NEC

Server Configuration Utility User's Guide

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About this Document

This document explains the complete procedures from installation of "Server Configuration Utility" to setup of the server.

Before attempting to operate Server Configuration Utility, read this document so as to gain an adequate understanding of the contents.

Notes

This document is intended for persons who are familiar with the operating system's functions and operations and the network's functions and setup. For operations and inquiries about the operating system, see its online help information.

This document covers universal information about generally servers. The notes and restrictions on use of each product as a server are explained in the user's guide provided with the server and "ESMPRO Manager Ver.6 Setup guide".

Names used with screen images in this document are fictitious. They are unrelated to existing product names, names of organizations, or individual names. The setting values on the screen images are shown as examples, so setting values such as IP addresses on screen images are not guaranteed for operation.

In this document. "¥" expresses back slash.

About Symbols in This Document

The following explains three symbols that are used in this document:

| IMPORTANT: | Points or particular notes you must follow when handling software of servers. |
|------------|---|
| CHECK: | Points or notes you need to check when handling software or servers. |
| TIPS: | Useful information. |

I. Summary

Server Configuration Utility is software that works on the server. It configures BMC on the server.

I.I Server Configuration Utility Functions

The functions which are supported are displayed.

■ BMC (not EXPRESSSCOPE Engine)

You can specify the configurations of BMC on the server. You can initialize the configurations to the ex-factory settings, reset to restart without system rebooting, clear the SEL (System Event Log) information.

■ ECO

You can check and configure the ECO information. You can initialize the ECO setting.

Battery

You can check and configure the information of the battery pack and the battery controller.

Monitoring

For Windows, you can configure the monitoring setting of WDT and OS shutdown.

2. System Requirements

2.1 Hardware

It needs to satisfy the following conditions.

- Target System
 - -- NEC Express5800 Series that integrates BMC which is not EXPRESSSCOPE Engine and bundles this product. (ex: NEC Express5800/T110m, T110m-S, T110k, T110k-S, T110j, T110j-S)
 - -- NEC Express5800/D120h
- Memory 512MB or more
- Availability of hard disk 100MB or more

CHECK:

- NEC Express5800/D120h is supported by the upper version from Server Configuration Utility for Windows Ver.1.09. This model supports only the function described in 4.5 Monitoring.
- BMC which is not EXPRESSSCOPE Engine (ex:NEC Express5800/T110j) is supported by the upper version from Server Configuration Utility for Windows/Linux Ver.1.11.

2.2 Operating System

Target OS is as follows.

• Windows

Windows Server 2016 Windows Server 2019 Windows Server 2022 Windows Server 2025

Linux

Red Hat Enterprise Linux Server 7 (x64) Red Hat Enterprise Linux Server 8 (x64) SUSE Linux Enterprise Server 15 (x64) Oracle Linux 7 (x64)

IMPORTANT:

You cannot install this product in the following case.
 -- Installation on guest OS of virtual machine.

.....

CHECK:

- Red Hat Enterprise Linux Server 7 is supported by the upper version from Server Configuration Utility for Linux Ver1.03.
- SUSE Linux Enterprise Server 15 and Oracle Linux 7 are supported by the upper version from Server Configuration Utility for Linux Ver1.10.

2.3 Server Management Driver

On Linux, OpenIPMI Driver must be run to use this product. The following command is an example. It may vary based on OS.

CHECK:

.....

- Use the following command to confirm that OpenIPMI Driver has been installed on Linux. • rpm -qa | grep -i OpenIPMI
- If the OpenIPMI Driver is stopped, you need to start OpenIPMI Driver. You can confirm • the status of OpenIPMI Driver by the following command.

| [In the case of Red Hat Enterprise Linux Server 6 or earlier] /etc/init.d/ipmi status |
|---|
| [In the case of Red Hat Enterprise Linux Server 7 or later] /usr/bin/systemctl status ipmi.service |
| If "not loaded" is displayed after executing the above command, please start OpenIPMI |
| Driver by the following command. |
| [In the case of Red Hat Enterprise Linux Server 6 or earlier] /etc/init.d/ipmi start |
| [In the case of Red Hat Enterprise Linux Server 7 or later] |
| /usr/bin/systemctl start ipmi.service |
| And you can start OpenIPMI Driver automatically at the system booting to execute the |
| following command and reboot the operation system. |
| chkconfig ipmi on |

3. Installation

3.1 Server Configuration Utility Installation for Windows

3.1.1 Check before installation

Check the followings:

-- See chapter 2 to check the system requirement.

-- Login to Windows as Administrator.

3.1.2 Start installer

■ If you install by using EXPRESSBUILDER:

Please refer to the User's Guide of the server for details of EXPRESSBUILDER. EXPRESSBUILDER Autorun Menu is started. The initiation method on the Autorun Menu is different depending on the models.

-- The equipment by which EXPRESSBUILDER DVD isn't standard.

Click NEC EXPRESSBUILDER from Windows Start Menu or run the shortcut on the desktop.

TIPS:

• After installing Starter Pack in the server, you can run EXPRESSBUILDER as a Windows application.

-- The equipment by which EXPRESSBUILDER DVD is standard.

You can install as follows:

(1) Insert EXPRESSBUILDER DVD into Optical disk drive on the server which Windows has started.

TIPS:

• If Autorun Menu does not launch, double-click ¥autorun¥dispatcher.exe from EXPRESSBUILDER. (x64 Edition : dispatcher_x64.exe)

.....

- If the device selection window is displayed, select the device you are using.
- (2) Select as follows, Server Configuration Utility installation will be started. -- Click [Applications] - [Server Configuration Utility] - [Install].

If you install by using downloaded modules:

After unzipping the downloaded modules, please execute the following file. The installer will be started. ¥sv_config¥setup.exe

TIPS:

• Please refer to 5.1 Installation when you install it.

3.1.3 Install Server Configuration Utility

(1) The Server Configuration Utility installer is started. Click [Next].



(2) Enter a folder name to install. Click [Next].

| NEC Server Configuration Utility 1.00 | × |
|--|---|
| Choose Destination Location Select folder where setup will install files. | |
| Setup will install NEC Server Configuration Ut | ility in the following folder. |
| To install to this folder, click Next. To install to another folder. | a different folder, click Browse and select |
| | |
| ⊂ Destination Folder | |
| C:\Program Files (x86)\ | Browse |
| InstallShield | |
| | < Back Cancel |

(3) Confirm the installation settings, and click [Next]. The installation is started.

| NEC Server Configuration Utility 1.00 | | × |
|---|--|------------------------------------|
| Start Copying Files Review settings before copying files. | | No. |
| Setup has enough information to start copyin change any settings, click Back. If you are s copying files. | g the program files. If you war atisfied with the settings, click | nt to review or : Next to begin |
| Current Settings: | | |
| Install to:C:\Program Files (x86)\ ∢ | | A V M |
| InstallShield | < <u>B</u> ack <u>Next</u> > | Cancel |

After the installation is completed, Server Configuration Utility is available after the system is rebooted.

3.2 Server Configuration Utility Uninstallation for Windows

3.2.1 Check before uninstallation

Check the following: -- Login to Windows as Administrator.

3.2.2 Uninstall Server Configuration Utility

Uninstall from the Windows menu [Control Panel] - [Add or Remove Programs]. Select [NEC Server Configuration Utility] and click [Change/Remove] button. You can uninstall it by displayed direction.

CHECK:

• After confirming Server Configuration Utility is not running, you can uninstall it.

3.3 Server Configuration Utility Installation for Linux

3.3.1 Check before installation

Check the followings:

-- See chapter 2 to check the system requirement.

-- Login to Linux as root user.

3.3.2 Copy and extract the installer

Copy the installer (all files in /sv_config) into any directory on the server. The following is an example to copy into /usr/local/bin:

CHECK:

- Server Configuration Utility installer exists on following directory:
- -- If you install by using EXPRESSBUILDER: <revision folder>/lnx/pp/sv_config

.....

-- If you install by using downloaded modules: /sv_config

(1) Copy the all installer files to /usr/local/bin.

It is shown example that files is copied from EXPRESSBUILDER DVD to /use/local/bin directory. (The mount path is dependent on the OS. Specify the right path.)

cp -r /mnt/cdrom/001/lnx/pp/sv_config /usr/local/bin

(2) Move to the directory containing the installer.

cd /usr/local/bin/sv_config

(3) Extract the installer.

-- In the case of tgz format:

tar xzvf ConfigurationUtility-N.NN-x.tgz

"N.NN" in the example file name means the version.

-- In the case of zip format:

"XXXXX..." in the example file name depends on the module.

CHECK:

If unzip command is not installed, you need to install it.

TIPS:

• Please refer to 5.1 Installation when you install it.

3.3.3 Install Server Configuration Utility

- (1) Move to the directory that the installer was extracted.
- -- In the case of tgz format:

cd /usr/local/bin/sv_config/ServerConfiguration-N.NN-x

"N.NN" in the example directory name means the version.

-- In the case of zip format:

cd /usr/local/bin/sv_config

(2) Execute the shell script for the installation.

(3) A confirmation message of installation is displayed. Input "yes" and "Enter" key. Server Configuration Utility is installed under /opt/nec/ServerConfiguration directory. If you input "no", the installation is not executed.

When the installation is completed, a completion message is displayed. After the installation is completed, Server Configuration Utility is available.

CHECK:

• Don't delete the files that are used to install, because you will use them to uninstall.

.....

3.4 Server Configuration Utility Uninstallation for Linux

3.4.1 Check before installation

Check the following: -- Login to Linux as root user.

3.4.2 Uninstall Server Configuration Utility

- (1) Move to the directory that the installer was extracted.
- -- In the case of tgz format:

cd /usr/local/bin/sv_config/ConfigurationUtility-N.NN-x

"N.NN" in the example directory name means the version.

-- In the case of zip format:

cd /usr/local/bin/sv_config

(2) Execute the shell script for uninstallation.

sh setup_config.sh

(3) A confirmation message of uninstallation is displayed. Input "delete" and "Enter" key.

When the uninstallation is completed, a completion message is displayed.

4. Functions

This chapter describes the functions of BMC Configuration of if you use a standard server.

4.1 Start procedure

4.1.1 On Windows

After the installation is completed, do the following operation as the built-in Administrator to start Server Configuration Utility.

- Click "NEC Server Management Utility" - "NEC Server Configuration Utility" - "NEC Server Configuration Utility" from [start] on Windows

CHECK:

• If it is not a built-in Administrator, right click the menu and select "Run as administrator".

TIPS:

- Refer to the following to see Server Configuration Utility help information.
 - -- Click "Help" on the screen.
 - -- Click "NEC Server Management Utility" "NEC Server Configuration Utility" -
- "NEC Server Configuration Utility Help" from [start] on Windows.

4.1.2 On Linux

After the installation is completed, do the following operation as root user to start Server Configuration Utility.

/opt/nec/ServerConfiguration/svconf

TIPS:

 Refer to the following to see Server Configuration Utility help information. Open the setting of Server Configuration Utility and press F12 key on the screen displayed "[F12] help" at the bottom.

4.1.3 On Off-line TOOL

Please refer to the User's Guide of the server for details of the Off-line TOOL.

Below is an example of the start procedure when the server that integrates EXPRESSSCOPE Engine 3 or EXPRESSSCOPE Engine SP3.

(1)The following message is displayed on the bottom of POST screen.

Press<F2> SETUP, <F3> Internal flash memory, <F4> ROM Utility, <F12> Network

(2) Press F4 key on this screen. If F4 key is entered, Keyboard type selection screen is displayed after POST screen, and the Off-line TOOL menu is displayed after selecting keyboard type.

(3) Select Server Configuration Utility.

TIPS:

- Off-line TOOL is integrated in the server that integrates EXPRESSSCOPE Engine 3 or EXPRESSSCOPE Engine SP3 by default.
- The Off-line TOOL menu is not displayed according to the system.
- Refer to the following to see help information.
- Start the tool and select Help menu, or press Home key or "?" key on the screen displayed "[Help:[Home or ?]]" at the bottom.

4.2 BMC

This chapter explains the items of BMC which is not EXPRESSSCOPE Engine. Refer to set more detailed settings.

| NEC Server Configuration Utility Version | n 1.11 | – 🗆 X |
|--|--|--|
| | | \Orchestrating a brighter world NEC |
| BMC Property Alert | Configuration Initialization Reset | All of BMC/Battery configuration parameters will be restored to the default settings. Resets the BMC. This operation may cause data destruction |
| ECO B-Battery H-Monitoring | Clear SEL | All log records in the SEL(System Event Log) Repository will be cleared. |
| | Network Displays and configures the se Alert Displays and configures the se | tting of the network environment with BMC. tting of the alert according to the SNMP from BMC. |
| | | Exit Help |

| Item | Description |
|------------------------------------|---|
| Configuration Initialization *1 *3 | You can restore all of configuration parameters to the default settings. It will take a few minutes to restart BMC. |
| Reset *2 *3 | You can reset BMC without rebooting system. It will take a few minutes to restart BMC. |
| Clear SEL | You can clear all records of System Event Log. |

*1: This operation may cause data destruction. If the server is equipped with a battery, battery configuration parameters are also initialized.

*2: Please use this operation when you cannot operate the BMC functions correctly or if necessary. This operation does not clear the configuration settings.

*3: False HW error information may be detected on the server if Shutdown, Reboot, or any other operation is executed during a few minutes after this operation. Please refer to the server's User's Guide to get more information, because the occurrence of the false HW error detection depends on the model of the server.

4.2.1 Network Property

This screen displays and sets the network environment.

| B NEC Server Configuration Utility Version | 1.11 | - 0 | × |
|--|--|---------------------------------|-----|
| | | \Orchestrating a brighter world | NEC |
| BMC Property ⊕ Alert ⊕ ECO ⊕ Battery ⊕ Monitoring | Basic Network Enable DHCP C Enable Disable IP Address [Required] Subnet Mask [Required] 255.255.254.0 Default Gateway 192.168.14.241 | | |
| | Default Apply | Exit He | lp |

| lt | em | Description | Default Value |
|-------|-----------------|--|---------------|
| Basic | | Network Property Basic setting | |
| | Network | Network status is displayed. | |
| | | Enable / Disable | |
| | DHCP | Select Enable/Disable of DHCP. *1 | Enable |
| | IP Address | Set the BMC IP address of the BMC LAN. *1 *2 | 192.168.1.1 |
| | Subnet Mask | Set the Subnet Mask of the BMC LAN. *1 *2 | 255.255.255.0 |
| | Default Gateway | Set the Default Gateway IP Address of the BMC LAN. *1 *2 | 0.0.0.0 |
| | | If you set this item, it is necessary for applying configuration | |
| | | information that the gateway is connected on network. | |

*1: It is possible to set when Network is "Enable".

*2: It is possible to set when DHCP is "Disable".

4.2.2 SNMP Alert

This screen displays and sets the behavior of SNMP Alert.

| NEC Server Configuration Utility Version | 1.11 – 🗆 X |
|--|---|
| | \Orchestrating a brighter world NEC |
| BMC Network Property Alert SNMP Alert ECO Battery Monitoring | SNMP Alert Alert Acknowledge © Enable Enable Alert Acknowledge if you manage server using NEC ESMPRO Manager. Alert Retry Count [Required] 7 times (0 - 7) Alert Timeout [Required] 30 seconds (3 - 30) |
| | Default Apply Exit Help |

| I | tem | Description | Default Value |
|----|-------------------|---|---------------|
| \$ | SNMP Alert | SNMP Alert setting | |
| | Alert Acknowledge | Select Enable/Disable of Alert Acknowledge. | Enable |
| | Alert Retry Count | Set the count of Alert retry. *1 | 3 |
| | Alert Timeout | Set the seconds to alert timeout. *1 | 6 |

*1: It is possible to set when Alert Acknowledge is "Enable".

4.3 ECO

This chapter explains "ECO" items. Refer to set more detailed settings. When BMC is not EXPRESSSCOPE Engine 3, only Configuration Initialization is supported.

| End Server Configuration Utility Versio | n 1.06 📃 🗌 🗙 |
|---|--|
| | \Orchestrating a brighter world NEC |
| EXPRESSSCOPE Engine 3 Network Property Service User Management Alert System Operation Control Miscellaneous System BIOS ECO Information Configuration Monitoring Backup/Restore System Information | Configuration Initialization All of ECO configuration parameters will be restored to the default settings. Information Displays the power capping status, the composition of the server for management and the reference value of power consumption by the operational condition are displayed. Configuration The setting and the display concerning power consumption and the system load are done. |
| | Exit Help |

| Item | Description |
|------------------------------|--|
| Configuration Initialization | You can clear all of ECO configuration parameters. |

CHECK:

• The ECO screen is not displayed if the system does not support this function.

4.4 Battery

This chapter explains "Battery" items. Refer to set more detailed settings.

CHECK:

• This setting does not exist if the server is not equipped with a battery.

• This setting does not exist in Linux.

4.4.1 Battery Information

This screen displays the information of the battery pack and the battery controller.

| NEC Server Configuration Utility Version 1 | .11 | | _ | □ × |
|---|---|--|--------------------------------|--------|
| | | | Orchestrating a brighter world | NEC |
| BMC Network Property Alert SMP Alert CO Battery Battery Controller Configuration Battery Controller Configuration | Battery Pack Infomation Status Charge Status Battery Pack Replacement Remaining Charge Full Charge Capacity Rated Capacity Voltage Current Manufacturer Name Model Name Battery Type Total Working Hours Recharged Count Full Charged Count | Normal Fully Charged No Need 2500 mAh 2500 mAh 9628 mV 0 mA FDK BBU0026 NiMH 4117 Hours 89 Times 119 Times | Exit | ^ / |
| | | | | |

| NEC Server Configuration Utility Version 1 | .11 | - 🗆 X |
|--|---|------------------------------------|
| | Ň | Orchestrating a brighter world NEC |
| BMC | Full Charged Count 119 Times | ^ |
| | Battery Controller Information | |
| Battery Battery Information | Manufacturer Name Device Name | FDK BDNE07 |
| Battery Controller Configuration Monitoring | Firmware Revision | 20.04 |
| | Supported Battery Type Approximate Backup Time at Full Charge(current load) min: | NiMH sec 17:58 |
| | Approximate Backup Time at Full Charge(maximum load) m | in:sec 3:29 |
| | Rated Capacity Rated Power | 2500 mAh 200 W |
| | Peak VA | 200 W |
| | Charge Power | 15 W |
| | | ~ |
| | | Exit Help |
| < > | | |

| Item | | Description |
|------|----------------------------|---|
| В | attery Pack Information | Displays the information of the Battery Pack. |
| | Status | The detected state of the battery pack is displayed. |
| | | Normal / Warning / Error / Not Mounted |
| | Charge Status | The charge status of the battery pack is displayed. *1 |
| | | Fully Charged / Charging / Discharging(%) / Unknown |
| | Battery Pack Replacement | The necessity of the battery pack replacement is displayed. *1 |
| | | Need / No Need |
| | Remaining Charge | The remaining charge [mAh] of the battery pack is displayed. *1 |
| | | Remaining Charge |
| | | : The remaining capacity for the Full Charge Capacity. |
| | Full Charge Capacity | Full Charge Capacity [mAn] of the battery pack is displayed. The Full Charge Capacity |
| | | : The battery capacity that could be discharged to the voltage |
| | | at the end of discharge from full charge. |
| | Rated Capacity | The rated capacity [mAh] of the battery pack is displayed. *1 |
| | | Rated Capacity |
| | | : The minimum capacity of the battery pack based on the |
| | | charge and discharge conditions of JIS C8708 2007. |
| | Voltage | The measured voltage [mV] of the battery pack is displayed. *1 |
| | Current | The measured current [mA] of the battery pack is displayed. *1 |
| | Manufacturer Name | The manufacturer name of the battery pack is displayed. *1 |
| | Model Name | The model name of the battery pack is displayed. *1 |
| | Battery Type | The type of the battery pack is displayed. *1 |
| | Total Working Hours | The total working hours of the battery pack is displayed. *1 |
| | Recharged Count | The recharged count of the battery pack is displayed. *1 |
| | Full Charged Count | The full charged count of the battery pack is displayed. *1 |
| В | attery Pack Information | Displays the information of the Battery Pack. |
| | Manufacturer Name | The manufacturer name of the battery controller is displayed. |
| | Device Name | The device name of the battery controller is displayed. |
| | Firmware Revision | The firmware revision of the battery controller is displayed. |
| | Supported Battery Type | The type of the battery controller is displayed. |
| | Approximate Backup Time at | The approximate backup time [minutes:seconds] in fully charged |
| | Full Charge(current load) | state at current load of the battery controller is displayed. *2 *3 |
| | Approximate Backup Time at | The approximate backup time [minutes:seconds] in fully charged |
| | Full Charge(maximum load) | state at maximum load of the battery controller is displayed. *2 *3 |
| | Rated Capacity | The rated capacity [mAh] of the battery controller is displayed. |
| | | Rated Capacity |
| | | : The minimum capacity of the battery controller based on the |
| | | charge and discharge conditions of JIS C8708 2007. |
| | Rated Power | The rated power [W] of the battery is displayed. |
| | Peak VA | The peak power [W] of the battery is displayed. |
| | Charged Power | The power [W] required for charging is displayed. |

*1: It is not displayed when the battery pack is not mounted.

*2: If the approximate backup time is unknown, "-" is displayed.

*3 'Approximate Backup Time at Full Charge' is a reference value when the server's environment temperature is 25 degrees Celsius. This value may be different from actual operating time caused by temperature differences.

4.4.2 Battery Controller Configuration

This screen displays and sets the functions of the battery controller.

| | | | - | | × |
|--|--|--|---|---|---|
| | | Orch | estrating a brighter work | NE | С |
| ontroller Configural n at power lost n delay time urn off delay time wer switch should t ir power recovery m is valid only whe å Last State is DC-CO eout after DC-ON Default | In AC-LINK is set 'S [Required] n AC-LINK is set 'S [Required] | © Enable (30 3600 down in the OS. © Enable (tay Off, or AC-I 0 | Disable Seconds (0 - 255) Seconds (0 - 360) Disable INK is set 'Last Seconds (0 - 3600) it |) 0))) | |
| | n at power lost n delay time urn off delay time wer switch should b r power recovery m is valid only whe Last State is DC-C0 eout after DC-ON | ontroller Configuration n at power lost n delay time [Required] urn off delay time [Required] wer switch should be configured to shuther power recovery m is valid only when AC-LINK is set 'S Last State is DC-OFF. eout after DC-ON [Required] Default Apply | Ontroller Configuration n at power lost (* Enable () n delay time [Required] 30 urn off delay time [Required] 3600 wer switch should be configured to shutdown in the OS. r power recovery (* Enable () m is valid only when AC-LINK is set 'Stay Off, or AC-I LIAST State is DC-OFF. 0 eout after DC-ON [Required] 0 | Ontroller Configuration at power lost | Default Apply Exit Help |

| lt | em | Description | Default Value |
|----|---------------------------------|--|---------------|
| В | attery Controller Configuration | Battery Controller setting | |
| | Shutdown at power lost | Select Enable/Disable of the ability to shutdown at the power failure. *1 | Enable |
| | Shutdown delay time | Set the timeout period until the shutdown will be started at the power failure. *2 *3 | 30 |
| | Battery turn off delay time | Set the timeout period until the shutdown will be finished at the power failure. *2 *3 | 3600 |
| | Boot after power recovery | Select Enable/Disable of the ability to boot after the power recovery. *2 *4 | Enable |
| | Boot timeout after DC-ON | Set the timeout period until the boot is complete after DC-ON. *2 *3 *5 | 0 |

*1: The POWER Switch should be configured to shutdown in the OS.

*2: It is possible to set only if Shutdown at power lost is set to "Enable".

*3: The battery output period may be briefer in duration than the each configured time in this item, depending on the remaining charge.

*4: This item is valid only when AC-LINK is set 'Stay Off', or AC-LINK is set 'Last State' and Last State is DC-OFF.

*5: This item is valid at DC-ON after the shutdown system by 'Shutdown at power lost'. (DC-ON by 'Boot after power recovery' or manually)

4.5 Monitoring

This chapter explains "Monitoring" items. Refer to set more detailed settings.

CHECK:

- NEC System Management Controller driver must be run to set.
- This setting item does not exist in Linux and Off-line TOOL.

4.5.1 WDT

This screen displays and sets the Monitor System Hangs.

| 🖳 NEC Server Configuration Utility Version | 1.06 | | |
|---|---|--|------|
| | | \Orchestrating a brighter we | |
| EXPRESSSCOPE Engine 3 Network Property Service User Management Alert System Operation Control Miscellaneous System BIOS ECO Monitoring Shutdown Backup/Restore System Information | Monitor System Hangs Timeout [Required] 180 Interval [Required] 30 Action at timeout NMI Action after timeout Reset | Seconds (180 - 600) Seconds (30 - 60) | |
| | | Apply Exit | Help |

| Item | | Description |
|----------------------|----------------------|--|
| Monitor System Hangs | | WDT monitoring setting |
| | Timeout | Set the timeout period of monitoring. |
| | Interval | Set the interval period of monitoring. |
| | Action at timeout | Select the action at timeout. |
| | | None |
| | | NMI |
| | Action after timeout | Select the action after timeout. |
| | | System |
| | | Reset |
| | | Power off |
| | | Power cycle |

4.5.2 Shutdown

This screen displays and sets the Monitor Shutdown Hangs.

| 💁 NEC Server Configuration Utility Version | 1.06 | | | | |
|---|--|---|-------------------|---------------|-----|
| | | | Orchestrating a b | righter world | NEC |
| EXPRESSSCOPE Engine 3 Network Property Service User Management Alert System Operation Control Miscellaneous System BIOS ECO Monitoring WDT Shutdown Backup/Restore System Information | Image: Timeout [Required] Action at timeout Action after timeout | 1800 Seconds None Power off | s (300 - 6000) | | |
| | | Apply | Exit | He | lp |

| Item | Description |
|------------------------|---------------------------------------|
| Monitor Shutdown Hangs | Shutdown monitoring setting |
| Timeout | Set the timeout period of monitoring. |
| Action at timeout | Select the action at timeout. |
| | None |
| | NMI |
| Action after timeout | Select the action after timeout. |
| | System |
| | Reset |
| | Power off |
| | Power cycle |

5. Precautions for Use

5.1 Installation

-- Server Configuration Utility Installer (Windows & Linux) cannot downgrade to the older version. If you want to use the older version, uninstall the current version and then install older version. Note: All the registered information will be deleted as the result of the uninstalling.

5.2 General settings

- -- When you apply the configuration parameters, it may take time to complete the configuration of the BMC firmware depending on the settings. The following message will be displayed during the application, please wait one minute from several tens of seconds.
 - Windows / Linux : Applying the parameters.
 - Off-line TOOL : Updating the parameters.

5.3 HTTP / HTTPS settings

-- HTTP alone cannot be set to "Enable". When HTTP is set to "Enable", HTTPS is also set to "Enable" automatically.

5.4 Redirection setting

-- If Redirection of Management Software setting in Miscellaneous is applied to "Enable", the Value of after rebooting of BIOS Redirection Port in BIOS Console Redirection Configuration is set to "Serial Port B".

5.5 PEF setting and SNMP Alert setting

-- If Platform Event Filter in Miscellaneous is applied to "Disable", SNMP Alert is set to "Disable". And if SNMP Alert is applied to "Enable", Platform Event Filter is set to "Enable".

5.6 Alert form BMC

- -- In the case that the item "Alert" is enabled, BMC will alert directly to the specified alert receiver when the event specified in Alert Level is occurred. If NEC ESMPRO Manager or NEC ESMPRO Manager Association Module is installed on the alert receiver, the SNMP alert from BMC is registered on Alert Manager.
- -- Sending the alert from BMC depends on exist of NEC ESMPRO Agent.
 - (1) In the case of NEC ESMPRO Agent has been installed on the managed server. If OS does not run on the managed server, BMC send the alert when the specified event happens. After OS runs and NEC ESMPRO Agent starts, BMC does not send the alert even if the event happens, because NEC ESMPRO Agent sends the alert.
 - (2) In the case of NEC ESMPRO Agent has not been installed on the managed server. BMC sends the alert whenever the specified event happens.

5.7 Alert Test

-- Please send a test alert after completing all the settings of the Alert Configuration. You may be unable to use the alert function due to network environment and settings.

5.8 ECO setting

- -- The electric power value might not necessarily reach even the value of Power Threshold. The electric power control lowers the power consumption of the system by lowering the frequency of CPU/Memory. When CPU/Memory Throttling value reaches 100%, the electric power value does not fall any more.
- -- The server may not boot correctly if you configure too low value to the Aggressive Mode "Power Threshold(Pa)" and enable the Shutdown System option. When validating this setup, it is recommended to fully consider the value of "Power Threshold(Pa)" to be specified.

5.9 Management LAN setting

- -- When set to "Shared BMC LAN", the management LAN port is disabled.
- -- When set to "Shared BMC LAN", the network performance may be reduced because the data of both LANs must be transmitted or received.

5.10 Connection Type setting

- -- When both of the following has been set, Server Configuration Utility fails to change "Connection Type".
 - Management LAN is set to "Shared BMC LAN".
 - Boot Mode of BIOS SETUP (To press F2 key on POST) is set to "UEFI".

You can change the configuration of "Connection Type" is available when Boot Mode is "Legacy". Change Boot Mode configuration from "UEFI" to "Legacy" before changing "Connection Type" configuration, and then restore Boot Mode to "UEFI" (after changing "Connection Type").

5.11 Default setting

-- Please refer to the appropriate EXPRESSSCOPE Engine User's Guide about differences between BMC Configuration's default values and values which "BMC Configuration Initialization" function will set.

5.12 Key input

- -- If you select the keyboard type "Japanese" in Off-line TOOL startup, you are not able to enter the key of "¥", "|" and "_".
- -- In Server Configuration Utility for Windows, if you want to apply a string containing "%", you must specify "%%" instead of "%".

5.13 Run on Linux(x64)

-- When starting Server Configuration Utility on Linux(x64), the following message is displayed by system library, and then Server Configuration Utility fails to be started.

- Aborted (core dumped)

In this case, please delete the following file, and then start Server Configuration Utility. - /dev/shm/sem.BIOS_LOGFILE_MUTEX

5.14 Exclusions setting of security software

-- When using security software, please exclude following installation folder or directory of this software from a target of scan. Because this software may not work right by influence of security software. Further please refer to the manual of security software about setting of exclusion.

1.on Windows

The following folder is the default folder. If you changed the installation folder, please exclude the changed folder.

- <system drive>¥Program Files (x86)¥ServerConfiguration

2.on Linux

- /opt/nec/ServerConfiguration

Revision History

| 1.00 | 2014/08/19 | Initial edition |
|------|------------|--|
| 1.01 | 2014/12/01 | Adds Connection Type setting Precautions. |
| | | Corrects writing errors. |
| 1.02 | 2014/12/12 | Adds Red Hat Enterprise Linux Server 7. |
| | | Changes Installation and Uninstallation for Linux. |
| | | Changes System BIOS setting. |
| 1.03 | 2015/12/04 | Changes System Requirement. |
| | | Changes Installation for Windows and Linux. |
| | | Changes Network and Mail Alert setting. |
| | | Changes Cover. Corrects writing errors. |
| 1.04 | 2016/12/15 | Changes Summary. |
| | | Changes System Requirement. |
| | | Adds Functions for Many-core Server. |
| | | Corrects writing errors. |
| 1.05 | 2017/02/23 | Adds Windows Server 2016. |
| | | Changes Start Procedure on Windows. |
| | | Changes Active Directory, Mail Alert, SNMP Alert and Monitoring setting. |
| | | Adds Linux(x64) and security software Precautions. |
| | | Corrects writing errors. |
| 1.06 | 2017/07/21 | Changes System Requirement. |
| | | Corrects writing errors. |
| 1.07 | 2018/02/27 | Changes Summary. |
| | | Changes System Requirement. |
| | | Adds EXPRESSSCOPE Engine SP3. |
| | | Adds Network setting Precautions. |
| | | Corrects writing errors. |
| 1.08 | 2018/10/15 | Changes Summary. |
| | | Changes System Requirement. |
| | | Changes Installation. |
| | | Adds BMC (not EXPRESSSCOPE Engine) and Battery setting. |
| | | Changes EXPRESSSCOPE Engine and ECO setting. |
| | | Corrects writing errors. |
| 1.09 | 2019/03/22 | Adds Windows Server 2019 and SUSE Linux Enterprise Server 15. |
| | | Corrects writing errors. |
| 1.10 | 2019/08/27 | Adds command example for Linux. |
| 1.11 | 2020/08/26 | Fixed description for BMC (not EXPRESSSCOPE Engine). |
| 1.12 | 2021/08/05 | Adds Express5800/1110k, 1110k-S. |
| 1.13 | 2021/11/19 | Adds windows Server 2022. |
| 1.14 | 2023/11/21 | Adas Express5800/1110m, 1110m-S. |
| 1.15 | 2025/01/27 | Adds windows Server 2025. |

Server Configuration Utility User's Guide

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