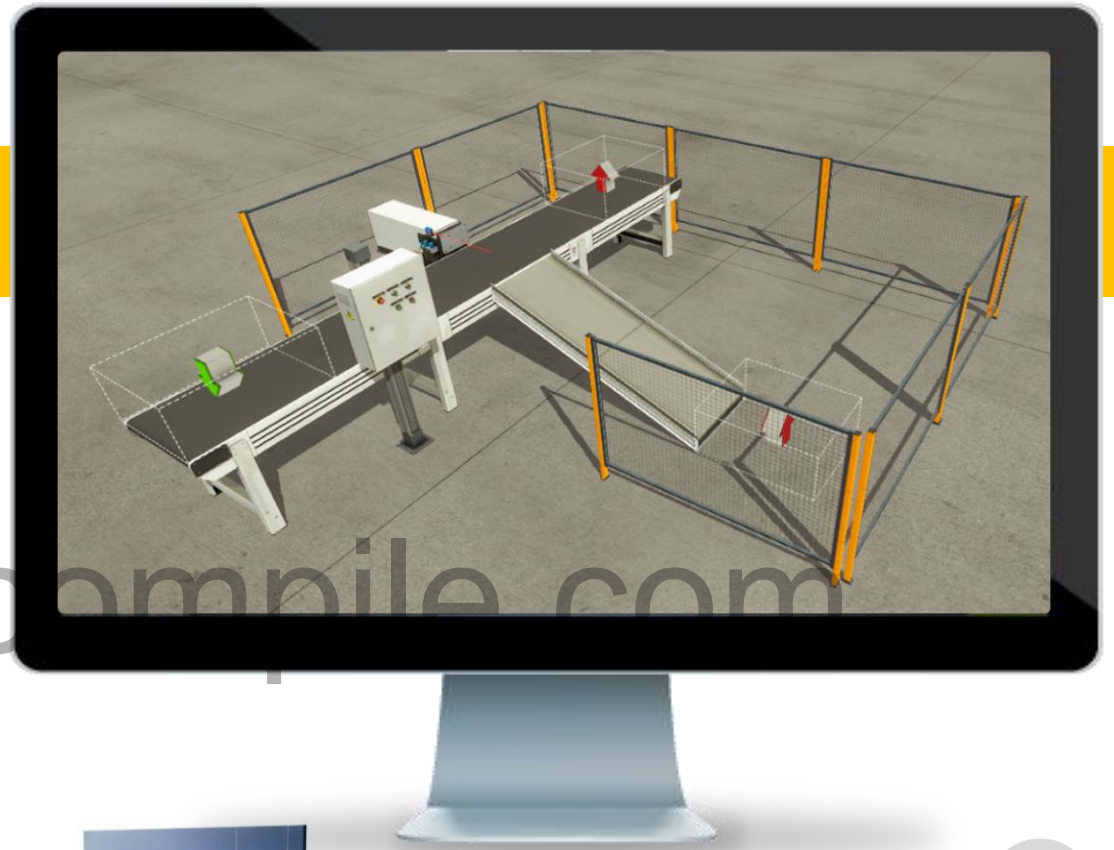
Siemens S7-1200

CPU 1212C AC/DC/Relay

Counters Application



Objective

Counting the smaller and bigger boxes

Commands to practice:

- CTU

This example is in continuation with

Example 1 of Bit Logic Instructions

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Software Platform by:

realgames

Objective: Counting the small & large boxes

PLC used
S7-1200

Programming Software
Siemens TIA

3D Software Platform
FACTORY I/O

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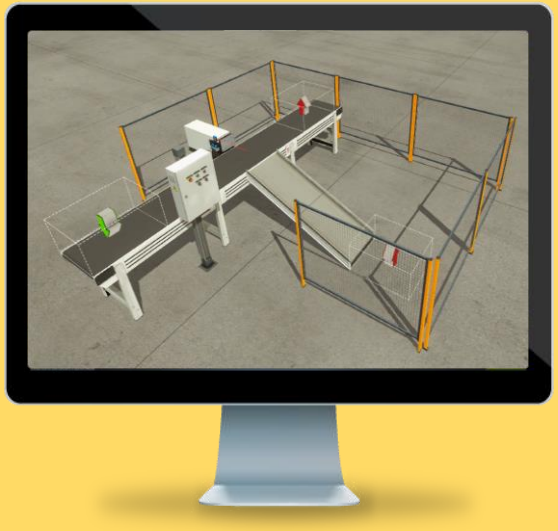
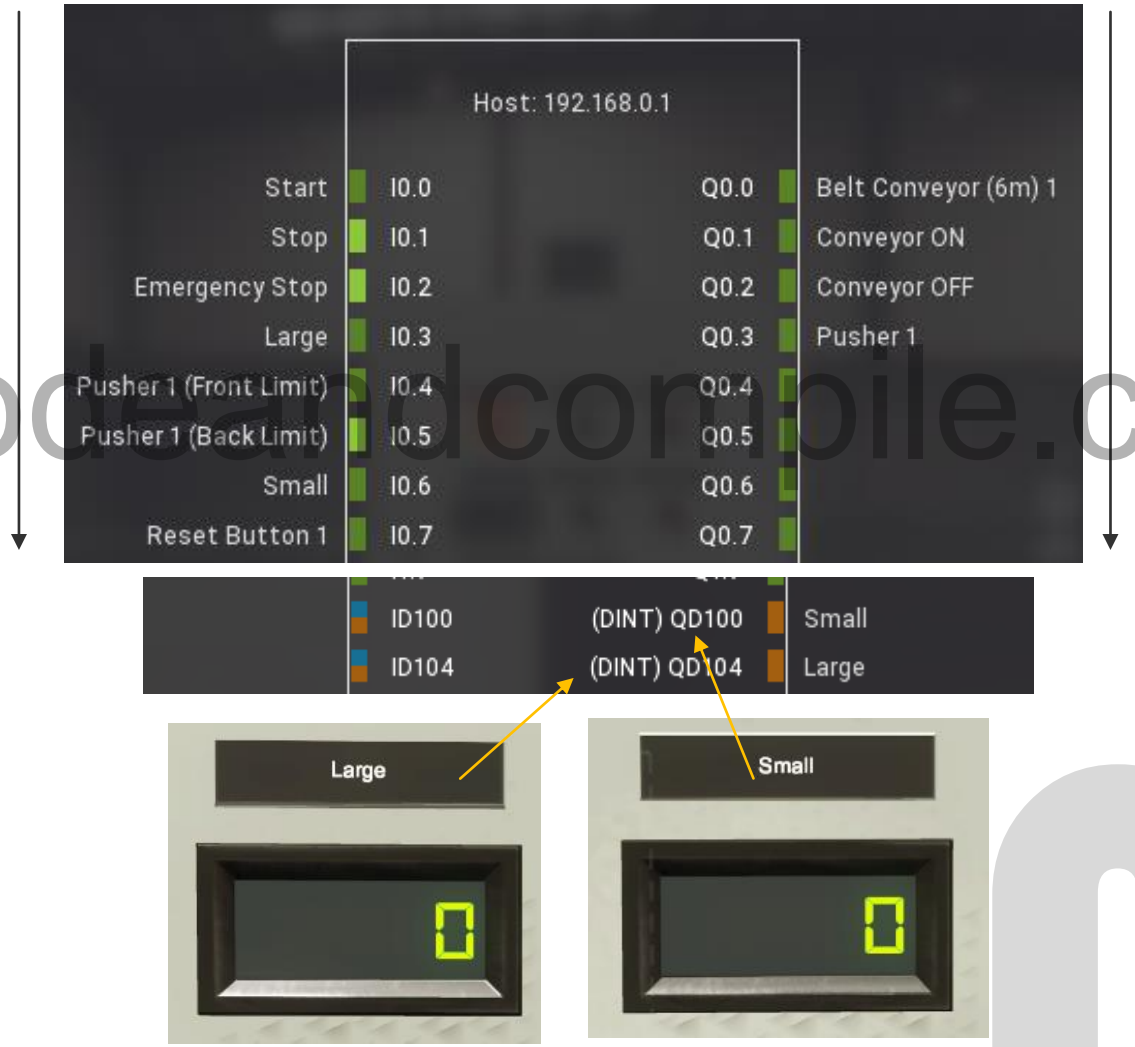
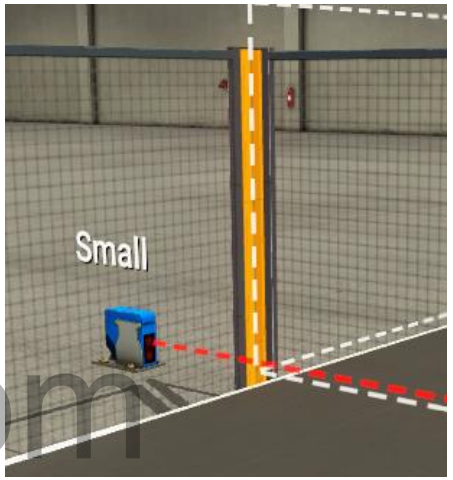


Objective: Counting the small & large boxes

Assigned Inputs & Outputs:





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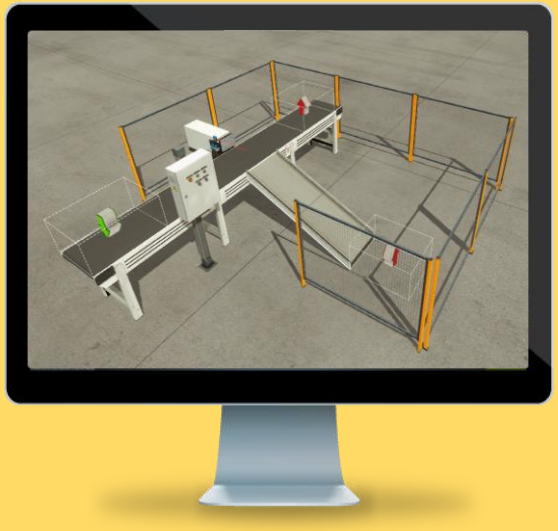
*Diffuse Sensor at **I0.3** has been renamed to **Large** and one sensor is added at **I0.6** for detecting **small boxes.** Reset Button **I0.7** is added to **reset the count***



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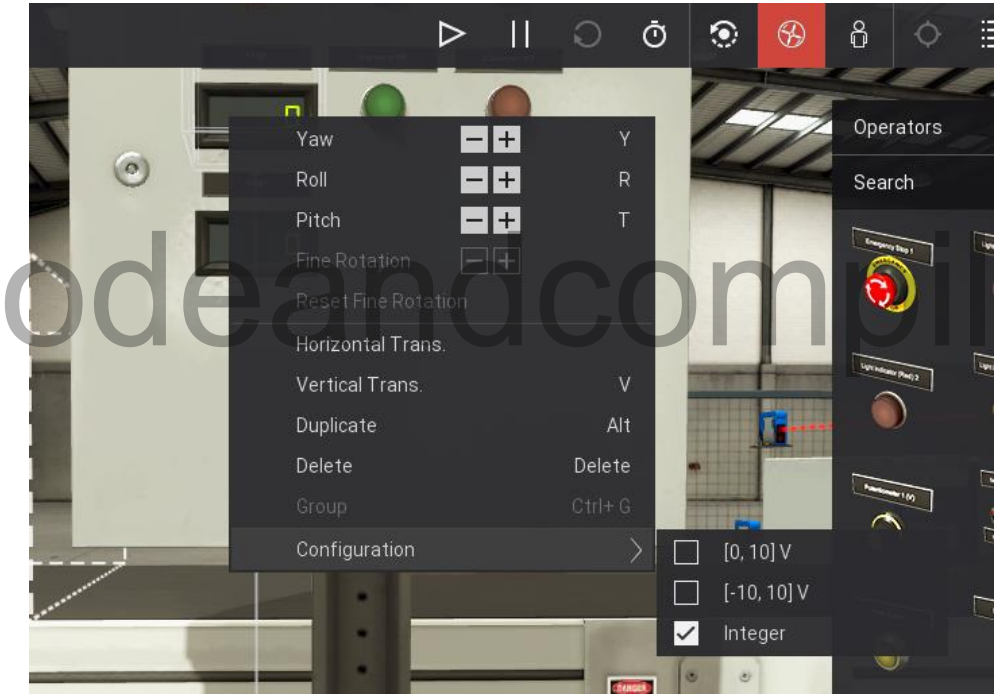
Objective: Counting the small & large boxes

Steps to follow: Define display as Integer

Right Click -> Configuration ->Integer



Tags added in the Example 1

13		Small	Default tag table	Bool	%I0.6
14		Large Box Display	Default tag table	UDInt	%QD100
15		Small Box Display	Default tag table	UDInt	%QD104
16		Reset	Default tag table	Bool	%I0.7

PLC used
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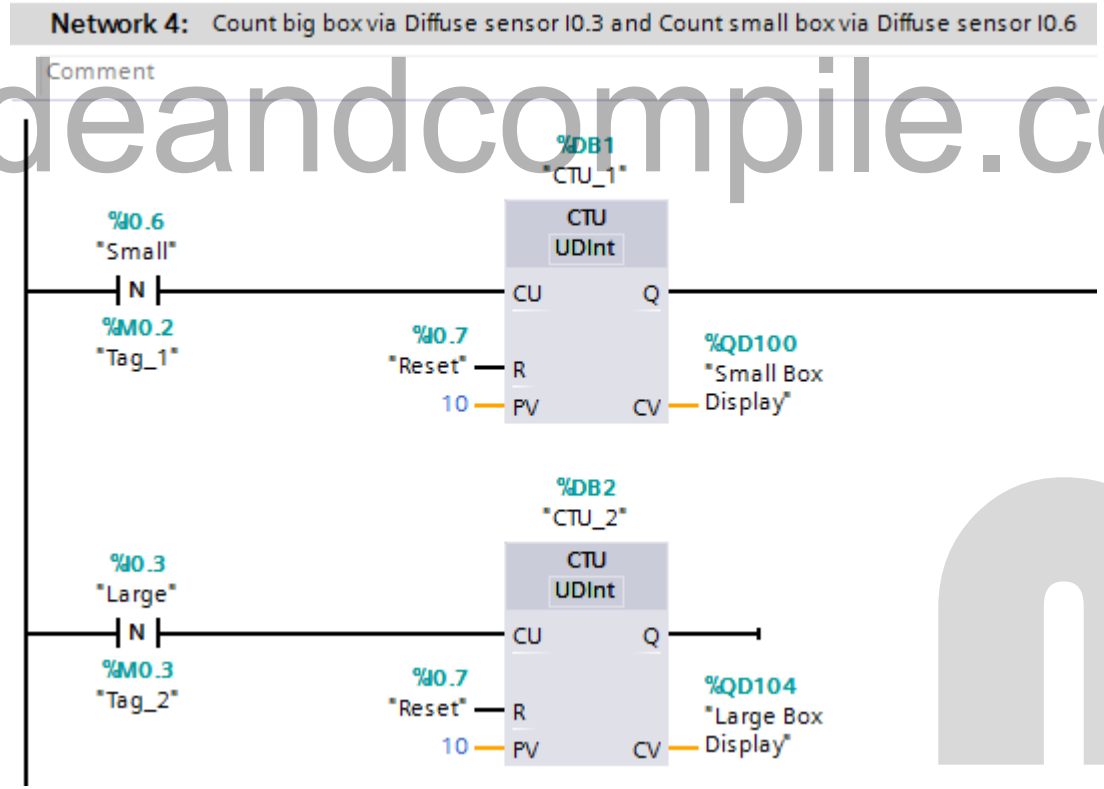
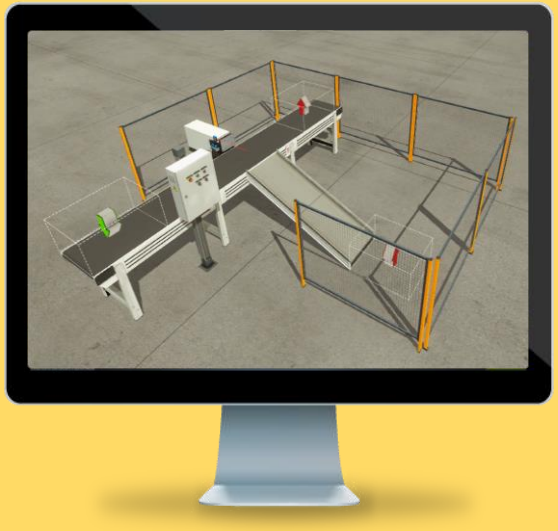
Objective: Counting the small & large boxes

Steps to follow:

1. Open the Logic made in Example 1 – Bit Logic Instructions
2. **Count and display QD100 big box via Diffuse sensor I0.3 with reset I0.7**
3. **Count and display QD104 small box via Diffuse sensor I0.6 with reset I0.7**
4. Stop the conveyor when we have at least 10 small and large boxes
5. Download the Logic and Test!





Objective: Counting the small & large boxes

Steps to follow:

1. Open the Logic made in Example 1 – Bit Logic Instructions
2. Count and display big box via Diffuse sensor I0.3
3. Count and display small box via Diffuse sensor I0.6
4. **Stop the conveyor Q0.0 when we have at least 10 small and large boxes**
5. Download the Logic and Test!

PLC used
S7-1200

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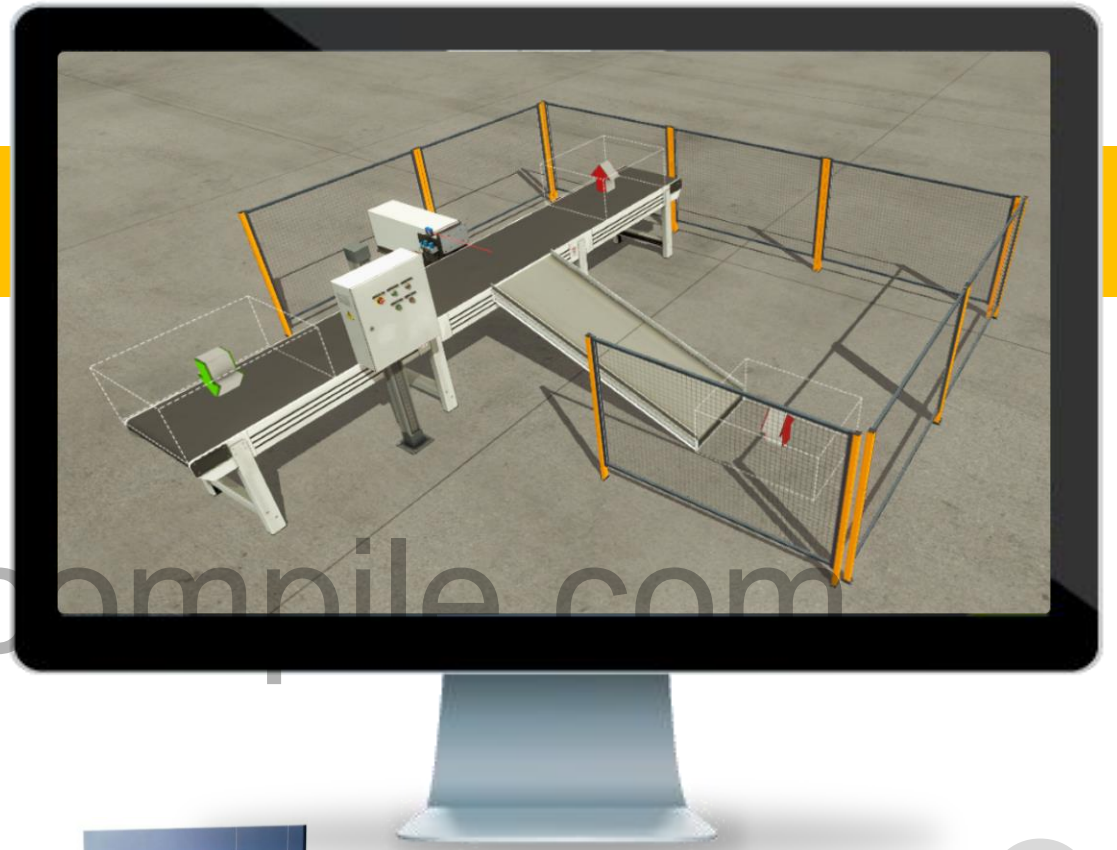
DID YOU KNOW ?

*You can control the **FACTORY I/O** environment without using hardware PLC via Control I/O Driver. This driver is available at NFI website www.nfiautomation.org. Special offer for student license.*

Siemens S7-1200

CPU 1212C AC/DC/Relay

Counter Application



Thank you

Get copy of this presentation and PLC code in the course!

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Software Platform by:

realgames