

UNIT 3: Control Building CMs

- **Lesson 1: Control Modules (CMs)**
- **Lesson 2: Control Strategy Execution**
- **Lesson 3: Configuring a Device Control Block**

Lesson 1. Control Modules (CMs)

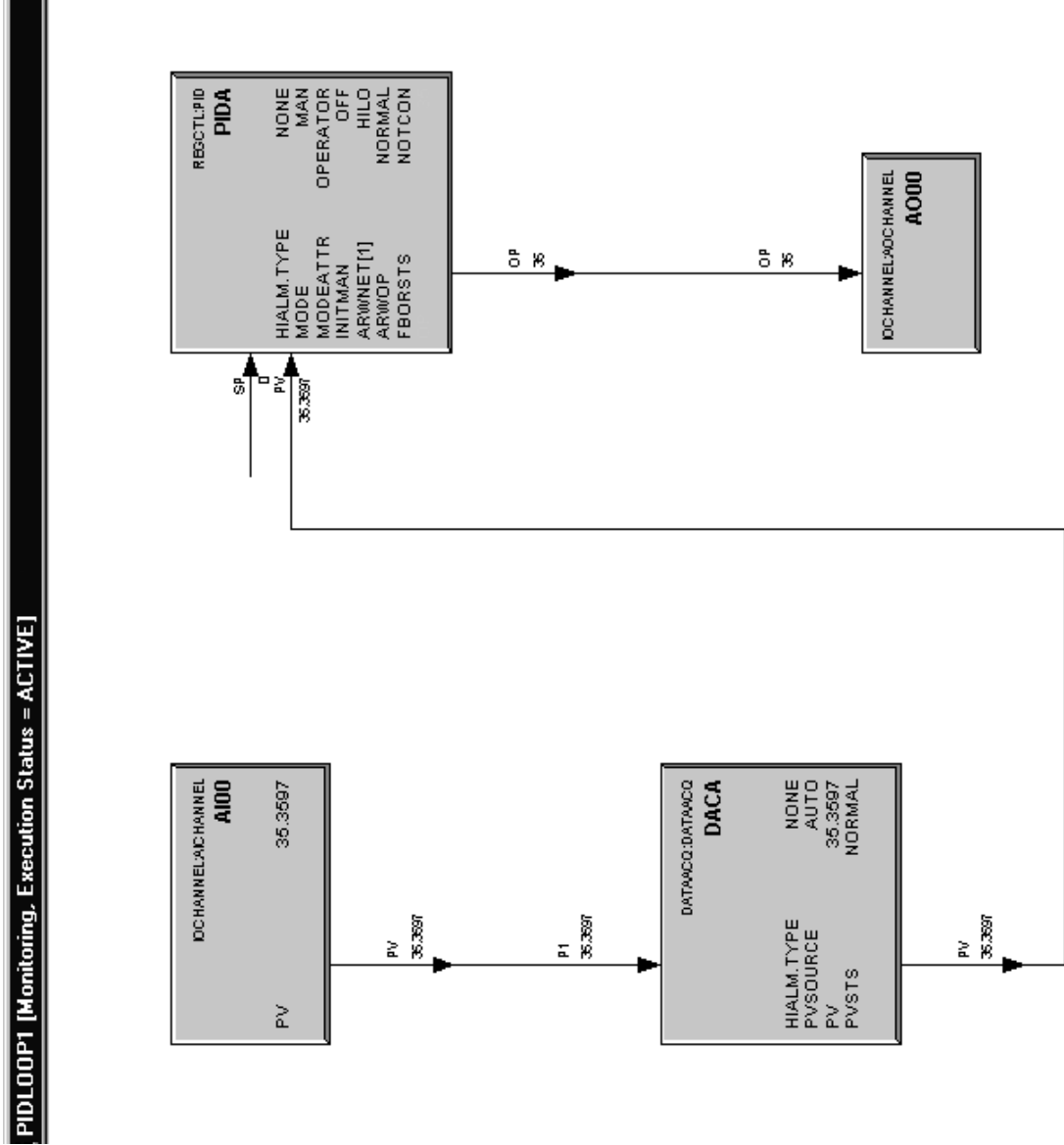
Objectives:

- Build and edit CMs
 - wire and connect blocks
- Configure PID CMs
- Configure a Device Control CM
- Load, execute and monitor CMs

Control Modules

- are used to build control loops and devices
- contain Function Blocks that provide executable actions
- execution period can be set at 50 msec to 2 sec
or
5 msec to 200 msec

Control Module Example



Function Blocks

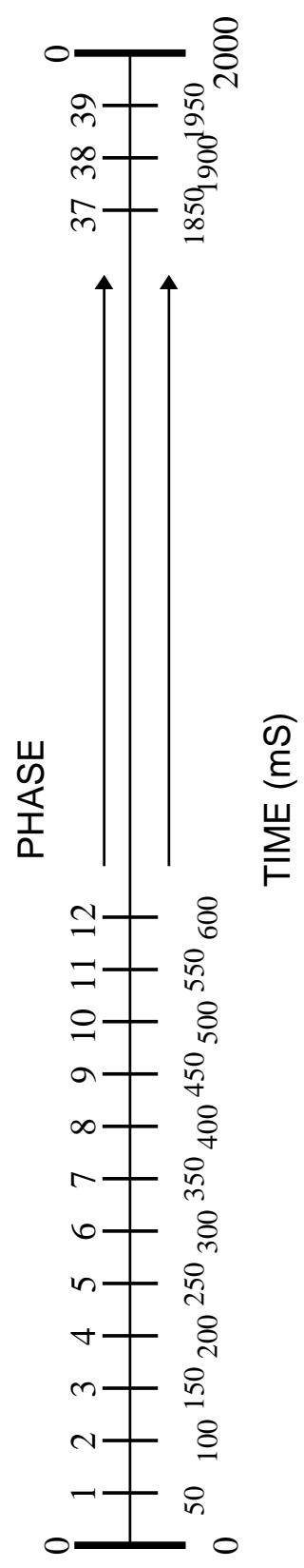
- basic objects that execute different control functions
- contain parameters that provide an external view of what the block is doing
 - parameters can be viewed externally via server database or via the MONITORING tab of Control Builder
- interconnect to construct control applications
 - parameters are passed between blocks that are wired together

Function Block Categories

- *PlantScape Control Builder Components Reference groups by block type:*

- System
- IO Channel
- Regulatory control
- Auxiliary
- Device control
- Logic
- Utility

CM \ SCM Execution Period and Phase

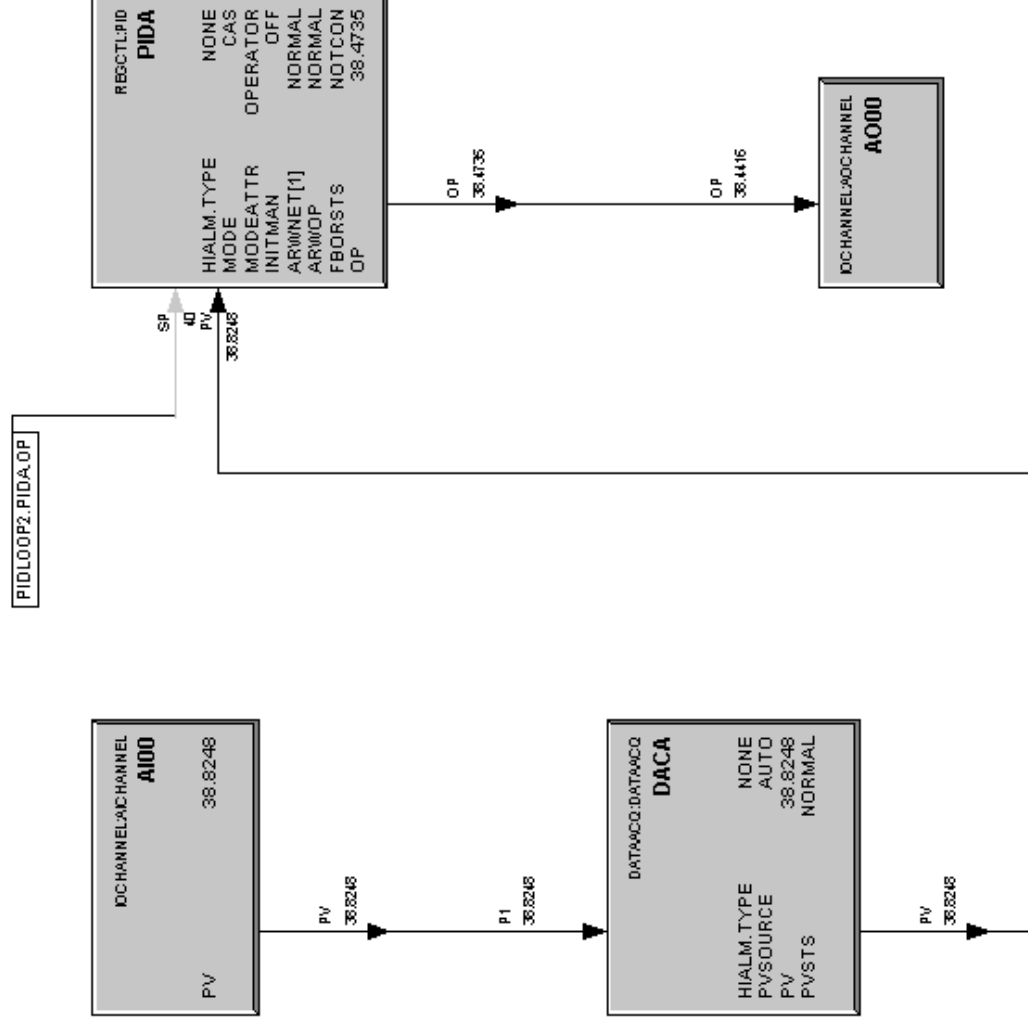


Execution Periods / Phase Choices (50 mS Base)

Period(ms)	Allowable Phase Values
50	-1, 0
100	-1, 0, 1
200	-1, 0, 1, 2, 3
500	-1, 0 through 9
1000	-1, 0 through 19
2000	-1 0 through 39

Parameter Connections

PIDLOOP1 [Monitoring, Execution Status = ACTIVE]



Device Control Module

