



Software For OMRON Uninterruptible Power Supply (UPS)

PowerAct Pro Master Agent

For Windows

Users Manual



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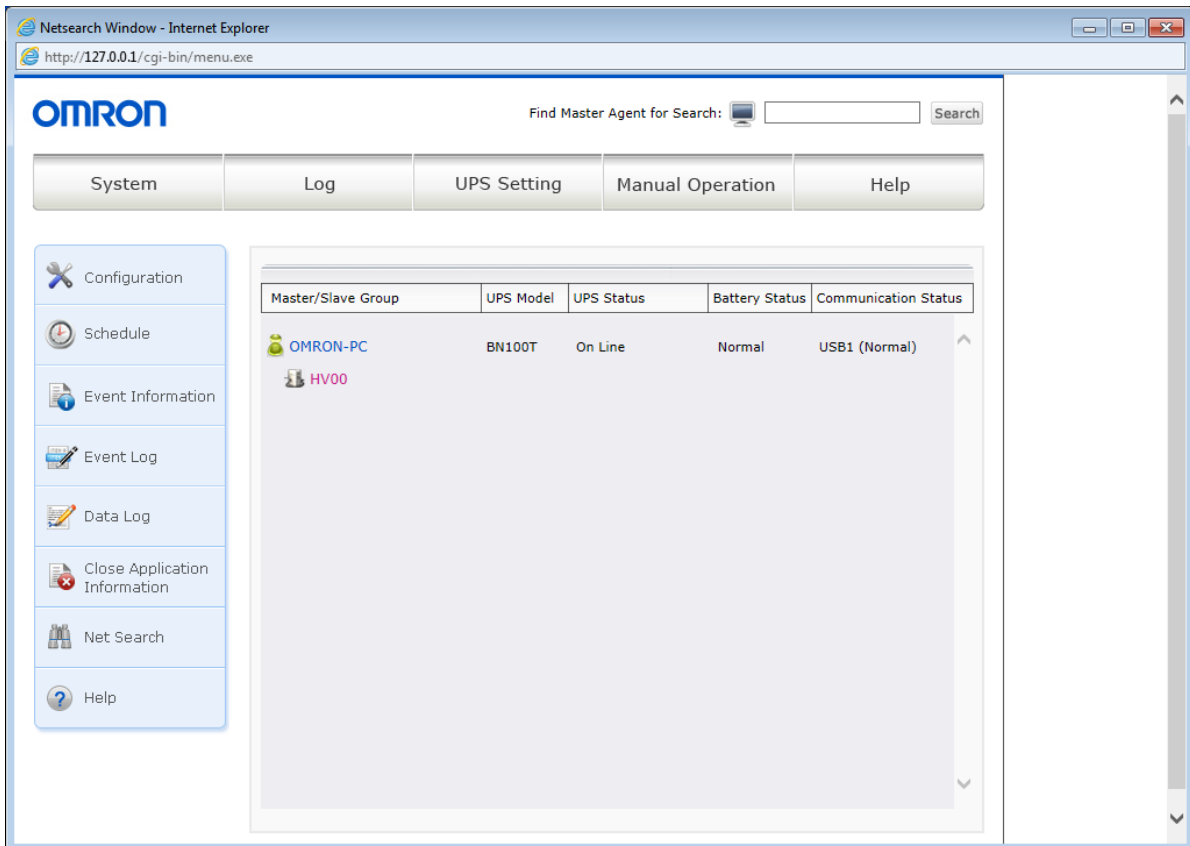
1. Monitor menu

1. 1 System

1. 1. 1 Automatic Agent Search

Automatically searches for agents in the same network and displays them in the Automatic Agent Search window.

Automatic Agent Search window



The following table shows the details of the display items in the Automatic Agent Search window.

Display item	Description
Master/Slave Group	Displays the agent names, master-slave distinction, and group configuration.
UPS Model	Displays the model of the connected UPS.
UPS Status	Displays the operating status of the UPS.
Battery Status	Displays the battery status.
Communication Status	Displays the operating status of the communication port.
Address input field	Type the IP address of the computer where Master Agent is installed and press the [Enter] key, and when the specified master exists, the Login window appears. If the specified master is not detected, an error message appears.

1. 1. 2 Configuration

(1) Shutdown parameter

For the [Shutdown Parameter] setting, set the time related to shutdown and the timing to display a warning message. Set the time suitable for the system in use.

Configure settings in the Shutdown Parameter Setting window in the following procedure.

- ① Display the Power Act Pro Monitor window.
- ② Select the System menu, then [Configuration], or select [Configuration] from the menu on the left.
- ③ The Shutdown Parameter window appears.

Agent Selection window



> Shutdown Parameter > UPS Boot/Reboot > Log Option > Communication Setting

Default

>> Shutdown Parameter

- ▣ Select Agent
- ▣ Redundant Power Supply Setting
- ▣ Other Device
- ▣ Wake On LAN Setting
- ▣ Outlet Information
- ▣ Script Shutdown

Select Agent: OMRON-PC(Master) Submit

Select UPS Outlet: Outlet A (No Control)

AC Fail Delay Time: 60 Sec

Shutdown Start Delay Time: 0 Sec

External Command Line:

Run External Command Executed Time: 0 Sec

Shutdown Need Time: 180 Sec

Select OS Shutdown Mode: Hibernate

Select Virtual Server Shutdown Mode: Shutdown by System

Select Guest OS Shutdown Mode: Shutdown

UPS Auto Stop: Enable

Ok Cancel

- ④ Select the master or slave to set the shutdown parameters for. Select from the list displayed in the pulldown menu for [Select Agent].

Select Agent: OMRON-PC(Master) Submit

Select UPS Outlet: Outlet A (No Control)

Item	Description and procedure
Select UPS Outlet	<p>Select an outlet to connect the currently connected load to. Two types of outlets exist: a controllable outlet and an uncontrollable outlet.</p> <p>Caution When using UPS not supporting outlet control, this function cannot be used.</p>
AC Fail Delay Time	<p>Set the delay time from when an abnormality occurs in the power supply until shutdown operation starts in seconds. A value in the range 0 to 360000 seconds can be selected. (The default value is 60 seconds. A value in the range 0 to 60 seconds can be selected in 10-second steps, and a value in the range 60 to 36000 seconds can be selected in 60-second steps.)</p>

Shutdown Start Delay Time	Set this time if you want to further delay the start of shutdown operation after shutdown operation starts. A value in the range 0 to 600 seconds can be selected. (The default value is 0 second.)
External Command Line	Specify the program to be simultaneously activated when shutdown operation starts. For example, specify a program saving backup data into a specific disk drive.
Run External Command Executed Time	Set the time necessary for executing an external command. A value in the range 0 to 600 seconds can be set in 60-second steps. Shutdown operation is temporarily stopped until this time elapses. (The default value is 0 second.)
Shutdown Need Time	Set the time necessary for shutting down the OS. A value in the range 0 to 1800 seconds can be selected. (The default value is 180 seconds.)
Select OS Shutdown Mode	Select the shutdown mode between "Hibernate" and "Shutdown".
Select Virtual Server Shutdown Mode	Select the setting to use for exiting between the setting of the system and the setting of PowerAct Pro. This function can be used on OS platforms supporting Hyper-V.
Select Guest OS Shutdown Mode	Select how to exit the Guest OS between Shutdown and Hibernate. This function can be used on OS platforms supporting Hyper-V.
UPS Auto Stop	Set whether to automatically stop the UPS after the computer shuts down completely.
[Default] button	When this button is clicked, the default value is set for each item.

Caution

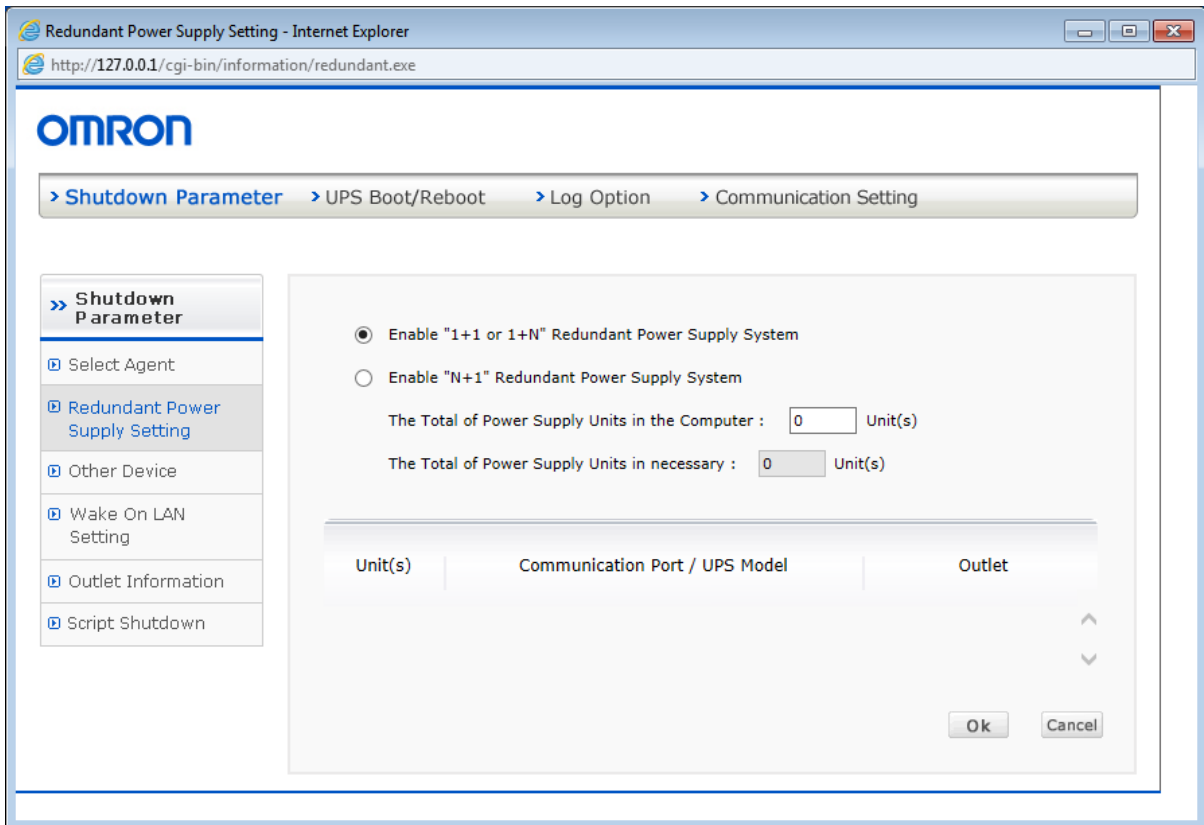
The sum of the values for "Shutdown Start Delay Time", "Run External Command Executed Time", and "Shutdown Need Time" is limited to maximum 600 seconds for UPS without outlet control functionality, and to maximum 1800 seconds for UPS with outlet control functionality.

When using your UPS in Hyper-V (virtual environment), set time equal to or longer than the time required for virtual OS shutdown for [Run External Command Executed Time (Sec)].

⑤ Click the [OK] button.

⑥ Select [Redundant Power Supply Setting]. In this window, set the redundant power supply system and necessary parameters.

Redundant Power Supply Setting window



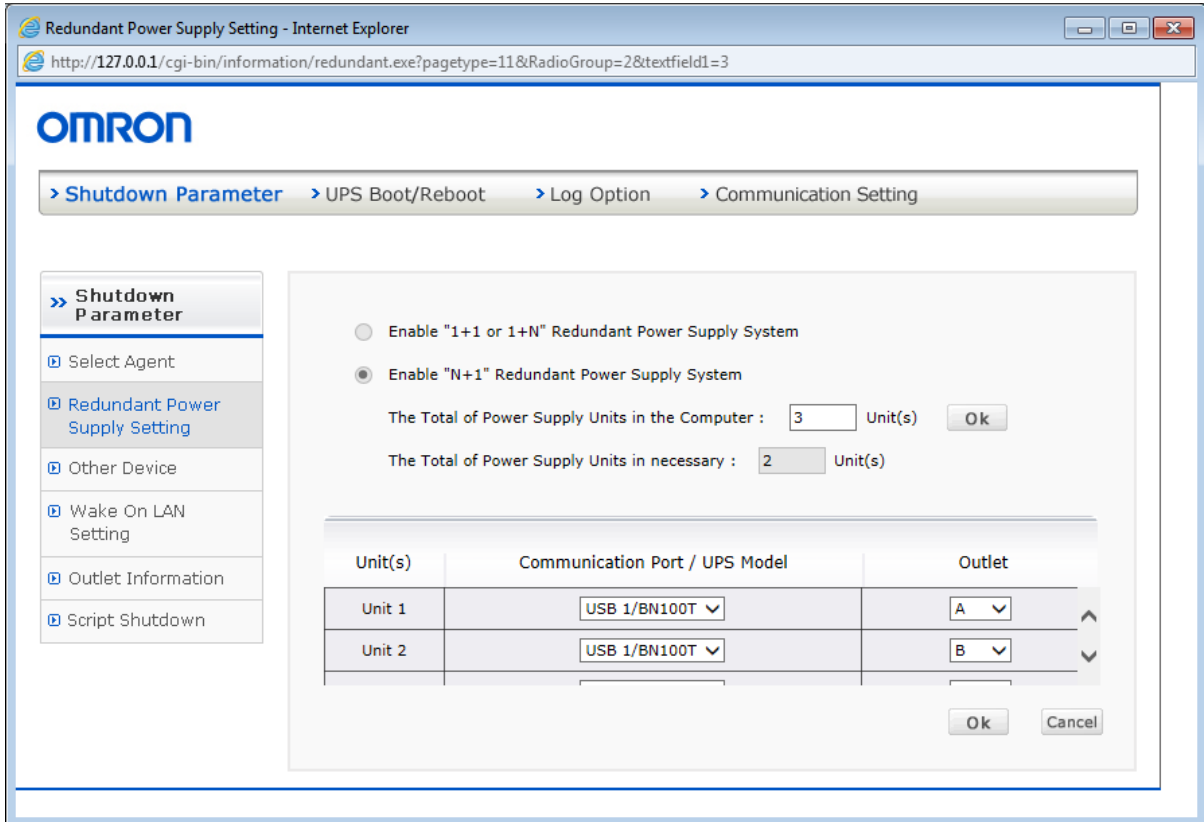
⑦ Select a redundant power supply system from the following options.

Enable "1+1 or 1+N" Redundant Power Supply System

A system in which the PC server does not start shutdown operation as long as at least one of the multiple UPS units connected to the computer is operating correctly. Only when an AC line failure occurs in every one of the UPS units, shutdown operation is started. When this option is selected, click the [OK] button and proceed to step ⑧.

Enable "N+1" Redundant Supply System

Shutdown operation is started when the total number of power supply units in the PC server to which power is supplied from the UPS becomes "N" or smaller. When this option is selected, enter the number of power supply units in the computer, and click the [OK] button.



Item	Description and procedure
The Total of Power Supply Units in the Computer	Enter the total number of power supply units in the computer. When the value is changed, click the [OK] button at the right side of the input field and calculate the number of power supply units necessary for operation.
The Total of Power Supply Units in necessary	The number of power supply units necessary for the computer to operate normally is calculated and displayed in the field.
Unit(s)	Shows a power supply unit in the computer.
Communication Port / UPS Model	Displays the model of the UPS connected to each power supply unit and the communication port. To select a UPS model and communication port, select them from the pulldown list.
Outlet	Specify the outlet to which the power supply unit in the computer is connected.

Caution

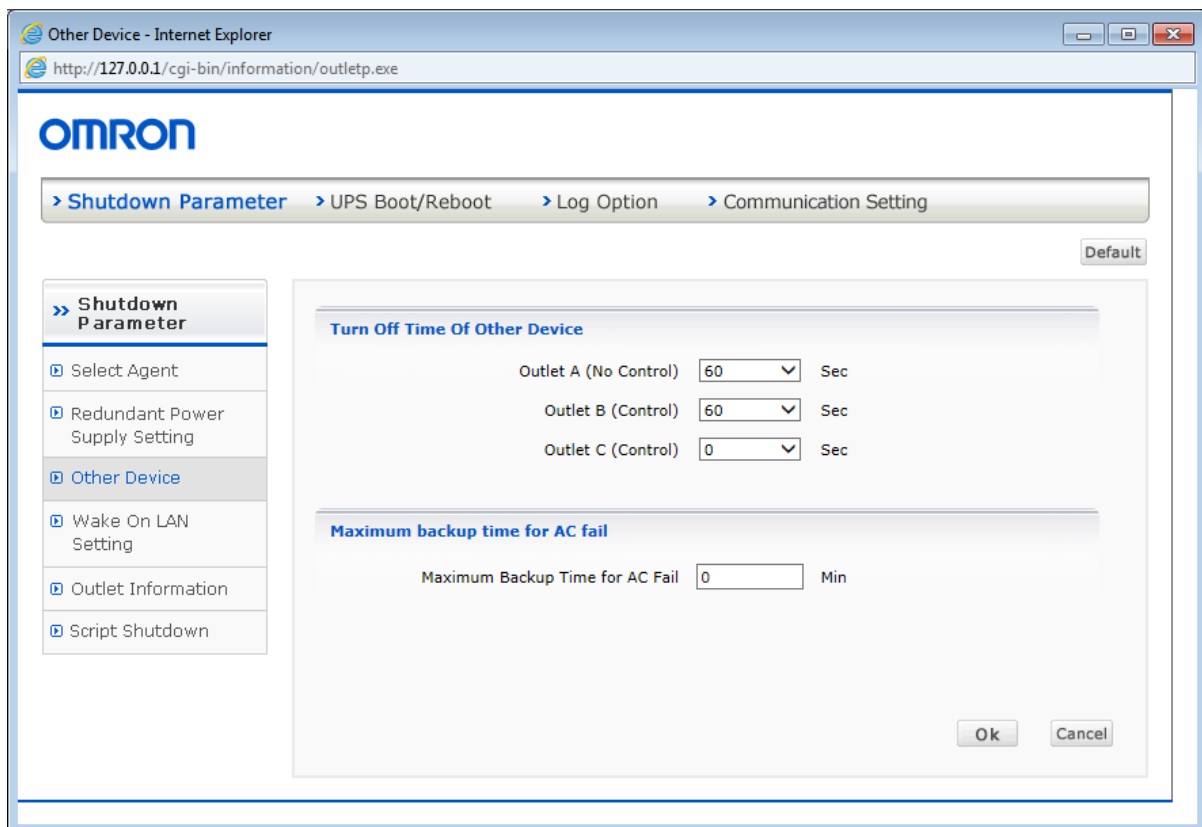
To connect multiple power supply units to your UPS, ensure that the total supply power of the power supply units does not exceed the supply power of the UPS.

- ⑧ Click the [OK] button.

- ⑨ Select [Other Device], and for [Turn Off Time Of Other Device] for each outlet, set a value in the range 0 to 600 seconds by clicking the arrow at the right side of the input field to display the list and selecting an option in that list.

In UPS units without outlet control functionality, you cannot set a value for either of items Outlet B and Outlet C.

Other Device window



- ⑩ Click the [OK] button.
- ⑪ Select [Wake On LAN Setting]. When this function is set, the Wake On LAN supported computer whose MAC address is registered in advance can be restarted via LAN from the standby state (hibernation).
- ⑫ In the [Setting] area, select values for [Repeating Times] and [Interval Time] for Wake On LAN packets.
- ⑬ For the [Setting] list, Wake On LAN packets are sent to the addresses with the check box [At Star] or [At Stop] being selected.
To delete an address from the list, click the [Remove] button.
- ⑭ To register or modify address information, click the [Add/Modify] button in [Setting].

Wake On LAN Setting window

Wake On LAN Setting - Internet Explorer
http://127.0.0.1/cgi-bin/information/WakeOnLanSetting.exe

OMRON

> Shutdown Parameter > UPS Boot/Reboot > Log Option > Communication Setting

>> Shutdown Parameter

- Select Agent
- Redundant Power Supply Setting
- Other Device
- Wake On LAN Setting
- Outlet Information
- Script Shutdown

Setting

At Stop

Repeating Times 1

Interval Time 1 Sec

At Start

Repeating Times 1

Interval Time 1 Sec

Setting

At Stop	At Start	Description	Mac Address	Remove
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Add/Modify

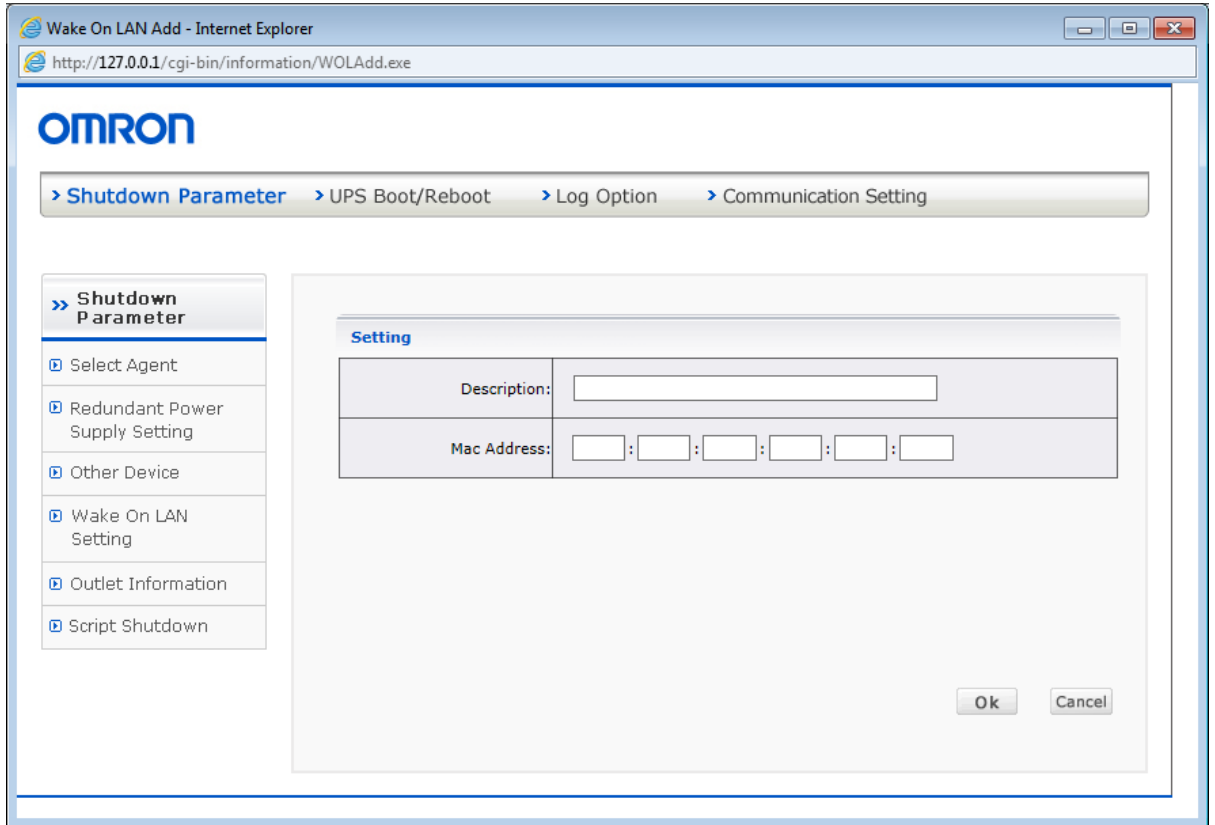
Ok Cancel

- Modifying registration information

By directly entering a value for [Mac Address], you can modify the address. To delete an address, clear the [Select] check box for it and click [Submit].

Click [Add(New)] to add an address to the list.

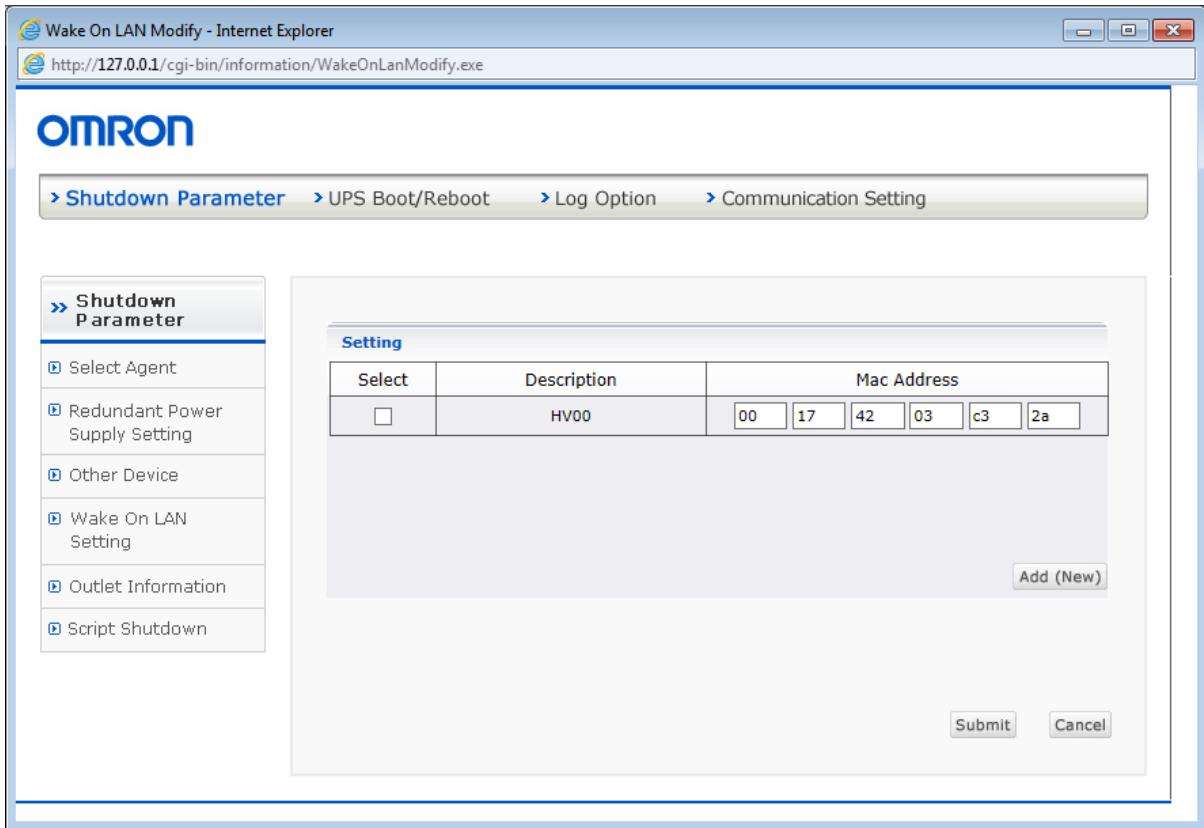
* The addresses of the slave agents logged in and linked to the master agent are automatically displayed in the list.



- Adding registration information

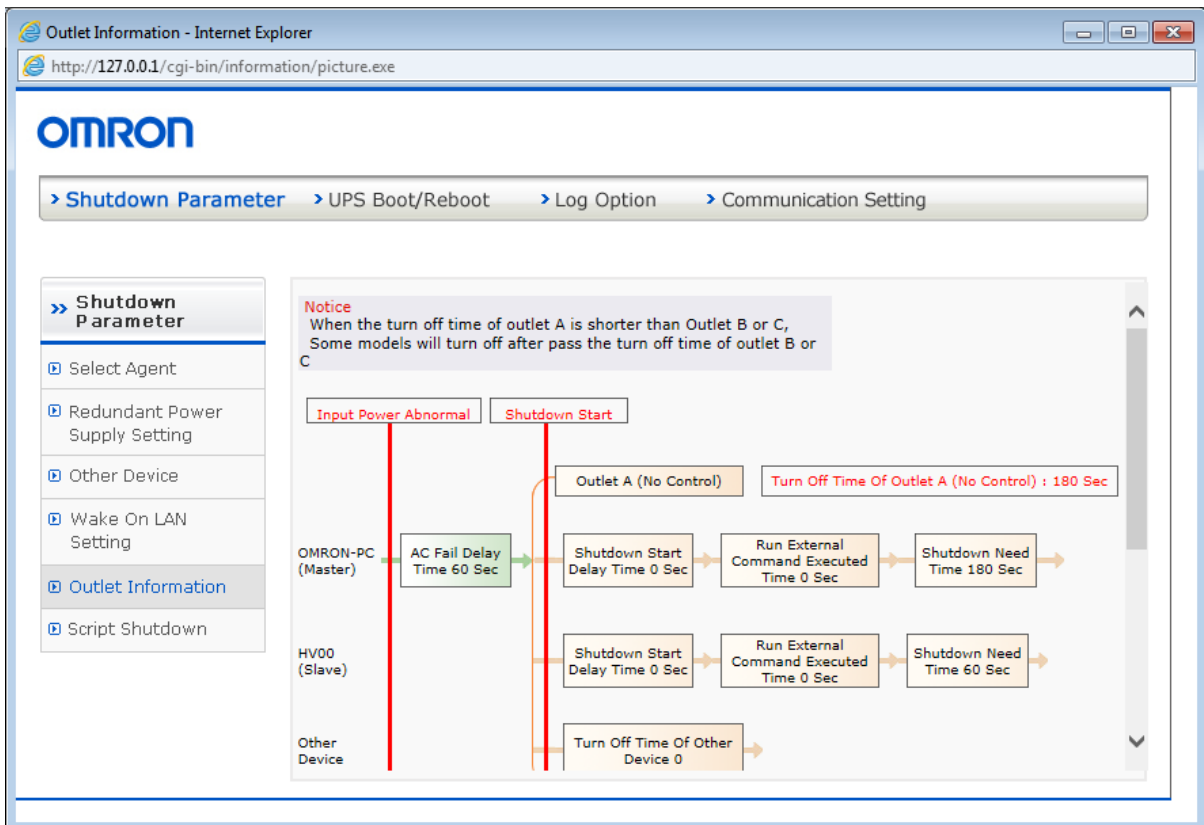
Enter words for identifying the destination for [Description], and enter the MAC address of the destination for [Mac Address].

Click [OK], and the destination is added to the address modification list mentioned above.



- ⑮ Select [Outlet Information]. When the timing chart for the set times per outlet is displayed, check the setting details. When you finish checking, click the [x] (Close) button to close the window.

Output Information window



Caution

When the turn off time of outlet A is shorter than that of outlet B or C, outlet A turns off after the turn off time of outlet B or C passes.

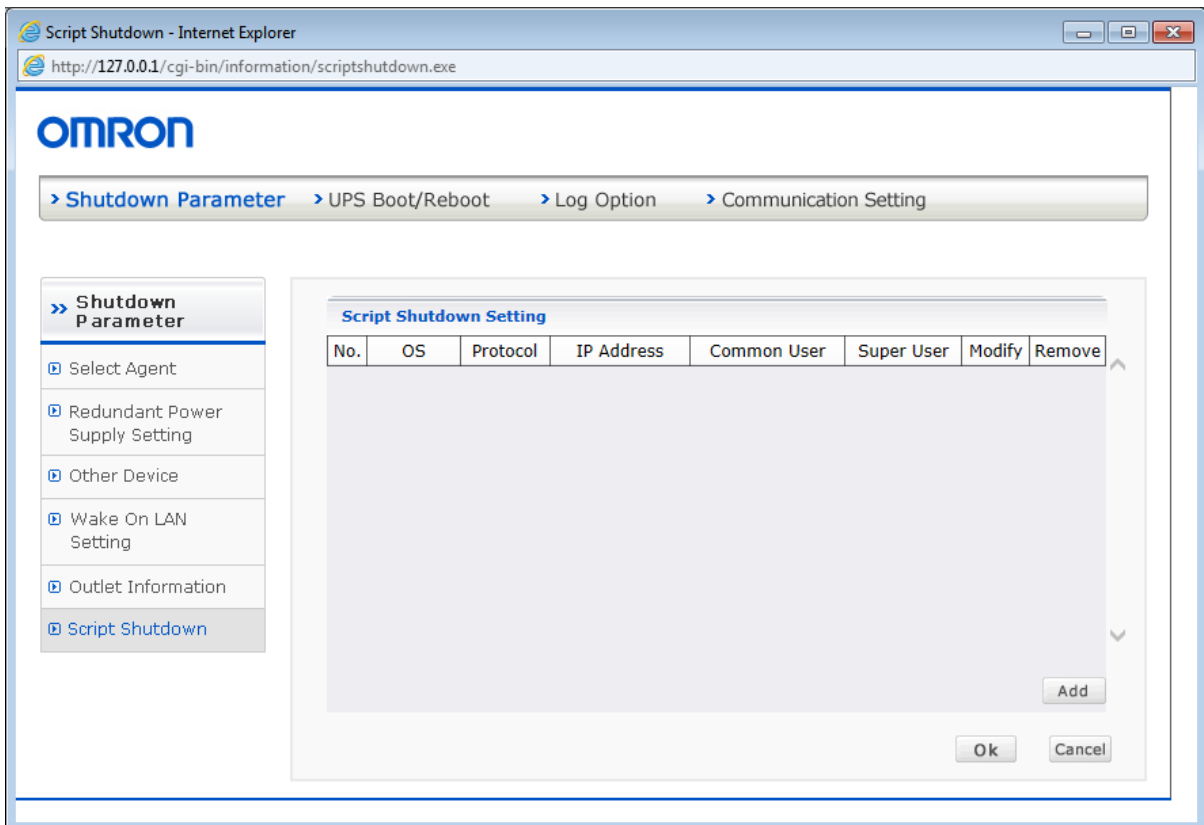
In the following models, the turn off time of outlet A works regardless of the condition of outlet B or C.

(The sold model is different depending on areas.)

- BU1002SW/BU3002SW
- BU75RW/BU100RW/BU200RW/BU300RW
- BU150R
- BN100T/BN150T/BN220T/BN300T
- BN75R/BN150R/BN300R
- BN150XR

- ⑩ When Script Shutdown is selected, by directly sending a script to the device connected to the UPS, the execution of shutdown operation regardless of the slave agent existence can be set.

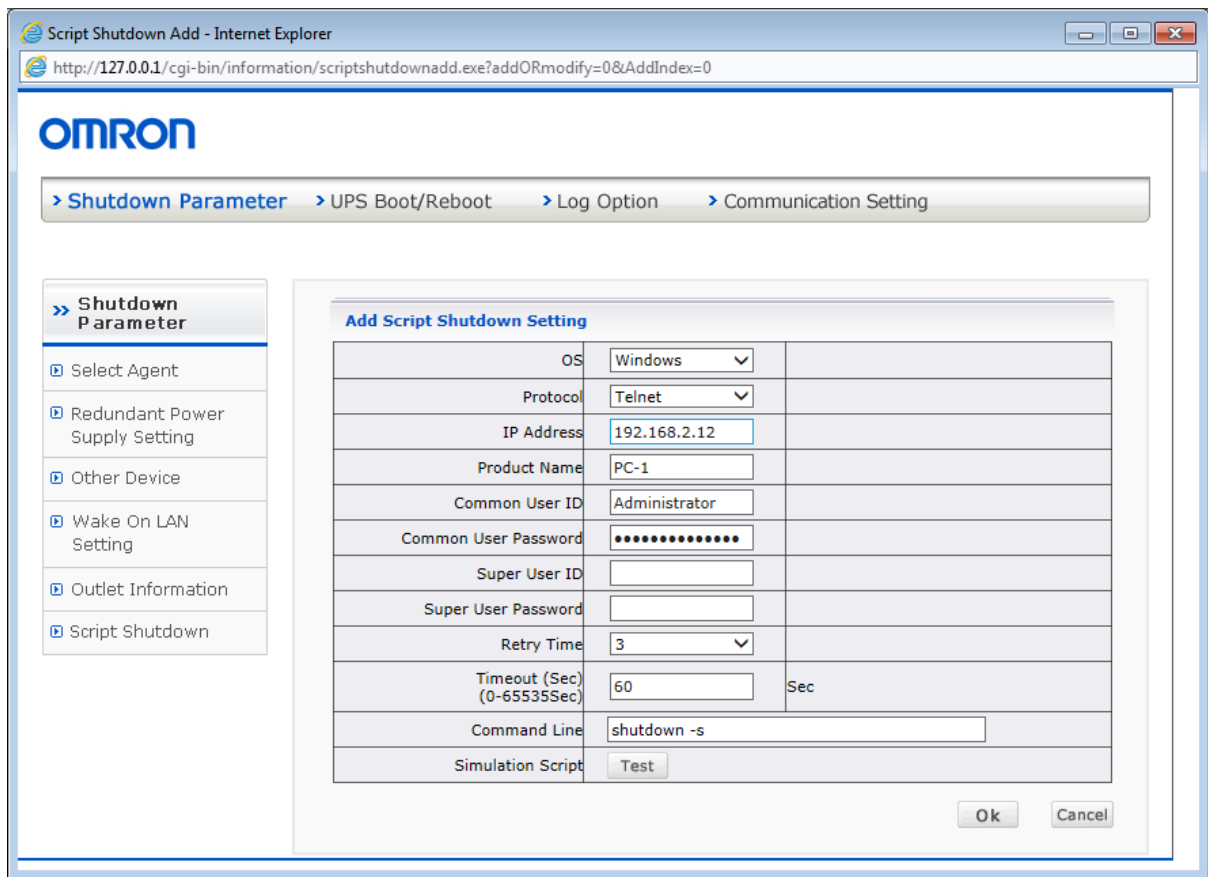
Script Shutdown window



- Adding registration information

Click [Add] to open the Script Shutdown setting window. Configure the settings for the Script Shutdown target device.

Click [OK], and the destination is added to the Script Shutdown setting list.



Item	Description and procedure
OS	Select the OS of the Script Shutdown target device.
Protocol	Specify the communication method to be used by the master agent. Two protocols, SSH and Telnet, are supported.
IP Address	Select the IP address of the Script Shutdown target device.
Product Name	Set the identification name of the Script Shutdown target device in an arbitrary character string.
Common User ID	Specify a common user name valid for login to the Script Shutdown target device.
Common User Password	Specify a common user password valid for login to the Script Shutdown target device.
Super User ID	Specify a super user name valid for login to the Script Shutdown target device. For Linux/Mac/Unix, enter data if necessary. For Windows, entry is not necessary.
Super User Password	Specify a super user password valid for login to the Script Shutdown target device. For Linux/Mac/Unix, enter data if necessary. For Windows, entry is not necessary.
Retry Time	Select the number of retries when you fail to log in.

Timeout (Sec)	Arbitrarily set the timeout time for login. A value in the range 0 to 65536 seconds can be set.
Command Line	Specify the command line to be executed when the master agent starts shutdown operation. You can set multiple commands by separating each with a semicolon (";"). Shutdown command examples: [Windows] shutdown -s [Linux] /sbin/halt [Mac] /sbin/halt [Unix] /sbin/halt
Simulation Script	Click the [Test] button, and you can conduct a test based on the set contents.

Note

For the execution of Script Shutdown, see "[UPS Boot/Reboot] setting" in "PowerAct Pro Configuration".

(2) UPS Boot/Reboot

In the [UPS Boot/Reboot] setting, set the reboot method for the UPS when the system recovers from a power supply failure after shutdown.

Display the UPS Boot/Reboot Setting window and configure settings in the following procedure.

- ① Display the Power Act Pro Monitor window.
- ② Select the System menu, then [Configuration].
- ③ Select [UPS Boot/Reboot Setting].

UPS Boot/Reboot Setting window

The screenshot shows the 'UPS Boot/Reboot Setting' window. The navigation menu includes 'Shutdown Parameter', 'UPS Boot/Reboot', 'Log Option', and 'Communication Setting'. The left sidebar has 'UPS Boot/Reboot' expanded, showing 'UPS Boot/Reboot Setting' and 'Ping Monitor Setting'. The main content area is titled 'UPS Reboot Setting' and contains the following settings:

- UPS Reboot Setting**
 - UPS Auto Reboot: On
 - UPS Starts Delay Time: 5 Sec
 - Battery Capacity: 0%
- Output Start Delay Time of UPS Boot Up**
 - Send Outlet Delay Command: Enable
 - Outlet A (No Control): [Empty] Sec
 - Outlet B (Control): 60 Sec
 - Outlet C (Control): 120 Sec
- UPS Cold Start**
 - UPS Cold Start Function: Off

Buttons for 'Ok' and 'Cancel' are located at the bottom right of the window.

- ④ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
UPS Auto Reboot	Set whether to reboot the UPS after recovery from a power supply failure. Click the arrow at the right end of the input field and select "On" or "Off" from the displayed list.

	<p>Caution</p> <p>This item cannot be set for UPS whose rebooting is specified with the setting switch.</p>
UPS Start Delay Time	<p>Set the delay time until the UPS is rebooted after recovery from a power supply failure.</p> <p>Click the arrow at the right end of the input field and select an option from the displayed list.</p>
Battery Capacity	<p>For the UPS, set the upper limit for the total power used by the connected devices.</p> <p>Click the arrow at the right end of the input field and select an option from the displayed list.</p>
Output Start Delay Time of UPS Boot Up	<p>Set the output delay time for each outlet when the UPS starts up in seconds.</p> <p>However, the value for outlet A is fixed as 0 sec.</p> <p>For example, connect the tape drive you want to turn on before the computer unit starts up to outlet A, and connect the computer unit to outlet B or C, and set their delay times, so that their startup times become different from each other.</p> <p>Caution</p> <p>This cannot be set if UPS without outlet control functionality is connected.</p>
USP Cold Start Function	<p>Set whether to enable the UPS cold start function.</p> <p>Click the arrow at the right end of the input field and select "On" or "Off" from the displayed list.</p>
[Default]	When this button is clicked, the default value is set for each item.

- ⑤ Click the [OK] button.
- ⑥ By selecting Ping Monitor Setting, you can set the life-and-death monitoring of connected devices by periodically sending a ping command.

Ping Monitor Setting window

⑦ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
Communications Port	Set which communication port is used for ping transmission. Click the arrow at the right end of the input field and select an option from the displayed list.
Test Rate	Specify the total number of times to send a ping command. Click the arrow at the right end of the input field and select an option from the displayed list.
Interval	Specify the interval time between ping commands. Specify the time in minutes. Click the arrow at the right end of the input field and select an option from the displayed list.
IP Address	Specify the IP address of each connected device.
Product Name	Enter an arbitrary name for the identification name of each device.
Script Shutdown	Specify whether to use Script Shutdown. To use Script Shutdown, select the check box.
Number of passes (Pass Rate)	As the condition for judging the device as operating normally, set how many times a ping command must be received successfully

	<p>after a ping command is sent for the number of times specified for Test Rate.</p> <p>Click the arrow at the right end of the input field and select an option from the displayed list.</p>
Fail Number of Ping monitoring	<p>As the condition for executing the selected operation, specify the number of devices in which an error is detected among all the devices connected to the relevant outlet.</p> <p>Click the arrow at the right end of the input field and select an option from the displayed list.</p>
Action	<p>Specify the action to be carried out.</p> <p>Click the arrow at the right end of the input field and select an option from the displayed list.</p>
Submit	<p>When this button is clicked, the setting for each item is confirmed.</p>

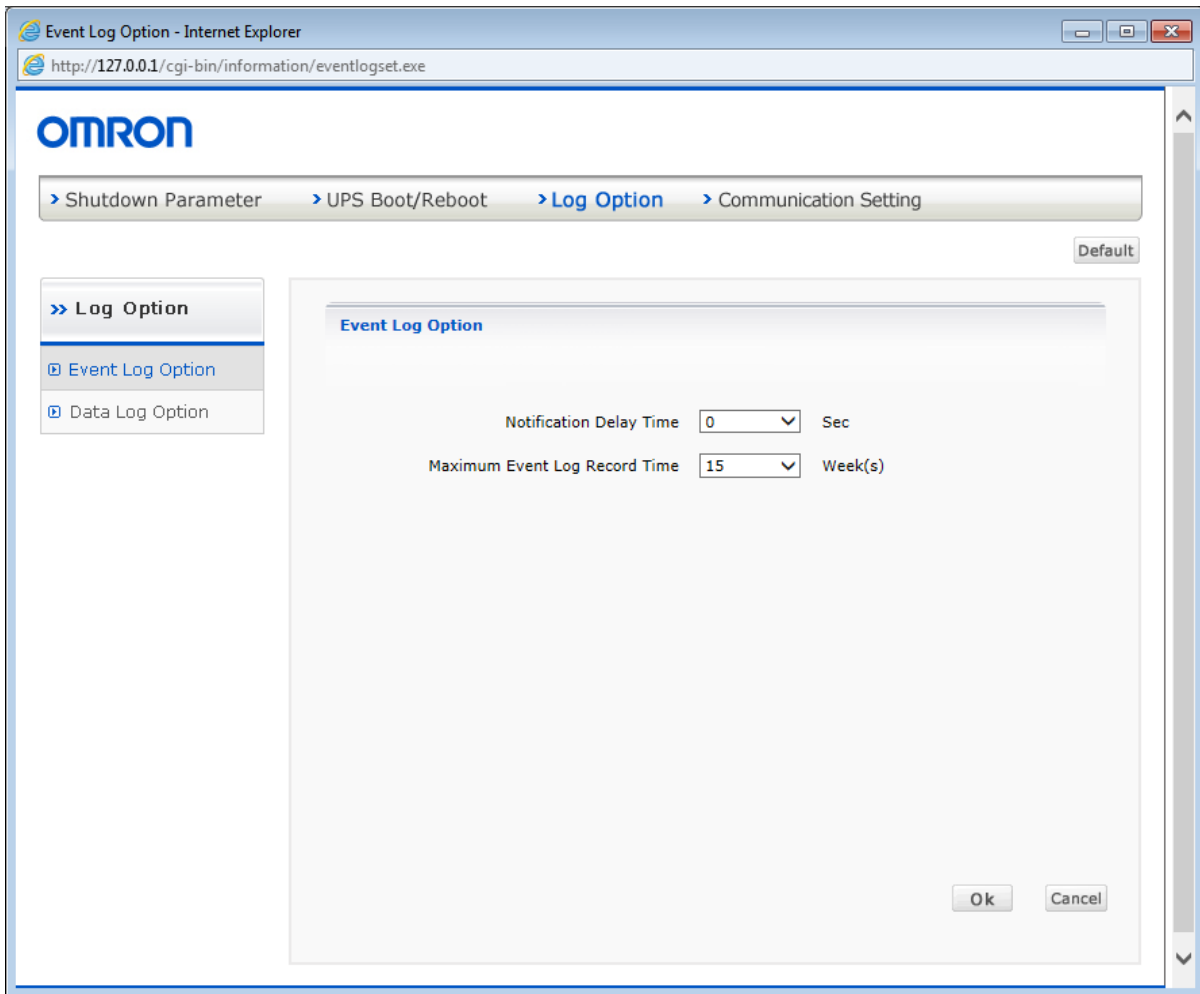
⑧ Click the [Submit] button.

(3) Log Option

In the [Log Option] setting, set the event log or data log size and record time interval. Display the Log Option Setting window and configure settings in the following procedure.

- ① Display the Power Act Pro Monitor window.
- ② Select the System menu, then [Configuration].
- ③ Select [Event Log Option].

Event Log Option window

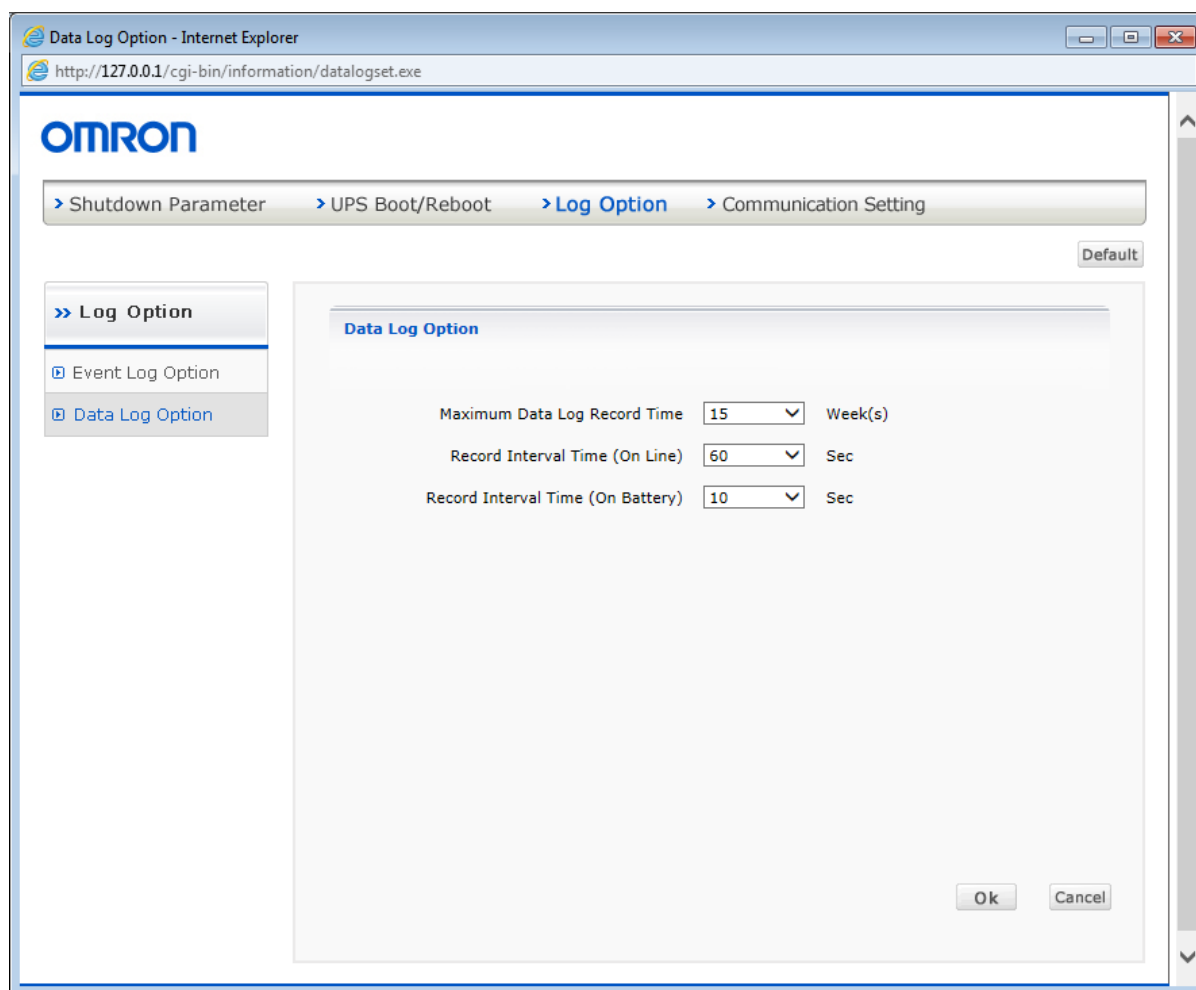


- ④ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
Notification Delay Time	Set the delay time from when an event occurs until it is notified to the user. Click the arrow at the right end of the input field and select an option from the displayed list.
Maximum Event Log Record Time	Set the maximum number of event logs to store in units of weeks. Click the arrow at the right end of the input field and select an option from the displayed list. The setting range is from 1 to 15 weeks (default: 15 weeks).
[Default]	When this button is clicked, the default value is set for each item.

- ⑤ Click the [OK] button.
 ⑥ Select [Data Log Option]

Data Log Option window



- ⑦ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
Maximum Data Log Record Time	Set the maximum number of data logs to store in units of weeks. Click the arrow at the right end of the input field and select an option from the displayed list. The setting range is from 1 to 15 weeks (default: 15 weeks).
Record Interval Time (On Line)	Set the data log recording time interval during operation based on commercial power in units of seconds. Click the arrow at the right end of the input field and select an option from the displayed list. The setting range is from 5 to 30000 seconds (default: 60 seconds).
Record Interval Time (On Battery)	Set the data log recording time interval during operation on battery power in units of seconds. Click the arrow at the right end of the input field and select an option from the displayed list. The setting range is from 5 to 30000 seconds (default: 10 seconds).

[Default]	When this button is clicked, the default value is set for each item.
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⑧ Click the [OK] button.

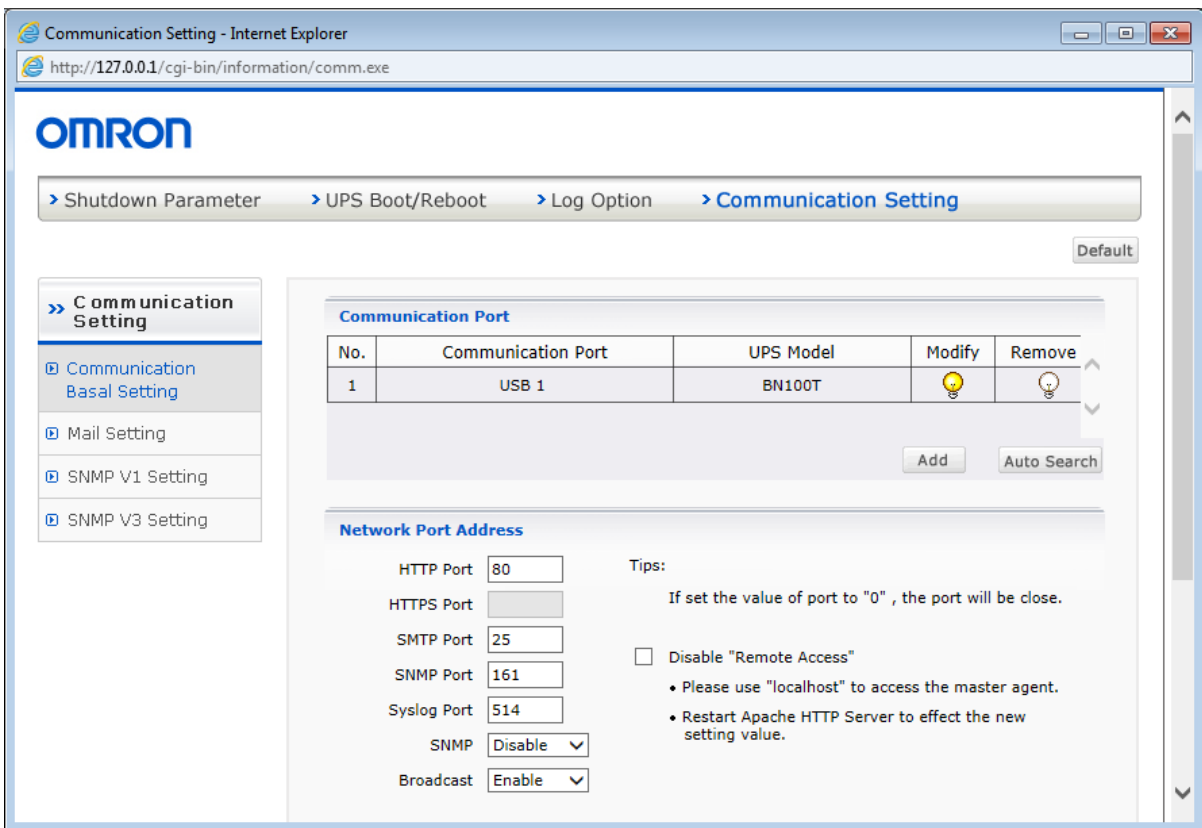
(4) Communication Setting

In the [Communication Setting] setting, set the communication port, network port address, and mail server for user notification.

Display the Communication Setting window and configure settings in the following procedure.



- ① Display the Power Act Pro Monitor window.
- ② Select the System menu, then [Configuration].
- ③ Select [Communication Setting].

Communication Setting window



④ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
Add	Click this button to display the Add Communication Port window, and you can add a communication port. The added communication port is displayed in the communication port list.

Modify	Click the icon  in the Modify column in the communication port list, and the communication port in the line that icon exists can be modified.
Remove	Click the icon  in the Remove column in the communication port list, and the communication port in the line that icon exists is deleted.
Auto Search	Click this button to search for all the communication ports in the computer and display the detected UPS units in the communication port list.
Network Port Address	Set the HTTP port number according to the condition of the currently used network. Set 80 by default. Operation from remote computers can be prohibited by prohibiting remote access.
Page Refresh Rate	Set the PowerAct Pro Monitor screen refresh interval in units of seconds. Click the arrow at the right end of the input field and select an option from the displayed list.
Logoff Time	Set the automatic logoff time for PowerAct Pro Monitor. Click the arrow at the right end of the input field and select an option from the displayed list.
[Default]	When this button is clicked, the default value is set for each item.

⑤ Click the [OK] button.

⑥ Select [Mail Setting].

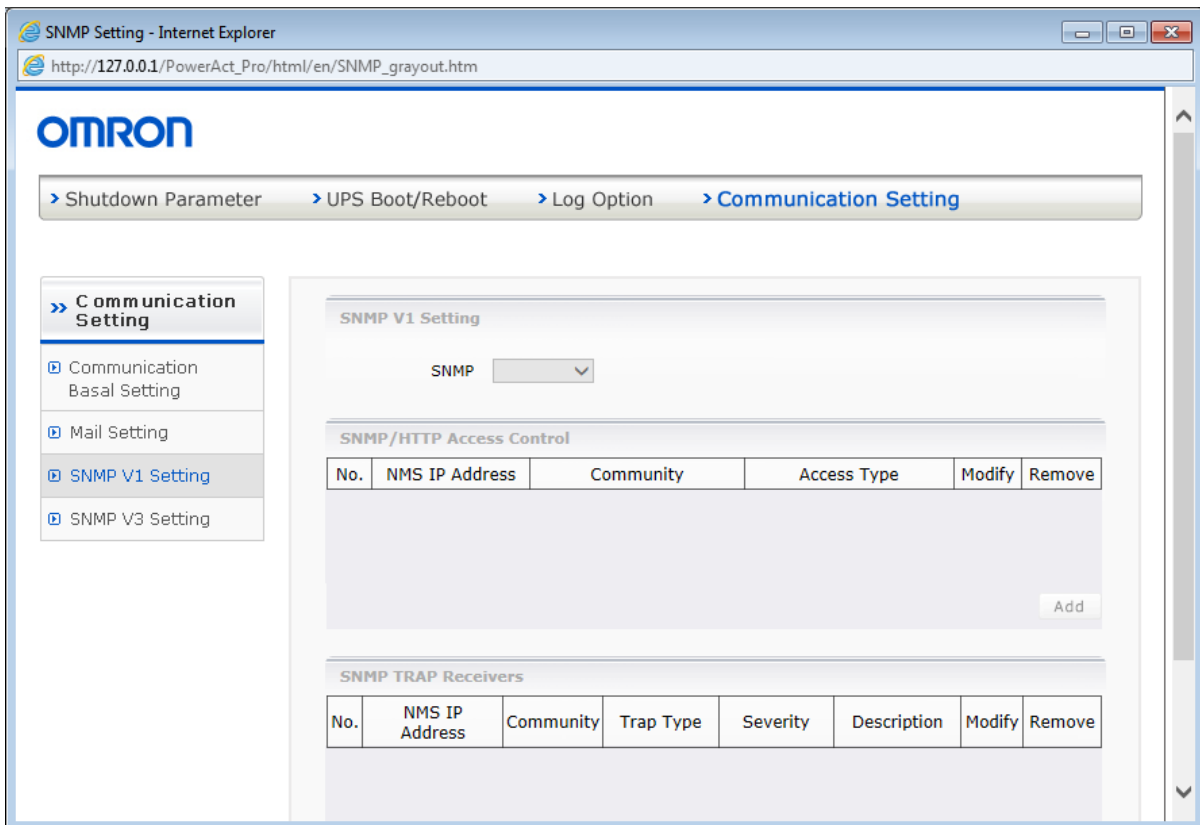
Mail Setting window

- ⑦ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.



Item	Description and procedure
Location	Enter the name of the installation location.
Computer Name	Enter the name of the computer.
User Account	Enter user account information for POP authentication.
User Password	Enter a user password for POP authentication.
SMTP Server	Set the server to send emails for event notification to the users. Caution This function cannot be used for SMTP authentication mail servers.
Email Address	Set the email address of the sender.
Domain Name	Set the name of the domain the mail server belongs to.

- ⑧ Click the [OK] button.
⑨ Select [SNMP V1 Setting].

SNMP V1 Setting window



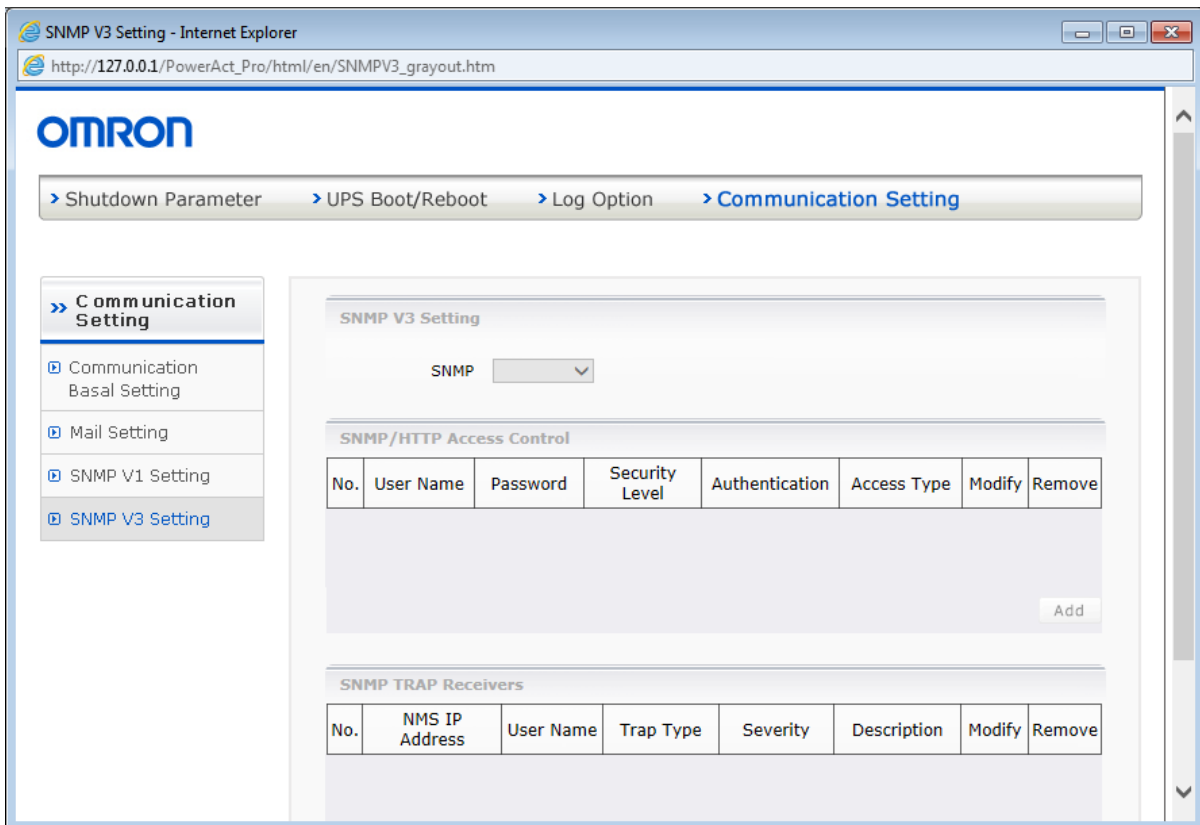
⑩ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
NMS IP Address	Set the IP address of NMS. 0.0.0.0 means that no value is set. (Example: When 192.168.7.255 is set, it means that the IP address range from 192.168.7.0 to 192.168.7.255 is set.)
Community	Set the community for the set IP address.
Access Type	Three options can be set: Access prohibited, Read, and Read/Write.
Modify	Click the icon  in the Modify column in the communication port list, and the communication port in the line that icon exists can be modified.
Remove	Click the icon  in the Remove column in the communication port list, and the communication port in the line that icon exists is deleted.


⑪ Click the [OK] button.


⑫ Select [SNMP V3 Setting].

SNMP V3 Setting window



⑬ Set each item in the setting window displayed. The following table shows the setting details and setting procedure for each item.

Item	Description and procedure
User Name	Enter the user name set in the SNMP manager. * This setting may not be required depending on the security level to be set.
Password	Enter the password set in the SNMP manager. * This setting may not be required depending on the security level to be set.
Security Level	You can set the security level for the set user among noAuthNoPriv, authNoPriv, and authPriv. Set the same level as the level set in the SNMP manager to communicate with.
Authentication	You can set the authentication method as HMAC-MD5 or HMAC-SHA. Set the same level as the level set in the SNMP manager to communicate with.
Access Type	You can select between Read Only and Read/Write.
Modify	Click the icon  in the Modify column in the communication port list, and the communication port in the line that icon exists can be modified.

Remove	Click the icon  in the Remove column in the communication port list, and the communication port in the line that icon exists is deleted.
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⑭ Click the [OK] button.

1. 1. 3 Event information type

Specify the display of a list of events occurring in the UPS and the computers (users) to which events are notified.

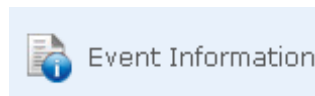
Each event can be notified to the computers (users) connected to the network every time it occurs.

Caution

No event is notified by default.

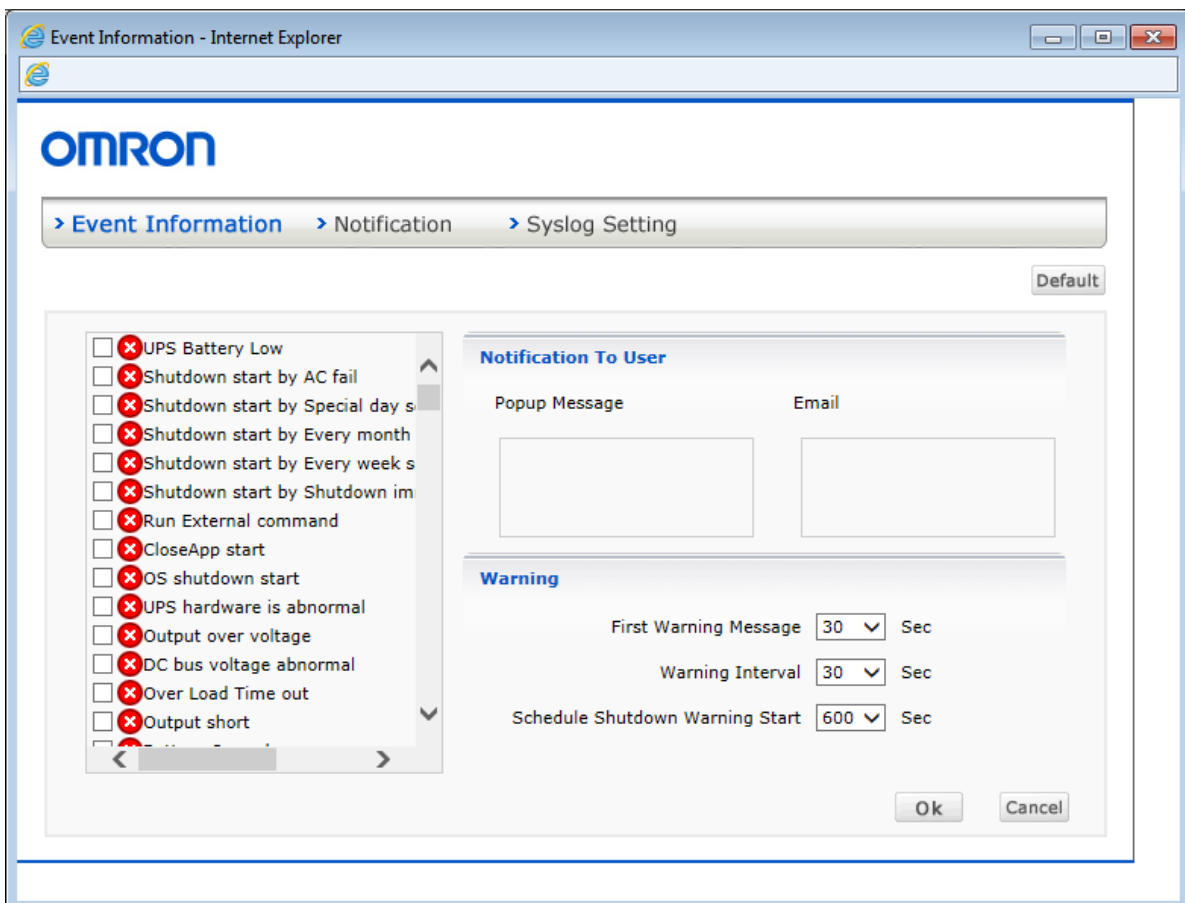
Specifying the user to which event information is notified

You can specify which event to be notified to which computer (user).












To set the above, click the button to display the Event Information window as follows.

Event Information window



The following table shows the meanings of the items in the Event Information window.

Item	Meaning								
Event details	<p>You can select a type of event information.</p> <p>For details on each type of event information see "4.3.1 Event information details".</p> <p>The meanings of symbols put before event details are as follows:</p> <table border="1"> <thead> <tr> <th>Symbol</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td></td> <td>Critical</td> </tr> <tr> <td></td> <td>Warning</td> </tr> <tr> <td></td> <td>Information</td> </tr> </tbody> </table>	Symbol	Meaning		Critical		Warning		Information
Symbol	Meaning								
	Critical								
	Warning								
	Information								
First Warning Message	Notify a warning message after the set period of time elapses.								
Warning Interval	Display the warning message at the set time intervals after the first warning message.								
Schedule Shutdown Warning Start	Display a warning message related to the start of the schedule action before starting schedule action.								

How to notify event messages

Two types of event notification methods are available. One is to send a popup message automatically displayed in the user's computer screen and the other is to send a notification via email.

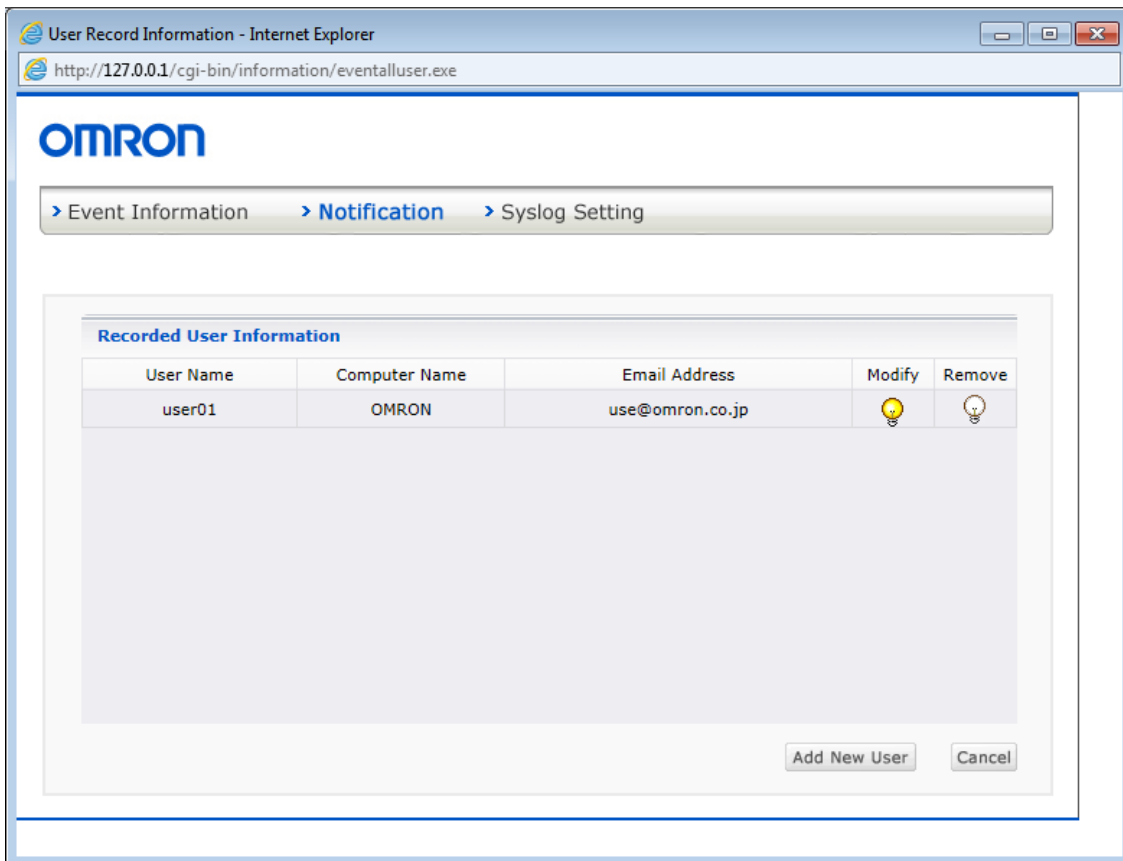
To notify the user via popup message, click the user name in the [Popup Message] area in [Notification To User], and to notify the user via email, click the user name displayed in the [Email] area in [Notification To User].

Registering a notification destination

To register a user to which you want to notify messages, click [Notification]. The Recorded User Information window below appears.

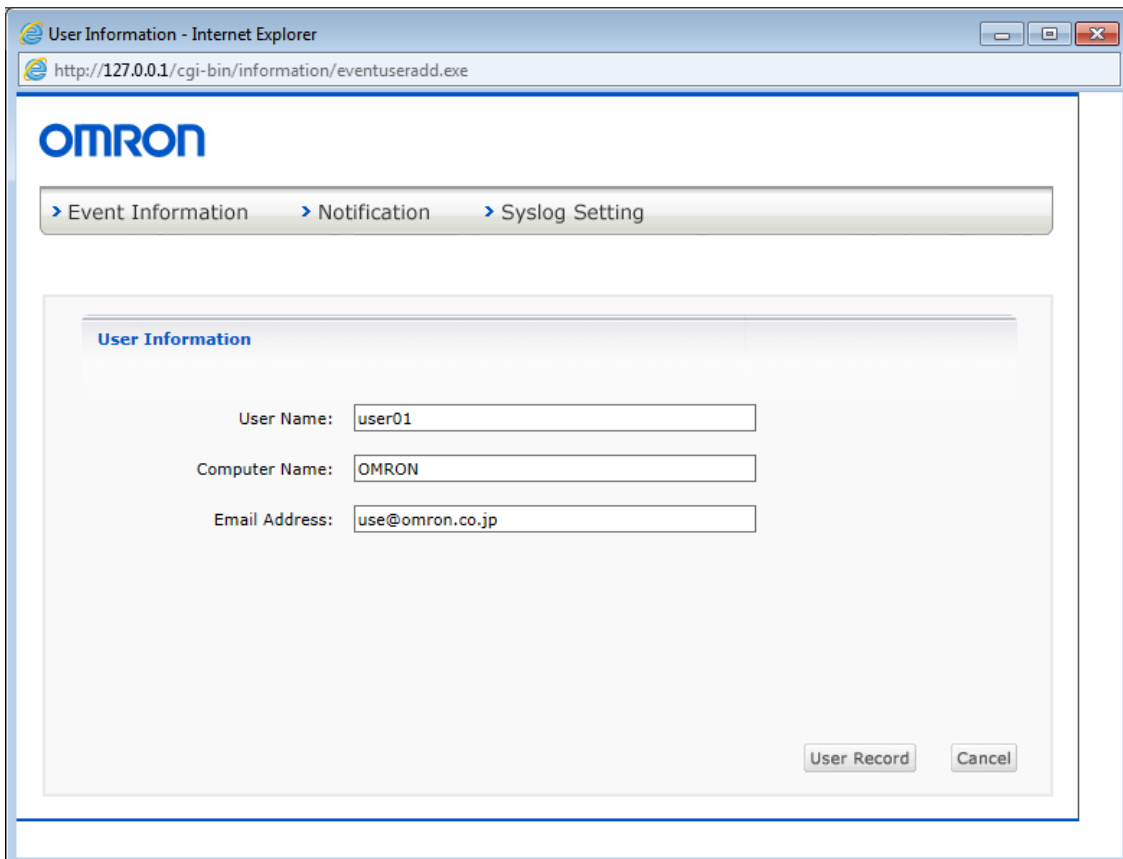
This window displays the registered notification destination users in list form.

Recorded User Information window



Add a user as follows:


- ① Click the [Add New User] button. The User Record window below appears.




- ② Enter the user name, user's computer, or email address as needed.
- ③ Click the [User Record] button.

When the [Cancel] button is clicked, the newly recorded user information is not registered.

Modify recorded user information as follows:

- ① In the Recorded User Information window, click the button  for the user you want to modify.
- ② When the User Record window appears, select and modify the item you want to modify.

Delete recorded user information as follows:

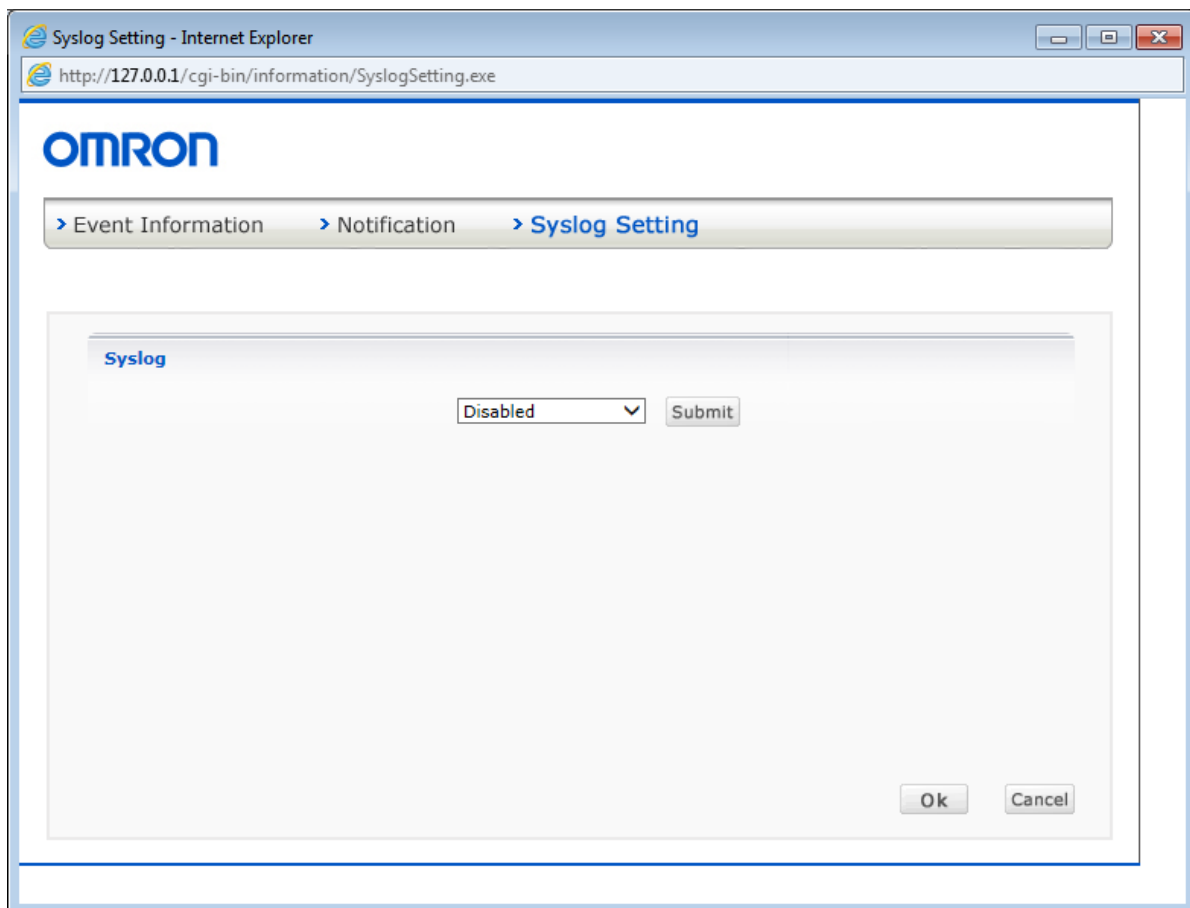
- ① In the Recorded User Information window, click the button  for the user you want to delete.

Syslog Setting

You can store log information by sending it to the Syslog server located on the network.

This setting is [Disabled] by default.

Select [Enabled] from the list and click [Submit], and you can perform the Syslog setting.

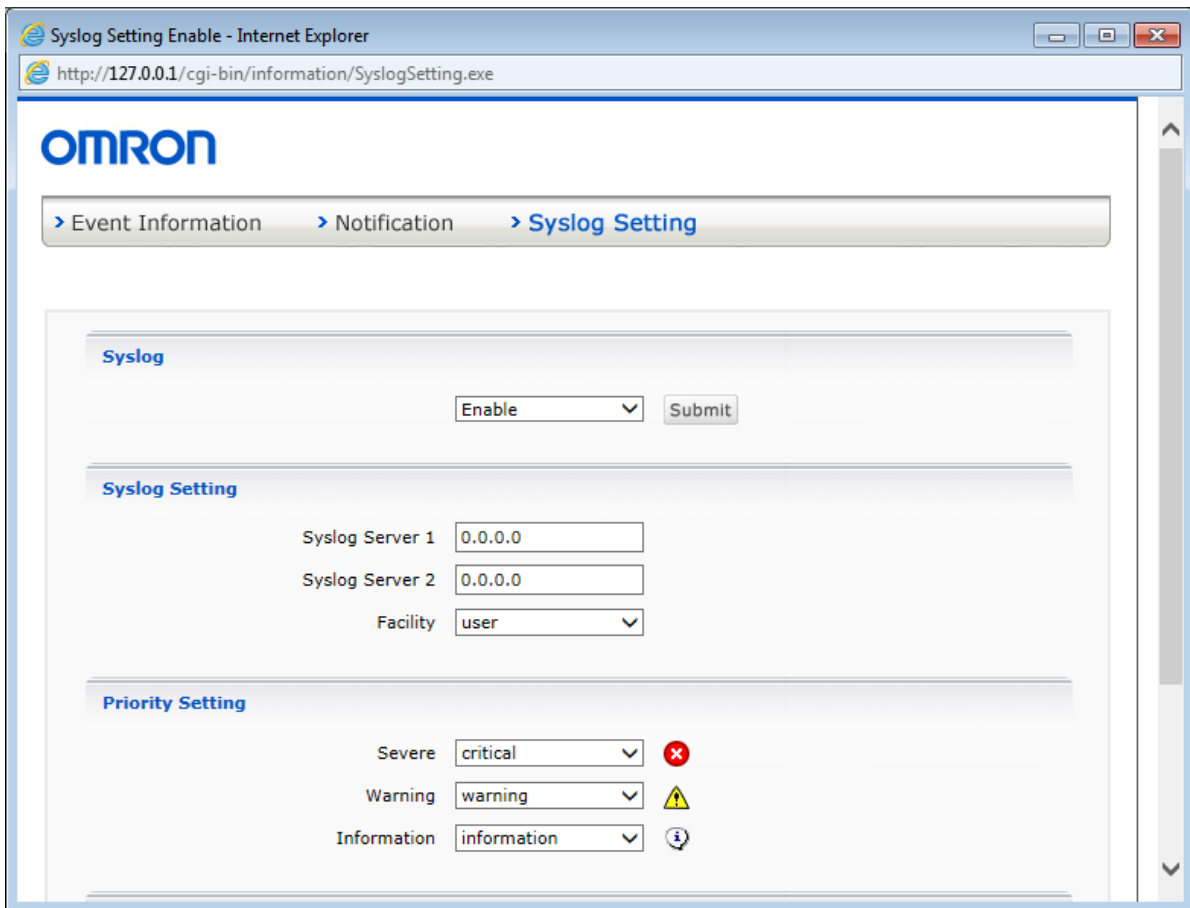


Set the Syslog function as follows:

- ① In [Syslog Setting], enter the IP address of a Syslog server and select Syslog Facility (function). Note that a maximum of two Syslog servers can be registered.
- ② In [Priority Setting], select Priority for each of the three UPS logs (critical, warning, and information).
- ③ In [Language Setting], select the language used for logs to be sent to the server(s). English or Japanese can be selected.
- ④ Click [Submit].

Note

- For details on Syslog Facility and Priority, see UNIX documents related to Syslog.
- To set Syslog, consult with your network administrator.



1. 1. 4 Schedule

You can specify the time and date to stop/start the UPS or perform self-diagnosis on the UPS.

Besides a time and date, you can also specify the interval such as weekly and monthly.

The use of the UPS by setting the above is called a "schedule action".

You can display schedule actions in list form, and modify or remove the setting for an individual action.

Caution

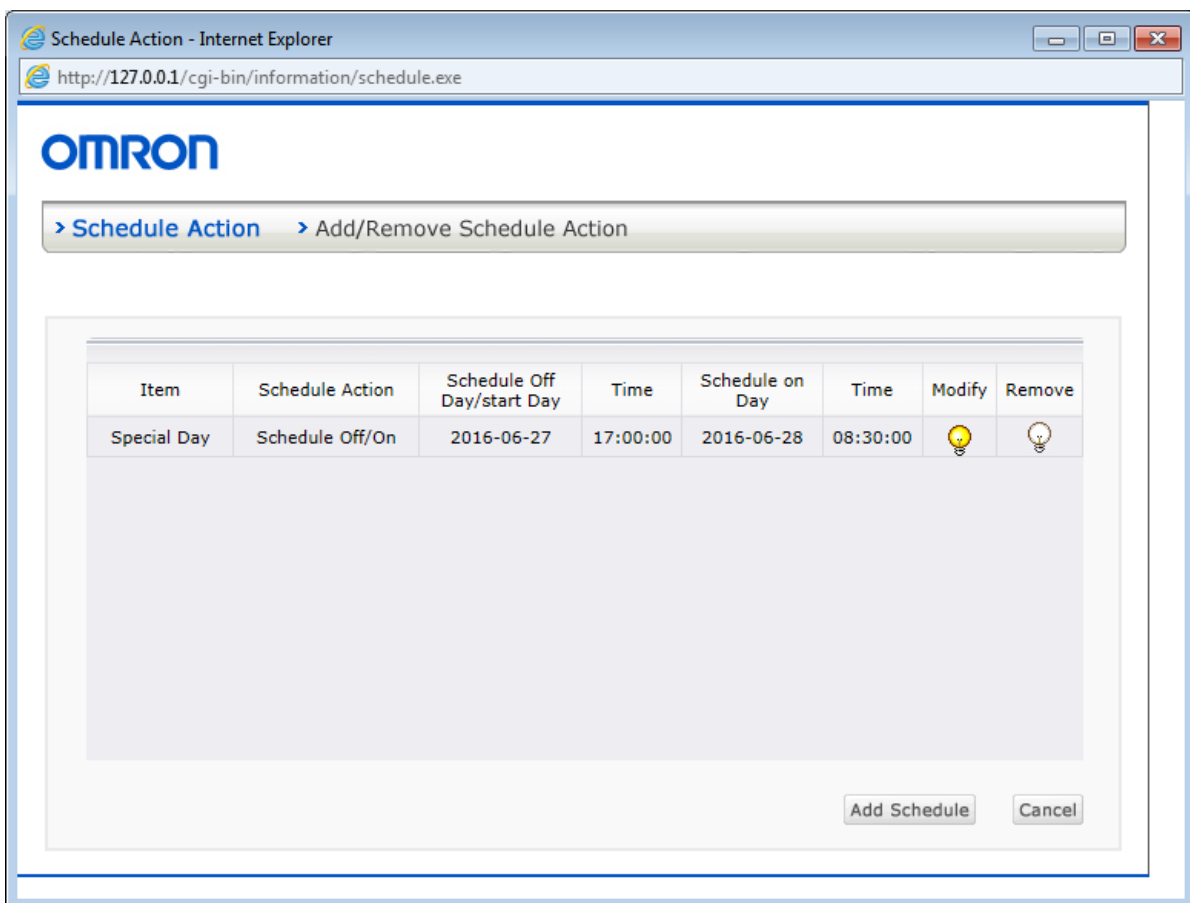
If an error such as a power failure occurs during a schedule action, the current schedule action is canceled, and the UPS operates according to the setting of the next schedule action.

Displaying a list of schedule actions



You can display the statuses of schedule actions in list form.

Click [Schedule].

Schedule Acton window



The following table shows the meanings of the items in the Schedule Action window.

Item	Description
Item	Displays the action interval of a set schedule action. "Special Day", "Weekly", or "Monthly" is displayed.
Schedule Action	Displays the description of a schedule action. "Schedule Off/On" (stop/start UPS), "Backup Time Test", or "Self Test" is displayed.
Schedule Off Day/start Day	Displays a date to stop a schedule action.
Time	Displays an Off time.
Schedule on Day	Displays a date to start a schedule action.
Time	Displays a start time.
Modify	 Click the button to modify the setting for the schedule action.
Remove	 Click the button to remove the setting for the schedule action.
Add Schedule	You can add a new schedule action.
Cancel	The set schedule action is not registered. Exit the Schedule Action window.

Adding/modifying a schedule action

You can add or modify a schedule action.

Click [Add/Remove Schedule Action].

Add/Remove Schedule Action window

The following table shows the meanings of the items in the Add/Remove Schedule Action window.

Item	Meaning
schedule action item:	Click the action item field to display the pulldown menu, and select an option among "Schedule Off/Schedule On", "Backup Time Test", and "Self Test" displayed in the menu by clicking it. And click the specified day filed to display the pulldown menu, and select an option among "Special Day", "Weekly", and "Monthly" displayed in the menu by clicking it.
OK	Register the schedule action with the set contents.
Cancel	The set schedule action is not registered. Exit the Add/Remove Schedule Action window.

How to set a schedule action

This section describes the setting procedures for adding, modifying, and removing a schedule action.


[Setting procedure for newly registering a schedule action]

- ① Click the [Add Schedule] button in the Schedule Action window.
- ② The Add/Remove Schedule Action window appears.
- ③ Select a schedule action item.


Schedule action item	Description
Schedule Off/Schedule On	Stops or starts the system.
Backup Time Test	A test for correcting the estimated backup time.
Self Test	Conducts a self test.
Special Day	Performs the schedule action on the specified day.
Weekly	Performs the schedule action on the set day of the week every week.
Monthly	Performs the schedule action on the set day every month.

- ④ Specify the date and time for stopping the system, or conducting a self test or backup time test.
- ⑤ Select whether to start the system according to the schedule action.
To start the system, click the Enable "Schedule On Day" check box.
[To start the system according to the schedule action]
Specify the values for Schedule On Day and Time, and go to procedure ⑥.
[If not starting the system according to the schedule action]
Schedule On Day and Time are disabled. Go to procedure ⑥.
- ⑥ Click the [OK] button.
- ⑦ When the Schedule Action window appears again, check the contents of the set schedule action, and be sure to click the [Submit] button.
If you exit the Schedule Action window without clicking the [Submit] button, the set schedule action will not be registered.

[Setting procedure for modifying a set schedule action]

Click the button  for the schedule action you want to modify in the Schedule Action window.

[Setting procedure for removing a set schedule action]

Click the button  for the schedule action you want to remove in the Schedule Action window.

Precautions

For models in which the Enable "Schedule On Day" check box cannot be selected in the Add/Remove Schedule Action window, you need to set as follows:

- [To start at the specified time on the specified date]
Select the System menu, [Configuration], then [UPS Boot/Reboot], and set "On" for [UPS Auto Reboot] so that the system automatically reboots.
- [If not starting at the specified time on the specified date]
Select the System menu, [Configuration], then [UPS Boot/Reboot], and set "Off" for [UPS Auto Reboot] so that the system does not automatically reboot.

1. 1. 5 Close

Finish displaying Power Act Pro Monitor.

1. 2 Log

1. 2. 1 Event log

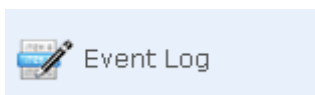
You can record operating states arising in the UPS such as an AC line failure, schedule shutdown, configuration, and battery test.

Recorded data can be read using [Microsoft Excel].

Event Log window

Time	Event Items
2016-06-27 12:58:54	[Schedule (Special Day)] is added [OMRON-PC (Master) 2016/06/27 17:00:00, S schedule on 2016/06/28 08:30:00]
2016-06-27 12:06:45	[Syslog function] is disabled [OMRON-PC(Master)]
2016-06-27 12:06:07	[Syslog function] is enabled [OMRON-PC(Master)]
2016-06-27 12:04:23	"Notification" is changed. [OMRON-PC (Master) (Add:user01)]
2016-06-27 11:50:21	[Redundant Power Supply Setting] is changed [OMRON-PC(Master) 1+N]
2016-06-27 11:49:28	[Redundant Power Supply Setting] is changed [OMRON-PC(Master) N+1]
2016-06-27 11:12:28	Communication establish [UPS(Model:BN100T / Communication Port:USB 1)] Start communication with UPS.
2016-06-27 11:12:26	Start Agent.
2016-06-27 11:11:48	Stop Agent.
2016-06-27 11:10:20	AC recover [UPS(Model:BN100T / Communication Port:USB 1)] Online mode start.
2016-06-27 11:09:55	AC line failure [UPS (Model:BN100T / Communication Port:USB 1)] Shutdown Action Starts Within 1 Minute(s)

- Either select [Log], then [Event Log], or click the button



in the tool bar, and the Event Log window appears.

- Click [Save] to save event log data into a file.
- Click [Remove] to erase event log data.
- Click [Print] to print data.
- Click [Log Option] to transition to the Log Option window in Configuration.

1. 2. 2 Data log

For data logs, you can record various kinds of data such as time, input voltage, output voltage, connection load, input frequency, and UPS internal temperature.

Recorded data can be read using [Microsoft Excel].

Data Log window

The screenshot shows the DataTime web interface in Internet Explorer. The browser address bar displays `http://127.0.0.1/cgi-bin/information/datalog.exe?upsport=0`. The page features the OMRON logo at the top left. Below the logo, there is a "Data Time" section with a radio button selected for "Last 1week" and a "Submit" button. A date range selector is also present, showing "From 2016 Year 06 Month 20 Day To 2016 Year 06 Month 27 Day".

The main content area contains two tables. The first table, titled "Data Time", shows summary statistics for various parameters:

Item Input	Input Voltage (V)	Output Voltage (V)	Input Frequency (Hz)	Output Frequency (Hz)	Load Level (%)	Internal Temperature (°C)	Backup Time (Min)	Battery Voltage (V)	Battery Level (%)
Maximum Value	103.5	103.5	50.0	50.0	6	26.5	432	54.4	95
Minimum Value	0.0	100.0	0.0	49.9	3	25.5	188	52.3	90
Average Value	100.2	102.0	49.1	49.9	4	26.0	387	54.3	92

The second table displays a list of recorded data points with columns for "Date and Time" and the same ten parameters as the first table:

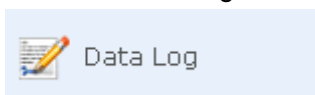
Date and Time	Input Voltage (V)	Output Voltage (V)	Input Frequency (Hz)	Output Frequency (Hz)	Load Level (%)	Internal Temperature (°C)	Backup Time (Min)	Battery Voltage (V)	Battery Level (%)
2016-06-27 13:01:29	101.0	101.8	50.0	50.0	4	25.6	432	54.3	95
2016-06-27 13:00:29	100.7	101.3	49.9	49.9	4	25.5	432	54.3	95
2016-06-27 12:59:29	100.6	100.7	49.9	49.9	4	25.5	432	54.4	95
2016-06-27 12:58:29	100.4	100.8	50.0	50.0	4	25.5	432	54.3	95
2016-06-27 12:57:29	100.4	100.2	49.9	49.9	4	25.5	432	54.4	95

At the bottom of the interface, there are navigation buttons: "Next Page", "Last Page", "Save", "Remove", "Print", "Log Option", and "Ok".

The following table shows the types of information that can be recorded in data logs and the meaning of each type of information.

Input Voltage	Commercial outlet voltage level
Output Voltage	Voltage level of electric power output from the UPS
Input Frequency	Commercial outlet frequency level
Output Frequency	Output frequency level of electric power output from the UPS
Load Level	Load of equipment connected to the UPS
Internal Temperature	Temperature inside the UPS
Backup Time	Displays the estimated backup time.
Battery Voltage	Charging voltage level of the battery
Battery Level	Charged level of the battery

- Either select [Log], then [Data Log], or click the button



in the tool bar, and the Data Log window appears.

- Click [Save] to save data log data into a file.
- Click [Remove] to delete data log data.
- Click [Print] to print data.
- Click [Log Option] to transition to the Log Option window in Configuration.

1. 2. 3 CO2 Log

For CO2 logs, you can record quantities of CO2 generated by the use of the UPS calculated based on the predetermined co-efficient.

Recorded data can be read using [Microsoft Excel].

CO2 Log window

Date Time	Power Of Load Device(kWh)	CO2 Quantity(tCO2)	Quotiety(tCO2/kWh)
2016- 6-27 17:02:39	0.027866	0.000015	0.000555
2016- 6-27 16:02:39	0.029113	0.000016	0.000555

The following table shows the types of information that can be set and recorded in CO2 logs and the meaning of each type of information.

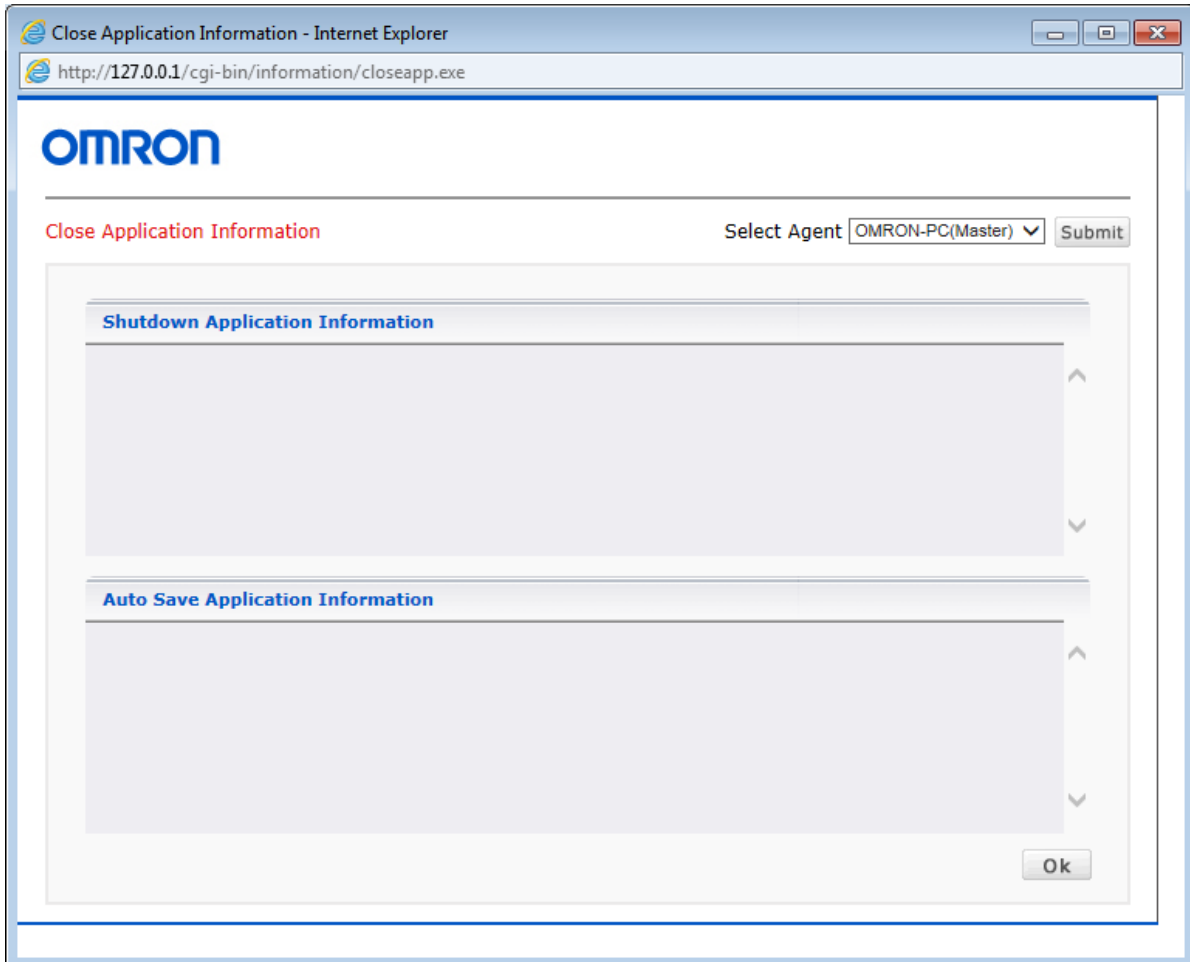
CO2 Discharge	Formula for calculating the amount of CO2. Enter a coefficient and click the [Submit] button to change the existing coefficient.
Time	Set the time period for data to display in a log. When the Time radio button is selected, Last Day, Last Week, or Last Month can be set from the pulldown menu on the right. When the From To radio button is selected, a specific period can be set. When the setting operation is completed, press the [Submit] button.
Begin Date	Logging start date
End Date	Time the latest log is obtained
Total CO2 Discharge	Amount of CO2 from the time the UPS started to be used until now

Total CO2 Discharge for a period	Amount of CO2 for a specific period
Time	Time of day the latest log was obtained
Power Of Load Device	Amount of electricity consumed by the UPS at the time of the log
CO2 Quantity	Amount of CO2 discharged by the UPS at the time of the log
Quotiety	Quatiety in the calculation formula at the time of the log

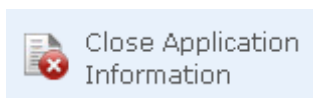
1. 2. 4 Close Application

Before shutting down the system, the Windows version of PowerAct Pro automatically saves the opened files and closes the applications. The following window displays information about the closed applications and saved files.

Close Application Information window



Either select [Log], then [Close Application Information], or click the button



in the tool bar, and the Close Application Information window appears.

1. 3 UPS Setting

1. 3. 1 Buzzer

You can set whether to make the buzzer of the UPS sound during backup operation.

If you do not want to make the buzzer sound during backup operation, set "Off".

If you want to make the buzzer sound during backup operation, set "On".

[Setting procedure]

Start Power Act Pro Monitor.

From the menu, select [UPS Setting], then [Buzzer], and select "On" or "Off" for the buzzer.

Precautions

Depending on the UPS model, set the buzzer using the "Setting Switches" at the back of the UPS unit.

1. 3. 2 Battery Auto Test

You can select whether to automatically diagnose the battery deterioration state.

When "Yes" is selected, the UPS diagnoses the battery state every four weeks.

[Setting procedure]

- ① Start Power Act Pro Monitor.
- ② From the menu, select [UPS Setting], then [Battery Auto Test], and select "Yes" or "No" for the battery auto test.

Precautions

If the result of the battery auto test is "Abnormal", there may be a problem with the UPS such as internal circuit failure, overload, short-circuit, internal temperature problem, low battery voltage, and battery deterioration. During battery auto test, make sure that the connected load does not fluctuate. Depending on the UPS to be used, a test may not be conducted correctly.

[Handling in the case of battery deterioration]

Be sure to replace the battery if it is deteriorated.

If you use the UPS in the state of "Battery Weak", in the event of an AC line failure in the UPS, backup operation cannot be normally performed.

[Handling in the event of an abnormality in the UPS]

If an abnormality occurs in the UPS, stop both the UPS and the system.

1. 3. 3 Input/Output Setting

You can select whether to set 100V or 115V for the output voltage of the UPS.

To connect a device with 115VAC power specification to the UPS, change the output voltage to 115VAC for use.

Note that when the output voltage is changed to 115VAC, 115VAC applies during both commercial operation and backup operation.

In addition, you can set the voltage sensitivity for the UPS to detect a power failure. For details, see the table below.

[Setting procedure]

Start Power Act Pro Monitor.

From the menu, select [UPS Setting], then [Input/Output Setting], and select the set output voltage and voltage sensitivity.

For details on each setting option, see the table in [Input/Output Setting setting items and descriptions].

Setting option	Description
100V/High sensitivity	The output voltage is 100VAC. The power failure detection voltage sensitivity is high sensitivity.
100V/Standard sensitivity	The output voltage is 100VAC. The power failure detection voltage sensitivity is standard sensitivity.
100V/Low sensitivity	The output voltage is 100VAC. The power failure detection voltage sensitivity is set to a value lower than standard sensitivity. Select this item when backup mode arises frequently.
110V/Standard sensitivity	The output voltage is 110VAC. The power failure detection voltage sensitivity is standard sensitivity.
115V/Standard sensitivity	The output voltage is 115VAC. The power failure detection voltage sensitivity is standard sensitivity.
115V/Low sensitivity	The output voltage is 115VAC. The power failure detection voltage sensitivity is set to a value lower than standard sensitivity. Select this item when backup mode arises frequently.
120V/Standard sensitivity	The output voltage is 120VAC. The power failure detection voltage sensitivity is standard sensitivity.
200V/Standard sensitivity	The output voltage is 200VAC. The power failure detection voltage sensitivity is standard sensitivity.
220V/Standard sensitivity	The output voltage is 220VAC. The power failure detection voltage sensitivity is standard sensitivity.
230V/Standard sensitivity	The output voltage is 230VAC. The power failure detection voltage sensitivity is standard sensitivity.
240V/Standard sensitivity	The output voltage is 240VAC. The power failure detection voltage sensitivity is standard sensitivity.

Precautions

This function cannot be used depending on the UPS model.

1. 3. 4 Battery replacement schedule setting

By setting the usage start date (replacement date) for the battery, you can schedule the time to perform periodical maintenance (battery replacement) in advance.

[Setting procedure]

- ① From the menu, select [UPS Setting], then [Battery use date (Battery Changed Date)], and set the date.

Battery Change - Internet Explorer
http://127.0.0.1/cgi-bin/information/batterchange.exe?iUPSNum=0

OMRON

Start Date of UPS: 2016 - 06 - 27

New battery replace date: 2016 - 06 - 27

Last battery replace date: 2016-06-27

Next battery replace date (Plan): 2017 - 06 - 27

[Notice]
The date input should be later than 2000-01-01.

Submit Cancel

- ② Click the [Submit] button to set the replacement date. When [Cancel] is clicked, the specified date will not be set.

1. 4 Manual operation

1. 4. 1 Shutdown Immediately

Execute Shutdown Immediately to immediately start shutting down the OS. You can also set the delay time for shutdown. After the OS is shut down completely, the UPS is automatically stopped.

If you want to restart the UPS, turn on the power switch of the UPS.

1. 4. 2 Buzzer Test

When Buzzer Test is executed, the buzzer of the UPS sounds for one second.

1. 4. 3 Self Test

Self Test is a function to perform diagnosis to see if each function of the UPS operates correctly. A self test can be conducted in two ways: To be automatically conducted by an schedule action, and to be conducted manually. We recommend conducting a self test on the UPS periodically using a schedule action.

[Setting procedure]

[To conduct a self test manually]

- ① Start Power Act Pro Monitor.
- ② From the menu, select [Manual Operation], then [Self Test], and perform diagnosis.

[To conduct a self test using an schedule action]

- ① Start Power Act Pro Monitor.
From the menu, select [System], then {Schedule}, and start the Schedule Action window.
- ② Click the [Add Schedule] button in the Schedule Action window.
- ③ The Add/Modify Schedule Action window appears.
- ④ From the schedule action items, select [Scheduled Self Test Day], then Day (Special Day/Weekly/Monthly).
- ⑤ Specify the scheduled self test day and time.
- ⑥ Click the [OK] button.
- ⑦ When the Schedule Action window appears again, check the contents of the set schedule action, and be sure to click the [Submit] button.
If you exit the Schedule Action window without clicking the [Submit] button, the set schedule action will not be registered.

Precautions

If the result of the self test is "Abnormal", there may be a problem with the UPS such as internal circuit failure, overload, short-circuit, internal temperature problem, low battery voltage, and battery deterioration.

[Handling in the case of battery deterioration]

Be sure to replace the battery if it is deteriorated.

If you use the UPS in the state of "Battery Weak", in the event of an AC line failure in the UPS, backup operation cannot be normally performed.

[Handling in the event of an abnormality in the UPS]

If an abnormality occurs in the UPS, stop both the UPS and the system.

1. 4. 4 Backup Time Test

A test for correcting the estimated backup time. Conduct this test with actual load connected.

[Setting procedure]

- ① Start Power Act Pro Monitor.
- ② From the menu, select [Manual Operation], then [Backup Time Test], and select "Execute" for a backup time test.
To cancel the "Backup Time Test", select "Stop".

Precautions

This function cannot be used depending on the UPS model.
--

1. 4. 5 Outlet B/C (Control)

You can start/stop the output of outlet B or C with control functionality.

[Setting procedure]

- ① Start Power Act Pro Monitor.
- ② From the menu, select [Manual Operation], then [Outlet B(Control)] (or [Outlet C(Control)], and select "Output start" or "Output stop".

1. 4. 6 Send UPS Command

This function is used for such purposes as maintenance. Do not use it in normal operation.

1. 5 Help

1. 5. 1 Online Help

Online Help contains various kinds of information such as the functions of PowerAct Pro and setting procedures.

Before using this software, be sure to start Online Help and view the explanations of the functions and the setting details.

Note

In Internet Explorer 10 and 11 may not be displayed correctly.

1. 5. 2 Version Information

Version Information contains such information as the version information of this software and copyright information.

1. 5. 3 System Information

System Information contains information about the Master Agent installed computer, connected UPS, and so on.

1. 5. 4 Administrator Information

You can register information about the contact point of the system administrator, and so on in Administrator Information.

1. 5. 5 Product Home Page

Select this in a network that allows you to connect to the Internet to display Omron Website.

1. 5. 6 User Registry Page









Select this in a network that allows you to connect to the Internet to display the PowerAct Pro user registration homepage.

2 Monitor Tool Bar

The tool bar displays icon buttons.

Click an icon button to start its corresponding function.

For the description about each function, see [PowerAct Pro Monitor menu].

Icon button	Description
 Configuration	Displays [Configuration].
 Schedule	Displays [Schedule].
 Event Information	Displays [Event Information].
 Event Log	Displays [Event Log].
 Data Log	Displays [Data Log].
 Close Application Information	Displays [Close Application Information].
 Net Search	Displays the Automatic Agent window. If the Automatic Agent Search window is already displayed, refreshes its contents.
 Help	Displays Online Help.















3 Event Information




















3. 1 Event Information Details


The table below shows major events displayed in logs or notified via email. For events that need to be handled, actions to be taken are shown in the table.

- Critical/warning events

Events notifying that action needs to be taken, such as the start of shutdown and a system abnormality.
















Mark icon	Event information	Description
	Battery Low	The UPS battery voltage dropped and the battery level is low. Starting shutdown operation. Power will become unable to be supplied if this state continues.
	Shutdown start by AC fail	Starting shutdown operation. An AC line failure has occurred.
	Shutdown start by Special day schedule action	Starting shutdown operation. The day specified for Schedule Action (Special Day) has come.
	Shutdown start by Every month schedule action	Starting shutdown operation. The day specified for Schedule Action (Monthly) has come.
	Shutdown start by Every week schedule action	Starting shutdown operation. The day specified for Schedule Action (Weekly) has come.
	Shutdown start by Shutdown immediately	Starting shutdown operation. [Shutdown Immediately] in the Manual Operation menu has been selected.
	Run External command	Run the external command set to be executed at shutdown.
	Close App start	Starting the operation to exit the running application.
	OS shutdown start	Starting OS shutdown operation.
	UPS hardware is abnormal	A hardware abnormality occurred.
	Self test(Function Test): NG(UPS hardware abnormal)	Stop the UPS and connected devices.
	Battery Auto Test result: Not OK (UPS hardware abnormal)	Then, remove all the connected devices from the UPS, and turn on the "RUN" switch for the UPS to start operation.
	Output over voltage	If a hardware abnormality occurs again, the internal circuit could be faulty.
	DC bus voltage abnormal	



















	Over Load Time out	
	Output short	
	Battery Over charge	
	Battery under charge	
	Over Temperature	
	FAN Fail	
	TX Fail	
	Battery Weak	The battery is deteriorated. Replace the battery. Otherwise, normal backup operation cannot be performed..
	Self test(Function Test): NG(Battery Weak)	
	Battery Auto Test result: Not OK (Battery Weak)	
	AC line failure	An abnormality occurred in the input power supply. Starting backup operation.
	Schedule Shutdown Warning Start(Special Day)	The time for the shutdown start (Special Day, Monthly, Weekly) specified by the schedule setting has come. Before starting shutdown operation, notify a start warning.
	Schedule Shutdown Warning Start(Every Month)	
	Schedule Shutdown Warning Start(Every Week)	
	Shutdown Pause	Pausing shutdown operation. Shutdown Pause operation was performed during AC Fail Delay Time.
	Over Load	Too many devices are connected. The output capacity rating for the UPS is exceeded. In this state, normal backup operation cannot be performed in the event of an AC line failure. Reduce the number of connected devices until the UPS error indication disappears.
	Output condition (Boost up / down)	The input voltage was too high or too low. The output voltage was adjusted.
	Battery Disconnect	The battery is not connected correctly. Check the battery connector.
	Bypass	Starting bypass operation.



















	Communication error	Cannot communicate with the UPS.
---	---------------------	----------------------------------



















- Information events













Notification events for checking the operating condition of PowerAct Pro such as the restart of operation, normal end of a test, and change of setting values.















Mark icon	Event information	Description
	Input power supply recovered	Starts commercial operation.
	Communication established	Started communication with the UPS.
	Agent Start	Starts Agent.
	Agent Stop	Stops Agent.
	Self test: OK	The result of the self check is OK and the UPS operates normally.
	Battery Auto Test result: OK	
	Setting for "Select UPS Outlet" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "AC Fail Delay Time" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "Shutdown Start Delay Time" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "Shutdown Need Time" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "コンセント出力停止までの時間@@Outlet Output Stop Delay Time@@" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "Outlet Delay Time of UPS Boot Up" changed	The setting was changed in the UPS Boot/Reboot window.
	Setting for "Select OS Shutdown Mode" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "UPS Auto Reboot" changed	The setting was changed in the UPS Boot/Reboot window.
	Setting for "First Warning	The setting was changed in the Event




















	Message" changed	Information window.
	Setting for "Warning Interval" changed	The setting was changed in the Event Information window.
	Setting for "Schedule Action Start Warning" changed	The setting was changed in the Event Information window.
	Setting for the "maximum number of event logs to store" changed	The setting was changed in the Log Option window.
	Setting for the "maximum number of data logs to store" changed	The setting was changed in the Log Option window.
	Setting for "Record Interval Time(On Line)" changed	The setting was changed in the Log Option window.
	Setting for "Record Interval Time(On Battery)" changed	The setting was changed in the Log Option window.
	Setting for "Communication Port" added	The setting was changed in the Communication Setting window.
	Setting for "Communication Port" deleted	The setting was changed in the Communication Setting window.
	Setting related to "Network Port Address" changed	The setting was changed in the Communication Setting window.
	Setting for "SMTP Mail" changed	The setting was changed in the Communication Setting window.
	Setting for "Schedule Action (Special Day)" added	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action (Monthly)" added	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action (Weekly)" added	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action (Special Day)" changed	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action (Monthly)" changed	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action (Weekly)" changed	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action (Special Day)" deleted	The setting was changed in the Schedule Action window.
	Setting for "Schedule Action	The setting was changed in the Schedule Action







	(Monthly)" deleted	window.
	Setting for "Schedule Action (Weekly)" deleted	The setting was changed in the Schedule Action window.
	Setting for "Run External Command Executed Time" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "External Command" added	The setting was changed in the Shutdown Parameter window.
	Setting for "External Command" deleted	The setting was changed in the Shutdown Parameter window.
	Setting for "Notification To User" changed	The setting was changed in the Event Information window.
	Setting for "Battery use date (Battery Changed Date)" updated	The setting was changed in the Battery use date (Battery Changed Date) window.
	Default value for "Shutdown Parameter" set	The setting was changed in the Shutdown Parameter window.
	Default value set for "UPS Boot/Reboot"	The setting was changed in the UPS Boot/Reboot window.
	Default value set for "Log"	The setting was changed in the Log Option window.
	Default value for "Communication Setting" set	The setting was changed in the Communication Setting window.
	Setting for "Event Information" changed	The setting was changed in the Event Information window.
	Setting for "Notification" changed	The setting was changed in the Event Information window.
	"Buzzer Test" executed	[Buzzer Test] in the Manual Operation menu was executed.
	"Self Test" executed	[Self Test] in the Manual Operation menu was executed.
	Setting for "Buzzer" changed	The setting for [Buzzer] was changed in the UPS Setting menu.
	Setting for "Battery Auto Test" changed	The setting for [Battery Auto Test] was changed in the UPS Setting menu.
	"Backup Time Test" started	[Backup Time Test] in the Manual Operation menu was selected to start a test.
	"Backup Time Test" completed	The test started by [Backup Time Test] in the

		Manual Operation menu was completed.
	"Backup Time Test" canceled	The test started by [Backup Time Test] in the Manual Operation menu was interrupted.
	Output from "Outlet B(Control)" started	Output from Outlet B was started by [Outlet B(Control)] in the Manual Operation menu.
	Output from "Outlet B(Control)" stopped	Output from Outlet B was stopped by [Outlet B(Control)] in the Manual Operation menu.
	Output from "Outlet C(Control)" started	Output from Outlet C was started by [Outlet C(Control)] in the Manual Operation menu.
	Output from "Outlet C(Control)" stopped	Output from Outlet C was stopped by [Outlet C(Control)] in the Manual Operation menu.
	Setting for "Input/Output Setting" changed	The setting for [Input/Output Setting] was changed in the UPS Setting menu.
	"Battery Unit" added	A battery unit was added in UPS whose battery unit is expandable (BN150XR, etc.).
	Resuming shutdown	The shutdown operation interrupted using Agent's menu was resumed.
	Setting for "UPS Auto Stop" changed	The setting was changed in the Shutdown Parameter window.
	Setting for "Page Refresh Rate" changed	The setting was changed in the Communication Setting window.
	Setting for "Redundant Power Supply Setting" changed	The setting was changed in the Shutdown Parameter window.
	"Syslog function" enabled	The setting was changed in the Syslog Setting window.
	"Syslog function" disabled	The setting was changed in the Syslog Setting window.
	Setting for "Syslog Setting" changed	The setting was changed in the Syslog Setting window.
	Setting for "Priority Setting" changed	The setting was changed in the Syslog Setting window.
	Setting for "Syslog Language Setting" changed	The setting was changed in the Syslog Setting window.
	Setting for "Setting" changed	The setting was changed in the Wake On LAN window.
	Setting for "Transmission Timing" changed	The setting was changed in the Wake On LAN window.

	Setting for "Wake On LAN Destination" added	The setting was changed in the Wake On LAN window.
	Setting for "Wake On LAN Destination" modified	The setting was changed in the Slave Agent Registration window.
	Setting for "Wake On LAN Destination" deleted	The setting was changed in the Slave Agent Registration window.
	Stopping output from Outlet A due to non-conformance with ping monitor judgment criteria	Output from Outlet A was stopped because the execution result of [Ping Monitor] was "Fail".
	Stopping output from Outlet B due to non-conformance with ping monitor judgment criteria	Output from Outlet B was stopped because the execution result of [Ping Monitor] was "Fail".
	Stopping output from Outlet C due to non-conformance with ping monitor judgment criteria	Output from Outlet C was stopped because the execution result of [Ping Monitor] was "Fail".
	Stopping/starting output from Outlet A due to non-conformance with ping monitor judgment criteria	Output from Outlet A was stopped and restarted because the execution result of [Ping Monitor] was "Fail".
	Stopping/starting output from Outlet B due to non-conformance with ping monitor judgment criteria	Output from Outlet B was stopped and restarted because the execution result of [Ping Monitor] was "Fail".
	Stopping/starting output from Outlet C due to non-conformance with ping monitor judgment criteria	Output from Outlet C was stopped and restarted because the execution result of [Ping Monitor] was "Fail".
	Restarting the monitoring of output from Outlet A due to conformance with ping monitor judgment criteria	The monitoring of output from Outlet A was restarted because the execution result of [Ping Monitor] was "Pass".
	Restarting the monitoring of output from Outlet B due to conformance with ping monitor judgment criteria	The monitoring of output from Outlet B was restarted because the execution result of [Ping Monitor] was "Pass".
	Restarting the monitoring of output from Outlet C due to conformance with ping	The monitoring of output from Outlet C was restarted because the execution result of [Ping Monitor] was "Pass".

	monitor judgment criteria	
	No response to ping from several devices connected to Outlet A	As a result of [Ping Monitor] execution, no response came from devices set to Outlet A.
	No response to ping from several devices connected to Outlet B	As a result of [Ping Monitor] execution, no response came from devices set to Outlet B.
	No response to ping from several devices connected to Outlet C	As a result of [Ping Monitor] execution, no response came from devices set to Outlet C.
	Stopping the UPS due to non-conformance with ping monitor judgment criteria	The UPS was stopped because the execution result of [Ping Monitor] was "Fail".
	Rebooting the UPS due to non-conformance with ping monitor judgment criteria	The UPS was stopped/rebooted because the execution result of [Ping Monitor] was "Fail".
	Remote computer shut down by a Ping Monitor script	As a result of [Ping Monitor] execution, remote computer script shutdown operation was performed.
	SNMP service started	The setting was changed in the Communication Setting window.
	SNMP service stopped	The setting was changed in the Communication Setting window.
	SNMP V1 started	The setting was changed in the Communication Setting window.
	SNMP V1 stopped	The setting was changed in the Communication Setting window.
	SNMP V3 started	The setting was changed in the Communication Setting window.
	SNMP V3 stopped	The setting was changed in the Communication Setting window.
	SNMP V1 Access Right added	The setting was changed in the SNMP V1 Setting window.
	SNMP V1 Access Right deleted	The setting was changed in the SNMP V1 Setting window.
	SNMP V1 Access Right changed	The setting was changed in the SNMP V1 Setting window.

	SNMP V3 Access Right added	The setting was changed in the SNMP V3 Setting window.
	SNMP V3 Access Right deleted	The setting was changed in the SNMP V3 Setting window.
	SNMP V3 Access Right changed	The setting was changed in the SNMP V3 Setting window.
	SNMP V1 TRAP added	The setting was changed in the SNMP V1 Setting window.
	SNMP V1 TRAP deleted	The setting was changed in the SNMP V1 Setting window.
	SNMP V1 TRAP changed	The setting was changed in the SNMP V1 Setting window.
	SNMP V3 TRAP added	The setting was changed in the SNMP V3 Setting window.
	SNMP V3 TRAP deleted	The setting was changed in the SNMP V3 Setting window.
	SNMP V3 TRAP changed	The setting was changed in the SNMP V3 Setting window.
	Script Shutdown setting added	The setting was changed in the Script Shutdown window.
	Script Shutdown setting deleted	The setting was changed in the Script Shutdown window.
	Script Shutdown setting changed	The setting was changed in the Script Shutdown window.
	Setting for "Logoff Time" changed	The setting was changed in the Communication Setting window.
	Maximum backup time changed	The setting was changed in the Other Device window.
	UPS Start Delay Time setting changed	The setting was changed in the UPS Boot/Reboot Setting window.
	USP Cold Start setting changed	The setting was changed in the UPS Boot/Reboot Setting window.
	Send Output Delay Command setting changed	The setting was changed in the UPS Boot/Reboot Setting window.
	UPS reboot condition changed	The setting was changed in the UPS Boot/Reboot Setting window.
	Notification Delay Time setting changed	The setting was changed in the Event Log Option window.

	POP Before SMTP setting changed	The setting was changed in the Mail Setting window.
	Administrator setting changed	The setting was changed in the Administrator Information window.
	Script Shutdown started	Script Shutdown was executed.
	VMware end processing started	VMware end processing was executed.
	Broadcast setting changed	The setting was changed in the Communication Setting window.
	Ping setting changed	The setting was changed in the Ping Monitor Setting window.

3. 2 External command execution by event information

By associating a type of event information with a command in advance, when an event occurs, this function can automatically execute the command associated with that event.

[Setting procedure]

- ① Start text editor software such as Notepad.
- ② Write an association between an event and a command to be executed in the following format.
Event code = Command name
Event code: Write a PowerAct Pro event code in hexadecimal digits.
(For details on event codes, see "Event code list".)
Command name: Write a command to be executed with full path.
(Besides a Windows command, an .exe file created by the user on his/her own can be also used)
Example: 0x409 = C:\OMRON\test.exe
When the event 0x409 (Communication error) occurs, test.exe in the C:\OMRON folder is executed.
You can write a maximum of 10 lines with "event code = command name" counted as one line.
(= a maximum of 10 rules can be set.)
- ③ Save the created file in the installation folder of PowerAct Pro (Default: "C:\Program Files\PowerAct Pro(Master Agent)") as the file name "ExternalSetting.ini".
- ④ Restart PowerAct Pro Agent.
From the icon menu in the task tray, run "Agent Stop", then "Agent Start" to restart.

Alternatively, restart the computer where PowerAct Pro is installed.
Then, this function is enabled.

[Event code list]

The events shown as follows can be set.

"Critical" category	
Event code	Description
0x800	Battery Low
0x801	Shutdown start (AC fail)
0x802	Shutdown start by Special day schedule action
0x803	Shutdown start by Every month schedule action
0x804	Shutdown start by Every week schedule action
0x805	Shutdown start by Shutdown immediately
0x806	Run External command
0x807	Close App start
0x808	OS shutdown start
0x809	UPS hardware is abnormal
0x80A	Output over voltage
0x80B	DC bus voltage abnormal
0x80C	Over Load Time out
0x80D	Output short
0x80E	Battery Over charge
0x80F	Battery under charge
0x810	Over Temperature
0x811	FAN Fail
0x812	TX Fail
0x813	Battery Weak
0x814	Self test(Function Test): NG(Battery Weak)
0x815	Self test(Function Test): NG(UPS hardware abnormal)
0x816	Battery Auto Test: NG(Battery Weak)
0x817	Battery Auto Test: NG(UPS hardware abnormal)
"Warning" category	
Event code	Description
0x400	AC line failure
0x401	Schedule Shutdown Warning Start(Special Day)
0x402	Schedule Shutdown Warning Start(Every Month)
0x403	Schedule Shutdown Warning Start(Every Week)
0x404	Shutdown Pause
0x405	Over Load
0x406	Output condition (Boost up / down)

0x407	Battery Disconnect
0x408	Bypass
0x409	Communication error
"Information" category	
Event code	Description
0x000	Recovery of input power supply
0x001	Establishment of communication
0x002	Agent Start
0x003	Agent Stop
0x004	Self test: OK
0x005	Battery Auto Test result: OK
0x006	Setting for "Select UPS Outlet" changed
0x007	Setting for "AC Fail Delay Time" changed
0x008	Setting for "Shutdown Start Delay Time" changed
0x009	Setting for "Shutdown Need Time" changed
0x00A	Setting for "コンセント出力停止までの時間@@Outlet Output Stop Delay Time@@" changed
0x00B	Setting for "Outlet Delay Time of UPS Boot Up" changed
0x00C	Setting for "Select OS Shutdown Mode" changed
0x00D	Setting for "UPS Auto Reboot" changed
0x00E	Setting for "First Warning Message" changed
0x00F	Setting for "Warning Interval" changed
0x010	Setting for "Schedule Action Start Warning" changed
0x011	Setting for "Maximum Event Log Record Time" changed
0x012	Setting for "Maximum Data Log Record Time" changed
0x013	Setting for "Record Interval Time(On Line)" changed
0x014	Setting for "Record Interval Time(On Battery)" changed
0x015	Setting for "Communication Port" added
0x016	Setting for "Communication Port" deleted
0x017	Setting related to "Network Port Address" changed
0x018	Setting for "SMTP Mail" changed
0x019	Setting for "Schedule Action (Special Day)" added
0x01A	Setting for "Schedule Action (Monthly)" added
0x01B	Setting for "Schedule Action (Weekly)" added
0x01C	Setting for "Schedule Action (Special Day)" changed
0x01D	Setting for "Schedule Action (Monthly)" changed
0x01E	Setting for "Schedule Action (Weekly)" changed
0x01F	Setting for "Schedule Action (Special Day)" deleted

0x020	Setting for "Schedule Action (Monthly)" deleted
0x021	Setting for "Schedule Action (Weekly)" deleted
0x022	Setting for "Run External Command Executed Time" changed
0x023	Setting for "External Command" added
0x024	Setting for "External Command" deleted
0x025	Setting for "Notification To User" changed
0x026	Setting for "Battery use date (Battery Changed Date)" updated
0x027	Default value for "Shutdown Parameter" set
0x028	Default value set for "UPS Boot/Reboot"
0x029	Default value set for "Log"
0x02A	Default value for "Communication Setting" set
0x02B	Setting for "Event Information" changed
0x02C	Setting for "Notification" changed
0x02E	"Buzzer Test" executed
0x02F	"Self Test" executed
0x030	Setting for "Buzzer" changed
0x031	Setting for "Battery Auto Test" changed
0x032	"Backup Time Test" started
0x033	"Backup Time Test" completed
0x034	"Backup Time Test" canceled
0x035	Output from "Outlet B(Control)" started
0x036	Output from "Outlet B(Control)" stopped
0x037	Output from "Outlet C(Control)" started
0x038	Output from "Outlet C(Control)" stopped
0x039	Setting for "Input/Output Setting" changed
0x03A	"Battery Unit" added
0x03B	Resuming shutdown
0x065	Setting for "UPS Auto Stop" changed
0x066	Setting for "Page Refresh Rate" changed
0x067	Setting for "Redundant Power Supply Setting" changed
0x068	"Syslog function" enabled
0x069	"Syslog function" disabled
0x06A	Setting for "Syslog Setting" changed
0x06B	Setting for "Priority Setting" changed
0x06C	Setting for "Syslog Language Setting" changed
0x06D	Setting for "Setting" changed
0x06E	Setting for "Transmission Timing" changed
0x06F	Setting for "Wake On LAN Destination" added

0x070	Setting for "Wake On LAN Destination" modified
0x071	Setting for "Wake On LAN Destination" deleted
0x072	Stopping output from Outlet A due to non-conformance with ping monitor judgment criteria
0x073	Stopping output from Outlet B due to non-conformance with ping monitor judgment criteria
0x074	Stopping output from Outlet C due to non-conformance with ping monitor judgment criteria
0x075	Stopping/starting output from Outlet A due to non-conformance with ping monitor judgment criteria
0x076	Stopping/starting output from Outlet B due to non-conformance with ping monitor judgment criteria
0x077	Stopping/starting output from Outlet C due to non-conformance with ping monitor judgment criteria
0x078	Restarting the monitoring of output from Outlet A due to conformance with ping monitor judgment criteria
0x079	Restarting the monitoring of output from Outlet B due to conformance with ping monitor judgment criteria
0x07A	Restarting the monitoring of output from Outlet C due to conformance with ping monitor judgment criteria
0x07B	No response to ping from several devices connected to Outlet A
0x07C	No response to ping from several devices connected to Outlet B
0x07D	No response to ping from several devices connected to Outlet C
0x07E	Stopping the UPS due to non-conformance with ping monitor judgment criteria
0x07F	Rebooting the UPS due to non-conformance with ping monitor judgment criteria
0x080	Remote computer shut down by a Ping Monitor script
0x081	SNMP service started
0x082	SNMP service stopped
0x083	SNMP V1 started
0x084	SNMP V1 stopped
0x085	SNMP V3 started
0x086	SNMP V3 stopped
0x087	SNMP V1 Access Right added
0x088	SNMP V1 Access Right deleted
0x089	SNMP V1 Access Right changed
0x08A	SNMP V3 Access Right added

0x8B	SNMP V3 Access Right deleted
0x8C	SNMP V3 Access Right changed
0x8D	SNMP V1 TRAP added
0x8E	SNMP V1 TRAP deleted
0x8F	SNMP V1 TRAP changed
0x90	SNMP V3 TRAP added
0x91	SNMP V3 TRAP deleted
0x92	SNMP V3 TRAP changed
0x93	Script Shutdown setting added
0x94	Script Shutdown setting deleted
0x95	Script Shutdown setting changed
0x96	Setting for "Logoff Time" changed
0x97	Maximum backup time changed
0x98	UPS Start Delay Time setting changed
0x99	USP Cold Start setting changed
0x9A	Send Output Delay Command setting changed
0x9B	UPS reboot condition changed
0x9C	Notification Delay Time setting changed
0x9D	POP Before SMTP setting changed
0x9E	Administrator setting changed
0x9F	Script Shutdown started
0xA0	VMware end processing started
0xA1	Broadcast setting changed
0xA2	Ping setting changed

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OMRON OMRON Corporation

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