
Honeywell

PlantScape Controller Implementation

Lesson 2

Configuring a Control Processor Module (CPM)

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Notes

Introduction

The purpose of this Lesson is to familiarize you with the method of configuring Control Processor Modules (C200) in the PlantScape system. After completing this Lesson you should be able to configure a CPM for non redundant use.

Objectives

- ❶ Correctly identify the name given to a hybrid controller using its addresses
- ❷ Configure a CPM to the proper settings in Control Builder

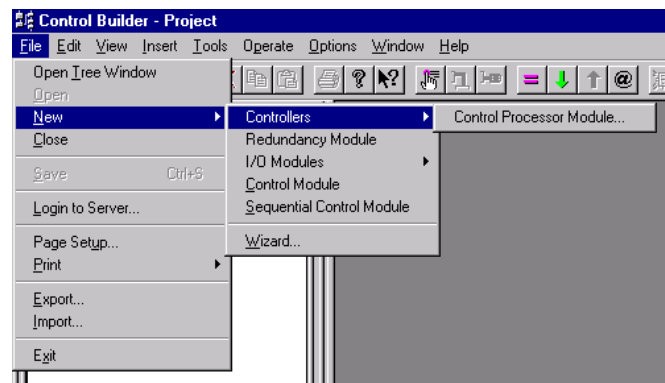
NOTE: The hardware configuration labs must be done as a team since there is one controller per student team. From this point onward the # sign is to be replaced with the student team number.

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Creating a Controller

➤ Creating a non-redundant CPM and CEE

- Click
 - **File**
 - **New**
 - **Controllers**
 - **Control Processor Module...** to open the configuration form shown on the next page.



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Notes

Adding to the Project

The above method of adding a controller to the Project can be used for all other components of the Project as well. In the next lab, we will use this method to add I/O modules.

Note: All Control Builder sessions will log into the server connected to your assigned C200 controller. Sign into Control Builder using the Operator ID and Password you created in the Server Configuration lab.

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Creating a Controller

➤ Creating a non-redundant CPM and CEE

- Enter the **Name** of the controller.
Suggestion: **CPM0101**, for address1, CPU slot location 1.
- Accept the Network type default ControlNet. Enter the driver name you configured earlier in RSLinx.
- Enter the **CPM Slot Number** (the left-most slot number of the two slots the CPM is plugged into)
- Enter the **"Uplink" MAC Address** of the CNI card in the rack that is connected to the server
- Enter the **Name** of the Control Execution Environment. Suggestion: **CEE0101**, for address1, CPU slot location 1.

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Notes

Creating a CPM and a CEE

The Control Execution Environment (CEE) supports the execution of a set of function blocks for solving control applications. It runs in the Hybrid Controller's CPM (Control Processor Module) as a software layer built on top of the control software infrastructure.

In configuration, you enter the CPM Slot Number and the "Uplink" MAC Address. The default names of your CPM and CEE will be assigned automatically. These names are often changed to reflect the controller MAC Address and slot number of the CPM module



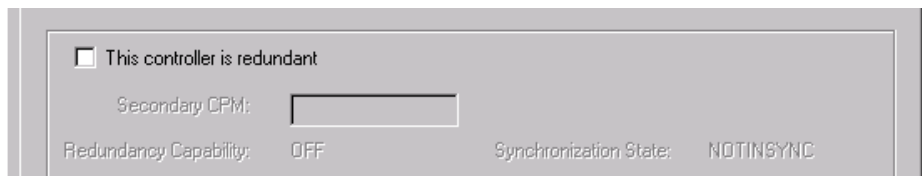
For CPM Slot Number — Slots in a PlantScape rack are numbered from left to right starting with Slot 0. Count from left to right (excluding the power supply) until you get to the first slot that the CPM occupies. This should be an odd number. (Hint: most CPMs are installed in Slot pair 1 and 2.) Enter left-most slot number of the pair into the **CPM Slot Number** area of the "New Controller" window.

For "Uplink" MAC Address — The up-link ControlNet Interface card (CNI) for the controller rack should be placed in slot 0. Determine its ControlNet MAC address by reading its front-panel display (the MAC address will have the format **A#xx**, where **xx** is the MAC address). Enter the address in **"Uplink" MAC Address** combo-box.

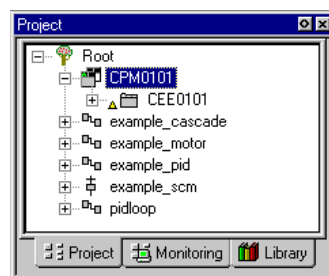
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➤ Creating a non-redundant CPM and CEE ...continued

- Note: To configure the C200 controller for redundancy you would use the same procedure with these exceptions: 1) The “This Controller is redundant” box would be checked; 2) The Secondary CPM name would be entered; 3) Two Redundancy Modules would be added and configured.



- Click **OK**
- Click **Project** Tab to see your newly configured CPM and CEE



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Notice that the CEE is under the CPM and connected directly to it. This tells you that the CEE is **assigned** to the CPM. Later, we'll see that you must assign everything that you want to download to your controller to the CEE. This includes all of your I/O modules, CMs, and SCMs.

Your **Project** tab also includes sample reference modules. These are supplied with every PlantScape database. Feel free to open and examine them.

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This completes....

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