PLC210 Lab Exercise 10: Periodic Tasks

Upon completion of this lab, the student should be able to:

1. Explain various tasks found in the controller organizer window
2. Explain how to change the parameters for a continuous task
3. Explain how to create a new periodic task
4. Explain how to change the parameters for a periodic task

Download the project Compact_Module_5_Ex1_Periodic_Task.ACD, go Online and put the CompactLogix into the Run mode to do the following lab.

The I/O tag names in this lab may need to be changed to match the addresses on your hardware trainer.

Figure 1. The ladder logic program in a periodic task.

1. Monitor the MainRoutine
   Does SS7 start the time1 Timer?______________________
   Is the logic running in the MainRoutine?____________________

2. What type of Task is the MainTask? ____________.

   Hint: Right Mouse Click on the Properties selection for MainTask.
Figure 2. Choosing the properties on the main task.

Note: Icon for MainTask

Left Mouse Click on the Configuration tab
Figure 3. Configuring the main task.

View Type information
3. Monitor the R1 routine.

Figure 4. Verifying the main task is a continuous task.

Figure 5. Monitoring the R1 routine.

Is the logic running?_______________

4. What type of Task is T1
   
   Hint: Right Mouse Click on the Properties selection for T1 task.
Figure 6. Viewing the properties of the R1 routine.

Note: Icon for T1 task

Left Mouse Click on the Configuration tab
Figure 7. Viewing the configuration of the R1 routine.

View Type information
What is the Period setting for the T1 task? ______________
What is the Priority setting for the T1 task? ______________
At what rate is the Tag1 in the R1 routine changing values?
(Fast or Slow)

5. Change the Period setting on the on the T1 Configuration tab to 1000.
   At what rate is the Tag1 in the R1 routine changing values?_______
   Is the logic in the MainRoutine being scanned?

6. Change the Period setting on the on the T1 Configuration tab to 10000.
At what rate is the Tag1 in the R1 routine changing values?________
Is the logic in the MainRoutine being scanned?

7. Explain how often are the routines in Periodic Tasks are scanned?

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