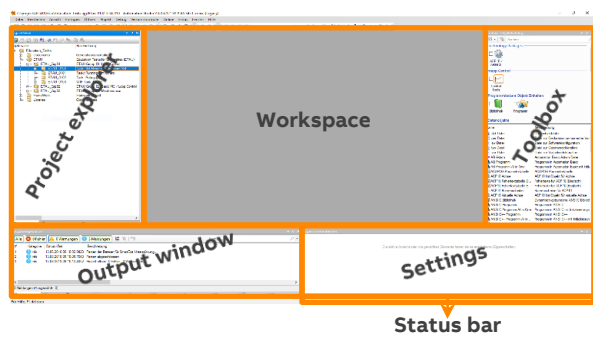




Workspace



Online connection to PLC

1. Main menu: Online → Settings...
2. select  Browse
3.  on desired PLC → Connect









Notice:
PLC and engineering computer must be in the same IP-address space and SNMP must be enabled.

Activate SNMP before the first transfer:
 Physical View → ETH →  Configuration → SNMP Parameters
The PLC can no longer be found without SNMP.
The system must be reset.


PLC reset

- Set the PLC to **BOOT** mode using the operating mode switch or reset button (1x <1s & 1x >1s).
- Connect and transfer project

Important toolbar items & shortcuts:

Automation Studio (AS)		Save all	(Strg + S)		Warm restart	
		Build	(F7)		Activate simulation	
		Build & transfer	(Strg + F5)		Declare all	
		Monitor mode	(Strg + M)		Debugger	

Transfer project


- Requirement: Active connection to the PLC
-  Build & transfer

Status bar

• Requirement: Active connection to the PLC

ANSL: tcpip/RT=1000 /DAIP=127.0.0.1 /REPO=11160 /ANSL=1 /PT=11169

IP-address of the PLC PLC-type Automation Runtime version


 4PPC70.0573-20B_D4.26 RUN

Betriebszustände: **RUN** → application is running
SERV → PLC in error state: open Logger
DIAG → SystemRom is loading
BOOT → default AR: no project / no CF-card
OFFLINE → no connection to PLC


Automation Studio Help

- Can be opened at any time with F1
- Is context sensitive; opens entry for selected object
- Can be searched via the Search tab

Insert new program/task

1. Switch to the  Logical View in the project explorer
2. Select the filter Program via the Toolbox
3. Insert the program in the desired language using drag & drop or double-click

Restart simulation

- Simulation will end after 2 hours
- A Pop-up message is displayed
- Simulation must be restarted
-  on in Windows taskbar → Toggle View → Restart

Diagnostic tools




System Diagnose Manager (SDM):

- Extensive diagnostic tool via a web browser
- Main menu: Tools → System Diagnostics Manager





Logger:

- Display of PLC system events
- Helpful in case of unexpected system behavior
- Various filter options: errors, warnings, modules etc.
- Main menu : Open → Logger






Monitor:

- Activate  Monitor in the toolbar
- Variables can be inserted and observed in the manual Watch for functional analysis
- Graphic programs show the signal flow
-  Line Coverage can be activated in textual programs
- Observe and set (force) i/o states directly at the i/o-card in the  Physical View




Watch:








- Enables monitoring and interacting with variables, functions and function blocks
-  the desired program in the  Logical View: Open → Watch
- Insert variables in the watch via  or  with





Trace:




- Allows recording of variable values
-  the desired program in the  Logical View: Open →  Insert trace configuration and select variables with  Insert Variables
- To configure  Settings

Debugger:

- Requirement: Active monitor mode
- Enable  Debugger in toolbar
- Set a  Breakpoint, single-step with 

Ladder diagram (LD)		Norm. open contact (C)		Funktion/Block (F)
		Coil (Shift + C)		Generic Block (S)
		Line right (Alt +)		
		Comment selection (Strg + K)		
		Uncomment selection (Strg + Shift + K)		

Sequential function chart (SFC)		Step (Strg + T)
		Alternative branch (Strg + B)
		Parallel branch (Strg + L)
		Jump (Strg + J)

Structured text (ST)		Function/Func. block (F)
		Comment selection (Strg + K)
		Uncomment selection (Strg + Shift + K)

