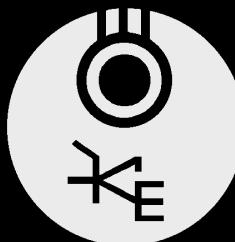


Міністерство освіти і науки України  
Державний вищий навчальний заклад  
“Національний гірничий університет”



КАФЕДРА ЕЛЕКТРОПРИВОДА

Кафедра електропривода

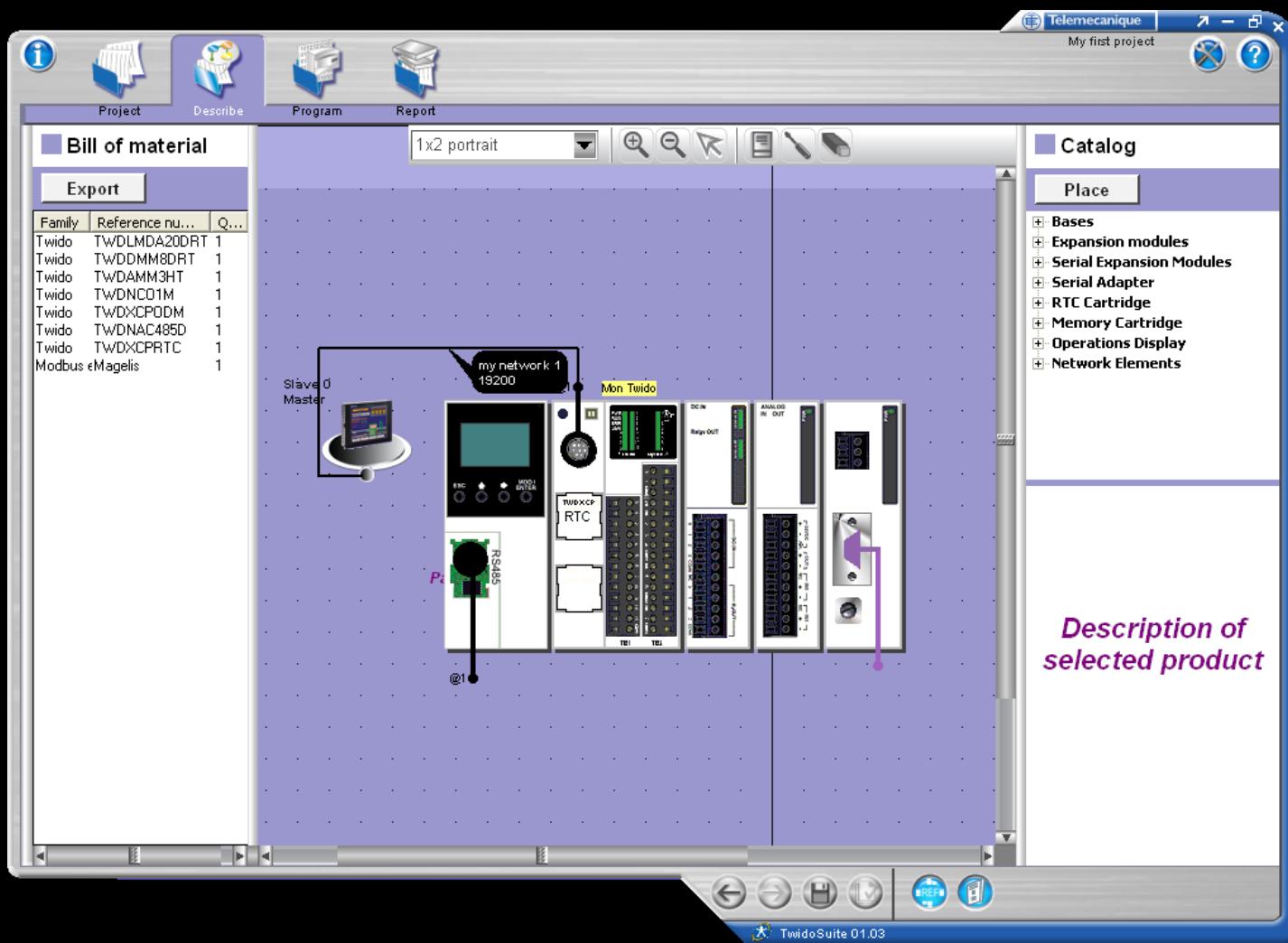
Авторизований навчальний центр “Schneider Electric”

Розробив: Яланський О.А., доцент кафедри електропривода

м. Дніпропетровськ

2007 - 2012

# Twido Suite



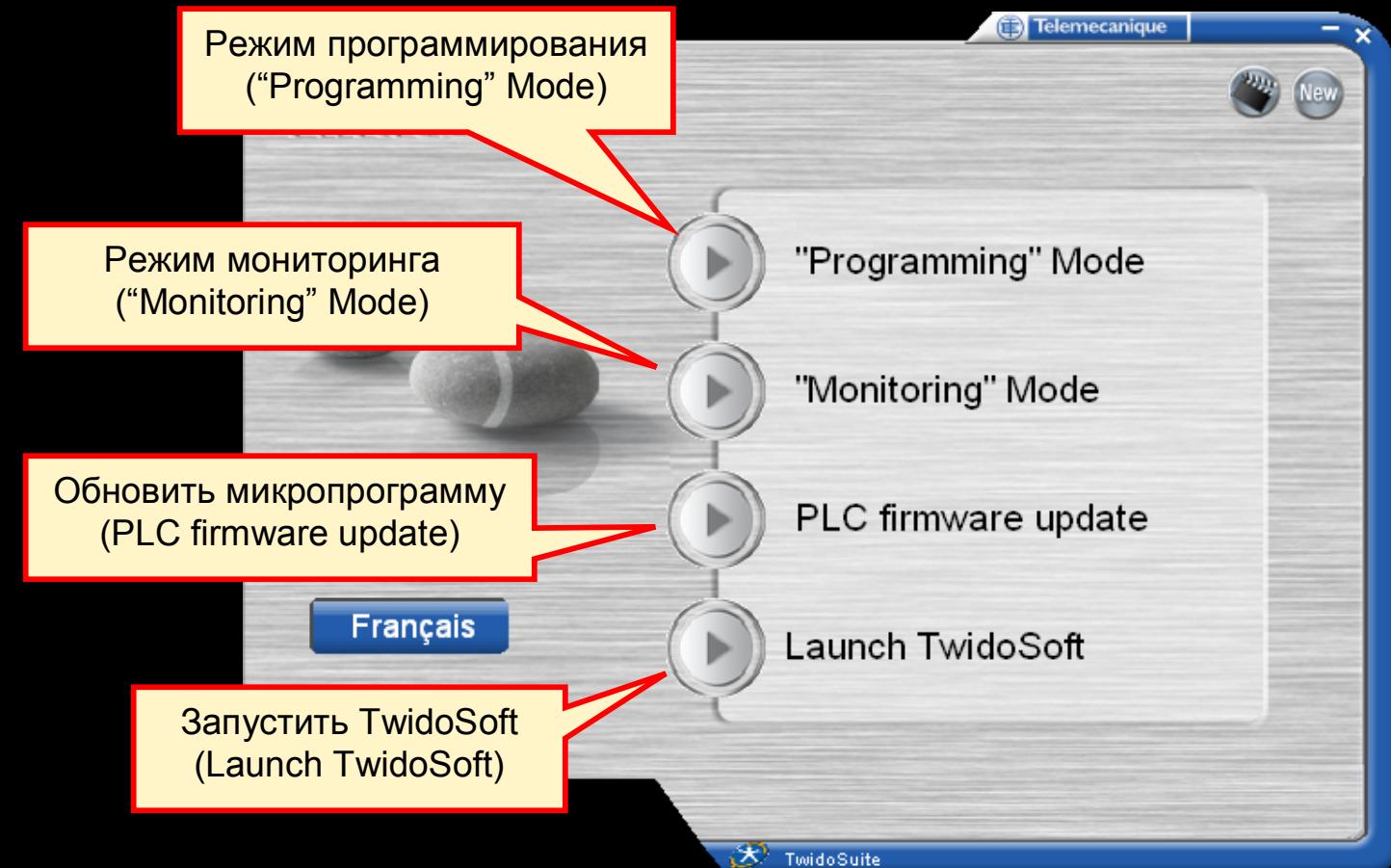


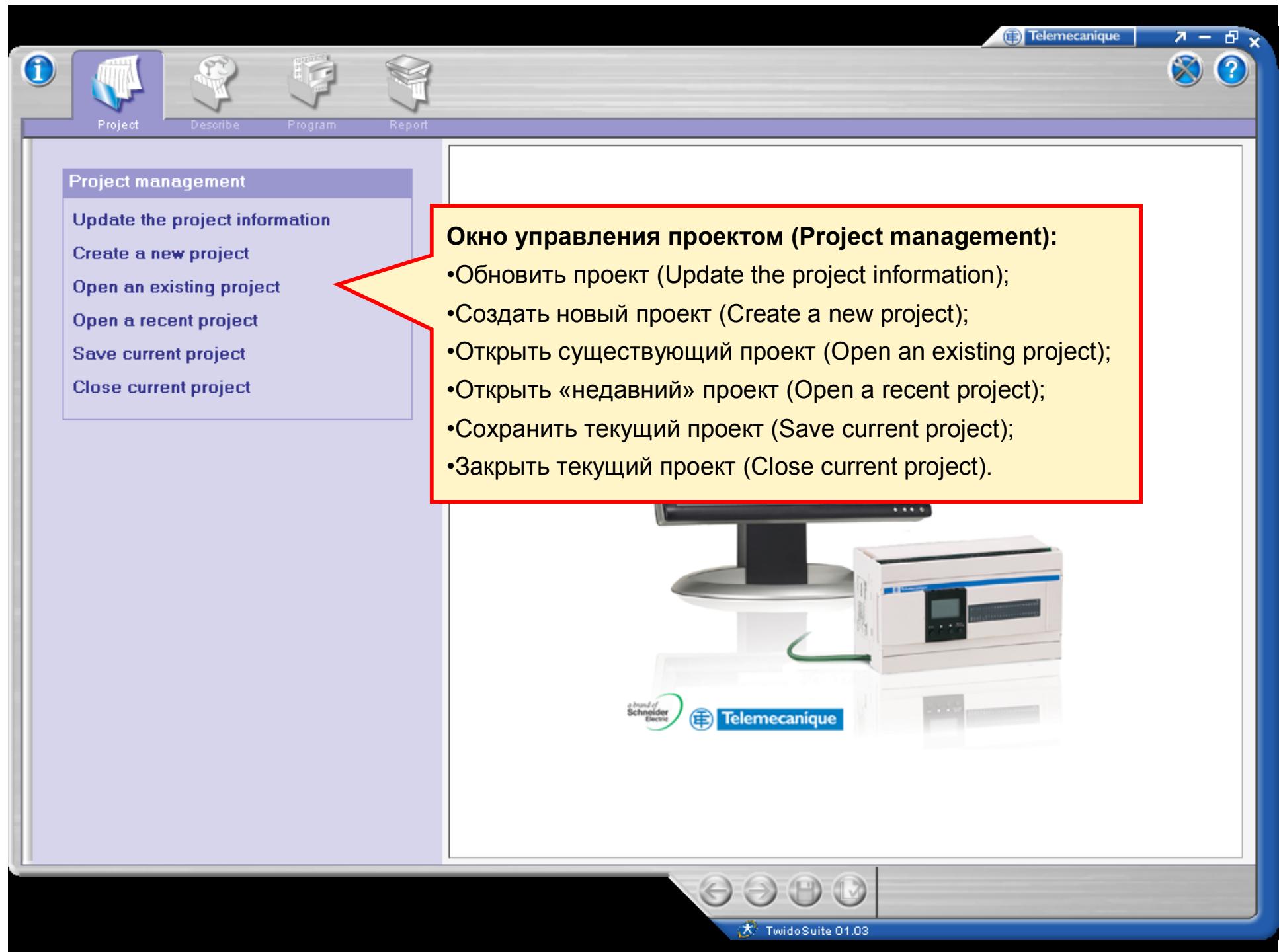
Переход на сайт  
[www.telemecanique.com](http://www.telemecanique.com)

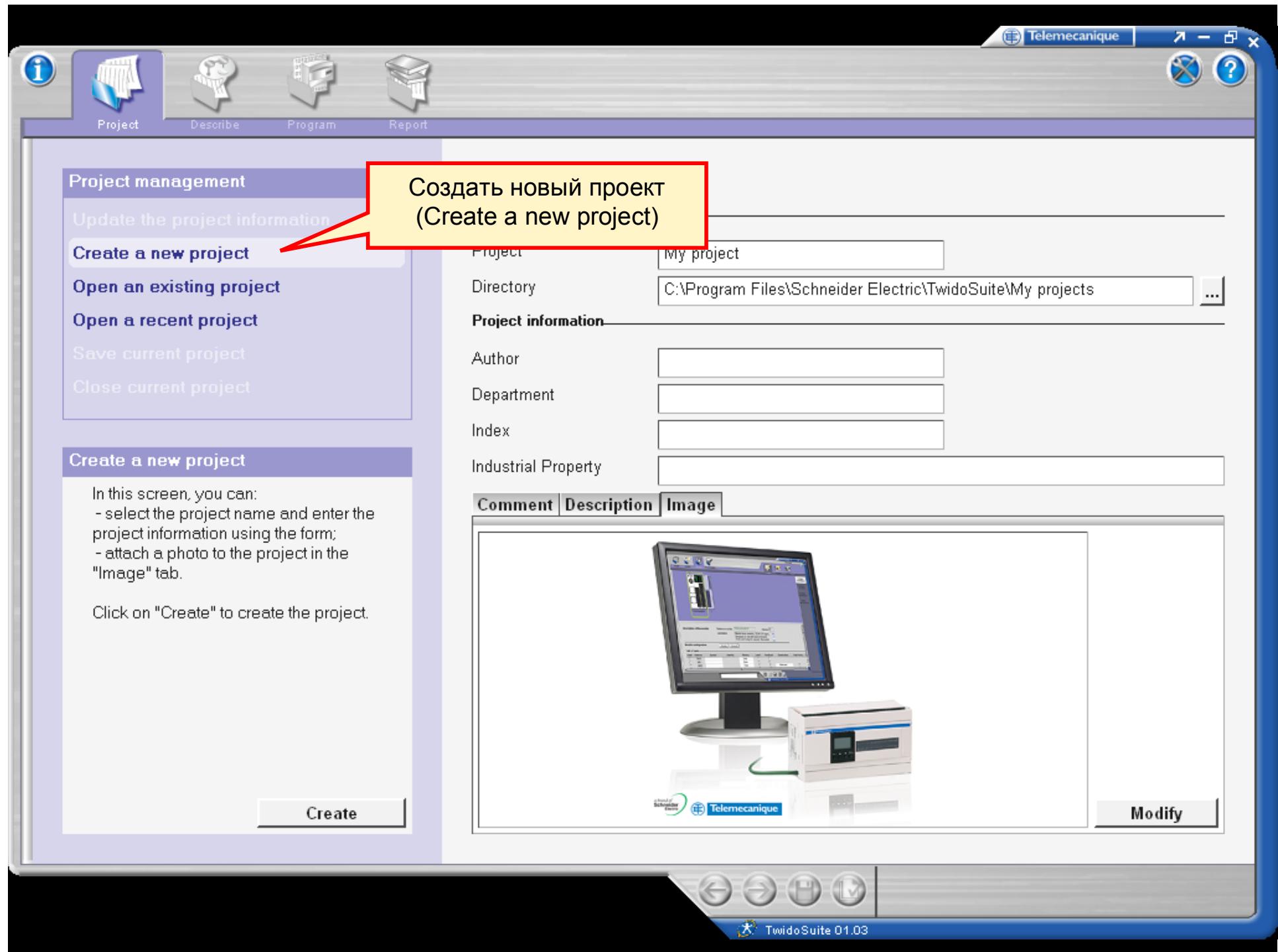
Общий обзор  
(General Survey)

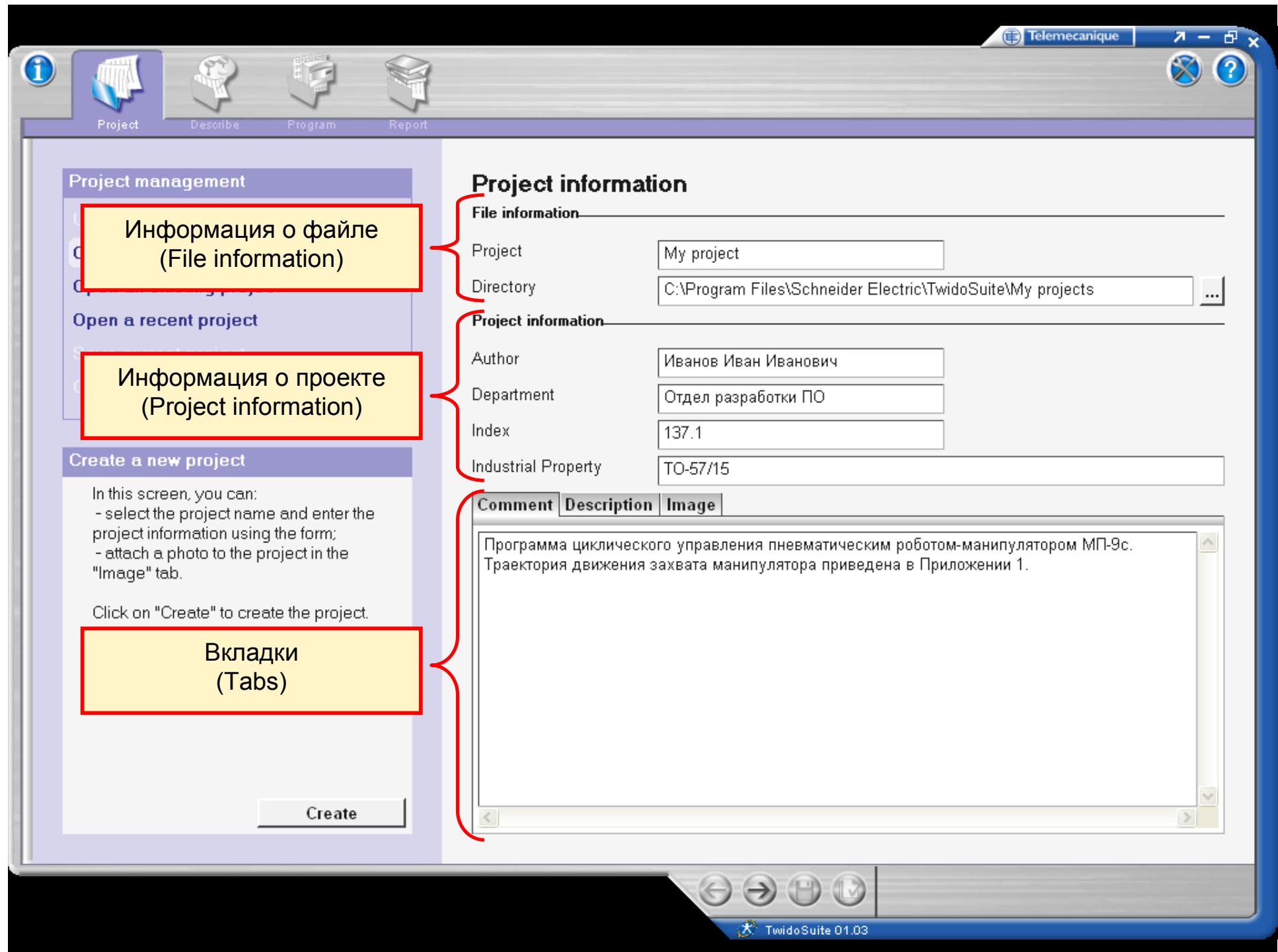
Что нового  
(What's New)

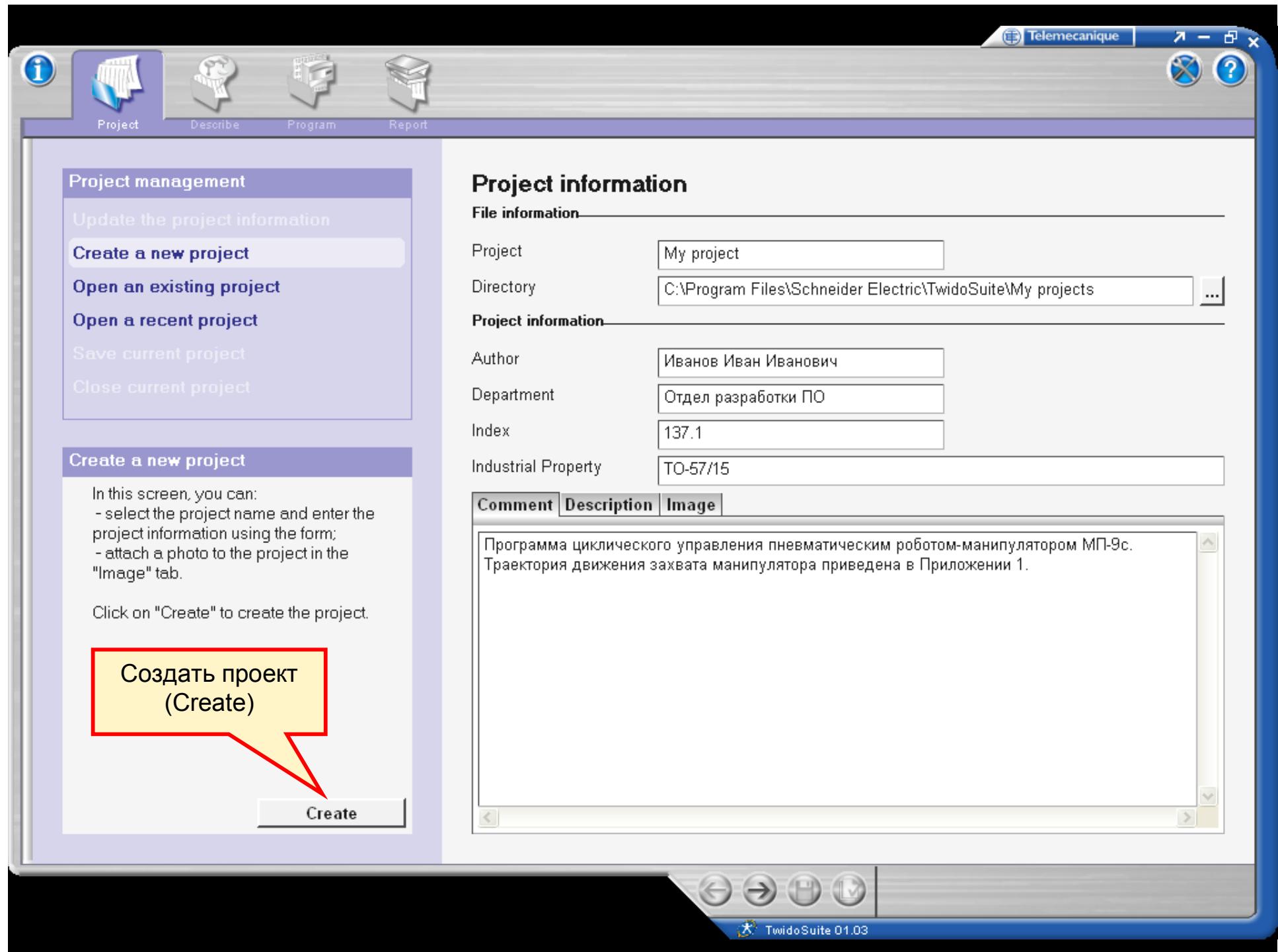


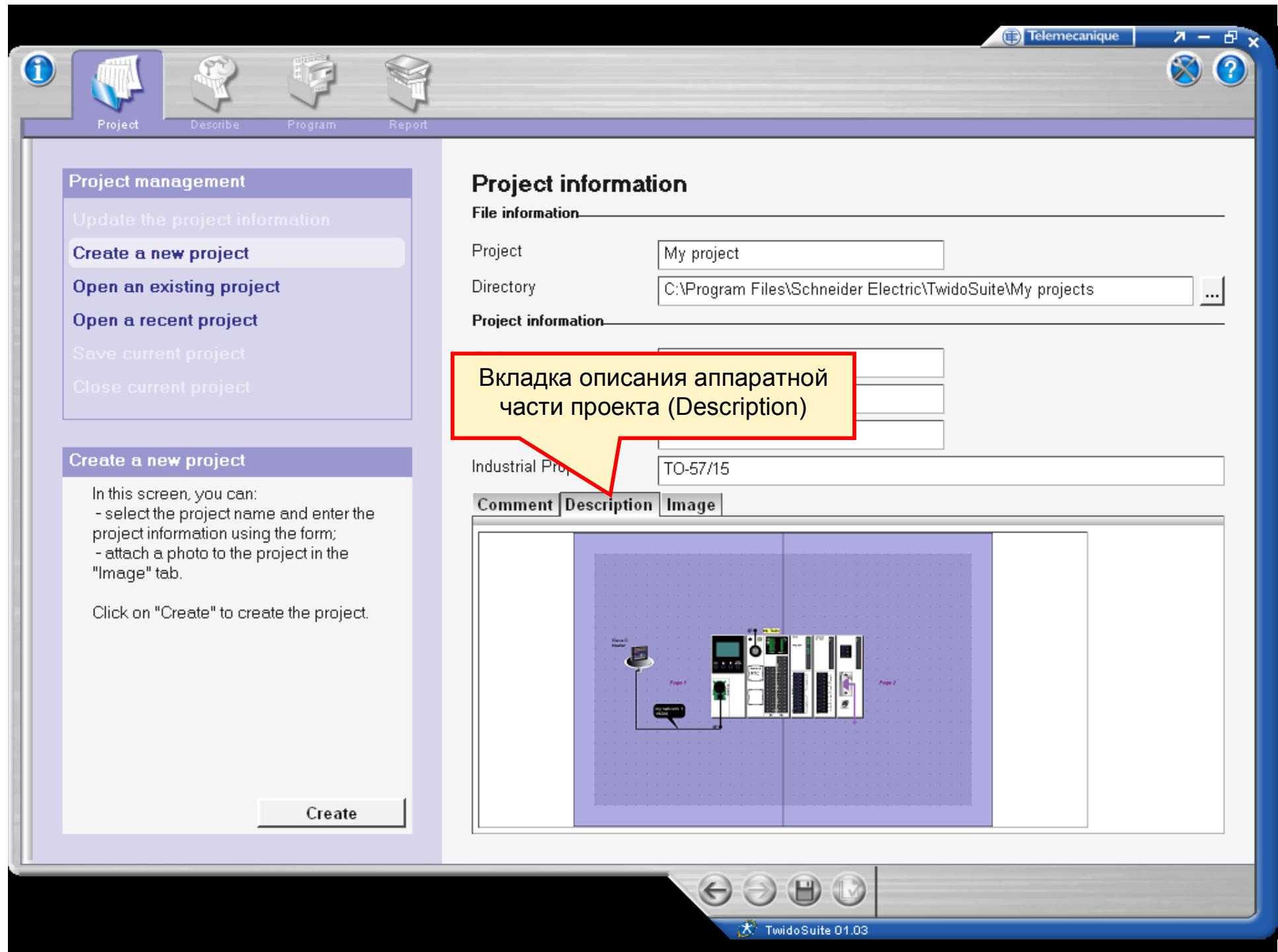












Project      Describe      Program      Report

## Project management

Update the project information

**Create a new project**

**Open an existing project**

**Open a recent project**

Save current project

Close current project

## Create a new project

In this screen, you can:

- select the project name and enter the project information using the form;
- attach a photo to the project in the "Image" tab.

Click on "Create" to create the project.

**Create**

## Project information

File information

Project: My project

Directory: C:\Program Files\Schneider Electric\TwidoSuite\My projects ...

Project information

Author: [Red box]

Department: [Red box]

Index: [Red box]

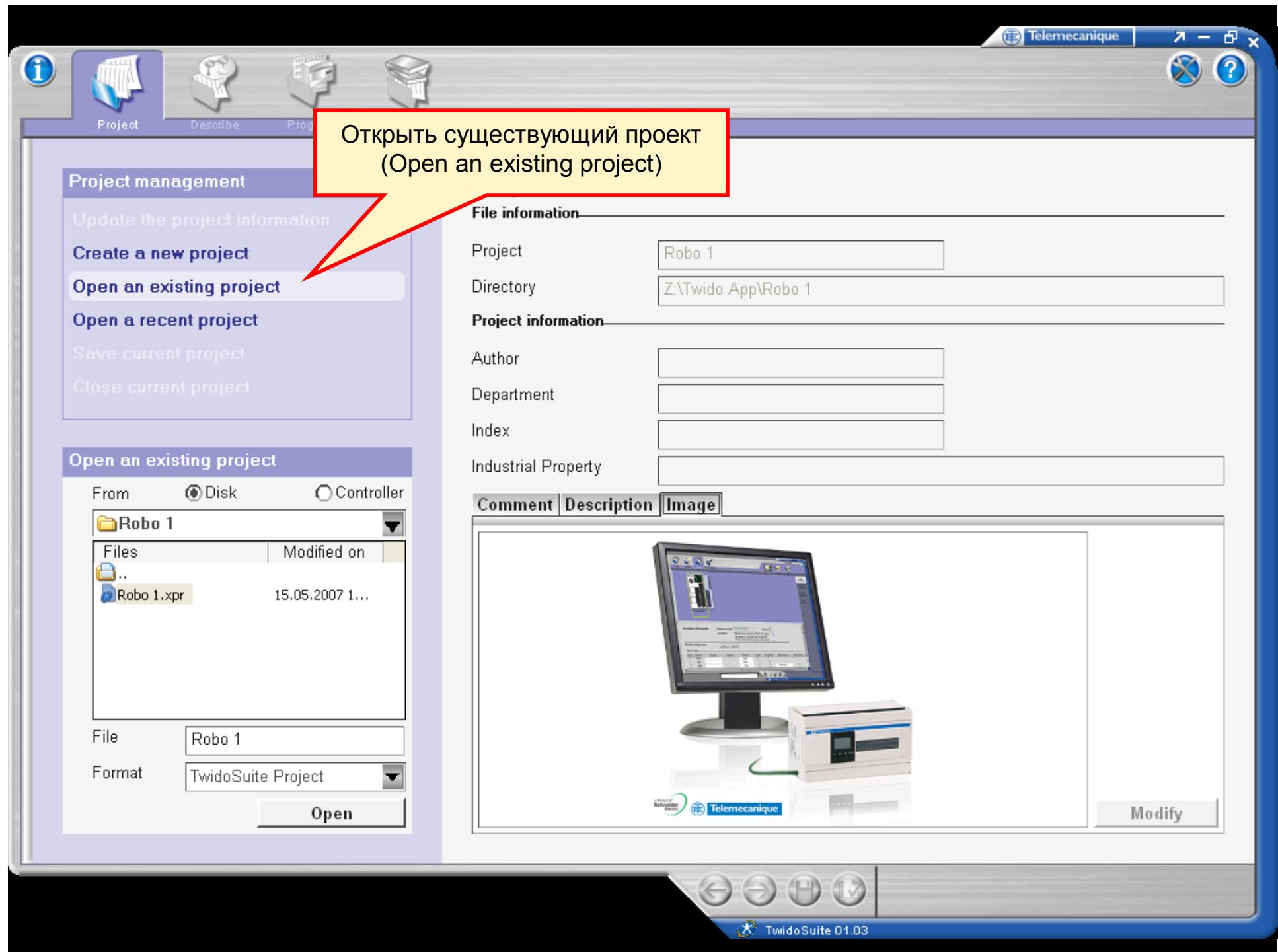
Industrial Property: 57/15

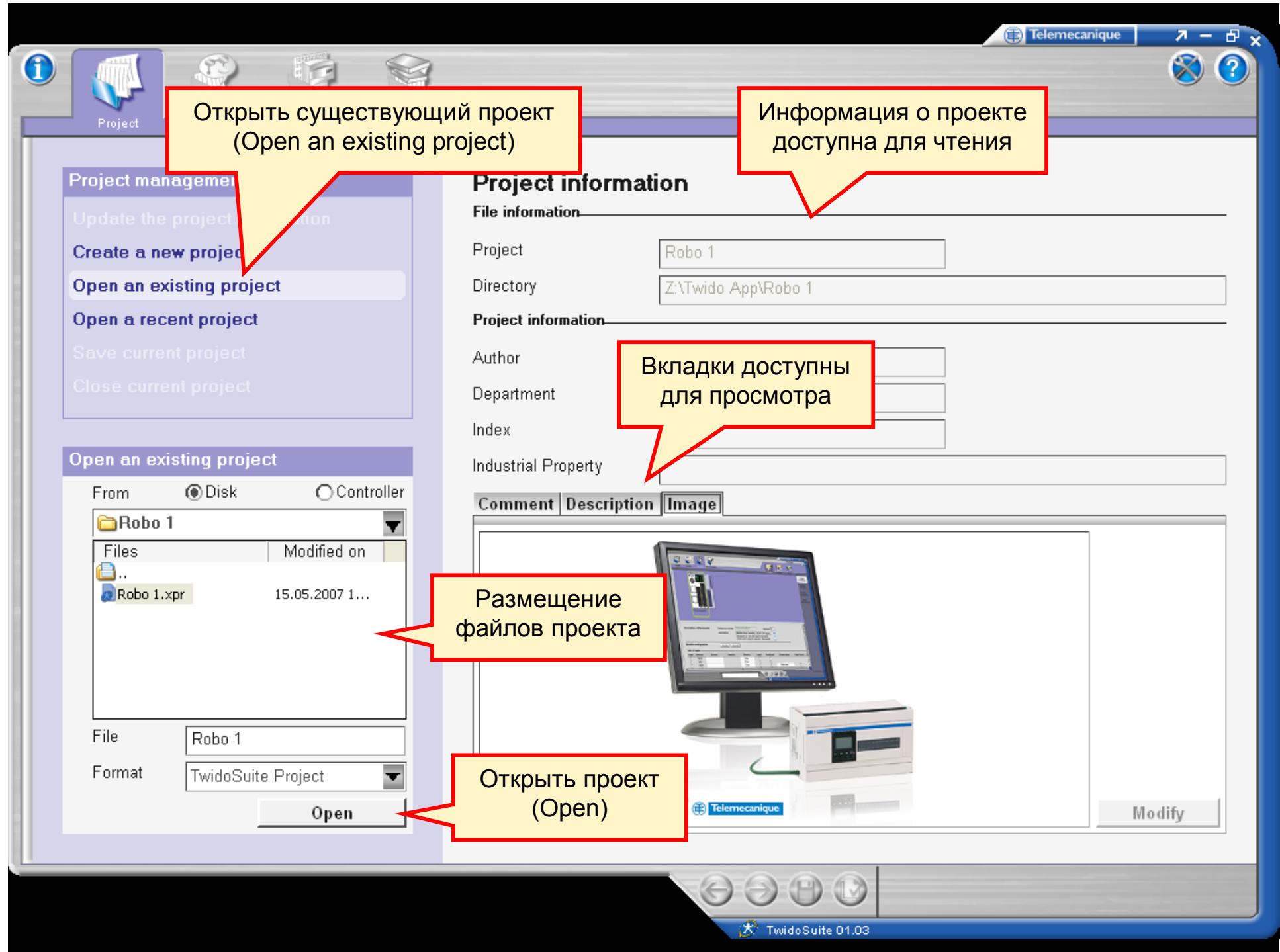
Comment      Description      **Image**

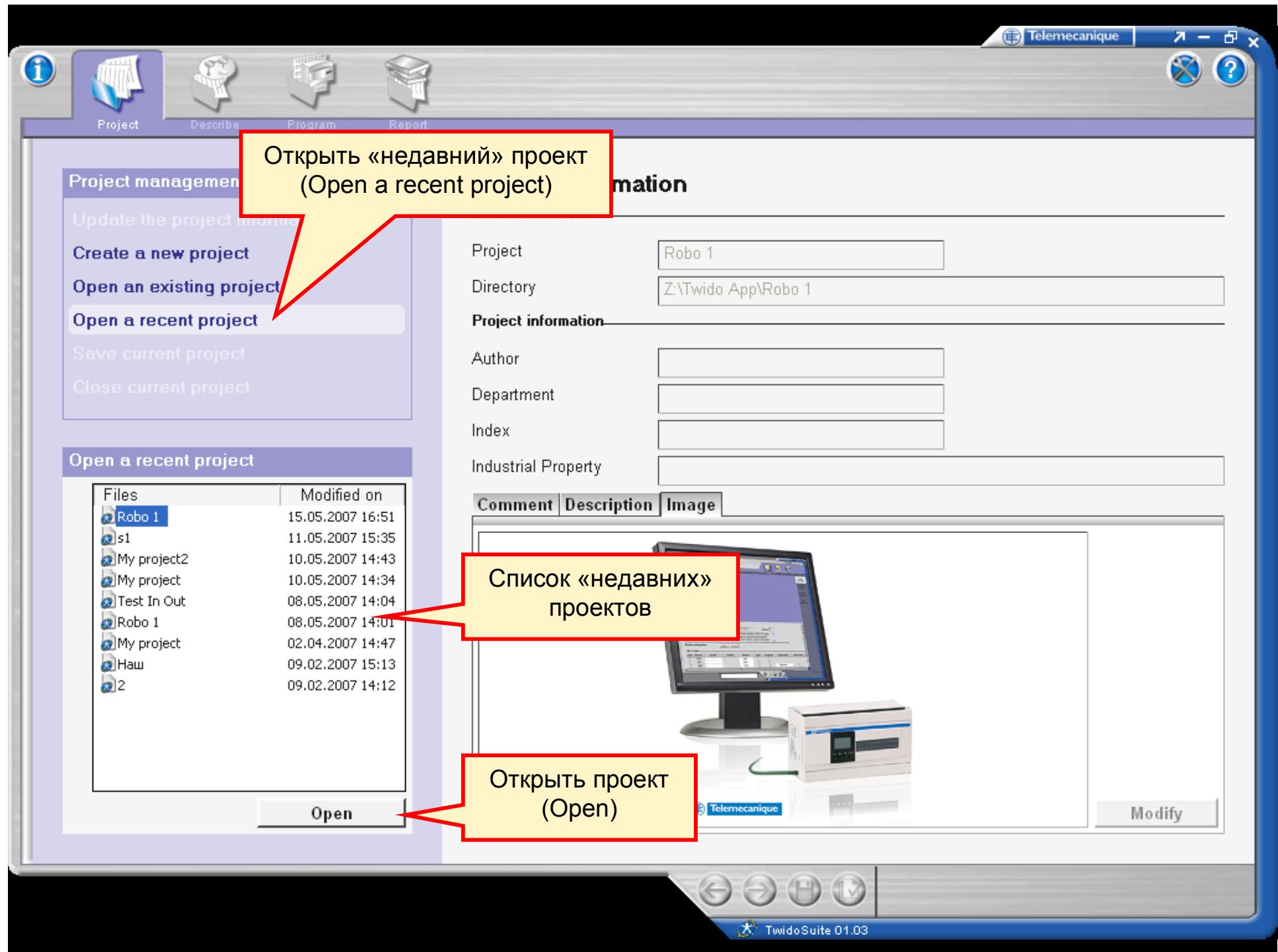
Изменить рисунок (Modify)

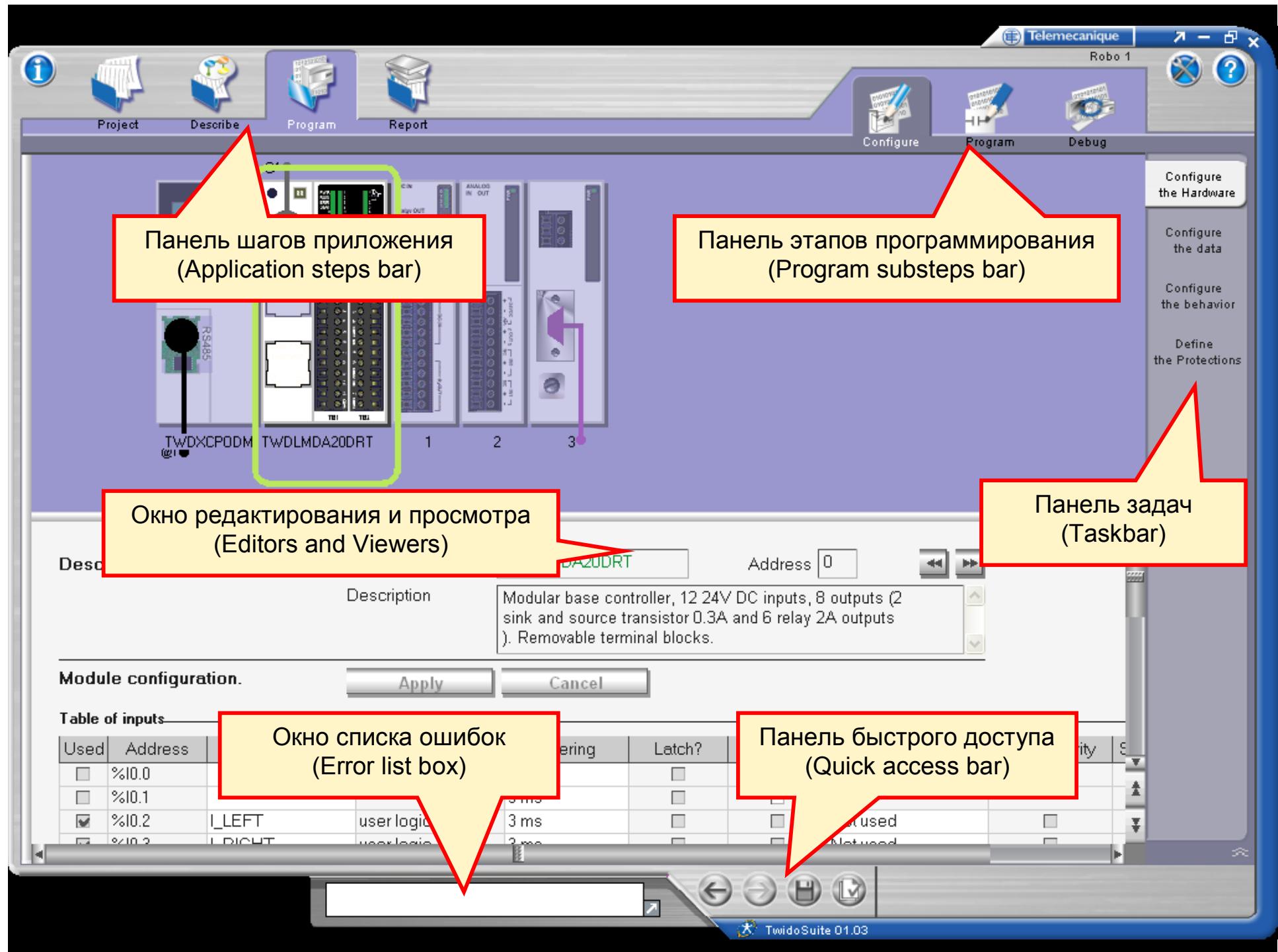
Modify

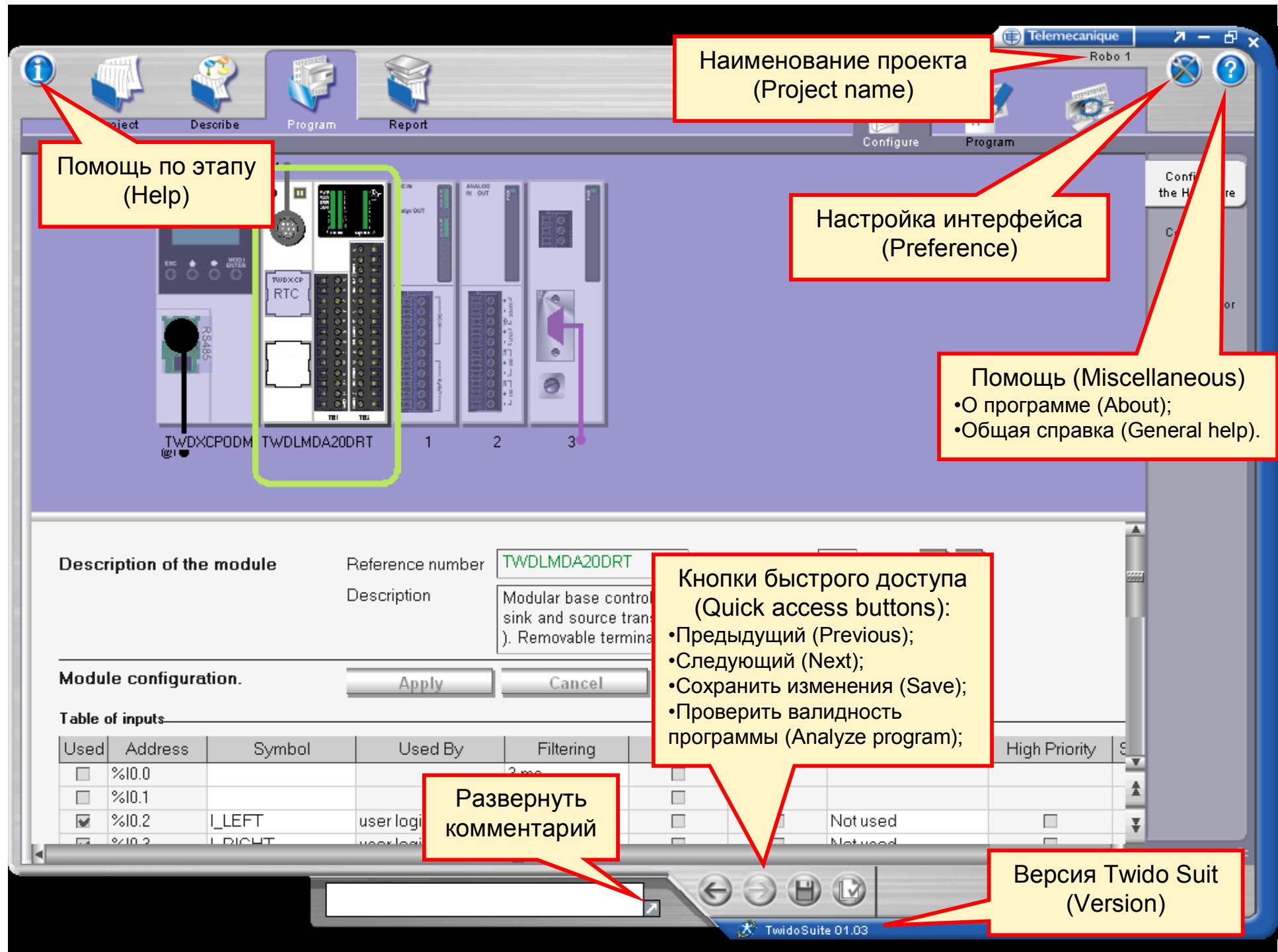
TwidoSuite 01.03



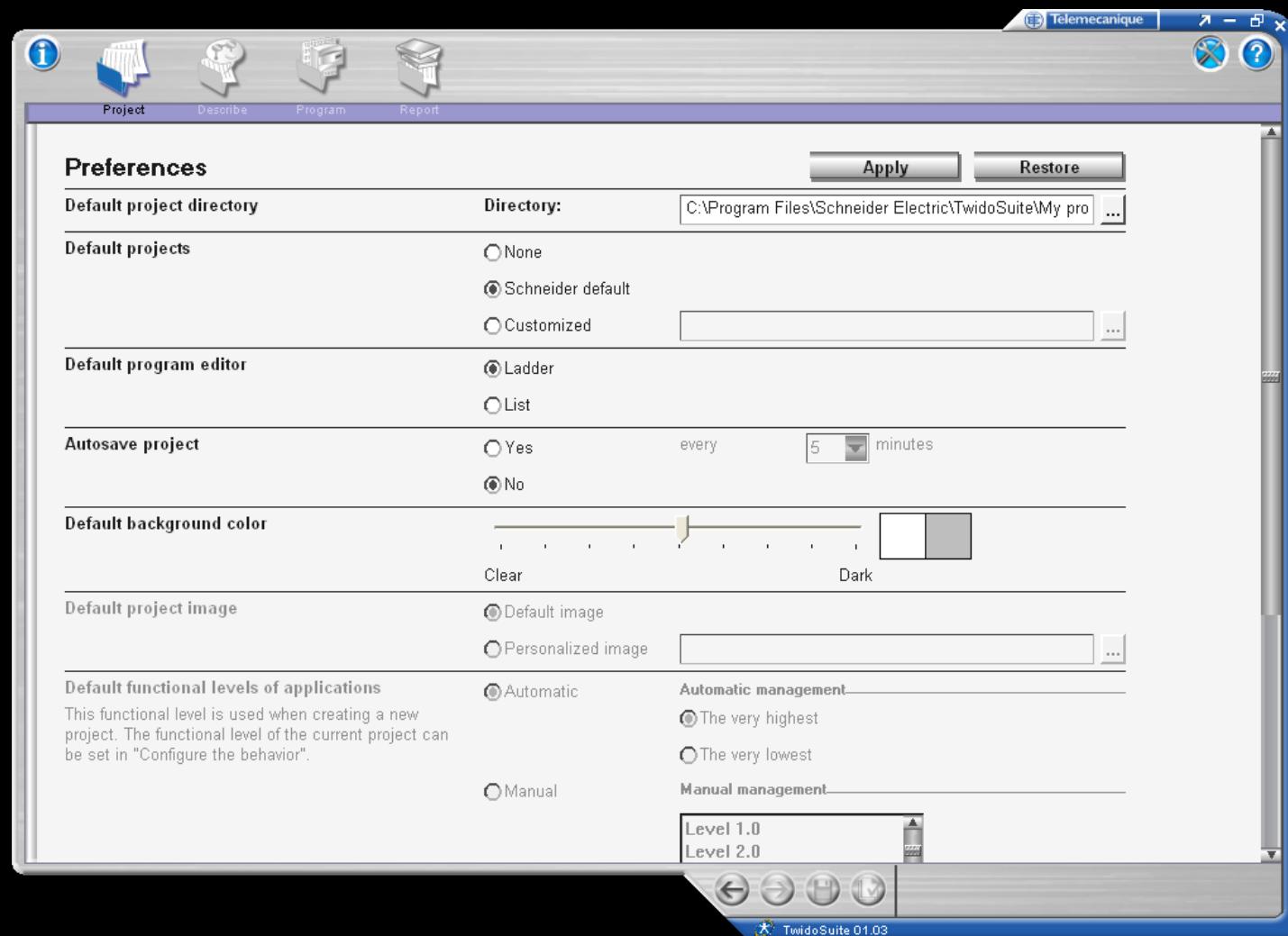




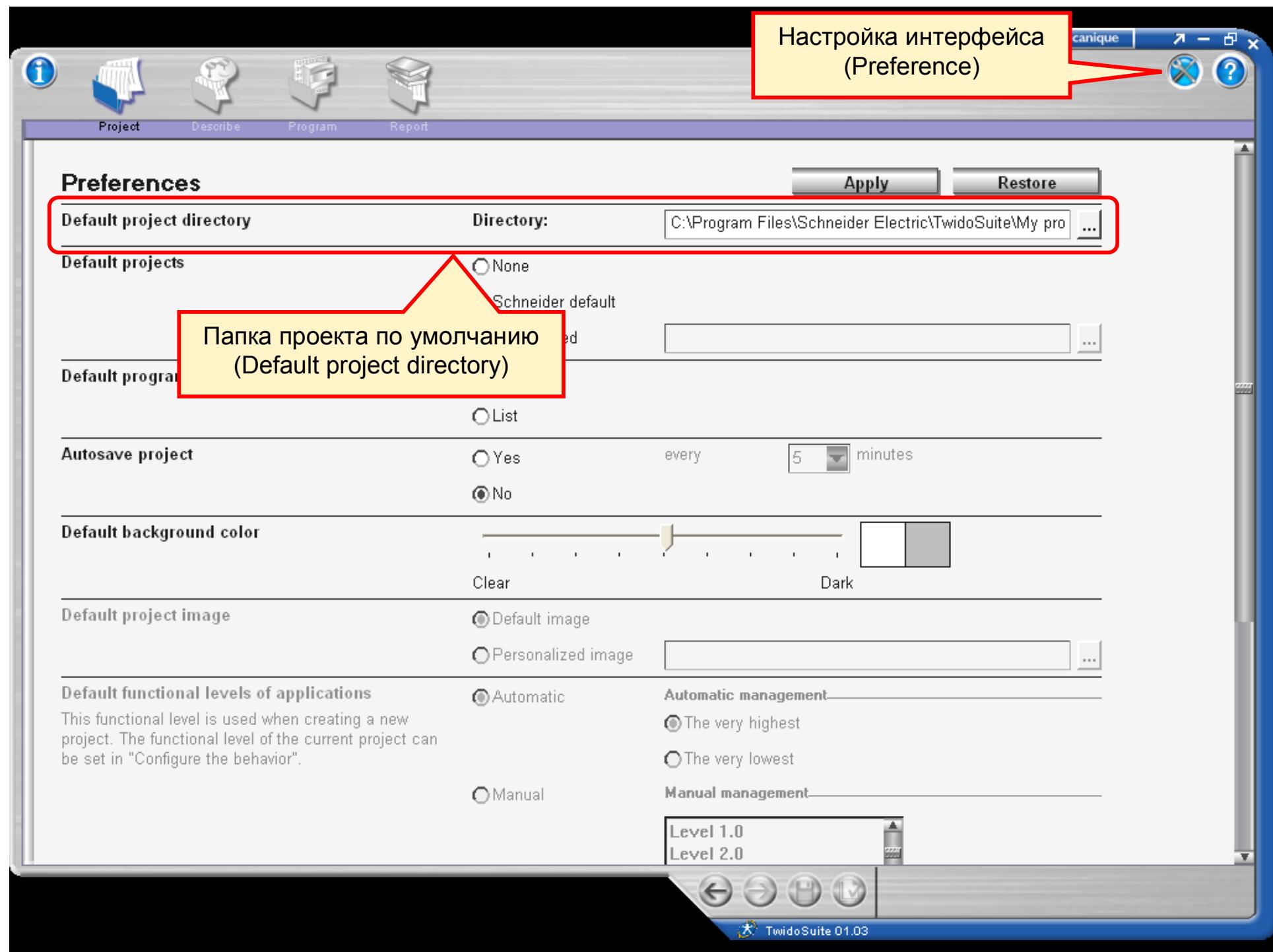




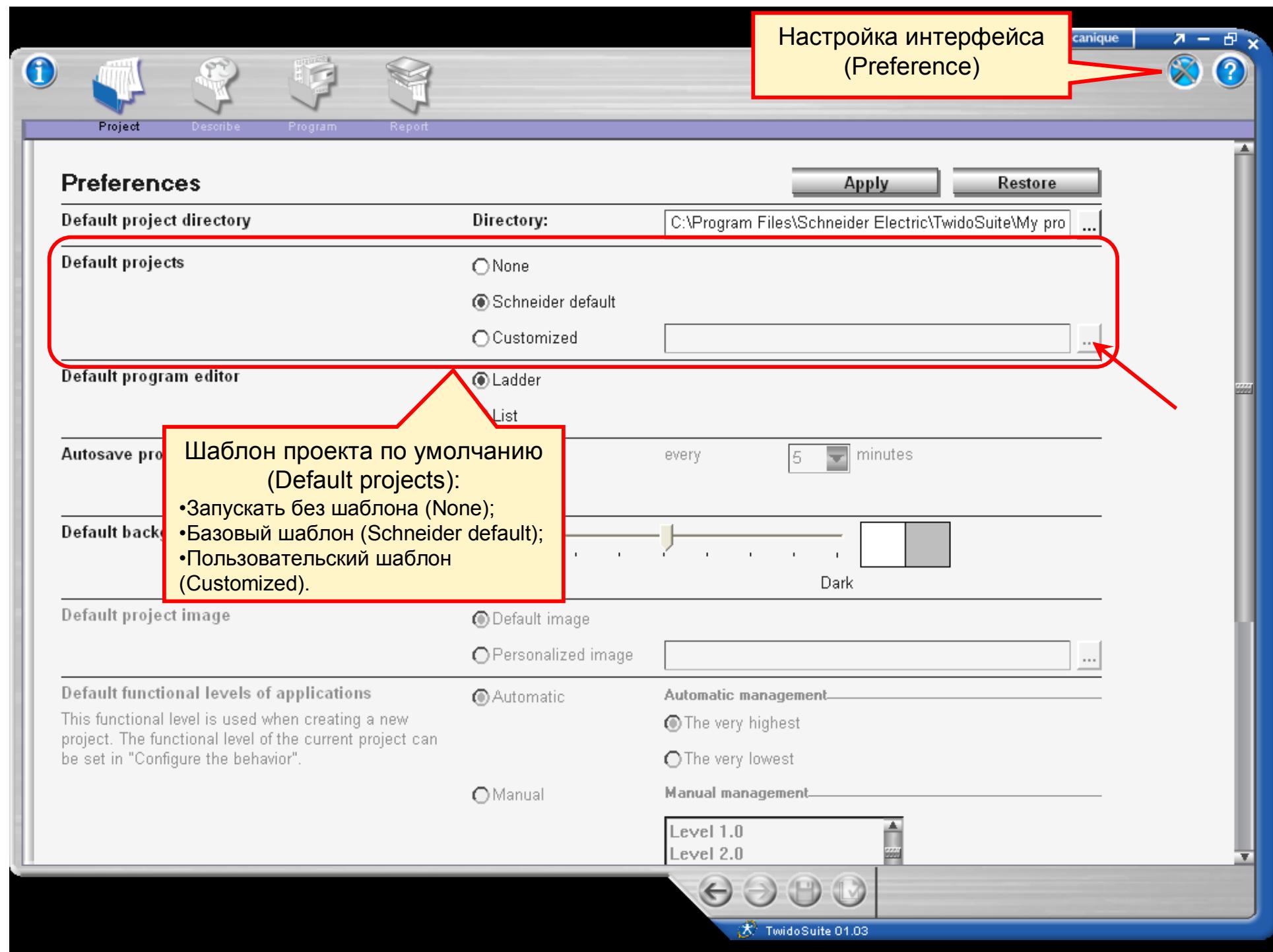
# Настройка оболочки



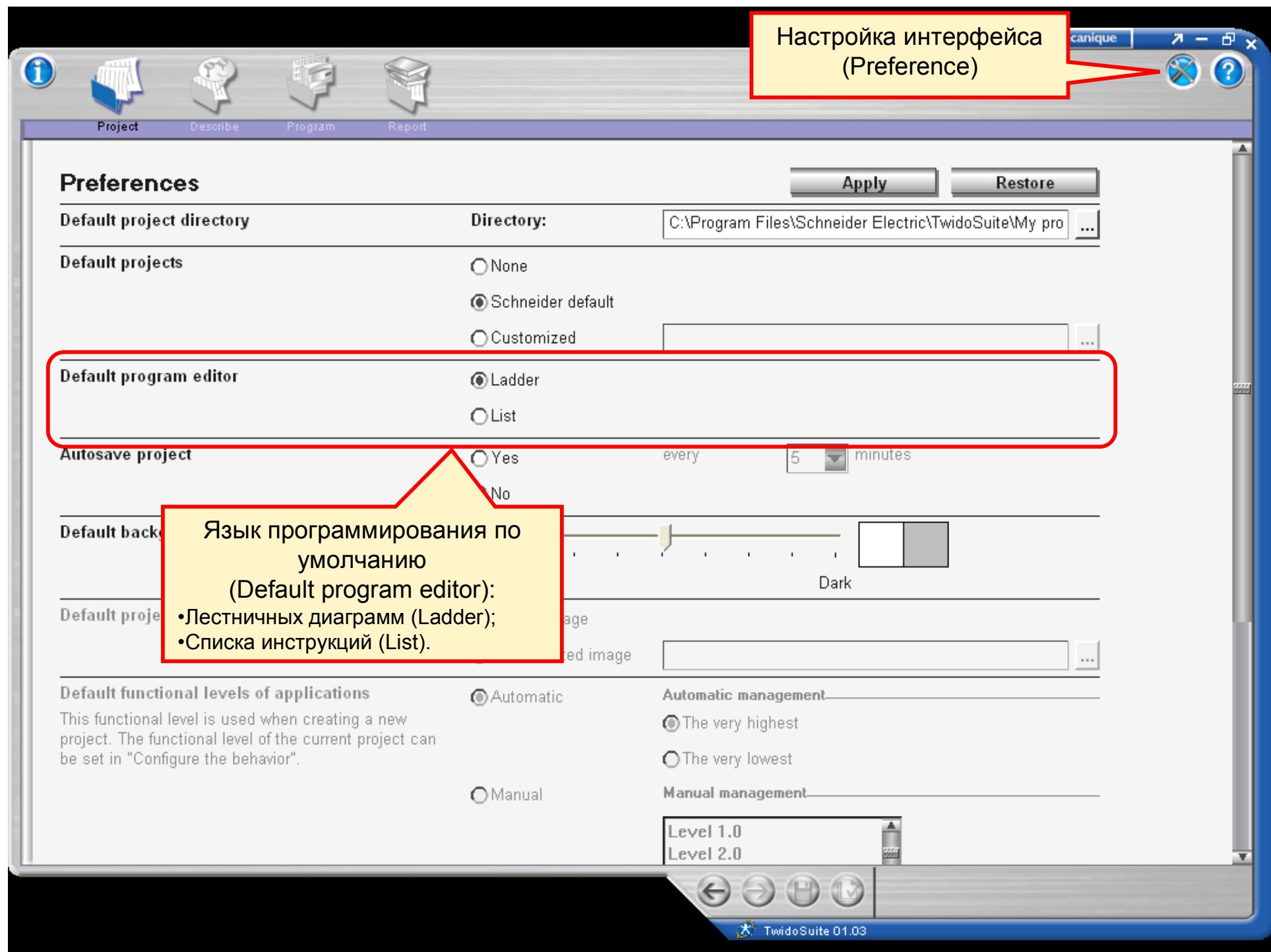
Настройка интерфейса  
(Preference)



Настройка интерфейса  
(Preference)



Настройка интерфейса  
(Preference)



Настройка интерфейса  
(Preference)

Project      Describe      Program      Report

**Preferences**

Default project directory      Directory: C:\Program Files\Schneider Electric\TwidoSuite\My pro ...

Apply      Restore

Default projects       None  
 Schneider default  
 Customized

Default program editor       Ladder  
 List

**Autosave project**       Yes      every 5 minutes  
 No

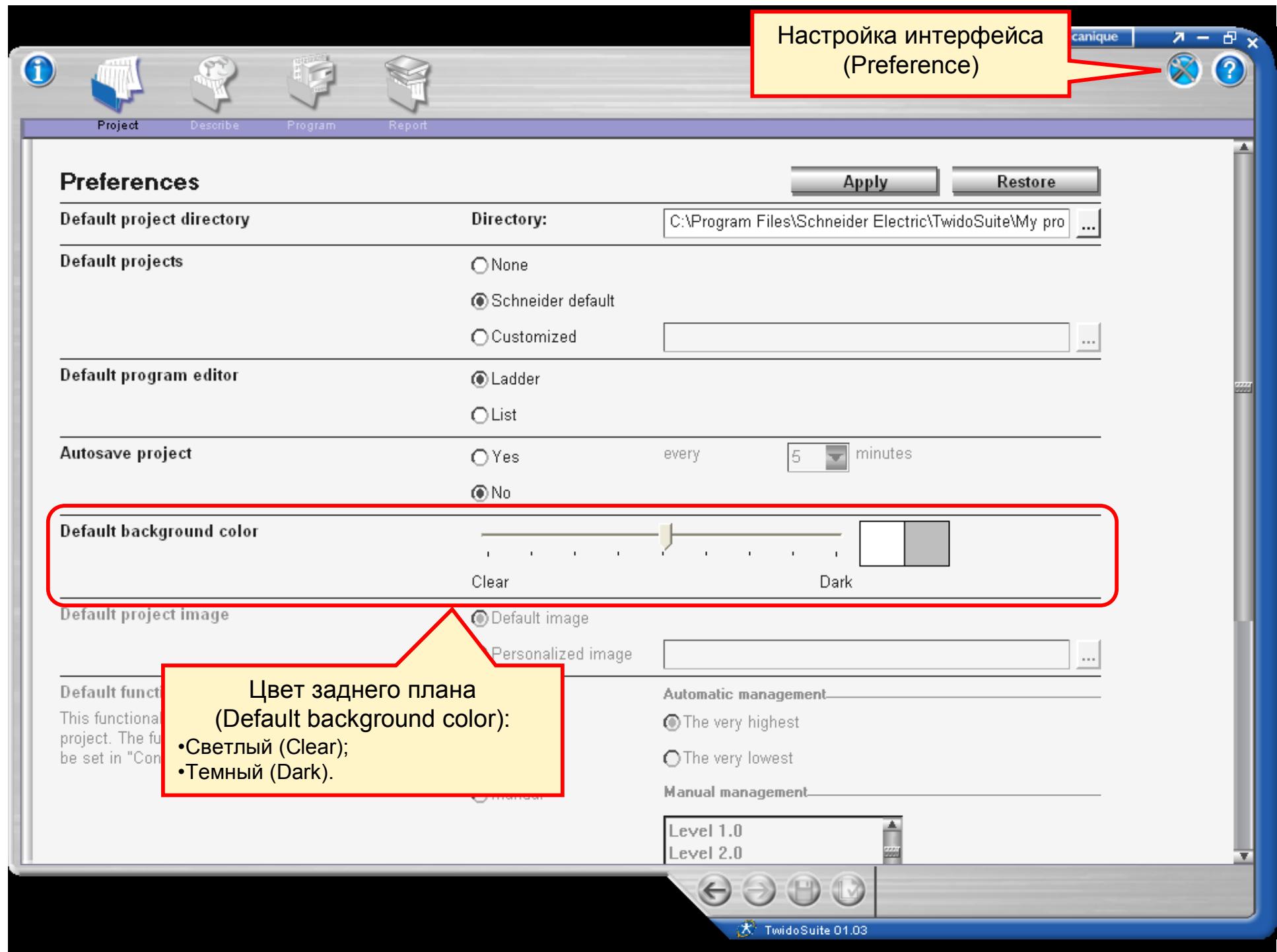
Default background color      [Color Swatch] Dark

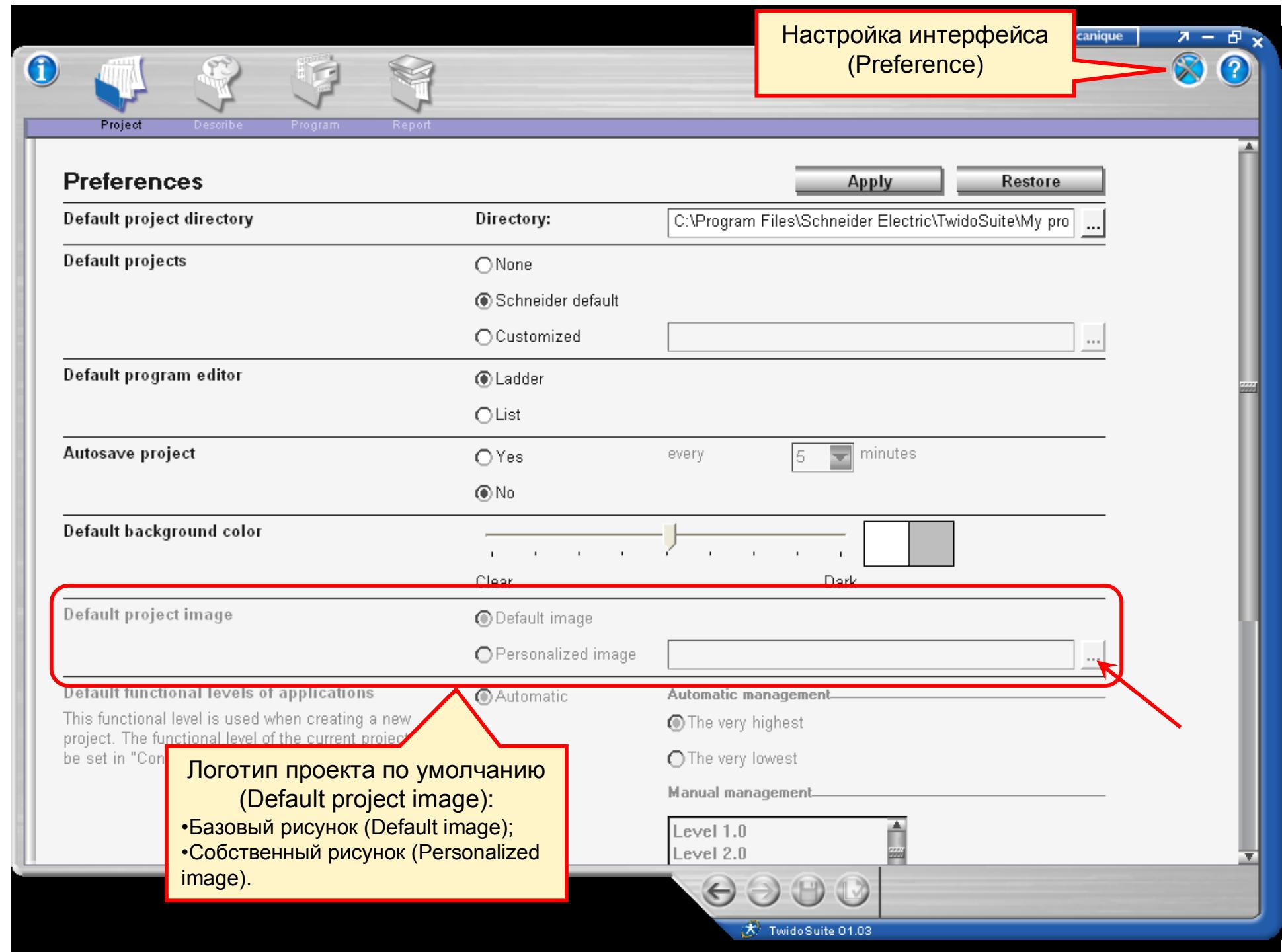
Default project image      [Image Placeholder] ...

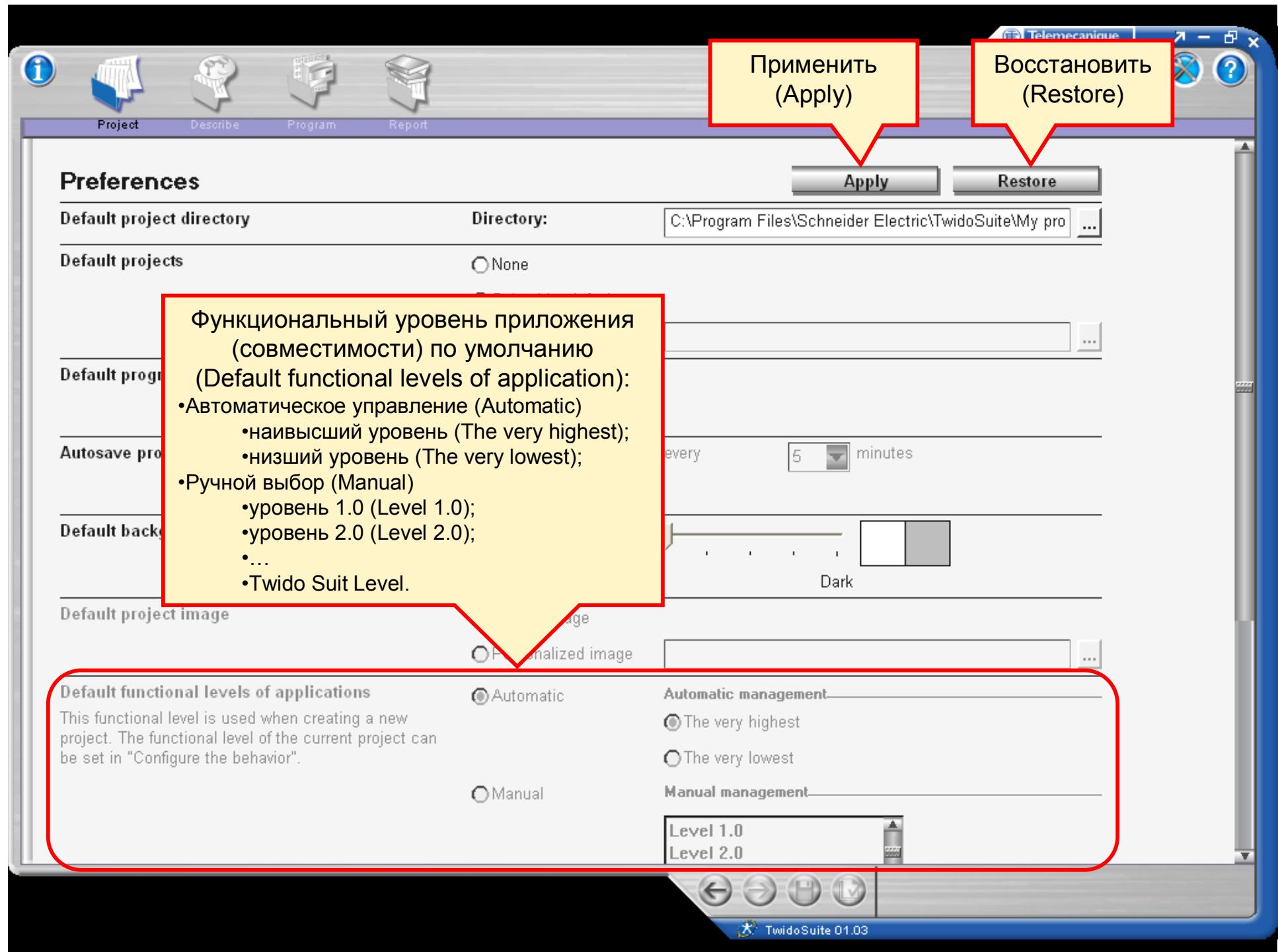
Default functional levels of applications       Automatic      Automatic management  
 The very highest  
 The very lowest  
 Manual      Manual management  
Level 1.0  
Level 2.0

TwidoSuite 01.03

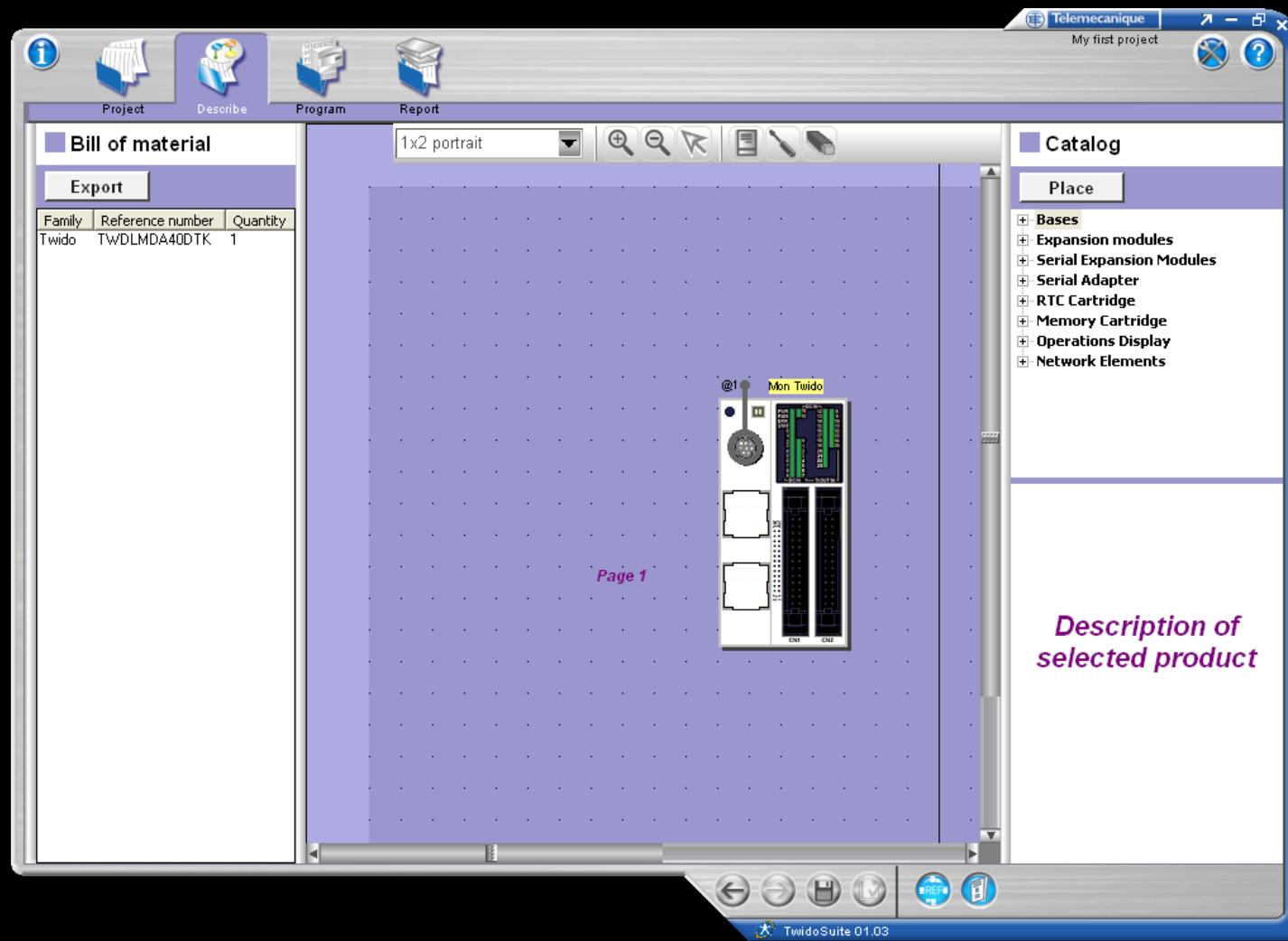
Настройка интерфейса  
(Preference)

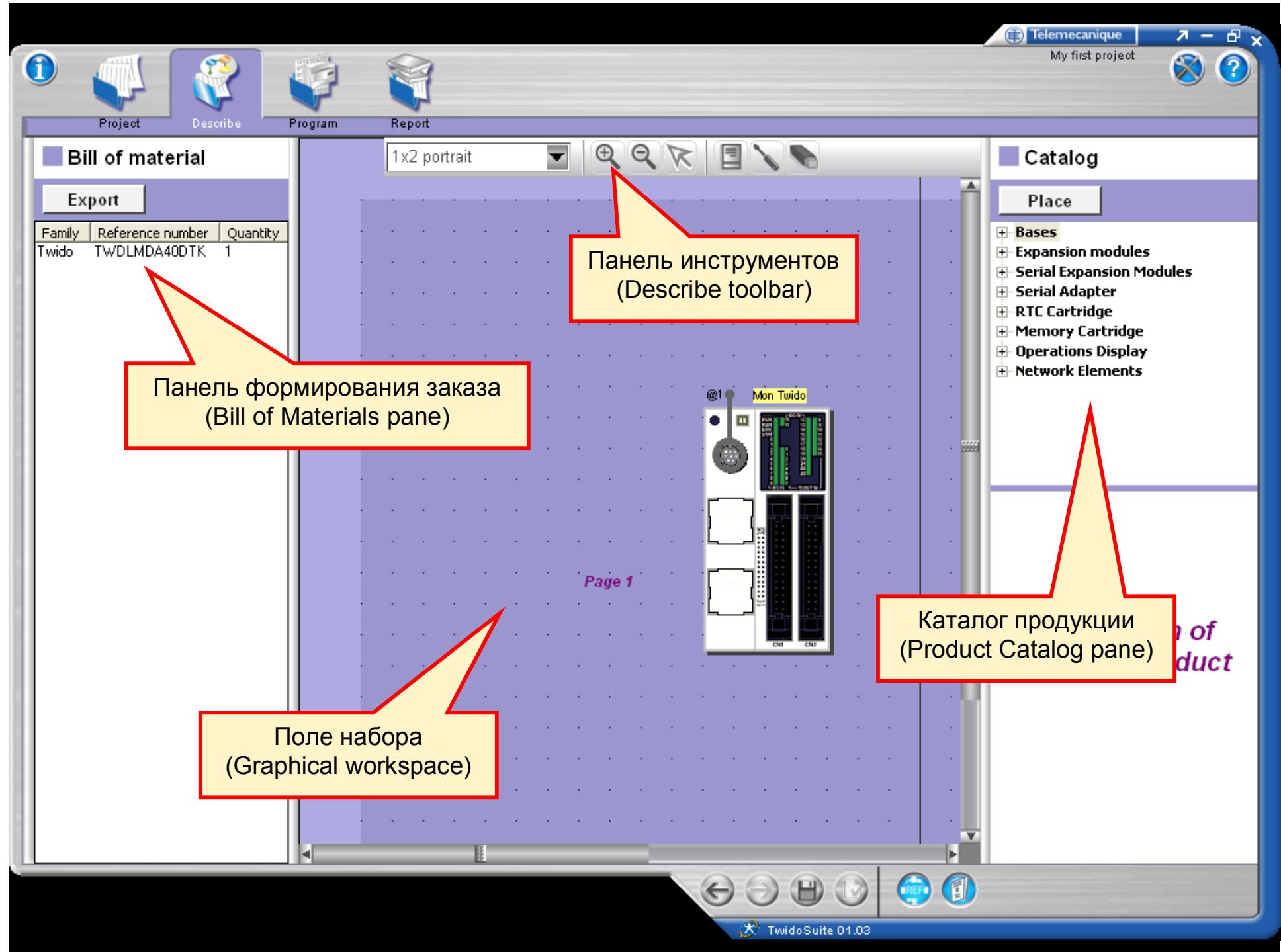


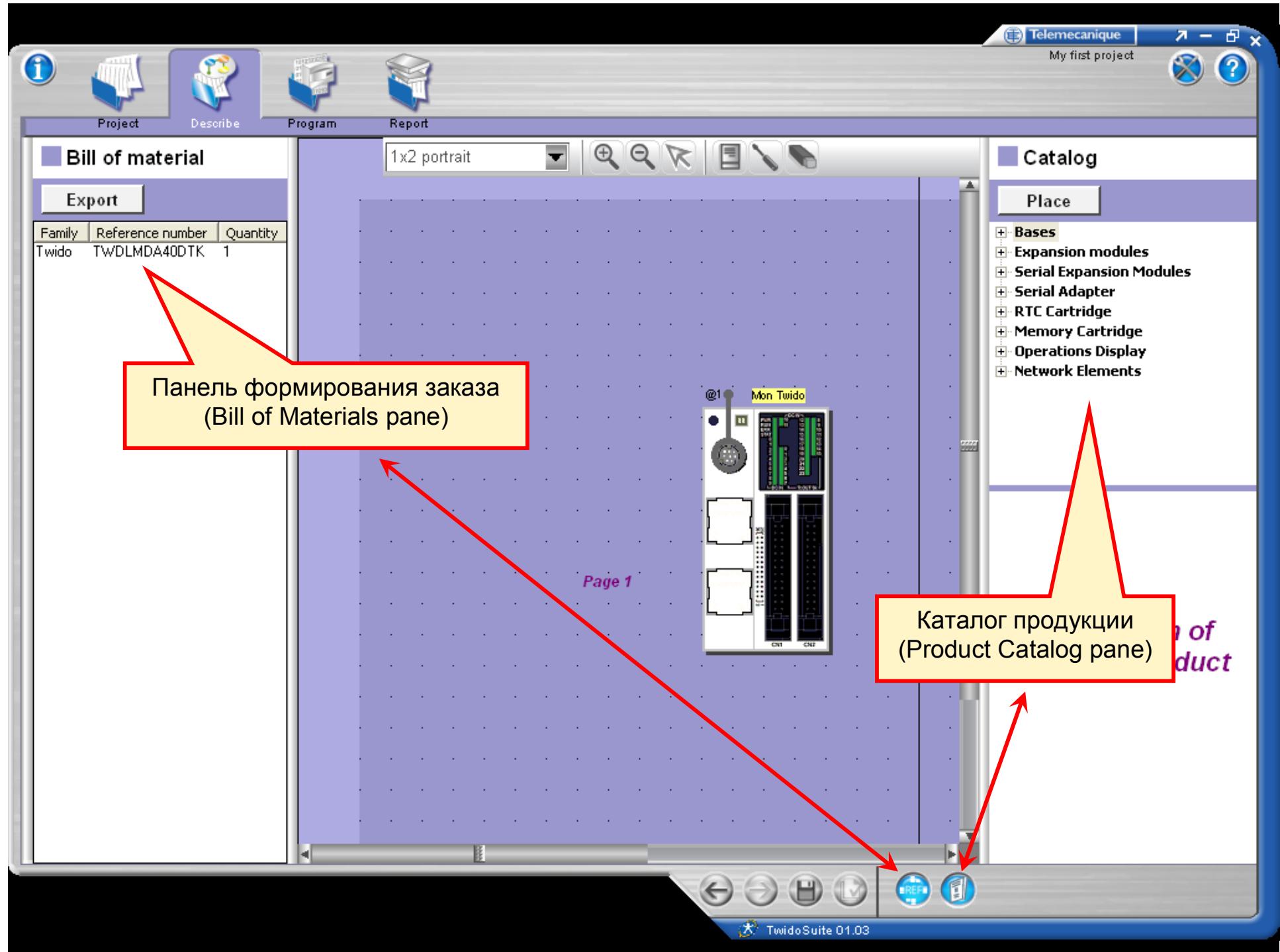


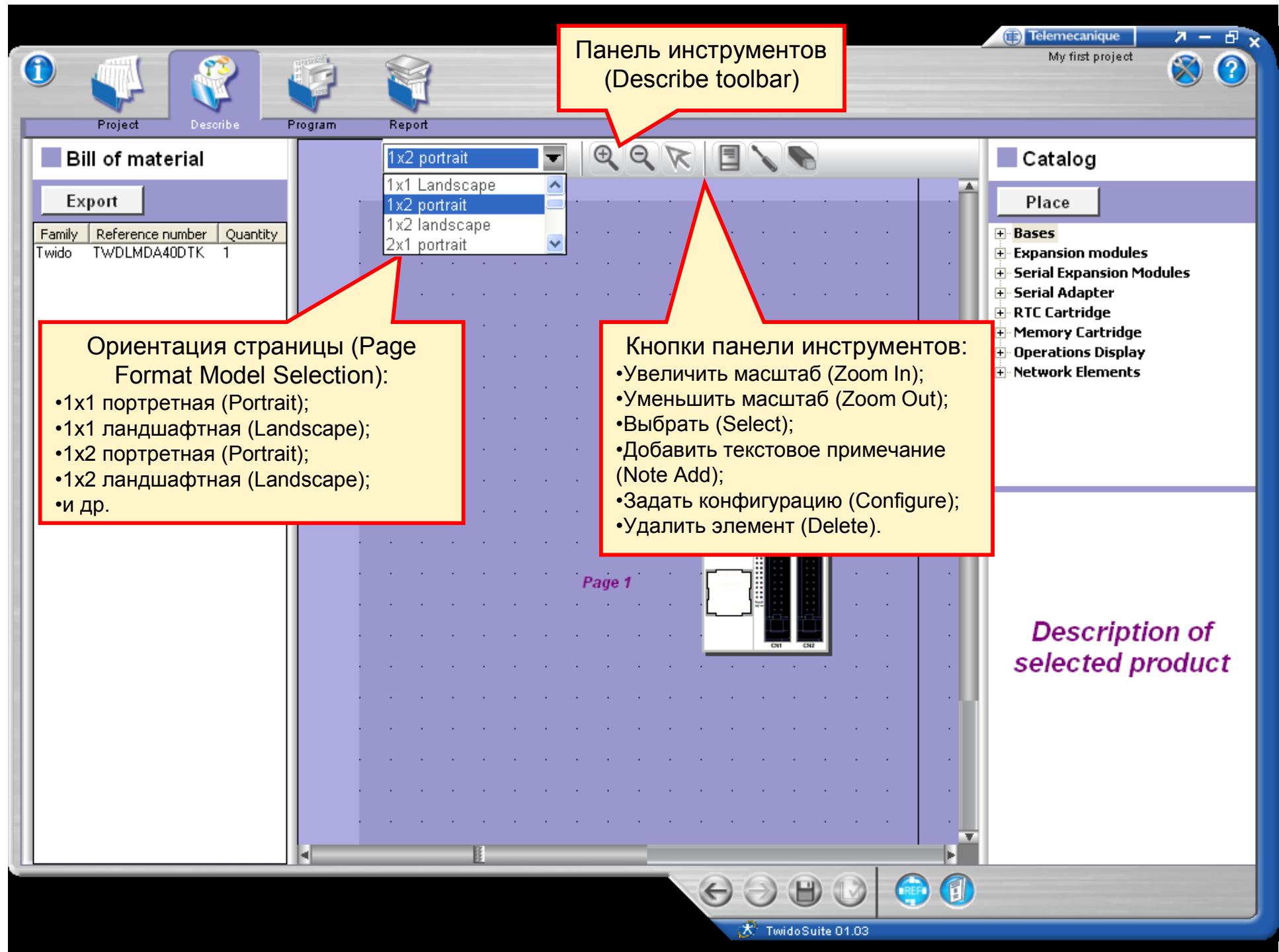


# Описание проекта









Панель формирования заказа  
(Bill of Materials pane)

Экспорт в файл  
(Export)

Поля панели формирования заказа:  
•Семейство (Family);  
•Каталожный номер (Reference number);  
•Количество (Quantity).

Page 1

Mon Twido

Description of selected product

TwidoSuite 01.03

The screenshot shows the TwidoSuite software interface. The top menu bar includes 'Project', 'Describe', 'Program', and 'Report'. The 'Bill of material' pane on the left displays a table with one row: 'Family' (Twido), 'Reference number' (TWDLMDA40DTK), and 'Quantity' (1). An 'Export' button is highlighted with a red box. The 'Catalog' pane on the right lists categories like 'Bases', 'Expansion modules', etc. A central workspace shows a schematic diagram of a 'Mon Twido' module. A callout box points to the 'Description of selected product' text. The bottom status bar shows 'TwidoSuite 01.03'.

Каталог продукции  
(Product Catalog pane)

Поместить элемент  
(Place)

Список продуктов  
(Product catalog)

Описание  
выбранного элемента  
(Product description)

Bill of material

Family	Reference number	Quantity
Twido	TWDLMDA40DTK	1

Export

1x2 portrait

Page 1

Project

Describe

Program

Report

Catalog

Place

Bases

- + Compact
- Modular
  - TWDLMDA20DTK
  - TWDLMDA20DUK
  - TWDLMDA20DRT**
  - TWDLMDA40DTK
  - TWDLMDA40DUK

Expansion modules

- + Serial Expansion Modules
- + Serial Adapter
- + RTC Cartridge
- + Memory Cartridge

**TWDLMDA20DRT**

Modular base controller, 12 24V DC inputs, 8 outputs (2 sink and source transistor 0.3A and 6 relay 2A outputs). Removable terminal blocks.

Telemecanique My first project

Project Describe Program Report

Bill of material

Export

Family	Reference number	Quantity
Twido	TwDLMDA40DTK	1

1x2 portrait

Place

**Digital Expansions**

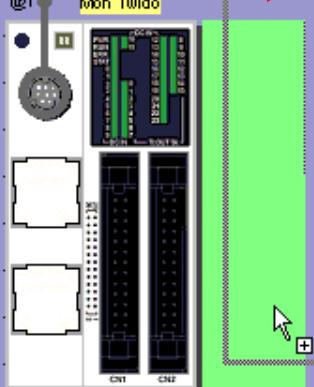
- TWDDDI8DT
- TWDDAI8DT
- TWDDDI16DT
- TWDDDI16DK
- TWDDDI32DK
- TWDDMM8DRT**
- TWDDMM24DRF
- TWDDDO8UT
- TWDDDO8TT
- TWDDRA8RT
- TWDDRA16RT
- TWDDDO16UK

**TWDDMM8DRT**

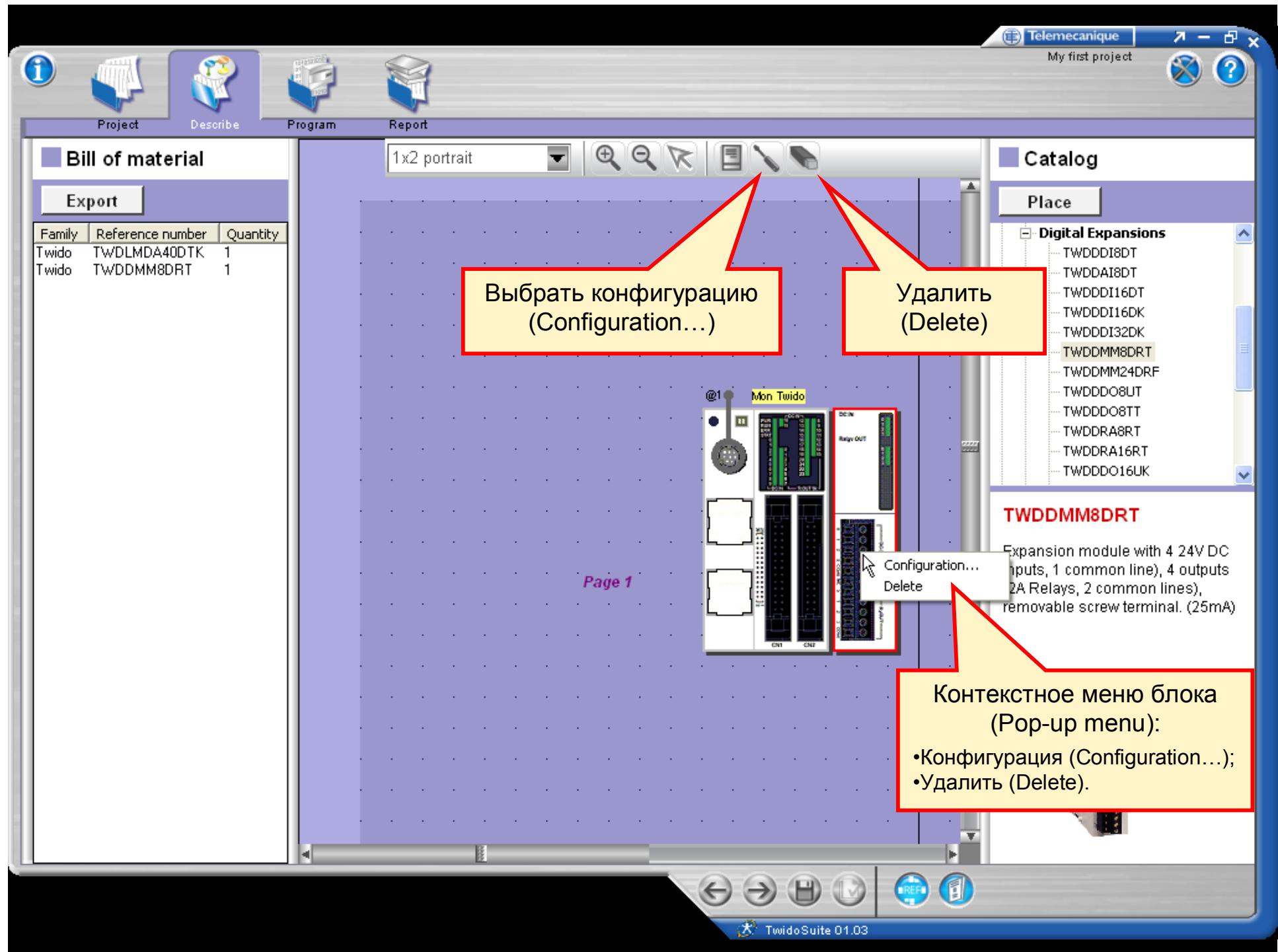
Expansion module with 4 24V DC inputs, 1 common line), 4 outputs (2A Relays, 2 common lines), removable screw terminal. (25mA)

Page 1

Mon Twido



TwidoSuite 01.03



Добавить комментарий  
(Note Add)

Bill of material

Family	Reference number	Quantity
Twido	TWDLMDA40DTK	1
Twido	TWDDMM8DRT	1

Export

1x2 portrait

Place

Page 1

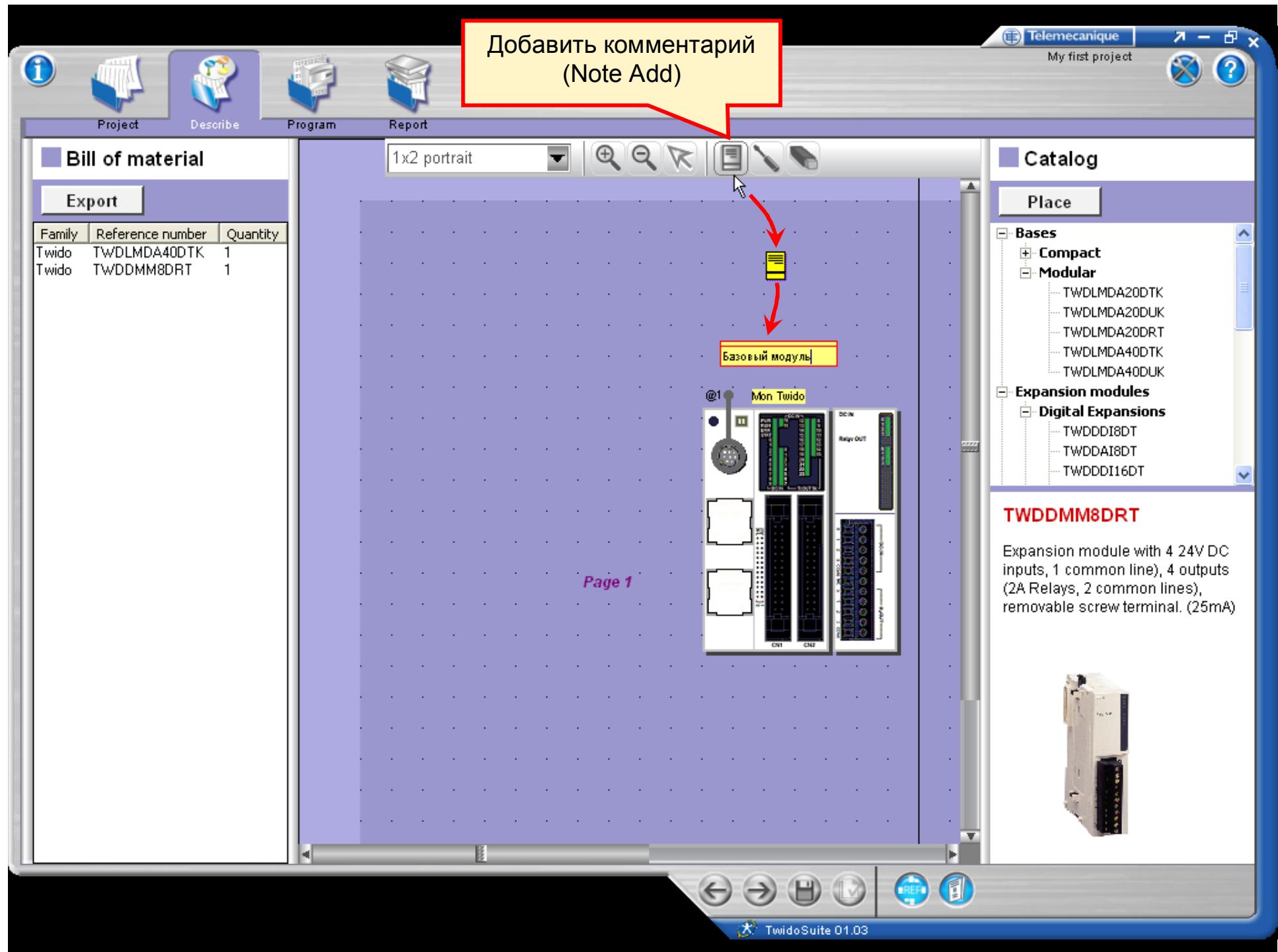
Базовый модуль

Mon Twido

TWDDMM8DRT

Expansion module with 4 24V DC inputs, 1 common line), 4 outputs (2A Relays, 2 common lines), removable screw terminal. (25mA)

TwidoSuite 01.03



Bill of material

Family	Reference number	Quantity
Twido	TWDLMDA20DRT	1
Twido	TWDMM8DRT	1
Twido	TWDAMM3HT	1
Twido	TWDNCO1M	1
Twido	TWDXCPODM	1
Twido	TWDNAC485D	1
Twido	TWDXCPRTC	1

Export

1x2 portrait

Bill of material

Place

Catalog

Часы реал. времени  
TWDXCPRTC

Интерфейс RS-485  
TWDNAC485D

Диспл. модуль  
TWDXCPODM

Базовый модуль  
TWDLMDA20DRT

Вв./выв. дискр.  
TWDMM8DRT

Вв./выв. аналог.  
TWDAMM3HT

Инт. CAN-Open  
TWDNCO1M

CANOpen

- TWDNCO1M

Serial Expansion Modules

Serial Adapter

- TWDNAC232D
- TWDNAC485D
- TWDNAC485T

RTC Cartridge

- TWDXCPRTC

Memory Cartridge

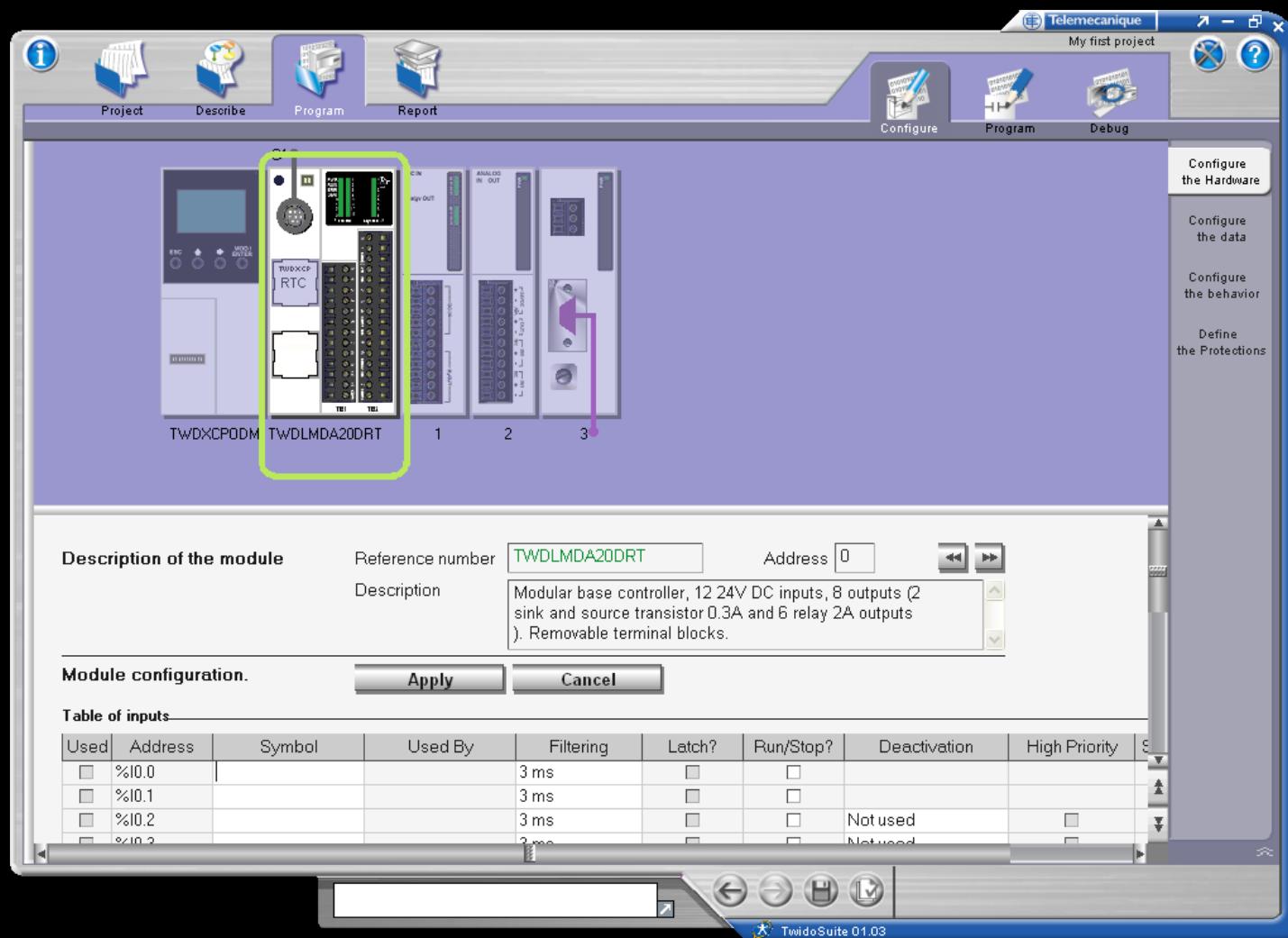
- TWDXCPODM

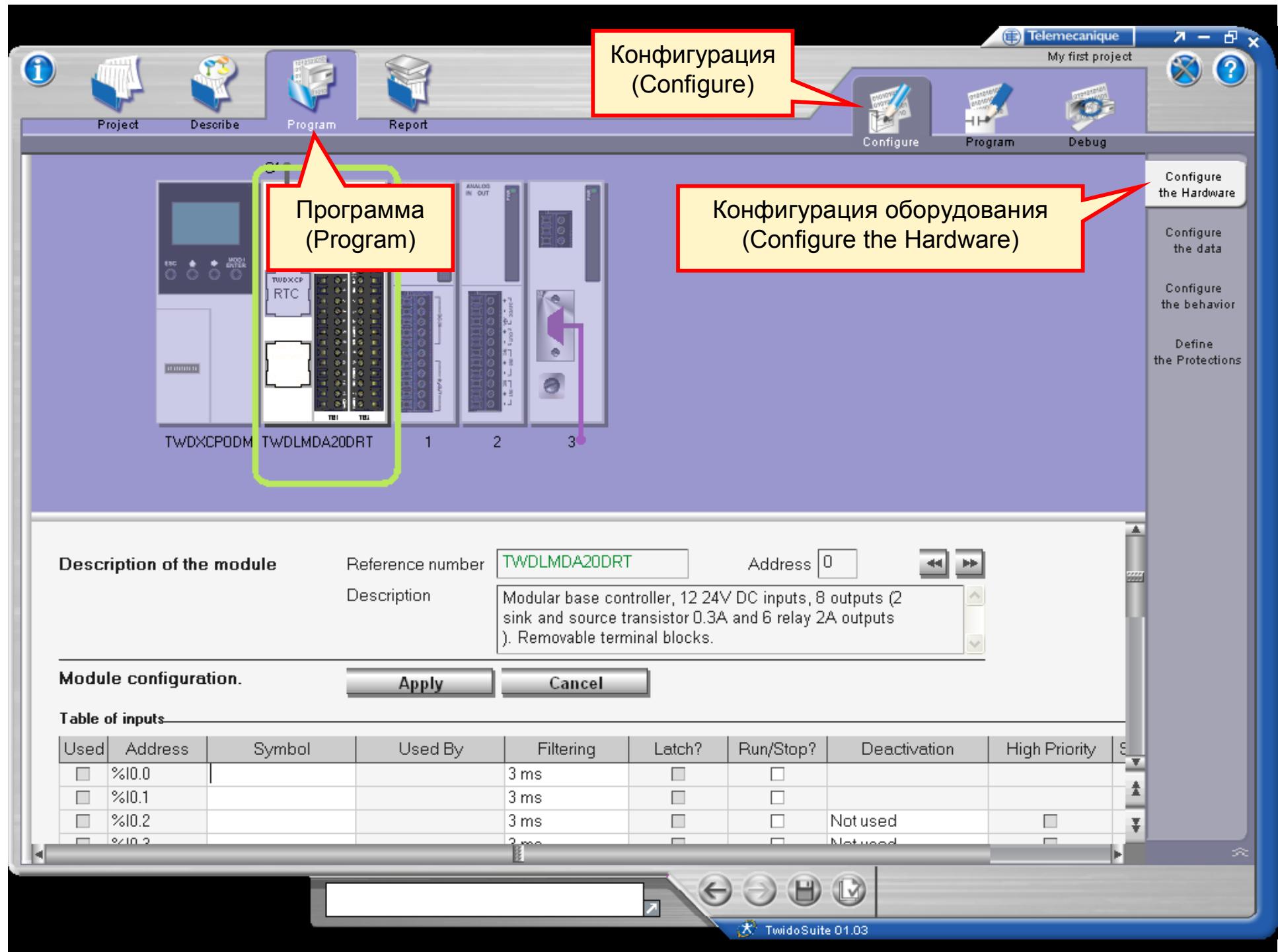
Operations Display

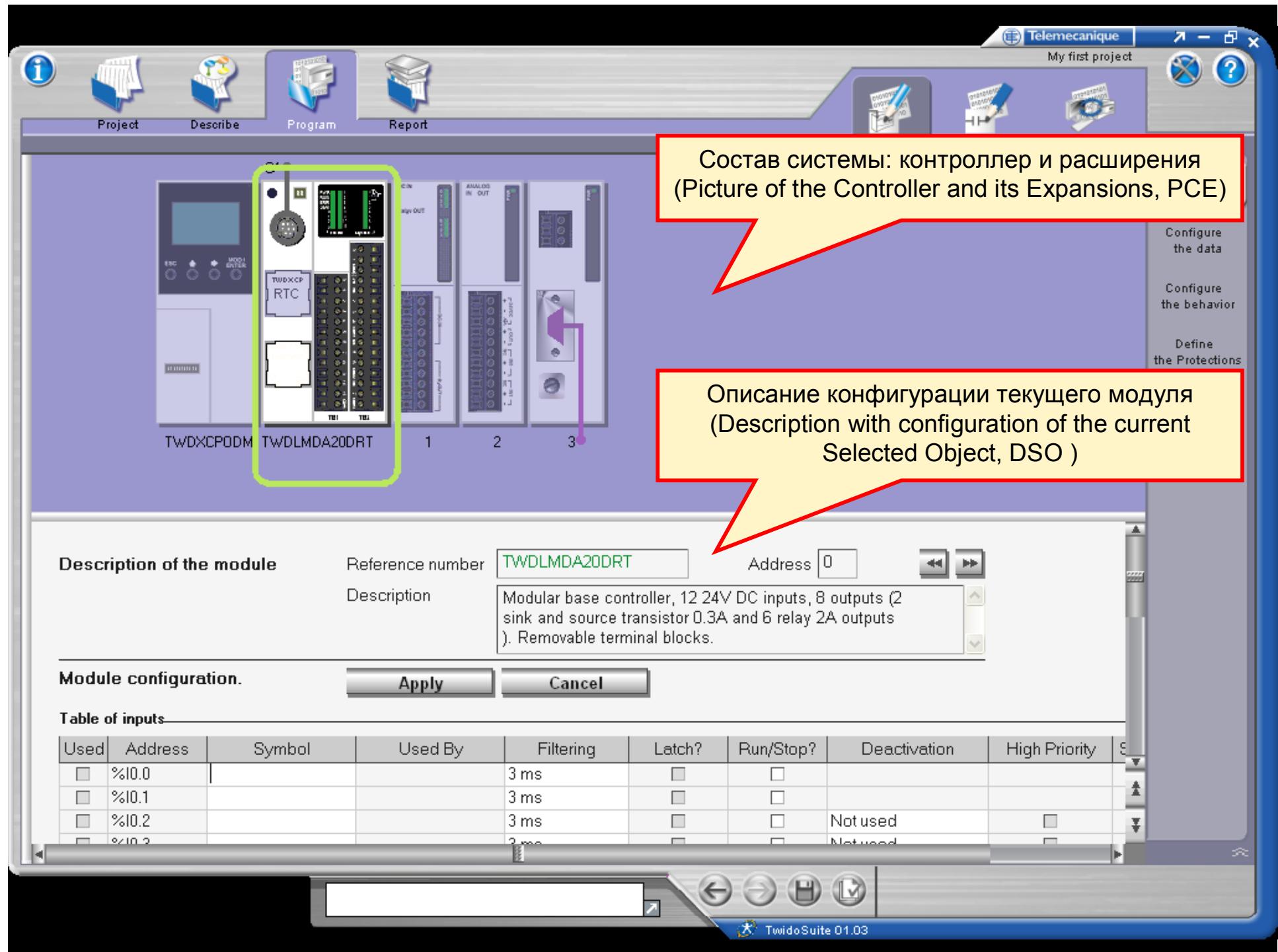
TWDNCO1M

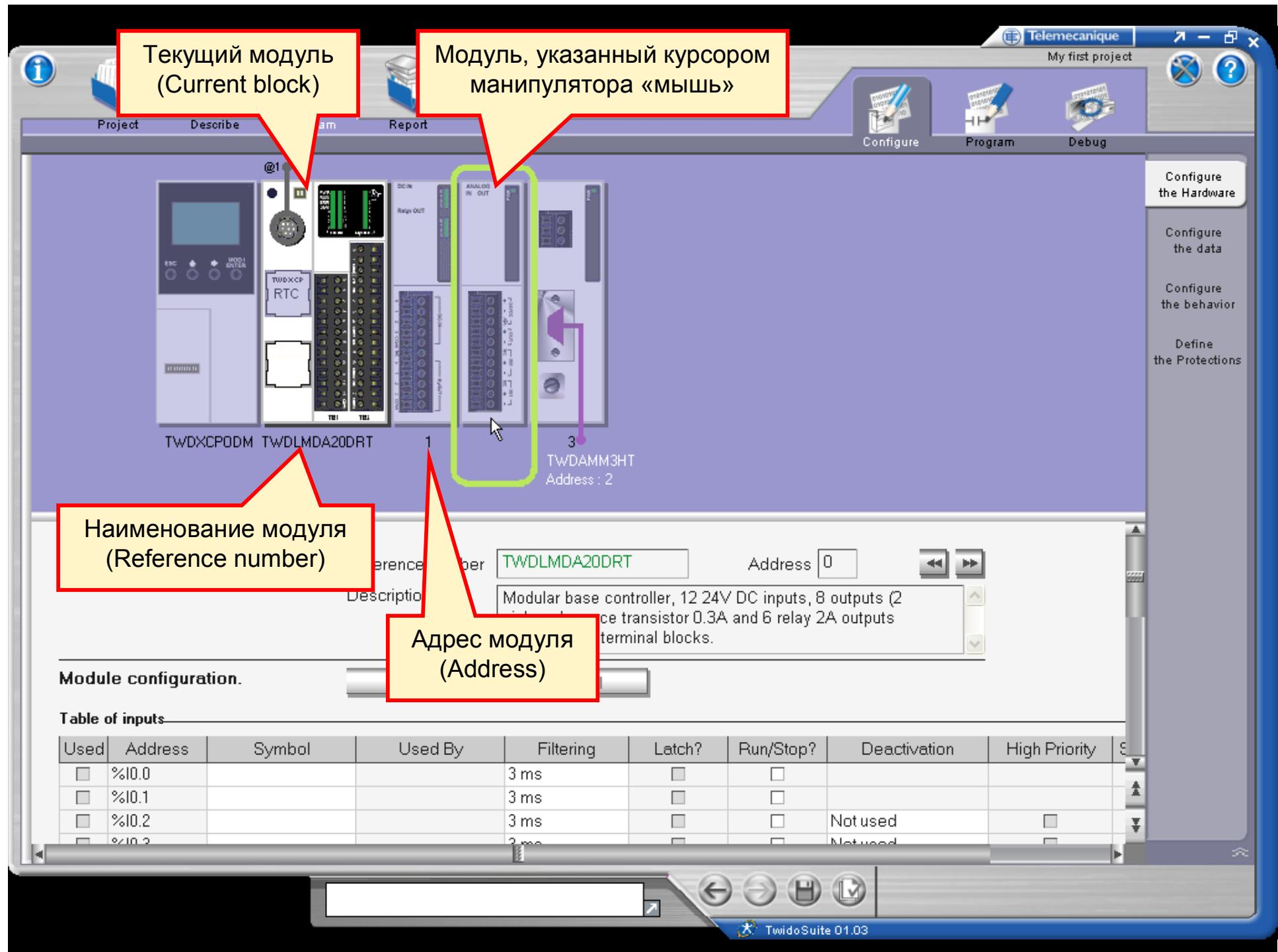
CANopen bus master module (50 mA)

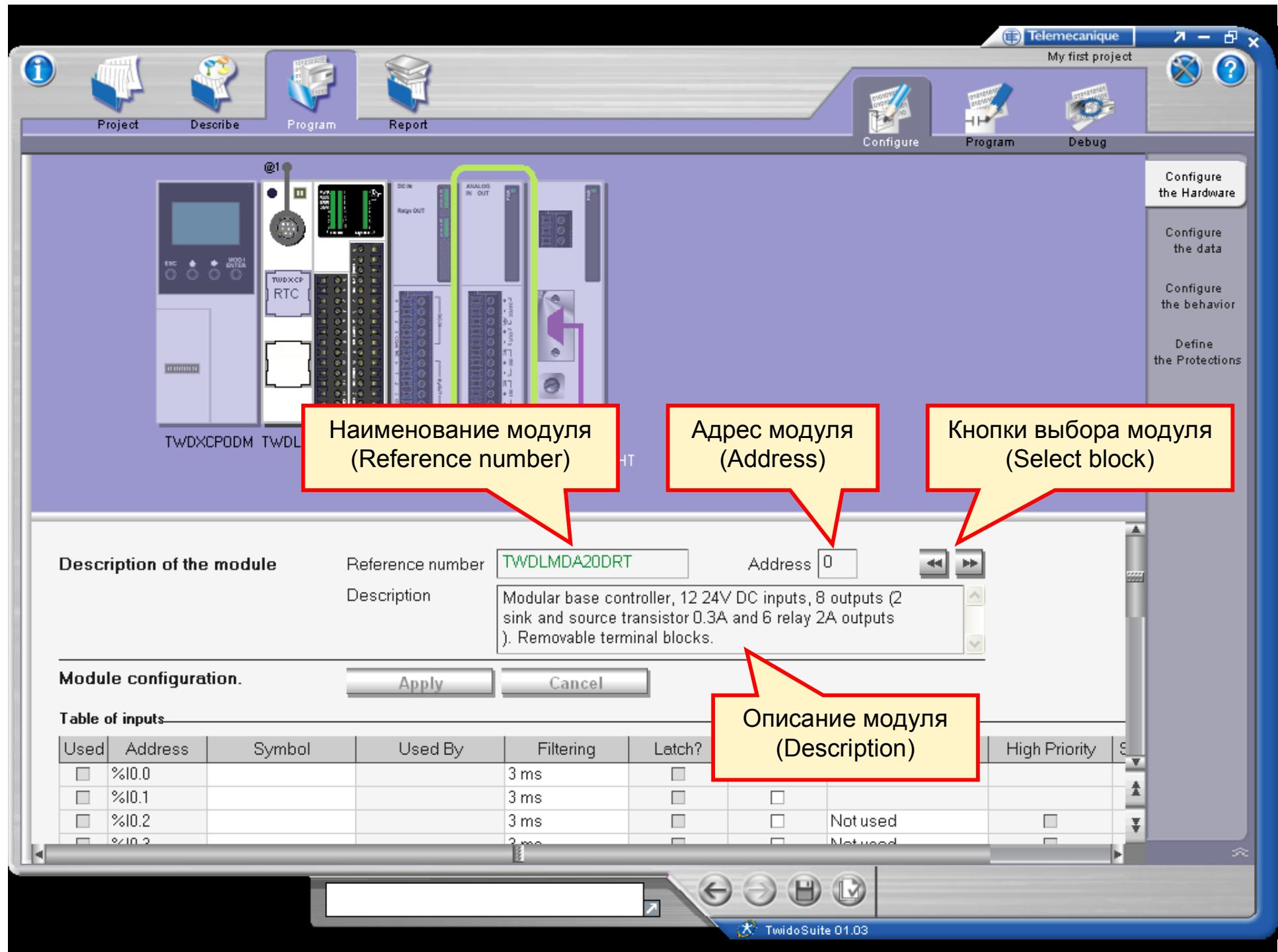
# Конфигурирование оборудования

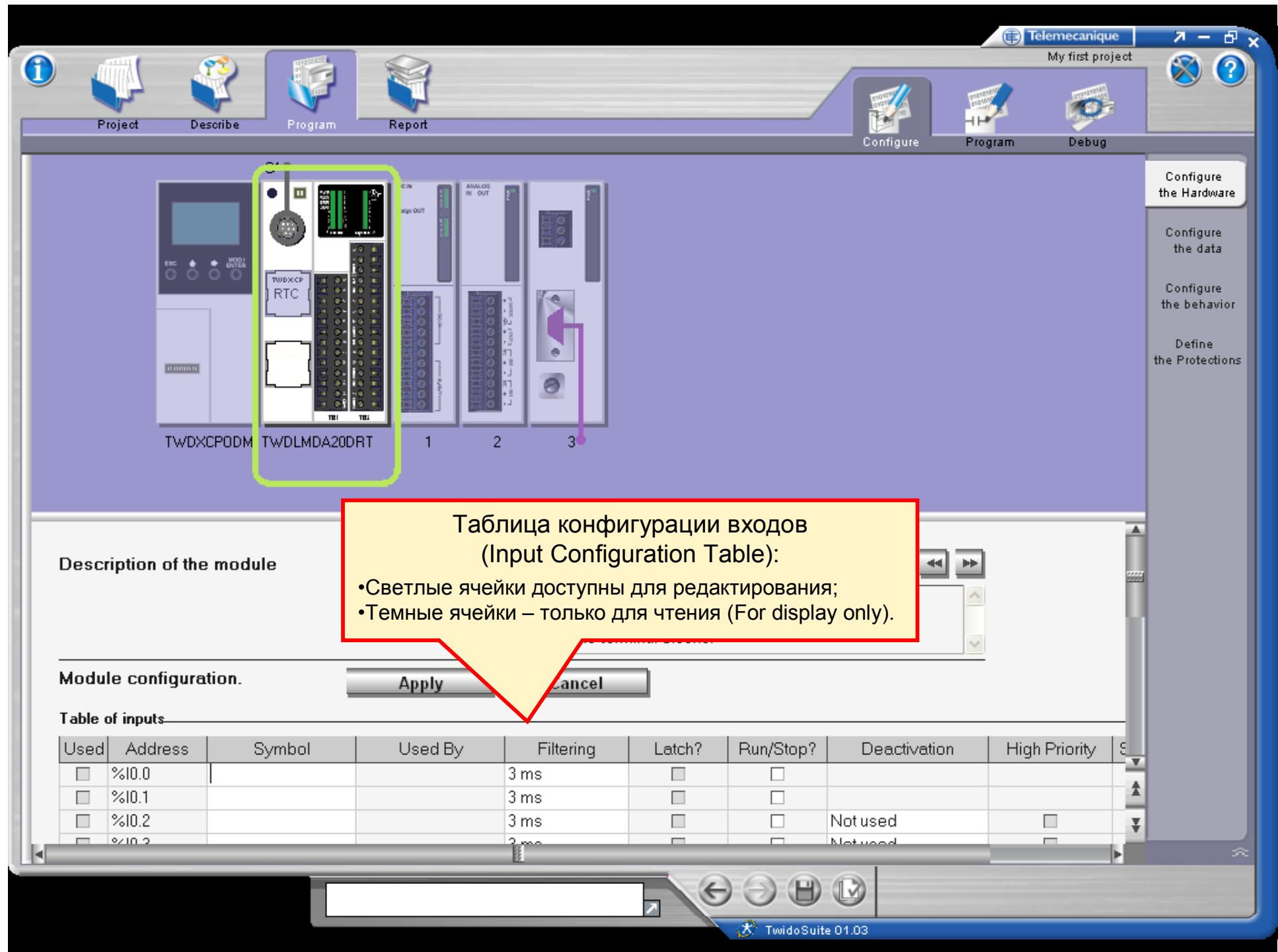


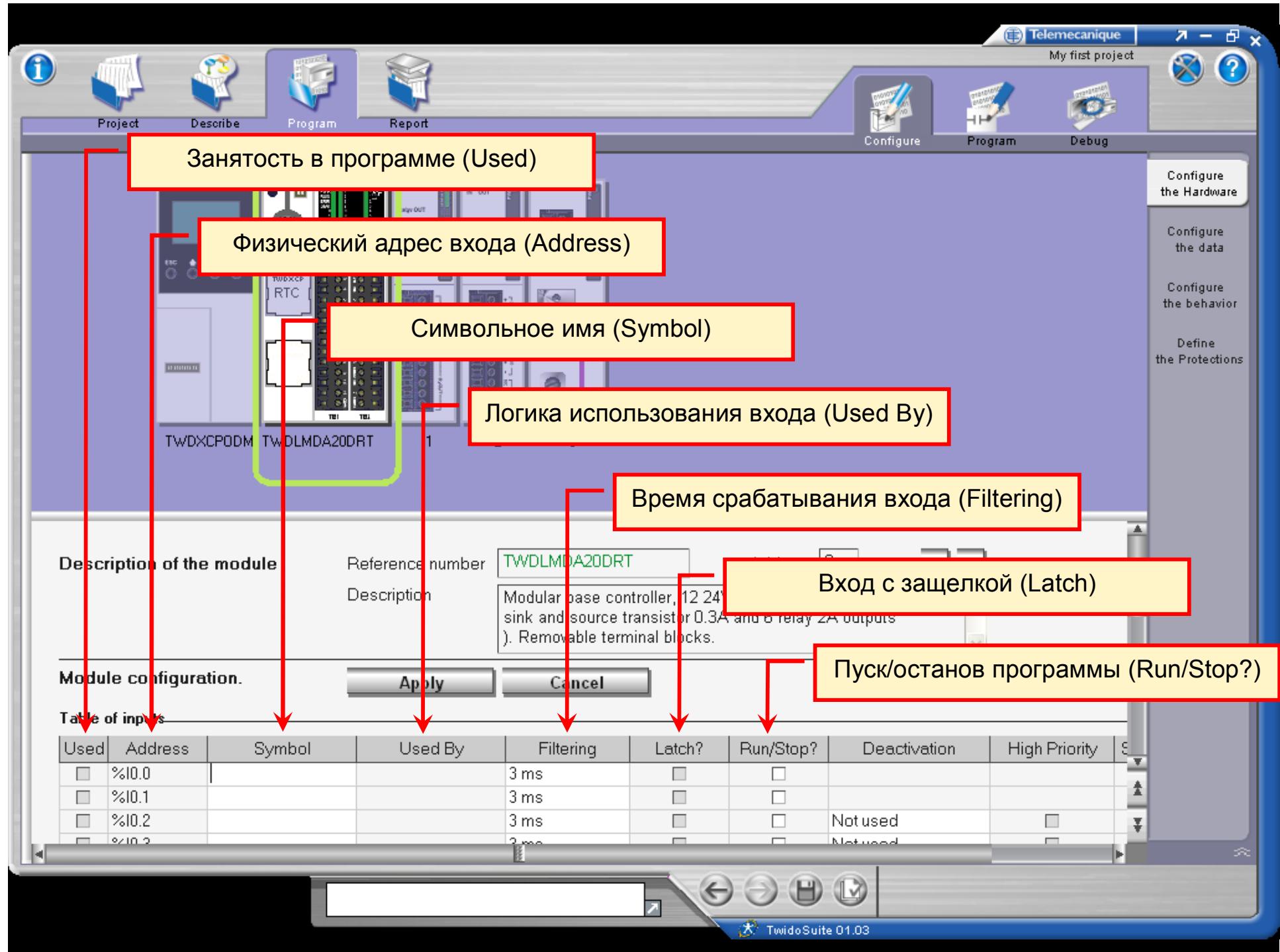












Telemecanique | My first project

Project Describe Program Report Configure Program Debug

Configure the Hardware  
Configure the data  
Configure the behavior  
Define the Protections

Hardware rack components visible:

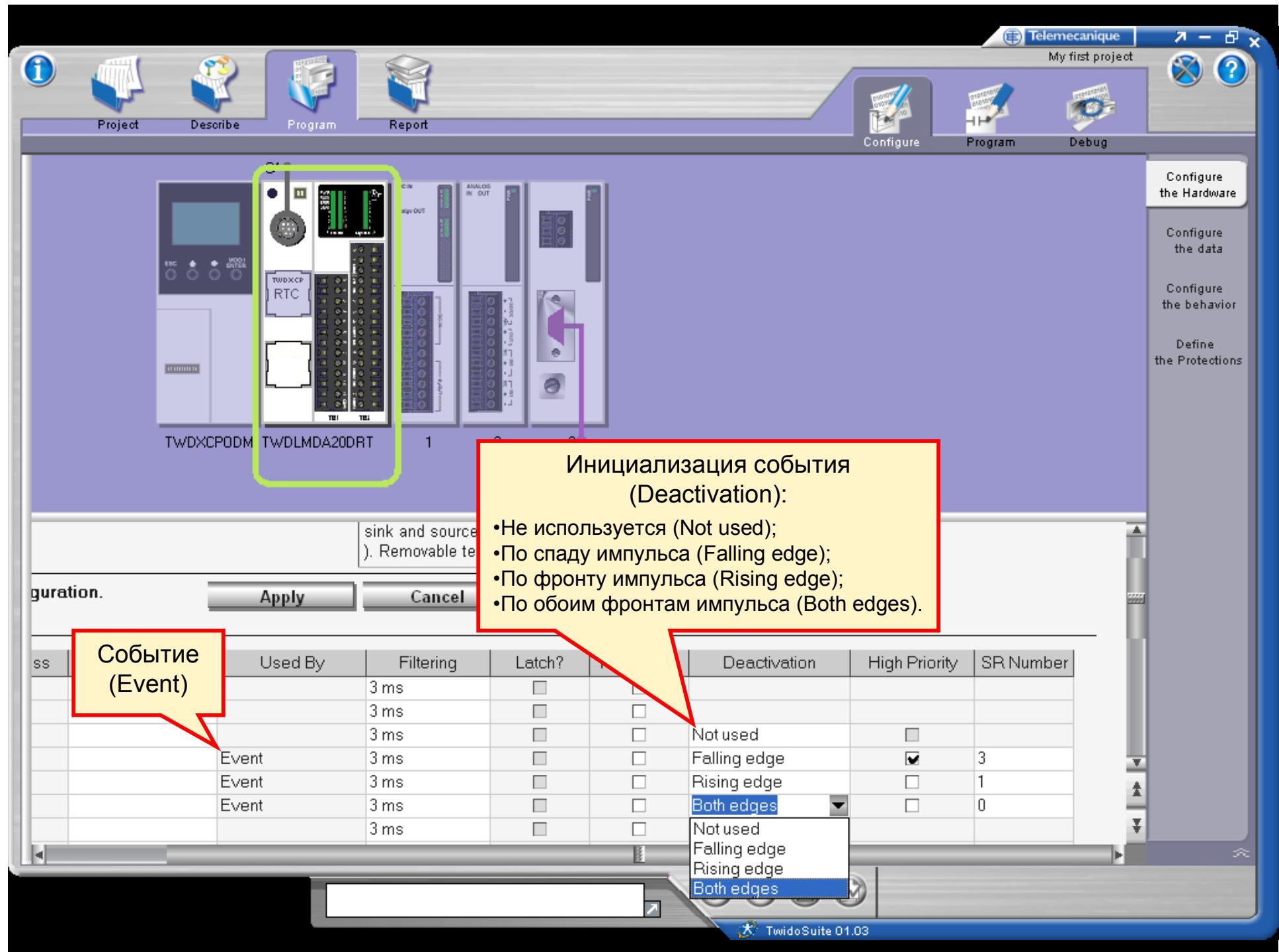
- Front panel: TWDXCPODM, TWDLMDA20DRT
- Module 1: Analog In/Out
- Module 2: Analog In/Out
- Module 3: Digital I/O

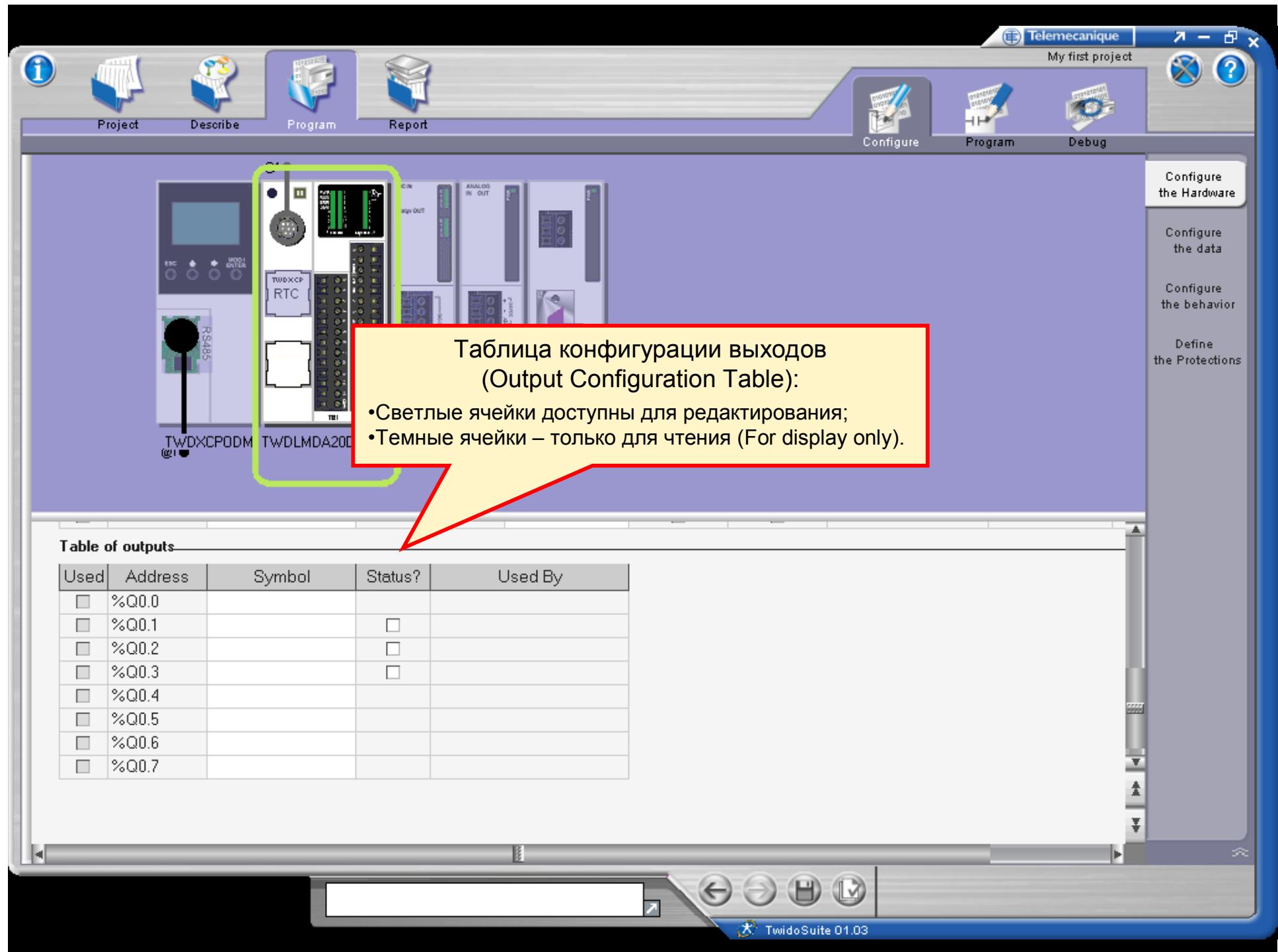
Configuration table (Module configuration):

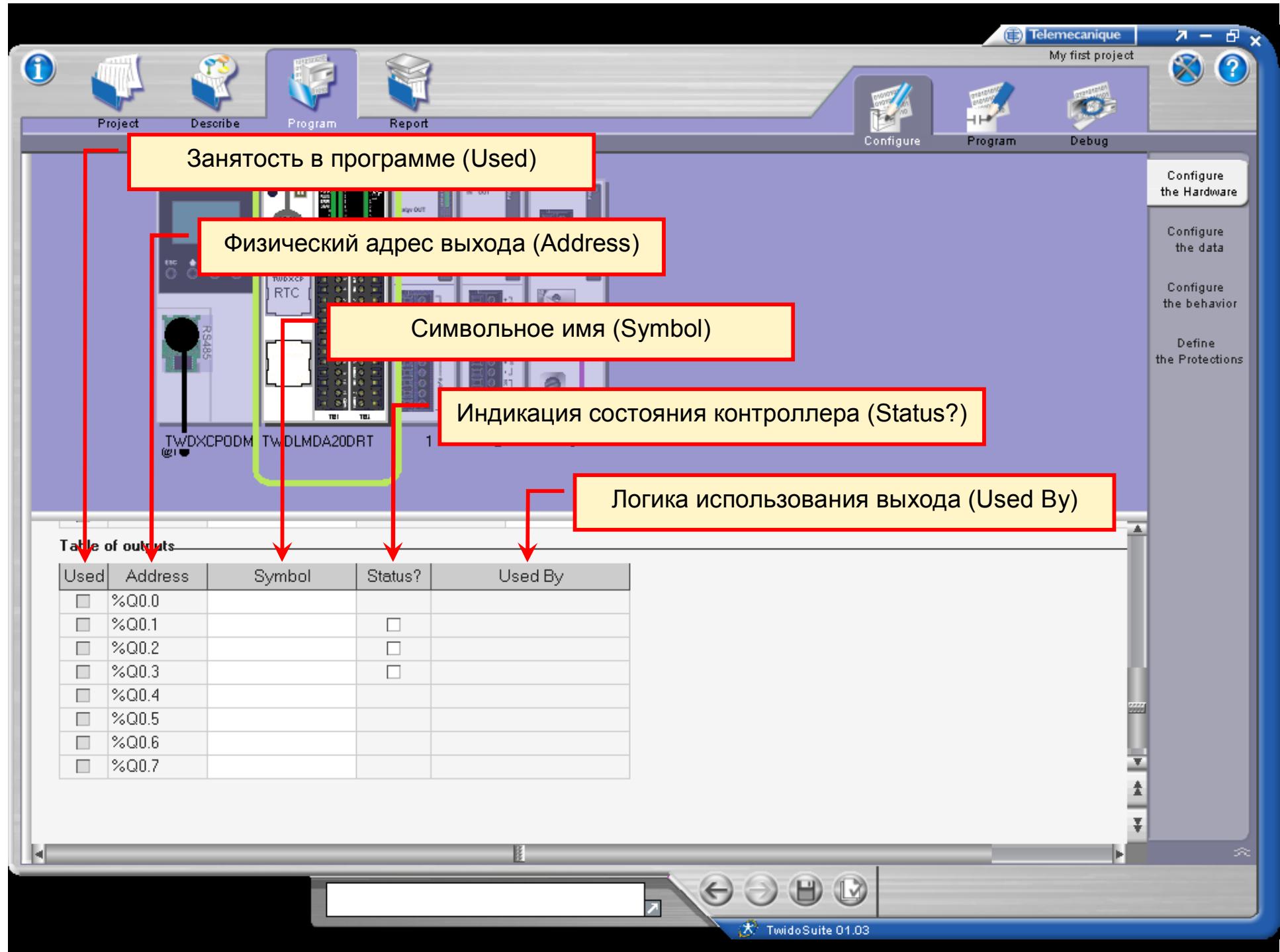
ss	Symbol	Used By	Filtering	Latch?	Run/Stop?	Deactivation	High Priority	SR Number
			3 ms	<input type="checkbox"/>	<input type="checkbox"/>			
			3 ms	<input type="checkbox"/>	<input type="checkbox"/>			
			3 ms	<input type="checkbox"/>	<input type="checkbox"/>	Not used	<input type="checkbox"/>	
			3 ms	<input type="checkbox"/>	<input type="checkbox"/>	Not used	<input type="checkbox"/>	

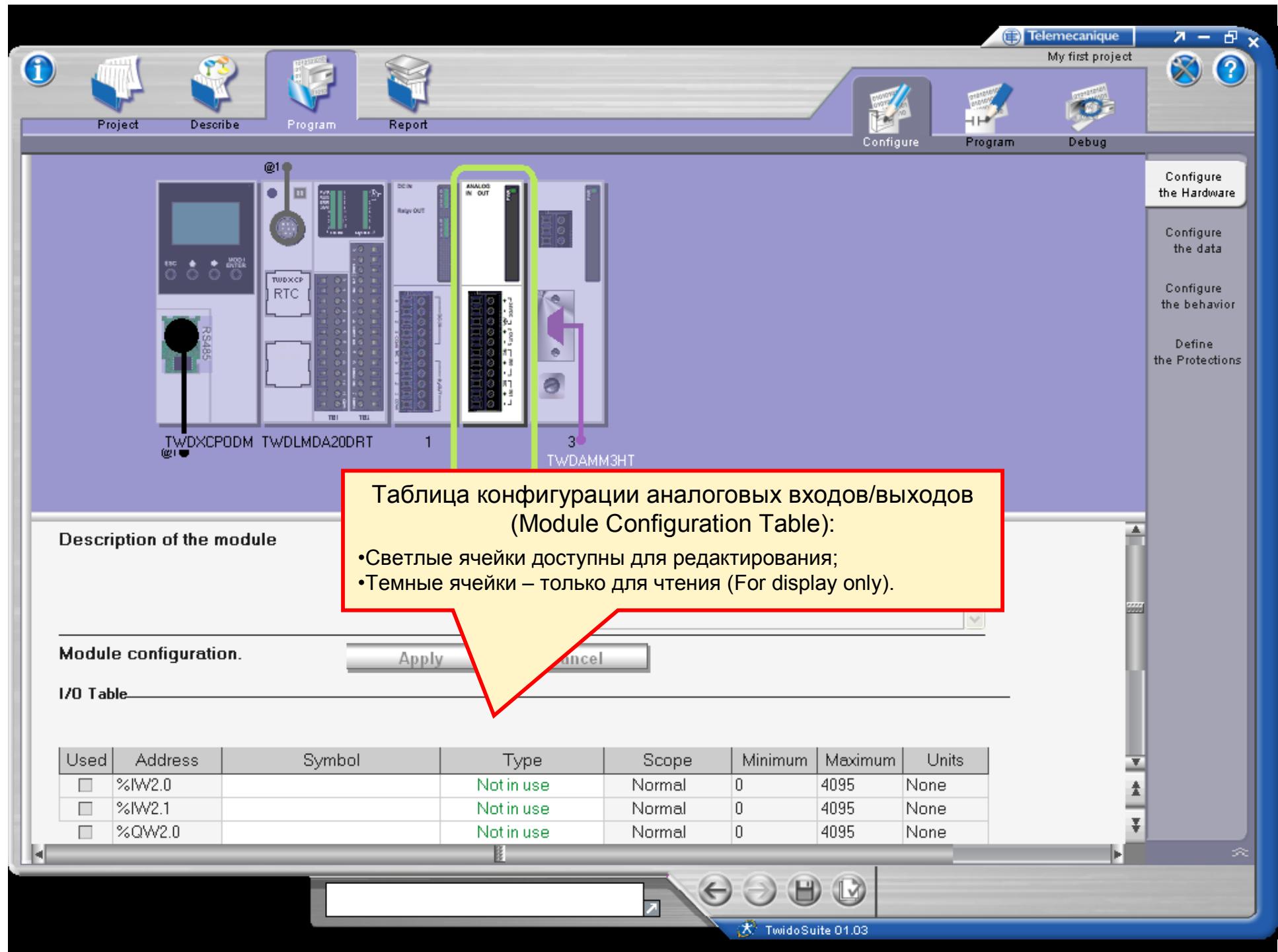
Annotations:

- Yellow box with red border: Номер подпрограммы (SR Number)
- Yellow box with red border: Высокий приоритет (High Priority)
- Yellow box with red border: Инициализация события (Deactivation)



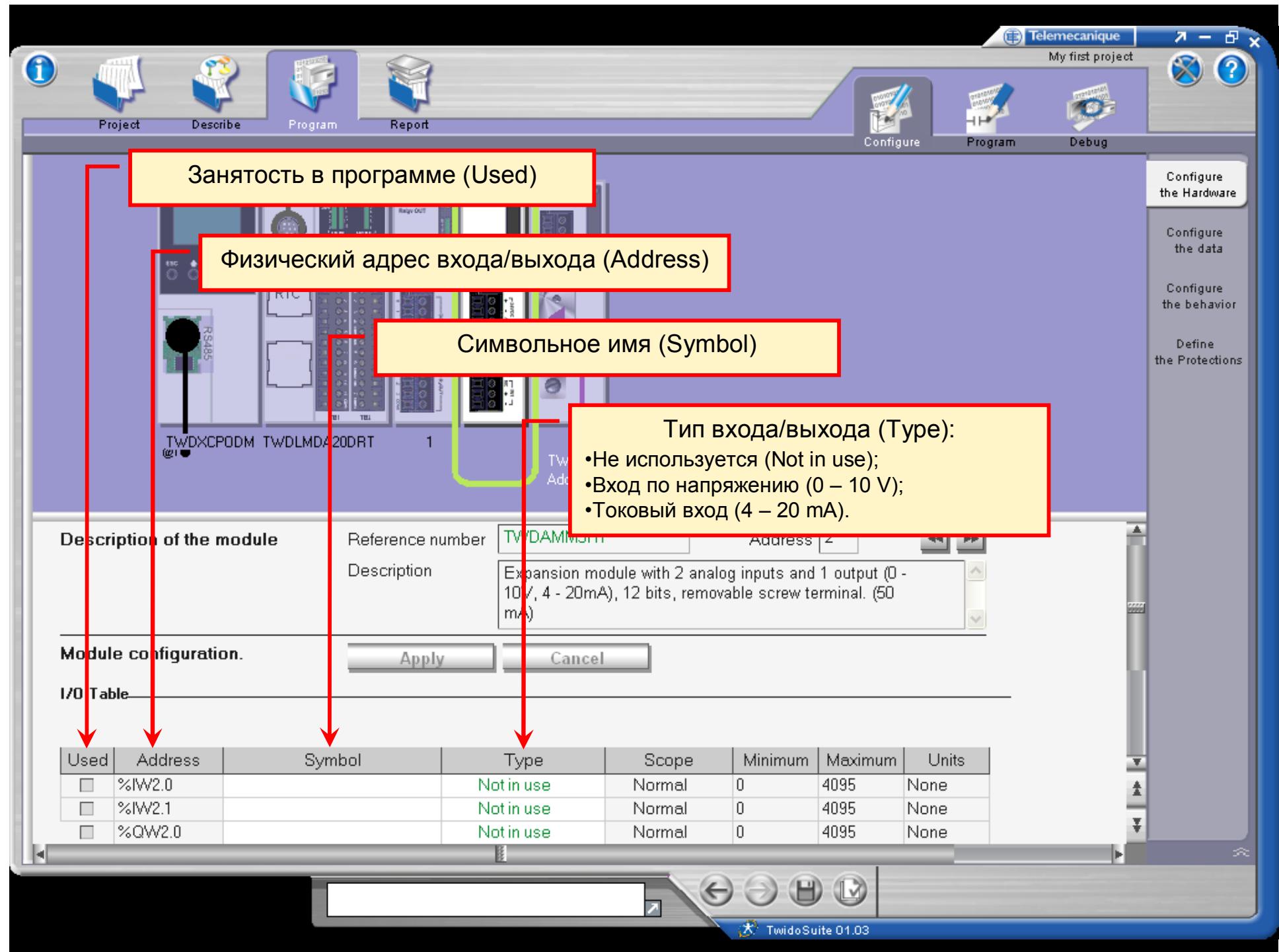






### Таблица конфигурации аналоговых входов/выходов (Module Configuration Table):

- Светлые ячейки доступны для редактирования;
- Темные ячейки – только для чтения (For display only).



My first project

Configure Program Debug

Configure the Hardware

Configure the data

Configure the behavior

Define the Protections

Units:

- Дес. доля градуса Цельсия (Celsius, 0.1°C);
- Дес. доля градуса по Фаренгейту (Fahrenheit, 0.1°F);
- Омическое сопротивление (Resistance, Ohm).

Maximum:

Minimum:

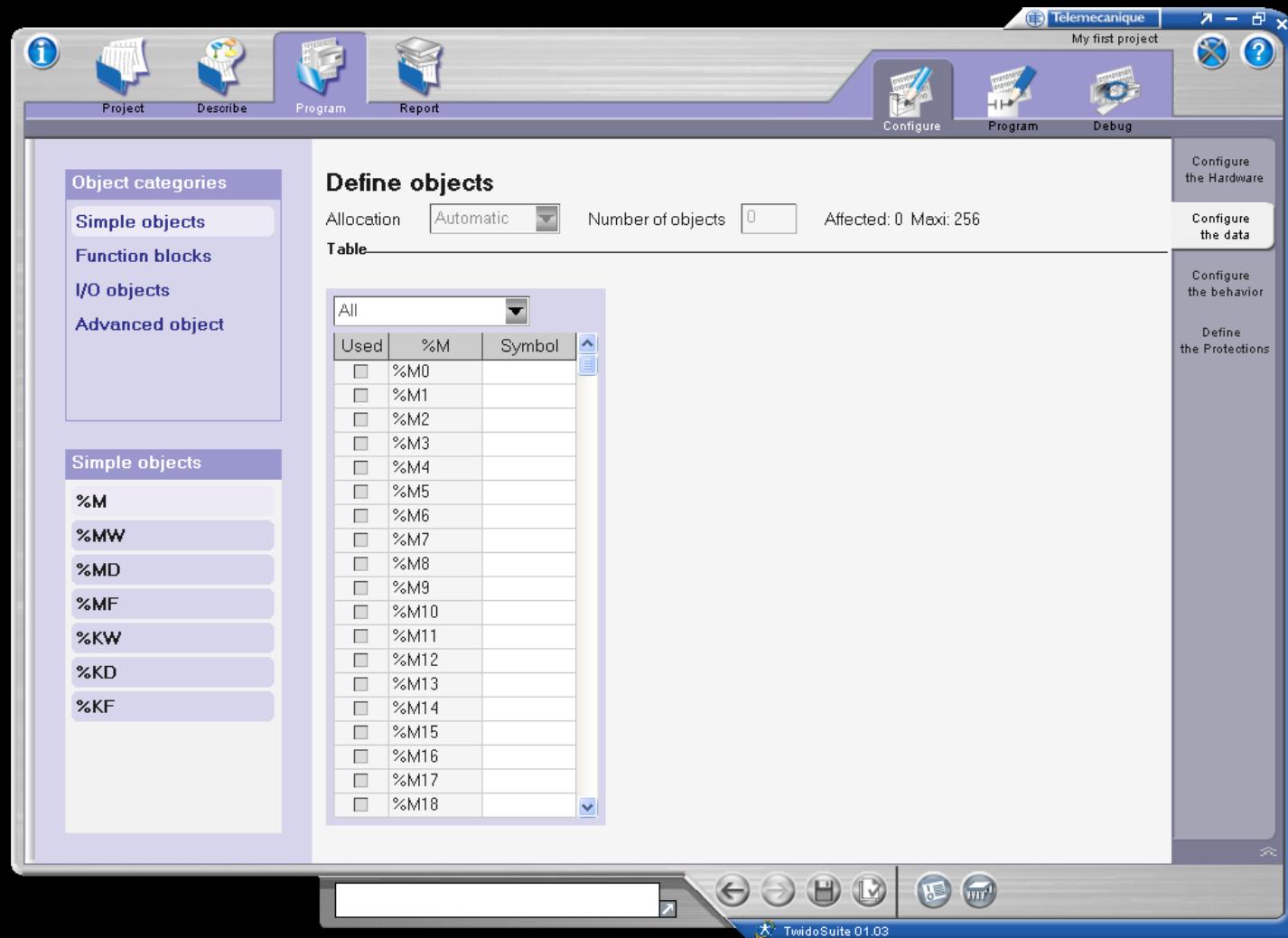
Scope:

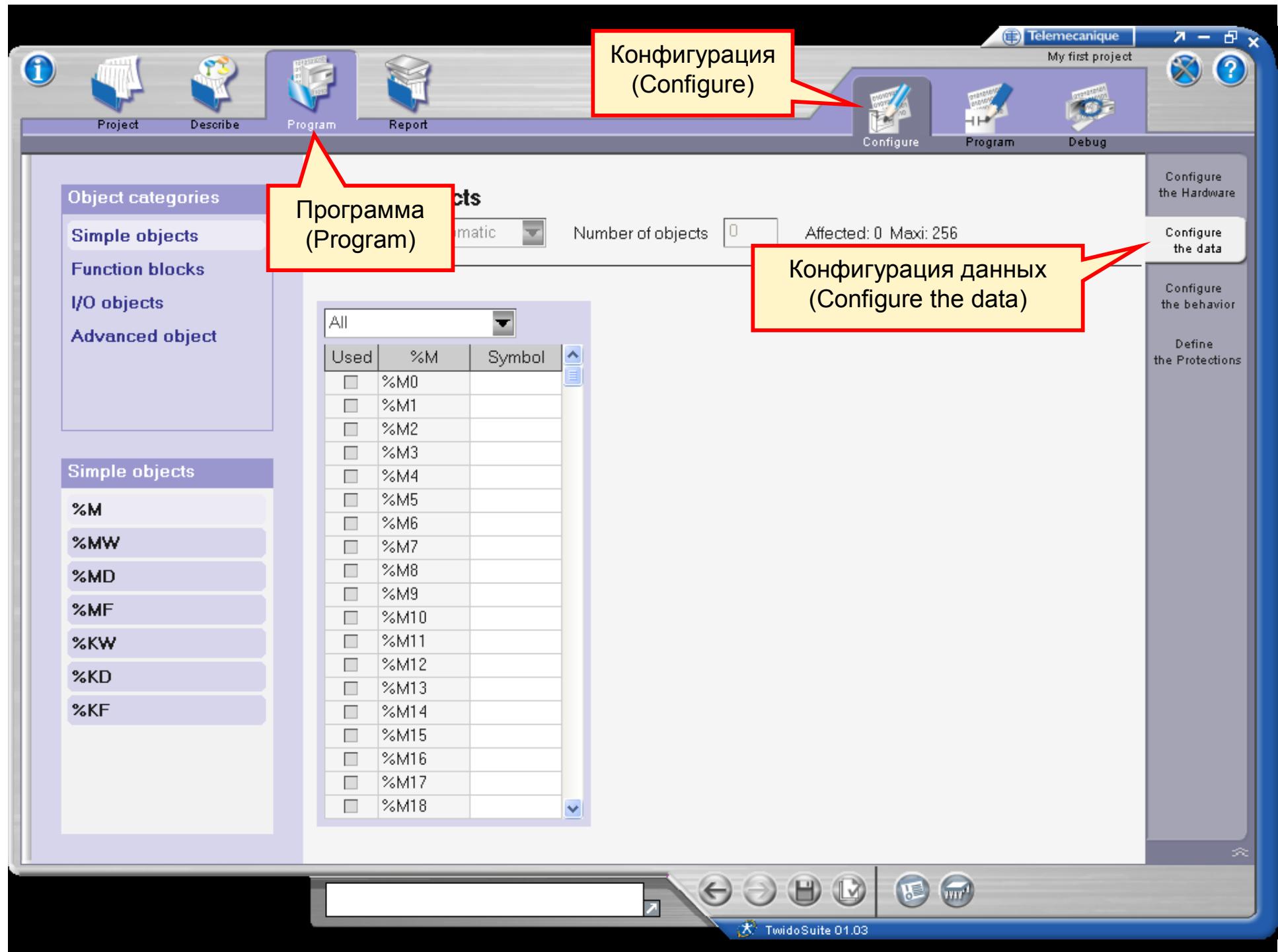
- Обычное (Normal);
- Пользовательское (Customized).

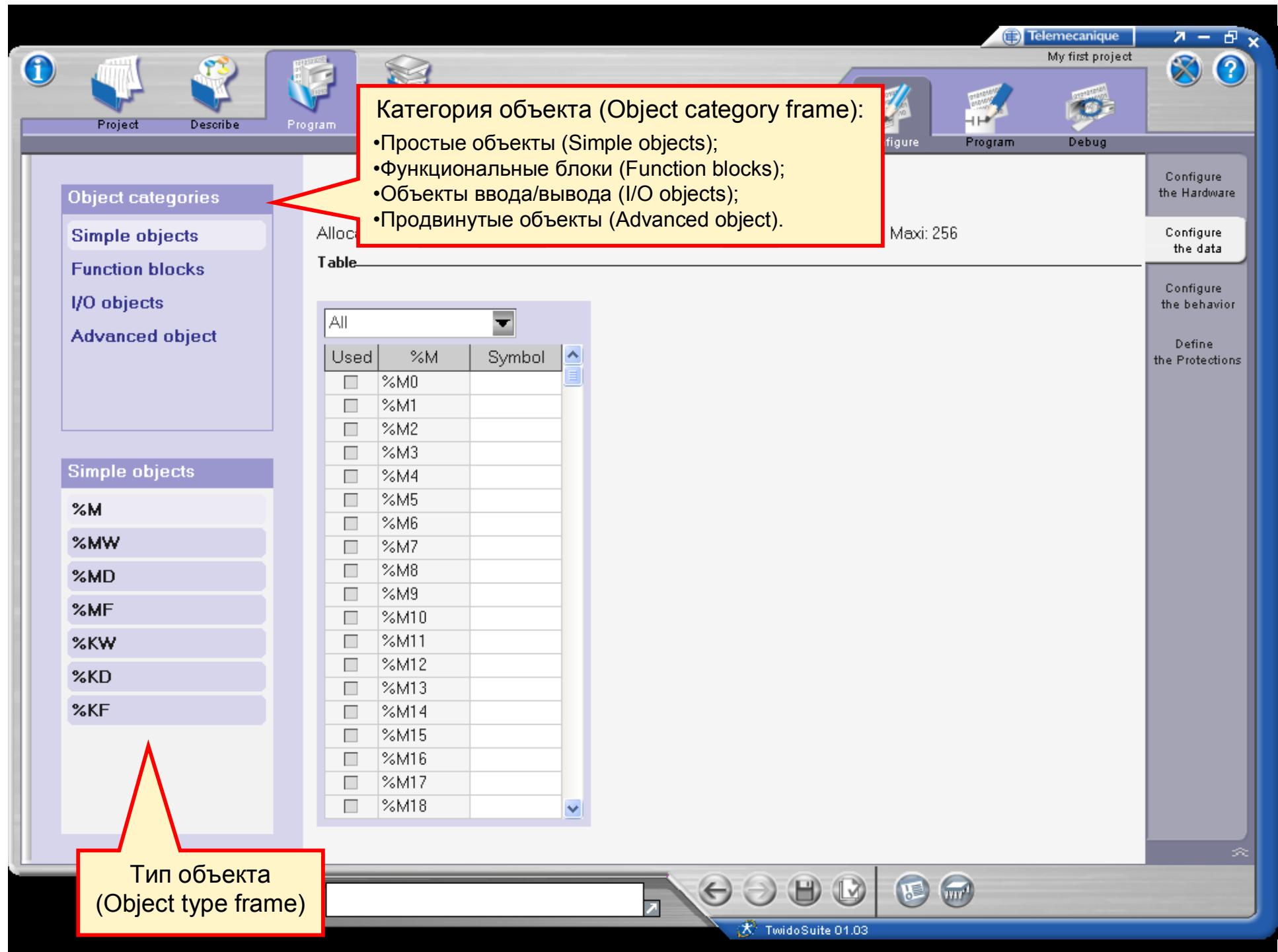
Used	Address	Symbol	Type	Scope	Minimum	Maximum	Units
<input type="checkbox"/>	%IW2.0		Not in use	Normal	0	4095	None
<input type="checkbox"/>	%IW2.1		Not in use	Normal	0	4095	None
<input type="checkbox"/>	%QW2.0		Not in use	Normal	0	4095	None

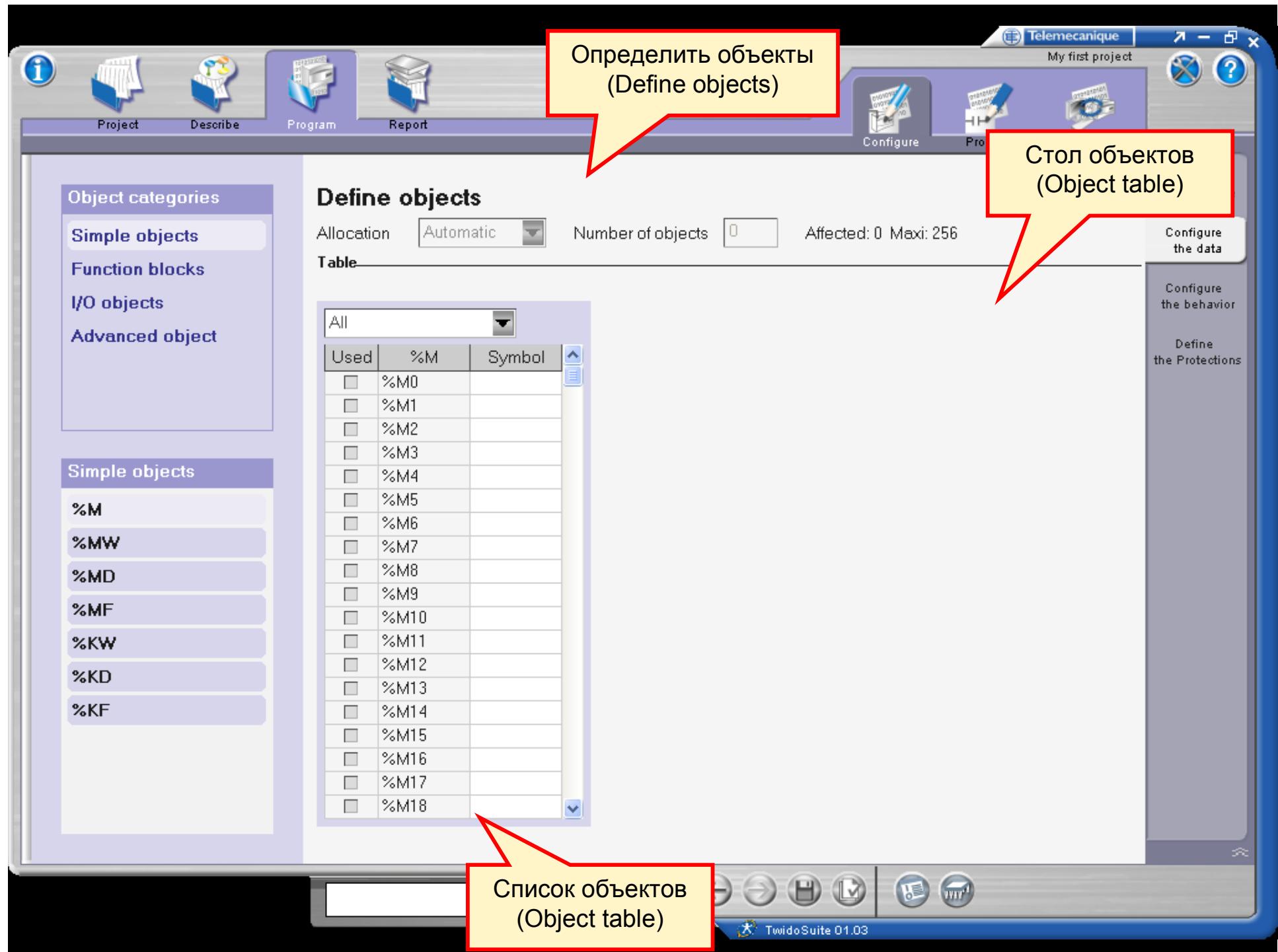
TwidoSuite 01.03

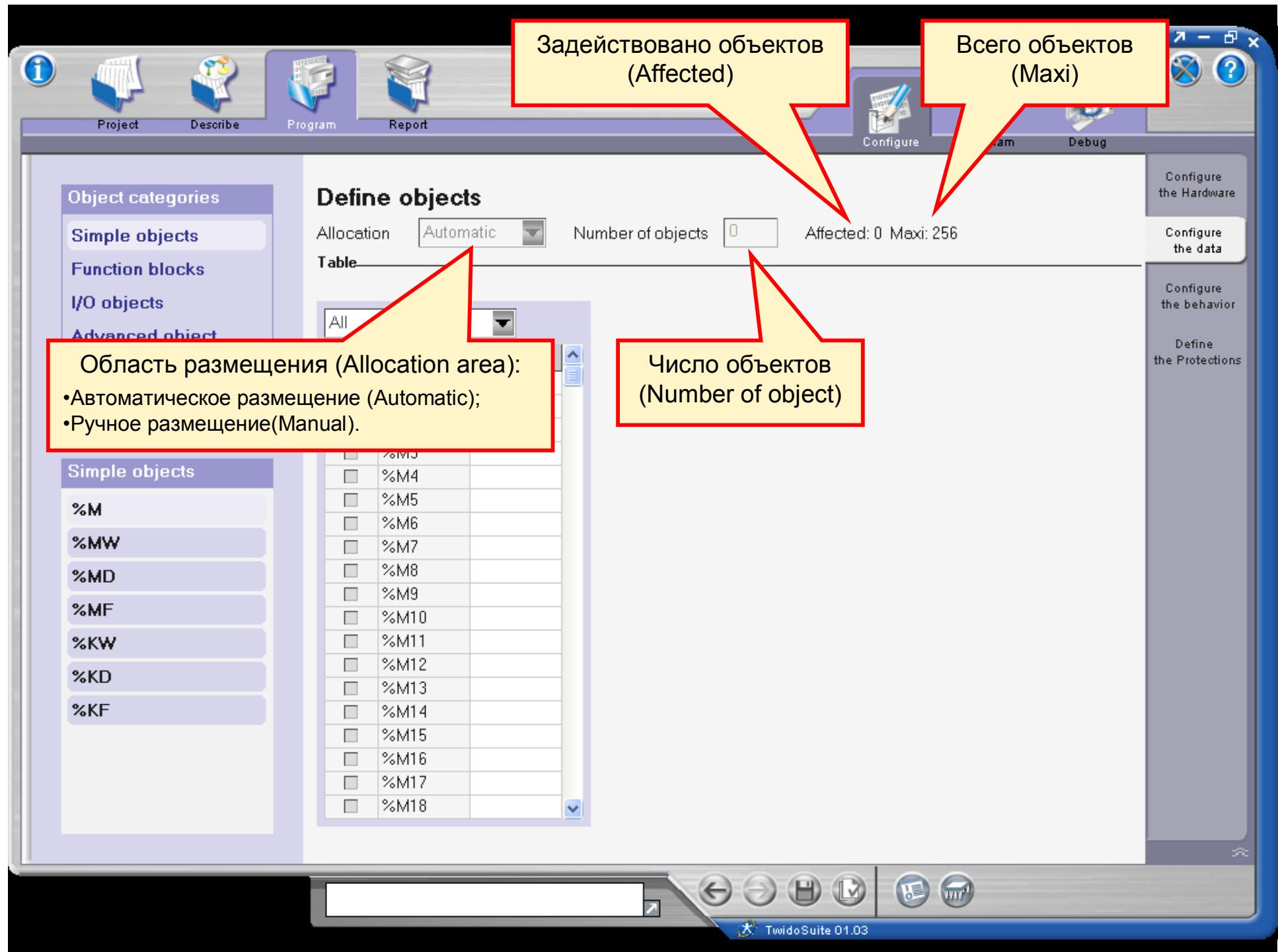
# Конфигурирование данных











## Задействовано объектов (Affected)

Всего объектов  
(Maxi)

## Object categories

## Simple objects

## Function blocks

## Advanced object

Область размещения (Allocation area):

- Автоматическое размещение (Automatic);
- Ручное размещение(Manual).

## Число объектов (Number of object)

## Simple objects

%M

%MW

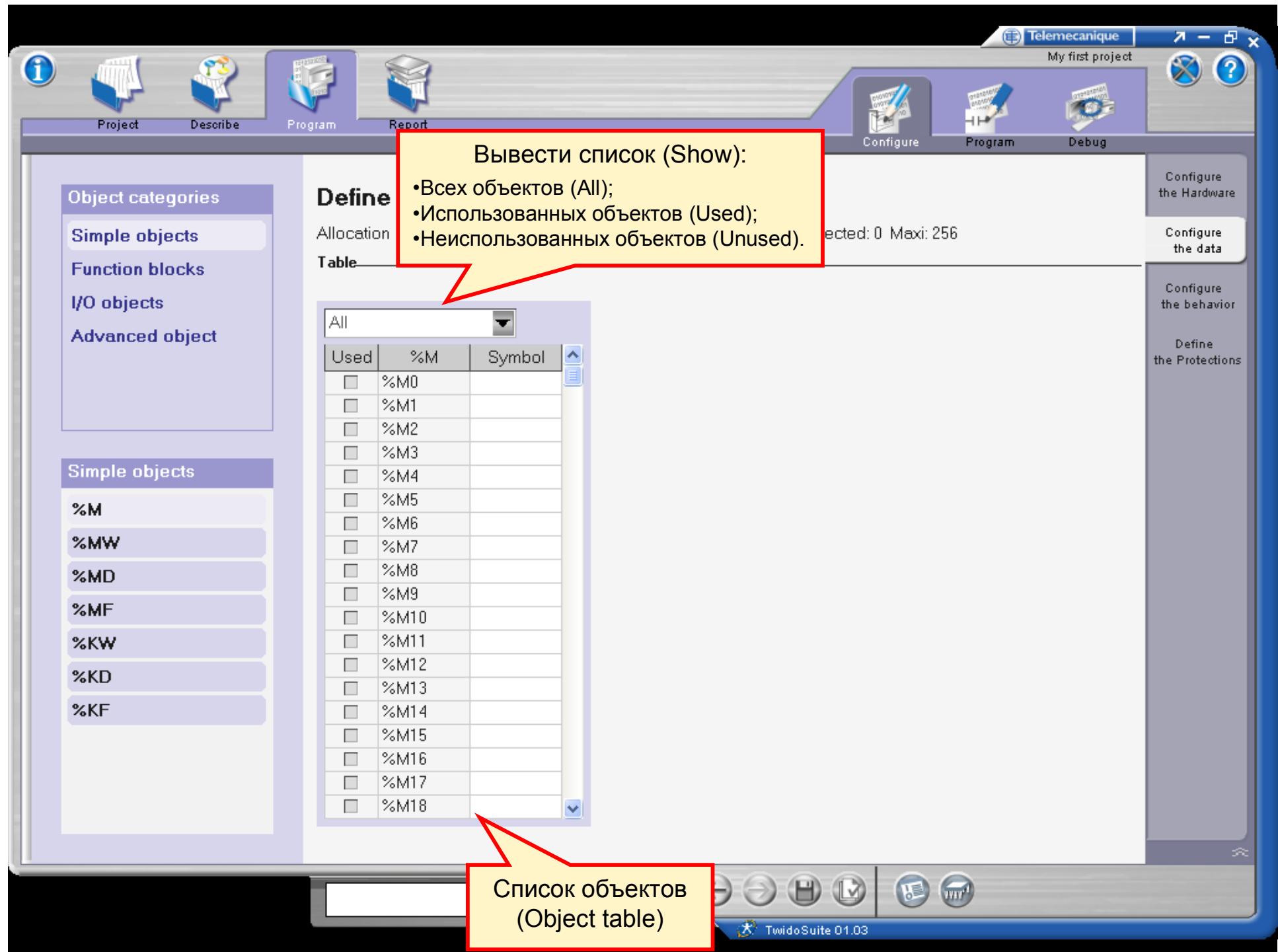
%MD

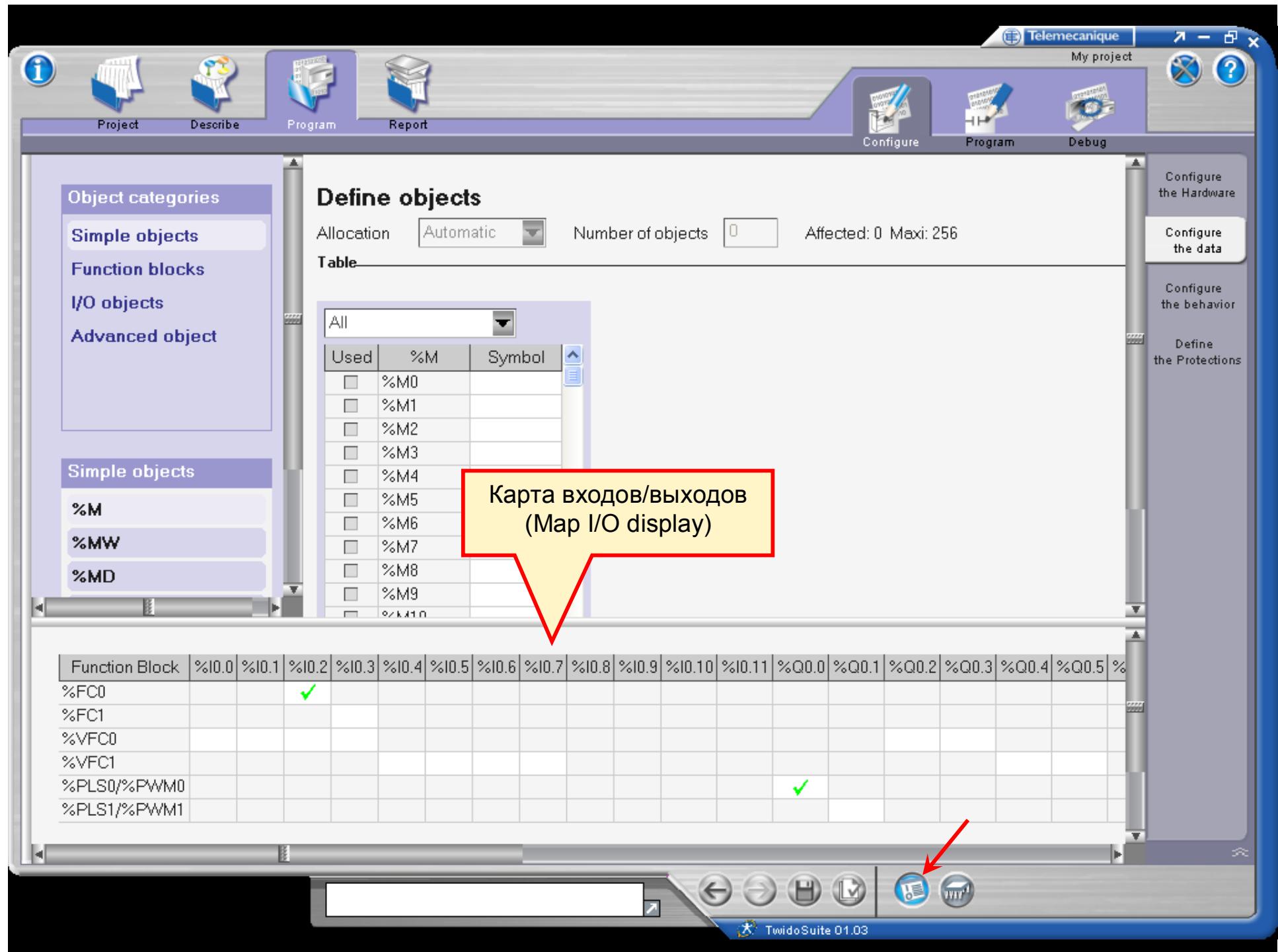
%MF

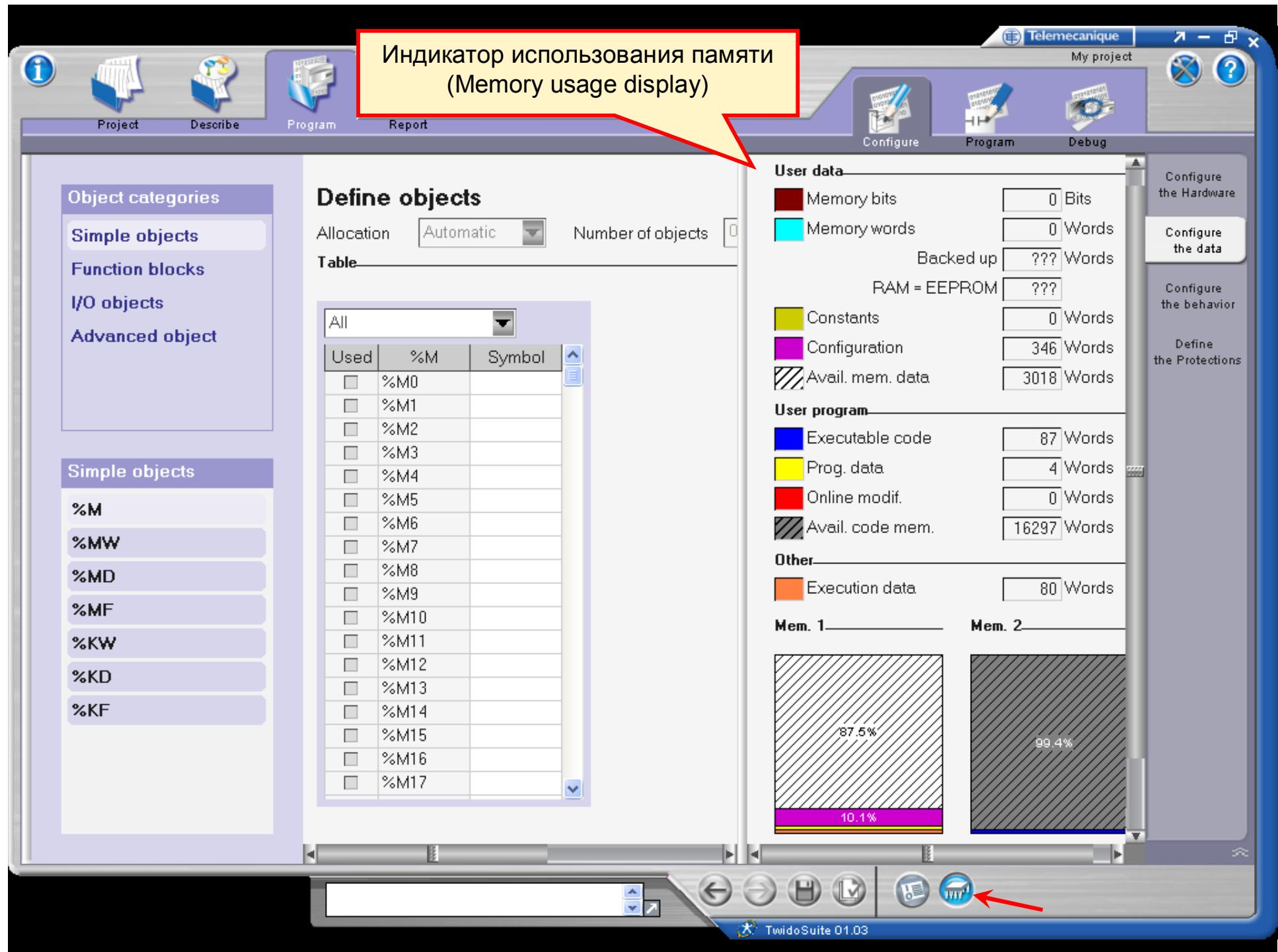
%KW

%KD

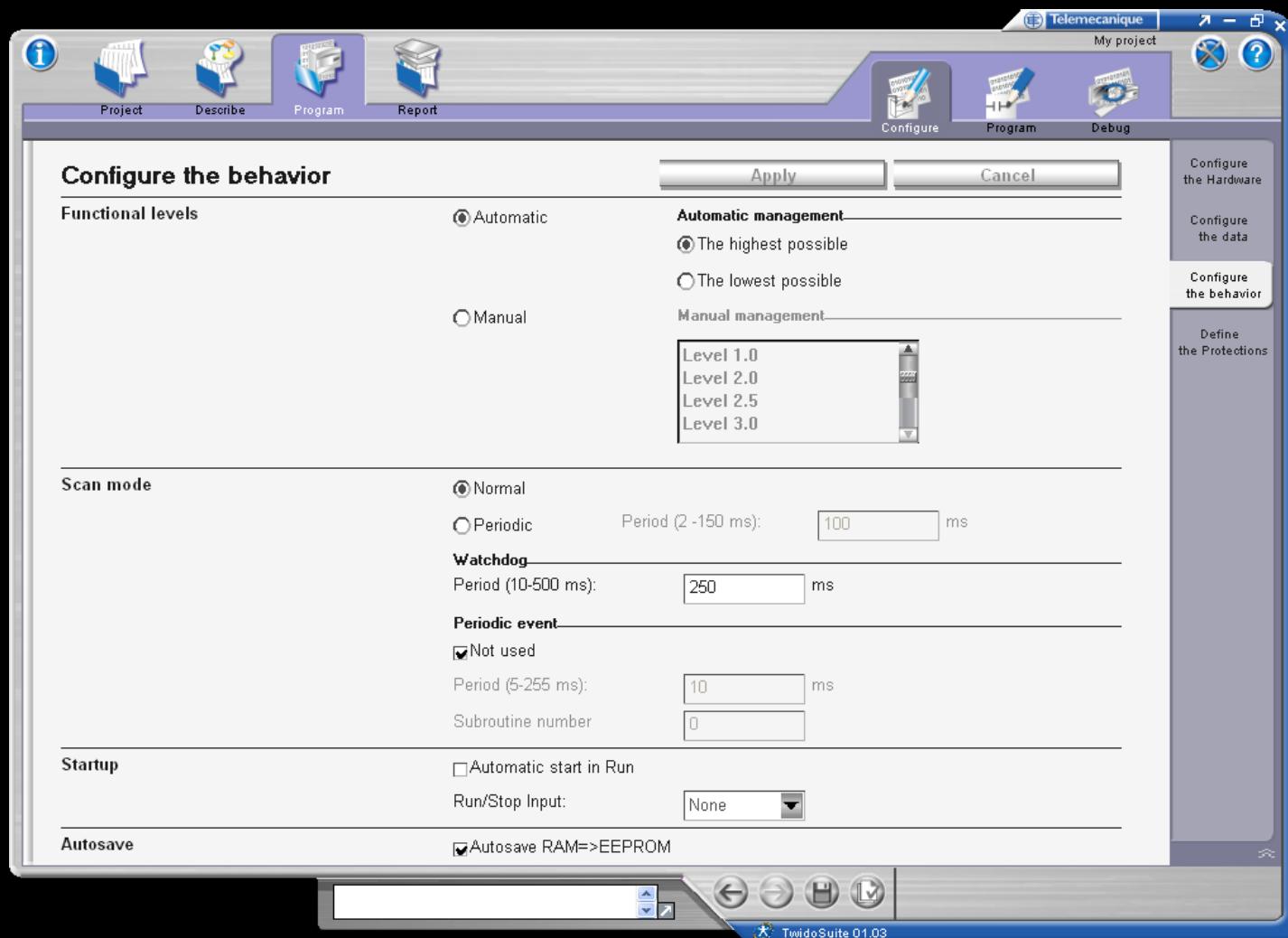
%KF

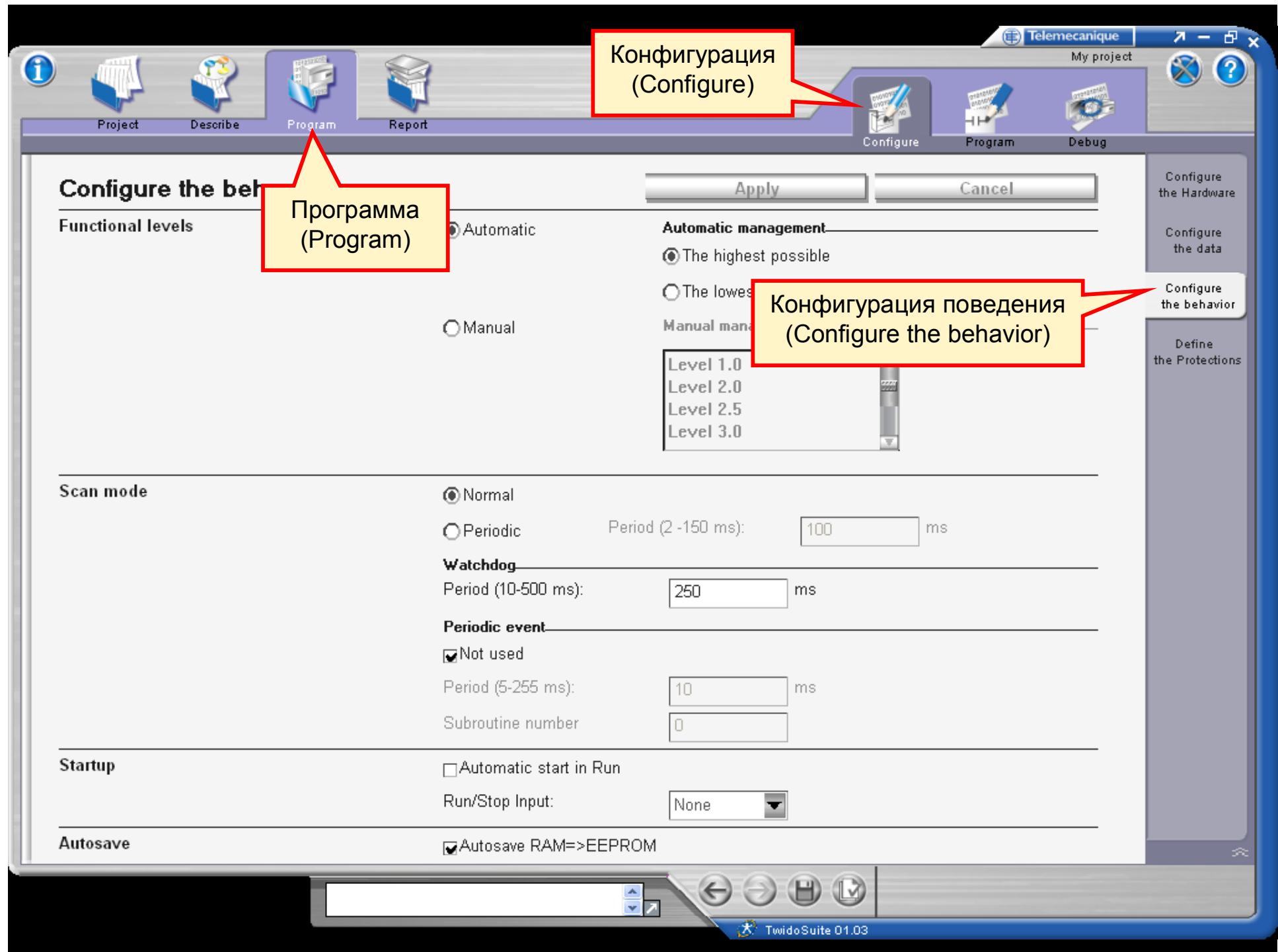






# Конфигурирование поведения





Telemecanique My project

Project Describe Program Report Configure Program Debug

## Configure the behavior

Apply Cancel

**Functional levels**

Automatic

Manual

**Automatic management**

The highest possible

The lowest possible

**Manual management**

Level 1.0  
Level 2.0  
Level 2.5  
Level 3.0

**Scan mode**

Normal

Periodic      Period (2 -150 ms):  ms

**Watchdog**

Period (10-500 ms):  ms

**Periodic event**

Not used

Period (5-255 ms):  ms

Subroutine number

**Startup**

Automatic start in Run

Run/Stop Input:

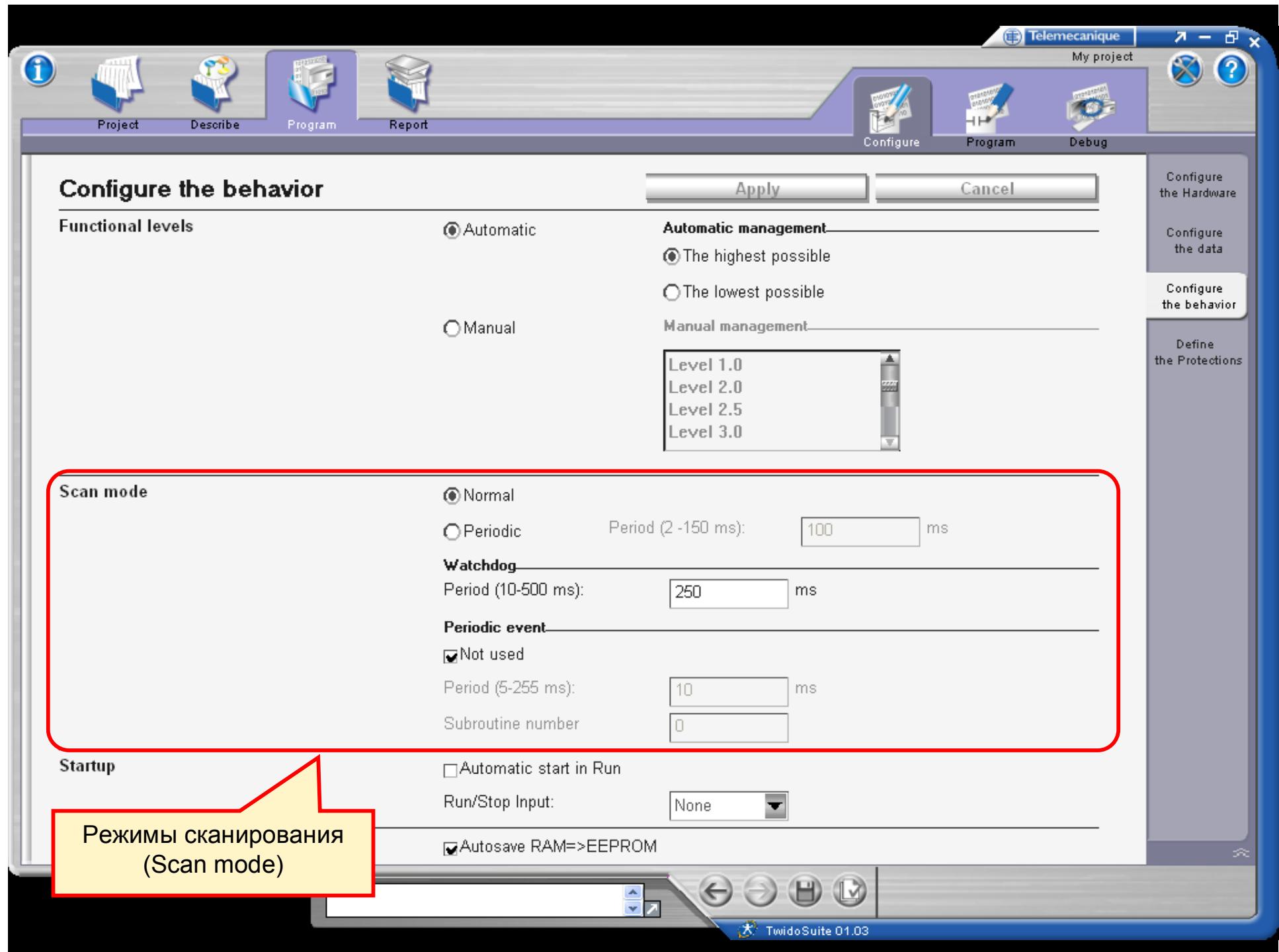
**Autosave**

Autosave RAM=>EEPROM

Configure the Hardware  
Configure the data  
Configure the behavior  
Define the Protections

Функциональные уровни  
(Functional levels)

TwidoSuite 01.03



Telemecanique My project

Project Describe Program Report Configure Program Debug

## Configure the behavior

Apply Cancel

Functional levels  Automatic  Manual

Automatic management  The highest possible  The lowest possible

Manual management

Level 1.0  
Level 2.0  
Level 2.5  
Level 3.0

Scan mode  Normal  Periodic Period (2 -150 ms): 100 ms

Watchdog Period (10-500 ms): 250 ms

Periodic event  Not used Period (5-255 ms): 10 ms  
Subroutine number 0

Startup  Automatic start in Run  
Run/Stop Input: None

Autosave  Autosave RAM=>EEPROM

Configure the Hardware  
Configure the data  
Configure the behavior  
Define the Protections

Способы запуска (Startup)

TwidoSuite 01.03

Telemecanique | My project |   

Project Describe Program Report Configure Program Debug

## Configure the behavior

Apply Cancel

Functional levels  Automatic  Manual

Automatic management  The highest possible  The lowest possible

Manual management

Level 1.0  
Level 2.0  
Level 2.5  
Level 3.0

Scan mode  Normal  Periodic Period (2 -150 ms): 100 ms

Watchdog Period (10-500 ms): 250 ms

Periodic event  Not used

Period (5-255 ms): 10 ms  
Subroutine number 0

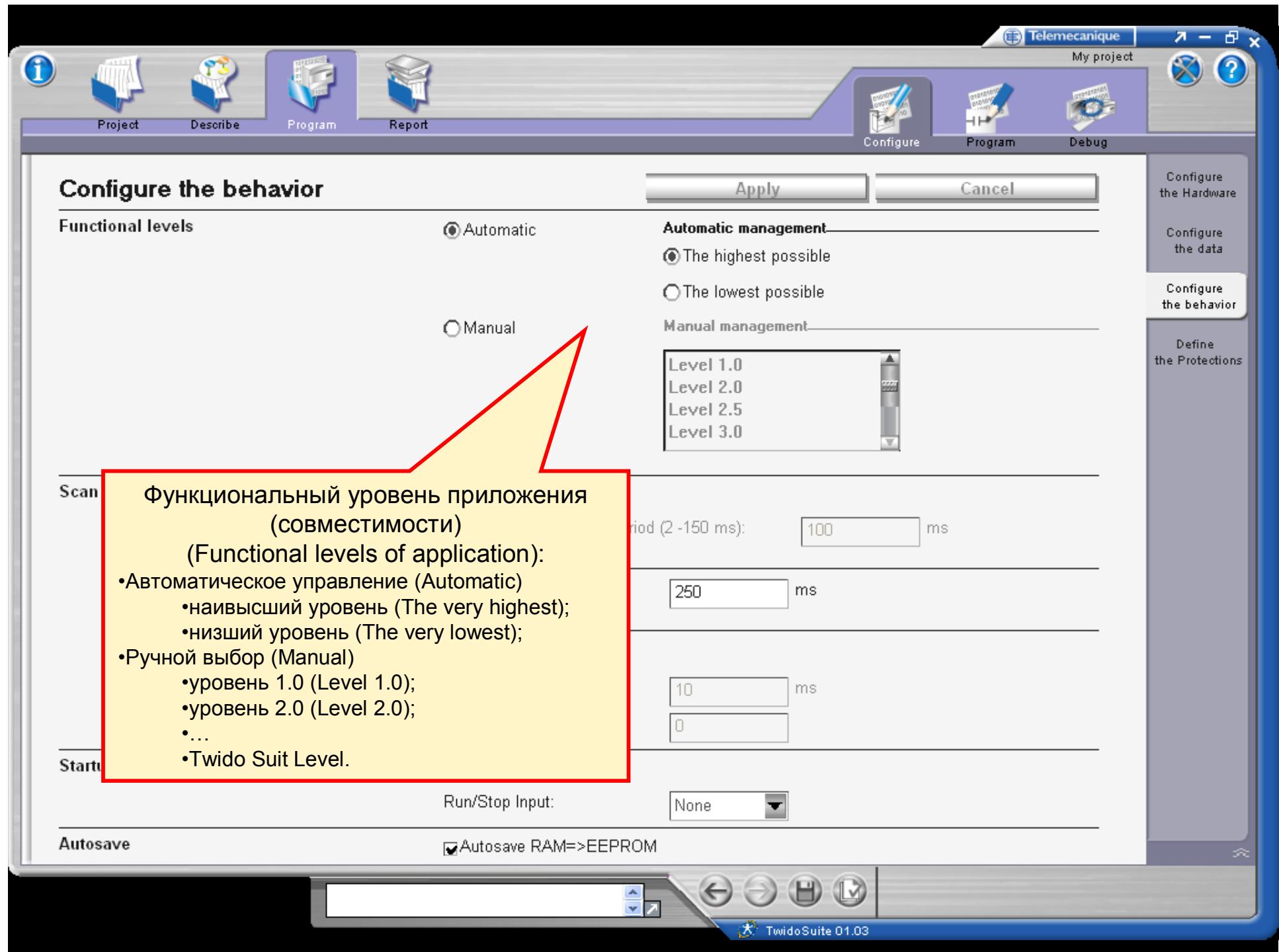
Startup  Automatic start in Run  
Run/Stop Input: None

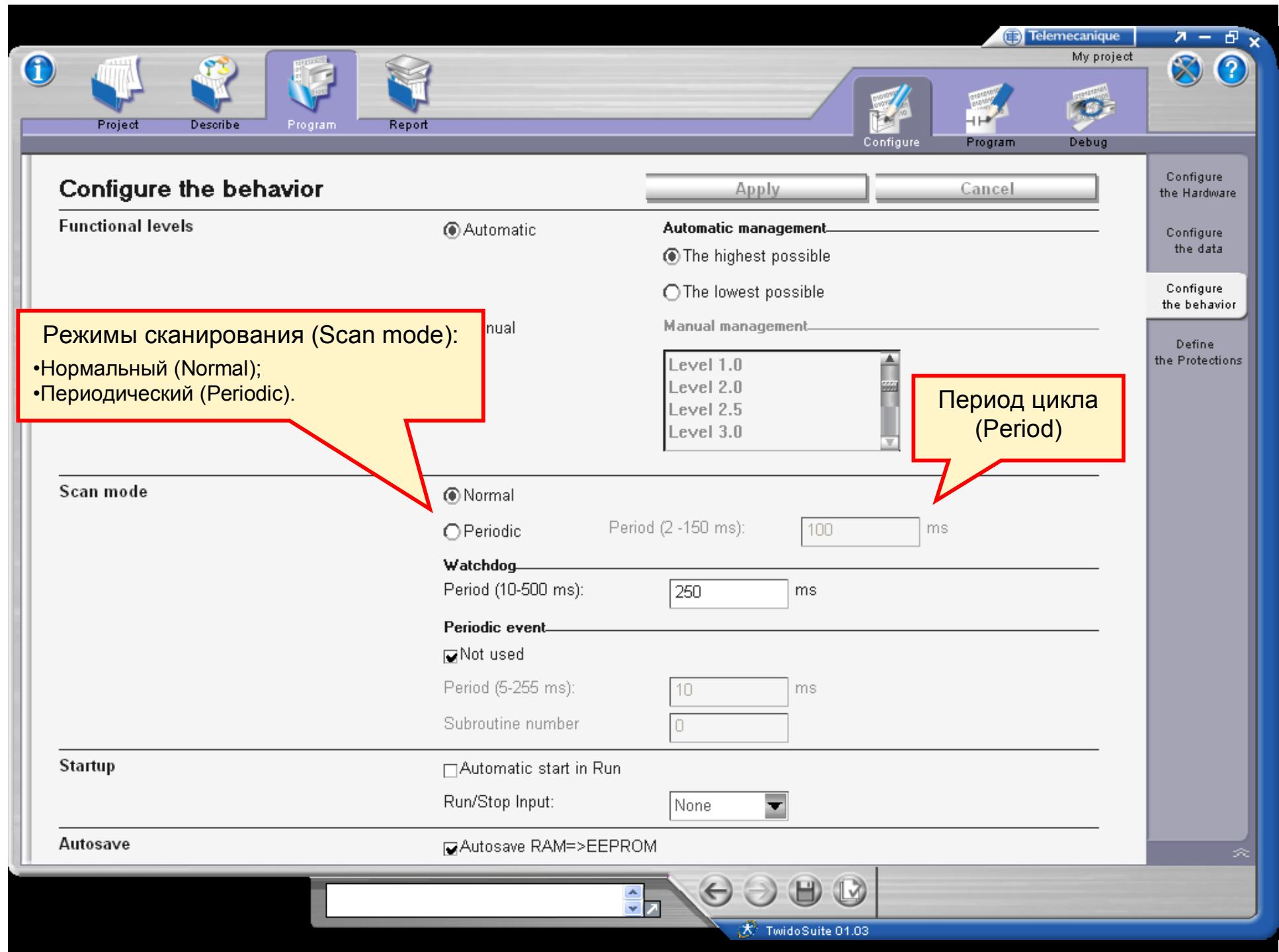
**Автосохранение (Autosave)**

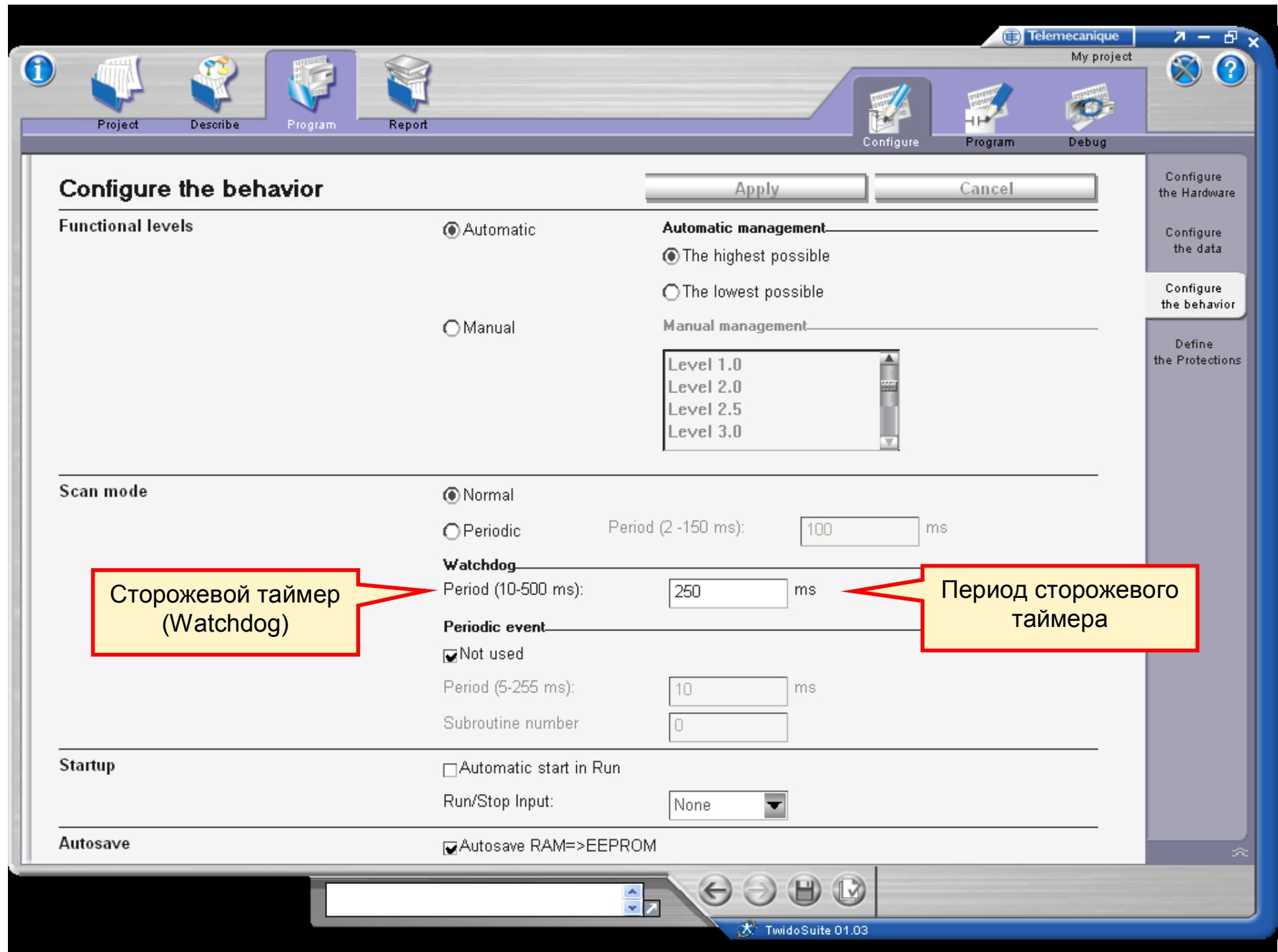
**Autosave**  Autosave RAM=>EEPROM

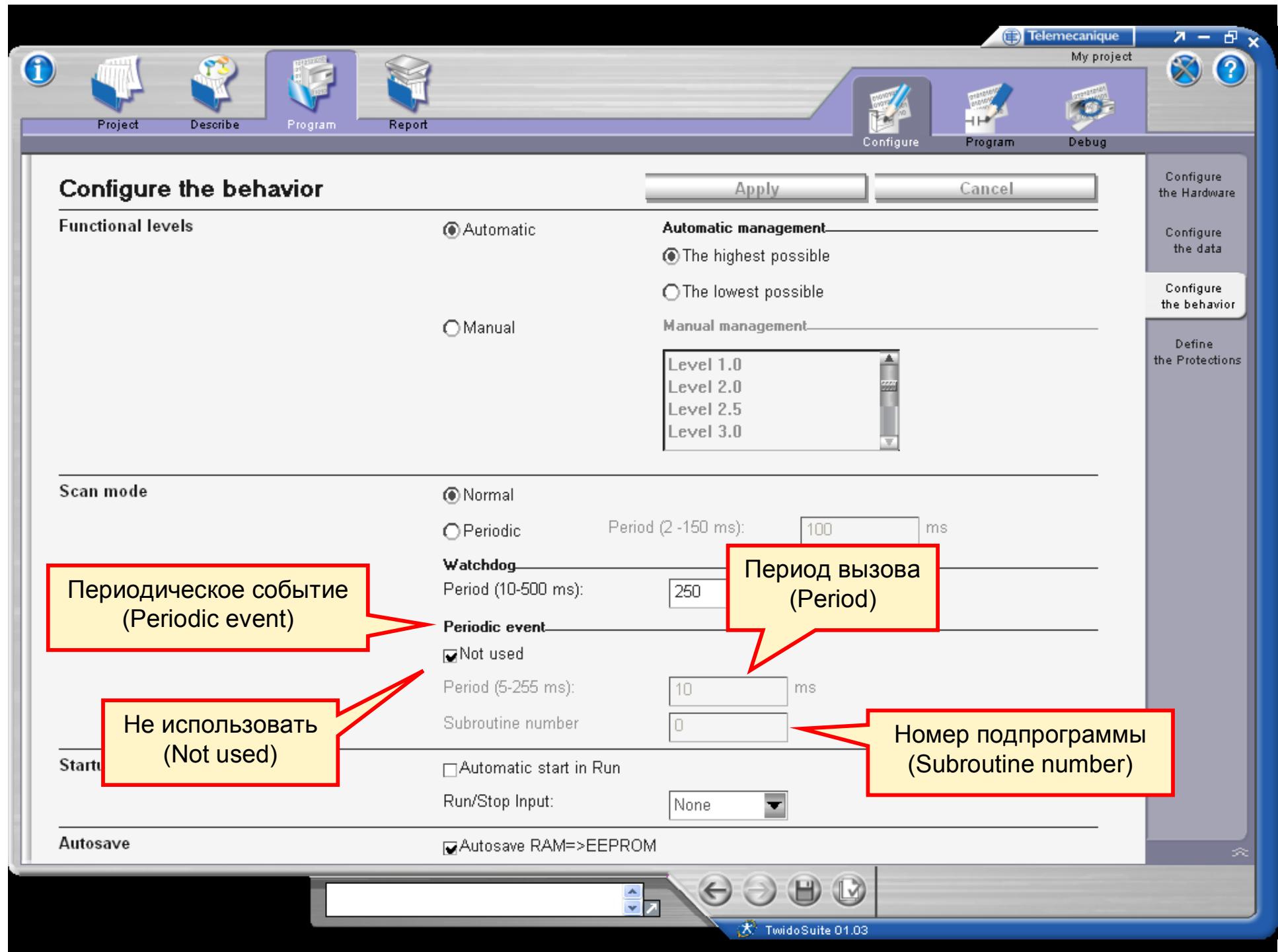
Configure the Hardware  
Configure the data  
Configure the behavior  
Define the Protections

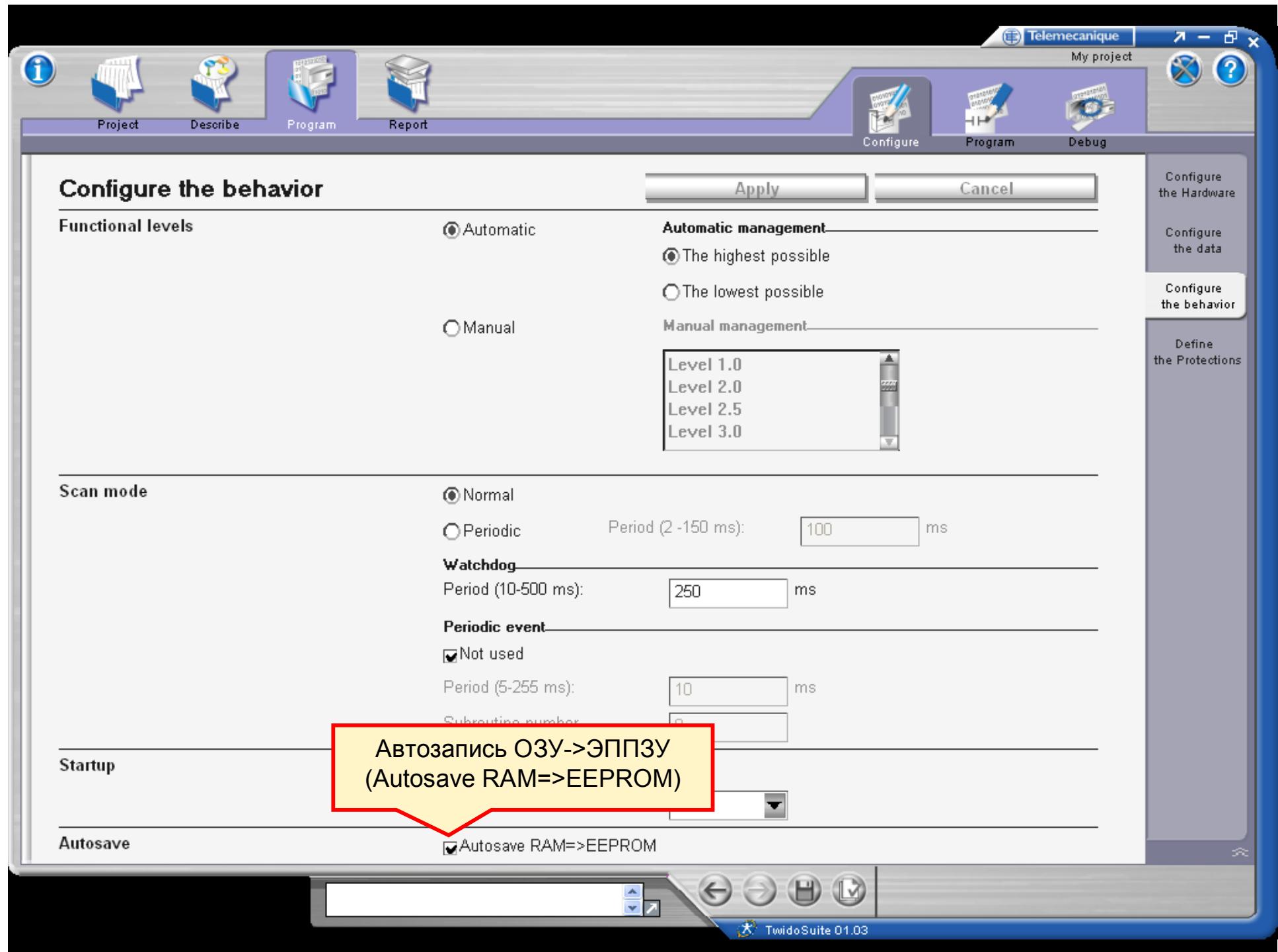
TwidoSuite 01.03



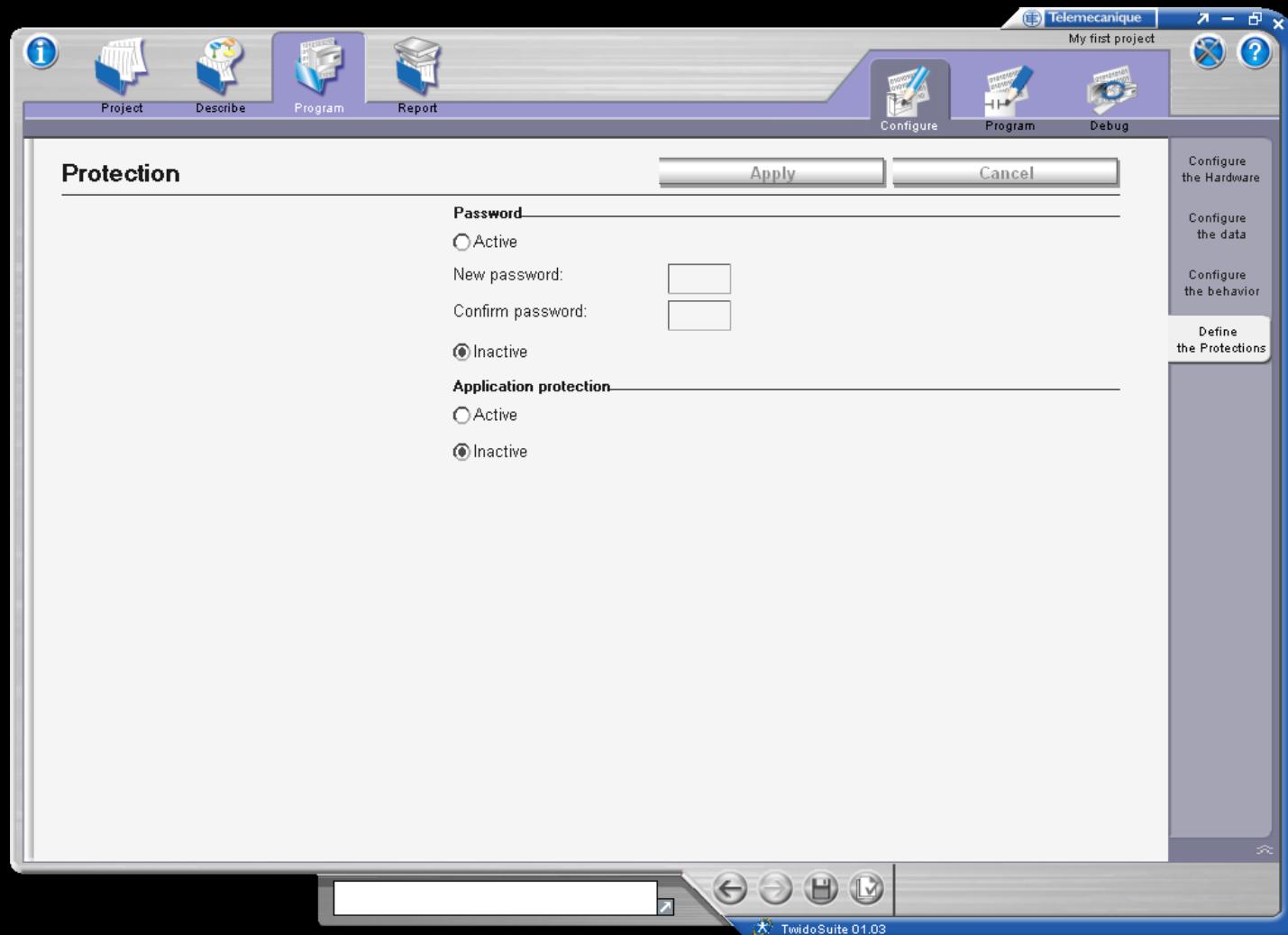


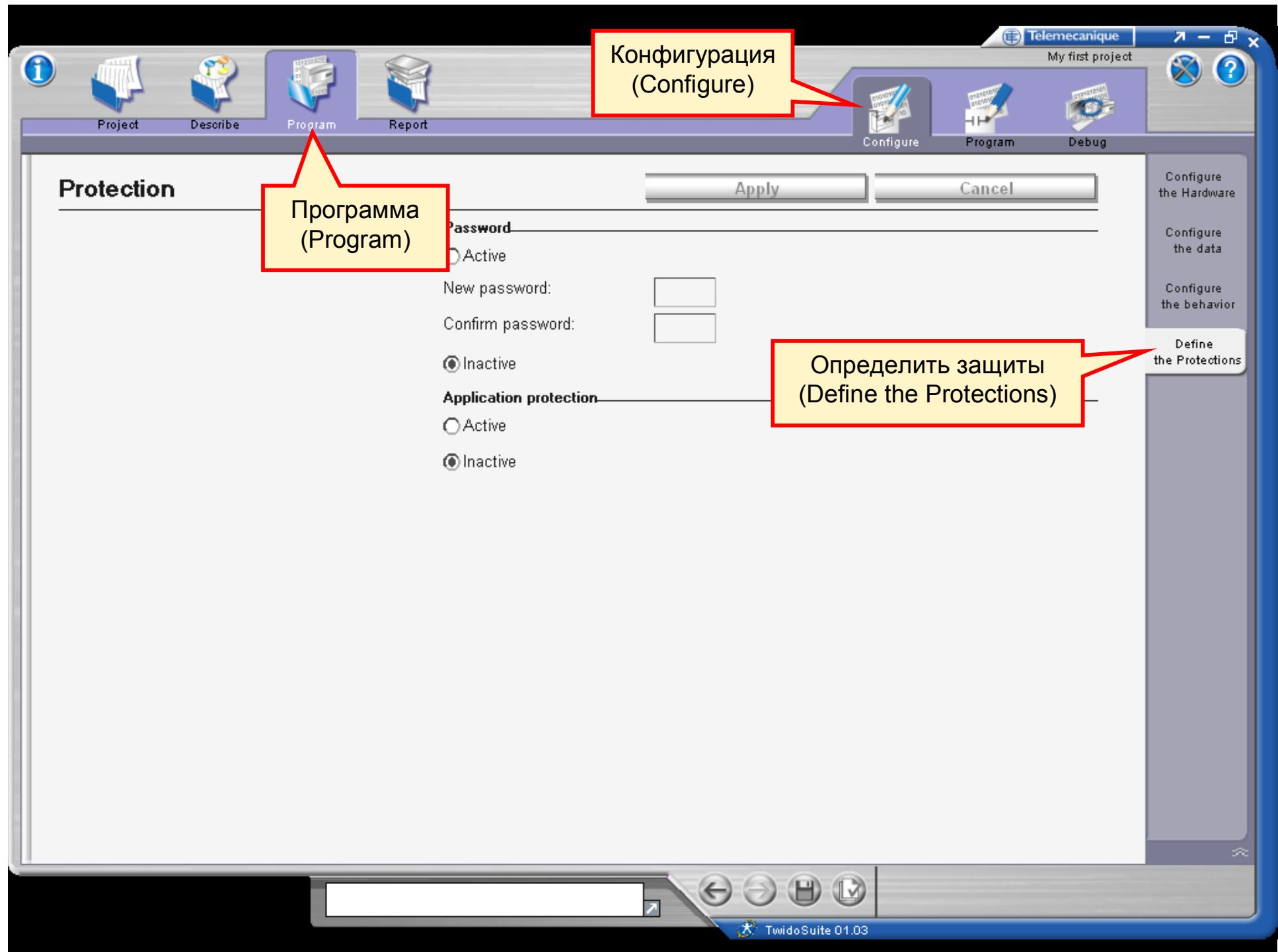


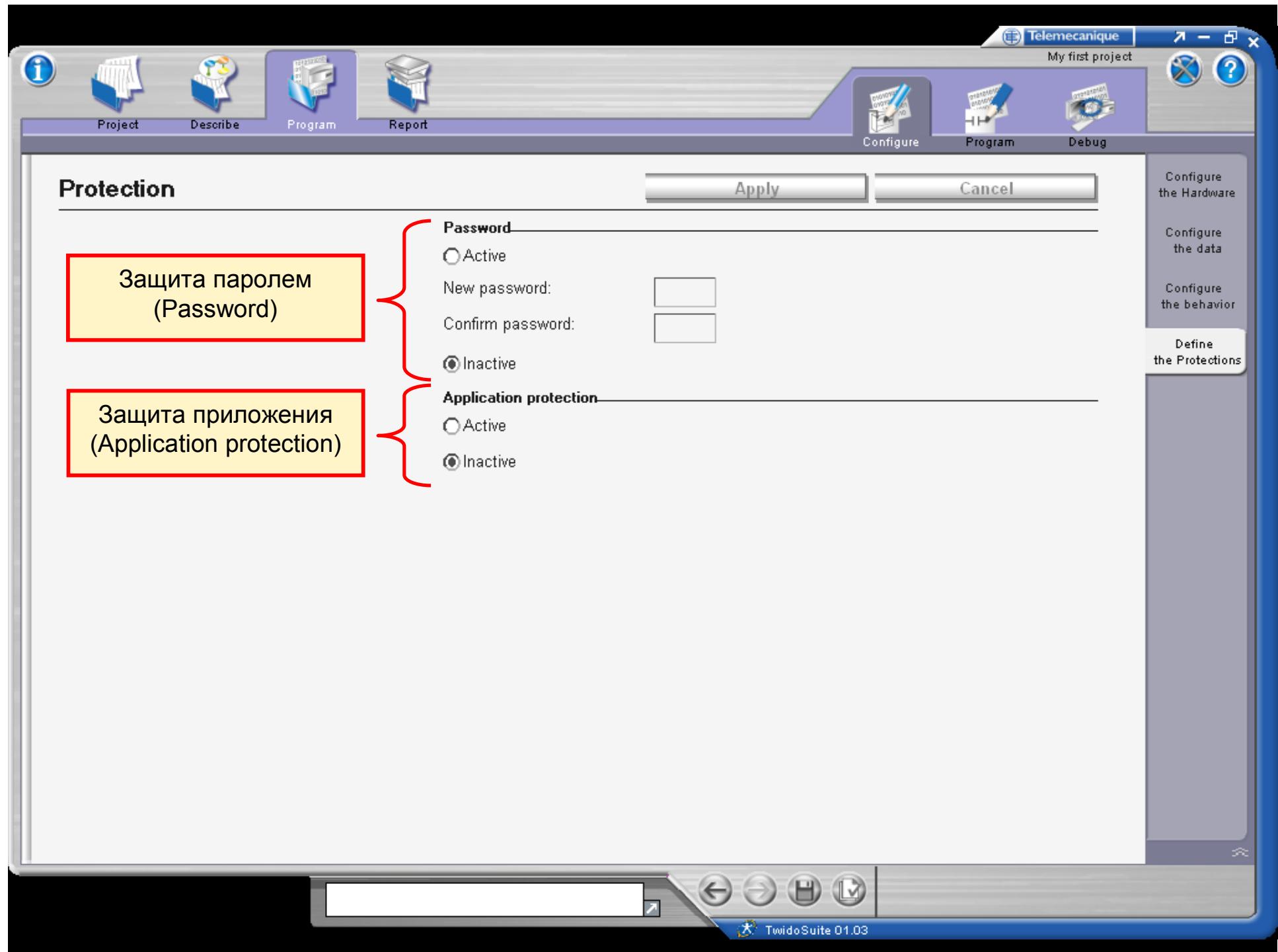


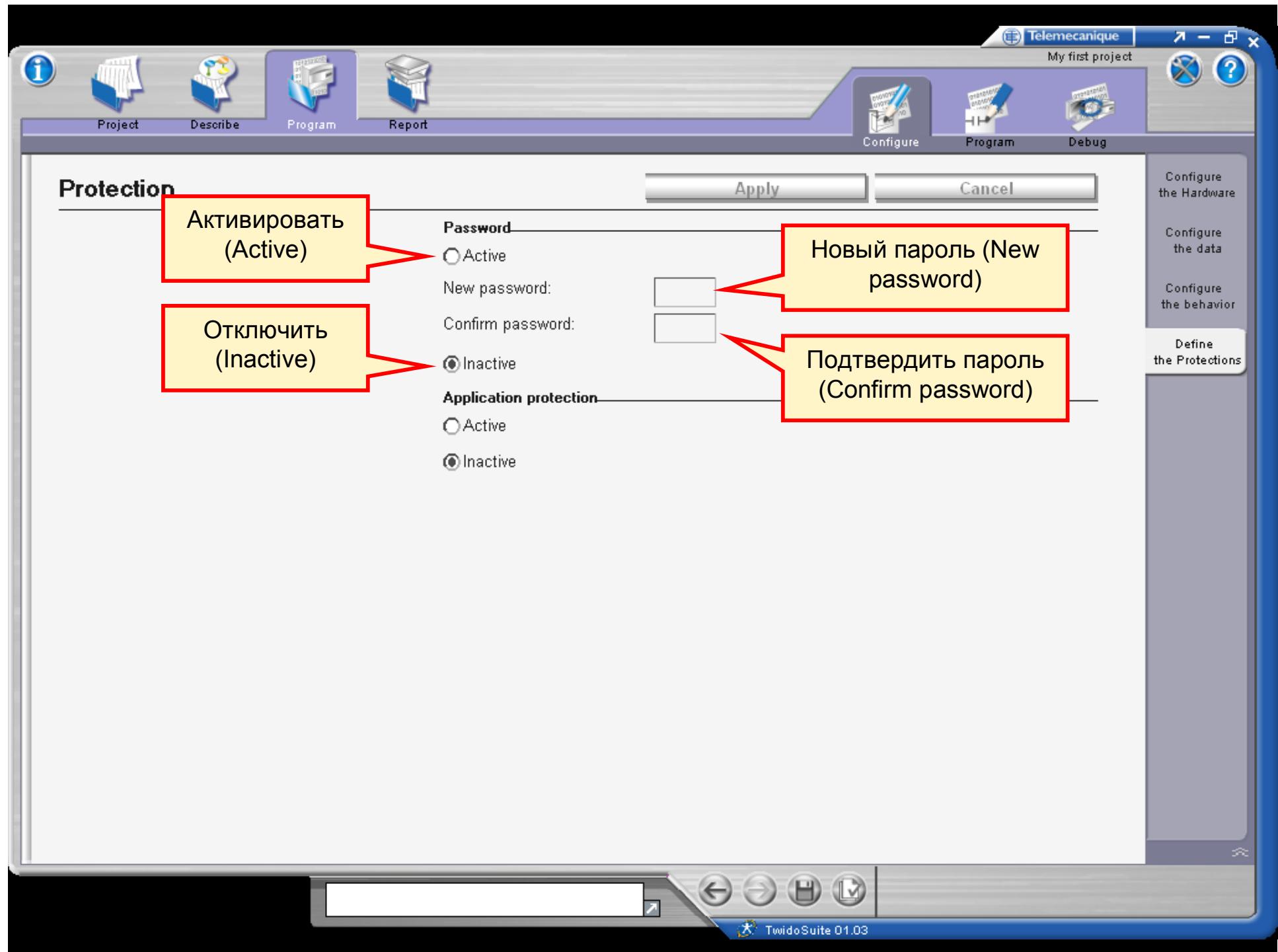


# Конфигурирование защиты









# Создание отчета

