M0011166

SANUPS

UPS Control System

SANUPS SOFTWARE

User Guide

Web / Telnet

SANYO DENKI

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ENGLISH

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Table of Contents

1. Introduction

1.1 Overview

This manual describes the functions of the Web Management Tool and Telnet Terminal Tool of **SANUPS SOFTWARE**.

1.2 Conventions Used in This Manual

- Unless otherwise mentioned, **Windows** indicates **Windows OS**.
- The **default** state indicates the initial, unmodified state after the introduction of **SANUPS SOFTWARE**.
- **Browser** and **Web browser** in this guide indicate Internet Explorer.
- **UPS management software** in this guide indicates SANUPS SOFTWARE.
- **SANUPS SOFTWARE** server or UPS indicates serial/contact connection of **SANUPS SOFTWARE** with UPS.
- **PC** in this guide indicates Windows computers and **WS** indicates UNIX and Linux computers.
- **Computers** are used to indicate both PC and WS.
- IP address indicates both an **IPv4** address and **IPv6** address. Where described separately, an address is referred to as an **IPv4** address or **IPv6** address.

1.3 Required Software Environment

The required operating environment for using the following software is described below.

・Web browser supporting Java

Java applets are used when managing the LAN interface card from web browsers.
Internet Explorer 8 or later is recommended.

Notes on using web browsers

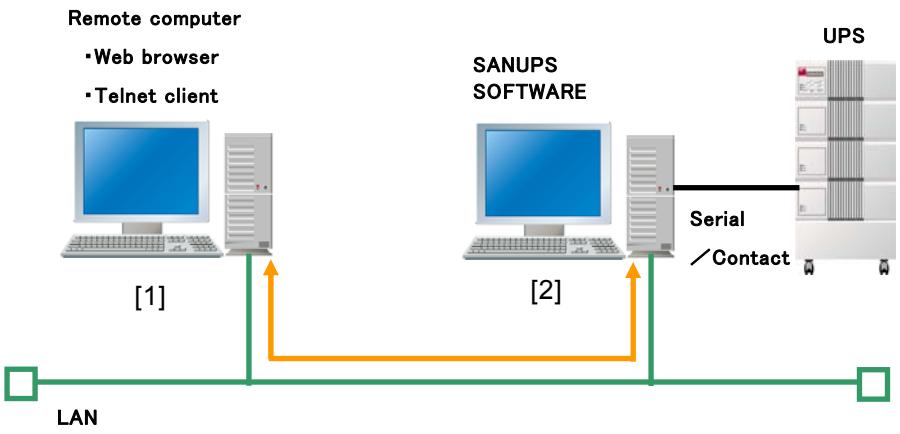
- When using web browsers
  The web browser must be able to run Java applets if you want to use the Web Management Tool on a web browser. Configure your web browser to enable Java applets
- When using Internet Explorer
  Install Oracle Java* to run Java applets on Internet Explorer.
  Java 7 or later is recommended.
  (*. Install the 32-bit version.)

・Telnet client software

Use this software when configuring the UPS with the Terminal Tool via a Telnet connection.

1.4 System Configuration

An example system configuration is shown below.



<Description of above diagram>

- Computer [2] functions as the **SANUPS SOFTWARE** server having a serial/contact connection with the UPS.
- Computer [2] is configured for network access, and enables HTTP and Telnet in Service settings. The port number can be changed to any other port, as required.
- UPS management/monitoring can be performed from a remote computer [1] by accessing the **SANUPS SOFTWARE** server from a web browser or Telnet client.

<u>If using a LAN interface card</u>
Web or Telnet connection to **SANUPS SOFTWARE** is not supported if using **SANUPS SOFTWARE** via a LAN Interface card connection.
In this case, use a web or Telnet connection for the LAN Interface card.

2. Explanation of the functions of the Web management tool

2.1 Starting the Web Management Tool from a Web Browser

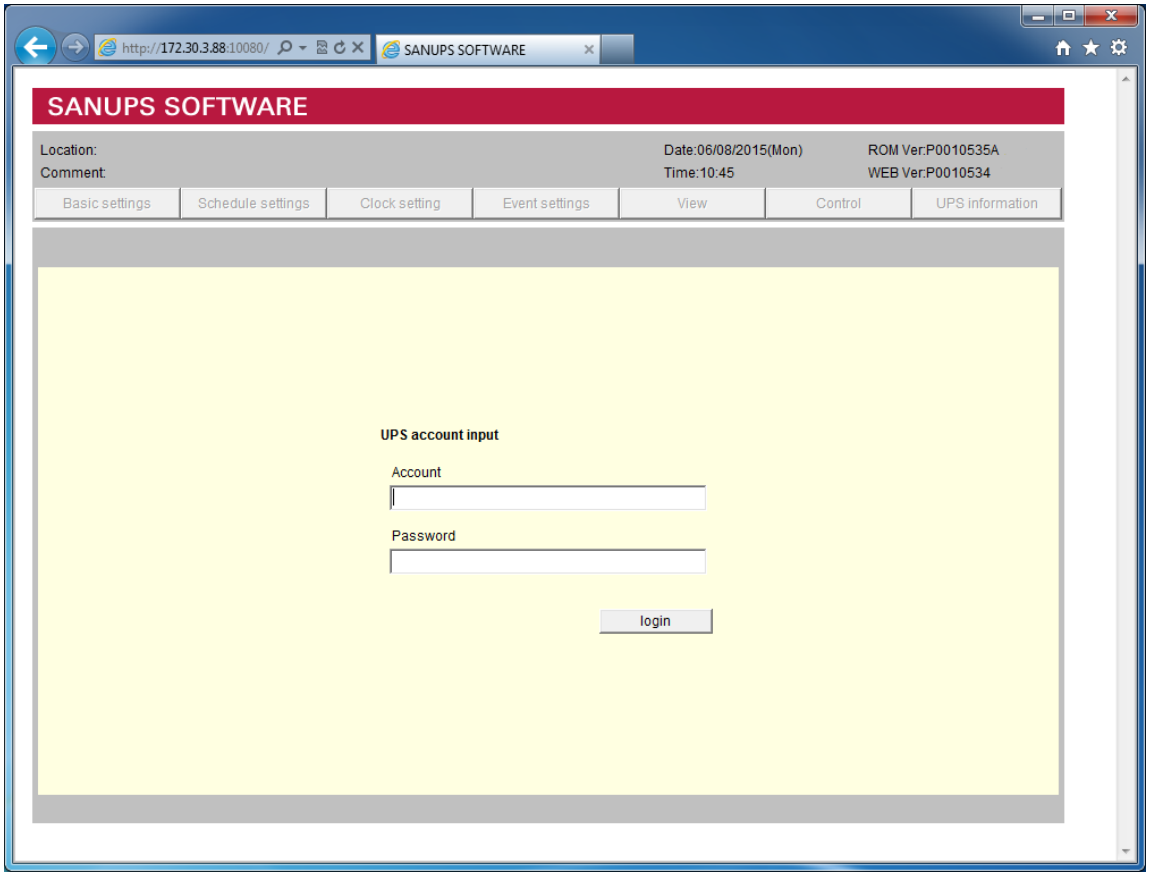
[1] Start the web browser.

[2] Enter the IP address and port number of the HTTP server for the UPS (**SANUPS SOFTWARE** server) in the address bar of the web browser.

Example) If IP address(IPv4 address) is **172.30.3.88** and port number is **10080** (default)

http://172.30.3.88 : 10080/

The following is displayed in the web browser.



Example) If IP address(IPv6 address) is **fdb6:a6ed:b3d0:3::12:3** and port number is **10080** (default)

http://[fdb6:a6ed:b3d0:3::12:3]:10080/

About used port numbers
When connecting from a web browser, connect by specifying port number 10080 (default). To use a different port number, change the port number in the Service settings of **SANUPS SOFTWARE**.

[3] Enter the account and password in single-byte characters using the keyboard.
The following table describes the default values for account information.

Account : **upsadmin**

Password : **UpsAdmin** (case sensitive)

The web management tool "main screen" is displayed if account authentication is successful.

<Note>
You can modify the account information. See "2.10 Modifying login accounts on the UPS".

2.2 List of the Web management tool functions

The Web management tool can be used to configure the UPS and to monitor the operating status.

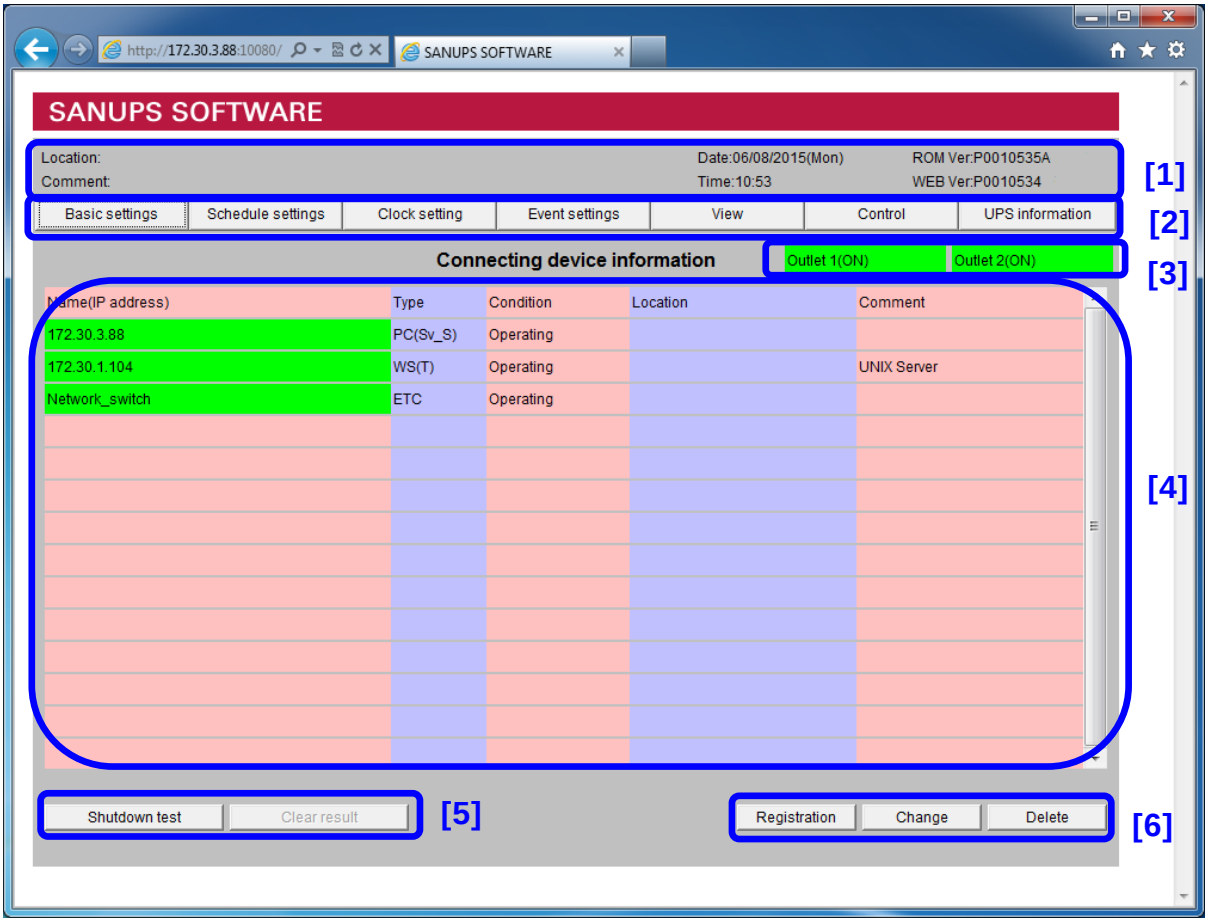
The following sections describe the functions of the web management tool.

For an overview of each function, refer to the functions in the following table.

Item	Description
2.3 Main screen of the web management tool	Describes each item of the main screen. Describes each menu item and the display items of the main screen.
2.4 Registering and editing devices with the UPS	Describes how to register devices with the UPS, and how to modify the registration details for registered devices.
2.5 Deleting a registered device from UPS	Describes how to delete a device registered with the UPS.
2.6 Configuring the Wake On LAN function	Describes how to configure the Wake On LAN function for a registered device.
2.7 Configuring UPS basic settings	Describes the network information, control operation, and other settings of the UPS.
2.8 Configuring delay time on UPS power outlets	Describes how to configure the On/Off delay time of UPS power outlets.
2.9 Configuring service settings	Describes the HTTP and Telnet settings.
2.10 Changing the UPS login account	Describes how to change the account information when accessing the UPS remotely.
2.11 E-mail function	Describes the UPS e-mail function.
2.12 Configuring the e-mail server	Describes how to configure the e-mail server.
2.13 About scheduled operations	Describes the UPS scheduling functions.
2.14 Enabling and disabling scheduled operations	Describes enable and disable the scheduled operations.
2.15 Configuring a weekly schedule	Describes how to configure a weekly schedule.
2.16 Configuring a schedule for a specific date	Describes how to configure a schedule for a specific date.
2.17 Checking the configured scheduled	Describes how to check a configured schedule.
2.18 About event settings	Describes the event settings.
2.19 Configuring event log settings	Describes how to set the conditions for recording an entry in the event log.
2.20 Configuring WS script execution settings	Describes WS script execution settings for when an event occurs.
2.21 Editing WS script execution settings	Describes how to edit a WS script.
2.22 Testing WS script execution operation	Describe the test function for WS scripts.
2.23 Configuring event notification e-mail transmissions	Describes the mail send function for when an event occurs.
2.24 Checking the UPS status and event log	2.24 Checking the UPS status and event log
2.25 Controlling the UPS	Describes the UPS On/Off control and battery check control from remote connections.
2.26 Checking UPS device information	Describes the UPS information display functions.
2.27 Performing a shutdown test	Describes the shutdown test function.

2.3 Main screen of the web management tool

Main screen of the web management tool (assuming a UPS with power distribution control.)



Screen structure

No.	Description
[1]	Displays the location of the UPS, time(*), and program version information.
[2]	Main menu buttons Use these buttons to configure each item and display menus such as status display.
[3]	Displays the output status of the UPS. ・The status of each outlet is displayed if the UPS has power distribution control. ・The status is displayed as follows if the UPS does not have power distribution control. UPSCondition : Start
[4]	Displays information on the registered devices.
[5]	You can test shutting down the registered device.
[6]	You can register devices connected to the UPS, modify and delete the information.

(*) The displayed time is for the computer where the web browser is running, not the time on the UPS.

Main menu functions

The following table lists the main menu functions.

Menu/button	Function name	Description
Basic settings	Basic settings	You can specify the UPS device location and add comments.
	UPS control setting	You can configure time settings for operations such as shutdown, and configure operations at a power failure.
	Power distribution control settings	You can specify the delay for turning ON and OFF the power distribution output. This function is available if the UPS is equipped with power distribution control.
	Service settings	You can configure service settings such as Web, Telnet.
	Account settings	You can modify accounts to log in to the UPS.
	E-mail settings	You can configure the e-mail server.
Schedule settings*	Operation schedule settings	You can enable or disable scheduled operations.
	Schedule settings for a specified date	You can configure the schedule for a specific date.
	Weekly schedule settings	You can configure weekly schedule settings.
	Scheduled confirmation	You can display the time chart of the configured schedule.
Clock setting*	Clock setting	You can set the clock on the UPS.
Event settings	Event-log settings	You can enable or disable logging for each event.
	WS script settings	You can enable or disable WS script execution.
	E-mail settings	You can enable or disable e-mail transmission for each event. You can configure e-mail transmission address.
View	UPS real-time view*	You can display the UPS status and measurement values
	Event-log view	You can display the event log recorded in the UPS.
Control*	UPS start up	You can turn the UPS ON.
	UPS stop	You can turn the UPS OFF.
	Start battery check	You can start a battery check.
	Stop battery check	You can stop the battery check.
UPS Information*	UPS information	You can display information for the UPS.

(*)These functions are available only when using serial connection with the UPS.

UPS output status display

The following information is displayed depending on the type of UPS.

・The UPS status is displayed if the UPS is not equipped with power distribution control.

Status display	Description
Start	The UPS output is ON.
Stop	The UPS output is OFF.
Power failure	A power failure is taking place.
Breakdown	The UPS has a fault.

*The status is not displayed if a serial communications error occurs between the UPS unit and **SANUPS SOFTWARE** when the computer starts. If a serial communications error occurs when the computer is running, the web management tool will continue to show the status prior to when the serial communications error occurred.

・The status of outlet 1 (OUTPUT1) and outlet 2 (OUTPUT2) is displayed if the UPS has power distribution control.

Status display	Description
Outlet 1 (ON)	Output of outlet 1 (OUTPUT1) is ON
Outlet 2 (ON)	Output of outlet 2 (OUTPUT2) is ON
Outlet 1 (OFF)	Output of outlet 1 (OUTPUT1) is OFF
Outlet 2 (OFF)	Output of outlet 2 (OUTPUT2) is OFF

Connecting device information

The following table describes the "types" of registered devices that are displayed in connecting device information.

Type	Device type	Remark
PC(Sv_S)	PC(serial connection)	UPS management software operating PC (Server)
PC(Sv_C)	PC(contact connection)	UPS management software operating PC (Server)
WS(Sv_S)	WS(serial connection)	UPS management software operating WS (Server)
WS(Sv_C)	WS(contact connection)	UPS management software operating WS (Server)
PC	PC(network connection)	UPS management software operating PC (Client)
WS	WS(network connection)	UPS management software operating WS (Client)
WS(T)	WS(Telnet connection)	
ETC	The others device	

The following table describes the [Condition] of registered devices that are displayed in [Connecting device information].

Operational status	Description
Start	The device is started.
Error	The UPS management program is stopped. Or Communication cannot be performed normally.
Stop	The device is stopped.
Shutdown	The device is being shut down.

*For WS(T) devices, the Start/Stop state is determined by network access availability. If the network is not connected, Stop is displayed.

*If the **SANUPS SOFTWARE** server has been shut down, the correct status cannot be displayed because the state cannot be acquired using the web management tool.

2.4 Registering and editing devices with the UPS

To shut down a computer supplied with power from a UPS, device registration using this function is required.

Up to 50 devices can be registered.

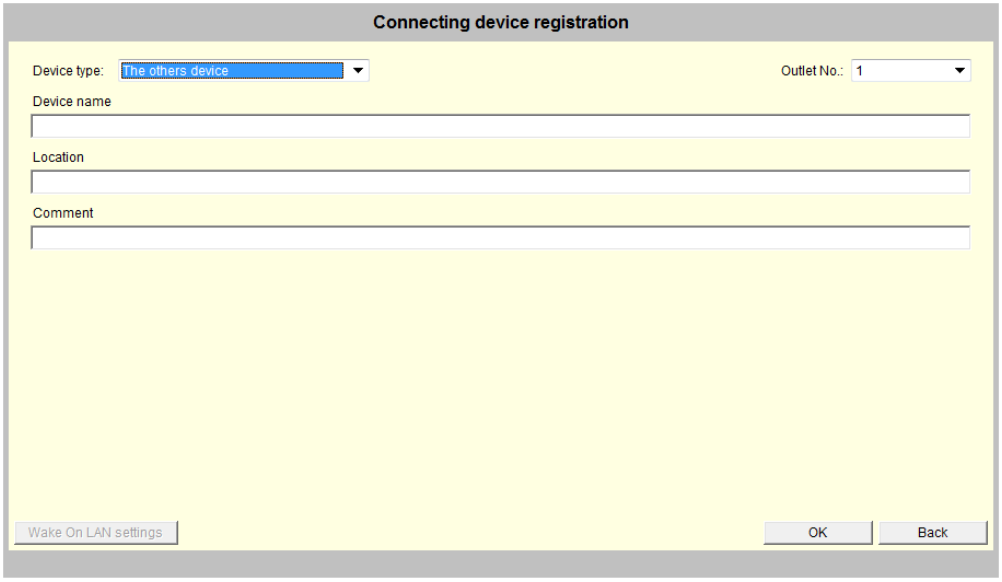
2.4.1 Registration

[Procedure]

Click the [Registration] button on the main screen.

The [Connecting device registration] screen is displayed.

[Screen description]



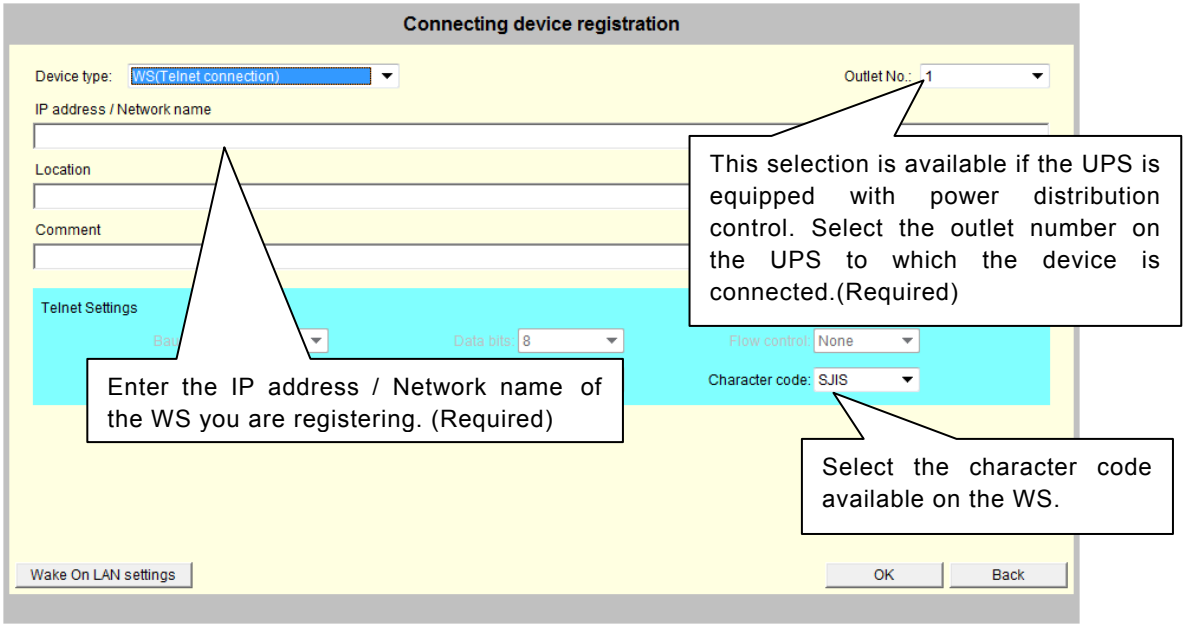
Displayed item	Description	Remarks
Device type	Select the type of the device to register.(Required)	
Outlet No.	This selection is available if the UPS is equipped with power distribution control. Select the outlet number on the UPS to which the device is connected. (Required)	
Device name	Enter the name of the device. The device name is displayed in the list of registered devices on the main screen.(Required)	Alphanumeric characters (names with only numerals are not permitted)
Location	Enter the device location (This field can be left blank.)	
Comment	Enter a comment. (This field can be left blank.)	

Select a device from [Device type].

[Device type] item	Description
WS(Telnet connection)	WS for shutting down using Telnet login connected via a network.
The others device	Device that does not require shutdown.

A PC/WS running UPS management software cannot **register**/**edit**/**delete** from the web management tool of the UPS. Perform these operations from the UPS management software configuration tool.

Registering a WS (Telnet connection)

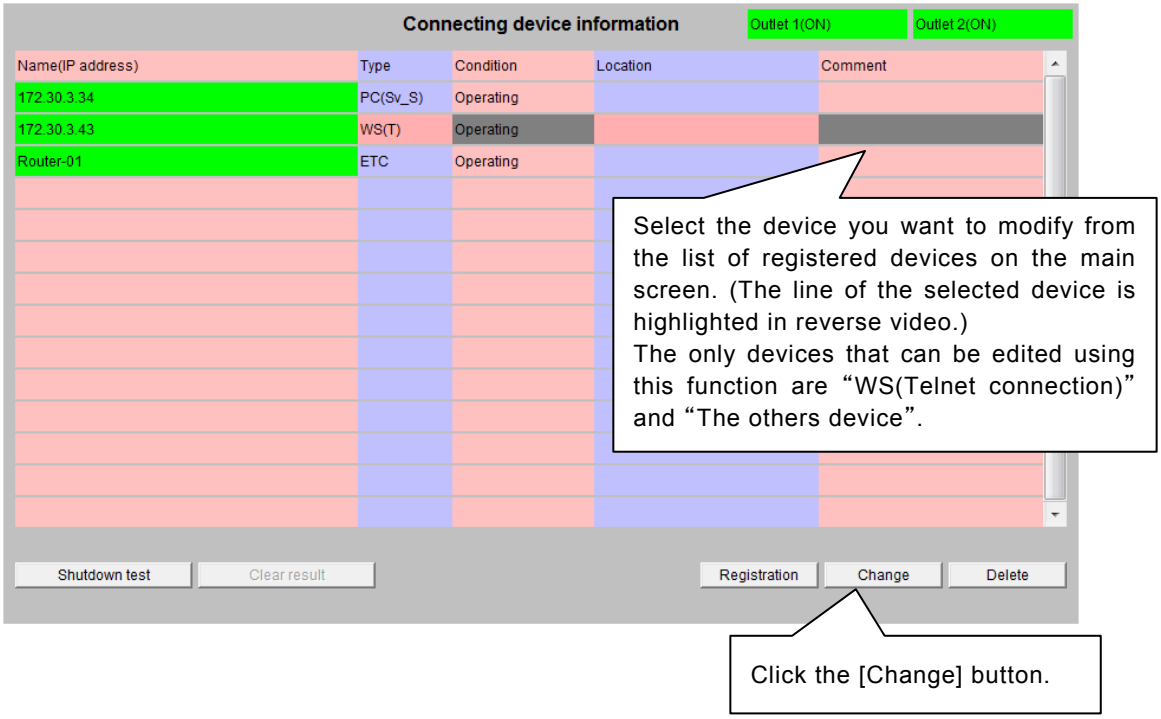


Go to "2.20" to configure the Telnet login procedure and shutdown procedure for the registered WS.

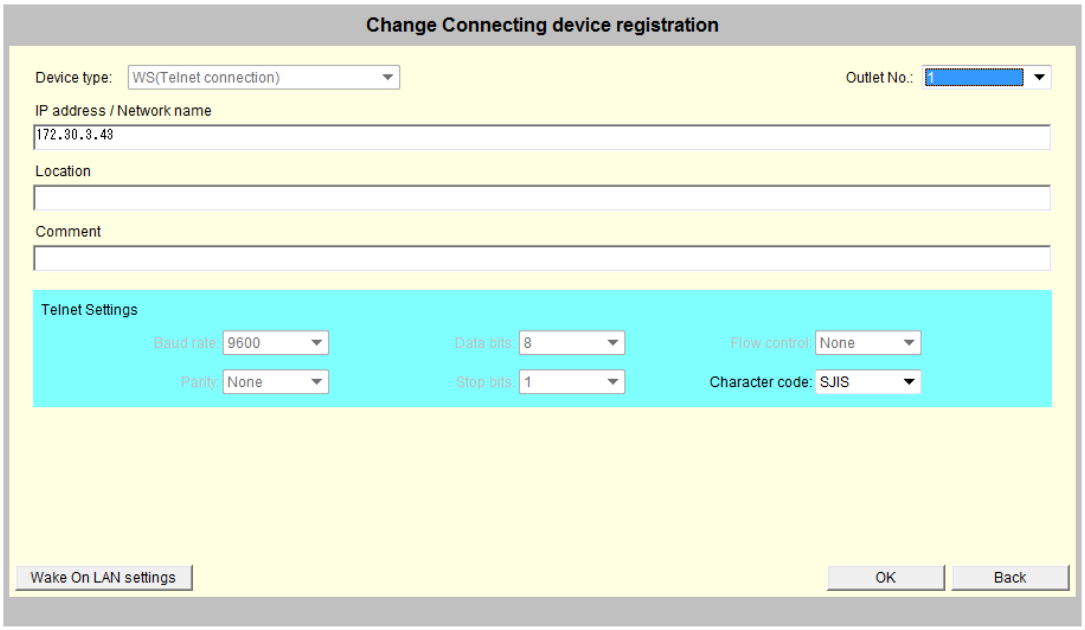
For details about the Wake On LAN function, see “2.6 Configuring the Wake On LAN function.”

2.4.2 Change

[Procedure]



The [Change connecting device registration] screen is displayed.
Edit the registered information.
Only items you can modify are enabled.

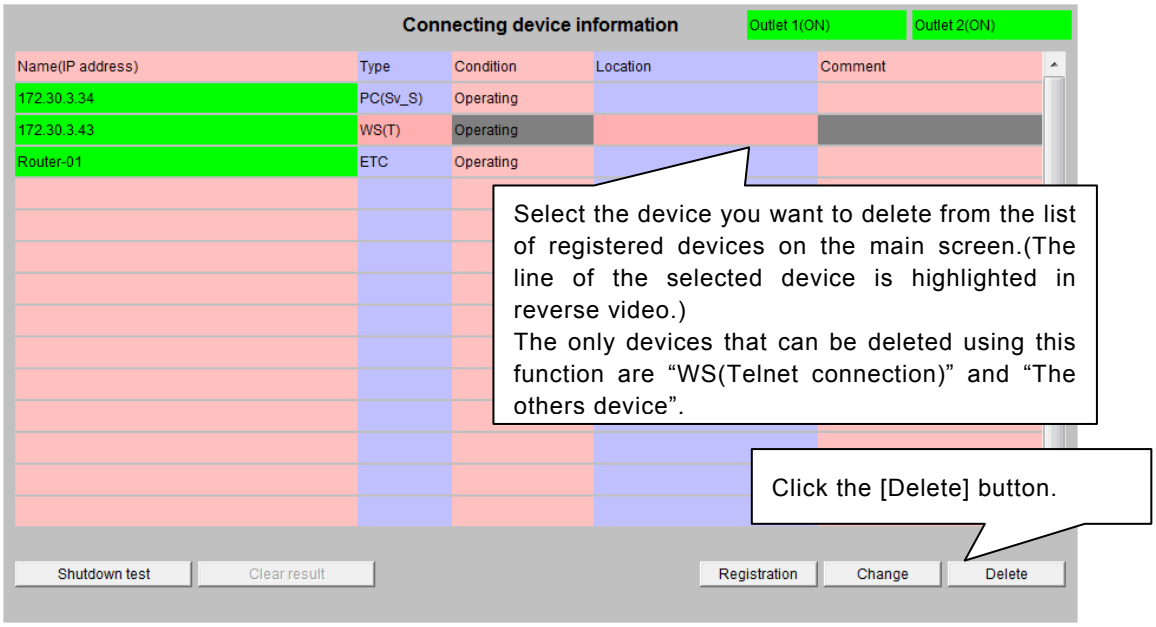


You cannot change the "Device type" of the registered device. Delete the registered information and register again if you want to change the "Device type".
You cannot modify information on devices that are running the UPS management software. Use the UPS management software to modify.

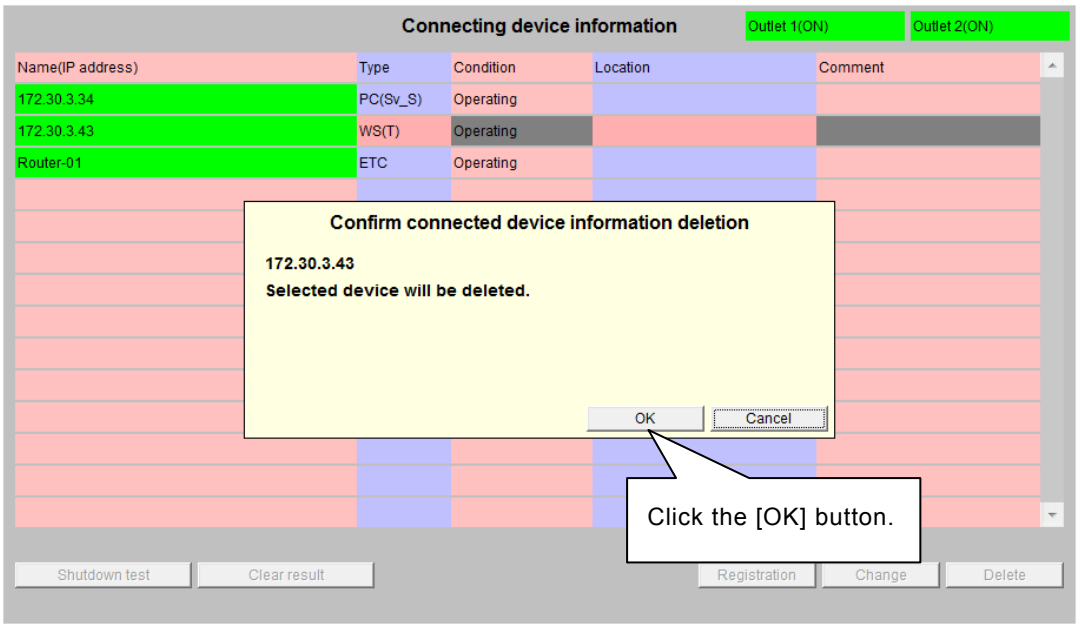
2.5 Deleting a registered device from UPS

Delete the registered device information when a device is disconnected from the UPS. Delete the registered information and register the device again if you want to change the "Device type" of a registered device.

[Procedure]



The confirmation screen is displayed.



You cannot undo the delete operation.
You cannot delete devices that are running the UPS management software using this function.
Use the UPS management software instead.

2.6 Configuring the Wake On LAN function

About Wake On LAN

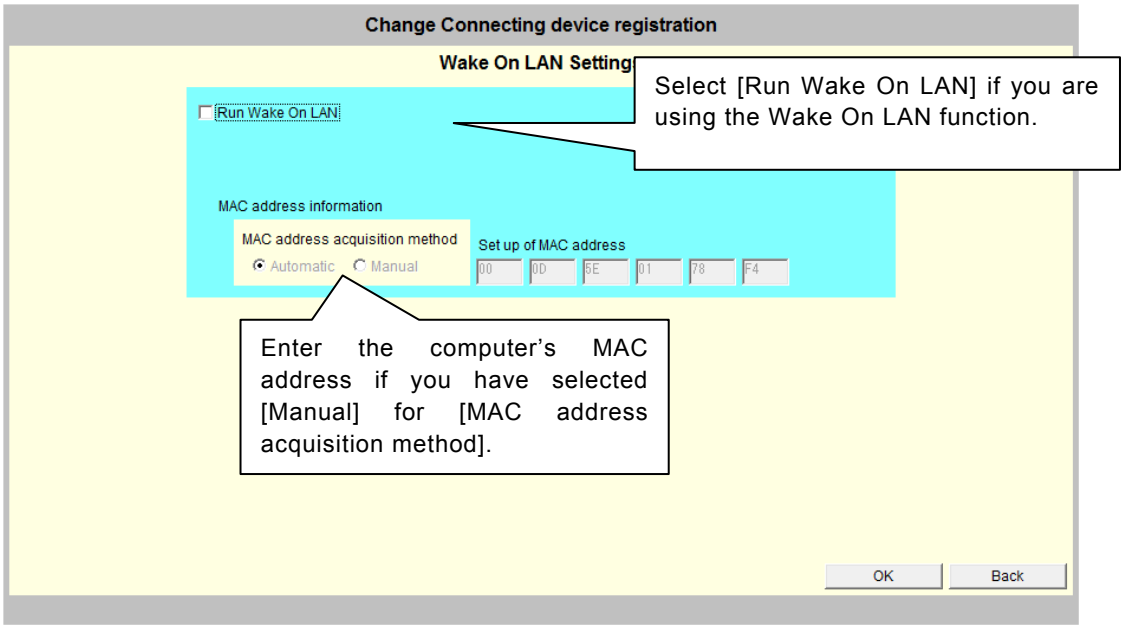
This function starts up a networked computer from another computer via the network.
The computer starts up when it receives the "magic packet". This must be supported by the computer hardware such as the network card, mother board, and BIOS for this function to be available.

About the Wake On LAN function of the UPS

If you select [Run Wake On LAN] when registering a device connected to the UPS, a "magic packet" is sent to the device when the UPS output is turned ON, or after the delay time if "sending delaying time" is specified.

Wake On LAN Settings

Click the [Wake On LAN settings] button when registering a WS(Telnet) device on the [Connecting device registration] screen.
The [Wake On LAN settings] screen is displayed.



Specify [Manual] as the [MAC address acquisition method] if the WS(Telnet) is on a different segment from the UPS in the network.

Note:IPv4 address environment

The Wake On LAN function may not work on WS(Telnet) devices even if you specify [Set up Wake On LAN].

The following conditions apply.

Condition 1	Condition 2	Wake On LAN function
The WS(Telnet) is in the same segment as the UPS.		○
WS(Telnet) is not in the same segment as the UPS.	The UPS management software installed in the same segment as the WS(Telnet) is **registered** to the UPS.	○
	The UPS management software installed in the same segment as the WS(Telnet) is **not registered** to the UPS.	×

Note: When using an IPv6 global address

When a WS (Telnet connection) device is located in a different segment than the UPS, the router must be set to pass the multicast address in order to send the "magic packet" to the other segment.

The multicast address is [ff05::13f].

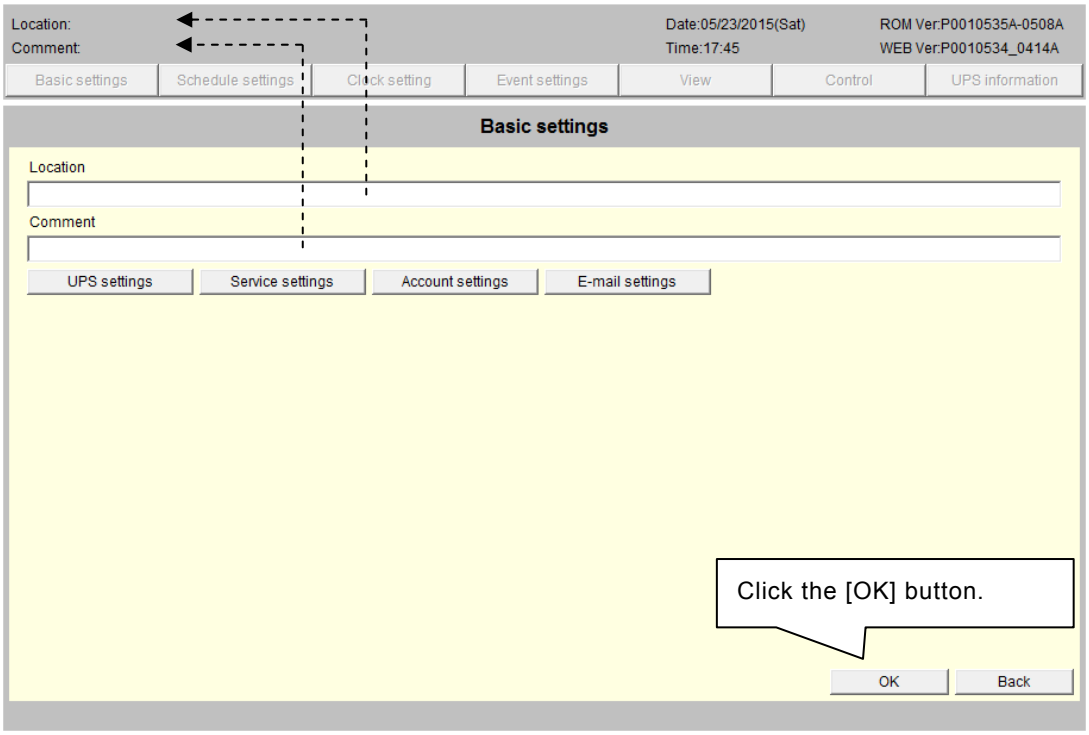
2.7 Configuring UPS basic settings

2.7.1 Configuring UPS basic setting

［**Procedure**］

Click **Basic settings** button on the main screen.

The Basic settings screen is displayed.



Change the [Location] and [Comment] entries on this screen.

(*) Changes to [Location] and [Comment] are reflected in the [Location] and [Comment] display in the web management tool.

2.7.2 Configuring UPS control settings

Configure the UPS operations from this screen.

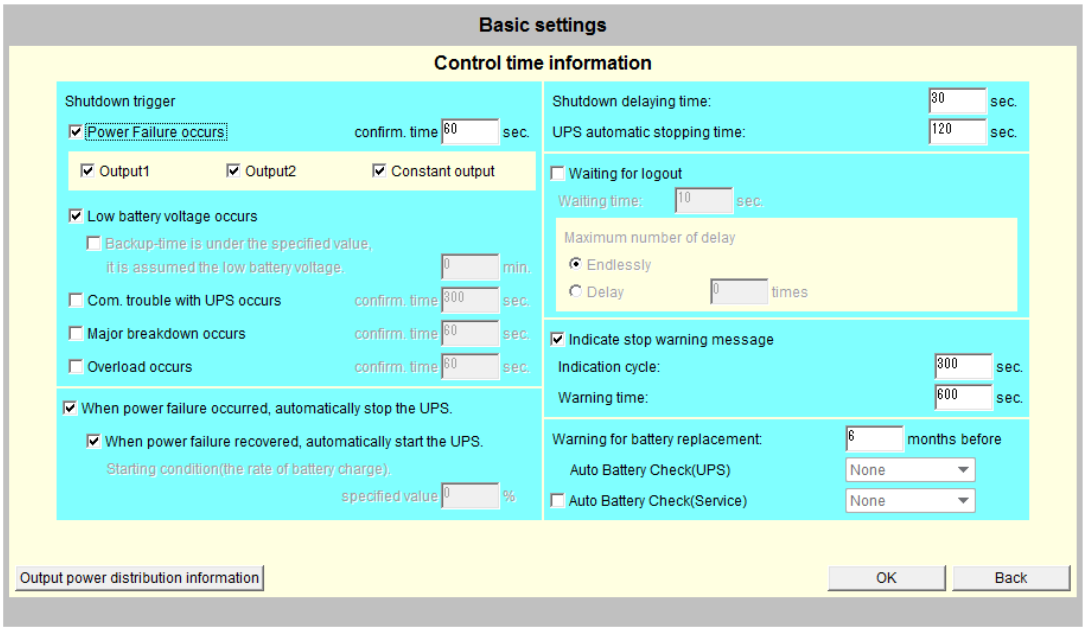
[**Procedure**]

Click the [Basic settings] button on the main screen.

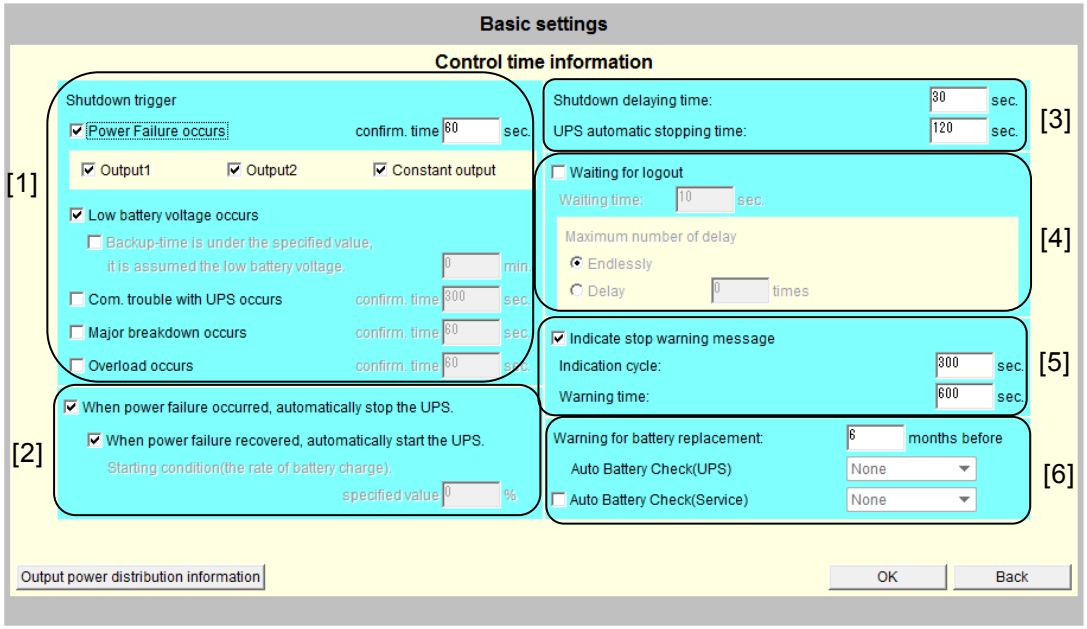
Click the [UPS settings] button on the basic settings screen.

The [Control time information] screen is displayed.

The following screenshot is for UPS with power distribution control.



Screen Description(when using a UPS with power distribution control)



Shutdown control time settings([1])

No.	Displayed item	Description	Default value
[1]	Shutdown trigger	Specify the condition of a shutdown and the confirmation time. *1	
	Power failure occurs	Select to shut down in the event of a power failure. Confirmation time: Settable range from 10 to 65535 (seconds)	Selected
	Low battery voltage occurs	Select to shut down in the event of low battery detection.	Selected
	Backup-time is under the specified value, it is assumed the low battery voltage *2	Specify the condition to determine low battery. Confirmation time: Settable range from 2 to 999 (minutes)	Not selected
	Com. trouble with UPS occurs	Not supported	—
	Major breakdown occurs	Select to shut down in the event of a major breakdown. Confirmation time: Settable range from 10 to 65535 (seconds)	Not selected
	Overload occurs	Select to shut down in the event of an overload. Confirmation time: Settable range from 10 to 65535 (seconds)	Not selected

Shutdown control time settings([2] – [4])

No.	Displayed item	Description	Default value
[2]	When power failure occurred, automatically stop the UPS.	Specify whether or not to shut down the UPS in the event of a power failure. *1, *4	Selected
	When power failure recovered, automatically start the UPS.	Specify whether or not to restart UPS output (start up the UPS) when the power is restored. *1, *4	Selected
	Starting condition (the rate of battery charge).	The UPS output is turned ON when the battery is charged to the specified value if you have specified to "Start" the UPS after the power is restored. (You cannot set this value if the UPS does not support this function) The UPS output is turned ON immediately after the power restoration if you specify 0%. Settable range: 0 to 100 (%)	0%
[3]	Shutdown delaying time	Specify the duration between entering an irreversible status due to a certain shutdown trigger and starting to shut down. This duration is for the pre-shutdown process. *1 Settable range: 0 to 65535 (seconds)	30 sec.
	UPS automatic stopping time	Specify the delay time after the shutdown delay time has elapsed and started to shut down before shutting down the UPS. Specify enough time to shut down all registered devices. *1 Settable range: 0 to 65535 (seconds)	120 sec.
[4]	Waiting for logout	Specify whether or not to delay the shutdown process while the users are logging out in the event of a scheduled shutdown or remotely controlled shutdown. This setting value is applied on PCs and WS where the UPS management software is running. (Refer to the User Guide of the UPS management software for details.)	None
	Waiting time	Specify the shutdown delay time if you have enabled the delay. The shutdown process commences after the duration of (Waiting time x Maximum number of delay).	
	Maximum number of delay		

Shutdown control time settings([5] – [6])

No.	Displayed item	Description	Default value
[5]	Indicate stop warning message	Specify whether or not to display the shutdown warning message in the event a power failure occurs or a scheduled shutdown.	Display
	Indication cycle	Specify the interval to display the shutdown warning message. Settable range: 20 to 65535 (seconds)	300 sec.
	Waiting time	Specify when to display the warning message for a scheduled shutdown. Settable range: 20 to 65535 (seconds)	600 sec.
[6]	Warning for battery replacement	Specify when to display a warning message indicating the number of months before the battery replacement time.*2 Settable range: 1 to 12 (months)	6 months
	Auto Battery Check(UPS)	Specify whether or not to perform automatic battery checks, and the interval. Specify the interval if the UPS supports automatic battery check. Settable values: Select from 30 days, 90 days, and 180 days	180 days
	Auto Battery Check(LAN I/F Card)	Select if your UPS supports battery check but does not support automatic battery check, and then specify the interval. Settable values: Select from 30 days, 90 days, and 180 days	Not selected

*1 See “2.2.1 Operation Sequence” of the User Guide for UPS operations.
*2 The message is displayed on the computer where the UPS management software is running. The battery replacement notification is a rough indication. The replacement time may come earlier depending on the operating environment.
*3 This item may not function correctly since the value of the backup time is not accurate if the load factor is low. Do not select this item if the load factor becomes lower than 30%.

The outlet number to shut down in the event of a power failure.

・You can specify whether or not to shut down **OUTPUT1, OUTPUT2, and Constant output** in the event of a power failure separately if your UPS is capable of power distribution control. You can only specify **OUTPUT1** if your UPS does not support power distribution control.
(You cannot specify OUTPUT2 and Constant output.)

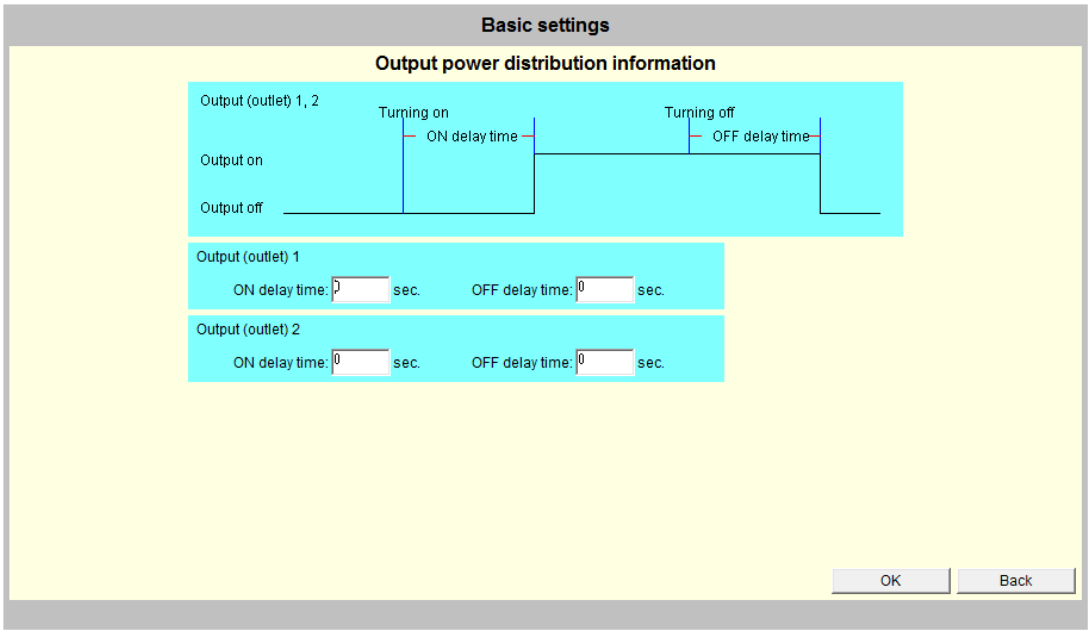
・If you have selected [Power Failure occurs] in [Shutdown trigger], selected outlets wait for the power to be restored for [Power failure confirmation time] in the event of a power failure. If the power is not restored, they will assume the power cannot be recovered and commence the shutdown process. Outlets that are not selected do not determine the power cannot be recovered until the UPS outputs low battery voltage signals. (They do not determine whether the power can be restored based on "Power failure confirmation time".)
If you want to run the computers as long as possible after a power failure, you can delay the shutdown process by configuring as above.

2.8 Configuring delay time on UPS power outlets

This function is available if the UPS is equipped with power distribution control.

[Procedure]

Click the [Basic settings] button on the main screen.
Click the [UPS settings] button on the basic settings screen.
Click the [Output power distribution information] button on the control time information screen.
The [Output power distribution information] screen is displayed.
Enter the ON delay time and OFF delay time for outlet 1 and 2.



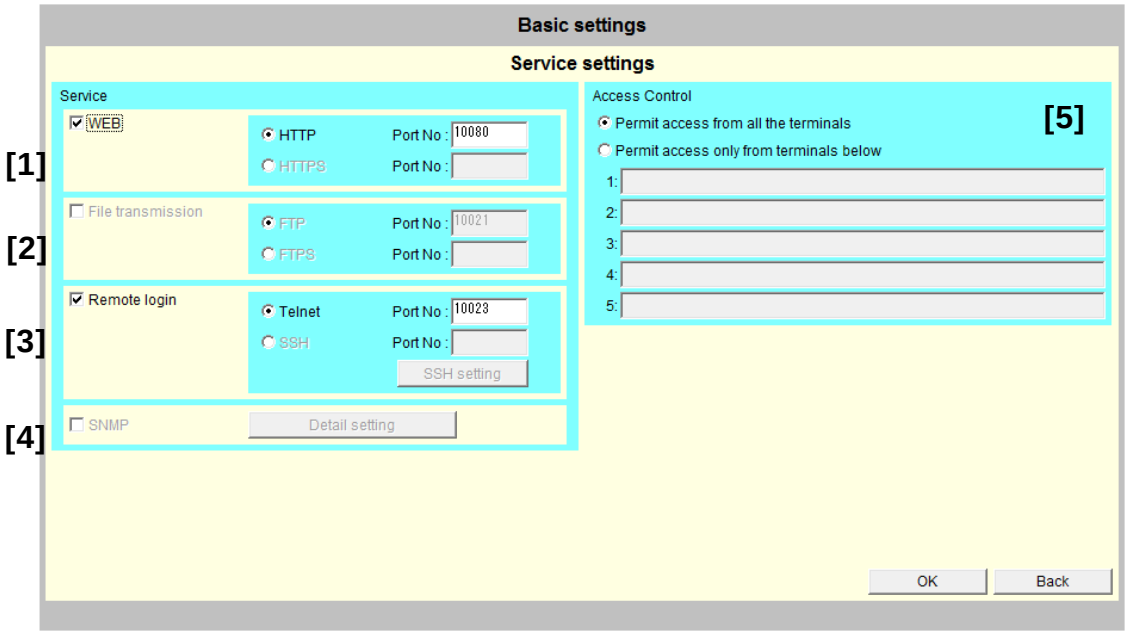
[Description]

You can specify the ON and OFF delay time separately on power outlet 1 and 2 if your UPS supports power distribution control.
This allows you to turn outlet 1 ON or OFF before or after outlet 2.
For example, the server is connected to outlet 1 and storage devices to outlet 2.
You can specify a longer delay time on outlet 1 than outlet 2 if you want to start the server after storage devices are started.
UPS output ON → Outlet 2 ON (starting the storage devices) → Outlet 1 ON (starting the server).

2.9 Configuring service settings

This section describes how to configure HTTP, remote login (Telnet), and access control, how to enable and disable, and how to modify port numbers.

[**Procedure**]
Click the [Basic settings] button on the main screen.
Click the [Service settings] button on the basic settings screen.
The [Service settings] screen is displayed.



No.	Displayed item		Description	Default value
[1]	WEB		Enable or disable access from the web.	Selected
		HTTP	You can use the port number as it is, or you can change it. (HTTPS cannot be used.)	10080
[2]	File transmission		Cannot be used.	
[3]	Remote login		Enable or disable access by a Telnet connection.	Selected
		Telnet	You can use the port number as it is, or you can change it. (SSH cannot be used.)	10023
[4]	SNMP		Cannot be used.	
[5]	Access control		Specify restrictions for accessing services from outside.	
		Permit access from all the terminals	Select to permit access from all terminals.	Enabled
		Permit access only from terminals below	Select to permit access from the specified terminals and enter network addresses of the permitted terminals. You can specify up to 5 terminals.	

2.10 Changing the UPS login account

The following table describes default values for login accounts.

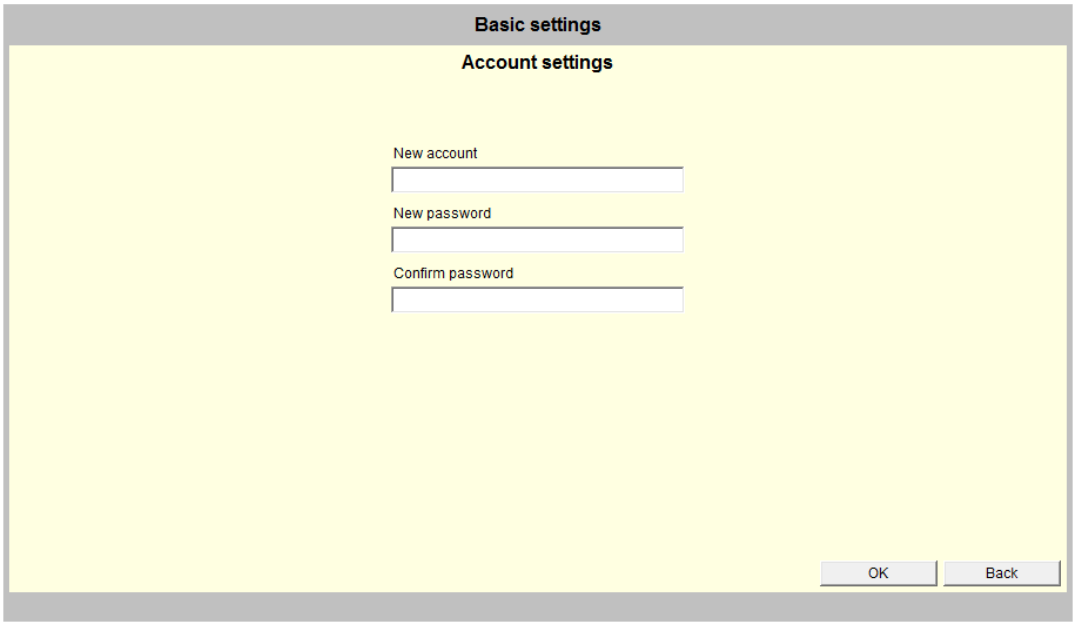
Account name: **UpsAdmin** (Not case sensitive)

Password: **UpsAdmin** (Case sensitive)

You can modify the accounts as follows.

[Procedure]

Click the [Basic settings] button on the main screen.
Click the [Account settings] button.
The [Account settings] screen is displayed.



[Screen Description]

Displayed item	Description	Remarks
New account	Enter the new account name.	1 to 20 half-width alphanumerical characters
New password*	Enter the new password.	1 to 20 single-byte alphanumeric characters
Confirm password*	Enter the confirm the password.	1 to 20 single-byte alphanumeric characters

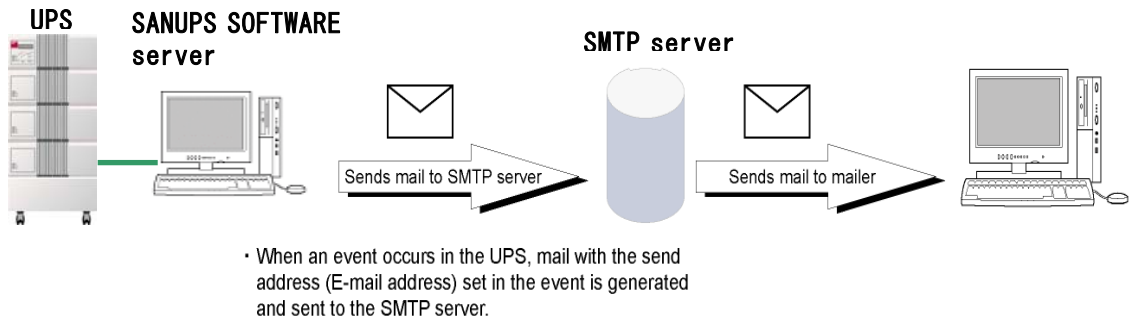
(*)Case sensitive.

2.11 E-mail Functions

The e-mail function of the UPS has the following purposes.

[1] Transmitting e-mails to specified addresses to send notification of errors such as a power failure.

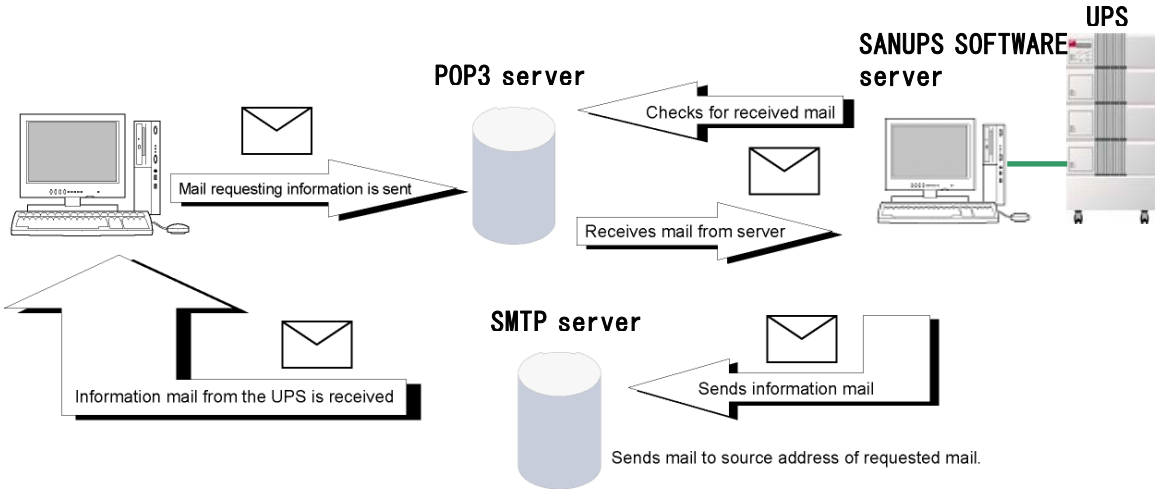
E-mails are sent to mobile terminals, computers, etc. to notify the recipient about the UPS error event.



[2] Checking the UPS status and measurement information by e-mail.

Information request e-mails are sent to the UPS from the e-mail function on mobile terminals or mailers on computers.

The UPS receives the request e-mail and returns the status and measurement information via e-mail.

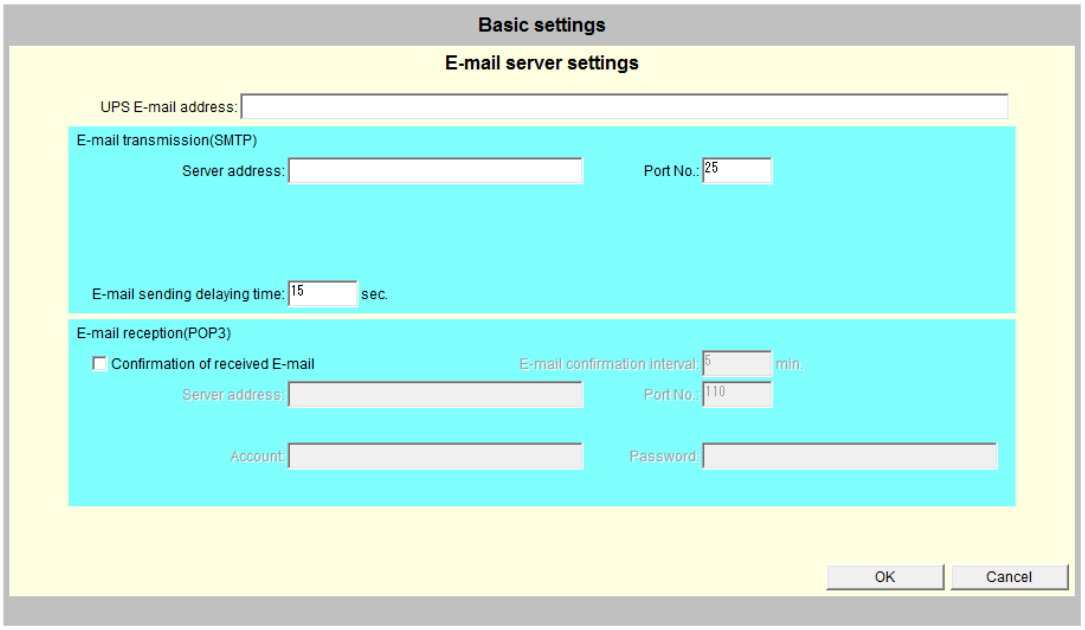


2.12 Configuring the e-mail server

You need to configure an e-mail server (SMTP server) to transmit notification e-mails to specified addresses in the event of errors, and an e-mail server (POP3 server) to query the status to the UPS and receive the stats information e-mails.

[Procedure]

Click the [Basic settings] button on the main screen.
Click the [E-mail settings] button on the basic settings screen.
The "E-mail server settings" screen is displayed.



No.	Displayed item		Description	Default value
[1]	UPS E-mail address		The sender's address to be added to the e-mail from the UPS. Enter an e-mail address including "@".	
[2]	E-mail transmission(SMTP)		Specify the e-mail server (SMTP server) for sending e-mails from the UPS.	
		Server address	Specify the IP address or network name of the SMTP server.	
		Port No.	Specify the port number of the SMTP server .	25
		E-mail sending delaying time	Specify the delay time for sending e-mails to the SMTP server in seconds.	15sec.

For e-mail send addresses for when an event occurs, see “2.23 Configuring event notification e-mail transmissions” to set e-mail addresses.

No.	Displayed item		Description	Default value
[3]	E-mail reception(POP3)		Request e-mails are sent from mailer or other functions to obtain the status and measurement information from the UPS. You need to configure an e-mail server (POP3 server) for the UPS to receive them.	
		Confirmation of received E-mail	Specify whether or not to check the incoming e-mails on the POP3 server. If this is cleared, the incoming e-mails on the POP3 server are not checked.	Not selected
		E-mail confirmation interval	Incoming e-mails on the POP3 server are checked at this interval.	5min.
		Server address	Specify the IP address or network name of the POP3 server.	
		Port No.	Specify the port number of the POP3 server .	110
		Account	Enter the account name for POP3 server authentication.	
		Password	Enter the password for POP3 server authentication.	

When the UPS take out the mail from the POP3 server, it is e-mail deleted from the POP3 server.

<Sending e-mail to the UPS to obtain status and measurement information>

This section describes how to request the UPS status and measurement information from mailers on mobile terminals or computers.
[1] Enter the following to the recipient address and subject.
・Recipient: E-mail address of the UPS
・Subject : Select from the following table depending on the requesting item.

<Subject>	<Description>
UPS Status Request	・・・UPS status measurement information
UPS Info Request	・・・UPS information
Setting Request	・・・Device setting information
Log Request	・・・Event log information (latest 10 records)
Log Request All	・・・Event log information (all 1000 records)

・Body: Blank

[2] Send the e-mail.
[3] The response e-mail[*2] is sent from the UPS.
See "Appendix F. LIST OF INCOMING E-MAILS" of “User Guide” for the contents of the response e-mails.

2.13 About scheduled operations

You can schedule UPS shutdowns and restarts.

This function is useful in the following cases.
・To shut down and start computers at a specified time every day.
・To shut down computers before a bank holiday and restart when the holiday is over.

You can specify 2 types of schedules for the UPS.

Weekly schedule

You can set a common schedule from Sunday to Saturday and repeat it for 365 days.
You can specify the start-up time and shutdown time for each week day.

Schedule for specific dates

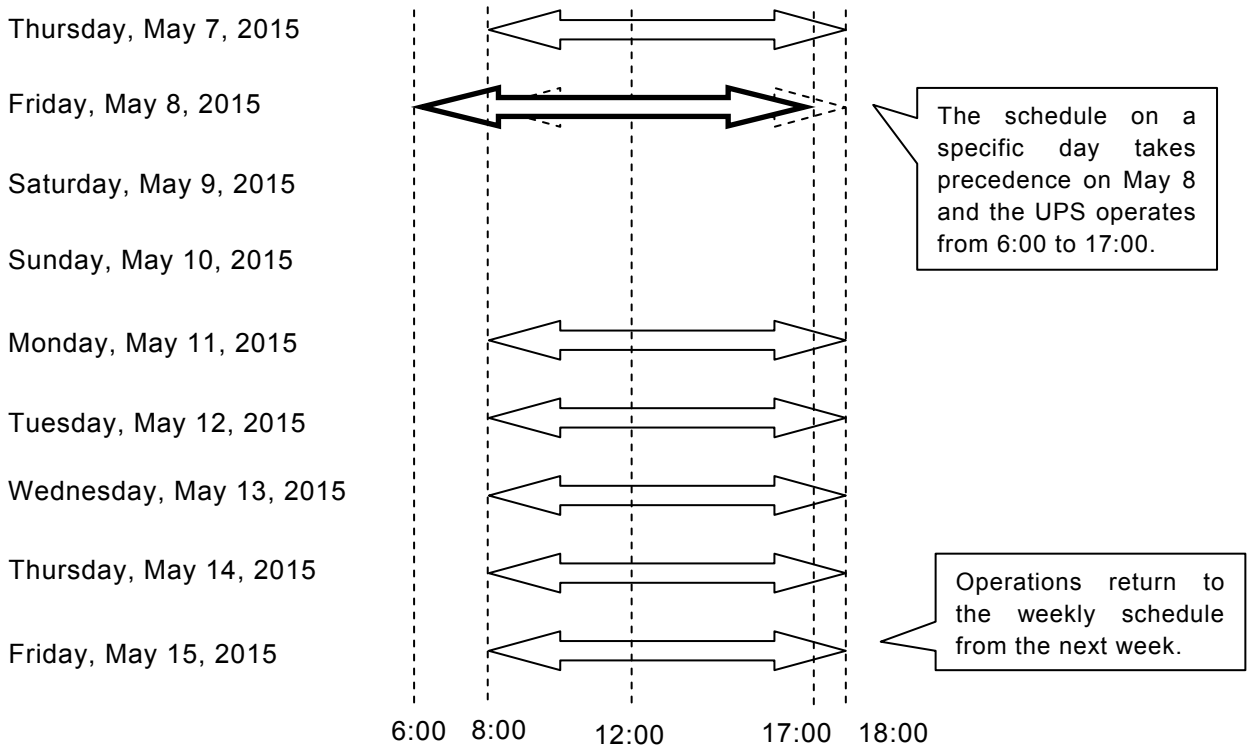
You can schedule a start-up time and shutdown time for specific dates.
For example, you can specify the start-up time at 8:00 and shutdown time at 17:00 on May 1, 2015.

The schedule for a specific date takes precedence when weekly and specific dates are scheduled.

The following schedule settings operate as shown in the figure.

Weekly schedule: Monday to Friday, start at 8:00 and shut down at 18:00

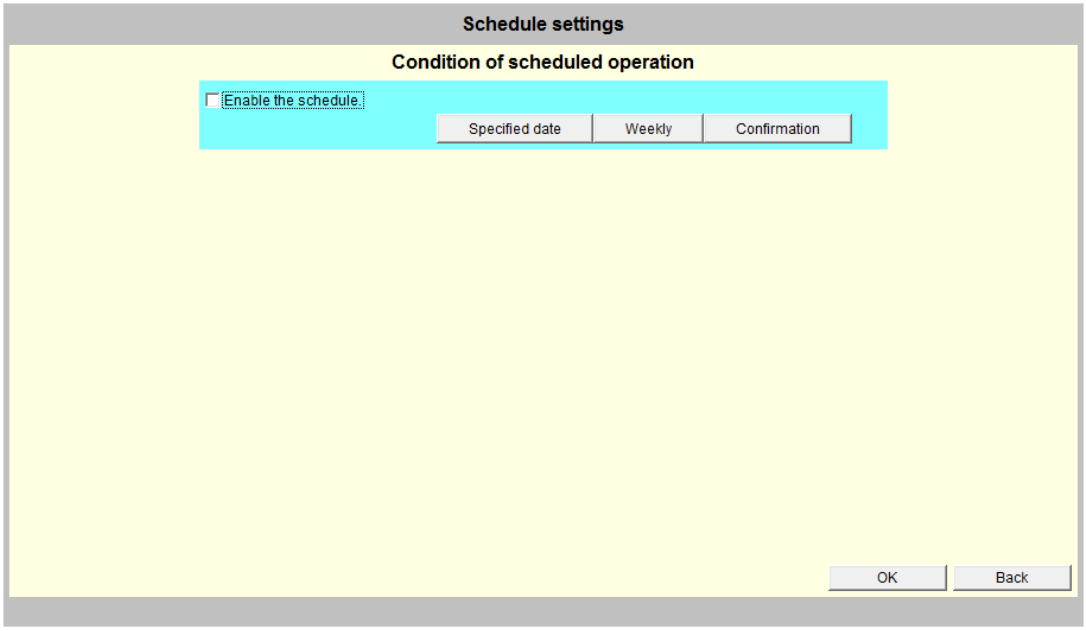
Specific date: May 8, start at 6:00 and shut down at 17:00



2.14 Enabling and disabling scheduled operations

[Procedure]

Click the [Schedule settings] button on the main screen.
The [Schedule settings] screen is displayed.



[Screen Description]

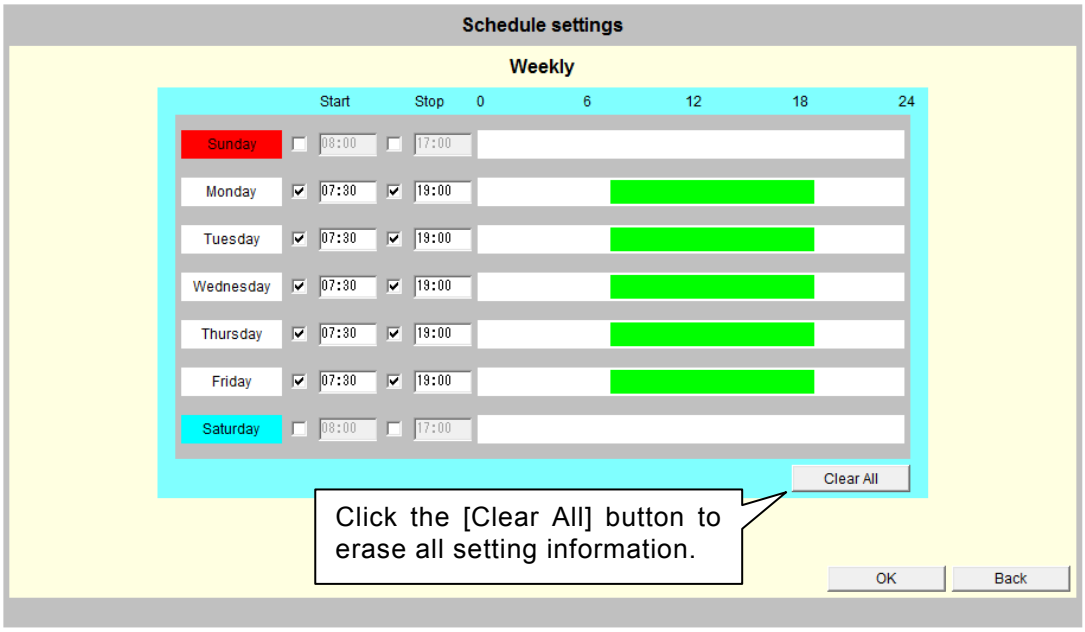
Displayed item	Description
Enable the Schedule	Select here to enable scheduled operations. Clear to disable the specified schedules.
Specified date	Click here to specify the schedule for a specific date. See "2.16 Configuring the schedule for a specific date".
Weekly	Click here to specify the weekly schedule. See "2.15 Configuring the weekly schedule".
Confirmation	Displays the list of specified schedules.

After setting a schedule, check that there is a check mark in [Enable the Schedule].
If only the specified date or weekly schedule settings are configured, the scheduled operation will not occur.

2.15 Configuring a weekly schedule

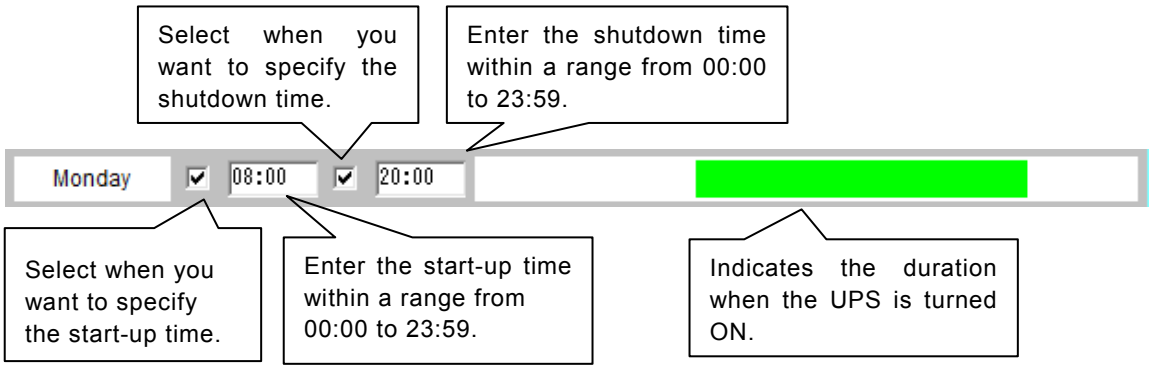
Click the [Weekly] button on the schedule settings screen.

The [Weekly] screen is displayed.



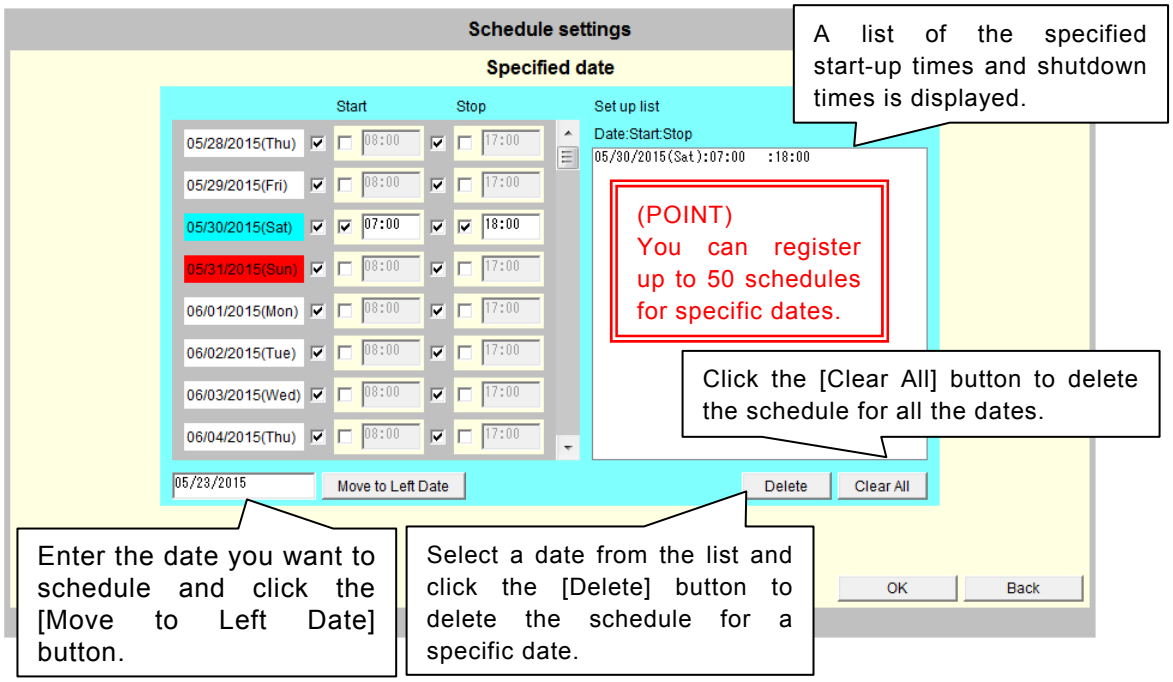
The above screenshot shows the weekly schedule to start at 7:30 and shut down at 19:00 from Monday to Friday.

[Configuration]



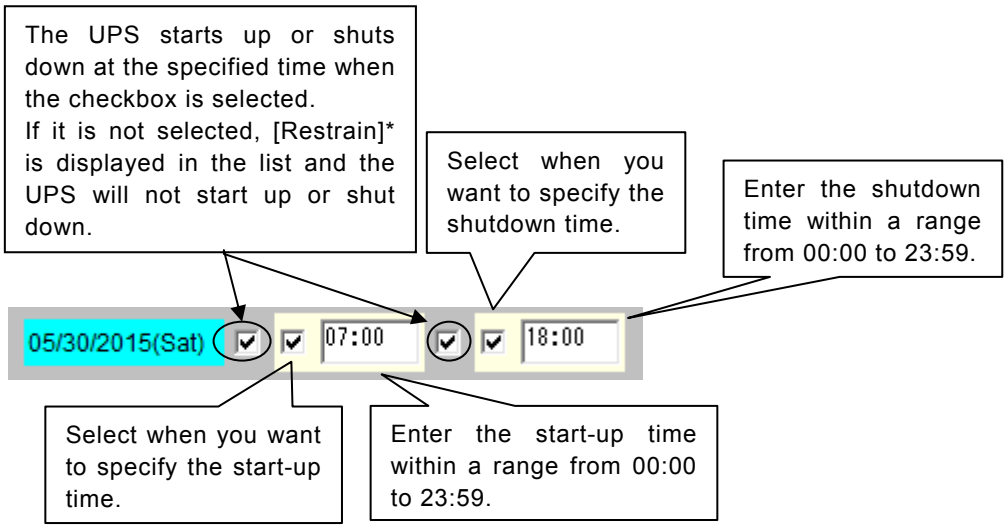
2.16 Configuring a schedule for a specific date

Click the [Specified date] button on the schedule settings screen.
The [Specified date] screen is displayed.



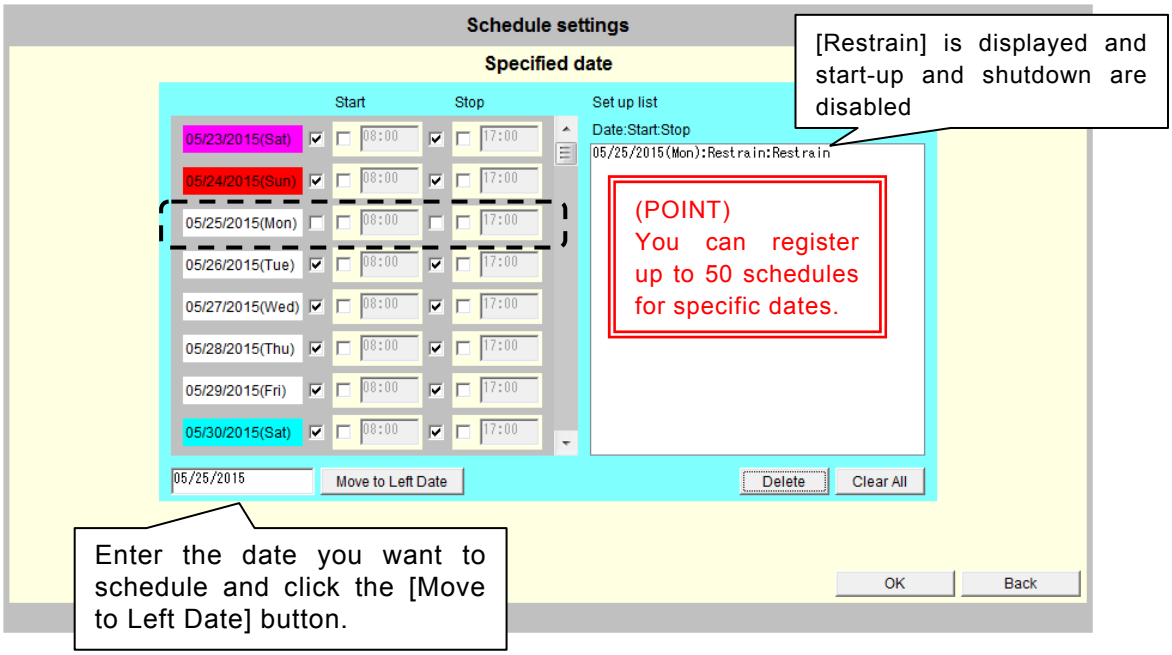
The above screenshot shows that the UPS is scheduled to start at 7:30 on May 9, and then shut down at 19:00 on the same day.

[**Configuration**]



Restrained scheduled operations

When you have a weekly schedule to start up and shut down from Monday, there may be bank holidays where the UPS does not need to start up or shut down. In this situation, you can specify to restrain (no start-up and shutdown) the scheduled operations. There is no need to modify the weekly schedule. You can also specify to restrain the scheduled operations even when you have a schedule for the specific date.

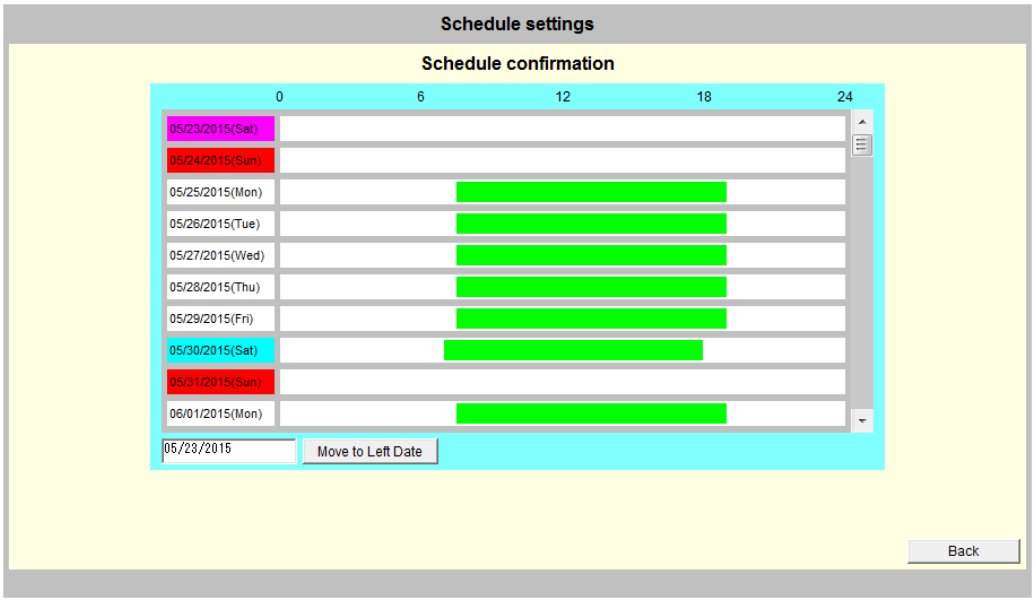


Clear the checkboxes to prevent the UPS from starting up and shutting down on Monday, May 11.

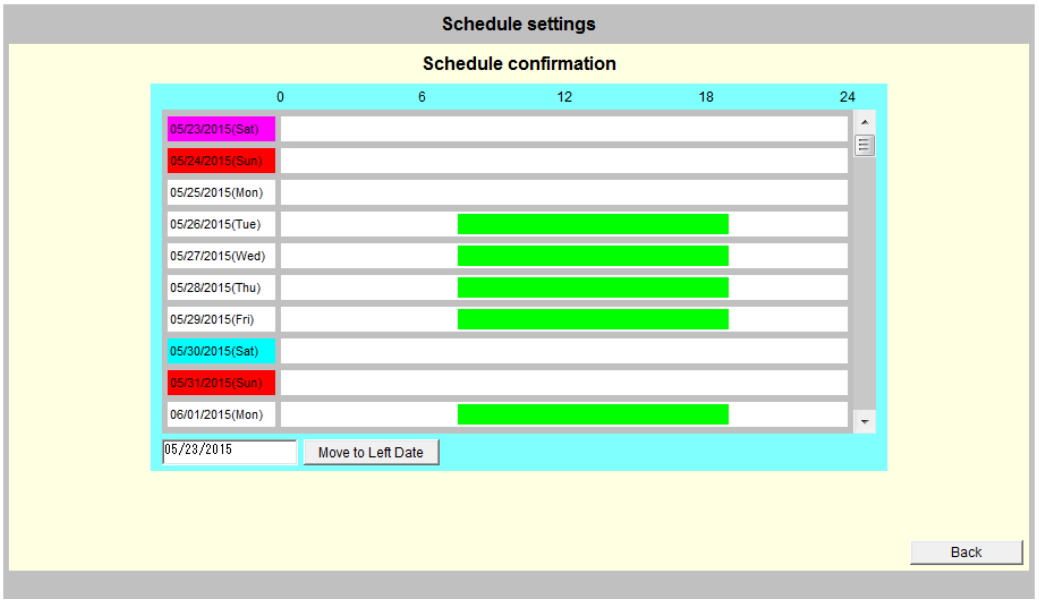
The UPS does not start up or shut down on Monday, May 11 because the scheduled operations are restrained, and will start on May 12 instead.

2.17 Checking the configured schedule

This section describes how to check the weekly schedule and the schedule for specific dates.
Click the [Confirmation] button on the schedule settings screen.
The [Schedule confirmation] screen is displayed.
Check the operation schedule for the UPS.



The screenshot is the confirmation screen with the following settings.
Weekly schedule
Monday to Friday, start-up at 7:30, shutdown at 19:00
Schedule for specific dates
May 30, start-up at 7:00, shutdown at 18:00



The screenshot is the confirmation screen with the following settings.
Weekly schedule
Monday to Friday, start-up at 7:30, shutdown at 19:00
Restrained scheduled operation
May 25

2.18 About event settings

"Events" are phenomena such as a power failure, restoration, UPS status transition, shutdown, etc.

The following 3 functions can be specified for each event on the event settings screen.

- Enable or disable logging events
- Run a script on WS
- Enable or disable e-mail transmissions

Event-Log

Enable or disable logging for each event.
The following items are saved in the event log.

・Status changes such as when the power failure occurred
・Which device was shut down
・Which device modified UPS configurations

WS Script

You can specify commands to be executed in the WS script.
Specify the commands to be executed for given events on the WS on which the UPS directly logs in using Telnet or SSH to shut down.
This function is useful when you need to run a command to terminate the application before shutting down.

E-mail

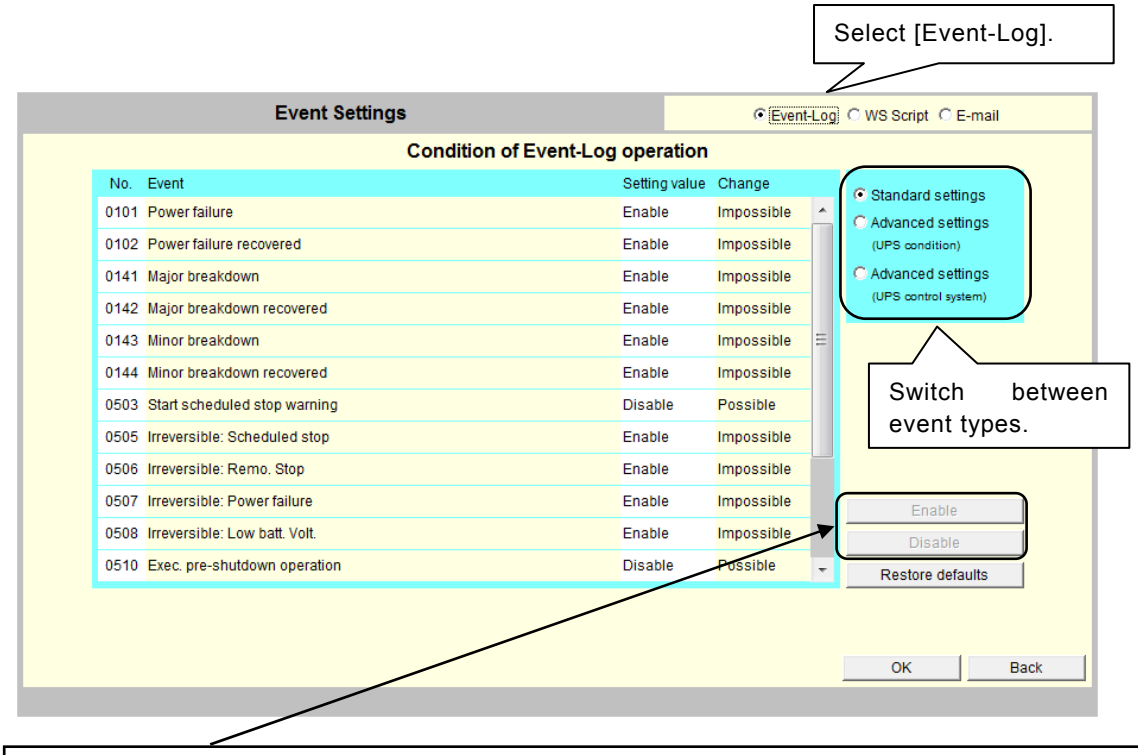
Enable or disable sending e-mails for each event.
The e-mail to notify that an event has occurred is sent to the specified e-mail addresses when the given event occurs.

2.19 Configuring event log settings

[Procedure]

Click the [Event settings] button on the main screen.

The [Event settings] screen is displayed.



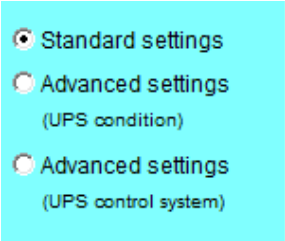
Specify whether to enable or disable.
The [Enable] and [Disable] buttons are enabled when you have selected an event where [Possible] is displayed in the [Change] column.
You cannot change the configuration of the event when [Impossible] is displayed in the [Change] column.

Switching the event function (below)

Displayed item	Description
Event-log	Switch to the Event Log setting function.
WS Script	Switch to the WS Script setting function.
E-mail	Switch to the E-mail transmission setting function.

(Caution)
If you select [WS Script] or [E-mail] after modifying the configuration without clicking the [OK] button, the modification is not applied to the UPS. Be sure to click the [OK] button before switching the function.

Switching the event type (below)



Displayed item	Description
Standard settings	Specify the standard items. You cannot change the configuration of the event when [Impossible] is displayed in the [Change] column.
Advanced settings (UPS condition)	Specify the details of UPS operations such as breakdown details.
Advanced settings (UPS control system)	Specify items concerning UPS management. You cannot change the configuration of the event when [Impossible] is displayed in the [Change] column.

Configuration buttons

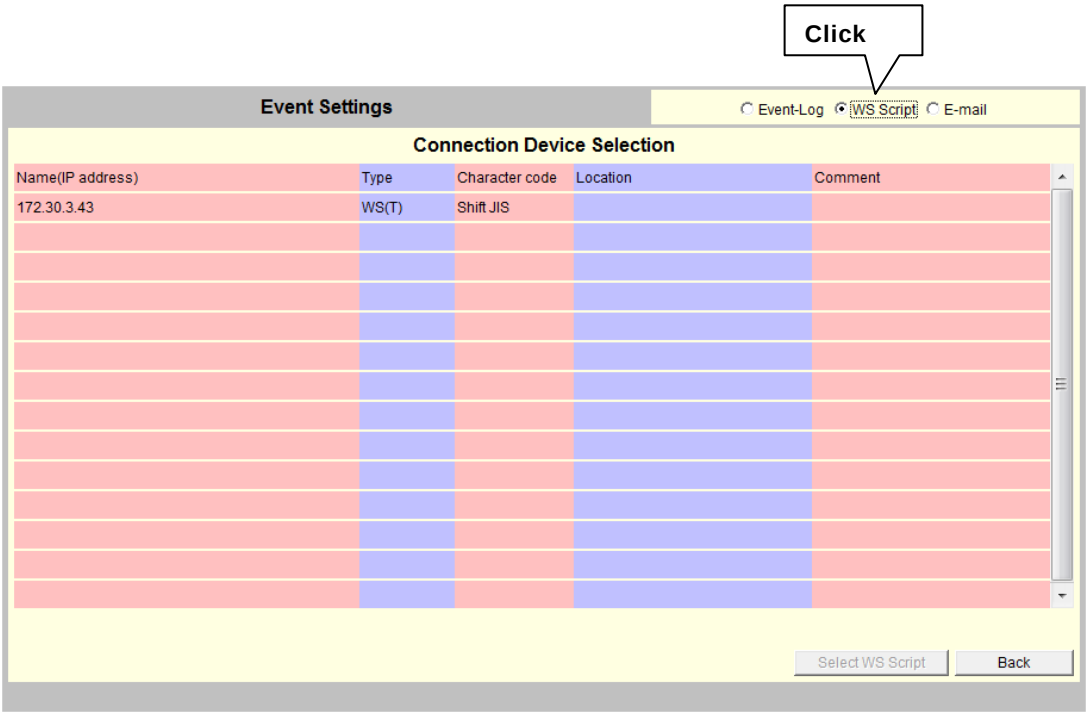
Button name	Description
Enable	Switches the setting value from **Disable** to **Enable**. The selected event is **Enabled** for logging.
Disable	Switches the setting value from **Enable** to **Disable**. The selected event is **Disabled** for logging.
Restore defaults	Restore the default value for the all the events that are displayed.
OK	Save the modified contents.
Cancel	Return to the main screen. If you have not clicked the [OK] button after modifying configurations, the modifications are not applied.

2.20 Configuring WS script execution settings

You can specify how to log in to WS and which commands are to be executed when shutting down the WS or executing application commands.

About script
"Scripts" are descriptions of a series of operations such as transmitting commands to computers.
They are different from shell scripts in UNIX.

[**Procedure**]
Click the [Event settings] button on the main screen.
Select [WS Script] on the event settings screen.
The [Connection Device Selection] screen is displayed.



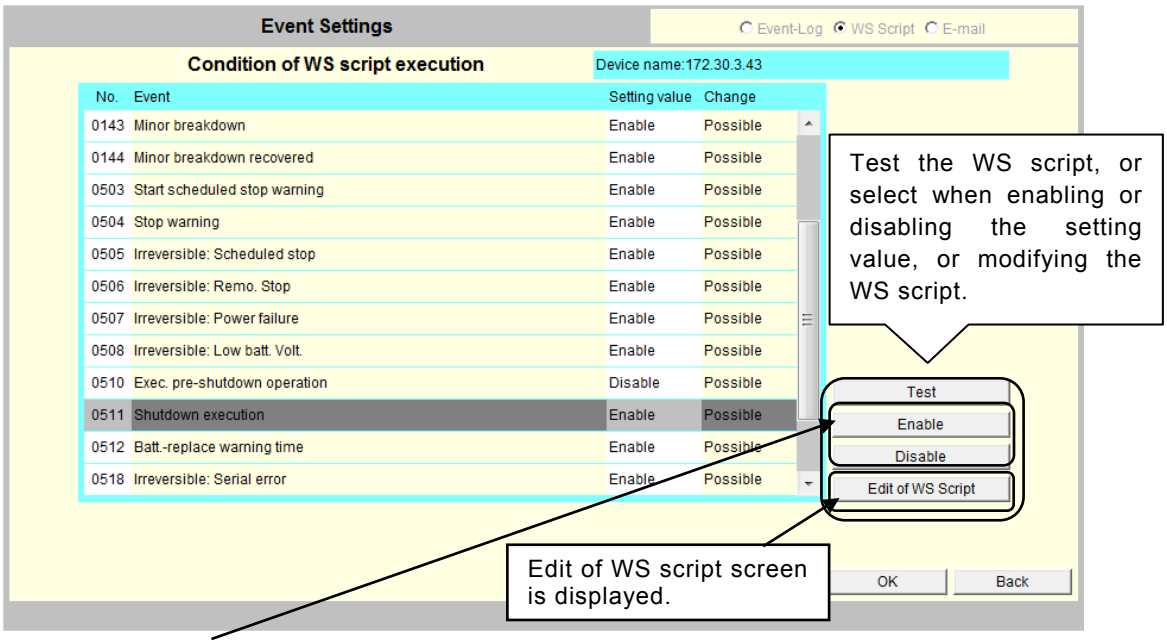
A list of registered WS is displayed.

(Caution)
WS with UPS management software are not displayed.

Select the line of the WS for the script you want to modify.
(The line of the selected WS is highlighted in reverse video.)
Once a WS is selected, the [Select WS Script] button at the bottom of the screen is enabled.
Click the [Select WS Script] button.
The [Condition of WS script execution] screen is displayed.

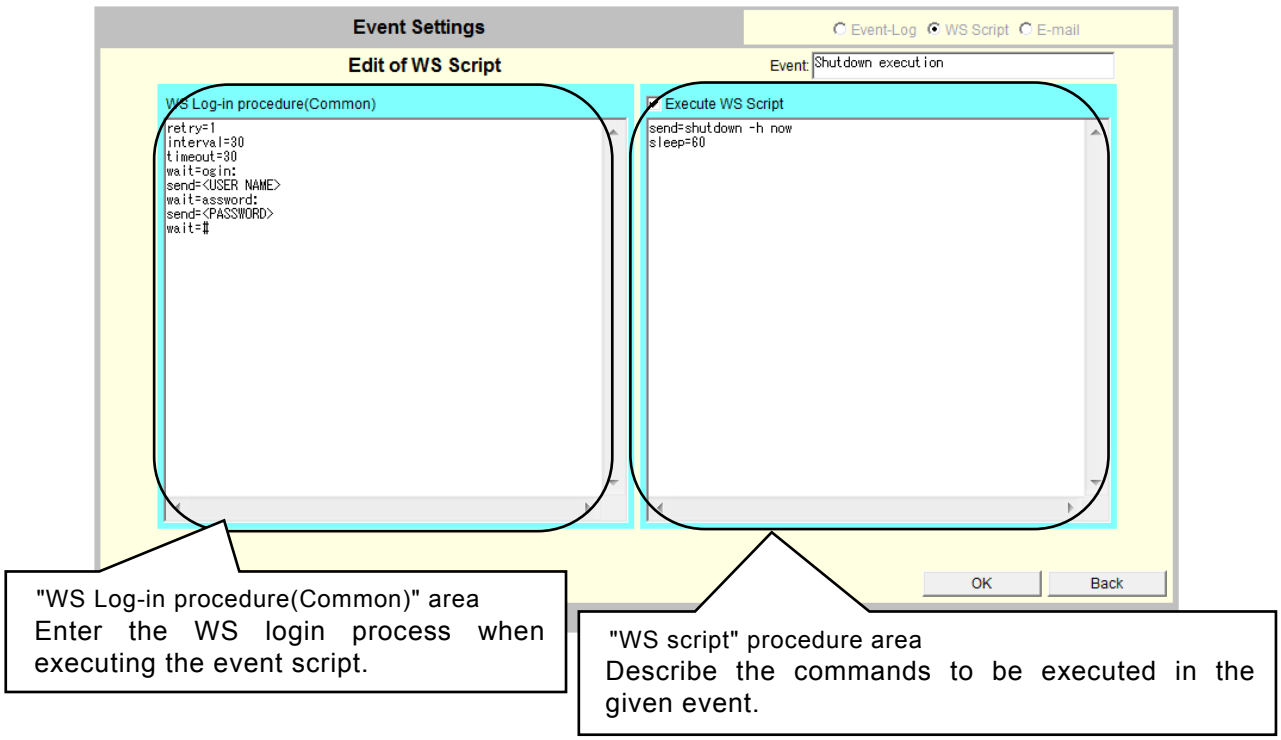
Editing a WS script

Select the line of the event for the WS script you want to modify. The selected line is highlighted in reverse video.
Click the [Edit of WS Script] button.
The [Edit of WS script] screen is displayed.



Specify whether to enable or disable.
The [Enable] and [Disable] buttons are enabled when you have selected an event where [Possible] is displayed in the [Change] column.
You cannot change the configuration of the event when [Impossible] is displayed in the [Change] column.

The following screenshot shows the edit of WS script screen for [Shutdown Execution].



2.21 Editing WS script execution settings

･WS login procedure

Enter the WS login process when executing the event script.
This description is common among the WS.
Contents specified in an event are also used in other events.

The default values of login scripts.

Line	Login script	Description
1	retry=1	Specify the number of retries when the script has failed to execute.
2	interval=30	Specify the interval between retries.
3	timeout=30	Specify the maximum wait time before receiving data in items with "wait=".
4	wait=ogin:	Specify the wait time for the login name.
5	send=<USER NAME>	Send the login name.
6	wait=assword:	Specify the wait time for the password.
7	send=<PASSWORD>	Send the password.
8	wait=#	Specify the wait time for completing logging in to the WS. (Waiting for the prompt display)

Line No. 1 to 3:Operational configurations of the login script.
Line No. 4 to 5：Login name entry.
Line No. 6 to 7: Password entry.
Line No. 8: Waiting time for the login process completion.
("#" prompt is displayed when the login is successful)

Available commands for WS login procedures

Command name	Description	Example
send	Specify the text to send to the WS.	send=shutdown
wait	Specify the text (prompt, etc.) to receive at the UPS.	wait=login
sleep	Specify the standby time without performing any processes. Unit: Seconds	sleep=90
timeout	Specify the wait time for the process to finish after executing a process. Unit: Seconds. Default: 30 seconds	timeout=60
retry	Specify the number of retries when the script has failed to execute. Unit: Times (0 to 10). Default: 1	retry=2
interval	Specify the interval between retries when the script has failed to execute. Unit: Seconds (1 to 60). Default: 30 seconds	interval=10
port	Specify the port number for Telnet on the WS. Valid range: 0 to 65,535 The following port numbers are used if omitted. WS(Telnet): 23	port=10023
cr_only	Specify the line feed code to be <CR> or <CR><LF>. Specify yes or no. The line feed code in any subsequent transmission data becomes <CR><LF> if you specify no. yes is assumed when omitted. (The line feed code is <CR>.)	cr_only=yes cr_only=no
binsend	Specify the 8-bit code to send to the WS. Valid range Hexadecimal view: x00 to xff Octal view: 000 to 377	Hexadecimal view binsend=x07 Octal view binsend=004
keep_time	Specify the duration of the logged-in status. The UPS is not logged off for the specified duration after completing the previous WS script. You can execute other WS scripts without logging in to WS. Valid range from 0 to 65,535 The following duration is used if omitted. WS(Telnet): 0 second	keep_time=120

Notes on command entry

Specify within 510 single-byte characters.

Whether or not to enter a space before and after "=" does not affect the process.

・WS script

Describe the commands to be executed in the given event.
The UPS logs in remotely to the WS as described in [WS Log-in procedure(Common)] and executes the commands specified for the event.
These settings are event specific.

Example） send=shutdown -h now ← send shutdown command
sleep=60 ← wait for 60 seconds
（wait for logout）

Available commands for "WS scripts"

Command name	Description	Example
send	Specify the text to send to the WS.	send=shutdown
wait	Specify the text (prompt) to receive at the UPS.	wait=login
sleep	Specify the standby time without performing any processes. Unit: seconds (s)	sleep=90
timeout	Specify the wait time for the process to finish after executing a process. Unit: Seconds. Default: 30 seconds	timeout=60
retry	Specify the number of retries when the script has failed to execute. Unit: Times (0 to 10). Default: 1	retry=2
interval	Specify the interval between retries when the script has failed to execute. Unit: Seconds (1 to 60). Default: 30 seconds	interval=10
cr_only	Specify the line feed code to be <CR> or <CR><LF>. Specify yes or no. The line feed code in any subsequent transmission data becomes <CR><LF> if you specify no. yes is assumed when omitted. (The line feed code is <CR>.)	cr_only=yes cr_only=no
binsend	Specify the 8-bit code to send to the WS. Valid range Hexadecimal view: x00 to xff Octal view: 000 to 377	Hexadecimal view binsend=x07 Octal view binsend=004
delay	Specify the delay time for executing the script. The login script is is executed after the specified delay time and then the event script is executed if "delay" are specified in the event script.	delay=60
keep_time	Specify the duration of the logged-in status. The UPS is not logged off for the specified duration after completing the previous WS script. You can execute other WS scripts without logging in to WS. Valid range: 0 to 65,535 The following duration is used if omitted. WS(Telnet): 0 second	keep_time=120

Notes on command entry

Specify within 598 single-byte characters.
Whether or not to enter a space before and after "=" does not affect the process.

Available macro characters for scripts

You can use macro characters in the text you are sending.
Macro characters in the following table are replaced with the corresponding text.

Macro character	Meaning
%STOP_TIME_M%	Remaining time before entering the irreversible status in minutes
%STOP_TIME_S%	Remaining time before entering the irreversible status in seconds
%SD_DELAY_TIME%	Shutdown delay time specified on the UPS in seconds
%BAT_CHG_MON%	Remaining months before the battery replacement

When you cannot log in with superuser (root) privileges

You may not be able to log in with superuser (root) privileges in some environments. In this situation, use a "su" command to execute the command as the root user.

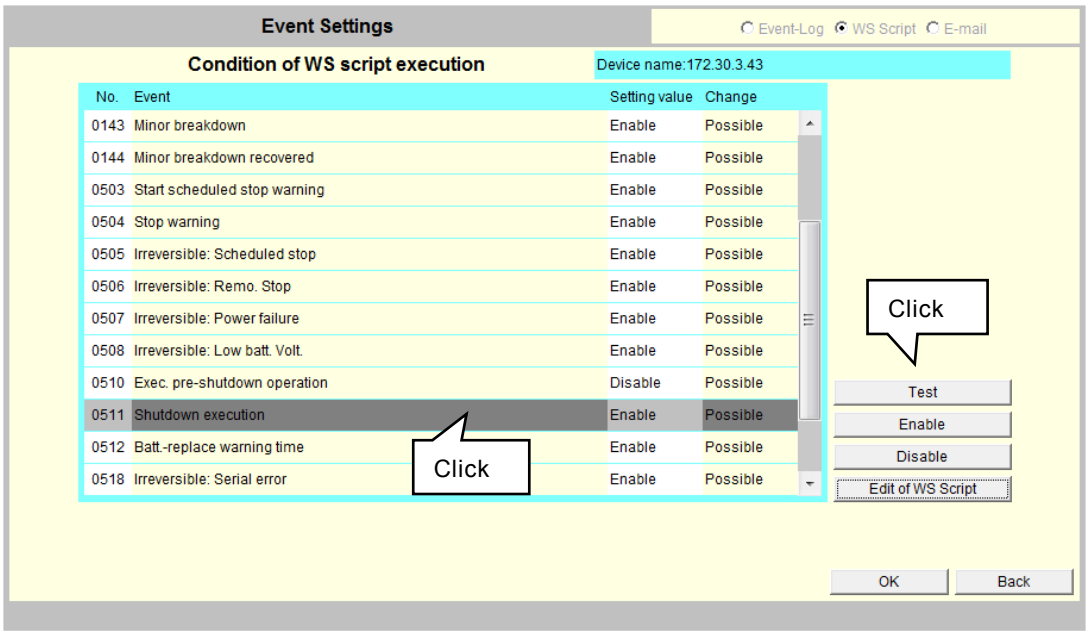
The following table shows an example of login scripts when using the "su" command. This example assumes the user (user name: guest, password: guest) and root (password: root).

Line	Login script	Description
1	retry=1	Operational configurations of the login script.
2	interval=30	
3	timeout=30	
4	wait=ogin:	Log in as a user "guest".
5	send=guest	Enter the login name "guest".
6	wait=assword:	Enter the password of the user "guest".
7	send=guest	Enter the password "guest".
8	wait=$	Wait for the $ prompt after the login.
9	send=su	Send the "su" command and execute it.
10	wait=assword:	Enter the password of root.
11	send=root	Enter the password "root".
12	wait=#	Wait for the # prompt after logging in as root.

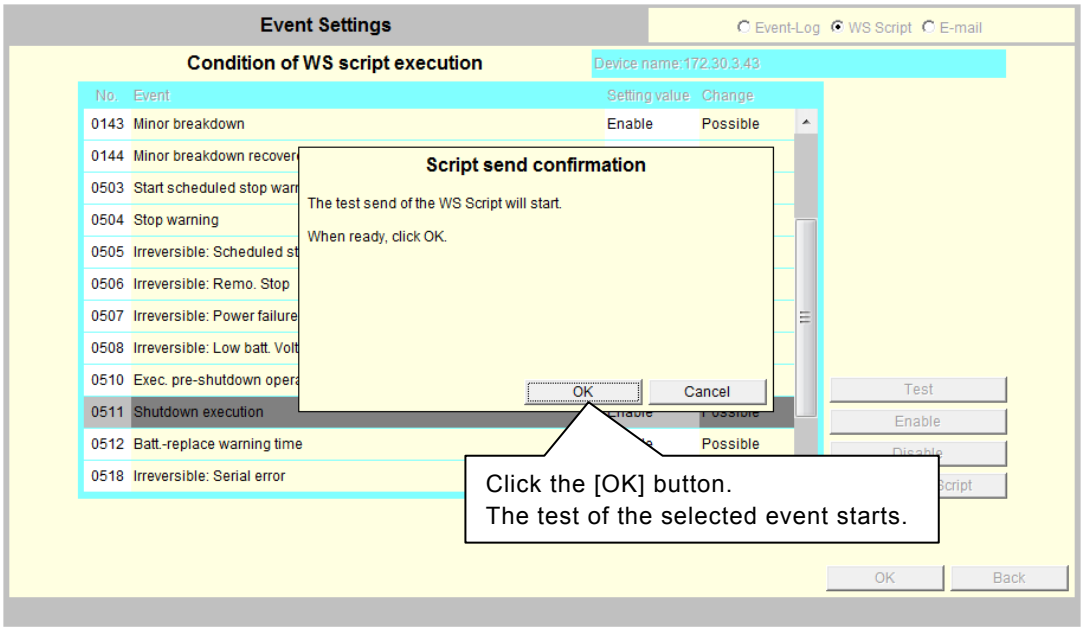
2.22 Testing WS script execution settings

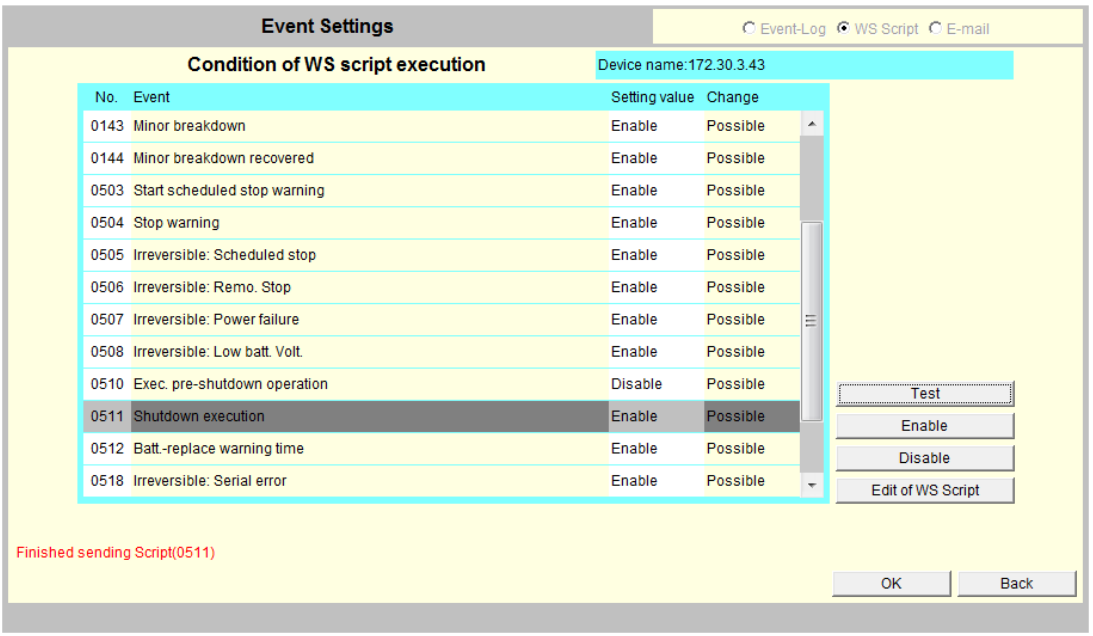
This section describes how to test the script you have set in "2.21 Editing WS script execution settings"

Select [WS Script] on the event settings screen.
Click the [Select WS Script] button.
The [Condition of WS script execution] screen is displayed.
Select the line of the event that you want to test.
Click the [Test] button.



The [Script sends confirmation] screen is displayed.





The test result is displayed at the bottom of the screen when the test is complete.

Script test results

The result is displayed when the script test is complete.
The following tables show examples of the displayed results.

- Message for successful execution

Display example	Finished sending Script (0511)
Description	The script of event No.0511 (shutdown) was successful.

(Notes on the result display)
"Finished sending Script" indicates the processes set in the script are complete, and does not indicate the successful execution of the specified commands.
Therefore, it is possible that the specified command failed on the WS because it contained an incorrect path or incorrect character, or for some other reasons. Check the status of the actual device to see the result of the specified commands.

- ･Message for failed execution

Display example	Failed to send Script (0511) Details: E=511,L=8T
Description	The script of event No.0511 (shutdown) failed. Details: E = 0511 Indicates the event No. L=8T Indicates a timeout on the 8th line in the login procedure. L･･･Indicates the script type. 8･･･Indicates the line in a number. T･･･Indicates the cause. Indicates the script type. L : Loin procedure S : WS Script Indicates the cause. T : Timeout F :Format error (incorrect script syntax)

- ･Message while the test in progress

Display example	Now testing (0511)
Description	The script of event No.0511 (shutdown) is being executed.

2.23 Configuring event notification e-mail transmissions

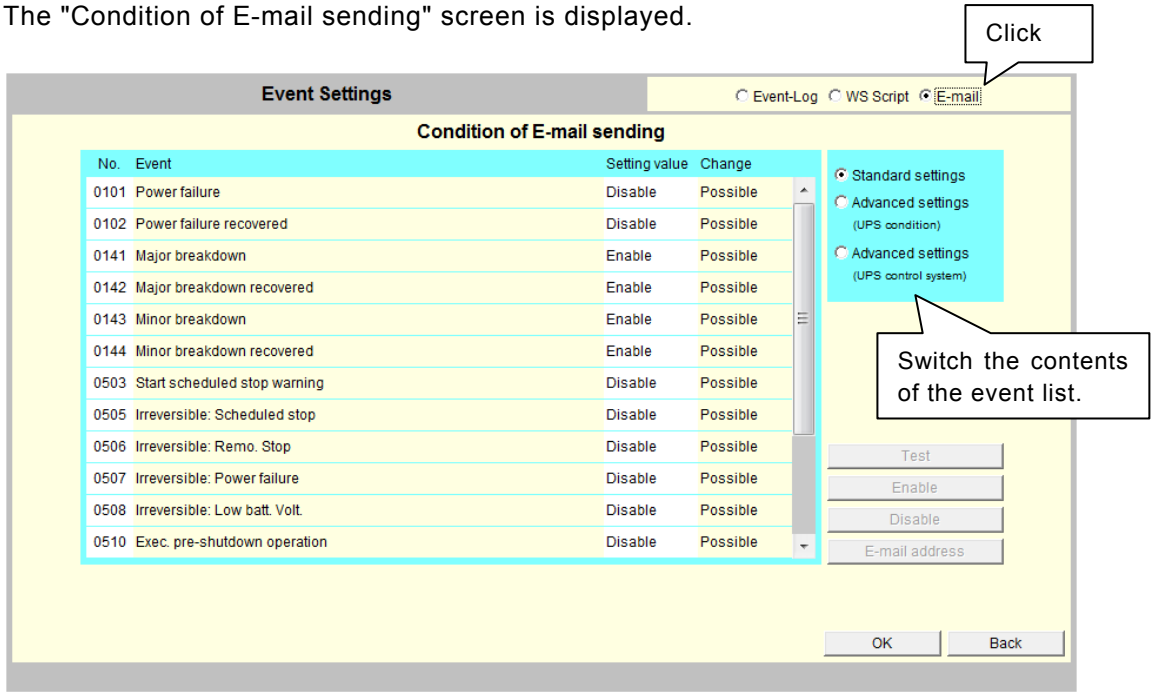
This section describes how to configure e-mail transmission from the UPS to the specified addresses to send notification about errors.

[Procedure]

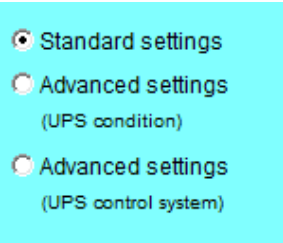
Click the [Event settings] button on the main screen.

Select [E-mail] in the event settings screen.

The "Condition of E-mail sending" screen is displayed.



Switching the event type (below)



Event list (type)	Description
Standard settings	Standard events.
Advanced settings (UPS condition)	Events concerning details of UPS operations such as breakdown details.
Advanced settings (UPS control system)	Events concerning UPS control.

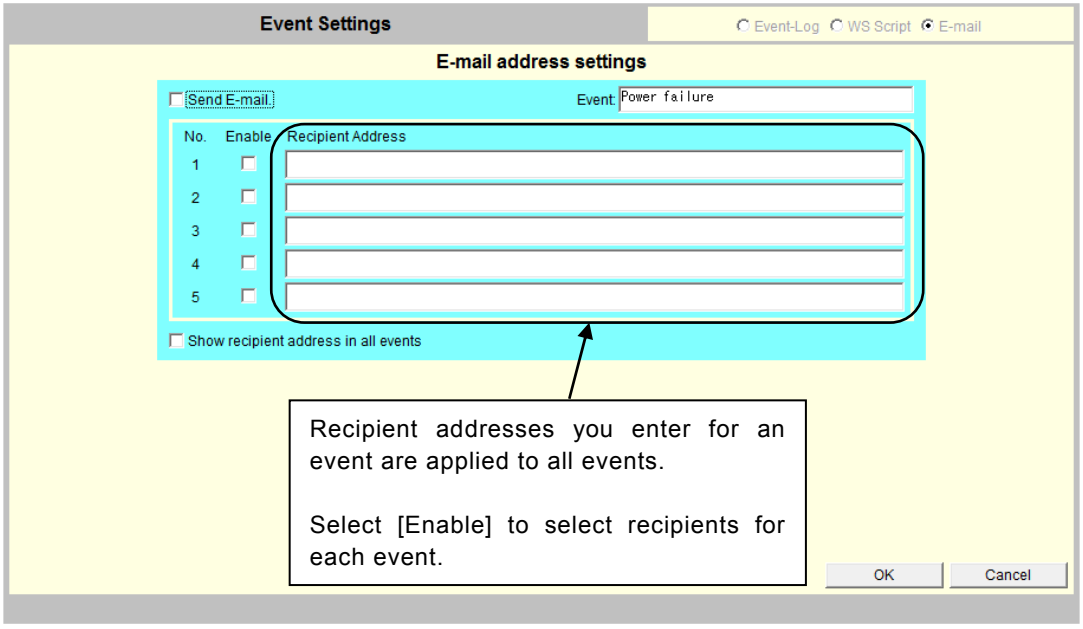
Configuration buttons

Buttons	Description
Test	Test e-mail transmission to the registered addresses for the selected event.
Enable	Switches the setting value from **Disable** to **Enable**. The selected event is **Enable** for e-mail transmission.
Disable	Switches the setting value from **Enable** to **Disable**. The selected event is **Disable** for e-mail transmission.
E-mail address	Specify the recipients for the selected event.

Configuring e-mail recipient addresses

[Procedure]

Select the event to set for e-mail recipients from the event list.
Click the [E-mail address] button.
The "E-mail address settings" screen is displayed. The following screenshot is for the "Power failure" event.



View	Description
Send E-mail.	Select this if you want to send e-mails when the event occurs. When this is selected on this screen, the setting value becomes "Enable". Only the specified events are enabled.
Enable	Select this if you want to send an e-mail to the given address when the selected event occurs. E-mails are not sent to addresses that are not selected.
Recipient Address	Enter the recipient's address. You can register up to 5 recipients. They are applied to all events.
Show recipient address in all events	Select this if you want to apply the enabled recipients you have specified to all events.

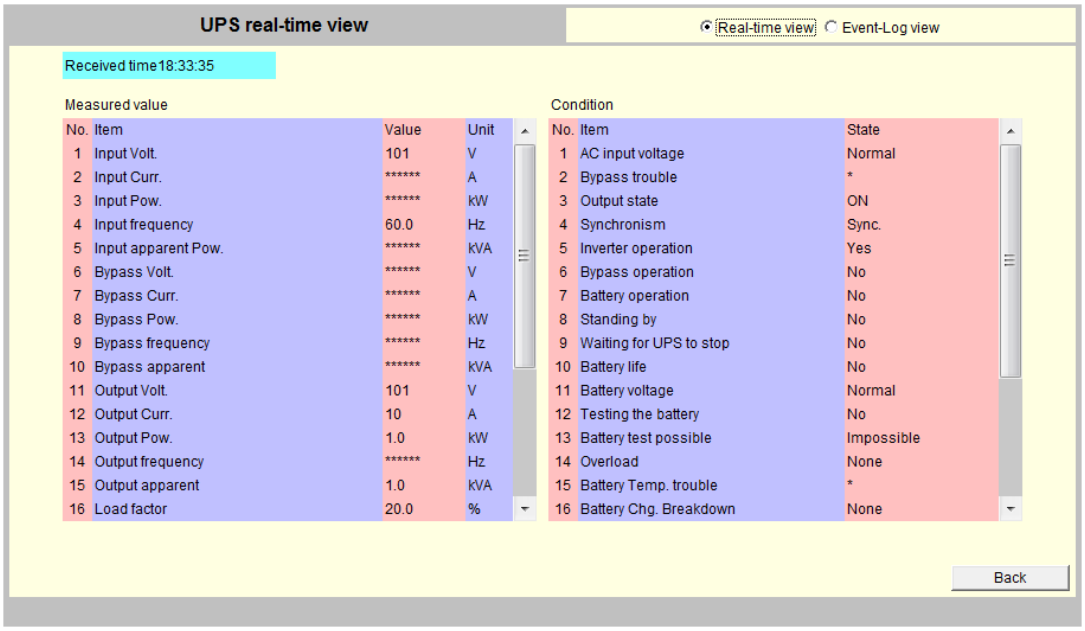
2.24 Checking the UPS status and event log

You can check the current status, UPS measurement values and UPS event log.

> For details about UPS status and measurement values, refer to “Appendix D. UPS status and measurement values” in the User Guide. For a description of events, refer to “Appendix C. Description of events.”

[Procedure]

Click the [View] button on the main screen.
The [UPS real-time view] screen is displayed.



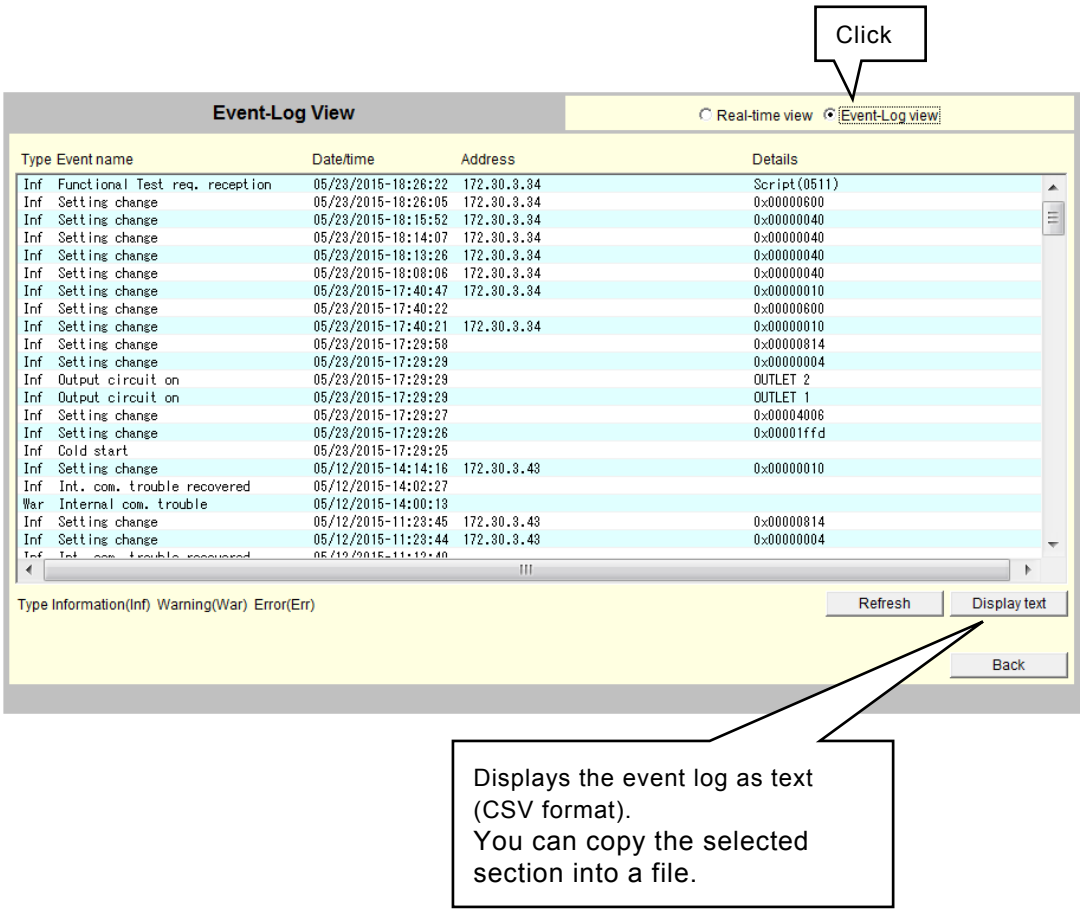
[Displayed Description]

View	Description
Received time	Displays the time when the condition and measured value information was obtained from the UPS. Condition and measured value information is obtained at approximately 10-second intervals and the displayed value is refreshed.
Measured value	Displays measured values of the UPS. Displays "******" for items without the measured value display.
Condition	Displays the condition of the UPS. Displays an asterisk (*) for items without the condition display.

> **(Caution)**
> Some UPS models are not equipped with the measured value display function. In this case, the values are all displayed as "******".

Event-log

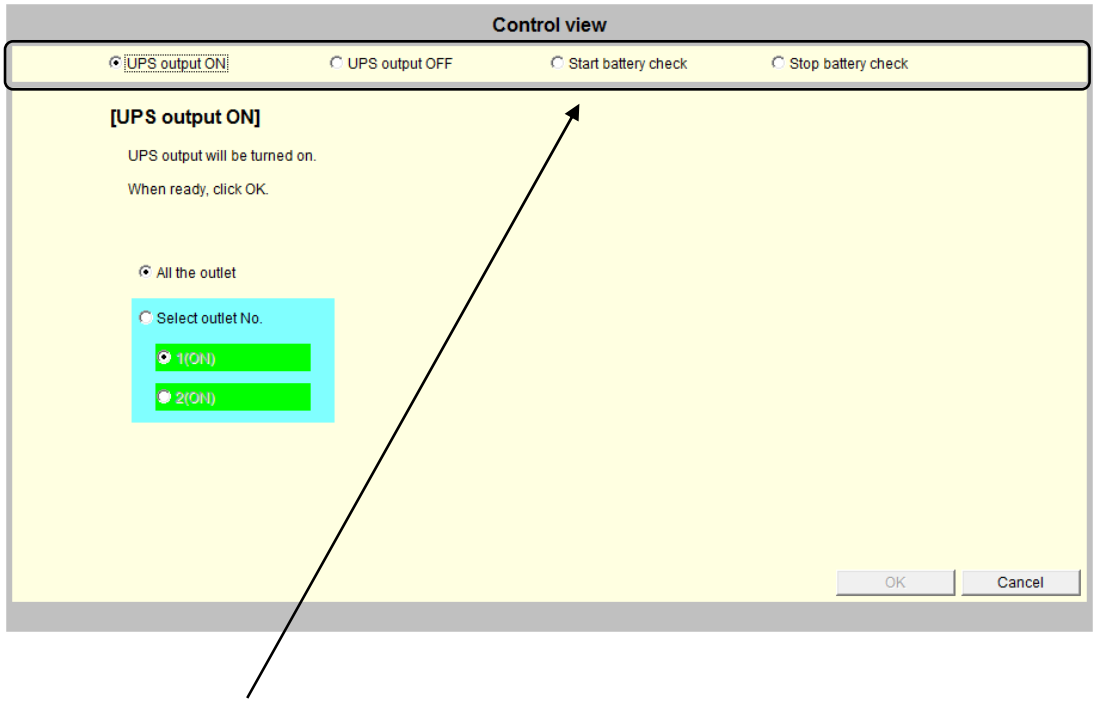
Click the [View] button on the main screen.
Click [Event-Log view] on the UPS real-time view screen.
The event log recorded on the UPS is displayed in the event-log view screen.



2.25 Controlling the UPS

This section describes how to turn the UPS ON and OFF (UPS output ON and OFF) and how to test the battery.
You can perform an shutdown of connected computers and restart devices by turning the UPS ON and OFF (UPS output ON and OFF). Computers are shut down before the UPS output stops.

[**Procedure**]
Click the [Control] button on the main screen.
The [Control view] screen is displayed.(UPS with output distribution control)

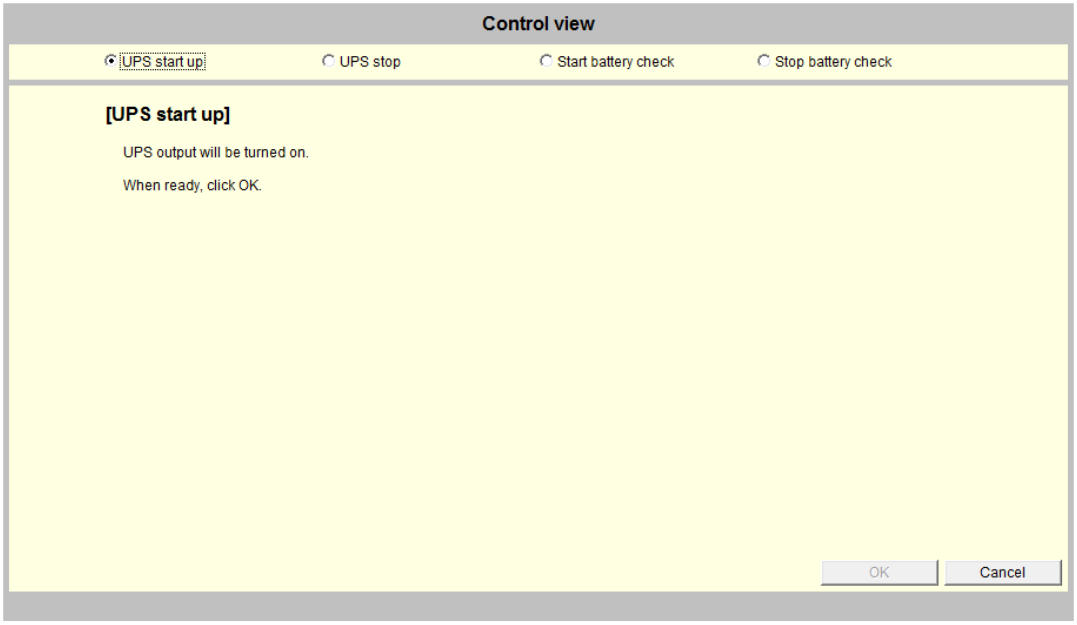


View	Description
UPS output ON	Turn on the UPS outlets.
UPS output OFF	Turn off the UPS outlets.
Start battery check	Starts a battery check.
Stop battery check	Cancels the battery check.

・Starting up the UPS and turning the UPS output on

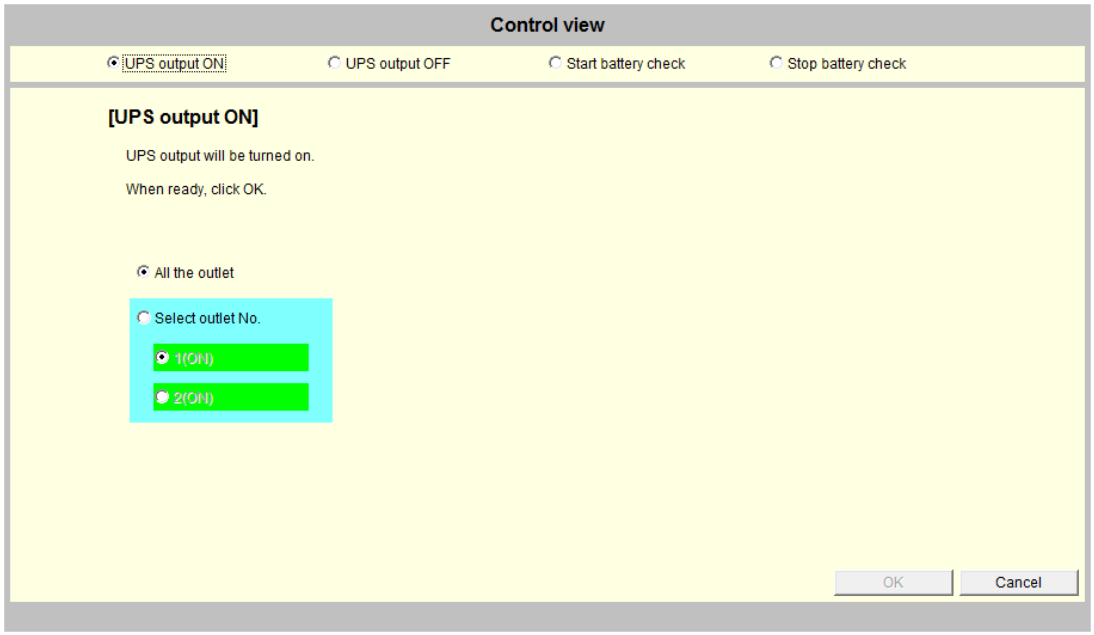
UPS without output distribution control

The [OK] button is enabled while the UPS is turned OFF.
Click the [OK] button. The UPS starts up.



UPS with output distribution control

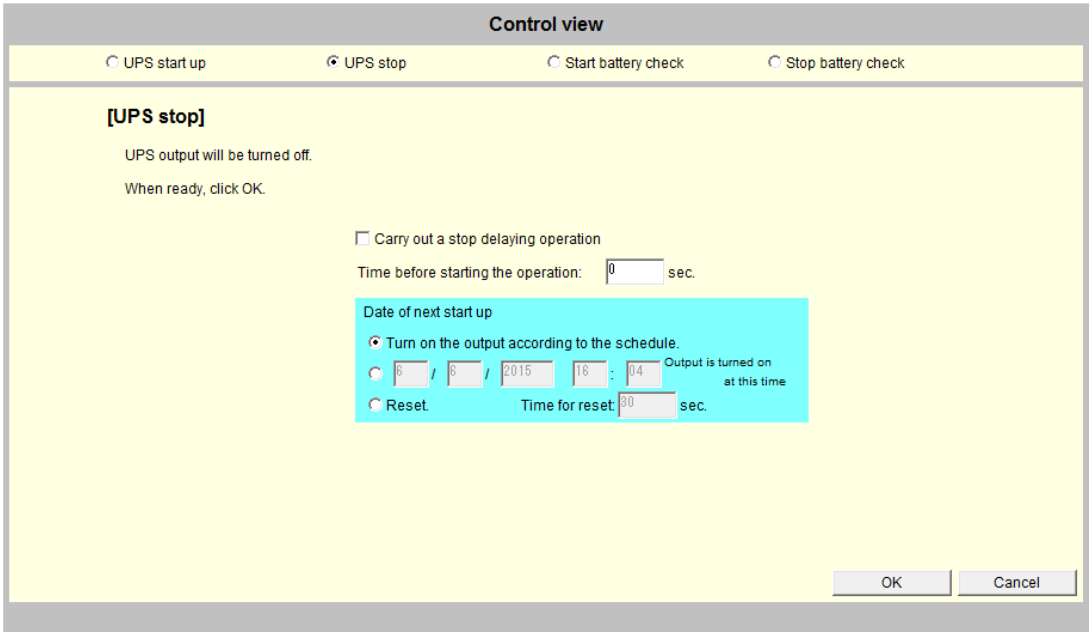
All the outlet: Turns on both OUTPUT1 and OUTPUT2 at the same time.
Select outlet No.: Turns on OUTPUT1 and OUTPUT2 separately.
Select how you want to turn the outlets ON.
Click the [OK] button.
Output from the specified outlets is turned ON.



•Stopping the UPS and turning the UPS output off

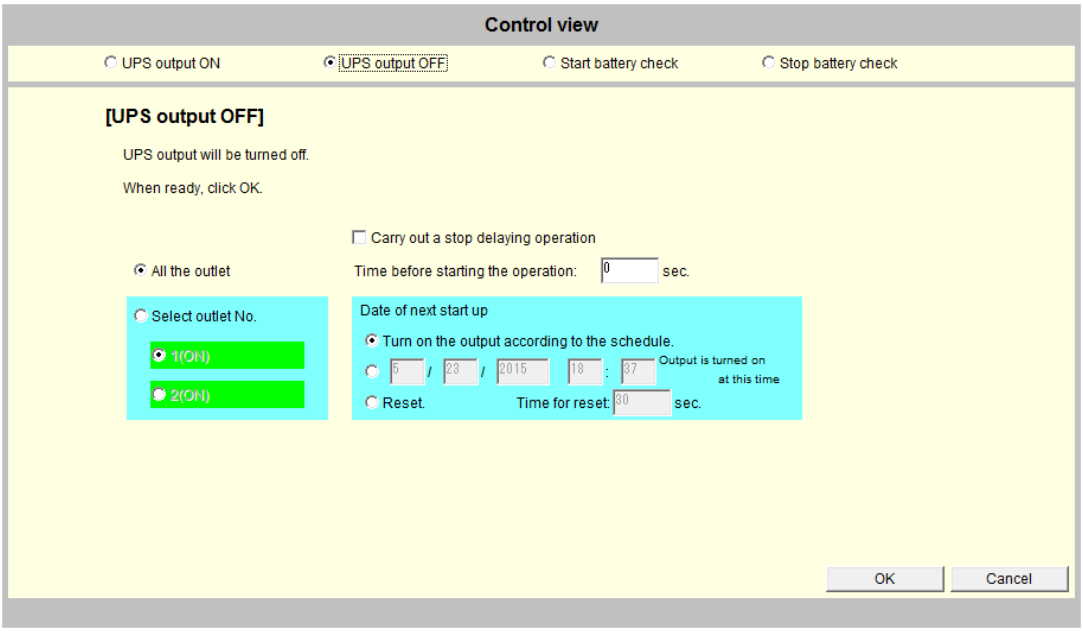
UPS without output distribution control

Select [Stop UPS] on the control view screen.
The [UPS stop] screen is displayed.
Specify the conditions to shut down the UPS.
Specify the conditions for the next start-up.
Click the [OK] button. The UPS shuts down.



UPS with output distribution control

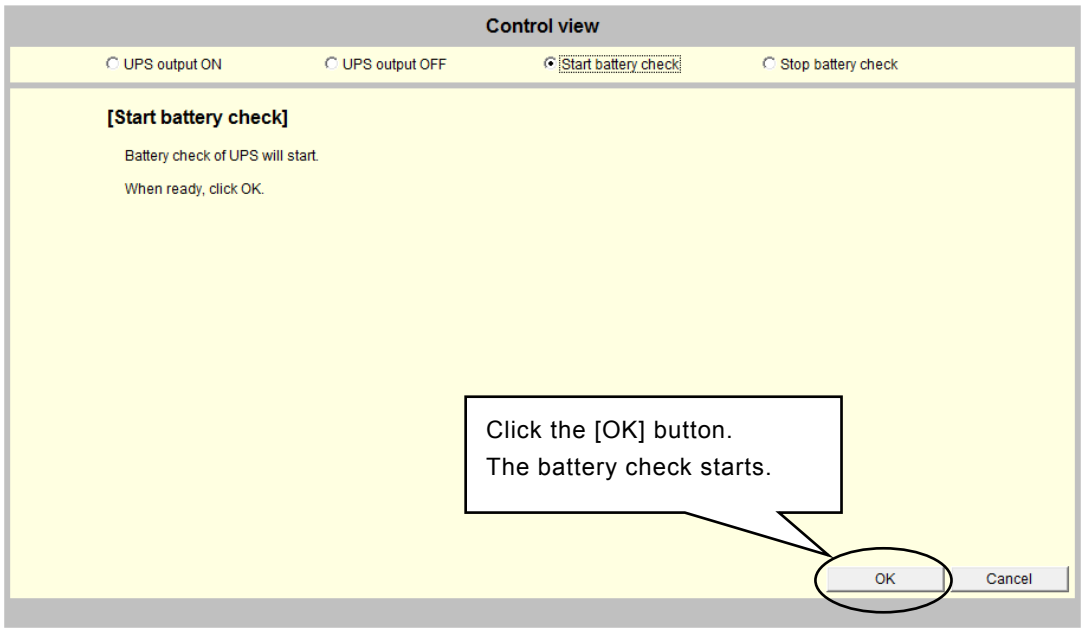
All the outlet: Turns off both OUTPUT1 and OUTPUT2 at the same time.
Select outlet No.: Turns off OUTPUT1 and OUTPUT2 separately.
Select how you want to turn the outlets OFF.
Specify the conditions for the next start-up.
Click the [OK] button. Output from the specified outlets is turned OFF.



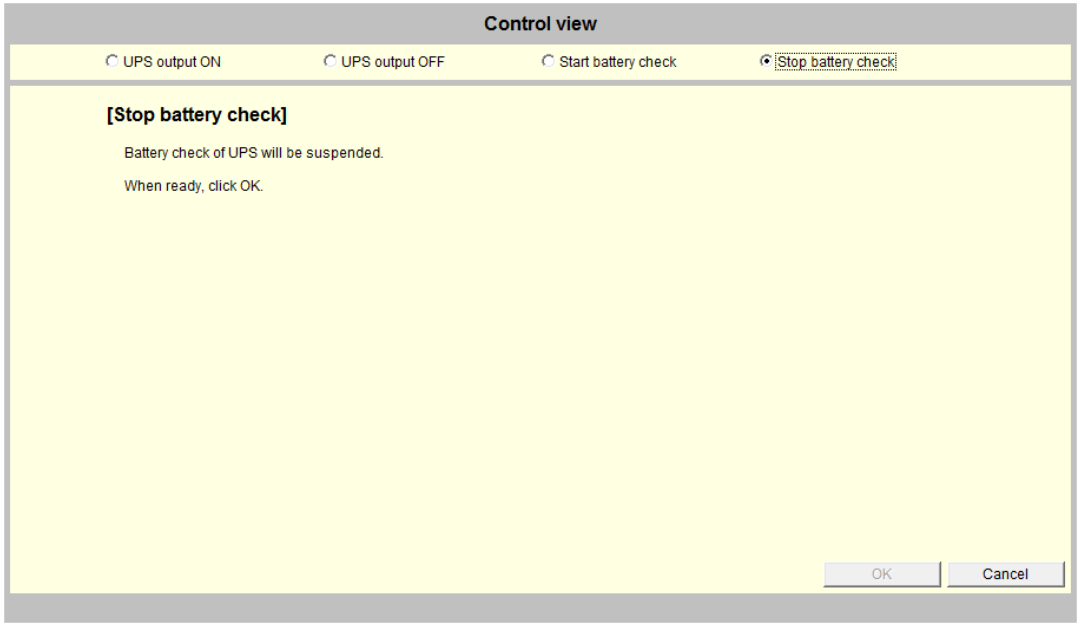
Screen display	Description
All the outlet	Available for UPS with output distribution control. Turns off both OUTPUT1 and OUTPUT2 at the same time.
Select outlet No.	Available for UPS with output distribution control. Turns off OUTPUT1 and OUTPUT2 separately.
1(ON)	Turns off OUTPUT1. Computers connected to OUTPUT1 are shut down before OUTPUT1 is turned OFF.
2(ON)	Turns off OUTPUT2. Computers connected to OUTPUT2 are shut down before OUTPUT2 is turned OFF.
Carry out a stop delaying operation	Performs a shutdown delay process before shutdown delay begins. This item is enabled if [Waiting for logout] is specified in "Configuring UPS control".
Time before starting the operation	Specify the duration before starting the shutdown process in seconds.
Date of next start up	Select from the following start-up methods for the next start-up process. Settable range from 10 to 65535 (seconds)
Turn on the output according to the schedule.	Starts at the scheduled time if you have specified the start-up schedule.
/ / : Output is turned on at this time	Starts at the specified time.
Reset	Starts after the duration specified in the [Time for reset] after the UPS shutdown.
OK	The UPS is shut down as specified.
Cancel	Returns to the main screen without shutting down.

・Checking the battery

Click the [Control] button on the main screen.
Select [Start battery check] on the control view screen.
The [Start battery check] screen is displayed.



This section describes how to cancel the battery check.
Click the [Control] button on the main screen.
Select [Stop battery check] on the control view screen.
Click the [OK] button.The battery check stops.



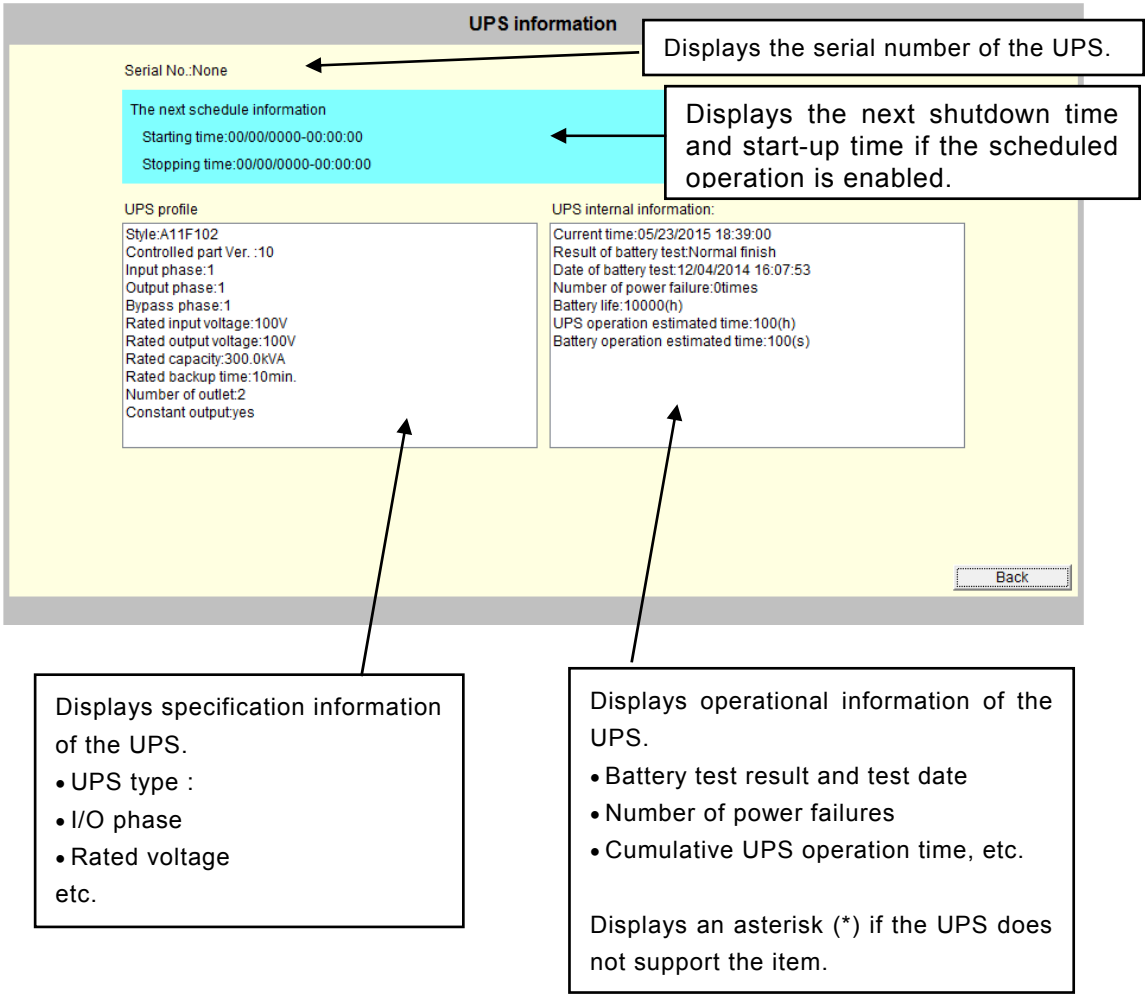
2.26 Checking UPS device information

You can check UPS information such as the specifications and program versions.

[Procedure]

Click the [UPS information] button on the main screen.

The [UPS information] screen is displayed.



2.27 Performing a shutdown test

You can execute the following three simulation sequences to test a shutdown of registered devices without causing a power failure.
E-mail notification and UPS output control are not performed in a shutdown test.

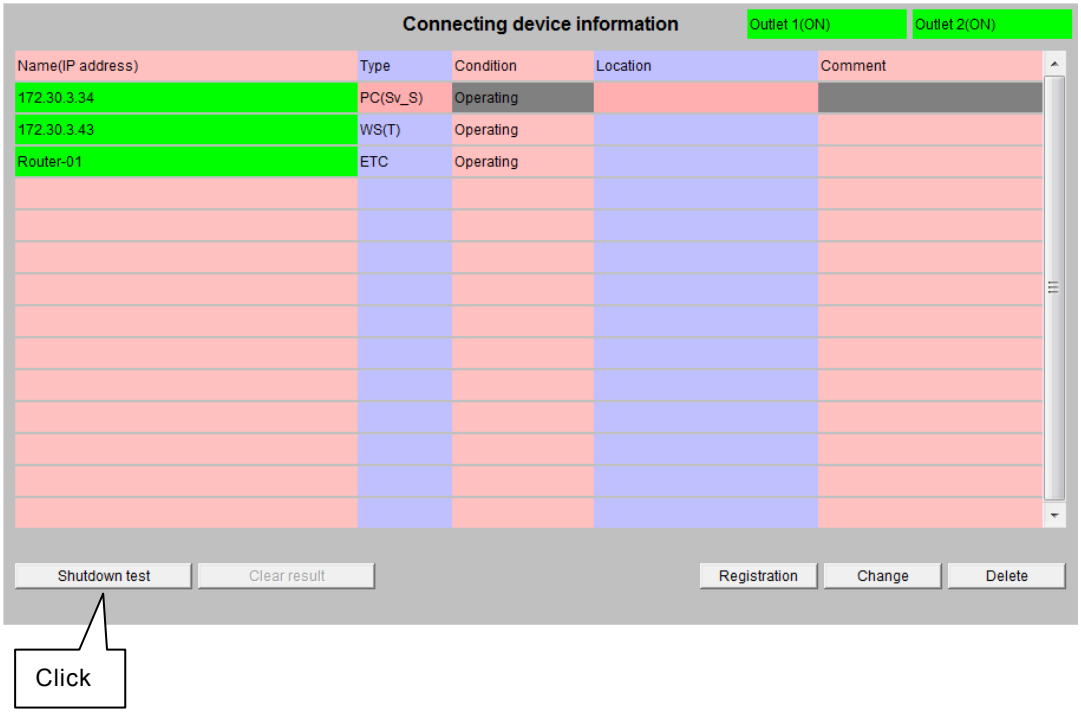
Sequence	Starting position	Ending position
Power failure	Occurrence of a power failure	UPS automatic stopping time has elapsed (The UPS output status is not altered)
Low battery voltage	Occurrence of low battery voltage	
Shutdown	Shutdown execution	

You can perform a shutdown test on the following registered devices either individually or in groups.

Type	Device type	Remark
PC	PC (network connection)	UPS management software operating PC
WS	WS (network connection)	UPS management software operating WS
WS(T)	WS(Telnet)	

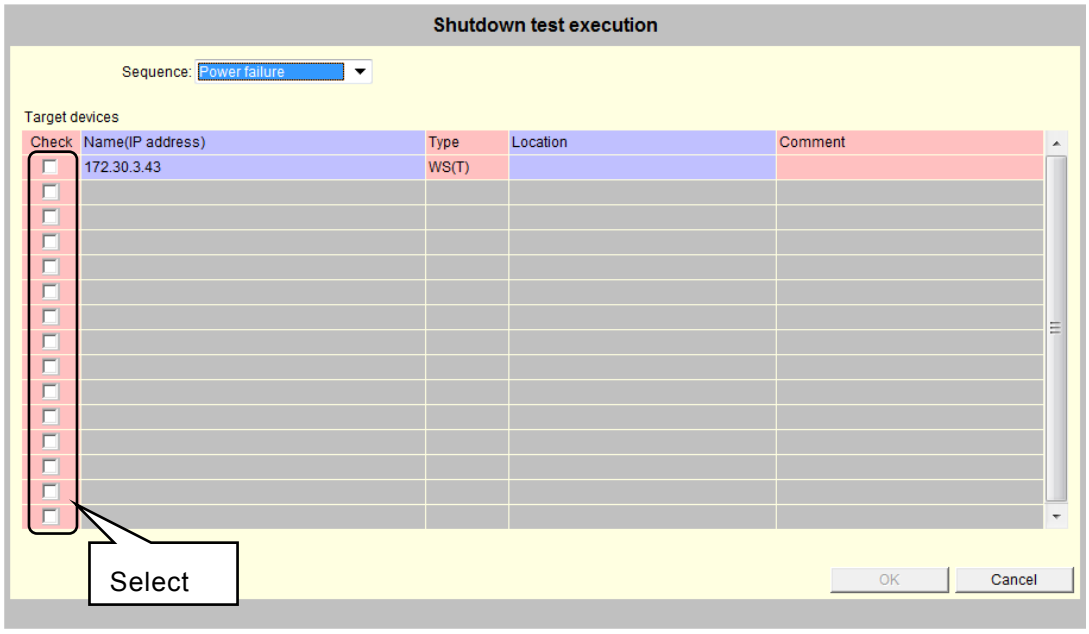
[Shutdown test start procedure]

Click the [Shutdown test] button on the main screen.



The [Shutdown test execution] screen is displayed.

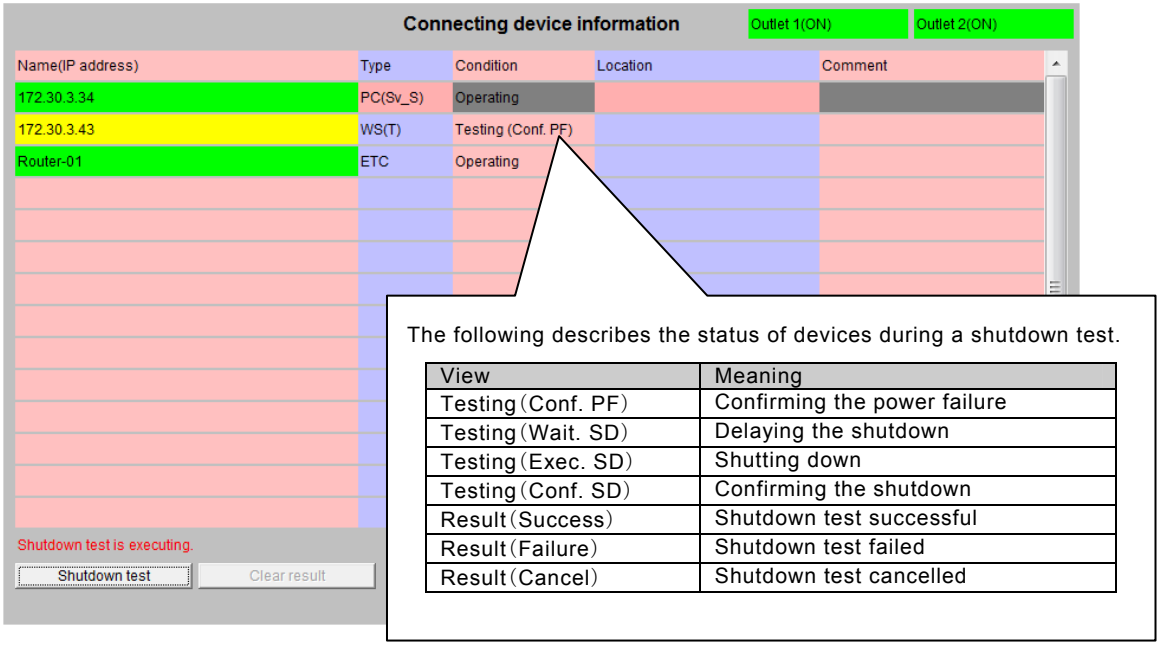
Select the sequence and devices to be shut down.



Click the [OK] button.

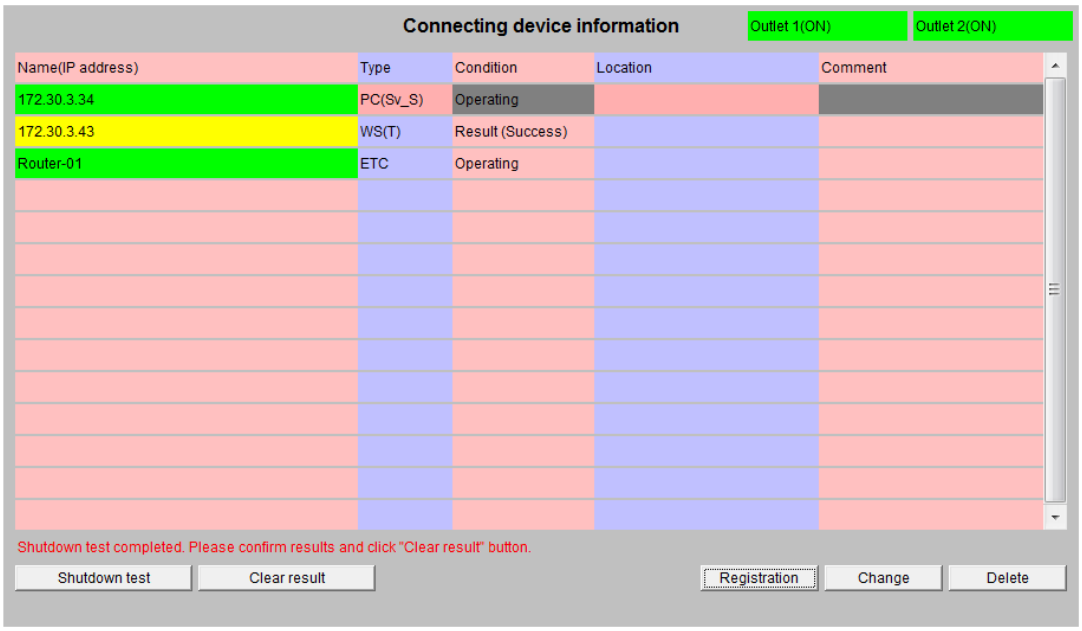
Performing a shutdown test.

You can check the progress of the shutdown test on the main screen.



View	Meaning
Testing (Conf. PF)	Confirming the power failure
Testing (Wait. SD)	Delaying the shutdown
Testing (Exec. SD)	Shutting down
Testing (Conf. SD)	Confirming the shutdown
Result (Success)	Shutdown test successful
Result (Failure)	Shutdown test failed
Result (Cancel)	Shutdown test cancelled

When the shutdown test is complete, the test results are displayed and the [Clear result] button is enabled.



Click the [Clear result] button.

The main screen is displayed again.

(The test results are displayed until you click the [Clear result] button.)

<Restrictions in a shutdown test>

(1) Shutdown tests may not start depending on the UPS status. In this situation, the message "Failed to start test. (Error code: **)"is displayed. Where the "**" is one of the following error codes.

No.	Error code	Cause
1	20	Performing a shutdown test, e-mail transmission test, or WS script test
2	21	Performing the shutdown sequence due to an irreversible event such as a scheduled shutdown.
3	22	Internal serial communication error
4	23	Power failure
5	25	Major breakdown
6	26	Overload
7	27	There is no available device for the shutdown test because all the selected devices are in one of the following status. ・The connected power outlet is OFF ・The device is shut down ・"Power failure" is selected as the test sequence; however, the device is connected to an outlet that is not specified as the shutdown trigger for a power failure. ・"Low battery voltage" is selected as the test sequence; however, "Low battery voltage occurs" is not specified as the shutdown trigger.

(2) The shutdown test is forcibly cancelled if one of the conditions 2 to 6 listed in (1) occurs during the test.

(3) E-mail notification and UPS output control are not performed in a shutdown test.

3. Explanation of the functions of the Telnet Terminal tool

3.1 Starting the Terminal Tool from a Telnet client software

Start the Telnet client from a computer that can be connected to the UPS via the network, and then perform log in.

Specify the **SANUPS SOFTWARE** server IP address and the port number for Telnet connection to the **SANUPS SOFTWARE** server in the Telnet client.

Example) If IP address is **172.30.1.88** and port number is **10023** (default)

telnet 172.30.1.128 10023

Check the display screen after UPS (**SANUPS SOFTWARE** server) connection, and perform the following.

```
Welcome to UPS Agent
User name :
```

Enter "UpsAdmin" in the user name and then press "Enter".

```
Welcome to UPS Agent
User name :UpsAdmin
Password  :
```

Enter "UpsAdmin" in the password and then press "Enter".
The character string entered in the password is not displayed on the screen.
The characters are case sensitive.

When you log in to the terminal tool, the [Main Menu] is displayed.

3.2 List of Telnet Terminal Tool functions Telnet

The following sections describe the functions of the Telnet Terminal Tool.

For an overview of each function, refer to the functions in the following table.

Item	Description
3.3 Main Menu	Describes each item of the main menu.
3.4 UPS configuration menu (Configuration)	Describes how to configure UPS operating information (network, account changing, control operation, E-mail settings, etc.).
3.5 Scheduled operation configuration menu (Schedule)	Describes how to configure UPS schedule settings.
3.6 UPS control menu (Control)	Describes the UPS On/Off control method from remote connections.
3.7 UPS information display menu (Display)	Describes the UPS status, measurement value information, and event log display functions.
3.8 Connected device configuration menu (Connection Device)	Describes how to register devices with the UPS, modify the registration details for registered devices, and delete registered devices. Also describes event and script configuration.
3.9 Event configuration menu (Event)	Describes how to set the conditions for sending an e-mail notification and recording an entry in the event log.
3.10 UPS Power Distribution Control Configuration menu (Outlet)	Describes how to configure the On/Off delay time of power outlets. This function can be used when using a UPS with power distribution control.
3.11 Checking Communication Circuits with Ping	Checks the network communications status with the specified device using the “ping” command.

3.3 Main Menu

When you log in to the terminal tool, the [Main Menu] is displayed.

```
  Main Menu
1.Configuration
2.Schedule
3.Control
4.Display
5.DateTime
6.Connection Device
7.Event
8.Outlet
9.Ping
10.Download/Upload
11.Exit
UPS Agent>
```

The functions of the [Main Menu] are described in the table below.

Menu name	Description
1.Configuration	Sets the UPS operation. The network settings, account change, control operation, E-mail settings, operation during a power failure, and measured value management are set.
2.Schedule	Sets the schedule operation of the UPS.
3.Control	Sets the UPS ON/OFF control from a remote location.
4.Display	Displays the UPS condition and measured value information, as well as the event log.
5.DateTime	Sets the UPS clock. **(not supported)**
6.Connection Device	Registers a device on the UPS, changes the registration contents, and deletes the registered devices. Also performs event and script settings, and executes a shutdown test.
7.Event	Sets the E-mail sending conditions and the event log recording conditions.
8.Outlet	Sets the delay time during ON/OFF for OUTPUT 1 and OUTPUT 2, when a UPS with a system control output is used. This function can only be used when a UPS with a system control output is used.
9.Ping	Executes a Ping command and checks the status of network communications with the specified device.
10.Download/Upload	Downloads (imports) or uploads (exports) the setup values of the UPS. **(not supported)**
11.Exit	Exits the terminal tool.

3.4 UPS Configuration menu (Configuration)

```
  Main Menu
1.Configuration
2.Schedule
3.Control
4.Display
5.DateTime
6.Connection Device
7.Event
8.Outlet
9.Ping
10.Download/Upload
11.Exit
UPS Agent>1

  Configuration Menu
1.Network
2.Account
3.Control Configuration
4.Service
5.UPS Information
6.E-Mail
7.NTP
8.Exit
UPS Agent>
```

Enter **1**

1.Network

```
1.IP Address
2.Router Address
3.DNS Server Address
4.Exit
UPS Agent>
(Display only)
```

2.Account

```
Input User Name.
UPS Agent>
Input Password.
UPS Agent>
Input Password Again.
UPS Agent>
```

3.Control Configuration

```
1.Shutdown Condition
2.UPS Control
3.Common
4.Battery
5.Exit
UPS Agent>
```

4.Service

```
1.Condition
2.Port
3.Access Limitation
4.Access Address
5.Community
6.Trap Address
7.Shutdown Mode
8.Trap Test
9.Exit
UPS Agent>
```

5.UPS Information

```
1.Location
2.Comment
3.Exit
UPS Agent>
```

6.E-Mail

```
1.UPS E-Mail Address
2.SMTP Address
3.SMTP Port
4.E-Mail Sending Delaying Time
5.Receiving Mail Confirmation
6.POP3 Server Address
7.POP3 Port No.
8.Account
9.E-Mail Confirmation Interval
10.Exit
UPS Agent>
```

7.NTP

(not supported)

3.4.1 Network Configuration menu (Network)

Enter "1"(Configuration) in the [Main Menu] screen and then press "Enter".
The [Configuration Menu] is displayed.
Enter "1"(Network) and then press "Enter".
[Network Information] is displayed.

```
Network Information
--- IP Address 1 ---
IPv6 Address                :fdb6:a6ed:b3d0:3::12:15

--- IP Address 2 ---
IPv6 Address                :fe80::f15e:1e85:7347:6e03

--- IP Address 3 ---
IPv4 Address                :172.30.3.88
Subnet Mask                 :255.255.255.0

1.IP Address
2.Router Address
3.DNS Server Address
4.Exit
UPS Agent>
```

The UPS (SANUPS SOFTWARE server) network information is displayed.

Network Configuration menu

Setup menu	Description
1.IP Address	Specify the settings for the IP address of the UPS. (not supported)
2.Router Address	Enter the address of the router. (not supported)
3.DNS Server Address	Enter the address of the DNS server. (not supported)
4.Exit	Return to the "Configuration Menu".

*The menu is displayed, but the addresses cannot be configured here.

3.4.2 UPS Account Configuration menu (Account)

Enter "1"(Configuation) on the [Main Menu] screen, and then press "Enter".
Enter "2"(Account) on the [Configuration Menu] screen, and then press "Enter".
The [Account Information] screen is displayed.

```
Account Information
User Name:UpsAdmin
Password :***************



Input User Name.
UPS Agent>
```

Enter the new user name and password, and then press "Enter".

Enter the password again for confirmation.

(Caution)
The password is case sensitive.
If you change the password, be sure to remember the correct password.

3.4.3 UPS Control Configuration menu (Control Configuration)

Enter "1" on the [Main Menu] screen, and then press "Enter".
Enter "3" on the [Configuration Menu] screen, and then press "Enter".
The [Control Configuration Menu] is displayed.

```
  Control Configuration Menu
1.Shutdown Condition
2.UPS Control
3.Common
4.Battery
5.Exit
UPS Agent>
```

The functions of the setup menu of [Control Configuration Menu] are described in the table below.

Setup menu	Description
1.Shutdown Condition	Set the shutdown triggers. Power failure confirmation time Shutdown during low battery voltage Shutdown due to a serial communication error Shutdown due to the occurrence of a major breakdown Shutdown due to the occurrence of an overload
2.UPS Control	Set the UPS control information. Stop the UPS during a power failure Automatically start the UPS during power failure recovery Battery charging rate
3.Common	Set the common information. Existence of a delay operation (waiting for user logoff) Stop delay time (delay repetition interval when the delay operation is enabled) Shutdown delaying time UPS automatic stopping time
4.Battery	Set the battery-related information. Warning for battery replacement Auto battery check (UPS main unit) Auto battery check (UPS management software)
5.Exit	Return to the [Configuration Menu].

Explanation of the function of the Telnet Terminal tool

(1) Shutdown triggers (Shutdown Condition)

```
Control Configuration(Shutdown Condition)
Power Failure Confirmation Time        :60(Sec)
Low Battery Voltage Operation          :Enable
  Won't Shutdown As Long As Possible   :Disable
  Low Battery Voltage Condition        :0(Min)
  (When The Backup-time Is Under The Specified Value)
Auto Shutdown Condition    Condition  Confirm.Time(Sec)
  Serial Comm. Err.         Disable      300
  UPS Breakdown             Disable       60
  UPS Over Load             Disable       60


1.Power Failure Confirmation Time
2.Low Battery Voltage Operation
3.Serial Comm. Err
4.UPS Breakdown
5.UPS Overload
6.Exit
UPS Agent>
```

The current setup values are displayed.

Shutdown Condition setup menu

Setup menu		Description
1.Power Failure Confirmation Time		Set the [Power failure confirmation time] (sec.).
2.Low Battery Voltage Operation		Set [When the low battery voltage occurs, shutdown execution.] 1. Enable: Perform a shutdown 2. Disable: Do not perform a shutdown
	Won't Shutdown As Long As Possible	Set whether or not to use the Backup-time (estimated hold time) in the low battery voltage condition. 1. Enable: Use 2. Disable: Do not use
		When [Enable] is selected, the [Low Battery Voltage Condition (Backup-time)] (min.) is set.
		When [Disable] is selected, the [Low Battery Voltage Condition (Backup-time)] is set to 0 (min.).
		When the UPS does not support [Low Battery Voltage Condition (Backup-time)], [Non Support] is displayed, and settings cannot be made.

Setup menu	Description
3.Serial Comm. Err	Set [Shutdown during a serial communication error]. 1. Enable: Perform a shutdown 2. Disable: Do not perform a shutdown When [Enable] is selected, the [confirmation time] (sec.) is set.
4.UPS Breakdown	Set [Shutdown during the occurrence of a breakdown]. 1. Enable: Perform a shutdown 2. Disable: Do not perform a shutdown When [Enable] is selected, the [confirmation time] (sec.) is set.
5.UPS Overload	Set [Shutdown during the occurrence of an overload]. 1. Enable: Perform a shutdown 2. Disable: Do not perform a shutdown When [Enable] is selected, the [confirmation time] (sec.) is set.
6.Exit	Return to the [Control Configuration Menu].

(2) UPS Control Information (UPS Control)

```
Control Configuration(UPS Control)
UPS Auto Stop                                        :Enable
  UPS Auto Stop Time                                 :120(Sec)
UPS Auto Start                                       :Enable
  Starting Condition(The Rate Of Battery Charge).    :0(%)

1.UPS Auto Stop
2.UPS Auto Start
3.Starting Condition(The Rate Of Battery Charge)
4.Exit
UPS Agent>
```

Setup menu	Description
1.UPS Auto Stop	Set the [Automatically stop the UPS at power failure] condition. 1. Enable 2. Disable When [Enable] is selected, the [UPS Automatic Stop Time] (sec.) is set.
2.UPS Auto Start	Set [Start the UPS during power failure recovery]. 1. Enable: Start 2. Disable: Do not start
3.Starting Condition(The Rate Of Battery Charge)	Set [Automatic start during power failure recovery (battery charging rate)] (%). When the UPS does not support [Automatic start during power failure recovery (battery charging rate)], [Non Support] is displayed, and settings cannot be made.
4.Exit	Return to the [Control Configuration Menu].

(3) Common Information (Common)

```
Control Configuration(Common)
Delay(Condition/Repeat)          :Disable
Delay Time                       :10(Sec)
Shutdown Delay                   :30(Sec)
UPS Auto Stop Time               :120(Sec)









1.Delay
2.Delay Time
3.Shutdown Delay
4.UPS Auto Stop Time
5.Exit
UPS Agent>
```

Setup menu	Description
1.Delay	Set whether or not to delay (the delay for awaiting logoff by the user) the shutdown operation during schedule stopping and stopping by remote control. This setup value is enabled in the PC or WS on which the UPS management software is operating. 1. Enabled: Perform the delay operation 2. Disabled: Do not perform a delay operation
Select Repeat.	When [Enable] is selected, the [Select Repeat] delay count is set.
1.Number Of Times	Enter the delay count.
2.Infinity	Delay is repeated endlessly.
2.Delay Time	The [Stop Delay Time] (sec.) is set. When [1. Enable] is set in [1. Delay], the delay is repeated at the interval (seconds) set in this menu.
3.Shutdown Delay	Set the time (seconds) from the state when recovery becomes impossible due to some shutdown trigger until the start of the shutdown. This is the time period for performing the shutdown pre-processing.
4.UPS Auto Stop Time	Set the delay time (seconds) from the start of the shutdown until stopping of the UPS, after the lapse of the shutdown delay time. Set a time with some margin until the shutdown of all registered devices is complete.
5.Exit	Return to the [Control Configuration Menu].

(4) Battery(Battery)

```
Control Configuration(Battery)
Warning For Battery Replacement     :6(Month Before)
Auto Battery Check(UPS)             :180(Days)
Auto Battery Check(UPS Service)     :None



1.Warning For Battery Replacement
2.Auto Battery Check(UPS)
3.Auto Battery Check(UPS Service)
4.Exit
UPS Agent>
```

Setup menu	Description
1.Warning For Battery Replacement	Set the time (how many months before the replacement period) for the output of the [Warning for battery replacement].
2.Auto Battery Check(UPS)	Set the cycle of the [Auto battery check] (UPS) executed automatically by the UPS. When the UPS does not support an [Auto battery check], [Non Support] is displayed, and settings cannot be made.
3.Auto Battery Check(UPS Service)	Set the [Auto battery check cycle] (LAN interface card). When the UPS does not support a battery check, [Non Support] is displayed, and settings cannot be made.
4.Exit	Return to the [Control Configuration Menu].

3.4.4 Service Configuration menu (Service)

Enter "1"(Configuration) on the [Main Menu] screen, and then press "Enter".
The [Configuration Menu] is displayed.
Enter "4"(Service), and then press "Enter".
The [Service Information] screen is displayed.

```
Service Information
HTTP                :Enable
  Port No.          :10080
Telnet              :Enable
  Port No.          :10023
------MORE------
```

------MORE------ Continued on the next screen.
press "Enter" to view the next screen.

```
Service Information
Access Limitation :Disable
Access Address    :1.None
                   2.None
                   3.None
                   4.None
                   5.None

1.Condition
2.Port
3.Access Limitation
4.Access Address
5.Community
6.Trap Address
7.Shutdown Mode
8.Trap Test
9.Exit
UPS Agent>
```

Explanation of the function of the Telnet Terminal tool

Setup menu	Description
1.Condition	Perform the settings for HTTP and Remote Login operation enable/disable. 1.Enable 2.Disable
2.Port	Perform settings for the HTTP and Telnet port number. (1 ~ 65535)
3.Access Limitation	Set limitations when each service is accessed externally. 1. Enabled: Permit access from the specified terminal. When [1. Enable] is set, specify the IP address of the computer from which access is permitted in [4. Access Address]. 2. Disabled: Permit access from all the terminals.
4.Access Address	Add or delete the IP address of the computer from which access is permitted for the HTTP and remote login.
1.Add	Add the IP address from which access is permitted. (Up to five IP addresses can be registered.)
2.Delete	Delete the already-registered IP address.
3.Exit	Return to [Service Information].
5.Community	Enter the community. (not supported)
6.Trap Address	Input Trap Address. (not supported)
7.Shutdown Mode	Specify the shutdown method when a UPS stop control is output from the SNMP manager via UPS-MIB. (not supported)
8.Trap Test	Perform the trap sending test. (not supported)
9.Exit	Return to the [Configuration Menu].

Access Address settings

Access Address registration procedure

```
1.Condition
2.Port
3.Access Limitation
4.Access Address
5.Community
6.Trap Address
7.Shutdown Mode
8.Trap Test
9.Exit
UPS Agent>4

Select No.
1.Add
2.Delete
3.Exit
UPS Agent>1

Input Access Address.
UPS Agent>172.30.3.50
OK
```

Enter 4

Enter 1

Input Address

Access Address delete procedure

```
1.Condition
2.Port
3.Access Limitation
4.Access Address
5.Community
6.Trap Address
7.Shutdown Mode
8.Trap Test
9.Exit
UPS Agent>4

Select No.
1.Add
2.Delete
3.Exit
UPS Agent>2

Select No.
UPS Agent>1
OK
```

Enter 4

Enter 2

Enter the Item No. of the registered address. Delete 172.30.3.50 registered in item 1.

3.4.5 UPS Information Configuration menu(UPS Information)

Enter "1"(Configuration) on the [Main Menu] screen, and then press "Enter".
The [Configuration Menu] is displayed.
Enter "5"(UPS Information), and then press "Enter".
The screen of the [UPS Information] setup menu is displayed.

```
UPS Information
Location:
Comment :

1.Location
2.Comment
3.Exit
UPS Agent>
```

1. Location: Enter the location. (Can be blank)
2. Comment: Enter a comment. (Can be blank)

3.4.6 E-mail Sending Configuration menu (E-Mail)

Enter "1"(Configuration) on the [Main Menu] screen, and then press "Enter".
The [Configuration Menu] is displayed.
Enter "6"(E-Mail), and then press "Enter".
The screen of the [E-Mail Menu] setup menu is displayed.

```
E-Mail Information
UPS E-Mail Address              :None

Send Mail
SMTP Server Address             :
SMTP Port No.                   :25
E-Mail Sending Delaying Time    :15(Sec)

------MORE------
```

------MORE------
Continued on the next screen.
press "Enter" to view the next screen.

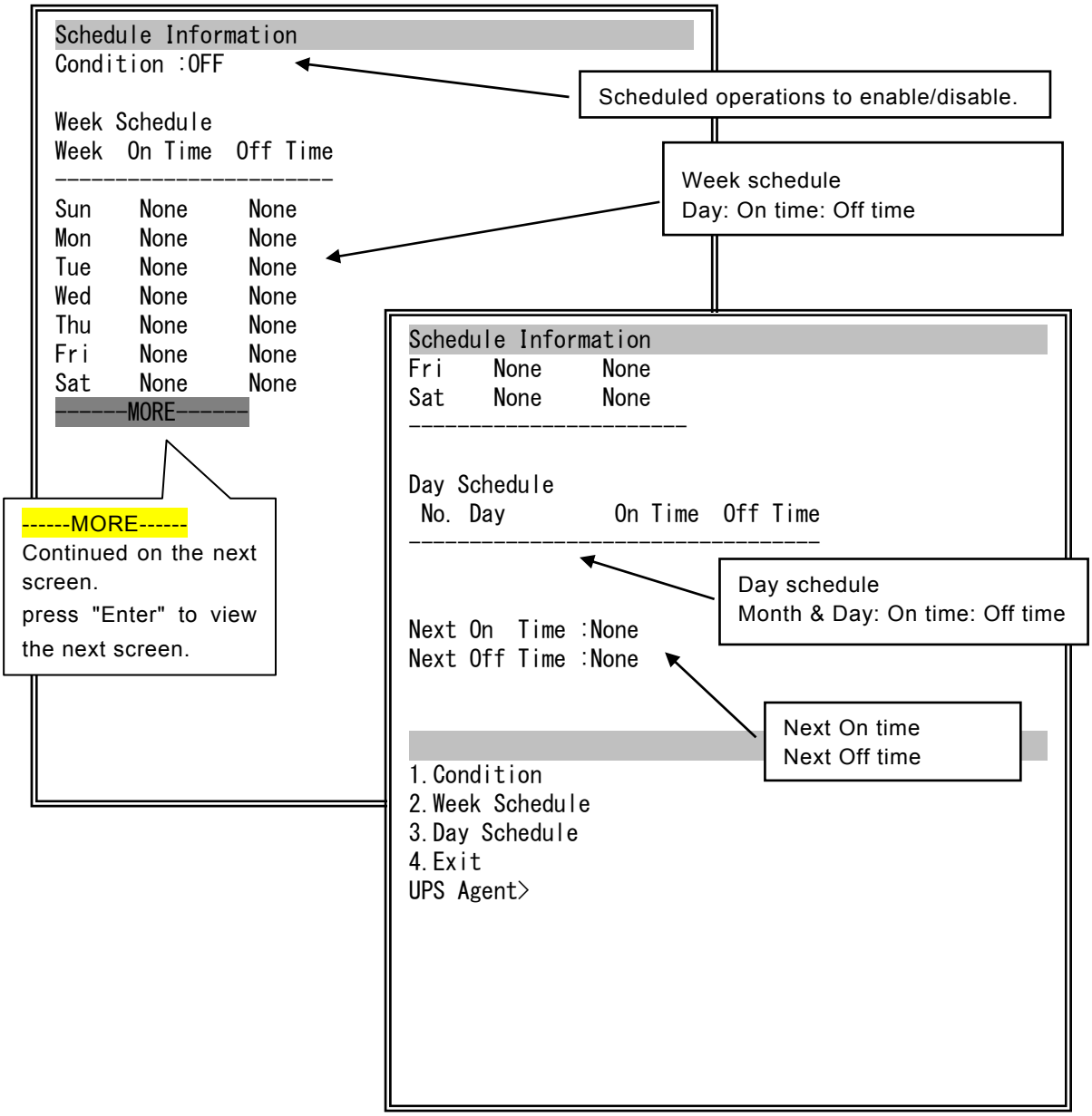
```
E-Mail Information
Recv Mail
Receiving Mail Confirmation     :Disable
POP3 Server Address             :
POP3 Port No.                   :110
Account                         :
Password                        :***************
E-Mail Confirmation Interval    :5(Min)




1.UPS E-Mail Address
2.SMTP Server Address
3.SMTP Port No.
4.E-Mail Sending Delaying Time
5.Receiving Mail Confirmation
6.POP3 Server Address
7.POP3 Port No.
8.Account
9.E-Mail Confirmation Interval
10.Exit
UPS Agent>
```

Explanation of the function of the Telnet Terminal tool

Setup menu	Description
1.UPS E-Mail Address	Set the source address for sending e-mails from the UPS.
2.SMTP Server Address	Set the IP address of the SMTP server.
3.SMTP Port No.	Set the port number of the SMTP server. (Default value: 25)
4.E-Mail Sending Delaying Time	Set the delay time during mail sending. (Default value: 15 secs.)
5.Receiving Mail Confirmation	Set whether to confirm receipt of the information request e-mail. 1. Enable 2. Disable
6.POP3 Server Address	Set the address of the e-mail server (POP3 server) that receives the information request e-mail.
7.POP3 Port No.	Set the port number of the e-mail server (POP3 server.) (Default value: 110)
8.Account	Set the account information for authentication of the POP3 server.
9.E-Mail Confirmation Interval	Check for information request e-mails for the e-mail server (POP3 server) at the set interval.
10.Exit	Return to the [Configuration Menu].

3.5 Scheduled operation configuration menu (Schedule)

Enter "2"(Schedule) on the [Main Menu] screen, and then press "Enter".
The [Schedule Information] screen is displayed.



Setup menu	Description
1.Condition	Set scheduled operations to enabled/disabled.
2.Week Schedule	Set the weekly schedule.
3.Day Schedule	Set the schedule for the specified day.
4.Exit	Return to the [Main Menu].

3.5.1 Enabling and disabling scheduled operations

Enter "1"(Condition) on the [Schedule Information] screen, and then press "Enter".

The screen shown in the figure below is displayed.

```
Select No.
1.ON
2.OFF
3.Exit
UPS Agent>
```

1. ON : Enabled
2. OFF: Disabled

Enter the number to be set, and then press "Enter".

Return to the [Schedule Information] screen.
Screen displayed when the schedule operation is set to [Enabled].

```
Condition : ON

Week Schedule
Week  On Time  Off Time
----------------------
Sun    None     None
Mon    7:00    19:00
Tue    7:00    19:00
Wed    7:00    19:00
Thu    7:00    19:00
Fri    7:00    19:00
Sat    None     None
```

3.5.2 Configuring scheduled weekly operations

Set the ON/OFF time for each day from Sunday to Saturday.
This section explains how to set the On time to 7:00 and the Off time to 19:00 on a Monday.

```
1.Condition
2.Week Schedule
3.Day Schedule
4.Exit
UPS Agent>2

Select Week.
1.Sun
2.Mon
3.Tue
4.Wed
5.Thu
6.Fri
7.Sat
UPS Agent>2

Select Schedule Type.
1.OFF Time
2.ON Time
UPS Agent>1

Input Time.([hh:mm], [0]:Delete)
UPS Agent>19:00
OK

Select Schedule Type.
1.OFF Time
2.ON Time
UPS Agent>2

Input Time.([hh:mm], [0]:Delete)
UPS Agent>7:00
OK
```

Enter 2

Enter the number of the day to be set.

Enter the number of the day to be set.

1. Off Time: Set the Off time
2. On Time: Set the On time

Set the Off time.
Enter in the format **19:00**.(Hour:min)

1. Off Time: Set the Off time
2. On Time: Set the On time

Enter the number of the day to be set.

Set the On time.
Enter in the format **7:00**.(Hour:min)

Displayed settings after configuration (excerpt)

```
Condition : ON

Week Schedule
Week   On Time   Off Time
-----------------------
Sun     None      None
Mon     7:00     19:00
Tue     None      None
Wed     None      None
Thu     None      None
Fri     None      None
Sat     None      None
```

(Description)
Scheduled operation set for 7:00 to 19:00 on Mondays.

3.5.3 Configuring scheduled operations for a specific date

Set the On/Off time for a specific day.
This section explains how to set the On time to 8:00 and the Off time to 18:00 on May 9, 2015.

```
1. Condition
2. Week Schedule
3. Day Schedule
4. Exit
UPS Agent>3
```

Enter 3

```
Select No.
1. Add
2. Delete
UPS Agent>1
```

1. Add : Add the specified day
2. Delete: Delete the specified day

Enter 1

```
Input Day. ([yy/mm/dd])
UPS Agent>15/5/9
```

Enter the month, day, and year for which the schedule is to be specified.
Enter in the format **15/5/9**.
Year /Month/ Day

```
Select On Schedule.
1. Set Time
2. Repression
3. None
UPS Agent>1
```

Enter 1

```
Input Time. ([hh:mm])
UPS Agent>8:00
```

Enter the time of starting the UPS, and then press "Enter".
Enter in the format **8:00**.
Hour:min

```
Select Off Schedule.
1. Set Time
2. Repression
3. None
UPS Agent>1
```

Enter 1

```
Input Time. ([hh:mm])
UPS Agent>18:00
OK
```

Enter the time for stopping the UPS.
Enter in the format **12:00**.(Hour:min)

1. Set Time: Specify the time
2. Repression: Make repression settings such as the set schedule is not executed.
3. None: Disable the set schedule

Displayed settings after configuration (excerpt)

```
------------------------

Day Schedule
 No. Day          On Time  Off Time
-----------------------------------
  1. 15/ 5/ 9      8:00     18:00

Next On  Time : 15/ 5/ 9  8:00
Next Off Time : 15/ 5/ 9 18:00
```

(Description)
Scheduled operation set for 8:00 to 18:00 on May 9, 2015 in specified date schedule item 1.

The upcoming start time is displayed in “Next On Time”.
The upcoming stop time is displayed in “Next Off Time”.

(Note)
Up to 50 schedules can be set.
Schedules that have already been executed are not included.

Delete the specified day for which the On/Off time has been set.

```
1.Condition
2.Week Schedule
3.Day Schedule
4.Exit
UPS Agent>3
```

Enter 3

```
Select No.
1.Add
2.Delete
UPS Agent>2
```

Enter "2" on the Add/Delete Specified Day screen.

```
Select No.
UPS Agent>1
```

For the days displayed on the [Schedule Information] screen, enter the number of the day to be deleted.

```
Delete OK?
1.Yes
2.No
UPS Agent>1
OK
```

Enter "1" on the screen for deletion confirmation.

Displayed settings before deletion (excerpt)

```
------------------------

Day Schedule
 No.  Day          On Time   Off Time
-----------------------------------
  1.  15/ 5/ 9      8:00     18:00

Next On  Time : 15/ 5/ 9  8:00
Next Off Time : 15/ 5/ 9 18:00
```

↓

Displayed settings after deletion (excerpt)

```
------------------------

Day Schedule
 No.  Day          On Time   Off Time
-----------------------------------

Next On  Time : None
Next Off Time : None
```

< About schedule repression settings >

Even when the On/Of time has been set for Monday through Friday in the weekly schedule, there are days, such as national holidays, when the UPS does not need to be started or stopped. In this situation, perform settings to repress On/Off of the scheduled operation (such that starting and stopping are not performed.) There is no need to change the settings for the weekly schedule. Scheduled repression can be set even when the daily schedule has been set.

This section explains how to set repression for the set-up week schedule.

Weekly schedule setting Monday to Friday On Time 7:00 Off Time 21:00

Daily schedule setting 4/29/15 Make settings so that the scheduled operation is not performed on national holidays.

```
1.Condition
2.Week Schedule
3.Day Schedule
4.Exit
UPS Agent>3

Select No.
1.Add
2.Delete
UPS Agent>1

Input Day.([yy/mm/dd])
UPS Agent>15/4/29

Select On Schedule.
1.Set Time
2.Repression
3.None
UPS Agent>2

Select Off Schedule.
1.Set Time
2.Repression
3.None
UPS Agent>2
OK
```

Select day schedule

Select Add.

Enter the month, day, and year for which the scheduled operation is to be repressed.
Enter the year, month, and day in the **15/4/29** format.

Set repression for the On Time.

Off Time: Select repression

On Time: Select repression

1. Set Time : Specify the time
2. Repression: Make repression settings such as the set schedule is not executed.
3. None: Disable the set schedule.

Displayed settings after scheduled repressed configuration (excerpt)

```
Condition : ON

Week Schedule
Week   On Time   Off Time
------------------------
Sun     None      None
Mon     7:00     21:00
Tue     7:00     21:00
Wed     7:00     21:00
Thu     7:00     21:00
Fri     7:00     21:00
Sat     None      None
------------------------

Day Schedule
 No.  Day          On Time   Off Time
-----------------------------------
  1.  15/ 4/29     XX:XX     XX:XX
```

(Description)

Weekly schedule set for 7:00 to 21:00 on Mondays to Fridays.

Repressed schedule (XX:XX) set for start (On Time) and stop (Off Time) on April 29, 2015 in specified date schedule item 1.

< About disabling the scheduled operation >

Even when the On/Off time has been set for Monday through Friday in the weekly schedule, if the operation is to be continued without starting or stopping on the specified day, set the On/Off time for the specified day to "Disable." The scheduled operation can be changed without changing the weekly schedule settings.

This section explains how to set "Disable" in the set-up weekly schedule.

Weekly schedule setting: Monday through Friday On Time 7:00 Off Time 21:00

Daily schedule setting:5/15/15 Off Time 21:00 Disable, 5/16/15 On Time 7:00 Disable.

Perform the operation below to change the On time of the scheduled operation of May 16 to "Disable." Using the same procedure, if the Off time of the scheduled operation of May 15 is also changed to "Disable", the operation does not stop on May 15, but continues up to 18:00 on May 16.

```
1.Condition
2.Week Schedule
3.Day Schedule
4.Exit
UPS Agent>3

Select No.
1.Add
2.Delete
UPS Agent>1

Input Day.([yy/mm/dd])
UPS Agent>15/5/16

Select On Schedule.
1.Set Time
2.Repression
3.None
UPS Agent>3

Select Off Schedule.
1.Set Time
2.Repression
3.None
UPS Agent>1

Input Time.([hh:mm])
UPS Agent>18:00
OK
```

Select day schedule

Select Add.

Enter the month, day, and year for which the scheduled operation is to be disabled.
Enter the year, month, and day in the **15/5/16** format.

Select None.

Off Time: Select "Set Time"

Enter the Off time

On Time: Select Disable

1. Set Time : Specify the time
2. Repression: Make repression settings such as the set schedule is not executed.
3. None: Disable the set schedule.

Displayed settings after configuration (excerpt)

```
Condition : ON

Week Schedule
Week   On Time   Off Time
------------------------
Sun     None      None
Mon     7:00     21:00
Tue     7:00     21:00
Wed     7:00     21:00
Thu     7:00     21:00
Fri     7:00     21:00
Sat     None      None
------------------------

Day Schedule
 No.  Day          On Time   Off Time
-----------------------------------
  1.  15/ 5/15      7:00     --:--
  2.  15/ 5/16     --:--     18:00
```

(Description)

Weekly schedule set for 7:00 to 21:00 on Mondays to Fridays.

Schedule start (On) (7:00) and disabled stop (Off) set for May 15, 2015 in specified date schedule item 1.

Disabled start and scheduled stop (18:00) set for May 16, 2015.

This schedule causes the unit to continue operation, without stopping on the 15th, until 18:00 on the 16th.

3.6 UPS Control menu (Control)

Enter "3"(Control) on the [Main Menu] screen, and then press "Enter".
If you are using a UPS that has a power distribution control output, the [UPS Control] screen shown below is displayed.

```
UPS Control
Outlet Status  UPS On Delay  UPS Off Delay
---------------------------------------------
1.      ON           0              0
2.      ON           0              0
---------------------------------------------
Select Outlet No.(All Outlet = 9999)
UPS Agent>
```

1: Output status of OUTPUT1
2: Output status of OUTPUT2
The setup values are displayed for
UPS On Delay: ON delay time
UPS Off Delay: OFF delay time

If you are using a UPS that does not have a power distribution control output.
There is only one output system from the UPS.
UPS On Delay: Delay time when UPS is started
UPS Off Delay: Delay time when UPS is stopped is displayed as [0].
The delay time is disabled for a UPS that does not have a power distribution control output.

```
UPS Control
Outlet Status  UPS On Delay  UPS Off Delay
---------------------------------------------
1.      ON           0              0
---------------------------------------------

1.UPS On
2.UPS Off
3.UPS Off(No Shutdown Delay)
4.UPS Reset
5.UPS Reset(No Shutdown Delay)
6.Exit
UPS Agent>>
```

Operation menu	Description
1.UPS On	Starts (turns ON) the UPS output.
2.UPS Off	Stops (turns OFF) the UPS output.
3.UPS Off(No Shutdown Delay)	Stops (turns OFF) the UPS output without performing the delay operation.
4.UPS Reset	Starts (turns ON) the UPS when the specified duration (seconds) has elapsed after stopping the UPS.
5.UPS Reset (No Shutdown Delay)	Starts (turns ON) the UPS when the specified duration (seconds) has elapsed after stopping (turning OFF) UPS output without the delay operation.
6.Exit	Returns to the [Main Menu].

3.6.1 Turning UPS output ON

This section describes how to turn ON the outlet of OUTPUT1 when you are using a UPS with a power distribution control output.

```
Outlet Status  UPS On Delay  UPS Off Delay
-------------------------------------------
1.      ON          0              0
2.      ON          0              0
-------------------------------------------
Select Outlet No.(All Outlet = 9999)
UPS Agent>1
```

Enter the outlet number.

Select Outlet	Description
1	Enter to turn ON OUTPUT1.
2	Enter to turn ON OUTPUT2.
9999	Enter to turn ON all outlets (OUTPUT1, OUTPUT2.)

```
1.UPS On
2.UPS Off
3.UPS Off(No Shutdown Delay)
4.UPS Reset
5.UPS Reset(No Shutdown Delay)
6.Exit
UPS Agent>1
```

Enter 1

```
UPS On OK ?
1.Yes
2.No
3.Exit
UPS Agent>1
OK
```

Enter "1" on the confirmation screen

[OK] is displayed indicating that the outlet of OUTPUT1 has been turned ON .

3.6.2 Turning UPS output OFF

This section describes how to turn OFF the outlet of OUTPUT1 when you are using a UPS with a power distribution control output.

```
Outlet Status  UPS On Delay  UPS Off Delay
-------------------------------------------
1.      ON          0              0
2.      ON          0              0
-------------------------------------------
Select Outlet No.(All Outlet = 9999)
UPS Agent>1
```

Enter the outlet number.

Select Outlet	Description
1	Enter to turn OFF OUTPUT1.
2	Enter to turn OFF OUTPUT2.
9999	Enter to turn OFF all outlets (OUTPUT1, OUTPUT2.)

```
1.UPS On
2.UPS Off
3.UPS Off(No Shutdown Delay)
4.UPS Reset
5.UPS Reset(No Shutdown Delay)
6.Exit
UPS Agent>2
```

Enter 2

```
UPS On OK ?
1.Yes
2.No
3.Exit
UPS Agent>1
OK
```

Enter "1" on the confirmation screen

[OK] is displayed indicating that the outlet of OUTPUT1 has been turned OFF.

2.UPS Off and 4.UPS Reset :

The shutdown process occurs after waiting for the computer to log off.

3.UPS Off (No Shutdown Delay) and 4.UPS Reset (No Shutdown Delay):

The shutdown process occurs without waiting for the computer to log off.

(The pre-shutdown process executes after the shutdown delaying time count starts.)

3.7 UPS Information Display menu (Display)

Enter "4"(Display) on the [Main Menu] screen, and then press "Enter".

The [Display Menu] screen is displayed.

```
  Display Menu
1.UPS Condition/ Meas. Value
2.UPS Service Information
3.Event Log
4.Exit
UPS Agent>
```

Display menu	Description
1.UPS Condition/ Meas. Value	The UPS condition and the measured value information is displayed.
2.UPS Service Information	The UPS (SANUPS SOFTWARE) information is displayed.
3.Event Log	The event log of the UPS is displayed.
4.Exit	Returns to the [Main Menu].

(Note)
Depending on the UPS model, the measurement display function might not be available.

3.7.1 Checking the UPS status and measurement values

Enter "4"(Display) on the [Main Menu] screen, and then press "Enter".

The [Display Menu] screen is displayed.

Enter "1"(UPS Condition/ Meas. Value), and then press "Enter".

The UPS information is displayed.

```
SCI With UPS(Status) :Normal
SCI With UPS(Ver)    :3.0

UPS Serial No.          :09407001

UPS Profile
Style                   :A11F102 001
Controlled part Ver.    :10
Input phase             :1
Output phase            :1
Bypass phase            :1
Rated input voltage     :100V
Rated output voltage    :100V
Rated capacity          :1.0kVA
Rated backup time       :10min
Number of outlet        :2
Constant output         :Yes
------MORE------
```

------MORE------ Continued on the next screen.
press "Enter" to view the next screen.

```
UPS Serial No.          :09407001

UPS Profile
Style                   :A11F102 001
Controlled part Ver.    :10
Input phase             :1
Output phase            :1
Bypass phase            :1
Rated input voltage     :100V
Rated output voltage    :100V
Rated capacity          :1.0kVA
Rated backup time       :10min
Number of outlet        :2
Constant output         :Yes

UPS Internal Information
Current time                        :15/05/07 19:29:23
Result of battery test              :Normal finish
Date of battery test                :15/03/31 12:00:00
Number of power failure             :0times
Battery life                        :10000hour
UPS operation estimated time        :100hour
Battery operation estimated time    :100sec
------MORE------
```

```
Battery life                        :10000hour
UPS operation estimated time        :100hour
Battery operation estimated time    :100sec

UPS Condition
AC input voltage        :Normal
Bypass trouble          :*
Output state            :ON
Synchronism             :Sync.
Inverter operation      :Yes
Bypass operation        :No
Battery operation       :No
Standing by             :No
Waiting for UPS to stop :No
Battery life            :No
Battery voltage         :Normal
Testing the battery     :No
Battery test possible   :Impossible
Overload                :None
Battery Temp. trouble   :*
Battery Chg. Breakdown  :None
Fin Temp. trouble       :None
Fan breakdown           :*
------MORE------
```

"*" is displayed for display items that are not supported by the UPS.

```
Major breakdown         :None
Minor breakdown         :None
UPS system OFF          :*
Mode                    :DOUBLE CONVERSION Mode

UPS Meas. Value
Input Volt.                     :   101V
Input Curr.                     :******A
Input Pow.                      :******kW
Input frequency                 :  60.0Hz
Input apparent Pow.             :******kVA
Bypass Volt.                    :******V
Bypass Curr.                    :******A
Bypass Pow.                     :******kW
Bypass frequency                :******Hz
Bypass apparent                 :******kVA
Output Volt.                    :   101V
Output Curr.                    :  10.0A
Output Pow.                     :  1.00kW
Output frequency                :******Hz
Output apparent                 :   1.0kVA
Load factor                     :    20%
Battery Chg. Volt.              :    41V
------MORE------
```

Explanation of the function of the Telnet Terminal tool

```
Input apparent Pow.              :******kVA
Bypass Volt.                     :******V
Bypass Curr.                     :******A
Bypass Pow.                      :******kW
Bypass frequency                 :******Hz
Bypass apparent                  :******kVA
Output Volt.                     :   101V
Output Curr.                     :  10.0A
Output Pow.                      :  1.00kW
Output frequency                 :******Hz
Output apparent                  :   1.0kVA
Load factor                      :    20%
Battery Chg. Volt.               :    41V
Battery Chg. Curr.               :******A
Battery Dis-Chg. Volt.           :    41V
Battery Dis-Chg. Curr.           :******A
Ambient Temp.                    :    26C
Battery Temp.                    :******C
Fin Temp.                        :******C
Battery Charge                   :   100%
Battery Backup Time              :   160min
OK

=== Hit Enter Key !! ===
```

Display item	Description
SCI With UPS(Status)	Communication status with UPS Normal communication: Normal Communication error: Error
SCI With UPS(Ver)	Protocol version used for communication with UPS
Serial No.	UPS serial number
UPS Profile	UPS profile
UPS Internal Information	UPS internal information
UPS Condition	Information about UPS condition
UPS Meas. Value	UPS measurement information

3.7.2 Checking the UPS event log

Enter "4"(Display) on the [Main Menu] screen, and then press "Enter".

The [Display Menu] screen is displayed.

Enter "3"(Event Log), and then press "Enter".

Up to 1,000 logs are displayed in the UPS event log.

```
Type No.  DateTime            Address                Detail
-------------------------------------------------------------------------------
Inf  0514 2015/05/08 09:37:16 172.30.3.34            0x00000002
Inf  0573 2015/05/07 20:06:20
Inf  0574 2015/05/07 20:05:03 172.30.3.43
Inf  0511 2015/05/07 20:04:20 172.30.3.43            shutdown test
War  0507 2015/05/07 20:03:50                        shutdown test(0)
War  0507 2015/05/07 20:03:50                        shutdown test(2)
War  0507 2015/05/07 20:03:50                        shutdown test(1)
War  0101 2015/05/07 20:02:50                        shutdown test
Inf  0320 2015/05/07 20:02:50 172.30.3.34            shutdown test
Inf  0102 2015/05/07 18:01:55
War  0101 2015/05/07 18:01:52
Inf  0320 2015/05/07 17:00:52 172.30.3.34            Script(0511)
Err  0406 2015/05/07 17:00:20 172.30.1.104           E=0511,L= 8T
Inf  0514 2015/05/07 17:00:17 172.30.3.34            0x00000600
Err  0406 2015/05/07 16:59:20 172.30.1.104           E=0511,L= 8T
Inf  0320 2015/05/07 16:58:49 172.30.3.34            Script(0511)
Inf  0514 2015/05/07 16:58:37 172.30.3.34            0x00000600
Err  0406 2015/05/07 16:56:47 172.30.1.104           E=0512,L= 8T
Err  0406 2015/05/07 16:55:47 172.30.1.104           E=0512,L= 8T
Inf  0320 2015/05/07 16:55:16 172.30.3.34            Script(0512)
Inf  0514 2015/05/07 16:54:58 172.30.3.34            0x00000600
------MORE------
```

Display item	Description
Type	Type of event log Inf:Information、War:Warning、Err:Error
No.	Event No.
DateTime	Date and time of occurrence
Address	IP address of the device when an access matches
Detail	Detailed information

3.8 Connection Device Configuration menu (Connection Device)

Enter "6"(Connection Device) on the "Main Menu" screen, and then press "Enter".

The "Connection Device" screen is displayed.

```
Connection Device
 1:172.30.3.88(PC-SV-SERIAL)
  Location    :
  Comment     :
  Outlet      :1

 2:172.30.3.34(PC-LAN-SG)
  Location    :
  Comment     :
  Outlet      :1
  Wake On LAN:Disable

------MORE------
```

<Device Type>
PC-SV-SERIAL : UPS management software operating PC(Serial)
WS-SV-SERIAL : UPS management software operating WS(Serial)
PC-SV-CONTACT:UPS management software operating PC(Contact)
WS-SV-CONTACT:UPS management software operating WS(Serial)
PC-LAN-SG:UPS management software operating PC (client)
WS-LAN-SG:UPS management software operating WS (client)
WS-TELNET : Telnet connection WS
OTHER : Other devices

------MORE------ Continued on the next screen.
press "Enter" to view the next screen.

```
Connection Device
  Outlet      :1
  Wake On LAN:Disable

 3:172.30.3.43(WS-LAN-SG)
  Kanji       :SHIFT JIS
  Location    :
  Comment     :
  Outlet      :1
  Wake On LAN:Disable

 4:172.30.1.104(WS-TELNET)
  Kanji       :SHIFT JIS
  Location    :
  Comment     :UNIX Server
  Outlet      :1
  Wake On LAN:Disable

 5:Network_Switch(OTHER)
  Location    :
  Comment     :
  Outlet      :1

------MORE------
```

Up to 50 devices can be registered.

The following screen is displayed after entering a Device No. above.
(Device No. 6 is selected. Currently, there is no registered device for item 6.)

```
Connection Device
------------------------
Connection Device No.6
------------------------

 6:None









1.Add
2.Delete
3.Event
4.Device Information
5.Outlet
6.Wake On LAN
7.Shutdown Test
8.Exit
UPS Agent>
```

Setup menu	Description
1.Add	Registers a device.
2.Delete	Deletes the information about the registered device.
3.Event	Sets the WS script during the occurrence of an event.
4.Device Information	Enter the device information (location/comment).
5.Outlet	If you are using a UPS with a power distribution control output, enter the outlet number of the UPS to be connected to.
6.Wake On LAN	Perform the settings for using the WakeOnLAN function.
7.Shutdown Test	Starts or cancels the shutdown test.
8.Exit	Returns to the screen for setting the device number.

3.8.1 Registering devices on the UPS

> "WS (Telnet connection)" type of devices can be registered using the **SANUPS SOFTWARE** Telnet Terminal Tool.
>
> Register **SANUPS SOFTWARE** clients using a GUI tool or CUI tool. Refer to the User's Guide for details.

Registering a Telnet connection WS

The method of registering a "Telnet connection WS" device in No. 6 is described below.

```
1.Add
2.Delete
3.Event
4.Device Information
5.Outlet
6.Wake On LAN
7.Shutdown Test
8.Exit
UPS Agent>1

Select Type.
1.PC(CONTACT)
2.WS(SERIAL)
3.WS(TELNET)
4.Exit
UPS Agent>3

Input Network Name Or IP Address
UPS Agent>172.30.1.18

Select Kanji Code.
1.SHIFT JIS
2.JIS
3.EUC
4.UNICODE(※)
UPS Agent>3
OK
```

Enter 1

Select the device type
Enter 3

Enter the IP address
or network name

Select the WS Kanji
code

Configuration screen after device registration

```
Connection Device
------------------------
Connection Device No.6
------------------------

 6:172.30.1.18(WS-TELNET)
  Kanji       :EUC
  Location    :
  Comment     :
  Outlet      :1
  Wake On LAN:Disable


1.Add
2.Delete
3.Event
4.Device Information
5.Outlet
6.Wake On LAN
7.Shutdown Test
8.Exit
UPS Agent>
```

*UNICODE is not supported in the current version. Do not select it.

The entered information is displayed.

Set the necessary items in "Connection Device" setup menu Steps 4 to 6.

Display item	Default value	Setup menu
Location	Blank	Change from "4. Device Information"
Comment	Blank	Change from "4. Device Information"
Outlet	1	Change from "5. Outlet"
Wake On Lan	Disable (displayed only when WS (LAN) is selected)	Change from "6. Wake On LAN"

3.8.2 Deleting device information registered in the UPS

Enter "6"(Connection Device) on the "Main Menu" screen, and then press "Enter".
The "Connection Device" screen is displayed.
Enter the device number to be deleted.
The screens below show how to delete the device registered in item No. 6.

```
1.Add
2.Delete
3.Event
4.Device Information
5.Outlet
6.Wake On LAN
7.Shutdown Test
8.Exit
UPS Agent>2

Delete Device
1.Yes
2.No
3.Exit
UPS Agent>1
OK
```

Enter 2

Select "1. Yes".
The registered device is deleted.

Configuration screen after device deletion

```
Connection Device
-----------------------
Connection Device No.6
-----------------------

 6:None

1.Add
2.Delete
3.Event
4.Device Information
5.Outlet
6.Wake On LAN
7.Shutdown Test
8.Exit
UPS Agent>
```

3.8.3 Configuring the action when an event occurs (Event)

Set the script executed during the occurrence of an event for the registered WS.
This function allows you to set the shutdown operation when a power failure occurs.

> **About script**
> “Scripts" are descriptions of a series of operations such as transmitting commands to computers.
> They are different from shell scripts in UNIX.

Enter "6"(Connection Device) on the [Main Menu], screen and then press "Enter".
Enter the number of the device to be set, and then press "Enter".
Enter Event "3", and then press "Enter".
The screen for setting the script is displayed.

```
Connection Device
------------------------
Connection Device No.6
------------------------

6:172.30.1.18(WS-TELNET)
  Kanji       :EUC
  Location    :
  Comment     :
  Outlet      :1
  Wake On LAN:Disable


Select Script.
1.Login Script
2.Event Script
3.Exit
UPS Agent>
```

The information of the device registered in the Connection Device No. entered is displayed.
The script is set for this device.

Setup menu
1. Login Script
   Describes the procedure for logging in to WS.
2.Event Script
   Describes the operation to be performed when an event occurs.

・Configuring login scripts

You can set the WS login operation during the execution of the event script.
The default settings of the login script are described in the figure below.

```
Connection Device
------------------------
Connection Device No.6
------------------------
Login Script
 1 :retry=1
 2 :interval=30
 3 :timeout=30
 4 :wait=ogin:
 5 :send=<USER NAME>
 6 :wait=assword:
 7 :send=<PASSWORD>
------MORE------

Select Script.
1.Login Script
2.Event Script
3.Exit
UPS Agent>
```

```
Connection Device
------------------------
Connection Device No.6
------------------------
Login Script
 1 :retry=1
 2 :interval=30
 3 :timeout=30
 4 :wait=ogin:
 5 :send=<USER NAME>
 6 :wait=assword:
 7 :send=<PASSWORD>
 8 :wait=#

Select Script Line Number.
UPS Agent>
```

------MORE------ Continued on the next screen.
press "Enter" to view the next screen.

Default value of Login Script

Line	Login script	Description
1	retry=1	Specify the number of retries when the script has failed to execute.
2	interval=30	Specify the interval between retries.
3	timeout=30	Specify the maximum wait time before receiving data in items with "wait=".
4	wait=ogin:	Specify the wait time for the login name.
5	send=<USER NAME>	Send the login name.
6	wait=assword:	Specify the wait time for the password.
7	send=<PASSWORD>	Send the password.
8	wait=#	Specify the wait time for completing logging in to the WS.(Waiting for the prompt display)

Line No.1 to 3:Operational configurations of the login script.
Line No.4 to 5: Login name entry.
Line No.6 to 7: Password entry.
Line No.8:Waiting time for the login process completion.("#" prompt is displayed when the login is successful)

Use the commands described in the "List of available commands" in the table below to describe the login script.

Login script List of available commands

Command name	Description	Example
send	Specify the text to send to the WS.	send=shutdown
wait	Specify the text (prompt etc.) to receive at the UPS.	wait=login
sleep	Specify the standby time without performing any processes. Unit: seconds (s)	sleep=90
timeout	Specify the wait time for the process to finish after executing a process. Unit: Seconds. Default: 30 seconds	timeout=60
retry	Specify the number of retries when the script has failed to execute. Unit: Times (0 to 10). Default: 1	retry=2
interval	Specify the interval between retries when the script has failed to execute. Unit: Seconds (1 to 60). Default: 30 seconds	interval=10
port	Specifies the Telnet port number of the WS. Valid range: 0 to 65,535 If the value is omitted, use the following port numbers: WS (Telnet connection) ... 23	port=10023
cr_only	Specify the line feed code to be <CR> or <CR><LF>. Specify yes or no. The line feed code in any subsequent transmission data becomes <CR><LF> if you specify no. yes is assumed when omitted. (The line feed code is <CR>.)	cr_only=yes cr_only=no
binsend	Specify the 8-bit code to send to the WS. Valid range Hexadecimal view: x00 to xff Octal view: 000 to 377	Hexadecimal view binsend=x07 Octal view binsend=004
keep_time	Specify the duration of the logged-in status. The UPS is not logged off for the specified duration after completing the previous WS script. You can execute other WS scripts without logging in to WS. Valid range: 0 to 65,535 The following duration is used if omitted. WS(Telnet): 0 second	keep_time=120

Specify within 510 single-byte characters.

Whether or not to enter a space before and after "=" does not affect the process

・Configuring event scripts

Enter the script operation to be performed in WS for each event.

Example） send=shutdown -h now ← Sending shutdown command.
sleep=60 ← Waiting for 60 sec.
(Wait for logging out)

The commands used in an event script are described in the table below.

Event script List of available commands

Command name	Description	Example
send	Specify the text to send to the WS.	send=shutdown
wait	Specify the text (prompt) to receive at the UPS.	wait=login
sleep	Specify the standby time without performing any processes. Unit: seconds (s)	sleep=90
timeout	Specify the wait time for the process to finish after executing a process. Unit: Seconds. Default: 30 seconds	timeout=60
retry	Specify the number of retries when the script has failed to execute. Unit: Times (0 to 10). Default: 1	retry=2
interval	Specify the interval between retries when the script has failed to execute. Unit: Seconds (1 to 60). Default: 30 seconds	interval=10
cr_only	Specify the line feed code to be <CR> or <CR><LF>. Specify yes or no. The line feed code in any subsequent transmission data becomes <CR><LF> if you specify no. yes is assumed when omitted. (The line feed code is <CR>.)	cr_only=yes cr_only=no
binsend	Specify the 8-bit code to send to the WS. Valid range Hexadecimal view: x00 to xff Octal view: 000 to 377	Hexadecimal view binsend=x07 Octal view binsend=004
delay	Specify the delay time for executing the script. The login script is executed after the specified delay time and then the event script is executed if "delay" are specified in the event script.	delay=60
keep_time	Specify the duration of the logged-in status. The UPS is not logged off for the specified duration after completing the previous WS script. You can execute other WS scripts without logging in to WS. Valid range: 0 to 65,535 The following duration is used if omitted. WS(Telnet): 0 second	keep_time=120

Specify within 598 single-byte characters.

Whether or not to enter a space before and after "=" does not affect the process

Available macro characters for scripts

You can use macro characters in the text you are sending.
Macro characters in the following table are replaced with the corresponding text.

Macro character	Meaning
%STOP_TIME_M%	Remaining time before entering the irreversible status in minutes
%STOP_TIME_S%	Remaining time before entering the irreversible status in seconds
%SD_DELAY_TIME%	Shutdown delay time specified on the UPS in seconds
%BAT_CHG_MON%	Remaining months before the battery replacement

When you cannot log in with superuser (root) privileges

You may not be able to log in with superuser (root) privileges in some environments.
In this situation, use a "su" command to execute the command as the root user.
The following table shows an example of login scripts when using the "su" command.
This example assumes the user (user name: guest, password: guest) and root (password: root)。

Line	Login script	Description
1	retry=1	Operational configurations of the login script.
2	interval=30	
3	timeout=30	
4	wait=ogin:	Log in as a user "guest".
5	send=guest	Enter the login name "guest".
6	wait=assword:	Enter the password of the user "guest".
7	send=guest	Enter the password "guest".
8	wait=$	Wait for the $ prompt after the login.
9	send=su	Send the "su" command and execute it.
10	wait=assword:	Enter the password of root.
11	send=root	Enter the password "root".
12	wait=#	Wait for the # prompt after logging in as root.

Explanation of the function of the Telnet Terminal tool

The procedure below describes how to modify the Login Script.

Select the Device No. of the registered device.
Change the entry on line 5 as follows:

send=<USER NAME>

↓

send=root

```
1.Add
2.Delete
3.Event
4.Device Information
5.Outlet
6.Wake On LAN
7.Exit
UPS Agent>3        ← [1]：Select “3.Event”

Select Script.
1.Login Script
2.Event Script
3.Exit
UPS Agent>1        ← [2]:Select “1.Login Script”

Select Script Line Number.
UPS Agent>5        ← [3]:Enter the number of the line to be
                        changed.

Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>d        ← [4]:Select Delete.
OK delete script 5line.

Select Script Line Number.
UPS Agent>4        ← [5]:Enter the number of the line to be
                        added.

Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>a        ← [6]:Select Add.

Input script.
UPS Agent>send=root      ← [7]:Describe the operation.

Select Script Line Number.
UPS Agent>1        ← [8]:Enter a appropriate line number.

Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>e                ← [9]:End the editing task.

Save Event Script.
1.Yes
2.No
UPS Agent>1              ← [10]:Save the edited contents.
OK
```

Initial settings screen

```
Login Script
 1 : retry=1
 2 : interval=30
 3 : timeout=30
 4 : wait=ogin:
 5 : send=<USER NAME>
 6 : wait=assword:
 7 : send=<PASSWORD>
 8 : wait=#
```

Settings after step [4] execution
“send=<USER NAME>”
line deleted

```
Login Script
 1 : retry=1
 2 : interval=30
 3 : timeout=30
 4 : wait=ogin:
 5 : wait=assword:
 6 : send=<PASSWORD>
 7 : wait=#
```

Settings after step [7] execution
“send= root” line added

```
Login Script
 1 : retry=1
 2 : interval=30
 3 : timeout=30
 4 : wait=ogin:
 5 : send=root
 6 : wait=assword:
 7 : send=<PASSWORD>
 8 : wait=#
```

The procedure below describes how to modify the Event Script.
The example shows the modification of a Shutdown event (Event No. 511).
Select the Device No. of the registered device.

```
1.Add
2.Delete
3.Event
    :(omitted)
UPS Agent>3        ← [1]:Select "3.Event".

Select Script.
1.Login Script
2.Event Script
3.Exit
UPS Agent>2        ← [2]:Select "2.Event Script".

Input event No.
UPS Agent>511      ← [3]:Select the menu number.

1.Condition
2.Edit Script
3.Test
4.Exit
UPS Agent>2        ← [4]:Select "2.Event Script".

Select Script Line Number.
UPS Agent>1        ← [5]:Enter the number of the line to be
                         deleted.
Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>d        ← [6]:Select Delete.

Select Script Line Number.
UPS Agent>1        ← [7]:Enter the number of the line to be
                         added.
Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>a        ← [8]:Select Add.

Input script.
UPS Agent>send=shutdown -i0 -g- -y  ←[9]:Adding of the
                                         operation

Select Script Line Number.
UPS Agent>1        ← [10]:Enter the number of the line to
                          be deleted.

Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>d        ← [11]:Select Delete.

Select Script Line Number.
UPS Agent>1        ← [12]:Enter a appropriate line number.

Operation          <a-key:Add d-key:Delete e-key:Exit>
UPS Agent>e        ← [13]:End ending.

Save Event Script.
1.Yes
2.No
UPS Agent>1        ← [14]:Save changed contents.
OK
```

Initial settings screen

```
--------------
Event No.0511
--------------
Condition          :ON

Event Script
 1 : send=shutdown -h now
 2 : wait=<SHUTDOWN MESSAGE>
 3 : sleep=60
```

Settings after step [6] execution
Delete line 1.

```
--------------
Event No.0511
--------------
Event Script
 1 : wait=<SHUTDOWN MESSAGE>
 2 : sleep=60
```

Settings after step [9] execution
Enter the adding of operation.

```
--------------
Event No.0511
--------------
Event Script
 1 : wait=<SHUTDOWN MESSAGE>
 2 : send=shutdown -i0 -g0 -y
 3 : sleep=60
```

Settings after step [11] execution
Delete line 1.

```
--------------
Event No.0511
--------------
Event Script
 1 : send=shutdown -i0 -g0 -y
 2 : sleep=60
```

・Enabling and disabling event scripts

For some events, the default value of the script execution condition is set to "Disabled."
If "Disabled" is set, the script is not executed even if set. Set Enabled/Disabled according to your system environment and purpose of use.

This section provides an example of setting enabled/disabled for the event script of "Power failure" event No. 0101 for a device with the registration number 1.

Enter "6"(Connection Device) on the [Main Menu] screen, and then press "Enter".
Enter the number of the device to be set, and then press "Enter".
Enter Event "3", and then press "Enter".
Enter Event Script "2", and then press "Enter".
Enter Event No. "101", and then press "Enter".
(Enter the event number with reference to User Guide"Appendix C. Explanation of Events.")

```
Connection Device
--------------
Event No.0101
--------------
Condition        :ON

Event Script
 1 :send=echo Power failure occurred. System will be stopped after %STOP_TIME_S%sec.
and %STOP_TIME_M%min. |wall
 2 :sleep=5


1.Condition
2.Edit Script
3.Test
4.Exit
UPS Agent>
```

Connection:Script execution settings
Enabled/disabled is displayed.
ON:Enable
OFF:Disable

Select 1. Condition, and set enabled/disabled.

```
Select No.
1.ON
2.OFF
UPS Agent>
```

1.ON:Enable
2.OFF:Disable

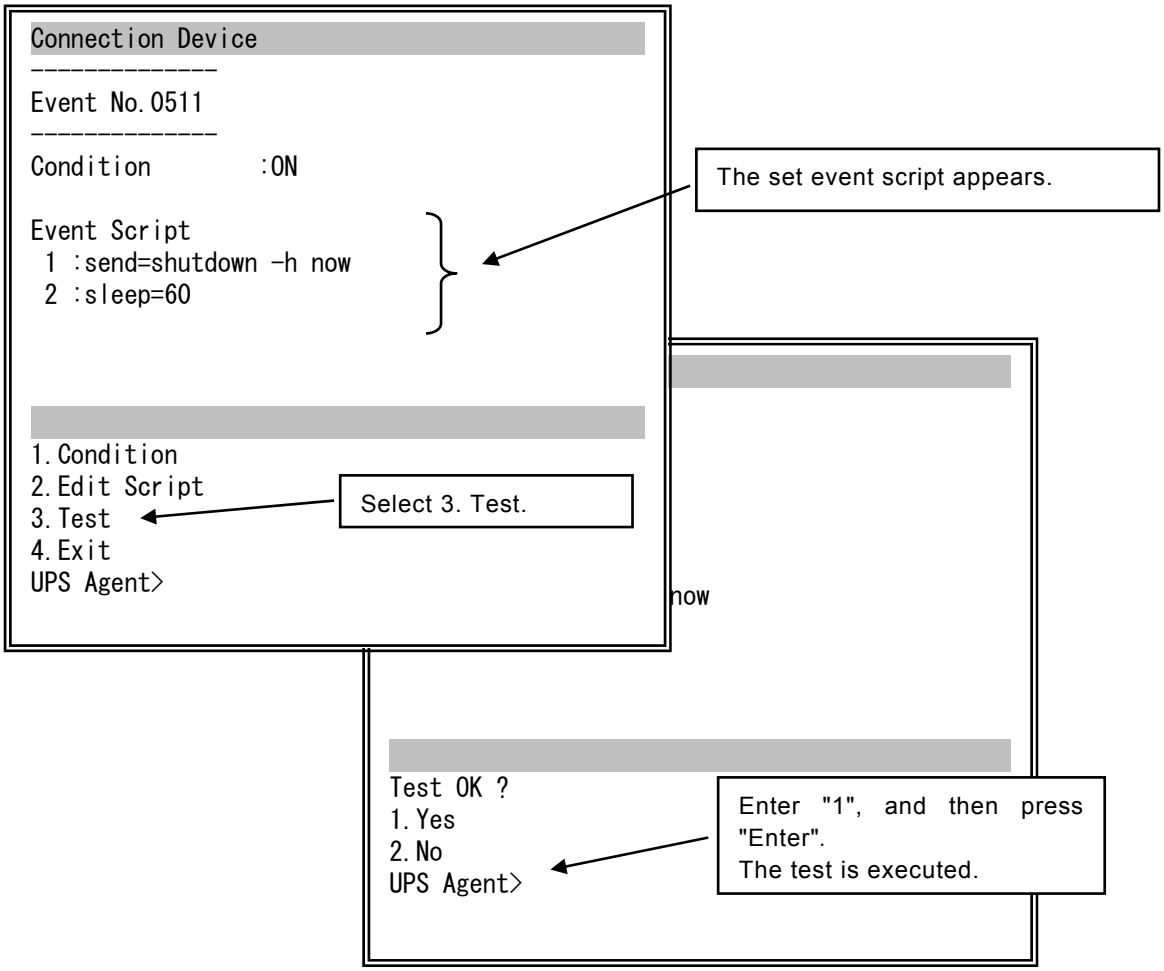
If the set script is not to be executed for the time being, set [2.OFF] disabled.

・Testing event script operations

Test if the script that has been set can be executed. The execution results are recorded in an event log.

This section provides an example of how to test the event script of "Power failure" event No. 0101 for a device with the registration number 1.

Enter "6"(Connection Device) on the [Main Menu] screen, and then press "Enter".
Enter the number of the device to be set, and then press "Enter".
Enter Event "3", and then press "Enter".
Enter Event Script "2", and then press "Enter".
Enter Event No. "511", and then press "Enter".



From the event log, check if the test has been executed normally.
See "7.3.2 Checking the UPS event log" and check the test results.

3.8.4 Changing devices registered on the UPS

You can change the default values that are set automatically when a device is registered in "3.8.1 Registering devices on the UPS".

Enter "6"(Connection Device) on the "Main Menu" screen, and then press "Enter".
Enter the number of the device you want to change, and then press "Enter".

Change the device information from the setup menu 4 to 6.

Setup menu	Description
4.Device Information	Enter the device location and comment.
5.Outlet	If you are using a UPS that has a power distribution control output, set the outlet of the UPS with which the selected device is to be connected. 1: OUTPUT1 2: OUTPUT2 0: OUTPUT0 (normal output)
6.Wake On LAN(*)	Set whether or not Wake On LAN is used.

(*) If the device is **"PC-LAN-SG", "WS-LAN-SG"** or **"WS-TELNET"**, the setup values can be changed.

Configuring the Wake On LAN

```
Connection Device
------------------------
Connection Device No.2
------------------------

Wake On LAN                        :Disable
Mac Address Acquisition Condition  :Automatic
Mac Address                        :00-00-00-00-00-00


Select Wake On LAN Condition.
1.Disable
2.Enable
3.Exit
UPS Agent>
```

The current setup information is displayed.

```
Select Wake On LAN Condition. : Set Wake On LAN to Enabled
or Disabled.
1.Disable
2.Enable
    Select Mac Address Acquisition Condition. :
      Set the method of acquiring the MAC address.
    1.Automatic : Automatic acquisition
    2.Fixation : Manual setting
        Input MAC Address. : Enter the address.
```

If the method of acquiring the MAC address is set to "1. Automatic", after making the settings, make sure the correct address is displayed in the "Mac Address" for the current setup information. If "00-00-00-00-00-00" is displayed, it indicates that the MAC address has not been acquired properly. Make the settings manually.

3.8.5 Testing shutdown of registered devices

You can execute or cancel a shutdown test for registered devices.

Enter "6"(Connection Device) on the "Main Menu" screen, and then press "Enter".
Enter the number of the device for which the shutdown test is to be executed, and then press "Enter".
Execute or cancel the shutdown test from the setup menu "7".

```
Connection Device
------------------------
Connection Device No.3
------------------------

 3:172.30.3.43(WS-LAN-SG)
  Kanji       :SHIFT JIS
  Location    :
  Comment     :
  Outlet      :1
  Wake On LAN:Disable


1.Test Start
2.Test Cancel
3.Exit
UPS Agent>
```

If you enter device number "3", the information of the device registered in Connection Device No. 3 is displayed.

1.Test Start:Test start
2.Test Cancel:Test cancel

```
Select Test Type.
1.Power Failure
2.Low Batt. Volt.
3.Shutdown
UPS Agent>1


Test Start OK ?
1.Yes
2.No
UPS Agent>1
OK

=== Hit Enter Key !! ===
```

Select the execution sequence.
1.Power Failure
2.Low Batt. Volt.
3.Shutdown

From the event log, check if the test has been executed normally.
See "3.7.2 Checking the UPS event log" and check the test results.

3.9 Event Configuration menu (Event)

You can set the event log recording conditions and the e-mail sending conditions used when an event occurs.
Enter "7"(Event) on the [Main Menu] screen, and then press "Enter".
The [Event Menu] setup menu screen is displayed.

```
  Event Menu
1.Event Log
2.E-Mail
3.Exit
UPS Agent>
```

Setup menu	Description
1.Event Log	Configuring event log recording conditions
2.E-Mail	Configuring event notification e-mail transmissions
3.Exit	Return to the [Main Menu].

Select 1. Event Log. Set the event log recording conditions.

```
Event Log
Event Log :Default

Select No.
1.Default
2.All Enable
3.Exit
UPS Agent>
```

Select the setup value
1.Default : Return to the initial setup value.
2.All Enable : Record all events.

Set the conditions for the E-mail sent when an event occurs.
Enter "7" on the [Main Menu] screen, and then press "Enter".
The [Event Menu] setup menu screen is displayed.
Enter "2"(E-Mail). and then press "Enter".

```
Input event No.
UPS Agent>
```

Enter the event number

```
E-Mail Information
--------------
Event No.0101
--------------
Condition          :ON

E-Mail Address
 1 :None
 2 :None
 3 :None
 4 :None
 5 :None

1.Condition
2.E-Mail Address
3.Test
4.Exit
UPS Agent>
```

The selected event number is displayed.

The registered E-mail address is displayed.
You can register up to five E-mail addresses.

Setup menu	Description		
1.Condition	Select No.:Set whether or not to send an e-mail.		
	1.ON	Enabled: E-mail is sent.	
	2.OFF	Disabled: E-mail is not sent.	
2.E-Mail Address	Select E-Mail Address No.: Select the number to which you want to set the E-mail address from the numbers 1 to 5 displayed in the upper column.		
	1 - 5	1.Add	Enter the E-mail address.
		2.Delete	Delete the registered address.
		3.Exit	Return to the previous menu.
3.Test	Send a test e-mail to the set address.		
4.Exit	Return to the previous menu.		

3.10 UPS Power Distribution Control Configuration menu (Outlet)

If you are using a UPS with a power distribution control output, set the operation for each output outlet to "OUTPUT1", "OUTPUT2", "OUTPUT0". If your UPS does not have a power distribution control output, you can specify the operation only for "outlets to shut down at power failure" for "OUTPUT1".

You can make the following settings for each of the output outlets.
・OUTPUT1, OUTPUT2: Delay time settings when the UPS output is turned ON/OFF
・OUTPUT1, OUTPUT2, OUTPUT0: Outlets to shut down at power failure

Enter "8"(Outlet) on the [Main Menu] screen, and then press "Enter".
The [Outlet Information] screen is displayed.

```
Outlet Information
 1:Outlet 1
   On Delay Time                :0(sec.)
   Off Delay Time               :0(sec.)
   Power Failure Confirmation :Enable

 2:Outlet 2
   On Delay Time                :0(sec.)
   Off Delay Time               :0(sec.)
   Power Failure Confirmation :Enable

 3:Outlet 0
   On Delay Time                :0(sec.)
   Off Delay Time               :0(sec.)
   Power Failure Confirmation :Enable

Select Outlet No.
UPS Agent>
```

Current setting is displayed.

Enter the outlet number to be set, and then press "Enter".

```
Outlet Information
1:Outlet 1
   On Delay Time              :0(sec.)
   Off Delay Time             :0(sec.)
   Power Failure Confirmation :Enable

1.On Delay Time
2.Off Delay Time
3.Power Failure Confirmation
4.Exit
UPS Agent>
```

Setup menu	Description	
1.On Delay Time	Enter the ON delay time (sec.). Output is supplied after the specified time has elapsed since the UPS started.	
2.Off Delay Time	Enter the OFF delay time (sec.). Output stops after the specified time has elapsed since the UPS automatic stop time has elapsed.	
3.Power Failure Comfirmation	Set whether or not to execute a shutdown when a power failure occurs.	
	1.Enable	Enabled
	2.Disable	Disable
4.Exit	Return to the previous menu.	

(Caution)
You can only set [Power Failure Confirmation] for Outlet0. [On Delay Time] and [Off Delay Time] are unavailable.

3.11 Checking Communication Circuits with Ping

By performing a Ping from the UPS to a specific device after specifying the IP address, you can check the status of the communication line between the UPS and that device.

Enter "9"(Ping) on the [Main Menu] screen, and then press "Enter".

Enter the IP address of the device with which the communication is to be checked, and then press "Enter".

```
Input IP Address.
UPS Agent>172.30.3.43
OK

=== Hit Enter Key !! ===
```

[OK] is displayed once communication has been checked.

```
Input IP Address.
UPS Agent>172.30.3.104
NG

=== Hit Enter Key !! ===
```

[NG] is displayed if communication has not been checked.

(Caution)
The input value does not support network names. If a network name is entered, the result is “NG”.