Cluster WebUI Help

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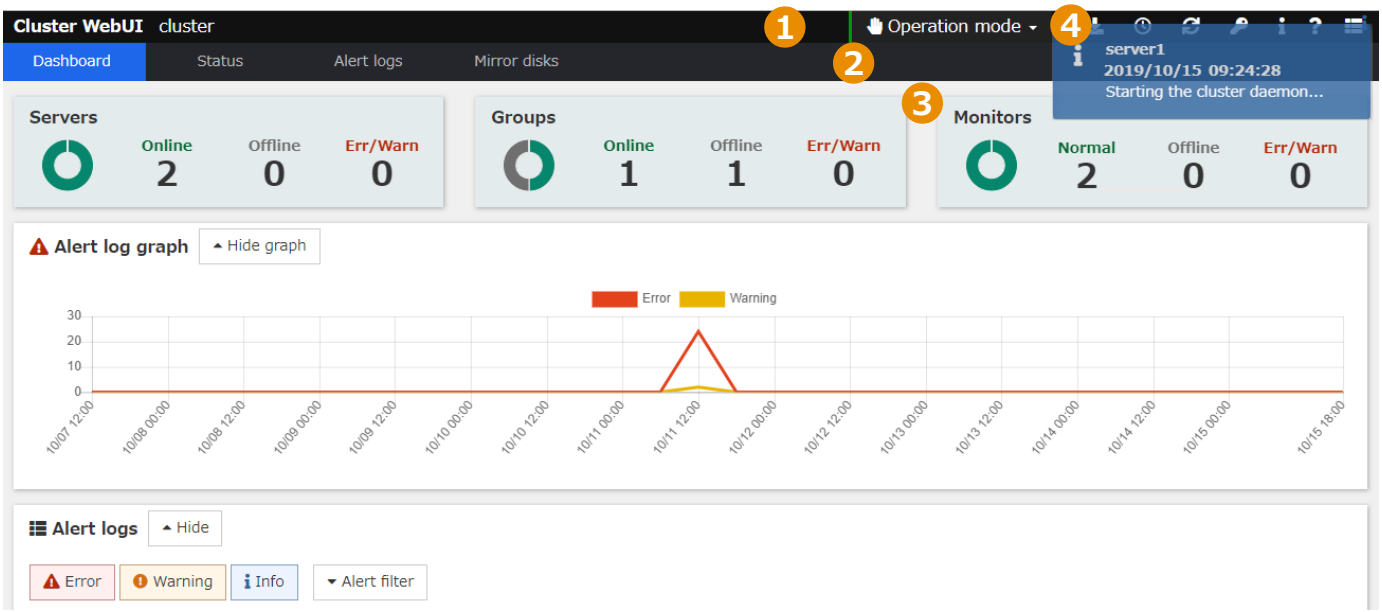
General

Overview

Cluster WebUI provides functionality to monitor and manage the status of a cluster and its servers, groups, resources, and monitors.
The main sections of the Cluster WebUI application are shown in the image below.



1. **Toolbar**
   The name of the cluster being managed is displayed on the left side of the toolbar.
   The right side of the toolbar contains a menu for selecting the current user mode, as well as various action buttons.
   For more details on the toolbar and its features, refer to Toolbar.

2. **Tabs**
   The different pages within the application are accessed by clicking on the appropriate tab. The currently selected tab is displayed in blue.
   For more details on tabs and a short summary of each page, refer to Tabs.

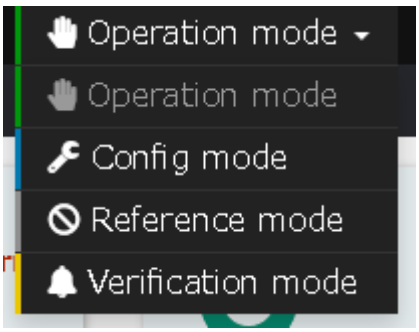
3. **Main area**
   The contents of the currently selected tab are displayed in the main area.

4. **Pop-up alert notification**
   New alert logs are displayed in the top right of the screen as they arrive.
   A maximum of three alert logs will be displayed at one time. Any additional alert logs can be viewed from the alert log table on the Dashboard or Alert log pages.
   Alert logs displayed as pop-up notifications can also be filtered by type. Refer to Toolbar - Alert log filter for more information.

General
Toolbar

1. **Cluster name**
   The name of the cluster being managed.

2. **User mode**
   The current user mode is displayed. Clicking on the user mode will display a menu allowing you to change the current user mode.



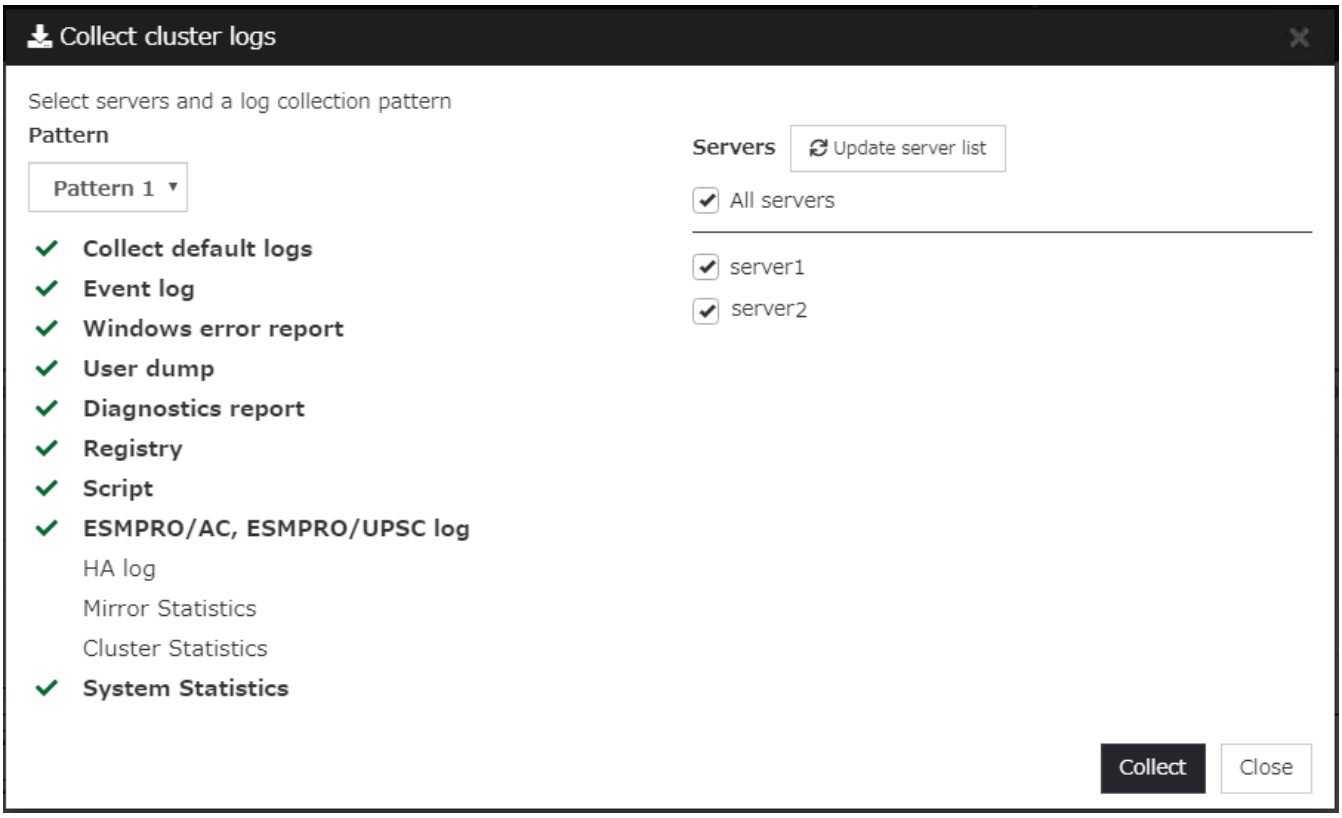
   Available user modes are as follows.

   - **Operation mode**
     Both status monitoring and operations such as starting/stopping servers and resources can be performed.
   - **Config mode**
     Editing, exporting and other actions for cluster configuration can be performed.
     Refer to Config mode for more information.
   - **Reference mode**
     Status monitoring can be performed but operations such as starting/stopping servers and resources are not allowed.
   - **Verification mode**
     As in Operation mode, both status monitoring and operations can be performed. In addition, dummy failures can be performed to verify operation under error.

   Note: Depending on cluster account permission settings, some modes may not be available or may require a login password.

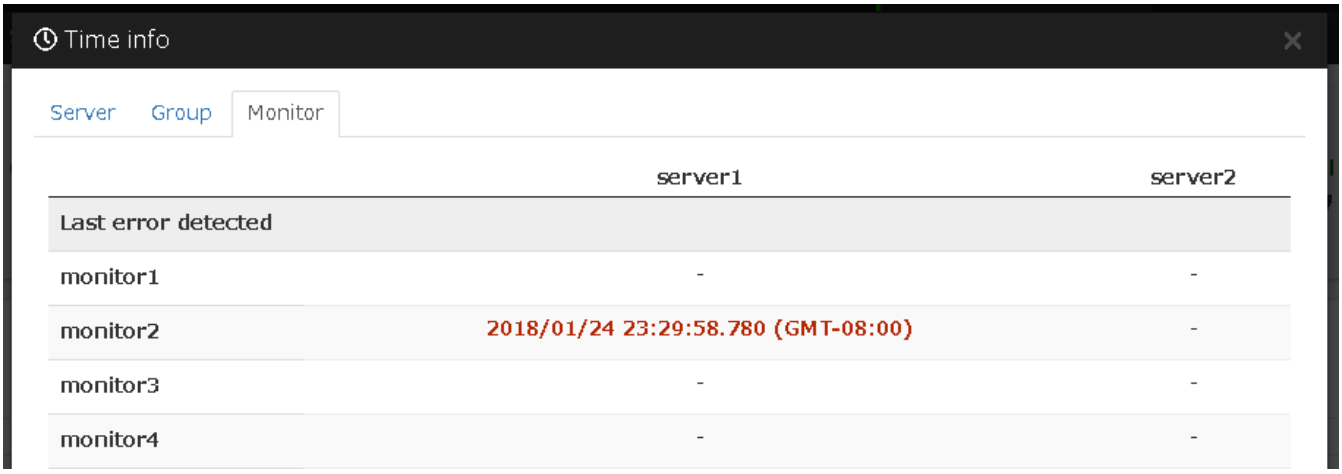
3. **Collect cluster logs**
   Specify and download log files from selected servers.
   Click the **Collect cluster logs** button to open the log collection dialog.
   Select a log collection pattern and the servers to collect logs from.

Click **Collect** to begin the log collection process.



Note: An error may occur with Internet Explorer 11 when downloading logs.
Refer to Notes and Restrictions - About log collection and configuration export for more information.

4. **Time info**
   Display information about the times of events such as when a server joined the cluster or when the last error occurred.
   Click **Clear** to clear the time info data, and **Update** to retrieve the latest time info data from the server.



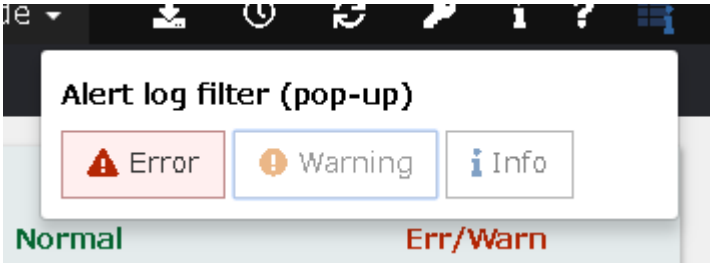
5. **Refresh data**
   Retrieve the latest data from the server.

6. **License information**
   Display cluster product license information.

7. **Application information**
   Display Cluster WebUI version information.

8. **Help**
   Display the Cluster WebUI online help.

9. **Alert log filter**
   The alert log filter allows you to select the types of alert logs that will be displayed as pop-up notifications.
   For example as in the following image if only 'Error' is selected, only 'Error' alert logs will be displayed as pop-up notifications ('Info' and 'Warning' logs will not be displayed).



General
Tabs

1. **Dashboard**
   The main page of Cluster WebUI showing an overview of the current status of servers, groups, and monitors, as well as information on recent alert logs.
   Refer to Dashboard for more information.

2. **Status**
   The current status of the groups, resources and monitors on cluster servers.
   While in operation or verification mode, operations such as starting or stopping servers, groups, resources and monitors can be performed.
   While in verification mode, dummy failures can be created for testing purposes.
   Refer to Status for more information.

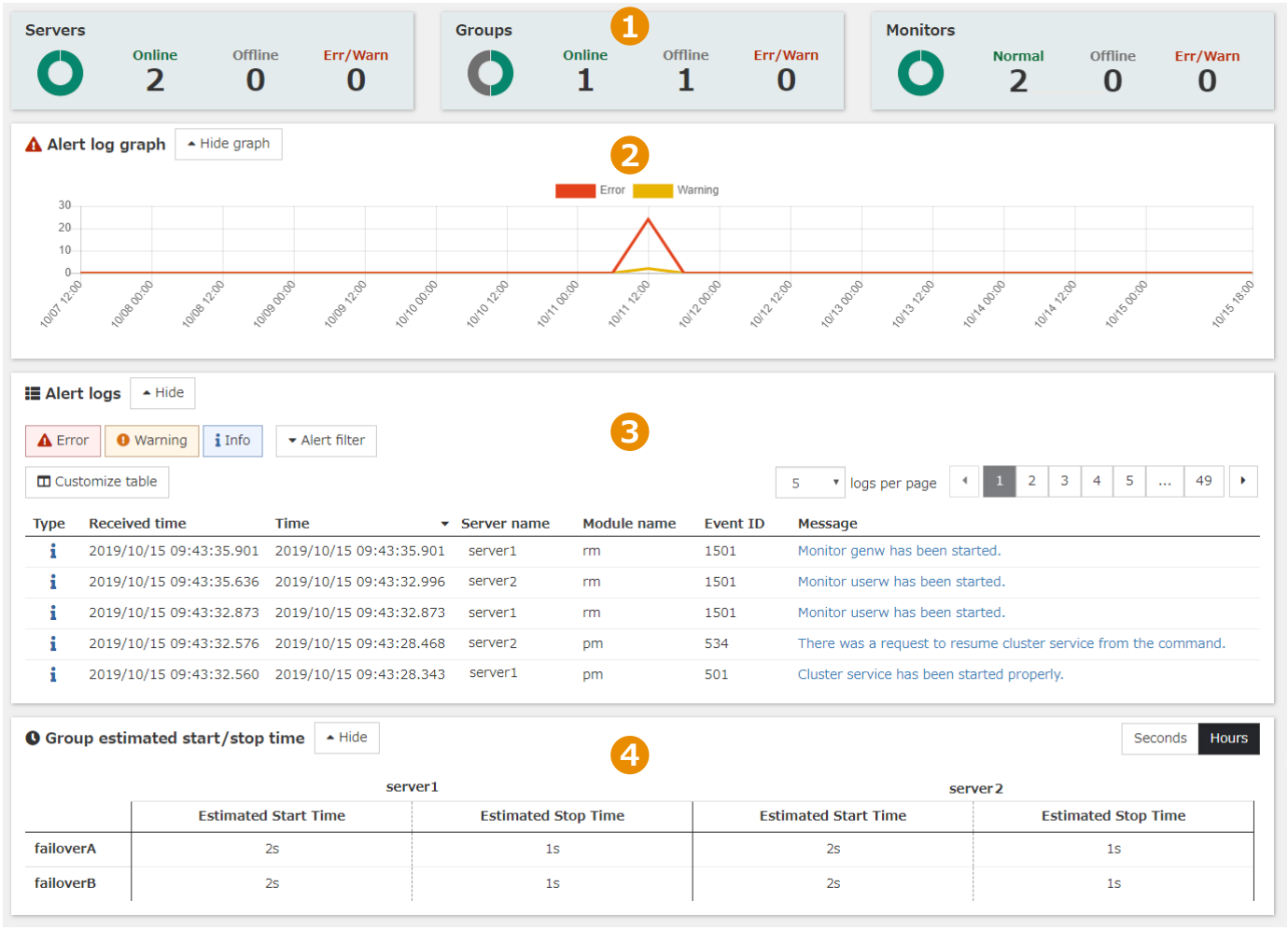
3. **Alert logs**
   After specifying the number of logs to retrieve from the server (up to 10,000), logs are displayed in a table where they can be filtered and sorted.
   Refer to Alert logs for more information.

4. **Mirror disks**
   View a list of all mirror disks. While in operation or verification mode, operations such as disk copy and changing access restriction can be performed.
   Refer to Mirror disks for more information.

Dashboard

Overview

The dashboard displays an overview of the current status of servers, groups, and monitors, as well as information on recent alert logs.



1. **Summary boxes**
   Summary boxes display a summary of the status of servers, groups, and monitors belonging to the cluster.
   For more details on the summary boxes, refer to Summary boxes.

2. **Alert log graph**
   The alert log graph displays the number of error or warning alert logs over time.
   For more details on the alert log graph, refer to Alert log graph.

3. **Alert log table**
   The 300 most recent alert logs can be viewed in the alert log table. Logs can be filtered by type, time, server name, module name and event ID.
   For more details on the alert log table, refer to Alert log table.

4. **Group estimated start/stop time**
   The table displays the estimated start time and stop time of groups.
   For more details on group estimated start/stop time, refer to Group estimated start/stop time.

Dashboard

Summary boxes

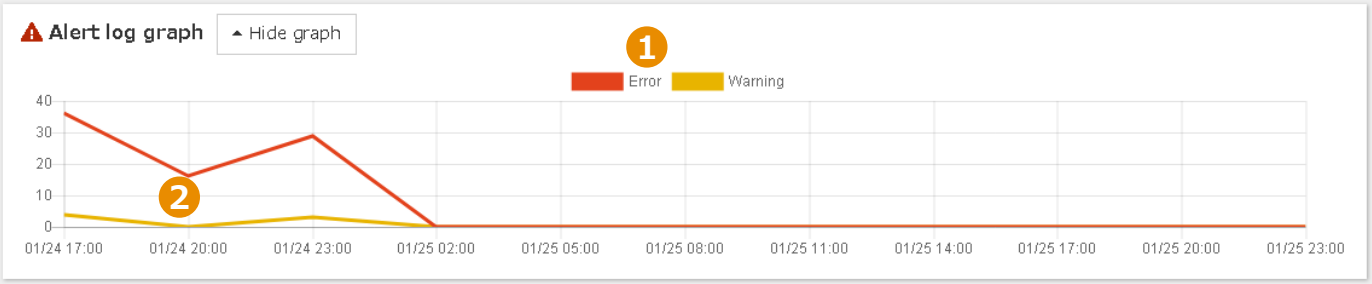
A summary of the status of servers, groups, and monitors belonging to the cluster is displayed in summary boxes on the dashboard.

1. **Type**
   The type of item (servers, groups, or monitors) that the summary is displaying data for.
2. **Donut graph**
   The number of servers, groups and monitors are displayed. The status is indecated as: Green (Normal), Gray (Stopped) or Red (Error/Warning).
3. **Count**
   The number of servers, groups and monitors are displayed according to the current status of each: Green (Normal), Gray (Stopped) or Red (Error/Warning).

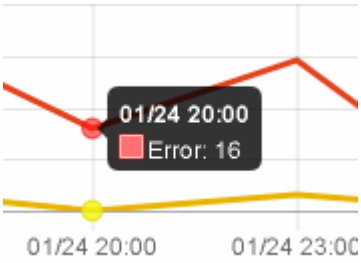
Dashboard

Alert log graph

The alert log graph shows the number of error or warning logs received over time.
The graph is constructed from the most recent 300 log messages (of any type).



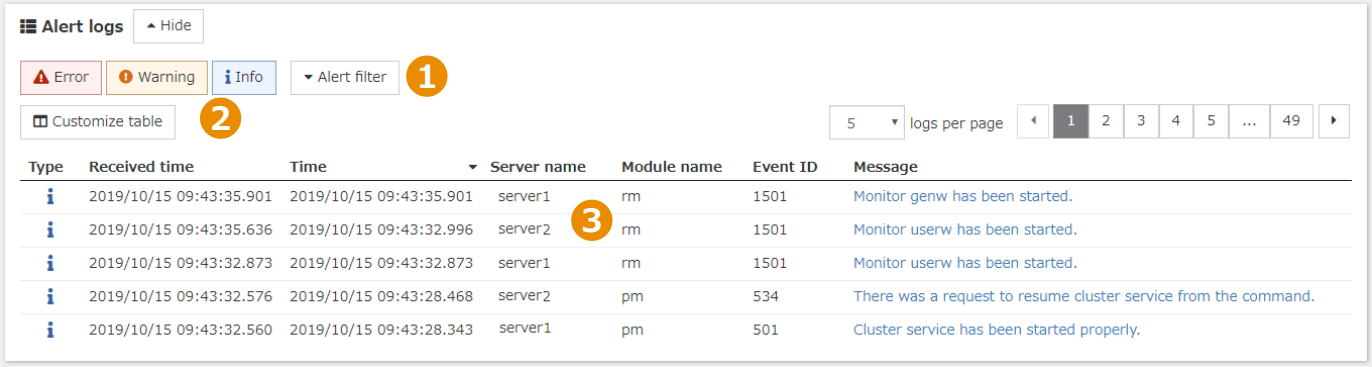
1. **Alert log type select**
   Click on **Error** or **Warning** to show or hide that type of alert log on the graph.
2. **Graph line**
   Highlight a point on the graph to display its value.
   Click on a point to display the related logs in the Alert log table.



Dashboard

Alert log table

Alert logs are displayed in table format and can be filtered by type, time, server name, module name and event ID.
The alert log table on the Dashboard page has the same functionality as the alert log table on the Alert logs page.
The Dashboard table shows the 300 most recent logs, whereas the Alert logs page table allows you to specify the number of logs to retrieve from the server.

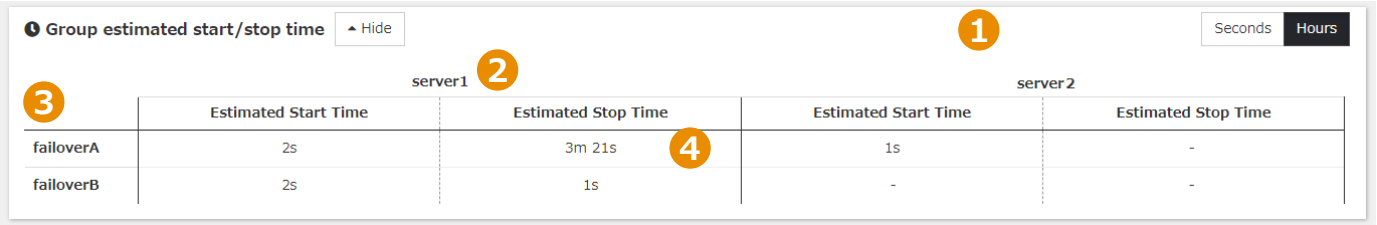


1. **Filter**
   For information on filtering the alert log table, refer to Filter.
2. **Customize table**
   For information on customizing the alert log table, refer to Customize table.
3. **Alert logs**
   Details of alert log entries are displayed. Click on the Message of a log to open a dialog to display the log's information and full message text.
   For information on displaying a log message, refer to Alert logs - Display alert.

Dashboard

Group estimated start/stop time

View the estimated start time and stop time of groups on each server.

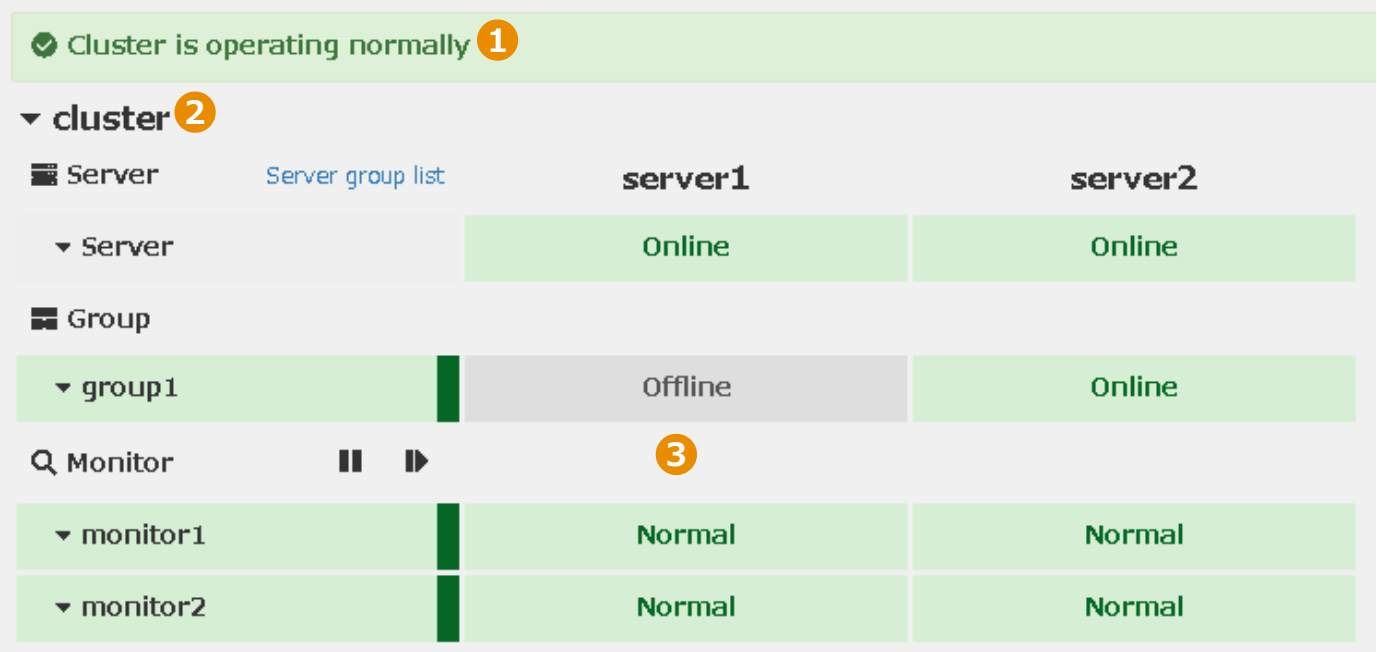


1. **Seconds / Hours**
   The estimated start/stop time of groups can be displayed in seconds or hours.
2. **Server name**
   View the hostname of the server.
3. **Group name**
   View the group name.
4. **Group estimated start/stop time table**
   The estimated start time and stop time of groups on each server are displayed.
   If a group has never been started or stopped on a server, the estimated start/stop time will display a hyphen.

Status

Overview

The status page displays the current status of the cluster including servers, groups, resources and monitors.
While in operation or verification mode, operations such as starting or stopping servers, groups, resources and monitors can be performed.
While in verification mode, dummy failures can be created for testing purposes.



1. **Cluster status**
   The current overall status of the cluster.
2. **Cluster name**
   The name of the cluster. Clicking on the cluster name will display a list of actions that can be performed on the cluster such as rebooting it or viewing its properties.
   For more information on cluster actions, refer to Cluster.
3. **Status table**
   The status table displays the current status of servers, groups, and monitors, and allows you to perform actions on them.
   The number of servers displayed on screen is adjusted automatically based on the size of the browser window.
   When there are four or more servers present, you can also manually select the number of servers shown by using the 'servers per page' dropdown box.
   For more information on server status and actions, refer to Servers.
   For more information on group status and actions, refer to Groups.
   For more information on monitor status and actions, refer to Monitors.

Status
Cluster

1. **Cluster name**
   Click on the cluster name to hide or show the cluster actions.
2. **Cluster actions**

   Shutdown cluster
   Shutdown all servers belonging to the cluster.

   Reboot cluster
   Reboot all servers belonging to the cluster.

   Suspend cluster
   Suspend the cluster service.

   Resume cluster
   Resume the cluster service.

   Start cluster
   Start the cluster service.

   Stop cluster
   Stop the cluster service.

   Restart manager
   Restart the cluster service.

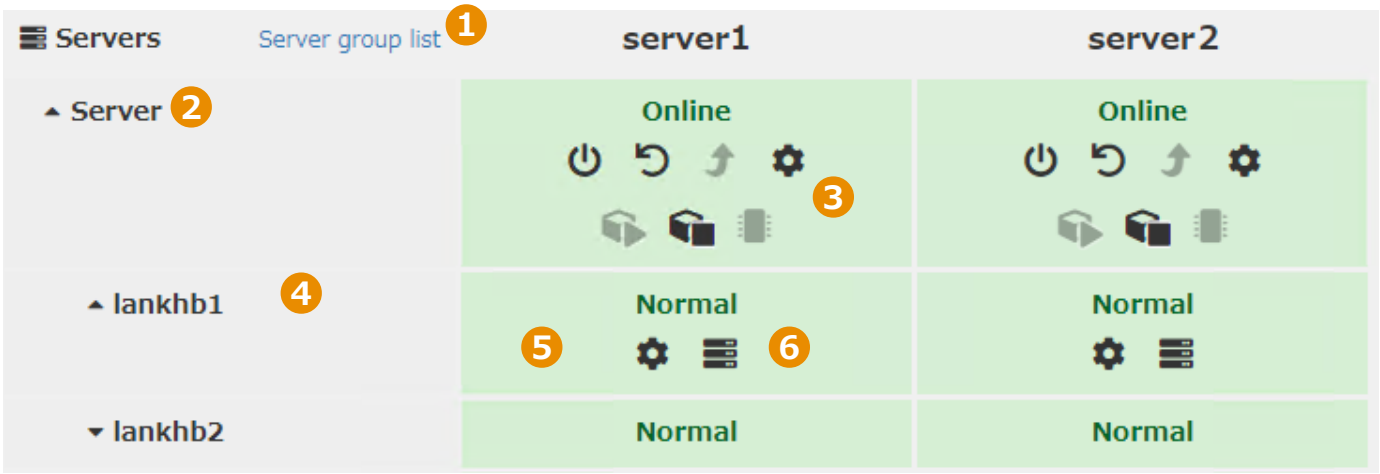
   Start mirror agent
   Start the mirror agent.

   Stop mirror agent
   Stop the mirror agent.

   Cluster properties
   View cluster's properties.

Status

Servers



1. **Server group list**
   Click **Server group list** to display a list of server groups.

2. **Server**
   Click **Server** to show or hide server actions and resources.

3. **Server actions**

   Shutdown server
   Shutdown the server.

   Reboot server
   Reboot the server.

   Server properties
   View the server's properties.

   Start server service
   Start the server service.

   Stop the server service
   Stop the server service.

   CPU frequency settings
   Set the CPU frequency of the server (highest frequency, lowest frequency, or auto).

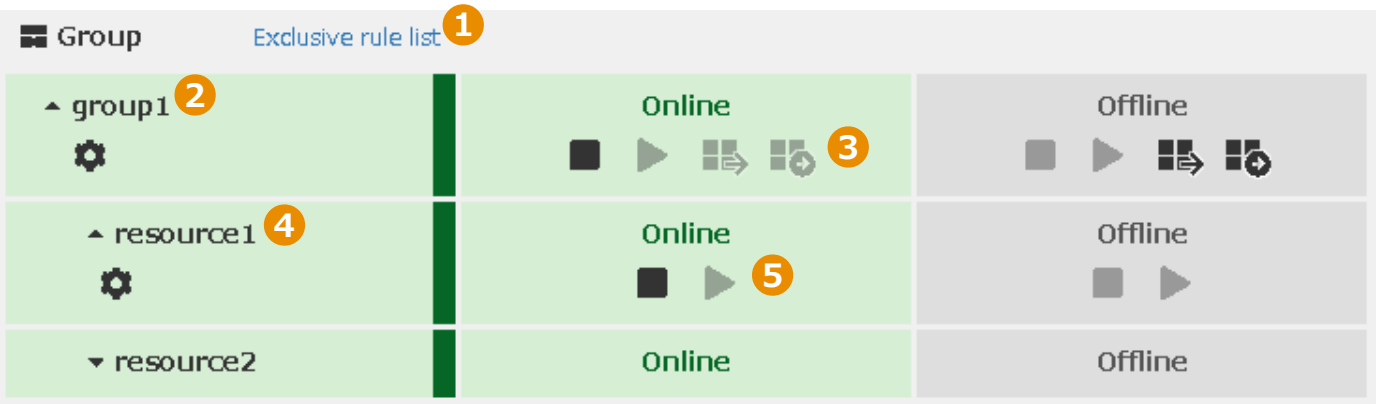
4. **Resource name**
   Click **Resource name** to show or hide resource properties and resource status on each server.

5. **Resource properties**
   View the properties of the heartbeart resource/NP resolution resource.

6. **Resource status**
   View the heartbeart resource/NP resolution resource's status on each server.

Status

Groups



1. **Exclusive rule list**
   Click **Exclusive rule list** to display a list of exclusive rules along with their attributes and groups.

2. **Group**
   Click the group name to show or hide group actions and group resources.

   Group properties
   View the group's properties.

3. **Group actions**

   Stop group
   Stop the group.

   Start group
   Start the group.

   Move group
   Move the group from its current server to the selected server.

   Live migrate group
   Live migrate the group from its current server to the selected server.

4. **Group resource**
   Click the name of the group resource to show or hide group resource actions.

   Group resource properties
   View the group resource's properties.

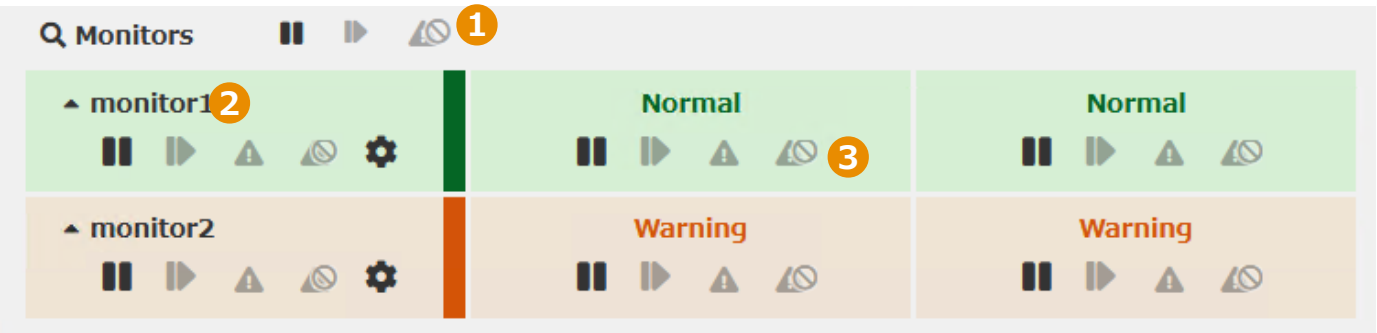
5. **Group resource actions**

   Stop group resource
   Stop the group resource.

   Start group resource
   Start the group resource.

Status

Monitors



1. **All monitor actions**
   Clicking a button will display a list of servers. The selected action will be performed on all the selected servers.

   Suspend monitor
   Suspend all monitors on the selected servers.

   Resume monitor
   Resume all monitors on the selected servers.

   Disable all dummy failures (Verification mode only)
   Disable dummy failures for all monitors on the selected servers.

2. **Monitor**
   Click the name of the monitor to show or hide monitor actions.

   Suspend monitor
   Suspend the monitor on the selected servers.

   Resume monitor
   Resume the monitor on the selected servers.

   Enable dummy failure (Verification mode only)
   Enable dummy failures for the monitor on the selected servers.

   Disable dummy failure (Verification mode only)
   Disable dummy failures for the monitor on the selected servers.

   Monitor properties
   View the monitor's properties.

3. **Monitor actions**

   Suspend monitor
   Suspend the monitor.

   Resume monitor
   Resume the monitor.

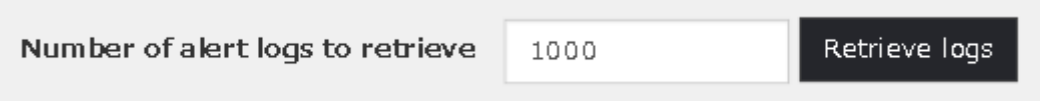
   Enable dummy failure (Verification mode only)
   Enable a dummy failure on the monitor.

   Disable dummy failure (Verification mode only)
   Disable a dummy failure on the monitor.

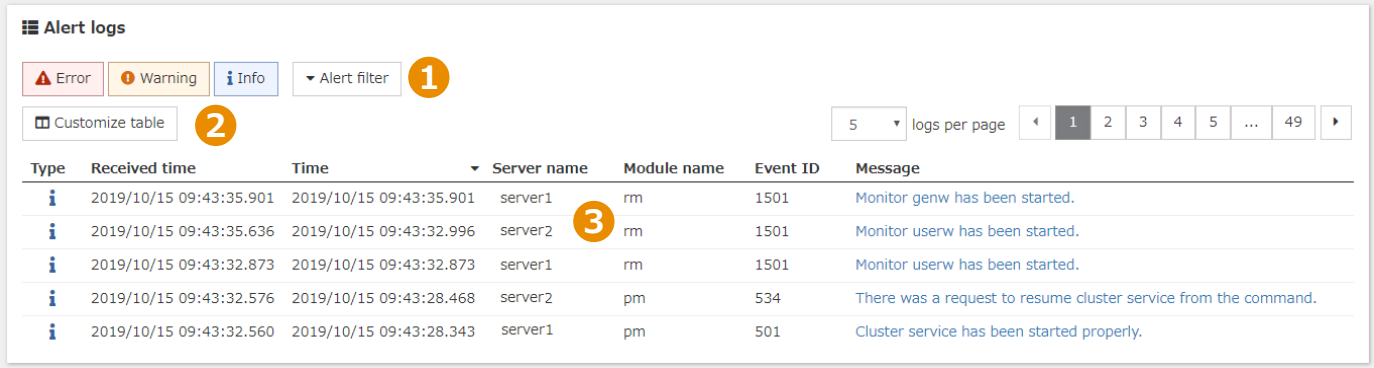
Alert logs

Overview

Alert logs are displayed in table format and can be filtered by type, time, server name, module name and event ID.
Alert logs must first be retrieved from the server by entering the number of logs to retrieve and then clicking Retrive logs.



For example, entering a value of 1000 will retrieve the most recent 1,000 alert logs from the server.
The maximum number of alert logs that can be retrieved is 10,000.
After the alert logs have been retrieved from the server, the alert log table will be displayed.



1. **Filter**
   The filter section allows you to filter logs displayed in the table by type, time, server name, module name and event ID.
   For more information on filtering the alert log table, refer to Filter.

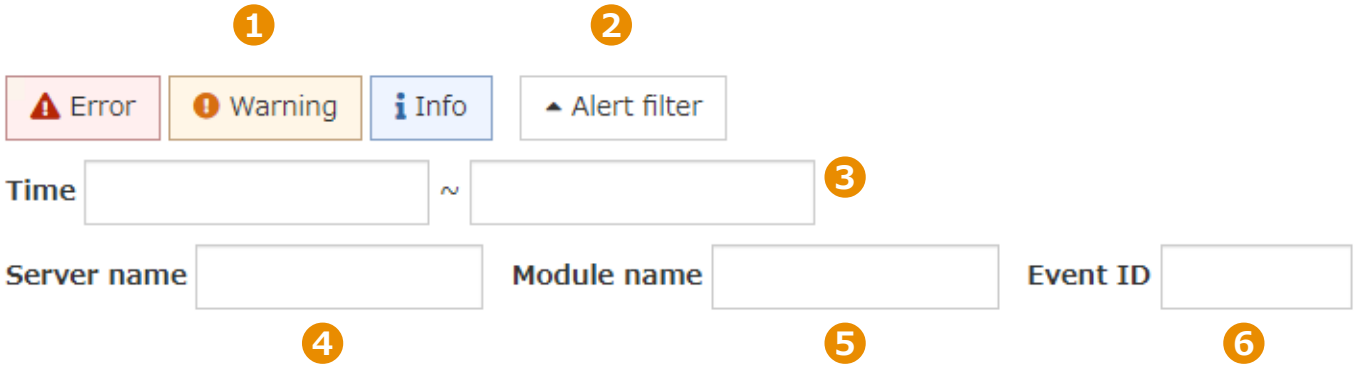
2. **Customize table**
   Customize table allows you to hide or show alert log table columns.
   For more information on customizing the alert log table, refer to Customize table.

3. **Alert logs**
   Alert log entries are displayed. Click on the Message of a log to open a dialog to display the log's information and full message text.
   For more information on displaying a log message, refer to Alert logs - Display alert.

Alert logs

Filter

The filter section allows you to filter logs displayed in the table by type, time, server name, module name and event ID.

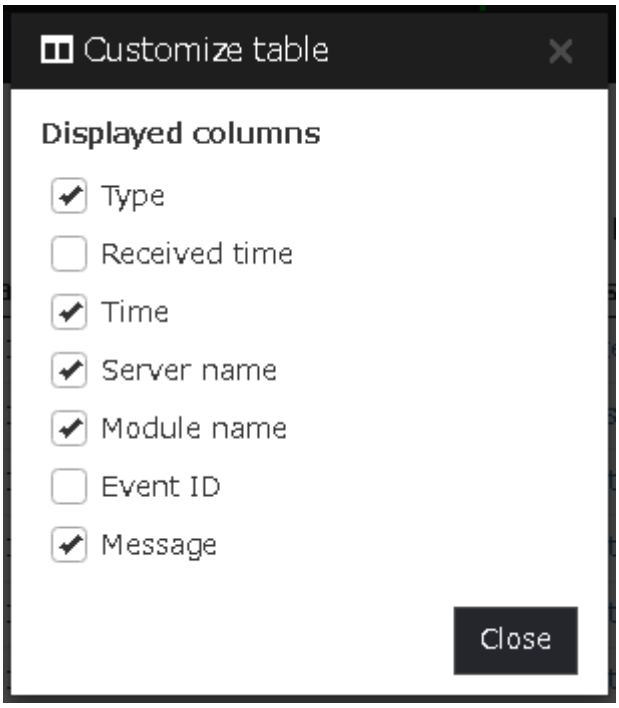


1. **Log type filter**
   Click on a log type (Error, Warning, or Info) to show or hide alert logs of that type.
2. **Alert filter**
   Click **Alert filter** to show or hide the alert filter section (Time filter, Server name filter, Module name filter, Event ID filter).
3. **Time filter**
   Click in the first box to set a start date, and in the second box to set an end date.
   Only alert logs between these two dates will be displayed.
   If only a start date is set, all logs from the start date to the current date will be displayed.
   If only an end date is set, all logs from the earliest existing log to the end date will be displayed.
4. **Server name filter**
   Enter all or part of a server name to only display alert logs with a matching server.
5. **Module name filter**
   Enter all or part of a module name to only display alert logs with a matching module.
6. **Event ID filter**
   Enter all or part of an event ID to only display alert logs with a matching event ID.

Alert logs

Customize table

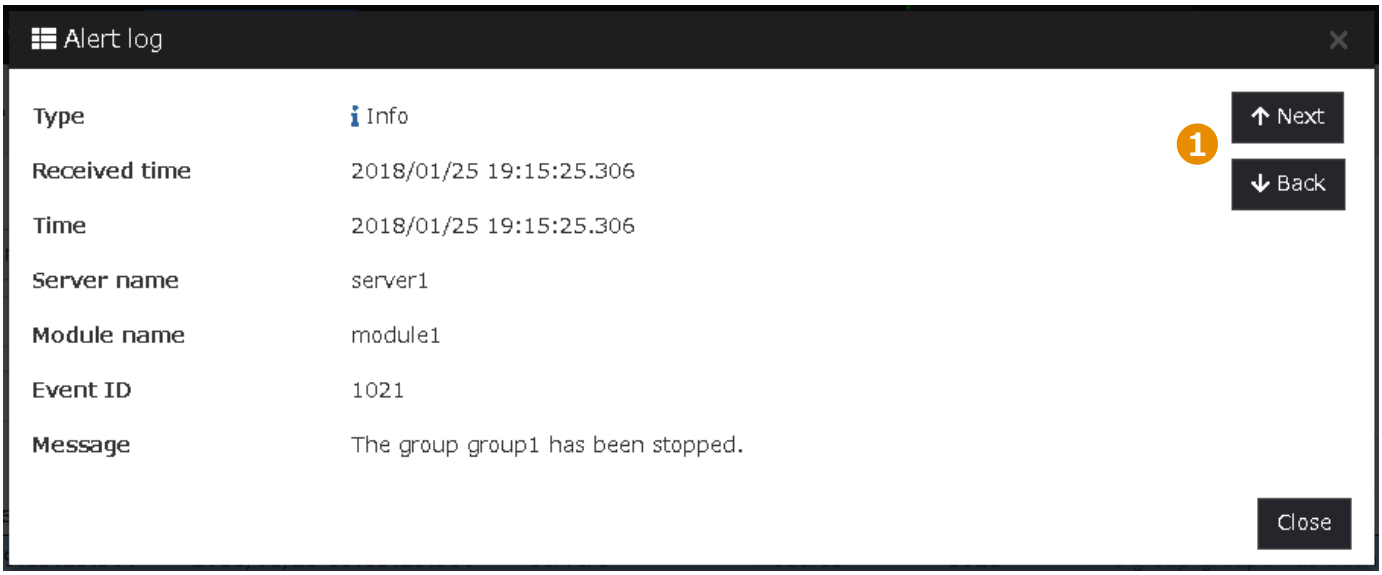
The Customize table feature allows you to hide or show alert log table columns.



Select or deselect columns to show or hide them.
Customize table settings are saved and will be restored the next time the Alert logs page is opened

Alert logs - Display alert

Clicking on the Message of a log in the Alert logs will open a dialog displaying the log's information and full message text.

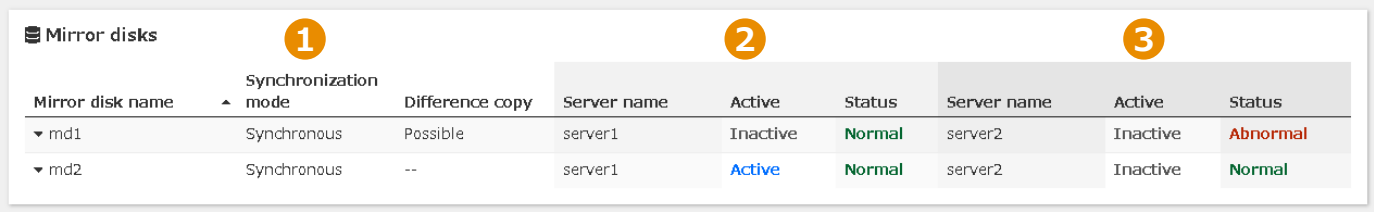


1. **Next/Back buttons**
   Click the **Next** button to view the next log in the alert log table, and the **Back** button to view the previous log.
   The Up and Down arrow keys on the keyboard can also be used to cycle through alert logs.

Mirror disks

Overview

The mirror disks page displays the status of all mirror disk resources present on the cluster.
In operation or verification mode, actions such as full or difference copy and mirror recovery can be performed.

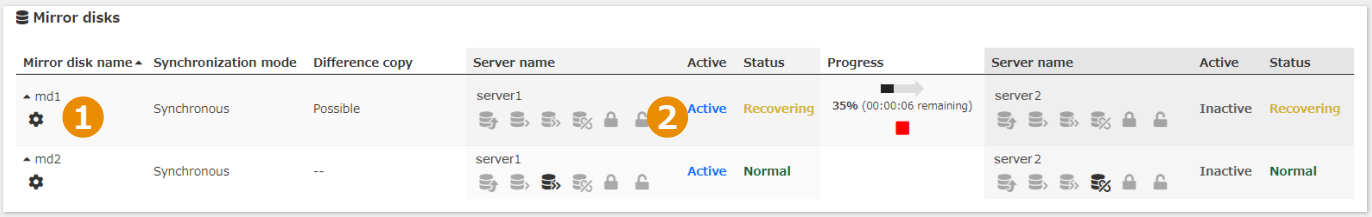


1. **Mirror disk information**
   Information about the mirror disk.
   - **Mirror disk name**
     The name of the mirror disk. Click the mirror disk name to display the action buttons allowing you to perform actions on the mirror disk.
     For more information on mirror disk actions, refer to Actions.
   - **Synchronization mode**
     Whether the synchronization mode of the mirror disk is in synchronous or asynchronous mode.
   - **Difference copy**
     Whether a difference copy operation can currently be performed or not.
2. **First server information**
   Information about the status of the mirror disk on the first server.
   - **Server name**
     The hostname of the server.
   - **Active**
     The current active status of the disk on the server.
   - **Status**
     The current status of the mirrored disk on the server.
3. **Second server information**
   Information about the status of the mirror disk on the second server.

Mirror disks

Actions

Click on the mirror disk name to show or hide the actions that can be performed on it.
Except for viewing the mirror disk's properties, actions can only be performed in operation or verification mode.



1. **Mirror disk properties**

   Properties
   View the mirror disk's properties.

2. **Mirror disk actions**
   The server name displayed above the action button is the server on which the action will be performed.
   For copy operations, the copy source will be the server clicked, and the copy destination will be the other server.

   Mirror recovery
   Recover the mirror disk.

   Difference copy
   Perform a difference copy.

   Full copy
   Perform a full copy.

   Mirror break
   Execute a mirror break operation.

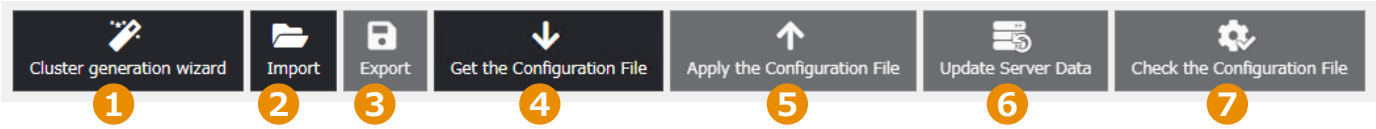
   Turn on access restriction
   Turn access restriction on for the mirror disk on the selected server.

   Turn off access restriction
   Turn access restriction off for the mirror disk on the selected server.

   Cancel
   Cancel the disk copy.

Config mode
Overview

In Config Mode, cluster configurations can be edited, imported, and exported.



1. **Cluster generation wizard**
   New cluster configurations can be created using the Cluster generation wizard.
2. **Import**
   Cluster configuration files can be imported from a local folder.
   Cluster configurations backed up from previous versions or the clpcfctrl command must be compressed into a zip file before being imported.
   Create the zip file so that when unzipped, the clp.conf file and scripts directory are created.
3. **Export**
   Cluster configuration files can be exported to a local folder.
   Exported cluster configurations must be decompressed before specifying them with the -x option of the clpcfctrl command.

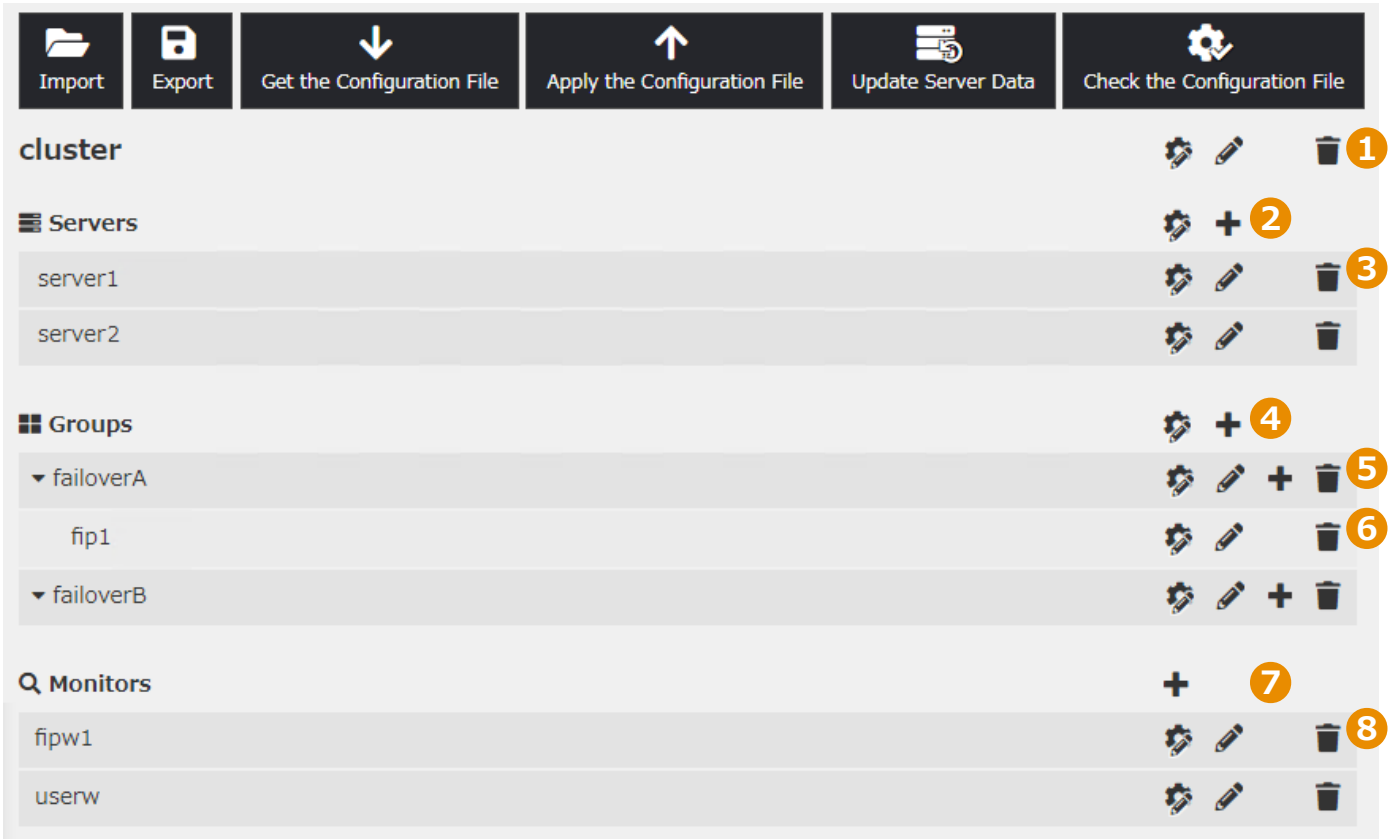
   Note: When using Internet Explorer 11, an error may occur when downloading configuration files.
   Refer to Notes and Restrictions - About log collection and configuration export for more information.
4. **Get the Configuration File**
   Cluster configurations can be retrieved from cluster servers
5. **Apply the Configuration File**
   Edited cluster configurations can be applied to cluster servers.
6. **Update Server Data**
   IP and device information of each server composing the cluster can be updated.
7. **Check the Configuration File**
   Edited cluster configuration information can be checked before applying or exporting it.

   Note: If pop-ups are blocked in your web browser settings, the cluster configuration information check result cannot be displayed.
   Refer to Notes and Restrictions - About displaying the cluster configuration information check result for more information.

Config mode

Edit area

Cluster configurations can be edited in the Edit area.



1. **Cluster**

   Edit properties
   Cluster properties can be edited.

   Change name
   Cluster name can be changed.

   Delete
   Cluster can be deleted.

2. **Servers**

   Edit properties
   Cluster properties common to all servers can be edited.

   Add
   Servers can be added.

3. **Server**

   Edit property
   Server properties can be edited.

   Change name
   Server names can be changed.

   Delete
   Servers can be deleted.

4. **Groups**

   Edit properties

Properties common to all groups can be edited.

Add
Groups can be added.

5. **Group**

Edit properties
Group properties can be added.

Change name
Group names can be changed.

Add
Group resources can be added.

Delete
Groups can be deleted.

6. **Group resource**

Edit properties
Group resource properties can be edited.

Change names
Group resource names can be changed.

Delete
Group resources can be deleted.

7. **Monitors**

Add
Monitor resources can be added.

8. **Monitor resource**

Edit properties
Monitor resource properties can be edited.

Change names
Monitor resource names can be changed.

Delete
Monitor resources can be deleted.

Other

Notes and Restrictions

1. **Displaying the latest information**
   (1)The information displayed in Cluster WebUI does not necessarily represent the latest status.
   If you want to get the latest information, click the Refresh Data button.

   (2)If issues such as server shutdown occur while Cluster WebUI is retrieving information, retrieval may fail and objects may partially be displayed incorrectly.
   Wait for the next automatic update or click the Refresh Data button to reacquire the latest information.

2. **Simultaneous collection of logs**
   Collecting of EXPRESSCLUSTER logs cannot be executed from two or more Cluster WebUI clients simultaneously.

3. **About log collection and configuration export**
   When using Internet Explorer 11, an error may occur when cluster log collection or configuration export is performed.
   In such cases, enable the following setting in Internet Explorer's Internet Options:
   Open [Security] tab -> [Internet] -> [Custom level] -> [Downloads] -> [File Download] and select [Enable].

4. **About simultaneous execution of checking the configuration file**
   Checking the configuration file cannot be executed from two or more Cluster WebUI clients simultaneously.

5. **About displaying the cluster configuration information check result**
   Configure your web browser to allow pop-ups from the address of the server connected to Cluster WebUI.