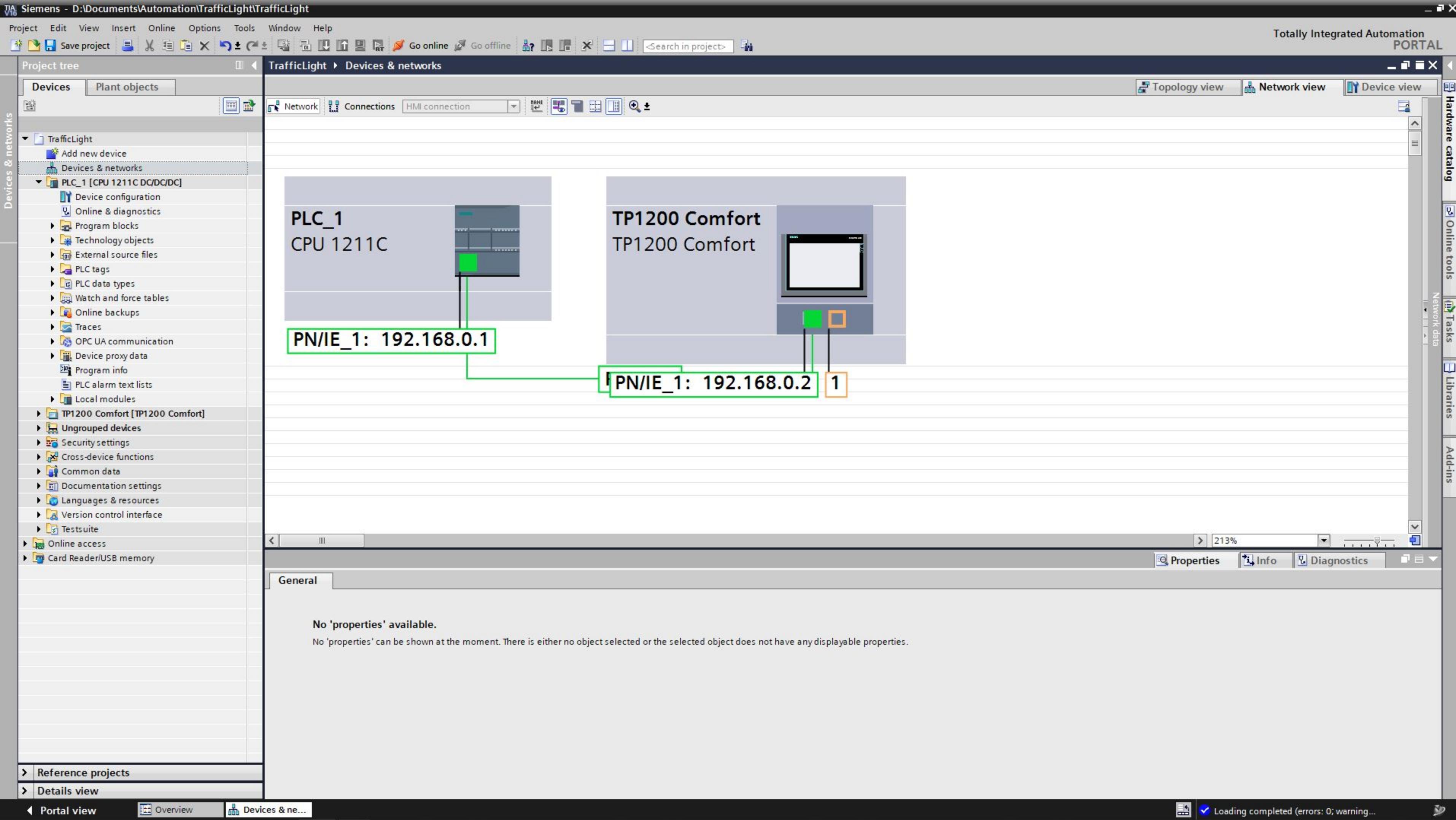


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Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]
- Device configuration
- Online & diagnostics
- Program blocks
- Technology objects
- External source files
- PLC tags
- PLC data types
- Watch and force tables
- Online backups
- Traces
- OPC UA communication
- Device proxy data
- Program info
- PLC alarm text lists
- Local modules

TP1200 Comfort [TP1200 Comfort]

Ungrouped devices

Security settings

Cross-device functions

Common data

Documentation settings

Languages & resources

Version control interface

Testsuite

Online access

Card Reader/USB memory

Topology view Network view Device view

Rack_0

103 102 101 1

PLC_1

SIMATIC S7-1200

CPU 1211C DC/DC/DC

PROFINET interface_1 [Module]

General IO tags System constants Texts

Ethernet addresses

Time synchronization

Operating mode

Advanced options

- Interface options
- Real time settings
- Port [X1 P1]
- Web server access

Ethernet addresses

Interface networked with

Subnet: PN/IE_1

Add new subnet

IP protocol

Set IP Address in the project

IP address: 192 . 168 . 0 . 1

Subnet mask: 255 . 255 . 255 . 0

Use router

Reference projects

Details view

Portal view Overview PLC_1

Loading completed (errors: 0; warning...)

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Project tree

Devices Plant objects

TrafficLight

- Add new device
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 - Local modules
- TP1200 Comfort [TP1200 Comfort]
- Ungrouped devices
- Security settings
- Cross-device functions
- Common data
- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

Reference projects

Details view

Topology view Network view Device view

Rack_0

103 102 101 1

SIEMENS SIMATIC S7-1200

CPU 1211C DC/DC/DC

Properties Info Diagnostics

General IO tags System constants Texts

AI 2

High speed counters (HSC)

Pulse generators (PTO/PWM)

Startup

Cycle

Communication load

System and clock memory

Web server

- General
- Automatic update
- User management
- Watch tables
- User-defined pages
- Entry page
- Overview of interfaces

Multilingual support

Time of day

Protection & Security

OPC UA

Advanced configuration

- DNS configuration

Address of system memory byte (MBx): 1

First cycle: %M1.0 (FirstScan)

Diagnostic status changed: %M1.1 (DiagStatusUpdate)

Always 1 (high): %M1.2 (AlwaysTRUE)

Always 0 (low): %M1.3 (AlwaysFALSE)

Address of clock memory byte (MBx): 0

10 Hz clock: %M0.0 (Clock_10Hz)

5 Hz clock: %M0.1 (Clock_5Hz)

2.5 Hz clock: %M0.2 (Clock_2.5Hz)

Portal view Overview PLC_1

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PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]

 - Device configuration
 - Online & diagnostics

Program blocks

- Add new block
- Main [OB1]

 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]

- Technology objects
- External source files
- PLC tags
- PLC data types
- Watch and force tables
- Online backups
- Traces
- OPC UA communication
- Device proxy data
- Program info
- PLC alarm text lists
- Local modules
- TP1200 Comfort [TP1200 Comfort]
- Ungrouped devices
- Security settings
- Cross-device functions
- Common data
- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

Main

Name	Data type	Default value	Comment
1 Input			
2 Initial_Call	Bool		Initial call of this OB
3 Remanence	Bool		=True, if remanent data are available
4 Temp			
5 <Add new>			
6 Constant			
7 <Add new>			

Block title: "Main Program Sweep (Cycle)"

Comment

Network 1:

Comment

```
graph TD; EN[EN] --> DB3["%DB3  
Intersection_DB"]; DB3 --> FB2["%FB2  
Intersection"]; FB2 --> ENO[ENO]; FB2 --> northLightGreen["%Q0.0  
northLightGreen"]; FB2 --> northLightYellow["%Q0.1  
northLightYellow"]; FB2 --> northLightRed["%Q0.2  
northLightRed"]; FB2 --> southLightGreen["%Q0.3  
southLightGreen"]; FB2 --> southLightYellow["%Q0.4  
southLightYellow"]; FB2 --> southLightRed["%Q0.5  
southLightRed"]; FB2 --> eastLightGreen["%Q1.0  
eastLightGreen"]; FB2 --> eastLightYellow["%Q1.1  
eastLightYellow"]; FB2 --> eastLightRed["%Q1.2  
eastLightRed"]
```

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview PLC_1 Main (OB1)

100% Loading completed (errors: 0; warning...)

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PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]

 - Device configuration
 - Online & diagnostics

- Program blocks

 - Add new block
 - Main [OB1]
 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]

- Technology objects
- External source files
- PLC tags
- PLC data types
- Watch and force tables
- Online backups
- Traces
- OPC UA communication
- Device proxy data
- Program info
- PLC alarm text lists
- Local modules
- TP1200 Comfort [TP1200 Comfort]
- Ungrouped devices
- Security settings
- Cross-device functions
- Common data
- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

TrafficLight > PLC_1 [CPU 1211C DC/DC/DC] > Program blocks > Main [OB1]

Block interface

Block title: "Main Program Sweep (Cycle)"

Comment

Network 1:

Comment

EN ENO

%DB3 "Intersection_DB"

%FB2 "Intersection"

northLightGreen n —> "northLightGreen"
%Q0.0

northLightYellow w —> "northLightYellow"
%Q0.1

northLightRed n —> "northLightRed"
%Q0.2

southLightGreen n —> "southLightGreen"
%Q0.3

southLightYellow w —> "southLightYellow"
%Q0.4

southLightRed n —> "southLightRed"
%Q0.5

eastLightGreen w —> "eastLightGreen"
%Q1.0

eastLightYellow w —> "eastLightYellow"
%Q1.1

eastLightRed n —> "eastLightRed"
%Q1.2

westLightGreen n —> "westLightGreen"
%Q1.3

westLightYellow w —> "westLightYellow"
%Q1.4

westLightRed n —> "westLightRed"
%Q1.5

Network 2:

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview PLC_1 Main (OB1)

100%

Instructions Testing Tasks Libraries Add-ins

Loading completed (errors: 0; warning...)

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PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]
 - Device configuration
 - Online & diagnostics
- Program blocks
 - Add new block
 - Main [OB1]
 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]
- Technology objects
- External source files
- PLC tags
- PLC data types
- Watch and force tables
- Online backups
- Traces
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- Device proxy data
- Program info
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- Local modules
 - TP1200 Comfort [TP1200 Comfort]
 - Ungrouped devices
 - Security settings
 - Cross-device functions
 - Common data
 - Documentation settings
 - Languages & resources
 - Version control interface
 - Testsuite
- Online access
- Card Reader/USB memory

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview PLC_1 Main (OB1) Intersection ... Startup (OB1...)

Instructions Testing Tasks Libraries Add-ins

Startup

Name	Data type	Default value	Comment
1 Input			
2 LostRetentive	Bool		True if retentive data are lost
3 LostRTC	Bool		True if date and time are lost
4 Temp			
5 <Add new>			
6 Constant			
7 <Add new>			

Block title: "Complete Restart"

Comment

Network 1:

Comment

%M2.0
"systemFAULT"

Network 2:

Comment

100% Loading completed (errors: 0; warning: 0)

```
graph TD; subgraph Network1 [Network 1]; M1["%M2.0  
\"systemFAULT\""]; end; subgraph Network2 [Network 2]; end;
```

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Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

Intersection

Name	Data type	Default value	Retain	Accessible f...	Writ...	Visible in ...	Setpoint	Comment
1 Input								
2 <Add new>								
3 Output								
4 northLightGreen	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
5 northLightYellow	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
6 northLightRed	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
7 southLightGreen	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
8 southLightYellow	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
9 southLightRed	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
10 eastLightGreen	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
11 eastLightYellow	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
12 eastLightRed	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
13 westLightGreen	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
14 westLightYellow	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
15 westLightRed	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
16 InOut								
17 <Add new>								
18 Static								
19 northLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
20 southLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
21 northInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
22 southInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
23 eastInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
24 westInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
25 eastLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
26 westLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Block title:

Comment

Network 1: Perform Reset or Start button event either through HMI button or PLC tag input

Comment

```

%#0.1
"reset_Button_IN"
#performRESET
{ }

%#M2.1
"reset_MEM_TAG"

```

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview PLC_1 Main (OB1) Intersection ... Loading completed (errors: 0; warning...)

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Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

Intersection

	Name	Data type	Default value	Retain	Accessible f...	Writ...	Visible in ...	Setpoint	Comment
14	westLightYellow	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15	westLightRed	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16	InOut				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	<Add new>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	Static				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19	northLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
20	southLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
21	northInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
22	southInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
23	eastInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
24	westInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
25	eastLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
26	westLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
27	eastInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
28	westInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
29	northInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
30	southInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
31	northSouthONDelay	TON_TIME			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
32	eastWestONDelay	TON_TIME			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
33	startNorth	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34	startSouth	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
35	startEast	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
36	startWest	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
37	startNSTimer	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
38	startEWTimer	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
39	Temp				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Block title:

Comment

Network 1: Perform Reset or Start button event either through HMI button or PLC tag input

Comment

```

%#0.1
"reset_Button_IN"
#performRESET
{ }

%#M2.1
"reset_MEM_TAG"

```

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview PLC_1 Main (OB1) Intersection ... Loading completed (errors: 0; warning...)

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Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

Intersection

	Name	Data type	Default value	Retain	Accessible f...	Writ...	Visible in ...	Setpoint	Comment
23	eastInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
24	westInterlock	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
25	eastLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
26	westLightOperation	"LightOperation"			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
27	eastInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
28	westInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
29	northInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
30	southInterlockFallEdge	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
31	northSouthONDelay	TON_TIME		Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
32	eastWestONDelay	TON_TIME		Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
33	startNorth	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34	startSouth	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
35	startEast	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
36	startWest	Bool	false	Non-retain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
37	startNSTimer	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
38	startEWTimer	Bool	false	Non-retain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
39	Temp				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40	performRESET	Bool			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
41	performSTART	Bool			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
42	Constant				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
43	<Add new>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Block title:

Comment

Network 1: Perform Reset or Start button event either through HMI button or PLC tag input

Comment

```

%#0.1
"reset_Button_IN"
-----#performRESET-----
| |
%#M2.1
"reset_MEM_TAG"
-----#n-----n

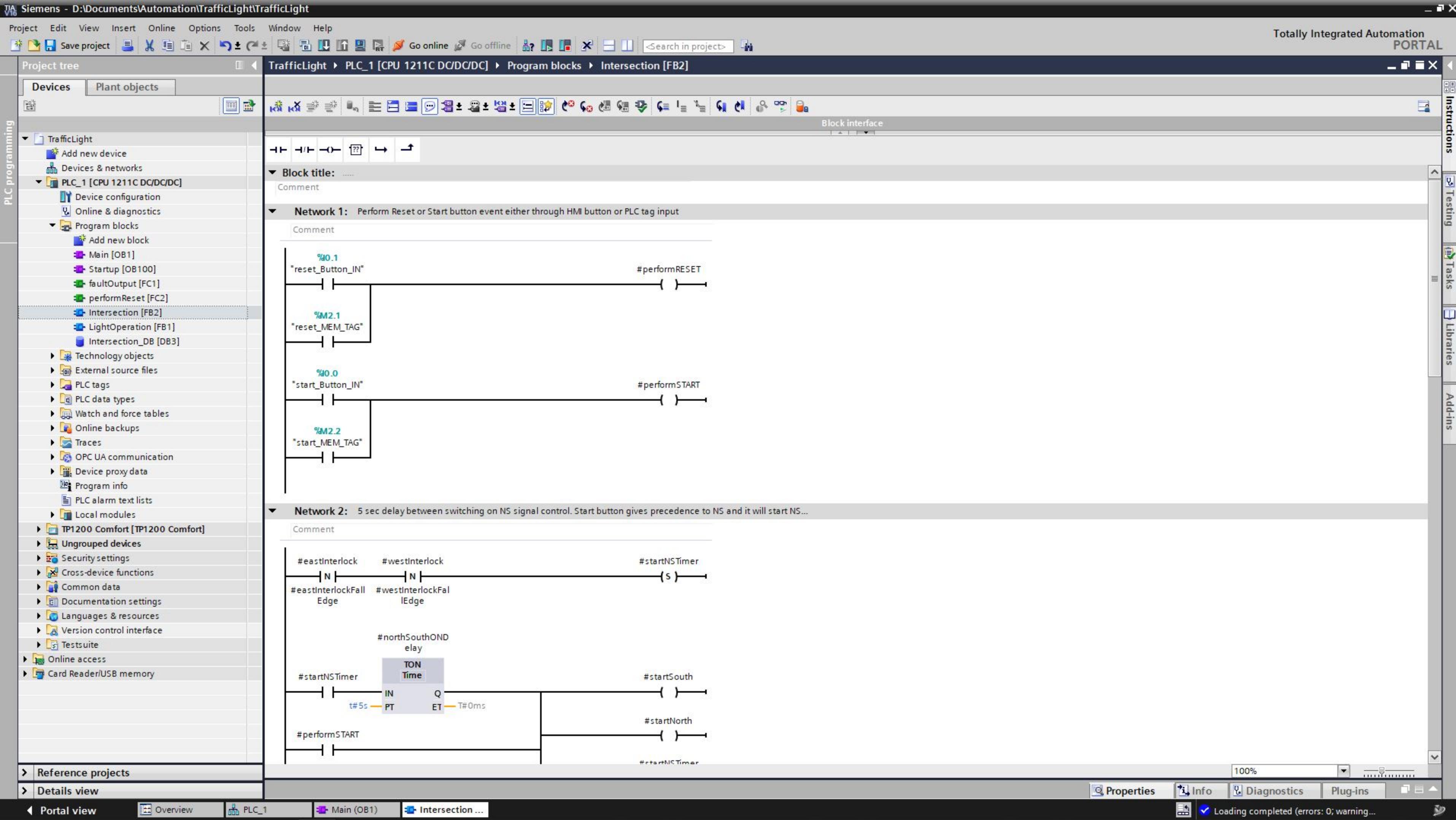
```

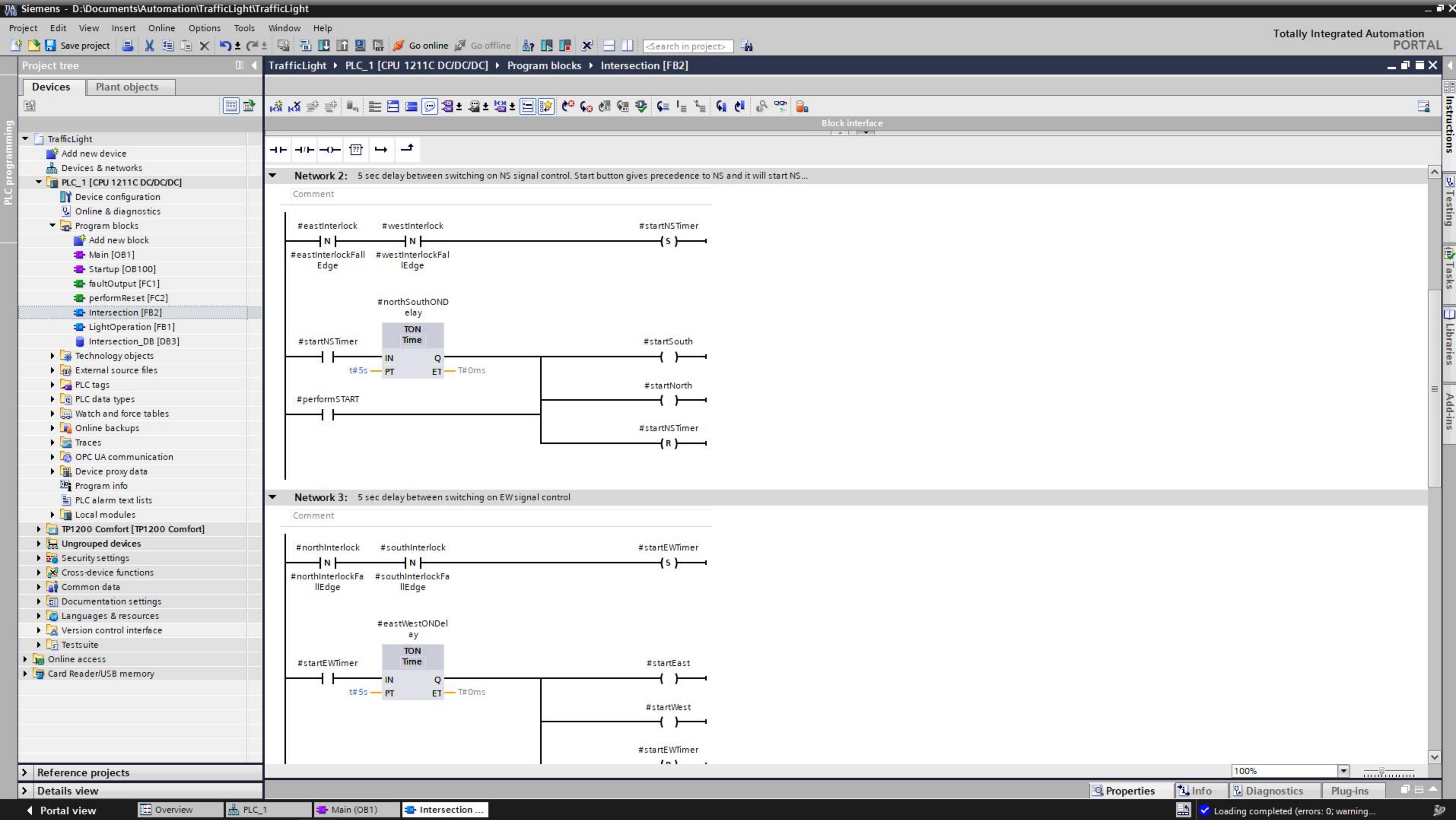
Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview PLC_1 Main (OB1) Intersection ... Loading completed (errors: 0; warning...)





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PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]
 - Device configuration
 - Online & diagnostics
 - Program blocks
 - Add new block
 - Main [OB1]
 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]
 - Technology objects
 - External source files
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 - PLC data types
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- TP1200 Comfort [TP1200 Comfort]
- Ungrouped devices
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- Cross-device functions
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- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

Reference projects

Details view

Portal view Overview PLC_1 Main (OB1) Intersection ... Properties Info Diagnostics Plug-ins

Instructions Testing Tasks Libraries Add-ins

Block interface

Network 3: 5 sec delay between switching on EWsignal control

Comment

```

#northInterlock #southInterlock #startEWTimer
N N (S)
#northInterlockFa #southInterlockFa
||Edge ||Edge

#eastWestONDel
ay

#startEWTimer TON Time
IN Q ( )
PT ET T#0ms

#startEast
#startWest
#startEWTimer (R)

```

Network 4: North South Light operation

Comment

```

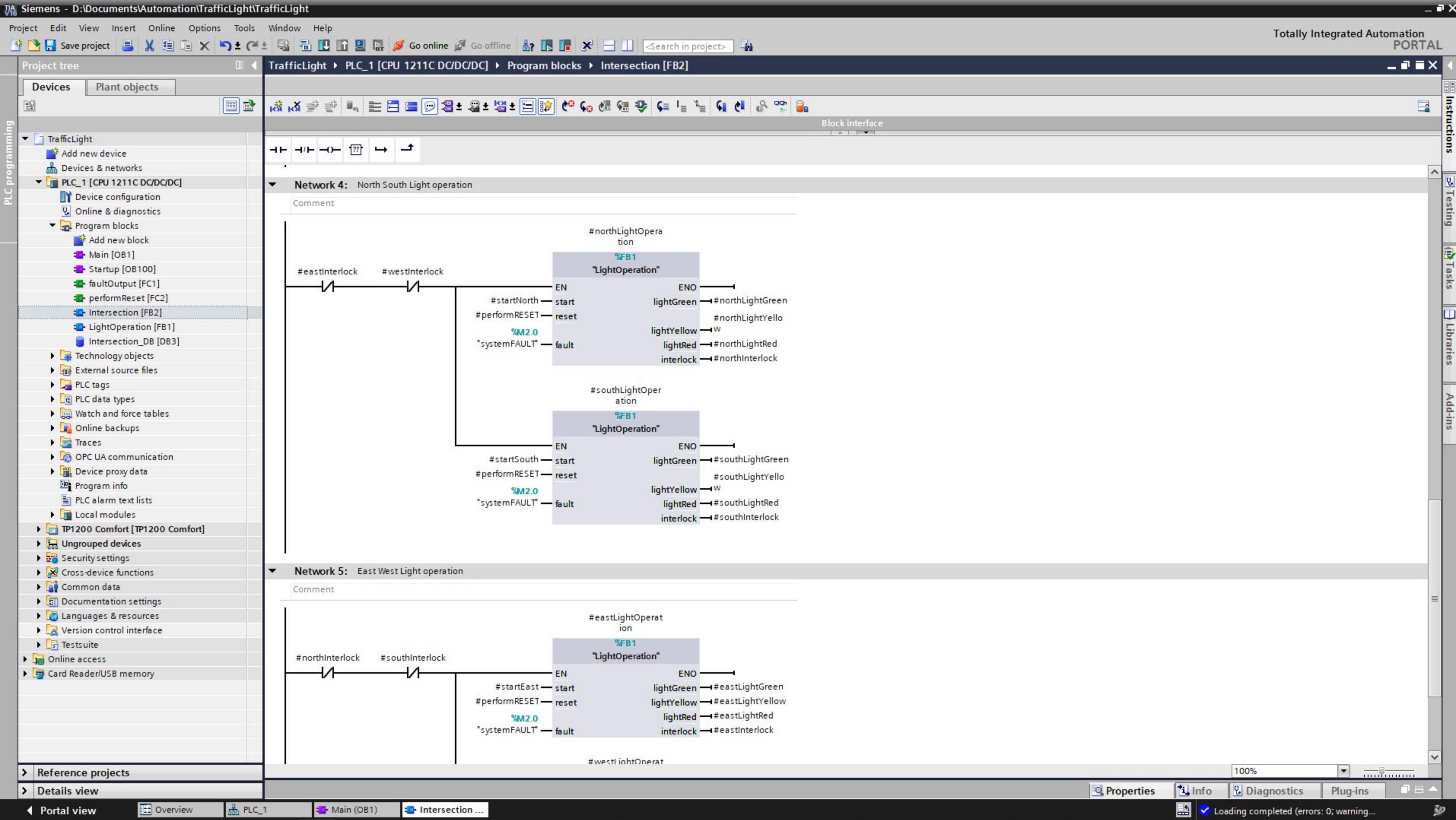
#eastInterlock #westInterlock #northLightOpera
tion
EN ENO
#startNorth start lightGreen → #northLightGreen
#performRESET reset lightYellow → #northLightYello
%M2.0 fault lightRed → #northLightRed
"systemFAULT" interlock → #northInterlock

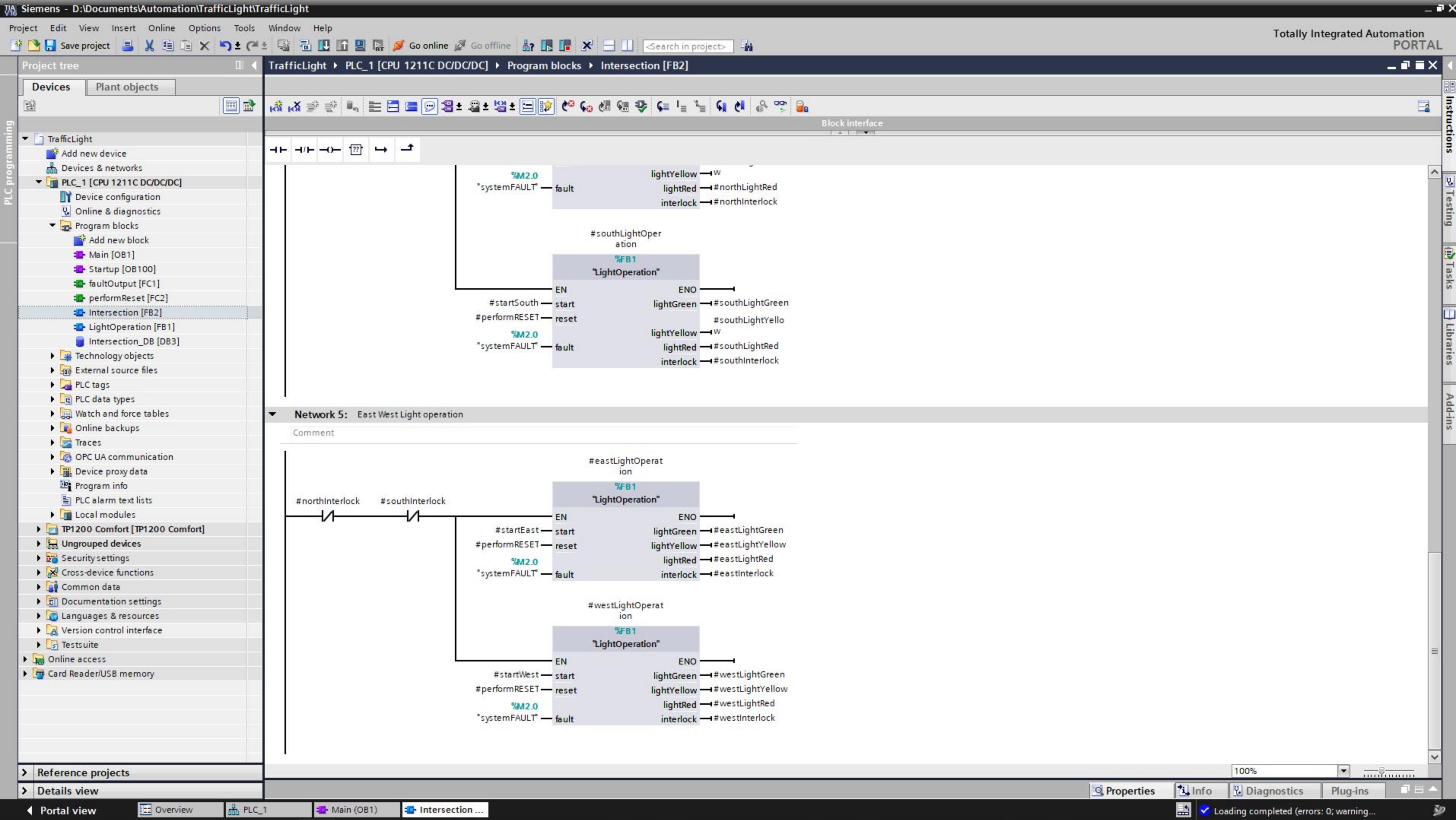
#southLightOpera
tion
EN ENO
%FB1 "LightOperation"
EN ENO

```

Properties Info Diagnostics Plug-ins

100% Loading completed (errors: 0; warning...)





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Totally Integrated Automation PORTAL

PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]
 - Device configuration
 - Online & diagnostics
- Program blocks
 - Add new block
 - Main [OB1]
 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]
- Technology objects
- External source files
- PLC tags
- PLC data types
- Watch and force tables
- Online backups
- Traces
- OPC UA communication
- Device proxy data
- Program info
- PLC alarm text lists
- Local modules
- TP1200 Comfort [TP1200 Comfort]
- Ungrouped devices
- Security settings
- Cross-device functions
- Common data
- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

faultOutput

Name	Data type	Default value	Comment
1 Input			
2 <Add new>			
3 Output			
4 redLight	Bool		
5 greenLight	Bool		
6 yellowLight	Bool		
7 interlock	Bool		
8 InOut			
9 <Add new>			
10 Temp			
11 <Add new>			
12 Constant			
13 <Add new>			
14 Return			
15 faultOutput	Void		

Block title:

Comment

Network 1: Turn ON/OFF Red Light Every 1 second

Comment

```
%M0.5  
"Clock_1Hz"  
#redLight
```

Network 2: Remove the interlock and ensure the other lights are OFF

Comment

```
#interlock  
( R )  
  
#greenLight  
( R )  
  
#yellowLight  
( R )
```

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview faultOutput ...

100% Loading completed (errors: 0; warning...)

VI6 Siemens - D:\Documents\Automation\TrafficLight\TrafficLight

Project Edit View Insert Online Options Tools Window Help

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Totally Integrated Automation PORTAL

PLC programming

Project tree

Devices Plant objects

TrafficLight

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- Common data
- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

Reference projects

Details view

Portal view Overview performReset [FC2]

Instructions Testing Tasks Libraries Add-ins

performReset

Name	Data type	Default value	Comment
1 Input			
2 <Add new>			
3 Output			
4 lightRed	Bool		
5 lightYellow	Bool		
6 lightGreen	Bool		
7 fault	Bool		
8 InOut			
9 <Add new>			
10 Temp			
11 <Add new>			
12 Constant			
13 <Add new>			
14 Return			
15 performReset	Void		

Block title: This block performs the RESET operation once the Reset button has been pressed

Comment

Network 1: Turn OFF Green

Comment

```
#lightGreen {R}
```

Network 2: Turn OFF Yellow

Comment

```
#lightYellow {R}
```

Network 3: Turn ON Red

Comment

```
#lightRed {S}
```

Properties Info Diagnostics Plug-ins

100% Loading completed (errors: 0; warning...)

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Totally Integrated Automation PORTAL

PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
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- PLC_1 [CPU 1211C DC/DC/DC]

 - Device configuration
 - Online & diagnostics

- Program blocks

 - Add new block
 - Main [OB1]
 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]

- Technology objects
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- Traces
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Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview performReset [FC2]

Block interface

Block title: This block performs the RESET operation once the Reset button has been pressed

Comment

Network 1: Turn OFF Green

Comment

#lightGreen {R}

Network 2: Turn OFF Yellow

Comment

#lightYellow {R}

Network 3: Turn ON Red

Comment

#lightRed {S}

Network 4: Remove the Fault

Comment

#fault {R}

Instructions Testing Tasks Libraries Add-ins

100%

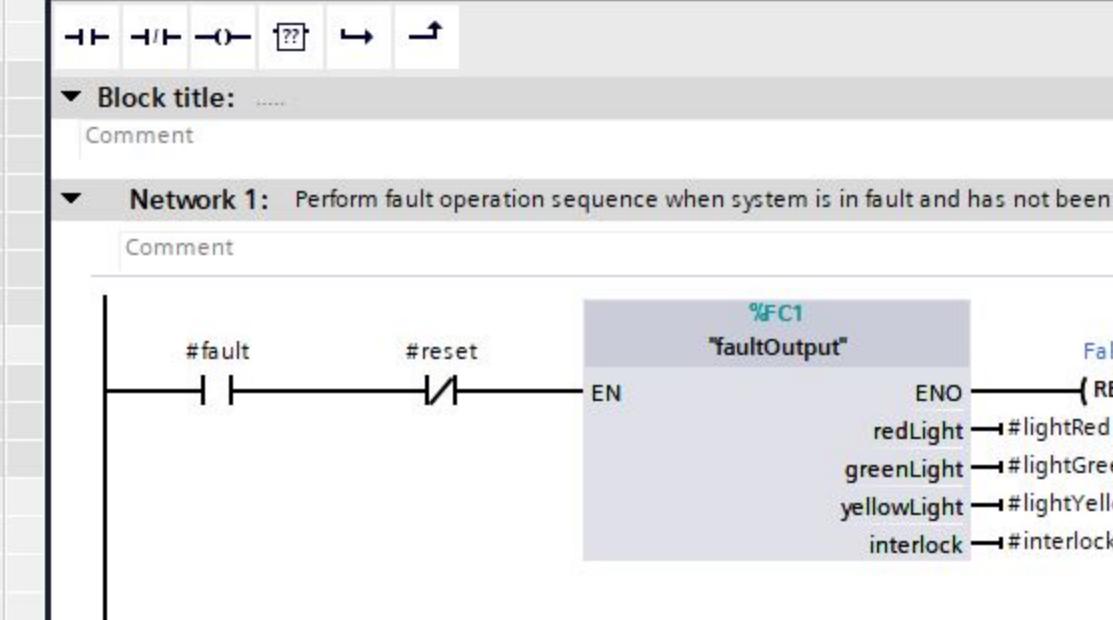
Loading completed (errors: 0; warning...)

Project tree

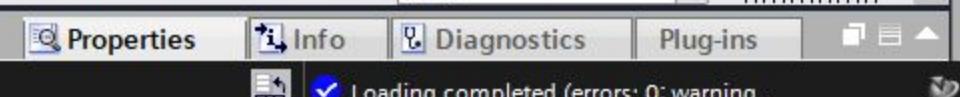
Plant objects

A horizontal toolbar with various icons for file operations, including save, copy, paste, and search.

- ▶ TrafficLight
 - ▶ Add new device
 - ▶ Devices & networks
 - ▶ PLC_1 [CPU 1211C DC/DC/DC]
 - ▶ Device configuration
 - ▶ Online & diagnostics
 - ▶ Program blocks
 - ▶ Add new block
 - ▶ Main [OB1]
 - ▶ Startup [OB100]
 - ▶ faultOutput [FC1]
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 - ▶ Intersection [FB2]
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▼ Network 2: Perform Reset and Set Red light to S



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Totally Integrated Automation PORTAL

PLC programming

Project tree

Devices Plant objects

TrafficLight

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- PLC_1 [CPU 1211C DC/DC/DC]

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 - performReset [FC2]
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 - LightOperation [FB1]
 - Intersection_DB [DB3]

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- Testsuite
- Online access
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Reference projects

Details view

Portal view Overview LightOperati...

Block interface

Block title:

Comment

Network 1: Perform fault operation sequence when system is in fault and has not been reset

Comment

#fault → AND → #reset → FC1 "faultOutput" EN False

ENO → (RET) → redLight → #lightRed
greenLight → #lightGreen
yellowLight → #lightYellow
interlock → #interlock

Network 2: Perform Reset and Set Red light to Solid

Comment

#reset → AND → #interlock → FC2 "performReset" EN

ENO → lightRed → #lightRed
lightYellow → #lightYellow
lightGreen → #lightGreen
fault → #fault

Network 3: Start the Normal signal light operation by setting the interlock to true so that no external can control the lig...

Comment

#start → AND → #fault → AND → #lightRed → AND → #lightYellow → AND → #lightGreen → AND → #interlock → (s)

Network 4: As soon as Interlock comes to true, turn on GREE light

Comment

#interlock → lightRed

Properties Info Diagnostics Plug-ins

100%

Instructions Testing Tasks Libraries Add-ins

Loading completed (errors: 0; warning...)

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Project Edit View Insert Online Options Tools Window Help

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Totally Integrated Automation PORTAL

PLC programming

Project tree

Devices Plant objects

TrafficLight

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 - Add new block
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 - faultOutput [FC1]
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- Online access
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Reference projects

Details view

Portal view Overview LightOperati...

Properties Info Diagnostics Plug-ins

100%

Instructions Testing Tasks Libraries Add-ins

Block interface

Network 3: Start the Normal signal light operation by setting the interlock to true so that no external can control the lig...

Comment

#start #fault #lightRed #lightYellow #lightGreen #interlock

Network 4: As soon as Interlock comes to true, turn on GREE light

Comment

#interlock #lightRed

#interlockRiseEdge

#greenLightPulse

TP Time

IN Q

t#5s PT ET T#0ms

Network 5: Turn ON YELLOW light when Green goes off

Comment

#yellowLightPulse

TP Time

IN Q

t#3s PT ET T#0ms

#interlock #lightGreen #lightYellow

#greenLightFallEdge

Network 6: Turn ON RED light once yellow goes off, and remove the interlock indicating the signal light operation has b...

Comment

#interlock #lightYellow #lightRed

#yellowLightFallEdge

The screenshot shows the SIMATIC Manager software interface for a PLC project named "TrafficLight". The project tree on the left lists various components like PLC configurations, program blocks (including "LightOperation [FB1]"), and security settings. The main workspace displays the ladder logic for "LightOperation [FB1]". It consists of six networks: Network 3 starts the normal signal light operation by setting the "interlock" coil; Network 4 turns on the green light as soon as the interlock becomes true; Network 5 turns on the yellow light when the green light goes off; Network 6 turns on the red light once the yellow light goes off and removes the interlock; and Networks 3, 4, and 5 also handle fault detection and fault output. The ladder logic uses standard PLC symbols for contacts, coils, and timers (TP). The "Properties" and "Info" tabs are visible at the bottom.

The screenshot shows the SIMATIC Manager interface for a TrafficLight project. The left sidebar displays the Project tree under 'PLC programming' with various nodes like 'TrafficLight', 'PLC_1 [CPU 1211C DC/DC/DC]', and 'Program blocks'. The main area shows the 'LightOperation [FB1]' block interface with three networks:

- Network 4:** As soon as Interlock comes to true, turn on GREE light. This network uses an #interlock input (P) to trigger a #greenLightPulse output (Q). The pulse is defined by a timer block with TP (Time) set to t#5s and PT (Period) set to T#0ms.
- Network 5:** Turn ON YELLOW light when Green goes off. This network uses an #interlock input (N) to trigger a #yellowLightPulse output (Q). The pulse is defined by a timer block with TP (Time) set to t#3s and PT (Period) set to T#0ms.
- Network 6:** Turn ON RED light once yellow goes off, and remove the interlock indicating the signal light operation has b... This network uses an #interlock input (N) to trigger a #lightRed output (S). It also includes a self-loop with an #interlock output (R) and an #redlightRiseEdg e input (P).

The bottom navigation bar includes tabs for 'Reference projects', 'Details view', 'Portal view', 'Overview', 'LightOperati...', 'Properties', 'Info', 'Diagnostics', and 'Plug-ins'.

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Project Edit View Insert Online Options Tools Window Help

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Totally Integrated Automation PORTAL

PLC programming

Project tree

Devices Plant objects

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]
 - Device configuration
 - Online & diagnostics
- Program blocks
 - Add new block
 - Main [OB1]
 - Startup [OB100]
 - faultOutput [FC1]
 - performReset [FC2]
 - Intersection [FB2]
 - LightOperation [FB1]
 - Intersection_DB [DB3]
- Technology objects
- External source files
- PLC tags
 - Show all tags
 - Add new tag table
 - Default tag table [44]
 - TrafficLightTags [17]
- PLC data types
- Watch and force tables
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- OPC UA communication
- Device proxy data
- Program info
- PLC alarm text lists
- Local modules
- TP1200 Comfort [TP1200 Comfort]
- Ungrouped devices
- Security settings
- Cross-device functions
- Common data
- Documentation settings
- Languages & resources
- Version control interface
- Testsuite
- Online access
- Card Reader/USB memory

Reference projects

Details view

Tags User constants System constants

Tasks Libraries Add-ins

Default tag table [44]

Default tag table

	Name	Data type	Address	Retain	Access	Write	Visible	Comment
1	Clock_Byt	Byte	%MBO	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Clock_10Hz	Bool	%M0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Clock_5Hz	Bool	%M0.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Clock_2.5Hz	Bool	%M0.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Clock_2Hz	Bool	%M0.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6	Clock_1.25Hz	Bool	%M0.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Clock_1Hz	Bool	%M0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	Clock_0.625Hz	Bool	%M0.6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9	Clock_0.5Hz	Bool	%M0.7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10	System_Byt	Byte	%MB1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
11	FirstScan	Bool	%M1.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
12	DiagStatusUpdate	Bool	%M1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13	AlwaysTRUE	Bool	%M1.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
14	AlwaysFALSE	Bool	%M1.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
15	<Add new>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Properties Info Diagnostics

Portal view Overview Default tag t... PLC tags Loading completed (errors: 0; warning...)

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Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

TrafficLight PLC_1 [CPU 1211C DC/DC/DC] PLC tags TrafficLightTags [17]

TrafficLightTags

	Name	Data type	Address	Retain	Access	Write	Visible	Comment
1	northLightGreen	Bool	%Q0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	northLightYellow	Bool	%Q0.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	northLightRed	Bool	%Q0.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	southLightGreen	Bool	%Q0.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5	southLightYellow	Bool	%Q0.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6	southLightRed	Bool	%Q0.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
7	eastLightGreen	Bool	%Q1.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	eastLightYellow	Bool	%Q1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9	eastLightRed	Bool	%Q1.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10	westLightGreen	Bool	%Q1.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
11	westLightYellow	Bool	%Q1.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
12	westLightRed	Bool	%Q1.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13	systemFAULT	Bool	%M2.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
14	start_MEMORY_TAG	Bool	%M2.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
15	reset_MEMORY_TAG	Bool	%M2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
16	start_Button_IN	Bool	%I0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
17	reset_Button_IN	Bool	%I0.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
18	<Add new>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Tags User constants

Tasks Libraries Add-ins

PLC programming

Reference projects Details view

Properties Info Diagnostics

Portal view Overview Default tag t... PLC tags TrafficLightT... Loading completed (errors: 0; warning...)

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Project Edit View Insert Online Options Tools Window Help

Save project Go online Go offline <Search in project>

Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

TrafficLight
Add new device
Devices & networks
PLC_1 [CPU 1211C DC/DC/DC]
TP1200 Comfort [TP1200 Comfort]
Device configuration
Online & diagnostics
Runtime settings
Screens
Screen management
HMI tags
Connections
HMI alarms
Recipes
Historical data
Scripts
Scheduled tasks
Cycles
Reports
Text and graphic lists
User administration
Ungrouped devices
Security settings
Cross-device functions
Common data
Documentation settings
Languages & resources
Version control interface
Testsuite
Online access
Card Reader/USB memory

Topology view Network view Device view

TP1200 Comfort [TP1200 Com...]

TP1200 Comfort

TP1200 Comfort_ CP_1 [PROFINET Interface]

Properties Info Diagnostics

100%

General IO tags System constants Texts

Ethernet addresses

Interface networked with Subnet: PN/IE_1 Add new subnet

IP protocol

Set IP Address in the project
IP address: 192 . 168 . 0 . 2
Subnet mask: 255 . 255 . 255 . 0
Use router
Router address: 0 . 0 . 0 . 0
IP address is set directly at the device

PROFINET

PROFINET device name is set directly at the device
Generate PROFINET device name automatically

Hardware catalog Online tools Device data Tasks Libraries Add-ins

Reference projects Details view

Portal view Overview TP1200 Com...

Loading completed (errors: 0; warning...)

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Project tree

Devices Plant objects

Network Connections HMI connection

Topology view Network view Device view

Network overview Connections I/O communication VPN TeleControl

Local connection name Local end point Local ID (hex) Partner ID (hex) Partner Connection type

HMI_Connection_1 HMI TP1200 Comfort PLC_1 [CPU 1211C ... HMI connection

PLC_1 CPU 1211C

TP1200 Comfort TP1200 Comfort

PN/IE_1

100%

Properties Info Diagnostics

General

No 'properties' available.

No 'properties' can be shown at the moment. There is either no object selected or the selected object does not have any displayable properties.

Reference projects

Details view

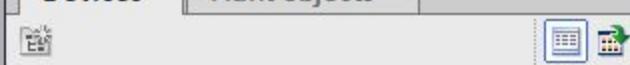
Portal view Overview Devices & ne...

Hardware catalog Online tools Tasks Libraries Add-ins

The screenshot shows the SIMATIC Manager software interface for a project named 'TrafficLight'. The main workspace is titled 'Devices & networks' and displays a network diagram. In the diagram, a PLC labeled 'PLC_1 CPU 1211C' is connected to a HMI device labeled 'TP1200 Comfort' via a connection labeled 'PN/IE_1'. The connection is highlighted in green. To the right of the diagram, a table provides detailed information about the connection, including the local connection name ('HMI_Connection_1'), local endpoint ('HMI TP1200 Comfort'), local ID (hex), partner ID (hex), partner device ('PLC_1 [CPU 1211C ...'), and connection type ('HMI connection'). The left sidebar, titled 'Devices & networks', contains a tree view of the project structure, including sections for 'TrafficLight', 'PLC_1 [CPU 1211C DC/DC/DC]', and 'TP1200 Comfort [TP1200 Comfort]'. The bottom of the screen features a status bar with various icons and the message 'Loading completed (errors: 0; warning...)'. The overall interface is designed for managing industrial automation projects, specifically focusing on device connections and network configurations.

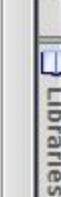
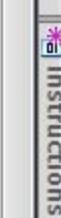
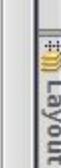
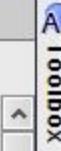
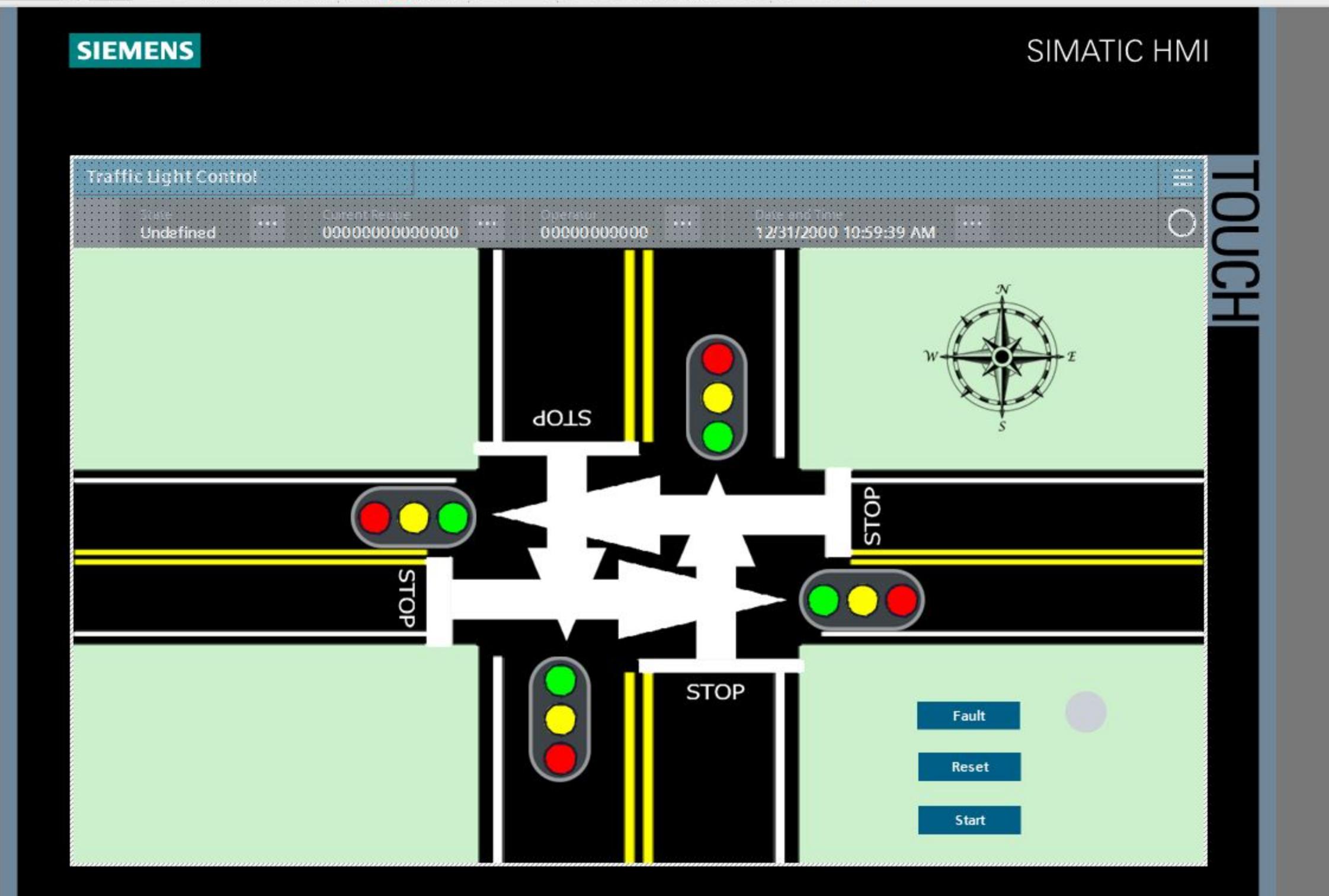
Project tree

Devices | Plant objects



- ▶ TrafficLight
 - Add new device
 - Devices & networks
 - ▶ PLC_1 [CPU 1211C DC/DC/DC]
 - ▶ TP1200 Comfort [TP1200 Comfort]
 - Device configuration
 - Online & diagnostics
 - Runtime settings
 - ▶ Screens
 - Add new screen
 - 10_Startscreen
 - 20_Messages
 - 30_Diagnostics
 - 40_Settings
 - ▶ Screen management
 - ▶ HMI tags
 - Connections
 - HMI alarms
 - Recipes
 - Historical data
 - ▶ Scripts
 - Scheduled tasks
 - Cycles
 - ▶ Reports
 - Text and graphic lists
 - User administration
 - ▶ Ungrouped devices
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 - ▶ Card Reader/USB memory

TrafficLight ▶ TP1200 Comfort [TP1200 Comfort] ▶ Screens ▶ 10 Sta



> Reference projects

> Details view

 [Portal view](#)

 Overview

10_Start

screen

Properties

Info

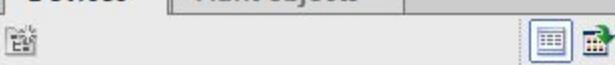
Diagnostics

Plug-ins

ng completed (errors: 0; warning...

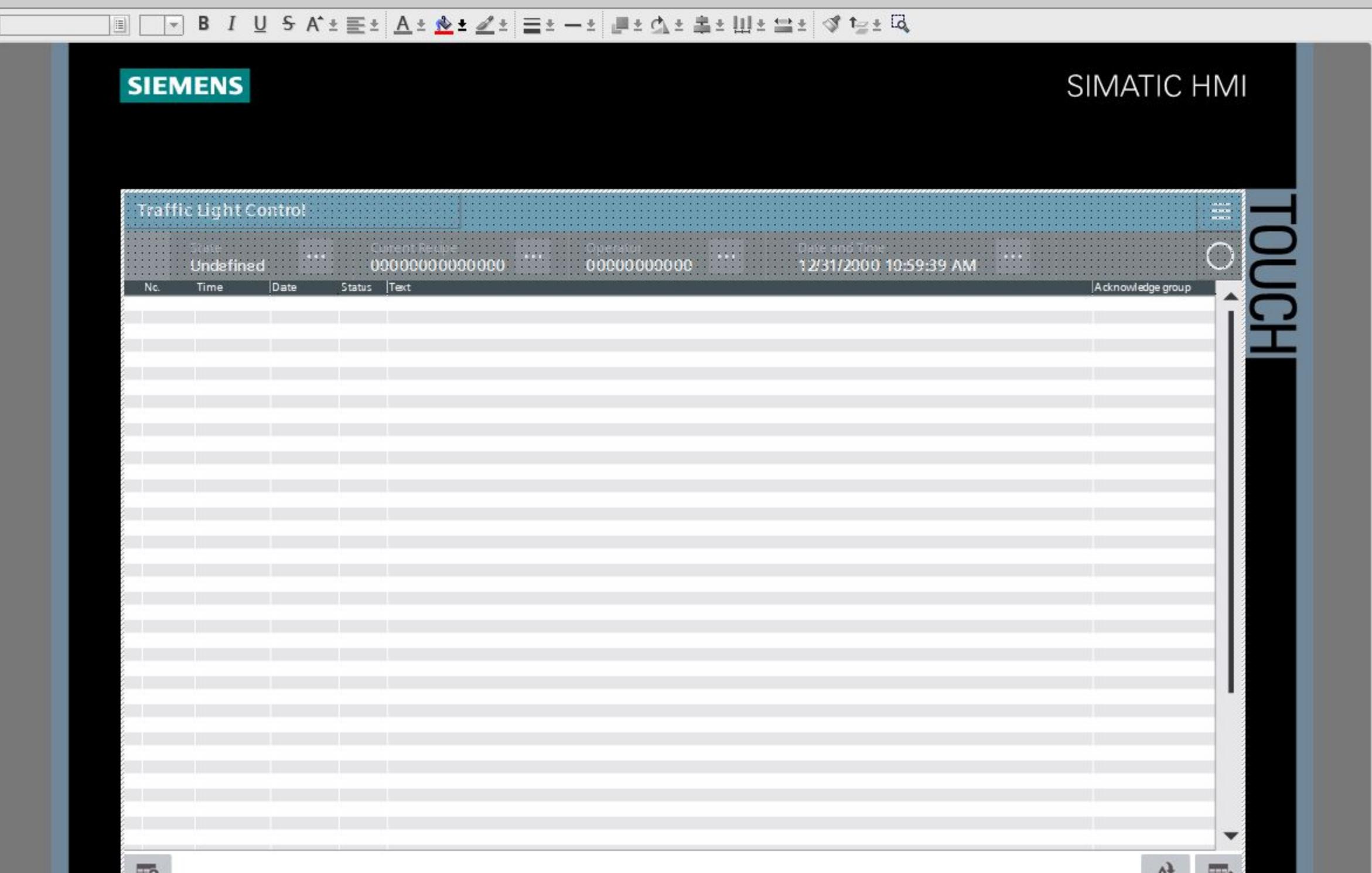
Project tree

Devices | Plant objects



- ▶ TrafficLight
 - Add new device
 - Devices & networks
 - ▶ PLC_1 [CPU 1211C DC/DC/DC]
 - ▶ TP1200 Comfort [TP1200 Comfort]
 - Device configuration
 - Online & diagnostics
 - Runtime settings
 - ▶ Screens
 - Add new screen
 - 10_Startscreen
 - 20_Messages
 - 30_Diagnostics
 - 40_Settings
 - ▶ Screen management
 - ▶ HMI tags
 - Connections
 - HMI alarms
 - Recipes
 - Historical data
 - ▶ Scripts
 - Scheduled tasks
 - Cycles
 - ▶ Reports
 - Text and graphic lists
 - User administration
 - ▶ Ungrouped devices
 - ▶ Security settings
 - ▶ Cross-device functions
 - ▶ Common data
 - ▶ Documentation settings
 - ▶ Languages & resources
 - ▶ Version control interface
 - ▶ Testsuite
 - ▶ Online access
 - ▶ Card Reader/USB memory

TrafficLight ▶ TP1200 Comfort [TP1200 Comfort] ▶ Screens ▶ 20_Mess...



VI6 Siemens - D:\Documents\Automation\TrafficLight\TrafficLight

Project Edit View Insert Online Options Tools Window Help

Save project Go online Go offline Search in project

Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

Visualization

TrafficLight > TP1200 Comfort [TP1200 Comfort] > Screens > 30_Diagnostics

SIEMENS SIMATIC HMI TOUCH

Traffic Light Control

Status	Name	Operati...	Slot	Type	Order number	Address	Plant designation	Location identifier
Undefined					000000000000	000000000000	12/31/2000 10:59:39 AM	...
Diagnostic overview								

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview 10_Startscreen 20_Messages 30_Diagnostics Loading completed (errors: 0; warning...)

A Toolbox

Animations Layout Instructions Tasks Libraries Add-ins

75%

This screenshot shows the SIMATIC Manager software interface for a TrafficLight project. The main window displays a SIMATIC HMI screen titled 'Traffic Light Control' with a table for 'Diagnostic overview'. The table has columns for Status, Name, Operation, Slot, Type, Order number, Address, Plant designation, and Location identifier. A single row is present with values: Status = Undefined, Name = , Operation = , Slot = , Type = , Order number = 000000000000, Address = 000000000000, Plant designation = 12/31/2000 10:59:39 AM, and Location identifier = The screen also features the SIEMENS logo at the top left and a large 'TOUCH' graphic on the right. The left sidebar shows the 'Project tree' with nodes like 'TrafficLight', 'PLC_1 [CPU 1211C DC/DC/DC]', and 'TP1200 Comfort [TP1200 Comfort]'. The 'Screens' node is expanded, showing screens such as '10_Startscreen', '20_Messages', '30_Diagnostics', and '40_Settings'. The '30_Diagnostics' screen is currently selected. The bottom navigation bar includes links for 'Portal view', 'Overview', '10_Startscreen', '20_Messages', '30_Diagnostics', and 'Loading completed (errors: 0; warning...)'. The right side of the interface includes a 'Toolbox' with categories like 'Animations', 'Layout', 'Instructions', 'Tasks', 'Libraries', and 'Add-ins'. The status bar at the bottom right shows a zoom level of 75%.

VI6 Siemens - D:\Documents\Automation\TrafficLight\TrafficLight

Project Edit View Insert Online Options Tools Window Help

Save project Go online Go offline Search in project

Totally Integrated Automation PORTAL

Project tree

Devices Plant objects

Visualization

TrafficLight > TP1200 Comfort [TP1200 Comfort] > Screens > 40_Settings

SIEMENS SIMATIC HMI TOUCH

Traffic Light Control

Display Brightness

Current Recipe: 000000000000 Operator: 000000000000 Date and Time: 12/31/2000 10:59:39 AM

Undefined

Animations Layout Instructions Tasks Libraries Add-ins

Reference projects

Details view

Properties Info Diagnostics Plug-ins

Portal view Overview 10_Startscreen 20_Messages 30_Diagnosi... 40_Settings

The project TrafficLight was saved successfully.

The screenshot shows the SIMATIC Manager software interface. The main window displays a SIMATIC HMI screen titled "Traffic Light Control". The screen has a black background with a blue header bar containing the SIMATIC logo, "SIMATIC HMI", and "TOUCH". Below the header is a toolbar with various icons. The main area of the screen is a large, empty space with a dotted grid pattern. At the bottom left is a small control panel with a power button icon. Above the main screen, the title bar reads "TrafficLight > TP1200 Comfort [TP1200 Comfort] > Screens > 40_Settings". The left sidebar, titled "Project tree", shows a hierarchical list of project components under "TrafficLight" and "TP1200 Comfort [TP1200 Comfort]". The "Screens" section is expanded, showing screens like "10_Startscreen", "20_Messages", "30_Diagnostics", and "40_Settings". The bottom navigation bar includes links for "Portal view", "Overview", and several other screens. The status bar at the bottom right indicates that the project was saved successfully.

VI6 Siemens - D:\Documents\Automation\TrafficLight\TrafficLight

Project Edit View Insert Online Options Tools Window Help

Totally Integrated Automation PORTAL

Save project Go online Go offline Search in project

Project tree

Devices Plant objects

Visualization

TrafficLight

- Add new device
- Devices & networks
- PLC_1 [CPU 1211C DC/DC/DC]
- TP1200 Comfort [TP1200 Comfort]
 - Device configuration
 - Online & diagnostics
 - Runtime settings
 - Screens
 - Add new screen
 - 10_Startscreen
 - 20_Messages
 - 30_Diagnostics
 - 40_Settings
 - Screen management
 - Templates
 - Pop-up screens
 - Slide-in screens
 - Global screen
 - Permanent area
 - HMI tags
 - Show all tags
 - Add new tag table
 - Default tag table [1]
 - AnimationTags [1]
 - PLC_Tags [15] (selected)
 - Template [25]
 - Connections
 - HMI alarms
 - Recipes
 - Historical data
 - Scripts
 - Scheduled tasks
 - Cycles
 - Reports
 - Text and graphic lists
 - User administration
 - Ungrouped devices
 - Security settings
 - Cross-device functions
 - Common data
 - Documentation settings
 - Languages & resources
 - Version control interface
- Reference projects
- Details view

PLC_Tags

PLC_Tags

Name	Data type	Connection	PLC name	PLC tag	Address	Access mode	Acquisition cycle	Logged	Source comment
eastLightGreen	Bool	HMI_Conne...	PLC_1	eastLightGreen		<symbolic access>	100 ms		
eastLightRed	Bool	HMI_Connectio...	PLC_1	eastLightRed		<symbolic access>	100 ms		
eastLightYellow	Bool	HMI_Connectio...	PLC_1	eastLightYellow		<symbolic access>	100 ms		
northLightGreen	Bool	HMI_Connectio...	PLC_1	northLightGreen		<symbolic access>	100 ms		
northLightRed	Bool	HMI_Connectio...	PLC_1	northLightRed		<symbolic access>	100 ms		
northLightYellow	Bool	HMI_Connectio...	PLC_1	northLightYellow		<symbolic access>	100 ms		
reset_MEMORY	Bool	HMI_Connectio...	PLC_1	reset_MEMORY		<symbolic access>	100 ms		
southLightGreen	Bool	HMI_Connectio...	PLC_1	southLightGreen		<symbolic access>	100 ms		
southLightRed	Bool	HMI_Connectio...	PLC_1	southLightRed		<symbolic access>	100 ms		
southLightYellow	Bool	HMI_Connectio...	PLC_1	southLightYellow		<symbolic access>	100 ms		
start_MEMORY	Bool	HMI_Connectio...	PLC_1	start_MEMORY		<symbolic access>	100 ms		
systemFAULT	Bool	HMI_Connectio...	PLC_1	systemFAULT		<symbolic access>	100 ms		
westLightGreen	Bool	HMI_Connectio...	PLC_1	westLightGreen		<symbolic access>	100 ms		
westLightRed	Bool	HMI_Connectio...	PLC_1	westLightRed		<symbolic access>	100 ms		
westLightYellow	Bool	HMI_Connectio...	PLC_1	westLightYellow		<symbolic access>	100 ms		

Discrete alarms Analog alarms Logging tags

ID	Name	Alarm text	Alarm class	Trigger tag	Trigge...	Trigger address	HMI acknowl...	HMI a...	HMI acknowl...	Report
<Add new>										

Properties Info Diagnostics

Portal view Overview PLC_Tags

The project TrafficLight was saved successfully.