

NOTATKA SŁÓŻBOWA S7 1200Slave

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Poniedziałek 11-14

1. Cel ćwiczenia

Stworzenie programu korzystając z oprogramowania TIA portal oraz SIMATIC Manager

2. Sprzęt:

Oprogramowanie TIA portal oraz program SIMATIC Manager, sprzęt zgodnie z instrukcją.

3. Wykonane ćwiczenia:

Konfiguracja Sprzętu w programie TIA Portal

The screenshot displays the Siemens TIA Portal software interface. The top window shows the 'Add new device' dialog, where a SIMATIC S7-1200 CPU 1214C AG/DQ/RLy is selected. The bottom window shows the hardware catalog with the following modules selected:

- CM 1243-2
- CM 1242-5
- PLC 1

The device overview table at the bottom shows the configuration of the rack:

Module	Slot	I address	Q address	Type	Order no.	Firmware	Comment
CM 1243-2	103			CM 1243-2	3RK7 243-2AA30-0XB0	V1.0	
CM 1242-5	102	2...63	2...63	CM 1242-5	6GK7 242-5DX30-0XE0	V1.0	
PROFIBUS interface (X1)	101	2		PROFIBUS interface (X1)			
PLC 1	1			CPU 1214C AG/DQ/RLy	6ES7 214-1BE30-0XB0	V2.2	

PLC_1

CM 1243-2
CM 1242-5
PC_1

S7-1200 rack

102 101 1

Device overview

Slot	Address	Q address	Type	Order no.	Firmware	Comment
PROFINET interface_1						

Properties Info Diagnostics

General

Ethernet addresses

Interface networked with

Subnet: Not networked

Add new subnet

IP protocol

☒ Set IP address in the project

IP address: 192 . 168 . 22 . 143

Subnet mask: 255 . 255 . 255 . 0

☐ Use IP router

PROFIBUS interface (X1)

Properties Info Diagnostics

General

PROFIBUS address

Interface networked with

Subnet: PROFIBUS_1

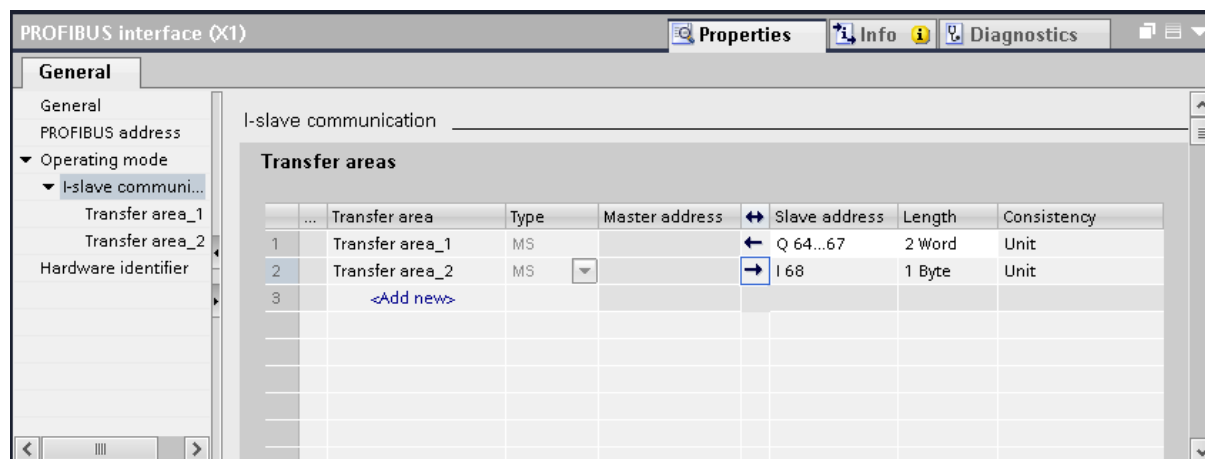
Add new subnet

Parameters

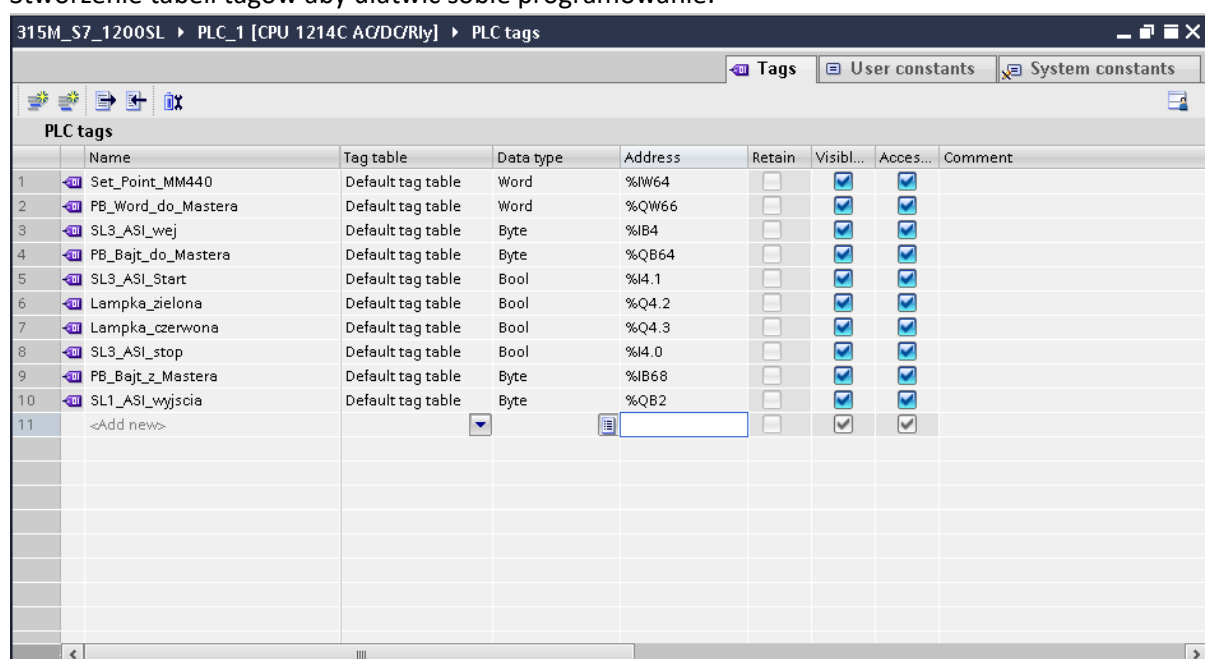
Address: 3

Highest address: 126

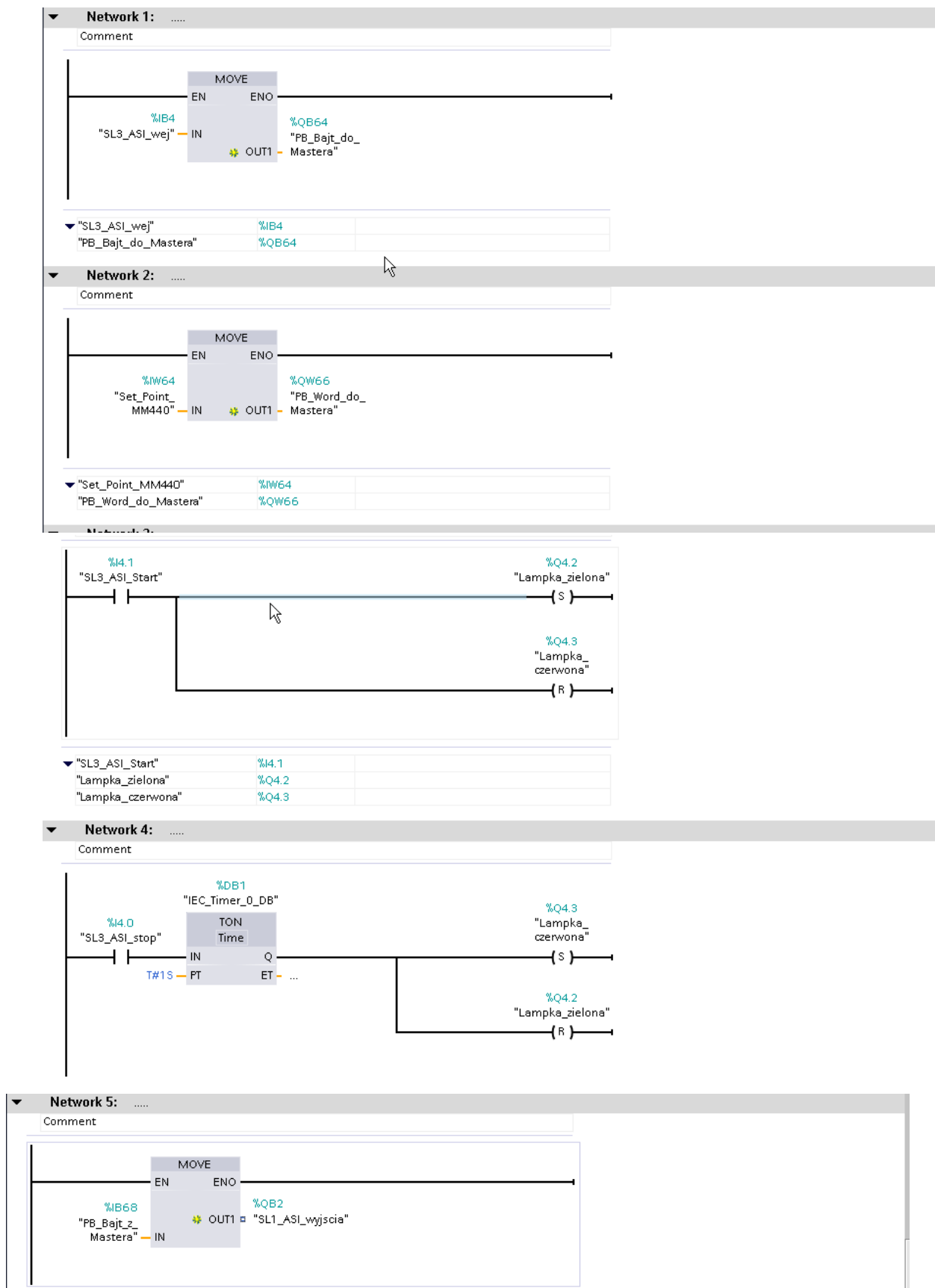
Transmission speed: 1.5 Mbps



Stworzenie tabeli tagów aby ułatwić sobie programowanie:



Napisanie programów w języku drabinkowym zgodnie z instrukcją:



Przejsie do konfiguracji w programie SIMATIC manager (wykorzystana zostala gotowa konfiguracja z poprzednich zajec)

HW Config - SIMATIC 300 Station

Station Edit Insert PLC View Options Window Help

SIMATIC 300 Station (Configuration) -- 315 S7-1200SL

0 UR

1	PS 307 2A
2	CPU315-2 DP(1)
X2	DP
3	
4	DI16xDC24V
5	AI4/AO2x8/8Bit
6	AO4x12Bit
7	DI16xDC24V

PROFIBUS(1): DP master system (1)

(3) CM 124-5

DP-NORM

(8) MICROM

Suchen:

Profile: Standard

SIMOVERT

- MICROMASTER 4
 - Universal module
 - Standard Telegram 1
 - 4 PKW, 2 PZD (PPO 1)
 - 0 PKW, 2 PZD (PPO 3)
 - 4 PKW, 4 PZD whole cons.
 - 4 PKW, 4 PZD word cons.
 - 0 PKW, 4 PZD word cons.
 - 0 PKW, 4 PZD word cons.
 - MM430/440 only: PZD >
 - 4 PKW, 6 PZD (PPO 2)
 - 4 PKW, 6 PZD word cons.
 - 0 PKW, 6 PZD (PPO 4)
 - 0 PKW, 6 PZD word cons.
 - 4 PKW, 8 PZD whole cons.
 - 4 PKW, 8 PZD word cons.
 - 0 PKW, 8 PZD whole cons.
 - 0 PKW, 8 PZD word cons.
- DKC03.3 FGP02
- Switching Devices
- I/O
 - Balluff
 - FD67
 - I/O
 - S7 1200
 - CM 1242-5
 - Universal module
 - 1 Byte Input
 - 1 Byte Output
 - 2 Byte Input

Insertion possible

HW Config - SIMATIC 300 Station

Station Edit Insert PLC View Options Window Help

SIMATIC 300 Station (Configuration) -- 315 S7-1200SL

0 UR

1	PS 307 2A
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DP-NORM

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Suchen:

Profile: Standard

SIMOVERT

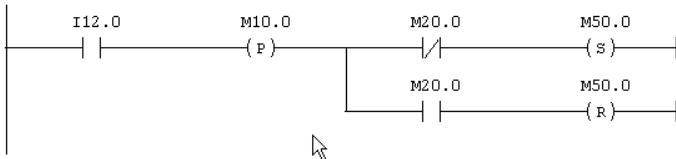
- MICROMASTER 4
 - Universal module
 - Standard Telegram 1
 - 4 PKW, 2 PZD (PPO 1)
 - 0 PKW, 2 PZD (PPO 3)
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 - MM430/440 only: PZD >
 - 4 PKW, 6 PZD (PPO 2)
 - 4 PKW, 6 PZD word cons.
 - 0 PKW, 6 PZD (PPO 4)
 - 0 PKW, 6 PZD word cons.
 - 4 PKW, 8 PZD whole cons.
 - 4 PKW, 8 PZD word cons.
 - 0 PKW, 8 PZD whole cons.
 - 0 PKW, 8 PZD word cons.
- DKC03.3 FGP02
- Switching Devices
- I/O
 - Balluff
 - FD67
 - I/O
 - S7 1200
 - CM 1242-5
 - Universal module
 - 1 Byte Input
 - 1 Byte Output
 - 2 Byte Input

Press F1 to get Help.

Programy w bloku OB1 zgodnie z instrukcją:

Network 1: Title:

Comment:



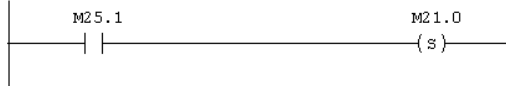
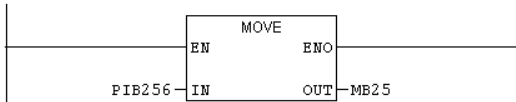
Network 2: Title:

Comment:



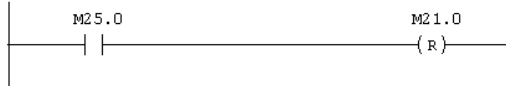
Network 3: Title:

Comment:



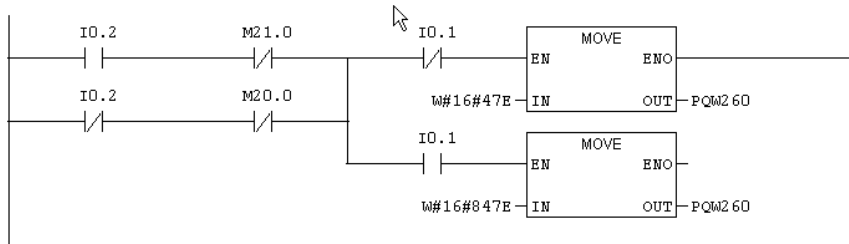
Network 5: Title:

Comment:



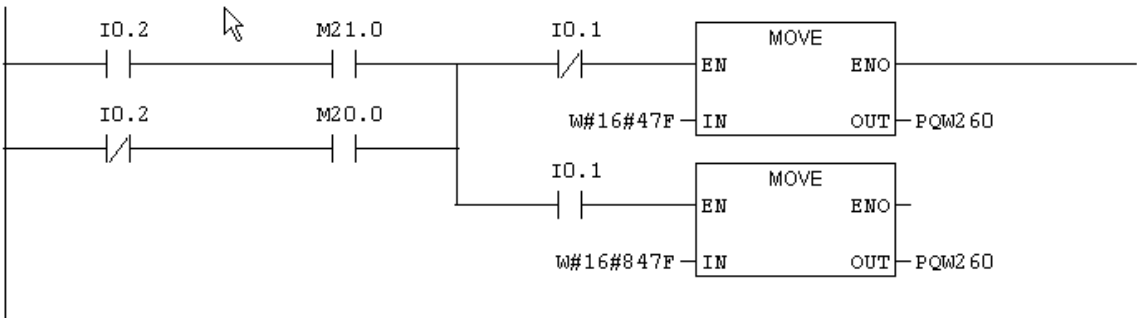
Network 6: Title:

Comment:



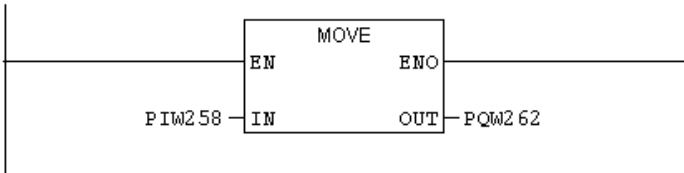
Network 7 : Title:

Comment:



Network 8 : Title:

Comment:



Network 9 : Title:

Network 9 : Title:

Comment:

