ExpressCluster® X Integrated WebManager

Administrator's Guide

Revision History

Edition	Revised Date	Description
First	06/15/2009	New manual
Second	09/30/2009	This manual has been updated for the following internal version. Windows: 10.11 Linux: 2.1.2-1

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Preface

Who Should Use This Guide

The *ExpressCluster® X Integrated WebManager Administrator's Guide* is intended for system administrators who manage a cluster system using ExpressCluster Integrated WebManager, and also for system engineers who introduce the Integraded WebManager. This document describes must issues in introducing cluster systems using ExpressCluster® Integraded WebManager (hereinafter called Integrated WebManager) in accordance with actual procedures.

How this Guide is Organized

Chapter 1   Overview of Integrated WebManager: Describes product overview of Integrated WebManager and how to setup.
Chapter 2   Functions of Integrated WebManager: Describes functions of Integrated WebManager.
Chapter 3   Supplement: Describes supplementary comment of Integrated WebManager

ExpressCluster X Documentation Set

The ExpressCluster X manuals consist of the following four guides. The title and purpose of each guide is described below.

Getting Started Guide

This guide is intended for all users. The guide covers topics such as product overview, system requirements, and known problems.

Installation and Configuration Guide
This guide is intended for system engineers and administrators who want to build, operate, and maintain a cluster system. Instructions for designing, installing, and configuring a cluster system with ExpressCluster are covered in this guide.

Reference Guide
This guide is intended for system administrators who want to introduce cluster systems using ExpressCluster. The guide covers topics such as how to operate ExpressCluster, function of each module, maintenance-related information, and troubleshooting. The guide is supplement to the *Installation and Configuration Guide*.

Integrated WebManager Administrator's Guide
This guide is intended for system administrators who manage a cluster system using ExpressCluster Integrated WebManager, and also for system engineers who introduce the Integraded WebManager. This document describes the required issues regarding introducing cluster systems using ExpressCluster® Integraded WebManager (hereinafter called Integrated WebManager) in accordance with actual procedures.

Conventions

In this guide, **Note**, **Important**, **Related Information** are used as follows:

Note:

Used when the information given is important, but not related to the data loss and damage to the system and machine.

Important:

Used when the information given is necessary to avoid the data loss and damage to the system and machine.

Related Information:

Used to describe the location of the information given at the reference destination.

The following conventions are used in this guide.

Convention	Usage	Example
Bold	Indicates graphical objects, such as fields, list boxes, menu selections, buttons, labels, icons, etc.	In **User Name**, type your name. On the **File** menu, click **Open Database**.
Angled bracket within the command line	Indicates that the value specified inside of the angled bracket can be omitted.	`Clpstat -s[-h host_name]`
Monospace (courier)	Indicates path names, commands, system output (message, prompt, etc), directory, file names, functions and parameters.	`c:\Program files\EXPRESSCLUSTER`
Monospace bold (courier)	Indicates the value that a user actually enters from a command line.	Enter the following: `# clpcl -s -a`
Monospace italic (courier)	Indicates that users should replace italicized part with values that they are actually working with.	`clpstat –s [-h host_name]`

Contacting NEC

For the latest product information, visit our website below:

http://www.nec.com/global/prod/expresscluster/

Chapter 1   Overview   of   Integrated WebManager

This chapter describes overview of the Integrated WebManager.

This chapter covers:

What is Integrated WebManager?

The Integrated WebManager is a function to unify the management of cluster systems disintegrated in the network and to monitor cluster status and so forth. The figure below shows overview of the Integrated WebManager.
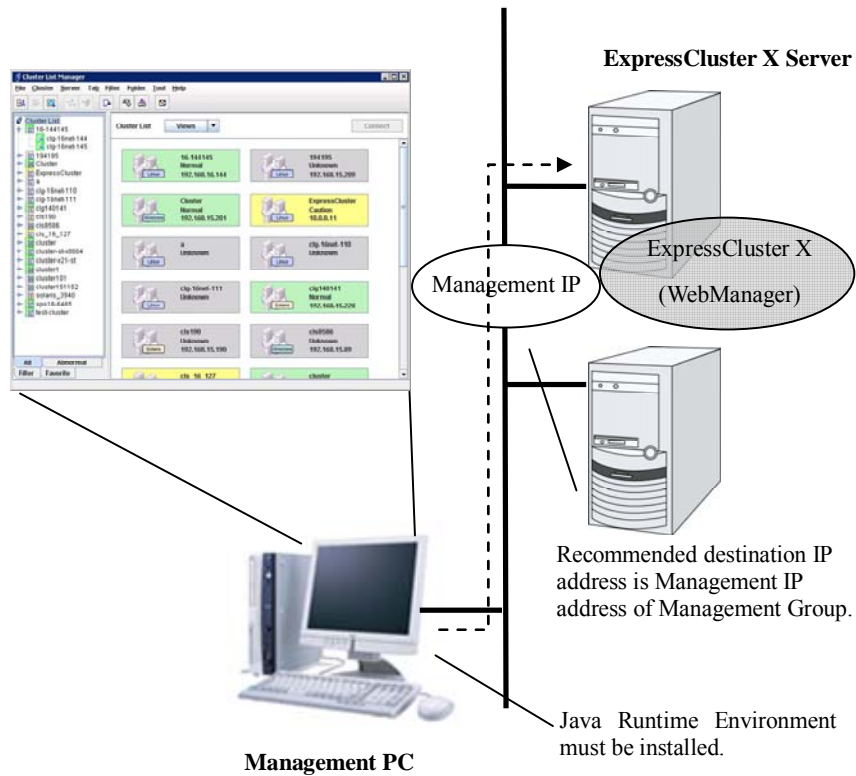
There are two types of the Integrated WebManager: One is the Java applet version that operates on a Web browser, and the other is the Java application version that can be operated by installing on a management PC and executed on Java Runtime Environment (JRE). This document describes the Java application version of Integrated WebManager. Refer to the ExpressCluster Reference Guide for the Java applet version of Integrated WebManager.

System requirement for integrated WebManager

This section describes system requirement to operate the Integrated WebManager.

Supported operating systems and browsers

For the latest information, please refer to the latest manual on ExpressCluster website. Currently supported operating systems and browsers are as following:

OS	Language
Microsoft Windows® XP SP3	English/Japanese
Microsoft Windows Vista™	English/Japanese
Microsoft Windows Server 2003 SP2	English/Japanese
Microsoft Windows Server 2003 R2	English/Japanese
Microsoft Windows Server 2008	English/Japanese
Microsoft Windows Server 2008 R2	English/Japanese
RedHat4(IA32)	English/Japanese
Asianux3 SP2(IA32)	English/Japanese
Solaris 10 for x86	English/Japanese

Note:

Use Java Runtime for 32-bit when operating the Integrated WebManager on x86_64 machines.

Java runtime environment

Java runtime environment is required to operate the Integrated WebManager.

Sun Microsystems
Java(TM) Runtime Environment
Version 5.0 Update 6 (1.5.0_06) or later.

Required memory and disk size

Required memory size   : 35MB or more

Required disk size   : 8.7MB or more (except for the required size for Java runtime environment)

Supported ExpressCluster versions

Use the following combinations of the Integrated WebManager versions and the ExpressCluster versions described in the following chart for your operation. The Integrated WebManager may not operate properly when using other combinations.

Windows

Integrated WebManager version	ExpressCluster X Server internal version
2.1.1	9.08 - 9.09 10.03 - 10.11

Linux

Integrated WebManager version	ExpressCluster X Server internal version
2.1.1	1.1.5-1 – 1.1.6-1 2.0.3-1 - 2.1.2-1

Solaris

Integrated WebManager version	ExpressCluster X Server internal version
2.1.1	2.1.0-1

HP-UX

Integrated WebManager version	ExpressCluster X HA/ClusterMaster
2.1.1	R2.3 - R3.1

Note:
When you use the Integrated WebManager on HP-UX environment, ExpressCluster X Integrated WebManager Client option 1.0 is required.

Setting up Integrated WebManager

There are two ways of setting up Integrated WebManager: One is installing from ExpressCluster CD-ROM and the other is downloading from a server that completed setting up ExpressCluster X 2.1.

Installing from CD-ROM

Set up the Integrated WebManager from the installation CD-ROM by following the procedure below.

1. Insert ExpressCluster X CD 2.1 CD-ROM media into the CD-ROM drive.
    Mount the CD-ROM under Linux/Solaris environment.

2. Expand clusterlist.zip included in the CD-ROM.

    ◆ **Windows**

    In the Explorer, open the folder \common\2.1 in the CD-ROM and right click on the clusterlist.zip. In the displayed menu, click **Expand All**, and **Deployment Wizard** dialog box appears. Then, specify the expansion target folder in which to extract the clusterlist.zip on the local disk.

    ◆ **Linux / Solaris**

    Copy the /common/2.1/clusterlist.zip in the CD-ROM onto the local disk, and run gzip command to expand.

    ```
    $ gzip –d clusterlist.zip
    ```

3. Go to the folder or directory where clusterlist.zip is expanded.

4. Start the Integrated WebManager by using startup script.

    ◆ **Windows**

    Select run.bat and run it.

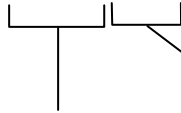   ◆ **Linux / Solaris**

    Select run.sh and run it.

    ```
    $ ./run.sh
    ```

Installing by download

1. Enter the following URL in a Web browser to download clusterlist.zip from a server that ExpressCluster 2.1 is operating.

    http://*10.0.0.3*:29003/clusterlist.zip

    Specify the port number of the WebManager specified at installation. (Default value is 29003)

    Specify the cluster's management IP or the actual IP address of a server that ExpressCluster Server is installed.

2. Expand the downloaded zip file.

    ◆ **Windows**

    Select clusterlist.zip and right click on it. Click **Expand All** in the displayed right click menu. **Deployment Wizard** is displayed. Follow the instruction to expand clusterlist.zip.

    ◆ **Linux / Solaris**

    Run gzip command and expand clusterlist.zip.

    ```
    $ gzip –d clusterlist.zip
    ```

3. Go to the folder or directory that clusterlist.zip is expanded.

4. Start the Integrated WebManager using the start up script.

    ◆ **Windows**

    Select run.bat and run it

    ◆ **Linux / Solaris**

    Select run.sh and run it

    ```
    $ ./run.sh
    ```

Uninstalling Integrated WebManager

Delete the directory that clusterlist.zip was expanded at installation.

Chapter 2 Functions of Integrated WebManager

This chapter describes functions of the Integrated WebManager.
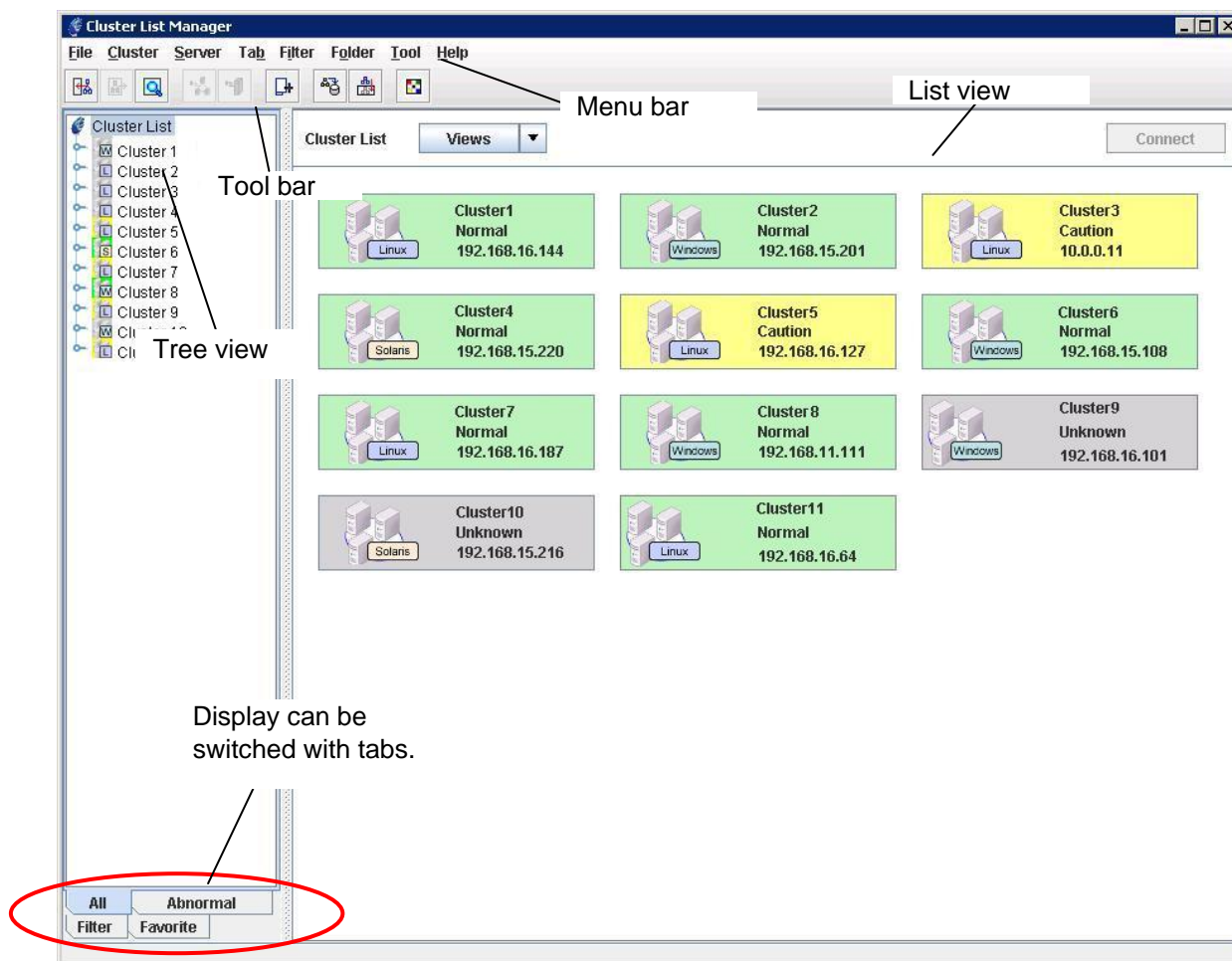
Note:

The description in this chapter is based on English environment. Displayed language depends on OS locale of the management terminal.

This chapter covers:

Main screen of Integrated WebManager

The following describes the Integrated WebManager screen.

Menu bar

Each function is available in the menu bar.

File Cluster Server Tab Filter Folder Tool Help

Menu name	Function overview
File	Registers and searches cluster
Cluster	Start WebManager (Connecting with management IP) after deregistering clusters.
Server	Starts WebManager (Connecting with actual IP)
Tab	Creates custom tabs
Filter	Applies filters
Folder	Creates custom folders
Tool	Setting options
Help	Version information

Tool bar

Each function is available in the menu bar.

Icon name		Function overview
Register		Registers clusters
Unregister		Deregisters clusters
Find		Searches clusters
Connect to Cluster		Starts WebManager (Connecting with management IP)
Connect to Server		Starts WebManager (Connecting with actual IP)
New Tab		Creates custom tabs
Save		Saves current configuration data
Refresh		Updates to the latest information
Option		Option setting

Tree view

Status of cluster and server can be confirmed.

By clicking the tabs below, the display can be switched.

| Tab name	Function overview
All	Displays all the list of registered clusters
Abnormal	Displays the list of failed cluster (Server is down or information cannot be collected)
Filter	Displays clusters that the filter is applied. Refer to Applying filter for the details.
Custom Tab	Displays clusters with hierarchical structure that users sort out Refer to Custom Tab Function for the details.
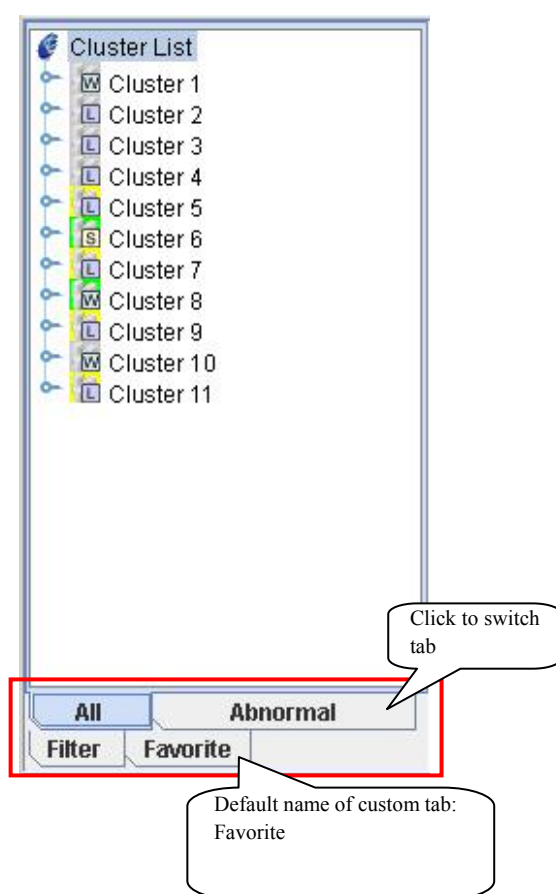
List view

Cluster and server information selected with the tree view are displayed.

The screen displayed when a directory of a tree is selected in the tree view:

This screen is displayed when selecting a directory that has clusters such as [All] tab - **Cluster List** in the tree view.
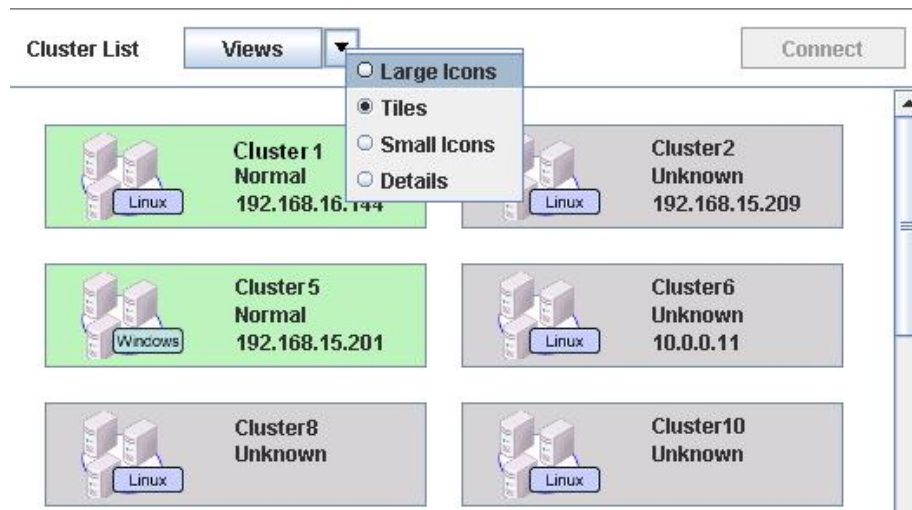
Button menu

The followings are descriptions of the buttons displayed in the upper part of the screen.

Views menu list

Display method of cluster list of search list can be changed.

Selectable display: **Large Icons**, **Tiles, Small Icon, Details**

Default: **Large Icons**

Connect button

Selecting a cluster from **Cluster List** and starting WebManager is possible.

Right click menu

The followings are descriptions of the menu when selecting a cluster from **Cluster List** and right clicking on it.

Connect

Selecting a cluster from **Cluster List** and starting WebManager is possible.

Unregister

Selecting a cluster from **Cluster List** and deleting the cluster from the Integrated WebManager is possible.

Screen to be displayed when a particular cluster is selected in the tree view:

This screen is displayed when a particular cluster is selected in the tree view, or when double clicking a cluster displayed in the list view.

On **Cluster**: **Selected Cluster Name** screen, detailed information on the selected cluster is displayed.

On **Server List** screen, server list that belongs to the selected cluster is displayed.

Screen to be displayed when a server is selected on the tree view:

This screen is displayed when a server is selected in the tree view, or when double clicking a server displayed in the list view.

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Registering Cluster on Integrated WebManager

When you manage clusters with the Integrated WebManager, you need to register the clusters to be managed on the Integrated WebManager.

This section describes how to register the clusters on the Integrated WebManager.

Note:

Integrated WebManager cannot register multiple clusters have the same name because manage the cluster as an identifier by a cluster name. If a registered cluster has the same name as a cluster will be registered, it is necessary to change the cluster name before registration.
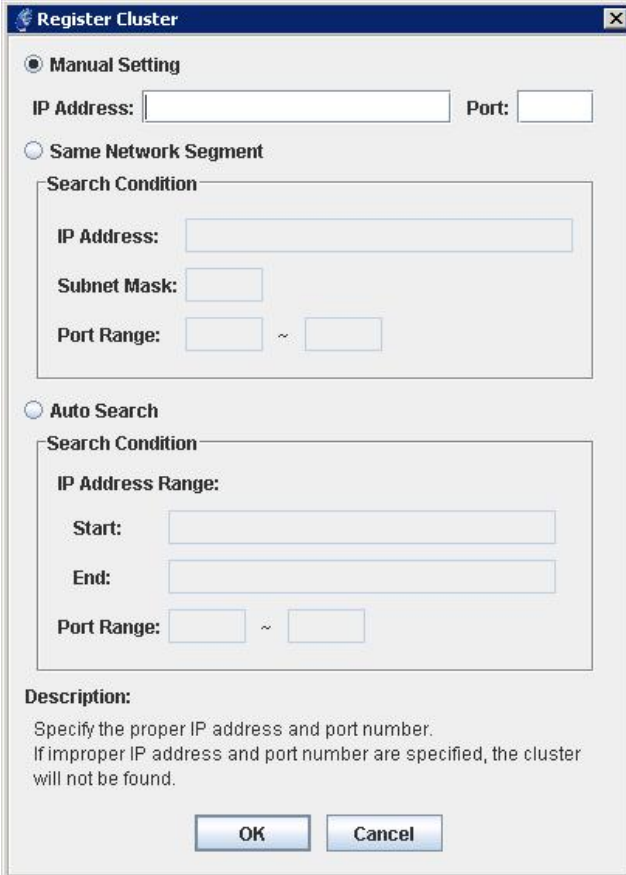
◆   Registering from tool bar

When you register clusters to the Integrated WebManager, click **Register** icon in the menu bar of the Integrated WebManager screen to show **Register Cluster** dialog box.

◆   Registering form menu bar

When you register clusters to the Integrated WebManager, click **File** in the menu bar of the Integrated WebManager to show the menu list.

Click **Register** in the menu list to display **Register Cluster** dialog box.

Manual setting

Enter the cluster management IP/actual cluster server IP address and the WebManager port number directly to register the cluster to the Integrated WebManager.
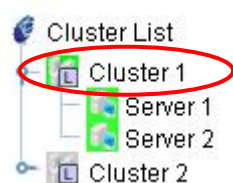
IP Address

Enter the cluster management IP or actual cluster server IP address.

Port

Enter the port number of WebManager (Default is 29003).

Click [OK]. If registration is completed successfully, the cluster icon is added to the tree view. If registration failed, the cluster icon is not added. Verify if [IP Address] and [Port] are specified correctly, and the cluster is already starting.

Same Network Segment

Registers the cluster to the Integrated WebManager by automatically detecting on the subnet of the specified address.

IP Address

Enter the subnet IP address of the search target.

   Example (IPv4): Enter 10.58.68.0 when network address is 10.58.68.0/24.

   Example (IPv6): Enter 3ffe:1234:5678:: when network address is 3ffe:1234:5678::/48.

Subnet Mask

Enter the subnet mask of the search target in bit number.

   Example (IPv4): Enter 24 when network address is 10.58.68.0/24.

   Example (IPv6): Enter 48 when network address is 3ffe:1234:5678::/48.

Port Range

Enter the port number range of the search target.

Auto Search

Registers the cluster to the Integrated WebManager by automatically detecting the cluster from the network.
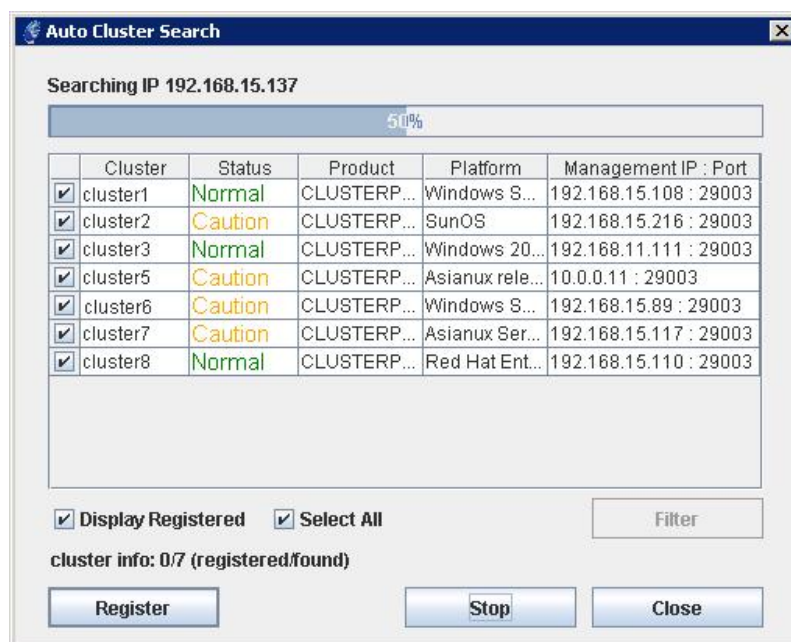
IP Address Range

Enter the IP address range of the search target. Enter the IP address in **Start** and **End**.

Port Range

Enter the port number range of the search target.

Select **Same Network Segment** or **Auto Search**, and then click **OK** to show **Auto Cluster Search** dialog box.

Check the clusters to be registered to the Integrated WebManager and click **Register** button. Cluster icons are added in the tree view.

Display Registered

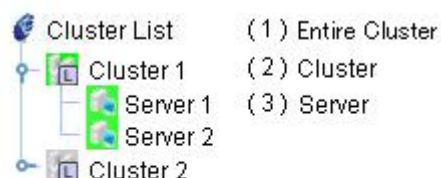Display all clusters including registered clusters by automatically detecting from the network.

Select All

Select all clusters displaying.

Filter

If you click Filter button, Register Filter screen is displayed. If you enter conditions of the clusters that you want to register and click OK button, all the clusters matching the conditions will be checked.

Checking Each Object Status on Tree View

On the Integrated WebManager screen, status of each object configuring the cluster can be visually checked. The following shows the status of each object.

No.	Icon		Status	Description
(1)	Entire cluster		—	No status
(2)	Cluster		[Normal]	All the server is operating.
			[Warning]	Some of the servers in the cluster is failing.
			[Unknown]	Information cannot be collected.
(3)	Server		[Started]	Servers are operating normally.
			[Warning]	Some servers cannot communicate.
			[Suspended(Network partition unsolved)]	Network partition cannot be resolved since the disk network partition resolution resource is abnormal status.
			[Suspended (Restart after shutdown)]	Server is forcibly shut down by other operations than cluster stop or cluster shut down, and the server is starting.
			[Stopped]/[Unknown]	Server is down/Information cannot be collected.

Updating the Integrated WebManager information to the latest

This section describes how to update the information to be displayed on the Integrated WebManager to the latest.

Note:

Information on the Integrated WebManager is automatically updated. However, the update is executed at the configured interval if the version of registered cluster is older than X 2.1. Thus, the information is not always the latest. If you want to display the latest information, follow the procedures below after the operation.

You can adjust the auto updating interval of the Integrated WebManager by going to [Tool] – [Option] – [Configuration data] – [Polling Interval].

If communication with the connecting destination is not available, or ExpressCluster itself does not operate on the connecting destination, a part of the objects may be displayed in gray.

If the version of registered cluster is X 2.1 or later, information on the Integrated WebManager will be updated when it received a notice of status update from registered cluster server. When the cluster status is changed from all servers down, it takes up to 90 seconds until Integrated WebManager received the notice from cluster server. Meanwhile, cluster information is not updated automatically, but it is possible to get the latest information by the following operation.

◆ Updating from tool bar

Click [Refresh] icon on the tool bar.

◆ Updating from menu bar

Click [Tool] in the menu bar. Then click [Refresh] in the displayed menu list.

Applying filter

Filter is a function to display target clusters only by specifying conditions in the cluster list. For example, you can display clusters that belong to a particular network only by specifying IP address conditions.

This section describes how to apply filter.
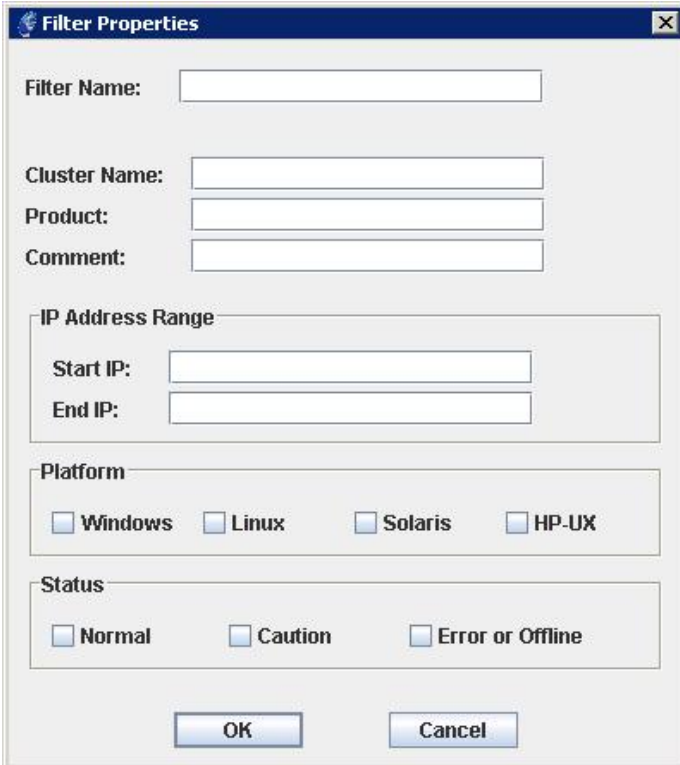
◆   Applying filter from the menu bar

Click [Filter] tab in the tree view and switch the display. Select [Filter List] in the tree view, and then click [Filter] in the menu bar. Select [New Filter] on the menu list to show [Filter Properties] dialog box.

◆   Applying filter from the right click menu

Click [Filter] tab in the tree view and switch the display. Right click on [Filter List], and then select [New Filter] to show [Filter Properties] dialog box.

Then, enter the filter conditions.

Entering filter conditions

Filter Name

Enter filter name

Cluster Name

Enter search string to be included in the cluster name that you want to sort out.

Product

Enter search string to be included in the product name of cluster that you want to sort out.

Comment

Enter search string to be included in the comment of cluster that you want to sort out.

Note

In three items above ([Cluster Name], [Product], [Comment]), you can perform a string search from each property values to be displayed in the list view when a particular cluster is selected in the tree view. As a result, the cluster including specified character string is extracted. It is necessary for the search string to match capital letter, small letter and space.

For example, it can extract a cluster if search string for [Product] is "2.1 for Windows" in a cluster is constructed with ExpressCluster X 2.1 for Windows. But, if it is "2.1forWin" (there is no space), it cannot extract.

You can use regular expressions of Java if you want to set further detailed conditions. Refer to "Package java.util.regex" of "JavaTM 2 Platform API Specification" document for the official expressions.

IP Address Range

Enter the IP address range of the cluster that you want to sort out.

Platform

Specify platform of the cluster that you want to sort out.

Status

Specify status of the cluster that you want to sort out.

Click **OK** after entering the filter condition to add the created filter to the **Filter** tab in the tree view.

When you select the added filter, the list that applied the filter appears.
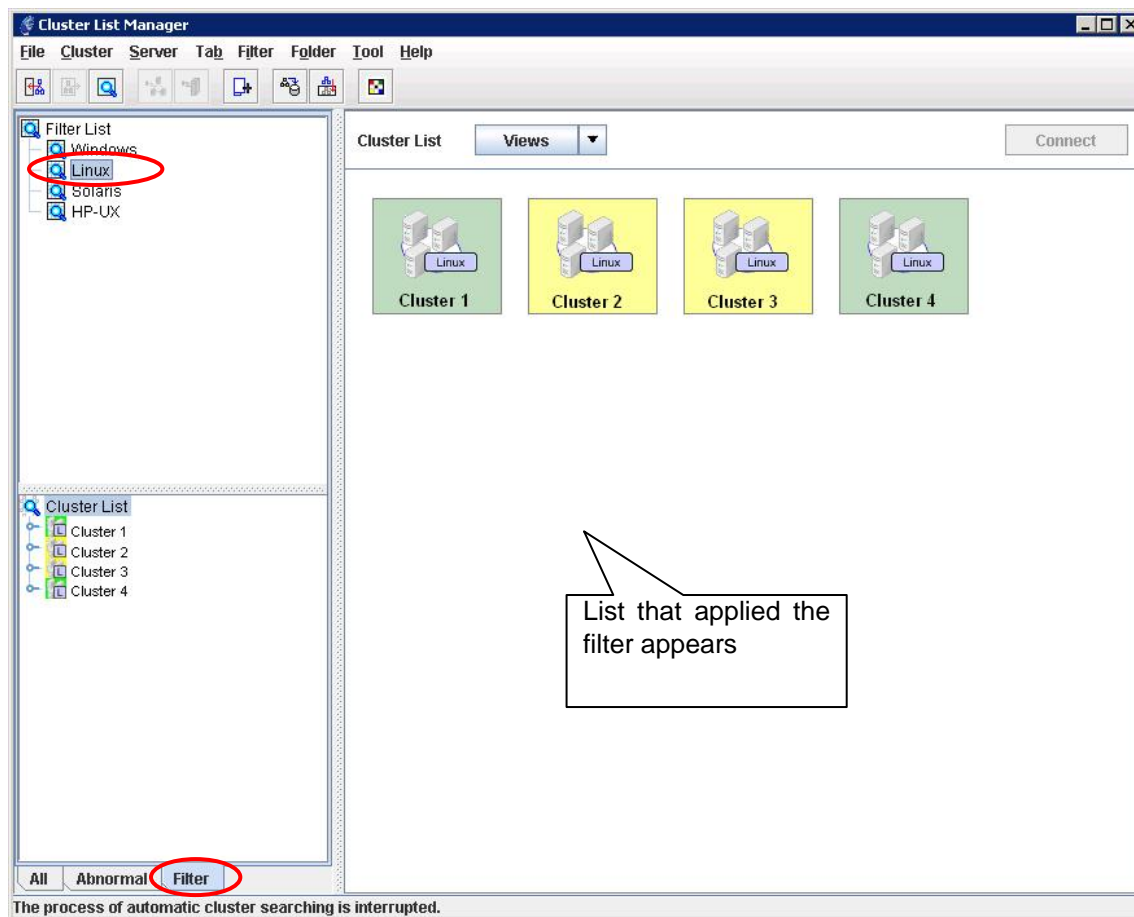
Adding filter

If you want to sort out further by adding conditions on the filtering result, you can apply different filters on the result in duplicate.

This section describes how to add filters.

◆ Adding filter from the menu bar

Select a filter that you want to add a condition from the tree view of the Integrated WebManager.

Click **Filter** in the menu bar. Select **New Filter** in the displayed menu list to show **Filter Properties** dialog box.

Specify the filter condition that you want to add and click **OK**.

◆ Adding filter by right click menu

Select a filter that you want to add a condition from the tree view of the Integrated WebManager, and right click on it Select [New Filter] on the displayed right click menu to show **Filter Properties** dialog box.

Specify the filter condition that you want to add and click **OK**.

List that applied two filters appears.
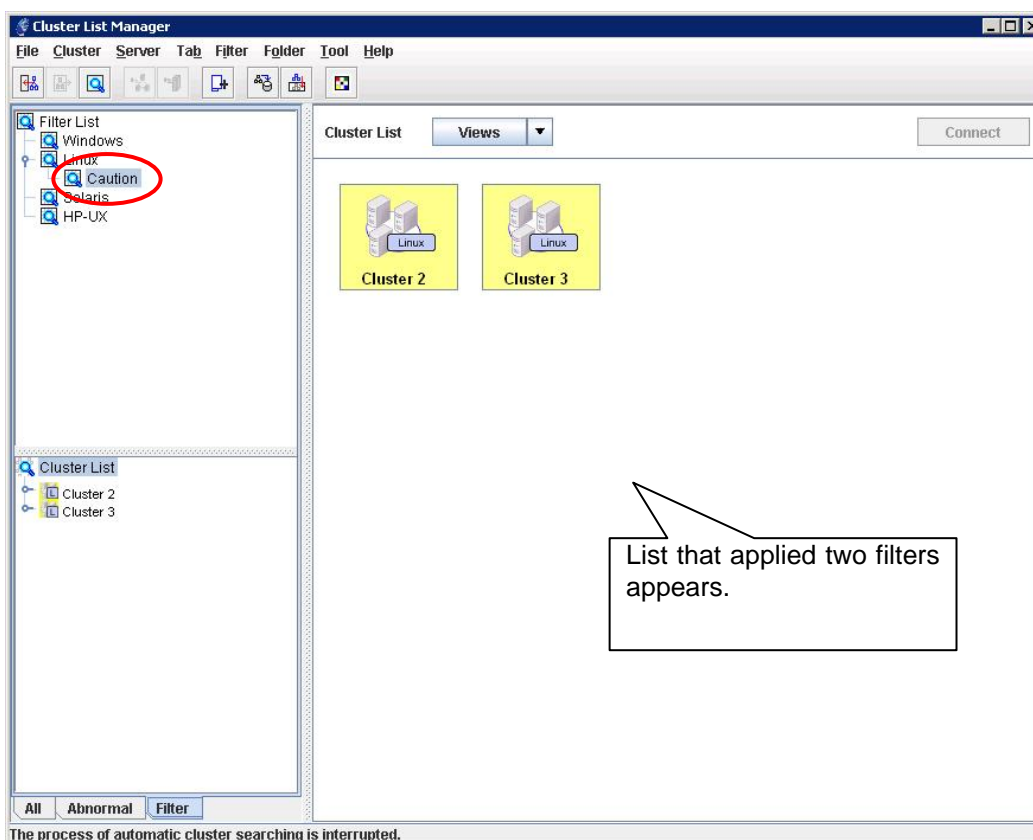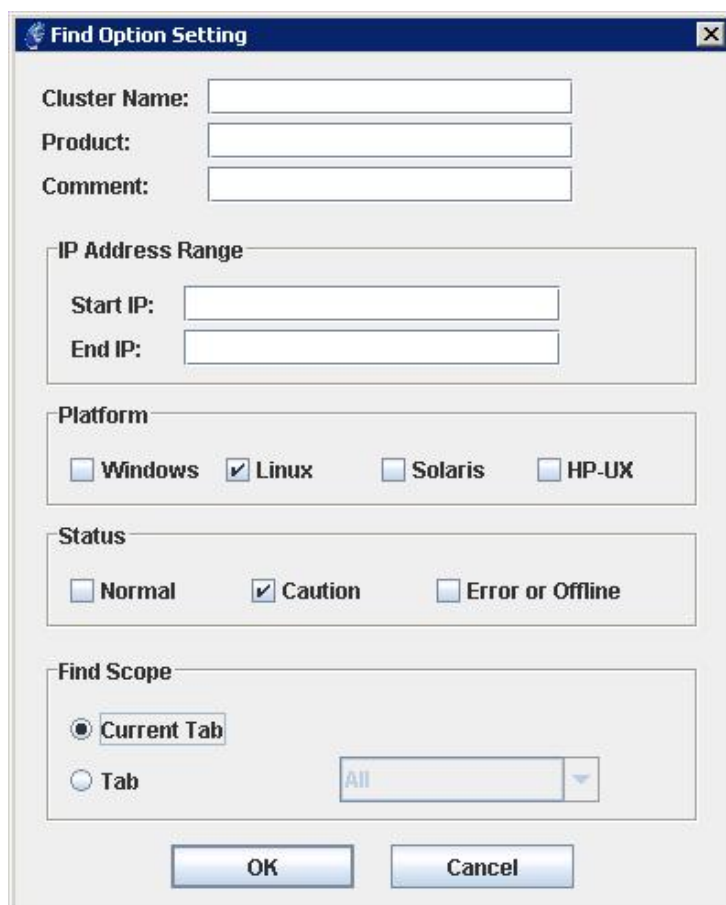
Searching Clusters

You can search a target cluster from the registered cluster list on the Integrated WebManager.

This section describes how to search a cluster.

Click **File** on the menu bar. Select [Find] from the displayed menu list to show **Find Option Setting**] dialog box.

Then, enter the search condition.

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Entering Search Conditions

Cluster Name

Enter a cluster name that you want to search.

Product

Enter a product name of a cluster product that you want to search.

Search from content to be displayed in the list view (Row [Product], Column [Value]) when a particular cluster is selected in the tree view.

   Example: ExpressCluster X 2.1 for Windows

Comment

Search by the contents of a comment. Enter a key word that you want to search.

Note:
You can execute the search of character strings for the three items above.(It is necessary for the search string to match capital letter, small letter and space.) You can use regular expressions of Java if you want to set further detailed conditions. Refer to "Package java.util.regex" of "JavaTM 2 Platform API Specification" document for the official expressions.

IP Address Range

Enter the IP address range of a cluster that you wan to search.

Platform

Specify the platform of a cluster that you want to search.

Status

Specify the status of a cluster that you want to search.

Find Scope

Specify a tab that you want to execute search.

◆   **Current Tab**   … Search from an opening tab.

◆   **Tab**   … Specify a tab to execute search

After specifying the search condition and click **OK**, **Find Result List** is displayed in the list view.
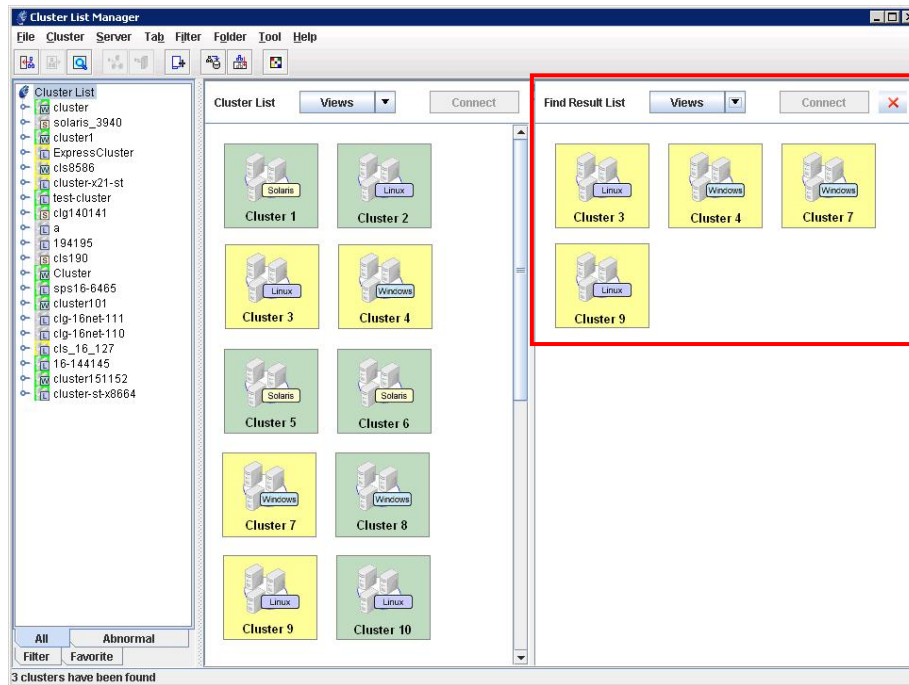
Find Result List Screen

On **Find Result List Screen** that shows the search result, you can deregister the cluster or connecting operation.

This section describes **Find Result List Screen** that shows the search result of cluster.
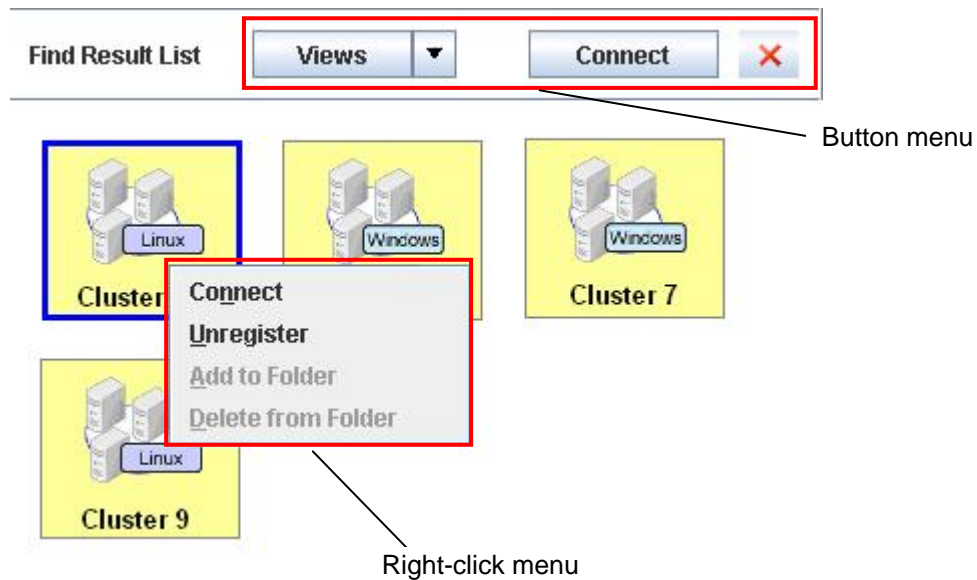
Button menu

Views menu list

　Display method of the search result cluster list can be changed.

　Selectable display: **Thumbnail**, **Titled**, **Small Icon**, **Details**

　Default: Thumbnail

Connect button

　Starts WebManager by selecting a cluster from **Find Result List**.

X button

　Exits Find Result List screen.

Right click menu

Connect

　Starts WebManager by selecting a cluster from **Find Result List**.

Unregister

　Deletes a cluster from Integrated Web Manager by selecting the cluster on **Find Result List**.

Add to Folder

　Sorts a cluster to custom folders by selecting the cluster on **Find Result List**.

Custom Tab Function

Integrated WebManager can create custom tabs that can execute grouping clusters. You can create custom folders in the custom tab as you like, and you can group selected clusters to the custom folders

This section describes how to use the custom tab.

Creating Custom Tab

◆   Creating with tool bar

Click **New Tab** in the tool bar to show **Confirmation** dialog box.

◆   Creating with menu bar

Click **Tab** in the menu bar. Select **New** to show **Confirmation** dialog box.

◆   Creating with right click menu

Right click on the tab in the bottom of the tree view. Select **New** on the displayed right click menu to show **Confirmation** dialog box.

◆   Procedures after **Confirmation** dialog box appears

Click **OK** to create **Favorite** custom tab, and **Find Option Setting** dialog box is displayed.

Click **Rename** to change the custom tab name.
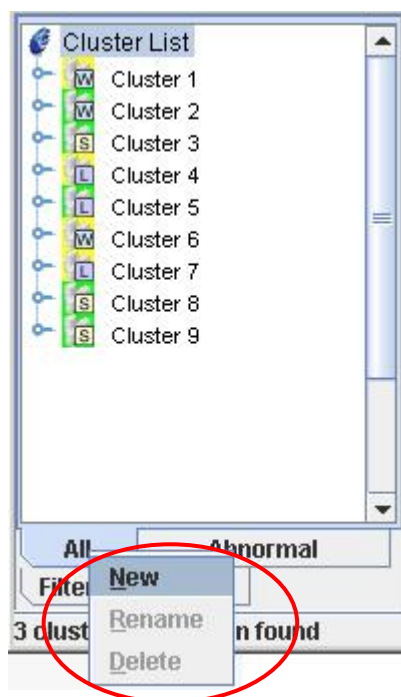
Enter condition of cluster that you want to group in **Find Option Setting** and execute the search.

Refer to Searching Clusters for how to search.

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Creating Custom Folder

You can create a folder to execute cluster grouping.

Custom folders can be created only on custom tab. Click the custom tab created from the tree view to display.

◆   Creating with menu bar

Select a folder on a layer that you want to create custom folder in the tree view of the Integrated WebManager. Click **Folder** in the menu bar and select **New** from the displayed menu list.

◆   Creating from right click menu

Select a folder on a layer that you want to create custom folder in the tree view of the Integrated WebManager, and right click on it. And select **New** from the displayed right click menu.

A folder is added in the tree view. (Default name is **New Folder**)

Click **Rename** to change the custom folder name.
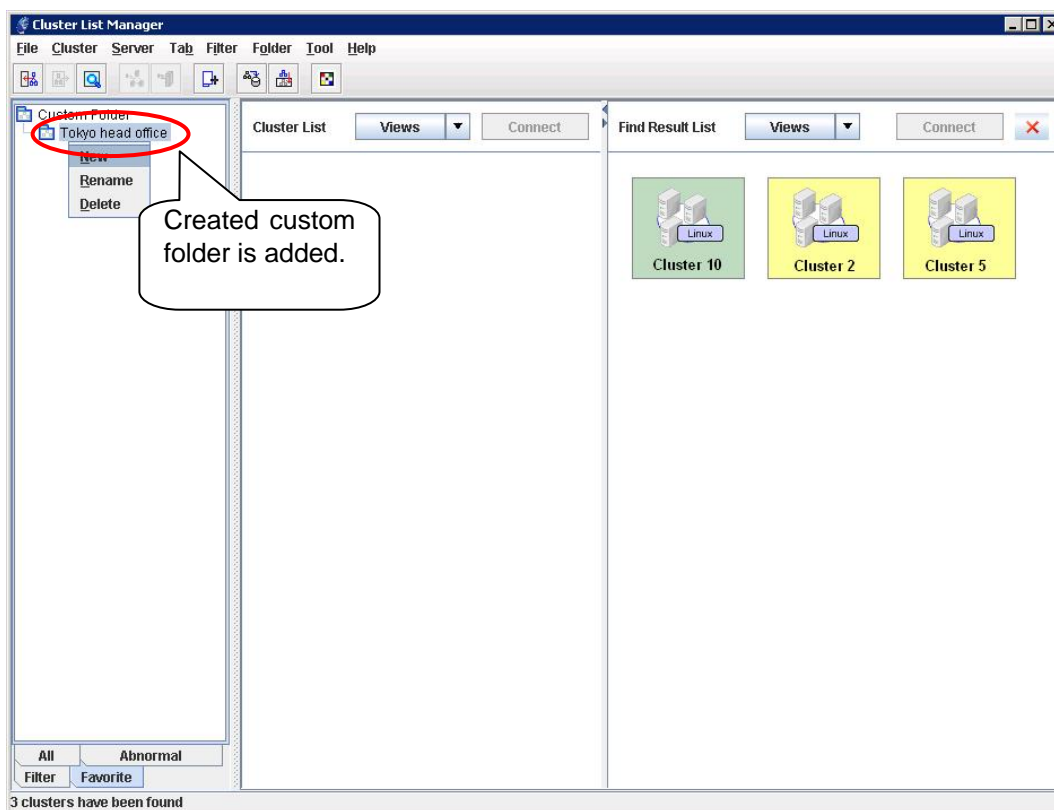
Grouping Cluster

You can execute grouping of clusters in the created folder.

◆   Grouping by drag and drop

Select clusters that you want to execute grouping from **Find Result List** displayed on the list view, and drag and drop them to the created folder.

◆   Grouping from right click menu

Select a folder created in the tree view of the Integrated WebManager. (Multiple clusters can be selected by pressing **Ctrl** key and click)

Select clusters that you want to execute grouping from **Find Result List** displayed in the list view, and right click. Click **Add to Folder** from the displayed right click menu.

Clusters are added under the created folder.
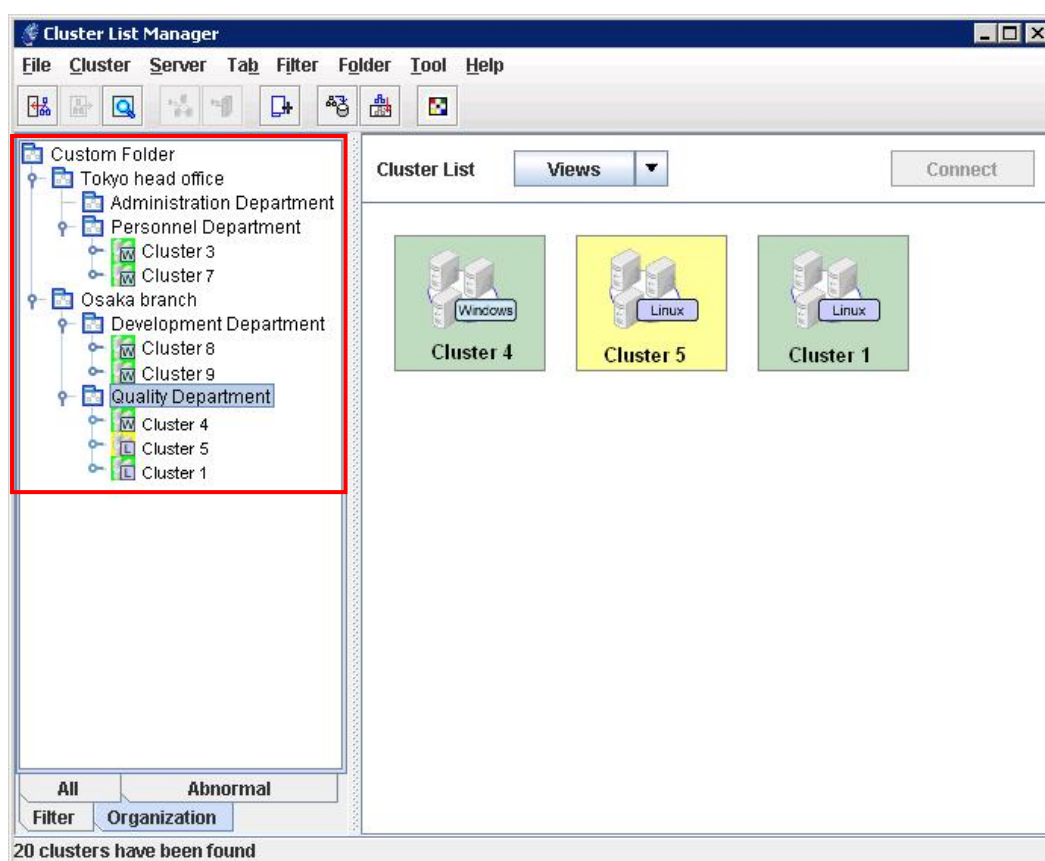
Starting WebManager from Integrated WebManager

There are two methods to start WebManager from the Integrated WebManager as following.

Starting WebManager using management IP

Select clusters that you want to connect to from **Cluster List/Search Result List** in the tree view or the list view. After selecting the clusters, execute the following procedures.

◆ Executing from the tool bar

Click **Connect to Cluster** icon on the tool bar.

◆ Executing from the menu bar

Click **Cluster** on the menu bar. Select **Connect** from the displayed menu list.

◆ Executing from the right click menu

After selecting clusters, right click. Select **Connect** from the right click menu.

◆ Executing from **Connect** in the list view

Click **Connect** button in the upper right of **Cluster List** in the list view.

Starting WebManager using server actual IP address

Select a server that you want to connect to from **Server List** in the tree view or the list view. After selecting a server, execute the following procedures.

◆ Executing from the tool bar

Click **Connect to Server** in the tool bar.

◆ Executing from the menu bar

Click **Server** in the menu bar. Click **Connect** from the displayed menu list.

◆ Executing from the right click menu

After selecting a server, right click. Click **Connect** in the right click menu.

◆ Executing from **Connect** in the list view

Click **Connect** button in the upper right of **Server List** in the list view.

When multiple IP addresses are stored, **Select IP Address** dialog box is displayed. Select the IP address of connecting destination and click **OK**.
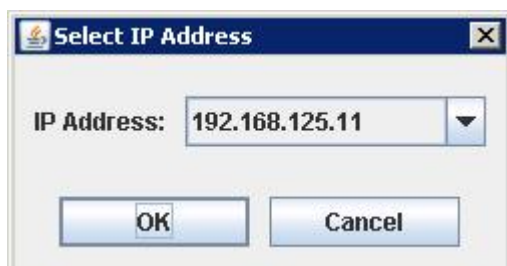
Deleting clusters from Integrated WebManager

This section describes how to delete registered clusters from Integrated WebManager.

Select clusters that you want to delete from **Cluster List/Search Result List** in the tree view or the list view. Multiple clusters can be selected by pressing **Ctrl** key and click when selecting from **Cluster List/Search Result List**. Or when **Detail** is displayed, they can be selected by drag.

After selecting clusters to be deleted, follow the procedure below.

◆   Deleting with the tool bar

   After selecting clusters, click **Unregister** icon in the tool bar.

◆   Deleting with the menu bar

   After selecting clusters, click **Cluster** in the menu bar and select **Unregister** from the displayed menu list.

◆   Deleting from right click menu

   After selecting clusters, right click. From the right click menu, select **Unregister**.

The clusters are deleted in the displayed order in the tree view.

Saving and Loading Setting

Settings used on the Integrated WebManager is following. You can save or load each setting.

This section describes how to save or load settings.

Setting information	Saved file
Cluster List	clusterlist/config/clsmgr_data.xml
User Setting Information	clusterlist/config/clsmgr.cfg
Configuration data	clusterlist/config/clsmgr.pol

Saving setting information

Settings is automatically saved with the following timing.

◆   Auto saving at 30 minutes interval.

◆   Auto saving when exiting.

Follow the procedure below when you save settings manually.

◆   Saving with the tool bar

Click **Save** in the tool bar.

◆   Saving with the menu bar

Click **File** in the menu bar and select **Save** from the displayed menu list.

Loading settings

Settings stored in the following directory are automatically loaded at start up.

clusterlist/config/*

Important:
When you transfer settings from different environment, back up each setting information first before overwriting.

Option Settings

You can change port number or a Web browser to use on Option Settings of the Integrated WebManager.

This section describes how to change Option Settings.

◆   Changing with the tool bar

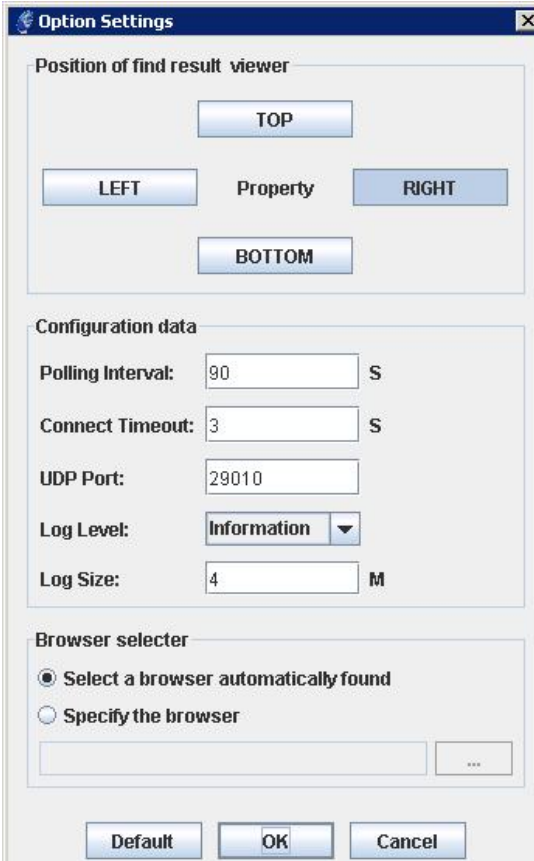Click **Option** icon on the tool bar to show **Option Settings** dialog.

◆   Changing with the menu bar

Click **Tool** in the menu bar, and select **Option** in the displayed menu list to show **Option Settings** dialog.

You can restore the default value by clicking **Default** under **Option Settings** dialog.

The following is the description on each setting.

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Position of search result viewer

You can select displaying position of search result of clusters.

Default: RIGHT

Configuration data

You can configure the system settings such as port numbers to be used, etc.

◆   Polling Interval

Changes auto-updating interval of cluster information.

When the version of registered cluster is older than X 2.1 or registered product is HA/ClusterMaster, the update is executed at this interval. It can shorten time to update the state of the cluster by setting short interval, but network traffic increases. For this reason, do not set extremely short interval when there are many registered clusters.

Setting range   : 1 - 300

Default   : 90 seconds

◆   Connect Timeout

Changes connecting timeout interval with a WebManager server.

Setting range   : 0 - 999999 (When you configure 0, the waiting time to connect is eternal)

Default   : 3 seconds

◆   UDP port

Changing port to receive notification from a WebManager server is enabled.

After changing the configuration, the change becomes available by rebooting the Integrated WebManager.

Setting range   : 1 - 65535

Default   : 29010

Note:
You do not need to configure on the WebManager server side as the changed port number is notified to the WebManager when rebooting the Integrated WebManager.

◆   Log Level

Changing log level to be saved is enabled. Log level has [Trace1] [Trace2] [Trace3] recording more detailed inside information other than [Error] [Warning] [Information]. [Trace3] records the most detailed log. The log is not recorded that is more detailed than the level that you set. For example, when you set [Information] that is default value, [Error] [Warning] [Information] logs are recorded.

Default: [Information]

◆   Log Size

Changing log size to be saved is enabled by a MByte unit. The log is stored by the name of clsmgr.log.0 and clsmgr.log.1 in the log folder that is under the folder that expanded clusterlist.zip. When cfsmgr.log.0 file is full, changing the destination to clsmgr.log.1 log file. For this reason, double disk capacity of the set value is necessary at the maximum.

When you set higher log level to record more detailed log, it is necessary to set bigger size because size of recorded log increases. In addition, when you set 0, Integrated WebManager records log without limit. Because the disk capacity may be approaching the maximum, usually set values greater than 1.

Setting range   : 0 - 2047(When you configure 0, there is "no size limitation")

Default   : 4MB

Selecting the browser

You can select a Web browser used for starting WebManager.

Default: **Select a browser automatically found**

◆   Select a browser automatically found

Automatically selects an installed Web browser.

◆   Specify the browser

Select it when you want to use a particular Web browser.

You need to specify the execute path of a Web browser that you want to use.

Chapter 3 Supplement

This chapter describes supplement of the Integrated WebManager.

Note:
The description on this chapter is based on Japanese environment. Displayed language depends on OS locale of the management terminal.

This chapter covers:

Notes

When Integrated WebManager hungs up frequently in the state that registered more than 1,000 clusters, heap space of the Java Runtime Environment may be short. The following error message is displayed in Java console[1] by insufficient heap space.

java.lang.OutOfMemoryError: Java heap space

In this case, you open run.sh or run.bat by a text editor, and add -Xmx option to java or javaw command as follows for expanding the heap size.

Example:

[run.sh]

Unmodified   : $JAVA_CMD –jar $JAR_FILE.

Modified   : $JAVA_CMD –Xmx256M –jar $JAR_FILE.

[run.bat]

Unmodified   : start javaw –jar %JAR_FILE%

Modified   : start javaw –javaw –Xmx256M –jar %JAR_FILE%

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[1] Java console is not displayed on Windows platform, but you can show a Java console by changing "start javaw –jar %JAR_FILE% to "start java –jar %JAR_FILE%" in run.bat.

Output Messages

The following is the message list displayed while operating the Integrated WebManager.

Level	Message	Cause	Measure
Information	The cluster "{0}" has been successfully registered.	Specified cluster is registered in the tree.	—
Confirmation	Are you sure to unregister "{0}"?	Do you want to delete the selected clusters from the management screen?	—
Confirmation	The folder "{0}" and all files in the folder will be deleted. Are you sure to continue?	Do you want to delete all the selected folders and contents of the folders?	—
Confirmation	The folder "{0}" and all files in the folder will be deleted. Are you sure to continue?	Do you want to delete the selected clusters from the folder?	—
Confirmation	Are you sure to delete the filter "{0}"?	Do you want to delete the selected filter?	—
Confirmation	You can add clusters to the "Favourite Tab" by drag and drop from the cluster search result. Do you want to start a cluster find right now?	You can add clusters to the "Favourite Tab" by drag and drop from the cluster search result. Do you want to start a cluster find right now?	—
Confirmation	Are you sure to delete the tab "{0}"?	Are you sure to delete the selected tab?	—
Confirmation	Are you sure to unregister all the selected clusters?	Are you sure to unregister all the selected clusters?	—
Confirmation	The port number assign to UDP module is already used. Do you want to specify the new port?	The assigned to UDP module is already used by another AP	—
Warning	Could not load the saved cluster list. \nPlease check whether the file "clsmgr_data.xml" is corrupted.	The target file is corrupted.	Check if the target file is normal.
Warning	Could not save the cluster list because there is no write permission to the file "clsmgr_data.xml".	The target file cannot be written because there is no permission.	Check the access permission of the file "clsmgr.cfg".
Warning	Could not load the user settings. \nPlease check whether the file "clsmgr.cfg" is corrupted.	The target file is corrupted.	Check if the target file is normal.
Warning	Could not save the user settings because there is no permission to write "clsmgr.cfg".	The target file cannot be written because there is no permission.	Check the access permission of the file "clsmgr.cfg".
Warning	Could not load the configuration file. \nPlease check whether the file "clsmgr.pol" is corrupted.	The target file does not exist, or is corrupted.	Check if the target file is normal.
Warning	The UDP port has been changed. Restart the application to apply the change.	UDP port number is changed.	The changed value becomes available after rebooting the Integrated WebManager.
Error	The Cluster List Manager is already running.	Integrated WebManager is already operating.	Check if the previously started Integrated WebManager is stopped.

Level	Message	Cause	Measure
Error	The specified cluster "{0}" is already registered.	There is a same cluster name in the cluster list tree.	—
Error	Could not find this cluster. \nCheck if the IP address and port number are correct, and that the cluster is started.	Cluster cannot be found from the entered IP address and port number.	Check if the IP address and the Port number are correct..
			Check if the search target cluster is started.
Error	Specify the IP address.	IP address is not set.	Close the error dialog, and then configure the search cluster IP address.
Error	Specify the port number.	Port number is not set.	Close the error dialog, and then configure the search cluster Port number.
Error	The specified IP address is invalid.	Specified IP address is invalid.	Close the error dialog, and then configure the correct IP address.
Error	The specified IP address range is invalid.	Start IP address is larger than stop IP address.	Specify the appropriate IP address range.
Error	Specify the value of {1}-{65535} to the port number.	Port number setting is out of the range.	Specify the value from 1 - 65535.
Error	The specified port range is invalid.	Start port is larger than stop port.	Specify the appropriate port range.
Error	The specified start IP address is invalid.	Specified start IP address is invalid.	Close the error dialog, and then configure the correct IP address.
Error	The specified stop IP address is invalid.	Specified ending IP address is invalid.	Close the error dialog, and then configure the correct IP address.
Error	The specified IP Address versions are not the same.	IP address versions of specified start address and stop address are different.	Specify the addresses that have the common IP version.
Error	The name "{0}" is already used.	Specified name is already used.	Specify an unused name.
Error	Specify the Filter Name.	Filter name is not entered.	Enter a name of the filter to be created.
Error	Specify the value of {0} – {300} to the polling interval.	Setting of Polling interval is out of the range.	Specify the value from 1 - 300.
Error	Specify the value of {1} – {65535} to the UDP port.	UDP port number is out of the range.	Specify the value from 1 - 65535.
Error	Specify the value bigger than 0 to the log size.	Log size value is out of the range.	Specify the value from 1 - 2047.
Error	The specified file does not exist.	Specified file does not exist.	Specify the appropriate web browser execution path.

Level	Message	Cause	Measure
Error	A folder is specified.	Folder is specified in the Web browser path.	Specify the appropriate web browser execution path.
Error	Please input browser's execute path.	Web executing path is not specified.	Specify the appropriate web browser execution path.
Error	The first 64 bits of specified start IP Address is different from the first 64 bits of stop IP Address.	The first 64 bits of specified start IP Address must be the same as the first 64 bits of stop IP Address.	Set the first 64 bits of the start address and the stop address to be the same.
Error	The local server does not support IPv4.	The local server does not support IPv4.	Activate IPv4.
Error	The local server does not support IPv6.	The local server does not support IPv6.	Activate IPv6.
Error	Specify the subnet mask.	The subnet mask is not specified.	Specify the subnet mask. (Number of bits))
Error	The specified subnet mask range is invalid.	The subnet mask value is invalid.	Specify the value from 1 - 128.
Error	The subnet mask of IPv4 should be less than 32.	The subnet mask value is invalid.	Specify the value from 1 - 32 for the subnet mask of IPv4 address.
Error	You have specified multicast type of IP Addresses.	The multicast address is entered.	Do not enter the multicast address.
Error	Specify the Tab Name.	The tab name is not specified.	Specify the tab name.
Error	There is the same name folder in the target folder.	There is the same name folder in the target folder.	Change the folder name to an unused name, and then process the transfer operation again.
Error	Failed to get URL.	Internal error occurred.	Check if the server's Public-LAN IP and the configuration value of the cluster management IP are correct.
Error	Failed to connect URL: {0}.	Failed to connect URL: {0}.	- Check if the URL is correct. - Check if the server of the IP corresponding to the URL is operating.
Error	Failed to find the browser.	Internal error occurred when auto-searching browsers.	- Execute again. - Specify the browser's execution path in Option Settings. (Refer to Selecting the browser for the details.)
Error	No browser has been found. Please install a web browser.	Browser cannot be found because the OS environment variable setting's path does not include browser execution path.	- Check if a Web browser is installed, or if the browser is configured to the path. - Specify the execution path in Option Settings. (Refer to Selecting the browser for the details.)
Error	Can not find the specified browser. Please confirm the browser's path in option dialog.	Specified Web browser's execution file does not exist.	Check if the Web browser's execution path is correct.
Error	{0} clusters have no manager IP:{1}.	Management IP is not specified in the displayed cluster.	Configure the management IP address on the displayed cluster

Level	Message	Cause	Measure
Error	The server "{0}" has no public lan IP.	IP address is not set in the Public-LAN of the server "{0}"	Configure the IP address on Public-LAN of the server"{0}".