

**MasterScope  
Integrated Management Server 1.0  
Release Notes**

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# Preface


Thank you for choosing MasterScope network management products. MasterScope network management products enable users to seamlessly integrate and operate the information and controls of multiple products on one Web Console by using the MasterScope Integrated Management Server component (hereafter referred to as IMS component).

This document describes the newly released functions of the IMS component (version 1.0) that is necessary to use Web Console, and provides an explanation of the operating environment. Before setting up IMS component, please read this document carefully.

## Notations and Text Conventions


In this manual, the following notations are used to indicate items that require special attention and supplementary information.

### Notations of Items Requiring Attention and Supplementary Information

| Notation   | Description  |
|--|--|
|  <b>Caution</b> | Indicates important points that the user should observe to configure and use the product properly. |
| <b>Tip</b>   | Indicates useful information.  |

In this manual, the following text conventions are used.

### Text Conventions

| Notation                        | Description  | Example   |
|---------------------------------|--|---|
| <b>name</b>                     | Indicates graphical user interfaces such as menus, items, and buttons.                             |  <b>Dashboard</b> menu, <b>OK</b> button |
| <code>&lt;userinput&gt;</code>  | Indicates items that change depending on the user environment or items that the user must specify. | <code>&lt;%INSTPATH%&gt;</code> , <code>&lt;filepath&gt;</code>   |
| <code>configuration file</code> | Indicates the contents of the configuration file.  | Set the following value:<br><code>port = 27120</code>   |
| <code>command line</code>       | Indicates command line operations.   | Run the following command:<br><code>&gt; Setup.exe</code>   |

In this manual, the following abbreviations are used.

### Abbreviations

| Formal Name                              | Abbreviation                      |
|--|-----------------------------------|
| MasterScope Integrated Management Server | Integrated Management Server, IMS |
| MasterScope Network Manager              | Network Manager                   |
| MasterScope Network Flow Analyzer        | NFA                               |

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# Chapter 1.

## Overview of Web Console

This chapter describes an overview and the purpose of the Web Console.

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## 1.1 The Usage of Web Console

Web Console provides the mechanism to remotely operate from any terminal using a Web browser. In addition, it seamlessly integrates the operation of individual products for network monitoring, analysis and control, and provides a mechanism for streamlining network operation lifecycle management..

Web Console is useful when operating as follows.

- When checking the network status from an arbitrary terminal

Installation of client software is not necessary because Web Console is used on a web browser. Therefore, in the case of emergency, it is possible to check the network status using web browser on an arbitrary terminal.

For example, when using the Network Manager, in an environment where web communication is permitted, it is possible to check the status of each node and the scope of impact of the failure by accessing the Web Console remotely.

- When integrating operations of multiple MasterScope network management products

Web Console integrates the management information of multiple products into one place and displays it. When grasping the overall status of the network, you do not need to check the individual views provided by each product, and you can efficiently perform management tasks.

For example, It is possible to integrate management information of multiple Network Managers and integrate information of Network Manager and NFA.

### Tip

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Web Console can be used for routine operation such as checking the occurrence status of events, checking or analyzing the performance information of each node. However, not all functional operations provided by each product can be performed. If necessary, also use the management console provided by each product together.

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## 1.2 Functional overview of Web Console

The following describes the functions on Web Console.

### Dashboard

- The current network performance and event occurrence status can be grasped promptly.
- Multiple display contents can be defined for each viewpoint. This enables the status to be viewed from various viewpoints by selecting the defined contents from a pull-down menu.
- A **Widget**, which is an element use to display a chart or list, can be freely located on the dashboard page by the intuitive drag-and-drop operation. Therefore, a dashboard definition according to the operations can be created easily.

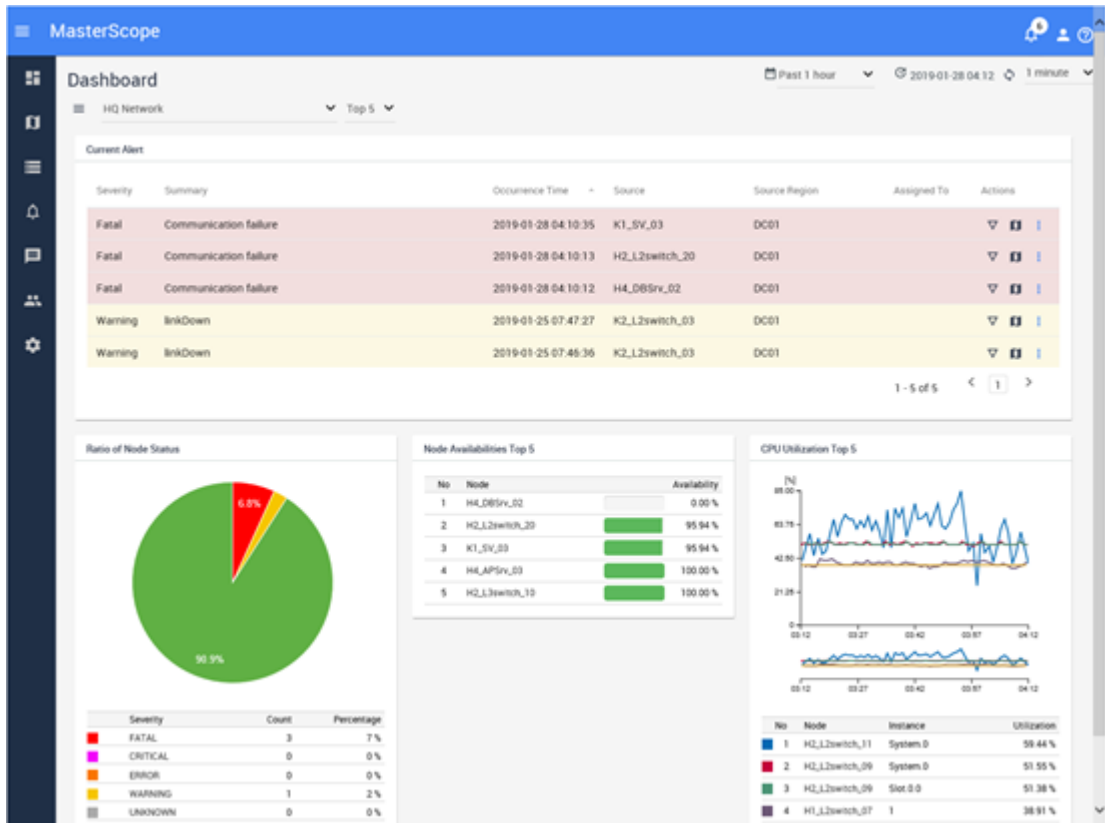


Figure 1-1 Dashboard

## Node management and analysis

- Nodes managed by Network Manager and exporters of NFA are managed as a “Node”. Information of nodes that can be assumed to be the same in multiple products is integrated and managed in a single node.
- It is possible to search nodes that match a certain condition among all managed nodes, and also check and compare the property information.
- The dashboard (Node Detail page) of each node can be used to check and analyze the property information and load status of the specified node in detail. The dashboard (Network Interface Detail page) of each network interface can be used to check the property information and communication status of the specified network interface in detail.

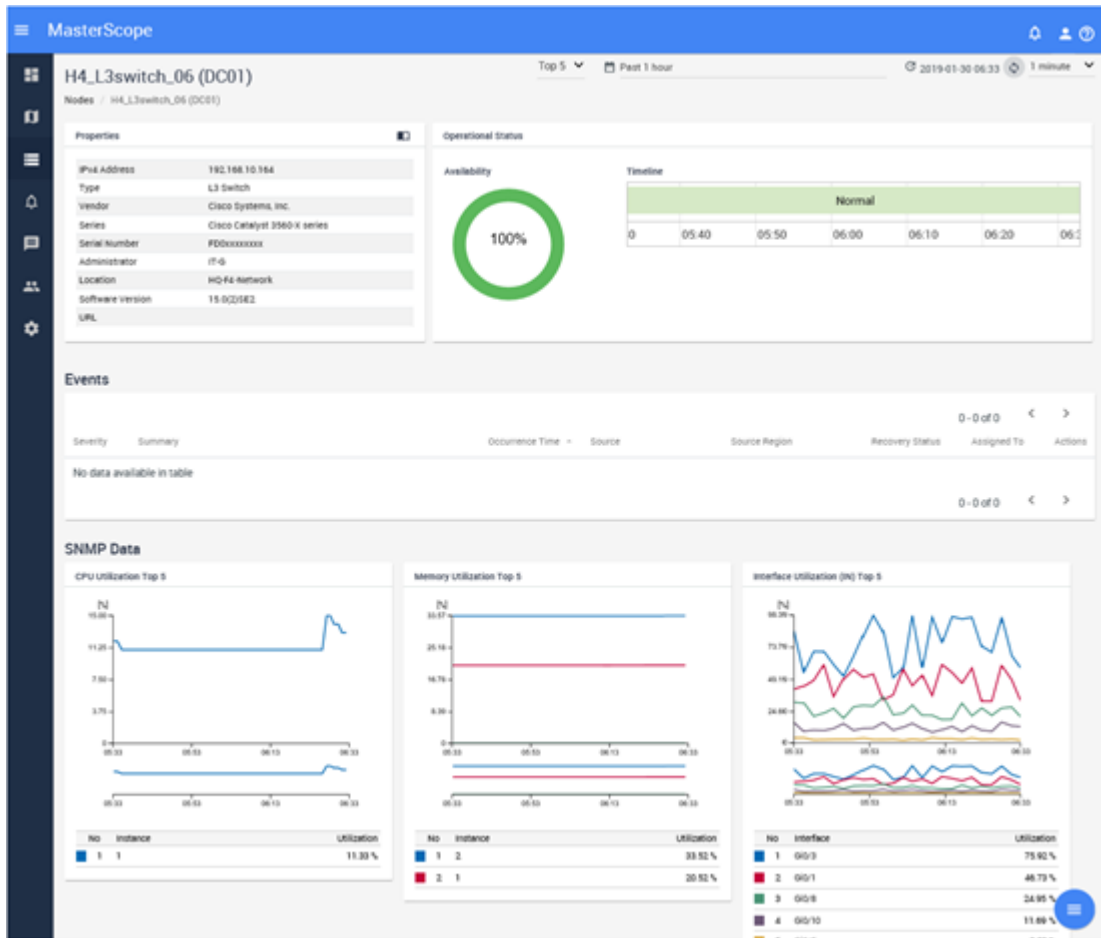


Figure 1-2 Node Detail

## Topology Map (when using Network Manager)

- As the topology map, it is possible to show the physical connections among the nodes, node placement in the building or on the floor, and so on. The topology map is helpful for operations such as checking the influence range when a fault occurs. The topology map provides various editing functions that make it easy to grasp network configuration such as insertion of background image.
- A mechanism (Side Panel) is provided to check the property and performance information of nodes while looking at the topology map. It can be used to investigate nodes, which are related to each other, one by one on the topology map.
- Displaying the topology map in **analysis mode** enables users to check the event severity of each node for a certain period in the past. This is called the Timeline function. For example, if an event that occurred last night has currently recovered, this function supports the situation grasping at the time of the event occurred by going back to the event occurrence time of the previous night and visualizing the event influence range on a topology map.



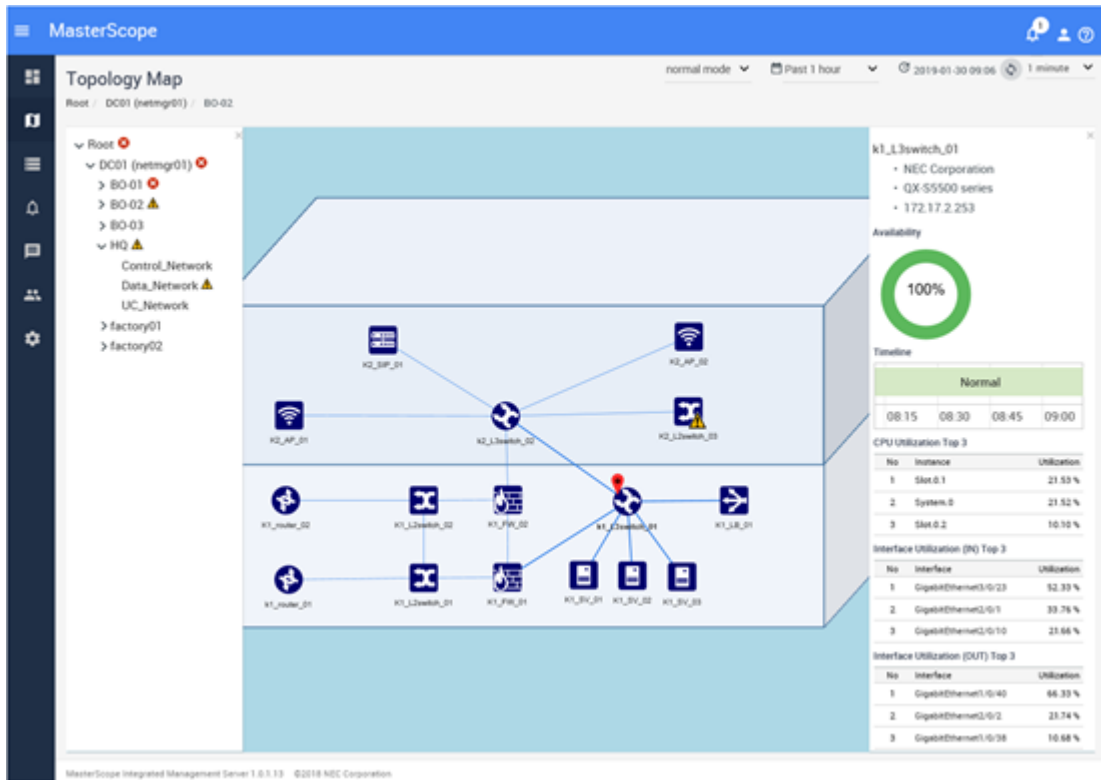


Figure 1-3 Topology Map

## Event monitoring

- Alerts detected by Network Manager and events exceeding the threshold of traffic volume detected by NFA are managed as an “event” integrally. Also, it is possible to investigate the cause smoothly from the event; for example, checking detailed information of the relevant node and jumping to the topology map.
- The occurred events can be checked the summary information in the event list. Also, it is possible to check only necessary information by narrowing down the display events by specifying a condition. Placing the **Current Alert** widget on the Dashboard page enables to grasp current fault events promptly.
- An action such as sending an Email or running a command can be executed when an event occurs by specifying a condition for events. This function can be used to send notifications to the person involved and to control automatic recovery.

The screenshot shows the MasterScope Events page. The interface includes a top navigation bar with the MasterScope logo, a notification bell with 10 alerts, and a user profile icon. Below the navigation bar is a sidebar with various icons for navigation. The main content area is titled 'Events' and features a search bar with a 'SELECT...' dropdown and a 'SEARCH' button. The events are displayed in a table with the following columns: Severity, Summary, Occurrence Time, Source, Source Region, Recovery Status, Assigned To, and Actions. The table shows a list of events with varying severities (Normal, Warning, Fatal) and recovery statuses (Recovered, Unrecovered). The table is paginated, showing 1-100 of 104 rows.

| Severity | Summary               | Occurrence Time     | Source         | Source Region | Recovery Status | Assigned To | Actions |
|----------|-----------------------|---------------------|----------------|---------------|-----------------|-------------|---------|
| Normal   | linkUp                | 2019-01-28 09:31:21 | K2_L2switch_03 | DC01          | -               |             | ▼ ⓘ     |
| Warning  | linkDown              | 2019-01-28 09:31:03 | H2_L2switch_01 | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Warning  | linkDown              | 2019-01-28 09:16:09 | K2_L2switch_04 | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Warning  | linkDown              | 2019-01-28 09:13:35 | H3_L3switch_03 | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Normal   | linkUp                | 2019-01-28 09:09:56 | K2_L2switch_03 | DC01          | -               |             | ▼ ⓘ     |
| Warning  | linkDown              | 2019-01-28 09:09:46 | K2_L2switch_03 | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Fatal    | Communication failure | 2019-01-28 04:10:35 | K1_SV_03       | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Fatal    | Communication failure | 2019-01-28 04:10:13 | H2_L2switch_20 | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Fatal    | Communication failure | 2019-01-28 04:10:12 | H4_DBSrv_02    | DC01          | Unrecovered     |             | ▼ ⓘ     |
| Normal   | Cancel Event          | 2019-01-28 02:15:56 | H2_L2switch_20 | DC01          | -               |             | ▼ ⓘ     |
| Normal   | Cancel Event          | 2019-01-28 02:15:35 | K1_SV_03       | DC01          | -               |             | ▼ ⓘ     |
| Normal   | Cancel Event          | 2019-01-28 02:15:35 | K1_SV_03       | DC01          | -               |             | ▼ ⓘ     |

Figure 1-4 Events

# Chapter 2.

# Operating Environment

This chapter describes the operating environment of the Web Console.

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## 2.1 System configuration

The following describes the system configuration when using Web Console.

To use Web Console, set up the IMS component and connect the IMS component to the MasterScope network management products. When connecting the IMS component with multiple products, products managing the same node are grouped into the region group.

For example, if Network Manager managing Nodes 1 to 45 and NFA managing Nodes 40 to 45 as exporters exist in the same environment, these two products manage Nodes 40 to 45 redundantly. In this case, the two products are grouped into the region group. Information of Nodes 40 to 45 managed by the two products can be viewed in an integrated manner on Web Console.

"[Figure 2-1 System Configuration Diagram \(page 8\)](#)" shows a system configuration example consisting of multiple region groups.

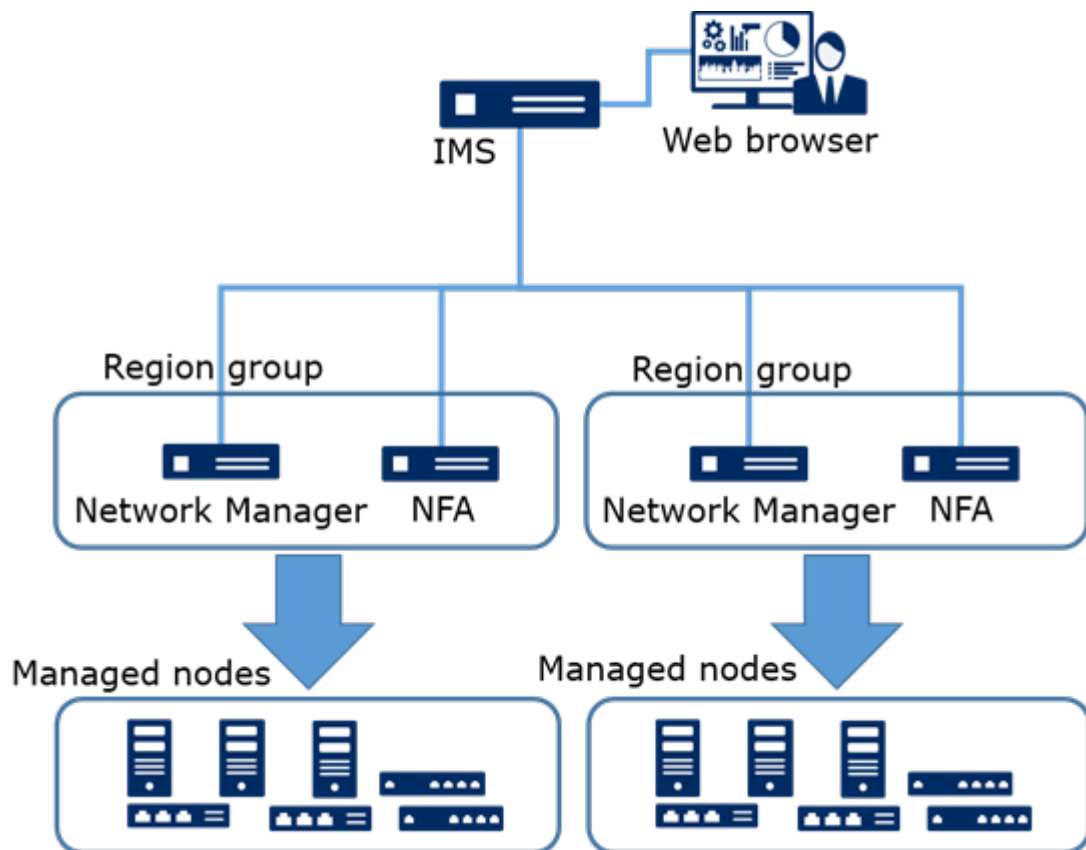


Figure 2-1 System Configuration Diagram

### Tip

- A system can be built by installing the IMS component and MasterScope network management products, such as Network Manager, on the same server.
- Note that installing the IMS component and multiple products on the same server may cause problems such as slow operational response of Web Console. Therefore, thoroughly assess the system configuration before starting operations. If possible, it is recommended that products be installed separately on multiple servers.

## 2.2 System requirements

The following describes the system requirements for properly operating the Web Console and the supported environment.

**Table 2-1 IMS requirements**

| Item                       | Description  |
|----------------------------|--|
| CPU                        | Intel Dual-Core Xeon or higher, or equivalent compatible processor recommended   |
| System memory              | 2 GB or more (8 GB or more recommended)  |
| Disk capacity              | Installation path: 2 GB or more  |
|                            | Data path: 20 GB or more   |
| OS                         | <ul style="list-style-type: none"> <li>• Windows Server 2019 (x64) <sup>1) 2)</sup></li> <li>• Windows Server 2016 (x64) <sup>1) 2)</sup></li> <li>• Windows Server 2012 R2 (x64) <sup>1)</sup></li> <li>• Windows Server 2012 (x64) <sup>1)</sup></li> <li>• Red Hat Enterprise Linux 7 (x86_64) <sup>3)</sup></li> <li>• Red Hat Enterprise Linux 6 (x86_64) <sup>3) 4)</sup></li> </ul> |
| Supported cluster software | EXPRESSCLUSTER X 3.0 or later  |

### Note

1. Windows Server Core is not supported.
2. Nano Server is not supported.
3. SELinux must be disabled.
4. Operation with version 6.6 or higher OS is supported.

**Table 2-2 Web browser requirements**

| Item                  | Description  |
|-----------------------|--|
| Supported web browser | The following web browsers running on Windows <ul style="list-style-type: none"> <li>• Internet Explorer 11</li> <li>• Mozilla Firefox 60 or later</li> <li>• Google Chrome 71 or later</li> </ul> |
| CPU                   | Intel Core i3 or higher, or equivalent compatible processor recommended  |
| System memory         | 1GB or more  |

### Tip

- It is recommended to apply the latest bug fix updates to the web browser before using it. If the bug fix updates have not been applied, some functions might not work properly.
- Depending on a web browser, a Unicode surrogate pair character is handled as two characters. In this case, an actual number of characters that can be input to each input field will be less.

# Chapter 3.

## Documents

The following lists the Web Console related documents supplied with this version.

**Table 3-1 Documents of Web Console**

| Title (File name)   | Description  |
|---|--|
| MasterScope Integrated Management Server 1.0<br>Release Notes<br>( ims-release.pdf )  | This document. IMS 1.0 release contents are described.   |
| MasterScope Network Management<br>Web Console Getting Started Guide<br>for Windows<br>( ims-startup-win.pdf )                       | This describes the procedure for setting up the Web Console usage environment for Windows.<br>In addition, This describes the basic operations of the Web Console.                       |
| MasterScope Network Management<br>Web Console Getting Started Guide<br>for Windows / EXPRESSCLUSTER X<br>( ims-startup-win-cs.pdf ) | This describes the procedure for setting up the Web Console usage environment for Windows on the cluster system.<br>In addition, This describes the basic operations of the Web Console. |
| MasterScope Network Management<br>Web Console Getting Started Guide<br>for Linux<br>( ims-startup-lin.pdf )                         | This describes the procedure for setting up the Web Console usage environment for Linux.<br>In addition, This describes the basic operations of the Web Console.                         |
| MasterScope Network Management<br>Web Console Getting Started Guide<br>for Linux / EXPRESSCLUSTER X<br>( ims-startup-lin-cs.pdf )   | This describes the procedure for setting up the Web Console usage environment for Linux on the cluster system.<br>In addition, This describes the basic operations of the Web Console.   |
| MasterScope Network Management<br>Web Console Reference Manual<br>( ims-reference.pdf )   | This describes the procedures to use and operate the Web Console.  |
| MasterScope Integrated Management Server 1.0<br>Open Source Software License Acknowledgement<br>( ims-oss-license.pdf )             | This describes the license agreements and copyrights of the open source software that IMS 1.0 uses.  |

# Chapter 4.

# Added and Enhanced Functions

This chapter describes the released contents.

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## 4.1 Contents released in this version

This version is the first release. For details on functions that can be operated with the Web Console, refer to "[1.2 Functional overview of Web Console \(page 2\)](#)".



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