# **Chapter 2: Advanced Architecture Configuration**

### **Overview**

#### Introduction

The basics to design an architecture have now been carried out.

In this chapter we will reuse what we have previously learned to design more sophisticated M580 architectures, including the following:

- > RIO
- DIO.
- ➤ Hot Standby

Migration paths from:

- > Premium I/O
- Quantum PLC with X80 I/O (same case as RIO)

As well as configuration of NOCs and advanced security features.

This section is modular which means that you can carry out the exercises in any order, as long as the prerequisites are followed (represented by arrows).

See the chart below for more information:



#### Note:

Kindly note that the RIO exercise is similar to migration from a Quantum PLC with X80 modules to a M580 PLC with X80 modules.

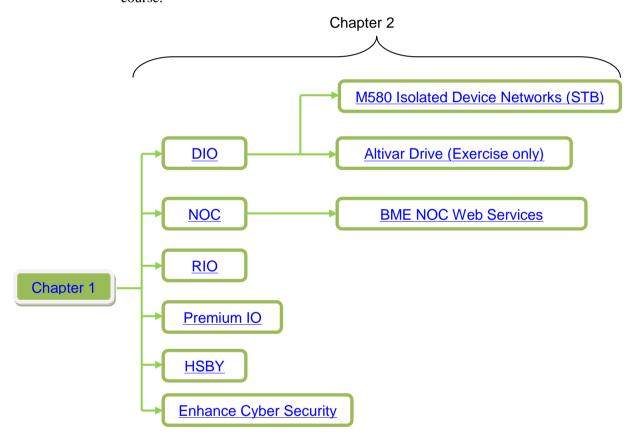
You can click the different items to jump directly to the topic.

# Overview (cont.)

Use the same application for all exercises or base the new project on the one created in the first chapter.

Most exercises can be fulfilled in Simulation Mode; however some require the user to have some hardware to complete steps. When this is the case it will be stated at the beginning of the exercise.

Once familiar with the features of chapter two; you can discover the other possibilities of the M580 in Chapter 3. These features will only be mentioned, in case you want to implement them, you may go through the M580 configuration course.



## DIO

### Introduction

Device Type Manager (DTM) through Ethernet allows DIO drop integration with almost any device to the architecture.

Configuring a DTM device is done in two steps:

- ➤ Installing the DTM in Unity Pro common to all FDT/DTM devices
- > Configuration of the device through Unity Pro's DTM window specific to each device.

As a generic configuration for all devices cannot be provided DTM configuration is illustrated through one of the most advanced examples of device integration: The integration of an Altivar drive through Unity Pro.

### **Topic Objectives**

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

- ➤ Install and add a DTM in Unity Pro
- ➤ Configure the basic settings of an Altivar drive
- > Test the communication with an Altivar drive