

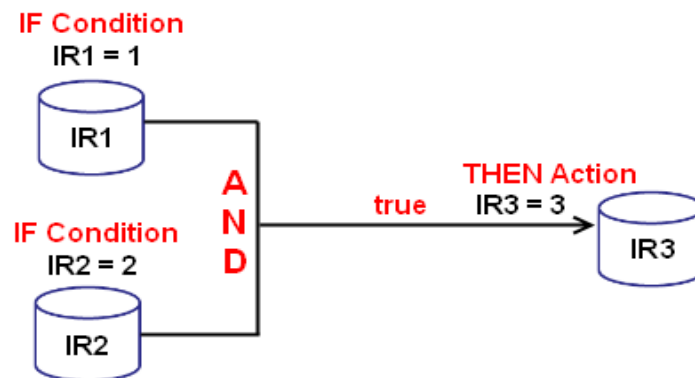
WISE-580x Internal Register

Application Example



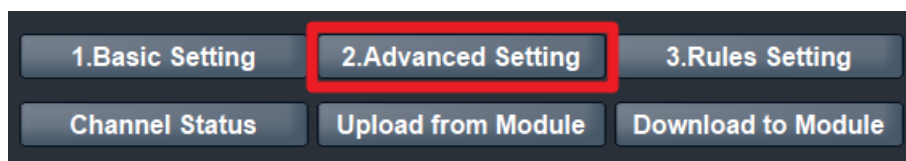
- **Scenario :**

In general, Internal Register(IR) mainly provides temporary variable to read/write data when performing IF-THEN-ELSE Rule evaluations and operations on a WISE-5800 controller. It also allows users to read/write data from remote SCADA via Modbus_TCP Protocol. Assume there is a WISE-5800 controller performing the following operations: when IR1 = 1 and IR2 = 2, then IR3 will be rewritten as 3.

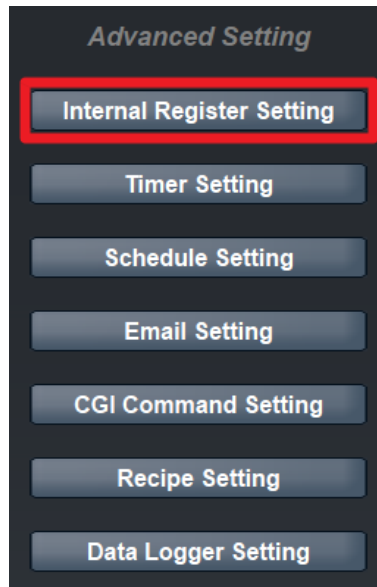


- **Steps :**

1. Open the WISE WEB page and get into the "2.Advanced Setting" page.



2. On the Advanced Setting page; click on "Internal Register Setting" to get into the setting page.



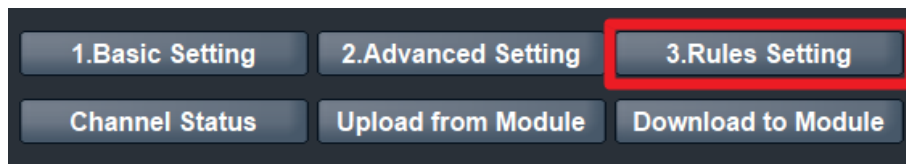
3. On the "Internal Register Setting"(on the right side), check the box of No.01, No.02, and No.03 to enable the Internal Registers and assign the No.01 Initial value to be "1" and the No.02 Initial value to be "2"; click "Save" button.

The screenshot shows the "Internal Register Setting Page" with a table of 48 registers. The table has columns for "Enable", "Nickname", and "Initial value" for each register number. The "Enable" checkboxes for No.01, No.02, and No.03 are checked. The "Initial value" for No.01 is 1 and for No.02 is 2. A red box highlights these three registers. A red arrow points from the "Save" button at the bottom to the "Initial value" field for No.03.

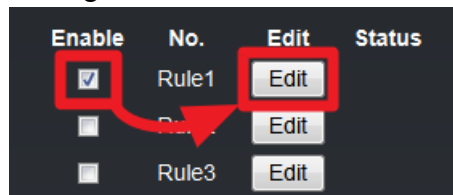
Enable	No.01	No.02	No.03	No.04	No.05	No.06
Nickname						
Initial value	1	2	0	0	0	0
Enable	No.07	No.08	No.09	No.10	No.11	No.12
Nickname						
Initial value	0	0	0	0	0	0
Enable	No.13	No.14	No.15	No.16	No.17	No.18
Nickname						
Initial value	0	0	0	0	0	0
Enable	No.19	No.20	No.21	No.22	No.23	No.24
Nickname						
Initial value	0	0	0	0	0	0
Enable	No.25	No.26	No.27	No.28	No.29	No.30
Nickname						
Initial value	0	0	0	0	0	0
Enable	No.31	No.32	No.33	No.34	No.35	No.36
Nickname						
Initial value	0	0	0	0	0	0
Enable	No.37	No.38	No.39	No.40	No.41	No.42
Nickname						
Initial value	0	0	0	0	0	0
Enable	No.43	No.44	No.45	No.46	No.47	No.48
Nickname						
Initial value	0	0	0	0	0	0

Save

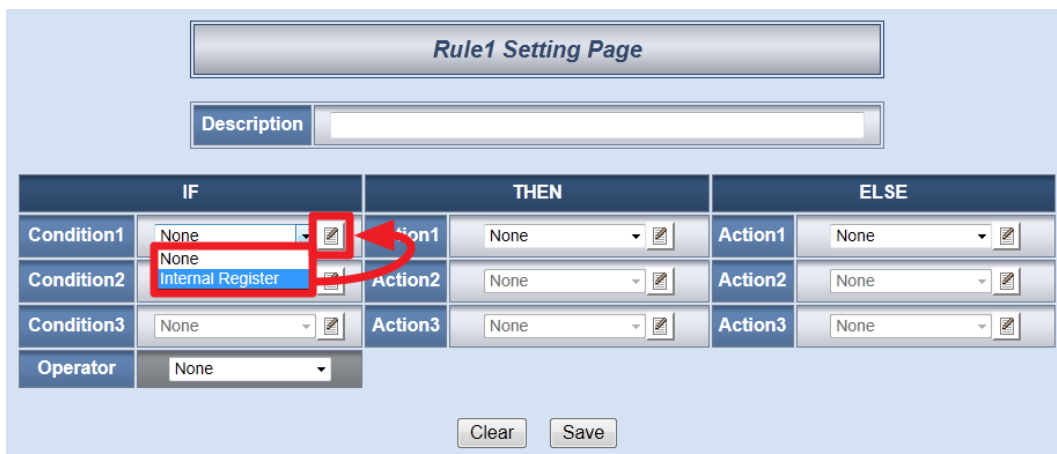
4. Click on “3.Rules Setting” page to get into the Rule Setting WEB page.



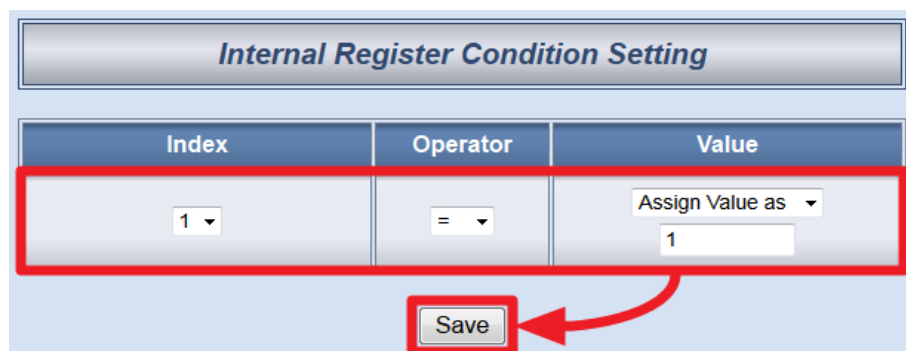
5. Check the “Rule 1” checkbox to enable “Rule 1”, then click “Rule 1” “Edit” button for “Rule 1” editing.



6. On the “Rule1 Setting Page”(on the right side), select “Internal Register” as IF Condition for “Condition 1”, and then click on the right side button to edit detailed information.



7. In the “Index” field, select “1” from the dropdown list. In the “Operator” field, select “=” and in the “Value” section, select “Assign Value as” and assign the value as “1”. Click “Save” button to save the settings and return to Rules 1 Setting Page.



8. On the “Rule1 Setting Page”, in the “Operator” field, select “AND” from the dropdown list. At this time the “Condition 2” field selection in the IF section will turn to be available.

The screenshot shows the "Rule1 Setting Page" with a "Description" field and a table for rule configuration. The table has columns for "IF", "THEN", and "ELSE", each with sub-columns for "Condition1", "Condition2", and "Condition3", and "Action1", "Action2", and "Action3". The "Operator" field is at the bottom left. A red box highlights the "Operator" dropdown menu, which is open and shows "None", "AND", and "OR" options. "AND" is selected. "Clear" and "Save" buttons are at the bottom right.

Rule1 Setting Page						
Description						
IF		THEN		ELSE		
Condition1	Internal Register	Action1	None	Action1	None	None
Condition2	None	Action2	None	Action2	None	None
Condition3	None	Action3	None	Action3	None	None
Operator	None None AND OR					

Clear Save

9. Select “Internal Register” as “Condition 2” of the IF Condition from the dropdown list for “Rule 1”, and then click on the right side button to get in to the “Internal Register Condition Setting” page.

The screenshot shows the "Rule1 Setting Page" with the "Operator" field set to "AND". A red box highlights the "Condition2" dropdown menu in the "IF" section, which is open and shows "None" and "Internal Register" options. "Internal Register" is selected. A red arrow points from the "Internal Register" option to the right side button of the dropdown menu. "Clear" and "Save" buttons are at the bottom right.

Rule1 Setting Page						
Description						
IF		THEN		ELSE		
Condition1	Internal Register	Action1	None	Action1	None	None
Condition2	None	Action2	None	Action2	None	None
Condition3	None	Action3	None	Action3	None	None
Operator	AND					

Clear Save

10. In the “Index” field, select “2” from the dropdown list. In the “Operator” field, select “=” and in the “Value” section, select “Assign Value as” and assign the value as “2”. Click “Save” button to save the settings and return to Rules 1 Setting Page.

Internal Register Condition Setting

Index	Operator	Value
2	=	Assign Value as 2

11. In the “THEN” section, in the “Action1” field, select “Internal Register” from the dropdown list; click the button next to the “Action 1” field as indicated to get into the “Internal Register Action Setting” page.

Rule1 Setting Page

Description:

IF	THEN	ELSE
Condition1: Internal Register	Action1: None	Action1: None
Condition2: Internal Register	Action2: Internal Register	Action2: None
Condition3: None	Action3: None	Action3: None
Operator: AND		

12. In the “Index” field, select “3” from the dropdown list. In the “Operator” field, select “=” and in the “Value” section, select “Assign Value as” and assign the value as “3”. Click “Save” button to save the settings and return to Rules 1 Setting Page.

Internal Register Action Setting

Index	Operator	Value
3	=	Assign Value as 3

13. Make sure all Rule 1 settings are accurate, click “Save” button to save the settings.

Rule1 Setting Page

Description

	IF		THEN		ELSE
Condition1	Internal Register	Action1	Internal Register <input checked="" type="radio"/> One Time <input type="radio"/> Repeat	Action1	None
Condition2	Internal Register	Action2	None	Action2	None
Condition3	None	Action3	None	Action3	None
Operator	AND				

14. After finish the rule editing, click the “Download to Module” button and input the password.

1.Basic Setting 2.Advanced Setting 3.Rules Setting

Channel Status Upload from Module **Download to Module**

15. After the download process is completed, click “Reboot” button to make the new updated settings take effect.

The download process is completed.

100%

16. Click on the “Channel Status” button to view the value of Internal Register.

1.Basic Setting 2.Advanced Setting 3.Rules Setting

Channel Status Upload from Module Download to Module

17. You can find the No.03 value has been modified from 0 to 3.

Channel Status Page

Module: Internal Register

Internal Register						
Index	No.01	No.02	No.03	No.04	No.05	No.06
Nickname						
Value	1.00	2.00	3.00	0.00	0.00	0.00
Index	No.07	No.08	No.09	No.10	No.11	No.12
Nickname						

● **Rule Overview :**

Rule Overview

Rule1(Enable)
Description:
< IF >
Internal Register 1 = 1 (AND)
Internal Register 2 = 2
< THEN >
Internal Register 3 = 3 (One Time)