



SystemGlobe GlobalMaster R1.3

Installation Guide

(Agent Version)

Jan 2004
NEC Corporation

Thank you for purchasing our products. This installation guide provides the Agent software installation method of “SystemGlobe GlobalMaster” for our customers.

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1. Preface

1.1. Outline

This document is the installation manual for SystemGlobe GlobalMaster R1.3 “Agent”.

=> SystemGlobe GlobalMaster Agent is application software operated on the OS of partitions managed system by SystemGlobe GlobalMaster.

SystemGlobe GlobalMaster Agent uses a network connection. If any network connections are not made on the Operating System where the Agent is installed, please make a network connection on it before starting an installation of the Agent.

Please refer to the related manuals (below) included with SystemGlobe GlobalMaster before installing SystemGlobe GlobalMaster R1.3 Agent.

- "SystemGlobe GlobalMaster R1.3 Release Notes"
- "SystemGlobe GlobalMaster Administration Guide"
- "SystemGlobe GlobalMaster Operation Manual"
- " SystemGlobe GlobalMaster R1.3 Installation Guide (Manager Version) "

To install the Agent, "installation" and "initial setting" are required. First install the Agent, and then execute initial setting.

Note that this document occasionally targets the users with a basic knowledge of the communication required for the basic operation of the OS and the initial setting of the Agent.

1.2. Requirements

SystemGlobe GlobalMaster R1.3 Agent is supported on the OSs and hardware listed below. Recheck the system configuration in use:

OS	OS version	Hardware
Windows	Windows Server 2003 Datacenter Edition	Express5800/1080Xd
	Windows Server 2003 Enterprise Edition	Express5800/1160Xd
		Express5800/1320Xd

Table 1 Requirements

1.3. Installation file list

The following files are installed by installation of the SystemGlobe GlobalMaster Agent:

Installation file path name	File description
[Installation root path]gmagent.exe	The executable file of the Agent (the Agent service)
[Installation root path]gmconfig.exe	The executable file of the Agent environment setting tool

Table 2 Installation files

1.4. Outline of installation

A setup of the agent progresses in the following procedures.

1. Preparation of installation
2. Installation of the Agent
3. Initial setting of the Agent

2. Preparation of installation

2.1. Log on

Log on to operating system as a user who has Administrator authority.

2.2. The setting of an installation media

Insert an installation media to a CD-ROM drive.

3. Installation of the Agent

3.1. First Installation

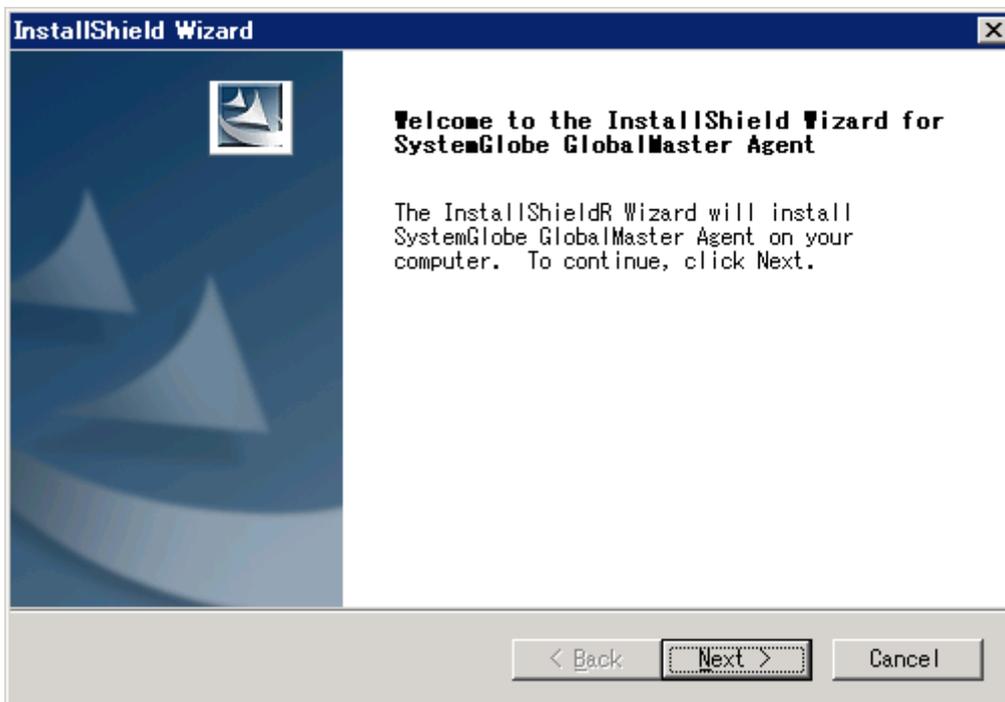
3.1.1. Starting Agent setup

Click **Start**, click **Run**, and then type bellow command in **Open** field:

E:\GlobalMaster\Agent \windows\IPF\setup.exe

(E: is drive letter of the CD-ROM drive which is inserted installation media)

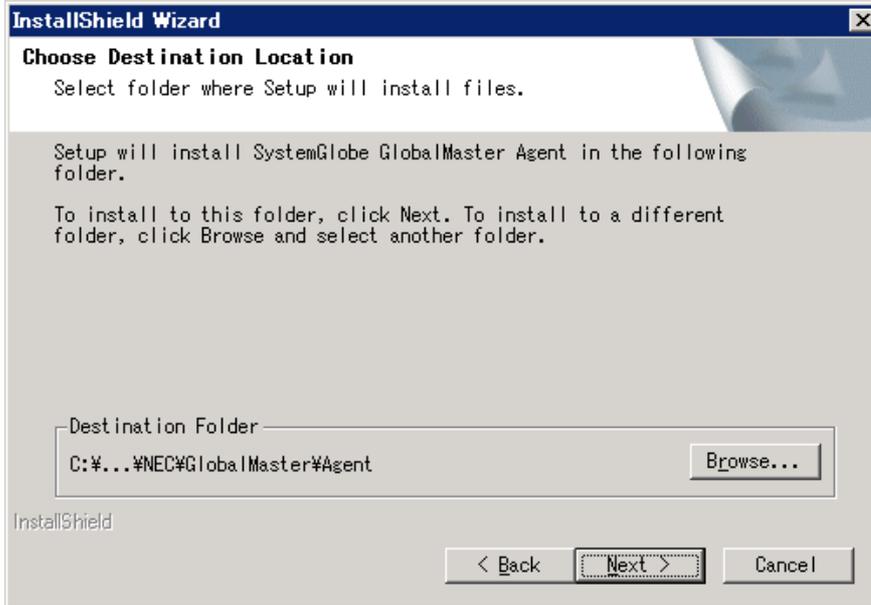
The following window is displayed:



Click [Next] button.

3.1.2. Choice of an installation directory

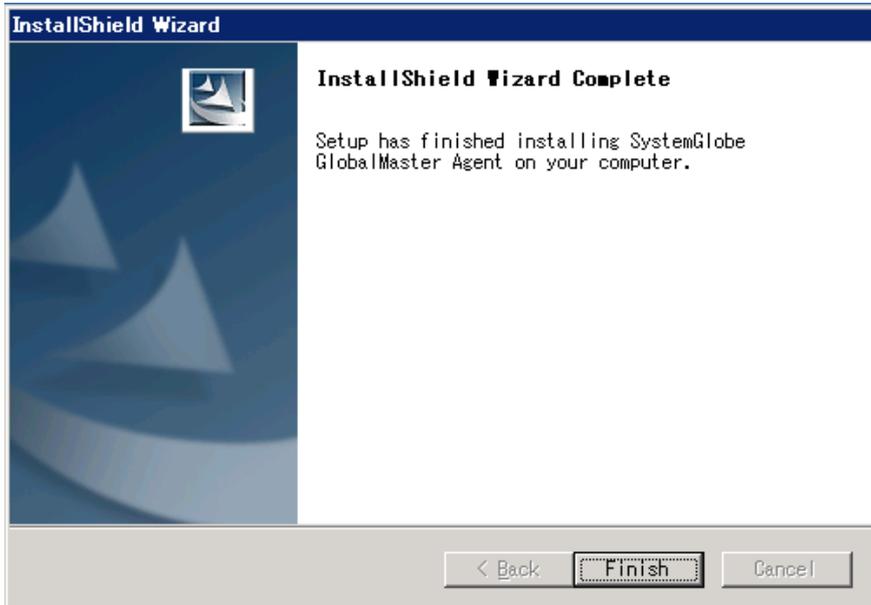
The following window is displayed:



To change an installation directory, choose it after pressing the [Browse] button. Click the [Next] button if an installation directory is determined.

3.1.3. Completion of installation

The following window is displayed:



Click the [Finish] button.

Agent installation is completed now.

3.2. Upgrade installation

☛ Please confirm a version of the Manager, before the Agent upgrade installation. If a version of the Manager is earlier, **please upgrade the Manager on ahead**. Please, refer to “SystemGlobe GlobalMaster Installation Guide (Manager Version)” about the Manager upgrade installation.

Upgrading the Agent of SystemGlobe GlobalMaster, it is necessary to uninstall an installed earlier Agent.

The procedures of upgrade installation are as follows.

- (1) Backup the following registry keys and its value by “Registry Editor”, etc. before starting

“HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NEC\GlobalMaster\Agent” followings

1. Starting Registry Editor

Click **Start**, click **Run**, and then type bellow command in **Open** field:

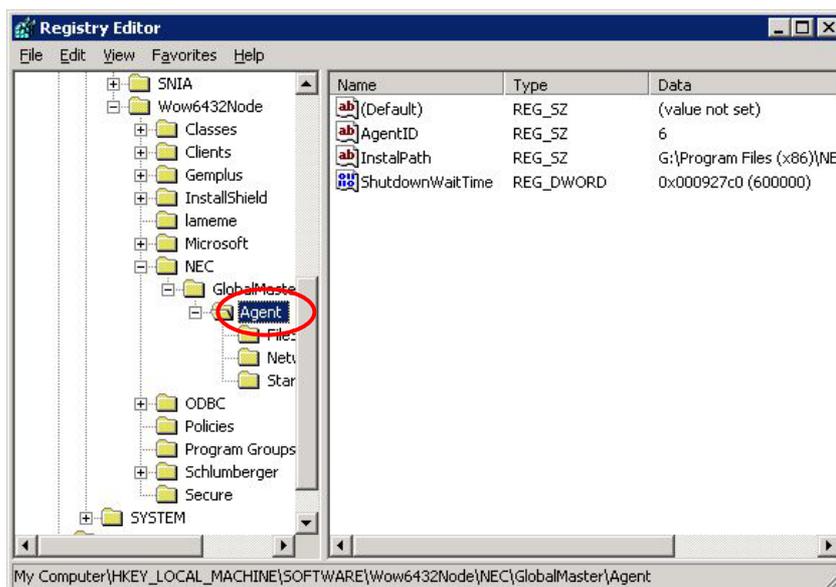
%SYSTEMROOT%\regedit.exe

2. Selecting the registry key of SystemGlobe GlobalMaster Agent

Select the registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NEC\GlobalMaster\Agent

as a following displayed window.



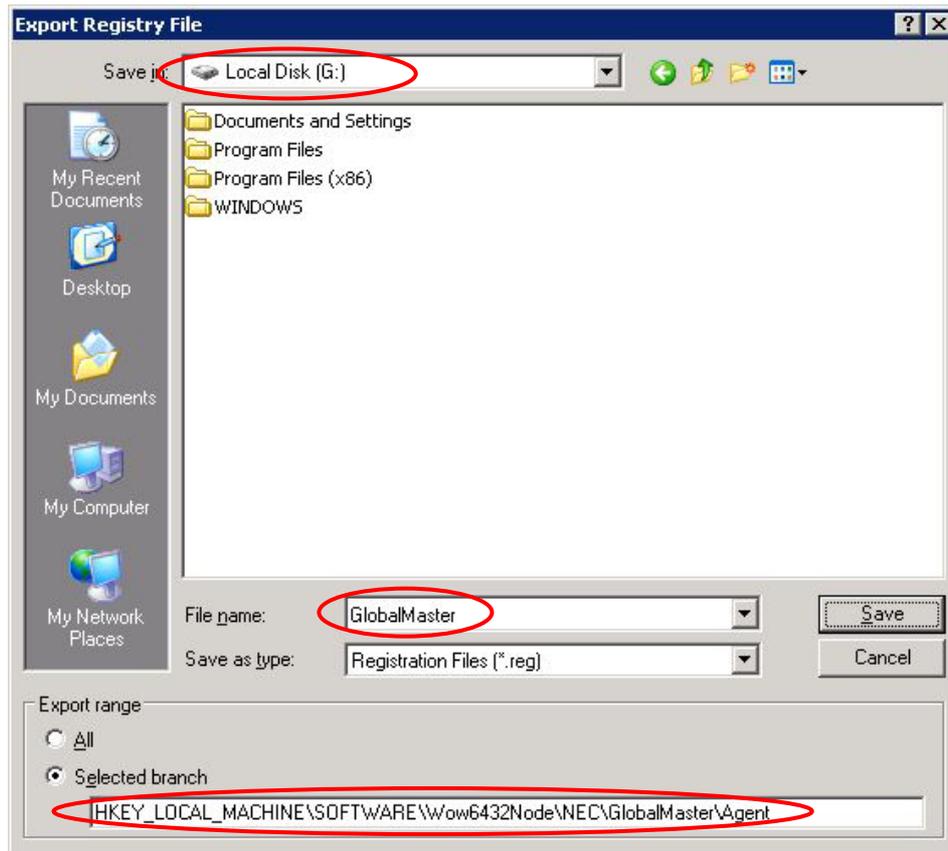
3. Exporting a registry file

Click **File**, click **Export** on the Registry Editor. Then “Export Registry File” dialog is displayed. And, save the registry file.

Then note that “Selected branch” field display:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NEC\GlobalMaster\Agent

(Case of following, the registry file is saved *GlobalMaster.reg*.)



(2) Refer to “6 Uninstallation of the agent”, and uninstall the Agent.

(3) Refer to “3.1 First Installation”, and install the Agent.

At “3.1.2 Choice of an installation directory”, have to choose **a same as directory chosen before upgrade installation.**

And, if Uninstallation at (2) is not finished, the Agent can not be installed.

(4) Overwrite the backup registry keys and value at (1) on the registry of Agent installed now.

As follows is explanation of recovery with Registry Editor.

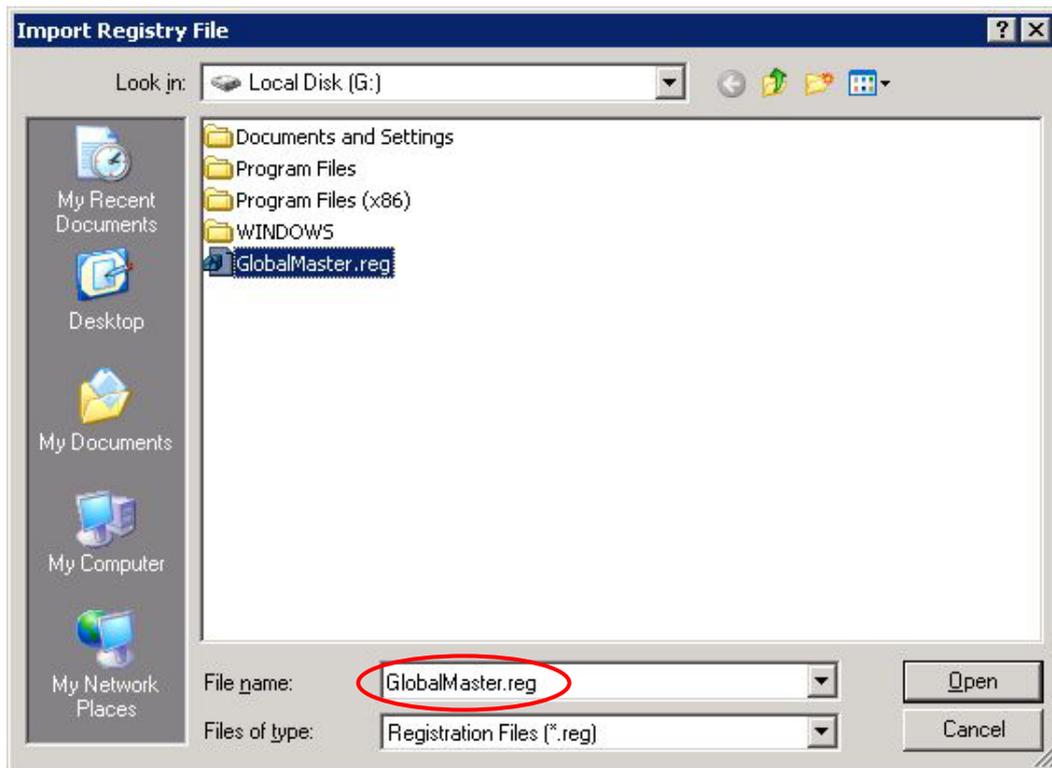
1. Starting Registry Editor

Click **Start**, click **Run**, and then type bellow command in **Open** field:

¥SYSTEMROOT¥regedit.exe

2. Importing a registry file

Click **File**, click **Import** on the Registry Editor. Then “Import Registry File” dialog is displayed. And, select and open the file as saved at “(1)-3 Exporting a registry file”.



(5) Refer to “5 Starting the Agent service”, and start the Agent.

Then, a message that the partition restarted is displayed to the Manager’s event log.

4. Initial setting of the Agent

4.1. Preface

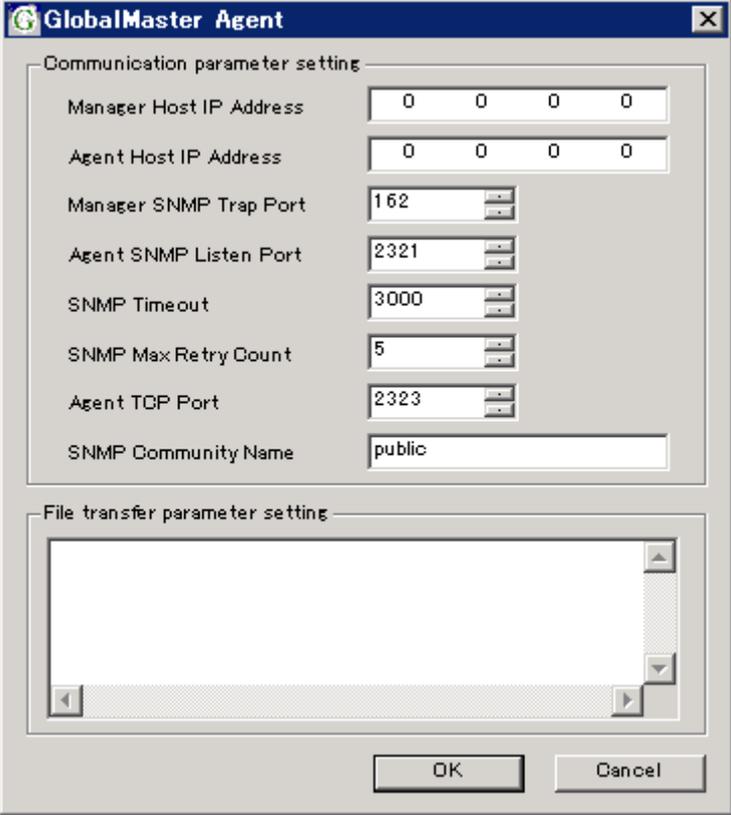
After the installation of the Agent complete, an initial setting of the Agent is required before using the Agent for the first time. The initial setting of the Agent is set using the Agent environment setting tool.

In an initial setting of the Agent, it is necessary to fix beforehand the parameters about communication between the SystemGlobe GlobalMaster administration manager (which is described as “the manager” subsequently) and the Agent, and a parameter of the manager. Fix the parameters of the manager by referring "SystemGlobe GlobalMaster Administration Guide" or other manuals.

4.2. Starting the Agent environment setting tool

Click **Start**, point **All Program**, point **NEC**, point **GlobalMaster**, point **Agent**, and then, click **Configuration** in order to start the Agent environment setting tool.

The following window is displayed:



The screenshot shows a Windows-style dialog box titled "GlobalMaster Agent". It is divided into two sections: "Communication parameter setting" and "File transfer parameter setting".

Communication parameter setting:

- Manager Host IP Address: 0 0 0 0
- Agent Host IP Address: 0 0 0 0
- Manager SNMP Trap Port: 162
- Agent SNMP Listen Port: 2321
- SNMP Timeout: 3000
- SNMP Max Retry Count: 5
- Agent TCP Port: 2323
- SNMP Community Name: public

File transfer parameter setting:

This section contains an empty text area with scrollbars.

At the bottom of the dialog are "OK" and "Cancel" buttons.

Note: When the tool is executed at first, the default of each parameter is displayed.

4.3. Item setting

There are the following kinds of items.

- (1) Communication parameter setting
- (2) File transfer parameter setting

Input each value and click [OK] button in order to change the parameter. To cancel the input, click the "Cancel" button.

■ A setting on communication of the Agent

A setting on communication of the Agent is to set values in the text box of the setting items. Refer to the following table about parameters, restriction of the value, and other descriptions:

Parameters	Description	Type and restriction
Manager Host IP Address (*)	IP address of the manager.	XXX.XXX.XXX.XXX
Agent Host IP Address	IP address of the Agent. This tool sets up automatically.	XXX.XXX.XXX.XXX
Manager SNMP Trap Port	The UDP port number which a manager receives the SNMP trap from the Agent. (1)	162 or Integer Value which is more than or equal to 1024 and less than or equal to 65535
Agent SNMP Listen Port	The UDP port number which receives the SNMP request from a manager. (2)	Integer Value which is greater than or equal to 1024 and less than or equal to 65535
SNMP Timeout	A time to wait for an acknowledge to SNMP trap. (3)	Integer Value which is more than or equal to 1 (A unit is a millisecond)
SNMP Max Retry Count	The number of times which sends SNMP trap again when a manager does not send an acknowledge to it. (4)	Integer Value which is more than or equal to 0
Agent TCP Port Number	The TCP port number which the Agent communicates with a manager. (5)	Integer Value which is more than or equal to 1024 and less than or equal to 65535
SNMP Community Name (*)	SNMP community name. (6)	ASCII character set

(1) Set the same value as a parameter of the manager "SNMP Trap port number".

- (2) Set the same value as a parameter of the manager "**SNMP port number**".
- (3) and (4) **It is not necessary to change these values usually.** If the problem of a network can be considered when a timeout occurs, set suitable values to these parameters.
- (5) Set the same value as a parameter of the manager "**Agent-side port number used for communication**".
- (6) Set the same value as the parameter of the manager "**SNMP COMMUNITY name**". Moreover, it is recommended for network security to set a unique value to an SNMP community name. **It is a security recommendation not to use a default setting value.**

(*) An item should surely set.

■ File transfer parameter setting

In the file transfer parameter setting, the destination directory of file transfer is restricted when the file is transferred from a manager.

=> A file transfer parameter setting is used in order to avoid shortage of the disk capacity on the Agent host by the file transfer function (*), or overwriting an important file.

When the script execution is not set on the manager's policy setting, this setting is not needed.

(*)The function transmits a file to the Agent from a manager. It is used in case "script execution" or "file replace" is carried out by a policy setting.

If some directories **wouldn't be written on**, describe their path in the "File transfer parameter setting" text box. One directory is described per line. A blank line is disregarded.

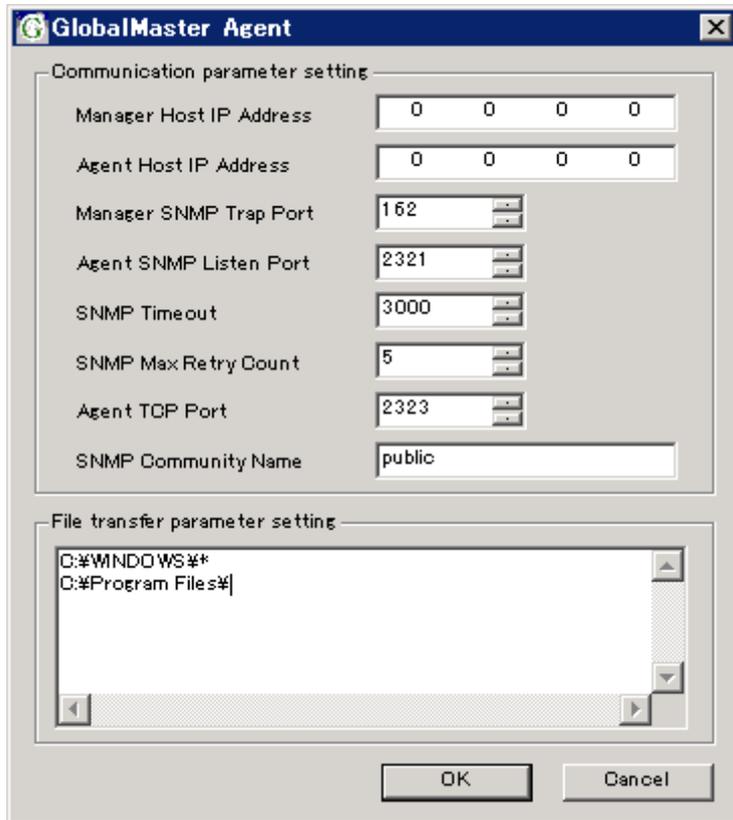
Specifying the directory which wouldn't be written on means that **only the files directly under** the specified directory is made not to be written on. Use "*" (asterisk) like following in order to also make some subdirectory not to be written on.

C:¥WINDOWS¥*

If this parameter is specified, and if the same is also set on the policy, the policy will result in failure.

(Example of a setting):

The following is a setting when not permitting to transfer the files under "C:¥WINDOWS", and only the files directly under "C:¥Program Files".



5. Starting the Agent service

5.1. Starting the Agent service

1. Click **Start**, point **Administrative Tools**, and then, click **Services** in order to display the service.
2. Right click **SystemGlobe GlobalMaster Agent** in a service list, and then, click **Start**.
3. Check that the **Status** of service is **Started**.

Since a service program is automatically started at the time of starting Windows, this operation is not usually required. When the Agent service has not been started like immediately after installation etc, should take the above.

5.2. Stopping the Agent service

1. Click **Start**, point **Administrative Tools**, and then, click **Services** in order to display the service.
2. Right click **SystemGlobe GlobalMaster Agent** in a service list, and then, click **Stop**.
3. Check that the **Status** of service is a blank display (the property of service **Stopped**).

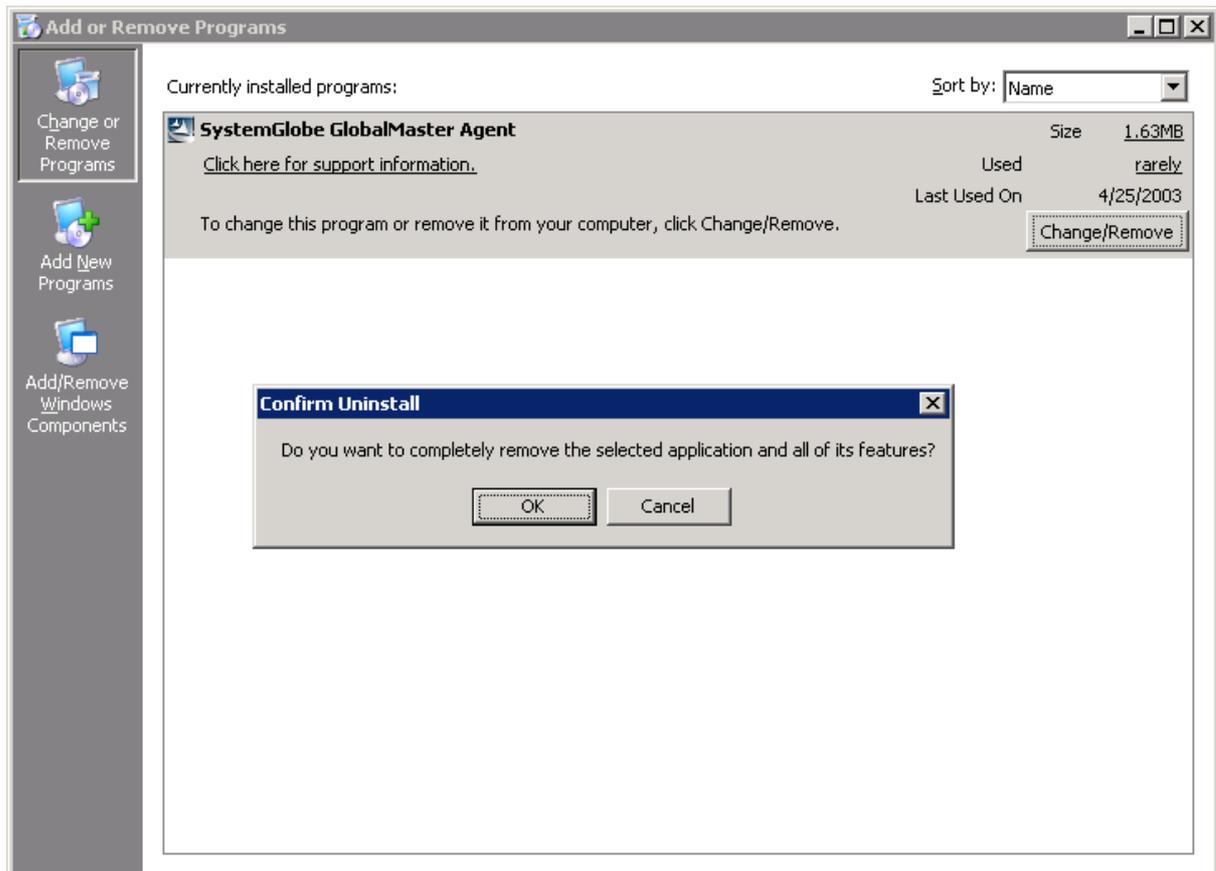
Since a service program stops automatically at the time of shutdown of Windows, this operation is not usually required.

6. Uninstallation of the agent

The Agent is uninstalled by

1. Click **Start**, point **Administrative Tools**, and then, click **Services** to display the service.
2. Right click **SystemGlobe GlobalMaster Agent** in a service list, and then, click **Stop**.
3. Click **Start**, point **Control Panel**, and then, click **Add or Remove Programs**. Choose **SystemGlobe GlobalMaster Agent** on **Add or Remove Programs**, and click [Change/Remove] button.

Since the confirmation dialog box displayed, click [OK] button, if you may delete. Uninstallation starts immediately.



7. Cautions and Restrictions

1. All Agents managed by one GlobalMaster Manager should have the same parameter as the communication parameter of the Manager.
2. Under the running, do not change the communication setting of a manager and all Agents managed by one GlobalMaster.
When it is necessary to change, stop all Agents, and then, change parameter of a manager. And, reboot all Agents after changing parameter of them.
3. It depends on how the application under operation processes a shutdown request to a partition from a manager whether the shutdown request operates correctly. When the shutdown is not finished within 10 minutes, the Agent makes the system to shutdown ignoring applications.

Time to start compulsive shutdown can be adjusted by changing the value of the following registries.

Key name:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NEC\GlobalMaster\Agent\

Entry name:

ShutdownWaitTime

Value:

Waiting time till starting compulsive shutdown. (Unit: a millisecond, initial value: 10 minutes)

However, a compulsive shutdown is not when 0xffffffff (Hexadecimal) is set.

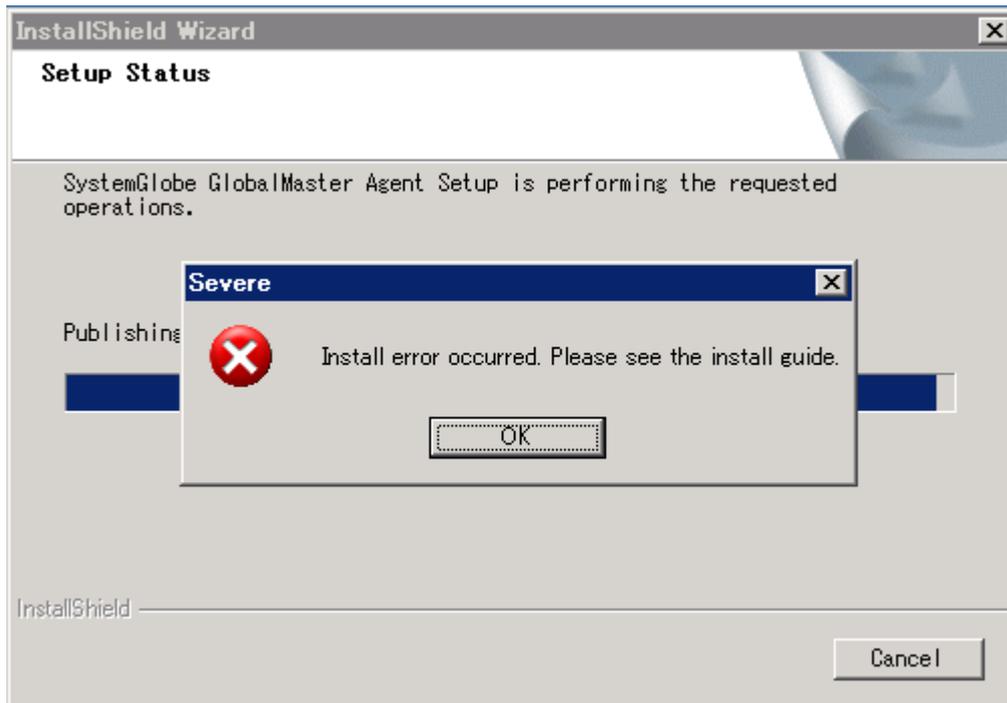
4. If the folder (file) is remain after uninstallation, check the security information on a file and delete it manually.

In addition, the files under [installation directory]\Temp are used by script execution of a manager, and a file "gmagent.pk" is used for communication with a manager. In case after uninstallation, even if deletes these files, the system is safe.

8. Troubleshooting

This chapter explains troubleshooting a problem on installation.

- The following error messages are displayed at the time of installation.



- The error occurred during installation. Click the [OK] button, interrupt installation and restore in the following procedures.

1. Reboot OS
2. Stopping the service
3. Execute command

Execute **gmsvconfig.exe** in an installation media.

Click **Start**, click **Run**, and then, in **Open**, type bellow command:

E:\GlobalMaster\Agent\tools\gmsvconfig.exe GlobalMasterAgent

(E:\ is drive name of the CD-ROM drive which is inserted installation media)

4. Starting the service

- The following warning message is displayed at starting the Agent environment setting

tool.



- Failed to get the network configurations on the Operating System. Check the “Network Connections” on the Operating System.