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**Honeywell**

# **PlantScape Controller Implementation**

## **Lesson 3**

### **Control Module Skill Development**

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#### **Notes**

#### **Introduction**

The purpose of this Lesson is to give you the knowledge to be able to create and configure device control CMs. After you complete this Lesson you will have configured all required device control modules needed for the simulation.

#### **Objectives**

- ❶ Create new CMs named CM#\_FV102, CM#\_FV103, CM#\_PMP101, CM#\_PMP102 and CM#\_PMP103 using the knowledge you gained in Lessons 1 and 2
- ❷ Add and configure the Function Blocks needed to control the devices
- ❸ Operate your newly created Device Control CMs from station



## Creating Remaining Device Control CMs

- Copy **CM#\_FV101** and use the information provided below to create Device Control Modules for all points needed

NAME	DESCRIPTION	D/O CHANNEL
CM#_FV102	TANK B BOTTOM VALVE	DO15
CM#_FV103	REACTOR DRAIN VALVE	DO13
CM#_PMP101	TANK A TRANSFER PUMP	DO04
CM#_PMP102	TANK B TRANSFER PUMP	DO07
CM#_PMP103	REACTOR DRAIN PUMP	DO14

- All valves will be **OPEN (State 1)** or **CLOSED (State 0)** and will be virtual duplicates of **CM#\_FV101**
- All pumps will be **ON (State 1)** or **OFF (State 0)** and will be similar to **CM#\_FV101**
- All Device Control Modules will have a **5** second delay
- All DO channels will use **DO\_IOM\_0#**

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## Notes

### Creating Remaining Device Control CMs

In this lesson you will be using the knowledge gained in previous Lessons to create new Control Modules. You must remember the primary rules used to create Control Modules

- Use one of three methods to create a new CM (or copy a similar CM)
- Configure the primary settings in the CM
- Close and save changes
- Assign CM to **CEE**
- Add and Configure Function blocks
- Wire Function blocks
- Load and Activate CMs
- Test CMs

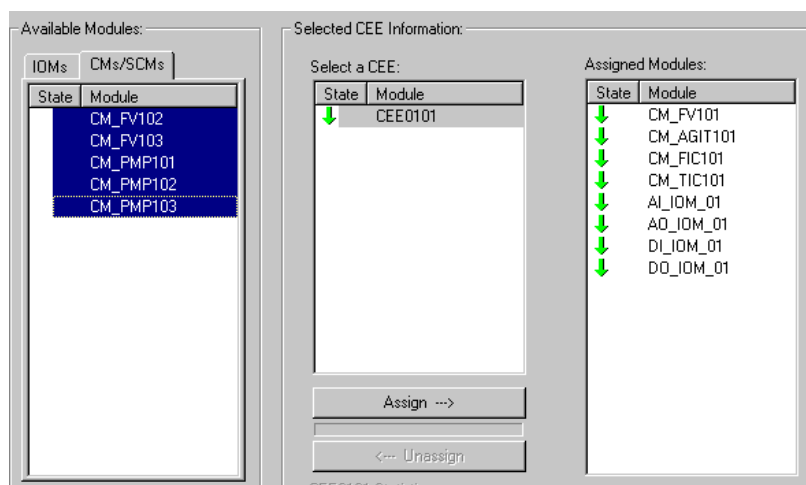


Normally the names and descriptions could be anything you like. For the purpose of this training it is important that the names be exactly as shown above. Any difference in the names will cause the SCMs constructed in later Lessons not to work.



## Load and Activate CMs

- Load and activate the following Control Modules
  - CM#\_FV102
  - CM#\_FV103
  - CM#\_PMP101
  - CM#\_PMP102
  - CM#\_PMP103



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## Notes

### Load and Activate CMs

Clicking on the Assign (=) button in Control Builder will allow you to load all the CMs at once. This can prove to be quite time saving. Select all the CMs you wish to load (in the right box) and then click on the Load button.

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### Creating Groups

- Construct groups #3 and #4 in Station
- |          |                |          |             |
|----------|----------------|----------|-------------|
| Group #3 |                | Group #4 |             |
| – Name   | TRANSFER A & B | – Name   | DRAIN       |
| – Slot 1 | CM#_FV101      | – Slot 1 | CM#_FV103   |
| – Slot 2 | Blank          | – Slot 2 | CM#_PMP103  |
| – Slot 3 | CM#_PMP101     | – Slot 3 | CM#_AGIT101 |
| – Slot 4 | Blank          | – Slot 4 | Blank       |
| – Slot 5 | CM#_FV102      | – Slot 5 | Blank       |
| – Slot 6 | CM#_PMP102     | – Slot 6 | Blank       |
| – Slot 7 | Blank          | – Slot 7 | Blank       |
| – Slot 8 | Blank          | – Slot 8 | Blank       |
- Verify that Pumps & Valves are operational.

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### Notes

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**This completes....**

**PlantScape Controller Implementation**

**Lesson 3**

**Control Module Skill Development**

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**Notes**

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