

MasterScope Network Manager Setup Guide (Rolling Update)

**For Windows / EXPRESSCLUSTER X
environment**

Copyrights

The information in this document is the property of NEC Corporation. No part of this document may be reproduced or transmitted in any form by any means, electronic or mechanical, for any purpose, without the express written permission of NEC Corporation.

The information in this manual may not include all the information disclosed by NEC Corporation or may include expressions that differ from information disclosed by other means. Also, this information is subject to change or deletion without prior notice.

Although every effort has been made to ensure accuracy in producing this manual, NEC Corporation does not guarantee the accuracy or applicability of the information contained herein. In addition, NEC Corporation is not liable for any loss or damage incurred as a result of the use or non-use of this information by any party.

Trademark

- Microsoft, Windows, Windows Server, Internet Explorer, Office and Excel are the registered trademarks of Microsoft Corporation in the United States and other countries.
- Intel and Intel Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
- UNIX is the registered trademark of The Open Group in the United States and other countries.
- Linux is the registered trademark of Linus Torvalds in the United States and/or other countries.
- Red Hat is the trademark or registered trademark of Red Hat Software, Inc.
- PostgreSQL is the name of the open source object-relational database management system advocated by the PostgreSQL Global Development Group.
- PATLITE is a registered trademark of PATLITE Corporation.
- Adobe, Acrobat and Reader is the trademarks or the registered trademarks of Adobe Systems Incorporated in the United States and other countries.
- The anti-virus software "VirusScan Enterprise 8.0" is a McAfee, Inc. product.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).
- This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).
- All other company names and trademark names are the trademarks or registered trademarks of their respective companies.
- The [™] and [®] symbols are not specified in this manual.

Introduction

Thank you for choosing MasterScope Network Manager.

This document describes how to upgrade (rolling update) MasterScope Network Manager to the version 9.0 or later in the cluster environment.

- Throughout this manual, the installation folders on thw above are referred to as *%NVP_INSTALL_PATH%*.
- Throughout this manual, the data installation path on the shared disk above are referred to as *%NVP_SHARE_PATH%*.
- To return to the former page after jumping from the hyper link in the PDF manual, press ALT + Left keys. (In the case of using Adobe Reader)
- Due to upgrades, the specifications and design of windows in this manual are subject to change without notice.

Notations and Text Conventions

Document Conventions

In this manual, the following notations are used to indicate items that require special attention and supplementary information.

Notations of Items Requiring Attention and Supplementary Information

Mark	Description
 Caution	Indicates important points that the user should observe to configure and use the product properly.
1) Note	Describes notes placed in the text.
Tip	Indicates useful information.

Text Conventions

In this manual, the following text conventions are used.

Text Conventions

Notation	Description	Example
uname	Indicates graphical user interfaces such as dialog boxes, tabs, menus, items, and buttons.	Alert Detail dialog, OK button
<i><userinput></i>	Indicates items that change depending on the user environment or items that the user must specify.	<i><filepath></i>
configuration file	Indicates the contents of the configuration file.	Set the following value:

Notation	Description	Example
		port = 54321
command line	Indicates command line operations.	Run the following script: > NvPRODBSetup.bat

Abbreviations

Abbreviations

Formal Name	Abbreviation
MasterScope Network Manager	Network Manager, NetMgr
Configuration management database	Configuration management DB, CMDB
Alert management database	AlertDB
sFlow database	sFlowDB
MasterScope Integrated Management Server	IMS
MasterScope Network Flow Analyzer	NFA

Install Path

Default installation directory: Windows

- 32bit OS: C:\Program Files\NEC\UMF\Operations
- 64bit OS: C:\Program Files (x86)\NEC\UMF\Operations

Contents

Chapter 1. Overview of Rolling Update Operations.....	1
1.1 Environments Supporting Rolling Updates	2
1.2 Rolling Update Work Flow	2
1.2.1 When using internal databases	2
1.2.2 When using external databases.....	4
Chapter 2. Preparations for the rolling update.....	7
2.1 Confirming the Precautions in Advance	8
2.2 Preparations	8
2.2.1 Confirming the firewall settings	8
2.2.2 Confirming the setup parameters for the existing environment.....	8
2.2.3 Parameter design on usage of the Web Console.....	10
2.3 Suppressing and Canceling the Failover Process Due to Error Detection	10
2.4 Backing up the Existing Environment	11
2.4.1 Backing up the active host.....	11
2.4.2 Backing up the standby host.....	13
Chapter 3. Performing the Rolling Update	14
3.1 Updating the Manager Function	15
3.2 Updating Databases.....	20
3.2.1 Updating Internal Databases.....	20
3.2.2 Updating external databases	21
3.3 Updating the configuration file related to using Web Console	23
3.4 Configuring for new services	25
3.4.1 Registering new services	25
3.4.2 Configuring new services for Cluster Environment	26
3.5 Moving a Failover Group	28
3.6 Updating the Monitoring Terminal Function	30
3.7 Starting the Monitoring Terminal Function	34
3.8 Enable WebAPI communication.....	37
Chapter 4. Troubleshooting.....	38
4.1 If RupInstCmd.log Is Not Output	39
4.2 If the End Code of RupInstCmd.log Is Other Than "0"	39
4.2.1 Restoring the shared disk	40
4.2.2 Remove the configuration for new services.....	43
4.2.3 Switching back to the old version of host	45
4.2.4 Failback of External Databases (SQL Server)	46
4.2.5 Failback of the upgraded Environment.....	50



Chapter 1.

Overview of Rolling Update Operations

This chapter provides a general overview of the rolling update operations, which minimizes the downtime of Network Manager while upgrading Network Manager in a cluster environment.

Contents

1.1 Environments Supporting Rolling Updates	2
1.2 Rolling Update Work Flow	2

A rolling update is a type of update that updates the standby host first while an old version of Network Manager operating in a cluster environment is kept running, and then updates the active host. Updating the standby host first ensures that the down time for Network Manager due to the update is minimized.

A rolling update may not be supported depending on the version of Network Manager in the existing environment. In addition, the procedure may differ depending on the database used. Before performing the rolling update, be sure to confirm the contents of this document.

1.1 Environments Supporting Rolling Updates

The following describes the environment in which rolling updates can be performed.

Upgrading Network Manager with a rolling update requires all of the following conditions be met.

- The existing environment in which to perform the update is in a cluster configuration.
- The version of Network Manager in the installation media used for the rolling update is 9.0 or later.
- Network Manager supports operations under the existing OS environment after the rolling update.

Before starting the rolling update, be sure to confirm that the above conditions are met.

1.2 Rolling Update Work Flow

This section describes the work flow of performing a rolling update for Network Manager.

The rolling update work flow differs depending on whether the internal or external databases are used in the existing environment. Confirm the work flow according to the existing environment.

1.2.1 When using internal databases

The following describes the rolling update work flow in an environment that uses internal databases.

The explanation in this section assumes that the rolling update is performed in the following environment.

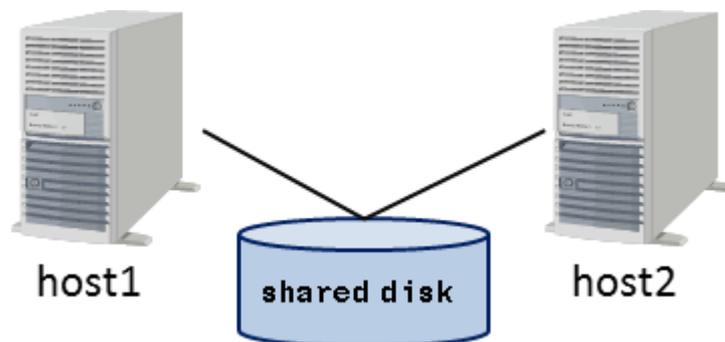


Figure 1-1 Existing environment which the rolling update is performed

- The existing environment is in a 1:1 cluster configuration with two servers named "host1" and "host2".
- In the initial state, "host1" operates as an active host, and "host2" operates as a standby host.

The rolling update work flow in the above environment is given in "[Table 1-1 The rolling update work flow \(when using internal databases\) \(page 3\)](#)".

Table 1-1 The rolling update work flow (when using internal databases)

No.	Work step	Overview
1	Preparations for the rolling update	"2.1 Confirming the Precautions in Advance (page 8)" Confirm the precautions on the operations related to a rolling update.
		"2.2 Preparations (page 8)" Perform the following necessary steps before applying the rolling update. <ul style="list-style-type: none"> "Confirming the firewall settings (page 8)" "Confirming the setup parameters for the existing environment (page 8)" "Parameter design on usage of the Web Console (page 10)"
		"2.3 Suppressing and Canceling the Failover Process Due to Error Detection (page 10)" Temporarily change the settings on the cluster software so that no failover occurs during the rolling update.
2	Back up host2 (standby host)	"2.4.2 Backing up the standby host (page 13)" Back up the environmental data for the standby host.* ¹
3	Update host2 (standby host)	"3.1 Updating the Manager Function (page 15)" Overwrite install the manager function of the standby host.
4	Back up host1 (active host)	"2.4.1 Backing up the active host (page 11)" Back up the environmental data for the active host.* ¹
5	Updating the databases from host1 (active host)	"3.2.1 Updating Internal Databases (page 20)" Execute the database update script from the active host to update the databases.
6	Updating the configuration file from host1 (active host)	"3.3 Updating the configuration file related to using Web Console (page 23)" Update the configuration file related to using Web Console from the active host. This work is required if the original Network Manager version is 8.0 or lower.
7	Configuring for new services	"3.4 Configuring for new services (page 25)" Perform the following for new services added in version 9.0. <ul style="list-style-type: none"> "Registering new services (page 25)" Register the new services from the active host. "Configuring new services for Cluster Environment (page 26)" Update the cluster configuration of both the active host and the standby host. This work is required if the original Network Manager version is 8.0 or lower.
8	Perform a failover host1: Standby host host2: Active host	"3.5 Moving a Failover Group (page 28)" Moving the failover group switches the active host and standby host with each other. In this step, the files on the shared disk are updated when the Network Manager-related service is started.

*1 With overwrite installation, all data from the existing environment is inherited. If, however, a problem occurs during the rolling update, the data may have to be recovered by restoring backup data.

No.	Work step	Overview
9	Update the monitoring terminal	"3.6 Updating the Monitoring Terminal Function (page 30)" Overwrite install the monitoring terminal function.
10	Confirm the connection between monitoring terminal and host2 (active host)	"3.7 Starting the Monitoring Terminal Function (page 34)" Start the monitoring terminal function, and confirm the connection to the manager function of the active host.
11	Update host1 (standby host)	"3.1 Updating the Manager Function (page 15)" Overwrite install the manager function of the standby host.
12	Perform a failover host1: Active host host2: Standby host	Move the failover group Switch the active host and standby host with each other.
13	Confirm the connection between monitoring terminal and host1 (active host)	"3.7 Starting the Monitoring Terminal Function (page 34)" Start the monitoring terminal function, and confirm the connection to the manager function of the active host.
14	Enable WebAPI communication	"3.8 Enable WebAPI communication (page 37)" In order to use the Web Console, enable the WebAPI communication. When not using the Web Console, this configuration is not necessary.
15	Cancel failover suppression	"2.3 Suppressing and Canceling the Failover Process Due to Error Detection (page 10)" Return the settings on the cluster software so that a failover is performed normally when an error is detected.

1.2.2 When using external databases

The following describes the rolling update work flow in an environment that uses external databases.

The explanation in this section assumes that the rolling update is performed in the following environment.

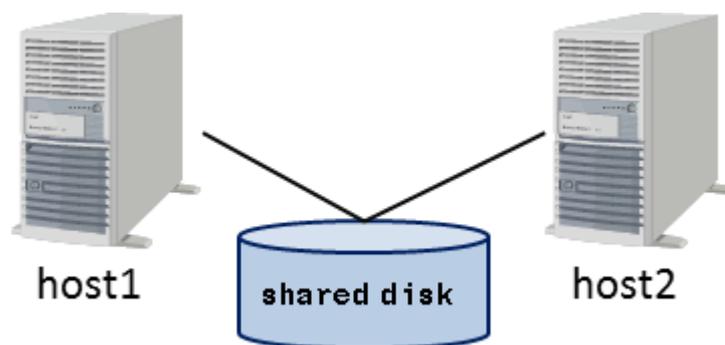


Figure 1-2 Existing environment which the rolling update is performed

- The existing environment is in a 1:1 cluster configuration with two servers named "host1" and "host2".
- In the initial state, "host1" operates as an active host, and "host2" operates as a standby host.

The rolling update work flow in the above environment is given in "Table 1-2 The rolling update work flow (when using external databases) (page 4)".

Table 1-2 The rolling update work flow (when using external databases)

No.	Work step	Overview
1	Preparations for the rolling update	"2.1 Confirming the Precautions in Advance (page 8)"

No.	Work step	Overview
		<p>Confirm the precautions on the operations related to a rolling update.</p> <p>"2.2 Preparations (page 8)"</p> <p>Perform the following necessary steps before applying the rolling update.</p> <ul style="list-style-type: none"> • "Confirming the firewall settings (page 8)" • "Confirming the setup parameters for the existing environment (page 8)" • "Parameter design on usage of the Web Console (page 10)" <p>"2.3 Suppressing and Canceling the Failover Process Due to Error Detection (page 10)"</p> <p>Temporarily change the settings on the cluster software so that no failover occurs during the rolling update.</p>
2	Back up host2 (standby host)	<p>"2.4.2 Backing up the standby host (page 13)"</p> <p>Back up the environmental data for the standby host.*²</p>
3	Update host2 (standby host)	<p>Upgrading the SQL Server</p> <p>Upgrade the SQL Server to a version supported by Network Manager after the update as needed.</p> <p>"3.1 Updating the Manager Function (page 15)"</p> <p>Overwrite install the manager function of the standby host.</p>
4	Back up host1 (active host)	<p>"2.4.1 Backing up the active host (page 11)"</p> <p>Back up the environmental data for the active host.*²</p>
5	Update the databases from host1 (active host)	<p>"3.2.2 Updating external databases (page 21)"</p> <p>Execute the configuration management database (CMDB) update script and the fault management database update script from the active host to update the databases.</p> <p>Next, copy the configuration file of each database on the active host to the standby host.</p>
6	Updating the configuration file from host1 (active host)	<p>"3.3 Updating the configuration file related to using Web Console (page 23)"</p> <p>Update the configuration file related to using Web Console from the active host.</p> <p>This work is required if the original Network Manager version is 8.0 or lower.</p>
7	Configuring for new services	<p>"3.4 Configuring for new services (page 25)"</p> <p>Perform the following for new services added in version 9.0.</p> <ul style="list-style-type: none"> • "Registering new services (page 25)" Register the new services from the active host. • "Configuring new services for Cluster Environment (page 26)" Update the cluster configuration of both the active host and the standby host. <p>This work is required if the original Network Manager version is 8.0 or lower.</p>
8	Perform a failover host1: Standby host	<p>"3.5 Moving a Failover Group (page 28)"</p>

*² With overwrite installation, all data from the existing environment is inherited. If, however, a problem occurs during the rolling update, the data may have to be recovered by restoring backup data.

No.	Work step	Overview
	host2: Active host	Moving the failover group switches the active host and standby host with each other. In this step, the files on the shared disk are updated when the Network Manager-related service is started.
9	Update the monitoring terminal	"3.6 Updating the Monitoring Terminal Function (page 30)" Overwrite install the monitoring terminal function.
10	Confirm the connection between monitoring terminal and host2 (active host)	"3.7 Starting the Monitoring Terminal Function (page 34)" Start the monitoring terminal function, and confirm the connection to the manager function of the active host.
11	Update host1 (standby host)	Upgrading the SQL Server Upgrade the SQL Server to a version supported by Network Manager after the update as needed.*3 "3.1 Updating the Manager Function (page 15)" Overwrite install the manager function of the standby host.
12	Move a failover group host1: Active host host2: Standby host	Move a failover group Switch the active host and standby host with each other.
13	Confirm the connection between monitoring terminal and host1 (active host)	"3.7 Starting the Monitoring Terminal Function (page 34)" Start the monitoring terminal function, and confirm the connection to the manager function of the active host.
14	Enable WebAPI communication	"3.8 Enable WebAPI communication (page 37)" In order to use the Web Console, enable the WebAPI communication. When not using the Web Console, this configuration is not necessary.
15	Cancel failover suppression	"2.3 Suppressing and Canceling the Failover Process Due to Error Detection (page 10)" Return the settings on the cluster software so that a failover is performed normally when an error is detected.

*3 The SQL Servers on the two hosts must have the same grade.

Chapter 2.

Preparations for the rolling update

This chapter describes the preparations you need to make before performing the rolling update.

Contents

2.1 Confirming the Precautions in Advance	8
2.2 Preparations	8
2.3 Suppressing and Canceling the Failover Process Due to Error Detection	10
2.4 Backing up the Existing Environment	11

2.1 Confirming the Precautions in Advance

Before starting the rolling update, confirm the precautions listed below.

1. Execute the setup procedures as a member of Administrators group.
2. The installer does not check if the installation drive has the necessary free disk space. Before installation, confirm that the installation drive has the necessary free disk space mentioned in "System Requirements".
3. The installation area is the folder under the system drive that is indicated by the environment variable `%TMP%` or `%TEMP%` and requires about 1 GB free disk space. Confirm that the environment variable `%TMP%` or `%TEMP%` is defined and that the folder is write-enabled. In addition, ensure a free space of 1 GB or greater on the system drive as the work area.
4. If the value of the environment variable `%TMP%` or `%TEMP%` contains any of the Unicode characters added to JIS2004, installation may fail.
5. During the rolling update, the data on the local disks of the two hosts and the shared disk will be backed up. Make sure there is enough free disk space for backup data storage.
6. If a problem occurs during the rolling update, you may need to stop the Network Manager-related services on the hosts to recover the environment using the backup data.
7. If a problem occurs during the rolling update, you may need to return the updated Network Manager to the previous version. In this case, the installation media containing the previous version of Network Manager is required. If an update module is applied, the update module is also required. Keep them on hand just in case.

2.2 Preparations

This section describes the confirmation and setting steps that you must perform before starting the rolling update.

2.2.1 Confirming the firewall settings

Confirm the network port settings in advance so that normal communication can be performed in Network Manager after the update.

For information about the network ports to be used with Network Manager after the update, refer to "Firewall Settings" in "MasterScope Network Manager Setup Guide for Windows / EXPRESSCLUSTER X Environment. Confirm if there are any differences from the existing version, and change the firewall settings as needed.

2.2.2 Confirming the setup parameters for the existing environment

During the database update, you need the values of the database setup parameters for the existing environment. This section describes how to confirm the database setup parameters.

In the database update performed during the rolling update, the setup parameters which must be confirmed in advance differ depending on which internal or external database is used.

The following describes how to confirm the setup parameters according to the type of the database used.

When using internal databases

You must confirm the setup parameters for the configuration management database (CMDB) in advance.

You can determine the setup parameters for the configuration management database (CMDB) from the contents of the following configuration file.

Configuration file: %NVP_INSTALL_PATH%\Manager\sg\wfdmgr\WFDB.INI

The parameters required during the database update are given in "[Table 2-1 Parameters required during the CMDB update \(page 9\)](#)".

Table 2-1 Parameters required during the CMDB update

Parameter	Description
CMDB_USER	User name
DATABASE_PORT	Port number
CMDB_PASSWD	User password
SERVER_NAME	Server name
DATABASE_NAME	Database name
DATABASE_PATH	Data storage directory

When using external databases (SQL Server)

You must confirm the setup parameters for the two databases, the configuration management database (CMDB), and the fault management database, in advance.

You can determine the setup parameters for the configuration management database (CMDB) from the contents of the following configuration file.

Configuration file: %NVP_INSTALL_PATH%\Manager\sg\wfdmgr\WFDB.INI

The parameters required during the database update are given in "[Table 2-2 Parameters required during the CMDB \(SQL Server\) update \(page 9\)](#)".

Table 2-2 Parameters required during the CMDB (SQL Server) update

Parameter	Description
DATABASE_NAME	Database name
SERVER_NAME	Server name
SQL_INSTANCE_NAME*1	Instance name
DATABASE_DRIVER	Database driver name

You can determine the setup parameters for the fault management database from the contents of the following configuration file.

Configuration file: %NVP_INSTALL_PATH%\Manager\sg\NvPRO\NvPROBaseMgr.ini

The parameters required during the database update are given in "[Table 2-3 Parameters required during the fault management database \(SQL Server\) update \(page 10\)](#)".

*1 The parameters are not contained in the default instance. In this case, read the instance name as a "\".

Table 2-3 Parameters required during the fault management database (SQL Server) update

Parameter	Description
DATABASE_NAME	Database name
SERVER_NAME	Server name
SQL_INSTANCE_NAME*1	Instance name

2.2.3 Parameter design on usage of the Web Console

When using the Web Console, specify the parameters for connecting to the IMS component during the rolling update. This section describes the parameters required when using the Web Console.

Caution

When using the Web Console, you need to set up the IMS component separately. Refer to “*MasterScope Network Management Web Console Getting Started Guide*” for the IMS component setup.

The parameters for connecting to the IMS component required during the rolling update are as follows.

Table 2-4 Setup parameters for connecting to the IMS component

Setting Item	Description	Default Value
InstanceID (manager id)	Specify the ID so that the IMS component can identify the Network Manager to be connected. Available characters are single-byte alphanumeric characters. This parameter must match the value of the configuration file (ims-conf.ini) on the IMS component.	1
MessageQueueIP (ims ip address)	Specify the IPv4 address of the server where the IMS component is installed. If the IMS component is installed on the cluster system, specify the floating IP address of the cluster system.	127.0.0.1
MessageQueuePort (port number)	Specify the communication port number to be used for communication with the Message Queue of the IMS component.	28110
sendEvent	Specify as follows whether to notify the IMS component of alert information detected by the Network Manager. <ul style="list-style-type: none"> • 1 : Notify alert information. Normally, specify “1”. • 0 : Does not notify alert information. 	1

2.3 Suppressing and Canceling the Failover Process Due to Error Detection

You must change the settings on the cluster software so that no unintended failovers occur during the rolling update.

The cluster software may monitor not only the status of the Network Manager-related service but also the status of the physical hosts and the status of the networks on the hosts. For this reason, if the cluster software detects any error during the rolling update, an unintended failover group movement occurs, placing the environment in an invalid state.

Before performing the rolling update, be sure to change the settings on the cluster software so that no unintended failover group movement occur, and that the failover group movement can only be made manually.

In addition, after completing the update work on the two hosts, be sure to return the settings on the cluster software so that failover group movement processes can be performed appropriately during monitoring and error detection by the cluster software.

Example:

When using EXPRESSCLUSTER X 3.1, you can suppress an unintended failover group movement by making the following settings.

- Setting in **Recovery operation when an activity error is detected**
 - Activity retry threshold: 0
 - Failover threshold: 0
- **Suppress recovery operation in the event of a monitor resource error:** ON

2.4 Backing up the Existing Environment

This section describes how to back up the existing environment in preparation for problems that may occur during the rolling update.

2.4.1 Backing up the active host

This section describes how to perform the backup procedure from the active host.

Back up the following data from the active host.

- Configuration data on the active host
- Configuration data and system data on the shared disk
- Data in the database

On the active host, perform the following procedure as a user with Administrator rights.

1. Replace the configuration file for the backup process

Replace the configuration file for defining the backup targets of the backup command (SysMonMgr -backup) with the one for the rolling update.

- a. Change the file name of the following configuration file to "sgbackup_comm.lst.org".

```
%NVP_INSTALL_PATH%\Manager\sg\NvPRO\NvPRORemoteCmd\sys_cmd\sgbackup_comm.lst
```

- b. Copy the configuration file from the installation media.

In the following explanation, the DVD-ROM drive is assumed to be the E: drive.

- Source file

```
E:\NvPRO\Windows\Tools\NvPRO\sgbackup_comm.lst
```

Tip

When using the MasterScope Media, there is the configuration file in the following path.

```
E:\Windows\Tools\NvPRO\sgbackup_comm.lst
```

- Destination directory

```
%NVP_INSTALL_PATH%\Manager\sg\NvPRO\NvPRORemoteCmd\sys_cmd\
```

2. Execute the backup command (SysMonMgr -backup)

Start the command prompt by executing **Run as administrator**, and execute the following backup command.

- Path

```
%NVP_INSTALL_PATH%\Manager\bin\SysMonMgr.exe
```

- Specification method

```
SysMonMgr.exe -backup
```

For details on the backup command, refer to the "User's Manual".

3. Replace the configuration file with the original configuration file for the backup process

Delete the replacement file, sgbackup_comm.lst. Change sgbackup_comm.lst.org to the original file name, "sgbackup_comm.lst", to return to the state before the backup process.

4. Back up the fault management database and the sFlow database (only when using external databases)

Back up information for the below databases if you are using an external database (SQL Server).

- Fault management database
- sFlow database

(Only if the sFlow database is created using the sFlow function)

Execute the SQL Server backup command (BACKUP) to back up the data from the fault management database.

Tip

- For details on the backup command (BACKUP), refer to the Microsoft SQL Server manual.
- Additionally, before backing up, confirm the configuration parameters for each database in the operation environment.

Execution examples:

- Fault management database

If backing up in "C:\bak\nvproddb.bak"

```
> osql -S localhost -U sa -P sa@Password -Q
"BACKUP DATABASE [nvproddb] TO DISK = N'C:\bak\nvproddb.bak'
WITH NOFORMAT, NOINIT, NAME = N'nvproddb-Full Database Backup',
SKIP, NOREWIND, NOUNLOAD, STATS = 10" -o nvproddb_Backup.log
```

(Do not insert a line break in the middle of the command.)

- sFlow database

If backing up in "C:\bak\sflowdb.bak"

```
> osql -S localhost\SFLOW -U sa -P sa@Password -Q
"BACKUP DATABASE [sflowdb] TO DISK = N'C:\bak\sflowdb.bak'
WITH NOFORMAT, NOINIT, NAME = N'sflowdb-Full Database Backup',
SKIP, NOREWIND, NOUNLOAD, STATS = 10" -o sflowdb_Backup.log
```

(Do not insert a line break in the middle of the command.)

This completes the backup.

2.4.2 Backing up the standby host

This section describes how to perform the backup procedure from the standby host.

Back up the following data from the standby host.

- Configuration data on the standby host

On the active host, perform the following procedure as a user with Administrator rights.

1. Back up the configuration data

Back up all files under the following directory.

Backup target: `%NVP_INSTALL_PATH%\Manager\sg`

This completes the backup.

Chapter 3.

Performing the Rolling Update

The following describes each of the steps of the rolling update in detail.

Contents

3.1 Updating the Manager Function	15
3.2 Updating Databases.....	20
3.3 Updating the configuration file related to using Web Console	23
3.4 Configuring for new services	25
3.5 Moving a Failover Group	28
3.6 Updating the Monitoring Terminal Function	30
3.7 Starting the Monitoring Terminal Function	34
3.8 Enable WebAPI communication.....	37

3.1 Updating the Manager Function

Update the manager function for the standby host.

Tip

- Perform backup before performing this procedure.
 - When using external databases (SQL Server), upgrade the SQL Server before performing this procedure as needed. For details on how to upgrade the SQL Server, refer to the SQL Server manual.
- After upgrading the SQL Server, you must restart the OS on the standby host to reflect the environmental information.
-

Caution

If the existing environment contains the following file or directory, the installation process described later may fail. Before starting the procedure, move the following file or directory to another location or delete it.

- %NVP_INSTALL_PATH%\Manager\UpdateData
-

1. Start the installer

Double-click `\NvPRO\Windows\Setup.exe` on the DVD-ROM drive.

Tip

To install using MasterScope Media, operate with the following path.

Path of the installer: `\Windows\Setup.exe`

If the following dialog box is displayed which says "the initialization failed", refer to the troubleshooting "MasterScope Network Manager Setup Guide Windows / EXPRESSCLUSTER X" and install again.

2. Start installation

When the Welcome screen is displayed. Select **Install** and click **Next**.

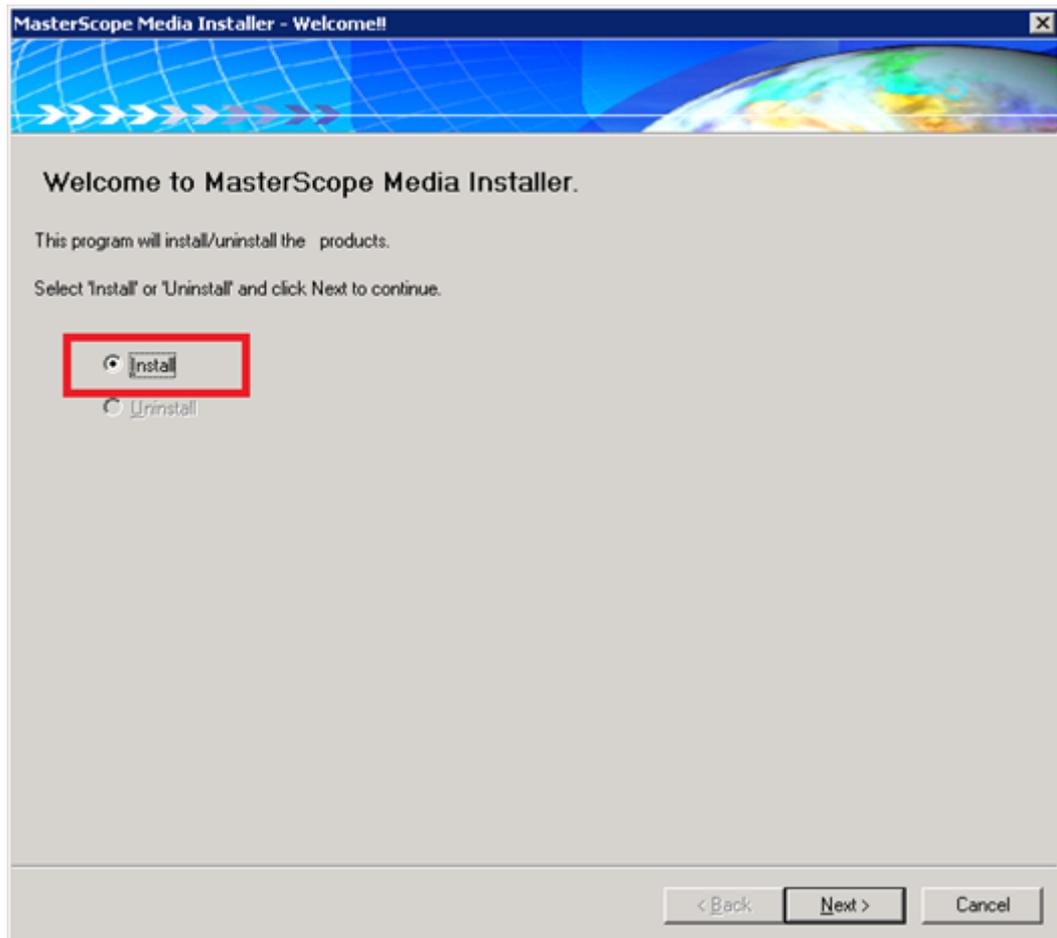


Figure 3-1 Welcome screen (installation start window)

3. Select the products to install

The products that can be installed are listed. Check the "MasterScope Network Manager (Manager)" as shown in Figure and click **Next**.

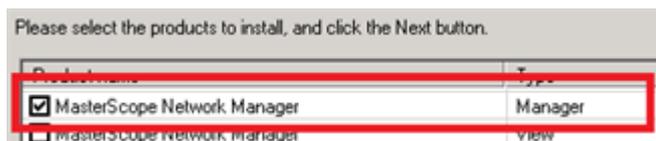


Figure 3-2 Selection screen of the products to install

4. Configure the install parameters

The products to be installed are listed in the Contents list. If installing the first standby host (installing "host2" as explained in "1.2 Rolling Update Work Flow (page 2)"), set **Update data area at startup** to "Yes". If the host to pair with the standby host is already updated, set it to "No".

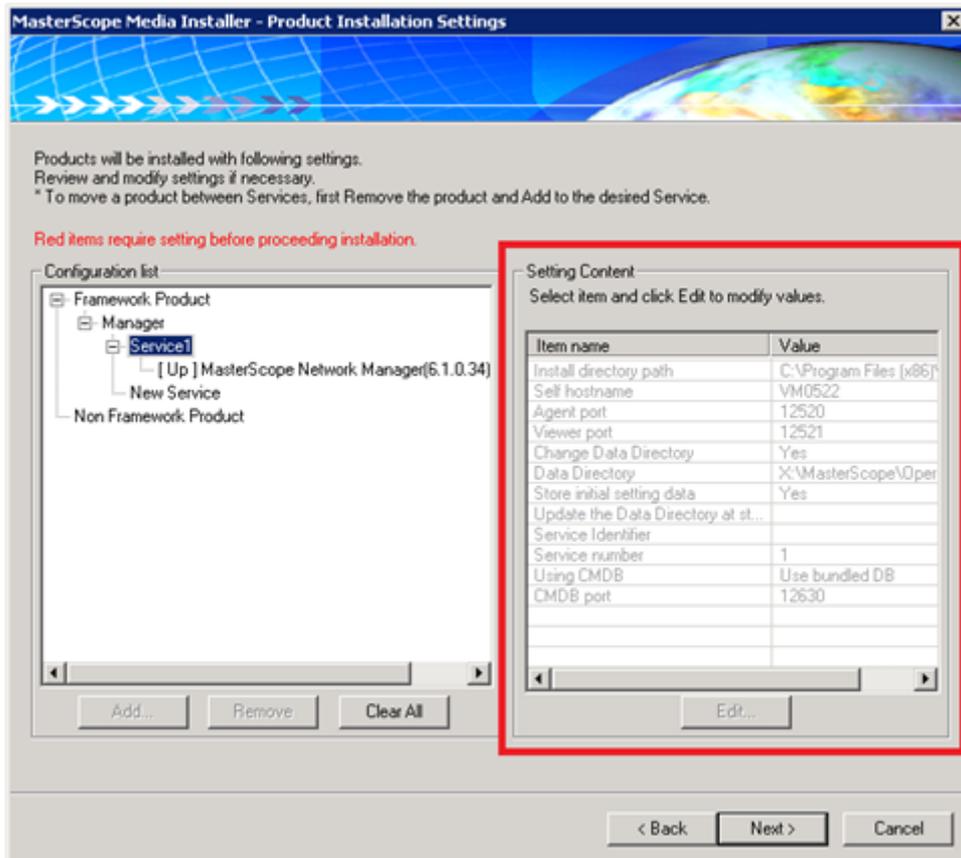


Figure 3-3 Installation configuration screen

After changing the installation parameters, click **Next** to proceed.

5. Confirm the installation settings

The installation confirmation screen is displayed. Verify the settings.

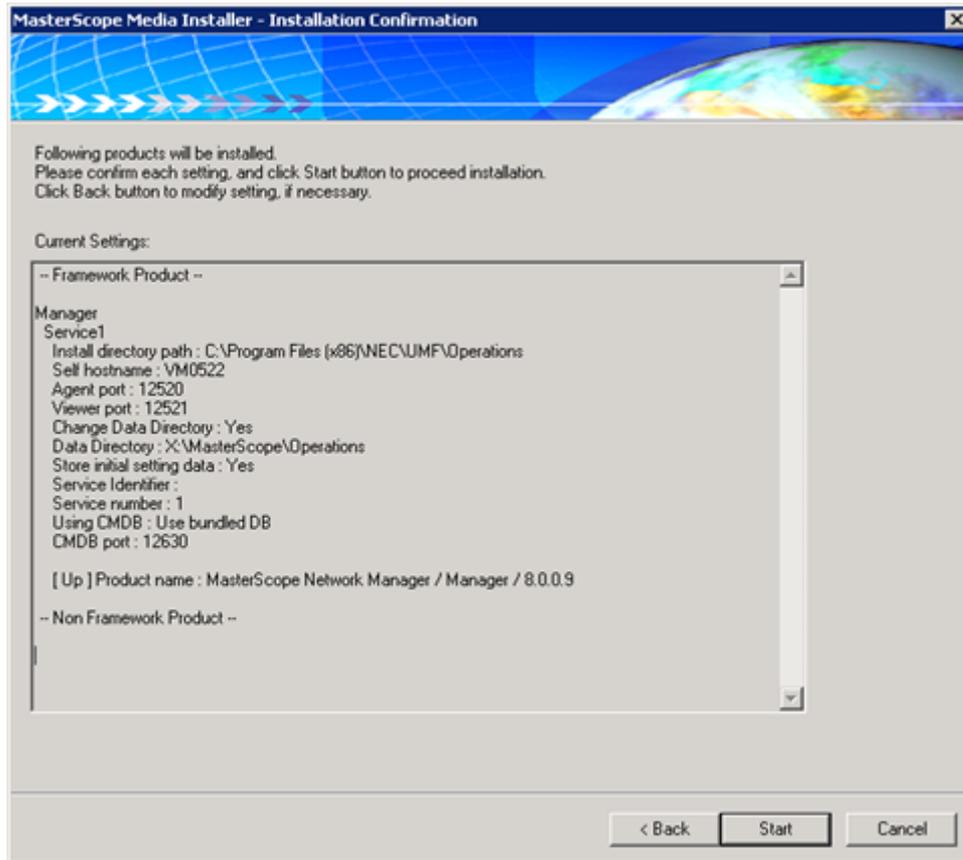


Figure 3-4 Installation confirmation screen

Verify the settings and click **Start** to start installation.

⚠ Caution

You cannot cancel once the installation **Start**.

If an update is performed in an environment in which internal databases are used, Microsoft Visual C++ 2005 Redistributable Package (x86) will be installed during the installation process. If it has already been installed in the environment, click the **No** button when a license agreement confirmation window is displayed. If no operations are performed for 30 minutes or more, the Network Manager installation fails.

6. Confirm the completion of installation

When the installation completes, the Finish screen is displayed. Confirm that Failed is 0 and click **Finish** to close the window.

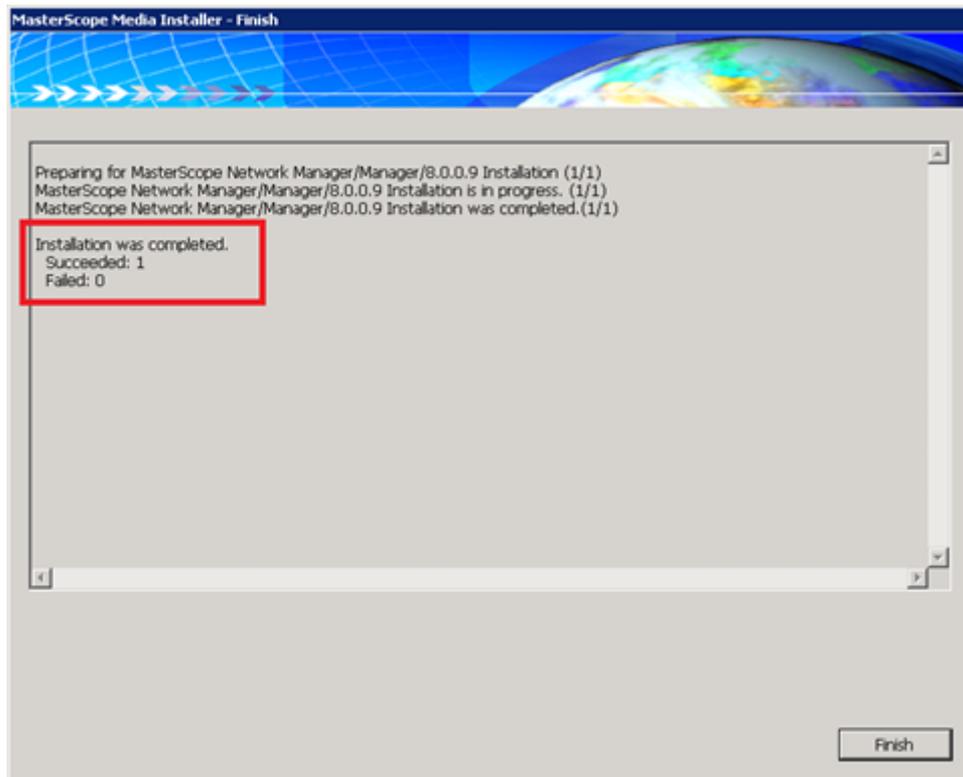


Figure 3-5 Installation finish screen

If Failed is not 0, refer to the troubleshooting "MasterScope Network Manager Setup Guide Windows / EXPRESSCLUSTER X" solve the problem and install the manager function again.

7. Confirm that services have started

From **Administrative Tools>Services** in Windows, confirm that all of the "Startup Type" for Network Manager-related services listed below is set to "Manual". Any services set to "Auto" should be changed to "Manual".

- Wfdb_wfdbn *1 *2
- Wfdb_nvalertdbn *1 *2
- Wfdb_nvsflowdbn *1 *2
- NvPRO Performance Database
- FTBase service
- NvPRO Base Manager
- MasterScope UMF Operations Manager_n *1
- NvPRO ResourceManagerAPI Service
- NvPRO Topology Adapter
- NvPRO Performance Manager

If any services have already been started, stop those services.

This completes the update of the manager function for the standby host.

*1 *n* is a numeric value of 1 or greater (service number).

*2 No registration is required if external databases are used as it does not exist.

3.2 Updating Databases

The following describes how to update the database from the active host.

The procedure differs depending on whether the internal or external database is used. Perform the appropriate procedure according to the environment.

3.2.1 Updating Internal Databases

The following describes how to update the database when using internal databases.

The internal database update will be performed while the manager function is operating from the active host.

Perform the following procedure as a user with Administrator rights.

1. Copy the database update script contained in the installation media

Copy the directory in the installation media that contains the database update script and place it in the specified directory.

In the following explanation, the DVD-ROM drive is assumed to be the E: drive.

- Source

```
E:\Windows\Tools\sql_rupdate
```

Tip

When using the MasterScope Media, there is the database update script in the following path.

```
E:\Windows\Tools\sql_rupdate
```

- Destination

```
%NVP_INSTALL_PATH%\Manager\sql_rupdate
```

2. Execute the database update script

Start the command prompt by executing **Run as administrator**, move to the following path, and execute the database update script (WfdbCmdSetup.bat).

- Path

```
%NVP_INSTALL_PATH%\Manager\sql_rupdate\postgres
```

- Specification method

```
WfdbCmdSetup.bat <User name> %NVP_INSTALL_PATH%\Manager\bin\dbms1
<Port number> SYSTEM <User password> <Server name>
<Database name> <Data storage directory> YES
```

Tip

- Do not insert a line break in the middle.
 - If the value contains a space, it must be enclosed in quotations (").
-

For each of the parameters for the database update script, specify the value confirmed in ["2.2.2 Confirming the setup parameters for the existing environment \(page 8\)"](#).

Execution example:

```
> cd "C:\Program Files (x86)\NEC\UMF\Operations\Manager\sql_rupdate
\postgres"
> WfdbCmdSetup.bat wfdb "C:\Program Files (x86)\NEC\UMF\Operations
\Manager\bin\dbms1" 12630 SYSTEM wfdb 127.0.0.1 wfdb
"X:\MasterScope\Operations\Manager" YES
```

3. Confirm the results

When you execute the database update script, the execution results are output at the command prompt. Confirm that the execution results do not contain any messages indicating errors.

Tip

The following error messages may be output. These messages indicate that the database users already exist, and do not indicate any problems in the update process.

```
ERROR: role "wfdb" already exists
ERROR: database "wfdb" already exists
ERROR: schema "wfdb" already exists
```

3.2.2 Updating external databases

The following describes how to update the database when using external databases.

The external database update will be performed while the manager function is operating from the active host.

Perform the following procedure as a user with Administrator rights.

1. Copy the database update script contained in the installation media

Copy the directory in the installation media that contains the database update script and place it in the specified directory.

In the following explanation, the DVD-ROM drive is assumed to be the E: drive.

- Source

```
E:\NvPRO\Windows\Tools\sql_rupdate
```

Tip

When using the MasterScope Media, there is the database update script in the following path.

```
E:\Windows\Tools\sql_rupdate
```

- Destination

```
%NVP_INSTALL_PATH%\Manager\sql_rupdate
```

2. Execute the configuration management database (CMDB) update script

Start the command prompt by executing **Run as administrator**, move to the following path, and execute the configuration management database (CMDB) update script (WfdbCmdSetup.bat).

- Path

```
%NVP_INSTALL_PATH%\Manager\sql_rupdate\sqlserver
```

- Specification method

```
WfdbCmdSetup.bat <Database name> <Server name> <Instance name>
<Database driver name>
```

Tip

- Do not insert a line break in the middle.
- If the value contains a space, it must be enclosed in quotations (").

For each of the parameters for the configuration management database (CMDB) update script, specify the value confirmed in ["2.2.2 Confirming the setup parameters for the existing environment \(page 8\)"](#).

Execution example:

```
> cd "C:\Program Files (x86)\NEC\UMF\Operations\Manager\sql_rupdate
\sqlserver"
> WfdbCmdbSetup.bat wfdb localhost \ "SQL Server"
```

3. Confirm the results of executing the configuration management database (CMDB) update script

When you execute the configuration management database (CMDB) update script, the execution logs given in ["Table 3-1 Execution logs for the configuration management database \(CMDB\) update script \(page 22\)"](#) are recorded in the execution directory. Confirm that the obtained execution results are the same as the results obtained at normal termination.

Table 3-1 Execution logs for the configuration management database (CMDB) update script

Execution log file name	Results obtained at normal termination
wfdbCreateDB.log	The following message is recorded, but does not indicate any problems in the update process. "Database 'wfdb' already exists."
wfdbCreateLogin.log	The following message is recorded, but does not indicate any problems in the update process. "Server principal 'wfdb' already exists."
wfdbCreateUser.log	The following message is recorded, but does not indicate any problems in the update process. "Users, groups, or the role 'wfdb' already exists in the present database."
wfdbAddRole.log	The file size is 0, and nothing is recorded in it.
wfdb_CR_TBL.log	Depending on the environment, the following warning message may be recorded, but does not indicate any problems in the update process. "Warning: The maximum key length is 900 bytes. (Subsequent text omitted)"
wfdb_UP_TBL n .log ^{*3}	Records messages indicating process details. Depending on the environment, the following warning message may be recorded, but does not indicate any problems in the update process. "Warning: The maximum key length is 900 bytes. (Subsequent text omitted)"

The file names of the execution logs in ["Table 3-1 Execution logs for the configuration management database \(CMDB\) update script \(page 22\)"](#) are the ones that are given when you specify the default value (wfdb) for the argument *<Database name>* of the update script. If *<database name>* differs from the default value, read the "wfdb" portion as the appropriate database name.

*3 n is a numeric value of 1 or greater.

If any messages indicating errors are output, confirm the causes of the errors, take action, and then execute the configuration management database (CMDB) update script again.

4. Execute the fault management database update script

Start the command prompt by executing **Run as administrator**, move to the following path, and execute the fault management database update script (NvPRODBSetup.bat).

- Path

```
%NVP_INSTALL_PATH%\Manager\sql_update\sqlserver
```

- Specification method

```
NvPRODBSetup.bat <Database name> <Server name> <Instance name>
```

Tip

If the value contains a space, it must be enclosed in quotations (").

For each of the parameters for the fault management database update script, specify the values confirmed in "[2.2.2 Confirming the setup parameters for the existing environment \(page 8\)](#)".

Execution example:

```
> cd "C:\Program Files (x86)\NEC\UMF\Operations\Manager\sql_update\sqlserver"
> NvPRODBSetup.bat nvprodb localhost \
```

5. Confirm the results of executing the fault management database update script

When you execute the fault management database update script, the execution logs are output to the execution directory. Confirm that the execution logs do not contain any messages indicating errors.

Tip

An execution log file with a file size of 0 in which nothing is recorded may be output, but this does not indicate any problems with the process.

If any messages indicating errors are output, confirm the causes of the errors, take action, and then execute the fault management database update script again.

6. Copy the database configuration files to the standby host

When you execute the configuration management database (CMDB) and fault management database update scripts, the configuration files for both databases are also updated. Copy the following database configuration files to the same directory on the standby host.

- %NVP_INSTALL_PATH%\Manager\sg\wfdbmgr\WFDB.INI
- %NVP_INSTALL_PATH%\Manager\sg\NvPRO\NvPROBaseMgr.ini

3.3 Updating the configuration file related to using Web Console

The following describes updating the configuration file related to using Web Console.

With the manager function running, place the configuration file on the shared disk from the active host and update it.

Tip

This work is required if the original Network Manager version is 8.0 or lower.

Perform the following procedure as a user with Administrator rights.

1. Copy the configuration file (NvPROIms.ini) in the installation media

Copy the configuration file in the installation media and place it in the specified directory.

In the following explanation, the DVD-ROM drive is assumed to be the E: drive.

- Source

E:\NvPRO\Windows\Tools\NvPRO\NvPROIms.ini

Tip

When using the MasterScope Media, there is the the configuration file in the following path.

E:\Windows\Tools\NvPRO\NvPROIms.ini

- Destination

%NVP_SHARE_PATH%\Manager\sg\NvPRO\NvPROIms.ini

2. Update the configuration file (NvPROIms.ini)

Update the parameters in the configuration file (NvPROIms.ini), overwrite it and save.

- When using the Web Console, update the following parameters in the configuration file (NvPROIms.ini).

```
[NOMS]
InstanceID=<manager id>
MessageQueueIP=<ims ip address>
MessageQueuePort=<port number>
[EVENT]
sendEvent=<1|0>
```

<manager id>

Specify the ID so that the IMS component can identify the Network Manager to be connected.

This parameter must match the value of the configuration file (ims-conf.ini) on the IMS component.

<ims ip address>

Specify the IPv4 address of the server where the IMS component is installed.

If the IMS component is installed on the cluster system, specify the floating IP address of the cluster system.

<port number>

Specify the communication port number to be used for communication with the Message Queue of the IMS component.

This parameter is required to be updated when changing the default communication port number.

<1|0>

Specify as follows whether to notify the IMS component of alert information detected by the Network Manager.

- 1 : Notify alert information. Normally, specify “1”.
- 0 : Does not notify alert information.

Example:

```
InstanceID=nvpro01
MessageQueueIP=192.168.1.200
MessageQueuePort=28110
[EVENT]
sendEvent=1
```

- When not using the Web Console, update the following two parameters in the configuration file (NvPROIms.ini).

```
[NOMS]
InstanceID=
```

Delete the value of **InstanceID**.

```
[EVENT]
sendEvent=0
```

Update the value of **sendEvent** to “0”.

3.4 Configuring for new services

This section describes the configuration for new services added in version 9.0.

Tip

This work is required if the original Network Manager version is 8.0 or lower.

3.4.1 Registering new services

This section describes the procedure for registering new services added in version 9.0.

With the manager function running, Run the script to register the new services from the active host.

Perform the following procedure as a user with Administrator rights.

1. Copy the services registration script contained in the installation media

Copy the directory in the installation media that contains the services registration script and place it in the specified directory.

In the following explanation, the DVD-ROM drive is assumed to be the E: drive.

- Source

```
E:\NvPRO\Windows\Tools\NvPRO\bin
```

Tip

When using the MasterScope Media, there is the database update script in the following path.

```
E:\Windows\Tools\NvPRO\bin
```

- Destination

```
%NVP_INSTALL_PATH%\Manager\bin
```

2. Execute the services registration script

Start the command prompt by executing **Run as administrator**, move to the following path, and execute the services registration script (`adapter-setup.bat`).

- Path

```
%NVP_INSTALL_PATH%\Manager\bin\NvPRO
```

- Specification method

```
adapter-setup.bat
```

- Execution example

```
> cd "C:\Program Files (x86)\NEC\UMF\Operations\Manager\bin\NvPRO"
> adapter-setup.bat
```

3. Confirm the results

When you execute the services registration script (`adapter-setup.bat`), the execution results are output at the command prompt. Confirm that the execution results do not contain any messages indicating errors.

4. Confirm the registration status of the services

From **Administrative Tools>Services** in Windows, confirm that the following services are registered.

- NvPRO Performance Database
- NvPRO Topology Adapter
- NvPRO Performance Manager

Change the "Startup Type" of the above services from "Auto" to "Manual". If some of the above services are running, stop them all.

3.4.2 Configuring new services for Cluster Environment

Register new services as EXPRESSCLUSTER X service resources to start these services properly when the hosts are switched.

Tip

For details operating the EXPRESSCLUSTER X, refer to the EXPRESSCLUSTER X documents.

Perform the following steps.

1. Update the service resources

Operate the EXPRESSCLUSTER X and register the following services as service resources.

- NvPRO Performance Database
- NvPRO Topology Adapter
- NvPRO Performance Manager

Tip

Each service can be started by using "net start" command in the script resource. In this case, start services so as to satisfy the dependency as shown in "[Table 3-2 Resource dependencies \(page 28\)](#)"

2. Add commands for the NvPRO Performance Database to the script

For the NvPRO Performance Database, it is recommended to delete the following files before starting the Network Manager services, in order to ensure that the database processes start.

- `%NVP_SHARE_PATH%\Manager\sg\database\NvPROPerfDB\postmaster.pid` ^{note}

Note

Even if you choose to use the external databases, the NvPRO Performance Database is created as the internal database.

The following is an example of deleting a file with a start script (start.bat) in an environment that uses internal databases. Even if you choose to use the external databases, add the same commands.

```
set NVP_DB_BASE_PATH=X:\MasterScope\Operations\Manager\sg\database

rem *****
rem Process for normal quitting program
rem *****
:NORMAL

rem Check Disk
IF "%CLP_DISK%" == "FAILURE" GOTO ERROR_DISK

del %NVP_DB_BASE_PATH%\wfdb\dbms1\data\postmaster.pid 2>NUL
del %NVP_DB_BASE_PATH%\nvalertdb\dbms1\data\postmaster.pid 2>NUL
del %NVP_DB_BASE_PATH%\nvsflowdb\dbms1\data\postmaster.pid 2>NUL

del %NVP_DB_BASE_PATH%\NvPROPerfDB\postmaster.pid 2>NUL

(An omission)

rem *****
rem Process for failover
rem *****
:FAILOVER

rem Check Disk
IF "%CLP_DISK%" == "FAILURE" GOTO ERROR_DISK

del %NVP_DB_BASE_PATH%\wfdb\dbms1\data\postmaster.pid 2>NUL
del %NVP_DB_BASE_PATH%\nvalertdb\dbms1\data\postmaster.pid 2>NUL
del %NVP_DB_BASE_PATH%\nvsflowdb\dbms1\data\postmaster.pid 2>NUL

del %NVP_DB_BASE_PATH%\NvPROPerfDB\postmaster.pid 2>NUL

(An omission)
```

3. Configure the resource dependency

By setting dependency on each registered resource, set up to start or stop in the correct order.

When registering each service in resources, set resources so as to satisfy the dependency as shown in "[Table 3-2 Resource dependencies \(page 28\)](#)". Uncheck "Follow the default dependence" in the dependency setting and add the dependent resources.

Table 3-2 Resource dependencies

Resource Name	Dependent Resources
Script	Floating IP resource Disk resource (or Mirror disk resource)
Wfdb_wfdbn *5 *5	Script resource
Wfdb_nvalertdbn *5 *5	Script resource
Wfdb_nvsflowdbn *5 *5	Script resource
NvPRO Performance Database	Script resource
FTBase service	Floating IP resource Disk resource (or Mirror disk resource)
NvPRO Base Manager	Script resource Wfdb_wfdbn service resource *5, Wfdb_nvalertdbn service resource *5, Wfdb_nvsflowdbn service resource *5 NvPRO Performance Database service resource
MasterScope UMF Operations Manager_n	FTBase service resource NvPRO Base Manager service resource
NvPRO ResourceManagerAPI Service	MasterScope UMF Operations Manager_n service resource
NvPRO Topology Adapter	NvPRO Base Manager service resource
NvPRO Performance Manager	NvPRO Base Manager service resource

4. Confirm the configuration

Before reflecting the configuration of the cluster system, confirm that the configuration for each resource are correct.

 **Caution**

If the configuration is reflected in the EXPRESSCLUSTER X by the procedure described next, the failover group stops and monitoring by the Network Manager stops. Therefore, it is necessary to immediately proceed according to the procedure of "[3.5 Moving a Failover Group \(page 28\)](#)". Carefully confirm the configuration of the cluster system.

5. Reflect the configuration

Operate the EXPRESSCLUSTER X and reflect the configuration of the cluster system. At that time, stop of the failover group and cluster suspend are executed.

After reflecting the configuration of the cluster system, execute cluster resume.

This completes the clustering configuration of the new services.

Immediately proceed according to the procedure of "[3.5 Moving a Failover Group \(page 28\)](#)".

3.5 Moving a Failover Group

This section describes the process to perform when a failover occurs.

*4 *n* is a service number larger than 1.

*5 These services do not exist when using external databases. There is no need to register.

When operations are switched by the cluster software from the active host on which the old version of Network Manager is operating to the standby host on which Network Manager is being updated, the files on the shared disk are updated.

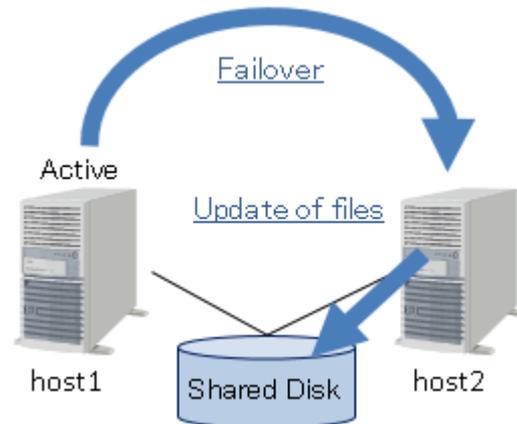


Figure 3-6 Update of files due to a failover

Network Manager-related service performs the process of reading data from the shared disk after updating the files on the shared disk.

The total time required from updating the files on the shared disk to the process of reading data from the shared disk is roughly three minutes.*6

How to confirm the completion of the process

You can confirm that the process has completed normally by checking the following.

1. Confirm the states of the startup service

If any of the processes to be executed at the movement of a failover group fails, the following service is stopped. Confirm that the following service is not stopped within three minutes, which is the approximate time required to complete the process.

- MasterScope UMF Operations Manager_*n**7

2. Confirm completion of the process of updating the files on the shared disk

The status about the process of updating the files on the shared disk is recorded in the following log file.

- %NVP_INSTALL_PATH%\Manager\log\RupInstCmd.log

The ExitCode value recorded at the end of the log file indicates the end code of the file update process.

If the update of the files on the shared disk is successful, the end code value is recorded as "0".

If the exit code shows a value other than "0", it indicates that the update of the files on the shared disk failed for some reason.

3. Confirm the completion of the process of reading data from the shared disk

The status about the process of reading the files from the shared disk is recorded in the following log file.

*6 The time required to complete the process depends on the specifications of the shared disk and the server.

*7 *n* is a numeric value of 1 or greater (service number).

- `%NVP_INSTALL_PATH%\Manager\log\NvpLog.log`

Confirm that the log file contains the following records.

- BaseMgr Initialization start
Indicates that completion of the update of the files on the shared disk is detected and the reading process is started.
- BaseMgr Initialization end
Indicates that the process of reading the files from the shared disk is complete.

If a service is stopped or updating the file on the shared disk fails, take action by referring to the following troubleshooting descriptions.

Troubleshooting:

- ["4.1 If RupInstCmd.log Is Not Output \(page 39\)"](#)
- ["4.2 If the End Code of RupInstCmd.log Is Other Than "0" \(page 39\)"](#)

If the Network Manager-related services are started normally, updating the files on the shared disk has succeeded, and the completion of the process of reading the files from the shared disk is confirmed. This determines that the update of host2 and the shared disk is complete.

Next, update the monitoring terminal function, and confirm the connection between the monitoring terminal function and the manager function.

3.6 Updating the Monitoring Terminal Function

Update the monitoring terminal function.

Caution

To perform the overwrite installation for upgrading the monitoring terminal, the monitoring terminal processes (SysMonSvc.exe) need to be stopped before installation.

1. Start the installer

Double-click `Windows\Setup.exe` on the DVD-ROM drive.

If a dialog box indicating a setup initialization process failure is displayed, solve the problem by referring to "Troubleshooting" in "MasterScope Network Manager Setup Guide Windows / EXPRESSCLUSTER X Environment", and start the installation again.

2. Start installation

When the Welcome screen is displayed. Select **Install** and click **Next**.

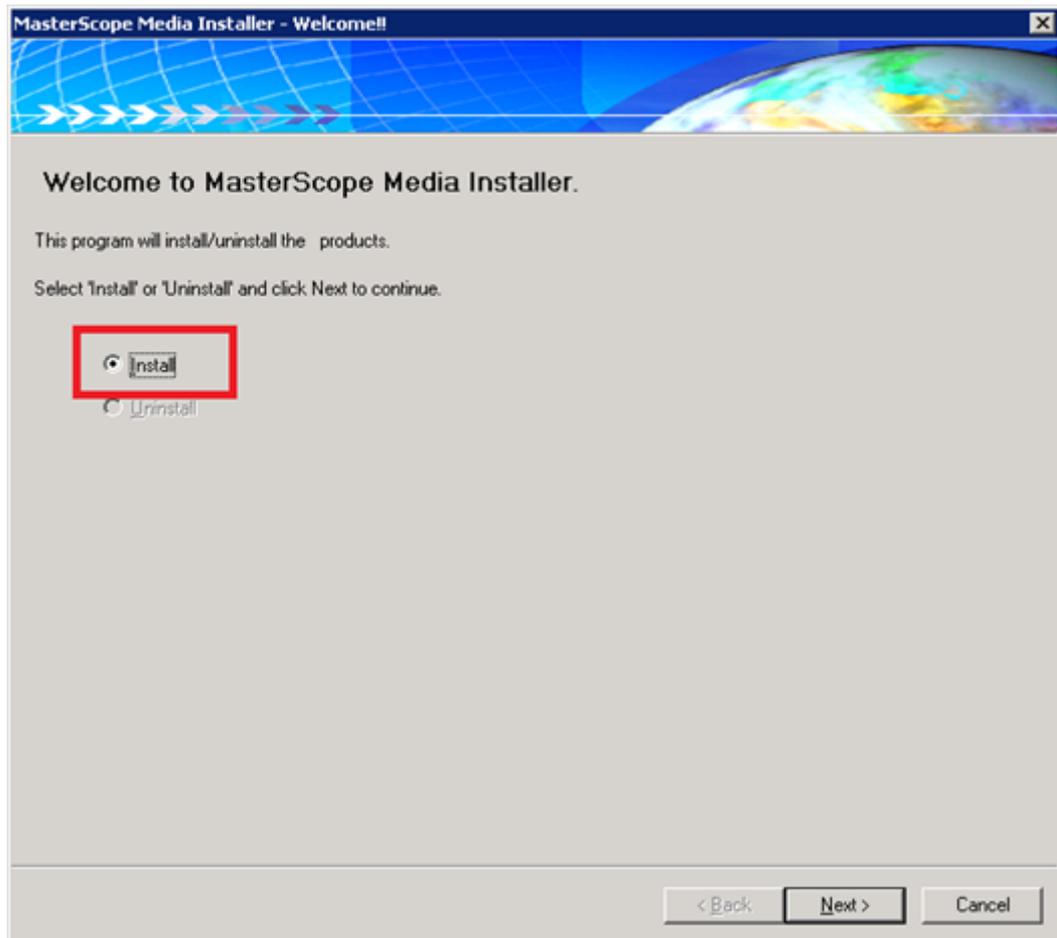


Figure 3-7 Welcome screen (installation start window)

3. Select the products to install

The products that can be installed are listed. The products that can be installed are listed. Check the "MasterScope Network Manager (View)" as shown in Selection screen of the products to install screen and click **Next**.

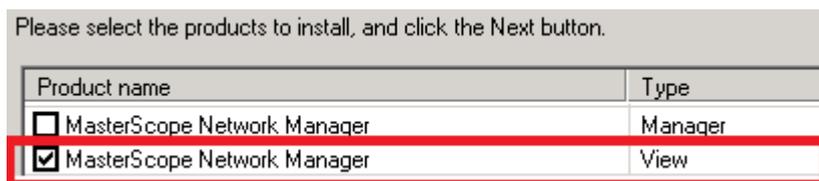


Figure 3-8 Selection screen of the products to install

4. Configure the install parameters

The products to be installed are listed in the Contents list. If the configuration is OK, click the **Next** button to proceed.

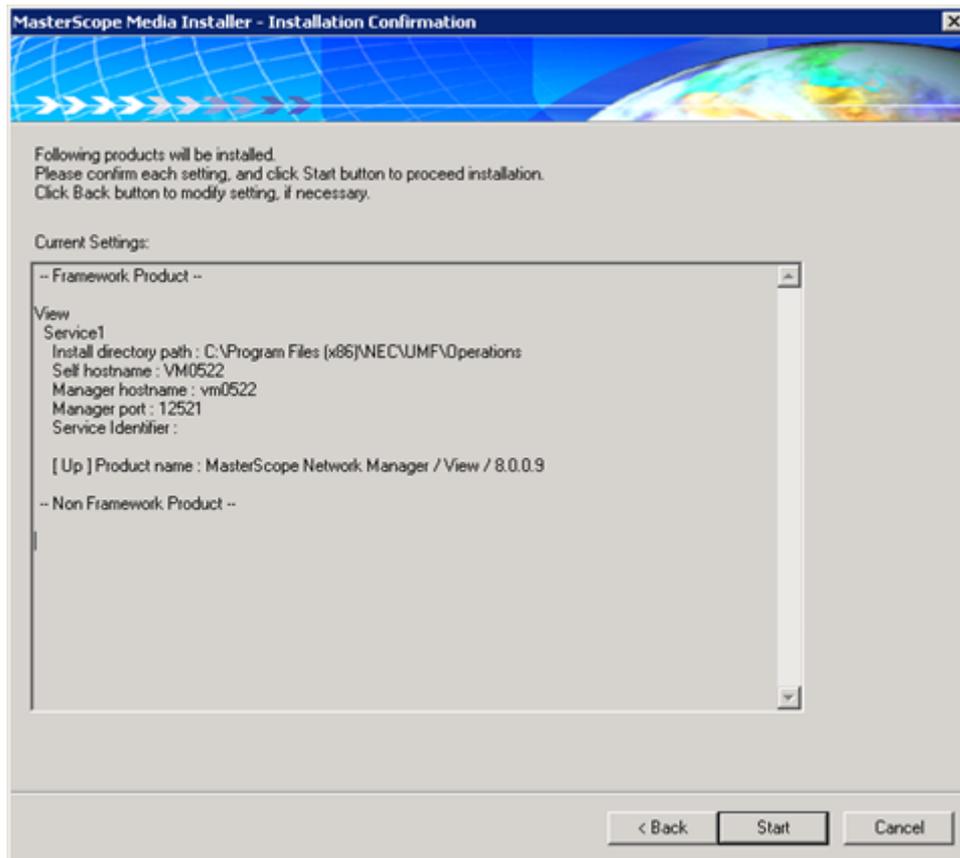


Figure 3-10 Installation confirmation screen

Verify the settings and click **Start** to start installation.

⚠ Caution

You cannot cancel once the installation **Start**.

6. Confirm the completion of installation

When the installation completes, the Finish screen is displayed. Confirm that Failed is 0 and click **Finish** to close the window.

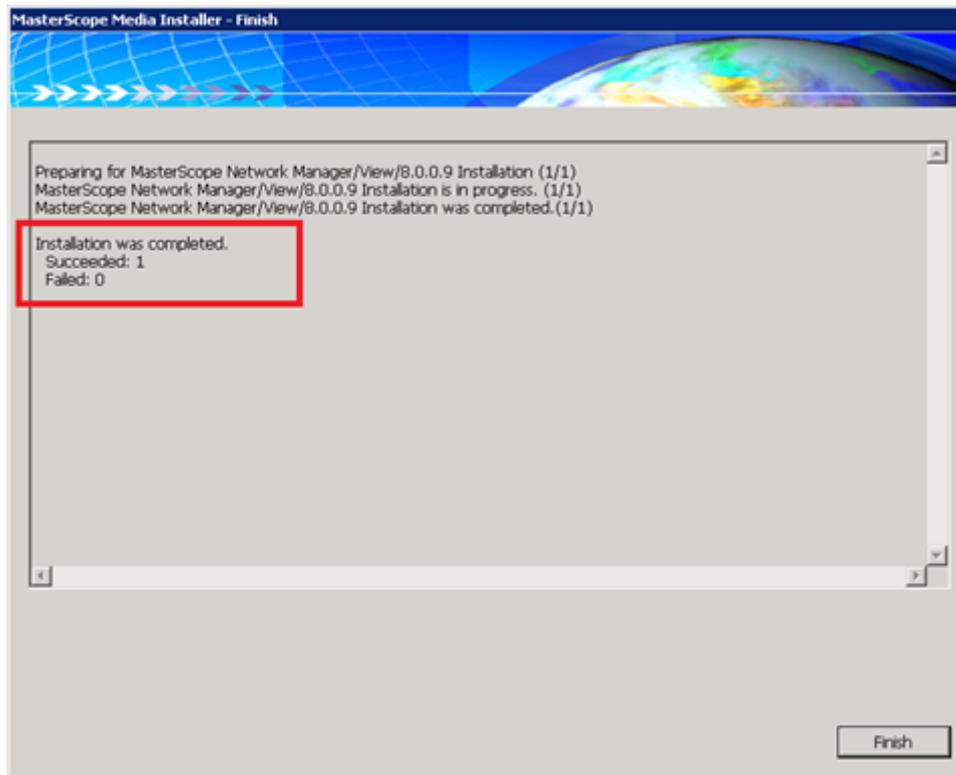


Figure 3-11 Installation finish screen

If Failed is not 0, refer to the troubleshooting "MasterScope Network Manager Setup Guide Windows / EXPRESSCLUSTER X Environment" to solve the problem and install the monitoring terminal function again.

This completes the installation of the monitoring terminal function.

3.7 Starting the Monitoring Terminal Function

Start the monitoring terminal function, and confirm the connection to the manager function.

Check whether the monitoring terminal function starts properly according to the following steps.

⚠ Caution

When starting and operating the monitoring terminal functions, you must log on to Windows as a user with Administrator rights.

1. Start Network Manager monitoring terminal

Double-click the "MasterScope Network Manager Console" icon on the desktop.

Tip

You can also start it from the Windows **Start** menu or the Start window.

Select **MasterScope Network Manager**>**MasterScope Network Manager Console**.

2. Login

Enter the login name and password accurately.



Figure 3-12 Login window

When the Login window is not displayed and the Error dialog box as shown in Figure is displayed, confirm the start up status of the services of the manager function.

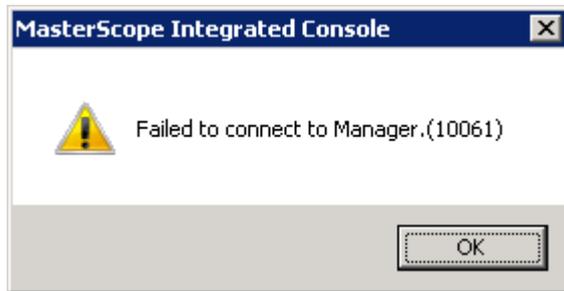


Figure 3-13 Error dialog box when starting the monitoring terminal

The monitoring terminal window opens after you have logged on successfully, and NetworkManagement and Alert Management icon are displayed under NetworkView icon .

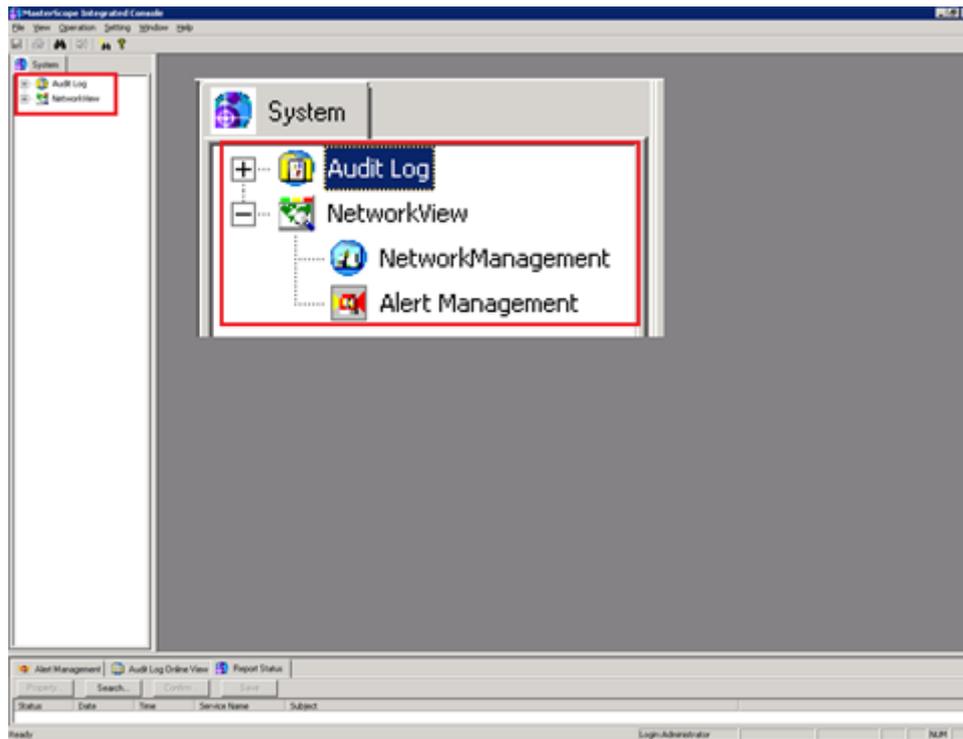


Figure 3-14 Monitoring terminal window

Tip

It may take several seconds to a few minutes to display Network Management depending on the environment. If it is not displayed, please wait for a moment.

In the case that the error dialog box is displayed although the monitoring terminal window is displayed, confirm that you are operating as a user with Administrator rights. In addition, confirm the startup status of the services of the manager function.

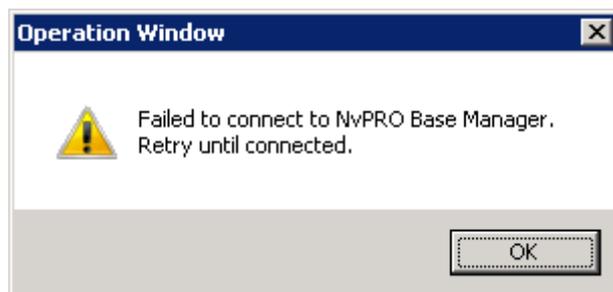


Figure 3-15 Error dialog box after monitoring terminal was started up

When you confirm that the monitoring terminal window starts properly, the setting up environment confirmation is completed.

If confirmation of the connections to the two hosts is complete, return the settings on the cluster software that you changed before the rolling update to the original ones as described in "[2.3 Suppressing and Canceling the Failover Process Due to Error Detection \(page 10\)](#)", so that failover control is automatically performed when an error is detected.

3.8 Enable WebAPI communication

When using the Web Console, it is necessary to enable WebAPI communication for control from the IMS component.

Tip

When not using the Web Console, this configuration is not necessary.

Execute the following steps.

1. Start Network Manager Monitoring Terminal.
Double-click “*Console*” icon on the desktop.
2. Change the Configuration Mode.
In the main menu, select **Setting>Configuration Mode** to change to the Configuration Mode.
3. Open the Option Setting dialog box.
In the main menu, select **Setting>Option**.
The Option Setting dialog box will be displayed.
4. Click the **Web Monitoring View** tab.
5. Enable the WebAPI communication.
Check the **Use Web API Function** checkbox. By checking this checkbox, the WebAPI communication is enabled.
6. Change the values of the parameters related to the WebAPI.
When changing the default value, specify values that match the contents of the IMS component configuration file (ims-conf.ini).
 - **Port**
Specify the communication port number of the WebAPI.
 - **Use HTTPS cryptogram** checkbox
 - Check : Use HTTPS.
 - Not check : Do not use HTTPS, use HTTP.
7. Save the configurations.
Click **OK** button.

Chapter 4.

Troubleshooting

This chapter describes how to handle problems that occur during the rolling update.

Contents

4.1 If RupInstCmd.log Is Not Output	39
4.2 If the End Code of RupInstCmd.log Is Other Than "0"	39

4.1 If RupInstCmd.log Is Not Output

If some of the Network Manager-related services are stopped and the RupInstCmd.log is not output to the specified directory, this indicates that the process of updating the files on the shared disk has not been successfully executed.

If operations are switched from the active host (host1) on which the old version of Network Manager is operating to the standby host (host2) on which Network Manager is being updated, the files on the shared disk are updated.

- `%NVP_INSTALL_PATH%\Manager\log\RupInstCmd.log`

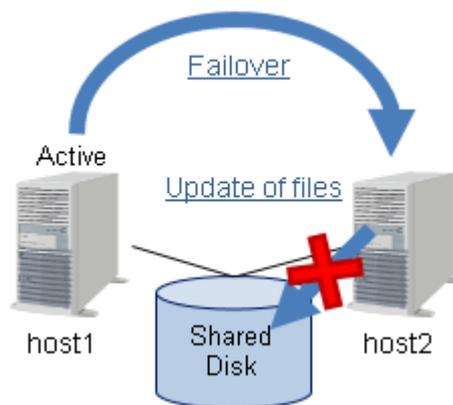


Figure 4-1 Update of the files on the shared disk is not executed

One possible cause of the RupInstCmd.log not being output is that the shared disk could not be accessed at the time of host switching due to the movement of a failover group. If you cannot access the shared disk, the process of updating the files on the shared disk is not performed at all.

Action

Confirm the settings on the cluster software, and make sure that "host2" shown in the system configuration in "[Figure 4-1 Update of the files on the shared disk is not executed \(page 39\)](#)" can access the shared disk.

Next, start the Network Manager-related services manually on "host2". This executes the process of updating the files on the shared disk.

For details on how to confirm processes such as updating the files on the shared disk, refer to "How to confirm the completion of the process," contained in "[3.5 Moving a Failover Group \(page 28\)](#)".

4.2 If the End Code of RupInstCmd.log Is Other Than "0"

If some of the Network Manager-related services are stopped and the end code value recorded in RupInstCmd.log is other than "0", this indicates that updating the files on the shared disk has failed.

When operation is switched from the active host (host1) on which the old version of Network Manager is operating to the standby host (host2) on which Network Manager is being updated, the process of updating the files on the shared disk is executed. If updating the files on the shared disk fails for any reason, some of the Network Manager-related services are stopped, and a value other than "0" is recorded as ExitCode at the end of RupInstCmd.log given below.

- `%NVP_INSTALL_PATH%\Manager\log\RupInstCmd.log`

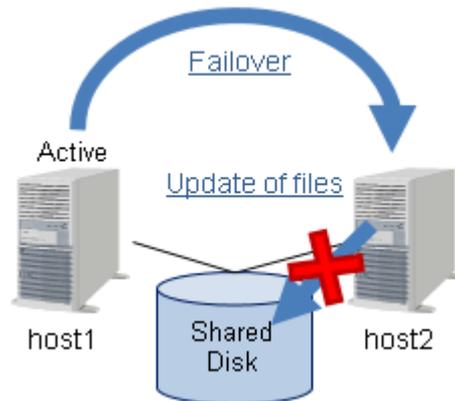


Figure 4-2 Failure to update the files on the shared disk

There are variable possible causes, such as insufficient free space on the shared disk and competition of access to overwrite files.

Action

In this situation, perform a failback to the old version and recover the environment following the steps below.

Tip

The following explanation assumes the system configuration shown in "[Figure 4-2 Failure to update the files on the shared disk \(page 40\)](#)".

1. Restoring the shared disk from host2

Stop all Network Manager-related services, and use backup data to return the files on the shared disk to the state they were in before the rolling update.

For details, refer to "[4.2.1 Restoring the shared disk \(page 40\)](#)".
2. Remove the configuration for new services on host1 and host2

If the original Network Manager version is 8.0 or lower, restore the configuration for new service registered by rolling update work to the state before work.

For details, refer to "[4.2.2 Remove the configuration for new services \(page 43\)](#)".
3. Failback to host1

Switch the hosts to operate and activate host1 as active. At this point, only the other host returns to the state in which it can operate with the old version.

For details, refer to "[4.2.3 Switching back to the old version of host \(page 45\)](#)".
4. Restore the environment of host2

Uninstall Network Manager on host2, and rebuild it with the version effective before the rolling update. Next, restore the backup data, to restore host2 as a standby host.

For details, refer to "[4.2.5 Failback of the upgraded Environment \(page 50\)](#)".

4.2.1 Restoring the shared disk

The following describes how to restore the shared disk when a rolling update fails.

If updating the files on the shared disk fails when operations are switched from the active host on which the old version of Network Manager is operating to the standby host on which Network Manager is being updated, recover the environment by restoring the shared disk and returning to the operation of the old version of the host.

The following describes the procedure for restoring the shared disk.

The following explanation assumes the system configuration shown in "Figure 4-3 Environment when a rolling update fails (page 41)".

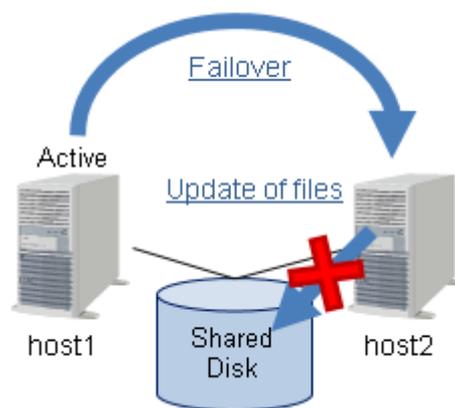


Figure 4-3 Environment when a rolling update fails

Perform the following procedure as a user with Administrator rights.

1. Stop the Network Manager-related services on host2

Stop all Network Manager-related services.

Network Manager-related services:

- NvPRO Performance Manager
- NvPRO Topology Adapter
- NvPRO ResourceManagerAPI Service
- MasterScope UMF Operations Manager_*n* *1
- NvPRO Base Manager
- FTBase service
- NvPRO Performance Database
- Wfdb_wfdb*n* *1 *2
- Wfdb_nvalertdb*n* *1 *2
- Wfdb_nvsflowdb*n* *1 *2

Follow the steps below to stop the services.

- a. Open the Control Panel window and search "Administrative Tools".
- b. In the Administrative Tools window, open the **Services**.

*1 *n* is a numeric value of 1 or greater (service number).

*2 This does not exist if you use external databases.

- c. From the list in the Services window, select the services you want to stop and execute **Stop service**.
2. Delete the specific directories on the shared disk

To delete the unnecessary files that were added due to the process of updating the files on the shared disk, delete the specific directories on the shared disk from host2.

Start the command prompt by executing **Run as administrator** on host2 and execute the following command.

```
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\RMAPI\db
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO
\ResourceManager\work
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK\local
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\amib
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\attitem
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\comptype
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\icontype
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\icontype_ax
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\locale
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\menuitem
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\menuitem_ax
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\reptype
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\trap
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK
\public\exdll\KNOWLEDGE
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\NVWORK\tmp
```

(Do not insert a line break in the middle of the command.)

If the old version was earlier than 8.0, execute the following command in addition to the above and delete the following directories and file.

```
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\NvPRO\ImsAdapter
> rmdir /q /s %NVP_SHARE_PATH%\Manager\sg\database\NvPROPerfDB
> del %NVP_SHARE_PATH%\Manager\sg\NvPRO\NvPROIms.ini
```

(Do not insert a line break in the middle of the command.)

3. Restore the backup data on the shared disk

Execute the following restore command (SysMonMgr -restore) from the command prompt of host2 to restore the shared disk.

- Path
 - %NVP_INSTALL_PATH%\Manager\bin\SysMonMgr.exe
- Specification method

```
SysMonMgr -restore -S -latest
```

For details of the restore command, refer to "User's Manual".

4. Maintain consistency between the configuration management database (CMDB) and the shared data

The configuration management database (CMDB) may be partially inconsistent with the data on the restored shared disk. From host2, perform the process of maintaining consistency between the configuration management database (CMDB) and the data on the shared disk.

- a. Start the configuration management database (CMDB).

- When using internal databases:

Execute the following command on the command prompt.

```
> cd /d "%NVP_INSTALL_PATH%\Manager\bin"
> WfdbCtlStart.bat
```

- When using external databases (SQL Server):

Start the SQL Server instance for the configuration management database (CMDB) from the list in the Windows Services window or from the command prompt.

Example of starting CMDB from the command prompt^{*3}

```
> net start MSSQLServer
```

- b. Execute the command for ensuring data consistency.

Execute the following command on the command prompt.

```
> cd /d "%NVP_INSTALL_PATH%\Manager\bin"
> NvPRORestoreDataC.bat
```

- c. Stop the configuration management database (CMDB).

- When using internal databases:

Execute the following command on the command prompt.

```
> cd /d "%NVP_INSTALL_PATH%\Manager\bin"
> WfdbCtlStop.bat
```

- When using external databases (SQL Server):

Stop the SQL Server instance for the configuration management database (CMDB) from the list in the Windows Services window or from the command prompt.

Example of starting CMDB from the command prompt^{*3}

```
> net stop MSSQLServer
```

This completes restoring the shared disk.

Next, perform operations to switch to the old version of host1 following the steps in ["4.2.3 Switching back to the old version of host \(page 45\)"](#).

4.2.2 Remove the configuration for new services

The following describes how to restore the configuration for new service registered by rolling update work to the state before work.

^{*3} In this example, the configuration management database (CMDB) is created in the default instance.

The following explanation assumes the system configuration shown in "Figure 4-4 Environment when a rolling update fails (page 44)".

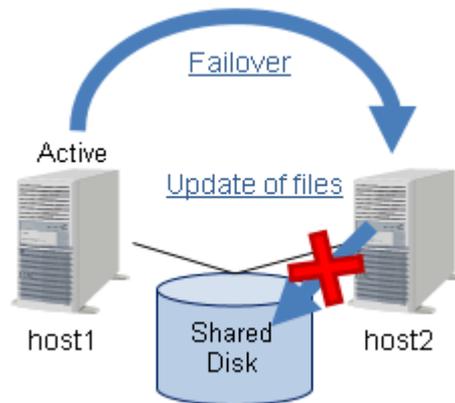


Figure 4-4 Environment when a rolling update fails

Remove the configuration of new services added as a service resource of EXPRESSCLUSTER X so that new services will not start up when switching hosts. Also, uninstall the new services of host1.

Tip

For details operating the EXPRESSCLUSTER X, refer to the EXPRESSCLUSTER X documents.

1. Restore the service resources

Operate the EXPRESSCLUSTER X and remove the following services from the service resources of EXPRESSCLUSTER X.

- NvPRO Performance Database
- NvPRO Topology Adapter
- NvPRO Performance Manager

Tip

- If you start each service using "net start" command in the script resource, update the script resource.
- In the work of "3.4.2 Configuring new services for Cluster Environment (page 26)", the file deletion processing related to NvPRO Performance Database is added. However, since this process does not affect the whole operation, it does not need to be removed.

2. Reflect the configuration

Operate the EXPRESSCLUSTER X and reflect the configuration of the cluster system. At that time, stop of the failover group and cluster suspend are executed.

After reflecting the configuration of the cluster system, execute cluster resume.

3. Uninstall the new services

- a. Log in to host1 as a user with Administrator rights.
- b. Start the command prompt by executing **Run as administrator**.
- c. Execute the services removal script (adapter-remove.bat).

- Path

```
%NVP_INSTALL_PATH%\Manager\bin\NvPRO
```

- Specification method

```
adapter-remove.bat
```

- Execution example

```
> cd "C:\Program Files (x86)\NEC\UMF\Operations\Manager
\bin\NvPRO"
> adapter-remove.bat
```

- d. Confirm the execution results of the services removal script (`adapter-remove.bat`).
When you execute the services removal script (`adapter-remove.bat`), the execution results are output at the command prompt. Confirm that the execution results do not contain any messages indicating errors.

4. Delete the configuration file

Manually delete the following configuration file related to the new services.

The configuration file

```
%NVP_INSTALL_PATH%\Manager\sg\NvPRO\NvPROAdapter.ini
```

This completes removing the configuration for the new services.

Next, perform operations to switch back to the old version of host1 following the steps in "[4.2.3 Switching back to the old version of host \(page 45\)](#)".

4.2.3 Switching back to the old version of host

The following describes how to switch back to the old version of host when a rolling update fails.

The following describes the specific procedure for switching back to the old version of the host.

The following explanation assumes the system configuration shown in "[Figure 4-5 Switch back to the old version of host \(page 45\)](#)".

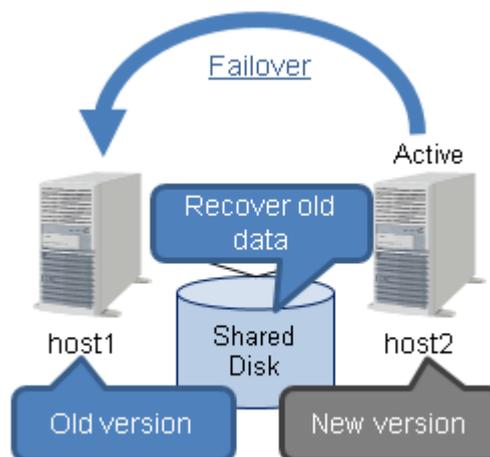


Figure 4-5 Switch back to the old version of host

Perform the following procedure as a user with Administrator rights.

1. Move a failover group

Use EXPRESSCLUSTER X to switch operation to host1 on which the old version of Network Manager is installed.

Tip

For details operating the EXPRESSCLUSTER X, refer to the EXPRESSCLUSTER X documents.

2. Confirm operating status of the Network Manager-related services

For an environment in which internal databases are used or in which the SQL Server is used as an external database and are not upgraded on host2, confirm that the Network Manager-related services have been started normally on host1.

If the SQL Server used as an external database is updated on host2, the Network Manager-related services cannot be started normally. Rebuild the database with backup data, according to "[4.2.4 Failback of External Databases \(SQL Server\) \(page 46\)](#)".

Tip

If the updated SQL Server is connected to an old version of the database data of the SQL Server, the contents of the database are automatically updated for the updated SQL Server. For this reason, a connection cannot be made normally from the old version of the SQL Server to the database data.

3. Downgrade the Monitoring Terminal Function

Uninstall the monitoring terminal function of the new version and reinstall the monitoring terminal function of the previous version.

Start the monitoring terminal function and confirm the connection with the manager function.

If you can confirm that a connection can be made normally between the monitoring terminal function and the manager function, operations for switching back to the old version of host1 are complete.

Next, perform operations to restore the updated host2 following the steps in "[4.2.5 Failback of the upgraded Environment \(page 50\)](#)".

4.2.4 Failback of External Databases (SQL Server)

The following describes the procedure for restoring the SQL Server if the SQL Server used as an external database was updated during the rolling update.

If the upgraded SQL Server is connected to the database data of an old version of the SQL Server, the contents of the database are automatically updated for the upgraded SQL Server. For this reason, access cannot be made normally from the old version of the SQL Server to the database data.

Perform the following procedure as a user with Administrator rights to restore to an environment which can be operated on the old version of the SQL Server.

The following explanation assumes the system configuration shown in "[Figure 4-6 Current SQL Server environment \(page 47\)](#)".

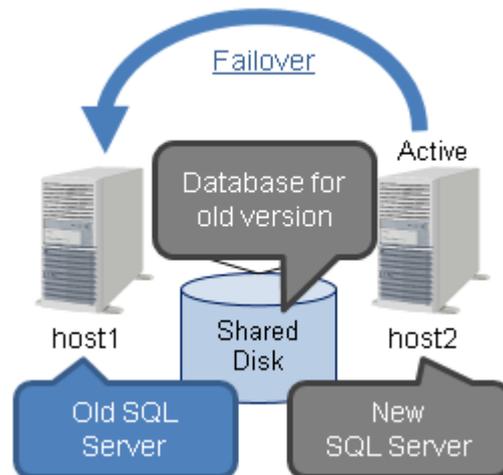


Figure 4-6 Current SQL Server environment

1. Stop the Network Manager-related services on host1

Stop all Network Manager-related services.

Network Manager-related services:

- NvPRO ResourceManagerAPI Service
- MasterScope UMF Operations Manager_*n* *4
- NvPRO Base Manager
- FTBase service

Stop the services according to the following steps.

- a. Open the Control Panel window and search "Administrative Tools".
- b. In the Administrative Tools window, open the **Services**.
- c. From the list in the Services window, select the services you want to stop, and then execute **Stop service**.

2. Confirm that the SQL Server instance has started

From the list in the Windows Service window, confirm that the instances *5*6 of the configuration management database (CMDB) and the sFlow database have been started.

3. Detach the database

Start the command prompt, and use the following command to detach each database.

- Detaching the configuration management database (CMDB) and the fault management database

```
osql -U sa -P <sa password> -S localhost\<CMDB>
-i C:\MSSQL\DEACT.sql
```

sa password

*4 *n* is a numeric value of 1 or greater (service number).

*5 The fault management database is created in the same instance as that of the configuration management database (CMDB).

*6 The instance of the sFlow database exists if you perform performance management with the sFlow function.

Password for the sa account of the SQL Server

CMDB

Specify the instance name of the configuration management database (CMDB). If you use the default instance, specify localhost as the -S option.

Execution example: When using the default instance

```
> osql -U sa -P sa@Password -S localhost
-i C:\MSSQL\DEACT.sql
```

(Do not insert a line break in the middle of the command.)

- Detach the sFlow database^{*7}

```
osql -U sa -P <sa password> -S localhost\<SFLOW>
-i C:\MSSQL\SFLOWDEACT.sql
```

sa password

Password for the sa account of the SQL Server

SFLOW

Instance name for the sFlow database. If you use the default instance, specify localhost for the -S option.

Execution example: When using an instance named SFLOW

```
> osql -U sa -P sa@Password -S localhost\SFLOW
-i C:\MSSQL\SFLOWDEACT.sql
```

(Do not insert a line break in the middle of the command.)

4. Delete the database files

Delete all database files placed on the shared disk (example: X:\MSSQL\Data).

Table 4-1 List of database files to delete

	File name	Destination example
Configuration management database (CMDB) file	<configuration management database name>.mdf	X:\MSSQL\Data\wfdb.mdf
	<configuration management database name>_log.ldf	X:\MSSQL\Data\wfdb_log.ldf
Fault management database file	<Fault management database name>.mdf	X:\MSSQL\Data\nvprodb.mdf
	<Fault management database name>_log.ldf	X:\MSSQL\Data\nvprodb_log.ldf
sFlow database file ^{*7}	<sFlow database name>.mdf	X:\MSSQL\Data\sflowdb.mdf
	<sFlowdatabase name>_log.ldf	X:\MSSQL\Data\sflowdb_log.ldf

5. Restore backup data

Using the SQL Server restore command (RESTORE), restore the data backed up with the procedure described in "2.4.1 Backing up the active host (page 11)" to restore each database to the state it was in before the rolling update. For details of the restore command (RESTORE), refer to the Microsoft SQL Server manual.

- Restore the configuration management database (CMDB)

^{*7} Perform this step only if the sFlow database exists.

Restore the data backed up with the Network Manager backup command (SysMonMgr -backup). The backup data for the configuration management database (CMDB) is stored in the following folder.

- %NVP_INSTALL_PATH%\Manager\backup\nnn\sg\wfdbmgr\

nnn

3-digit integer number identifying backup data. If the value is unknown, execute the backup list command (SysMonMgr -listbackup), and determine the value from the backup acquisition date and time.

CMDB

Backup file name in the configuration management database. The file name differs depending on the version of Network Manager being used when acquiring the backup. Specify a file name with an extension of "bak."

⚠ Caution

In Network Manager version 6.1, depending on the version of the modules common to MasterScope products that are contained internally, the backup data in the configuration management database (CMDB) may be stored in the backup directory of the SQL Server. If the backup files do not exist in the specified location above, check the backup directory of the SQL Server.

Execution example:

(When restoring the backup data "C:\Program Files (x86)\NEC\UMF\Operations\Manager\backup\005\sg\wfdbmgr\CMDB.bak")

```
> osql -S localhost -U sa -P sa@Password -Q
"RESTORE DATABASE [wfdb] FROM DISK = N
'C:\Program Files (x86)\NEC\UMF\Operations
\Manager\backup\005\sg\wfdbmgr\CMDB.bak'
WITH FILE = 1, NOUNLOAD, STATS = 10"
```

(Do not insert a line break in the middle of the command.)

- Restore the fault management database

Restore the data backed up with the SQL Server backup command (BACKUP).

Execution example: (When restoring the backup data "C:\bak\nvprodb.bak")

```
> osql -S localhost -U sa -P sa@Password -Q
"RESTORE DATABASE [nvprodb] FROM DISK = N'C:\bak\nvprodb.bak'
WITH FILE = 1, NOUNLOAD, STATS = 10"
```

(Do not insert a line break in the middle of the command.)

- Restore the sFlow database*7

Restore the data backed up with the SQL Server backup command (BACKUP).

Execution example: (When restoring the backup data "C:\bak\sflowdb.bak")

```
> osql -S localhost\SFLOW -U sa -P sa@Password -Q
"RESTORE DATABASE [sflowdb] FROM DISK = N'C:\bak\sflowdb.bak'
WITH FILE = 1, NOUNLOAD, STATS = 10"
```

(Do not insert a line break in the middle of the command.)

6. Maintain consistency between the configuration management database (CMDB) and the shared data

The restored configuration management database (CMDB) may be partially inconsistent with the data on the shared disk. From host1, perform the process of maintaining consistency between the configuration management database (CMDB) and the data on the shared disk.

Execute the following command on the command prompt.

```
> cd /d "%NVP_INSTALL_PATH%\Manager\bin"
> NvPRORestoreDataC.bat
```

This completes operations for restoring the external database.

Start all Network Manager-related services on host1, and confirm that all Network Manager-related services have been started normally. After confirming that the Network Manager-related services have been started, launch the monitoring terminal function and confirm the connection between the monitoring terminal function and the manager function.

If you can confirm that a connection can be made normally between the monitoring terminal function and the manager function, operations for restoring the old version on host1 are complete.

Next, perform operations to restore the updated host2 according to ["4.2.5 Failback of the upgraded Environment \(page 50\)"](#).

4.2.5 Failback of the upgraded Environment

The following describes how to fail back the updated environment when a rolling update fails.

If the rolling update fails for any reason after the standby host has been updated, you must restore the updated environment to the old version.

The following describes the procedure to restore it to the old version.

The following explanation assumes the system configuration shown in ["Figure 4-7 Current system status \(page 50\)"](#).

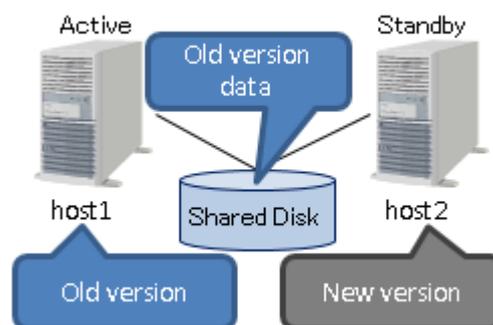


Figure 4-7 Current system status

Perform the following procedure as a user with Administrator rights.

1. Uninstall Network Manager

Uninstall the manager function for the updated Network Manager on host2 referring to "MasterScope Network Manager Setup Guide for Windows / EXPRESSCLUSTER X Environment".

⚠ Caution

If you use external databases (SQL Server) and you updated the SQL Server during the rolling update, uninstall the SQL Server as well.

2. Build the old version of the environment

Using the installation media containing the old version, install the manager function for Network Manager on host2, and rebuild the manager function. At this time, you must specify the parameters to the installer so that the setup parameters are the same as those before uninstallation (the same as those on host1). For details on the procedure, refer to the "MasterScope Network Manager Setup Guide for Windows / EXPRESSCLUSTER X Environment" to confirm the version you need to install.

⚠ Caution

- If you applied an update module of Network Manager in the environment before the rolling update, be sure to apply the modules after installing the manager function.
- After installing the manager function, set up the Network Manager-related services so that they are not automatically started when the OS is started.

3. Restore backup data

Store the data backed up in "2.4.2 Backing up the standby host (page 13)" in the following directory on host2 to overwrite the existing data.

Destination directory: %NVP_INSTALL_PATH%\Manager\sg

Tip

After overwriting the backup data, make changes to the files and directories such as removing the read-only attributes, so that the files and directories are write-enabled.

4. Move a failover group

Switch operations from the active host (host1) to the standby host (host2), with cluster software control. Confirm that the Network Manager-related services have been started normally. After confirming that the Network Manager-related services have been started, launch the monitoring terminal function and confirm the connection between the monitoring terminal function and the manager function.

⚠ Caution

If you are using external databases (SQL Server) and the SQL Server has been rebuilt with an old version, the connection to the database fails and some of the Network Manager-related services cannot be started normally.

In this case, perform the procedure described below so that the connection to the database can be made normally.

a. Stop the Network Manager-related services

Stop all Network Manager-related services.

Network Manager-related services:

- NvPRO ResourceManagerAPI Service
- MasterScope UMF Operations Manager_n *8
- NvPRO Base Manager

*8 *n* is a numeric value of 1 or greater (service number).

- FTBase service

Follow the steps below to stop the services.

- Open the Control Panel window and search "Administrative Tools".
- In the Administrative Tools window, open the **Services**.
- From the list in the Services window, select the services you want to stop, and then execute **Stop service**.

- Confirm that the SQL Server instance has been started

From the list in the Windows Service window, confirm that the instances ^{*9}*10 of the configuration management database (CMDB) and the sFlow database have been started.

- Re-create the database login user

Execute RECRTUSR.sql, NVRECRTUSR.sql, and SFLOWRECRTUSR.sql, which are created upon building the previous environment to re-create the database login user.

Execution examples:

- Configuration management database (CMDB)

```
> osql -U sa -P sa@Password -S localhost
-i C:\MSSQL\RECRTUSR.sql
```

- Fault management database

```
> osql -U sa -P sa@Password -S localhost
-i C:\MSSQL\NVRECRTUSR.sql
```

- sFlow database^{*11}

```
> osql -U sa -P sa@Password -S localhost\SFLOW
-i C:\MSSQL\SFLOWRECRTUSR.sql
```

- Start the Network Manager-related services

Start all Network Manager-related services on host2, and confirm that all Network Manager-related services have been started normally. After confirming that the Network Manager-related services have been started, launch the monitoring terminal function and confirm the connection between the monitoring terminal function and the manager function.

If you can confirm that a connection can be made normally between the monitoring terminal function and the manager function, operations for failback to the old version on host2 are complete.

Return the settings on the cluster software that were changed before the rolling update to the original settings as described in "2.3 Suppressing and Canceling the Failover Process Due to Error Detection (page 10)", so that failover control is automatically performed when an error is detected.

Report the status when the rolling update fails along with the system environment information to the NEC Customer Support Center, and request that they investigate the cause.

*9 The fault management database is created in the same instance as that of the configuration management database (CMDB).

*10 The instance of the sFlow database exists if you perform performance management with the sFlow function.

*11 Perform this step only if the sFlow database exists.



**MasterScope Network Manager
Setup Guide
(Rolling Update)
For Windows / EXPRESSCLUSTER X environment**

NVP0WCUE0000-04

January, 2019 4 Edition

NEC Corporation

© NEC Corporation 2017 - 2019