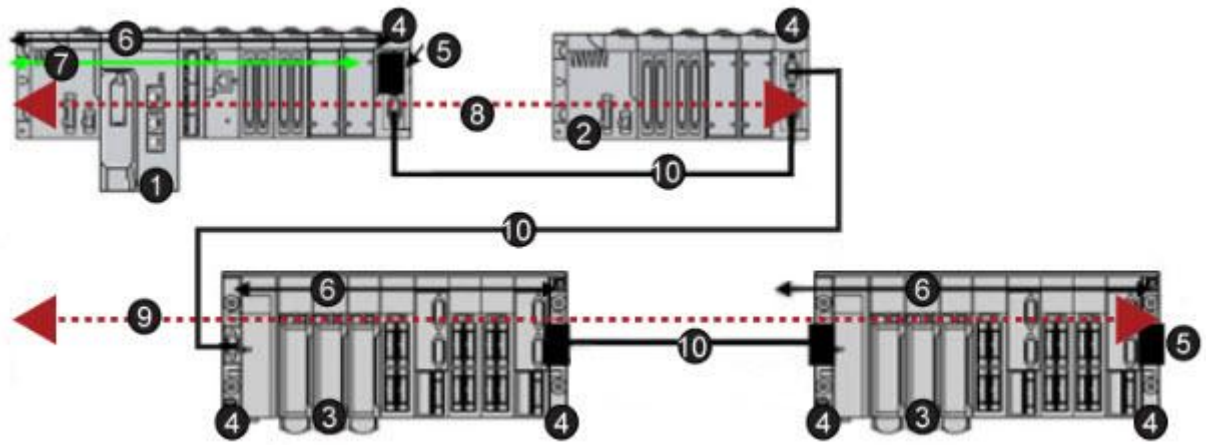
Premium I/O

Legacy Migration (Premium I/O)

In addition to the new modules and features, a key feature of the M580 is the ability to manage install base via the possibility to connect to Premium PLC racks and use the Premium I/O.

An existing Premium installation can be easily migrated by replacing the Premium local rack with a **BME XBP **00** and M580 CPU, whilst the Premium Remote racks can be upgraded to Premium Extended racks (**TSX RKY **EX**) and connected to the M580 rack via a **BMX XBE 1000** expansion module and supported cables.



1	Modicon M580 main local rack
2	Modicon X80 extended local rack
3	Premium extended local rack
4	extension rack module
5	bus terminator module
6	X Bus connection on the rack
7	Ethernet connection on the rack
8	maximum X Bus cable length between the M580 main local rack (1) and the Modicon X80 extended local rack (2) is 30 m (98 ft)
9	maximum X Bus cable length between the M580 main local rack (1) and the Premium extended local rack (4) is 100 m (328 ft)
10	X Bus extension cable

Note:

Premium motion, communication, and safety and modules are not supported in an M580 system.

Topic Objectives

By the end of this section the student will be able to:

Connect a Premium I/O drop to a M580 main rack

Exercise - Premium I/O

Learning Outcomes

By the completion of this exercise the student will:

- Integrate Premium I/O as an Extension Rack with an M580 architecture
- Prove Legacy Migration of Install Base systems

Equipment Required

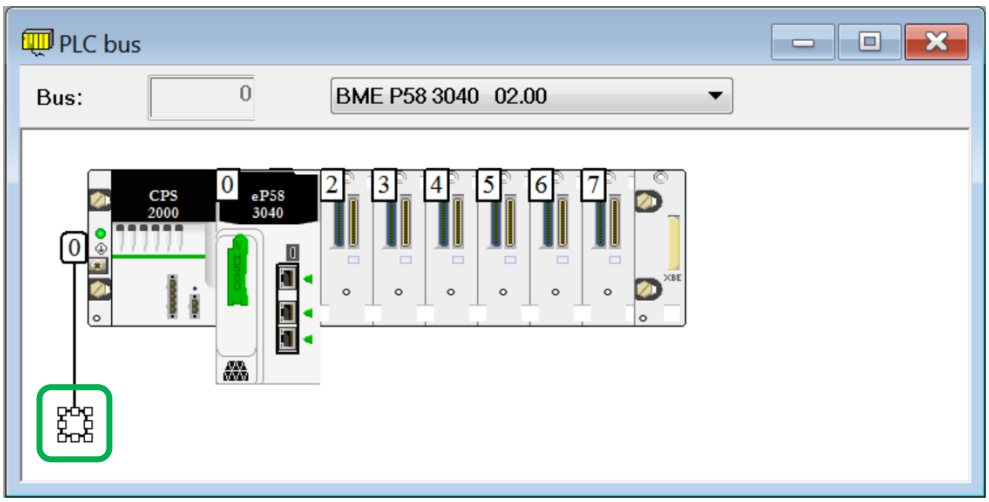
To complete this exercise on a PLC the following equipment is required:

- TSX RKY 4EX
- DEY 08D2
- DSY 08T2

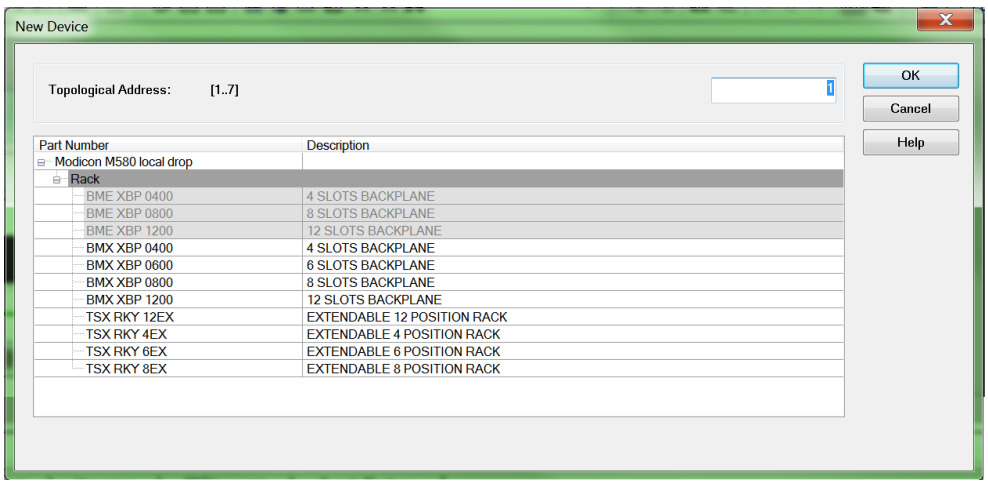
Configure the Premium Extension Rack within the Application.

i. From the **Project Browser** open the **Main rack.**

ii. Double-click the place holder for the Extension Rack.



The New Device window appears.

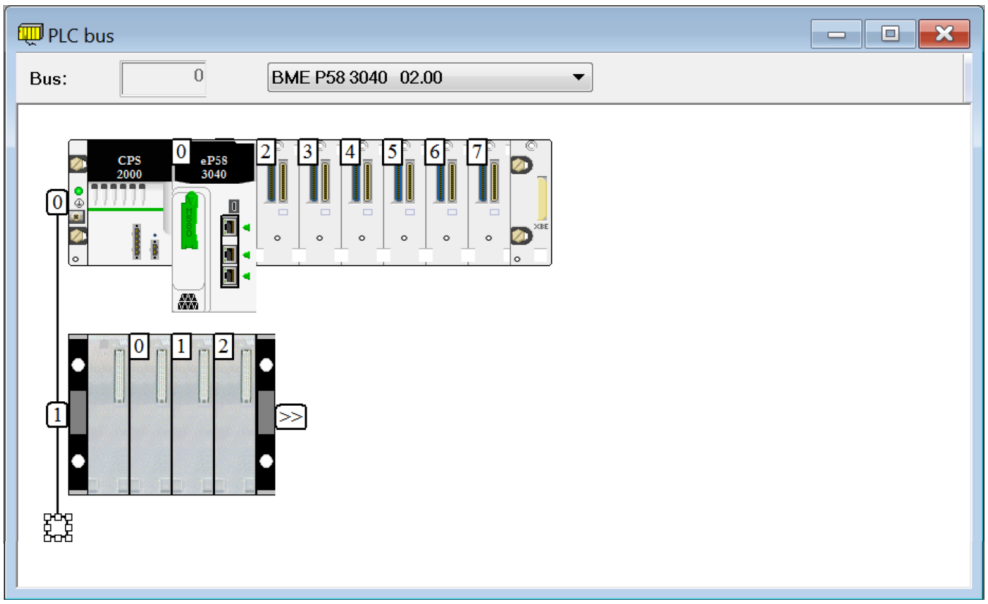


Exercise - Premium I/O (cont.)

iii. Select the **TSX RKY 4EX** rack and click the **OK** button.

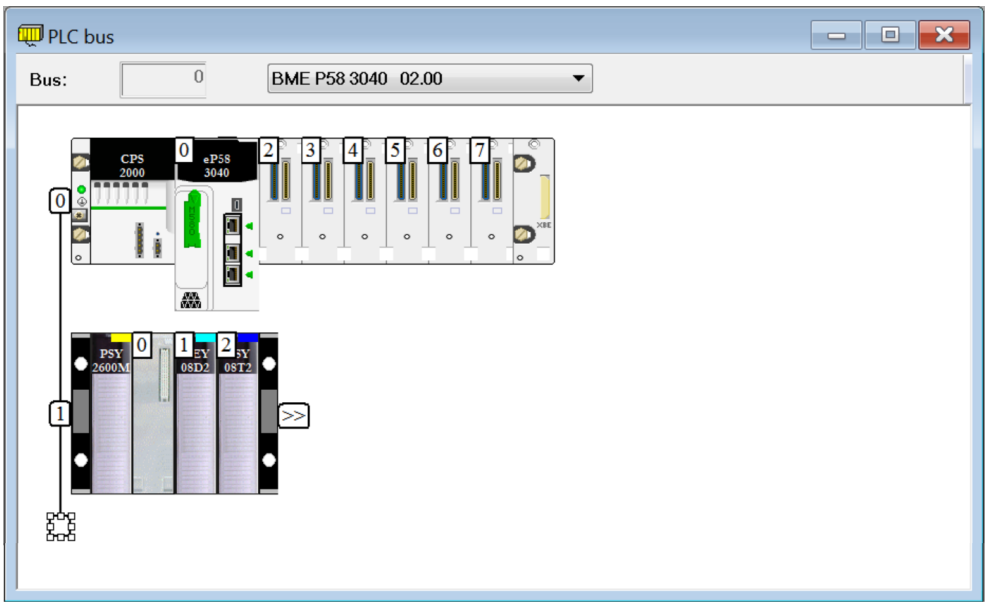
Part Number	Description
Modicon M580 local drop	
Rack	
BME XBP 0400	4 SLOTS BACKPLANE
BME XBP 0800	8 SLOTS BACKPLANE
BME XBP 1200	12 SLOTS BACKPLANE
BMX XBP 0400	4 SLOTS BACKPLANE
BMX XBP 0600	6 SLOTS BACKPLANE
BMX XBP 0800	8 SLOTS BACKPLANE
BMX XBP 1200	12 SLOTS BACKPLANE
TSX RKY 12EX	EXTENDABLE 12 POSITION RACK
TSX RKY 4EX	EXTENDABLE 4 POSITION RACK
TSX RKY 6EX	EXTENDABLE 6 POSITION RACK
TSX RKY 8EX	EXTENDABLE 8 POSITION RACK

iv. The new rack will appear.



Exercise - Premium I/O (cont.)

v. Populate the rack with the appropriate Power Supply and I/O modules.

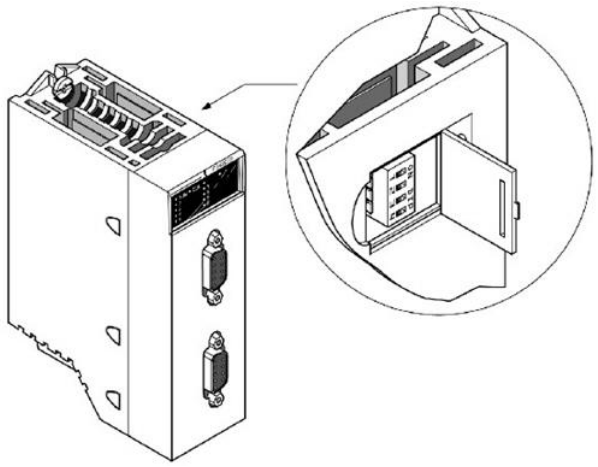


vi. **Build** and **Save** the application.

Do NOT Transfer the application yet.

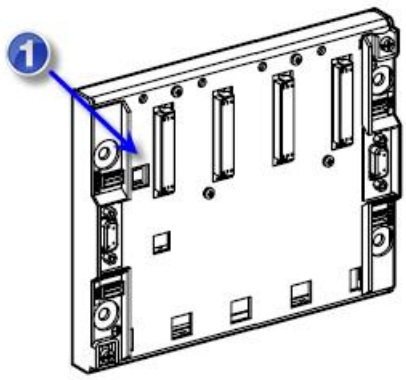
Manually configure the hardware components required.

i. Take the **BMX XBE 1000** adaptor, open the door on the side and confirm the **Address** is set **0** via the Dip Switches.



Exercise - Premium I/O (cont.)

ii. Remove the Power Supply of the Premium Rack to reveal the dip switches **(1)** used to set the Address. Ensure the **Address** is set to **1**, to match with the Rack number within Unity Pro.



iii. Take the Bus-X terminators (TSX TLY EX). Place the Terminator marked **A** into the **Top Port** of the **BMX XBE 1000** adaptor. Place the Terminator marked **B** into the **Port** on the **Right Side** of the **Premium Rack**.

iv. Using the Bus-X cable, connect the **bottom port** of the **BMX XBE 1000** adaptor and the **Port** on the **Left Side** of the **Premium Rack**.

v. Turn **OFF** the power to the Simulator.

vi. **Connect** the **BMX XBE 1000** adaptor to the **XBE slot** of the **Local Rack**.

vii. Power **ON** the Simulator and the Premium Rack.

viii. The exercise is now over click the link to go back to the Chapter 2 Organisation Chart or to the Table of Contents.