



ezTCP Utility

ModMap User Manual

Version 2.0

Sollae Systems Co., Ltd.

<http://www.ezTCP.com>

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1 Overview

1.1 What is ModMap

The ModMap is an utility program for I/O controllers of Sollae Systems. It provides the easiest way to control the devices. The ModMap is for the following products.

Product Name	Product Type	Number of port	
		Digital Input	Digital Output
CIE-H10	External	8	8
CIE-M10	Module	8	8
CIE-H14	External	4	4
CIE-H12	External	2	1
EZI-10	External	1	1

Table 1-1 I/O Controllers

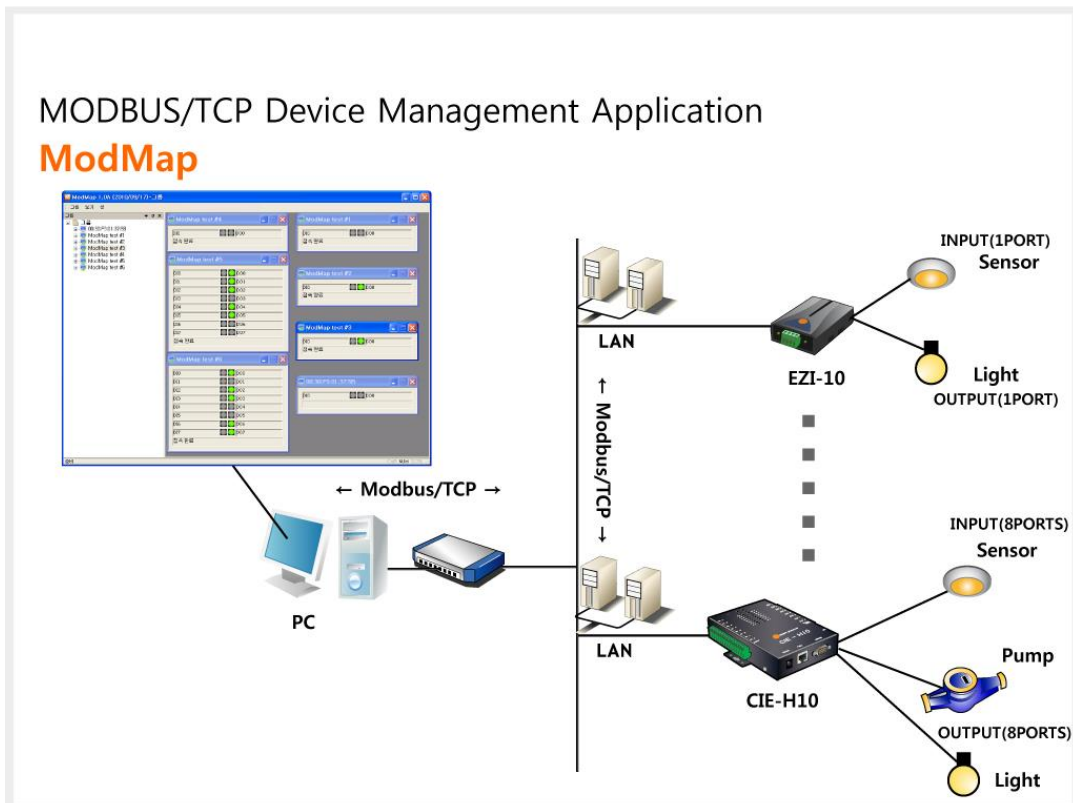


Figure 1-1 Overview

● NOTICES:

- ① The ModMap uses Modbus/TCP protocol.
- ② The ModMap does not support HTTP protocol.
- ③ The ModMap is working Modbus/TCP masters.

☞ **The CIE-H10, CIE-M10, CIE-H12, CIE-H14 and EZI-10 should work as a Modbus/TCP slave.**

● ModMap

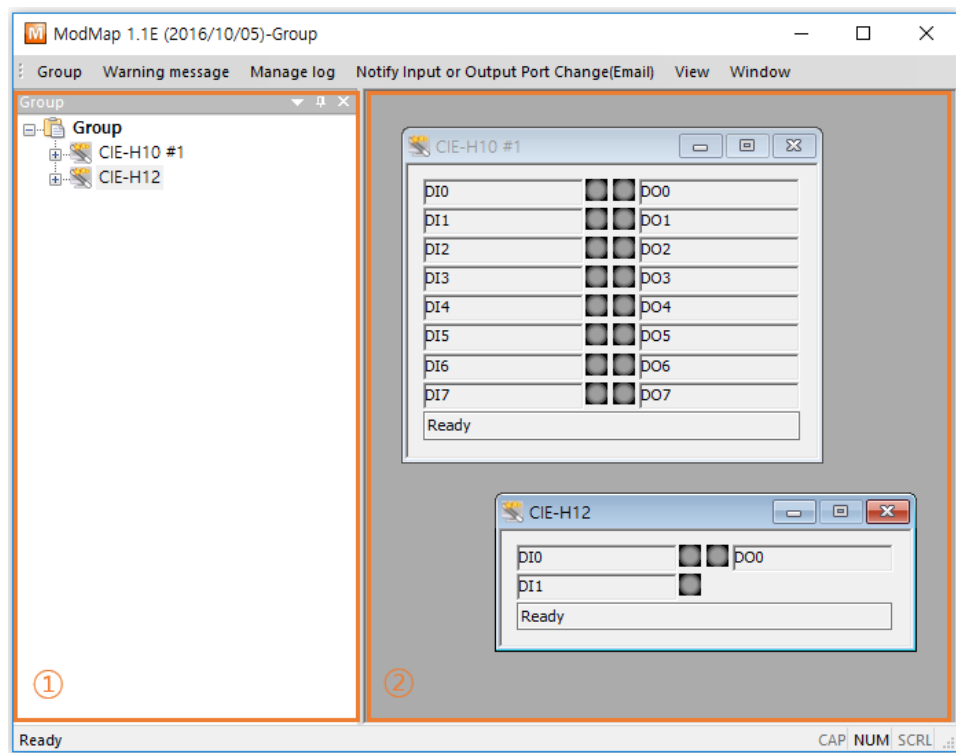


Figure 1-2 ModMap

① Tree

- ☞ The tree shows all registered groups and I/O controllers.
- ☞ Each group can have I/O controllers up to 30.

② Control window

- ☞ The control window shows dialogues of input and output ports of I/O controllers that you can control and monitor.

2 Features of ModMap

2.1 Adding I/O controllers

2.1.1 Adding I/O controllers

There are four menus to add I/O controllers.

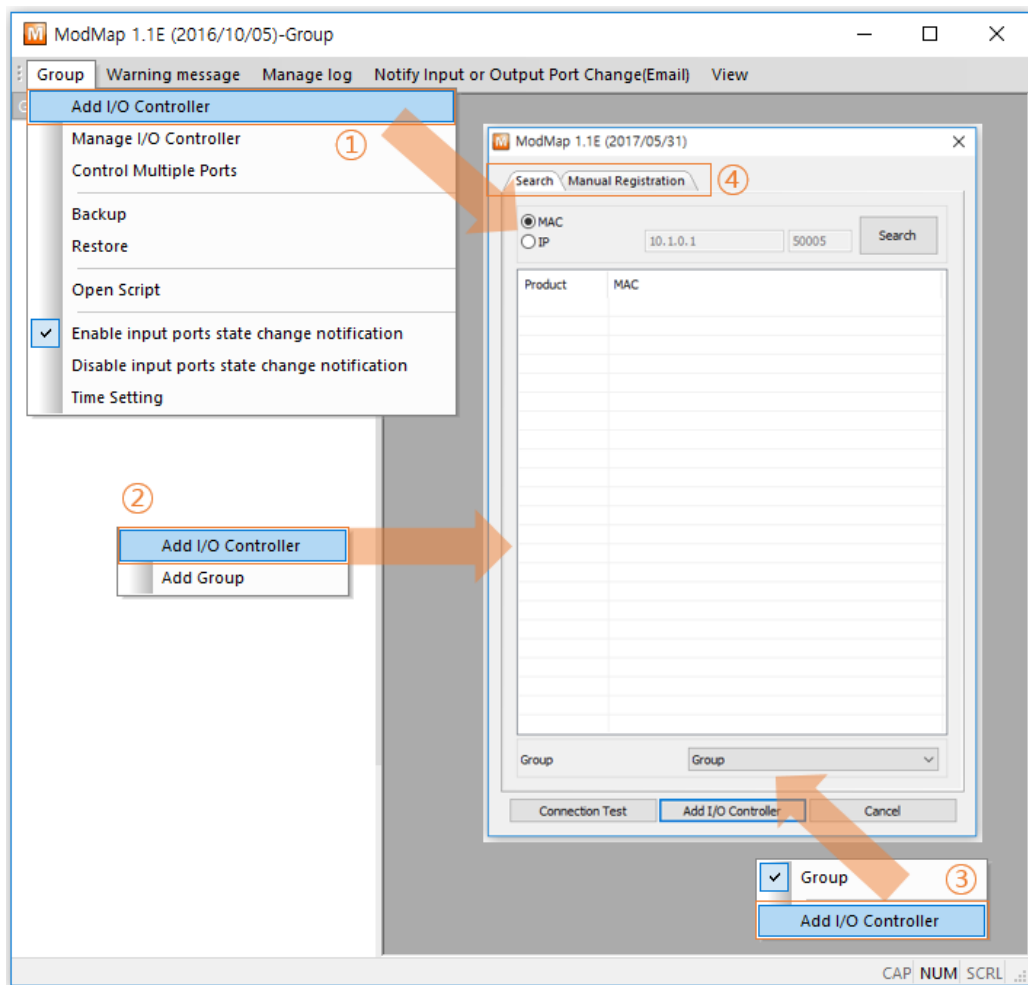


Figure 2-1 Adding I/O controllers

- ① Click [Add I/O Controller] in [Group] menu.
- ② Right-click the tree window and then click [Add I/O Controller] menu.
- ③ Right-click the control window and then click [Add I/O Controller] menu.
- ④ Click [Search] or [Manual Registration] tab to add I/O controllers.

2.1.2 Search tab

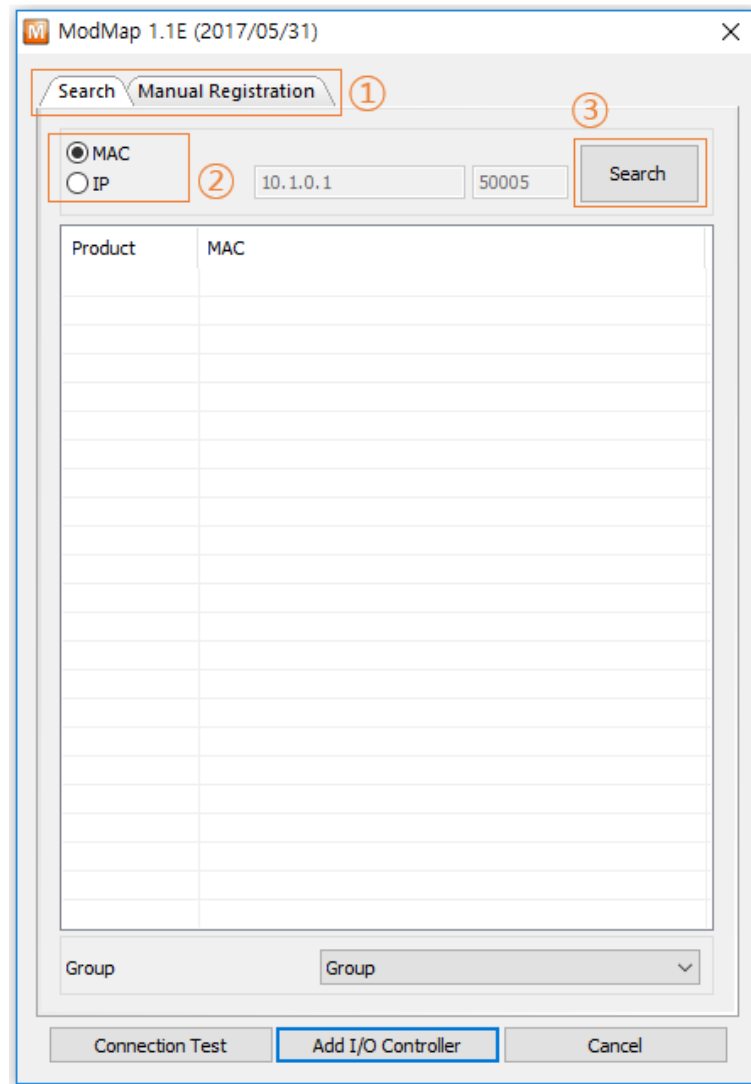


Figure 2-2 Search tab

- ① Click [Search] tab.
- ② Select one of the search methods.
 - ☞ MAC
Search I/O controllers from local network.
 - ☞ IP
Search the I/O controller by using an IP address or a host name.
- ③ Click [Search] button.
When you click [Search] button, ModMap searches I/O controllers by using the selected method and lists up the result. The list displays MAC addresses, comments, and IP addresses of I/O controllers.

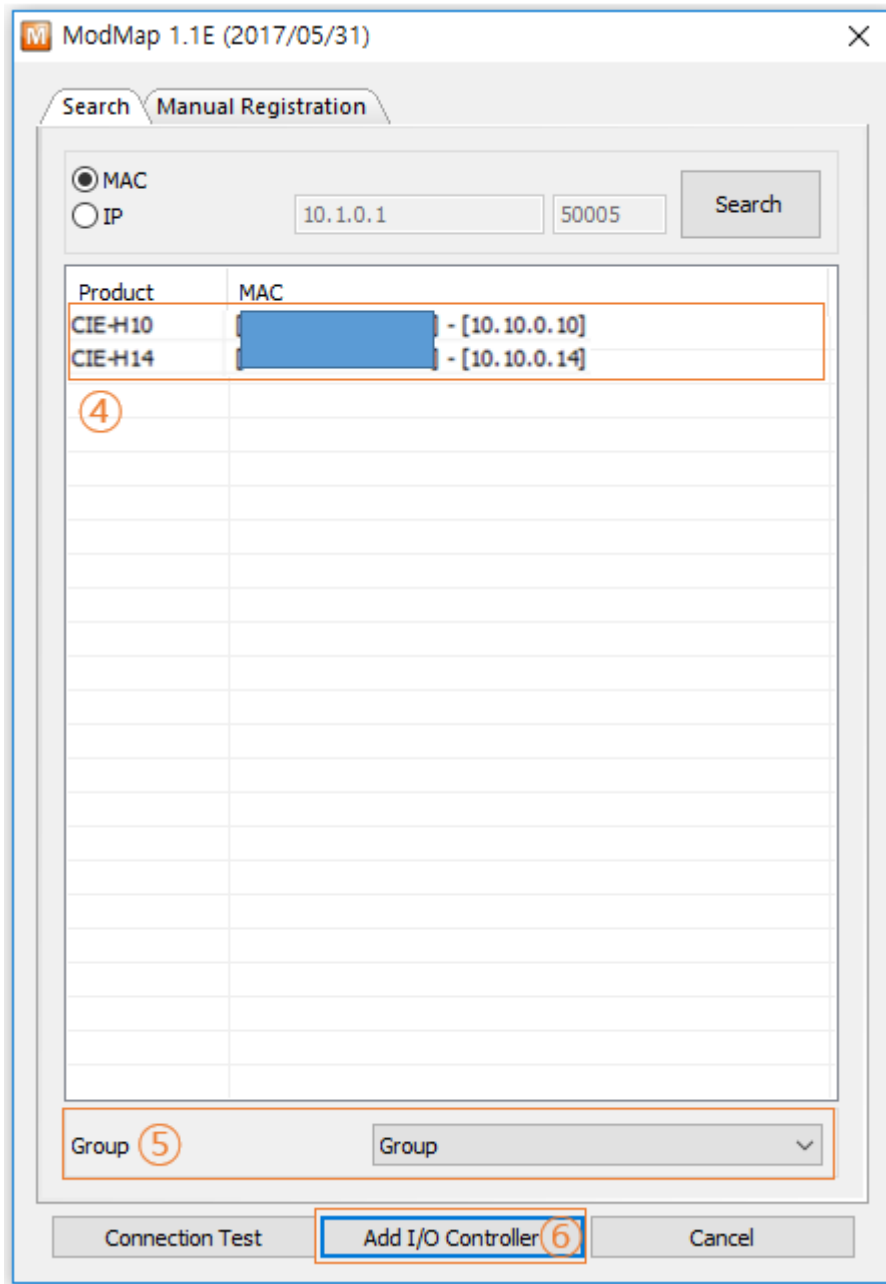


Figure 2-3 Search tab

- ④ Select I/O controllers on the list.
If you want to select multiple I/O controllers, press the "Ctrl" key on your keyboard and then click I/O controllers on the list.
- ⑤ Select a group.
- ⑥ Click [Add I/O Controller] button.

2.1.3 Manual registration tab

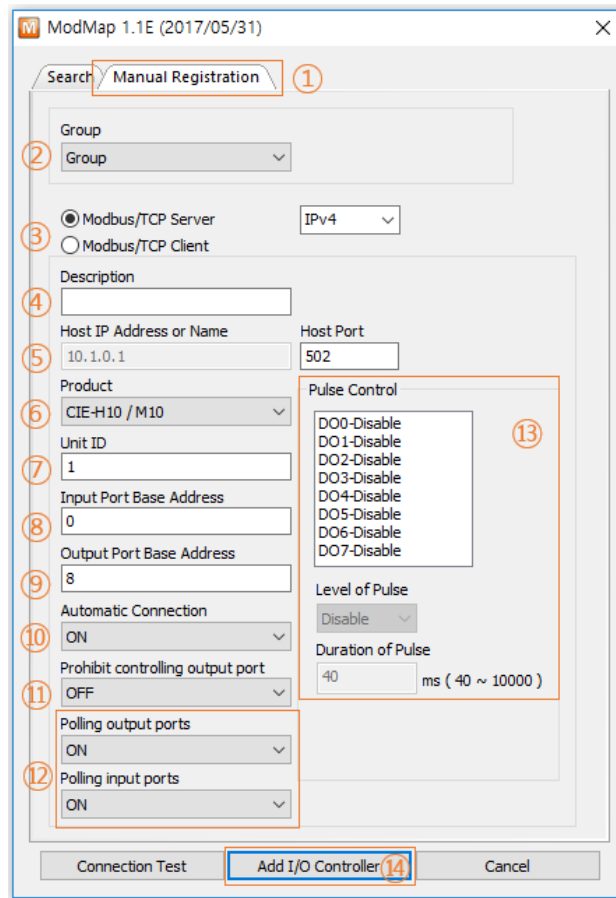


Figure 2-4 Manual registration

- ① Click [Manual Registration] tab.
- ② Select the group.
- ③ Select "Modbus/TCP Server" or "Modbus/TCP Client".

You can choose one of the options according to the I/O controller's communication mode.

I/O controller's Communication Mode	Option
Passive (Modbus/TCP Server)	Modbus/TCP Client
Active (Modbus/TCP Client)	Modbus/TCP Server (It supports IPv4 and IPv6.)

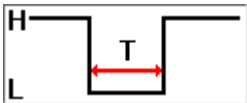
Table 2-1 How to select the option

- ④ Enter the explanation of the I/O controller.
- ⑤ Host IP Address or Name
 - ☞ In case of "Modbus/TCP Client" :
You have to enter "Host IP Address or Name" and "Host Port".
 - ☞ In case of "Modbus/TCP Server" :
You have to enter "Host Port".
- ⑥ Select "Product". Available products are as follows.

Name	Type	Number of Port(s)	
		Digital Input	Digital Output
CIE-H10	External	8	8
CIE-M10	Module	8	8
CIE-H14	External	4	4
CIE-H12	External	2	1
EZI-10	External	1	1

Table 2-2 Available products

- ⑦ Enter "Unit ID".
- ⑧ Enter "Input Port Base Address".
- ⑨ Enter "Output Port Base Address".
- ⑩ Select "Automatic Connection"
 - If you select "ON", ModMap tries to make a Modbus/TCP connection automatically when it starts up.
- ⑪ Select "Prohibit controlling output port"
 - If you select "ON", you are not allowed to control the output ports.
- ⑫ Select "Polling output ports"
 - If you select "ON", ModMap reads the status of the output ports of the I/O controller every second.
- ⑬ Set "Pulse Control".

Level of Pulse	Duration of Pulse	Description
LOW	40ms ~ 10,000ms	 <p>- I/O controller changes its output port's status</p>

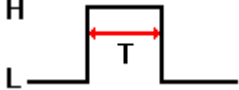
		<p>from "HIGH" to "LOW" only during the time of "Duration of Pulse."</p> <ul style="list-style-type: none"> - This operation is only valid when the output port's status is in "HIGH".
HIGH	40ms ~ 10,000ms	 <p>The diagram shows a digital signal transitioning from a low state (L) to a high state (H). A red double-headed arrow labeled 'T' indicates the duration of the pulse while the signal is in the high state.</p> <ul style="list-style-type: none"> - I/O controller changes its output port's status from "LOW" to "HIGH" only during the time of "Duration of Pulse." - This operation is only valid when the output port's status is in "LOW".

Table 2-3 Pulse Control

⑭ Click [Add I/O Controller] button.

2.1.4 Tree and control window

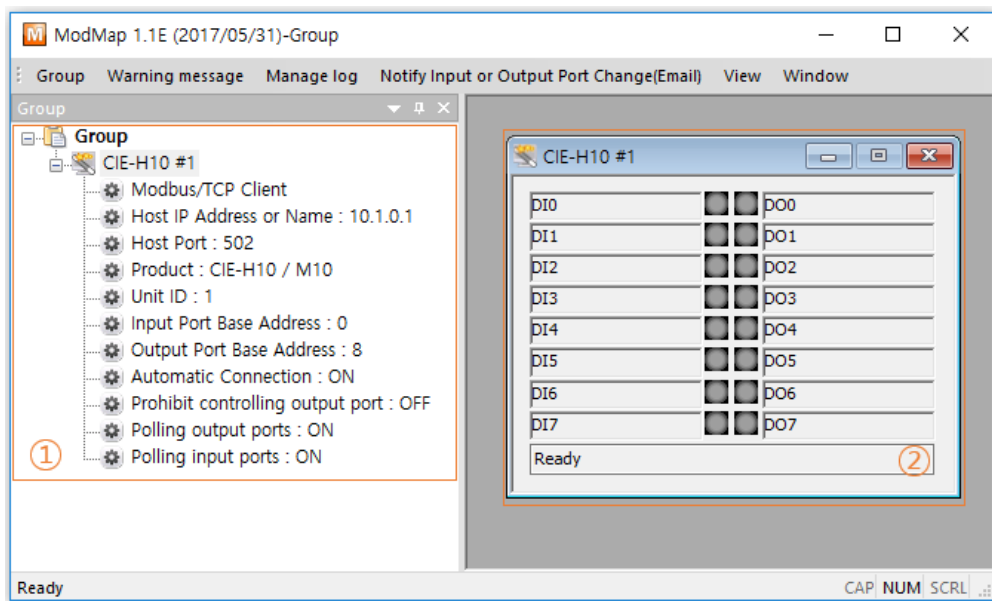


Figure 2-5 Tree and control window

When ModMap adds I/O controllers, the information of I/O controllers is displayed on the tree window (①) and control window (②) is popped up.

2.2 Control window

2.2.1 Pop-up menu

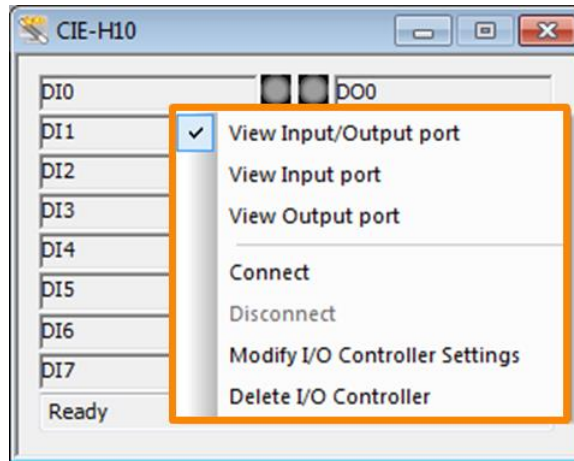


Figure 2-6 Pop-up menu

Right-click on the control window and then the pop-up menu is displayed.

- View Input/Output port, View Input Port and View Output Port
You can change the shape of the control window.

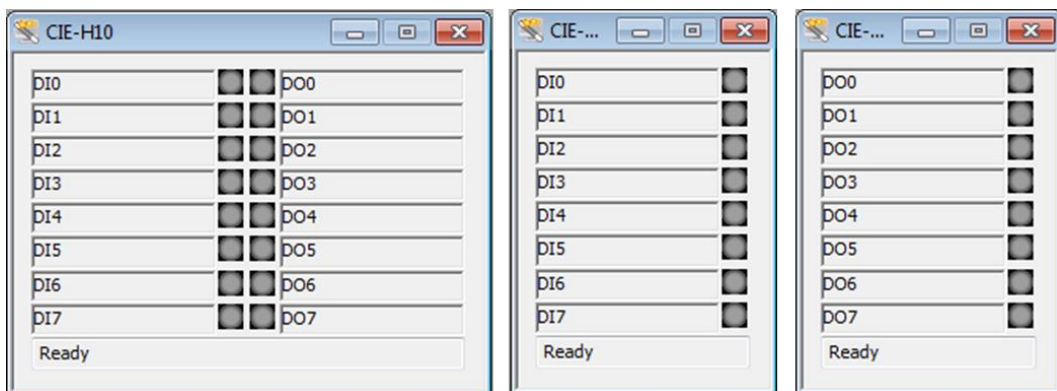


Figure 2-7 View of Input/Output port, View of Input Port and View of Output Port

- Connect / Disconnect
You can make or close a Modbus/TCP connection. The following icons represents the status of Modbus/TCP connection.






ICON	Description
	The Modbus/TCP connection is in READY state.
	The Modbus/TCP connection is in READY state and "Automatic Connection" is activated.
	<i>In case of the "Modbus/TCP Client" :</i> The Modbus/TCP connection is in CONNECTING state. <i>In case of the "Modbus/TCP Server" :</i> The Modbus/TCP connection is in LISTENING state.
	The Modbus/TCP connection is in ESTABLISHED state.
	An error occurred.

Table 2-4 Modbus/TCP status icons.

- Modify I/O Controller Settings

You can modify settings of I/O controllers. Referring to "[2.1.3 Manual registration tab](#)" and "[2.4 Changing I/O controller settings](#)". You are not allowed to use this menu when the Modbus/TCP connection is in CONNECTING, LISTENING, or ESTABLISHED state.

- Delete I/O Controller

You can delete the I/O controller.

2.2.2 Comment of input/output ports

The edit boxes are on the control window for I/O ports' comment. You can modify the comments of each port. Default values are DI0 ~ DI7 and DO0 ~ DO7.

- Changing comment

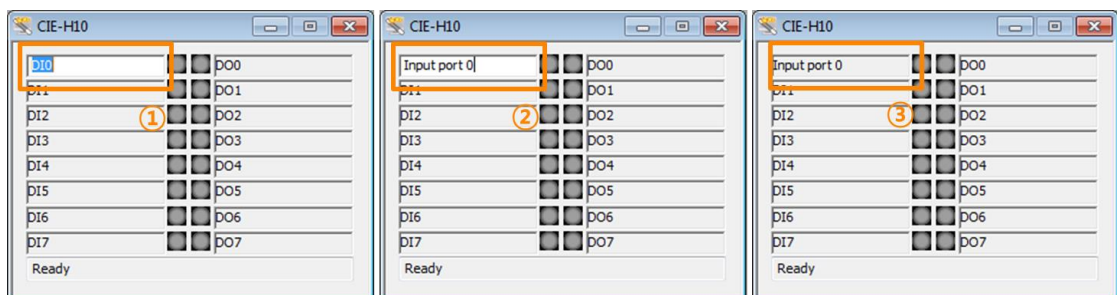


Figure 2-8 Changing comment

- ① If you click one of the disabled edit boxes, that will be enabled.
- ② Change the text.
- ③ Changing is completed when you touch the enter key on your keyboard or move out the focus from the edit box.

2.2.3 Controlling and monitoring input / output ports

On the control window, LED icons for representing the status of the input or output ports are located. You can control and monitor the ports with the LED icons.

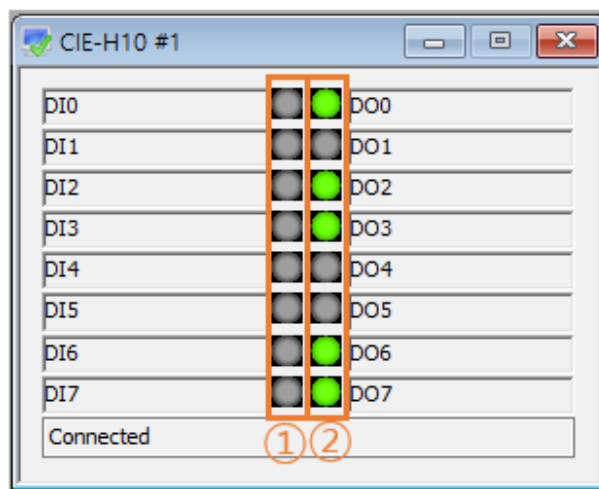


Figure 2-9 Controlling and monitoring input/output ports

☞ **Controlling and monitoring input or output ports are possible only if the Modbus/TCP connection is in ESTABLISHED state.** ()

- Controlling and monitoring
 - ① When you click one of the icons on the left side (①), ModMap reads the status of input ports from the I/O controller.
 - ② When you click one of the icons on the right side (②), ModMap changes the output port's status.

ICON	Description
	Input port : The digital signal is detected. Output port : The output port is turned on.
	Input port : The digital signal is not detected. Output port : The output port is turned off.



	Output port : "Prohibit controlling output port" option is ON.
	Output port : "Warning message" option is ON.

Table 2-5 The status of I/O ports

- ☞ You are not allowed to control output ports if "Prohibit controlling output port" option is "ON".
- ☞ ModMap shows a warning message when the function is enabled.

2.3 Tree

2.3.1 Changing settings

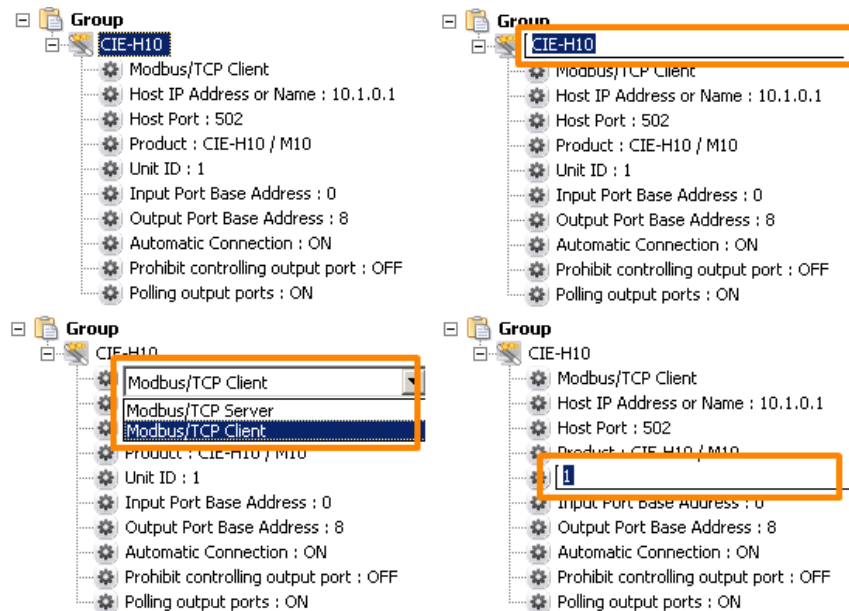


Figure 2-10 Changing settings

- Changing settings
 - ① Select one of the items of which you want to change the value. And then, click the item one more time or press the "F2" key on your keyboard.
 - ② When the edit box or the combo box is appeared, you can change the value.
- ☞ "Modbus/TCP Server or Modbus/TCP Client", "Host IP Address or Name", "Host Port", "Product", "Unit ID", "Input Port Base Address" and "Output Port Base Address" are not allowed to change when Modbus/TCP connection is in ESTABLISHED state.

2.3.2 Pop-up menus

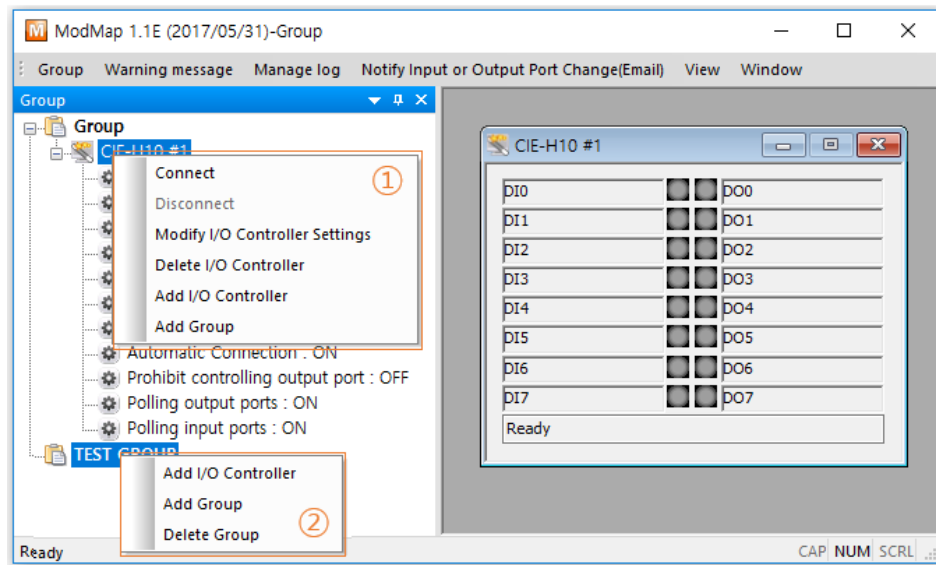


Figure 2-11 Pop-up menu

- ① Right-click on the I/O controller setting items.
- ② Right-click on the group name.

- **Connect / Disconnect**
You can make or close a Modbus/TCP connection. The connection status is represented by icon. **Refer to the "Table 2-4 Modbus/TCP status icons."**
- **Modify I/O Controller Settings**
You can modify settings of I/O controllers. Referring to "[2.1.3 Manual registration tab](#)" and "[2.4 Changing I/O controller settings](#)". ModMap doesn't allow to use this menu when a Modbus/TCP connection is in CONNECTING, LISTENING, or ESTABLISHED state.
- **Delete I/O Controller**
You can delete the I/O controller.
- **Add I/O Controller**
You can add new I/O controller. Referring to "[2.1 Adding I/O controllers](#)"
- **Add Group / Delete Group**
You can add or delete the group. Referring to "[2.5 Group](#)".
☞ **You are not allowed to delete the default group.**

2.4 Changing I/O controller settings

2.4.1 Changing I/O controller settings

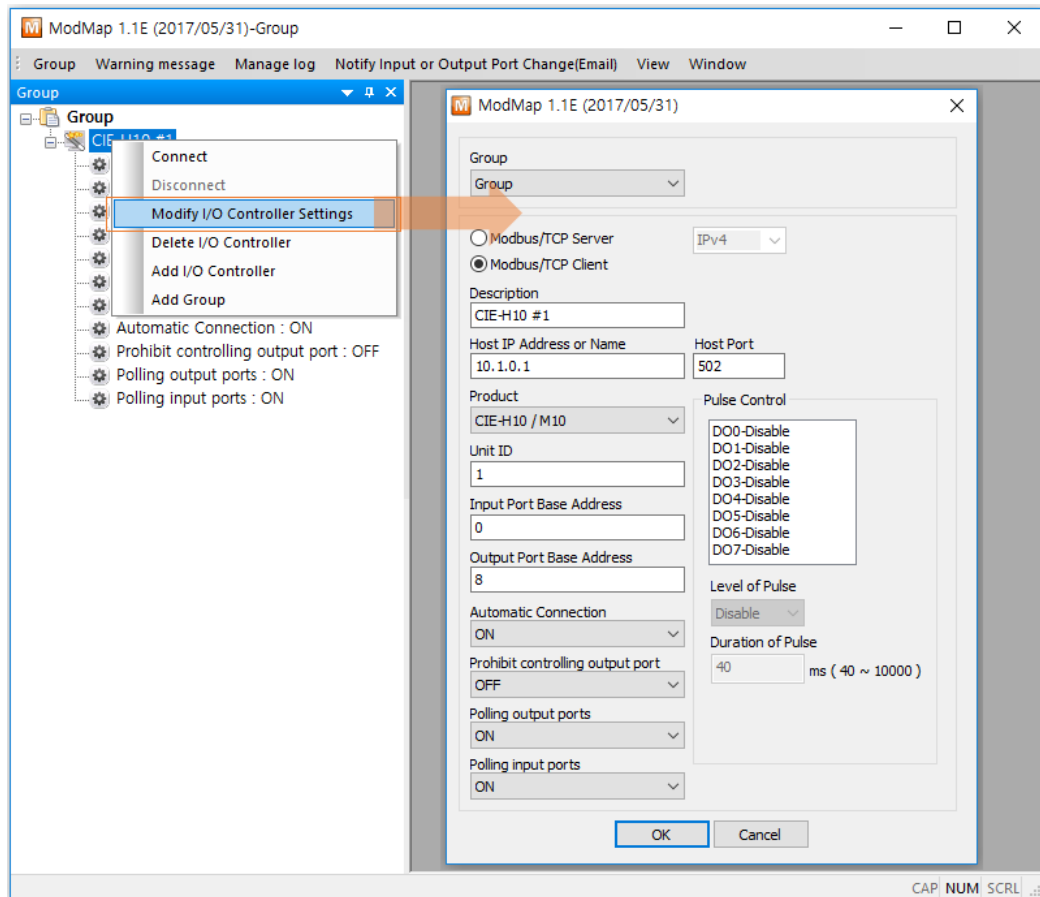


Figure 2-12 Changing I/O controller settings

Click [Modify I/O Controller Settings] menu and then the configuration window appears. Referring to [“2.1.3 Manual registration tab”](#) for more detail information about each option.

2.5 Group

2.5.1 Adding group

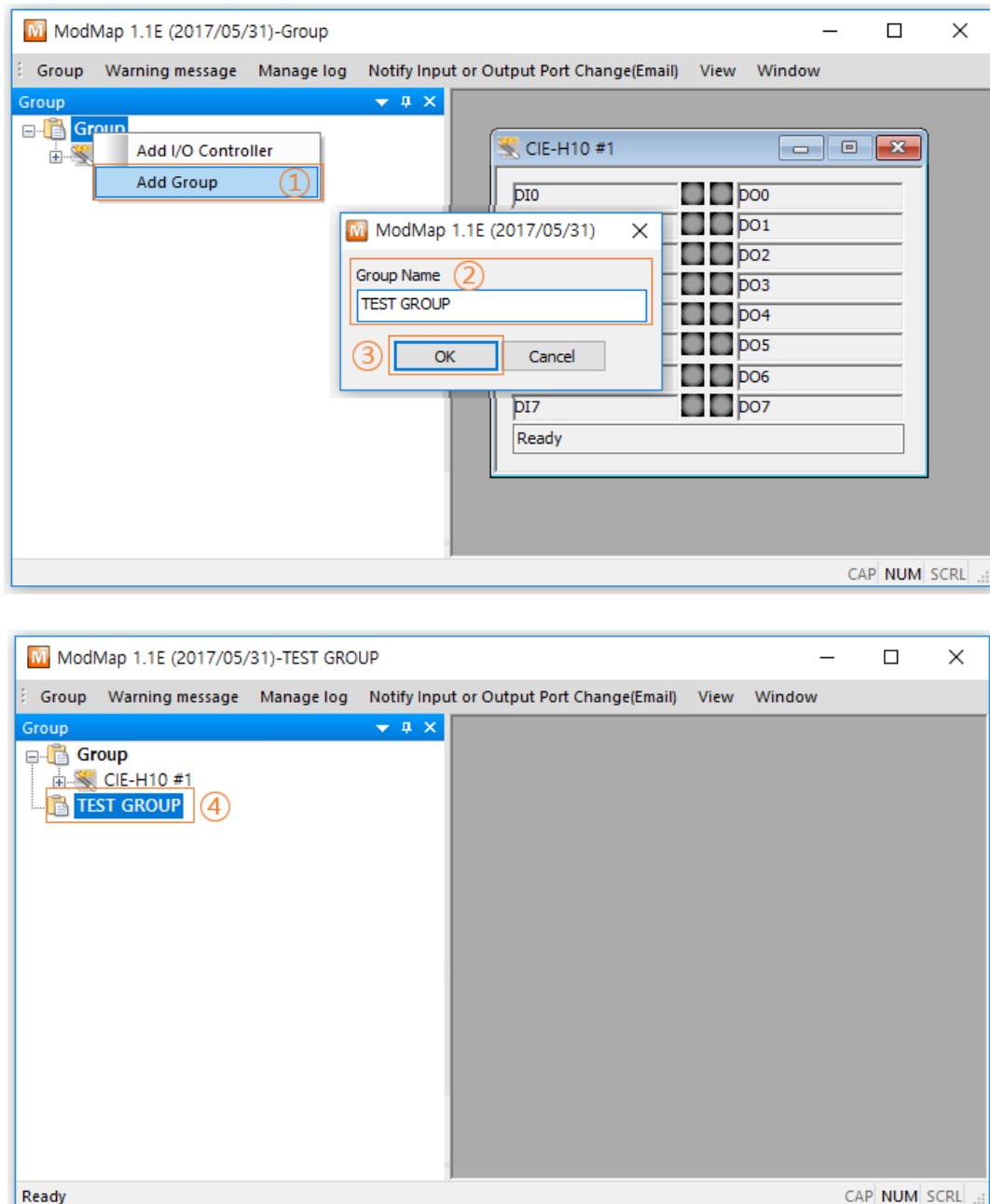


Figure 2-13 Ways of adding groups

- ① Click [Add Group] menu.
- ② Enter a name for the new group.

- ③ Click [OK] button.
- ④ The group is added on the tree.

2.5.2 Changing name of group

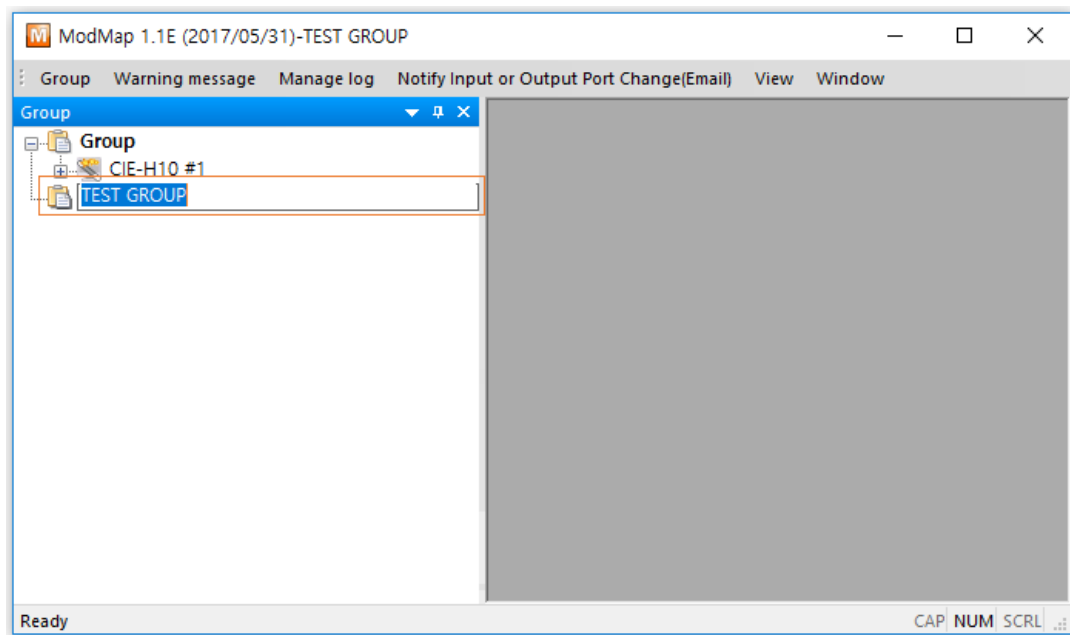


Figure 2-14 Changing name of group

- ① Click the group name which you want to change. And then, click the group name one more time or press the "F2" key on your keyboard.
- ② When the edit box appears, you can change the name.

2.5.3 Deleting group

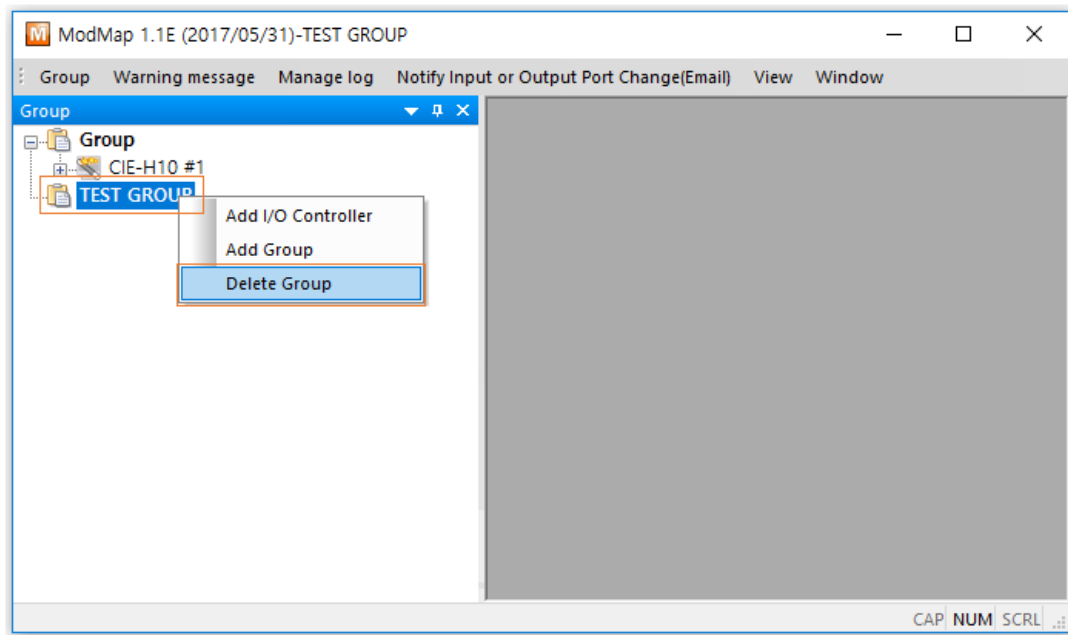


Figure 2-15 Deleting a group

- ① Click the group which you want to delete. And then right-click the name.
- ② Click [Delete Group].

⚠ WARNING :

If you delete the group, all I/O controllers in the group will be removed.

2.6 Manage I/O controllers

2.6.1 Manage I/O controllers

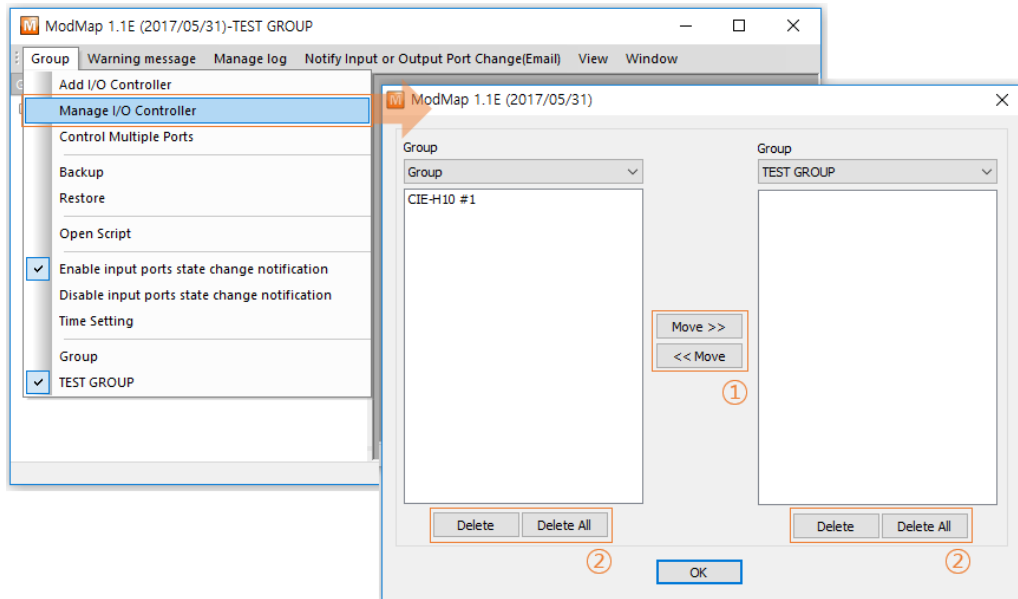


Figure 2-16 Manage I/O controllers

- ① You can move I/O controllers between groups.
- ② You can delete I/O controllers.

- Moving I/O controllers

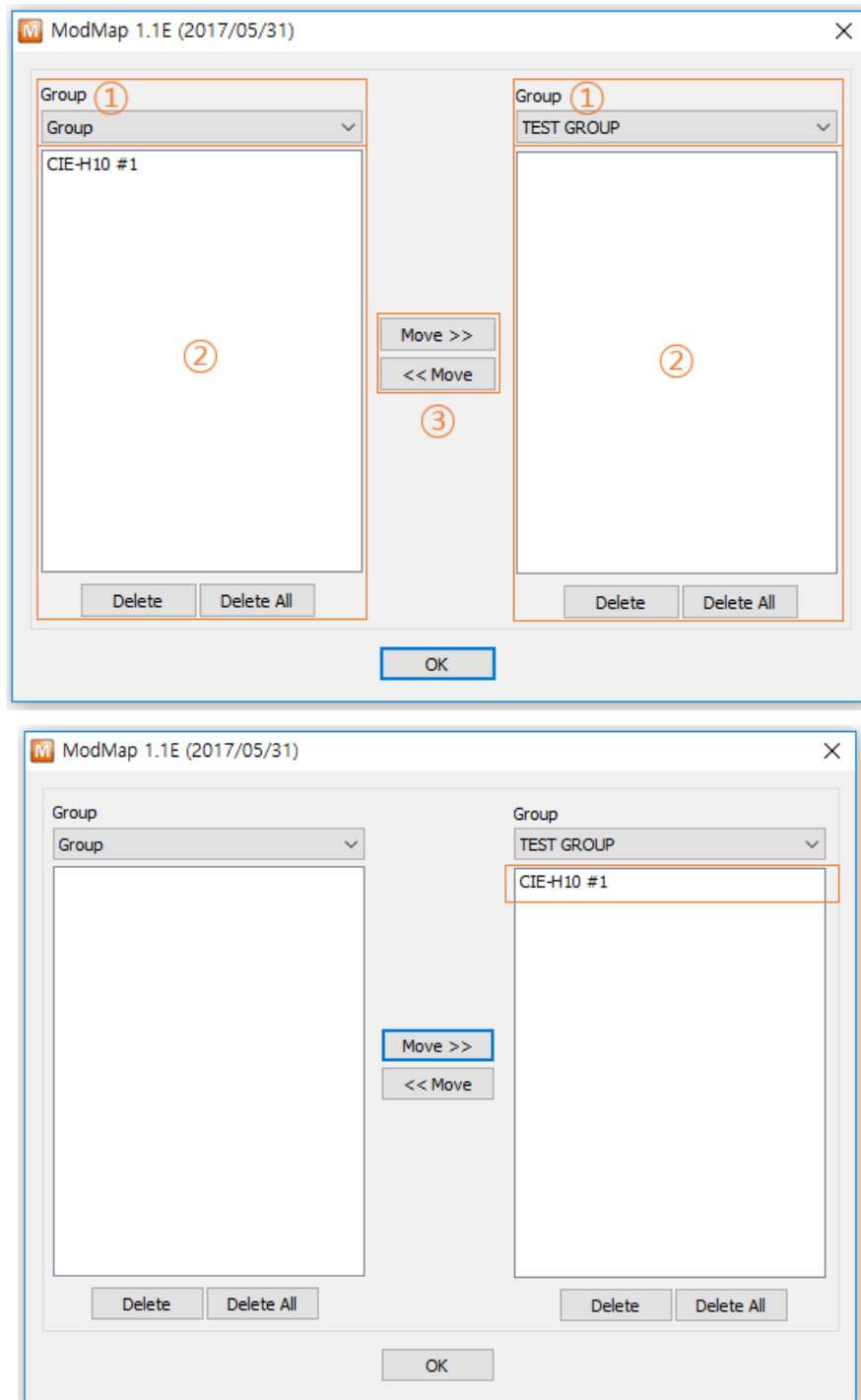


Figure 2-17 How to move I/O controllers

- ① Select the group.
- ② Click I/O controllers.
- ③ Click [Move>>] or [<<Move] button.

- Deleting I/O controllers

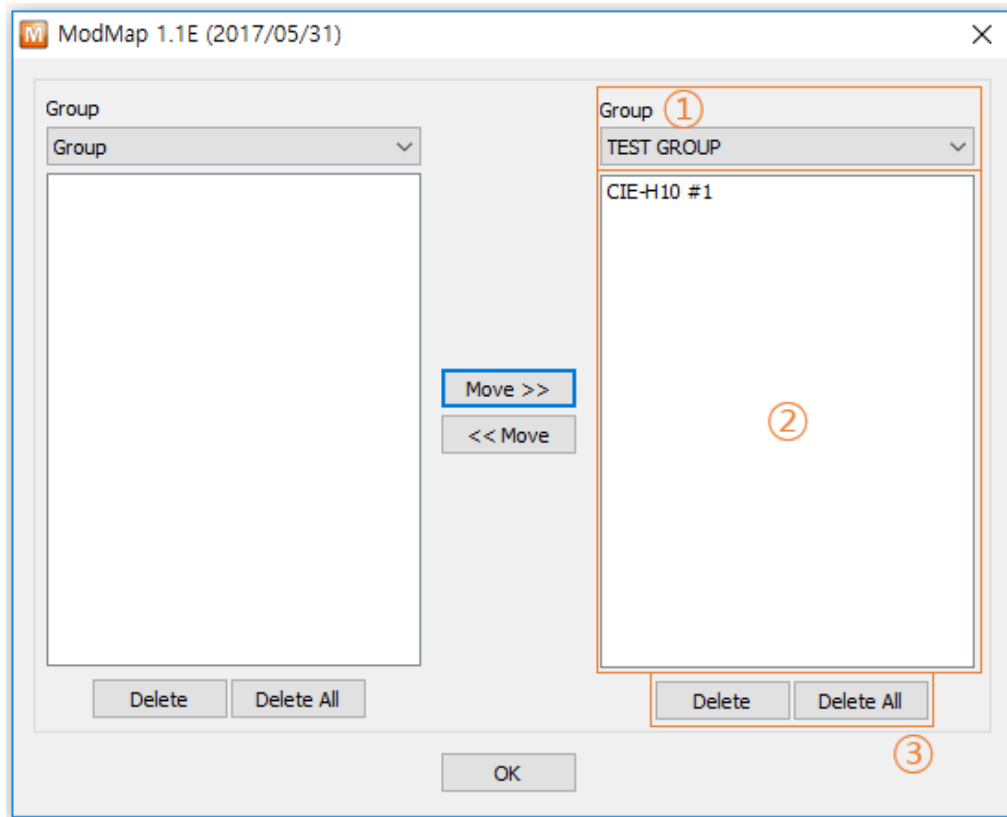


Figure 2-18 Deleting I/O controllers

- ① Select the group.
- ② Click I/O controllers.
- ③ Click [Delete] or [Delete All] button.

2.7 Backup and restore

2.7.1 Backup and restore

You can make a backup of current settings of groups and I/O controllers.

- Make a backup

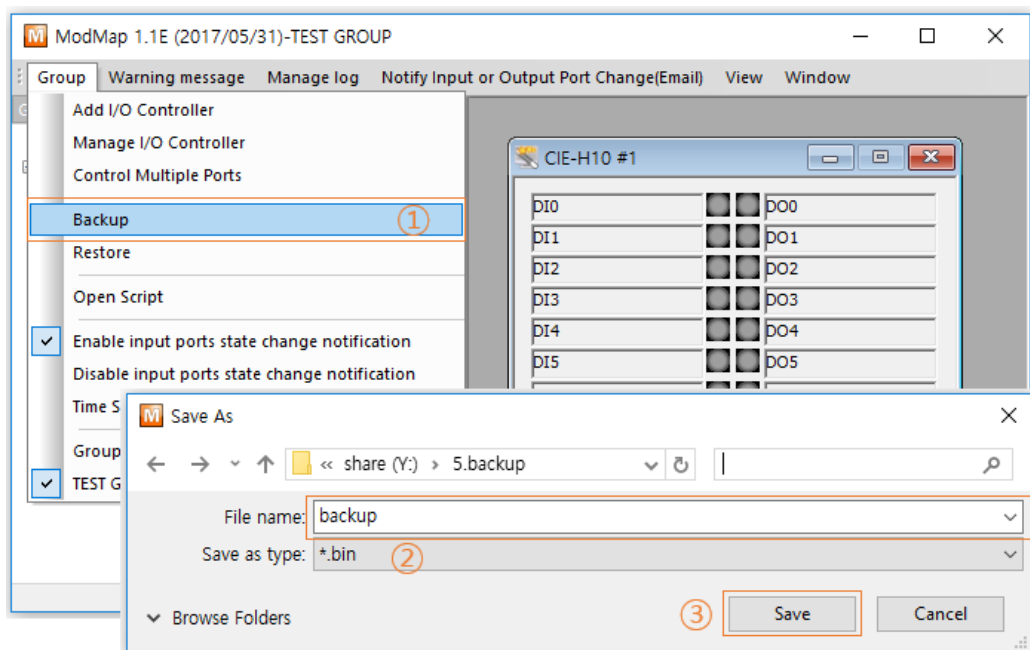


Figure 2-19 Backup

- ① Click [Backup] menu.
- ② Enter the backup file name.
- ③ Click [Save] button.

- Restore settings

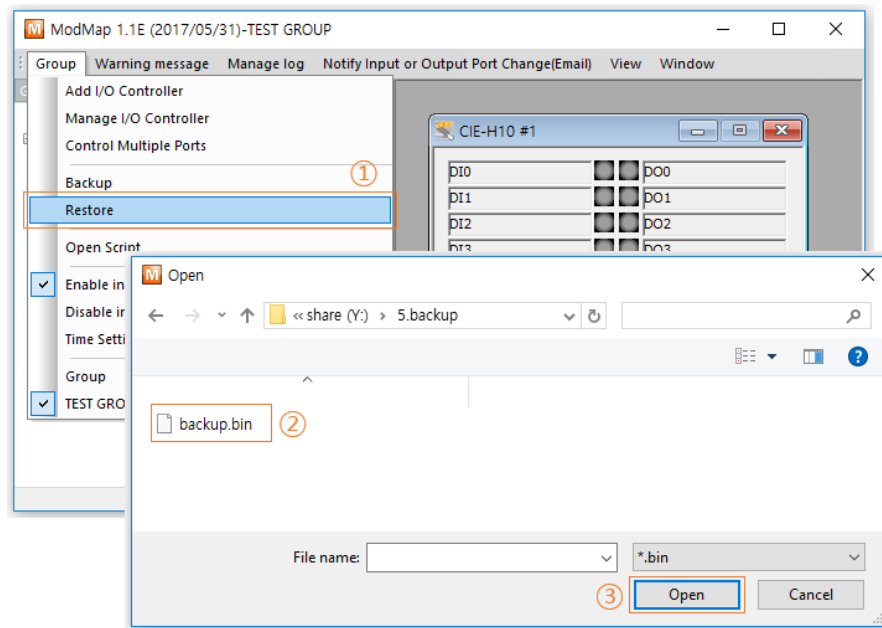


Figure 2-20 Restore (1)

- ① Click [Restore] menu.
- ② Select the backup file.
- ③ Click [Open] button.

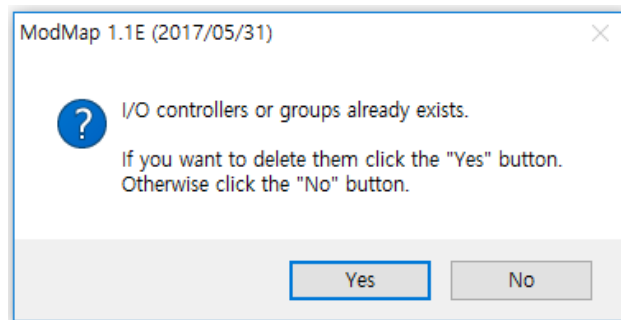


Figure 2-21 Restore (2)

- ④ Confirm the users' choice.
 - ☞ When you click [Yes] button :
Existing settings are removed from ModMap before restoring the data from the backup.
 - ☞ When you click [No] button :
The data in the backup will be appended to the existing settings.

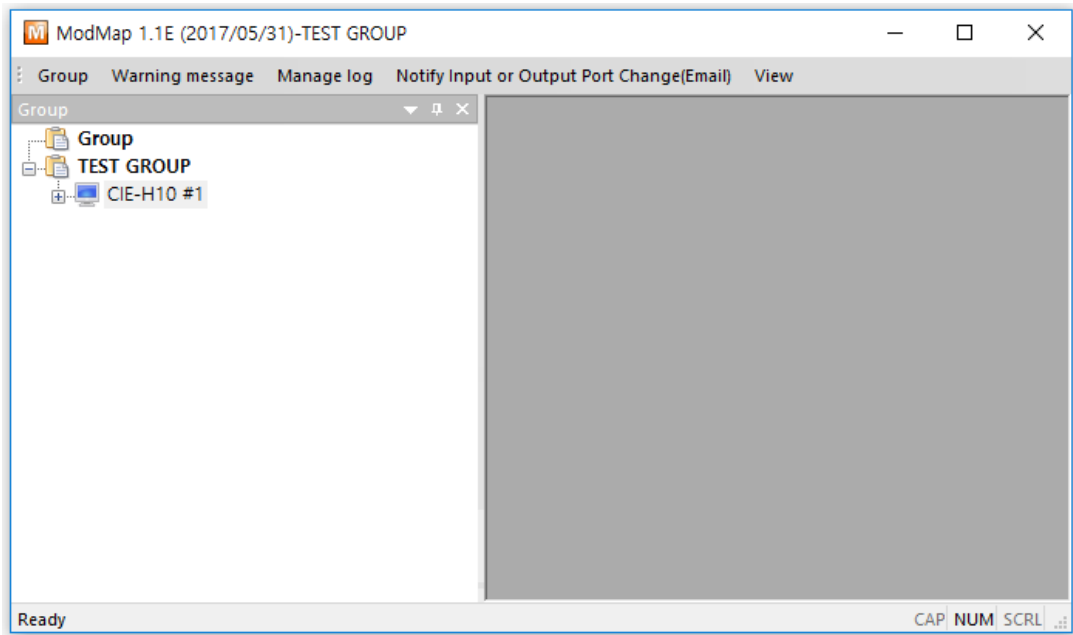


Figure 2-22 In case of [Yes] button pressed.

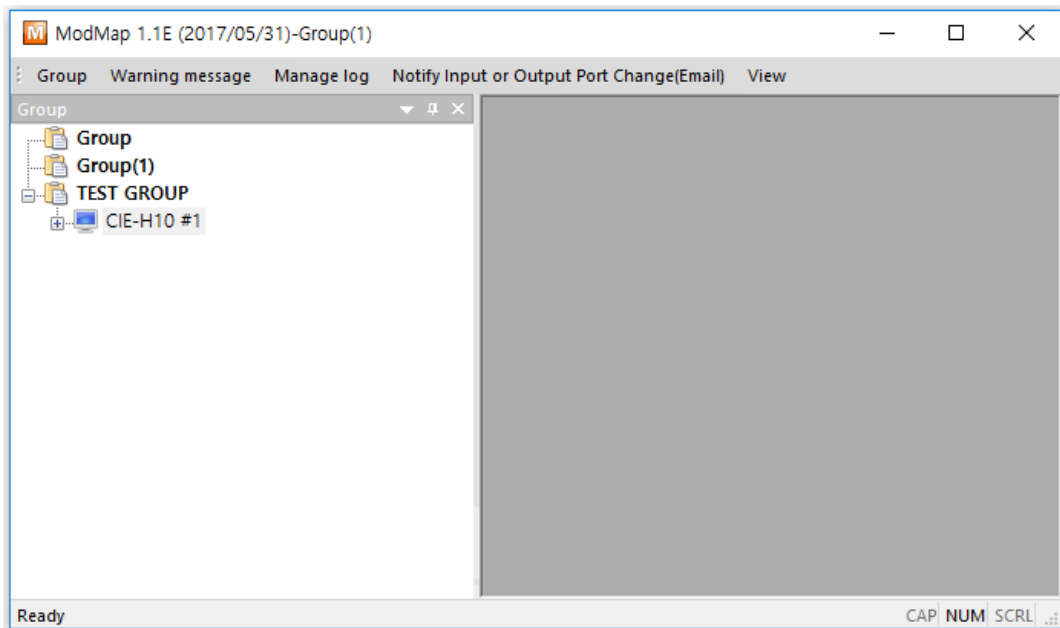


Figure 2-23 In case of [No] button pressed.

2.8 Script

2.8.1 Script

The Script is one of the ways of adding I/O controllers. It must comply with a syntax provided by ModMap. The syntax supports INI and CSV file format.

2.8.2 Syntax of script

Properties	Required	Comment
Group	X	Group name of I/O controllers. <ul style="list-style-type: none"> - If Group property is not in the script then ModMap assigns a group automatically. - If Group property is in the script, however, ModMap can't find the group then it adds the group.
Comment	<input type="radio"/>	Enter a comment of the I/O controller.
Network	<input type="radio"/>	0 - Modbus/TCP Client 1 - Modbus/TCP Server
HostAddr	<input type="radio"/>	In case of "Modbus/TCP Client" : You have to present HostAddr property. HostAddr is an IP address or a DNS name of remote host.
HostPort	<input type="radio"/>	In case of "Modbus/TCP Client" : HostPort is a TCP port number of remote host. In case of "Modbus/TCP Server" : HostPort is a TCP port number of ModMap.
Product	<input type="radio"/>	The name of I/O controller. Product should be one of the names below. (CIE-H10, CIE-M10, CIE-H12, CIE-H14, EZI-10)
UnitId	<input type="radio"/>	Unit id of I/O controller.
InputAddr	<input type="radio"/>	Input port base address of I/O controller.
OutputAddr	<input type="radio"/>	Output port base address of I/O controller.

AutomaticConnection	X	0 – Set "Automatic Connection" option to "OFF". 1 – Set "Automatic Connection" option to "ON".
OuputPortControl	X	0 – Set "Prohibit controlling output port" option to "OFF". 1 – Set "Prohibit controlling output port" option to "ON".
Polling	X	0 – Set "Polling output ports" option to "OFF". 1 – Set "Polling output ports" option to "ON".
PollingInput	X	0 – Set "Polling input ports" option to "OFF". 1 – Set "Polling input ports" option to "ON".
DiComment0 ~ 7	X	A comment of input port number 0 to 7.
DoComment0 ~ 7	X	A comment of output port number 0 to 7.
UseWarningMsg	X	0 – Set "Warning message" option to "OFF". 1 – Set "Warning message" option to "ON"
WarningMsgType	X	0 – Same warning message will be used to all output ports. 1 – Each output port has its own warning message.
UseWarningMsgDo0 ~ 7	X	Set "Warning message" option to each output port. 0 – Set "Warning message" option to "OFF". 1 – Set "Warning message" option to "ON"
MsgAllOn	X	<i>When "WarningMsgType" is zero(0):</i> This message is shown before changing output ports' status to "ON".
MsgAllOff	X	<i>When "WarningMsgType" is zero(0):</i> This message is shown before changing output ports' status to "OFF".
DoMsgOn0 ~ 7	X	<i>When "WarningMsgType" is one(1) and the "UseWarningMsgDo0 ~ 7" is one(1) :</i> This message is shown before changing output ports' status to "ON".

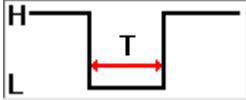
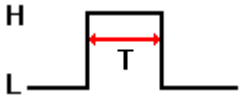
DoMsgOff0 ~ 7	X	When "WarningMsgType" is one(1) and the "UseWarningMsgDo0 ~ 7" is one(1) : This message is shown before changing output ports' status to "OFF".
UsePulseDo0 ~ 7	X	Set "Pulse Control" option to each output port. 0 – Not using "Pulse Control" option. 1 – Use "Pulse Control" option.
DurationDo0 ~ 7	X	The time to keep signal level. The unit is millisecond and the range is from 40 to 10,000.
SignalLevelDo0 ~ 7	X	0 – Low pulse control  1 – High pulse control 
UseLog	X	0 – Not using "Log" option. 1 – Use "Log" option.

Table 2-6 Properties

- INI file format

- ☞ Properties

The basic element contained in an INI file. Every property has a name and value, delimited by an equal sign (=). The name appears to the left of the equals sign.

- ☞ Sections

Properties are grouped into named sections. The section name appears on a line by itself, in square brackets ([and]). The '[CONTROLLER]' must be used for a section name.

- ☞ **Properties or sections have to end with <CR><LF>.**

- ☞ You have to use all required properties.

```
[CONTROLLER]
Group=Group #1
Comment=I/O controller #3
Network=0
HostAddr=10.1.0.1
HostPort=502
Product=CIE-H10
UnitId=1
InputAddr=0
OutputAddr=8
AutomaticConnection=1
OutputPortControl=1
Polling=1
DiComment0=DI0
DiComment1=DI1
DiComment2=DI2
DiComment3=DI3
DiComment4=DI4
DiComment5=DI5
DiComment6=DI6
DiComment7=DI7
DoComment0=DO0
DoComment1=DO1
DoComment2=DO2
DoComment3=DO3
DoComment4=DO4
DoComment5=DO5
DoComment6=DO6
DoComment7=DO7
UseWarningMsg=1
WarningMsgType=1
UseWarningMsgDo0=1
UseWarningMSgDo7=1
DoMsgOn0=Are you sure to change the status of output #0 to ON?
DoMsgOff7= Are you sure to change the status of output #7 to OFF?
```

Table 2-7 An example of INI file

- CSV file format

- ☞ CSV is a delimited data format with fields separated by the comma character(,) and record separated by newlines(<CR> <LF>).

- ☞ **The comma character(,) is not allowed for Fields.**

- ☞ The first record in a csv file contain column names in each of the fields. The column names should be one of the property names of INI file.

```

Comment,Network,HostAddr,HostPort,Product,UnitId,InputAddr,OutputAddr
I/O controller #1,0,10.1.0.1,502,CIE-H10,1,0,8
I/O controller #2,0,10.1.0.2,502,CIE-H10,1,0,8
I/O controller #3,0,10.1.0.3,502,CIE-M10,1,0,8
I/O controller #4,0,10.1.0.4,502,CIE-M10,1,0,8
I/O controller #5,0,10.1.0.5,502,CIE-H12,1,0,8
I/O controller #6,0,10.1.0.6,502,CIE-H12,1,0,8
I/O controller #7,0,10.1.0.7,502,EZI-10,1,0,8
I/O controller #8,0,10.1.0.8,502,EZI-10,1,0,8
I/O controller #9,0,10.1.0.9,502,EZI-10,1,0,8
I/O controller #10,0,10.1.0.10,502,EZI-10,1,0,8

```

Table 2-8 An example of csv file

2.8.3 Open script

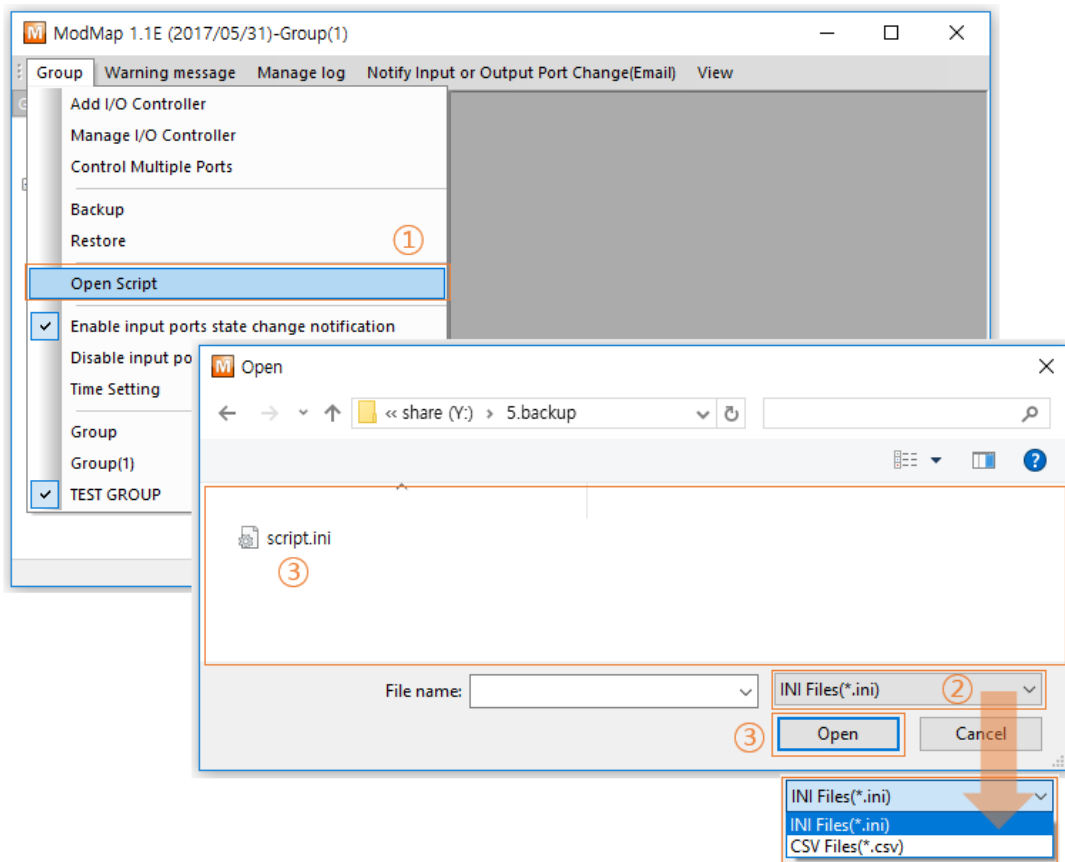


Figure 2-24 Open script

- ① Click [Open Script] menu.
- ② Select "INI Files(*.ini)" or "CSV Files(*.csv)".
- ③ Select the script file.
- ④ Click [Open] button then MoMap starts adding I/O controllers.

2.9 Warning message

2.9.1 Warning message

If "Warning message" option is ON, a warning message is shown before changing output ports' status. With this function, you can prevent unwanted changing of output ports' status.

- Configuring "Warning message"

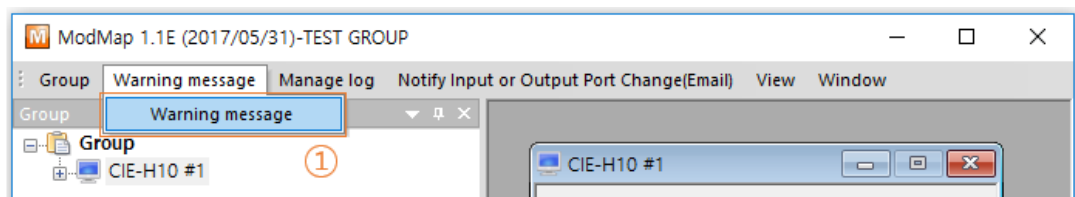


Figure 2-25 Configuring "Warning message" (1)

- ① Click [Warning message] menu.

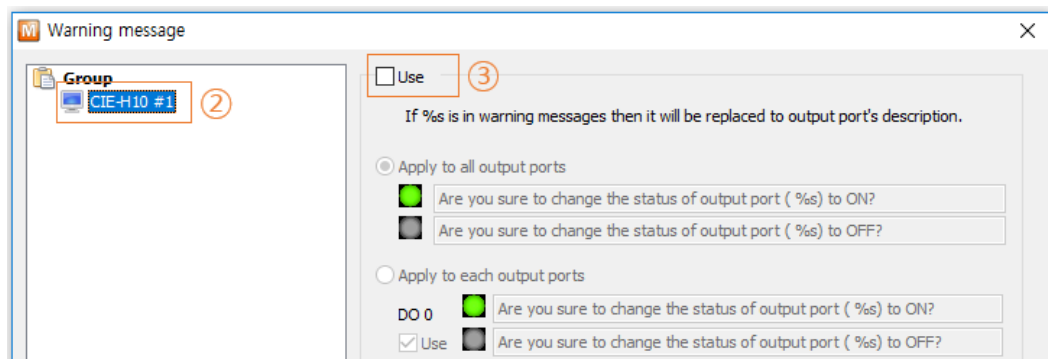


Figure 2-26 Configuring "Warning message" (2)

- ② Select the I/O controller.
- ③ Click [Use] checkbox.

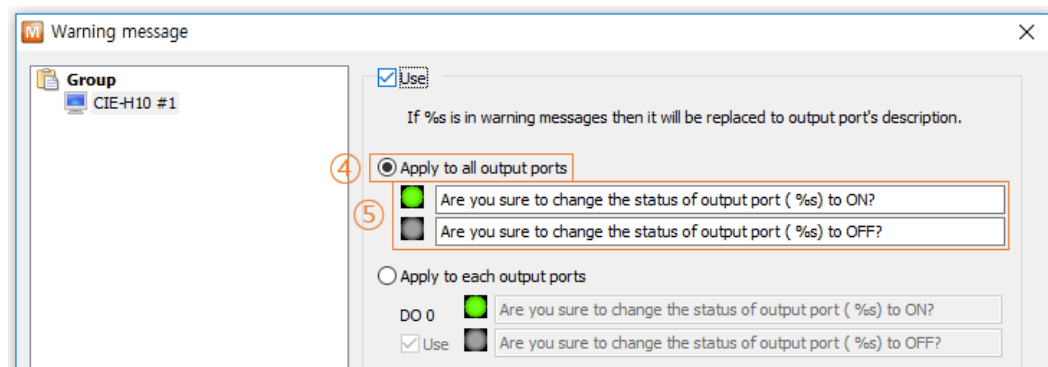


Figure 2-27 Configuring "Warning message" (3)

- ④ In case of the "Apply to all output ports".
Same warning message will be used to all output ports.
- ⑤ Enter warning messages.
 - ☞ Default values are "Are you sure to change the status of output port (%s) to ON?" and "Are you sure to change the status of output port (%s) to OFF?".
 - ☞ If %s is in a warning messages, it will be replaced to the output port's comment.

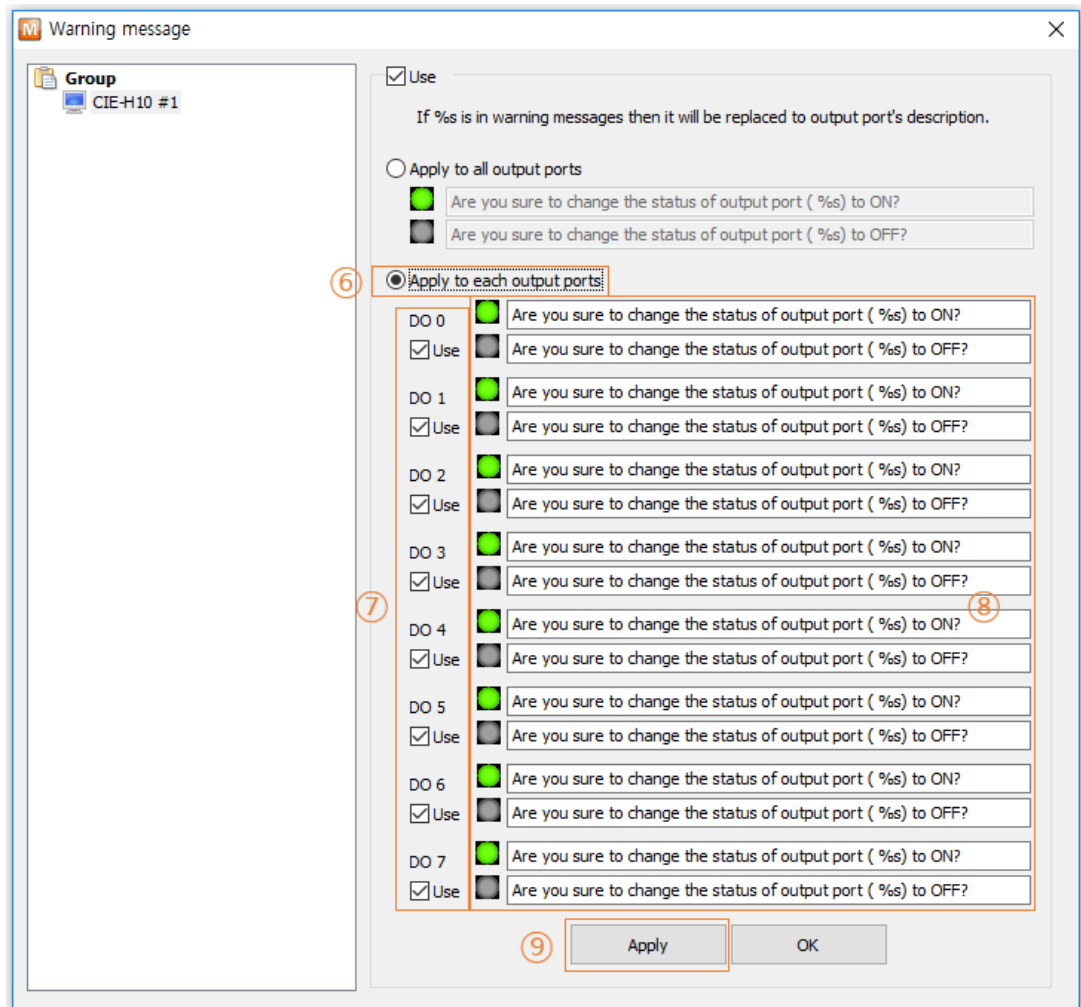


Figure 2-28 Configuring “Warning message” (4)

- ⑥ In case of “Apply to each output ports”
Each output port has its own warning message.
- ⑦ Check one of “Use” checkboxes.
- ⑧ Enter warning messages.
 - ☞ Default values are “Are you sure to change the status of output port (%s) to ON?” and “Are you sure to change the status of output port (%s) to OFF?”.
 - ☞ If %s is in a warning message, it will be replaced to output port’s comment.
- ⑨ Click [Apply] button.

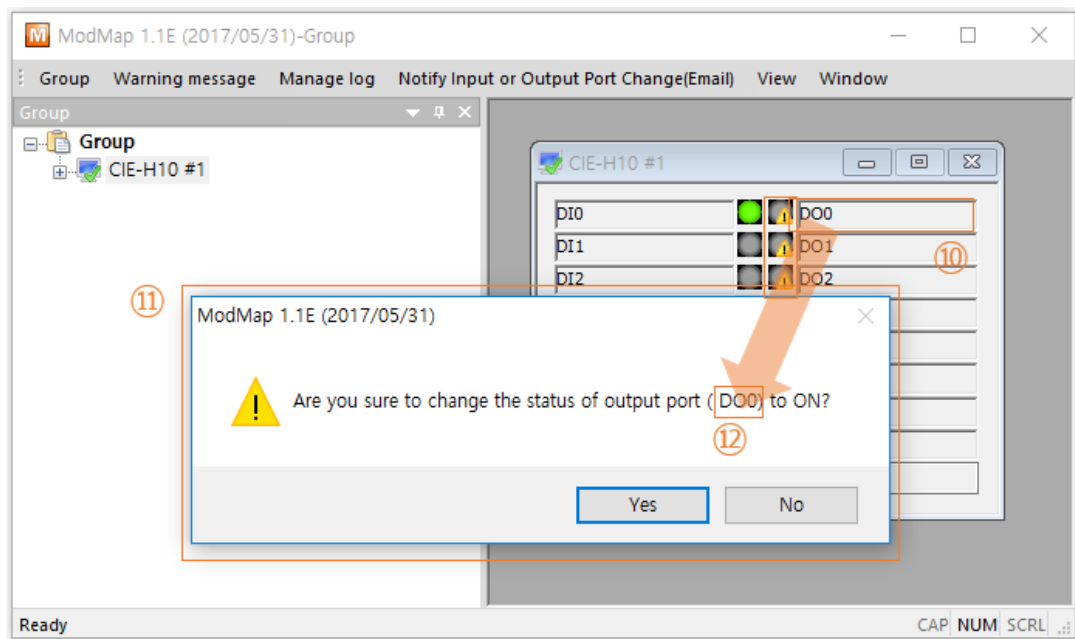


Figure 2-29 Configuring "Warning message" (5)

- ⑩ The icons of output ports are changing when the "Warning message" option is ON.
- ⑪ A warning message is shown when you click the icon.
- ⑫ If %s is in a warning message, it will be replaced to the output port's comment.

2.10 Manage Log

2.10.1 Manage log

- When any event, such as changing Modbus/TCP status or input / output ports status is raised, ModMap writes a text based message into a log file.

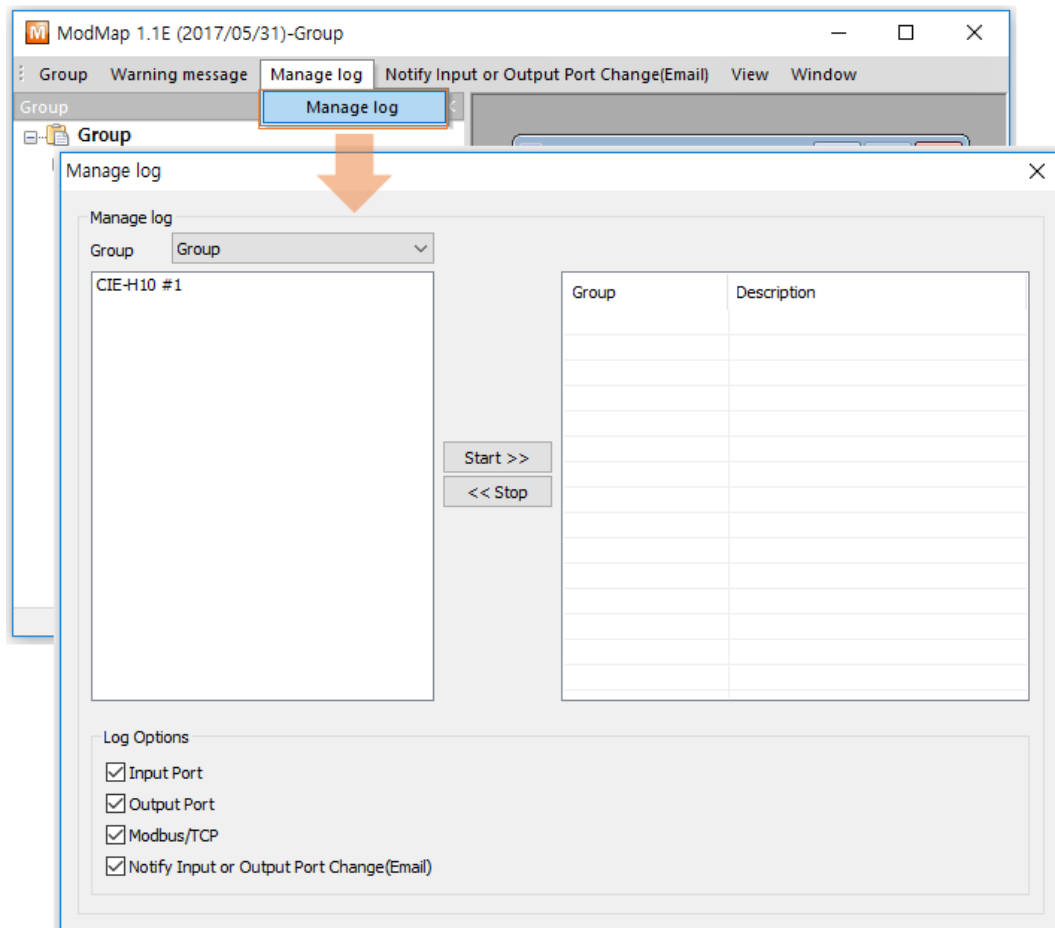


Figure 2-30 Manage log

- ① Select a group.
- ② Click I/O controllers.
- ③ Choose contents of log.
- ④ Click [Start >>] button

● Stopping log

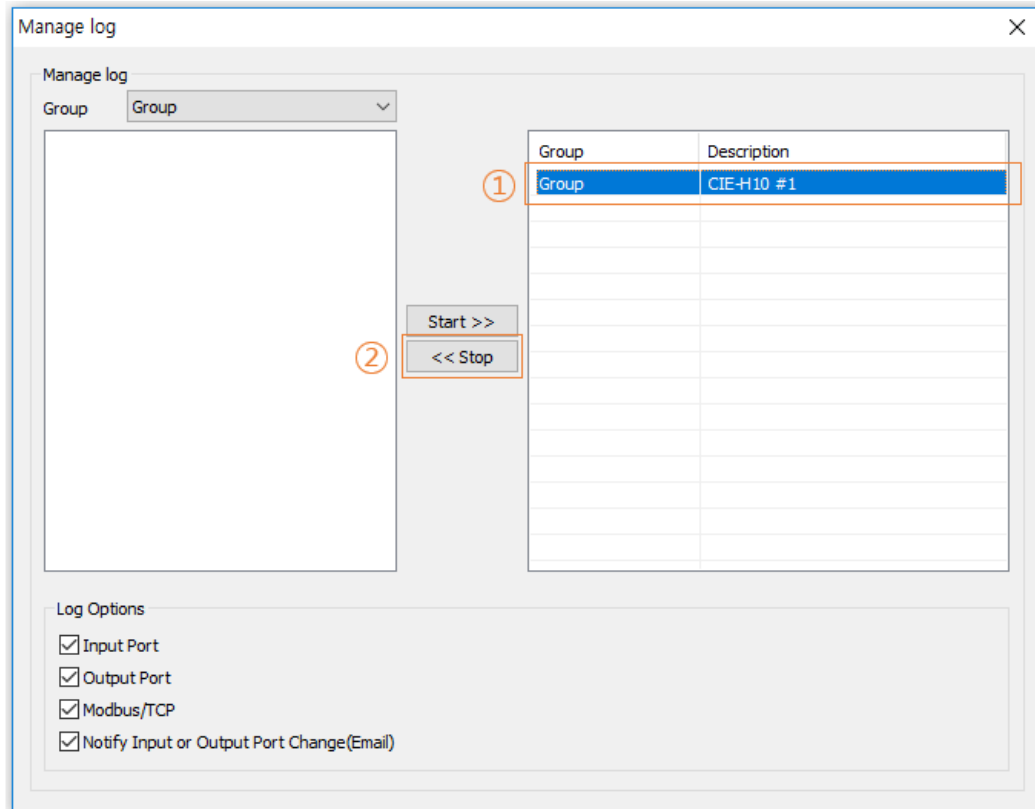


Figure 2-32 Stopping log

- ① Click I/O controllers.
- ② Click [<< Stop] button.

2.11 Log file

2.11.1 Location of log files

- The log files are saved in "C:/Users/User Account/Documents/ModMap"
The folder is easily accessible through "Libraries -> Documents -> ModMap".
- ModMap creates a log file whenever it is started.
The log filename represents its creation time. The notation is YYYYMMDD_HHMMSS.txt
- ModMap creates a new log file if the date is changed or the size of log file exceeds 5 Mega-byte.

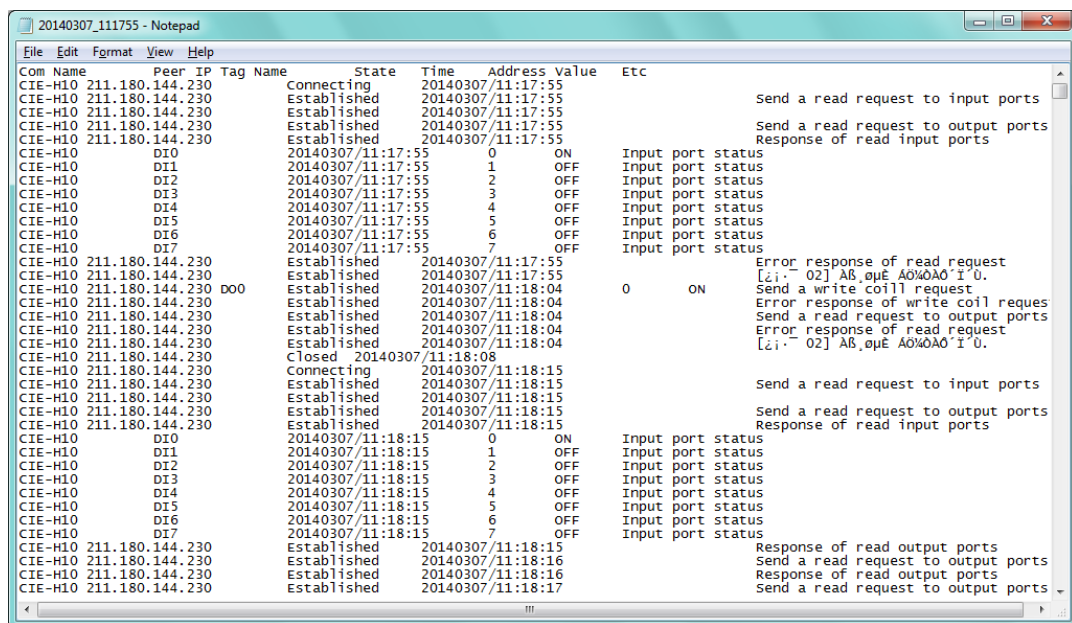


Figure 2-33 A log file

Title	Comment
Com Name	A comment of the I/O controller.
Peer IP	An IP address of a remote host.
Tag Name	A comment of the port in case of an event for input or output port.
State	The Modbus/TCP state.
Time	The time of an event raised for this record.

Address	The index number of the port in case of an event for input or output port.
Value	The state of the port in case of an event for input or output port. The Value is "ON" or "OFF".
Etc	Etc gives additional information for an event.

Table 2-9 A log file

2.12 Notify Input or Output Port Change(Email)

2.12.1 Notify Input or Output Port Change(Email)

- ModMap sends an email to notify I/O controllers port's state.

2.12.2 Adding Email Account

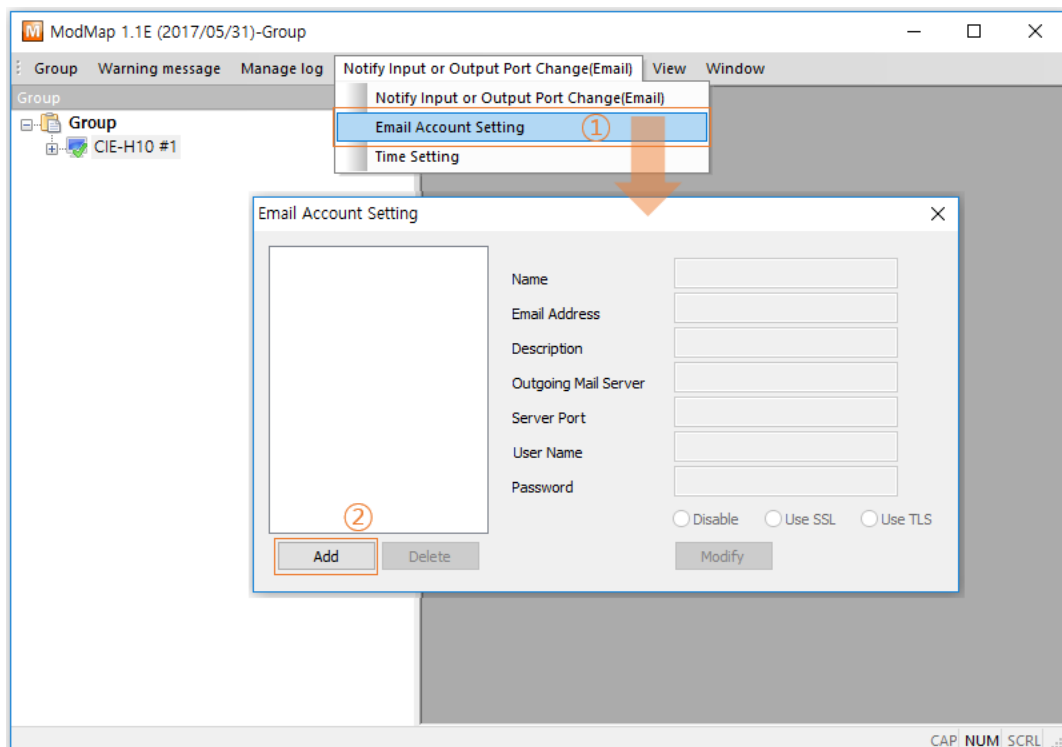


Figure 2-34 Email Account Setting (1)

- ① Click [Email Account Setting] menu.

- ② Click [Add] button then ModMap

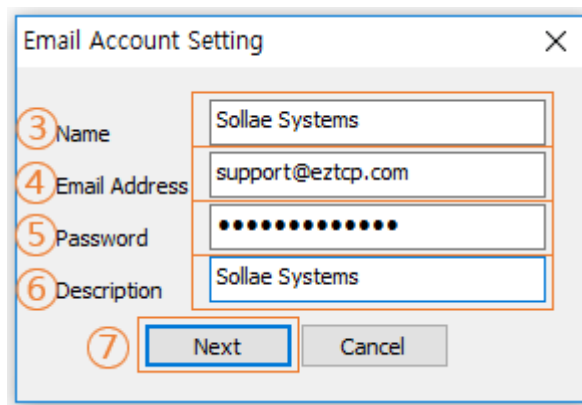
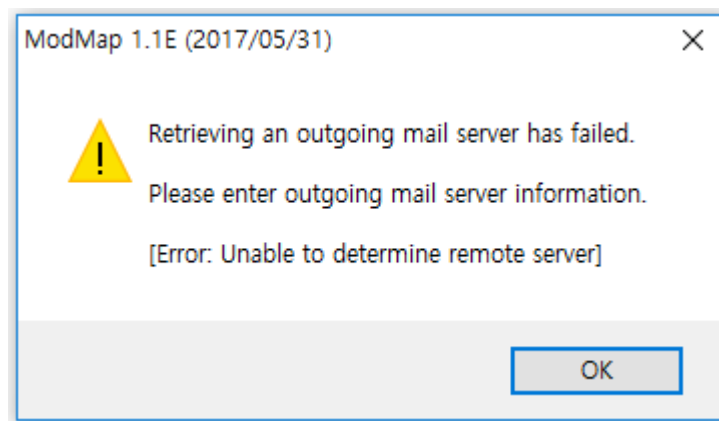


Figure 2-35 Email Account Setting (2)

- ③ Enter the sender's name.
- ④ Enter the sender's email address.
- ⑤ Enter the password of sender's email account.
- ⑥ Enter a brief description of the email account.
- ⑦ Click [Next] button then ModMap starts looking up email account by using the email address(4) and password(5).



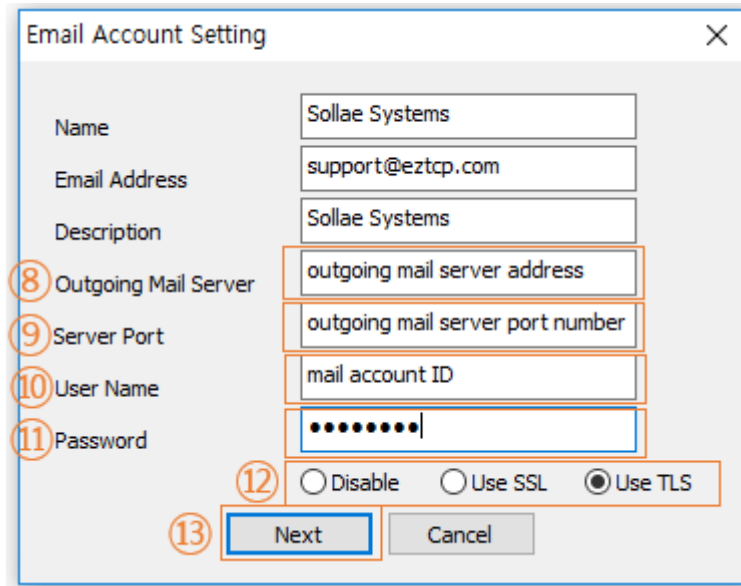


Figure 2-36 Email Account Setting (3)

- ⑧ You have to enter (8) outgoing mail server address, (9) outgoing mail server port number, (10) mail account ID, (11) mail account password, and select (12) security option when ModMap cannot automatically look up email account. Click [Next] button then ModMap starts again looking up email account.

※ Please see your email account settings of SMTP.

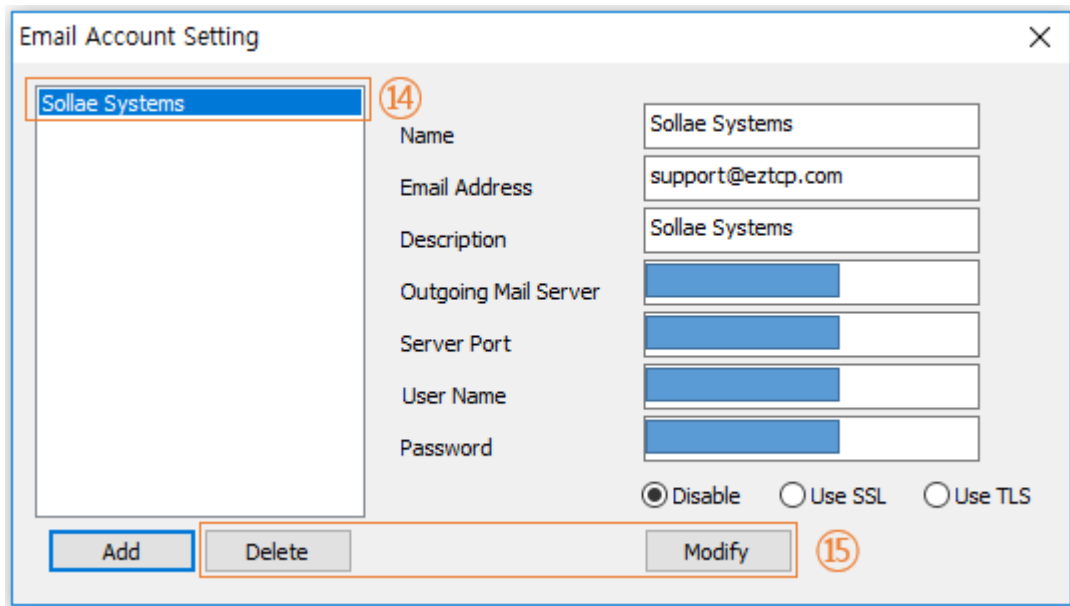


Figure 2-37 Email Account Setting (4)

- ⑨ A description of email account is shown when ModMap successfully looks up the information of email account.
- ⑩ You can manage email accounts on the list with (15) [Delete] or [Modify] button.

2.12.3 Setting Notify Input or Output Port Change(Email)

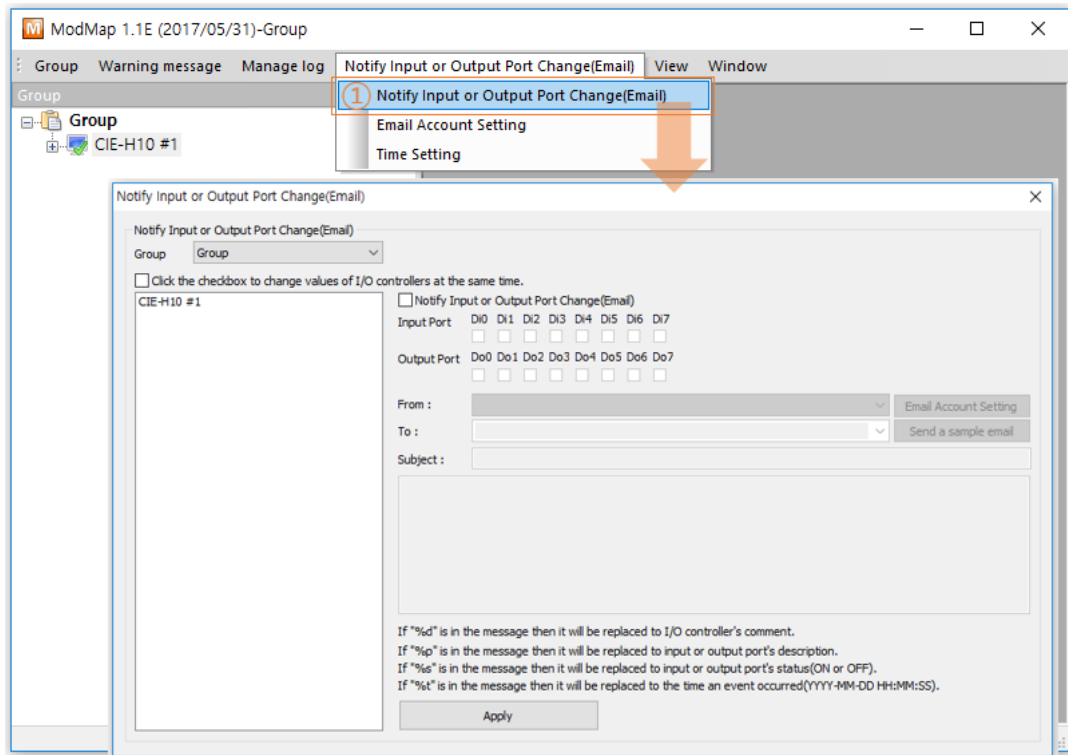


Figure 2-38 Notify Input or Output Port Change(Email) (1)

- ① Click [Notify Input or Output Port Change(Email)] menu.

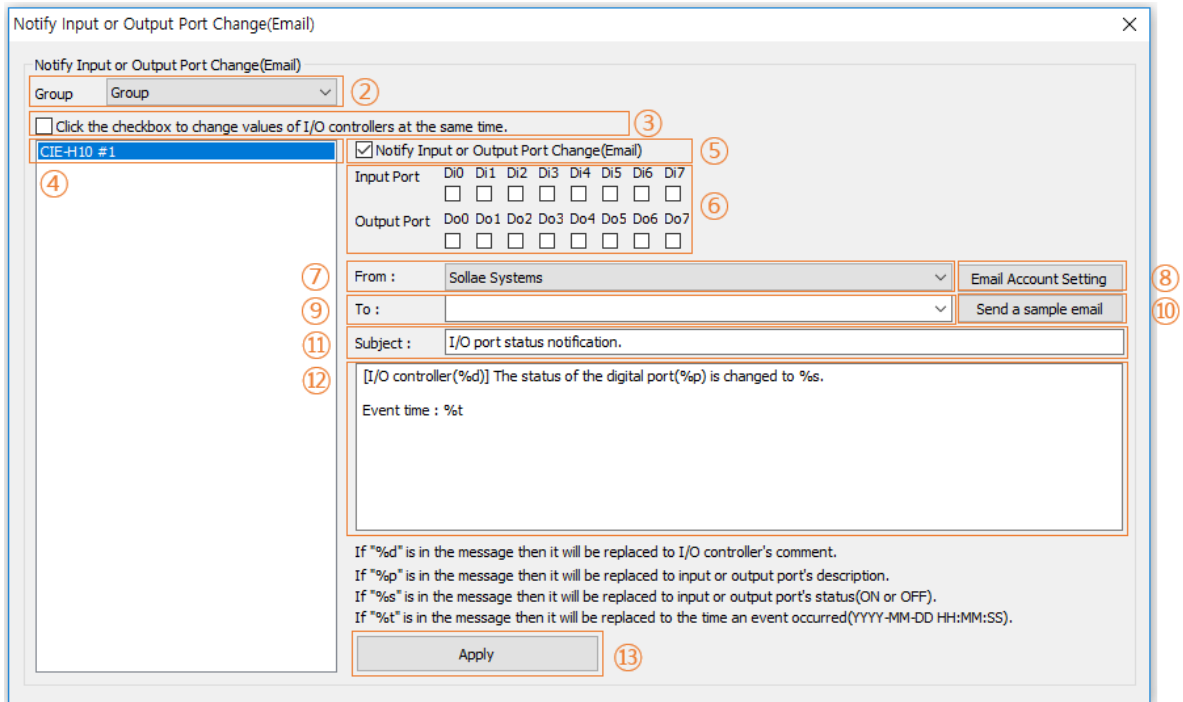


Figure 2-39 Notify Input or Output Port Change(Email) (2)

- ② Select the group.
- ③ Click the checkbox to change values of I/O controllers at the same time.
- ④ Click I/O controllers.
- ⑤ Click [Notify Input or Output Port Change(Email)] checkbox.
- ⑥ Click input or output ports.
- ⑦ Select an email account.
- ⑧ Refer to "[2.12.2 Adding Email Account.](#)"
- ⑨ Enter the recipient's email address or select one previously used.
- ⑩ Sending a sample email to the recipient.
- ⑪ Enter the subject.
 - ☞ Default subject is **I/O port status notification.**
- ⑫ Enter the content.
 - ☞ Default content is **[I/O controller(%d)] The status of the digital port(%p) is changed to %s. Event time : %t.**
 - ☞ %d is replaced the comment of I/O controller.
 - ☞ %p is replaced the comment of input or output port.
 - ☞ %s is replaced the state of input or output port.
 - ☞ %t is replaced the time that the state of input or output port has changed.
 - ☞ The notation of the time is YYYY-MM-DD HH:MM:SS.
- ⑬ Click [Apply] button to save all settings.

2.12.4 Time Settings

- You can set the time for sending input or output port change notification emails.

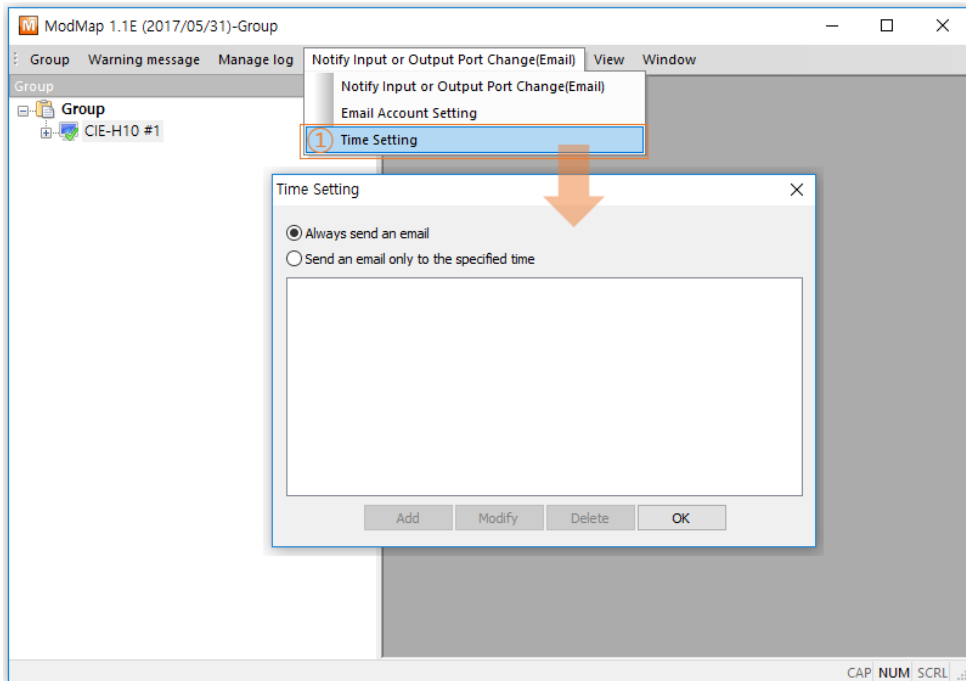


Figure 2-40 Time setting(1)

- ① Click [Time Setting] menu.

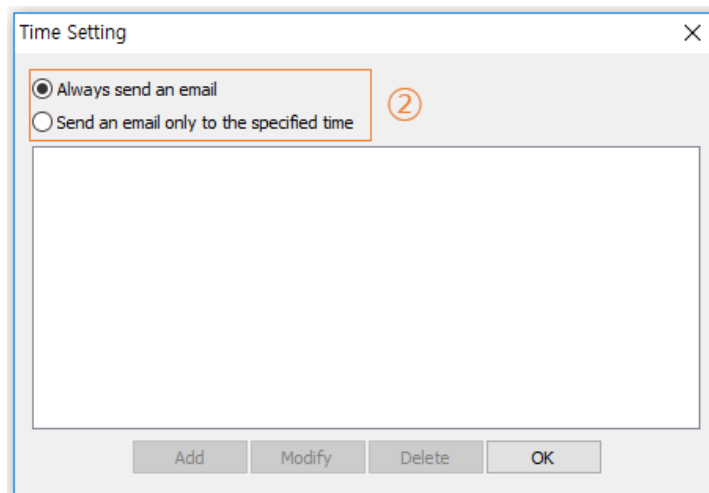


Figure 2-41 Time setting(2)

- ② Choose one of time setting options.

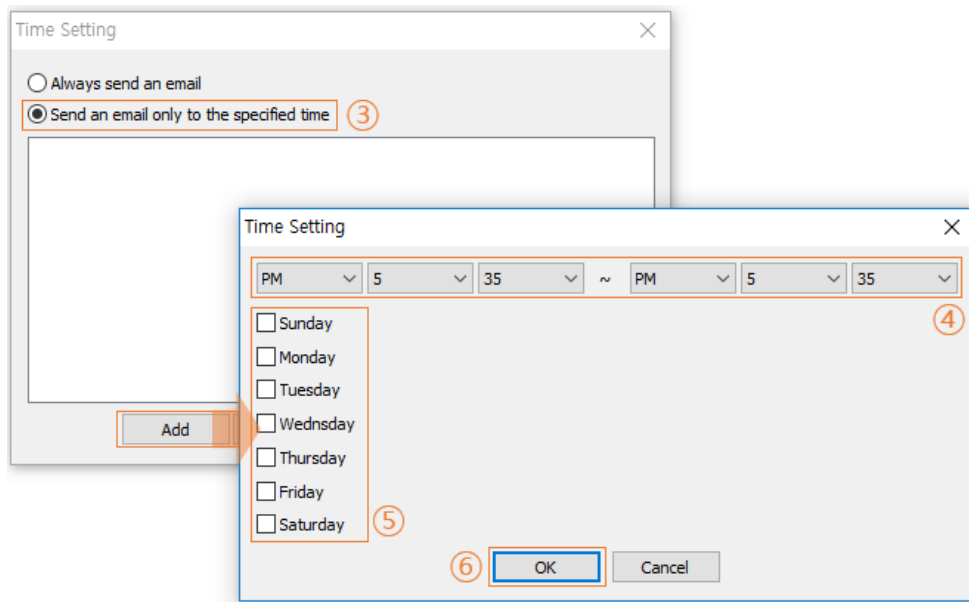


Figure 2-42 Time setting(3)

- ③ Click [Send an email only to the specified time] radio button if you want to enable sending a notification email function for limited time periods.
- ④ Set time period.
- ⑤ Set days.
- ⑥ Click [OK] button.

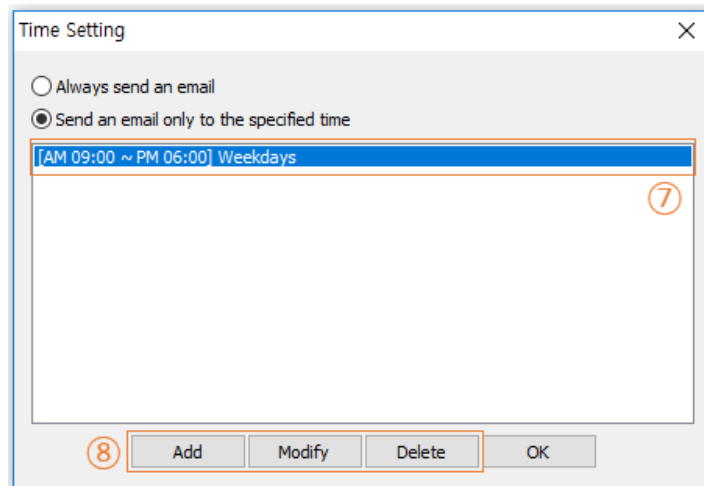


Figure 2-43 Time setting(4)

- ⑦ Select an item.
- ⑧ You can manage the item with [Add], [Modify], and [Delete] buttons.

2.13 Control Multiple Ports

- ModMap provides turning on or off digital output ports on several I/O controllers concurrently.

2.13.1 Setting Control Multiple Ports

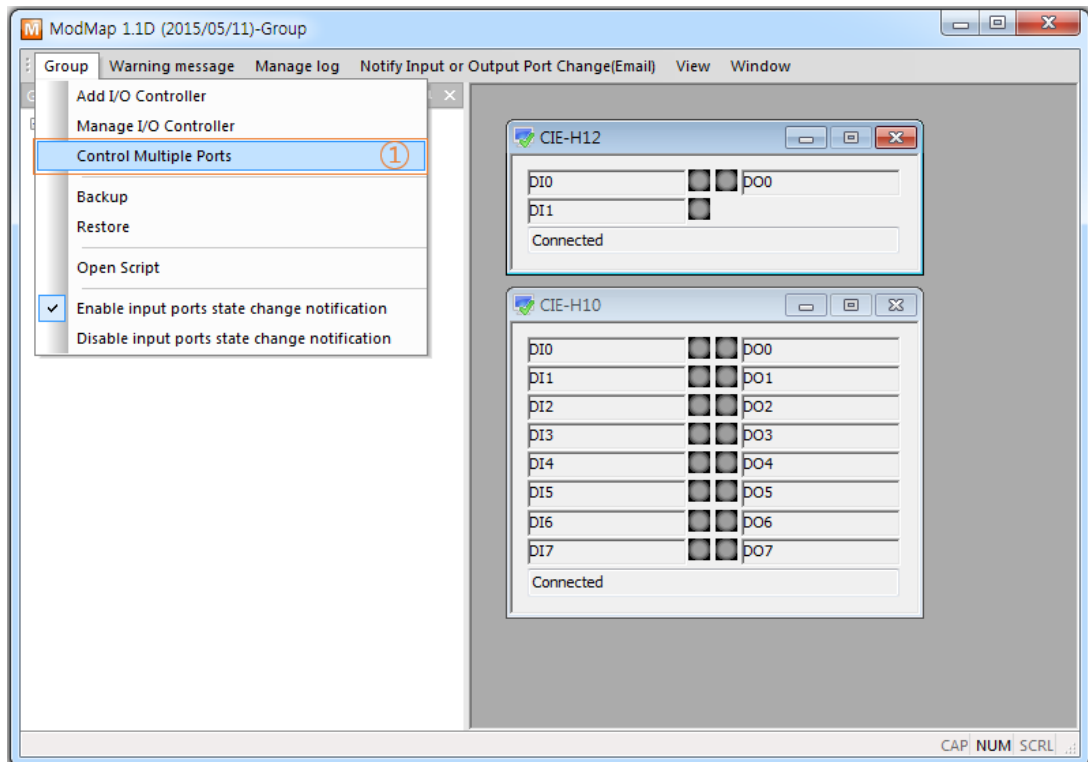


Figure 2-44 Setting Control Multiple Ports (1)

- ① Click [Control Multiple Ports] menu.

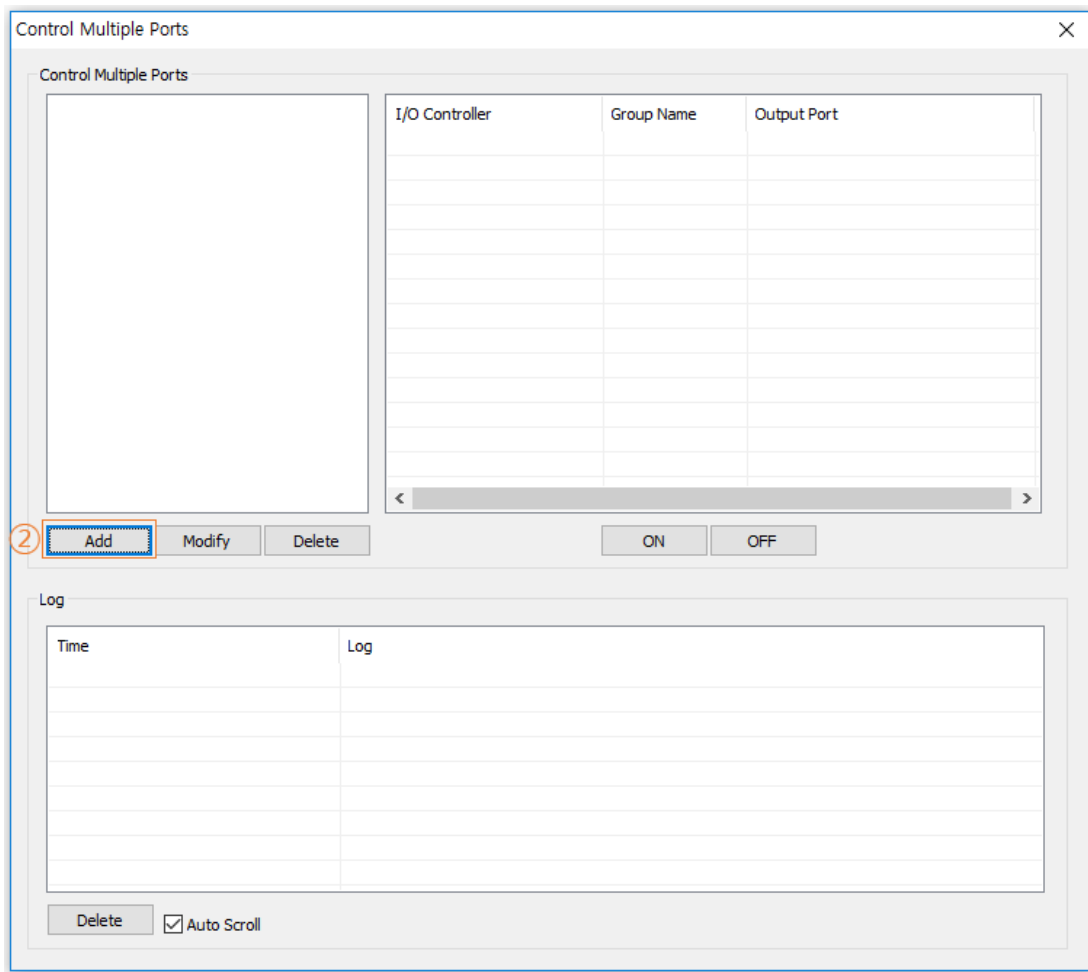


Figure 2-45 Setting Control Multiple Ports (2)

- ② Click [Add] button.

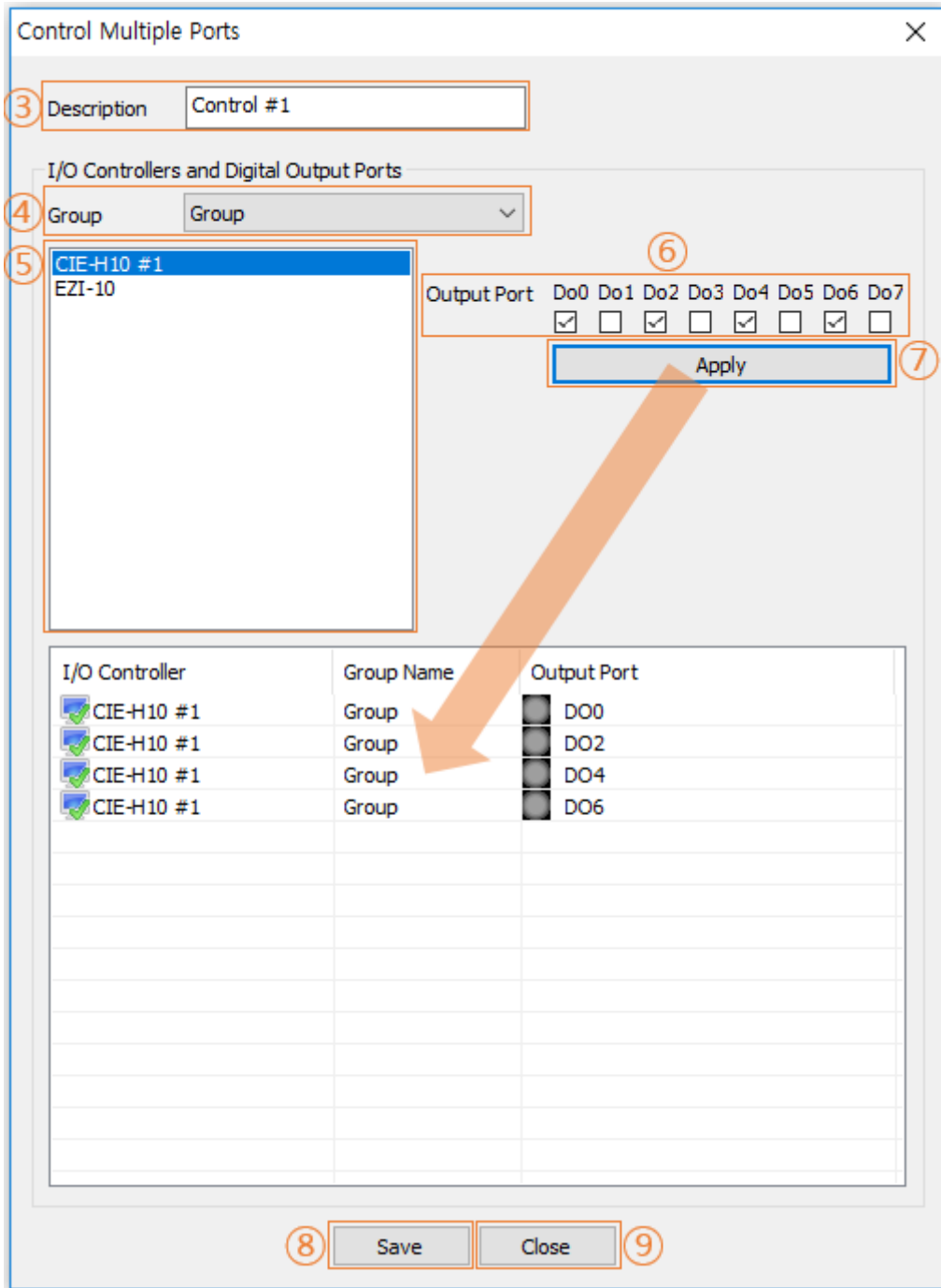


Figure 2-46 Setting Control Multiple Ports (3)

- ③ Enter a brief description.
- ④ Select the group.
- ⑤ Click I/O controllers.
- ⑥ Click output ports.
- ⑦ Click [Apply] button to move selected output ports to the list. In order to add other I/O controller’s output ports, repeat step (4) to (7).

- ⑧ Click [Save] button to save all settings.
- ⑨ Click [Close] button to close this window.

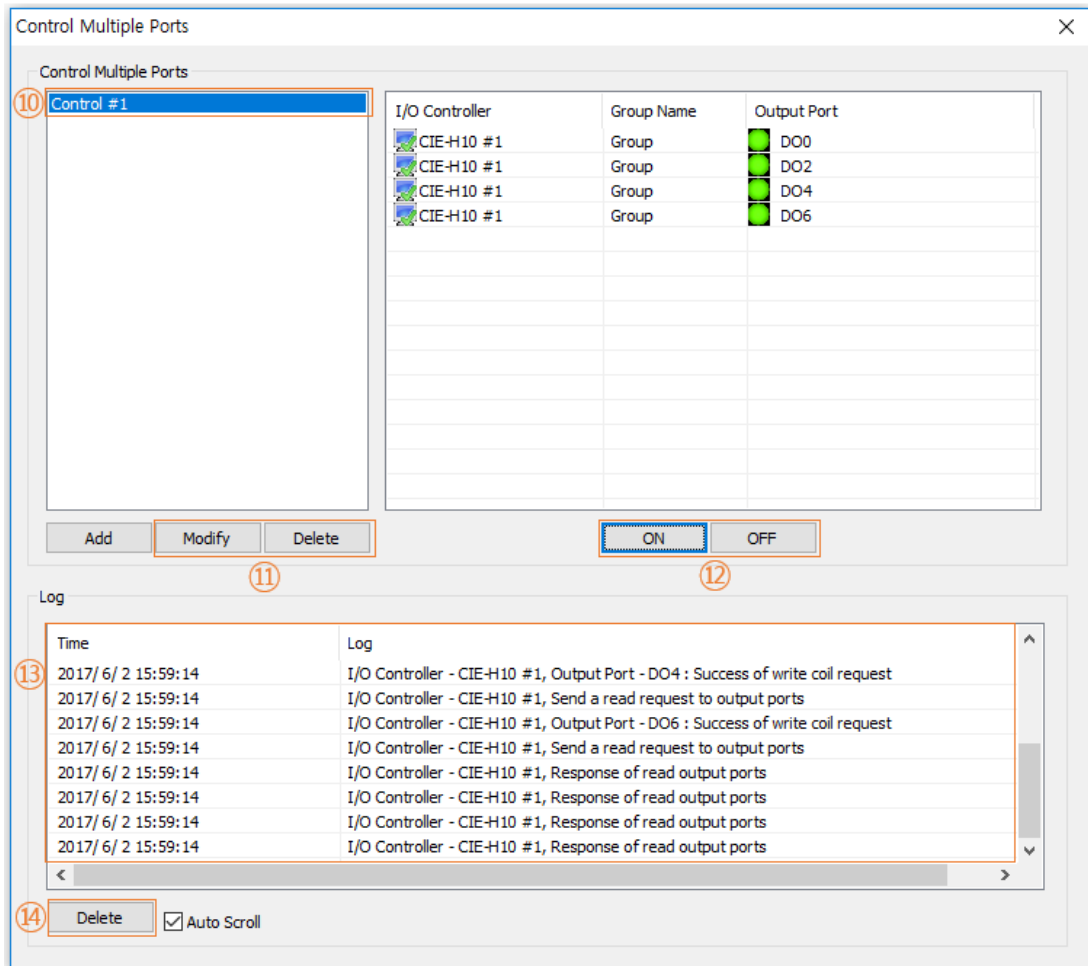


Figure 2-47 Setting Control Multiple Ports (4)

- ⑩ Select an item on the [Control Multiple Ports] list.
- ⑪ Click [Modify] or [Delete] button to modify or delete the output ports list.
- ⑫ Click [ON] button to try turn all output ports on.
Click [OFF] button to try turn all output ports off.
- ⑬ Log messages related to [ON] or [OFF] action are shown.
- ⑭ Click [Delete] button to delete all log messages.

2.14 Input ports state change notification

2.14.1 Enable input ports state change notification

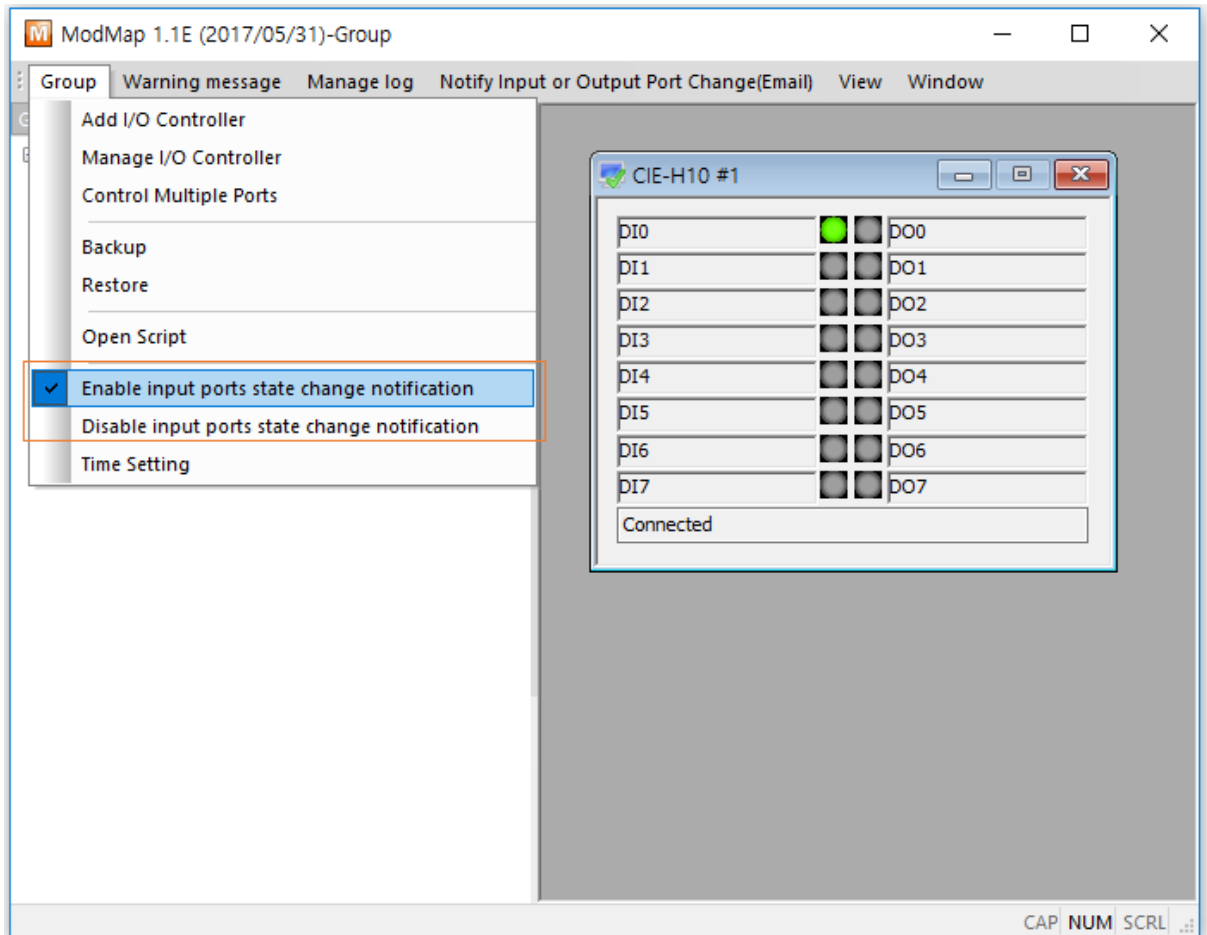


Figure 2-48 Input ports state change notification

- An message box is appearing on the right bottom corner of desktop whenever I/O device's input ports status have changed.

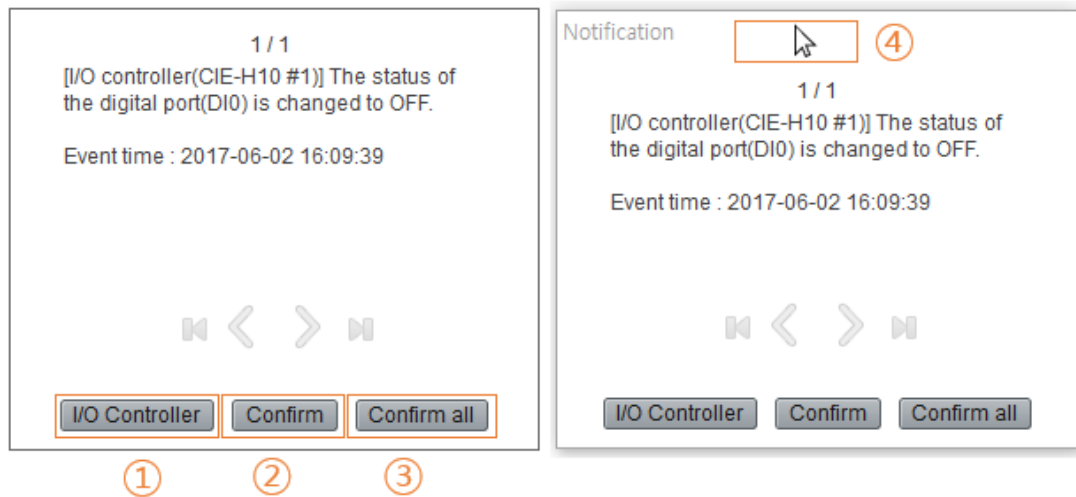


Figure 2-49 Notification message box

- ① [I/O Controller] button:
It displays the I/O controller which has detected notification message in the control window.
- ② [Confirm] button:
It closes the currently displayed message box.
- ③ [Confirm all] button:
It closes all message box.
- ④ You can change the position of message box.

2.14.2 Time setting

- You can set the time for showing notification message box.

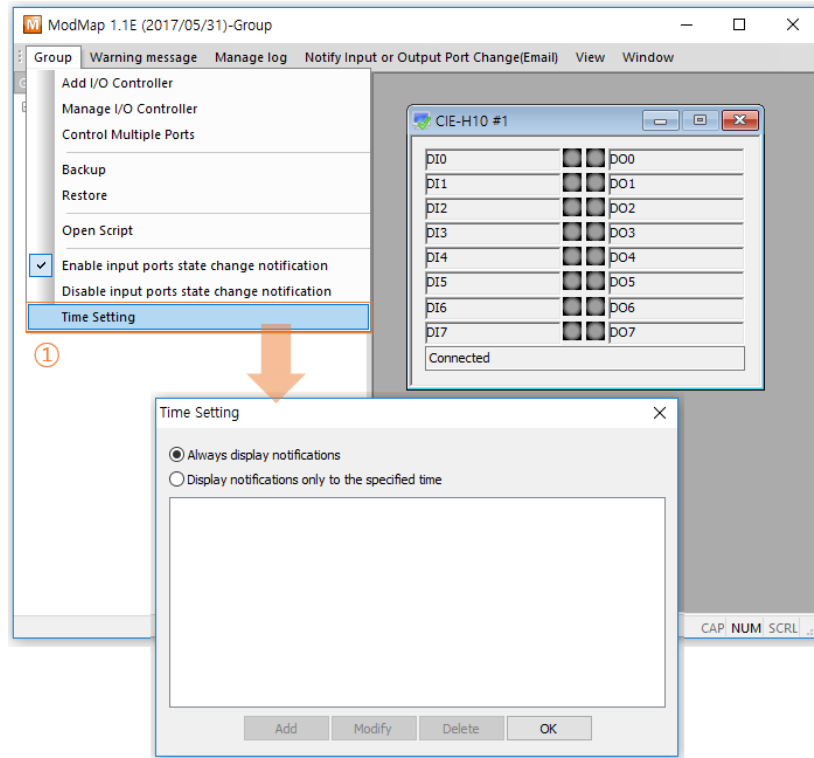


Figure 2-50 Time setting(1)

- ① Click [Time Setting] menu.

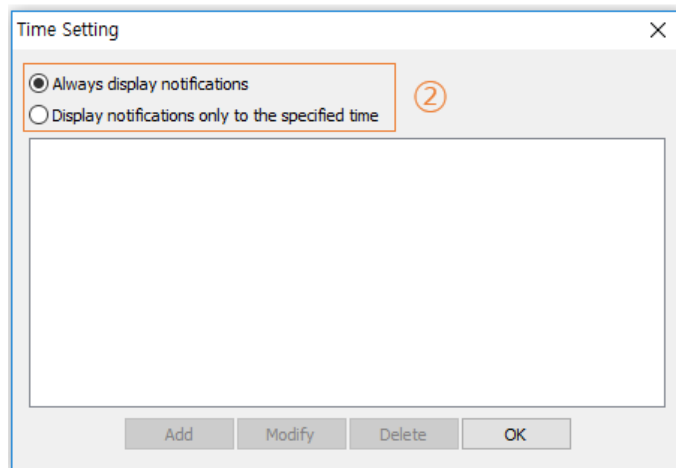


Figure 2-51 Time setting(2)

- ② Choose one of time setting options.

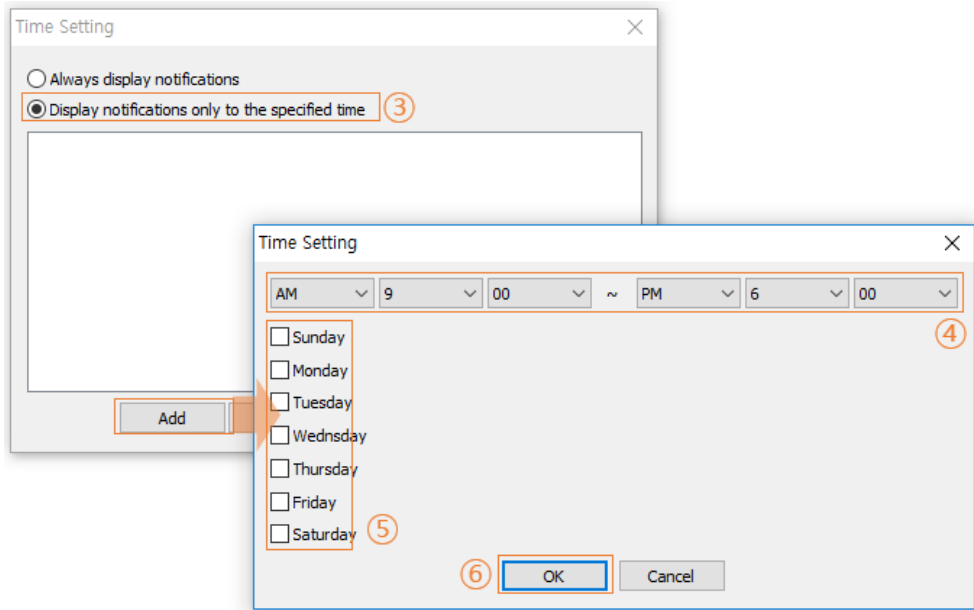


Figure 2-52 Time setting(3)

- ③ Click [Display notification only to the specified time] radio button if you want to enable the function for limited time periods.
- ④ Set time period.
- ⑤ Set days.
- ⑥ Click [OK] button.

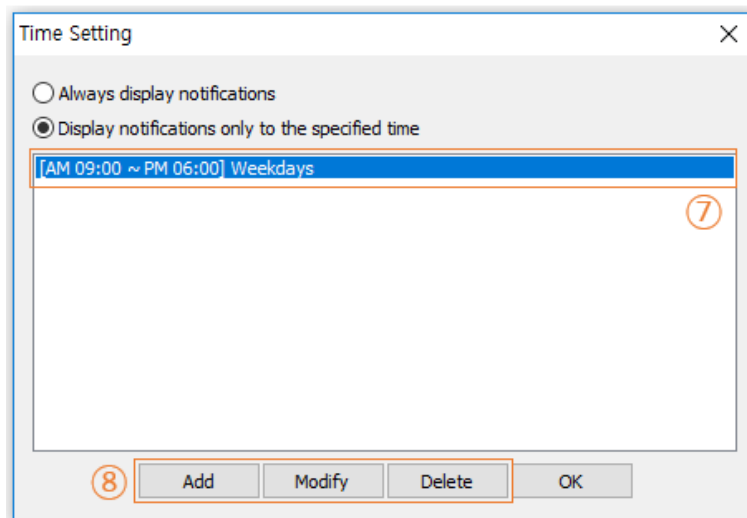


Figure 2-53 Time setting(4)

- ⑦ Select an item.
- ⑧ You can manage the item with [Add], [Modify], and [Delete] buttons.

3 History

Date	Ver.	Comments	Author
2010.10.15	1.0	○ Created	Jack Kim
2010.11.03	1.1	○ [Script] function has been added.	Jack Kim
2010.12.24	1.2	○ [Warning message] function has been added.	Jack Kim
2011.08.17	1.4	○ Contents about the script has been changed. ○ Screen shots have been updated.	Roy LEE
2013.07.30	1.5	○ [Log] function has been added. ○ Screen shots have been updated.	Lisa Shin
2014.03.13	1.6	○ Contents about the script has been changed. ○ Screen shots have been updated. ○ [Notify Input or Output Port Change(Email)] function has been added.	Jack Kim
2014.05.22	1.7	○ Operating system requirement have been updated.	Jack Kim
2015.02.12	1.8	○ Wrong expressions have been modified.	Jack Kim
2015.05.13	1.9	○ Contents about [Notify Input or Output Port Change(Email)] has been changed. ○ Script properties related to [Notify Input or Output Port Change(Email)] have been removed. ○ [Control Multiple Ports] function has been added.	Jack Kim
2017.05.31	2.0	○ Screen shots have been updated. ○ [Input ports state change notification] function has been added.	Jack Kim