IaaS infrastructure using large scale and wide area datacenter which accommodates 100,000 VMs.

OS/Manager :	Windows
OS/Target :	Windows Linux
Hypervisors :	VMware Hyper-V RHEL KVM

*For more details on supported platforms, please contact your local NEC sales representative.

\Orchestrating a brighter world   NEC

MasterScope JobCenter

Product Overview

JobCenter automates routine jobs and batch processing and controls job execution on multi-platform environment. It supports stable system accurately and effective with simple job-flow and schedule creation function. In addition, JobCenter enables substantially reducing management workload and operation costs.

Benefits

- Automatic execution of operations reliably schedule and flow.
- Solution for reducing administrator's workload and human errors.
- Flexible support for job-flow modification.
- Detect errors immediately and monitors job status and results.
- Reasonable pricing according to machine rank.

Features

1. Rich functionality of job network items
2. Flexible control by calendar and scheduler function
3. Job execution status monitoring (Displayed in graph, Send email on error)
4. Specifying Job execution start priorities between queues.
5. Simulation execution function
6. Access Control function
7. Integrated management of distributed job execution environment
8. Link with SAP, Excel and text format
9. Web GUI and Dashboard

http://www.nec.com/masterscope/jobcenter/

Management Server
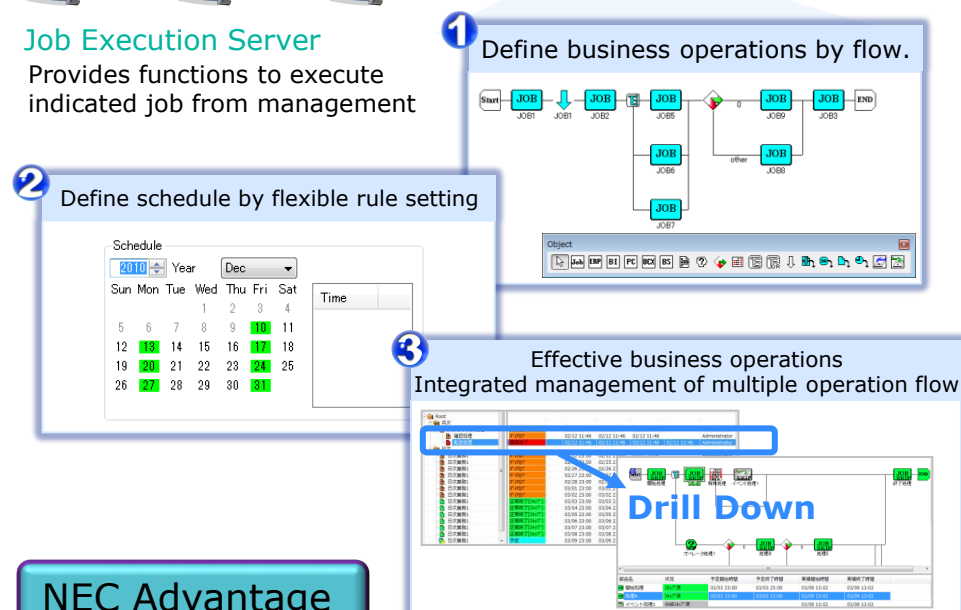JobCenter management server manages job flow and schedule and configure environment.

Client GUI (Viewer)
Client GUI for job creation and schedule to confirm execution results

Job Execution Server
Provides functions to execute indicated job from management

① Define business operations by flow.

② Define schedule by flexible rule setting

③ Effective business operations
Integrated management of multiple operation flow

Drill Down

NEC Advantage

"Definition Helper" function enables you to create job definition and flow and schedule confirmation.

OS/Manager, Server :	Windows Linux HP-UX AIX
OS/View :	Windows
Hypervisors :	VMware Hyper-V

*For more details on supported platforms, please contact your local NEC sales representative.

Orchestrating a brighter world **NEC**

MasterScope SigmaSystemCenter

MasterScope

Product Overview

MasterScope SigmaSystemCenter is infrastructure management software that enables the management of servers, storage, and network, providing a single unified view to operate a multi-platform, multi-OS system. By optimizing IT resources, SigmaSystemCenter significantly reduces operational costs.
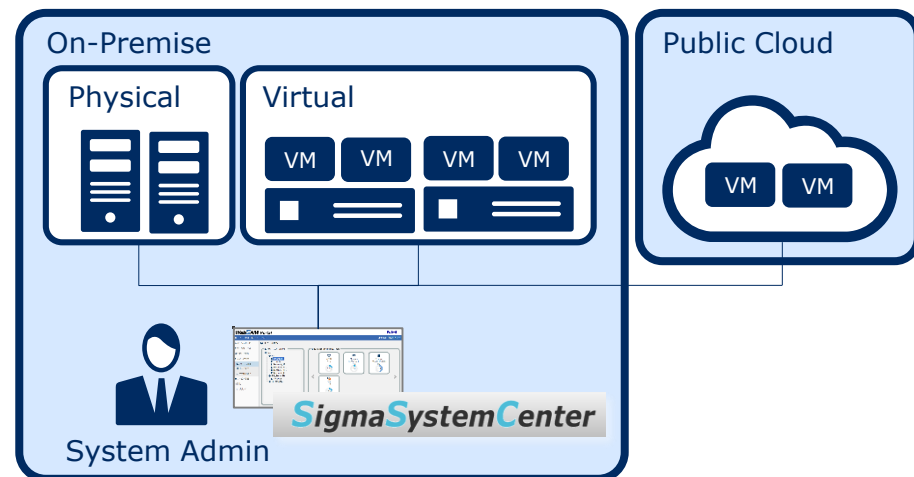
Benefits

- ●Integrated management
  - •Unified management of IT infrastructure reduces operational costs
  - •Visualize the impact of hardware failures in Topology View that makes the acquisition of the root causes and affected resources easy
- ●Hybrid cloud management
  - •An integrated single view for on-premise and public cloud
  - •Adding public cloud to an existing on-premise environment allows operators to continue to use the same comfortable interface **New**
- ●Auto configuration of virtual resources
  - •Automated configuration management in virtual environments eliminates manual spreadsheet-based processes
  - •Display the history of configuration changes made during operations such as automatic failover and load balancing **New**

Features

- ●Provisioning and backup
- ●Failure detection, pre-failure alerts, performance monitoring
- ●Automated disaster recovery, load balancing, power saving
- ●Resource pooling, tenant isolation
- ●VM templates, thin provisioning
- ●Resource usage report
- ●Web-based interface, self-service portal

http://www.nec.com/sigmasystemcenter/

On-Premise

Physical | Virtual

VM VM VM VM

Public Cloud

VM VM

System Admin

SigmaSystemCenter

NEC Advantage

- •Integrated management of physical, virtual, and cloud environments
- •Advanced features such as automatic failure recovery, load balancing, and power saving are readily available.

OS/Manager :	Windows
OS/Target :	Windows Linux
Hypervisors :	VMware Hyper-V RHEL KVM

*For more details on supported platforms, please contact your local NEC sales representative.

\Orchestrating a brighter world **NEC**

MasterScope DeploymentManager

MasterScope

Product Overview

MasterScope DeploymentManager provides the entire lifecycle management of machines from implementation to operation and maintenance (master image deployment, patch distribution, backup and restore of the whole system disk drive). These operations can be performed remotely resulting in lower operational costs.

Benefits

- Quick recovery from failure
  - Restoring the drives by the images that have been backed up in advance facilitates fast recovery. Reinstallation is not necessary.
- Easy implementation and replacement of machines
  - The master image of one machine can be deployed to other machines with customization such as IP address and hostname.
- Reduce operational cost
  - Flexible patch management is offered such as "apply patches forcibly by administrator" and "automated and scheduled distribution" improving system security.

Administrator

Remote Management

<Operation>
Patch Distribution

Machine

<Implementation>
Deployment

<Maintenance>
Backup/Restore

Features

- OS clean installation, OS installation using replication
- Patch/application distribution, BIOS/firmware update
- Multicast OS with customization using one master image
- Periodic backups, generation management, HW RAID
- Scheduled distribution
- Remote power management
- Web-based interface
- Backup/restore of machines with secure boot enabled

New in 6.6

http://www.nec.com/masterscope/deploymentmanager/
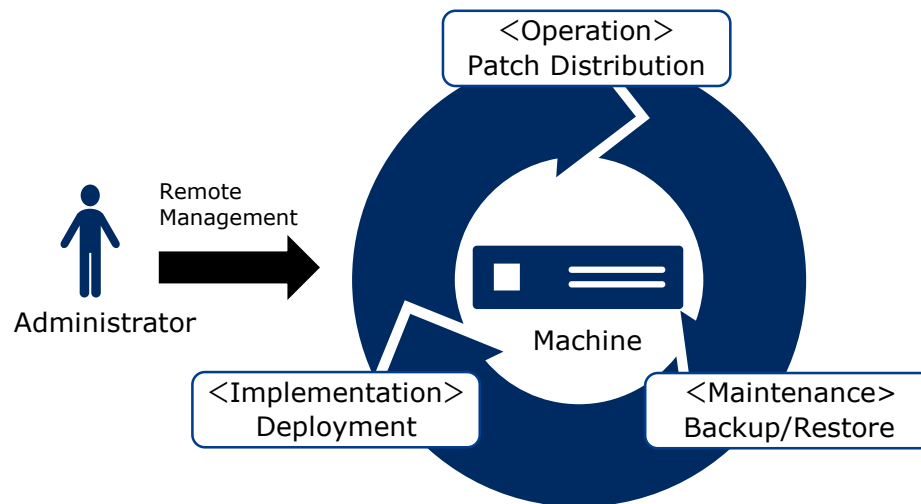
NEC Advantage

- The compatibility test results on all the servers of Express5800 family are available.
- Features such as backing up whole disk drives and restoring without media are easy to operate.

OS/Manager :	Windows
OS/Agent :	Windows Linux
Hypervisors :	VMware Hyper-V

*For more details on supported platforms, please contact your local NEC sales representative.

Orchestrating a brighter world **NEC**

Thank You

Realize simple and integrated system operation

For more product information,
visit >> http://www.nec.com/masterscope/

For more information, please contact your local NEC
representative or contact us at global@soft.jp.nec.com

\Orchestrating a brighter world   **NEC**