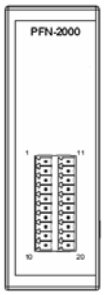
PFN-2000 Series Modules Quick Start

This Quick Start Guide will provide information needed to get started with PFN-2000. Please also consult the User Manual for detailed information on the setup and use of PFN-2000.

What's In the Box ?

In addition to this guide, the package includes the following item:



PFN-2000 Module



Product CD

Technical Support

- **PFN-2000 User Manual**
  CD: \fieldbus_cd\profinet\remote io\pfn-2000\manual\
  ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/profinet/remote%20io/pfn-2000/manual/

- **PROFINET Website**

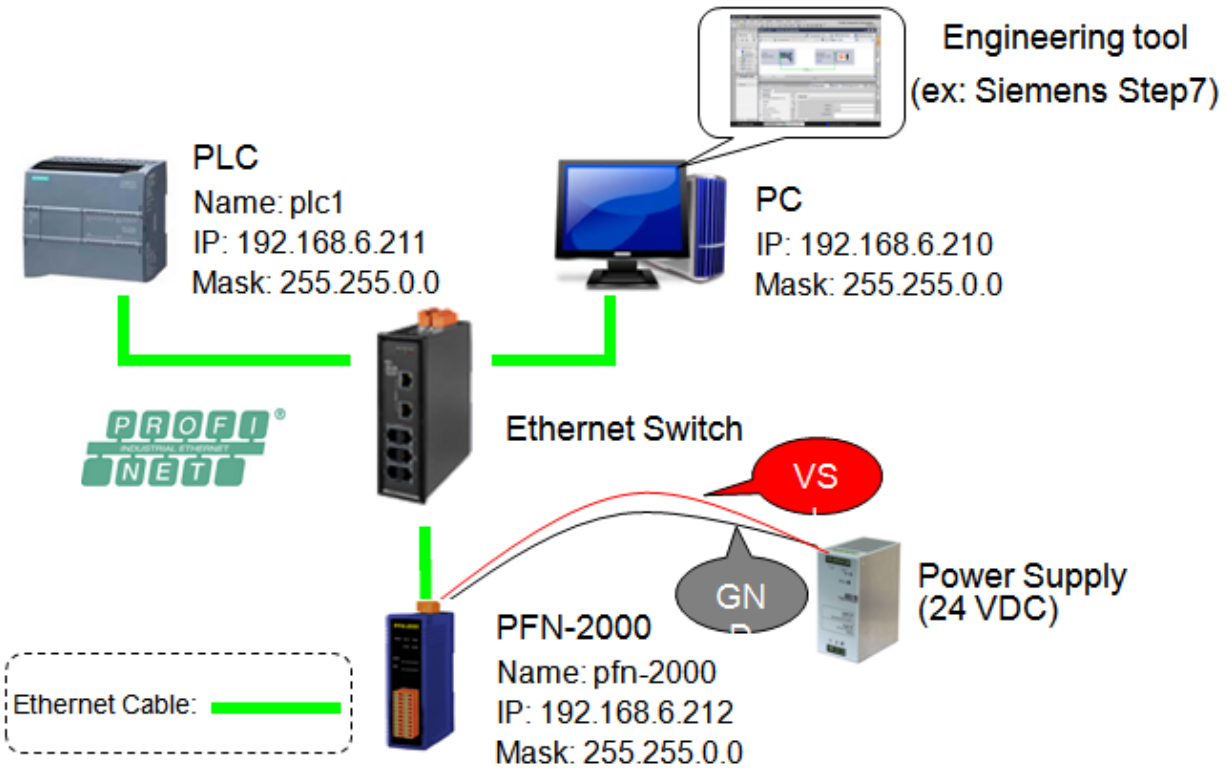
http://www.icpdas.com/products/Industrial/profibus/profinet_intro.htm

Let's Start

In the following examples the S7-1200 PLC from Siemens is used. The configuration and communication is done by the program ''Step 7 V11 (TIA PORTAL)'' provided by Siemens. We will establish a PROFINET IO network.

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1 Connecting to Network, PC, PLC and Power



2 Network Configuration

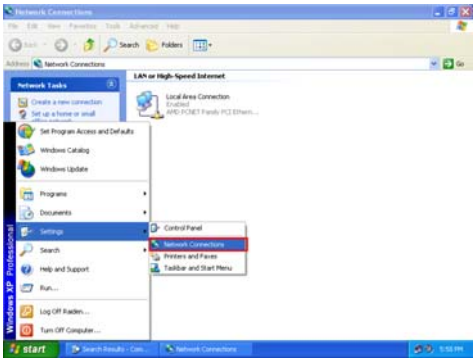
In this example, please follow the below configuration to configure the network.

PC=>	PLC=>	PFN-2000=>
IP: 192.168.6.210	Device name: plc1	Device name: pfn-2000
Mask: 255.255.0.0	IP: 192.168.6.211	IP: 192.168.6.212
	Mask: 255.255.0.0	Mask: 255.255.0.0

Step 1: Set PC's IP & Mask (IP=192.168.6.210, Mask=255.255.0.0)

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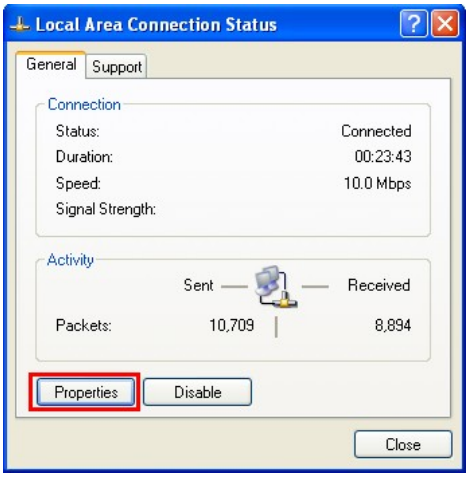
1. Click “start->Settings->Network Connections”



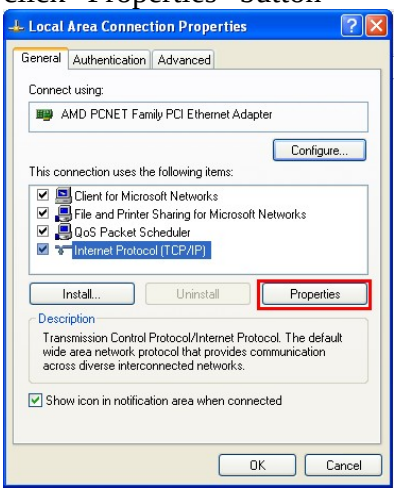
2. Double click “Local Area Connection” icon



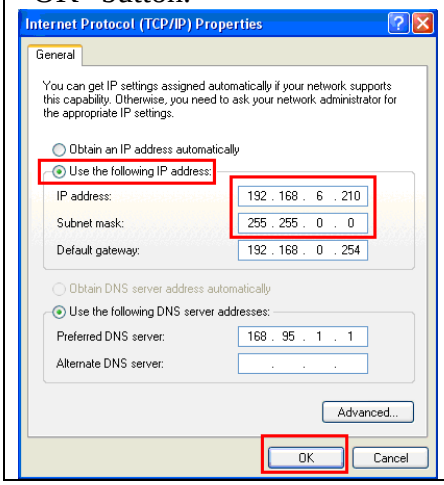
3. Click “Properties” button



4. Select “Internet Protocol(TCP/IP)” and click “Properties” button



5. Set “Internet Protocol Properties” and then click “OK” button.



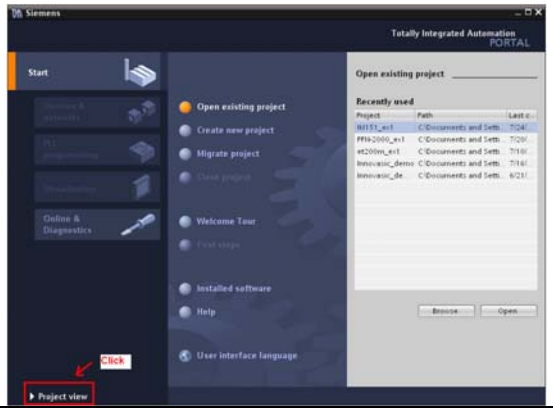
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Step 2: Set PLC's name and IP

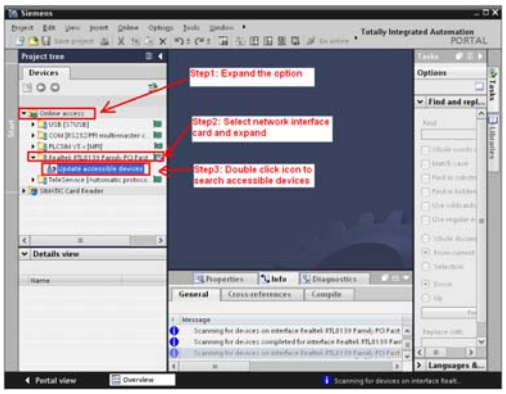
1. Double Click TIA icon to start Step 7 V11



2. Click "Project view"

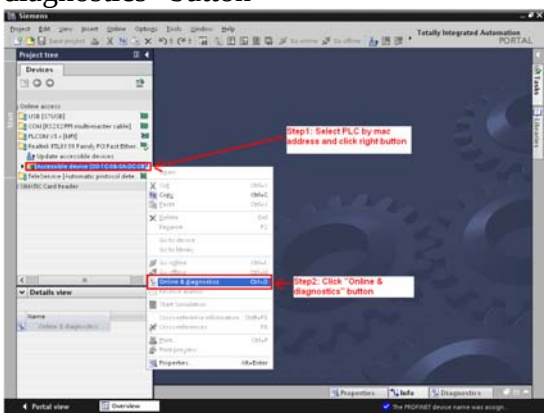


3. Search accessible devices



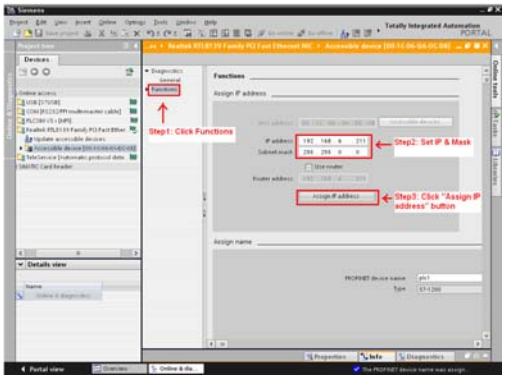
Note: At "Online access", select network interface card and expand it=>Double click "Update accessible devices" icon

4. Select PLC and click "Online & diagnostics" button



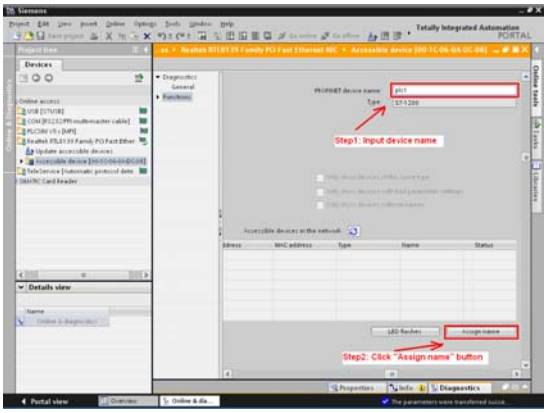
Note: Select PLC by mac address and click right button=>Click "Online & diagnostics" button

5. Set IP and Mask



Note: Select "Functions"=>Set IP=192.168.6.211 & Mask=255.255.0.0=>Click "Assign IP address" button

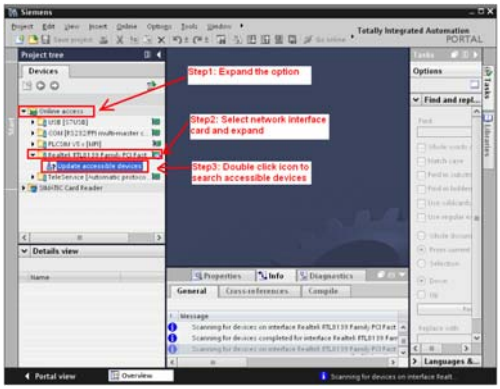
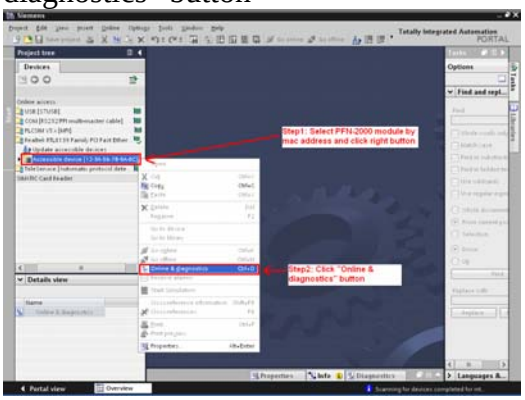
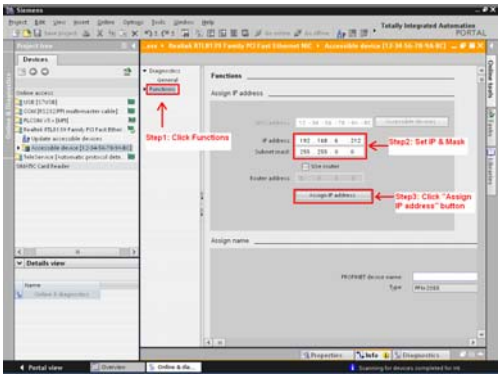
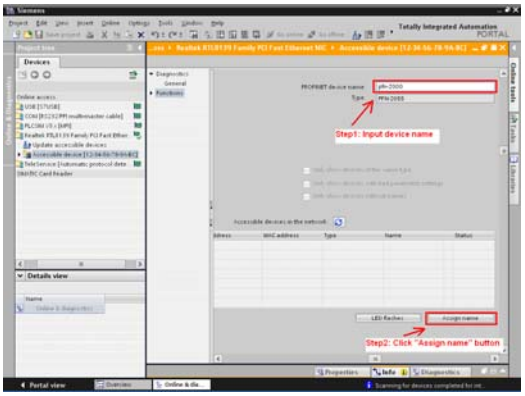
6. Set device name



Note: Input device name=plc1=>Click "Assign name" button

Step 3: Set PFN-2000's name and IP

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1. Search accessible devices  Note: At “Online access”, select network interface card and expand it=>Double click “Update accessible devices” icon	2. Select PFN-2000 and click “Online & diagnostics” button  Note: Select PFN-2000 by mac address and click right button=>Click ”Online & diagnostics” button
3. Set IP and Mask  Note: Select “Functions”=>Set IP=192.168.6.212 & Mask=255.255.0.0=>Click ”Assign IP address” button	4. Set device name  Note: Input device name=pfn-2000=>Click ”Assign name” button

3 GSD Import

In this example, please follow the step to import GSD file.

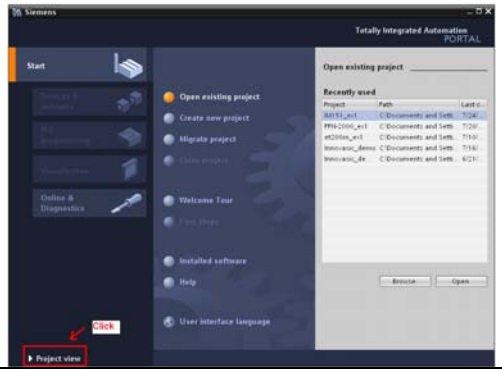
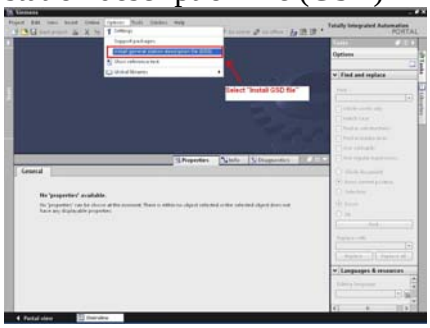
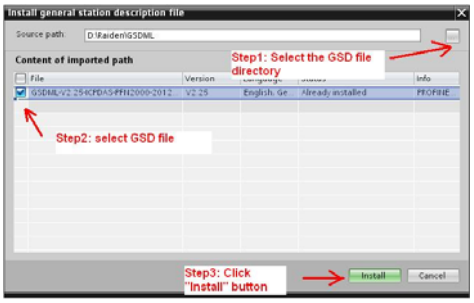
Step 1: Get GSD file

The GSD file can be obtained from companion CD or our FTP site:

CD: \fieldbus_cd\profinet\remote io\pfn-2000\gsd\
ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/profinet/remote%20io/pfn-2000/gsd/

Step 2: Import GSD file

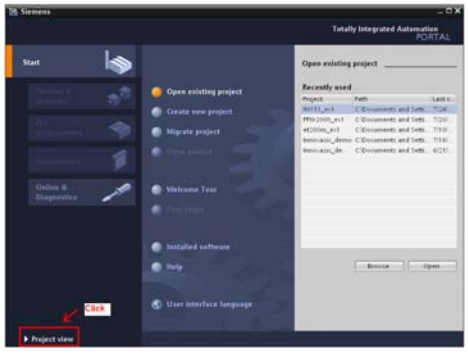
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1. Double Click TIA icon to start Step 7 V11 	2. Click “Project view” 
3. Select “Menu->Options->Install general station description file (GSD)” 	4. Select and install GSD file  Note: Select the GSD file directory=>Select GSD file of PFN-2000=>Click “Install” button

4 Project Setup

In this example, please follow the step to setup project.

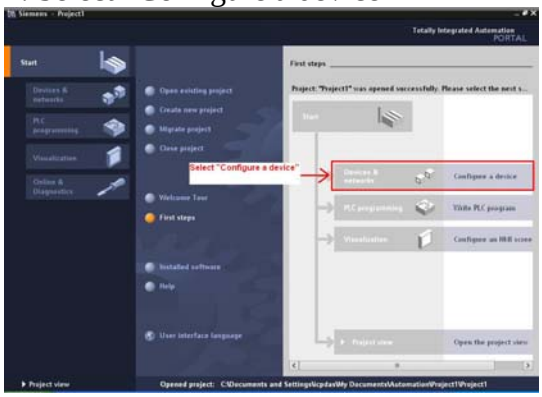
Step 1: Create the project

1. Double Click TIA icon to start Step 7 V11 	2. Create the Project  Note: Select ”Create new project” => Click “Create” button

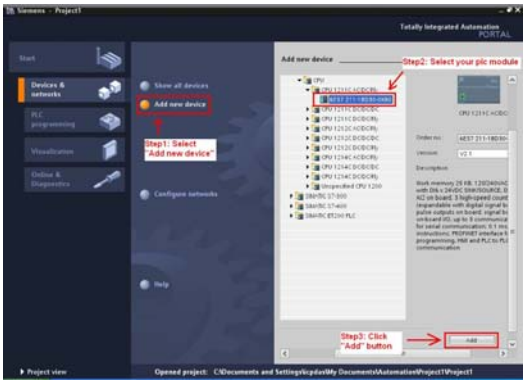
Step 2: Project configuration

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1. Select ”Configure a device”

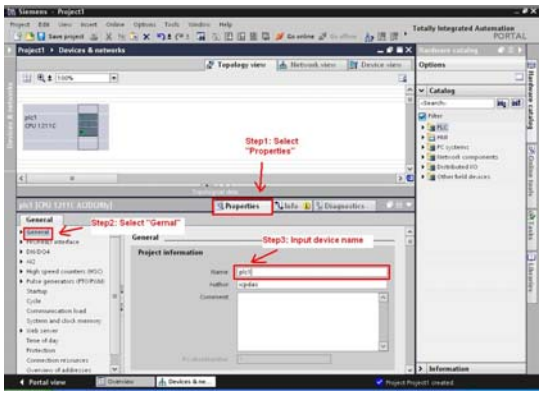


2. Select ”Add new device”



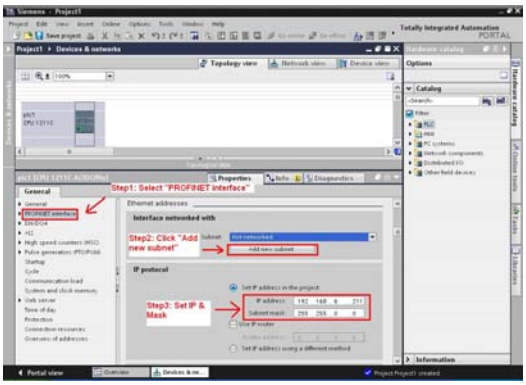
Note: Select “Add new device” => Select your PLC module => Click “Add” button

3. Set the device name of PLC to “plc1”



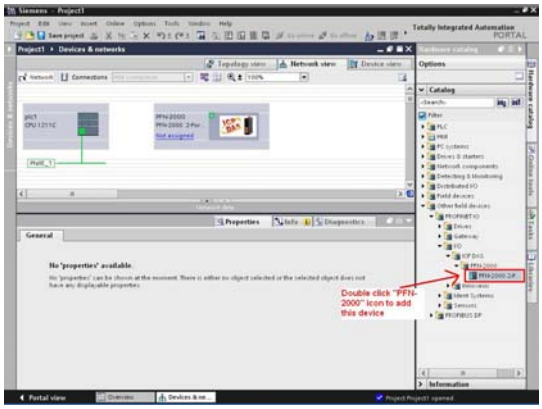
Note: Select ”Properties” windows => Select ”General” => Input device name = plc1 at “Project Information”

4. Set the IP and mask of PLC and add a new subnet



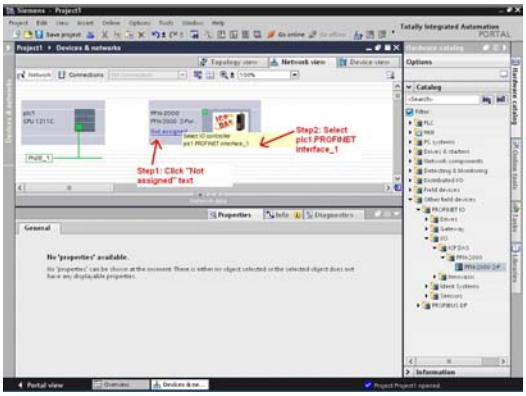
Note: Select ”PROFINET Interface” => Click ”Add new subnet” button at ”Ethernet addresses” => Input IP=192.168.6.211, mask=255.255.0.0

5. Add PFN-2000 module



Note: Add PFN-2000 device by Hardware catalog (Other field devices->PROFINET IO->I/O->ICP DAS->PFN-2000)

6. Select PROFINET interface

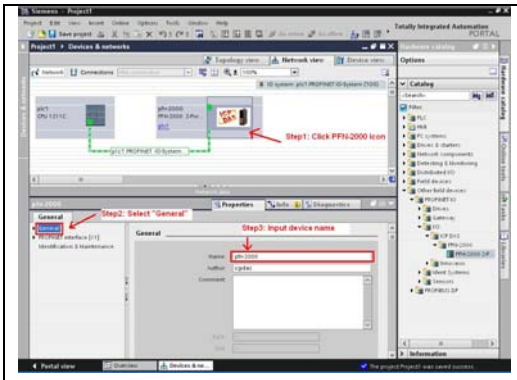


Note: Click ”Not assigned” text => Select plc1.PROFINET Interface_1

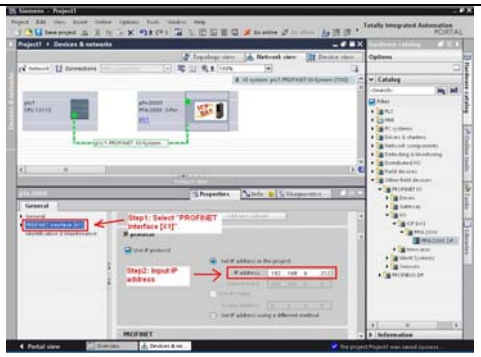
7. Set device name to “pfn-2000”

8. Set the IP of PFN-2000 module

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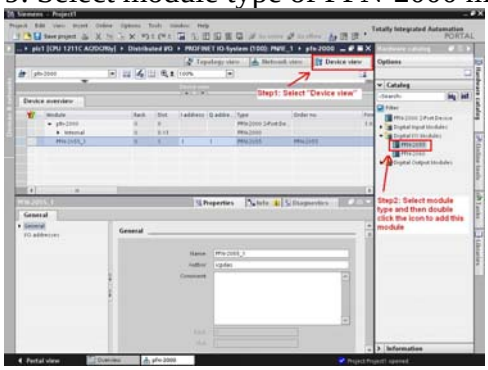


Note: Select PFN-2000 icon => Select ”Properties” => Select ”General” => Input name = pfn-2000 at ”Project Information”



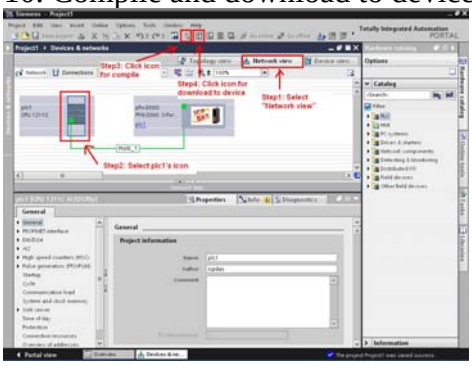
Note: Select ”PROFINET Interface [X1]” => Input IP=192.168.6.212 at ”IP addresses”

9. Select module type of PFN-2000 module



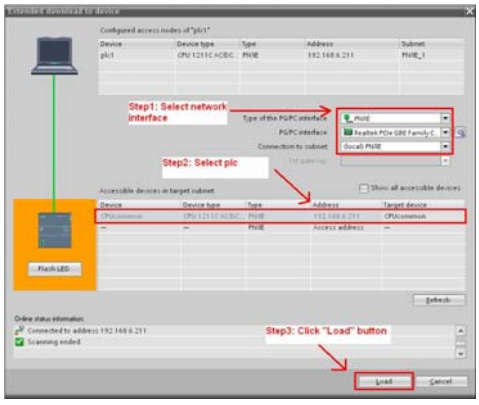
Note: Select ”Device view” windows => Select PFN-2055 module (Follow the module type of users to select) at “Hardware catalog” and double click the icon to add this module

10. Compile and download to device



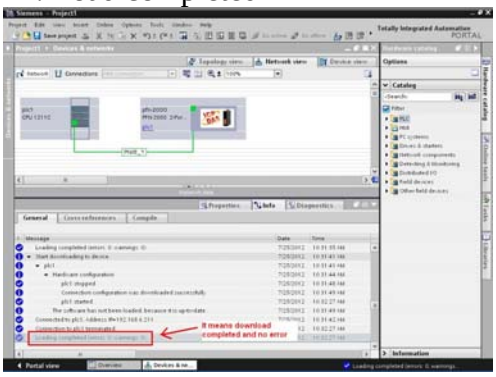
Note: Select ”Network view” windows => Select PLC icon => Click compile icon => Click download icon

11. Select network interface and PLC



Note: Select network interface => Select PLC => Click “Load” button

12. Load completed



Note: Select “Info” windows, it will show “Load completed (errors: 0, warnings: 0)” message, it means download completed and no error.

At this time, the S1A & S2A LEDs of PFN-2000 module should turn on, it means the connection between PLC and PFN-2000 module is established.

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