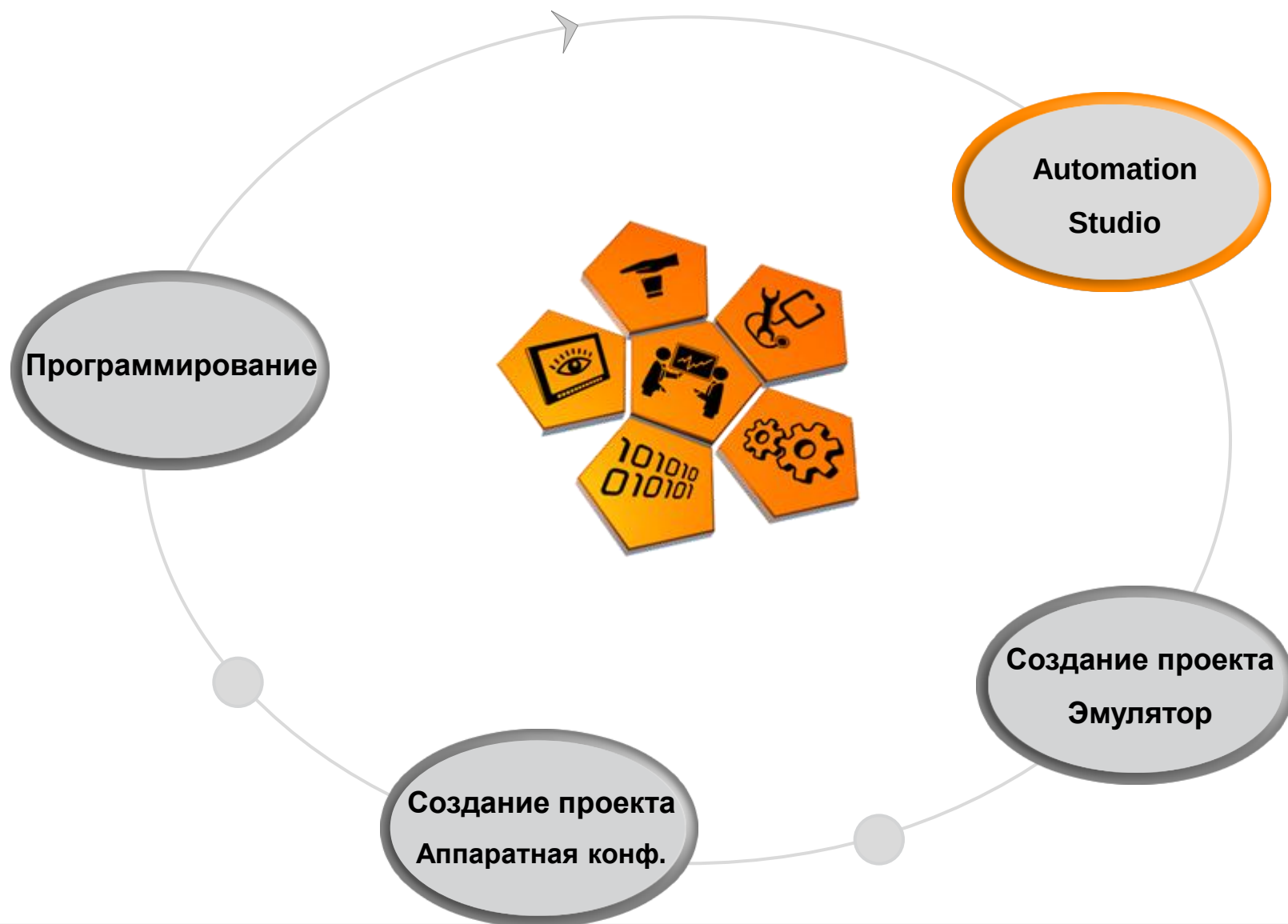




TM210

РАБОТА С ПРОГРАММОЙ AUTOMATION STUDIO





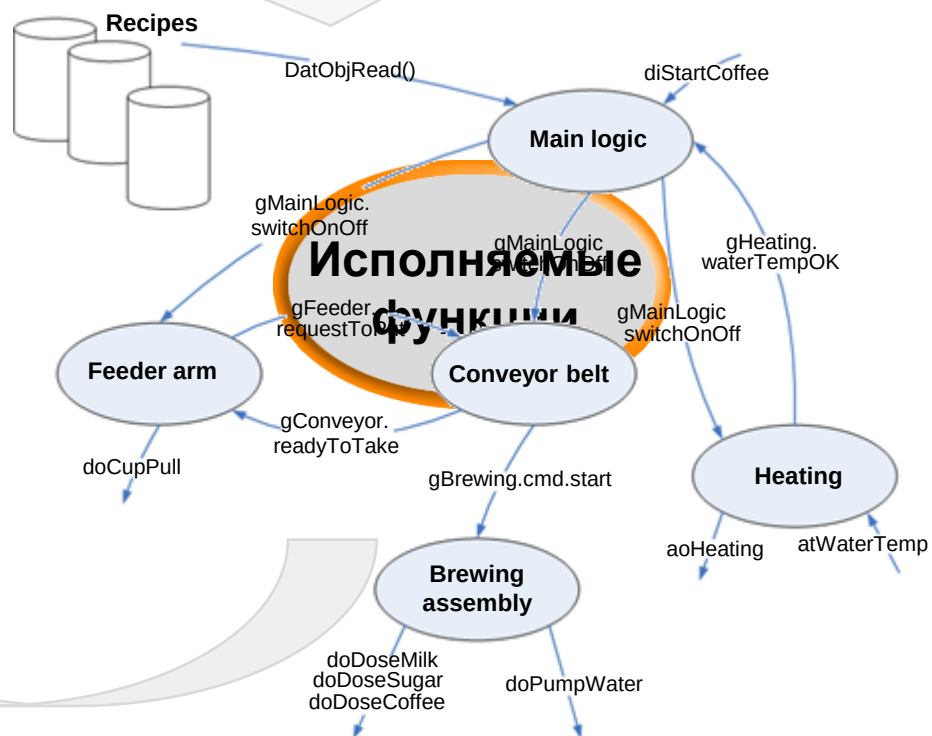
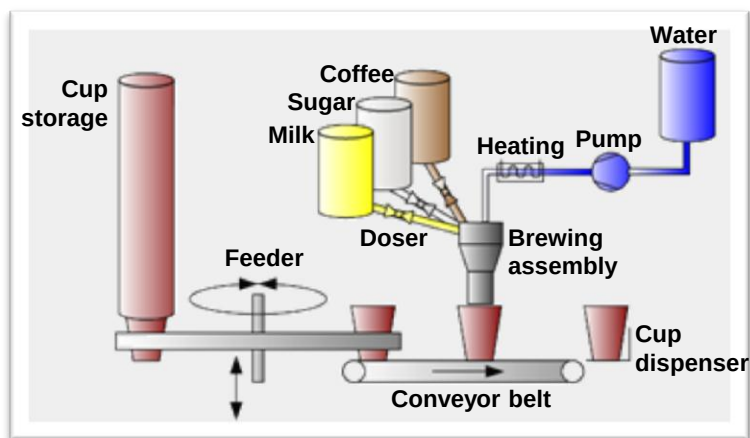


Automation Studio

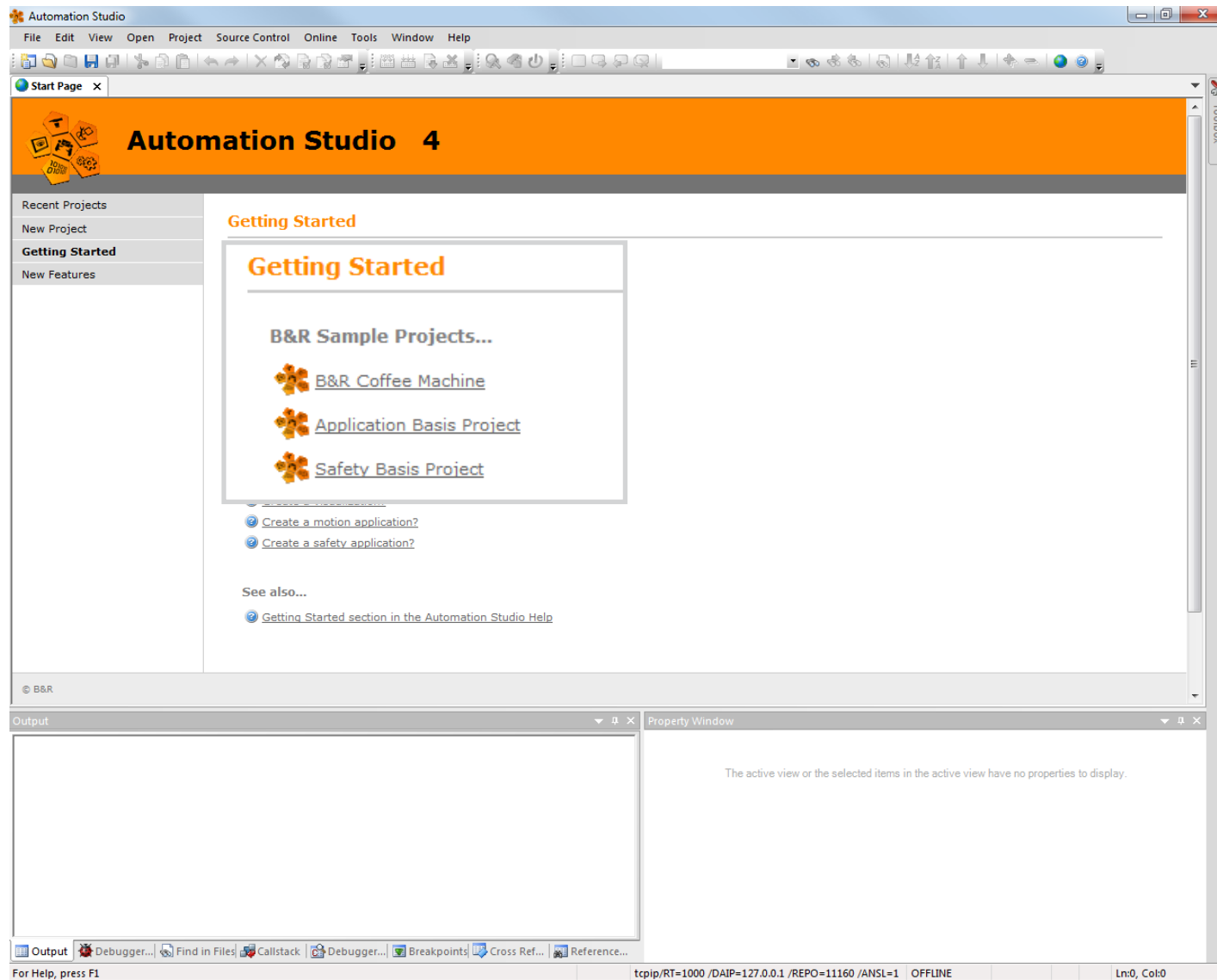




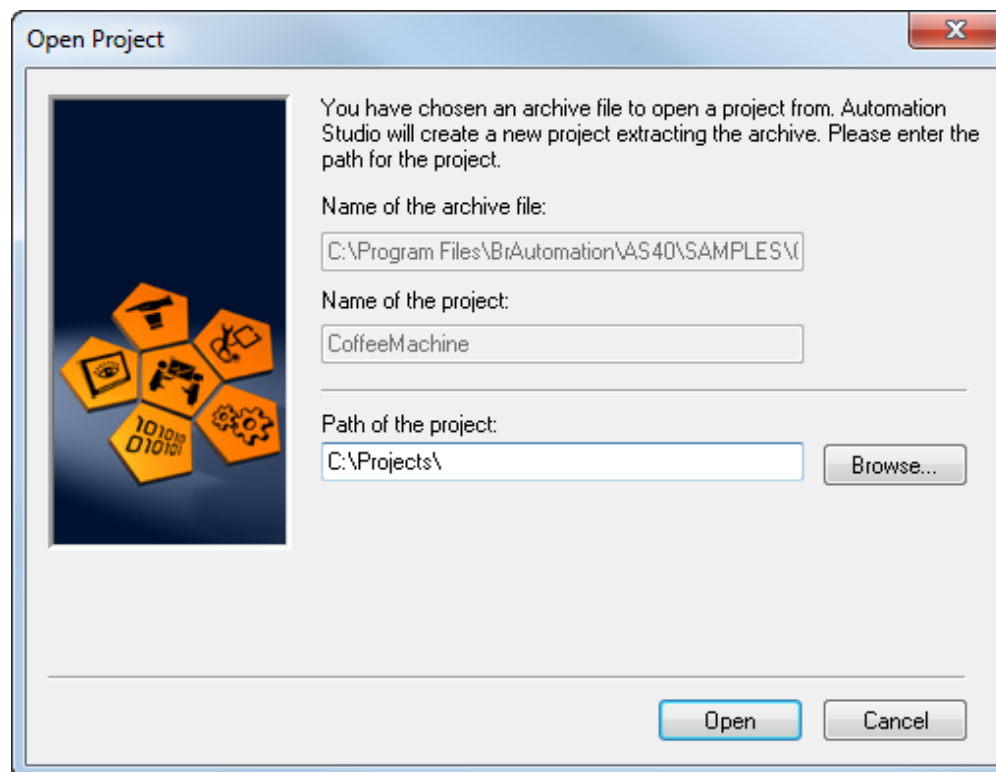
Типовой проект "Coffee Machine"

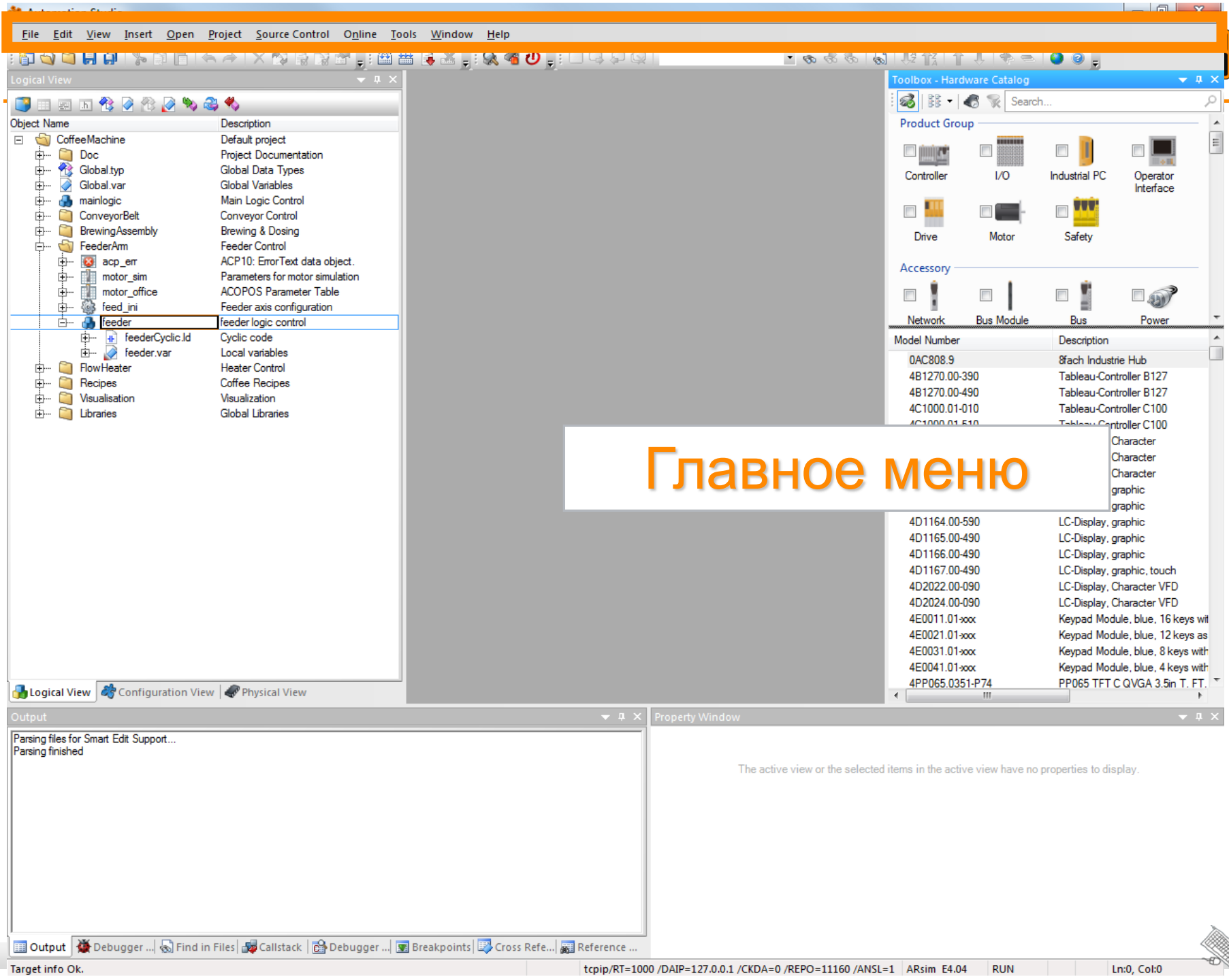


Типовой проект "CoffeeMachine"



Типовой проект "CoffeeMachine"





Automation Studio

Object Name | Description

- CoffeeMachine | Default project
- Doc | Project Documentation
- Global.typ | Global Data Types
- Global.var | Global Variables
- mainlogic | Main Logic Control
- ConveyorBelt | Conveyor Control
- BrewingAssembly | Brewing & Dosing
- FeederArm | Feeder Control
- acp_err | ACP10: ErrorText data object.
- motor_sim | Parameters for motor simulation
- motor_office | ACOPOS Parameter Table
- feed_ini | Feeder axis configuration
- feeder** | **feeder logic control**
- feederCyclic.Id | Cyclic code
- feeder.var | Local variables
- FlowHeater | Heater Control
- Recipes | Coffee Recipes
- Visualisation | Visualization
- Libraries | Global Libraries

Product Group

- Controller
- I/O
- Industrial PC
- Operator Interface
- Drive
- Motor
- Safety

Accessory

- Network
- Bus Module
- Bus
- Power

Model Number	Description
0AC808.9	8fach Industrie Hub
4B1270.00-390	Tableau-Controller B127
4B1270.00-490	Tableau-Controller B127
4C1000.01-010	Tableau-Controller C100
4C1000.01-510	Tableau-Controller C100
	Character
	Character
	Character
	graphic
	graphic
4D1164.00-590	LC-Display, graphic
4D1165.00-490	LC-Display, graphic
4D1166.00-490	LC-Display, graphic
4D1167.00-490	LC-Display, graphic, touch
4D2022.00-090	LC-Display, Character VFD
4D2024.00-090	LC-Display, Character VFD
4E0011.01-xxx	Keypad Module, blue, 16 keys with
4E0021.01-xxx	Keypad Module, blue, 12 keys as
4E0031.01-xxx	Keypad Module, blue, 8 keys with
4E0041.01-xxx	Keypad Module, blue, 4 keys with
4PP065.0351-P74	PP065 TFT C QVGA 3.5in T. FT.

Панели инструментов

Logical View | Configuration View | Physical View

Output

Parsing files for Smart Edit Support...
Parsing finished

Property Window

The active view or the selected items in the active view have no properties to display.

Output | Debugger ... | Find in Files | Callstack | Debugger ... | Breakpoints | Cross Refe... | Reference ...

target info OK. | tcpip/K1=1000 /DAIP=127.0.0.1 /CKDA=0 /REPO=11160 /ANSL=1 | ARsim E4.04 | RUN | Ln:0, Col:0

Automation Studio

File Edit View Insert Open Project Source Control Online Tools Window Help

Logical View

Object Name Description

- CoffeeMachine Default project
- Doc Project Documentation
- Global.typ Global Data Types
- Global.var Global Variables
- mainlogic Main Logic Control
- ConveyorBelt Conveyor Control
- BrewingAssembly Brewing & Dosing
- FeederArm Feeder Control
- acp_err ACP10: ErrorText data object.
- motor_sim Parameters for motor simulation
- motor_office ACOPOS Parameter Table
- feed_ini Feeder axis configuration
- feeder** **feeder logic control**
- feederCyclic.Id Cyclic code
- feeder.var Local variables
- FlowHeater Heater Control
- Recipes Coffee Recipes
- Visualisation Visualization
- Libraries Global Libraries

Logical View Configuration View Physical View

Output

Parsing files for Smart Edit Support...
Parsing finished

Property Window

The active view or the selected items in the active view have no properties to display.

Toolbox - Hardware Catalog

Search...

Product Group

- Controller
- I/O
- Industrial PC
- Operator Interface
- Drive
- Motor
- Safety

Accessory

- Network
- Bus Module
- Bus
- Power

Model Number	Description
0AC808.9	8fach Industrie Hub
4B1270.00-390	Tableau-Controller B127
4B1270.00-490	Tableau-Controller B127
4C1000.01-010	Tableau-Controller C100
4C1000.01-510	Tableau-Controller C100
	Character
	Character
	Character
	graphic
	graphic
4D1164.00-590	LC-Display, graphic
4D1165.00-490	LC-Display, graphic
4D1166.00-490	LC-Display, graphic
4D1167.00-490	LC-Display, graphic, touch
4D2022.00-090	LC-Display, Character VFD
4D2024.00-090	LC-Display, Character VFD
4E0011.01-xxx	Keypad Module, blue, 16 keys with
4E0021.01-xxx	Keypad Module, blue, 12 keys as
4E0031.01-xxx	Keypad Module, blue, 8 keys with
4E0041.01-xxx	Keypad Module, blue, 4 keys with
4PP065.0351-P74	PP065 TFT C QVGA 3.5in T. FT.

Рабочая область

Target info Ok.

tcpip/RT=1000 /DAIP=127.0.0.1 /CKDA=0 /REPO=11160 /ANSL=1 ARsim E4.04 RUN Ln:0, Col:0

Automation Studio

File Edit View Insert Open Project Source Control Online Tools Window Help

Logical View

Object Name Description

- CoffeeMachine Default project
- Doc Project Documentation
- Global.typ Global Data Types
- Global.var Global Variables
- mainlogic Main Logic Control
- ConveyorBelt Conveyor Control
- BrewingAssembly Brewing & Dosing
- FeederArm Feeder Control
- acp_err ACP10: ErrorText data object.
- motor_sim Parameters for motor simulation
- motor_office ACOPOS Parameter Table
- feed_ini Feeder axis configuration
- feeder** **feeder logic control**
- feederCyclic.Id Cyclic code
- feeder.var Local variables
- FlowHeater Heater Control
- Recipes Coffee Recipes
- Visualisation Visualization
- Libraries Global Libraries

Logical View Configuration View Physical View

Output

Parsing files for Smart Edit Support...
Parsing finished

Property Window

The active view or the selected items in the active view have no properties to display.

Product Group

- Controller
- I/O
- Industrial PC
- Operator Interface
- Drive
- Motor
- Safety

Accessory

- Network
- Bus Module
- Bus
- Power

Model Number	Description
0AC808.9	8fach Industrie Hub
4B1270.00-390	Tableau-Controller B127
4B1270.00-490	Tableau-Controller B127
4C1000.01-010	Tableau-Controller C100
4C1000.01-510	Tableau-Controller C100
4D1022.00-090	LC-Display, Character
4D1042.00-090	LC-Display, Character
4D1044.00-090	LC-Display, Character
4D1084.00-090	LC-Display, graphic
4D1164.00-090	LC-Display, graphic
4D1164.00-590	LC-Display, graphic
4D1165.00-490	LC-Display, graphic
4D1166.00-490	LC-Display, graphic
4D1167.00-490	LC-Display, graphic, touch
4D2022.00-090	LC-Display, Character VFD
4D2024.00-090	LC-Display, Character VFD
4E0011.01-xxx	Keypad Module, blue, 16 keys with
4E0021.01-xxx	Keypad Module, blue, 12 keys as
4E0031.01-xxx	Keypad Module, blue, 8 keys with
4E0041.01-xxx	Keypad Module, blue, 4 keys with
4PP065.0351-P74	PP065 TFT C QVGA 3.5in T. FT.

Target info Ok.

tcpip/RT=1000 /DAIP=127.0.0.1 /CKDA=0 /REPO=11160 /ANSL=1 ARsim E4.04 RUN Ln:0, Col:0

Панель инструментов - Каталоги

Automation Studio

File Edit View Insert Open Project Source Control Online Tools Window Help

Logical View

Object Name	Description
CoffeeMachine	Default project
Doc	Project Documentation
Global.typ	Global Data Types
Global.var	Global Variables
mainlogic	Main Logic Control
ConveyorBelt	Conveyor Control
BrewingAssembly	Brewing & Dosing
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acp_err	ACP10: ErrorText data object.
motor_sim	Parameters for motor simulation
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feed_ini	Feeder axis configuration
feeder	feeder logic control
feederCyclic.Id	Cyclic code
feeder.var	Local variables
FlowHeater	Heater Control
Recipes	Coffee Recipes
Visualisation	Visualization
Libraries	Global Libraries

Toolbox - Hardware Catalog

Product Group

Controller I/O Industrial PC Operator Interface

Drive Motor Safety

Accessory

Network Bus Module Bus Power

Model Number	Description
0AC808.9	8fach Industrie Hub
4B1270.00-390	Tableau-Controller B127
4B1270.00-490	Tableau-Controller B127
4C1000.01-010	Tableau-Controller C100
4C1000.01-510	Tableau-Controller C100
	Character
	Character
	Character
	graphic
	graphic
4D1164.00-590	LC-Display, graphic
4D1165.00-490	LC-Display, graphic
4D1166.00-490	LC-Display, graphic
4D1167.00-490	LC-Display, graphic, touch
4D2022.00-090	LC-Display, Character VFD
4D2024.00-090	LC-Display, Character VFD
4E0011.01-xxx	Keypad Module, blue, 16 keys with
4E0021.01-xxx	Keypad Module, blue, 12 keys as
4E0031.01-xxx	Keypad Module, blue, 8 keys with
4E0041.01-xxx	Keypad Module, blue, 4 keys with
4PP065.0351-P74	PP065 TFT C QVGA 3.5in T. FT.

Окно вывода

Output

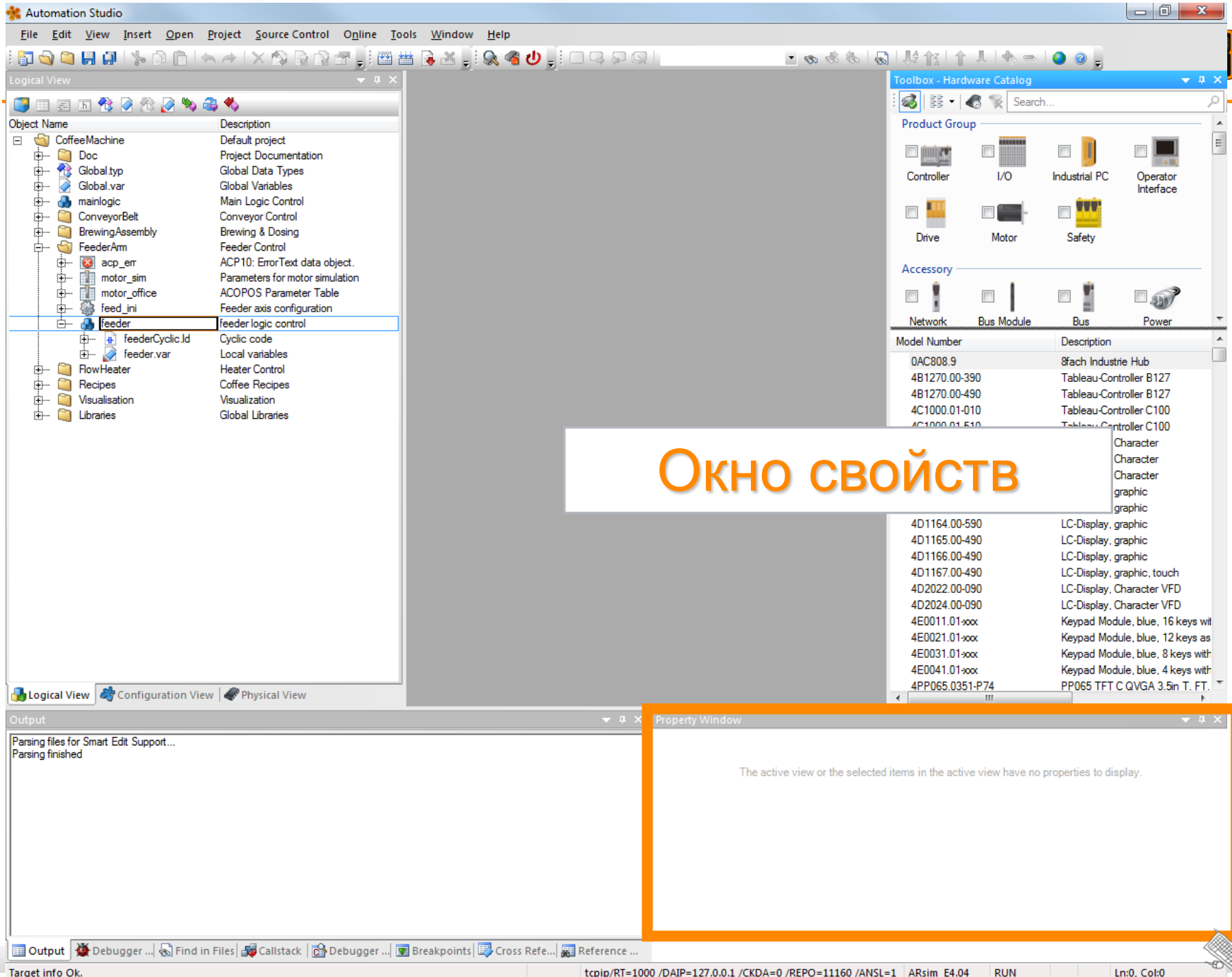
Parsing files for Smart Edit Support...

Parsing finished

Property Window

The active view or the selected items in the active view have no properties to display.

Target info Ok. tcpip/RT=1000 /DAIP=127.0.0.1 /CKDA=0 /REPO=11160 /ANSL=1 ARsim E4.04 RUN Ln:0, Col:0



Automation Studio

File Edit View Insert Open Project Source Control Online Tools Window Help

Logical View

Object Name	Description
CoffeeMachine	Default project
Doc	Project Documentation
Global.typ	Global Data Types
Global.var	Global Variables
mainlogic	Main Logic Control
ConveyorBelt	Conveyor Control
BrewingAssembly	Brewing & Dosing
FeederArm	Feeder Control
acp_err	ACP10: ErrorText data object.
motor_sim	Parameters for motor simulation
motor_office	ACOPOS Parameter Table
feed_ini	Feeder axis configuration
feeder	feeder logic control
feederCyclic.Id	Cyclic code
feeder.var	Local variables
FlowHeater	Heater Control
Recipes	Coffee Recipes
Visualisation	Visualization
Libraries	Global Libraries

Logical View Configuration View Physical View

Output

Parsing files for Smart Edit Support...
Parsing finished

Toolbox - Hardware Catalog

Search...

Product Group

Controller I/O Industrial PC Operator Interface

Drive Motor Safety

Accessory

Network Bus Module Bus Power

Model Number	Description
0AC808.9	8fach Industrie Hub
4B1270.00-390	Tableau-Controller B127
4B1270.00-490	Tableau-Controller B127
4C1000.01-010	Tableau-Controller C100
4C1000.01-510	Tableau-Controller C100
	Character
	Character
	Character
	graphic
	graphic
4D1164.00-590	LC-Display, graphic
4D1165.00-490	LC-Display, graphic
4D1166.00-490	LC-Display, graphic
4D1167.00-490	LC-Display, graphic, touch
4D2022.00-090	LC-Display, Character VFD
4D2024.00-090	LC-Display, Character VFD
4E0011.01-xxx	Keypad Module, blue, 16 keys with
4E0021.01-xxx	Keypad Module, blue, 12 keys as
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4E0041.01-xxx	Keypad Module, blue, 4 keys with
4PP065.0351-P74	PP065 TFT C QVGA 3.5in T. FT.

Property Window

The active view or the selected items in the active view have no properties to display.

Target info Ok.

tcpip/RT=1000 /DAIP=127.0.0.1 /CKDA=0 /REPO=11160 /ANSL=1 ARsim E4.04 RUN Ln:0, Col:0

Строка состояния

Организация программного обеспечения

The screenshot displays the Siemens Automation Studio interface. The main window shows a project tree on the left with the following structure:

- CoffeeMachine
 - Doc
 - Global.type
 - Global.var
 - mainlogic
 - ConveyorBelt
 - BrewingAssembly
 - FeederArm
 - acp_err
 - motor_sim
 - motor_office
 - feed_ini
 - feeder
 - feederCyclicId
 - feeder.var
 - FlowHeater
 - Recipes
 - Visualisation
 - Libraries

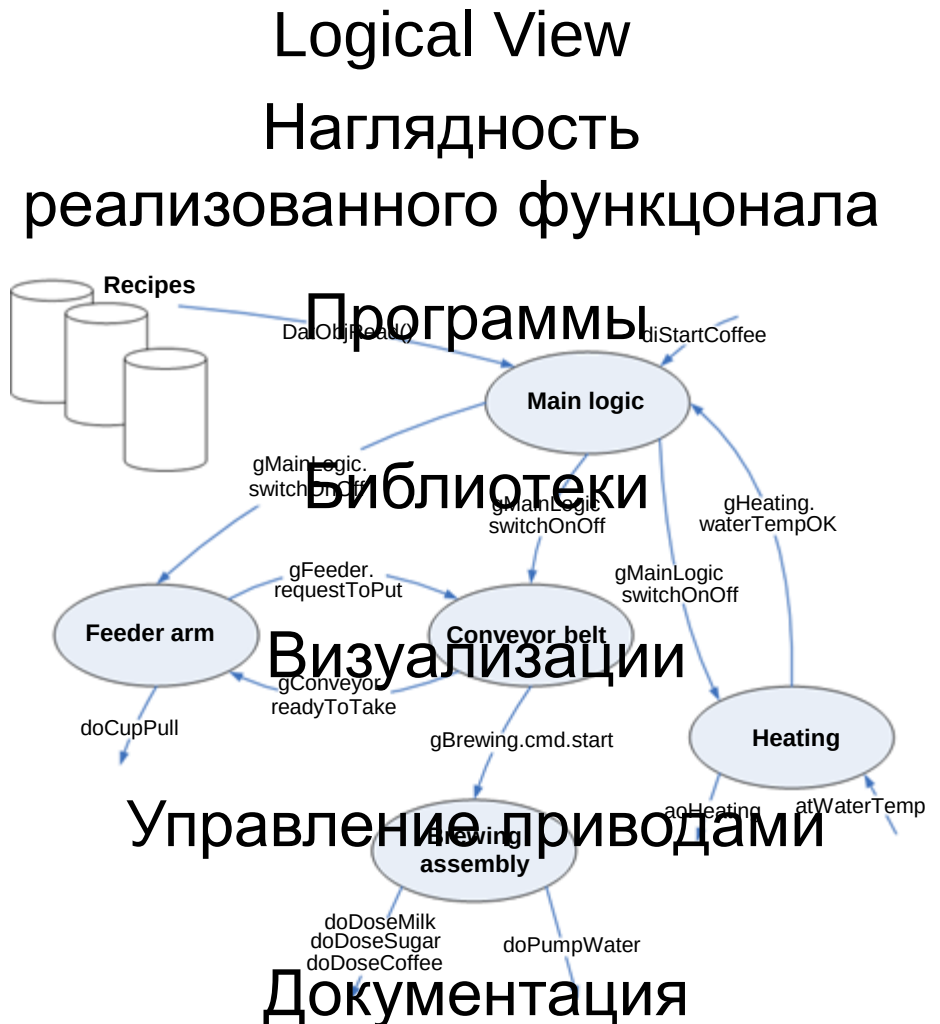
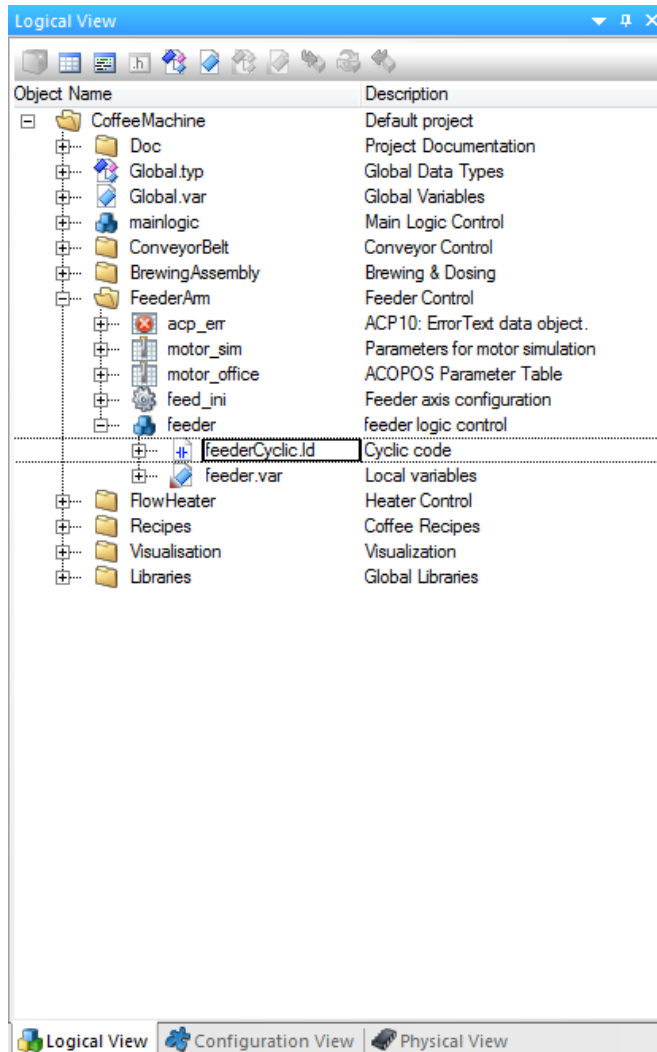
The 'Logical View' tab is active, showing the 'feederCyclicId' object selected. The 'Toolbox - Hardware Catalog' is open on the right, displaying a list of hardware components. The 'Accessory' section is expanded, showing a table of components:

Model Number	Description
0AC808.9	8fach Industrie Hub
4B1270.00-390	Tableau-Controller B127
4B1270.00-490	Tableau-Controller B127
4C1000.01-010	Tableau-Controller C100
4C1000.01-510	Tableau-Controller C100
4D1164.00-590	LC-Display, graphic
4D1165.00-490	LC-Display, graphic
4D1166.00-490	LC-Display, graphic
4D1167.00-490	LC-Display, graphic, touch
4D2022.00-090	LC-Display, Character VFD
4D2024.00-090	LC-Display, Character VFD
4E0011.01-xxx	Keypad Module, blue, 16 keys with
4E0021.01-xxx	Keypad Module, blue, 12 keys with
4E0031.01-xxx	Keypad Module, blue, 8 keys with
4E0041.01-xxx	Keypad Module, blue, 4 keys with
4PP065.0351-P74	PP065 TFT C QVGA 3.5in T. FT.

Проводник проекта

The 'Property Window' at the bottom right shows the message: "The active view or the selected items in the active view have no properties to display."

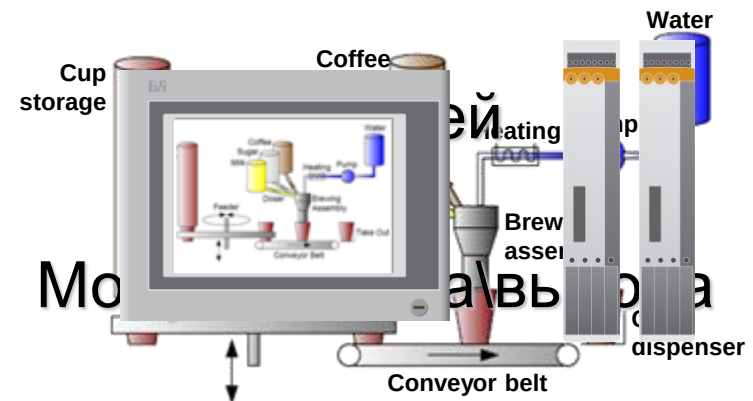
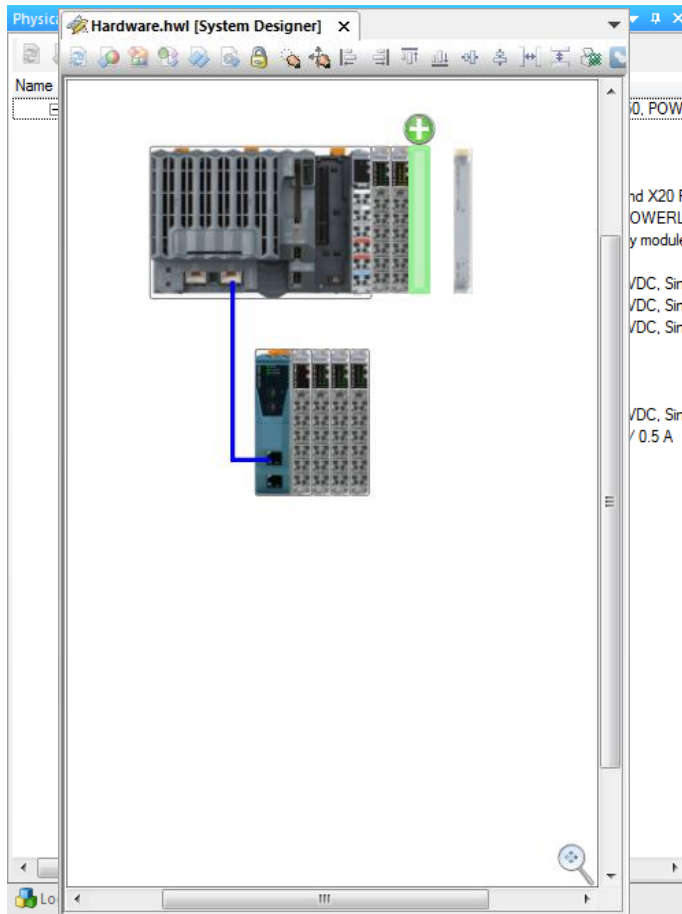
Target info OK. tcpip/RT=1000 /DAIP=127.0.0.1 /CKDA=0 /REPO=11160 /ANSL=1 ARsim E4.04 RUN Ln:0, Col:0





Physical View System Designer

Графическое отображение
конфигурации системы
ЦПУ

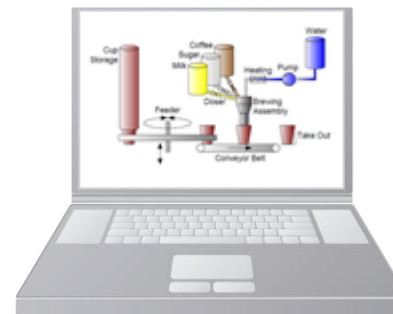
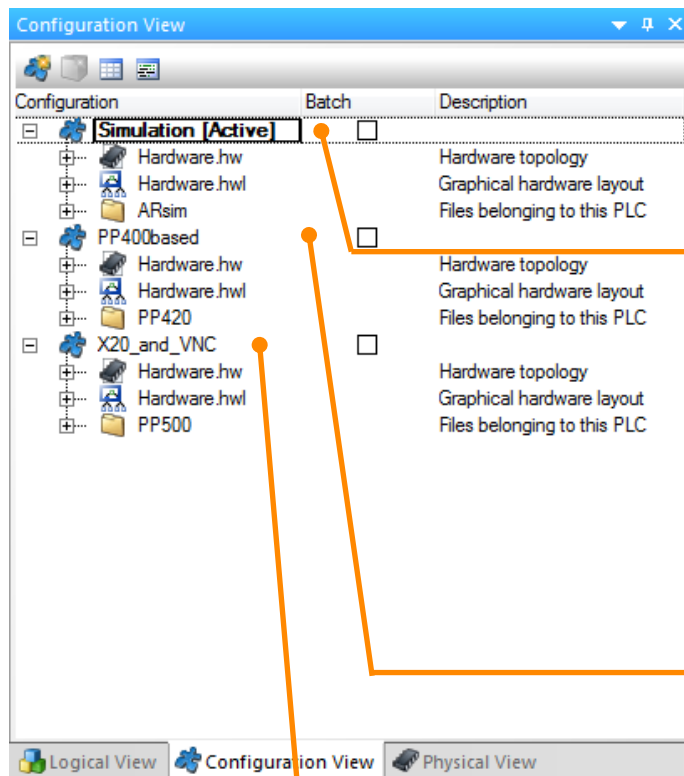


Привода
Интерфейсы

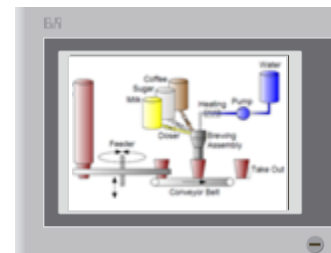




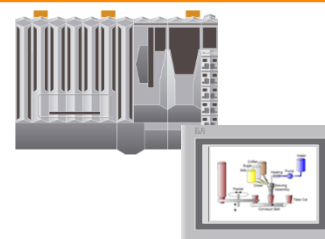
Configuration View



Эмулятор ARsim



PP400



X20_VNC





Logical View

Object Name	Description
Global.type	Global Data Types
Global.var	Global Variables
mainlogic	Main Logic Control
ConveyorBelt	Conveyor Control
conv_ini	Conveyor axis configuration
conveyor	Conveyor Logic Control
conveyorCyclicId	Cyclic code
conveyor.var	Local variables
BrewingAssembly	Brewing & Dosing
FeederArm	Feeder Control
FlowHeater	Heater Control
Recipes	Coffee Recipes
regular	Normal coffee
cappu	Cappuccino
espres	Espresso
Visualisation	Visualization
Libraries	Global Libraries

PP420 [Software]

Object Name	Version	Transfer To	Size (bytes)	Source	Source File	Description
CPU						
Cyclic #1 - [10 ms]						
mainlogic	1.00.0	UserROM	0	mainlogic	PP400based\PP420\C...	Main Log
feeder	1.00.0	UserROM	0	FeederArm.feeder	PP400based\PP420\C...	feeder lo
conveyor	1.00.0	UserROM	0	ConveyorBelt.conveyor	PP400based\PP420\C...	Conveyo
heating	1.00.0	UserROM	0	FlowHeater.heating	PP400based\PP420\C...	Heating
brewing	1.00.0	UserROM	0	BrewingAssembly.brewing	PP400based\PP420\C...	Brewing
Cyclic #2 - [20 ms]						
Cyclic #3 - [50 ms]						
Cyclic #4 - [100 ms]						
visCtrl	1.00.0	UserROM	0	Visualisation.visCtrl	PP400based\PP420\C...	Visualizat
visAlarm	1.00.0	UserROM	0	Visualisation.visAlarm	PP400based\PP420\C...	Alarm Co
visTrend	1.00.0	UserROM	0	Visualisation.visTrend	PP400based\PP420\C...	Trend Co
Cyclic #5 - [200 ms]						
Cyclic #6 - [500 ms]						
Cyclic #7 - [1000 ms]						
Cyclic #8 - [10 ms]						
Data Objects						
espres	1.00.0	UserROM	0	Recipes.espres	PP400based\PP420\C...	Espresso
cappu	1.00.0	UserROM	0	Recipes.cappu	PP400based\PP420\C...	Cappucir
regular	1.00.0	UserROM	0	Recipes.regular	PP400based\PP420\C...	Normal c
Nc Data Objects						
motor_sim	1.00.0	UserROM	0	FeederArm.motor_sim	PP400based\PP420\C...	Paramete
motor_offi	1.00.0	UserROM	0	FeederArm.motor_office	PP400based\PP420\C...	ACOPOS
conv_ini	1.00.0	UserROM	0	ConveyorBelt.conv_ini	PP400based\PP420\C...	Conveyo
feed_ini	1.00.0	UserROM	0	FeederArm.feed_ini	PP400based\PP420\C...	Feeder a
acp_err	1.00.0	UserROM	0	FeederArm.acp_err	PP400based\PP420\C...	ACP10: f
Visualization						
Binary Objects						
Library Objects						
sys_lib		UserROM	0	Libraries.sys_lib	PP400based\PP420\C...	
brsystem		UserROM	0	Libraries.brsystem	PP400based\PP420\C...	





Logical View

Object Name | Description

- Global.type | Global Data Types
- Global.var | Global Variables
- mainlogic | Main Logic Control
- ConveyorBelt | Conveyor Control
- conv_ini | Conveyor axis configuration
- conveyor | Conveyor Logic Control
- conveyorCyclic.Id** | **Cyclic code**
- conveyor.var | Local variables
- BrewingAssembly | Brewing & Dosing
- FeederArm | Feeder Control
- FlowHeater | Heater Control
- Recipes | Coffee Recipes
- regular | Normal coffee
- cappu | Cappuccino
- espres | Espresso
- Visualisation | Visualisation
- Libraries | Global Libraries

conveyor::conveyorCyclic.Id [Ladder Diagram - Cyclic] X

Copyright -- Bernecker + Rainer

Program: conveyor
File: conveyorCyclic.Id
Author: paulinw
Created: June 12, 2007

Implementation of program conveyor

PROGRAM_CYCLIC

0001
Power management of axis: as soon as machine is switched on, controller of axis becomes active

TRUE

axConveyor [DR] Axis

MC Power

Status

gConveyor.statu power

Ena

Busy

Error

ErrorID

0002
Do homing as soon as controller has been switched on

conveyorMC_H

ome

MC Home

gConveyor.statu home

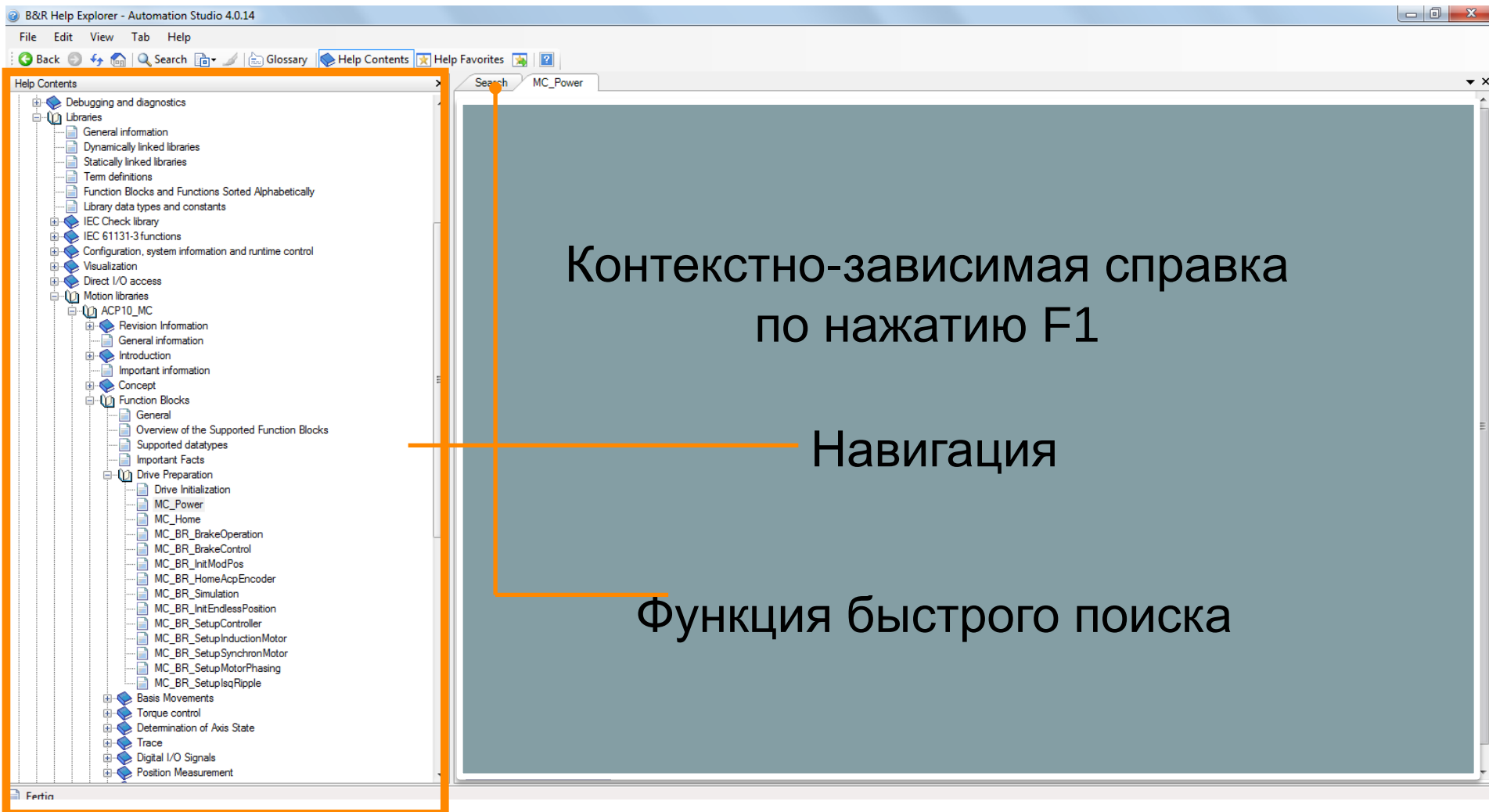
Logical View | Configuration View | Physical View

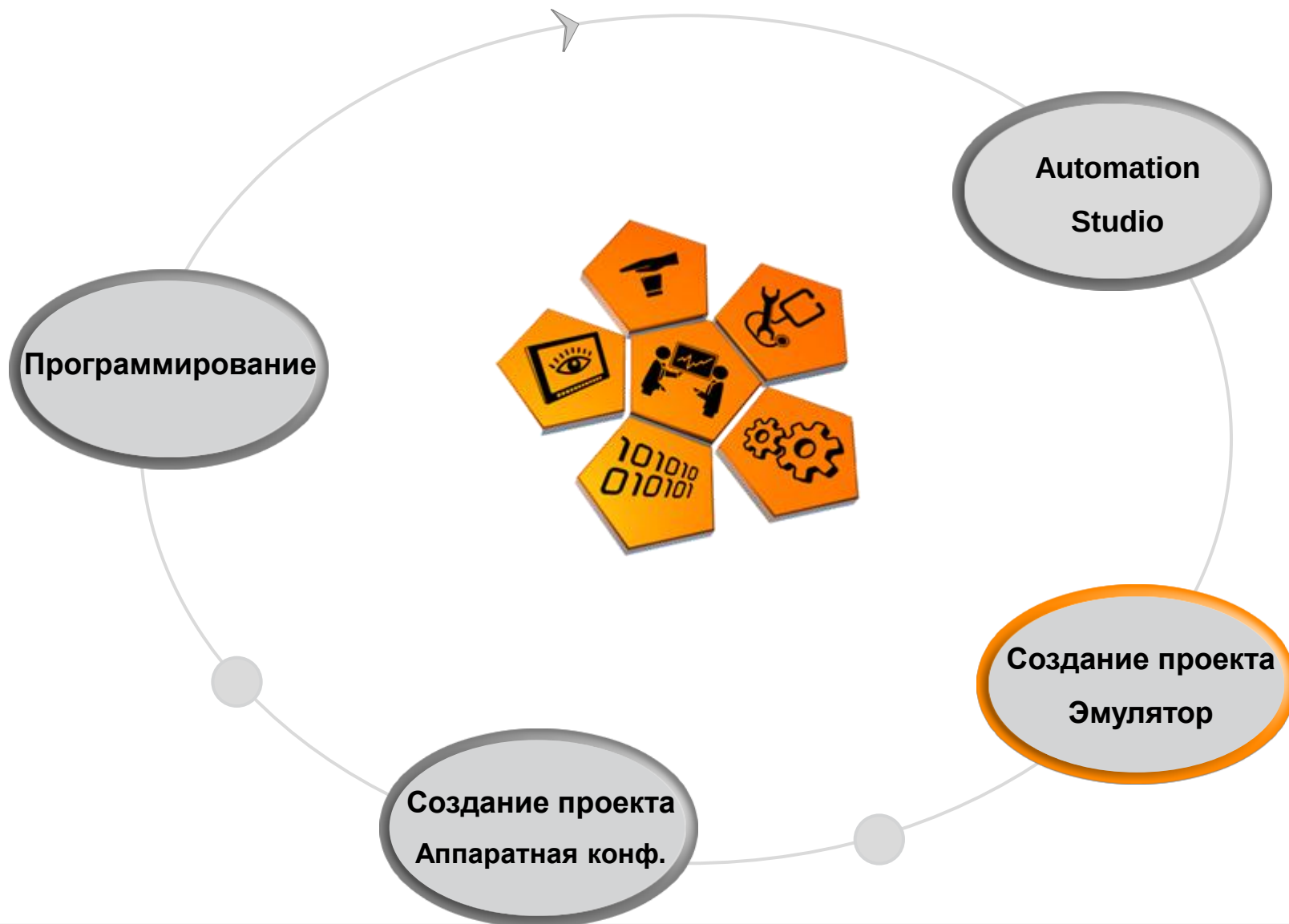
Выберите элемент

Нажмите **F1**

ABS	returns the absolute value of a number
Access	
ACOS	returns the arc cosine (inverse function of cos
Action	
ADD	adds 2 or more variables
Address contact	
ADR	determines the address of a data point
AND	makes a bitwise AND relation for 2 or more va
AsArLogClear	deletes or reinitializes the log data in an AR lo
AsArLogCreate	creates an AR logger user module; asynchron
AsArLogDelete	deletes an AR logger user module; asynchron
AsArLogGetInfo	reads information from a self-generated AR lo
AsArLogRead	reads a log entry from a AR logger module; as
AsArLogWrite	writes a log entry to a AR logger user module;
ascDT	converts the DATE_AND_TIME data type to
ascDTStructure	converts a "date" structure to a character stri
ascTIME	converts the TIME data type to a character st
ascTIMEStruc...	converts a "time" structure to a character str
asimChangeSl...	change slave address









Как создать исполняемый проект?

5 шагов к успеху





New Project

Automation Studio - New Project Wizard

In this screen please enter the base parameters for the new project.

 Name of the project:

Path of the project:
 

Note: A subfolder with the same name as the project will be created automatically.

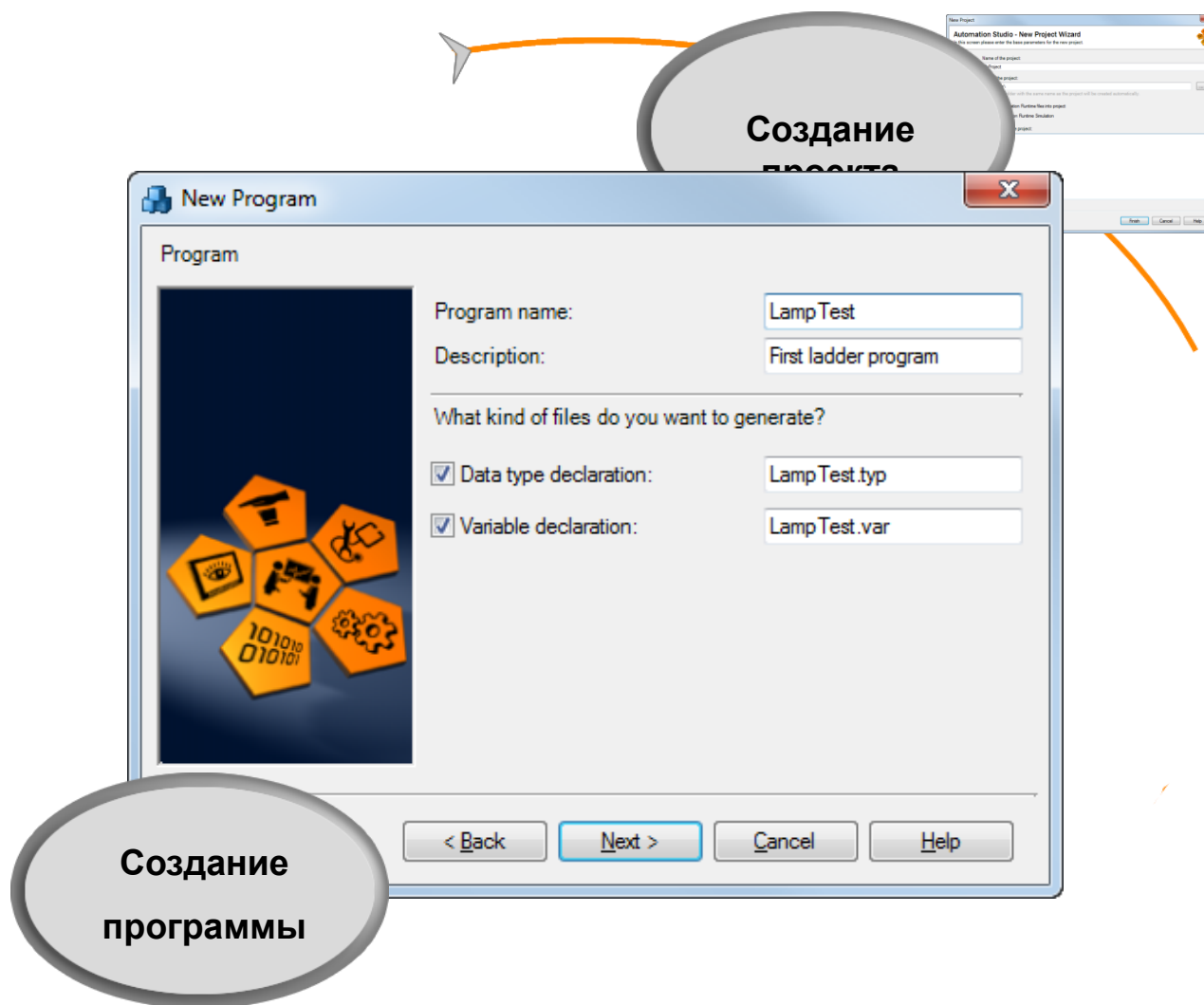
☐ Copy Automation Runtime files into project
☒ Use Automation Runtime Simulation

Description of the project:

**Создание
проекта**





Создание проекта



Создание проекта

Создание программы

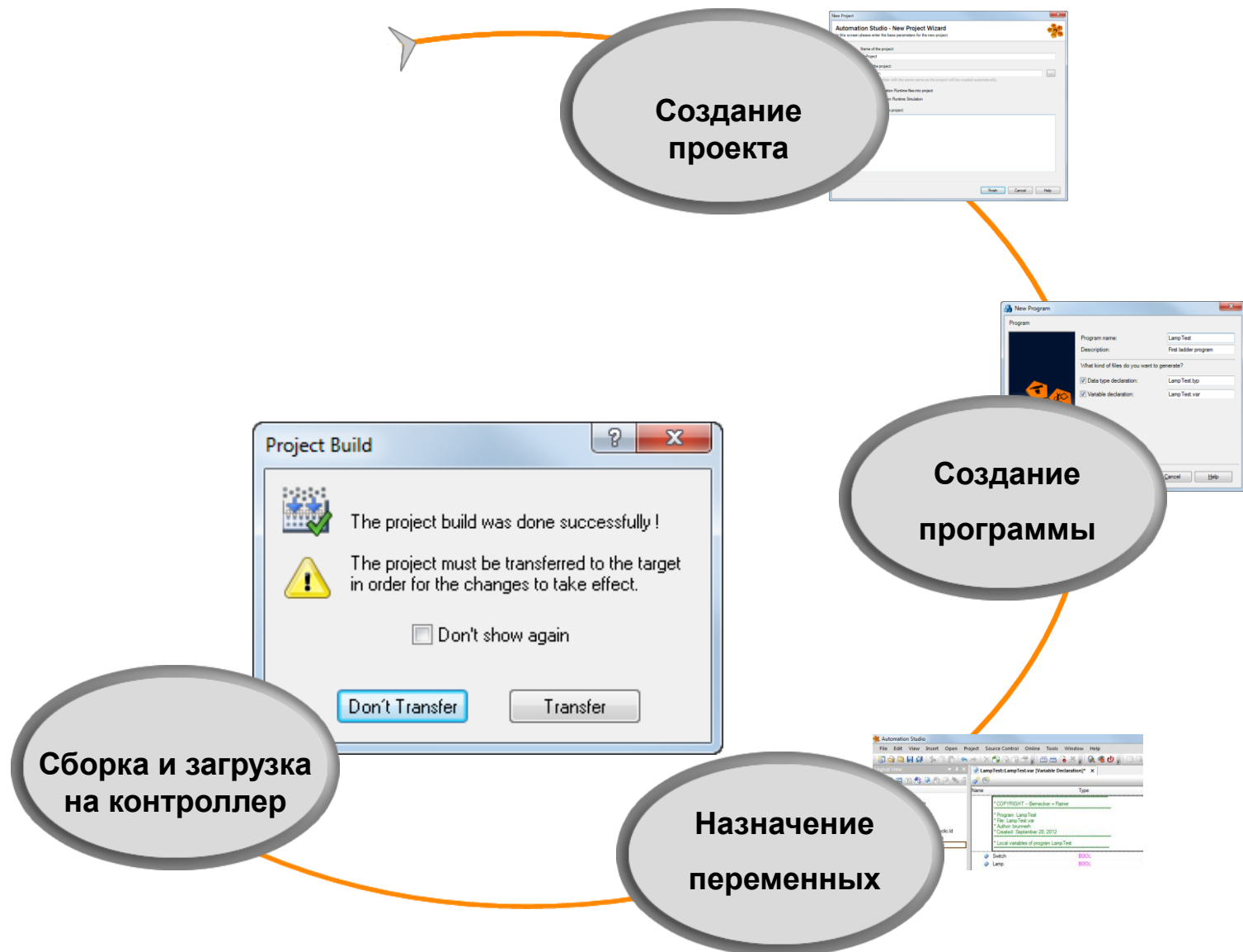
Назначение переменных

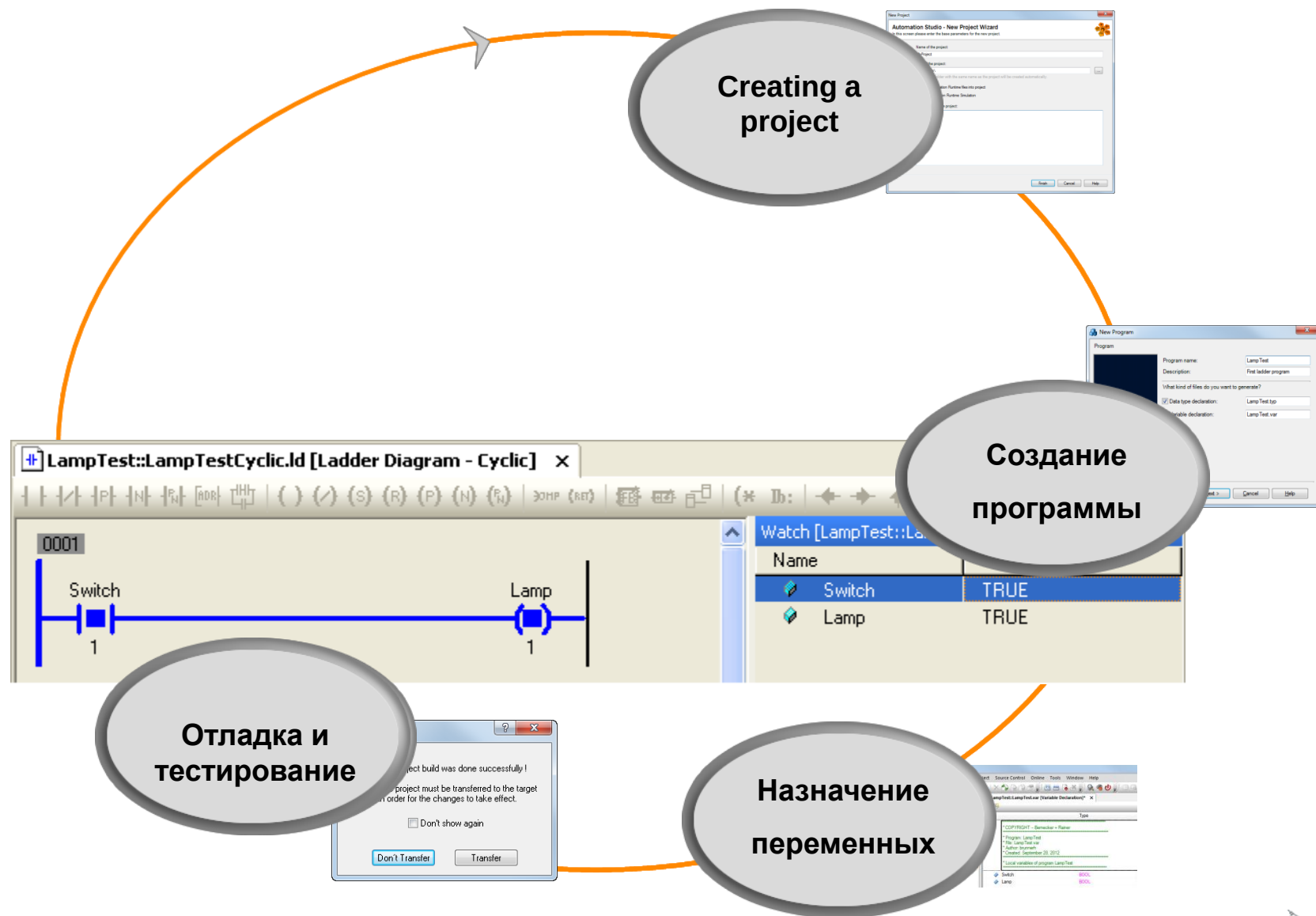
The screenshot displays the Automation Studio interface with three key steps highlighted by callouts:

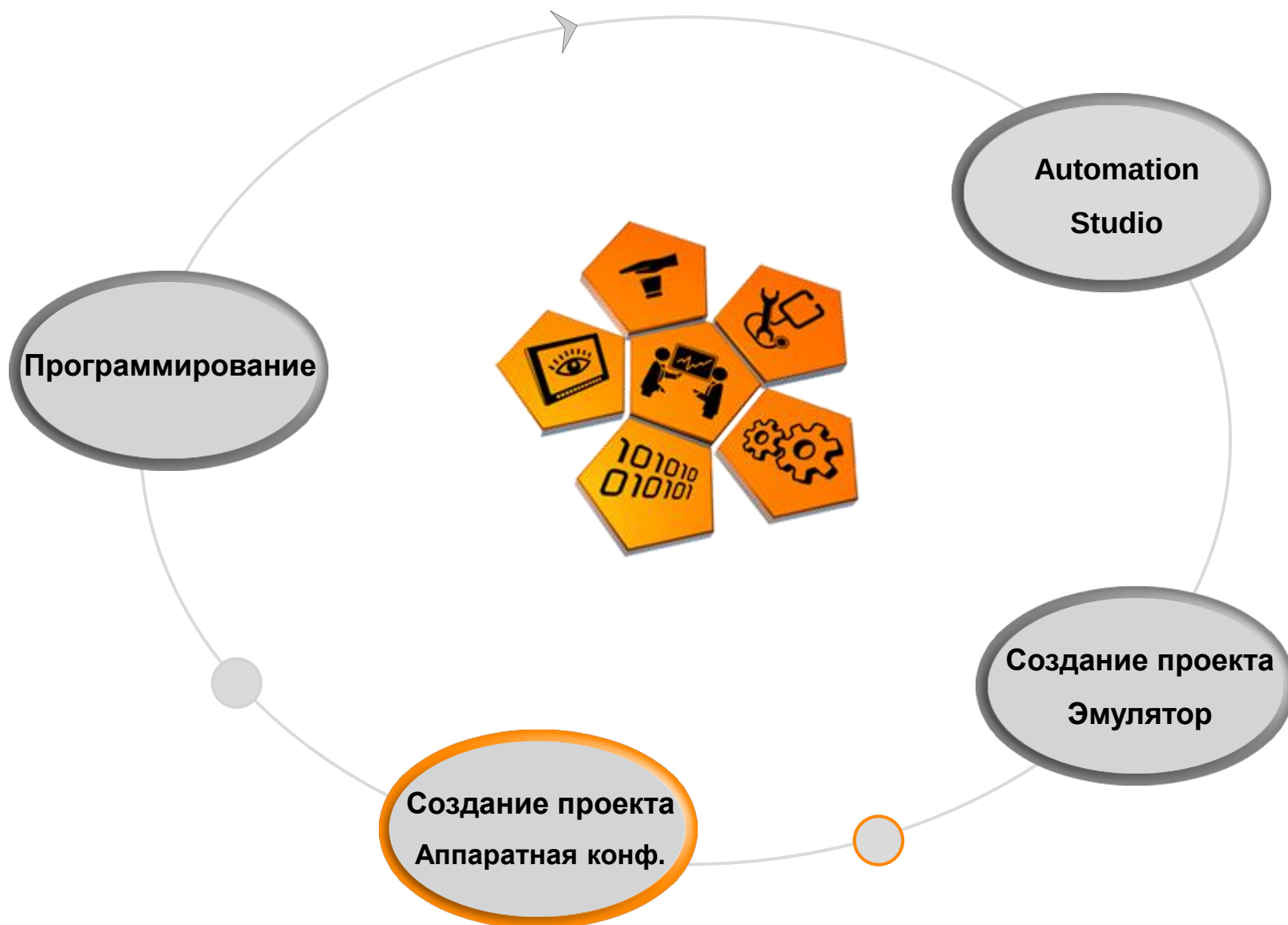
- Создание проекта (Project Creation):** A 'New Project' dialog box is shown in the top right corner.
- Создание программы (Program Creation):** A 'New Program' dialog box is shown in the middle right, with fields for Program name (LampTest), Description (First ladder program), and Variable declaration (LampTest var).
- Назначение переменных (Variable Assignment):** The 'Logical View' on the left shows a tree structure under 'MyProject' with 'LampTest.var' selected. The main editor shows the 'Variable Declaration' for 'LampTest.var' with the following content:

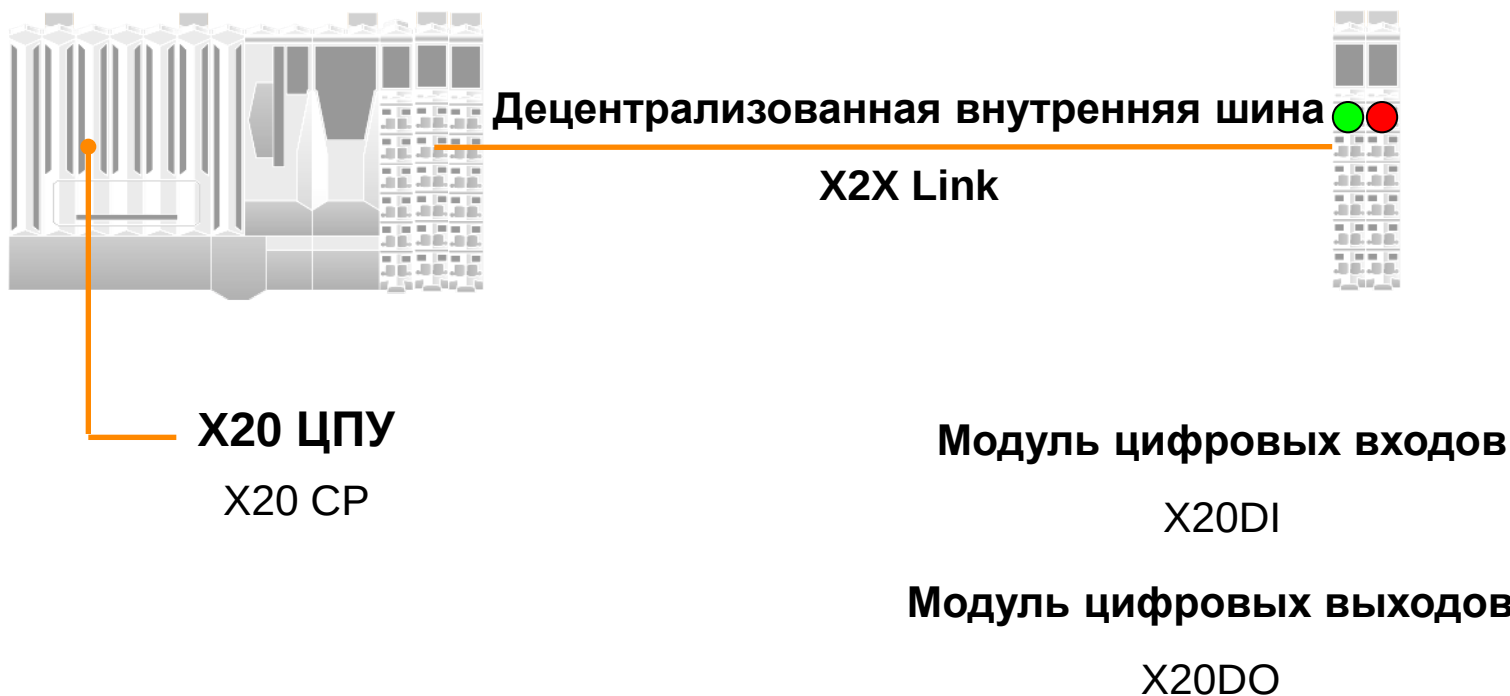
```
* COPYRIGHT - Bemecker + Rainer  
* Program: LampTest  
* File: LampTest.var  
* Author: brunnerh  
* Created: September 28, 2012  
* Local variables of program LampTest  
Switch      BOOL  
Lamp        BOOL
```



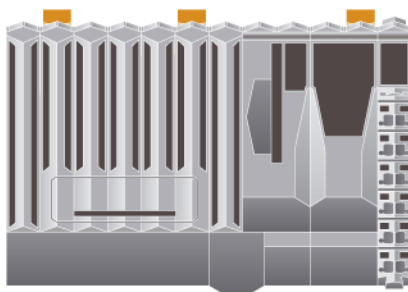






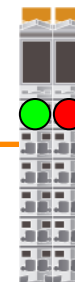


Добавление модулей ввода/вывода



Децентрализованная внутренняя шина

X2X Link



Automation Studio

File Edit View Insert Open Project Source Control Online Tools Window Help

Physical View

Name	Position	Version	Description
X20CP1486		1.1.2.0	X20 CPU Celeron 650, POWERLINK, 1x IF
Serial	IF1		Communication Port
ETH	IF2		Ethernet
EPL	IF3		POWERLINK
USB	IF4		Universal Serial Bus
USB	IF5		Universal Serial Bus
X2X	IF6		B&R X2X Link
X20DI9371	ST1	1.0.1.1	12 Digital Inputs 24 VDC, Sink, IEC 61131-2, Type 1
X20DO9322			

Insert X20DI9371 before X20DI9371.

Toolbox - Hardware Catalog (X20DI9371)

Product Group

- I/O
- Safety

I/O

- Input
- Output
- Digital
- Analog
- Counter

Motor Encoder

Others

Model Number	Description
X20DI4372	4 Digital Inputs 24 VDC, Source
X20DI4375	4 Digital Inputs 24 VDC, Wire monitoring
X20DI4653	4 Digital Inputs, 100-240VAC
X20DI4760	4x Namur IN, 8.05 VDC
X20DI6371	6 Digital Inputs 24 VDC, Sink, IEC 61131-2, Type 1
X20DI6372	6 Digital Inputs 24 VDC, Source, IEC 61131-2, Type 1
X20DI6373	6 Digital Inputs 24 VDC electrically isolated, Sink/Source
X20DI6553	6 Digital Inputs, 100-120VAC
X20DI8371	8 Digital Inputs 24 VDC, Sink, IEC 61131-2, Type 1
X20DI9371	12 Digital Inputs 24 VDC, Sink, IEC 61131-2, Type 1
X20DI9372	12 Digital Inputs 24 VDC, Source
X20DI9371	12 Digital Inputs 24 VDC, Sink, IEC 61131-2, Type 1
X20DI9372	12 Digital Inputs 24 VDC, Source
X20DI9371	12 Digital Inputs 24 VDC, Sink, IEC 61131-2, Type 1



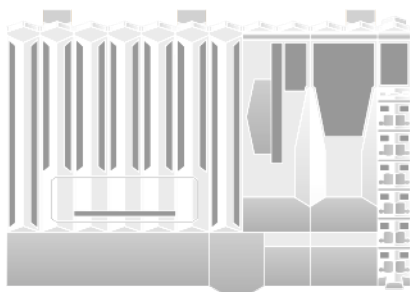
The screenshot displays the 'X20DI9371 [I/O Mapping]*' window in SIMATIC Manager. The left pane shows a hierarchical tree of the hardware configuration, including the X20CP1486 CPU and various I/O modules. The right pane shows a table of I/O modules with columns for Channel Name, Process Variable, Data Type, Task Class, Inverse, and Simulate. A 'Select' dialog box is open in the foreground, showing the 'Variables' tab with a list of variables including 'Lamp' and 'Switch'.

Channel Name	Process Variable	Data Type	Task Class	Inverse	Simulate
ModuleOk		BOOL		☐	☐
SerialNumber		UDINT		☐	☐
ModuleID		UINT		☐	☐
HardwareVariant		UINT		☐	☐
FirmwareVersion		UINT		☐	☐
DigitalInput01	LampTest:Switch	BOOL	Automatic	☐	☐
DigitalInput02		BOOL		☐	☐

The 'Select' dialog box shows the 'Variables' tab with the following variables:

Name	Type
Global variables	
LampTest	
Lamp	BOOL
Switch	BOOL

Конфигурация: I/O configuration



Physical View

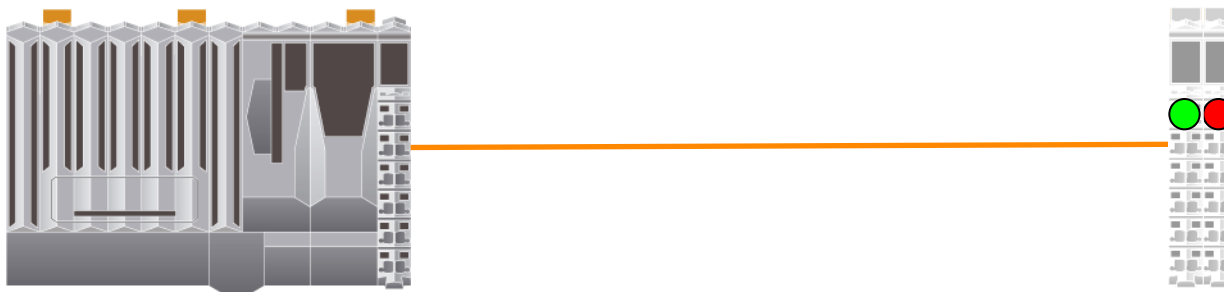
Name	Position
X20CP1486	
Serial	IF1
ETH	IF2
EPL	IF3
USB	IF4
USB	IF5
X2X	IF6
X20DI9371	CT1
X20DO9371	

X20DI9371 [Configuration]

Name	Value	Description
X20DI9371		
Function model	default	Module operating mode
General		
Module supervised	on	Service mode if there is no hardware module
Module information	off	Additional module information
Input filter [0.1 ms]	10	Specifies the filter time of all digital inputs
Packed inputs	off	Packed I/O data instead of single digital inputs
Simulation device		Assigned simulation device
Offset for inputs	0	Offset is relative to base address of bus controller
Offset for outputs	0	Offset is relative to base address of bus controller

I/O Mapping
Configuration
System Designer
Add Hardware Module...
Replace Hardware Module...
Cut
Copy
Paste

Сетевая настройка: Ethernet



Automation Studio

File Edit View Insert Open Project Source Control Online Tools Window Help

Physical View

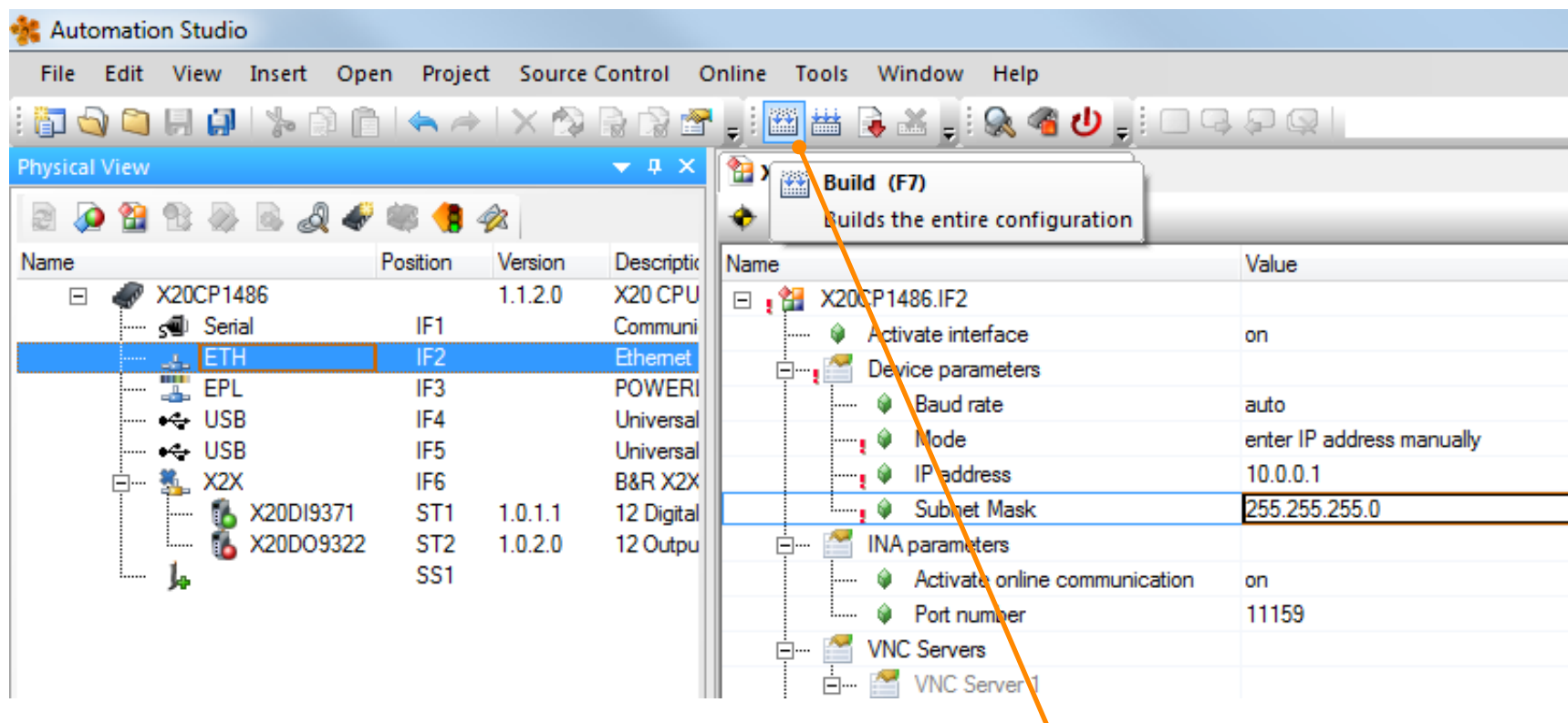
Name	Position	Version	Description
X20CP1486		1.1.2.0	X20 CPU
Serial	IF1		Communi
ETH	IF2		Ethernet
EPL			
USB			
USB			
X2X			
X20D			
X20D			

I/O Mapping
Configuration
System Designer
Add Hardware Module...
Replace Hardware Module...
Cut
Copy
Paste
Delete

X20CP1486.IF2 [Configuration]*

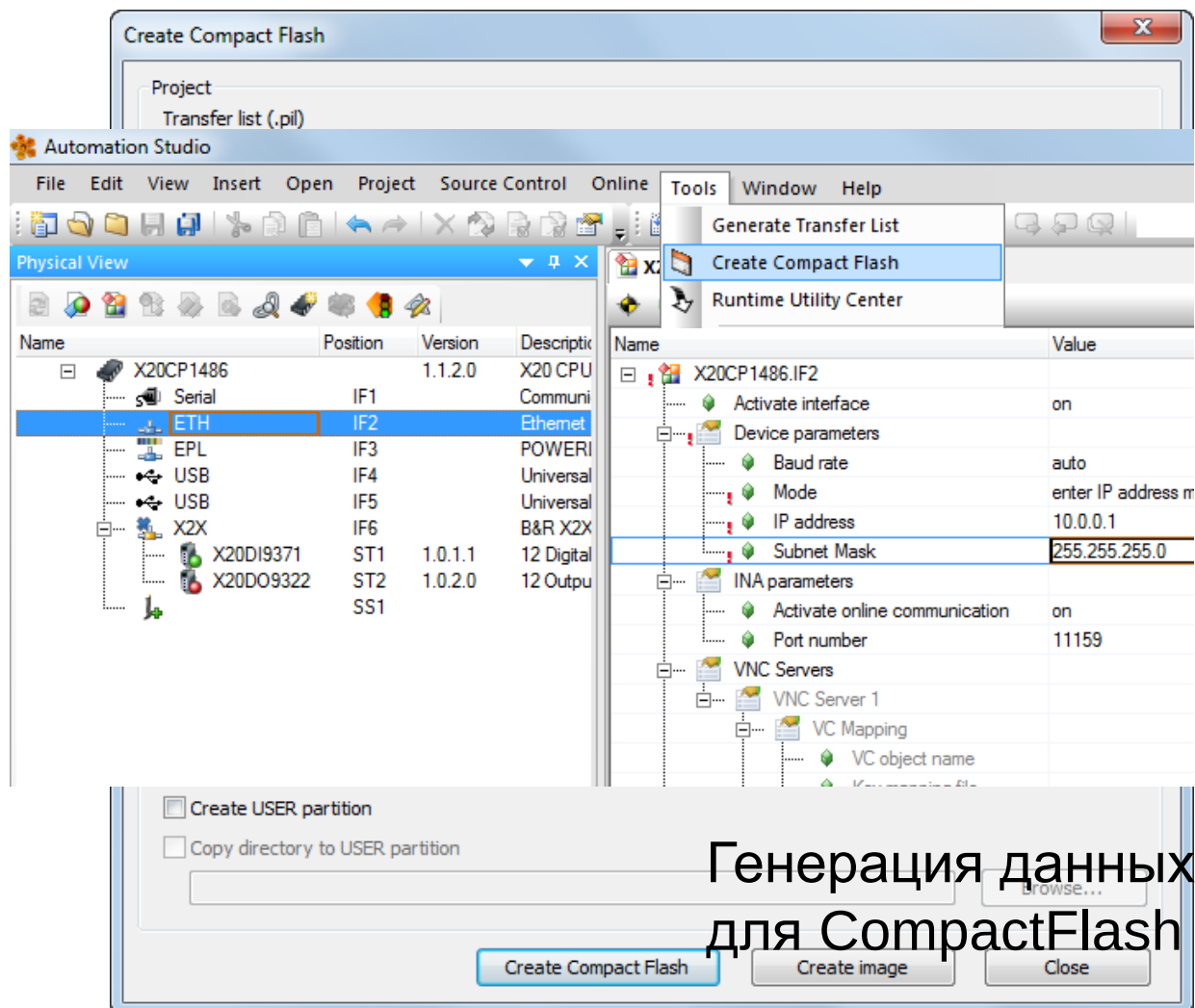
Name	Value	Description
X20CP1486.IF2		
Activate interface	on	
Device parameters		For global Ethernet
Baud rate	auto	
Mode	enter IP address manually	
IP address	10.0.0.1	
Subnet Mask	255.255.255.0	
INA parameters		
Activate online communication	on	
Port number	11159	
VNC Servers		
VNC Server 1		
VC Mapping		
VC object name		
Key mapping file		





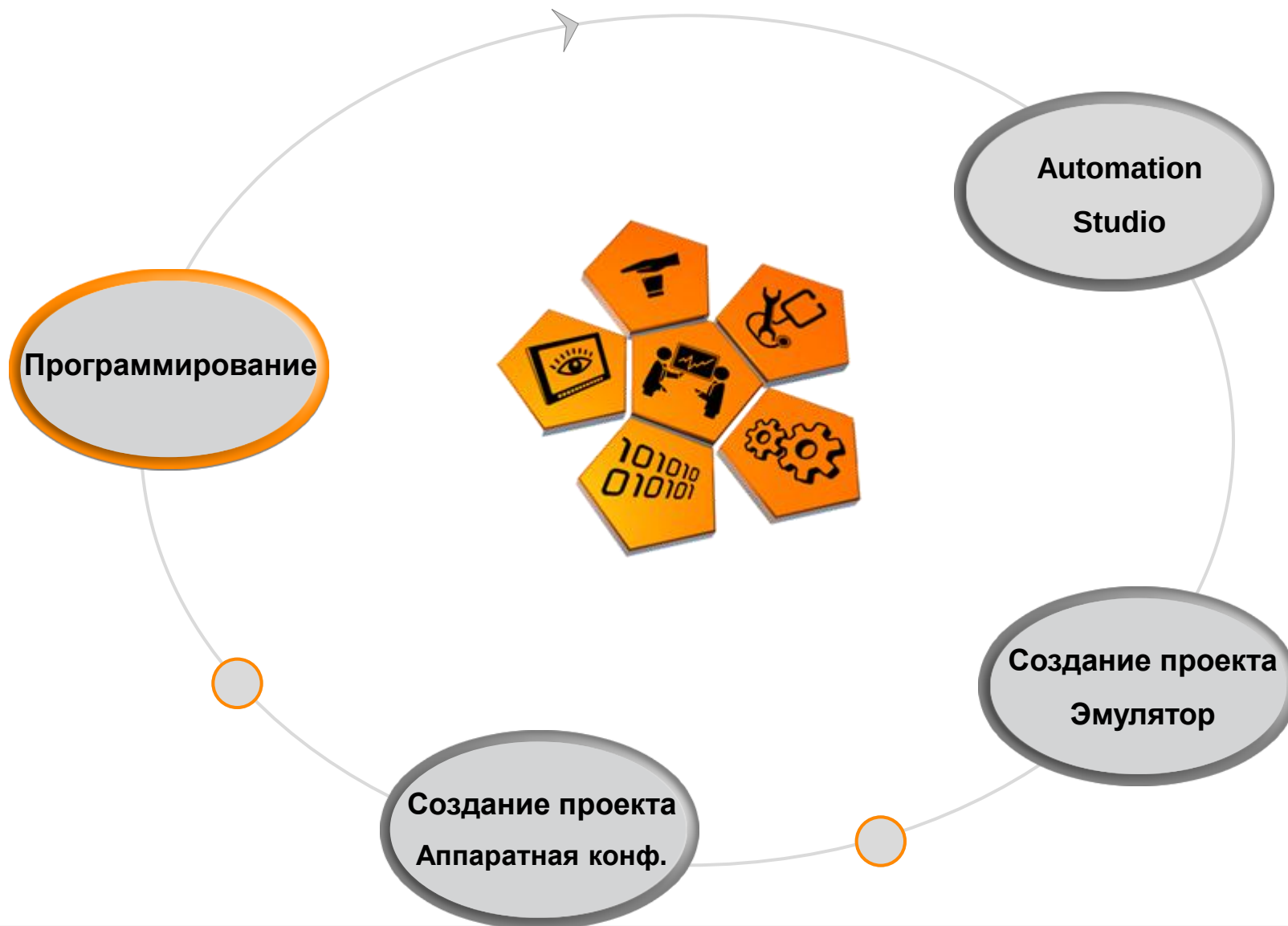
Пиктограмма «Build»





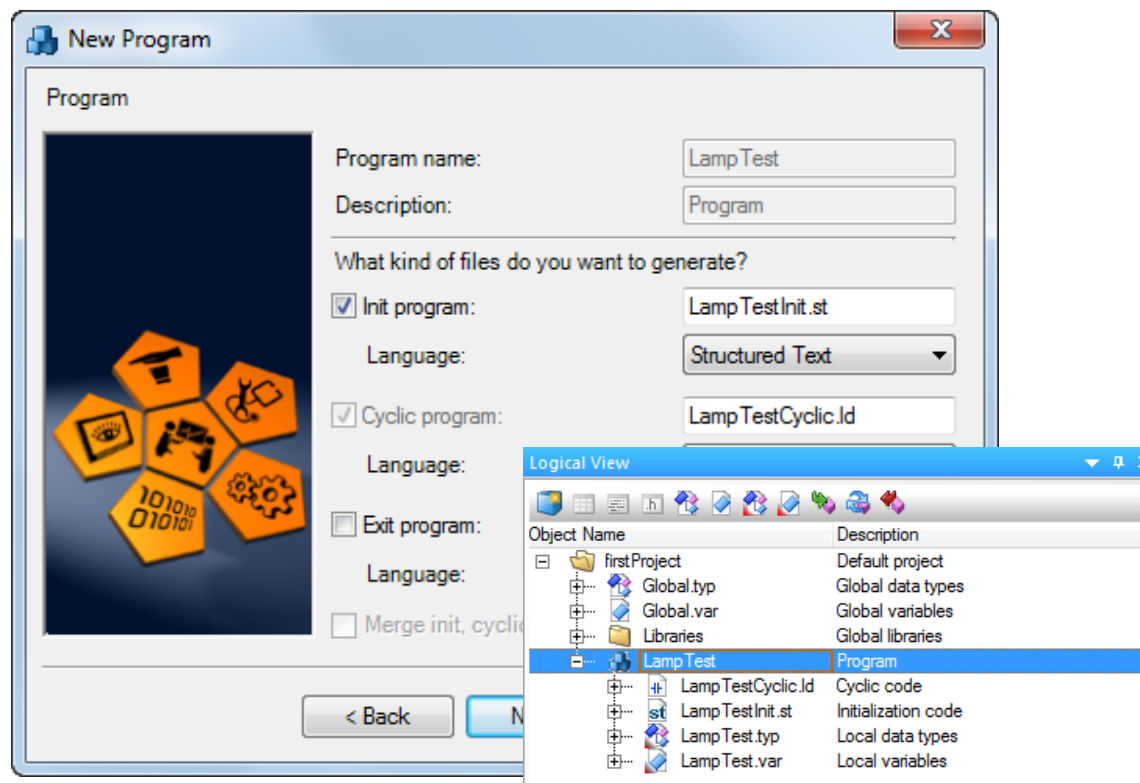
Генерация данных
для CompactFlash

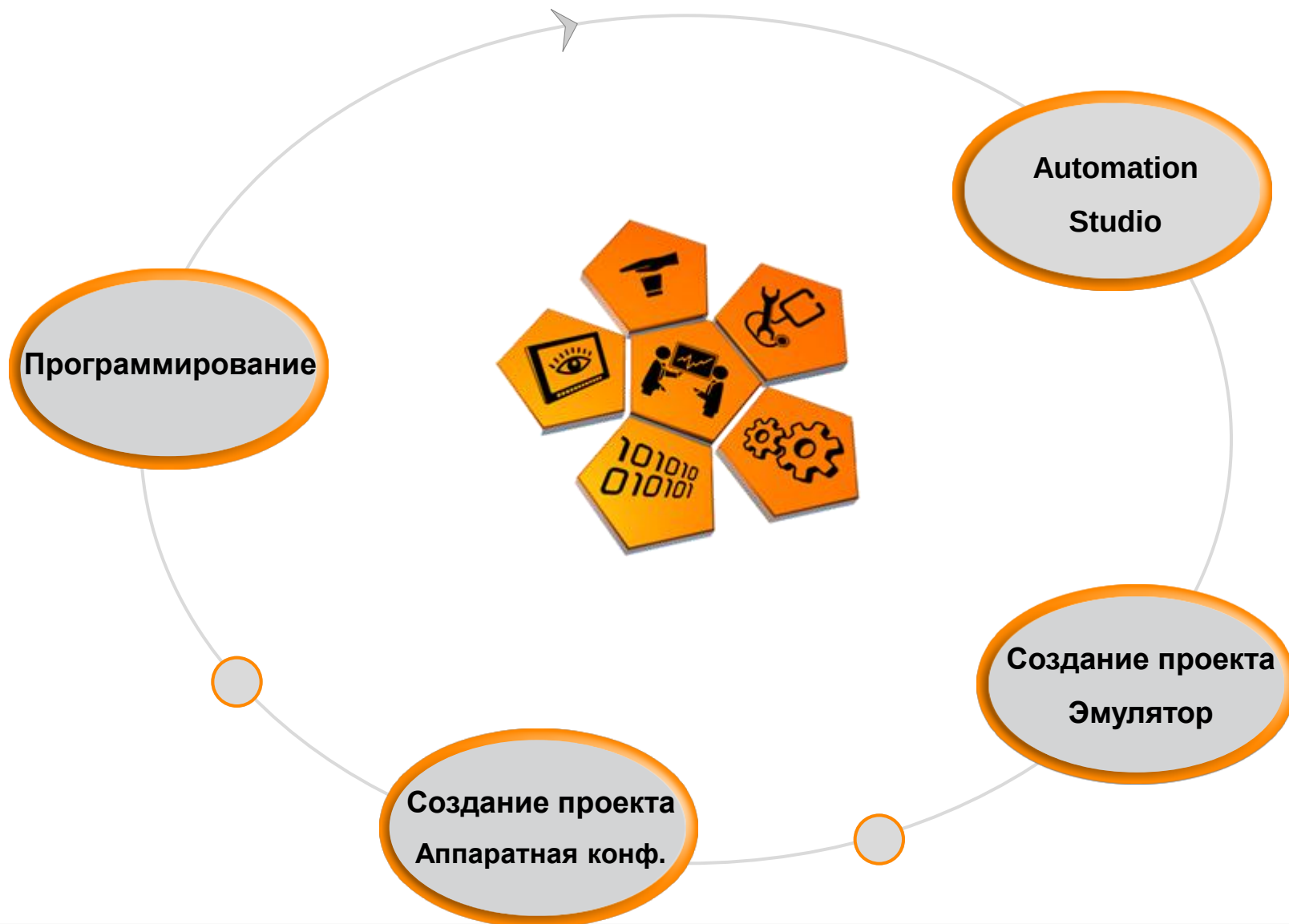






Языки программирования		IEC 61131
Ladder Diagram (LD)	✓	✓
Function Block Diagram (FBD)	✓	✓
Continuous Function Chart (CFC)	✓	✗
Sequential Function Chart (SFC)	✓	✓
Instruction List (IL)	✓	✓
Structured Text (ST)	✓	✓
ANSI C / C++	✓	✗







Automation Studio

Больше чем просто среда программирования



TM210

Работа с программой Automation Studio

TM213

Automation Runtime