# NEC

# NEC ESMPRO Agent Extension Installation Guide

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# **About This Document**

This document explains the complete procedures from installation of "NEC ESMPRO Agent Extension" to setup of managed server.

Before attempting to operate NEC ESMPRO Agent Extension, 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 managed servers. The notes and restrictions on use of each product as a managed server are explained in the user's guide provided with the managed server and "NEC ESMPRO Manager 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.

#### 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.

# Chapter1 Summary

NEC ESMPRO Agent Extension (Ver.2) is software that works on the managed server. When "ESMPRO Management" of BMC configuration on the managed server is set "Enable", you can execute commands specified by NEC ESMPRO Manager Ver.5.4 or later.

#### **CHECK:**

•

- You can configure BMC on the managed server by the following software.
  - Server Configuration Utility or BMC Configuration (Windows/Linux/Off-line TOOL)

- Web Console of EXPRESSSCOPE Engine 3, SP3 (except ft Server)
- NEC ESMPRO Manager (Ver.5.4 or later) (ft Server: Ver.5.61 or later)
- You can not configure BMC by NEC ESMPRO Agent Extension (Ver.2 or later).

# Chapter2 System Requirements

### 2.1 Managed server

Install NEC ESMPRO Agent Extension (Ver.2) in the managed server. It works on the following environment.

#### ■ Hardware

It needs to be managed by NEC ESMPRO Manager (Ver.5.4 or later) and satisfy the following conditions.

#### Managed Server

NEC Express5800 series, NEC Storage NS series and DX2000 that integrates EXPRESSSCOPE Engine 3 or SP3.

#### **IMPORTANT:**

- You can not install NEC ESMPRO Agent Extension (Ver.2) in the server with EXPRESSSCOPE Engine 2 or earlier.
- You can not install NEC ESMPRO Agent Extension (Ver.1) or NEC DianaScope Agent in the server with EXPRESSSCOPE Engine 3.

#### **CHECK:**

- ft Server (NEC Express5800/R320c-M4, R320c-E4, R310c-E4, R320d-M4, R320d-E4 and R310d-E4) is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver.2.02.
- ft Server (NEC Express5800/R320e-M4, R320e-E4, R310e-E4, R320f-M4, R320f-E4 and R310f-E4) is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver.2.06.
- ft Server (NEC Express5800/R320g-M4, R320g-E4 and R310g-E4) is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver.2.10.
- ECO CENTER (NEC Express5800/E120d-M and E110d-M) is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver2.03 and NEC ESMPRO Agent Extension for Linux Ver2.02.
- EXPRESSSCOPE Engine SP3 (NEC Express5800/A\*\*\*\*b, A\*\*\*\*c and A\*\*\*\*d) is supported by the upper version from NEC ESMPRO Agent Extension for Windows/Linux Ver2.04. (\*\*\*\* : 2040, 2020, 2010 or 1040)
- EXPRESSSCOPE Engine SP3 (NEC Express5800/A\*\*\*\*e and later) is supported by the upper version from NEC ESMPRO Agent Extension for Windows/Linux Ver2.09. (\*\*\*\* : 2040 or 1040)
- DX2000 is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver2.07 and NEC ESMPRO Agent Extension for Linux Ver2.08.

### • Memory

512MB or more

• Availability of hard disk 100MB or more

#### ■ Software

#### • Operating system

Windows Server 2016 Standard/Datacenter Windows Server 2019 Standard/Datacenter Windows Server 2022 Standard/Datacenter

Red Hat Enterprise Linux Advanced Platform 5 (x86, x64) Red Hat Enterprise Linux Server 5 (x86, x64) Red Hat Enterprise Linux Server 6 (x86, x64) Red Hat Enterprise Linux Server 7 (x64) SUSE Linux Enterprise Server 10 (SP3) (x86, x64) SUSE Linux Enterprise Server 11 (SP2, SP3) (x86, x64) SUSE Linux Enterprise Server 12 (x64) Oracle Linux 6 (x64)

#### **IMPORTANT:**

- You can not install NEC ESMPRO Agent Extension in the following case.
   -- Installation on guest OS virtual of machine.
- The following packages are necessary to use NEC ESMPRO Agent Extension on Red Hat Enterprise Linux Server 6(x64), Red Hat Enterprise Linux Server 7(x64) or Oracle Linux 6 (x64).

- -- glibc i686
- -- nss-softokn-freebl i686
- -- libgcc i686

#### **CHECK:**

 Oracle Linux 6 is supported by the upper version from NEC ESMPRO Agent Extension for Linux Ver2.04.

- Red Hat Enterprise Linux Server 7 is supported by the upper version from NEC ESMPRO Agent Extension for Linux Ver2.06.
- SUSE Linux Enterprise Server 12 is supported by the upper version from NEC ESMPRO Agent Extension for Linux Ver2.08.

#### • Other information

If you use the remote management function realized by the communication between NEC ESMPRO Manager (Ver.5.4 or later) and NEC ESMPRO Agent Extension (Ver.2), NEC ESMPRO Agent Extension needs one of following:

-- JRE 6 (32bit version 1.6.0\_20 or later)

-- JRE 7 (32bit version 1.7.0\_07 or later)

-- JRE 8 (32bit version 1.8.0\_40 or later)

(JRE is attached to NEC ESMPRO Agent Extension)

#### **IMPORTANT:**

• You cannot update NEC ESMPRO Agent Extension from Ver.1 to Ver.2 because the server that is able to be installed NEC ESMPRO Agent Extension is different between Ver.1 and Ver.2.

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#### **CHECK:**

- JRE 7 is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver2.03 and NEC ESMPRO Agent Extension for Linux Ver2.02.
- JRE 8 is supported by the upper version from NEC ESMPRO Agent Extension for Windows Ver2.06 and NEC ESMPRO Agent Extension for Linux Ver2.07.

#### 2.1.1 Server Management Driver

On Linux, OpenIPMI Driver must be started to use NEC ESMPRO Agent Extension (Ver.2). 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

# 2.2 Notes on Managed Servers

This section explains particular notes on managed servers.

### 2.2.1 Teaming Setting

If you set Teaming (providing redundancy or multiplexing with multiple network adapters) for LAN port that NEC ESMPRO Agent Extension uses on the managed server, please setup the NEC ESMPRO Agent Extension with the procedure below. This procedure does not depend on OS of the managed server.

Set IP address that NEC ESMPRO Agent Extension uses.

- Set the IP address that is used for Teaming on any LAN in the NEC ESMPRO Agent Extension screen.

# CHECK:

• If the "Check Connection" for the managed server has been completed, perform "Check Connection" again after performing "Set IP address that NEC ESMPRO Agent Extension uses".

# Chapter3 Installation

### 3.1 NEC ESMPRO Agent Extension Installation for Windows

Install NEC ESMPRO Agent Extension in the managed server in following order:

- (1) Install JRE
  - It is necessary to install JRE before the installation of NEC ESMPRO Agent Extension.
- (2) Install NEC ESMPRO Agent Extension

Install NEC ESMPRO Agent Extension on the managed server.

(3) Set IP Address of the OS that NEC ESMPRO Agent Extension uses Do the setting by NEC ESMPRO Agent Extension.

### 3.1.1 Check before installation

Check the followings:

- -- See chapter 2.1 to check the system requirement of the managed server and NEC ESMPRO Agent Extension.
- -- Login to Windows as Administrator.

#### 3.1.2 Start installation menu

#### If you install NEC ESMPRO Agent Extension by using 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:

Installation menu must be opened using Microsoft Internet Explorer.

-- The equipment by which EXPRESSBUILDER DVD is standard.

You can open the installation menu as follows:

(1) Insert EXPRESSBUILDER DVD into Optical disk drive on the managed 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) In any of the following, NEC ESMPRO Agent Extension installation menu for Windows will appear.

-- Click [Applications] - [NEC ESMPRO Agent Extension] - [Install].

-- Click [Applications] - [ESMPRO] - [Agent Extension].

-- Click [Set up Software] - [ESMPRO] - [Agent Extension].

#### ■ If you install NEC ESMPRO Agent Extension by using downloaded modules:

Open the following files of NEC ESMPRO Agent Extension Installer on web browser. ¥esmpro\_sa\_ex¥menu¥en¥menu.html

#### **CHECK:**

• Installation menu must be opened using Microsoft Internet Explorer.

#### 3.1.3 Install JRE

Be sure to install JRE of the version specified in chapter 2.1.

(1) Click "Java Runtime Environment (JRE)" on the installation menu. . The "Download Files" dialog box will appear. Click [Open]. JRE installer will be started.

.....

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#### TIPS:

• Depending on your environment, please substitute [Run] for [Open].

(2) Install JRE according to the installer's instructions.

## 3.1.4 Install NEC ESMPRO Agent Extension

Check before perform the installation.

-- Login to Windows as Administrator.

-- Confirm that JRE has been installed. See chapter 2.1 for JRE version.

(1) Click "NEC ESMPRO Agent Extension" on the installation menu. The "Download Files" dialog box will appear. Click [Open]. NEC ESMPRO Agent Extension installer will be started.

## TIPS:

- Depending on your environment, please substitute [Run] for [Open].
- When asked to run or save the file, please run without saving it.

(2) NEC ESMPRO Agent Extension installer will be started. Click [Next].

NEC ESMPRO Agent Extension 2.00	
	Welcome to the InstallShield Wizard for NEC ESMPRO Agent Extension
	The InstallShield Wizard will install NEC ESMPRO Agent Extension on your computer. To continue, click Next.
	< Back Cancel

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

NEC ESMPRO Agent Extension 2.00	×
Choose Destination Location Select folder where setup will install files.	K
Setup will install NEC ESMPRO Agent Extension in the following folder.	
To install to this folder, click Next. To install to a different folder, click Browse ar another folder.	nd select
Destination Folder C:\Program Files (x86)\	B <u>r</u> owse
InstallShield	Cancel
< <u>B</u> ack <u>Next&gt;</u>	

(4) Confirm the installation setting, and click [Next]. The installation will be started.

NEC ESMPRO Agent Extension 2.00		×
Start Copying Files Review settings before copying files.		XX
Setup has enough information to start copying change any settings, click Back. If you are sa copying files.		
Current Settings:		
Install to:C:\Program Files (x86)\		× ×
InstallShield	< Back Next >	Cancel

When the installation is completed, NEC ESMPRO Agent Extension service is started and available.

TIPS:

• You can confirm whether the installation of NEC ESMPRO Agent Extension is completed or not.

- Click "Administrative Tools" "Services",
- if the Status of "ESM Agent Extension Service" is started, the installation is completed.

### 3.1.5 Set the IP Address that NEC ESMPRO Agent Extension uses

Do the setting on the managed server.

(1) Click "NEC ESMPRO Agent Extension" - "NEC ESMPRO Agent Extension" from [start] on Windows to open the setting dialog box of NEC ESMPRO Agent Extension.

(2) Select IP address of Operating System that NEC ESMPRO Agent Extension uses.

Prince SMPRO Agent Extension			
	-Select IP addre	955	
	Primary:	192.168.14.63	
	Secondary:	192.168.14.63	
		OK Close	

#### **CHECK:**

• Please execute [Set Agent IP address] again if you change the LAN ports or a new LAN card is inserted to the managed server. Perform the "Check Connection" of NEC ESMPRO Manager (Ver.5.4 or later) after the setting is changed.

#### TIPS:

• Set Primary an IP Address which NEC ESMPRO Agent Extension mainly use to connect with NEC ESMPRO Manager (Ver.5.4 or later)., and set Secondary a spare IP Address. Secondary is used when the connection error occurs on Primary.

# 3.2 NEC ESMPRO Agent Extension Uninstallation for Windows

To uninstall the software, perform it in following order:

#### (1) Uninstall NEC ESMPRO Agent Extension

Open "Add/Remove Programs" of control panel on Windows. Select NEC ESMPRO Agent Extension and click [Delete]. Uninstall it according to the on-screen instructions.

#### **CHECK:**

• Close the dialog box of NEC ESMPRO Agent Extension if it has been opened, and then uninstall NEC ESMPRO Agent Extension.

#### (2) Uninstall JRE

Open "Add/Remove Programs" of control panel on Windows. Select JRE and click [Delete]. When the version of JRE is 7 Update7, select [Java 7 Update 7].

# 3.3 JRE Update for Windows

To update JRE on the managed server which NEC ESMPRO Agent Extension has been installed on, perform it in following order.

The following is an example that NEC ESMPRO Agent Extension is installed under "C:¥Program Files¥ServerAgent Extension", and JRE is installed under "C:¥Program Files¥Java¥xxxxx".

# (1) Stop NEC ESMPRO Agent Extension service.

#### TIPS:

Service name is "ESM Agent Extension Service".

(2) Install the new version JRE.

#### **IMPORTANT:**

• If the reboot of operating system is required, please reboot Operating System after (3).

If you reboot Operating System, the process (4) is unnecessary.

(3) Edit path of the JRE that NEC ESMPRO Agent Extension use.

Open the following file with text editor.

C:\Program Files\ServerAgent Extension\Service\jsl.ini

Edit the path of JRE.

jrepath=C:¥Program files¥Java¥xxxxx

(4) Start NEC ESMPRO Agent Extension service.

# 3.4 NEC ESMPRO Agent Extension Installation for Linux

To install the software, perform it in following order:

(1) Install JRE

It is necessary to install JRE before the installation of NEC ESMPRO Agent Extension.

- (2) Install NEC ESMPRO Agent Extension Install NEC ESMPRO Agent Extension on the managed server.
- (3) Set IP Address of the OS that NEC ESMPRO Agent Extension uses Do the setting by NEC ESMPRO Agent Extension.

#### 3.4.1 Check before installation

Check the followings:

-- See chapter 2.1 to check the system requirement of managed server and NEC ESMPRO Agent Extension.

-- Login to Linux as root user.

#### 3.4.2 Copy and extract the installer

Copy the installer into any directory on the managed server. The following is an example to copy into /usr/local/bin: The Installer may be tgz format or zip format.

#### **CHECK:**

NEC ESMPRO Agent Extension installer exists on following directory:

-- If you install by using EXPRESSBUILDER: <revision folder>/lnx/pp/esmpro\_sa\_ex

-- If you install by using downloaded modules:/esmpro\_sa\_ex

-- In the case of tgz format:

(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/esmpro\_sa\_ex/jre\_x /usr/local/bin cp -r /mnt/cdrom/001/lnx/pp/esmpro\_sa\_ex/agt\_x /usr/local/bin

(2) Move to the directory containing NEC ESMPRO Agent Extension installer.

cd /usr/local/bin/agt\_x

#### (3) Extract NEC ESMPRO Agent Extension installer.

tar xzvf EsmproSaEx-N.NN-x.tgz

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

- -- In the case of zip format:
- (1) Copy the installer 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/esmpro\_sa\_ex /usr/local/bin
- (2) Move to the directory containing the installer.

cd /usr/local/bin/esmpro\_sa\_ex

(3) Extract the installer.

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

**CHECK:** 

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

#### 3.4.3 Install JRE

Regardless of below input examples, be sure to install JRE of the version specified in chapter 2.1.

(1) Move to the directory containing the JRE installer.

```
-- In the case of tgz format
```

cd /usr/local/bin/jre\_x

```
-- In the case of zip format
```

```
cd /usr/local/bin/esmpro sa ex/jre x
```

(2) Install JRE. JRE will be installed in the directory named JRE version under JRE/usr/java.

```
The following is an example that the version of JRE is 7 Update25.
```

chmod a+x jre-7u25-linux-i586.rpm rpm -ivh jre-7u25-linux-i586.rpm

### 3.4.4 Install NEC ESMPRO Agent Extension

(1) Move to the directory that the installer was extracted.

-- In the case of tgz format

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

-- In the case of zip format

cd /usr/local/bin/esmpro\_sa\_ex/agt\_x

(2) Execute the shell for the installation.

sh EsmproSaEx-N.NN-x.sh

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

(3) A message to confirm whether to install NEC ESMPRO Agent Extension is displayed.Input "yes" and "Enter" key. NEC ESMPRO Agent Extension will be installed under /opt/nec/esmpro\_sa\_ex\_sysman and /opt/nec/esmpro\_sa\_ex\_agent directory. If you input "no", the installation is not executed.

When the installation is completed, following message will be displayed. "The installation of NEC ESMPRO Agent Extension is now completed." NEC ESMPRO Agent Extension service is available.

#### **CHECK:**

• Do not delete the files that are used to install, because you will use them to uninstall.

### 3.4.5 Set the IP Address of NEC ESMPRO Agent Extension uses

Do the setting on the managed server.

(1) Open the setting of NEC ESMPRO Agent Extension.

Do the following operation to open the setting function of NEC ESMPRO Agent Extension.

/opt/nec/esmpro sa ex sysman/agentconf

(2) Select IP address of Operating System that NEC ESMPRO Agent Extension uses.

#### TIPS:

• Set Primary an IP Address which NEC ESMPRO Agent Extension mainly use to connect with NEC ESMPRO Manager (Ver.5.4 or later), and set Secondary a spare IP Address. Secondary is used when the connection error occurs on Primary.

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# 3.5 NEC ESMPRO Agent Extension Uninstallation for Linux

Login to Linux as root user.

To uninstall the software, perform in following order:

(1) Uninstall NEC ESMPRO Agent Extension

(2) Uninstall JRE

### 3.5.1 Uninstall NEC ESMPRO Agent Extension

(1) Move to the directory that the installer was extracted.

-- In the case of tgz format

cd /usr/local/bin/agt\_x/EsmproSaEx-N.NN-x

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

-- In the case of zip format

cd /usr/local/bin/esmpro\_sa\_ex/agt\_x

#### (2) Execute the shell for uninstallation.

sh EsmproSaEx-N.NN-x.sh

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

(3) A confirmation message for uninstallation of NEC ESMPRO Agent Extension is displayed. Input "delete" and "Enter" key.

When the uninstallation is completed, following message will be displayed. "The uninstallation of NEC ESMPRO Agent Extension is now completed."

### 3.5.2 Uninstall JRE

You can confirm the version of JRE by following command.

rpm -qa | grep jre

The following is an example that the version of JRE is 7 Update25.

rpm -e jre-1.7.0\_25-fcs

# 3.6 JRE Update for Linux

Perform in following order to update JRE software on the managed server which NEC ESMPRO Agent Extension has been installed on:

This example is for updating JRE to ver.7 Update25 when you use NEC ESMPRO Agent Extension.

#### (1) Stop NEC ESMPRO Agent Extension service.

[In the case of Red Hat Enterprise Linux Server 6 or earlier] /etc/rc.d/init.d/dianascopeagent stop [In the case of Red Hat Enterprise Linux Server 7 or later]

/usr/bin/systemctl stop dianascopeagent.service

#### (2) Update JRE.

chmod a+x jre-7u25-linux-i586.rpm rpm -ivh jre-7u25-linux-i<u>5</u>86.rpm

#### (3) Start NEC ESMPRO Agent Extension service.

[In the case of Red Hat Enterprise Linux Server 6 or earlier]

/etc/rc.d/init.d/dianascopeagent start

[In the case of Red Hat Enterprise Linux Server 7 or later]

/usr/bin/systemctl start dianascopeagent.service

# Chapter4 Precautions for Use

### 4.1 NEC ESMPRO Agent Extension installation

- -- NEC ESMPRO Agent Extension 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.
- -- NEC ESMPRO Agent Extension (Windows) Installer may indicate a message that requests the removable media if you upgrade NEC ESMPRO Agent Extension with the installer on CD-ROM/DVD-ROM. In this case, copy the installer on the HDD and then upgrade.
- -- You can not update NEC ESMPRO Agent Extension from Ver.1 to Ver.2 because the server that is able to be installed NEC ESMPRO Agent Extension is different between Ver.1 and Ver.2.

# 4.2 JRE7 installation

-- JRE7 Linux installer may indicate the following message depending on the JRE version. These messages are harmless, and can be ignored. To suppress these messages, please use the JRE7 Update21 or later.

Error:Could not open input file :/usr/java/jre1.7.0\_15/lib/rt.pack

 $Error: Could \ not \ open \ input \ file: /usr/java/jre1.7.0\_15/lib/jsse.pack$ 

Error:Could not open input file :/usr/java/jre1.7.0\_15/lib/charsets.pack

Error:Could not open input file :/usr/java/jre1.7.0\_15/lib/localedata.pack

Error:Could not open input file :/usr/java/jre1.7.0\_15/lib/plugin.pack

Error:Could not open input file :/usr/java/jre1.7.0\_15/lib/javaws.pack

Error:Could not open input file :/usr/java/jre1.7.0\_15/lib/deploy.pack

# 4.3 Firewall

If the firewall is enabled on the managed server, NEC ESMPRO Agent Extension can not communicate NEC ESMPRO Manager (Ver.5.4 or later).Please open the following ports on the managed server.

Port number	47120 - 47129
Protocol	ТСР

## 4.4 Reservation TCP Ports

In Red Hat Enterprise Linux 6.0 or later or Red Hat Enterprise Linux 5.6 or later, NEC ESMPRO Agent Extension for Linux (Ver.2.03 or later) automatically reserves TCP ports (47120-47129) itself uses to avoid conflicts with the software automatically assigning TCP ports.

(1) You can manually set the reservation TCP ports as follows:

```
(2) Set the reservation TCP ports.
```

Execute the following command. /sbin/sysctl -w net.ipv4.ip local reserved ports=47120-47129

(3) Save the setting of the reservation TCP ports.

Add the settings to the file as follows.		he file as follows.
	File name	/etc/sysctl.conf
	Description	net.ipv4.ip_local_reserved_ports = 47120-47129

# 4.5 Remote Power Control

When you perform a remote power control (power cycle, power off, etc.) from NEC ESMPRO Manager, you may environment of NEC ESMPRO Agent Extension of the managed server becomes illegal, it becomes "null" version of NEC ESMPRO Agent Extension that is displayed in NEC ESMPRO Manager. In this case, please uninstall NEC ESMPRO Agent Extension and reinstall it.

# 4.6 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.

- (32bit Edition) <system drive>¥Program Files¥ServerAgent Extension
- (64bit Edition) <system drive>¥Program Files (x86)¥ServerAgent Extension

2.on Linux

- /opt/nec/esmpro\_sa\_ex\_agent
- /opt/nec/esmpro\_sa\_ex\_sysman

### **Revision History**

2.00	2011/05/10	Initial edition
2.01	2011/06/24	Adds required packages by Red Hat Enterprise Linux Server 6 (x64).
		Changes cover. Corrects writing errors.
2.02	2012/02/28	Corrects writing errors.
2.03	2012/05/25	Changes Installation.
		Corrects writing errors.
2.04	2012/07/05	Changes Installation for Linux.
		Corrects writing errors.
2.05	2012/08/22	Adds ft Server.
		Corrects writing errors.
2.06	2012/10/31	Adds ECO CENTER.
		Adds Windows Server 2012.
		Adds JRE7.
		Changes Installation.
		Corrects writing errors.
2.07	2013/03/12	Adds reservation TCP ports Precautions.
		Corrects writing errors.
2.08	2013/07/18	Adds JRE7 installation Precautions.
		Corrects writing errors.
2.09	2013/09/11	Changes Installation for Windows.
		Corrects writing errors.
2.10	2014/01/07	Adds target server that integrates EXPRESSSCOPE Engine SP3.
		Adds Windows Server 2012 R2, SLES11 and Oracle Linux 6.
		Corrects writing errors.
2.11	2014/08/19	Changes Installation for Windows.
		Adds Remote Power Control Precautions.
		Changes cover. Corrects writing errors.
2.12	2014/12/01	Adds Red Hat Enterprise Linux Server 7.
2.13	2014/12/12	Changes Installation and Uninstallation for Linux.
2.14	2015/07/27	Adds ft Server and JRE8.
		Corrects writing errors.
2.15	2015/12/04	Changes Installation for Windows and Linux.
		Changes Cover. Corrects writing errors.
2.16	2016/02/16	Adds DX2000.
		Corrects writing errors.
2.17	2016/07/22	Adds SUSE Linux Enterprise Server 12.
2.18	2017/02/23	Adds Windows Server 2016.
		Adds security software Precautions.
2.19	2017/06/19	Changes Managed server.
2.20	2018/09/14	Changes Managed server.
2.21	2019/06/25	Changes System Requirements.
2.22	2019/08/27	Adds command example for Linux.
2.23	2019/11/21	Changes Firewall Precautions.
2.24	2021/12/24	Adds Windows Server 2022.
2.24-02	2022/11/07	Added license notation.
2.25	2023/10/11	Deleted WindowsServer2012.
		Deleted WindowsServer2012 R2.

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