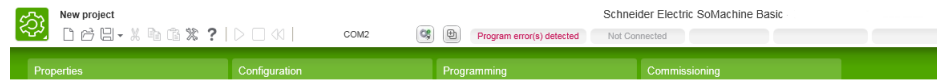


The Configuration Environment

Application Configuration

The main application configuration area consists of four tabs. These are:

- Properties
- Configuration
- Programming
- Commissioning



These sections provide a logical structure and make the various configuration tools easy to find. Working from left to right creates a structured approach to creating the application.

Properties

The Properties section allows information to be recorded about the application including the programmer and where it is being used.

- The Front Page Section allows the creator of the application to enter contact information. This is useful to the customer as if the application needs modifying as it provides a first point of contact.
- The Company section allows information about the company to be entered. This information can be useful to an integrator to identify who the application was created for.
- The project information section gives information about the project itself. This is useful for both integrators and end users who have multiple projects for a site as it will identify the application and where it is used.

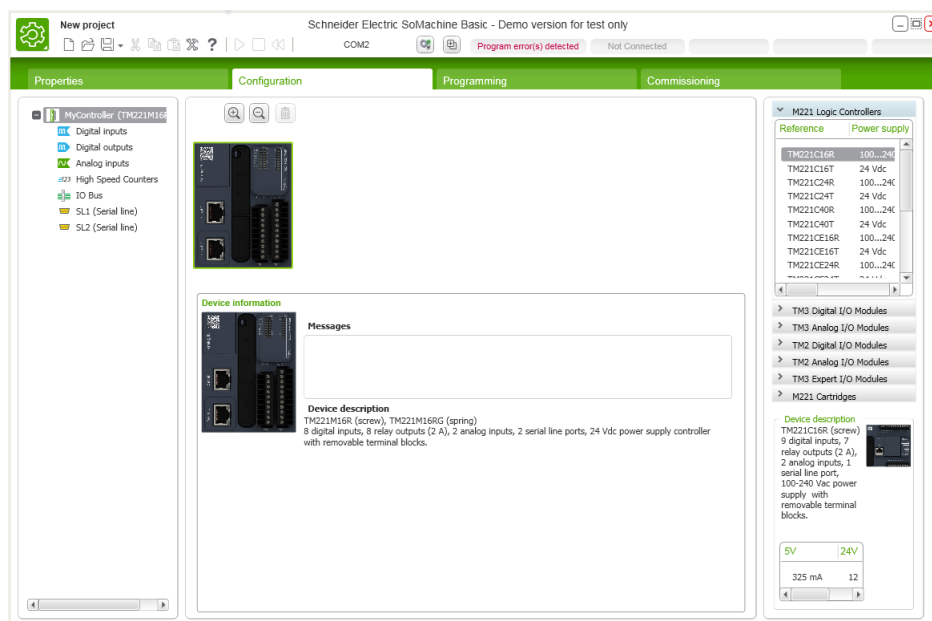
A photo can also be included which can be useful to show the area where the application is being used.

This section also contains areas where the project can be protected from viewing or changing. This can be useful for OEMs and Integrators who wish to protect their intellectual property.

The Configuration Environment (cont.)

Configuration

The configuration page is used to configure the hardware used in the project. This will include selecting the correct controller and additional I/O modules, and configuring the parameters for the hardware.



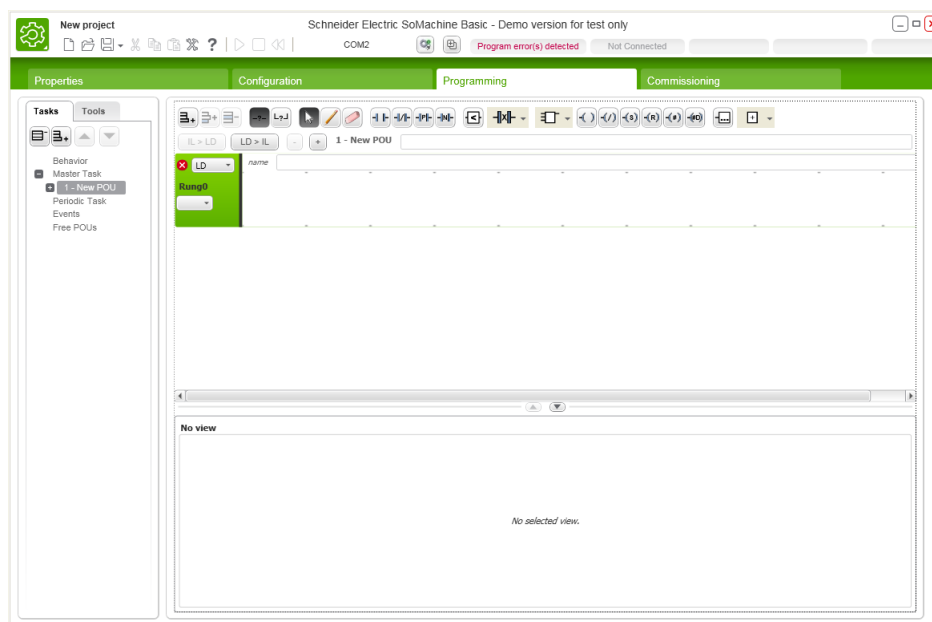
The SoMachine Basic software has drag-and-drop hardware configuration. Controllers and modules are listed in a catalog allowing the modules to be selected and dropped into the configuration area. Modules may be reordered by simply dragging them to the new position.

When the required modules have been added, they can be selected and a list of configurable sections is shown in the hardware tree allowing parameters to be configured.

The Configuration Environment (cont.)

Programming

The programming tab is where the control program is actually written. This can currently be done using either Instruction List or Ladder. SoMachine Basic provides a way to program in either of these languages and switch easily between the two. It also provides a way of separating sections of program into a logical structure to make the program easy to follow.



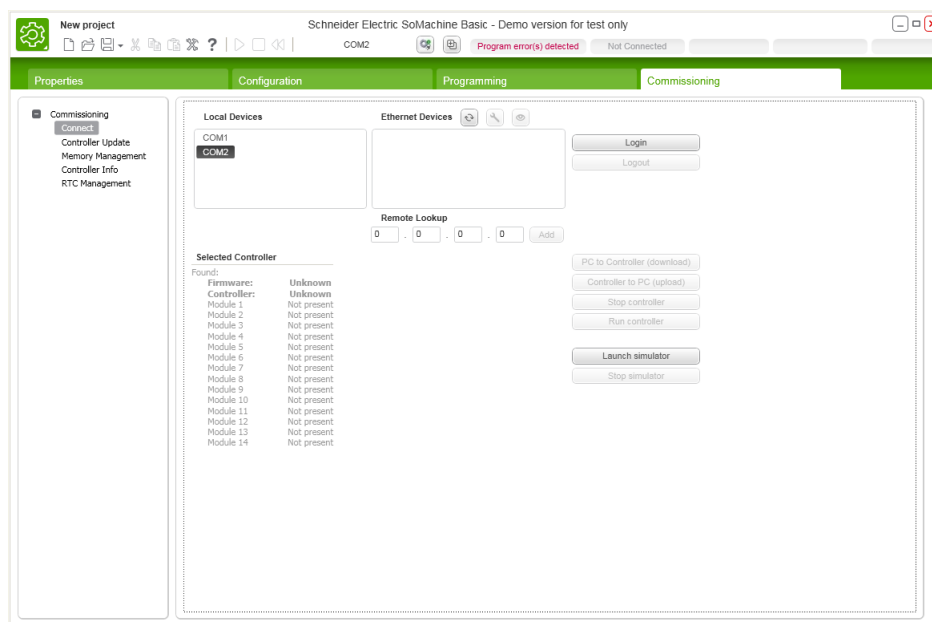
This section can also be used for debugging the application when SoMachine Basic is connected to the M221 Logic Controller.

The Programming section is covered in more detail in *Chapter 3 - Programming a Simple Application*.

The Configuration Environment (cont.)

Commissioning

When an application has been created, SoMachine basic can be connected to a M221 Logic Controller and the application sent to the controller. This connection can be made by serial, USB or Ethernet. Before the application is downloaded, the program is checked for programming errors to ensure that it is not run in the controller with an error present.



Various tools are then available to check the operation of the program and that the application is working correctly. These include in-line monitoring of values in the program, animation tables and the ability to change the values of objects in the program.

The Commissioning section is covered in more detail in the *Chapter 4 - Getting it all Working*.

The Configuration Environment (cont.)

Status Bar

The status bar shows information about the connection between SoMachine Basic and the M221 Logic Controller.



It shows whether there is a program error, connection status, controller status, scan time and the last error. It also shows whether the controller is running or stopped.

The information shown here can be useful for debugging applications.