

## PLC 210 Hands-On Assessments: Module 6

Student Name: \_\_\_\_\_ N# \_\_\_\_\_ Date: \_\_\_\_\_

This hands-on assessment requires that each student successfully demonstrates each of these tasks to the instructor's satisfaction. There is no grade for this assessment.

Prior to taking this assessment, the student must pass (minimum of 80%) the Knowledge and Application Assessment.

The student cannot proceed to the HOA for the next module without completing this HOA

Note: Be specific in answering questions on the types of Routines.

Be specific in answering questions on Property information of Routines and Programs.

Be specific in answering questions on processor scanning of Routines

Download the project file HOA\_Module\_6.ACD to the CompactLogix demo.

Ensure all demo inputs are OFF / False – Selector Switches turned to left.

Place processor in RUN mode

\_\_\_\_\_ 1. What caused the Warning in the Error Result window when downloading?

\_\_\_\_\_

Does the Project File download with Warnings? \_\_\_\_\_

Does the Project File RUN with Warnings? \_\_\_\_\_

Navigate to routines in the Prog3 program

Is Rout1 being scanned? \_\_\_\_\_

Is Rout2 being scanned? \_\_\_\_\_

Is Rout3 being scanned? \_\_\_\_\_

Explain: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ 2. Go Offline

Configure the Prog3 Properties to:

1. To eliminate the Warning on downloading

2. Have the processor scan the three routines in the Prog3 without having to change any logic the Prog3 routines.

Download the Project file. Put the processor in RUN mode .

Did the Warning message show-up? \_\_\_\_\_

Are the three routines in Prog3 being scanned? \_\_\_\_\_

Explain: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ 3. Navigate to routines in the Prog1 program

How many routines are in Prog1? \_\_\_\_\_

How is Routine1 configured (style)? \_\_\_\_\_

How is Routine2 configured (style)? \_\_\_\_\_

How is Routine3 configured (style)? \_\_\_\_\_

How is Routine4 configured (style)? \_\_\_\_\_

Which routine(s) is / are being scanned? \_\_\_\_\_

Explain: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

What will cause the processor to scan Routine4? \_\_\_\_\_

Start the Timer in Routine1.

Change the Preset value to -1.

What happens to the processor? \_\_\_\_\_

What caused the Fault? \_\_\_\_\_

Did the designated Fault Routine run? \_\_\_\_\_

Explain: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Clear the processor fault.

Put the processor in RUN Mode.

Does the processor Run? \_\_\_\_\_

\_\_\_\_\_ 4. Navigate to R1 routine in the Prog2 program

What type of routine is R1? \_\_\_\_\_

Toggle the int\_tag1 to start timer\_prog2.

Does the timer run? \_\_\_\_\_

Change the Preset value of timer\_prog2 to -1.

What happens to the processor? \_\_\_\_\_

What caused the Fault? \_\_\_\_\_

Did the designated Fault Routine run? \_\_\_\_\_

Explain: \_\_\_\_\_

\_\_\_\_\_

Change the timer\_prog2 Preset to 10000.

Clear the processor fault.

Put the processor in RUN Mode.

Does the processor Run? \_\_\_\_\_

- \_\_\_\_\_ 5. Modify the Properties of the Prog2 program so that the R3 routine is a Fault Routine.

Navigate to the R1 routine.

Toggle the int\_tag1 to start timer\_prog2.

Does the timer run? \_\_\_\_\_

Change the Preset value of timer\_prog2 to -1.

What happens to the processor? \_\_\_\_\_

What caused the Fault? \_\_\_\_\_

Did the designated Fault Routine run? \_\_\_\_\_

Explain: \_\_\_\_\_

\_\_\_\_\_

- \_\_\_\_\_ 6. Turn all SS switches on the demo board OFF – turned to left position.

Clear Processor Fault

Place Processor in RUN Mode.

Navigate to the R1 routine.

Ensure toggle\_bit at Rung 1 is false.

Based on the above conditions, which routines are being scanned by the processor?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Explain: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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