

## PLC210 Lab Exercise 11: Event 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 event task
- 4. Explain how to change the parameters for a event task
- 5. Explain how a Trigger Event Task instruction works.

Download the project Compact\_Module\_5\_Ex2\_Event\_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.

0	Event Instructio	Trigger Event Task Task task1
1	Local:1:I.Data.6	Local:2:0.Data.0
(End)		

Figure 1. The EVENT instruction.

- 2. What type of Task is the MainTask? \_\_\_\_\_\_.

Hint: Right Mouse Click on the Properties selection for MainTask.



🚊 📥 Tasks			
🖨 🖓 MainTas			
🖻 🚭 Main	₽,	New Program	
🙋 P	જિ	New Equipment Phase	
🔂 N		Import Program	
🕀 💭 task1		Import Equipment Phase	
🛅 Unsched			
📄 😁 Motion Grou	Ж	Cut	Ctrl+X
🛅 Ungroup	₿ <mark>a</mark>	Сору	Ctrl+C
🛅 Add-On Inst	R	Paste	Ctrl+V
📄 😁 Data Types		Delete	Del
- 🙀 User-Def		Delete	Dei
🕀 🙀 Strings		Cross Reference	Ctrl+E
🔤 🙀 Add-On			
🕀 🙀 Predefin		Print	
🗄 🚂 Module-		Dti	Alt. F. t.
Trends		Properties	Alt+Enter
🕆 🖴 V/O Configuration 🛛 🔗			13

Figure 2. The Icon for MainTask.

Left Mouse Click on the Configuration tab

🔞 Task Proper	ties - MainTask	
General Conf	iguration Program / Phase Schedule Monitor	
Name:	MainTask	
Description:		
	Ŧ	
	OK Cancel Apply	Help
		Ticip

Figure 3. View Type information.



👸 Task Properties - Ma	ainTask	
General Configuration	Program / Phase Schedule Monitor	
Watchdog: 500	tinuous	head
	OK Cancel Apply	Help

Figure 4. Verify the Continuous task setting.

3. Ensure SS5 is turned to the left – OFF.

Monitor the R1 routine.

0	Local:1:I.Data.5	Local:2:0.Data.7
(End)		



Toggle SS5 does PL7 change states?



Is the logic in R1 being scanned?\_\_\_\_\_

4. In the MainRoutine, toggle SS7 to the right – ON

In the R1routine, toggle SS5 does PL7 change states?\_\_\_\_\_ Is the logic in R1 being scanned?

In the MainRoutine, toggle SS7 to the left – OFF In the R1routine, toggle SS5 does PL7 change states?\_\_\_\_\_\_ Is the logic in R1 being scanned?\_\_\_\_\_\_

5. What type of Task is task1

Hint: Right Mouse Click on the Properties selection for T1 task.

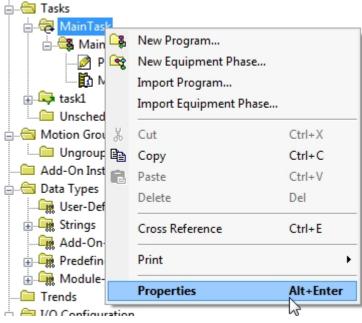


Figure 6. Verify the Properties of MainTask.



## Note: Icon for task1 task

## Left Mouse Click on the Configuration tab

👸 Task Prope	erties - MainTask	
General Cor	nfiguration Program / Phase Schedule Monitor	
Name:	MainTask	
Description:	*	
	Ŧ	
		-
	OK Cancel Apply	Help

Figure 7. Verify the Configuration of MainTask.

View Type information



👸 Task Pr	operties - task1 📃 🔲 💌
General	Configuration Program / Phase Schedule Monitor
Type:	Event
Trigger:	EVENT Instruction Only
Tag:	<none></none>
Exec	ute Task If No Event Occurs Within 10000.000 ms
Priority:	10 🔄 (Lower Number Yields Higher Priority)
Watchdo	og: 500.000 ms
Disable Automatic Output Processing To Reduce Task Overhead	
🔲 Inhibi	t Task
	OK Cancel Apply Help

Figure 8. Verify the Event setting for task1.

What is the Type setting for the task1 task?

What is the Trigger setting for the task1 task?\_\_\_\_\_

Where is the EVENT instruction located in the project file?\_\_\_\_\_

What are the other types of triggers?\_\_\_\_\_

What is the range of the Priority setting?\_\_\_\_\_



A task with a Priority setting of \_\_\_\_\_ will be the highest priority task.

6. Explain when the routines in an Event Tasks are scanned?

\_\_\_\_\_

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