

MasterScope SystemManager G Performance Report Solution

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NEC





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Introduction

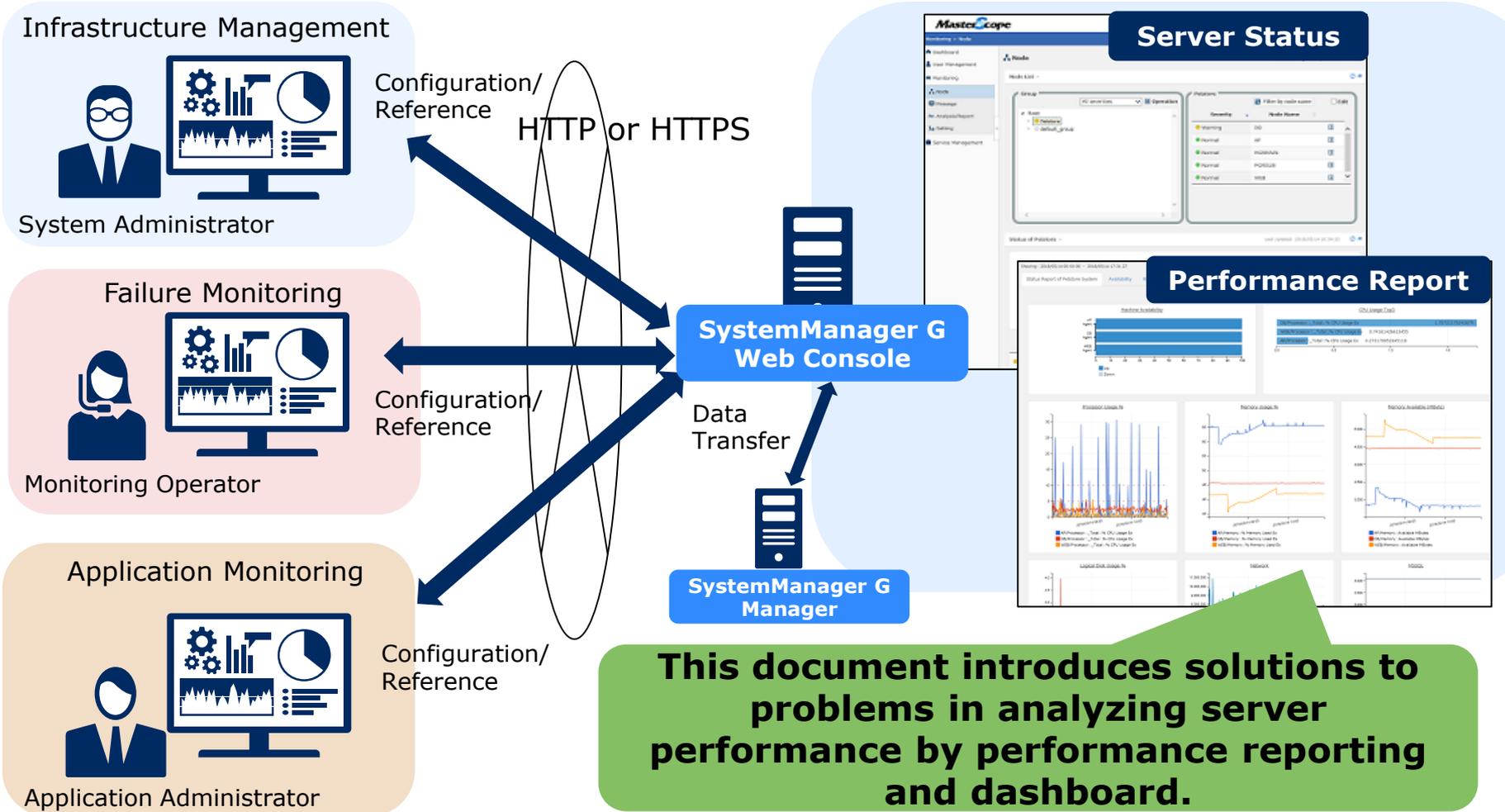
- This document introduces performance reporting and dashboard provided by MasterScope SystemManager G 8 Web Console option.
- Please refer to Web Console Introduction document for the whole feature of Web Console option.

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Web Console Option

Web browser console allows you to monitor systems and performance reports on user-customizable dashboards from anywhere.



This document introduces solutions to problems in analyzing server performance by performance reporting and dashboard.

Problems in Analyzing and Reporting Server Operation Status

Are you having problems in analyzing and reporting server operating status?

It takes time to organize data and create graphs for monthly operational reports.

Opening every window to check the status of each server is tedious.

RAM and HDD should be upgraded, but data analysis is time-consuming.

Server availability report is required.

Monitoring real-time operational status from anywhere is required.

Solutions to the Problems

Web Console allows you to analyze performance and make reports from anywhere, anytime.

Features

Performance Report

Dashboard

Problems

It takes time to organize data and create graphs for monthly operational reports.

Opening every window to check the status of each server is tedious.

RAM and HDD should be upgraded, but data analysis is time-consuming.

Server availability report is required.

Monitoring real-time operational status from anywhere is required.

Solutions

Easy creation of suitable graphs, switch tabs, print out for submission.

Display usage ranking based on performance data.

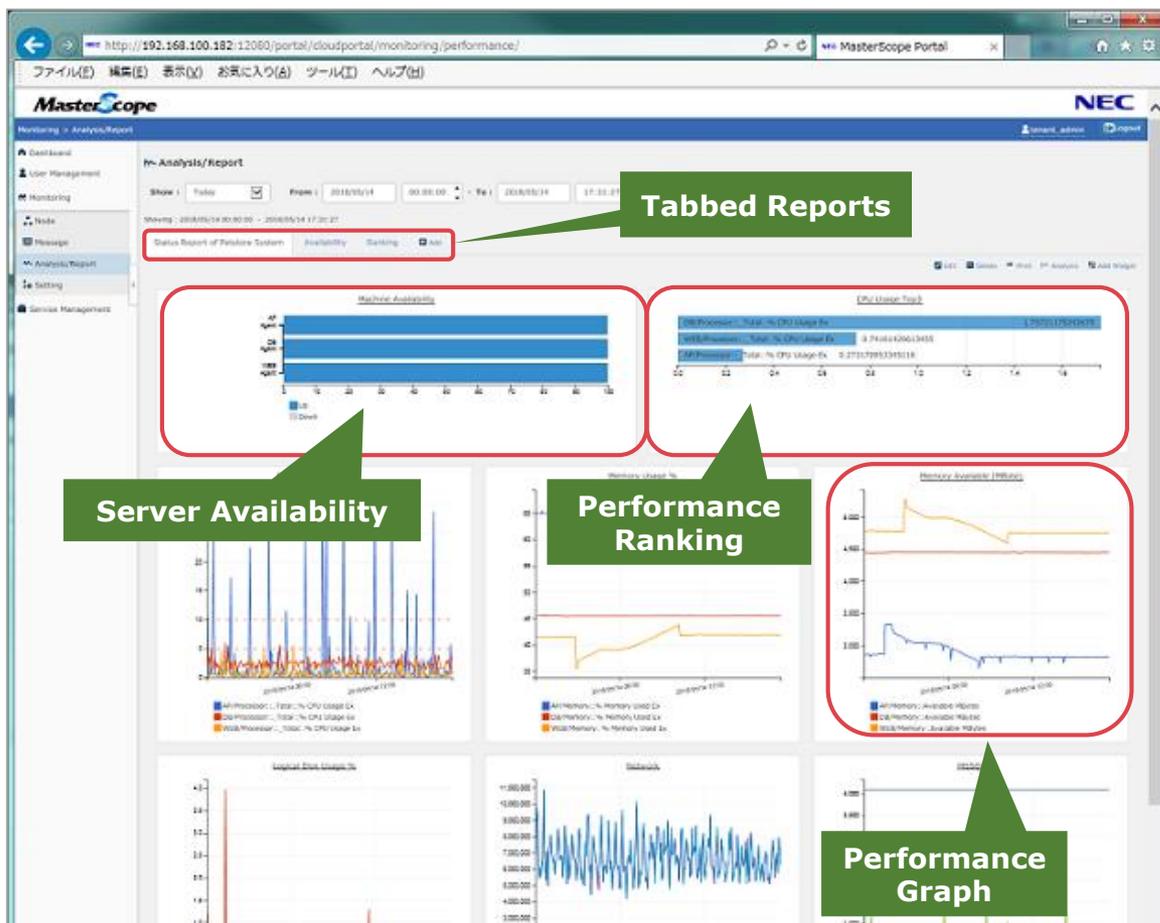
Draw a regression line based on performance data to estimate resource scarcity.

Display a graph of server availability.

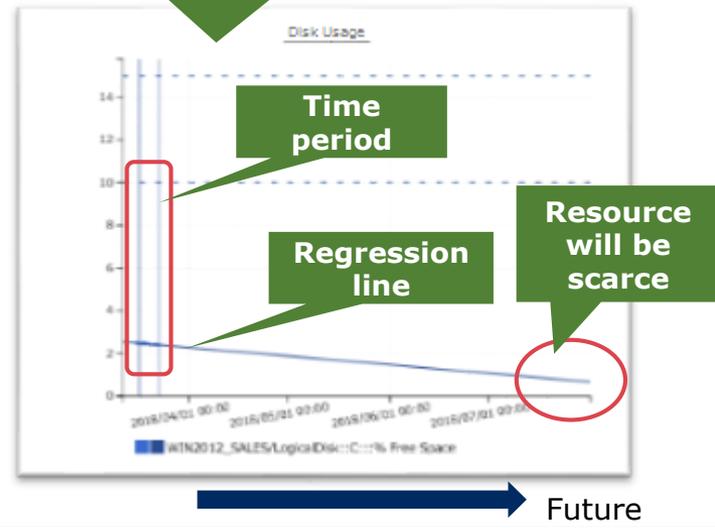
Dashboard is available on web browser.

Performance Report

Performance reports are displayed using tabs, visualizing monthly reports and current operational status. Host availability, ranking, and capacity management by regression lines are newly added features.

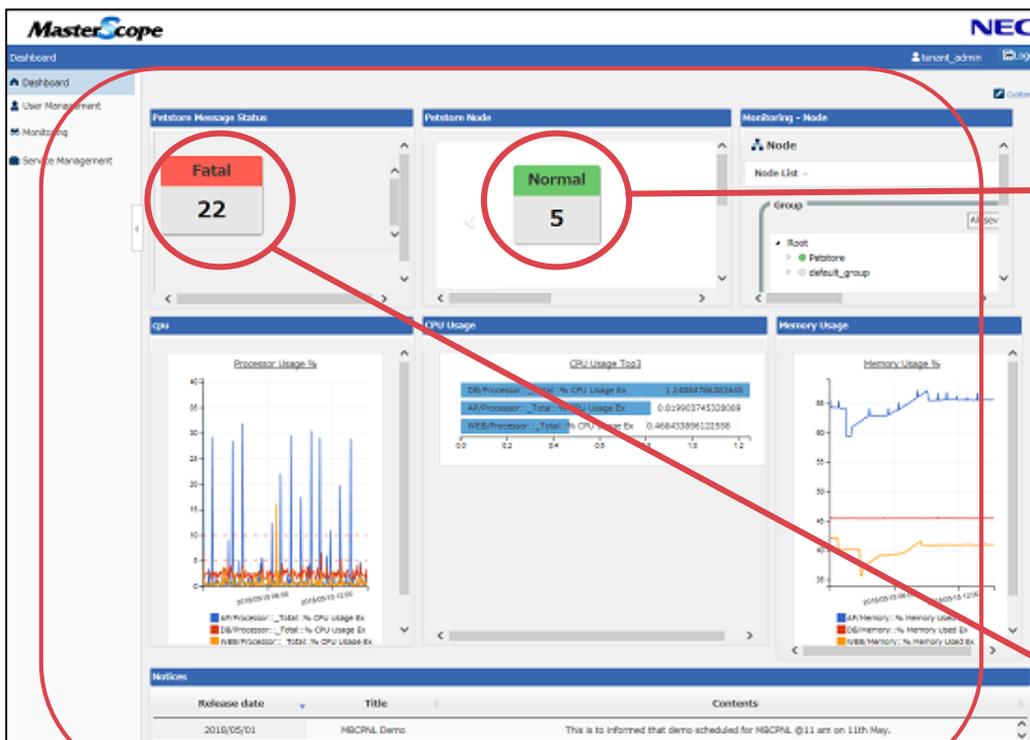


Drawing a regression line based on performance data during the specified time period enables you to estimate resource scarcity in the future.

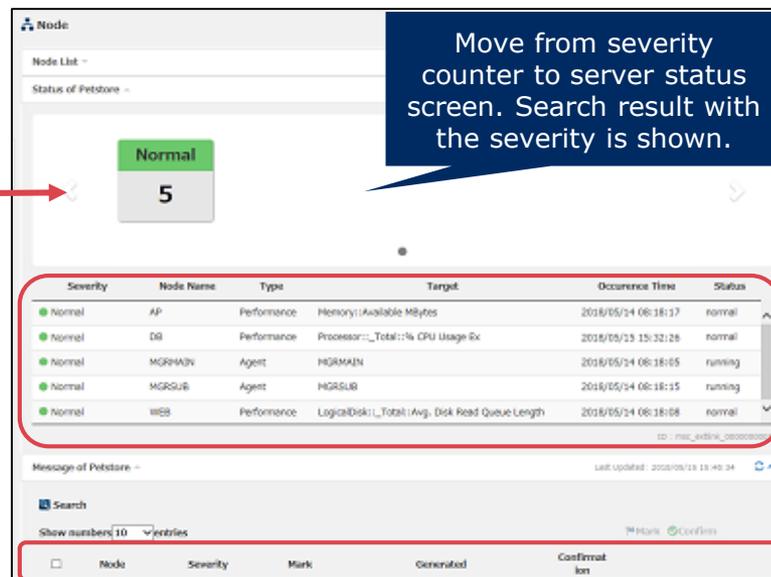


Monitoring Dashboard

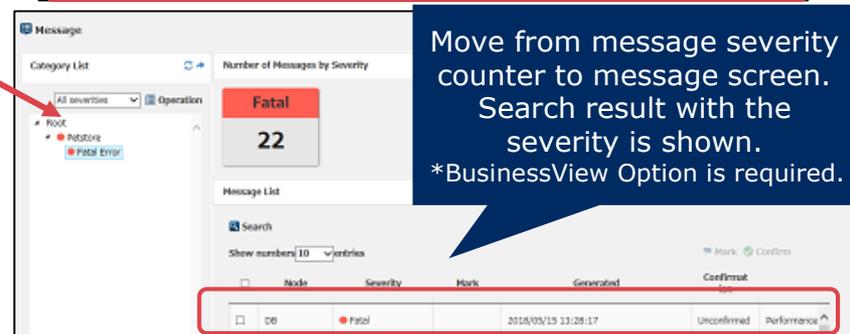
You can create and customize your dashboard with widgets to get a quick view of the system status as soon as you login.



Widgets can be freely added and adjustable on a personal dashboard for each user.



Move from severity counter to server status screen. Search result with the severity is shown.

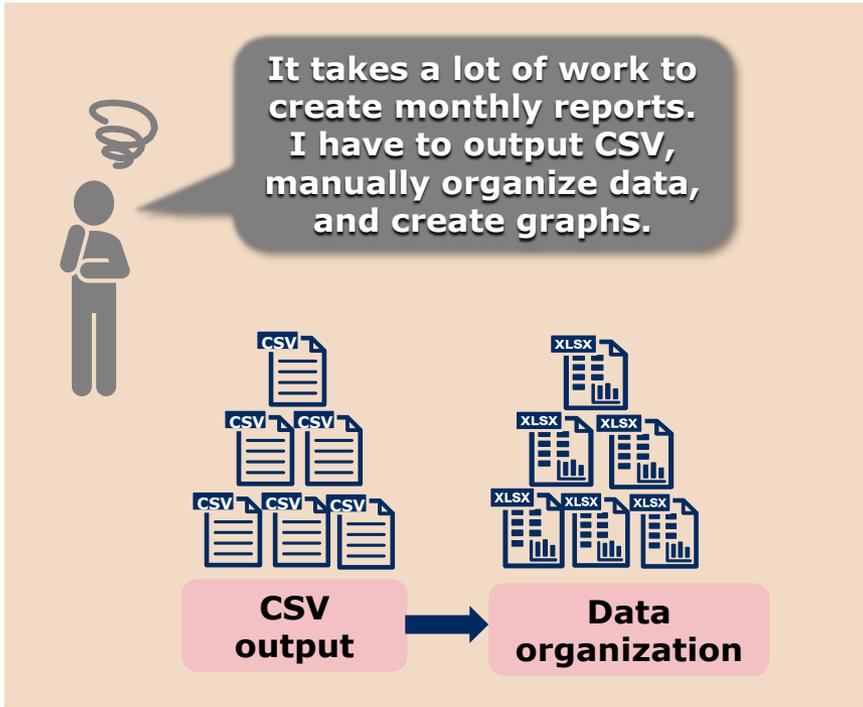


Move from message severity counter to message screen. Search result with the severity is shown. *BusinessView Option is required.

Collected performance data is visualized for monthly reports and current operational status and can be accessed from anywhere via web browser.

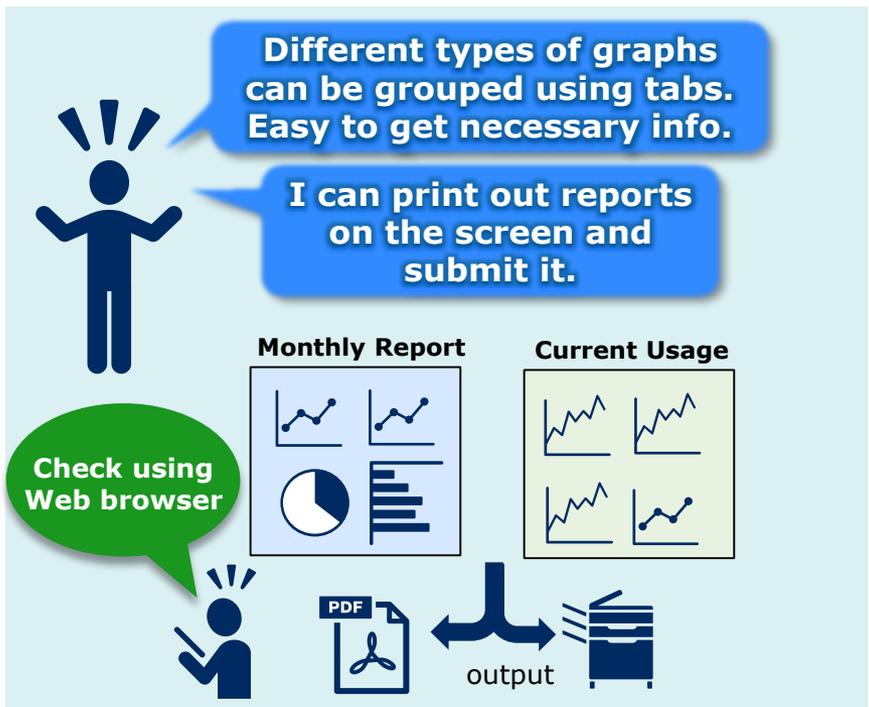
Before

It takes time to manually organize data and create graphs for reports.



After

Performance information can be checked using web browser. Reports can be output to PDF or printer.



"Easy to Access, Easy to Create Graphs"

Create reports easily on web browser, group by tabs, access and print anytime.

CPU/Memory/Disk Usage Graph

The screenshot shows the MasterScope Performance Report interface. The main content area displays a line graph titled "CPU/Memory/Disk Usage" for the "Petstore System". The graph shows three data series: AP/Processor::Total::% CPU Usage Ex (blue), AP/Memory::% Memory Used Ex (orange), and AP/LogicalDisk::Total::% Used Ex (yellow). A horizontal threshold line is drawn at approximately 50% on the y-axis. The x-axis represents time from 2018/07/12 01:00 to 2018/07/12 09:00. The interface includes a navigation sidebar on the left, a top navigation bar with "tenant_admin" and "Logout", and a central control area with "Show: Today", "From: 2018/07/12 00:00:00", and "To: 2018/07/12 09:41:47". Below the graph, there are "Edit", "Delete", and "Print" buttons.

Tabbed Reports

Performance graph with threshold

Configuration with GUI

This screenshot shows the "Add View" configuration window. It includes a "View Name" field, a "Report Type" dropdown, and a "Graph Type" dropdown. Below these are several rows of configuration options for different metrics, such as "AP/Processor::Total::% CPU Usage Ex", "AP/Memory::% Memory Used Ex", and "AP/LogicalDisk::Total::% Used Ex". Each row has a "Color" column with a corresponding color swatch.

This screenshot shows the "Print" dialog box. It has "Current" and "Options" tabs. Under "Current", there is a "Select Printer" dropdown menu. Under "Options", there are checkboxes for "Page Range" (All, Selection, Pages) and "Number of copies". There are also fields for "Page number or a single page range" and "Page range". A "Print" button is at the bottom.

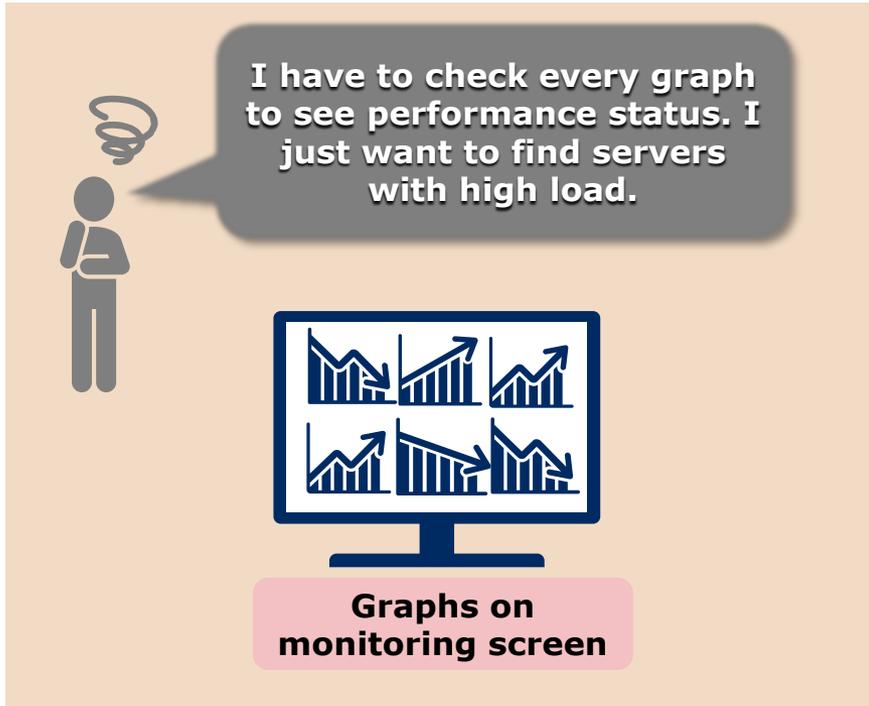
Output to PDF or printer



Overloaded servers are automatically extracted and shown as a ranking list.

Before

To see overload status, each performance graph needs to be checked on monitoring screen.

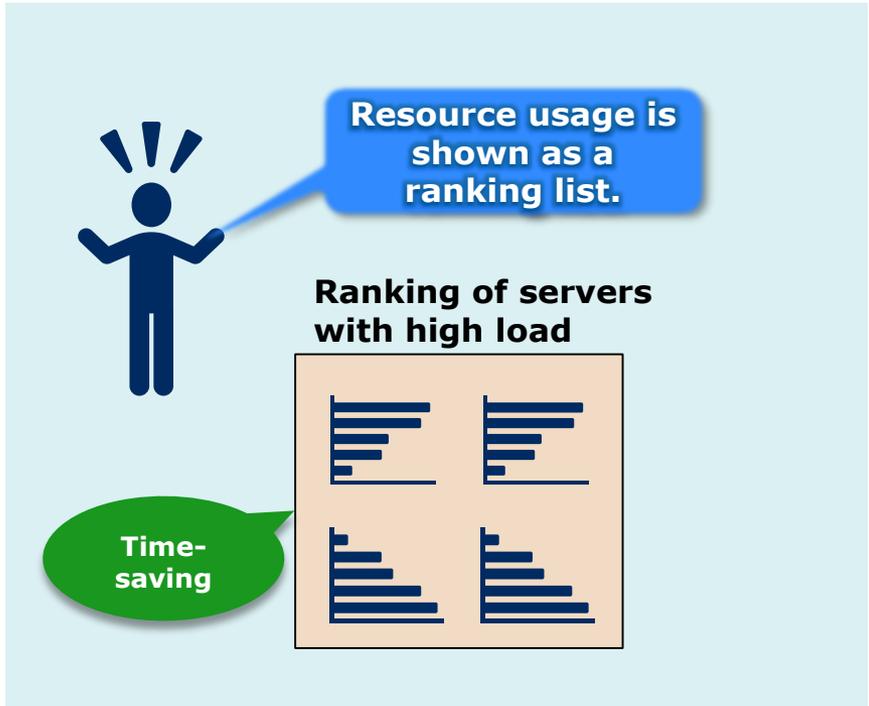


I have to check every graph to see performance status. I just want to find servers with high load.

Graphs on monitoring screen

After

Ranking of servers with high resource usage helps you identify overloaded servers.



Resource usage is shown as a ranking list.

Ranking of servers with high load

Time-saving

“Identify Overloaded Servers”

Specify the time period, servers, and resource to display a ranking list of resource usage.

Ranking list of servers with high memory usage

The screenshot shows the MasterScope Performance Report interface. A callout box labeled "Specify time period" points to the time selection fields: "Show: Today", "From: 2018/07/12 00:00:00", and "To: 2018/07/12 11:14:49". Below this, the "Ranking" tab is selected, and the "Edit" button is highlighted with a red box. A callout box labeled "Overloaded server" points to the top two entries in the "Memory Usage Top 10" bar chart, which are 66.348182 and 66.136489.

Server	Memory Usage (%)
/Memory::% Memory Used Ex	66.348182
/Memory::% Memory Used Ex	66.136489
/Memory::% Memory Used Ex	48.937542
/Memory::% Memory Used Ex	45.338099
/Memory::% Memory Used Ex	40.787146
/Memory::% Memory Used Ex	23.013083
/Memory::% Memory Used Ex	23.006802
/Memory::% Memory Used Ex	17.239790
/Memory::% Memory Used Ex	15.636204
/Memory::% Memory Used Ex	15.613937

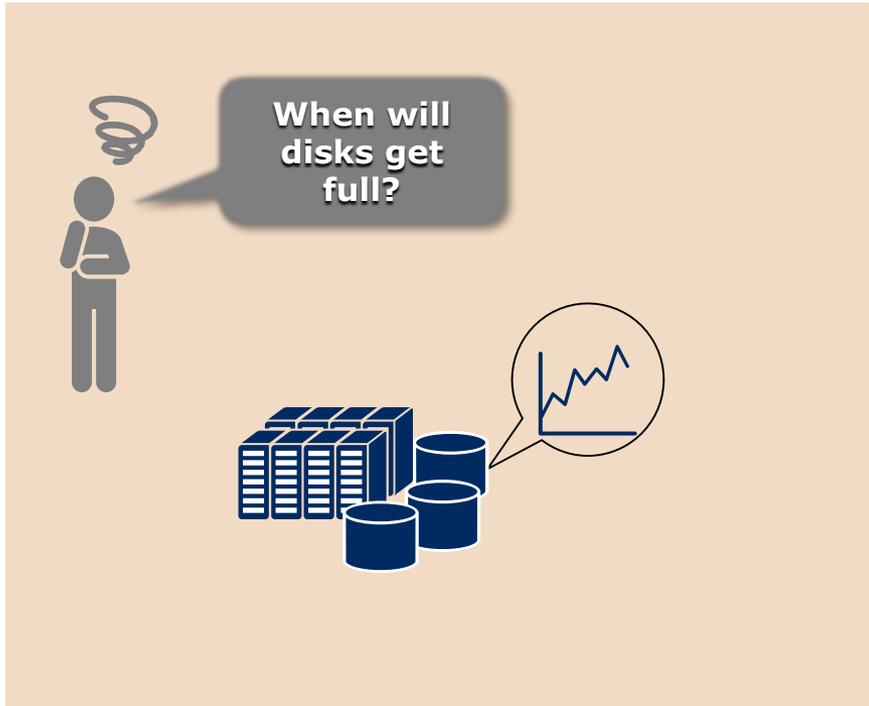
The "Graph - Graph Configuration" dialog box is shown. The "Graph Name" is "Memory Usage Top 10". The "Graph Type" is "Performance Graph". The "Data" source is "RAW". The "Value" options are "Average", "Minimum", "Maximum", and "Latest", with "Average" selected. The "Vertical Scale" is "Automatic". The "Ranking" section shows "Show: 10 entries" and "Order: Descending Order" selected. The "Value" options are "Average", "Minimum", "Maximum", "Latest", and "RAW".

For resource usage, select descending order. For resource availability, select ascending order.

Estimation based on the collected performance data helps you prepare for capacity planning.

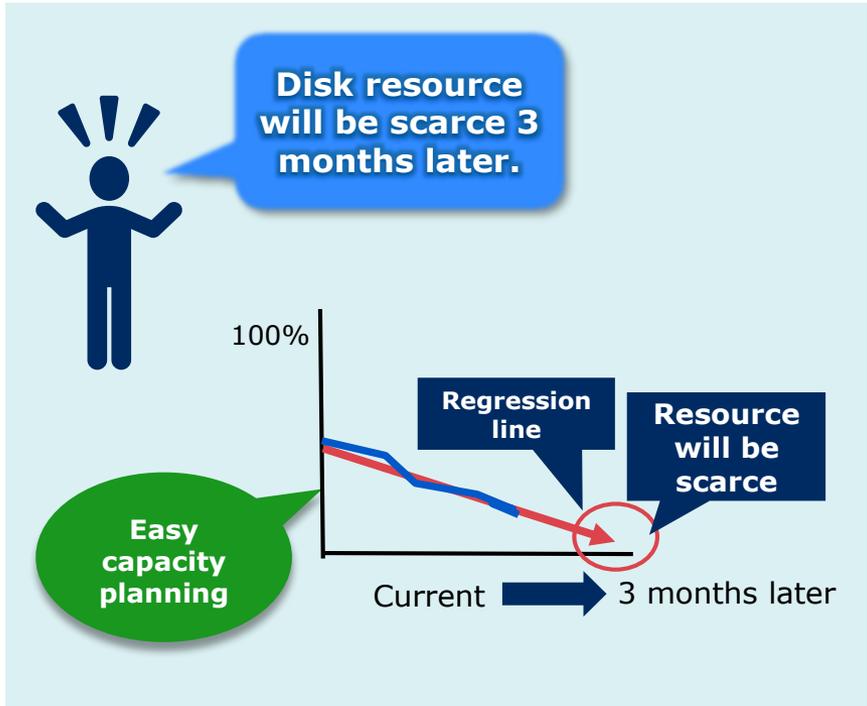
Before

Disk capacity is monitored, but it is too late to plan disk allocation after the threshold is reached.



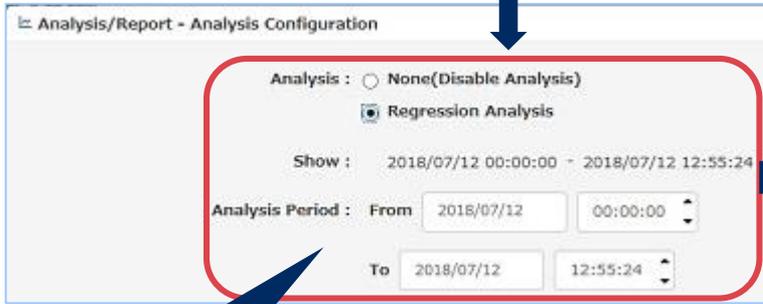
After

Drawing a regression line based on collected performance data enables you to estimate resource scarcity.



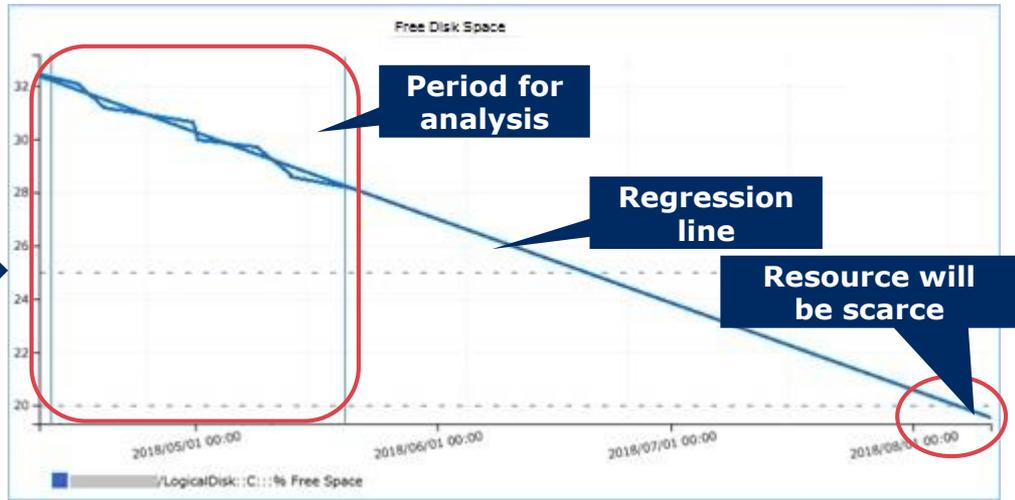
“Estimate Resource Scarcity”

Specify the time period to analyze and a regression line will be drawn on a performance graph, showing the estimation.



Select Regression Analysis

Analyzes Free Disk Space

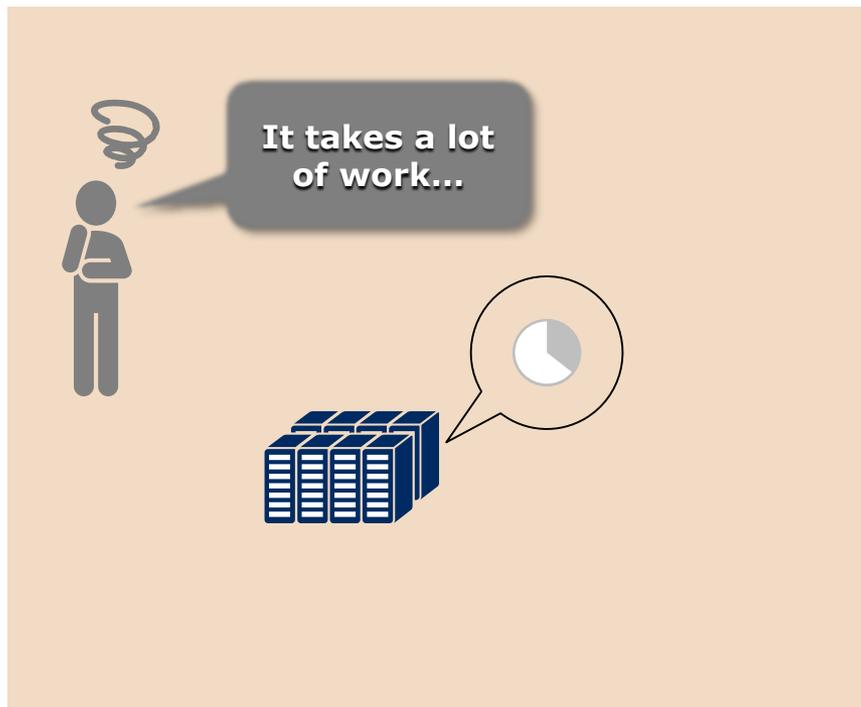


Future

Server availability during the specified time period is shown with a graph.

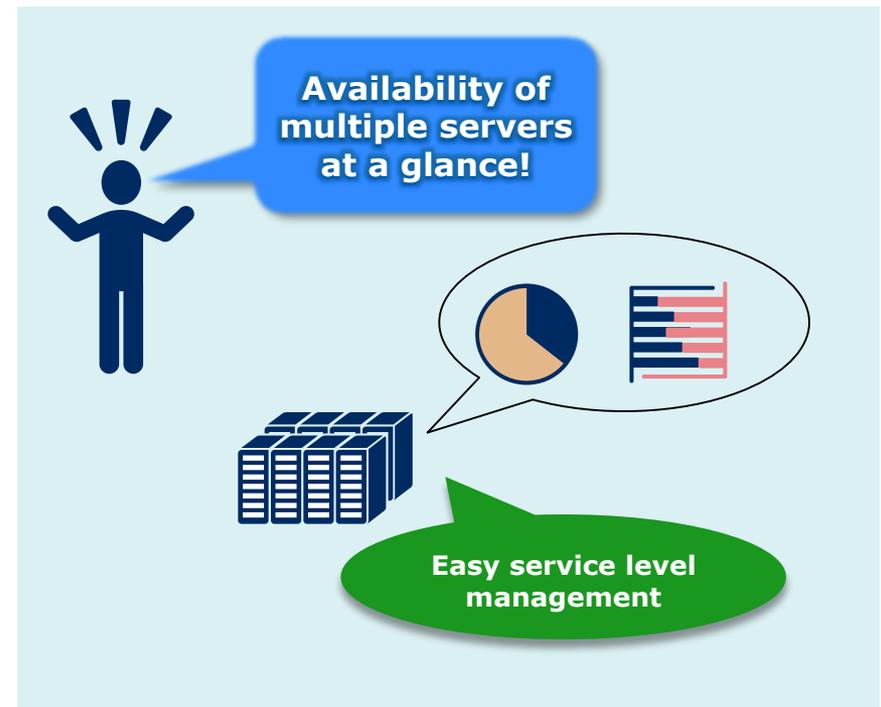
Before

Finding server uptime requires collecting information and calculation.



After

Availability of multiple servers is shown with a graph.

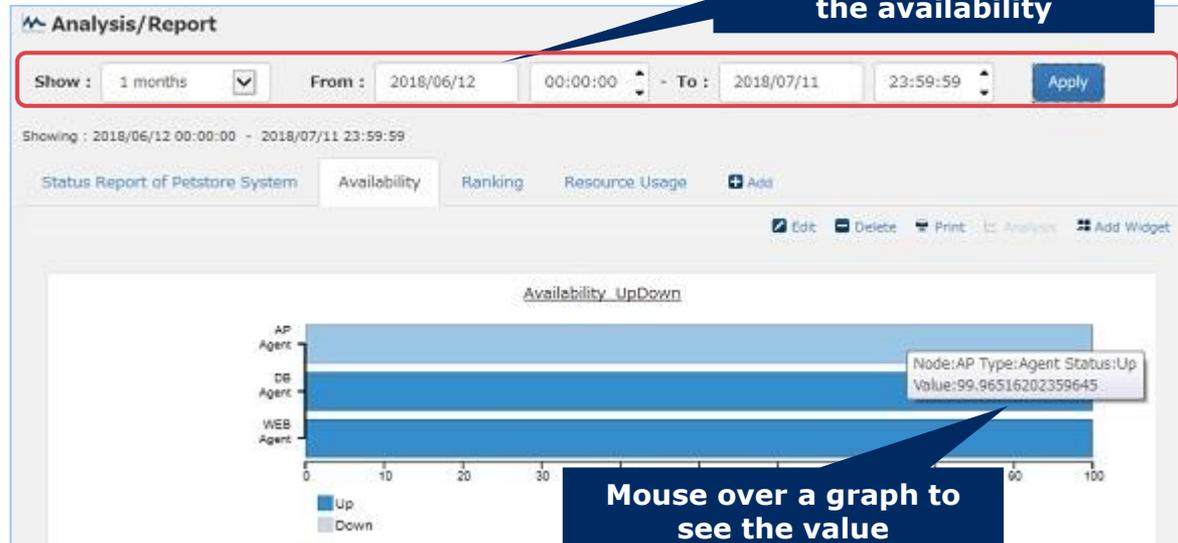


Visualize server availability of the specified period. (availability of SystemManager G Agent, processes, ports)

Agent availability (1 node)



Agent availability (multiple nodes)



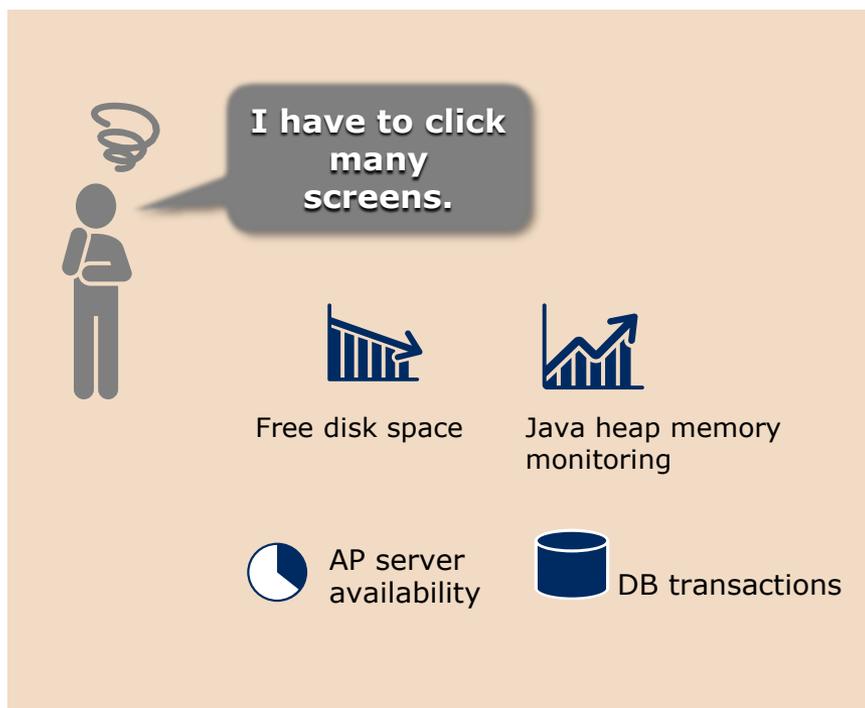
Time ratio of the following item status can be shown.

- Processes (process start/stop, the number of processes)
- Windows services (service start/stop)
- TCP/UDP ports (port open/close state)
- Performance (threshold status)
- File size (threshold status)

You can create and customize your dashboard with widgets to get a quick view of the system status.

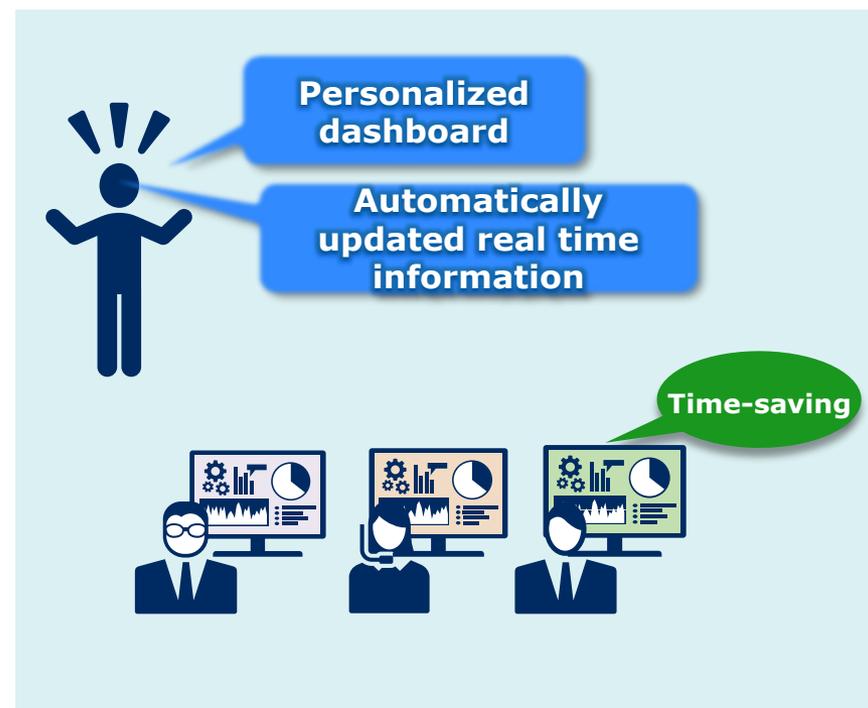
Before

Different users need different information. It takes time to check scattered information.



After

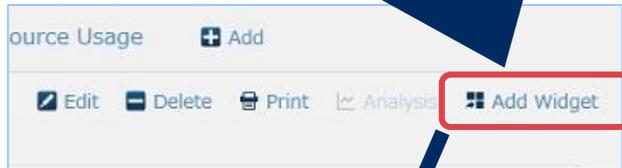
Dashboard gives you quick access to frequently used information, saving time to collect data.



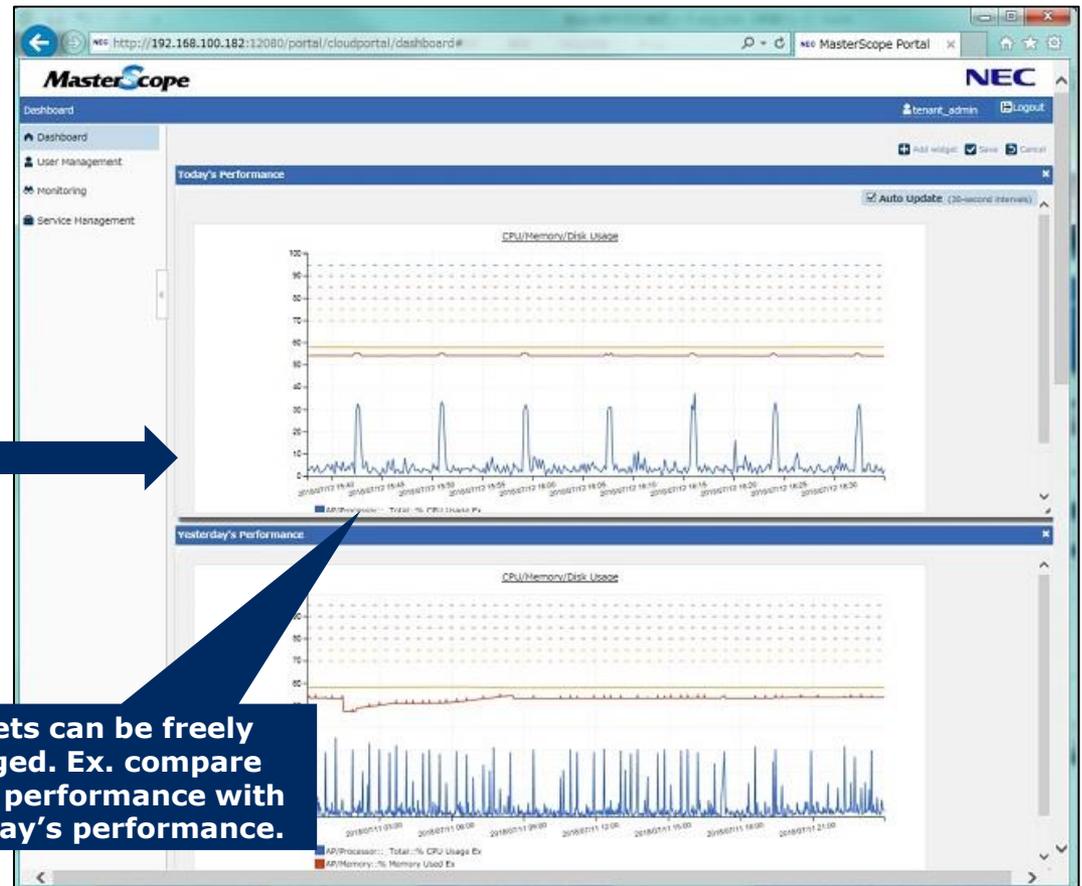
“Customizable Dashboard”

Dashboard gives you quick access to frequently used performance reports updated in real time.

Click 'Add Widget' on the upper right corner of a performance graph.



Display performance graphs on dashboard

A screenshot of the 'Analysis/Report - Add widget' dialog box. It contains the following fields and options:

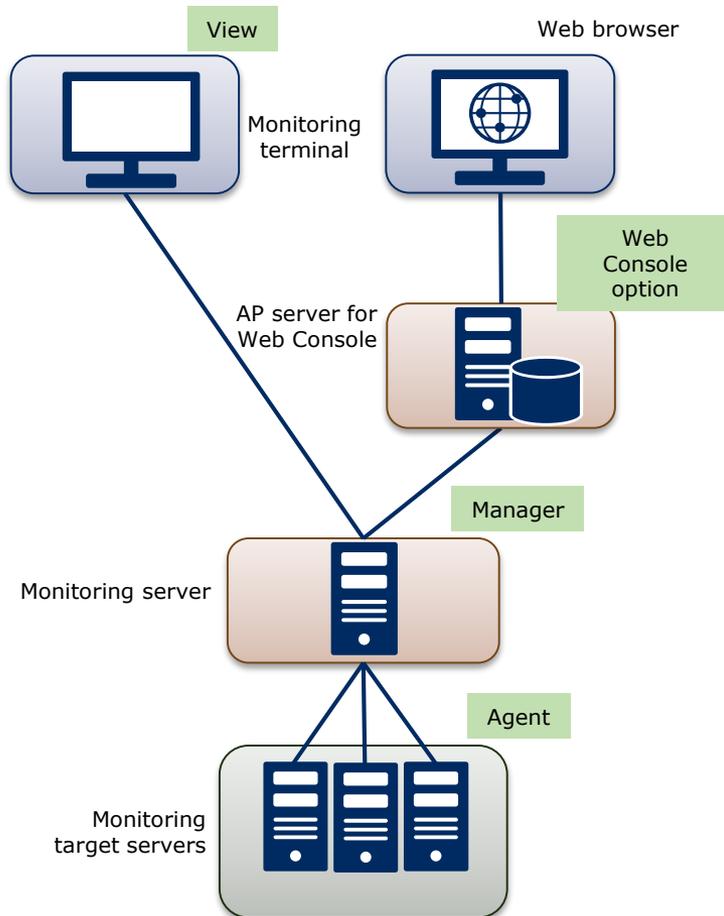
- Widget title: Today's Performance
- Add: CPU/Memory/Disk Usage (dropdown menu)
- Show: Last 1 hour (dropdown menu)
- Update Automatically
- OK button

Specify name, graph, and time period.

Widgets can be freely arranged. Ex. compare today's performance with yesterday's performance.

License and Configuration Example

One Web Console license is required per installation.



One Web Console license is required per AP server for Web Console.

- Web Console and manager can be installed on the same server.
- 2 Web Console licenses are required for a 2-node cluster.

There is no limit to the number of users.

- There is no limit to the number of concurrent connections via web browser.

Configuration Example of 3 Monitoring Target Servers

Name	QTY
MasterScope SystemManager G Manager for Windows/Linux	1
MasterScope SystemManager G Agent for Windows/Linux(1)	3
MasterScope SystemManager G Web Console	1
MasterScope Media	1

*One view license is bundled with a manager license.

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