# User's Manual

Network Remote
Shutdown Program

FU-α3-Shutdown
for Windows

Installation／Users Guide

INR-HG51359 | b

# About High Safety Required Use

This product is designed, developed and manufactured as contemplated for general use, including without limitation, general office use, personal use and household use, but is not designed, developed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter "High Safety Required Use"), including without limitation, nuclear power core control, airplane control, air traffic control, mass transport operation control, life support, weapon launching control. You shall not use this product without securing the sufficient safety required for the High Safety Required Use. If you wish to use this product for High Safety Required Use, please consult with our sale person in charge before such use.

# Contents

# 1 Feature of FU-α3-Shutdown

## 1.1. Overview

FU-α3-Shutdown enables multiple servers on identical network (TCP/IP )to shut down. As the configuration of the system, FU-α3-LANBOARD or FU-α3-LANBOARD-2 (hereafter, referred to as FU-α3-LANBOARD) card is executed, Power supply is supplied to the multiple servers from UPS and these servers are assumed the case on identical network. The FU-α3-Shutdown is installed in these servers. When the power outage occurs, FU-α3-LANBOARD that is controlling the UPS sends the shutdown command via network (TCP/IP) to the server that is supplied power supply. When the server receives the shutdown command, start up the system shutdown of the OS.

Following environment requires to use the main software.

| | |
|---|---|
| FU-α3-LANBOARD | **10.48.XX firmware**<br>**10.102.XX firmware** |
| Objection UPS | FU-α3 Series |
| other | LAN cable、TCP/IP（Protocol） |

**Table 1**

### 1.1.1. Recommended motion environment

When FU-α3-Shutdown is used, following environment is recommended.

- CPU （Pentium） More than 200MHz
- Memory More than 128MB
- Empty capacity of the hard disc More than 100MB

### 1.1.2. Correspondence of the OS

Corresponding to following OS in our software.

**For the period of Windows 2000 SP4**
**Windows XP**
**Windows Server 2003 / 2003 R2**
**Windows Vista**
**Windows Server 2008 / 2008 R2**
**Windows 7**
**Windows Server 2012 / 2012 R2**
**Windows 8 / 8.1**
**Windows 10**
**Windows 11**
**Windows Server 2016**
**Windows Server 2019**
**Windows Server 2022**

## 1.2. Function

Following function is in our software.

| | |
|---|---|
| **Shutdown** | After the shutdown signal is received, the system is shut down in safety. |
| **Program execution** | When the system is shut down to customize「doshutdown.sh」within install directory, external program can be possible to implement external program within install directory. |
| **Monitor of FU-α 3-LANBOARD** | Monitor the motion of FU-α 3-LANBOARD.<br>The transmission between FU-α 3-LANBOARD that send shutdown signal can be confirmed. |
| **Transfer of shutdown signal** | After shutdown signal transmission module is used, the transfer of shutdown signal can perform. Theoretically, infinite unit of shutdown is possible. |
| **Shutdown in the case of UPS redundant composition** | The function shuts down in the case of operating backup or the abnormal in the no case of keeping the redundant composition in the redundant composition system that is supplied power supply from 2 units of UPS. |

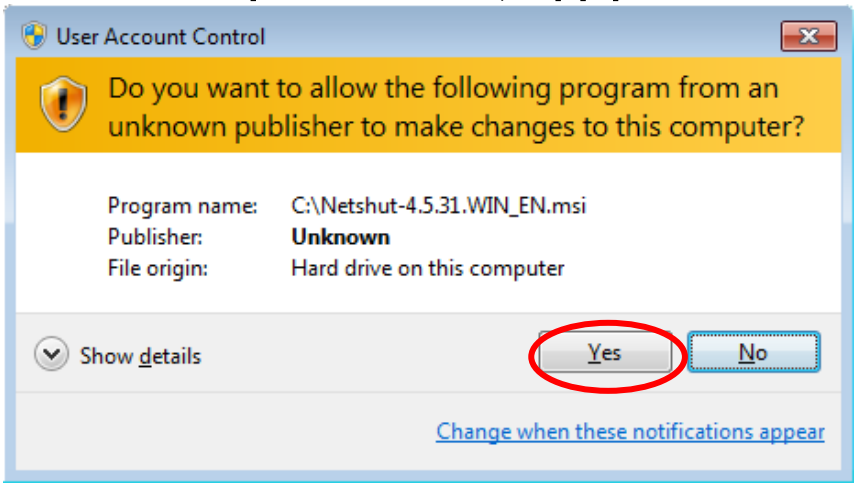
Table 2

## 2 Installation

1. Execute “FU-α3-Shutdown -X.Y.Z-WIN_JP.msi”.

**Caution**

When UAC is enable about the OS for period of Windows Vista, the pop up of user account control is displayed.




**After [YES] button is selected, authorize the change. When [NO] button was selected, the installation does not complete normally.**

Installation wizard is started.

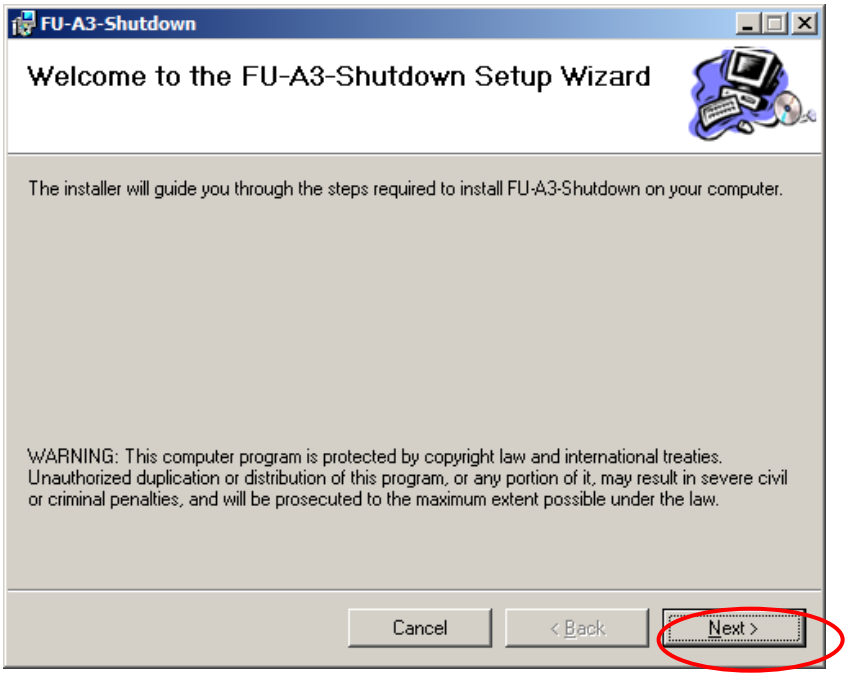



Figure 1 FU-a3-Shutdown screen

Click to the [NEXT] button.

3. The screen of license agreement is displayed as shown in Figure 3.

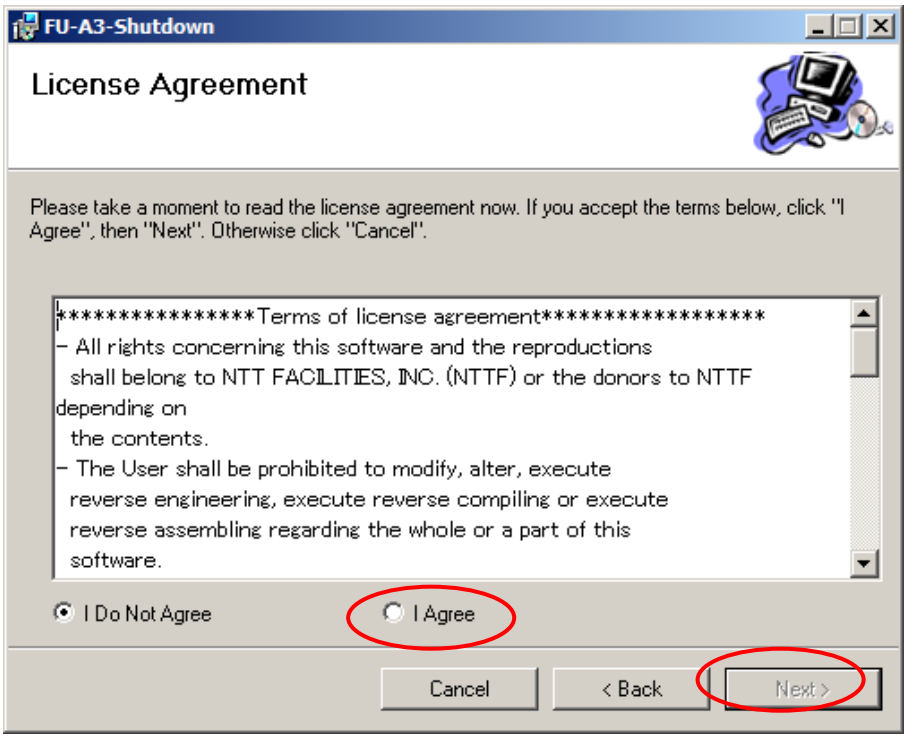



Figure 2 FU-a3-Shutdown screen

After the [AGREE] button is changed , select the [NEXT] button.

Complement : After [AGREE] button is selected, there is possible to select [NEXT] button.

4. Set the “INSTALLTION”.

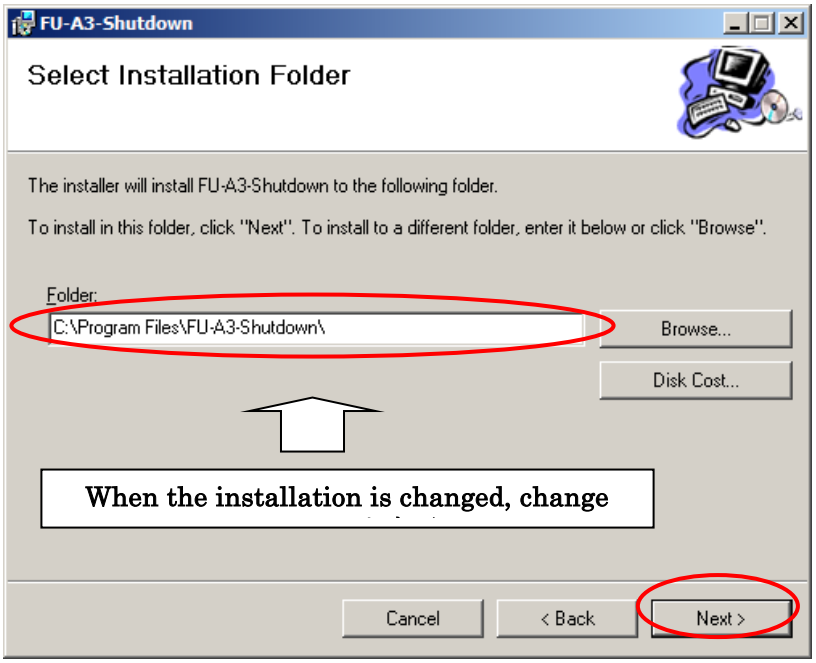



Figure 3 FU-α3-Shutdown screen

Select the [NEXT] button after [FOLDER] button is changed in the case of changing the installation.

5. Installation check

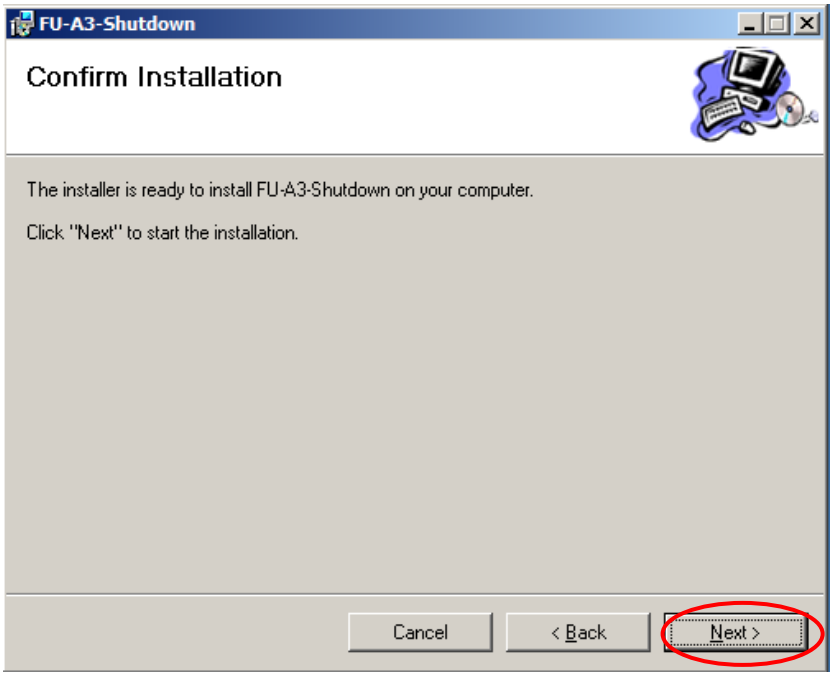
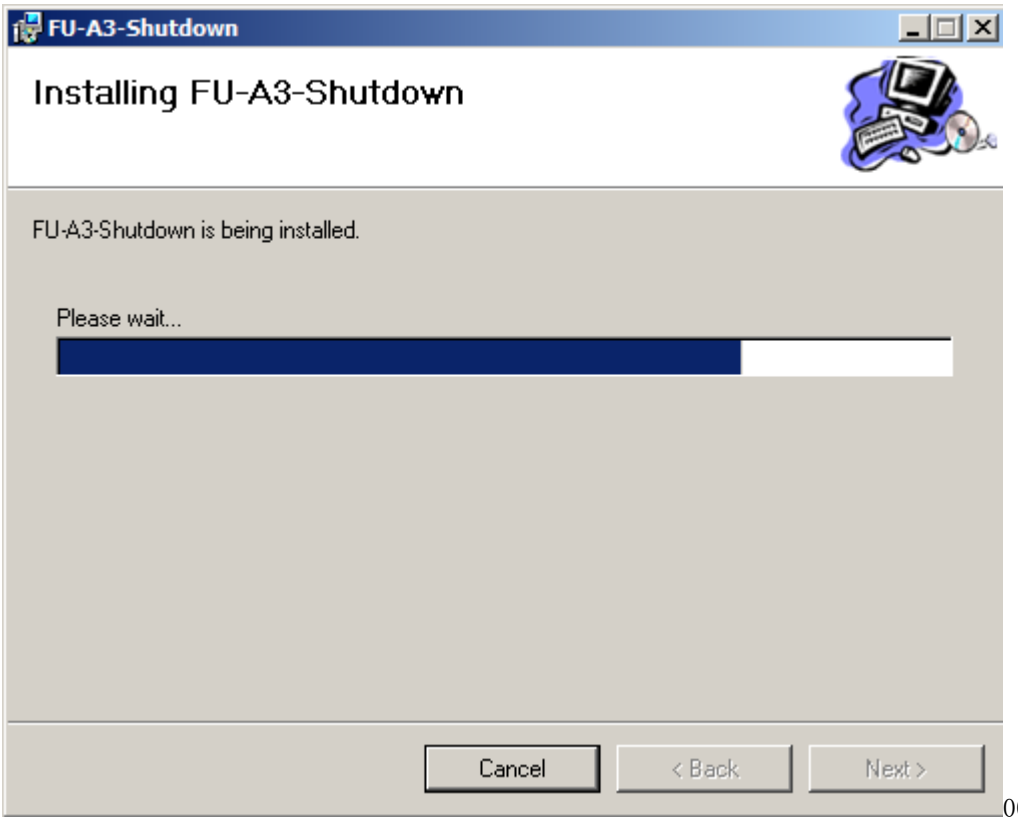



Figure 4 FU-α3-Shutdown screen

Select the [NEXT] button.

Installation is started.




00

Figure 5 FU-α3-Shutdown screen

6. The input screen of the license key is displayed as shown in Figure 7.

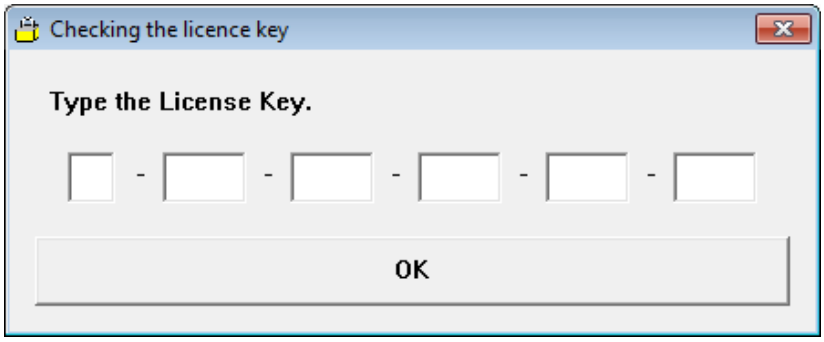



Figure 6 LICENSE KEY CHECK screen

Select the [OK] button after the license key is input.

7. The complete of the installation

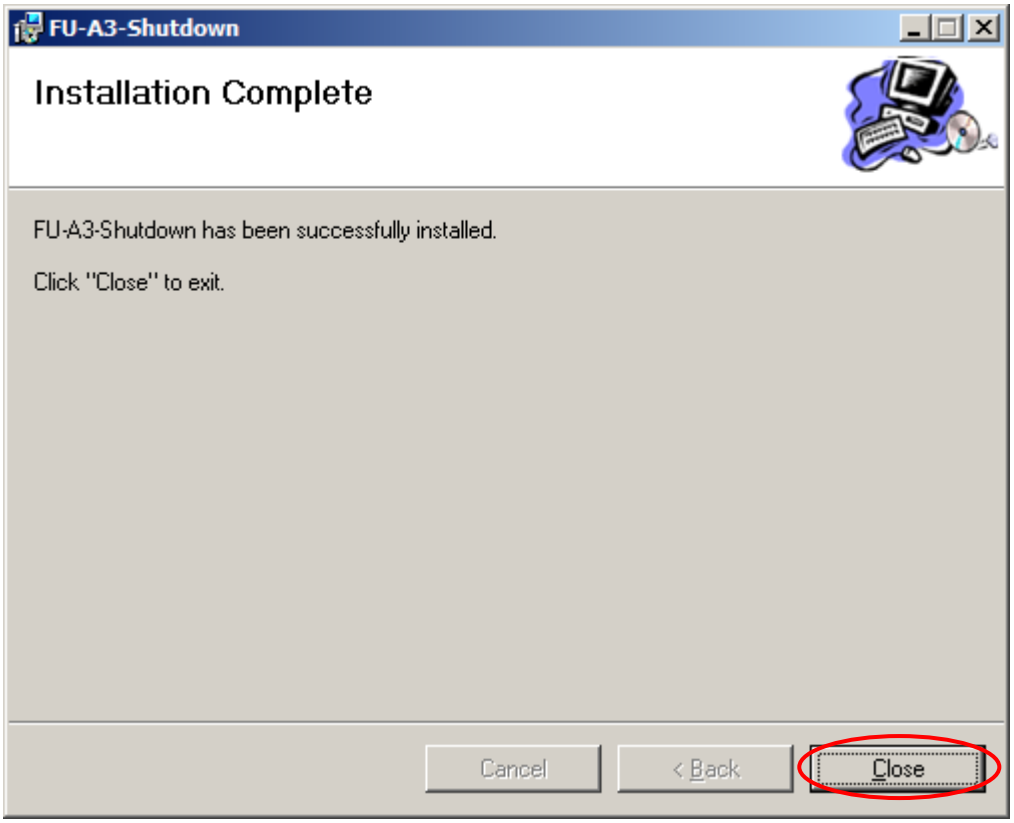



Figure 7 FU-a3-Shutdown screen

The installation completes. After [CLOSE] button is selected, finish the installer.

# 3 Uninstallation

In the case of Windows 2000, Windows XP, Windows Server 2003

1. Execute the “ADDITION AND DELETE OF PROGRAM” from the control panel.

2. After “FU-α3-Shutdown” from “The change and delete of the program” is selected, select the [DELETE] button.

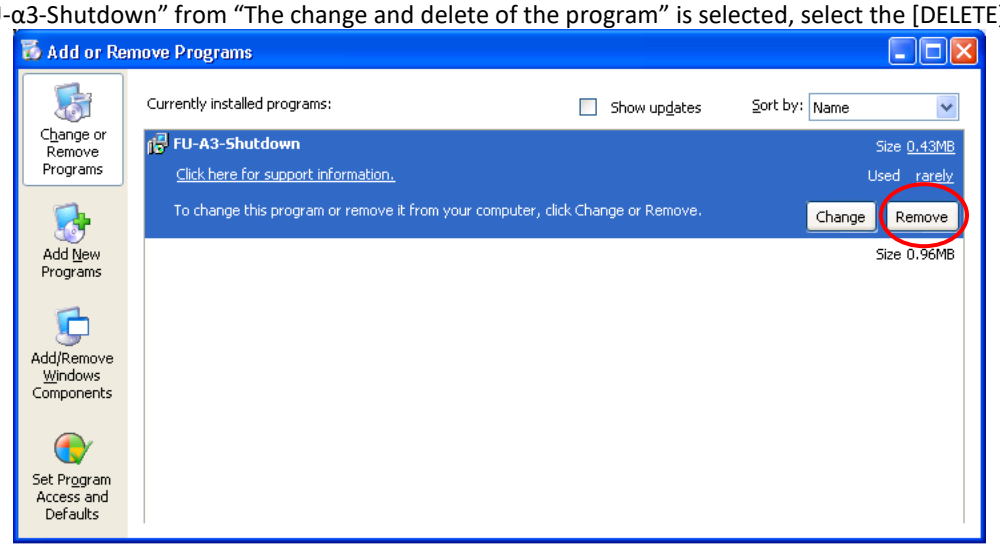



**Figure 8 ADDITION AND DELETE OF PROGRAM screen**

3. The confirmed popup of delete is displayed.

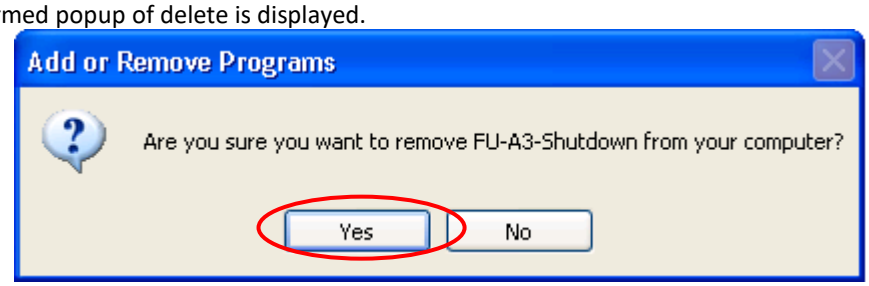



**Figure 9 ADDITION AND DELETE OF PROGRAM screen**

When the [YES] button is selected, uninstall is started.

Uninstall completes.

| CAUTION |
| --- |
| **In OS (for the period of Windows XP) that is executed Windows Firewall, uninstall adds the setting of port that FU-α3-Shutdown uses in the case of installing automatically. Change the setting of security when the uninstall implements the security step (such as Firewall of HUB) except for Windows Firewall.**<br><br>TCP receive port number that FU-α3-Shutdown uses (In the case of default): 7006<br><br>The process name of FU-α3-Shutdown: Netshut.exe |

In the case for period of Windows Vista

1. Select the uninstall from “PROGRAM of the control panel”.
2. Select the uninstall after “FU-α3-Shutdown” is selected from the function of the program.

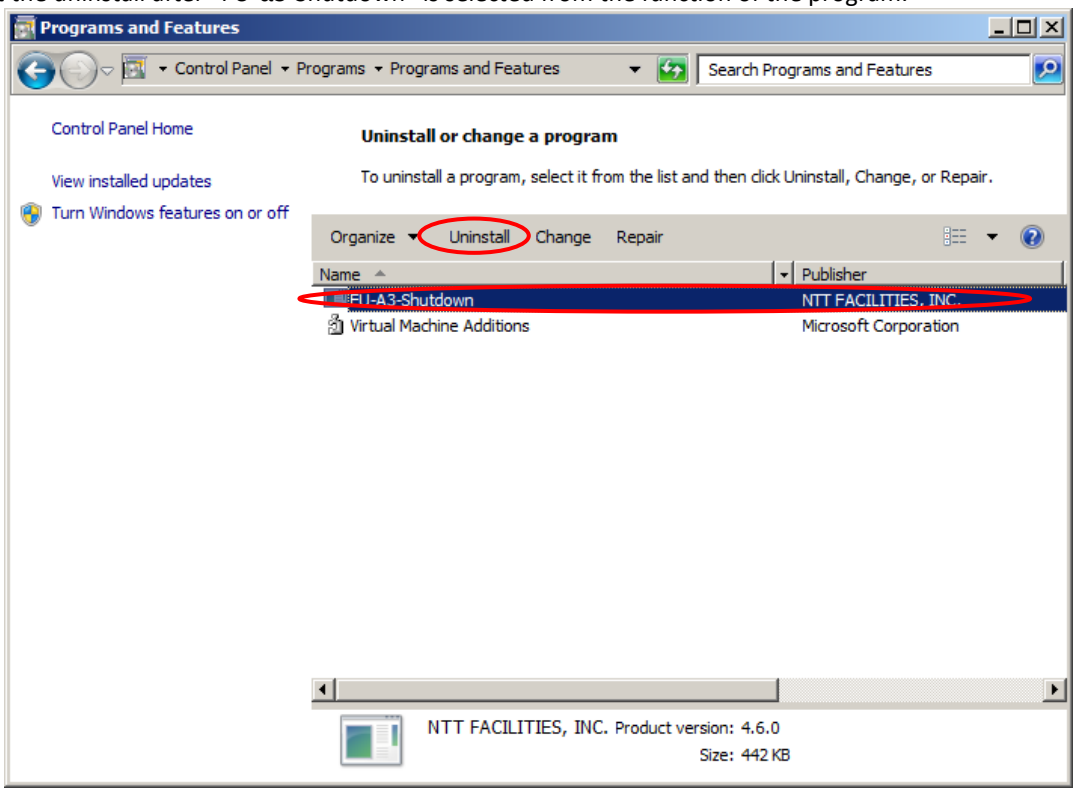



Figure 10 PROGRAM AND FUNCTION screen

3. The confirmed popup of delete is displayed.

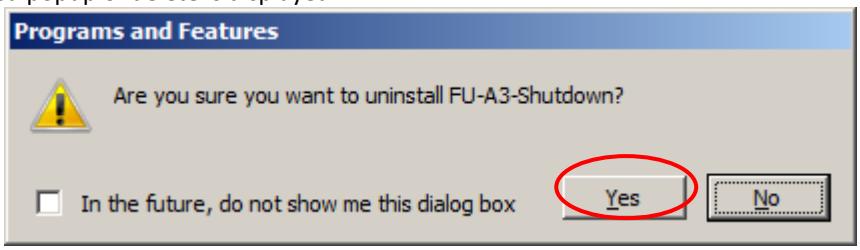



Figure 11 PROGRAM AND FUNCTION screen

When the [YES] button is selected, uninstall is started.

4. The completion confirmation of FU-α3-Shutdown is displayed.

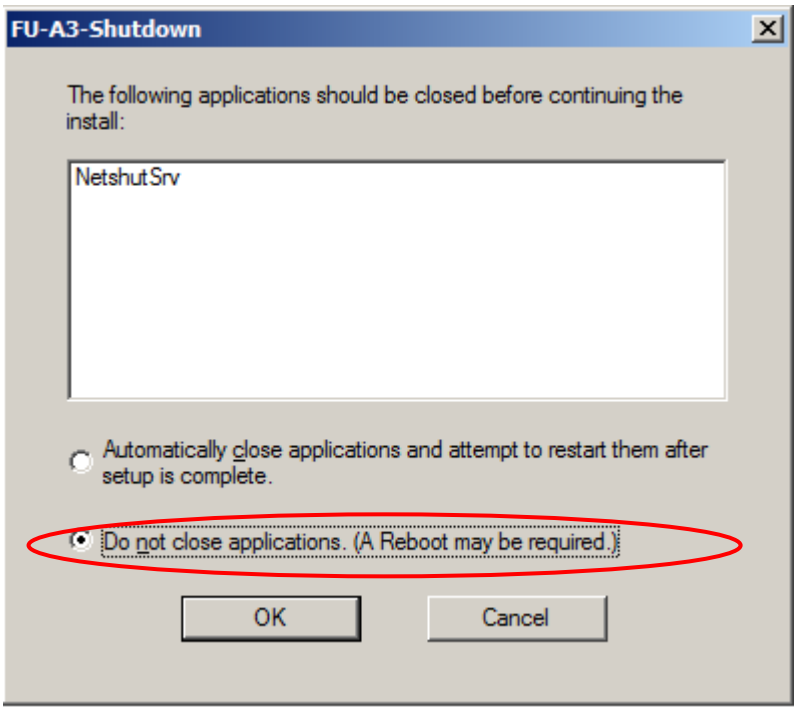



Figure 12 FU-α3-Shutdown screen

Select the [OK] button after [APPLICATION IS NOT FINISHED (THERE IS THE CASE THAT START UP NEEDS)] button is changed.

Uninstall completes.

| Caution |
| --- |
| **In OS (for the period of Windows XP) that is executed Windows Firewall, uninstall adds the setting of port that FU-α3-Shutdown uses in the case of installing automatically. Change the setting of security when the uninstall implements the security step (such as Firewall of HUB) except for Windows Firewall.**<br><br>TCP receive port number that FU-α3-Shutdown uses (In the case of default): 7006<br>The process name of FU-α3-Shutdown:Netshut.exe |

# 4 Operation of FU-α3-Shutdown

## 4.1. The start/stop/restart up of the service

FU-α3-Shutdown starts up as the service in the background. When the OS starts up, FU-α3-Shutdown is also started automatically. Use the service stop restart function of Windows standard to perform the start stop restart from the condition that started up OS.
Example) The startup stop of FU-α3-Shutdown is possible for executing the following command.
In the case of Windows 2000, Windows XP, Windows Server 2003

**net stop NetshutSrv ← In the case of service stop**
**net start NetshutSrv ← In the case of service start up**

For the period of the case of Windows Vista

**sc stop NetshutSrv ← In the case of service stop**
**sc start NetshutSrv ← In the case of service start up**

## 4.2. The transfer of shutdown signal

There are eight units to send the shutdown signal from FU- α 3-LANBOARD.
The transfer of shutdown signal can be required to perform transfer of shutdown signal to shut down PC more than 8 units.

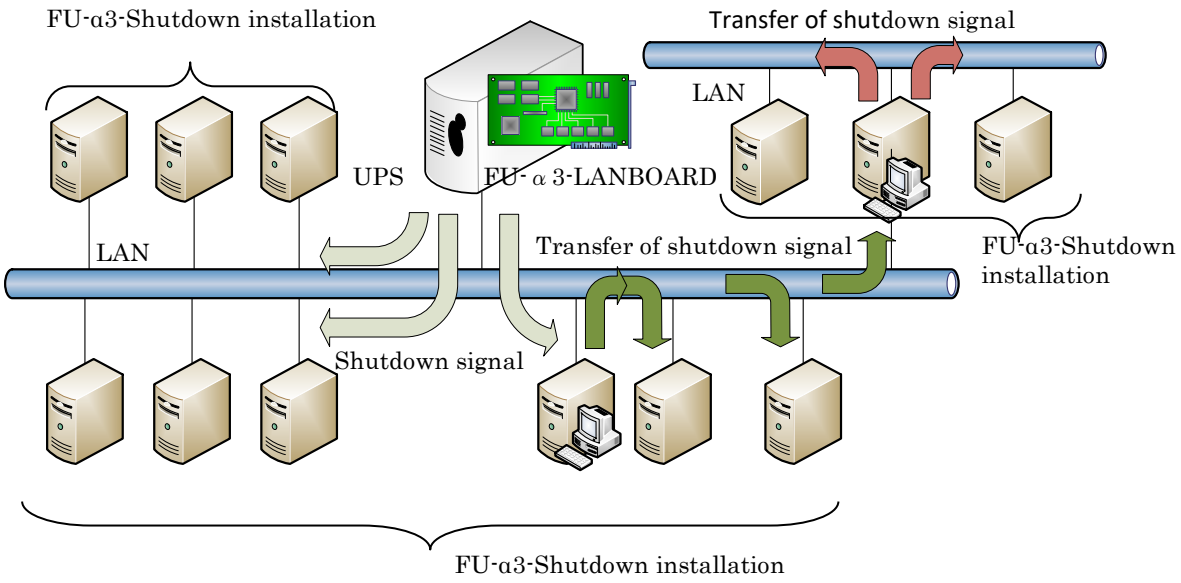



**Figure 13 Transfer image of shutdown signal**

There is explanation about the transfer method of the shutdown signal in our chapter.

1. 「Netshutcmd.exe」module in install directory of FU-α3-Shutdown for transfer of shutdown signal can be used.

   The startup parameter of 「Netshutcmd.exe」 is as follows.

Netshutcmd 〈 IP-Address of forwarding address〉 〈Communication port〉 [-SC]

| | |
|---|---|
| IP-Address of transfer | IP-Address to transfer the shutdown signal is designated. FU-α3-Shutdown can be required to install in the terminal of forwarding address. |
| Communication port | TCP connection port number that sends to the shutdown signal is designed. There is 「7006 」 in default. |
| -SC | The content of command is encrypted. When this flag is not used, Encryption treatment does not implement. |

Table 3

2. Above Module can be described to implement in 「doshutdown.bat」within same directory.

   Open 「doshutdown.bat」 of the same directory in text editor.

3. Highlighted text is added as follows.
   (Example：Default value (7006/TCP) can be shown about the each communication port in 192.168.1.100、192.168.1.101、192.168.1.102 of 3 units of IP-Address of forwarding address in following description.)
   In the case of Windows 2000, Windows XP, Windows Server 2003

```
Netshutcmd 192.168.1.100 7006 -SC
Netshutcmd 192.168.1.101 7006 -SC
Netshutcmd 192.168.1.102 7006 -SC
shutdown.exe /L /Y /C /T:10
```

   In the case for the period of Windows Vista

```
Netshutcmd 192.168.1.100 7006 -SC
Netshutcmd 192.168.1.101 7006 -SC
Netshutcmd 192.168.1.102 7006 -SC
shutdown_vista.vbs
```

4. The transfer setting of shutdown signal completes.

## 4.3. Operation and setting in the case of UPS redundant composition

In the server of redundant power supply correspondence, shutdown system that is prioritized possibility can be consisted in the redundant composition that supplies power supply from UPS of 2 units.

### 4.3.1. The UPS redundant composition

The system configuration example of the redundant component is displayed as illustrated below.
The power supply of server that corresponded to redundant power supply is supplied from each UPS and LAN network also connects with UPS. When performing the backup operation about the condition that does not keep redundant composition in UPS1 and UPS2, server is shut down.
In this case, because the shutdown signal though network is sent, Hub as communication path is also requires to correspond.

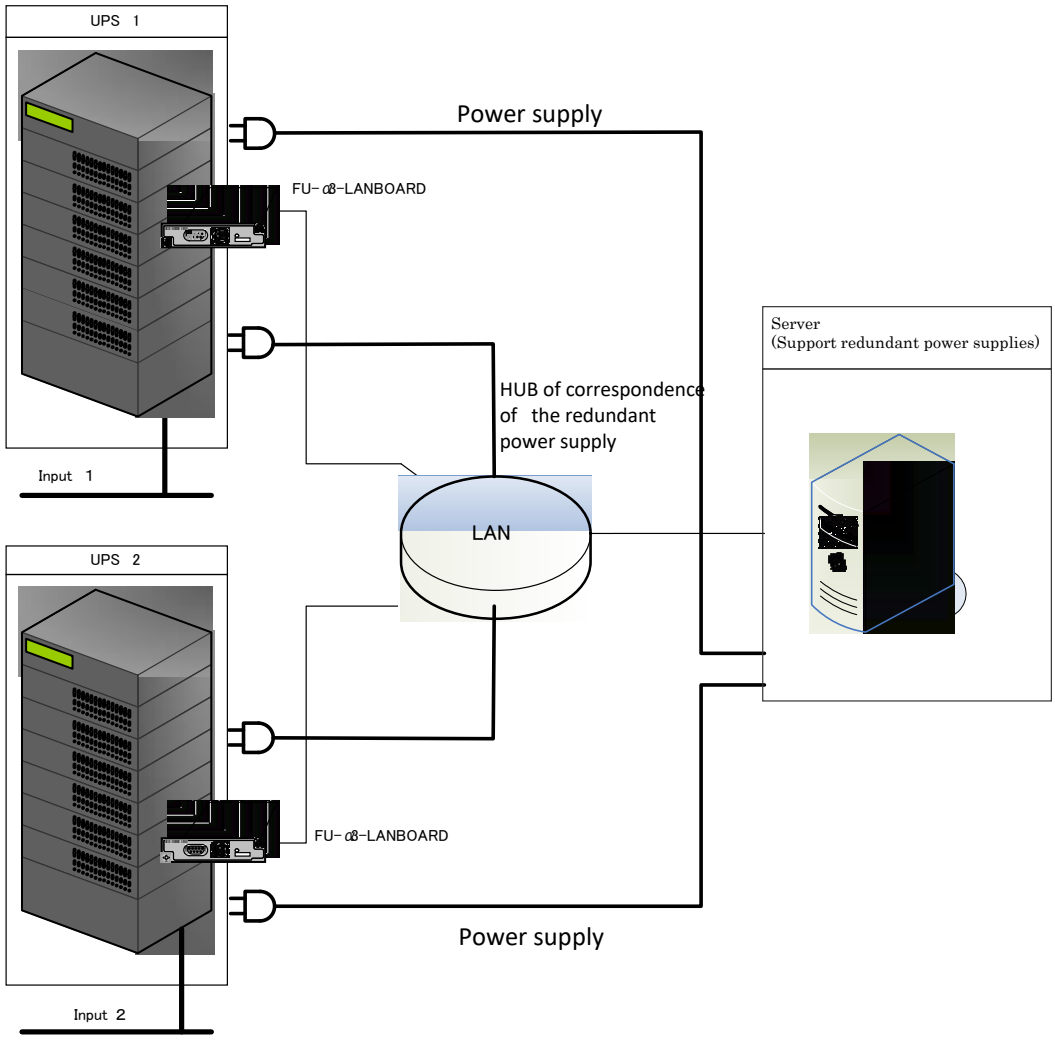



**Figure 14 Connection image in the case of UPS redundant composition**

In the case of redundant composition, there is shutdown system that is prioritized. When backup operation in the condition that does not keep redundant composition (uncondition such as bypass operation, fault or being backup operation of UPS1 or UPS2) performs, the shutdown of OS starts. When FU-α3-Shutdown receives the OS shutdown, the condition is checked (SNMP-GET) and check.
Even if side is fault ot power outage, the shutdown of OS does not shut down.

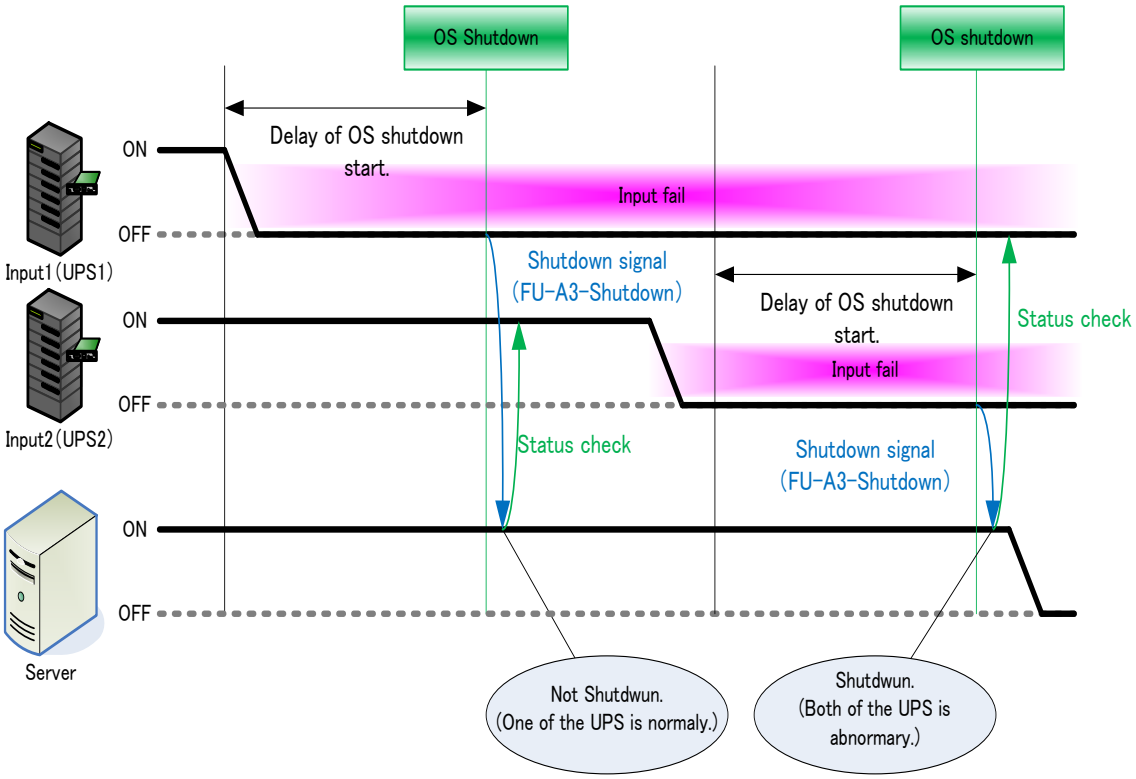



**Figure 15　Shutdown image in the case of UPS redundant composition**

When UPS performed backup operation, the shutdown is implemented by the condition of UPS of side.

| UPS1 (Side) | UPS2 (Event occurrence UPS) | Server shutdown |
|---|---|---|
| Normal operation | Backup operation | No |
| Backup operation | Backup operation | **Yes** |
| Bypass operation (manual、fault) | Backup operation | **Yes** |
| Communication abnormal | Backup operation | **Yes** |
| Stop operation (waiting operation) | Backup operation | **Yes** |

**Table 4 shutdown condition in the case of backup**

Refer to「4.3.4 About the UPS condition monitoring in the case of UPS redundant composition」about the detail.

4.3.2. UPS redundant composition（Composition of server several units）

When the server of multiple units in redundant composition is backed up, representative server that is shut down the system is selected. Shut down (Transfer of shutdown signal) the other server from shutdown timing of the server.

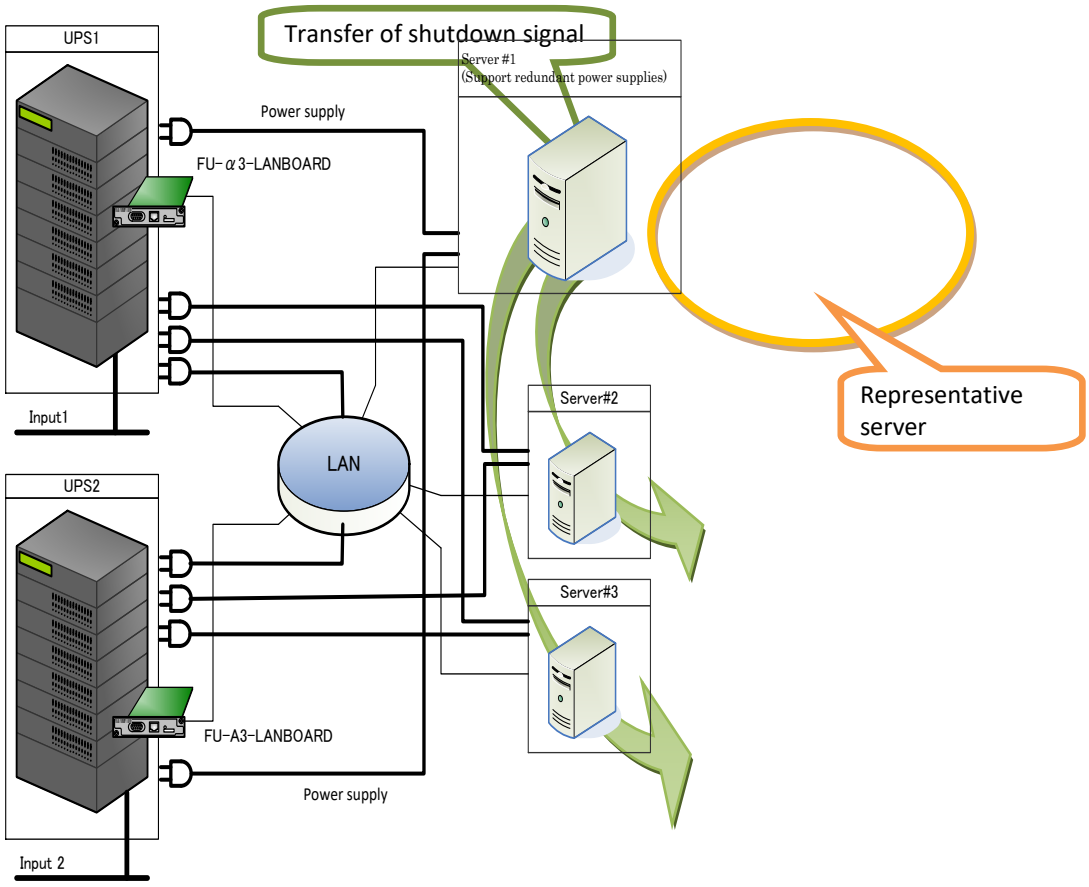



**Figure 16 server multiple units connection images in the case of UPS redundant composition**

| CAUTION |
| --- |
| Do not be enable (REDUNDANT=ENABLE) the redundant setting about the server#2 and server#3 as illustrated Figure 17. When the redundant component was enable in server#2 and server#3, the UPS redundant composition can not shut down if receiving the transfer of shutdown signal from the server#1. |

4.3.3. Restrictions in the case of UPS redundant composition

In the case of the redundant composition, the setting value of FU-α3-LANBOARD requires to set as illustrated below.

(1) AUTHORIZED SETTING OF SNMP (MIB) ACCESS

Because FU-α3-Shutdown accesses using SNMP (MIB) of UPS condition of 2 units, set the access authorization of MIB. After the setting login from monitor screen from FU-α3-LANBOARD, perform from [UPS management screen] – [SNMP setting screen].

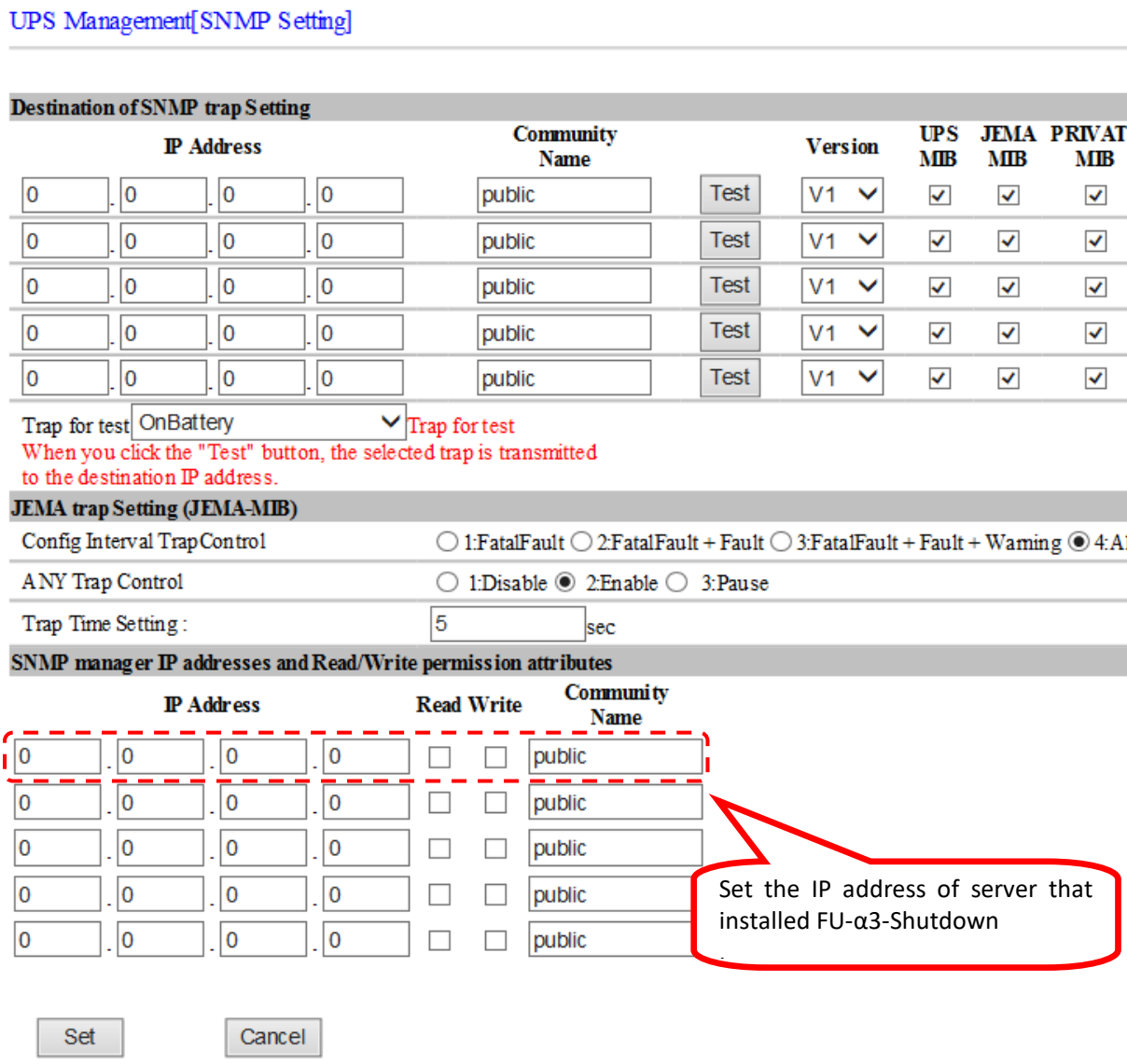



Figure 17 MONITORING screen [SNMP setting]

(2) OFF setting of UPS output stop function

Because the output stop of UPS implement from FU-α3-Shutdown, turn off the output stop of UPS function in the case of power outage in stop motion (power outage) setting on FU-α3-LANBOARD.

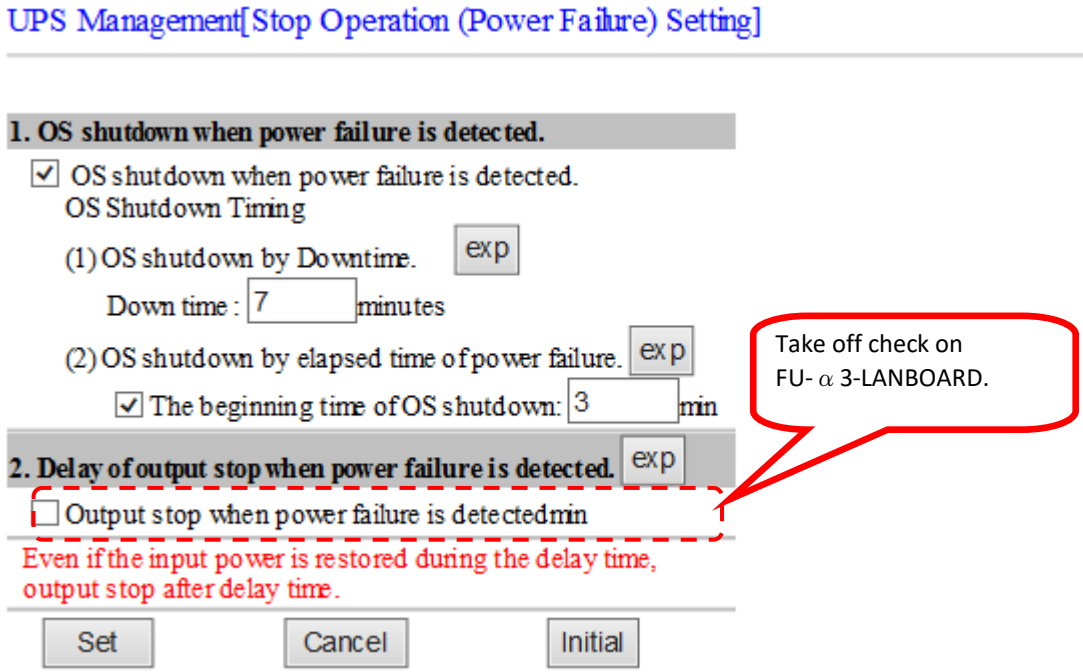



Figure 18 MONITORING screen [STOP MOTION (POWER OUTAGE) SETTING]

**CAUTION**

Because the stop output setting of stop motion (Event) is fixed as On, it can not be turned off.

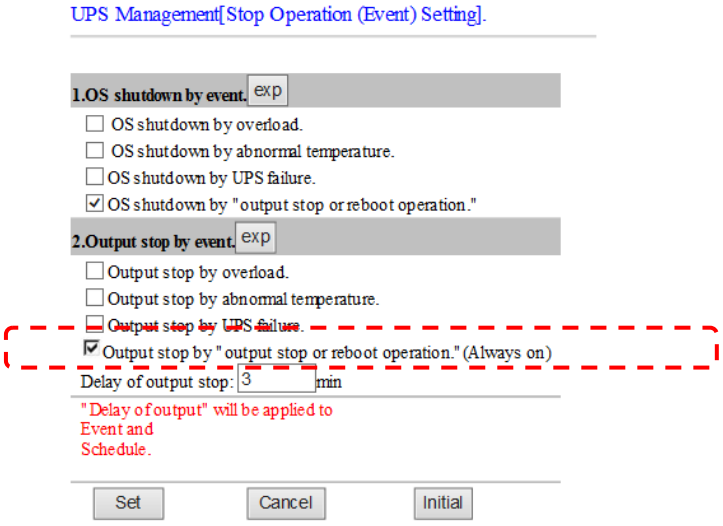



Figure 19 MONITORING screen [STOP MOTION (EVENT) SETTING]

(3) Align the setting value of UPS of 2 units that did redundant composition

Be same the below setting in the setting of FU-α3-LANBOARD that mounted to UPS of 2 units that did redundant composition.

Stop motion (power outage) Setting

- Stop motion (power outage) Setting
- Stop motion (Serial) Setting
- Schedule setting

※The output OFF command according to FU-α3-LANBOARD operation requires to implement each UPS#1 and UPS#2.

| CAUTION |
| --- |
| The output OFF command according to Web operation needs to implement each UPS#1 and UPS#2.<br>Implement that each implemented operation set in 「FORCRE_SHUTDOWN_TIME」 within time. |

4.3.4. About the UPS conditional monitoring in the case of UPS redundant composition

The conditional confirmation of UPS performs the state confirmation of UPS according to the SNMP Get.
OID that does SNMP Get is JEMA-MIB.

Used MIB and shutdown operation

| OID | Name | Content | Acquired value and shutdown motion |
|---|---|---|---|
| 1.3.6.1.4.1.4550.1.1.4.1.0 | jemaUpsOutputSource | Power supply states to output<br>1 : unknown<br>2 : No power supply（UPS output stop）<br>3 : normal condition<br>5 : backup（Battery operation） | 1: shutdown execution<br>2: shutdown execution<br>3: shutdown cancel<br>5: shutdown execution<br>Other: shutdown<br>In the case for acquired fault: shutdown |

Table 5

## 4.4. Setting of FU-α3-Shutdown

Customizing is possible about the motion setting in editing the setting file of FU-α3-Shutdown.
The change of setting file performs in following procedure.

1. Open「Netshut.conf」within install directory of FU-α3-Shutdown in text editor.

2. After the value of respective set item is changed, it is saved as.

Refer to the Table 6 as illustrated below about the each setting title.

| Setting item | Setting range (initial value) | Content |
|---|---|---|
| PORT | 1024～49151 (7006) | **Input number [1-65534].** Designate the port number of TCP that receives the shutdown signal. |
| IP_ADDR | [IPv4] (0.0.0.0) | **Input the IP address [***.***.***.***]** Designate the IP address of FU-α3-LANBOARD that sends to the shutdown signal. FU-α3-LANBOARD of IP address designated here is monitored. When the address「0.***.***.***」 When the address that starts in 0 was designated, the monitoring of FU-α3-LANBOARD does not perform. |

Table 6

Refer to the Table 7 below about the each setting title that uses in the case of redundant composition

| Setting item | Setting range (initial value) | Content |
|---|---|---|
| REDUNDANT | ENABLE DISABLE (DISABLE) | Set the enable or unable of redundant correspondence. When the ENABLE is set, the redundant composition is enable. When the DISABLE is set, the set of title that uses in the redundant composition is disable and there is normal operation. |
| REDUNDANT_UPS1 | [IPv4] (0.0.0.0) | Set the IP address of FU-α3-LANBOARD mounted with UPS (UPS#1) that performs the redundant composition. |
| REDUNDANT_UPS2 | [IPv4] (0.0.0.0) | Set the IP address of FU-α3-LANBOARD card mounted with UPS (UPS#2) that performs the redundant composition. |
| REDUNDANT_UPS_OFF | ENABLE DISABLE (ENABLE) | When the OS shutdown started in the redundant composition, set whether the output of UPS stops or not. When ENABLE is set, after the OS shutdown is started in the redundant composition and the output of UPS is stopped in the time designated in「REDUNDANT_UPS_OFF_DELAY」. When DISABLE is set, the output of UPS is not stopped after OS shutdown was performed. In this case, backup operation is continued until the battery disappears. |

| Setting item | Setting range (initial value) | Content |
|---|---|---|
| REDUNDANT_UPS_OFF_DELAY | 1～99 (3) | When the UPS output stop setting「REDUNDANT_UPS_OFF」after OS shutdown is ENABLE, set the time until the output of UPS stops after OS shutdown starts.<br><br>Our setting value is compared with the time that sets in output stop delay time of stop motion (Event) of FU-α3-LANBOARD.<br>Compared with the time that sets in output stop delay time of stop motion (event) of FU-α3-LANBOARD, it is applicable to the longer. |
| UPS_AUTO_RESTART | ENABLE DISABLE (DISABLE) | After「REDUNDANT_UPS_OFF_DELAY」is stopped because of commercial abnormal, set whether the output of UPS opens or not.<br>When ENABLE is set, the output of UPS reopens in timing of commercial abnormal restoration.<br>When DISABLE is set, the output of UPS is not started automatically. |
| UPS1_COMMUNITY | (public) | Set the setting value of community to perform the SNMP Get in FU-α3-LANBOARD mounted with UPS (UPS#1) that performs the redundant composition. |
| UPS2_COMMUNITY | (public) | Set the setting value of community to perform the SNMP Get in FU-α3-LANBOARD mounted with UPS (UPS#2) that performs the redundant composition. |
| SNMP_GET_RETRY | 1～99 (2) | Set the number of times of retry of SNMP Get. |
| SNMP_GET_TIMEOUT | 1～9999 (5) | Set the time out (seconds) of SNMP Get. |
| SCRIPT_DELAY_TIME | 1～9999 (300) | After the shutdown script is executed, designate the time<br>Time is designated until the execution is possible again after execution of shutdown script.<br>Normally, the change does not need. |
| FORCRE_SHUTDOWN_TIME | 1～9999 (60) | After the command of FU-α3-Shutdown is received from REDUNDANT_UPS1 or REDUNDANT_UPS2, in the time until the other FU-α3-Shutdown command receives, When receiving within「FORCRE_SHUTDOWN_TIME」, start the shutdown without performing the other condition check. After the「FORCRE_SHUTDOWN_TIME」passes, When the other Netshu command was received, the shutdown script of execution enable/disable is decided after the states of UPS of side receiving is checked, |

Table 7

3. The startup of the service requires to respond the each setting value.

Refer to【4.1The start/stop/restart up of the service of service 】about the procedure that performs restart up of service.

## 4.5. Record content to the system log

The information according to the motion of FU-α3-Shutdown is recorded in the system log.
The record content and the explanation that are recorded are as illustrated below.

| ID | class | Explanation | content |
|---|---|---|---|
| 1 | info | Netshut CMD OK (from ***.***.***.***). | When the shutdown signal is received correctly, IP address of shutdown signal send is recorded. |
| 2 | Info | Netshut Start (port @@@@). | When the system log starts up the Netshut, it is recorded.<br>TCP connection port that receives the shutdown signal in 「@@@@」is recorded. |
| 4 | info | Netshut Recv Start (from ***.***.***.***). | When the system log receives the shutdown signal, it is recorded.<br>IP address of shutdown signal send is recorded in 「***.***.***.***」. |
| 18 | info | Netshut Socket Error (from ***.***.***.***). | When the system log fails the receive of shutdown signal (Socket error), it is recorded.<br>IP address of shutdown signal send is recorded in 「***.***.***.***」. |
| 20 | info | Netshut CMD Error (from ***.***.***.***)." | When the system log fails the receive of shutdown signal, it is recorded. IP address of shutdown signal send is recorded in 「***.***.***.***」. |
| 24 | warning | Netshut STOP. | When the system log stops Netshut, it is recorded. |
| 257 | error | tcp_listen error for 0.0.0.0,<br>@@@@: Address already in use. | When the competitors of shutdown signal receive port occurred, it is recorded.<br>TCP connection port that receives the shutdown signal in 「@@@@」. |
| 258 | warning | Netshut Node isn't alive (ip ***.***.***.***). | When the communication abnormal occurs in monitoring of node (FU-α 3-LANBOARD), it is recorded.IP address of node(FU-α 3-LANBOARD) as monitoring objection in the 「***.***.***.***」is recorded.When the address 「0.***.***.***」that starts at 0 was set as monitoring objection, our items is not recorded because the monitoring function does not operate. |
| 260 | info | Netshut Node is alive (ip ***.***.***.***). | In the case of restoration from communication in the monitoring of node (FU-α 3-LANBOARD). IP address of node(FU-α 3-LANBOARD) as monitoring objection in the 「***.***.***.***」is recorded.<br>In the case of setting the address that starts at 0 「0.***.***.***」as monitoring objection, it is not recorded because the monitoring function does not operate. |
| 513 | info | Netshut UPS1 CMD OK (from ***.***.***.***). | When redundant composition is enable, it is recorded.<br>In the case of receiving the shutdown command in the no condition of redundant composition, it is recorded. |
| 514 | info | Netshut UPS2 CMD OK (from ***.***.***.***). | When the system log is enable redundant composition, it is recorded.<br>In the case of receiving the shutdown command in the no condition of redundant composition, it is recorded. |

| ID | class | Explanation | content |
|---|---|---|---|
| 529 | info | Netshut UPS1 RESTOR (from ***.***.***.***). | When the system log is enable redundant composition, it is recorded.<br>In the no redundant composition, the part as abnormal is recorded for the case of normal restoration (restoration).<br>Confirm whether normal restoration or not in the timing that was received the shutdown signal from UPS2. |
| 530 | info | Netshut UPS2 RESTOR (from ***.***.***.***). | When the system log is enable the redundant composition, it is recorded.<br>In the no redundant composition states, in the case of powering restoration the side that is abnormal, it is recorded. In timing that is received the shutdown signal from UPS1, check whether there is normal restoration or not. |
| 531 | info | Netshut ALREDY CMD (from ***.***.***.***). | When the system log is enable redundant composition, it is recorded.<br>In the no redundant composition states, in the case of powering restoration the side that is abnormal, it is recorded. In timing that is received the shutdown signal from UPS1, check whether there is normal restoration or not. |
| 532 | info | Netshut GET UPS1 STATUS(*). | When the system log is enable redundant composition, it is recorded. When the system log receives the shutdown signal, it records the result that acquired the other UPS condition.<br>Input the value of 「jemaUpsOutputSource」 of JEMA-MIB in * |
| 533 | info | Netshut GET UPS2 STATUS(*). | When the system is enable redundant composition, it is recorded. When the system log receives the shutdown signal, it records the result that acquired the other UPS condition.<br>Input the value of 「jemaUpsOutputSource」 in *. |

Table 8

4.5.1. The record example to the system log

【Example of system log In the case of starting up （When the system log sets the default）】

| Source | class | class | Event ID | User | Explanation |
|---|---|---|---|---|---|
| Netshut | No | info | 2 | N/A | Netshut Start (port 7006). |

【Example of system log In the case of shutdown execution (When the system log sets the default）】

| Source | class | class | Event ID | User | Explanation |
|---|---|---|---|---|---|
| Netshut | No | info | 4 | N/A | Netshut Recv Start (from 10.65.11.130). |

| Source | class | class | Event ID | User | Explanation |
|---|---|---|---|---|---|
| Netshut | No | info | 1 | N/A | Netshut CMD OK (from 10.65.11.130). |

## 4.6. Setting in the case of shut-down action

When FU-α3-Shutdown receives the shutdown signal, implement “doshutdown.bat” within installation folder.
When the “doshutdown.bat” of contents is changed, external program can be executed in the case of shutdown.

Note1) “When the description of doshutdown.bat” is incorrect, there is the case that do not finish normally OS.
Note2) “doshutdown.bat” is implemented in the background (no interactive).

The content of “doshutdown.bat” in the initial condition is as illustrated below.

In the case of Windows 2000, Windows XP, Windows Server 2003

```
shutdown.exe /L /Y /C /T:10
```

In the case for period of Windows Vista

```
shutdown_vista.vbs
```

The case 「Command（Batch treatment[batch.bat]before shut-down）is implemented」as example in this explain.

The command that want to implement in 1 line of “doshutdown.bat” of default.

There is the command that performs shutdown for period of the 1 line.

Note1) The additional command needs to finish (Control is returned.) the implementation.
Note2) When taking time in treatment, set the UPS output stop delay time enough.
Note3) Because the shutdown of OS performs after added command finishes, the implemented time amount of command delays the shutdown of OS.

The example is as illustrated below.

In the case for Windows 2000, Windows XP, Windows Server 2003

```
c;¥shutdown_scripts¥batch.bat
shutdown.exe /L /Y /C /T:10
```

In the case for period of Windows Vista

```
c;¥shutdown_scripts¥batch.bat
shutdown_vista.vbs
```

# 5 Trouble shooting

## 5.1. Shutdown is not implemented.

Check the following thing as the cause that is not shut down.

1. The communication is shut down by the Firewall.
2. Trouble shooting does not correspond to the communication port that is designated in the OS shutdown setting screen of FU-α3-LANBOARD card.

## 5.2. In the case of shut-down action, external program can not implement

There is the case that can not use「application execution」from the service program in the Windows 8/8.1、Windows Server 2012 and Windows Server 2012 R2 （for the period of OS）
This is change to 「disable」 about the authorization of conversation form execution of service program.
Also、「Application implementation」is inspected and reported in「Interactive Service Detection」(Interactive service inspection service) to「Event viewer」-「Windows log」-「system」.

As prevented method, the registry is performed when changing.

Pass of registry：HKEY_LOCAL_MACHINE¥SYSTEM¥CurrentControlSet¥Control¥Windows
Subkey：NoInteractiveServices
Regulated value：1
Modified value：Change to 0

| Caution |
| --- |
| Be careful enough not to mistake about the change of registry. There is possibility that can not start up windows about the setting. |

## 5.3. Filtering Shutdown signal in IP address.

Use the Firewall about the filtering to authorization rejection of shut down signal.
Refer to the following【5.3.1 In the case of authorizing only from specific IP address in Windows firewall when using Windows Firewall. When using the other security software is used, authorize the following response of port to take shutdown command from FU-α3-LANBOARD.

TCP receive port number (In the case of default):7006
Process name: Netshut.exe

### 5.3.1. In the case of authorizing only from specific IP address in the Windows Firewall

In OS(for period of Windows XP)mounted with Windows Firewall The setting of Firewall is added automatically when FU-α3-Shutdown is installed. Because the additional setting authorizes the receive randomly from IP address, there is possible to authorize the shutdown signal of only specific IP address for changing the setting of Windows Firewall.

In the case of Windows XP, Windows Server 2003

1. Execute “Windows Firewall” of the program from the control panel.

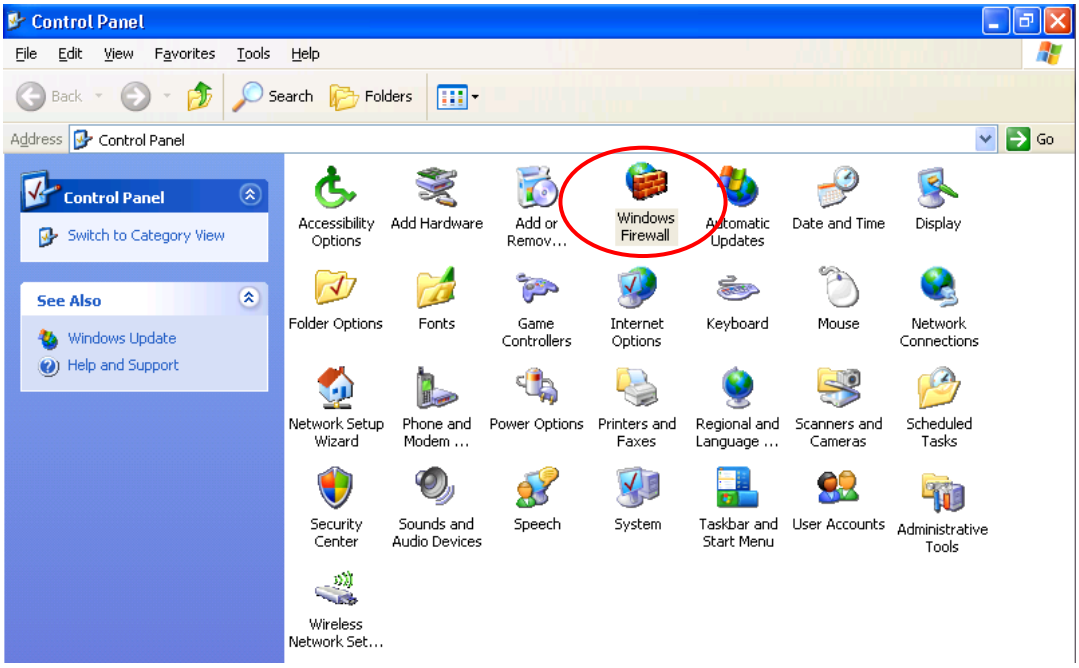



Figure 20 CONTROL PANEL screen

2. After the tab [EXCEPTION] button from Windows Firewall is selected, select the [EDITION] button after [Netshut] button is selected.

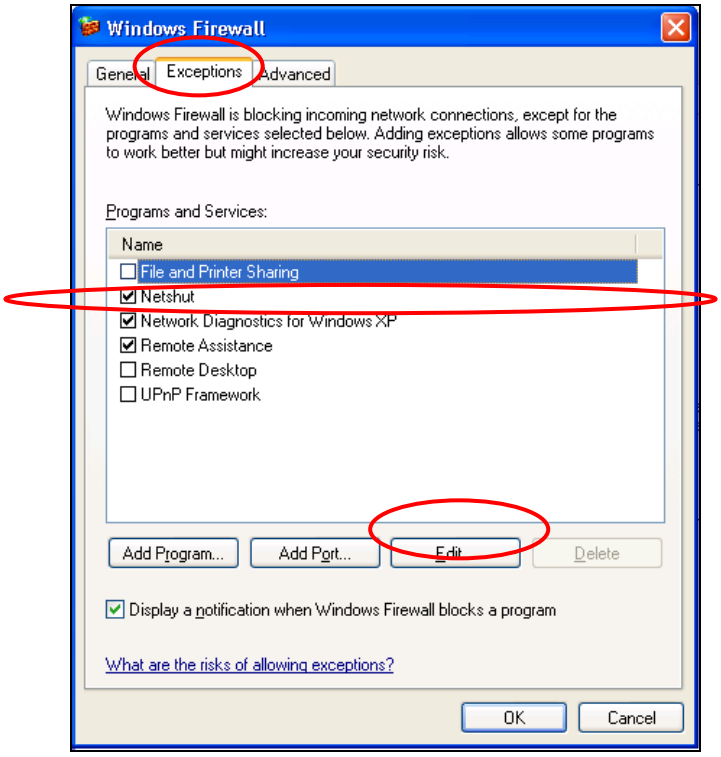



Figure 21 WINDOWS FIREWALL screen

3. Select the [SCOPE CHANGE] button from the port edition.

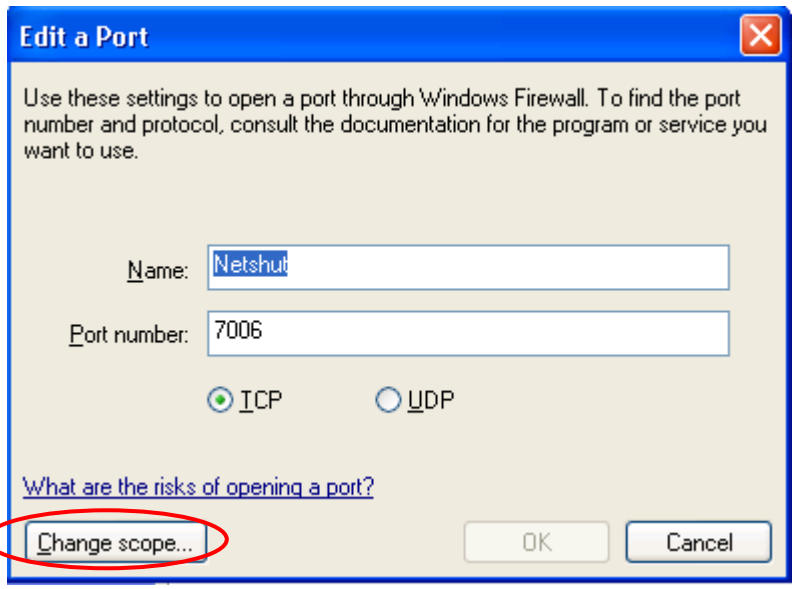



Figure 22 PORT EDITION screen

4. Select the [OK] button after the setting that performs the authorization is selected from SCOPE CHANGE.

The shutdown signal is only authorized from 192.168.10.10 as shown in Figure 23.

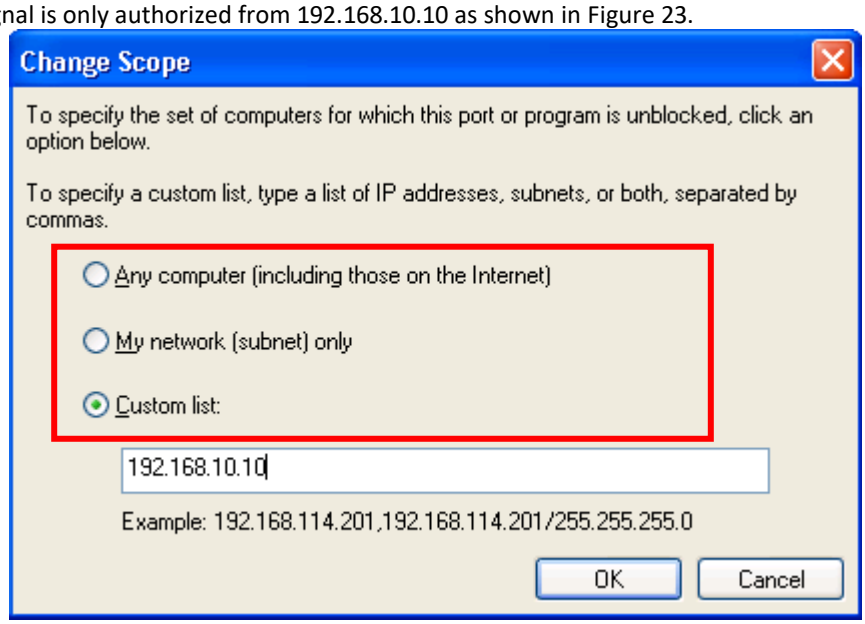



Figure 23 SCOPE CHANGE screen

Return to the port edition.

5. Select the [OK] button from the port edition.

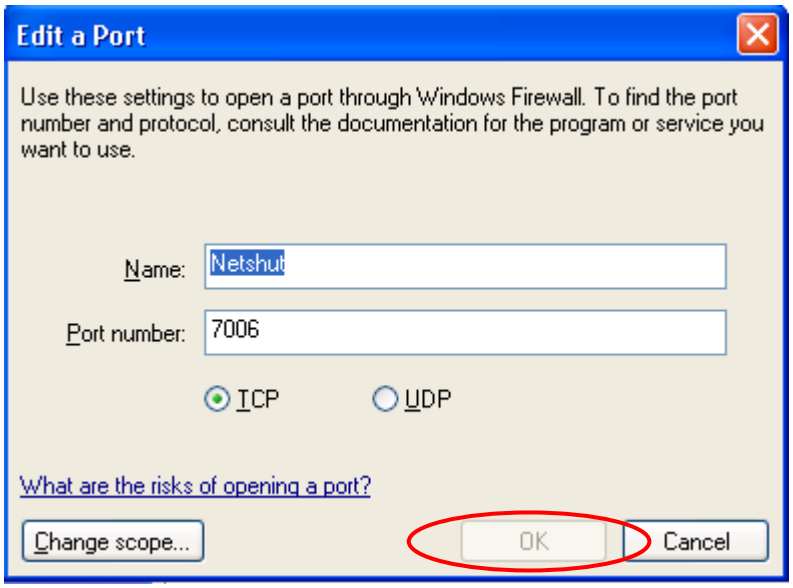



**Figure 24 PORT EDITION screen**

Return to Windows Firewall.

6. Select the [OK] button from the Windows Firewall.

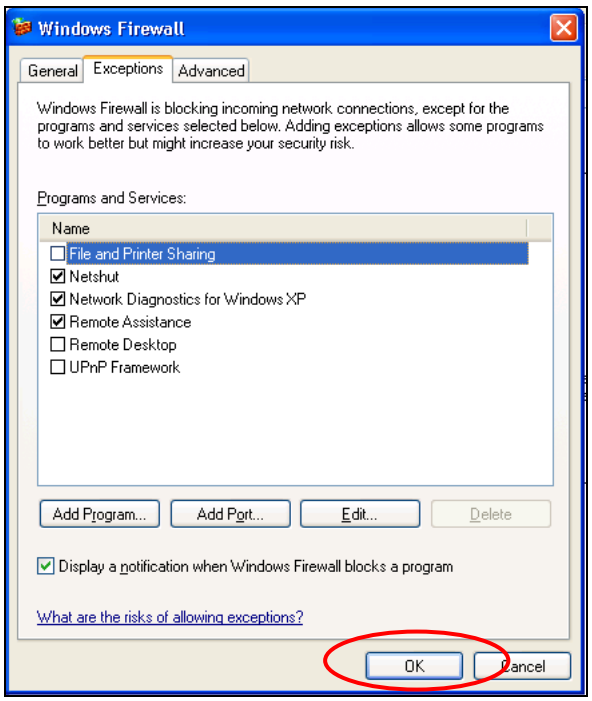



**Figure 25 WINDOWS FIREWALL screen**

The change of setting completes.

In the case for period of Windows VISTA

1. Select the [SYSTEM AND SECURITY] button from the control panel.

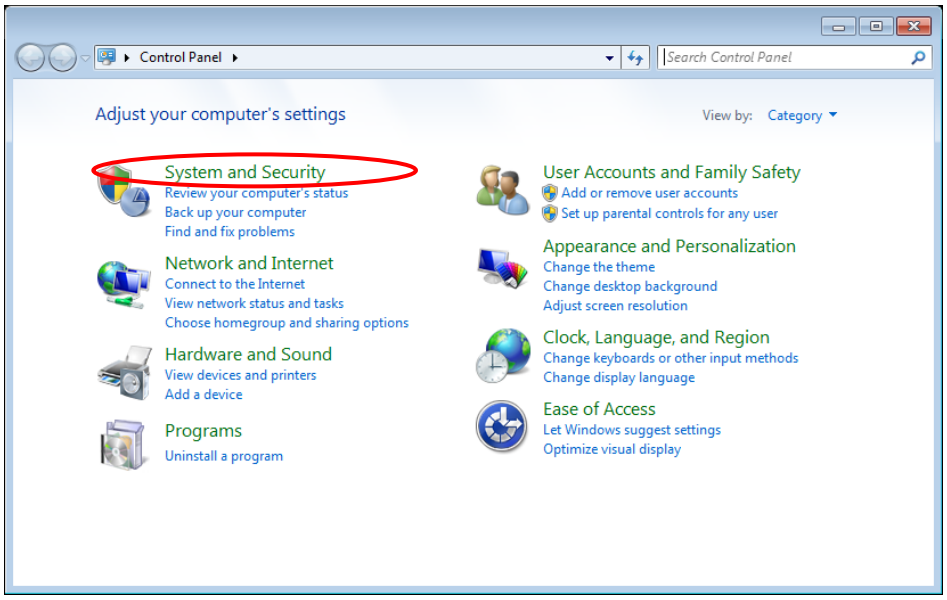



**Figure 26 CONTROL PANEL screen**

2. Select the [WINDOWS FIREWALL] button from the SYSTEM AND SECURITY.

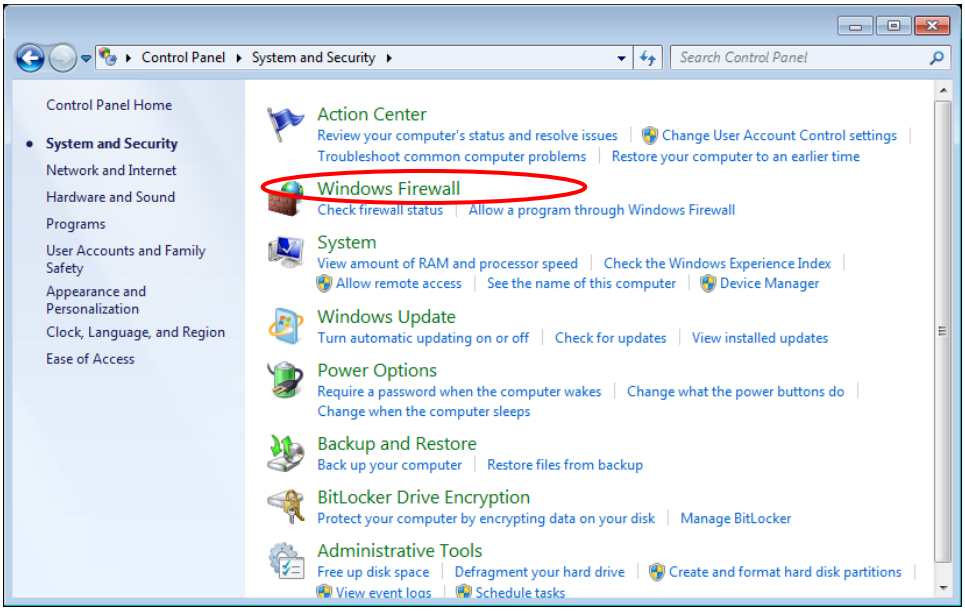



**Figure 27 SYSTEM AND SECURITY screen**

3. Select the [Advanced SETTING] button from Windows Firewall.

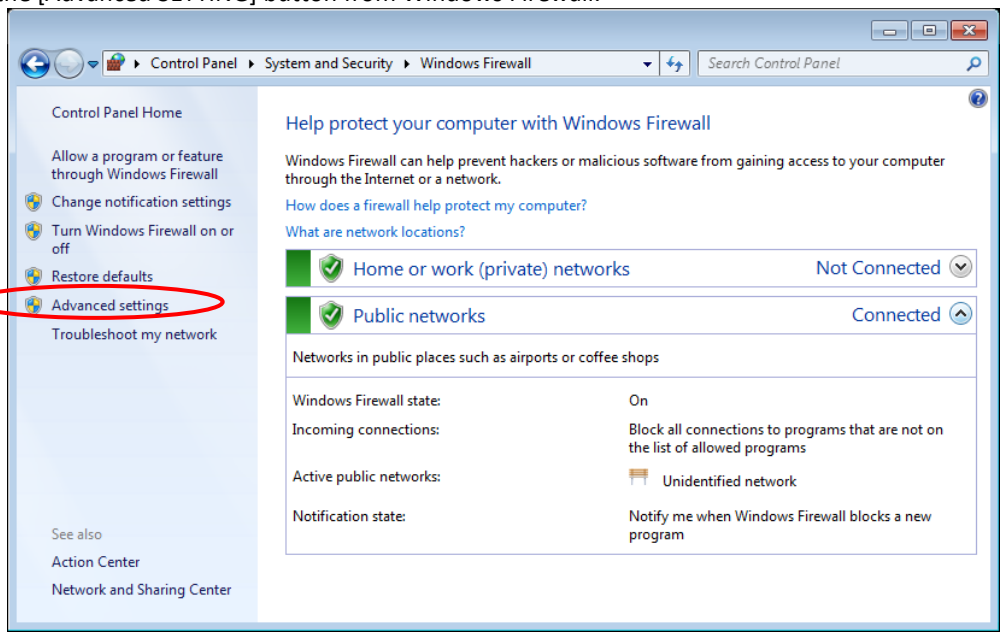



Figure 28 WINDOWS FIREWALL screen

4. After [REGULATION OF RECEIVER] button is selected, select the property after [Netshut] button is selected.

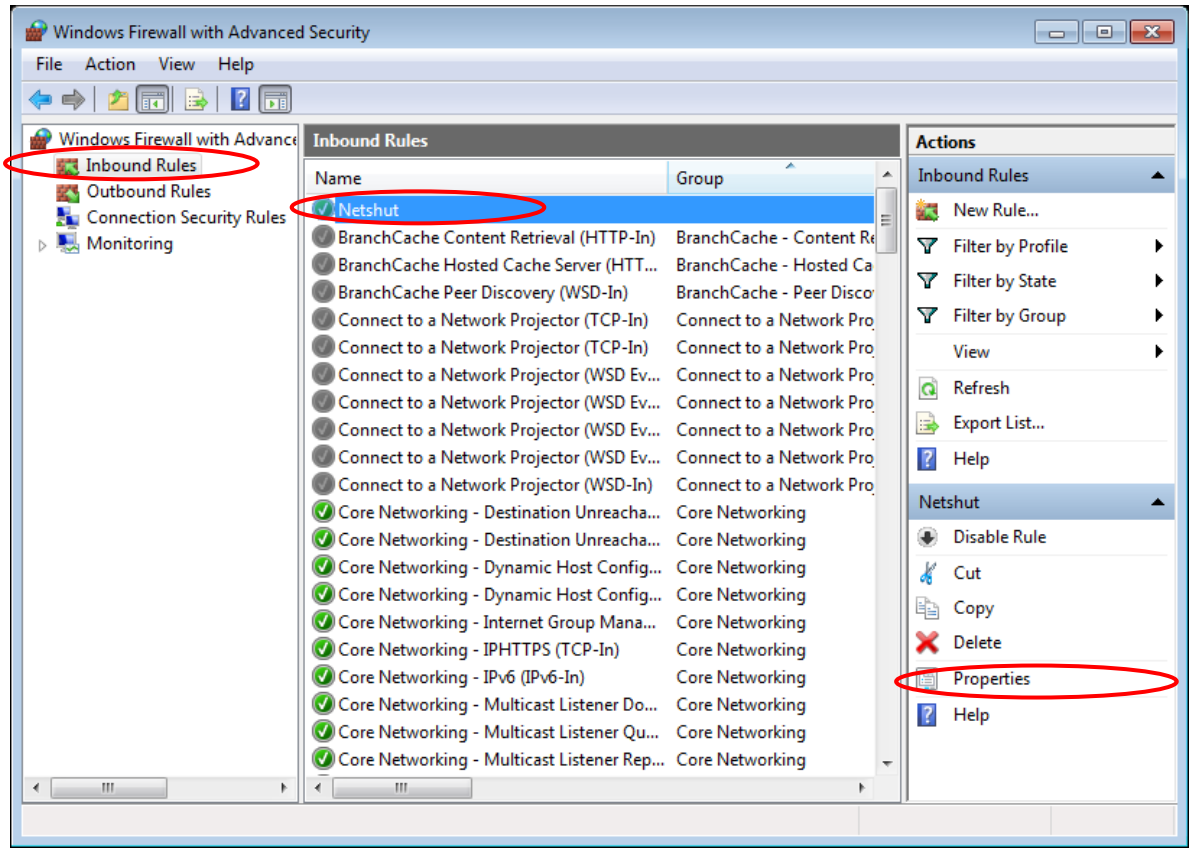



Figure 29 WINDOWS FIREWALL THAT CAN BE RAINFORCED SECURITY screen

5. After the tab [SCOPE] is selected, select the [ADDITION] button after [THESE IP ADDRESSES] button of remote IP address is selected.

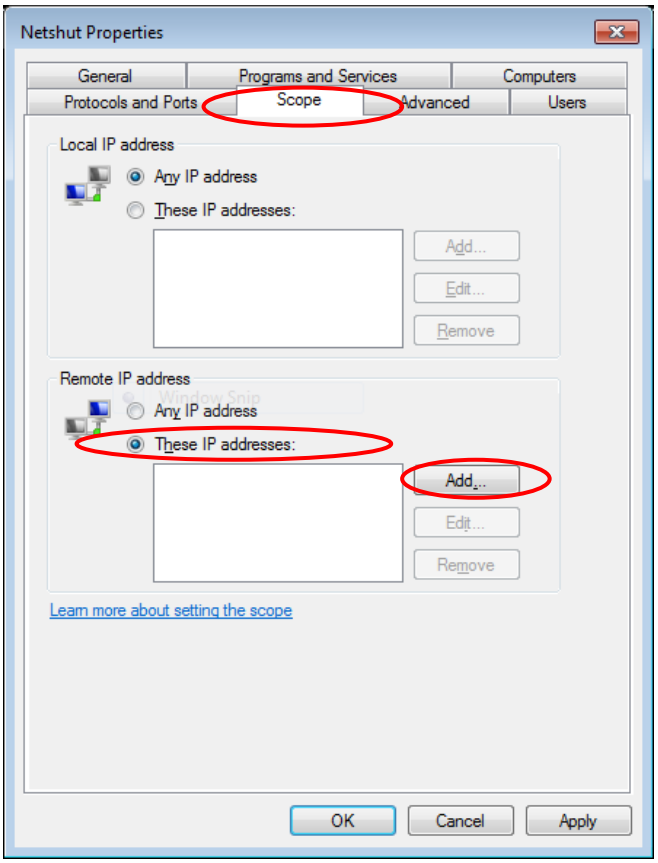



Figure 30 PROPERTY OF NETSHUT screen

6. Select the [OK] button after the setting that performs authorization is changed. Only shutdown signal is authorized from 192.168.10.10 in example (Figure 33).

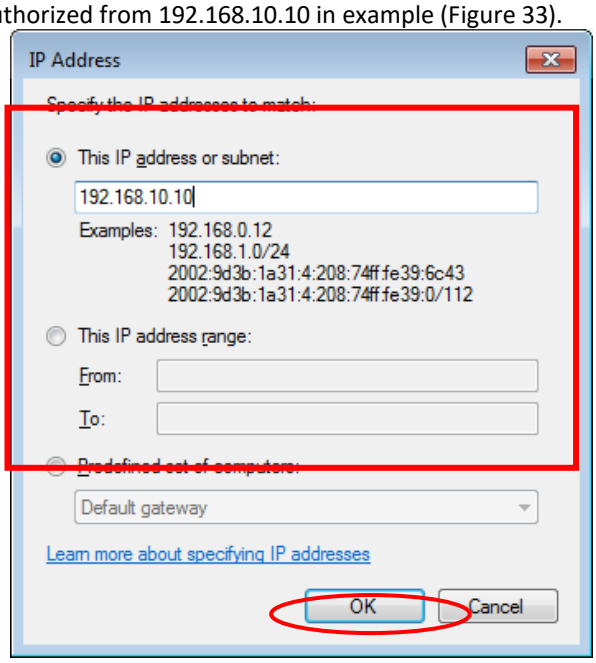



Figure 31 IP ADDRESSES screen

7. Select the [OK] button from the property of Netshut.

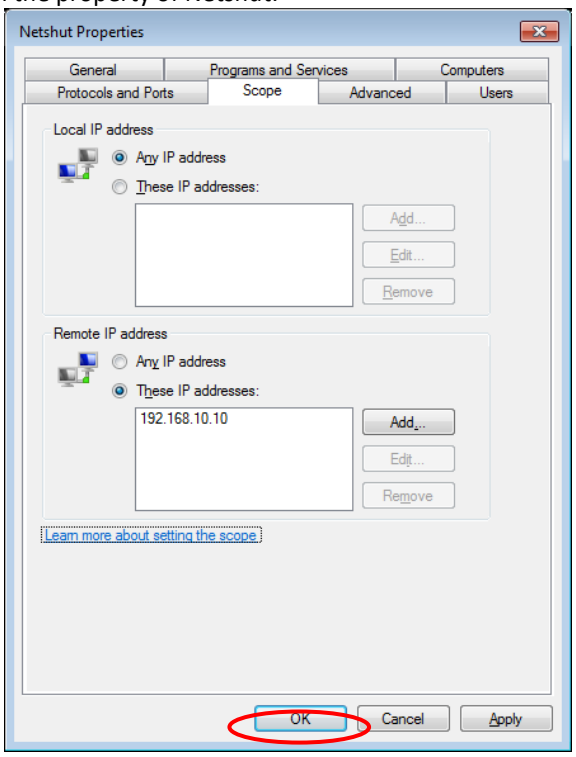



Figure 32 PROPERTY OF NETSHUT screen

Return to the Windows Firewall of enhanced security.

8. Finish Windows Firewall.

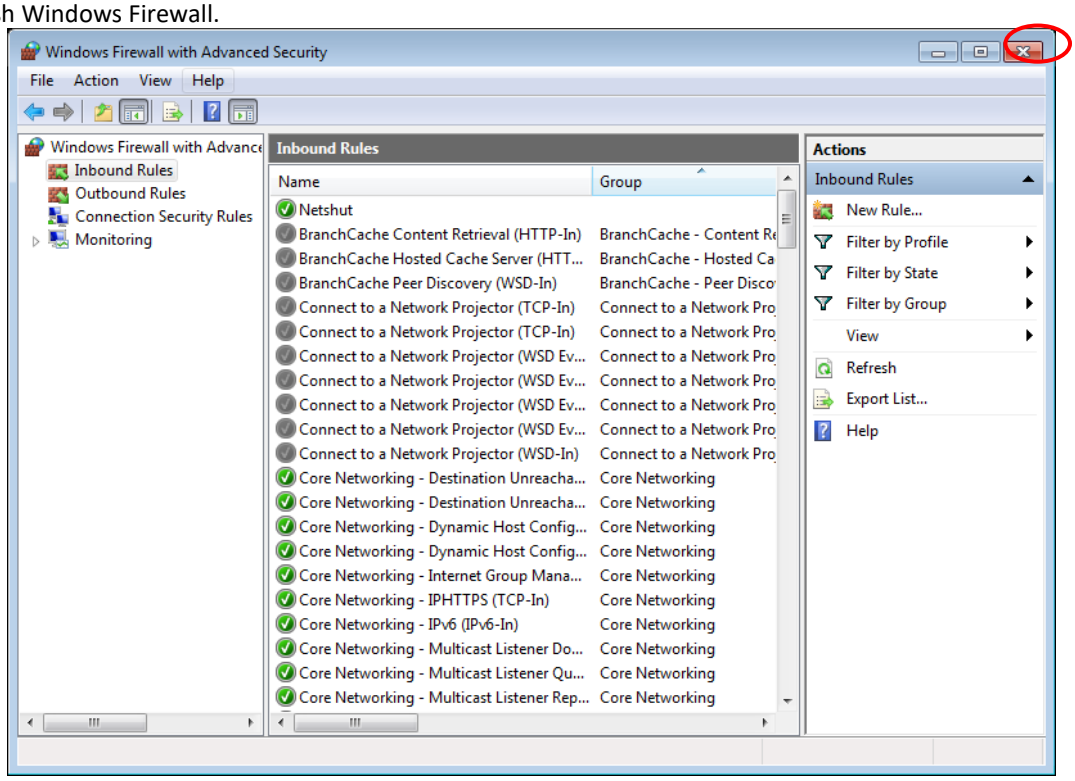



Figure 33 PROPERTY OF NETSHUT screen

The change of setting completes.