

NEC ExpressUpdate Functions and Features

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Table of Contents

Table of Contents	- 2 -
Table of Figures	- 5 -
■ Trademarks	- 9 -
■ Notes	- 9 -
■ About this Document	- 9 -
■ Symbols in this Document	- 9 -
■ Terminology	- 10 -
1. Overview	- 11 -
1.1. NEC ExpressUpdate	- 11 -
1.2. Component Configuration	- 12 -
1.2.1. NEC ESMPRO Manager Ver. 5	- 13 -
1.2.2. NEC ExpressUpdate Manager	- 13 -
1.2.3. Repository	- 13 -
1.2.4. NEC ExpressUpdate Agent	- 13 -
1.2.5. EXPRESSSCOPE Engine 3	- 14 -
1.3. Sharing the Repository	- 15 -
1.4. Update Packages	- 18 -
1.4.1. Configuration and Security of the Update Package	- 18 -
1.4.2. OS and Server Supporting NEC ExpressUpdate	- 19 -
1.4.3. Supported Modules	- 20 -
1.5. NEC ExpressUpdate-Related Screens	- 21 -
1.5.1. Update Package Installation Screen	- 21 -
1.5.2. Remote Batch Settings Screen	- 22 -
1.5.3. Repository Settings Screen	- 22 -
1.5.4. Repository Management Information Screen	- 24 -
2. Details of NEC ExpressUpdate	- 26 -
2.1. Installing Update Packages	- 26 -
2.1.1. "Install only latest version" Check Box	- 26 -
2.1.2. "Automatic Reboot" Check Box	- 28 -
2.1.3. Description of Each Status	- 29 -
2.1.4. When Server Status Is Unknown	- 33 -
2.1.5. When an Update Package Requiring a Reboot is Installed	- 34 -
2.1.6. When the Installation Failed	- 34 -

NEC ExpressUpdate Functions and Features

2.1.7.	Installation Order of Update Packages	- 34 -
2.1.8.	Correlation Between Executing and Installing the Remote Batch.....	- 36 -
2.2.	Repository	- 38 -
2.2.1.	Downloading Update Packages	- 38 -
2.2.2.	Generation Management for Update Packages	- 39 -
2.2.3.	Adding Update Packages.....	- 40 -
2.2.4.	Removing Update Packages.....	- 41 -
2.2.5.	"Clean Removal History" for Update Packages.....	- 42 -
2.2.6.	Saving Update Packages	- 43 -
2.2.7.	Proxy Server Settings.....	- 45 -
2.2.8.	Alive Monitoring of NEC ExpressUpdate Manager.....	- 45 -
2.3.	NEC ExpressUpdate Agent	- 46 -
2.3.1.	NEC ExpressUpdate Agent	- 46 -
2.3.2.	Installation Conditions	- 46 -
2.3.3.	Notes for Installation.....	- 47 -
2.4.	Application Log.....	- 48 -
2.4.1.	Normal Logs.....	- 49 -
2.4.2.	Error Logs	- 52 -
3.	Using NEC ExpressUpdate	- 54 -
3.1.	Installing NEC ExpressUpdate Agent	- 54 -
3.2.	Registering a Server as a Management Target Server to NEC ESMPRO Manager-	55 -
3.2.1.	When Enabling NEC ExpressUpdate for a Server at the Time of Registering the Server as a Management Target Server to NEC ESMPRO Manager	- 55 -
3.2.2.	When the Server is Already Registered as a Management Target Server to NEC ESMPRO Manager	- 57 -
3.3.	Setting the Repository	- 58 -
3.4.	Downloading Update Packages	- 61 -
3.4.1.	Automatic Downloading.....	- 61 -
3.4.2.	Downloading Update Packages Explicitly on Demand.....	- 61 -
3.4.3.	Adding Update Packages Manually.....	- 63 -
3.4.4.	Notification for Update Package Download	- 65 -
3.5.	Installing Update Packages	- 68 -
3.5.1.	Installing an Update Package to a Single Server	- 68 -
3.5.2.	Installing an Update Package to a Group of Servers at Once	- 71 -
3.5.3.	Installing Update Packages by Using the Remote Batch	- 75 -

NEC ExpressUpdate Functions and Features

3.5.4.	Installing Update Packages Not Supporting Automatic Update Manually..	- 76 -
3.6.	Removing Update Packages	- 77 -
3.7.	Saving Update Packages	- 79 -
3.7.1.	Saving Update Packages from the NEC ExpressUpdate Screen.....	- 79 -
3.7.2.	Saving Update Packages from the Repository Management Information Screen	- 80 -
3.8.	Installing NEC ExpressUpdate Agent Remotely	- 82 -
3.8.1.	When Performing "Check Connection" of the Registered Server	- 82 -
3.8.2.	When Searching by Auto Registration.....	- 93 -
3.8.3.	When Installing from the NEC ExpressUpdate Screen	- 102 -
3.8.4.	Installation Status and Results	- 104 -
3.9.	Uninstalling Software	- 107 -
3.9.1.	Selecting a Single Server to Uninstall Software	- 107 -
3.9.2.	Selecting a Group of Servers to Uninstall Software at Once	- 110 -
4.	FAQ	- 114 -
4.1.	What will Happen to the Installation of an Update Package if the Communication with the Agent is Lost During the Installation?.....	- 114 -
4.2.	What Should I Do If the Communication with NEC ExpressUpdate Agent Is Lost?..	115 -
4.3.	How Can the Repository Be Transferred?	- 115 -
4.4.	What Should I Do If the Log File Grows?	- 116 -

Table of Figures

Fig. 1 Component correlation diagram	- 12 -
Fig. 2 When failing to connect to the repository	- 15 -
Fig. 3 Using an older repository	- 16 -
Fig. 4 Sharing the repository	- 16 -
Fig. 5 Sharing the repository 2	- 17 -
Fig. 6 Configuration of the update package	- 19 -
Fig. 7 Update package installation screen	- 21 -
Fig. 8 Remote Batch settings screen	- 22 -
Fig. 9 Repository Settings screen	- 22 -
Fig. 10 Repository Management Information screen displayed by component	- 24 -
Fig. 11 Repository Management information screen displayed by model targeted for management	- 25 -
Fig. 12 "Install only latest version" check box	- 26 -
Fig. 13 Displaying downgrade support	- 28 -
Fig. 14 Displaying each status	- 29 -
Fig. 15 Before changing the status icon	- 32 -
Fig. 16 Selecting the status icon to change	- 32 -
Fig. 17 After changing the status icon	- 33 -
Fig. 18 Application Log	- 34 -
Fig. 19 Release dates for the update packages	- 35 -
Fig. 20 Remote Batch setup settings screen	- 36 -
Fig. 21 Flow of applying the remote batch	- 37 -
Fig. 22 Generation management for update packages	- 39 -
Fig. 23 Options for adding update packages	- 40 -
Fig. 24 "Remove By Force" check box	- 42 -
Fig. 25 "Clean Removal History" for update packages	- 43 -
Fig. 26 Saving options check boxes	- 44 -
Fig. 27 Update package archive	- 44 -
Fig. 28 index file	- 45 -
Fig. 29 Proxy Server Settings	- 45 -
Fig. 30 Setting for NEC ExpressUpdate	- 55 -
Fig. 31 "Management Controller" management	- 55 -

Fig. 32 NEC ExpressUpdate management settings	- 56 -
Fig. 33 NEC ExpressUpdate management settings	- 57 -
Fig. 34 Repository Settings.....	- 58 -
Fig. 35 Update target module with update package not supporting automatic update....	- 60 -
Fig. 36 Update package list display	- 62 -
Fig. 37 Screen for adding update packages	- 64 -
Fig. 38 Update package download event.....	- 65 -
Fig. 39 Details of the download event of the update package	- 66 -
Fig. 40 Popup notification for update package download	- 67 -
Fig. 41 "Not Latest" display.....	- 68 -
Fig. 42 Selecting a version to install	- 69 -
Fig. 43 Execute button.....	- 69 -
Fig. 44 Progress status.....	- 70 -
Fig. 45 Installation results	- 70 -
Fig. 46 Installing to a group	- 71 -
Fig. 47 Selecting the version to install	- 73 -
Fig. 48 Progress status display.....	- 74 -
Fig. 49 Installation results display	- 74 -
Fig. 50 Remote batch settings	- 75 -
Fig. 51 Remote batch calendar.....	- 76 -
Fig. 52 Removing the update package	- 78 -
Fig. 53 Update packages saving operation on the NEC ExpressUpdate screen	- 79 -
Fig. 54 Creating Update Package archive screen	- 80 -
Fig. 55 Saving the update package archive.....	- 80 -
Fig. 56 Update package saving operation on the Repository Management Information screen.....	- 81 -
Fig. 57 "Check Connection" of the registered server	- 83 -
Fig. 58 Remote installation notification for NEC ExpressUpdate Agent.....	- 84 -
Fig. 59 License agreement	- 85 -
Fig. 60 License agreement for update module	- 85 -
Fig. 61 OS Type.....	- 86 -
Fig. 62 Installation folder.....	- 87 -
Fig. 63 Installation Folder (Linux System).....	- 87 -
Fig. 64 Manager account	- 88 -
Fig. 65 Repository setting.....	- 88 -

Fig. 66 Package selection.....	- 89 -
Fig. 67 File Designation	- 90 -
Fig. 68 Notification displayed when there is a newer package in the repository	- 90 -
Fig. 69 Selecting a package to use.....	- 90 -
Fig. 70 Installation Confirmation	- 91 -
Fig. 71 Confirmation for starting the installation.....	- 92 -
Fig. 72 Installation status	- 92 -
Fig. 73 Installation results	- 92 -
Fig. 74 Searching by auto registration	- 93 -
Fig. 75 Notification for NEC ExpressUpdate Agent remote installation.....	- 94 -
Fig. 76 License agreement	- 94 -
Fig. 77 License agreement for Update Module.....	- 95 -
Fig. 78 Server selection	- 95 -
Fig. 79 OS Type.....	- 96 -
Fig. 80 Installation Folder	- 97 -
Fig. 81 Manager account	- 98 -
Fig. 82 Repository Setting	- 98 -
Fig. 83 Package selection (for Windows OS)	- 99 -
Fig. 84 Package selection (for Linux OS)	- 100 -
Fig. 85 Installation Confirmation	- 100 -
Fig. 86 Confirmation for starting the installation.....	- 101 -
Fig. 87 Installation status	- 101 -
Fig. 88 Installation results	- 102 -
Fig. 89 Management target server's state screen.....	- 103 -
Fig. 90 Remote installation from the NEC ExpressUpdate screen	- 104 -
Fig. 91 Installation status of NEC ExpressUpdate Agent	- 104 -
Fig. 92 Installation results of NEC ExpressUpdate Agent	- 105 -
Fig. 93 Example of succeeded installation.....	- 105 -
Fig. 94 Example of failed installation	- 105 -
Fig. 95 Messages displayed when the NEC ExpressUpdate functions are not supported	- 106 -
Fig. 96 Selecting a single server to uninstall software	- 107 -
Fig. 97 Uninstallation confirmation.....	- 108 -
Fig. 98 Uninstallation progress status.....	- 108 -
Fig. 99 Uninstallation results.....	- 109 -
Fig. 100 Notification for excluded management target.....	- 109 -

Fig. 101 Update notification for NEC ExpressUpdate Agent.....	- 110 -
Fig. 102 Selecting a group of servers to uninstall software.....	- 110 -
Fig. 103 Uninstallation confirmation.....	- 111 -
Fig. 104 Uninstallation progress status.....	- 111 -
Fig. 105 Uninstallation results.....	- 112 -
Fig. 106 Notification for excluded management target.....	- 112 -
Fig. 107 Update notification for NEC ExpressUpdate Agent.....	- 113 -
Table 1 Term.....	- 10 -
Table 2 Function to share the repository.....	- 15 -
Table 3 Correlation between modules and update packages	- 18 -
Table 4 Configuration of the update package	- 19 -
Table 5 Update packages supporting NEC ExpressUpdate.....	- 19 -
Table 6 Modules supporting NEC ExpressUpdate.....	- 20 -
Table 7 Icons showing the automatic update supportability.....	- 30 -
Table 8 Module status.....	- 31 -
Table 9 Status icons for the module with update package not supporting automatic update	- 32 -
Table 10 Server Status.....	- 33 -
Table 11 Example of update packages to be installed	- 35 -
Table 12 Order of installation	- 35 -
Table 13 Options for adding update packages.....	- 40 -
Table 14 Results of adding update packages	- 41 -
Table 15 Options for removing update packages.....	- 41 -
Table 16 Results of removing update packages	- 42 -
Table 17 Update packages saving options	- 43 -
Table 18 Normal logs.....	- 49 -
Table 19 Error logs	- 52 -
Table 20 Icons for update package additional information.....	- 63 -
Table 21 Filtering of servers to display.....	- 72 -
Table 22 Update Package Installation and Reboot	- 114 -

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■ About this Document

This document explains the "NEC ExpressUpdate" functions installed on the server management software "NEC ESMPRO Manager Version 5." Refer to this document when using NEC ExpressUpdate.

This document is intended for the latest version of NEC ESMPRO Manager. A part of the functions described in this document is unavailable for previous versions of NEC ESMPRO Manager. If such is the case, please update it to the latest version.

■ Symbols in this Document

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

IMPORTANT: Key points or notes you must follow when handling software or devices of servers.

CHECK: Key points you need to check when handling software or devices of the server.

TIPS: Useful information.

■ **Terminology**

The following are terms used in this document.

Table 1 Term

Term	Description
NEC ESMPRO Manager	NEC ESMPRO Manager
NEC ESMPRO Agent	NEC ESMPRO Agent
NEC ESMPRO Agent Extension	NEC ESMPRO Agent Extension
Module	A collective term for firmware and software targeted to be updated, including the system BIOS, EXPRESSSCOPE Engine firmware, NEC ESMPRO Agent, etc. on a management target server.
Management server	A server on which NEC ESMPRO Manager is installed and used to manage servers. A computer or management target server itself can also be used as a management server.
Management target server	A server managed by NEC ESMPRO Manager. To use NEC ExpressUpdate, NEC ExpressUpdate Agent needs to be installed.
BMC	Baseboard Management Controller. A management controller that monitors system hardware and reports alerts without being affected by the system state or OS.
Update package	Update files for the system BIOS or BMC firmware of a management target server.
Update package server	A server distributes update packages that NEC Corporation provides by having repositories access this server to download them.
Repository	A function of NEC ESMRPO Manager Ver. 5, which downloads update packages from the "update package server" to store and manage them in the repository. This is available in NEC ESMPRO Manager Ver. 5.1 and later.

1. Overview

1.1. NEC ExpressUpdate

NEC ExpressUpdate is a part of functions of NEC ESMPRO Manager Ver. 5.1. It allows you to manage versions of firmware and software of the management target servers through an intuitive user interface.

With NEC ExpressUpdate, the firmware and software versions can be managed more easily and accurately.

In addition, only required update files (update package) for the management target servers are selected to be downloaded from the update package server, which makes it possible to minimize network bandwidth and disk capacity required for management.

To use NEC ExpressUpdate, NEC ExpressUpdate Agent or EXPRESSSCOPE Engine 3 needs to be installed on the management target servers. If NEC ExpressUpdate Agent is not installed on a management target server, it can be installed on the management target server remotely from NEC ESMPRO Manager.

CHECK:

- The installation function of NEC ExpressUpdate Agent is supported in NEC ESMPRO Manager Ver. 5.25 and later.
-

1.2. Component Configuration

This section briefly shows the correlation of each NEC ExpressUpdate component.

"NEC ExpressUpdate Manager" and "repository" installed on the management server as part of NEC ESMPRO Manager communicate with either "NEC ExpressUpdate Agent" or "EXPRESSSCOPE Engine 3" installed on the management target servers through the network, which enables to update the firmware and software on the management target servers.

NEC ExpressUpdate saves update packages downloaded from the update package server or manually added by the user in the repository within NEC ESMPRO Manager. NEC ExpressUpdate Manager can use a "repository" installed on another management server, in addition to the "repository" installed on its own server.

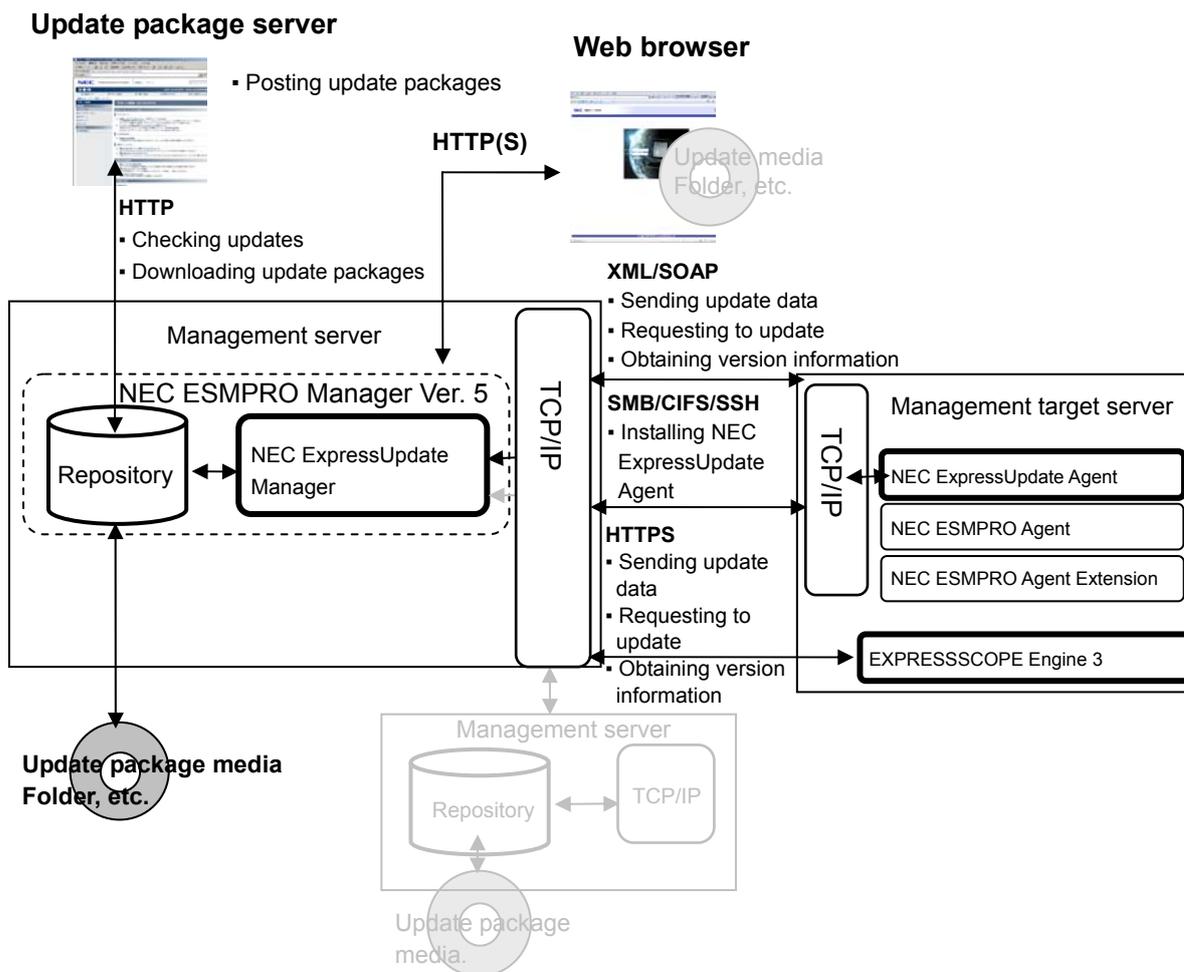


Fig. 1 Component correlation diagram

1.2.1. NEC ESMPRO Manager Ver. 5

NEC ESMPRO Manager Ver. 5 is server management software that provides capability to manage servers visually. It allows you to manage servers remotely such as controlling power without going to the actual locations where the servers are installed, enabling reduction in costs for operation and management of the servers.

1.2.2. NEC ExpressUpdate Manager

NEC ExpressUpdate Manager is a core component that controls the NEC Express Update functions such as sending an update package to the NEC ExpressUpdate Agent on a management target server and reflecting responses from the NEC ExpressUpdate Agent in the GUI. It is installed as part of NEC ESMPRO Manager.

CHECK:

- NEC ExpressUpdate Manager is available in NEC ESMPRO Manager Ver. 5.1 and later.
-

1.2.3. Repository

Repository is a component that stores update packages for management target servers and performs generation management. It downloads update packages from the update package server at a specified time, etc. All downloaded update packages are stored in this repository. It is installed as part of NEC ESMPRO Manager.

CHECK:

- The repository is available in NEC ESMPRO Manager Ver. 5.1 and later.
-

1.2.4. NEC ExpressUpdate Agent

NEC ExpressUpdate Agent is software running on a management target server. It has functions such as primarily performing an update package installation and sending the current version information of each module in use, which are requested by NEC ExpressUpdate Manager.

1.2.5. EXPRESSSCOPE Engine 3

EXPRESSSCOPE Engine 3 is a chip installed on the motherboard which provides remote management functionality including monitoring hardware components such as CPUs, memory, and cooling fans, controlling the power, and operating the servers, regardless of the power or operating system status. It supports the function to update the firmware of EXPRESSSCOPE Engine 3 itself (BMC firmware) and the BIOS.

CHECK:

- EXPRESSSCOPE Engine and EXPRESSSCOPE Engine 2 do not support this function.
-

IMPORTANT:

- If EXPRESSSCOPE Engine 3 is installed on management target servers, NEC ExpressUpdate can be used without NEC ExpressUpdate Agent installed. In such a case, however, only BIOS and BMC firmware will be targeted for this management.
-

1.3. Sharing the Repository

NEC ExpressUpdate Manager can share the repository installed on a server other than its own server among multiple other NEC ExpressUpdate Manager by the settings (refer to Fig. 4 Sharing the repository). This is useful when the Internet connection of the management server is limited (refer to Fig. 5 Sharing the repository 2). However, when using the following port for communication between the repository and NEC ExpressUpdate Manager, you need to configure the settings in the firewall to allow such communication.

Table 2 Function to share the repository

Function	Component	Port	Protocol/ direction	Port	Component
Sharing the repository	NEC ExpressUpdate Manager	Indeterminate	TCP → ←	8080 (Changeable)	Repository

* Refer to NEC ESMPRO Manager Installation Guide for how to change the port number 8080.

A repository referred to by NEC ExpressUpdate Manager can be set by going to "Tools" > "ExpressUpdate Management Information" > "Repository Settings."

By default, the "repository" installed on its own server is set. After changing the "Repository Settings," NEC ExpressUpdate Manager connects to the specified repository to check the network connection and password. If there is no problem, the settings will be completed. If connecting to the specified repository fails, a message asking whether to set it by force or cancel new settings is displayed.

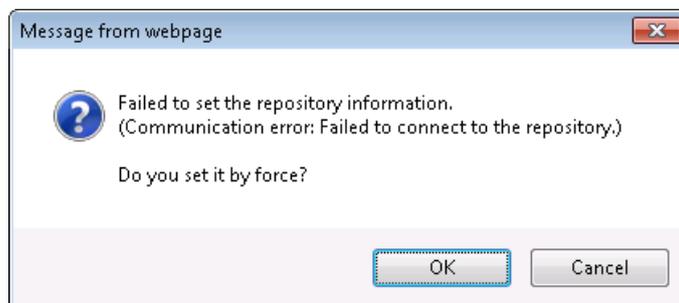


Fig. 2 When failing to connect to the repository

However, if the version of a remote repository is older than that of a repository installed

on its own server, some functions of NEC ExpressUpdate cannot be used. Update the remote NEC ESMPRO Manager to the same version as NEC ESMPRO Manager of its own server, if the following message is displayed when you set to use the remote repository on the "Repository Settings" screen.

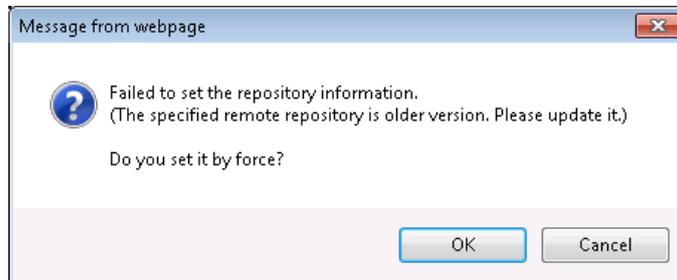


Fig. 3 Using an older repository

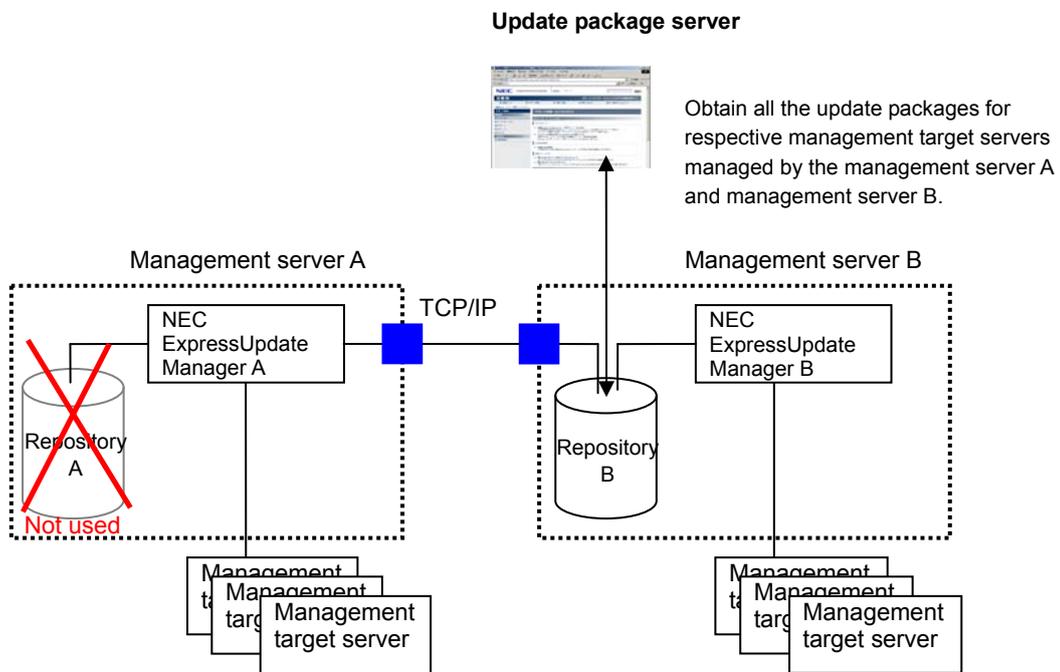


Fig. 4 Sharing the repository

NEC ExpressUpdate Functions and Features

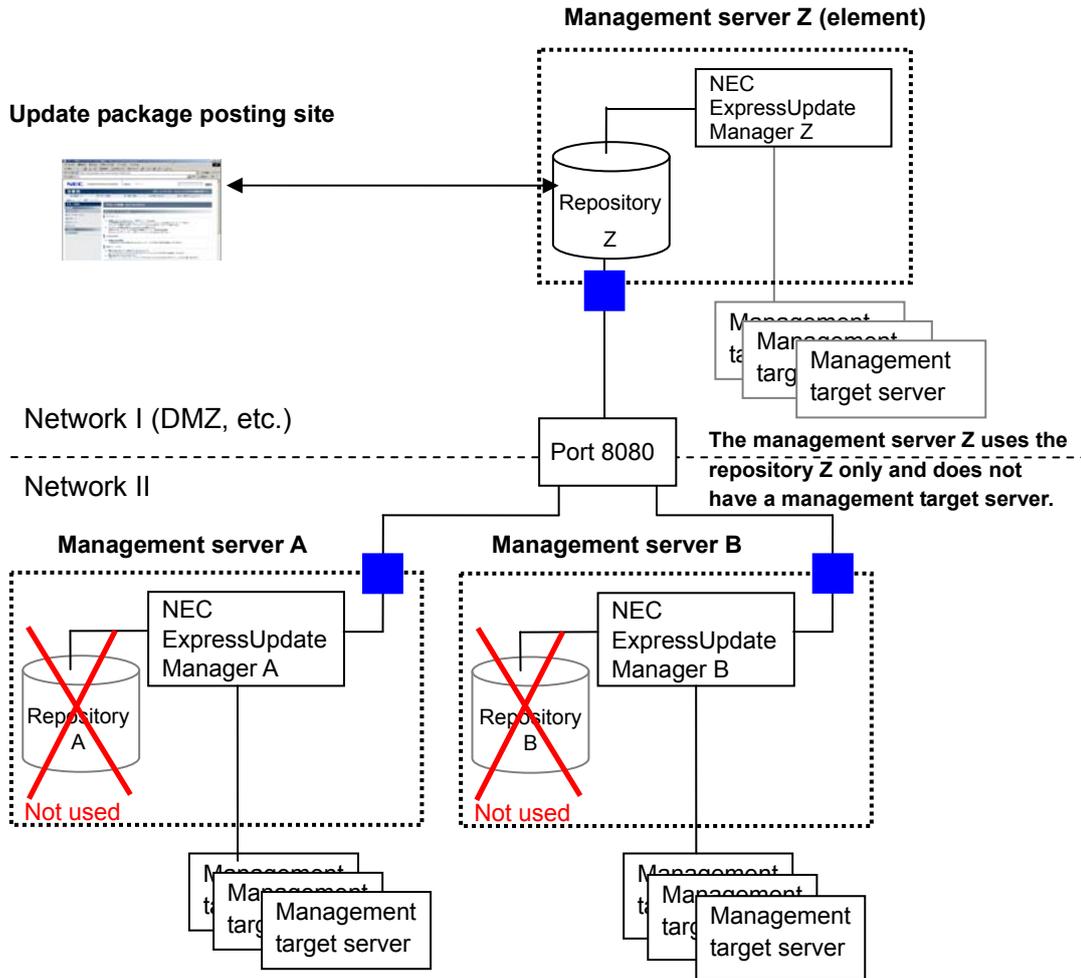


Fig. 5 Sharing the repository 2

1.4. Update Packages

An update package is update files for firmware and software of the management target server and provided by NEC Corporation. The update package contains update files for modules supporting NEC ExpressUpdate. There are two types of update packages: the one supporting automatic update and the other not supporting automatic update.

The table below shows the correlation between modules and update packages.

Table 3 Correlation between modules and update packages

Module	Type of update package	Description
Module supporting NEC ExpressUpdate	Package supporting automatic update	It can be downloaded from the update package server by using NEC ExpressUpdate. The update package can be installed on the management target component from the screen of NEC ExpressUpdate. For the installation procedure, refer to 3.5.
	Package NOT supporting automatic update	It can be downloaded from the update package server by using NEC ExpressUpdate. However, it cannot be installed on the management target component from the screen of NEC ExpressUpdate. You need to manually install the downloaded update package. For the installation procedure, refer to 3.5.4.
Module NOT supporting NEC ExpressUpdate	-	You need to check updates provided in the NEC corporate Web site. Obtain the update files as necessary for individual installation.

1.4.1. Configuration and Security of the Update Package

The following shows the configuration of the update package.

To prevent a third party other than NEC Corporation from creating the update package illegally, a file (ExUpHash.xml) proving the update package is created by NEC Corporation is contained in the update package. If any of the files in the update package is tampered with, that update package is no longer available for NEC ExpressUpdate.

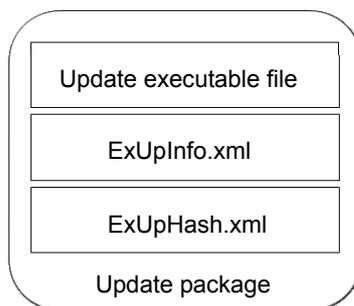


Fig. 6 Configuration of the update package

Table 4 Configuration of the update package

File	Description
Update executable file	An executable file, ROM image, etc., to update the module. This may consist of multiple files and folders.
ExUpInfo.xml	An XML file that contains information on the model and OS targeted for this update package. A repository manages the update package based on this information.
ExUpHash.xml	A file proving that this update package is created by NEC Corporation.

1.4.2. OS and Server Supporting NEC ExpressUpdate

As of August 2012, models supporting NEC ExpressUpdate are limited to the ones having a processor that employs the **QPI** (QuickPath Interconnect) or **DMI** (Direct Media Interface) architecture. All the NEC Express series servers currently available in the market support NEC ExpressUpdate. In addition, both the Windows OS and Linux OS which are supported by the management target servers support NEC ExpressUpdate.

Table 5 Update packages supporting NEC ExpressUpdate

Update packages supporting NEC ExpressUpdate	Supportability of NEC ExpressUpdate
Update package for Windows	Supported
Update package for Linux	Supported
Update package for EXPRESSSCOPE Engine 3 (for updating via management controller)	Supported
Offline update package (for installation in DOS mode, etc.)	Supported (*1)

NEC ExpressUpdate Functions and Features

*1 Only downloading the update package is supported. To install the offline update package, run the update individually. For details, refer to 3.5.4.

1.4.3. Supported Modules

As of August 2012, only the modules listed in the table below can be managed by NEC ExpressUpdate. Modules other than below are also scheduled to be supported in the future. If it becomes necessary to manage modules not listed below, please check updates provided in the NEC corporate Web site by users themselves.

Table 6 Modules supporting NEC ExpressUpdate

Module	Supportability of NEC ExpressUpdate
System BIOS	Supported
BMC firmware (firmware of EXPRESSSCOPE Engine 2/3)	Supported
BIOS and firmware of Fiber Channel Controller	Supported
BIOS and firmware of RAID Controller	Supported
NEC ESMPRO Agent (*1)	Supported
NEC ESMPRO Agent Extension	Supported
NEC ExpressUpdate Agent	Supported
Universal RAID Utility	Supported
BMC Configuration	Supported
SDR (Sensor Data Record)	Supported
Other firmware and software	Not supported

*1 Only Windows OSs are supported. Linux OSs are unsupported.

1.5. NEC ExpressUpdate-Related Screens

This section describes the screens used for NEC ExpressUpdate.

1.5.1. Update Package Installation Screen

Select a management target server displayed in the tree on the left side of the screen, and select "Remote Control" > "NEC Express Update" in the middle of the screen. The version of each module and other information are displayed when the selected management target server supports NEC ExpressUpdate. This screen is used to install update packages. You can also perform a batch update to a group of servers by selecting the group in the tree and then selecting "Server Control" > "NEC Express Update" in the middle of the screen.

In addition, "Download Update Packages" can be performed for the repository in use from this screen.

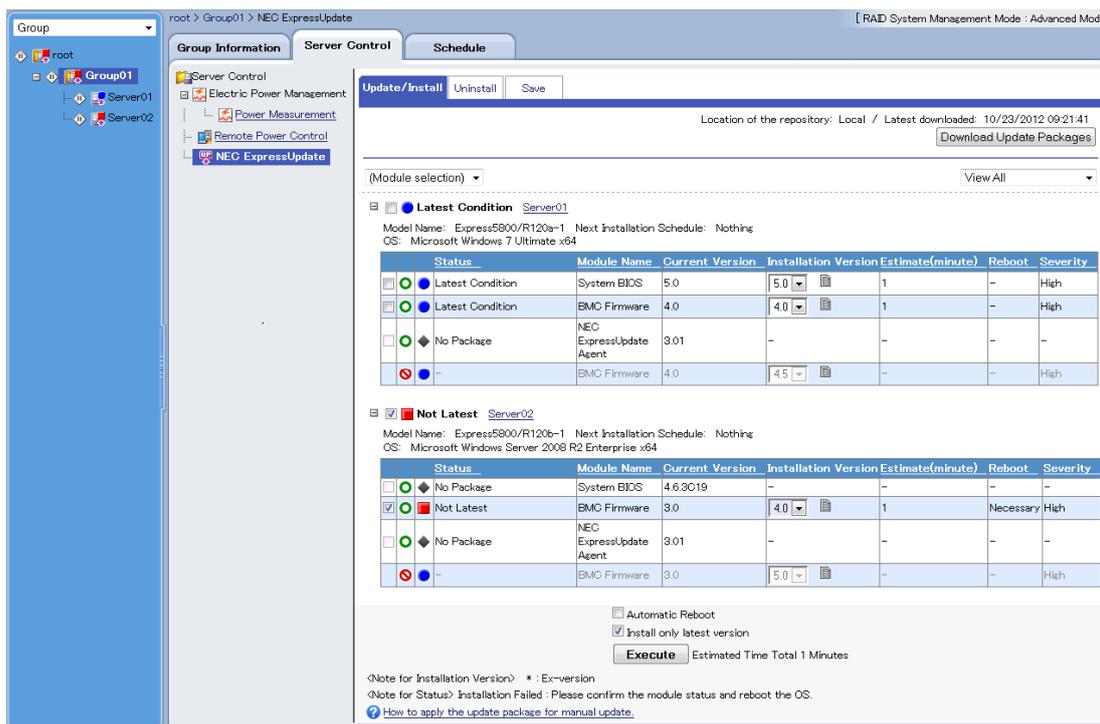


Fig. 7 Update package installation screen

1.5.2. Remote Batch Settings Screen

With NEC ExpressUpdate, an update package can be installed at a specified time using the remote batch. You can configure the settings for a single server or for a group of servers.

Select Remote Batch New

Item Name	Setup Value
Remote Batch Item	Install Update Packages
Remote Batch Type	Specified Date
Start Date/Time	2/1/2012 (Wed) 00 : 00
Automatic Reboot	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Download Update Packages	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Apply Delete Cancel

Fig. 8 Remote Batch settings screen

1.5.3. Repository Settings Screen

To configure the repository settings, go to "Tools" > "ExpressUpdate Management Information" > "Repository Settings." This screen is also used to use a remote repository or set the proxy server when accessing the update package server.

IPMI Information Backup File List Searching Registered Components Linkage Service ExpressUpdate Management Information

Repository Settings Repository Management Information NEC ExpressUpdate Agent Install Status

Item Name	Setup Value
Common Setting	
Location of the repository	Local
Remote Repository Settings	
Address	
Port Number	0
Password	
Repository Password Setting	
Password	*****
Automatic Downloading Settings	
Address of the Update Package Server	http://www.exifs.nec.co.jp/
Downloading Schedule	Disable
Schedule Type	Daily
Start Time	02 : 10
Proxy Server Settings	
Address	
Port Number	0
User Name	
Password	
Settings of update packages for manual update	
Default status icon	<input checked="" type="radio"/>

Edit

Fig. 9 Repository Settings screen

NEC ExpressUpdate Functions and Features

If the NEC ESMPRO Manager version of a remote repository is older than the version of the local NEC ESMPRO Manager, some functions cannot be used. Refer to section 1.3 for details.

1.5.4. Repository Management Information Screen

To display a list of update packages managed by the repository, add or remove update packages, or perform "Download Update Packages," go to "Tools" > "ExpressUpdate Management Information" > "Repository Management Information." On the "Repository Management Information" screen, two types of display methods are available, and each of them is described below.

The figure below shows the "Repository Management Information" screen displayed based on each component. The list of update packages available for each component is displayed.

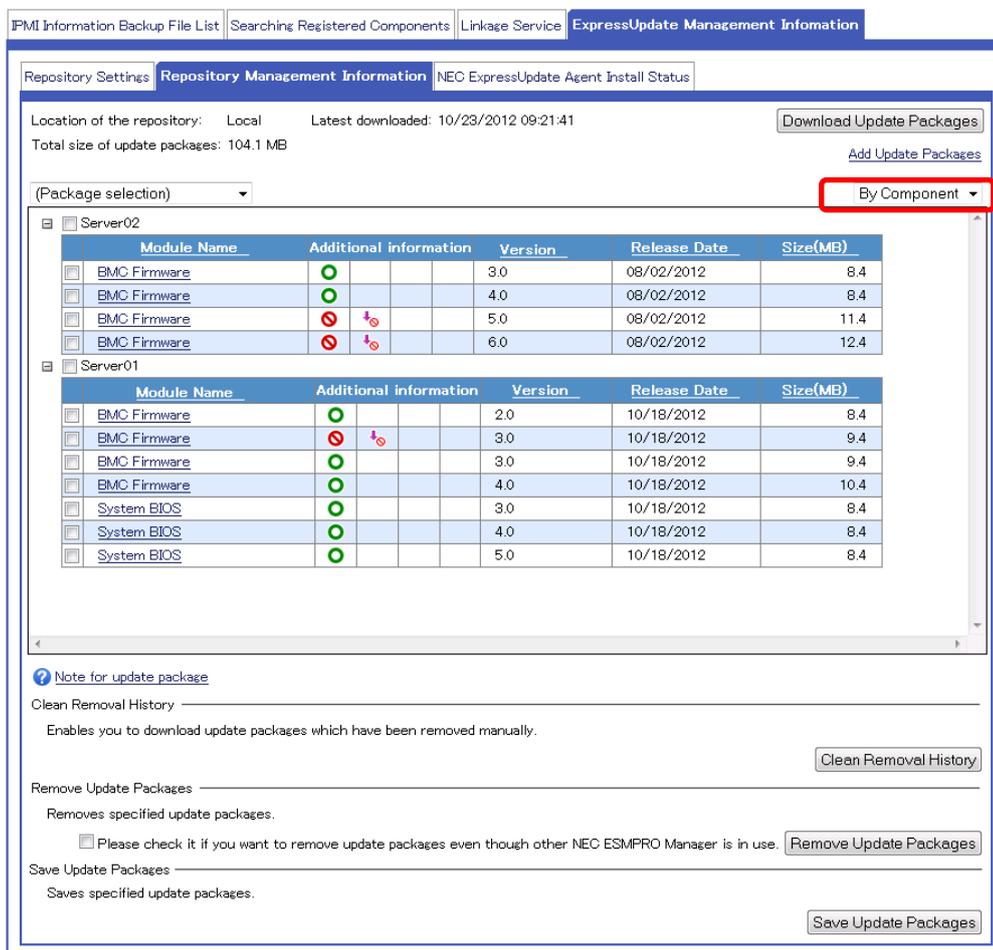


Fig. 10 Repository Management Information screen displayed by component

NEC ExpressUpdate Functions and Features

The figure below shows the "Repository Management Information" screen displayed based on each model targeted for management. The list of update packages available for each model is displayed.

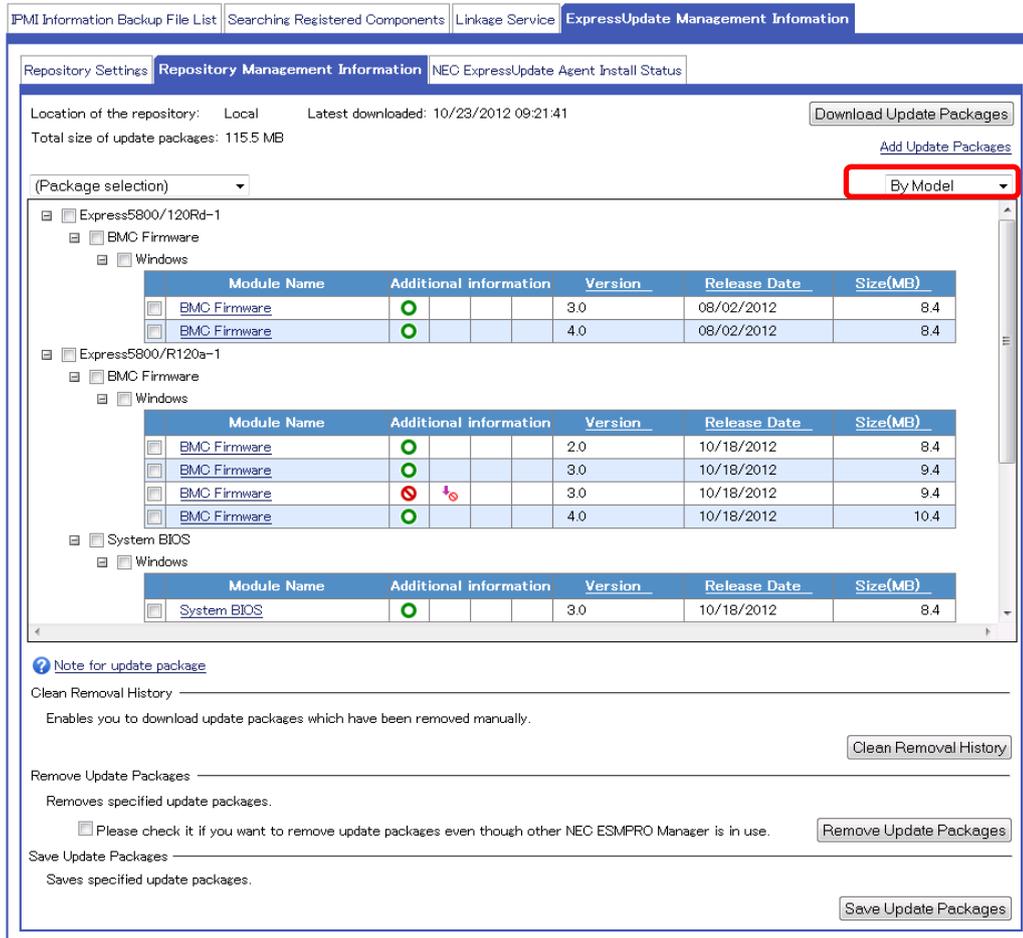


Fig. 11 Repository Management information screen displayed by model targeted for management

2. Details of NEC ExpressUpdate

This chapter describes the details of NEC ExpressUpdate.

2.1. Installing Update Packages

This section describes the details of when you install an update package.

2.1.1. "Install only latest version" Check Box

This paragraph describes the difference in the behavior of NEC ExpressUpdate between when the "Install only latest version" check box is selected and when cleared.

Update/Install Uninstall Save

Location of the repository: Local / Latest downloaded: 10/23/2012 09:21:41
[Download Update Packages](#)

(Module selection) View All

Latest Condition [Server01](#)

Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input type="checkbox"/>	<input checked="" type="radio"/> Latest Condition	System BIOS	5.0	5.0	1	-	High
<input type="checkbox"/>	<input checked="" type="radio"/> Latest Condition	BMC Firmware	4.0	4.0	1	-	High
<input type="checkbox"/>	<input checked="" type="radio"/> No Package	NEC ExpressUpdate Agent	3.01	-	-	-	-
<input checked="" type="checkbox"/>	<input checked="" type="radio"/> -	BMC Firmware	4.0	3.0	-	-	High

Not Latest [Server02](#)

Model Name: Express5800/R120b-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows Server 2008 R2 Enterprise x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input type="checkbox"/>	<input checked="" type="radio"/> No Package	System BIOS	4.6.3C19	-	-	-	-
<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Not Latest	BMC Firmware	3.0	4.0	1	Necessary	High
<input type="checkbox"/>	<input checked="" type="radio"/> No Package	NEC ExpressUpdate Agent	3.01	-	-	-	-
<input checked="" type="checkbox"/>	<input checked="" type="radio"/> -	BMC Firmware	3.0	5.0	-	-	High

Automatic Reboot
 Install only latest version
 Estimated Time Total 1 Minutes

<Note for Installation Version> * : Ex-version
 <Note for Status> Installation Failed : Please confirm the module status and reboot the OS.
[How to apply the update package for manual update.](#)

Fig. 12 "Install only latest version" check box

2.1.1.1. When the Check Box is Selected

When the "Install only latest version" check box is selected, only a newer version of an update package than the version currently displayed in the "Current Version" column can be installed. At that time, when the repository has multiple update packages whose versions are newer than the "Current Version," only the latest update package of them can be installed.

With this check box selected, even if you select an update package other than described above and click "Execute," the package cannot be installed.

2.1.1.2. When the Check Box is Cleared

When the "Install only latest version" check box is cleared, the following versions of update packages can be installed in addition to those described in "When the Check Box is Selected."

- An update package whose version is newer than the "Current Version," but not the latest among other packages in the repository.
- An update package whose version is older than or the same as the "Current Version," and that supports downgrade.

CHECK:

- Support information on downgrade can be checked from "Additional information" on the "Repository Management Information" screen shown below (a module with the  icon does not support downgrade.). Refer to 3.4.2 Table 20 for icons displayed in "Additional information."

The below shows the example of update packages which support downgrade. Downgrade is supported by the upgrade packages for which the  icon is not displayed in the second row from the left in "Additional information."

NEC ExpressUpdate Functions and Features

IPMI Information Backup File List | Searching Registered Components | Linkage Service | **ExpressUpdate Management Information**

Repository Settings | **Repository Management Information** | NEC ExpressUpdate Agent Install Status

Location of the repository: Local Latest downloaded: 10/23/2012 09:21:41 [Download Update Packages](#)

Total size of update packages: 104.1 MB [Add Update Packages](#)

(Package selection) By Component

Server02		Module Name	Additional information	Version	Release Date	Size(MB)
<input type="checkbox"/>		BMC Firmware	○	3.0	08/02/2012	8.4
<input type="checkbox"/>		BMC Firmware	○	4.0	08/02/2012	8.4
<input type="checkbox"/>		BMC Firmware	⊗	5.0	08/02/2012	11.4
<input type="checkbox"/>		BMC Firmware	⊗	6.0	08/02/2012	12.4
Server01		Module Name	Additional information	Version	Release Date	Size(MB)
<input type="checkbox"/>		BMC Firmware	○	2.0	10/18/2012	8.4
<input type="checkbox"/>		BMC Firmware	⊗	3.0	10/18/2012	9.4
<input type="checkbox"/>		BMC Firmware	○	3.0	10/18/2012	9.4
<input type="checkbox"/>		BMC Firmware	○	4.0	10/18/2012	10.4
<input type="checkbox"/>		System BIOS	○	3.0	10/18/2012	8.4
<input type="checkbox"/>		System BIOS	○	4.0	10/18/2012	8.4
<input type="checkbox"/>		System BIOS	○	5.0	10/18/2012	8.4

Fig. 13 Displaying downgrade support

2.1.2. "Automatic Reboot" Check Box

A management target server that meets all of the following conditions is rebooted when you click "Execute" with the "Automatic Reboot" check box selected.

1. At least one update package requiring a reboot after it is installed is selected.
2. All of the selected update packages have been installed successfully.

2.1.3. Description of Each Status

This paragraph describes each status displayed on the update package installation screen.

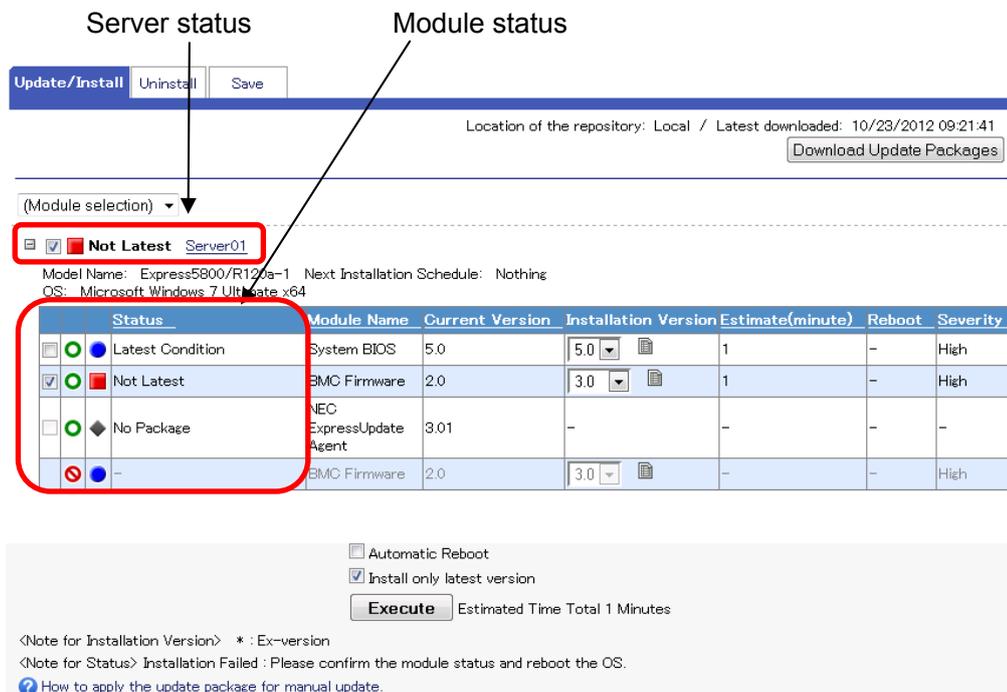


Fig. 14 Displaying each status

2.1.3.1. Automatic Update Supportability Status

Whether an update package supports automatic update for NEC ExpressUpdate is displayed by icons as shown below.

Table 7 Icons showing the automatic update supportability

Icon	Description
	Automatic update supported
	Automatic update NOT supported

CHECK:

- The update can be executed for the module from the update package installation screen only when its update package supports automatic update.
 - For a module with the update package not supporting automatic update, save the update package and then install it manually. For details, refer to 3.5.4.
-

NEC ExpressUpdate Functions and Features

2.1.3.2. Module Status

For modules with the update package supporting automatic update, the description of each status displayed on the left of each module name is as follows.

Table 8 Module status

Icon	Status	Description
	Not Latest	An update package updated to a newer version than that version displayed in the "Current Version" field exists in the repository.
	Under Installation	The update package is being installed.
	Under Uninstallation	The module is being uninstalled.
	Rebooting	The management target server is being rebooted after an update package requiring a reboot is installed, with the "Automatic Reboot" check box selected. Another update package cannot be installed in this status.
	Wait Installation	The update package is not yet installed.
	Wait Uninstallation	The module is not yet uninstalled.
	Cancelled	The update package installation or the module uninstallation is cancelled.
	Reboot required	A management target server is not yet rebooted after an update package requiring a reboot is installed. This status will be cleared when the server is rebooted. Another update package cannot be installed in this status.
	Latest Condition	The "Current Version" is newer than or the same as the latest version of an update package in the repository.
	Installation Failed	The previous installation of an update package failed. This status will be cleared when the server is rebooted. The cause of this failure can be checked from the "Application Log." Another update package cannot be installed in this status.
	Access Failed	Unable to communicate with NEC ExpressUpdate Agent.
	No package	No update package of the relevant module exists in the repository.

The following shows the status icons for the modules with the update package not supporting automatic update. The "Status" row shows "-."

Table 9 Status icons for the module with update package not supporting automatic update

Icon	Status	Description
	-	Indicates the status equivalent to "Latest Condition."
	-	Indicates the status equivalent to "Not Latest."
	-	Indicates the status equivalent to "No package."

In addition, the status icon of the module with the update package not supporting automatic update can be changed manually. Follow the steps below to change the icon.

1. From the tree view, click a component or a group to which the update package will be installed.
2. From the "Remote Control" tab, open "Remote Control" > "NEC ExpressUpdate."
3. Click the "Save" tab.
4. Click the  icon of the module of which to change the status icon.

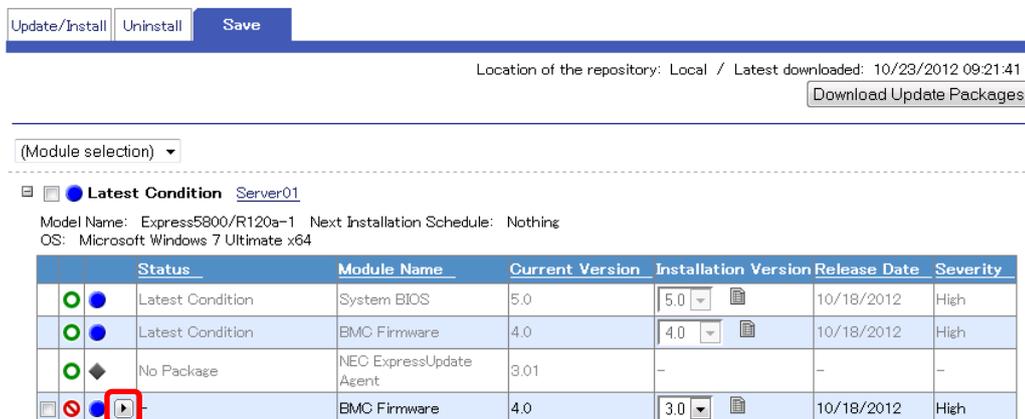


Fig. 15 Before changing the status icon

5. The box for changing the status icon is displayed. Click the icon you want to change.

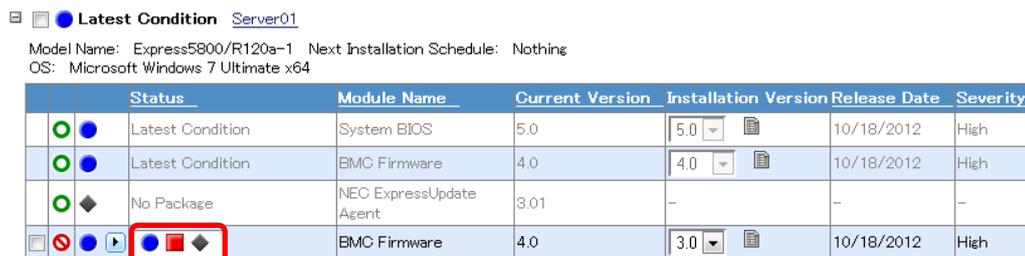


Fig. 16 Selecting the status icon to change

6. The status icon of the module is changed to the one selected.



 Model Name: Express5900/R120a-1 Next Installation Schedule: Nothing

 OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Release Date	Severity
	Latest Condition	System BIOS	5.0	5.0	10/18/2012	High
	Latest Condition	BMC Firmware	4.0	4.0	10/18/2012	High
	No Package	NEC ExpressUpdate Agent	3.01	-	-	-
	-	BMC Firmware	4.0	3.0	10/18/2012	High

Fig. 17 After changing the status icon

2.1.3.3. Server Status

The highest-priority status of the above module statuses is displayed on the left of the server name. The following shows the order of priority according to which the status is displayed.

Table 10 Server Status

Icon	Status	Description
	Access Failed	Unable to communicate with NEC ExpressUpdate Agent.
	Unknown	Unable to obtain the correct information of the module because an incompatible update package exists in the repository.
	Under Installation	An update package is being installed.
	Under Uninstallation	A module is being uninstalled.
	Not Latest	None of the above status is applicable, and the "Note Latest" status applies to one or some of the modules managed by NEC ExpressUpdate.
	Installation Failed	None of the above status is applicable, and the "Installation Failed" status applies to one or some of the modules managed by NEC ExpressUpdate.
	Reboot required	None of the above status is applicable, and the "Reboot required" status applies to one or some of the modules managed by NEC ExpressUpdate.
	Latest Condition	None of the above status is applicable.

2.1.4. When Server Status Is Unknown

After an incompatible update package is added to the repository, the server status shows "Unknown." In this status, the correct information of the module cannot be

obtained. The update package can be installed even in this status, however, whether the module is latest cannot be determined. To clear this status, NEC ESMPRO Manager Ver. 5 needs to be updated to the latest version. Please download the latest NEC ESMPRO Manager Ver. 5 from the Web site below to update.

<http://www.58support.nec.co.jp/global/download/index.html>

2.1.5. When an Update Package Requiring a Reboot is Installed

After an update package requiring a reboot is installed, the module status shows "Reboot required" until the management target server is rebooted. In this status, the installation is not completed and the module before the installation is running. To complete the installation, rebooting the management target server is required. The management target server can be rebooted by using the "Remote Power Control" function.

In addition, the subsequent update package cannot be installed in this status.

2.1.6. When the Installation Failed

When the installation of an update package fails, the module status will show "Installation Failed." The subsequent package cannot be installed in this status. To clear this status, rebooting the management target server is required.

In addition, the cause of this installation failure can be checked in the "Application Log" tab view.

Type	Component Name	IP Address	Management LAN IP Address	Date/Time	User Name	Contents
Error	Server02	172.16.30.20	172.16.30.21	1/23/2012 17:47:52		Failed to installation of update package.(Timeout occurred while installing the update package)
Information	Server02	172.16.30.20	172.16.30.21	1/23/2012 17:46:51	Administrator	Getting of repository information was executed.
Information	Server02	172.16.30.20	172.16.30.21	1/23/2012 17:46:50	Administrator	Applying the update package has been started.(BMC Firmware: 2.0 -> 4.0)
Information	Server02	172.16.30.20	172.16.30.21	1/23/2012 17:46:50	Administrator	Getting of version information was executed.
Information	Server02	172.16.30.20	172.16.30.21	1/23/2012 17:46:50	Administrator	Installation of update package was executed.

Fig. 18 Application Log

2.1.7. Installation Order of Update Packages

When multiple update packages are requested to be installed to the same server, they are sorted based on the following criteria before installed.

1. Install update packages starting from the ones not requiring a reboot of the

management target server after the installations.

2. Install update packages starting from the ones with an older release date.
3. When ExpressUpdate Agent is requested to be uninstalled, install the update packages before the uninstallation.
- 4.

For example, to install the following update packages,

Table 11 Example of update packages to be installed

Package name	Release date	Reboot
PKG 1	01/01/2009	Not required
PKG 2	01/02/2009	Required
PKG 3	01/03/2009	Not required
PKG 4	01/04/2009	Required

They will be installed in the following order.

Table 12 Order of installation

Package name	Release date	Reboot
PKG 1	01/01/2009	Not required
PKG 3	01/03/2009	Not required
PKG 2	01/02/2009	Required
PKG 4	01/04/2009	Required

CHECK:

- The release dates of update packages can be checked from the "Repository Management Information" screen shown below.

	Module Name	Additional information	Version	Release Date	Size(MB)
<input type="checkbox"/>	BMC Firmware	⊘ ⊕	6.0	08/02/2012	12.4
<input type="checkbox"/>	BMC Firmware	⊘ ⊕	5.0	08/02/2012	11.4
<input type="checkbox"/>	BMC Firmware	⊙	4.0	08/02/2012	8.4
<input type="checkbox"/>	BMC Firmware	⊙	3.0	08/02/2012	8.4

Fig. 19 Release dates for the update packages

2.1.8. Correlation Between Executing and Installing the Remote Batch

A module can be updated at a specified time by using the remote batch. However, an update package to be installed at a specified time is the latest one posted on the update package server at the time of installation or the latest one in the repository in use.

You can check whether the latest update is published from the Web distribution server before updating the module in a specified server group at a specified time. In such a case, set "Download Update Packages" to "Enable."

Select Remote Batch New ▾

Item Name	Setup Value
Remote Batch Item	Install Update Packages ▾
Remote Batch Type	Specified Date ▾
Start Date/Time	2/29/2012 (Wed) ▾ : 00 ▾ : 00 ▾
Automatic Reboot	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Download Update Packages	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Apply Delete Cancel

Fig. 20 Remote Batch setup settings screen

CHECK:

- One of the following three methods can be used to get the repository up-to-date.
 1. Set "Download Update Packages" to "Enable" when setting the remote batch.
 2. Click "Download Update Packages" on the update package installation screen.
 3. Go to "Tools" > "ExpressUpdate Management Information" > "Repository Management Information" and click "Download Update Packages."
-

When "Automatic Reboot" is set to "Enable" and there is an update package requiring a reboot for update, reboot the management target server after the update.

Go to "About NEC ESMPRO Manager" > "Application Log" to check the results of installing update packages using the remote batch.

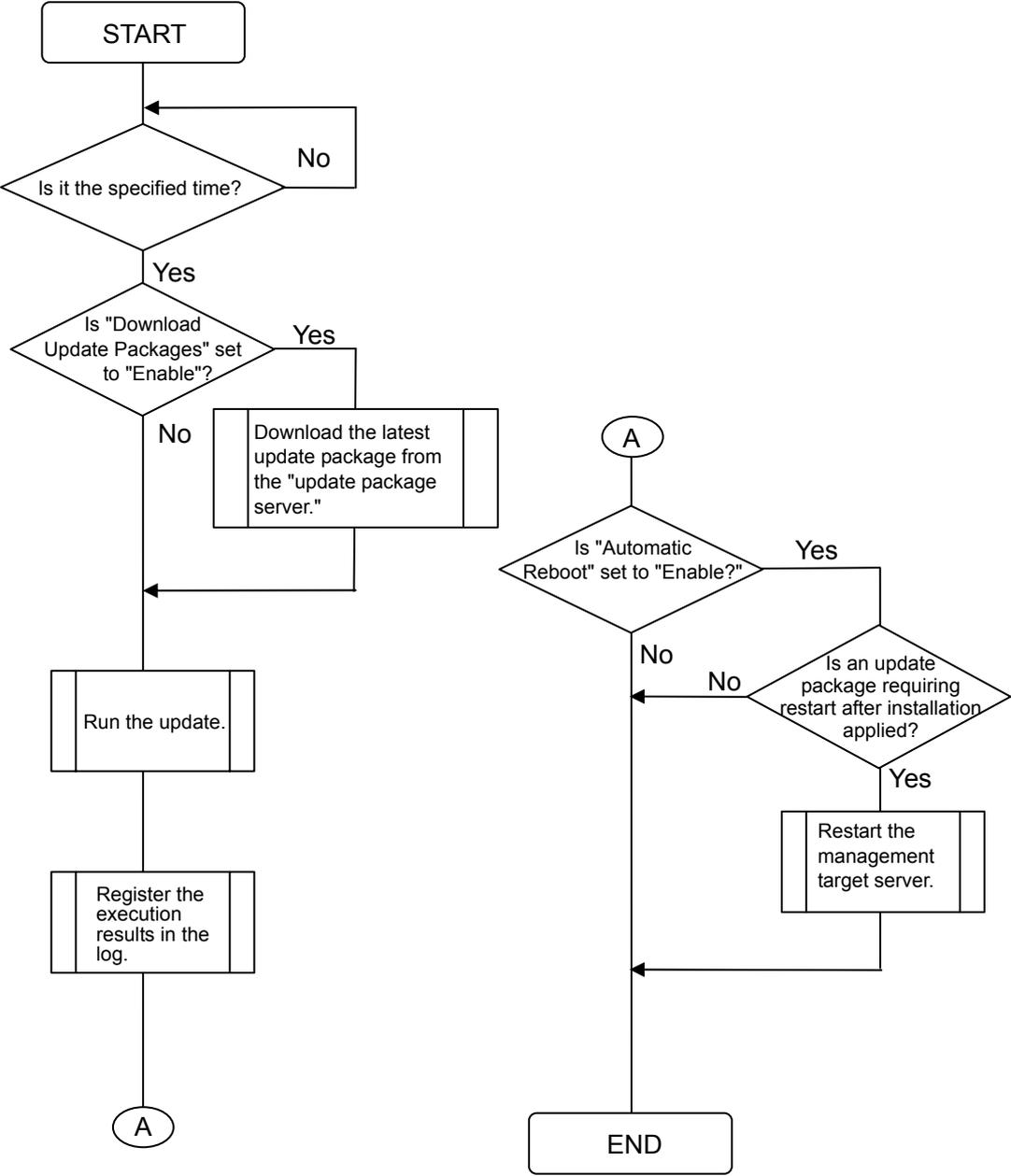


Fig. 21 Flow of applying the remote batch

2.2. Repository

A repository is a component that stores update packages for management target servers and performs generation management. It downloads an update package from the update package server at a specified time.

2.2.1. Downloading Update Packages

The following describes the flow of downloading update packages.

1. Use any one of the three methods described in Check of 2.1.8 to request the repository to download update packages.
2. The repository connects to the update package server and passes the date of last time it accessed the update package server (the first access was on 01/01/1970).
3. The update package server sends the list of update packages published after the date passed back to the repository. (The list includes information on the model, OS, etc., targeted for each update package.)
4. The repository selects from the list only a necessary update package for the management target server managed by NEC ESMPRO Manager, and downloads the update package.

The repository can be connected to the update package server through the proxy server. Refer to paragraph 2.2.7 for details.

2.2.2. Generation Management for Update Packages

Repeated downloads of update packages require much larger hard disk drive capacity. Therefore, the repository performs generation management for update packages to automatically remove older packages. The generation management is performed according to the following rules.

- Retain up to three generations of each module for each "model name and OS" of a management target server.
- Retain update packages applied to the previous generation module of the management target server (only when they are in the repository).

The repository manages generations of update packages for each combination of "model names and OSs." Therefore, three or more of update packages may be displayed on the "Repository Management Information" screen for a single model when there are servers that are the same model using a different OS, for example.

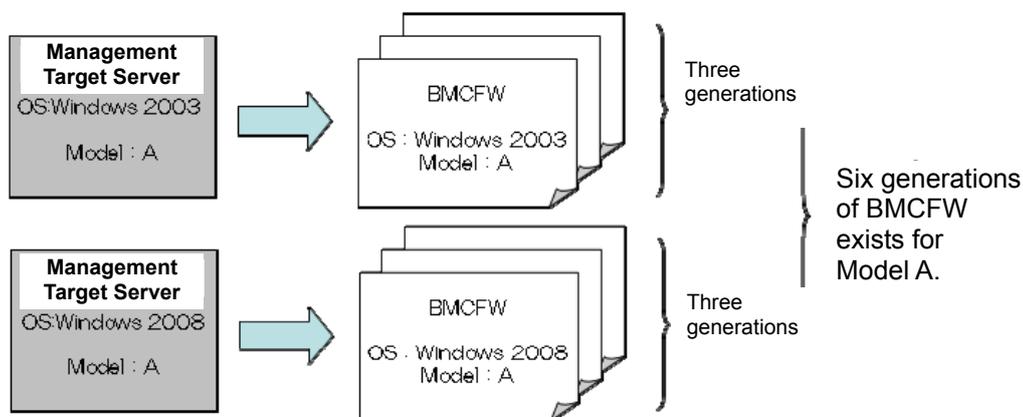


Fig. 22 Generation management for update packages

* Update packages added in "Add all selected update packages" mode by performing "Add Update Packages" as described in the next paragraph will be exempt from generation management by the repository.

2.2.3. Adding Update Packages

NEC ExpressUpdate can be used by downloading update packages from the NEC corporate Web site directly by users and adding them to the repository manually, when the server on which NEC ESMPRO Manager is installed fails to access the Internet.

The following two options can be used to add update packages.

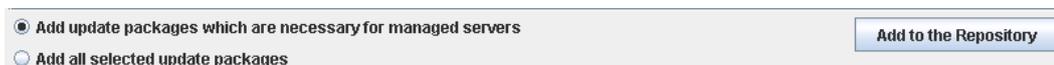


Fig. 23 Options for adding update packages

Table 13 Options for adding update packages

Option	Description
Add update packages which are necessary for managed server	A mode for adding only necessary update packages for generation management from the list of update packages to add by targeting a management target server currently managed by NEC ESMPRO Manager. Update packages added in this mode will be targeted for three-generation management by the repository.
Add all selected update packages	A mode for adding all the update packages selected from the list of update packages to add. Update packages added in this mode will be exempt from three-generation management, and will remain in the repository until the user removes them manually. Refer to the next paragraph for how to remove update packages.

The following four icons show the results of adding update packages.

Table 14 Results of adding update packages

Result	Details of error	Description
 Normal	-----	The update package was added to the repository successfully.
 Error	The hash value of the update package is incorrect.	Incorrect update package.
 Warning	No applicable server is registered or an older update package.	Failed to add the update package to the repository as there was no applicable server for the update package, or the update package was removed automatically after three-generation management.
 Warning	The same update package is already in the repository.	The update package you tried to add is already in the repository.

2.2.4. Removing Update Packages

Update packages managed by the repository can be removed from the "Repository Management Information" screen.

An update package removed will not be downloaded again even if you click "Download Update Packages." Refer to the following paragraph for how to obtain it again.

When the repository is used remotely, it may not be recommended to remove update packages in some cases. Therefore, two options shown below are prepared for removing update packages.

Table 15 Options for removing update packages

Option	Description
Remove Update Packages (clear "Remove By Force")	Removes update packages. However, update packages with  cannot be removed.
Remove By Force (select "Remove By Force")	Update packages with  can be removed.

NEC ExpressUpdate Functions and Features

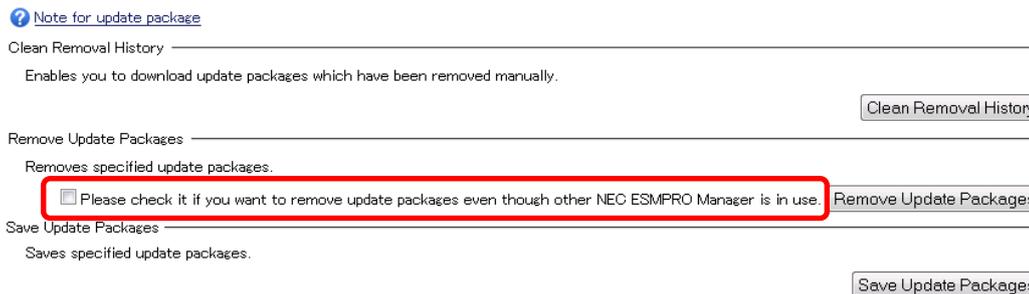


Fig. 24 "Remove By Force" check box

The following three icons show the results of removing update packages.

Table 16 Results of removing update packages

Result	Details of error	Description
 Normal	-----	The update package was removed.
 Error	Failed to remove the update package as it is used by other NEC ESMPRO Manager.	Failed to remove this update package as NEC ESMPRO Manager remotely using this repository needs it. Select the "Remove By Force" check box to remove it.
 Error	The specified update package does not exist.	The specified update package did not exist in the location where it was saved.

2.2.5. "Clean Removal History" for Update Packages

As briefly mentioned in the previous paragraph, the update package that has been removed will not be downloaded again even when you click "Download Update Packages," because the repository retains the information that "the xxx package was removed by the user manually." However, with this function, the accidentally removed update package can be downloaded again.

By clicking "Clean Removal History," the information that "the xxx update package was removed by the user" contained in the repository can be erased collectively (you cannot erase the information one by one for each update package.) Thus, the update package removed manually in the past can be downloaded next time you click "Download Update Packages."

However, if the update package removed is three or more generations older than the latest version of the download target update package, it cannot be downloaded again.

NEC ExpressUpdate Functions and Features

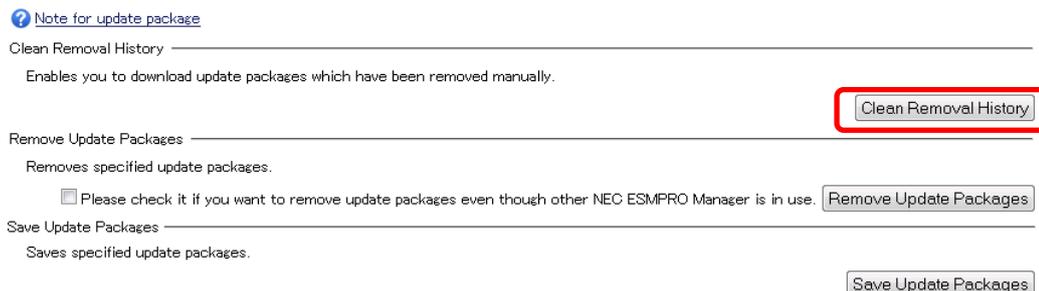


Fig. 25 "Clean Removal History" for update packages

2.2.6. Saving Update Packages

The function to save update packages has become available to enable manual updates by using the update package management by NEC ExpressUpdate. Update packages managed by the repository can be saved from the NEC ExpressUpdate screen and the "Repository Management Information" screen.

From the NEC ExpressUpdate screen, only the update packages not supporting automatic update can be saved. From the "Repository Management Information" screen, both update packages supporting and not supporting automatic update can be saved. For the saving procedure for each screen, refer to 3.7.

The saved update packages are bundled into one file as an update package archive to be downloaded in bulk. The download destination is specified during the saving operation. For details on the update package archive, refer to 2.2.6.2.

2.2.6.1. Options for Saving Operation

There are two options for the saving operation from the NEC ExpressUpdate screen. The table below shows the details on the saving options.

Table 17 Update packages saving options

Option	Description
Saves only selected packages	Only the currently-displayed version of the update package for the selected module is saved. Clear this option to save all versions of the update package for the selected module.
Changes status icon to  after saving	After saving the update package for the selected module, the status icon of the module is changed to  .

The following shows where you can select these options.

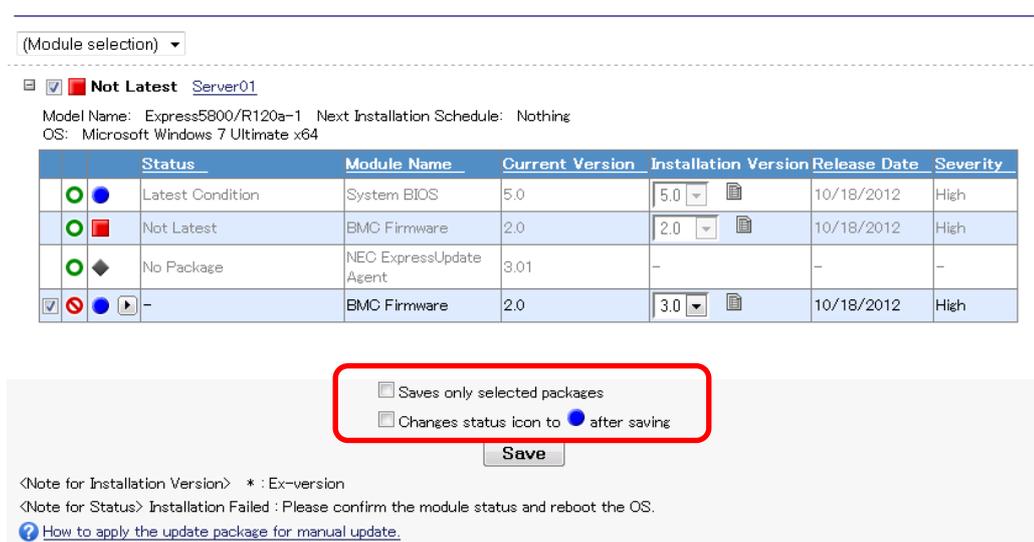


Fig. 26 Saving options check boxes

2.2.6.2. Update Package Archive

In the update package archive, the update package specified at the update package saving operation and the index file are stored. The update package is stored in the "packages" folder. The following shows the structure of the update package archive.

Update package archive

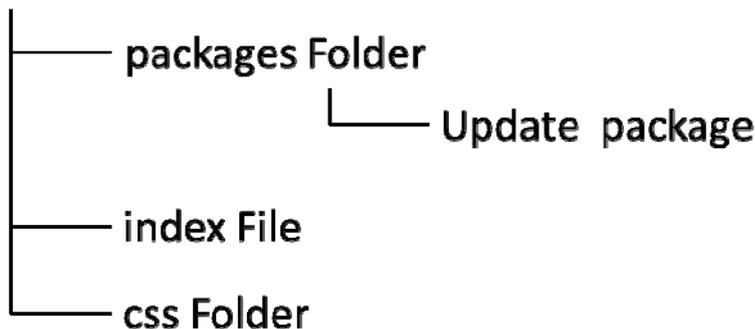


Fig. 27 Update package archive

In the index file, the update package information and the component name targeted for the update are described.

NEC ESMPRO Manager Ver.5

Update packages index

• **Server01**

File Name	Module Name	Version
410050-A01_634862568489319025.zip	System BIOS	5.0
410024-A01_634862567899359025.zip	System BIOS	4.0

Fig. 28 index file

2.2.7. Proxy Server Settings

The proxy server can be used when you connect to the update package server. It can be set from "Repository Settings."

Proxy Server Settings	
Address	<input type="text" value="192.168.1.1"/>
Port Number (0 - 65535)	<input type="text" value="8080"/>
User Name	<input type="text" value="testuser"/>
Password	<input type="password" value="••••••••"/>

Fig. 29 Proxy Server Settings

When the proxy server supports the "basic authentication" and "digest authentication," the proxy authentication can be used for the connection. However, the NTLM authentication is not supported.

2.2.8. Alive Monitoring of NEC ExpressUpdate Manager

When the repository is used from the remote NEC ExpressUpdate Manager, it also downloads and manages update packages that are necessary for the remote NEC ExpressUpdate Manager. However, in order to avoid continuing to manage them even after they are not used remotely, the repository periodically receives a presence notification from NEC ExpressUpdate Manager, and performs alive monitoring of NEC ExpressUpdate Manager based on the notification.

The repository determines NEC ExpressUpdate Manager is no longer available if the NEC ExpressUpdate Manager does not send a presence notification for two months or more after the last access. In such a case, update packages only necessary for a management target server managed by the NEC ExpressUpdate Manager are removed.

However, when a presence notification is sent within two months, the time limit is reset to two months after the receipt.

2.3. NEC ExpressUpdate Agent

NEC ExpressUpdate Agent is software running on a management target server. It has functions such as installing an update package requested by NEC ExpressUpdate Manager and sending the current version of each module.

2.3.1. NEC ExpressUpdate Agent

NEC ExpressUpdate Agent is software that executes requests from NEC ExpressUpdate Manager. It executes various types of processing in response to each request from NEC ExpressUpdate Manager. Its functions include the following:

- Obtaining the server information (model name, OS, etc.) and sending them to NEC ExpressUpdate Manager.
- Sending the current version of each module to NEC ExpressUpdate Manager.
- Saving update packages sent by NEC ExpressUpdate Manager.
- Installing update packages.
- Sending the progress status of update package installation to NEC ExpressUpdate Manager.
- Shutting down or rebooting the OS.
- Sending a set of NEC ExpressUpdate Agent log files collected on the Agent side to NEC ExpressUpdate Manager.

2.3.2. Installation Conditions

The following conditions need to be satisfied to install NEC ExpressUpdate Agent.

- Supported hardware: NEC Express5800 series and NEC Storage NS series
- Supported OSs:
 - Windows Server 2003 SP1 and later (x86/x64)
 - Windows Server 2003 R2 (x86/x64)
 - Windows Server 2008 (x86/x64)
 - Windows Server 2008 R2 (x64)
 - Windows XP SP2 and later (x86/x64)

NEC ExpressUpdate Functions and Features

- Windows Vista (x86/x64)
 - Windows 7 (x86/x64)
 - Red Hat Enterprise Linux 4 (x86/x64)
 - Red Hat Enterprise Linux 5 (x86/x64)
 - Red Hat Enterprise Linux 6 (x86/x64)
 - Miracle Linux 4.0 (x86/x64)
 - Asianux Server 3 == MIRACLE LINUX V5 (x86/x64)
 - SUSE Linux Enterprise Server 10 (SP2, SP3) (x86/x64)
 - VMware ESX 4.1
-
- Apache Axis2c is not installed on a management target server (except in the case mentioned below).
 - When Universal RAID Utility (ver. 2.10 or later) is installed for Windows.
 - OpenSLP (Service Location Protocol) is not installed on a management target server (except in the case mentioned below).
 - When Universal RAID Utility (ver. 2.10 or later) is installed for Windows.
 - When OpenSLP is installed on SUSE Linux Enterprise Server as the standard OS.
 - In Windows 2008 R2 ServerCore, "Wow6432Node" is not uninstalled.
 - To use NEC ExpressUpdate Agent with Red Hat Enterprise Linux 6 (x64), the following packages are required (which are not installed in the standard configuration.) If these are not installed, please install them additionally from the installation disk of the OS.
 - glibc(i686)
 - nss-softokn-freebl(i686)
 - libxml(i686)
 - zlib(i686)
 - libstdc++(i686)
 - libgcc(i686)

2.3.3. Notes for Installation

NEC ExpressUpdate Agent cannot be installed on the guest OS of the virtual machine.

2.4. Application Log

Go to "About NEC ESMPRO Manager" > "Application Log" to check all the logs of the entire NEC ESMPRO or the logs of NEC ExpressUpdate. The following describes the logs related to NEC ExpressUpdate.

NEC ExpressUpdate Functions and Features

2.4.1. Normal Logs

Table 18 Normal logs

Log	Description
Installation of update package was executed.	Collected when the update is executed for the management target server.
Installing the software has been started.	Collected when starting the new installation of software on the management target server. The specific module name and version to install are displayed, respectively.
Installing the software has been completed successfully.	Collected when the new installation of software on the management server is completed. The specific module name and version to install are displayed, respectively.
Uninstalling the software has been started.	Collected when starting the uninstallation of software from the management server. The specific module name and version to uninstall are displayed, respectively.
Uninstalling the software has been completed successfully.	Collected when the uninstallation of software from the management server is completed. The specific module name and version to uninstall are displayed, respectively.
Applying the update package has been started.	Collected when starting to install the update package to the management target server. The specific module name, the version of the update package in use before the installation, and the version to be installed are displayed, respectively.
Applying the update package has been completed successfully.	Collected when installing the update package to the management target server is completed. The specific module name, the version of the update package in use before the installation, and the version to be installed are displayed, respectively.
Cleaning of the removal history was executed.	Collected when "Clean Removal History" for update packages is performed on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Downloading of Agent log was executed.	Collected when collecting the NEC ExpressUpdate Agent logs.

NEC ExpressUpdate Functions and Features

Getting of update package information was executed.	Collected when selecting an update package and displaying the information in a separate window.
Getting of list of update packages was executed.	Collected when opening the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Getting of repository information was executed.	Collected when the "Repository Settings" screen is opened from "Tools" > "ExpressUpdate Management Information."
Getting of version information was executed.	Collected when the "ExpressUpdate" screen is opened.
Removing of update packages was executed.	Collected when update packages are removed manually on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Cancel of update process was executed.	Collected when the update process for the management target server is cancelled.
Setting of repository information was executed.	Collected when the repository information is set on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Updating the repository was executed.	Collected when "Download Update Packages" is performed.
Adding of update package was executed.	Collected when the update package is added manually on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Update package server address was modified.	Log collected when the address of the update package server is modified by redirection.
Started update repository.	Log collected when starting "Download Update Packages." This log is collected only for the server with a different repository from that of NEC ESMPRO Manager that has downloaded the update package.
Update package server address was modified.	Log collected when "Download Update Packages" is completed. This log is collected only for the server with a different repository from that of NEC ESMPRO Manager that has downloaded the update package.
Downloading update package was canceled.	Log collected when "Download Update Packages" is cancelled.

NEC ExpressUpdate Functions and Features

Getting of update package archive was executed.	Log collected when "saving the update package" is completed.
Getting update package archive was canceled.	Log collected when "saving the update package" is cancelled.
Changing of ExpressUpdate status was executed.	Log collected when the status of the module not supporting automatic update is changed on NEC ExpressUpdate.

NEC ExpressUpdate Functions and Features

2.4.2. Error Logs

The specific cause of an error is provided in parentheses.

Example) Failed to set the repository information. (Failed to connect to the proxy server.)

Table 19 Error logs

Log	Description
Failed to obtain the version information.	Collected when the information is not collected from the NEC ExpressUpdate Agent or repository for any cause.
Failed to obtain the version information. (Communication error: Cannot connect to the NEC ExpressUpdate Agent and the Management Controller.)	Collected when communication with both the NEC ExpressUpdate Agent and the management controller fails for any cause.
Failed to obtain the version information.(Communication error: Cannot connect to the NEC ExpressUpdate Agent.)	Collected when communication with the NEC ExpressUpdate Agent fails for any cause.
Failed to obtain the version information. (Communication error: Cannot connect to the Management Controller.)	Collected when communication with the management controller fails for any cause.
Failed to get the update package information.	Collected when the update package is selected and displaying the details in a separate window fails for any cause.
Failed to installation of update package.	Collected when the update process for the management target server fails.
Failed to install the software.	Collected when the new installation of software on the management target server fails.
Failed to uninstall the software.	Collected when uninstalling the software from the management target server fails.
Failed to reboot the OS.	Collected when "Automatic Reboot" is selected for update and rebooting the OS after the installation is completed fails.
Failed to get the progress information of the applying.	Collected when getting the progress information of the update fails.
Failed to cancel of installation process.	Collected when cancelling the update fails.

NEC ExpressUpdate Functions and Features

Failed to get the repository information.	Collected when getting the repository information fails from "Tools" > "ExpressUpdate Management Information" > "Repository Settings."
Failed to set the repository information.	Collected when setting the repository information from "Tools" > "ExpressUpdate Management Information" > "Repository Settings" fails.
Failed to update the repository.	Collected when "Download Update Packages" fails.
Failed to add update packages to the repository.	Collected when adding update packages fails on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Failed to get the list of update packages.	Collected when getting the list of update packages fails when opening the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Failed to remove update packages.	Collected when removing update packages fails on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Failed to clean removal history.	Collected when "Clean Removal History" of update packages fails on the "Repository Management Information" screen from "Tools" > "ExpressUpdate Management Information."
Failed to get the log file of the NEC ExpressUpdate Agent.	Collected when collecting the logs of NEC ExpressUpdate Agent fails.
Failed to reboot the OS.	Collected when "Automatic Reboot" is selected for update and rebooting the OS after the installation is completed fails.
Unknown error occurred during repository processing.	Collected when an unknown error occurs during repository processing. This log is collected only when the repository is used remotely.
Failed to cancel downloading of update package.	Collected when cancelling "Download Update Packages" fails.
Failed to get update package archive.	Collected when "saving the update package" fails.
Failed to cancel getting update package archive.	Collected when cancelling "saving the update package" fails.
Failed to change ExpressUpdate status.	Collected when changing the status of the module not supporting automatic update fails on NEC ExpressUpdate.

3. Using NEC ExpressUpdate

This chapter describes the procedure for installing update packages to the management target server using NEC ExpressUpdate, according to the flow shown below.

1. Installing NEC ExpressUpdate Agent
2. Registering the Management Target Server to NEC ESMPRO Manager
3. Setting the Repository
4. Updating the Repository
5. Installing Update Packages
6. Removing Update Packages

3.1. Installing NEC ExpressUpdate Agent

NEC ExpressUpdate Agent needs to be running on the management target server to use NEC ExpressUpdate. Install NEC ExpressUpdate Agent on the management target server by following the steps below.

1. Insert NEC EXPRESSBUILDER into the DVD drive of the management target server.
2. The menu is displayed by the Autorun function.
3. Click "NEC ESMPRO Setup" > "Additional Application" > "NEC ExpressUpdate Agent."
4. Start installing NEC ExpressUpdate Agent.
5. Install NEC ExpressUpdate Agent by following the instructions by the installer.

TIPS:

- When only BIOS and BMC firmware are managed with a server in which EXPRESSSCOPE Engine 3 is installed, no installation of NEC ExpressUpdate Agent is required.
-

3.2. Registering a Server as a Management Target Server to NEC ESMPRO Manager

NEC ExpressUpdate can be enabled for a management target server in either of the two cases: when enabling it for a server at the time of registering the server as a management target server, and when enabling it for a server which is already registered as a management target server, to the NEC ESMPRO Manager.

3.2.1. When Enabling NEC ExpressUpdate for a Server at the Time of Registering the Server as a Management Target Server to NEC ESMPRO Manager

To register a server, either of the following auto registration or manual registration can be used.

3.2.1.1. Auto Registration

1. From the tree view, click a group to register the server.
2. From the "Group Information" tab, select "Group Information" > "Add Component" > "Auto Registration."
3. When NEC ExpressUpdate Agent is installed in the management target server, set "Search" in the setting for "NEC ExpressUpdate" to "Enable."



Fig. 30 Setting for NEC ExpressUpdate

4. When EXPRESSSCOPE Engine 3 is installed in the management target server, set both "Search" and "Features NEC ExpressUpdate" in ""Management Controller" management" to "Enable."

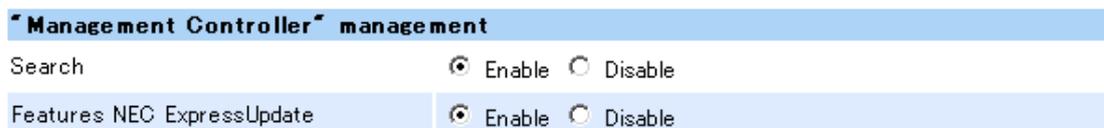


Fig. 31 "Management Controller" management

5. Click "Search."
6. The searched server is displayed.

If "The server was added" is displayed in the "Contents" column, the registration is completed. This allows the server to be managed using NEC ExpressUpdate.

CHECK:

- To use NEC ExpressUpdate, at least one of either *Setting for NEC ExpressUpdate management* or *"Management Controller" management* needs to be "Enable."
-

3.2.1.2. Manual Registration

1. From the tree view, click a group to register the server.
2. From the "Group Information" tab, select "Group Information" > "Add Component" > "Manual Registration."
3. Set each item.

When NEC ExpressUpdate Agent is installed in the management target server, set the item in "Updates via NEC ExpressUpdate Agent" in "NEC ExpressUpdate" indicating NEC ExpressUpdate management settings to "Registration."

When EXPRESSSCOPE Engine 3 is installed in the management target server, set the item in "Updates via Management Controller" to "Registration."



Fig. 32 NEC ExpressUpdate management settings

4. Click "Add."
5. The server is added to the list of servers under the group.
6. To display the setting information, click the server name.

7. Click "Check Connection."
8. When the connection check is completed successfully, the server can be managed using NEC ExpressUpdate.

CHECK:

- To use NEC ExpressUpdate, at least one of either "Updates via NEC ExpressUpdate Agent" or "Updates via Management Controller" needs to be registered.
-

3.2.2. When the Server is Already Registered as a Management Target Server to NEC ESM PRO Manager

1. From the tree view, click the target server.
2. From the "Setting" tab, select "Server setting" > "Connection Setting."
3. When NEC ExpressUpdate Agent is installed in the management target server, set the item in "NEC ExpressUpdate" indicating NEC ExpressUpdate management setting to "Registration."
When EXPRESSSCOPE Engine 3 is installed in the management target server, set the item in "Updates via Management Controller" to "Registration."

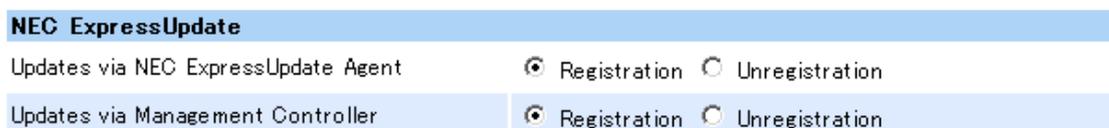


Fig. 33 NEC ExpressUpdate management settings

4. To display the setting information, click "Update."
5. Click "Check Connection."
6. When the connection check is completed successfully, the server can be managed using NEC ExpressUpdate.

CHECK:

- To use NEC ExpressUpdate, one of either "Updates via NEC ExpressUpdate Agent" or "Updates via Management Controller" needs to be registered.
-

3.3. Setting the Repository

Set the repository by following the steps below before managing update packages.

1. From the header menu, click "Tools" > "Repository Settings."
2. Click "Edit." The "Repository Settings" screen is displayed.

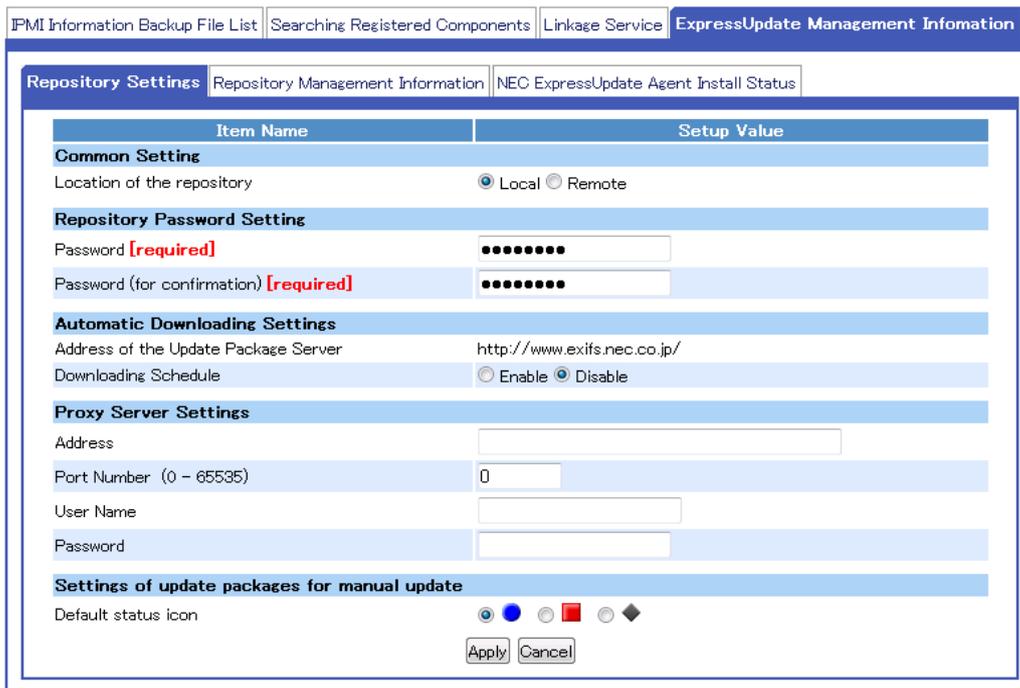


Fig. 34 Repository Settings

3. Set "Location of the repository" to either "Local" or "Remote."
 - (1) When it is set to "Local," use the repository of the management server to save and manage update packages. Specify a folder in which to save update packages when installing NEC ESMPRO Manager. By default, the folder is located in: <System Drive>\Program Files\ESMPRO\ESMWEB\pkgpool.
 - (2) When it is set to "Remote," access the repository of another management server to install update packages. This is useful when only the limited number of servers can be connected to the Internet.
4. Set each item.
 - (1) When "Location of the repository" is set to "Local:"

- (i) In "Repository Settings," specify "Schedule Type" and "Start Time" for automatically downloading update packages from the update package server. The values of the update package server address cannot be edited.
- (ii) In "Proxy Server Settings," set the proxy server address, port number, user name, and password. These settings are required for connecting to the update package server through the proxy server.
- (iii) In "Repository Password Setting," set the password for accessing the repository. This enables another management server to access the repository. The default is "password."

(2) When "Location of the repository" is set to "Remote:"

- (i) In "Repository Settings," set the OSIP address of another management server on which the repository is located, port number for connecting to NEC ESMPRO Manager, and password. For the password, enter the values of "Repository Password Setting" set for another management server on which the repository is located.

5. Set the "initial status icon."

Select the status icon of the update target module which is displayed when the update package not supporting automatic update is added to the repository. At the time the update package not supporting automatic update is added to the repository, the selected icon will be displayed in the status icon row of the update target module in the NEC ExpressUpdate screen. The icon set by default is .

For example, when the icon  is set and the update package not supporting automatic update is added, the initial status icon of the target module is . The following shows the example when there is an update package not supporting automatic update for BMC firmware.

NEC ExpressUpdate Functions and Features

Update/Install Uninstall Save

Location of the repository: Local / Latest downloaded: 10/23/2012 09:21:41 [Download Update Packages](#)

(Module selection) ▾

Not Latest [Server01](#)

Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input type="checkbox"/>	Latest Condition	System BIOS	5.0	5.0	1	-	High
<input checked="" type="checkbox"/>	Not Latest	BMC Firmware	2.0	3.0	1	-	High
<input type="checkbox"/>	No Package	NEC ExpressUpdate Agent	3.01	-	-	-	-
<input checked="" type="checkbox"/>	-	BMC Firmware	2.0	3.0	-	-	High

Automatic Reboot
 Install only latest version
Execute Estimated Time Total 1 Minutes

<Note for Installation Version> * : Ex-version
<Note for Status> Installation Failed : Please confirm the module status and reboot the OS.
[How to apply the update package for manual update.](#)

Fig. 35 Update target module with update package not supporting automatic update

3.4. Downloading Update Packages

The following three methods are available to register update packages to the repository.

3.4.1. Automatic Downloading

NEC ESMPRO Manager downloads the latest update package from the update package server at the specified time for automatic downloading. The downloaded update package is stored in the management server repository.

Follow the steps below to configure the automatic update settings.

1. From the header menu, click "Tools" > "ExpressUpdate Management Information" > "Repository Setting."
2. Click "Edit."
3. Set "Location of the repository" to "Local."
4. In "Automatic Downloading Settings," specify "Schedule Type" and "Start Time" for downloading the update package from the update package server automatically.
5. In "Proxy Server Setting," set the proxy server address, port number, user name, and password. These settings are required for connecting to the update package server through the proxy server.
6. NEC ESMPRO Manager downloads the update package at the specified time and stores it in the repository.
7. The versions of three generations of the update package stored in the repository are managed. Update packages no longer necessary are automatically removed from the repository.

3.4.2. Downloading Update Packages Explicitly on Demand

This function is useful when you want to download update packages immediately. Follow the steps below to download update packages on demand.

1. From the header menu, open "Tools" > "Repository Management Information."

NEC ExpressUpdate Functions and Features

2. The information on update packages stored in the management server repository is displayed.
3. Click "Download Update Packages."
4. NEC ESMPRO Manager downloads the latest update package from the update package server and stores it in the repository.
 - (1) When "Location of the repository" is set to "Local," the update package is stored in the management server repository.
 - (2) When it is set to "Remote," another management server managing the repository downloads the update package from the update package server and stores it in the repository.
5. The versions of three generations of the update package stored in the repository are managed. Update packages no longer necessary are automatically removed from the repository.

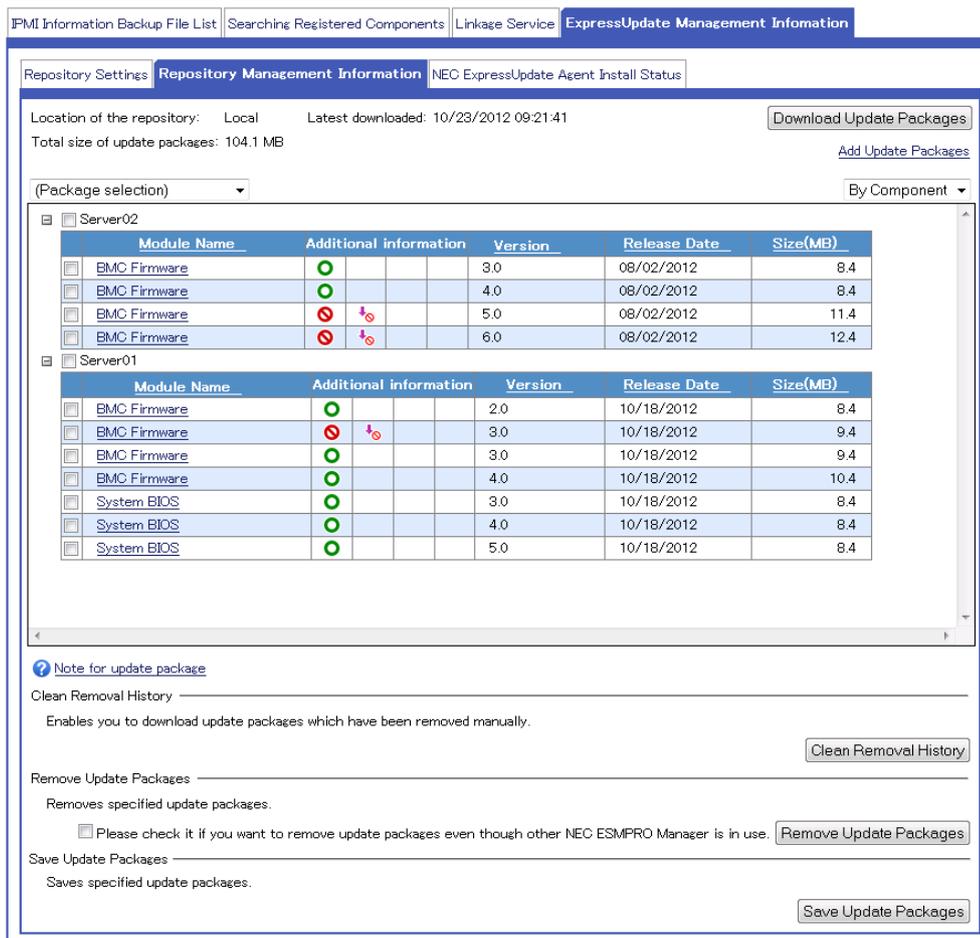


Fig. 36 Update package list display

Additional information on update packages is displayed with the following icons.

Table 20 Icons for update package additional information

Icon	Information
	The update package supports automatic update of NEC ExpressUpdate.
	The update package does not support automatic update of NEC ExpressUpdate.
	The update package does not support downgrade.
	The update package supports multiple models of server.
	The update package is in use by other NEC ESM PRO Manager.

3.4.3. Adding Update Packages Manually

Add update packages obtained from the NEC corporate Web site to the repository manually.

Although it is possible to add an update package not supporting NEC ExpressUpdate, the package is not displayed in the pull-down of "Installation Version" on the update package installation screen, and it cannot be installed by using NEC ExpressUpdate. To check whether the update package supports NEC ExpressUpdate or not, refer to "Additional information" on update packages displayed on the "Repository Management Information" screen. Refer to the previous page for "Additional Information."

Follow the steps below to manually add update packages to the repository.

1. From the header menu, click "Tools" > "ExpressUpdate Management Information" to open "Repository Management Information."
2. The list of update packages stored in the repository is displayed.
3. Select "Add Update Packages."
4. Move to the screen for adding update packages.
5. Click "Browse..." and select update packages from the file viewer. Download update packages manually from the NEC corporate Web site beforehand.

6. The list of the selected update packages is displayed.

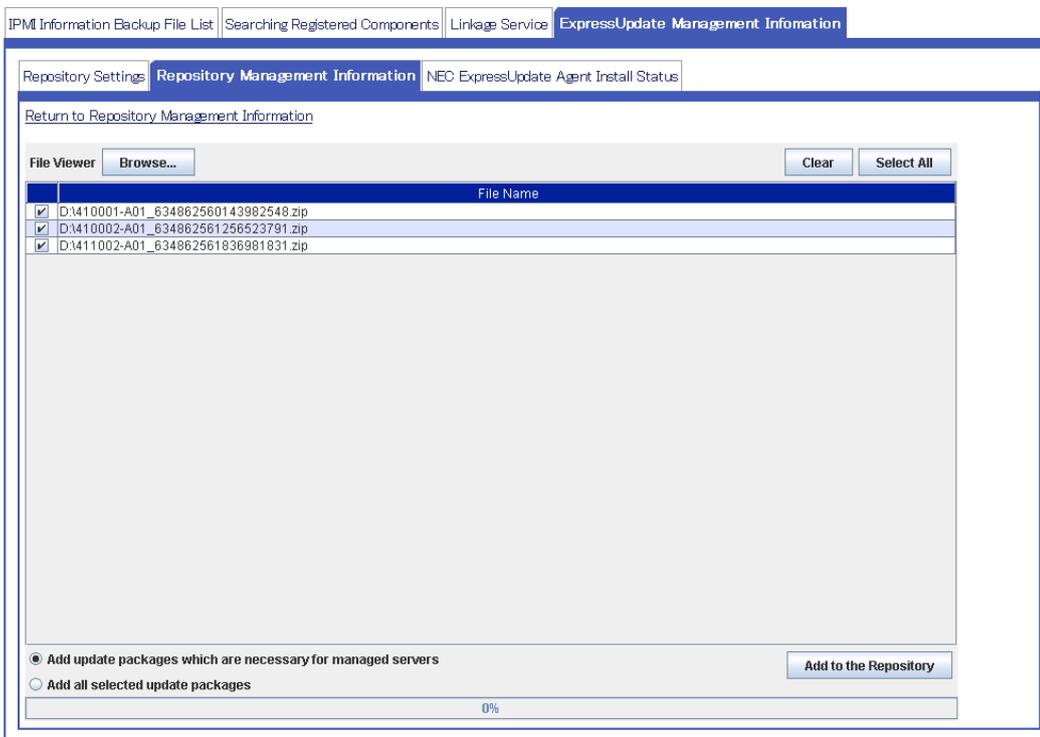


Fig. 37 Screen for adding update packages

7. Click "Add to the Repository."

(1) By selecting "Add update packages which are necessary for managed servers," only an update package required for the server managed by NEC ESMPRO Manager is added. The update package added in this mode becomes the target for generation management by the repository, and the versions of three generations are managed. An unnecessary update package is automatically removed from the repository.

(2) By selecting "Add all selected update packages," all the selected update packages are added to the repository. Update packages added in this mode will be exempt from generation management by the repository, and will remain in the repository until removed manually. Refer to section 3.6 for how to remove update packages.

8. The selected update packages are added to the repository according to the options selected in the previous step.

3.4.4. Notification for Update Package Download

When a new update package is downloaded, notification is issued in either of the following two methods.

3.4.4.1. Event Logged in AlertViewer

An event is logged in AlertViewer.



Fig. 38 Update package download event

In the "Action" field of the "Details" screen of the event, the list of components relevant to the downloaded update package is displayed.

NEC ExpressUpdate Functions and Features

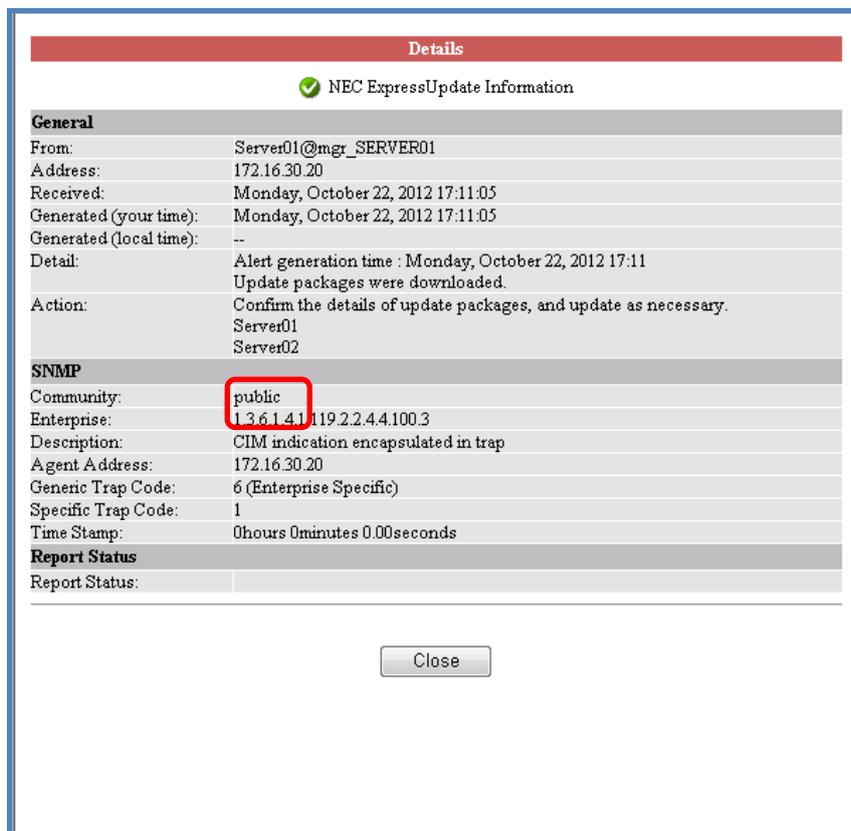


Fig. 39 Details of the download event of the update package

CHECK:

- The event is logged only when using NEC ESM PRO Manager installed in the Windows environment.
-

3.4.4.2. Popup Notification

A popup is displayed when you log in to NEC ESMPRO Manager. If an update package is downloaded while you are logged in, no popup is displayed.

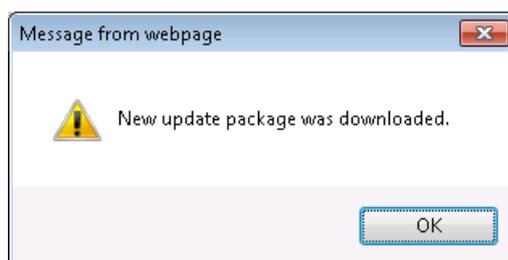


Fig. 40 *Popup notification for update package download*

CHECK:

- A popup is displayed only when you log in to NEC ESMPRO Manager as a user for whom execution privilege for "Install Update Packages" is enabled.
 - A popup is displayed only once when you log in to NEC ESMPRO Manager after a new update package is downloaded.
-

3.5. Installing Update Packages

Two methods are available to install update packages to the management target server: installing to a single server and installing to a group of servers at once.

3.5.1. Installing an Update Package to a Single Server

Follow the steps below to install an update package to the management target server.

1. From the tree view, click the server to which the update package will be installed.
2. From the "Remote Control" tab, open "Remote Control" > "NEC ExpressUpdate."
3. The server information ("Module Name," "Current Version," "Installation Version," "Status," etc., of the update package) is displayed.
4. Click "Download Update Packages."
The latest update package is downloaded from the update package server and stored in the repository.
5. Select the module whose status shows "Not Latest."

(Module selection) ▾

Not Latest Server01

Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input checked="" type="checkbox"/>	Not Latest	System BIOS	3.0	4.0	1	Necessary	High
<input checked="" type="checkbox"/>	Not Latest	BMC Firmware	3.0	4.0	1	-	High
<input type="checkbox"/>	No Package	NEC ExpressUpdate Agent	3.01	-	-	-	-
<input type="checkbox"/>	-	BMC Firmware	3.0	3.0	-	-	High

Fig. 41 "Not Latest" display

6. From the pull-down menu, select the update package version to install.
Applicable package versions are displayed in the pull-down menu. If the previous generation version is included in the applicable versions, it is indicated by [*].
The "previous generation version" indicates the version which was running

NEC ExpressUpdate Functions and Features

on the management target server right before the previous installation.

(Module selection) ▾

Not Latest Server01

Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Not Latest	System BIOS	3.0	4.0	1	Necessary	High
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Not Latest	BMC Firmware	3.0	4.0	1	-	High
<input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> No Package	NEC ExpressUpdate Agent	3.01	4.0	-	-	-
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> -	BMC Firmware	3.0	3.0 2.0*	-	-	High

Fig. 42 Selecting a version to install

7. Click "Execute" to install the update package.

The update package is installed to the selected module. The "Execute" button is not displayed for a user with no execution privileges. Execution privileges for this operation (NEC ExpressUpdate) can be obtained by setting "Install Update Packages" to "Enable" when adding a user from "User Information." The account created at the time of NEC ESMPRO Manager installation has execution privileges for NEC ExpressUpdate by default.

Update/Install Uninstall Save

Location of the repository: Local / Latest downloaded: 10/23/2012 09:21:41
[Download Update Packages](#)

(Module selection) ▾

Not Latest Server01

Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Not Latest	System BIOS	3.0	4.0	1	Necessary	High
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Not Latest	BMC Firmware	3.0	4.0	1	-	High
<input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> No Package	NEC ExpressUpdate Agent	3.01	-	-	-	-
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> -	BMC Firmware	3.0	3.0	-	-	High

Automatic Reboot
 Install only latest version
Execute Estimated Time Total 2 Minutes

<Note for Installation Version> * : Ex-version
<Note for Status> Installation Failed : Please confirm the module status and reboot the OS.
[How to apply the update package for manual update.](#)

Fig. 43 Execute button

- (1) When selecting "Automatic Reboot"
If installing the update packages requires a reboot of the server, the server will be rebooted after all the update packages are installed.
- (2) When selecting "Install only latest version"

NEC ExpressUpdate Functions and Features

Only the latest update package will be installed. Disable this option to downgrade the server by installing an update package older than the current version or to install an update package which is not the latest version.

While the update package is being installed, the progress status is displayed in the progress bar.

Under Installation Server01
 Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows 7 Ultimate x64

Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
	Wait Installation	System BIOS	3.0	4.0	1	Necessary High
	17%	BMC Firmware	3.0	4.0	1	- High
	No Package	NEC ExpressUpdate Agent	3.01	-	-	-
	-	BMC Firmware	3.0	3.0	-	- High

Total Progress [0 / 2] (Remaining Time : 01:49)

Fig. 44 Progress status

(3) When cancelling the installation in progress

By clicking "Cancel," you can cancel the unexecuted installation. However, the installation of an update package for which the installation process is already started or completed cannot be cancelled. Only the installation of an update package for which the installation has not started yet can be cancelled.

8. Check the installation results.

When the installation is completed, check the installation results in the "Status" column of the server information. Refer to section 2.1.3 for the description of the icons.

Reboot Required Server01
 Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows 7 Ultimate x64

Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
	Reboot Required	System BIOS	4.0	4.0	1	Necessary High
	Latest Condition	BMC Firmware	4.0	4.0	1	- High
	No Package	NEC ExpressUpdate Agent	3.01	-	-	-
	-	BMC Firmware	4.0	3.0	-	- High

Fig. 45 Installation results

3.5.2. Installing an Update Package to a Group of Servers at Once

Follow the steps below to install an update package to servers managed as a group at once:

1. From the tree view, click the group to which the update package will be installed.
2. From the "Server Control" tab, open "Server Control" > "NEC ExpressUpdate."
3. In the group, update packages installation statuses of modules of the servers whose NEC ExpressUpdate Agent can be started and managed with NEC ExpressUpdate is displayed.

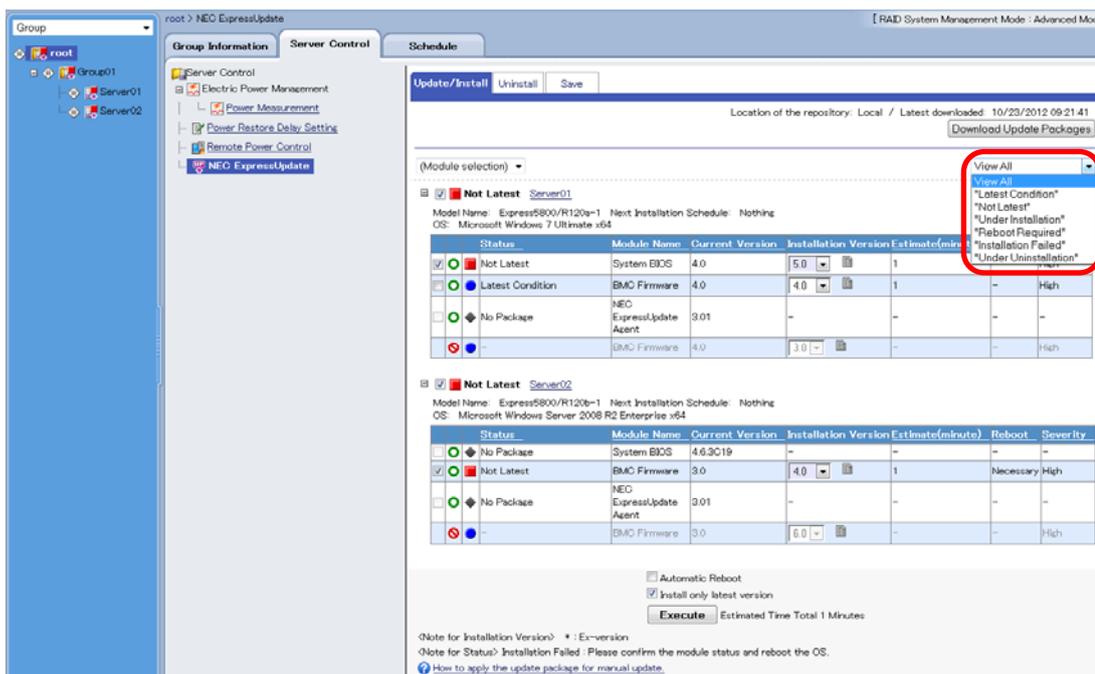


Fig. 46 Installing to a group

The servers to display can be selected according to their status. The selection items are as follows.

Table 21 Filtering of servers to display

Selection item	Display contents
View All	Displays all the servers.
Latest Condition	Displays servers in the latest server status.
Not Latest	Displays servers using a module requiring the update.
Under Installation	Displays servers to which the update package is being installed.
Reboot Required	Displays servers using a module requiring a reboot.
Installation Failed	Displays servers whose server statuses are shown as "Installation Failed."
Under Uninstallation	Displays servers from which a module is being uninstalled.

4. Click "Download Update Packages."
The latest update packages applicable for the servers will be downloaded from the update package server and stored in the repository.
5. Select the servers whose statuses shown as "Not Latest."
6. Select the update package version you want to install from the pull-down menu.
Applicable package versions are displayed in the pull-down menu. If the previous generation version is included in the applicable versions, it is indicated by [*].
The "previous generation version" indicates the version which was running on the management target server right before the previous installation.

NEC ExpressUpdate Functions and Features

Not Latest [Server01](#)
 Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows 7 Ultimate x64

	Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input checked="" type="checkbox"/>		System BIOS	4.0	5.0	1	-	High
<input type="checkbox"/>		BMC Firmware	4.0	5.0	1	-	High
<input type="checkbox"/>		NEC ExpressUpdate Agent	3.01		-	-	-
<input checked="" type="checkbox"/>		BMC Firmware	4.0	3.0	-	-	High

Fig. 47 Selecting the version to install

7. Click "Execute" to install the update package.
 The update package will be installed to the selected servers. The "Execute" button is not displayed for a user with no execution privileges. Execution privileges for this operation (NEC ExpressUpdate) can be obtained by setting "Install Update Packages" to "Enable" when adding a user from "User Information." The account created at the time of NEC ESMPRO Manager installation has execution privileges for NEC ExpressUpdate by default.
 - (1) When selecting "Automatic Reboot"
 If installing the update package requires a reboot of management target servers, the management target servers will be rebooted after all the update packages are installed.
 - (2) When selecting "Install only latest version"
 Only the latest update package will be installed. To downgrade the servers by installing an update package older than the current version or install an update package which is not the latest version, disable this option.

While the update package is being installed, the progress status is displayed in the progress bar. In addition to the progress status of each module, the entire progress status is also displayed at the top of the screen.

NEC ExpressUpdate Functions and Features

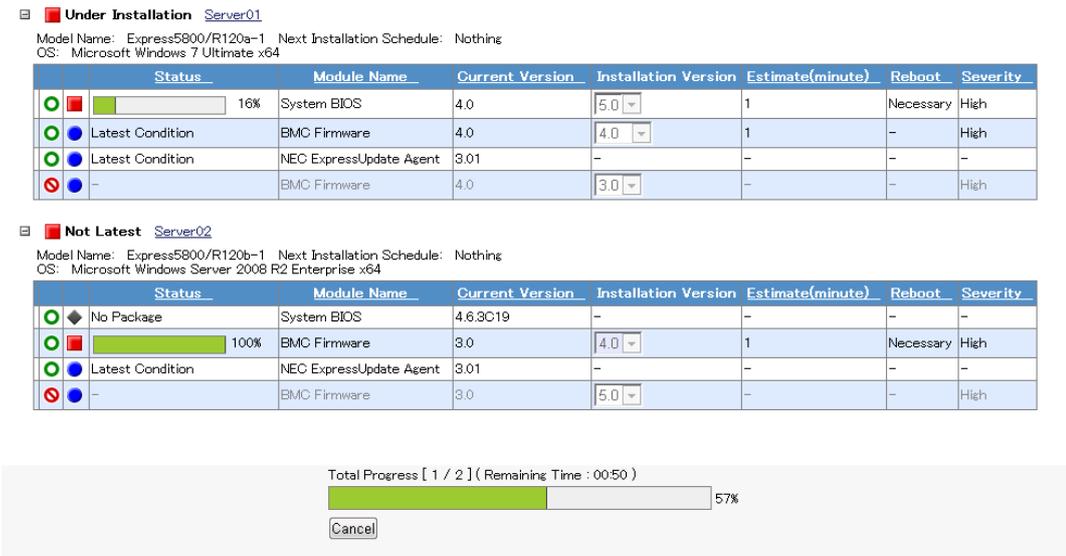


Fig. 48 Progress status display

(3) When cancelling the installation in progress

By clicking "Cancel," you can cancel the unexecuted installation. However, the installation of an update package for which the installation process is already started or completed cannot be cancelled. Only the installation of an update package for which the installation has not started yet can be cancelled.

8. Check the installation results.

When the installation is completed, check the installation results in the "Status" column of the server information. Refer to section 2.1.3 for the description of the icons.

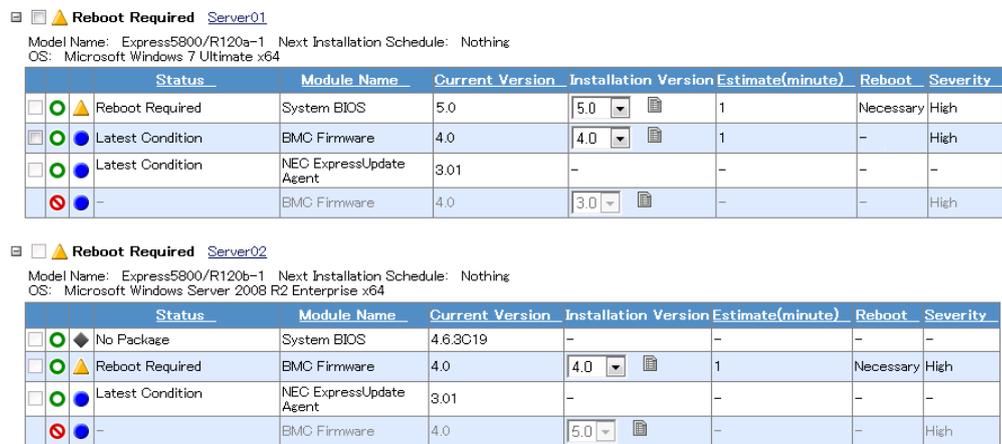


Fig. 49 Installation results display

3.5.3. Installing Update Packages by Using the Remote Batch

By using the remote batch, update packages can be installed at the specified date and time. Follow the steps below.

1. From the tree view, click the server for which the update package is applicable. To install to all the management target servers of a group, click the target group.
2. From the "Schedule" tab, open "Schedule" > "Remote Batch." To install to the group, open "Server Control."
3. Select a date and time at which to update the package from the calendar.
4. Set the detailed information.
 - (1) For "Remote Batch Item," select "Install Update Packages."
 - (2) For "Remote Batch Type" and "Start Date/Time," select the date and time at which to install the update package.
 - (3) Set "Automatic Reboot."

When "Enable" is set, the management target server will be rebooted after the update package is installed if it requires a reboot of the server.
 - (4) Set "Download Update Packages."

When "Enable" is set, the update package is downloaded from the Update Package Server and stored in the repository before it is installed.

Select Remote Batch

Item Name	Setup Value
Remote Batch Item	Power ON
Remote Batch Type	Specified Date
Start Date/Time	10/23/2012 (Tue) 04 : 00

Fig. 50 Remote batch settings

5. Click "Update."

- The icon  is displayed for the specified date and time.

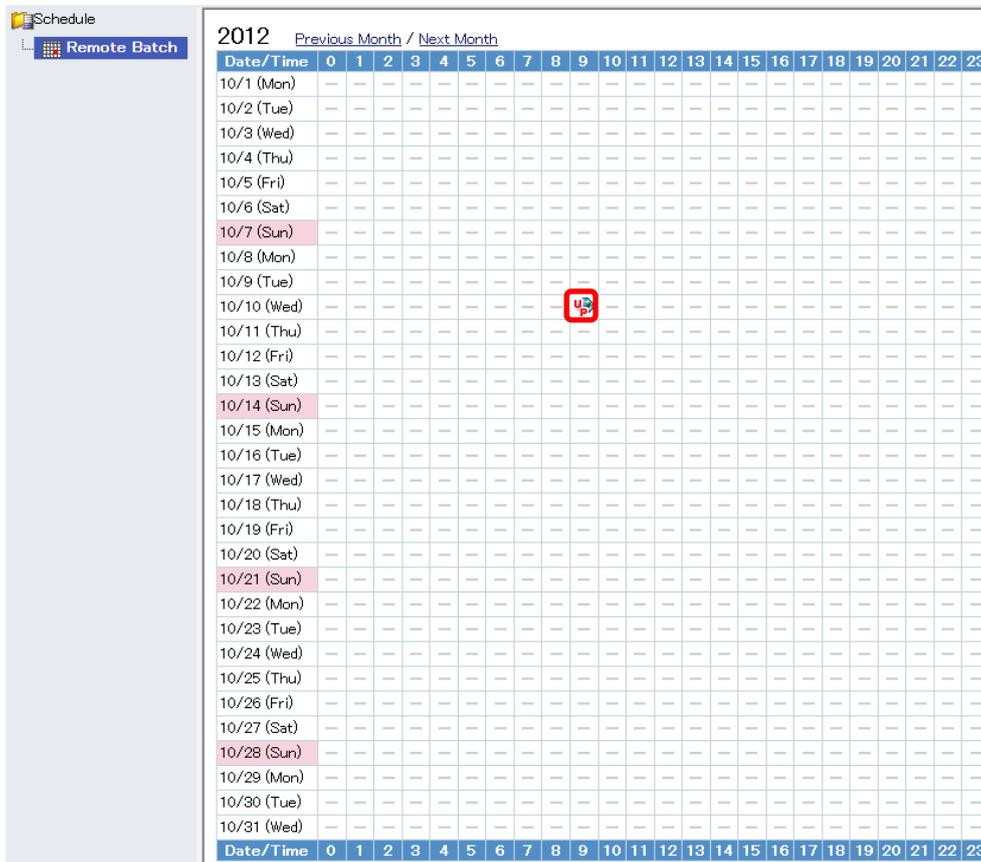


Fig. 51 Remote batch calendar

- The latest update package is automatically installed at the specified date and time.

3.5.4. Installing Update Packages Not Supporting Automatic Update Manually

The update packages not supporting automatic update can be installed manually after saving them once to the machine on which NES ESMPRO Manager is operated. Follow the steps below.

- Save the update packages to install. For the saving procedure, refer to 3.7.
- Extract the saved update package archive to any location. The update packages are stored in the "packages" folder within the extracted folder.
- Refer to the readme file of the update packages, and install the update packages to the update target servers.

3.6. Removing Update Packages

Old update packages are automatically removed by the generation management function of the repository. It is also possible to remove them manually from the "Repository Management Information" screen.

When update packages are manually added to the repository by selecting "Add all selected update packages," the "generation management for update packages" function of the repository does not work for the update packages. Therefore, a user needs to remove them manually by using this function. Refer to section 2.2.2 for "Generation Management for Update Packages."

In addition, when a remote repository is used, update packages managed by the remote repository cannot be removed.

1. From the header menu, open "Tools" > "ExpressUpdate Management Information" > "Repository Management Information."
2. Select the update package to remove.
3. Select the option to remove the update package.
4. Refer to 2.2.4 for details on the options.
 - (1) When you click "Remove Update Packages" without selecting the "Remove By Force" check box, the update package selected with the check box is removed. However, an update package used by another NEC ESMPRO Manager (indicated by the  icon) cannot be removed.
 - (2) When you click "Remove Update Package" with the "Remove By Force" check box selected, even the update package used by another NEC ESMPRO Manager is removed forcibly.

NEC ExpressUpdate Functions and Features

IPMI Information Backup File List | Searching Registered Components | Linkage Service | **ExpressUpdate Management Information**

Repository Settings | **Repository Management Information** | NEC ExpressUpdate Agent Install Status

Location of the repository: Local Latest downloaded: 10/23/2012 09:21:41 [Download Update Packages](#)

Total size of update packages: 104.1 MB [Add Update Packages](#)

(Package selection) By Component

Server02		Module Name	Additional information	Version	Release Date	Size(MB)
<input type="checkbox"/>		BMC Firmware	○	3.0	08/02/2012	8.4
<input type="checkbox"/>		BMC Firmware	○	4.0	08/02/2012	8.4
<input type="checkbox"/>		BMC Firmware	⊘	5.0	08/02/2012	11.4
<input type="checkbox"/>		BMC Firmware	⊘	6.0	08/02/2012	12.4
Server01		Module Name	Additional information	Version	Release Date	Size(MB)
<input type="checkbox"/>		BMC Firmware	○	2.0	10/18/2012	8.4
<input type="checkbox"/>		BMC Firmware	⊘	3.0	10/18/2012	9.4
<input type="checkbox"/>		BMC Firmware	○	3.0	10/18/2012	9.4
<input type="checkbox"/>		BMC Firmware	○	4.0	10/18/2012	10.4
<input type="checkbox"/>		System BIOS	○	3.0	10/18/2012	8.4
<input type="checkbox"/>		System BIOS	○	4.0	10/18/2012	8.4
<input type="checkbox"/>		System BIOS	○	5.0	10/18/2012	8.4

[Note for update package](#)

Clean Removal History
 Enables you to download update packages which have been removed manually. [Clean Removal History](#)

Remove Update Packages
 Removes specified update packages.
 Please check it if you want to remove update packages even though other NEC ESMPRO Manager is in use. [Remove Update Packages](#)

Save Update Packages
 Saves specified update packages. [Save Update Packages](#)

Fig. 52 Removing the update package

3.7. Saving Update Packages

Save the update packages managed by the repository. Two methods available for saving update packages are:

- Saving from the NEC ExpressUpdate screen.
- Saving from the "Repository Management Information" screen.

3.7.1. Saving Update Packages from the NEC ExpressUpdate Screen

Follow the steps below to save update packages not supporting automatic update.

1. From the tree view, click a component or a group.
2. From the "Remote Control" tab, open "Remote Control" > "NEC ExpressUpdate."
3. Click the "Save" tab.
4. Select the update package to save.
5. Select the option(s) as necessary, and click "Save." For details on the options, refer to 2.2.6.1.

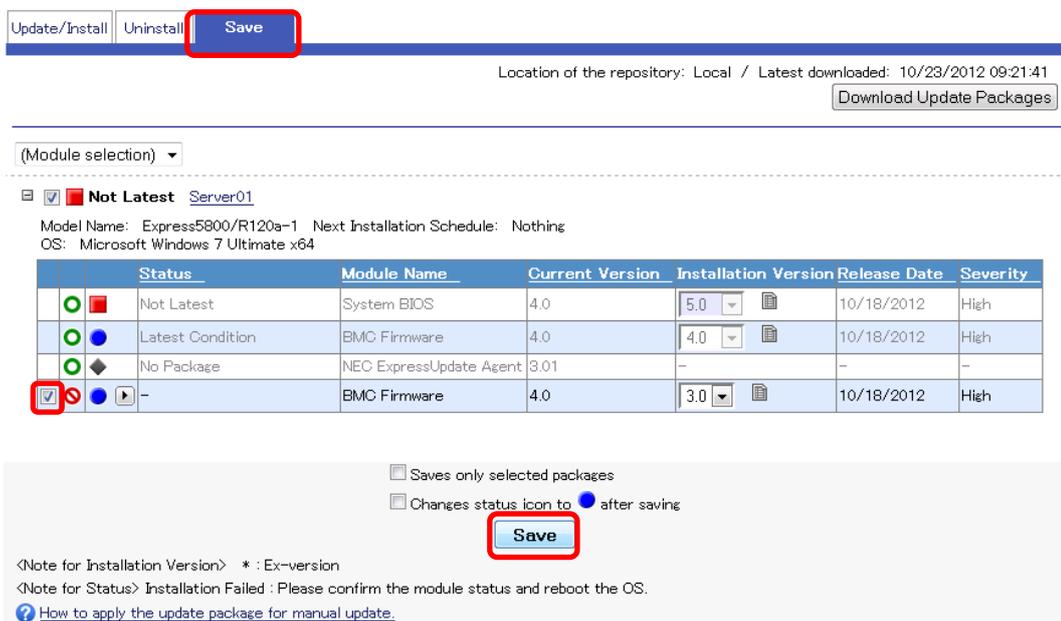


Fig. 53 Update packages saving operation on the NEC ExpressUpdate screen

6. The update package archive into which update packages for the selected module are bundled is automatically created. To cancel the creation of the update package archive, click "Cancel."

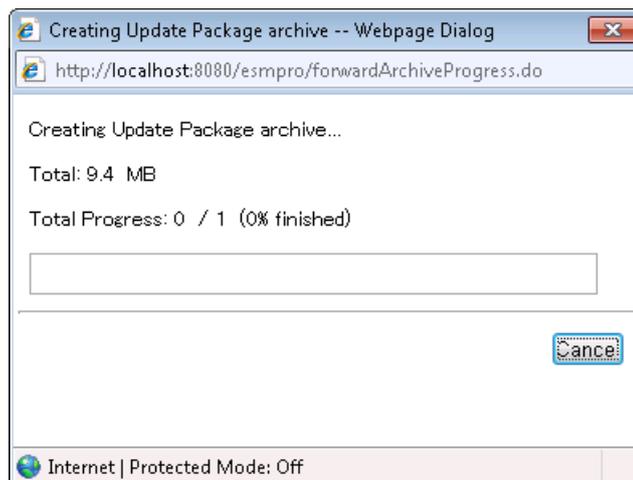


Fig. 54 Creating Update Package archive screen

7. When creating the update package archive is completed, a dialog for saving a file is displayed. Save the update package archive to any location.

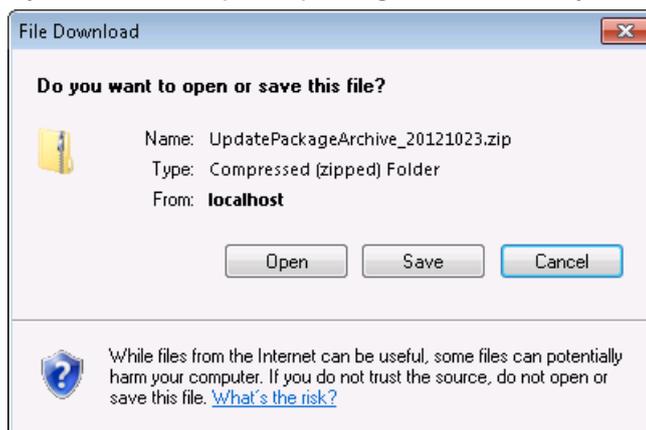


Fig. 55 Saving the update package archive

3.7.2. Saving Update Packages from the Repository Management Information Screen

Follow the steps below to save update packages.

1. From the header menu, click "Tools" > "ExpressUpdate Management Information" > "Repository Management Information."
2. Select the update package(s) to save.
3. Click "Save Update Package."

NEC ExpressUpdate Functions and Features

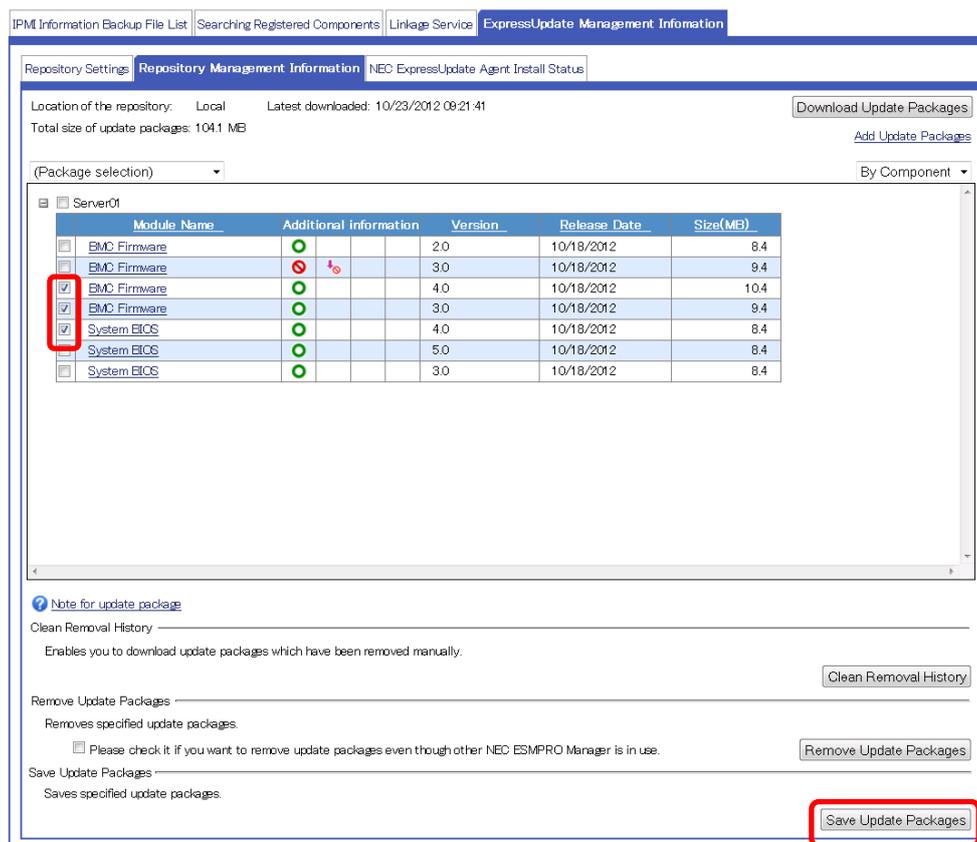


Fig. 56 Update package saving operation on the Repository Management Information screen

4. The update package archive into which selected update packages are bundled is automatically created.
5. When creating the update package archive is completed, a dialog for saving a file is displayed. Save the update package archive to any location.

3.8. Installing NEC ExpressUpdate Agent Remotely

It is the function to install NEC ExpressUpdate Agent remotely by configuring the settings necessary to install NEC ExpressUpdate Agent in a wizard format. When the NEC ExpressUpdate Agent is not installed on the management target server and the following conditions are met, it can be installed from NEC ESMPRO Manager.

1. The target system satisfies the conditions defined in "1.4.2 OS and Server Supporting NEC ExpressUpdate."
2. The settings of the firewall, user account control and port of the management target server OS are configured properly.

CHECK:

- For details on the setting procedure, refer to "About installation of NEC ExpressUpdate Agent" described in the "Notes" of "NEC ESMPRO Manager Ver. 5 Installation Guide."
-

To use the remote installation function of NEC ExpressUpdate Agent, three methods are available depending on the case, when "Check Connection" of the registered server is performed or "Auto Registration" is performed, or installation from the NEC ExpressUpdate screen is performed. The following describes each method.

3.8.1. When Performing "Check Connection" of the Registered Server

When all of the following conditions are met, click "Check Connection" of the registered server. After the connection check is completed, a notification indicating that the remote installation is possible is displayed.

1. "Updates via NEC ExpressUpdate Agent" in "NEC Express Update" indicating NEC Express Update management settings is set to "Registered."
2. "NEC ExpressUpdate Agent cannot be detected on the management target server."
3. "The OS is running on the management target server."

NEC ExpressUpdate Functions and Features

Item Name	Setup Value
Component Name	Server01
Alias	Server01
Group	Group01
Connection Type	LAN
Common Setting	
OS IP Address	172.16.0.19
System management	
Management	Registered<valid>
SNMP Community Name(Get)	public
SNMP Community Name(Set)	
RAID system management	
Management	Not Registered
NEC ExpressUpdate	
Updates via NEC ExpressUpdate Agent	Registered<invalid>
"Management Controller" management (Common)	
Management	Not Registered
Management Type	BMC
Authentication Key	*****
User Name	
Password	*****
"Management Controller" management (LAN)	
Current IP Address	0.0.0.0
Failover	Disable
IP Address1	0.0.0.0
Subnet Mask1	255.255.255.0
IP Address2	0.0.0.0
Subnet Mask2	255.255.255.0
"Management Controller" management (Modem)	
Phone Number	
VMware Auth Information	
User Name	
Password	

Fig. 57 "Check Connection" of the registered server

The pop-up "NEC ExpressUpdate Agent Installation is possible." is displayed. Click "OK," and then click the "Install NEC ExpressUpdate Agent" link.

Note) If the "Install NEC ExpressUpdate Agent" link is not displayed, the remote installation function cannot be used. Check whether the conditions for using this function are satisfied.

NEC ExpressUpdate Functions and Features

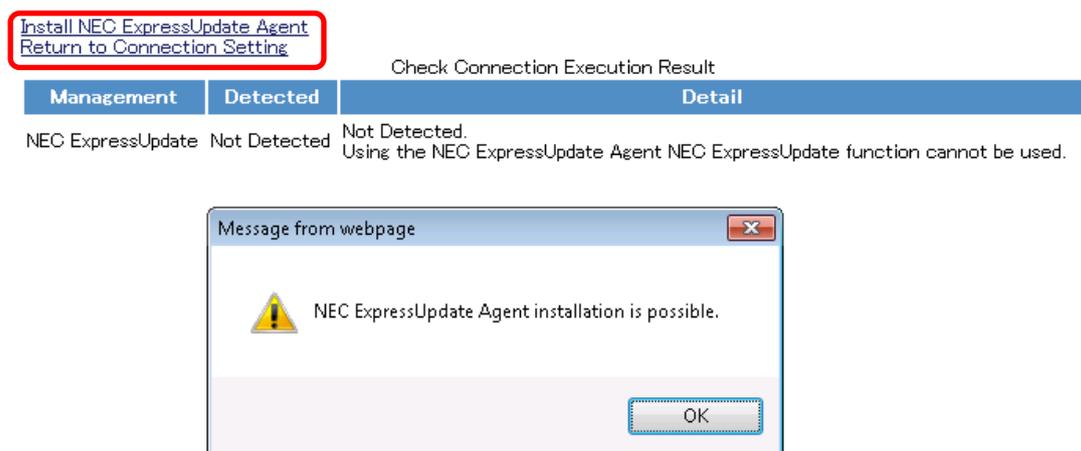


Fig. 58 Remote installation notification for NEC ExpressUpdate Agent

3.8.1.1. Installation Wizard for Single Management Target Server

Configure the settings necessary to install NEC ExpressUpdate Agent in a wizard format. Follow the steps below.

* By clicking the "Install NEC Express Update Agent" link, a new window only for the remote installation function of NEC ExpressUpdate Agent opens. To cancel the remote installation, click "Cancel" or "X" and close the window.

1. License agreement

The license agreement for NEC ExpressUpdate Agent installation is displayed. If you agree to the terms of the license agreement, select "I accept the terms of the license agreement" and click "Next."

NEC ExpressUpdate Functions and Features

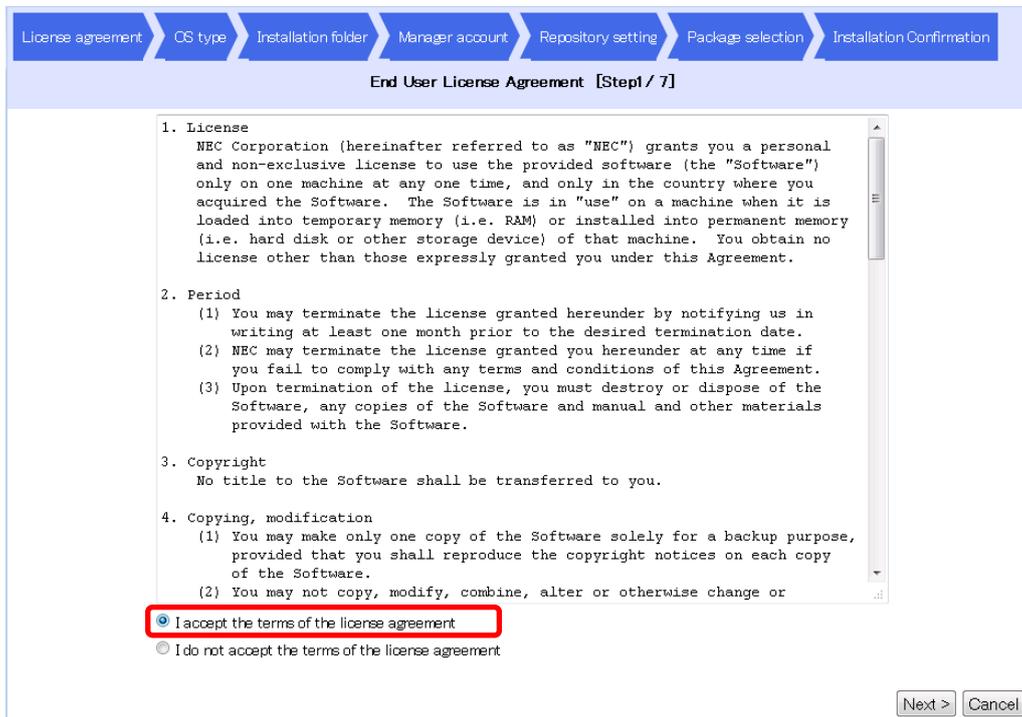


Fig. 59 License agreement

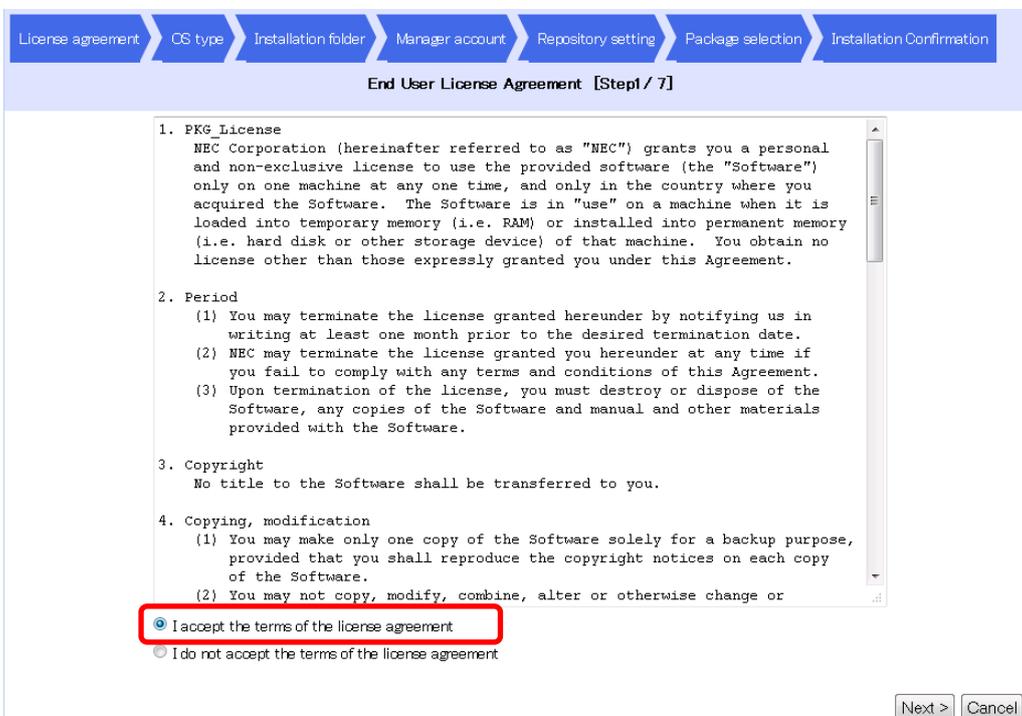


Fig. 60 License agreement for update module

2. OS type

Set the OS type of the management target server on which NEC ExpressUpdate Agent is installed. Select the OS type (Windows System or Linux System) for the management target server with the radio button in the "OS Type" column, and click "Next."

License agreement > OS type > Installation folder > Manager account > Repository setting > Package selection > Installation Confirmation

Please select OS type. [Step2/ 7]

⚠ The setting of firewall and User Account Control on the server to install are necessary.
As for details, notice of the ESM/PRO/ServerManager Ver.5 installation guide please refer to "About installation of NEC ExpressUpdate Agent".

OS Type :
Paste OS Type to the selected component. Windows System Linux System

Component Name	IP Address	OS Type
<input type="checkbox"/> Server01	172.16.0.19	<input checked="" type="radio"/> Windows System <input type="radio"/> Linux System

Next > Cancel

Fig. 61 OS Type

3. Installation folder

Set the folder in which to install NEC ExpressUpdate Agent. Enter an installation path in the "Installation Folder" column and click "Next."

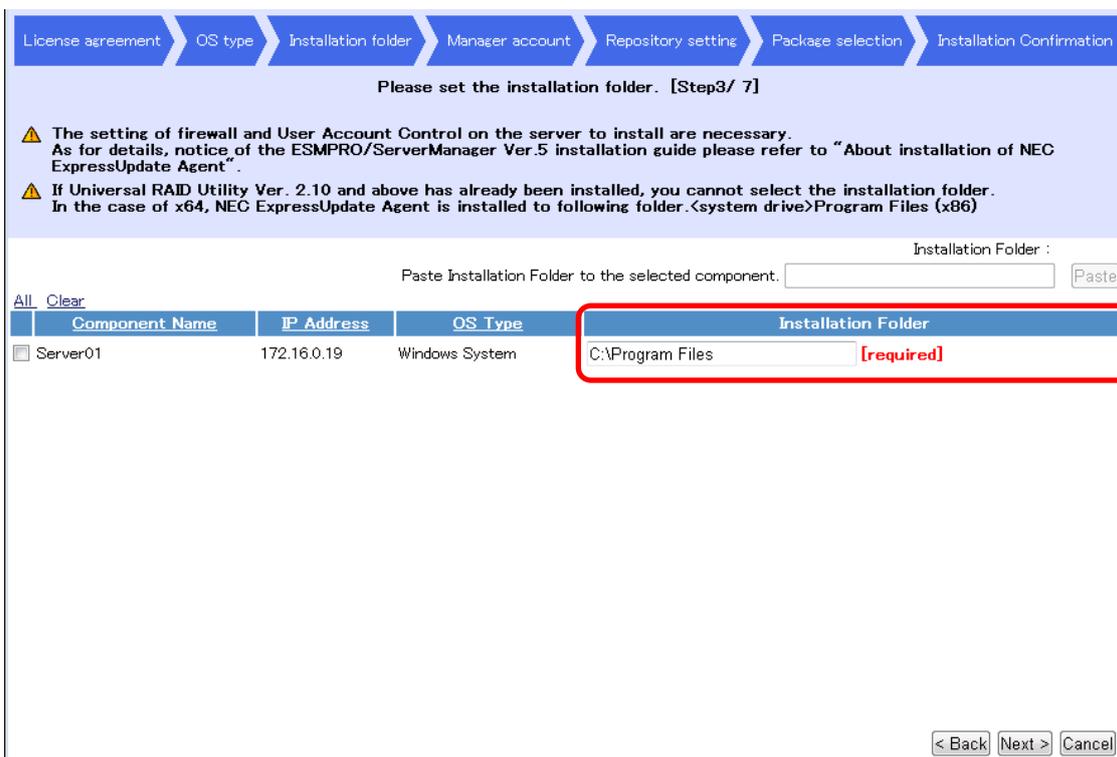


Fig. 62 Installation folder

Note)

- The installation folder cannot be specified if the OS type is "Linux System." The NEC ExpressUpdate Agent will be installed in "/opt/nec."
- The installation folder cannot be specified if Universal RAID Utility Ver. 2.10 or later is already installed on the management target server.

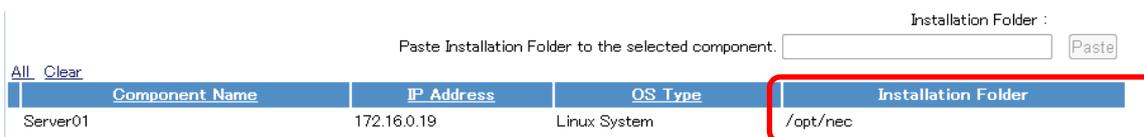


Fig. 63 Installation Folder (Linux System)

4. Manager account

Set the manager account information of the management target server on which NEC ExpressUpdate Agent is installed. Enter "User Name" and "Password," and click "Next."

- * As the default value, "Administrator" is entered when "Windows System" is selected for the OS type, and "root" is entered when "Linux System" is selected for the OS type.

User Name : Password :

Paste User Name or Password to the selected component.

[All](#) [Clear](#) [Windows System](#) [Linux System](#)

Component Name	IP Address	OS Type	User Name	Password
<input type="checkbox"/> Server01	172.16.0.19	Windows System	Administrator [required]	●●●●●●●● [required]

Fig. 64 Manager account

5. Repository setting

The repository setting information is displayed. When there is no change in the current repository setting, click "Next." To change the setting, click "Edit" and edit the setup values. Refer to section 3.3 "Setting the Repository" for details on the setting procedure.

License agreement OS type Installation folder Manager account Repository setting Package selection Installation Confirmation

Specify the repository to add the package or retained the package. [Step5/ 7]

⚠ The setting of firewall and User Account Control on the server to install are necessary. As for details, notice of the ESM/ServerManager Ver.5 installation guide please refer to "About installation of NEC ExpressUpdate Agent".

Item Name	Setup Value
Common Setting	
Location of the repository	Local
Remote Repository Settings	
Address	
Port Number	0
Password	
Proxy Server Settings	
Address	
Port Number	0
User Name	
Password	

Fig. 65 Repository setting

6. Package selection

Specify how to obtain the NEC ExpressUpdate Agent package to install. Select the "Location of the update package" from the list box and click "Next." You can select from the following four types to obtain it.

License agreement > OS type > Installation folder > Manager account > Repository setting > **Package selection** > Installation Confirmation

Please specify NEC ExpressUpdate Agent (Windows edition). [Step6/ 7]

⚠ The setting of firewall and User Account Control on the server to install are necessary. As for details, notice of the ESM/PRO/ServerManager Ver.5 installation guide please refer to "About installation of NEC ExpressUpdate Agent".

Item Name	Setup Value
Location of the update package	Using the latest of Repository Using the latest of Repository Download EXPRESSBUILDER File Designation

< Back Next > Cancel

Fig. 66 Package selection

- (1) Using the latest of Repository
Use the latest NEC ExpressUpdate Agent package in the repository.

Note) When there is no available NEC ExpressUpdate Agent package for the repository, "Using the latest of Repository" is not displayed.
- (2) Download
Access the update package server, and obtain and use the latest NEC ExpressUpdate Agent package.
- (3) EXPRESSBUILDER
Obtain and use the NEC ExpressUpdate Agent package by automatic search from NEC EXPRESSBUILDER. Insert NEC EXPRESSBUILDER, bundled with the server which supports NEC ExpressUpdate, into the disk drive of the server on which the web browser of NEC ESM/PRO Manager is open.

(4) File Designation

Use the specified NEC ExpressUpdate Agent package. Click "Browse..." and select the NEC ExpressUpdate Agent package to use.

* The specified NEC ExpressUpdate Agent package is added to the repository.



Fig. 67 File Designation

Note) If the specified NEC ExpressUpdate Agent package is older than the one in the repository, the following message is displayed.

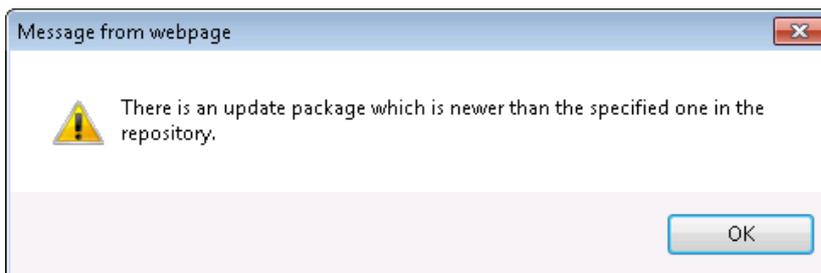


Fig. 68 Notification displayed when there is a newer package in the repository

To use the NEC ExpressUpdate Agent package that already exists in the repository, click "OK." To use the one specified in "File Designation," click "Cancel."

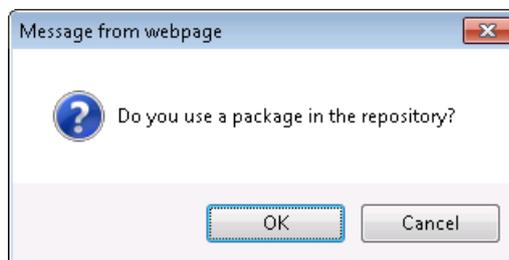


Fig. 69 Selecting a package to use

* When "OK" is selected, the specified NEC ExpressUpdate Agent package is not added to the repository.

7. Installation Confirmation

The installation setting information of NEC ExpressUpdate Agent is displayed in a list. After checking the setting, click "Installation."

* The installation does not start at this stage yet.



Fig. 70 Installation Confirmation

When "Installation" is clicked, a pop-up message confirming the start of the installation appears. Click "OK."

* When "Cancel" is clicked, the installation does not start.

NEC ExpressUpdate Functions and Features

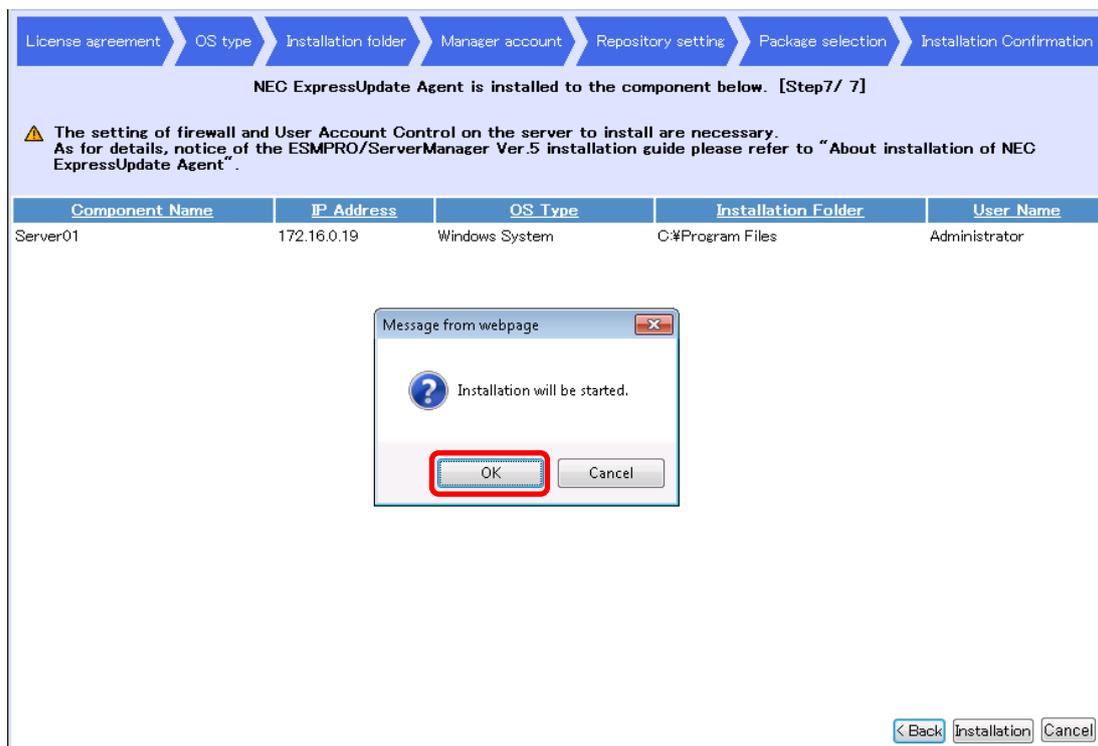


Fig. 71 Confirmation for starting the installation

When the installation of NEC ExpressUpdate Agent is started, the installation status is displayed and the progress status of the installation can be checked.

[Installing : 1 count] (Remaining Time : 39 seconds)

Component Name	IP Address	Status	Remaining Time (seconds)
Server01	172.16.0.19	<div style="width: 35%; background-color: #92d050;"></div> 35%	39

Fig. 72 Installation status

When the installation is completed, the "Status" column indicates the completion. The status of the management target server is changed to one in which NEC ExpressUpdate is enabled, and NEC ExpressUpdate becomes available.



Fig. 73 Installation results

3.8.2. When Searching by Auto Registration

When all the following conditions are met, go to "Add Component" > "Auto Registration" and click "Search." After search is completed, a notification indicating that the remote installation is possible is displayed.

1. "Perform search by setting the "Setting for NEC ExpressUpdate" to "Enable.""
2. "NEC ExpressUpdate Agent cannot be detected on the management target server."
3. "The OS is running on the management target server."

Item Name	Setup Value
Search Mode	<input type="radio"/> Network Address Search <input checked="" type="radio"/> IP Address Range Search
IP Address Range Search	
Start Address [required]	172 . 16 . 0 . 1
End Address [required]	172 . 16 . 0 . 20
Common	
Registration Group	Group01
System management	
Search	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
SNMP Community Name [required]	public
RAID system management	
Search	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
NEC ExpressUpdate	
Search	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
"Management Controller" management	
Search	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Features NEC ExpressUpdate	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Authentication Key	•••••
<input type="button" value="Search"/>	

Fig. 74 Searching by auto registration

A pop-up "There is the server which can install NEC ExpressUpdate Agent" appears. Click "OK" and then click the "Install NEC ExpressUpdate Agent" link.

Note) When the "Install NEC ExpressUpdate Agent" link is not displayed, the remote installation function cannot be used. Check whether the conditions for using this function are met.

NEC ExpressUpdate Functions and Features

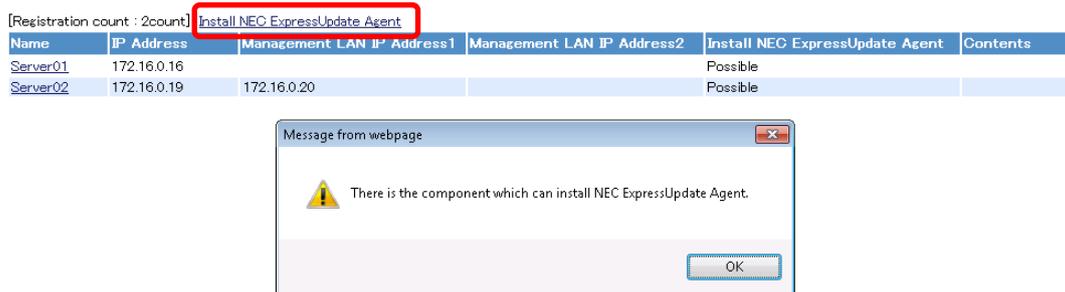


Fig. 75 Notification for NEC ExpressUpdate Agent remote installation

3.8.2.1. Installation Wizard for Multiple Management Target Servers

Configure the settings necessary to install NEC ExpressUpdate Agent in a wizard format by following the steps below.

1. License agreement

The license agreement for NEC ExpressUpdate Agent installation is displayed. If you agree to the terms of the license agreement, select "I accept the terms of the license agreement" and click "Next."

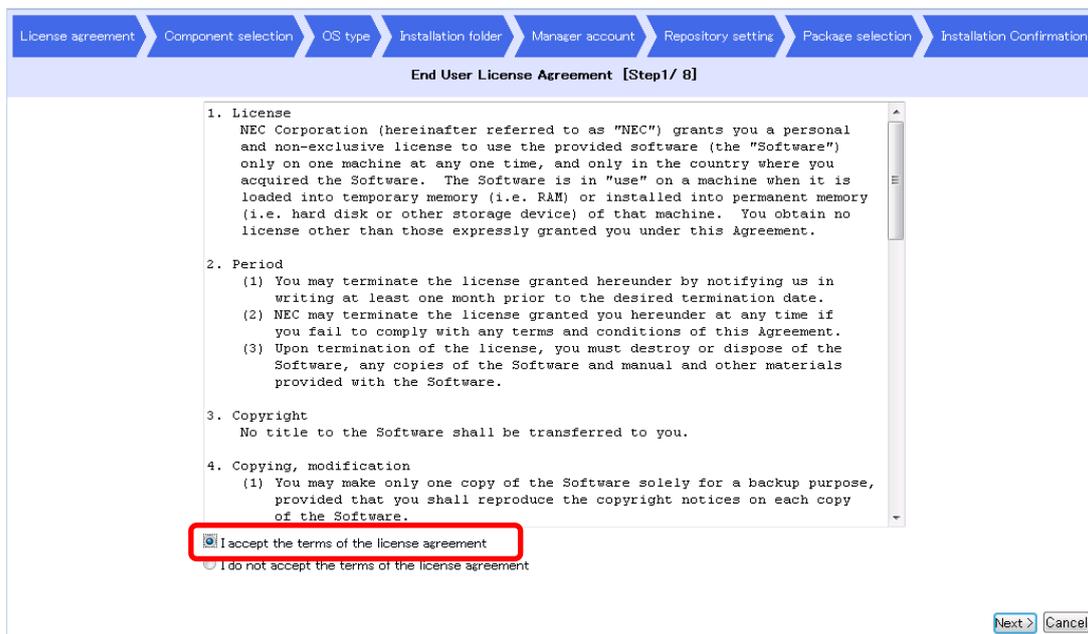


Fig. 76 License agreement

NEC ExpressUpdate Functions and Features

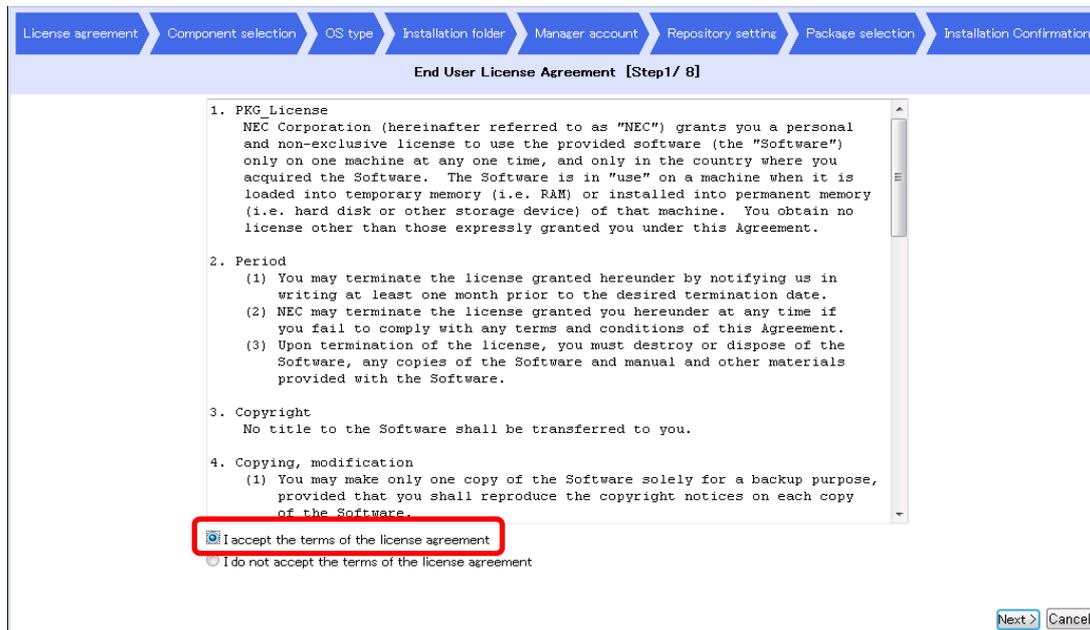


Fig. 77 License agreement for Update Module

2. Server selection

Select the management target server on which NEC ExpressUpdate Agent is installed. Select the management target server and click "Next."

* Click the "All" or "Clear" link to select or clear all the check boxes at once.

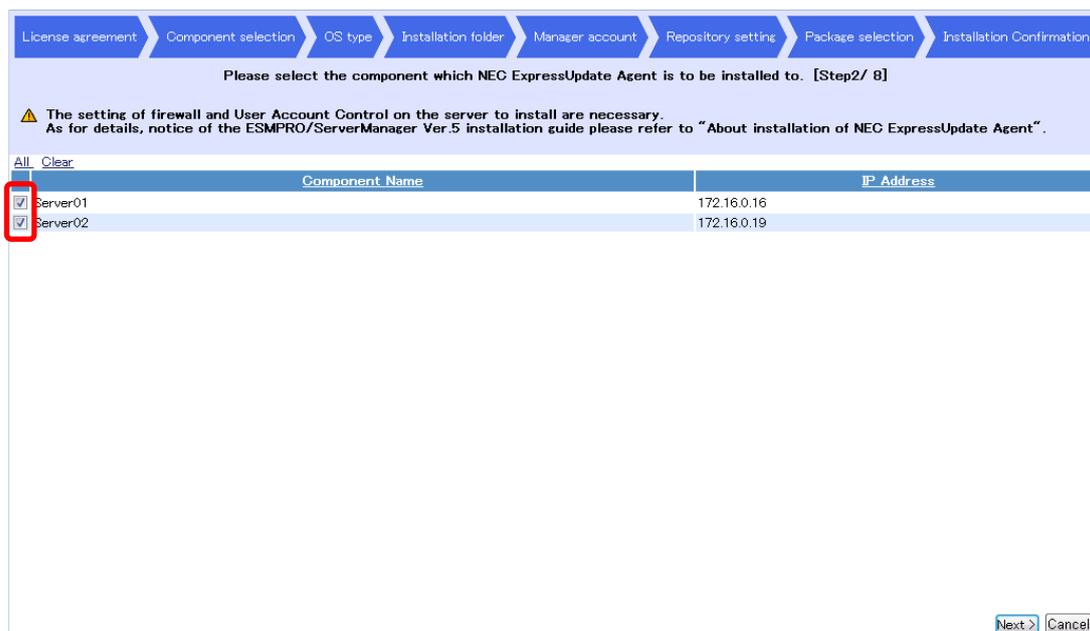


Fig. 78 Server selection

3. OS type

For each OS type, configure the settings of the management target servers on which to install the NEC ExpressUpdate Agent. On and after this screen, the management target servers selected in step 2 "Server selection" are displayed. Select the OS type for each management target server and click "Next."

* You can paste an OS type to the selected servers in a batch operation.

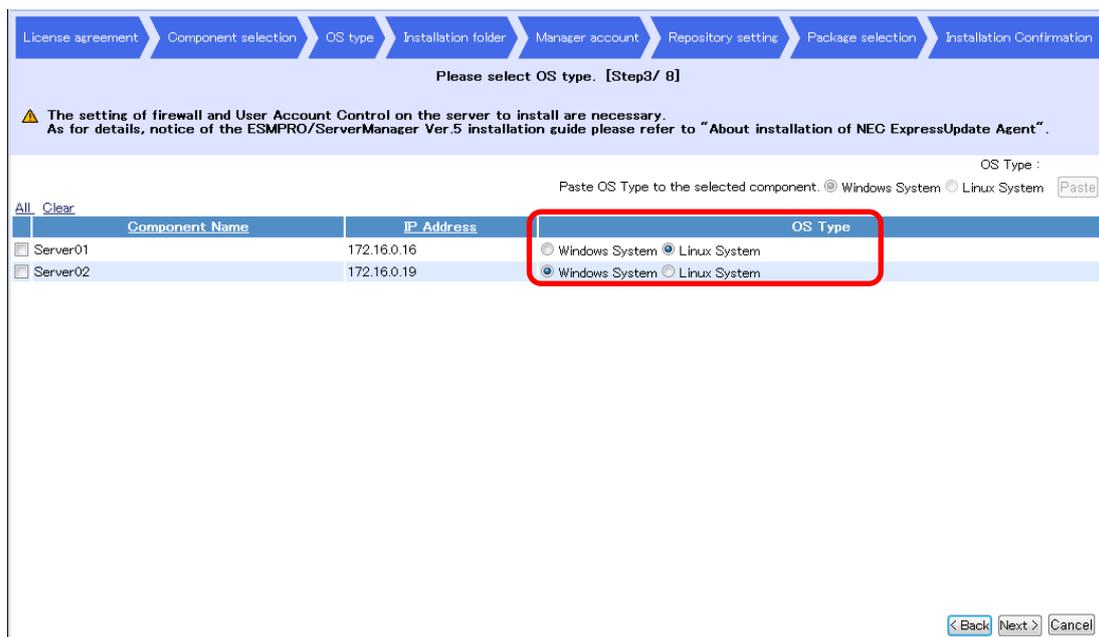


Fig. 79 OS Type

4. Installation folder

Set the folder in which to install NEC ExpressUpdate Agent. Enter an installation path in the "Installation Folder" column and click "Next."

* You can paste an installation folder to the selected servers in a batch operation.

Note)

- The installation folder cannot be specified if the OS type is "Linux System." The NEC ExpressUpdate Agent will be installed in "/opt/nec."
- The installation folder cannot be specified if Universal RAID Utility Ver. 2.10 or later is already installed on the management target servers.

NEC ExpressUpdate Functions and Features

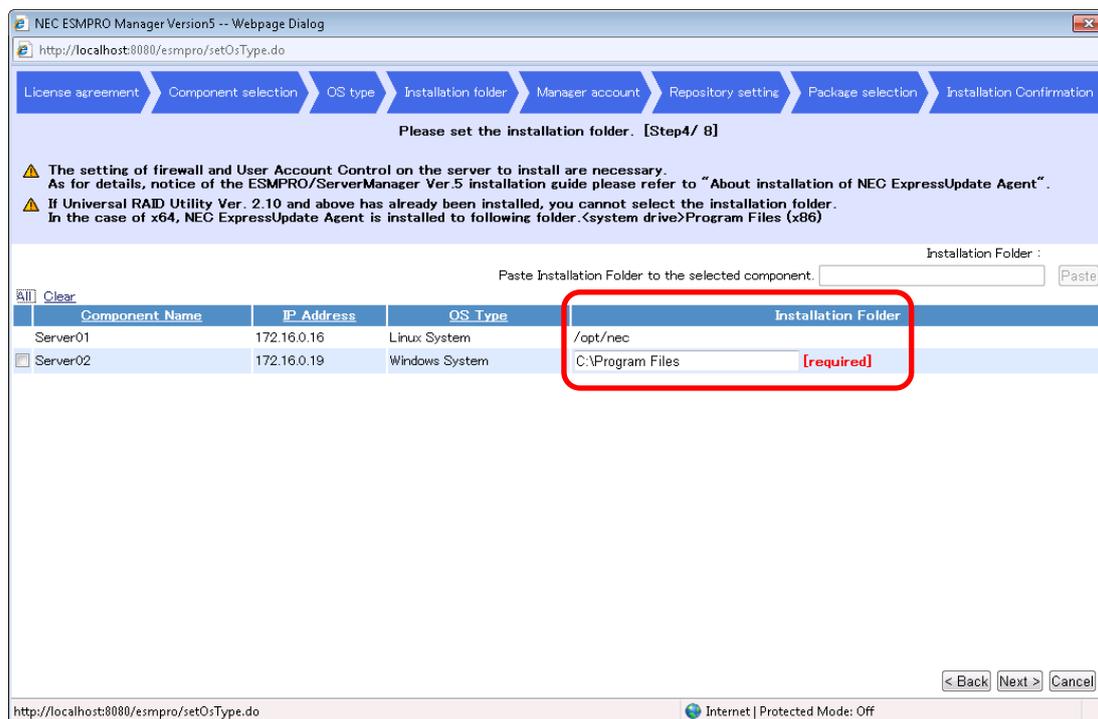


Fig. 80 Installation Folder

5. Manager account

Set the administrator account information of the management target server on which NEC ExpressUpdate Agent is installed. Enter "User Name" and "Password," and click "Next."

* You can paste the user name and password to the selected servers in a batch operation.

NEC ExpressUpdate Functions and Features

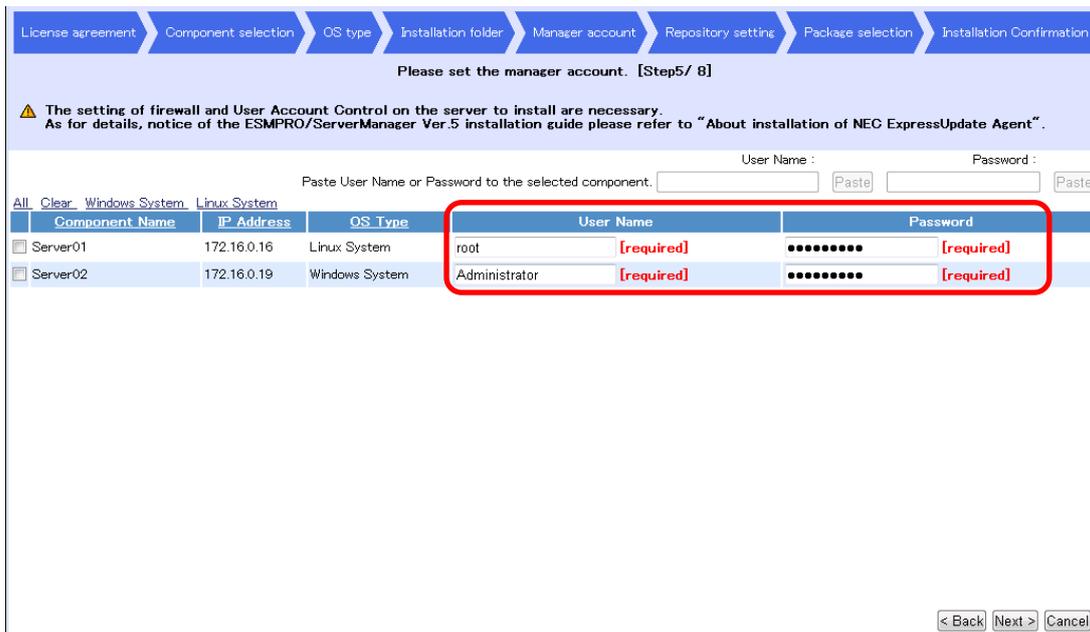


Fig. 81 Manager account

6. Repository setting

The repository setting information is displayed. When there is no change in the current setting, click "Next." To change the setting, click "Edit" and edit the setup values. Refer to section 3.3 "Setting the Repository" for details on the setting procedure.

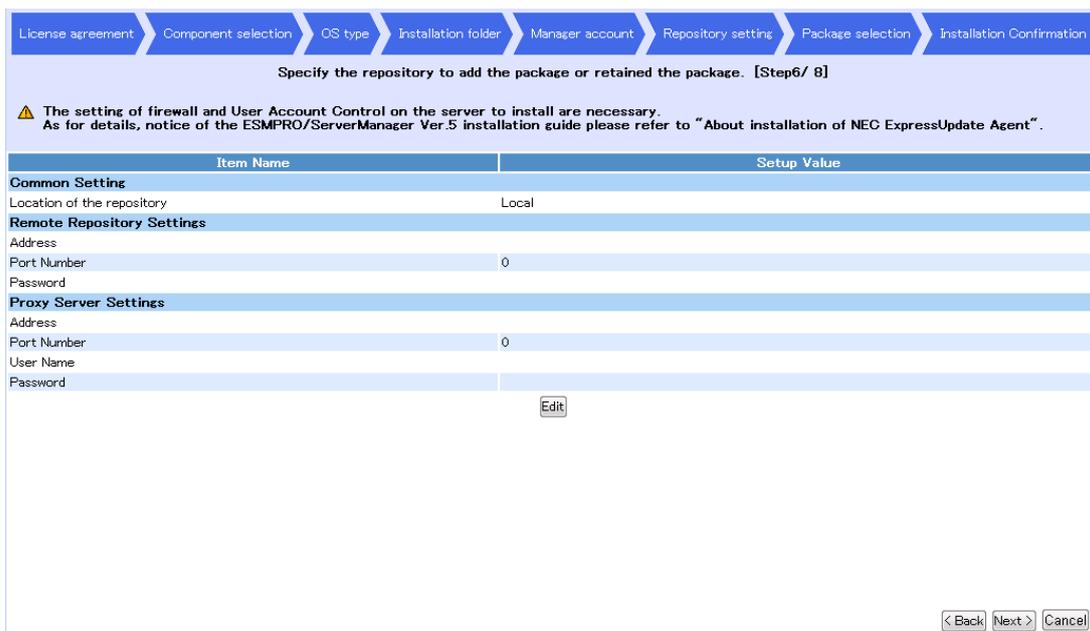


Fig. 82 Repository Setting

7. Package selection

For each OS type, specify how to obtain the NEC ExpressUpdate Agent package to install. Select the "Location of the update package" from the list box and click "Next."

Note)

- When the both OS types are selected in step 3, the "Package selection" screen for Windows is displayed first. Then the "Package selection" screen for Linux is displayed. Select the "Location of the update package" from the list box for each OS.
- When only one of the OS types is selected in step 3, only the "Package selection" screen for the selected OS type is displayed.

Refer to 3.8.1 "When Performing "Check Connection" of the Registered Server" for details on how to obtain the NEC ExpressUpdate Agent package.

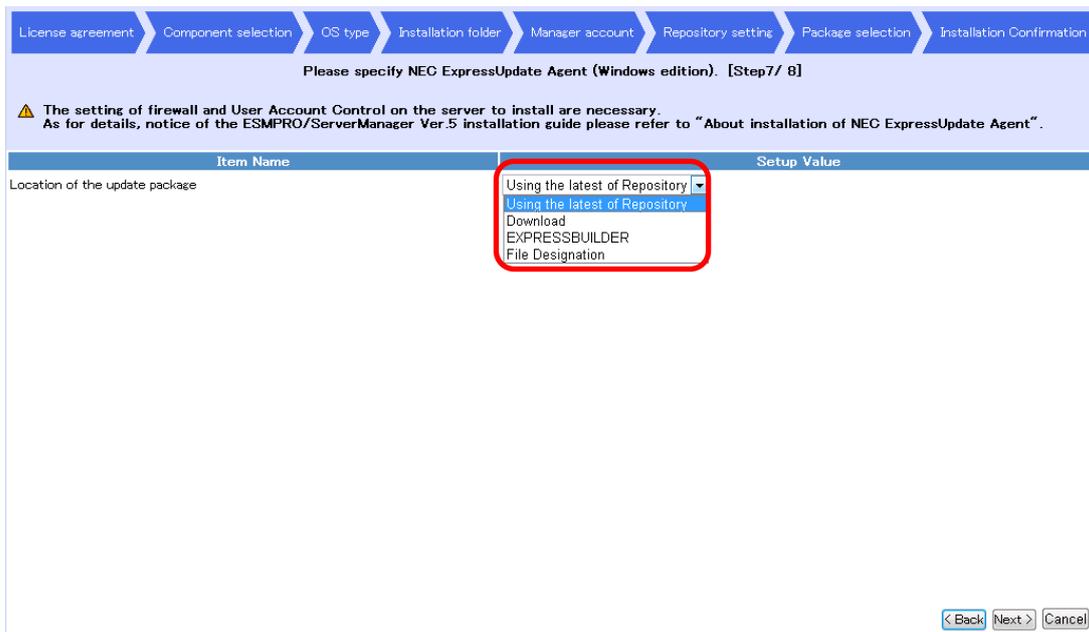


Fig. 83 Package selection (for Windows OS)

NEC ExpressUpdate Functions and Features

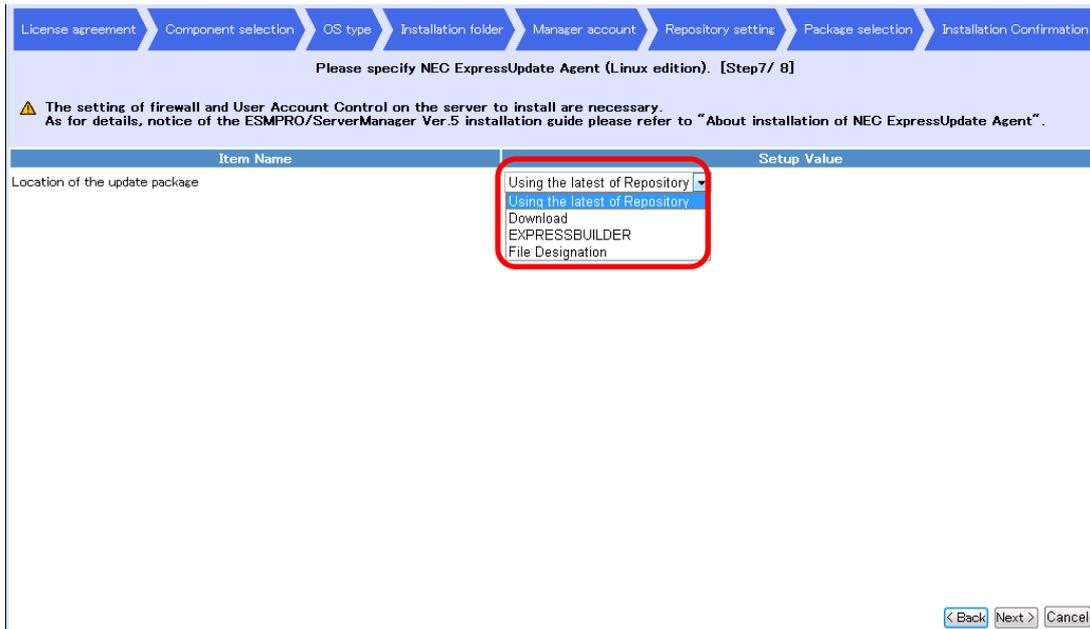


Fig. 84 Package selection (for Linux OS)

8. Installation Confirmation

The installation setting information of NEC ExpressUpdate Agent is displayed in a list. After checking the setting, click "Installation."

* The installation does not start at this stage yet.

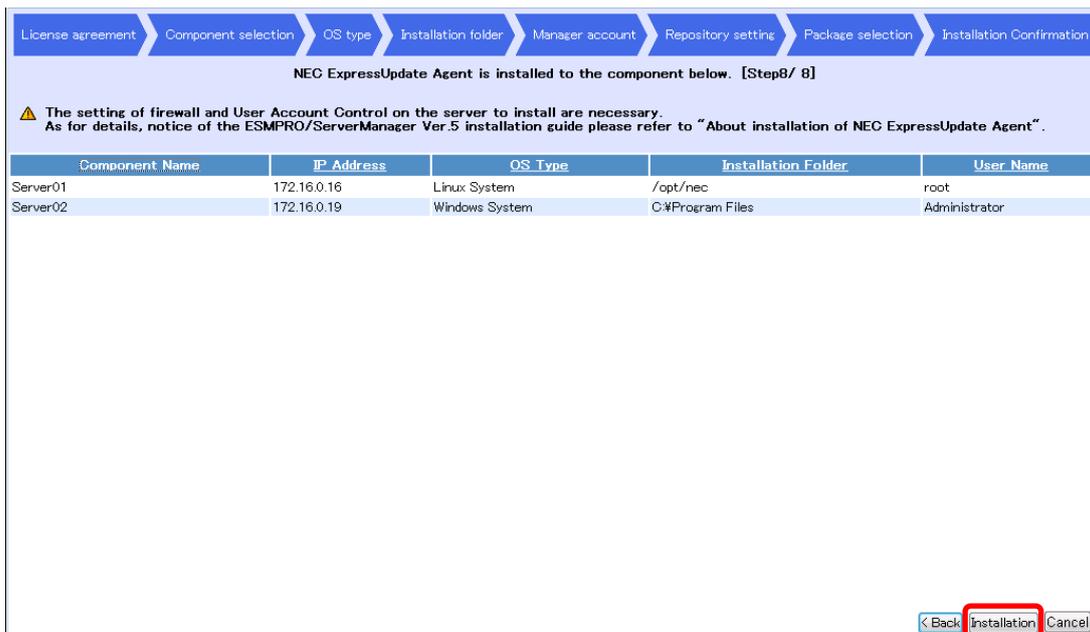


Fig. 85 Installation Confirmation

NEC ExpressUpdate Functions and Features

When "Installation" is clicked, a confirmation pop-up is displayed. Click "OK" to install. The installation starts.

* When "Cancel" is clicked, the installation does not start.

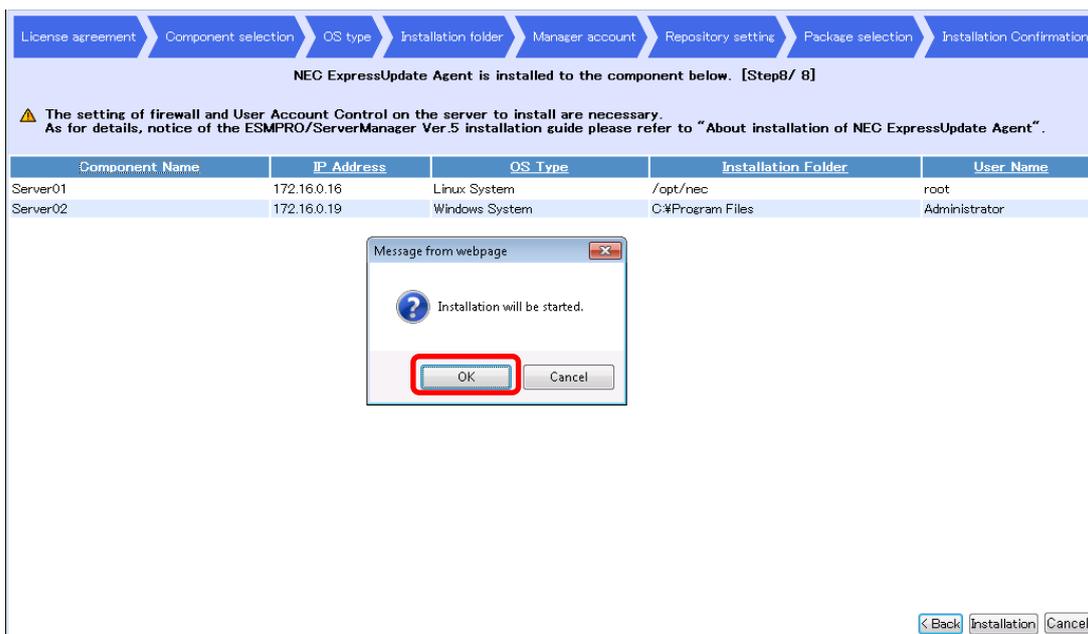


Fig. 86 Confirmation for starting the installation

When the installation of NEC ExpressUpdate Agent is started, the installation status is displayed and the progress status of the installation can be checked.

[Installing : 2 count] (Remaining Time : 0 seconds)

Component Name	IP Address	Status	Remaining Time (seconds)
Server01	172.16.0.16	<div style="width: 17%; background-color: green;"></div> 17%	48
Server02	172.16.0.19	<div style="width: 17%; background-color: green;"></div> 17%	48

Fig. 87 Installation status

When the installation is completed, the management target servers are registered in NEC ESMPRO Manager and NEC ExpressUpdate becomes available.



The screenshot shows the NEC ESMPRO Manager interface. On the left, a tree view shows a hierarchy: root > Group01 > Server01 and Server02. Both Server01 and Server02 have green checkmarks next to them. The main window displays a table titled "Auto Registration" with the following data:

Component Name	IP Address	Status	Remaining Time (seconds)
Server01	172.16.0.16	Installing the software has been completed successfully.(NEC ExpressUpdate Agent 3.00 in /opt/nec/axis2c)	-
Server02	172.16.0.19	Installing the software has been completed successfully.(NEC ExpressUpdate Agent 3.00 in C:\Program Files\axis2c)	-

Fig. 88 Installation results

3.8.3. When Installing from the NEC ExpressUpdate Screen

When a management target server that satisfies all of the following conditions exists on the "NEC ExpressUpdate" screen, the "Install NEC ExpressUpdate Agent" link will be displayed for the management target server.

1. "Updates via management controller" is enabled.
2. "Updates via NEC ExpressUpdate Agent" is disabled.
3. The OS IP Address of the management target server is set.
4. NEC ExpressUpdate Agent is not installed in the management target server.
5. The OS of the management target server is running.

NEC ExpressUpdate Functions and Features

Item Name	Setup Value
Product Information	
Model Name	Express5800/GT110d-S [N8100-1772Y]
Serial Number	1800160
GUID	59d64680-cca5-11e0-8001-50e549824bbd
Server information	
Information	
Server status	
STATUS Lamp	 Green On
Power Status	 DC On
LCD	POST Completed Successfully
System Power-on Hours	2989 hours 0 minutes
System Monitoring	Monitoring OS
Monitoring Interval	180seconds
Version Information	
OS Version	Windows Server 2003 R2 Service Pack 2
BIOS Version	4.6.0031
LAN Driver Version	14.6.0.6
NEC ESMPRO Agent Version	4.53
NEC ESMPRO Agent Extension Version	2.00
Management Controller Information	
BMC FW Revision	00.48
IPMI Version	2.0
Remote KVM and Media License	Installed
NEC ExpressUpdate Information	
Updates via NEC ExpressUpdate Agent	<input type="radio"/> Disable
Updates via Management Controller	<input type="radio"/> Enable
Status	<input checked="" type="radio"/> Latest Condition
Next Installation Schedule	02/07/2012 07:00

Fig. 89 Management target server's state screen

CHECK:

- For servers in which EXPRESSSCOPE Engine 3 is not installed, the remote installation function cannot be used from the NEC ExpressUpdate screen.

Click the "Install NEC ExpressUpdate Agent" link, and the installation wizard will run. Set necessary information to install.

For the details of the installation wizard, refer to 3.8.1.1.

NEC ExpressUpdate Functions and Features

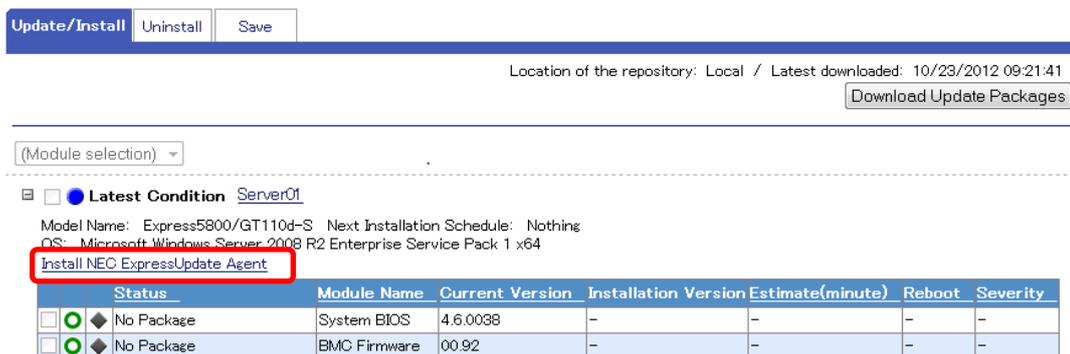


Fig. 90 Remote installation from the NEC ExpressUpdate screen

3.8.4. Installation Status and Results

3.8.4.1. Installation Status

From "Tools" > "ExpressUpdate Management Information" > "ExpressUpdate Agent Install Status" > "Install Status," the progress status of all the management target servers on which ExpressUpdate Agent is being installed can be checked.

* Only the progress status of the on-going installation is displayed. When the installation is completed, the result is displayed in "Install Result."

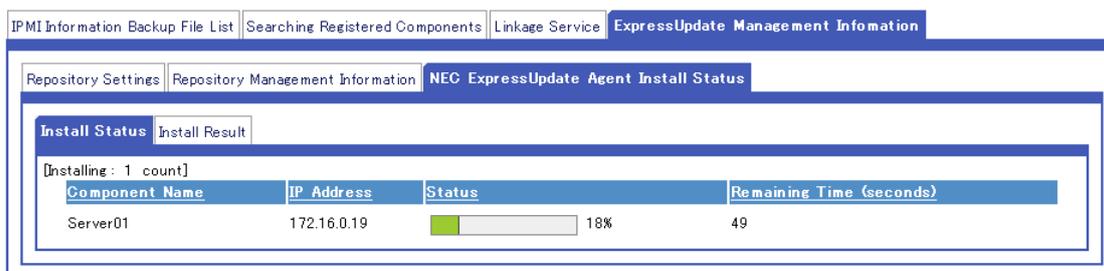


Fig. 91 Installation status of NEC ExpressUpdate Agent

3.8.4.2. Installation Results

From "Tools" > "ExpressUpdate Management Information" > "ExpressUpdate Agent Install Status" > "Install Result," the installation results of the management target servers on which NEC ExpressUpdate Agent was installed remotely can be checked. The installation results can be checked also from the "Application Log."

NEC ExpressUpdate Functions and Features



The screenshot shows a web interface for NEC ExpressUpdate Agent. The main menu includes 'IPMI Information', 'Backup File List', 'Searching Registered Components', 'Linkage Service', and 'ExpressUpdate Management Information'. Under 'ExpressUpdate Management Information', there are sub-menus for 'Repository Settings', 'Repository Management Information', and 'NEC ExpressUpdate Agent Install Status'. The 'Install Status' sub-menu is active, showing a table with two rows: one for a successful installation and one for a failed installation.

Result	Component Name	IP Address	Date/Time	Contents
Information	Server01	172.16.0.19	1/24/2012 19:45:10	Installing the software has been completed successfully.(NEC ExpressUpdate Agent 3.00 in C:\Program Files#axis2c)
Error	Server01	172.16.0.19	1/24/2012 19:43:16	Failed to install the software.(Failed to login. Please confirm your user name and password.)

Fig. 92 Installation results of NEC ExpressUpdate Agent

- 1) When the installation is successful
A message indicating the completion of the installation, the version of the NEC ExpressUpdate Agent installed, and the installation location are displayed in the "Status" column.



This is a close-up of the 'Information' row from the table in Fig. 92. It shows the component name 'Server01', IP address '172.16.0.19', date/time '1/24/2012 19:45:10', and the content 'Installing the software has been completed successfully.(NEC ExpressUpdate Agent 3.00 in C:\Program Files#axis2c)'. The 'Information' icon is a lowercase 'i' in a blue square.

Information	Server01	172.16.0.19	1/24/2012 19:45:10	Installing the software has been completed successfully.(NEC ExpressUpdate Agent 3.00 in C:\Program Files#axis2c)
-------------	----------	-------------	--------------------	---

Fig. 93 Example of succeeded installation

- 2) When the installation fails
A message indicating the installation failure and the cause are displayed in the "Status" column. Check the installation settings and environment again, and install NEC ExpressUpdate Agent remotely again.



This is a close-up of the 'Error' row from the table in Fig. 92. It shows the component name 'Server01', IP address '172.16.0.19', date/time '1/24/2012 19:43:16', and the content 'Failed to install the software.(Failed to login. Please confirm your user name and password.)'. The 'Error' icon is a red 'x' in a square.

Error	Server01	172.16.0.19	1/24/2012 19:43:16	Failed to install the software.(Failed to login. Please confirm your user name and password.)
-------	----------	-------------	--------------------	---

Fig. 94 Example of failed installation

NEC ExpressUpdate Functions and Features

Note) If the installation fails, the following messages may be displayed in the "Status" column. When these messages are displayed, NEC ExpressUpdate cannot be used since the management target server does not support NEC ExpressUpdate.

Failed to install the software (The repository does not have any update package which supports the specified component.)

Fig. 95 Messages displayed when the NEC ExpressUpdate functions are not supported

3.9. Uninstalling Software

It is possible to uninstall software remotely from NEC ESMPRO Manager when the update package supports uninstallation of the software. Two methods are available: selecting a single server to uninstall software and selecting a group of servers to uninstall software at once.

3.9.1. Selecting a Single Server to Uninstall Software

Follow the steps below to uninstall software from the management target server.

1. From the tree view, click the target server from which to uninstall software.
2. From the "Remote Control" tab, open "Remote Control" > "NEC Express Update."
3. Select the "Uninstall" tab.

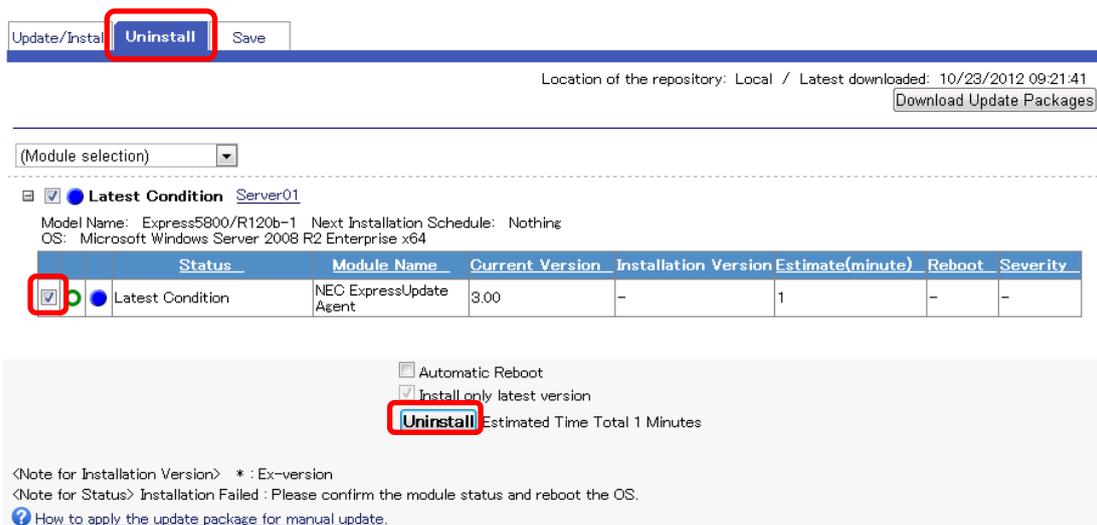


Fig. 96 Selecting a single server to uninstall software

- The check boxes for uninstallable software are selectable. Select the software to uninstall and click "Uninstall" to start the uninstallation.
When the following dialog appears, click "OK."

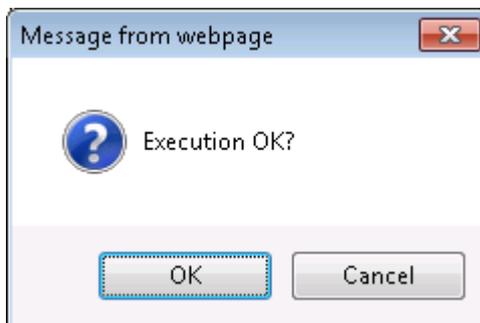


Fig. 97 Uninstallation confirmation

When "Automatic Reboot" is selected

The server will be rebooted if required after all the software is uninstalled.

During the uninstallation, the progress status is shown in the progress bar.

Under Uninstalling Server01
 Model Name: Express5800/R120b-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows Server 2008 R2 Enterprise x64

Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
	NEC ExpressUpdate Agent	3.00	-	1	-	-

Fig. 98 Uninstallation progress status

When cancelling during the uninstallation

By clicking "Cancel," the unexecuted uninstallation can be cancelled. However, the uninstallation of software for which the uninstallation is already started or completed cannot be cancelled. Only software for which the uninstallation is not started yet can be cancelled.

- Check the uninstallation results.
When the software was uninstalled successfully, the following screen appears.



Fig. 99 Uninstallation results

Note) After NEC ExpressUpdate Agent is uninstalled, NEC ExpressUpdate cannot be used for the management target server. If the management target server is monitored only by NEC ExpressUpdate, the server is deleted from the management target of NEC ESM PRO Manager after the uninstallation.



Fig. 100 Notification for excluded management target

CHECK:

- When you uninstall NEC ExpressUpdate Agent, the following message may be displayed. In such a case, upgrade the NEC ExpressUpdate Agent version to 2.03 or later once and then uninstall NEC ExpressUpdate Agent. The version of NEC ExpressUpdate Agent can be upgraded remotely by using NEC ExpressUpdate.

NEC ExpressUpdate Functions and Features

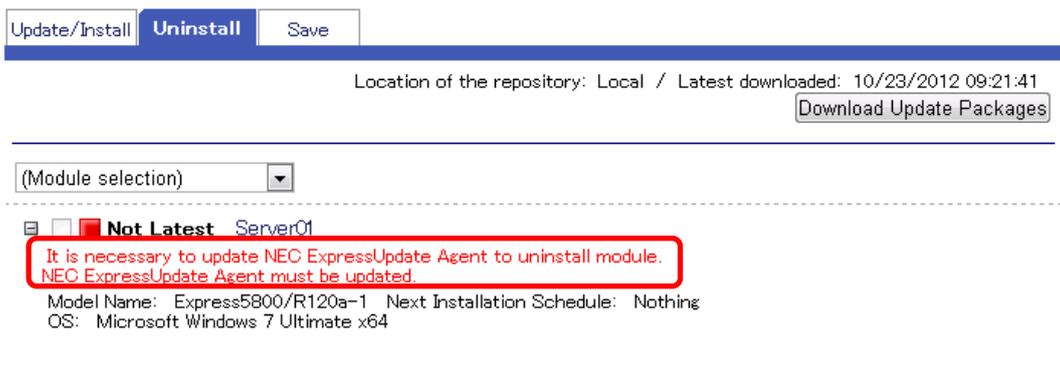


Fig. 101 Update notification for NEC ExpressUpdate Agent

3.9.2. Selecting a Group of Servers to Uninstall Software at Once

Follow the steps below to uninstall software for all the servers managed as a group at once.

1. From the tree view, click the group from which to uninstall software.
2. From the "Server Control" tab, open "Server Control" > "NEC ExpressUpdate."
3. Select the "Uninstall" tab.
4. NEC ExpressUpdate Agent runs in the group and the list of servers that can be managed by NEC ExpressUpdate is displayed.

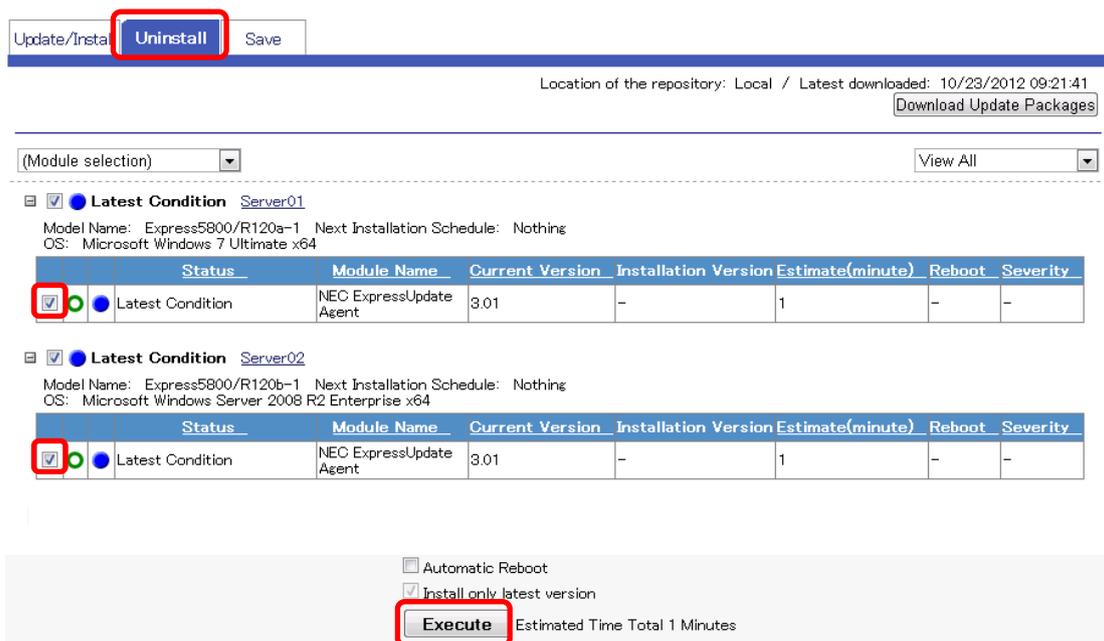


Fig. 102 Selecting a group of servers to uninstall software

- The check boxes for uninstallable software are selectable. Select the software to uninstall and click "Uninstall" to start the uninstallation.
When the following dialog appears, select "OK."

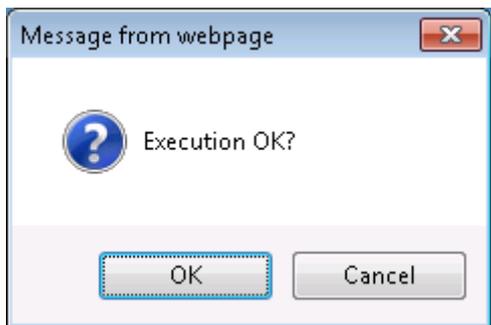


Fig. 103 Uninstallation confirmation

When "Automatic Reboot" is selected
The server will be rebooted if required after all the software is uninstalled.

During the uninstallation, the progress status is shown in the progress bar.

Under Uninstalling [Server01](#)
 Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows 7 Ultimate x64

Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
	NEC ExpressUpdate Agent	3.01	-	1	-	-

Under Uninstalling [Server02](#)
 Model Name: Express5800/R120b-1 Next Installation Schedule: Nothing
 OS: Microsoft Windows Server 2008 R2 Enterprise x64

Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
	NEC ExpressUpdate Agent	3.01	-	1	-	-

Fig. 104 Uninstallation progress status

When cancelling the uninstallation in progress
By clicking "Cancel," the unexecuted uninstallation can be cancelled. However, the uninstallation of software for which the uninstallation is already started or completed cannot be cancelled. Only software for which uninstallation is not started yet can be cancelled.

- Check the uninstallation results.



Fig. 105 Uninstallation results

CHECK:

- After NEC ExpressUpdate Agent is uninstalled, the function of Updates via NEC ExpressUpdate Agent cannot be used for the management target. If the management target server is managed only by NEC ExpressUpdate, the server will be deleted from the management target of NEC ESM PRO Manager.



Fig. 106 Notification for excluded management target

CHECK:

- When you uninstall NEC ExpressUpdate Agent, the following message may be displayed. In such a case, upgrade the NEC ExpressUpdate Agent version to 2.03 or later once and then uninstall NEC ExpressUpdate Agent. The version of NEC ExpressUpdate Agent can be upgraded remotely by using the NEC ExpressUpdate.

NEC ExpressUpdate Functions and Features

Update/Install Uninstall Save

Location of the repository: Local / Latest downloaded: 10/23/2012 09:21:41
[Download Update Packages](#)

(Module selection) View All

Not Latest Server01
It is necessary to update NEC ExpressUpdate Agent to uninstall module.
NEC ExpressUpdate Agent must be updated.
Model Name: Express5800/R120a-1 Next Installation Schedule: Nothing
OS: Microsoft Windows 7 Ultimate x64

Latest Condition Server02
Model Name: Express5800/R120b-1 Next Installation Schedule: Nothing
OS: Microsoft Windows Server 2008 R2 Enterprise x64

Status	Module Name	Current Version	Installation Version	Estimate(minute)	Reboot	Severity
<input checked="" type="checkbox"/>	Latest Condition	NEC ExpressUpdate Agent	3.01	-	1	-

Fig. 107 Update notification for NEC ExpressUpdate Agent

4. **FAQ**

4.1. What will Happen to the Installation of an Update Package if the Communication with the Agent is Lost During the Installation?

If the communication with the NEC ExpressUpdate Agent has been lost while an update package is being installed, the installation in process at that time continues till the end of the installation without being interrupted. However, because the installation results are not sent to the NEC ESMPRO Manager, they cannot be checked on the NEC ExpressUpdate screen or in the "Application Log."

If multiple update packages are being installed when the communication has been lost, only the update packages whose installations are not yet executed at that time will be cancelled. In addition, the server will not be rebooted even if the "Automatic Reboot" check box is selected.

For example, when installing the following two update packages,

Table 22 Update Package Installation and Reboot

Package name	Reboot
PKG 1	Required
PKG 2	Required

The packages will be installed in the following order:

1. Installation of PKG 1
2. Installation of PKG 2
3. Reboot

If the communication has been lost when the PKG 1 is being installed, the installation results will be as follows:

1. Installation of the PKG 1 → Completed
2. Installation of the PKG 2 → Not executed
3. Reboot → Not executed

4.2. What Should I Do If the Communication with NEC ExpressUpdate Agent Is Lost?

If the NEC ExpressUpdate Agent services seem to be not running properly due to some causes such as being unable to communicate with NEC ESMPRO Manager, restarting the services may resolve the problem. Execute the following batch file on the management target server and restart the NEC ExpressUpdate Agent services.

- For Windows -

<NEC ExpressUpdate Agent installation folder>\axis2c\bin\eciServiceReStart.bat

- For Linux -

/opt/nec/axis2c/bin/eciServiceReStart.sh

4.3. How Can the Repository Be Transferred?

When you replace the server on which NEC ESMPRO Manager is installed, the update package information managed by the repository can be transferred by following the steps below.

However, the version of NEC ESMPRO Manager on the destination server needs to be later than that on the source server.

1. Stop the NEC ESMPRO Manager services on the source and destination servers.
From "Run," enter "services.msc" and click "OK." Right-click each of "NEC ESMPRO Manager Common Component" and "NEC ESMPRO Manager Web Container" and select "Stop."
2. Copy update packages.
Copy all the files in the folder "location where update packages are saved (the default is NEC ESMPRO Manager installation directory\ESMWEB\package pool)" specified when installing NEC ESMPRO Manager to the "location where update packages are saved" specified when installing NEC ESMPRO Manager on the destination server.

* There is no problem if the "location where update packages are saved" differs between the source and destination servers.
3. Overwrite the repository data
Save the "db" folder (the default is <System Drive>\Program Files\ESMPRO\ESMWEB\wbserver\webapps\esmpro\WEB-INF\db) under the

installation folder of NEC ESMPRO Manager to the destination server.

* Ensure that the directory allocation is the same for both the source and destination servers.

4. Start the NEC ESMPRO Manager services of the destination server.
From "Run," enter "services.msc" and click "OK." Right-click each of "NEC ESMPRO Manager Common Component" and "NEC ESMPRO Manager Web Container" and select "Start."
5. Add the management target server.

4.4. What Should I Do If the Log File Grows?

When the version of NEC ESMPRO Manager is 5.1 or later and earlier than 5.24, the following log files may grow due to initialization failure.

If the version of your NEC ESMPRO Manager falls into the range described above, please refer to the Web site below to update the NEC ESMPRO Manager because such failure does not occur in 5.24 and later versions.

<http://www.58support.nec.co.jp/global/download/index.html>

If you continue to use a version in such range, perform the recovery operation by following the steps below.

File

- For Windows OS -

<NEC ESMPRO Manager installation folder>\ESMWEB\wbserver\webapps
\esmpro\WEB-INF\service\derby.log

- For Linux OS -

/opt/nec/es_manager/wbserver/webapps/esmpro/WEB-INF/service/derby.log

Countermeasures

- For Windows OS -

1. Stop the NEC ESMPRO Manager services.
Stop the following two services from the Windows service window.
 - NEC ESMPRO Manager CommonComponent
 - NEC ESMPRO Manager Web Container

NEC ExpressUpdate Functions and Features

2. Delete the entire folder below.
 <NEC ESMPRO Manager installation folder>
 \ESMWEB\wbserver\webapps\esmpro\WEB-INF\db
3. Start the NEC ESMPRO Manager services.
 Start the following two services from the Windows service window.
 - NEC ESMPRO Manager CommonComponent
 - NEC ESMPRO Manager Web Container
4. The Initialization is executed again. Check that the log file growth has stopped.
5. Restore the update packages.
 - 1) Copy all the update packages (zip file) in the folder where update packages are saved and that was specified when installing NEC ESMPRO Manager to another location.
 - * The default folder where update packages are saved is as follows.
 <NEC ESMPRO Manager installation folder>\ESMWEB\pkgpool
 - 2) Log in to NEC ESMRO Manager and go to "Tools" > "ExpressUpdate Management Information" > "Repository Management Information" > "Add Update Packages." Add all the update packages copied in step 1 to the repository.

- For Linux OS -

1. Stop the NEC ESMPRO Manager services.
 Enter the following commands in the console.
 - /etc/rc.d/init.d/esmsm stop
 - /etc/rc.d/init.d/esmweb stop
2. Delete the entire folder below.
 /opt/nec/es_manager/wbserver/webapps/esmpro/WEB-INF/db
3. Start the NEC ESMPRO Manager services.
 Enter the following commands in the console.
 - /etc/rc.d/init.d/esmsm start
 - /etc/rc.d/init.d/esmweb start
4. The Initialization is executed again. Check that the log file growth has stopped.

NEC ExpressUpdate Functions and Features

5. Restore the update packages.

- 1) Copy all the update packages (zip file) in the folder where update packages are saved and that was specified when installing NEC ESMPRO Manager to another location.

* The default folder where update packages are saved is as follows.

`/opt/nec/es_manager/pkgpool`

- 2) Log in to NEC ESMPRO Manager and go to "Tools" > "ExpressUpdate Management Information" > "Repository Management Information" > "Add Update Packages." Add all the update packages copied in step 1 to the repository.