Treinamentos e Manutenção
de Softwares e Hardwares

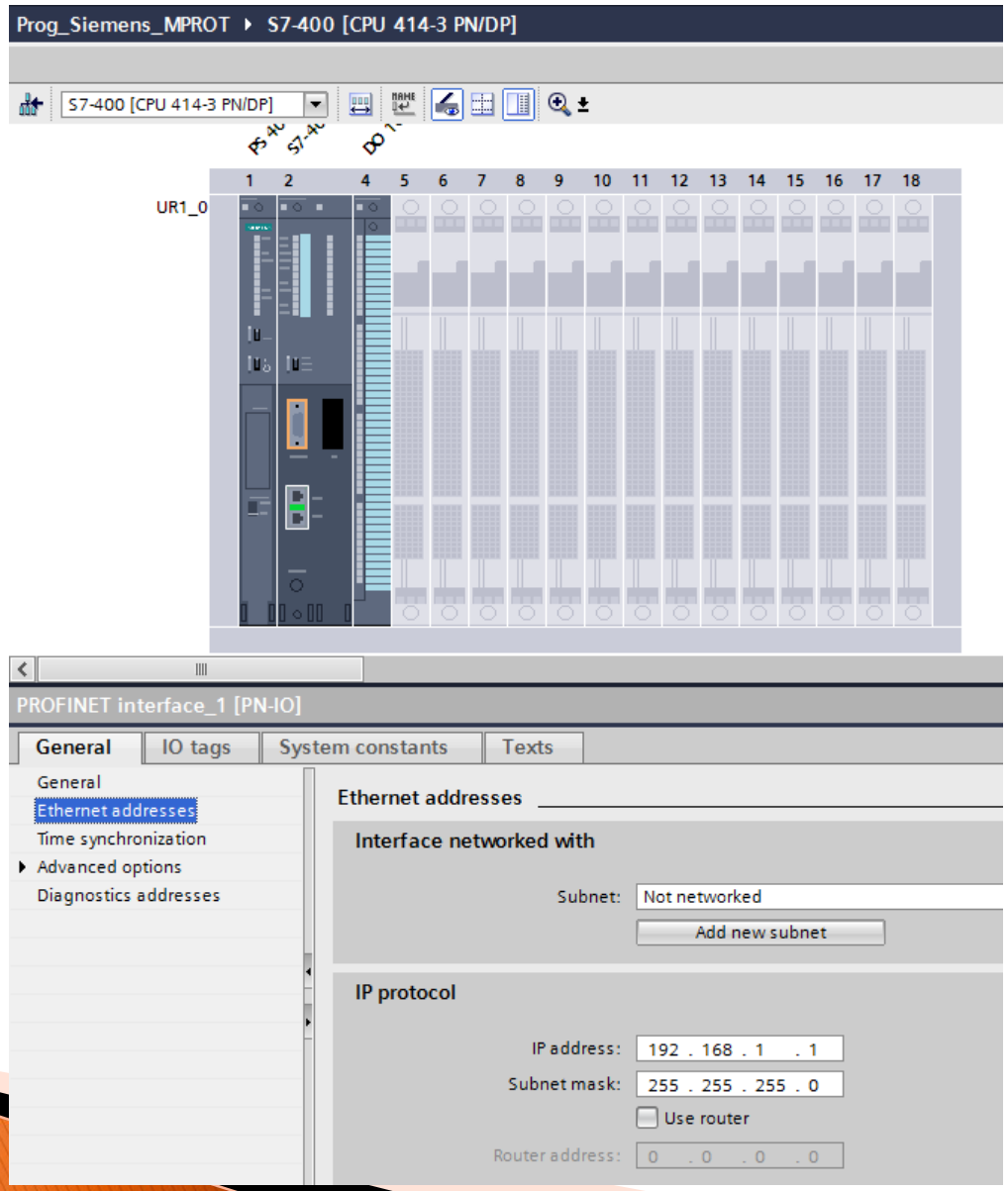
# Configuração Driver MProt da Siemens

# Roteiro de Apresentação

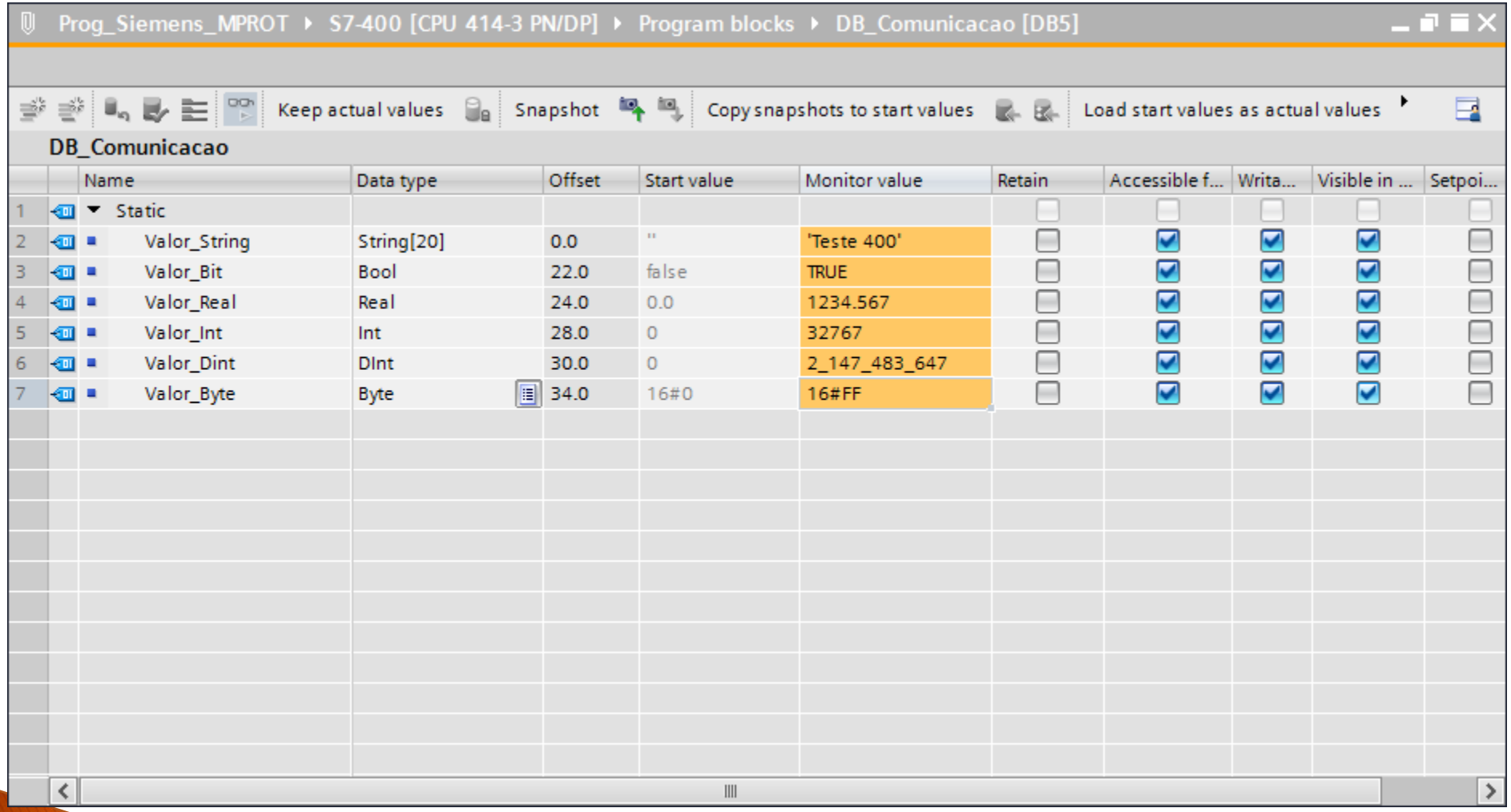
- **Configurando para CLP S7-400**
- **Configurando para CLP S7-1200**

# Configurando Driver Mprot para CLP S7-400

# Endereço IP

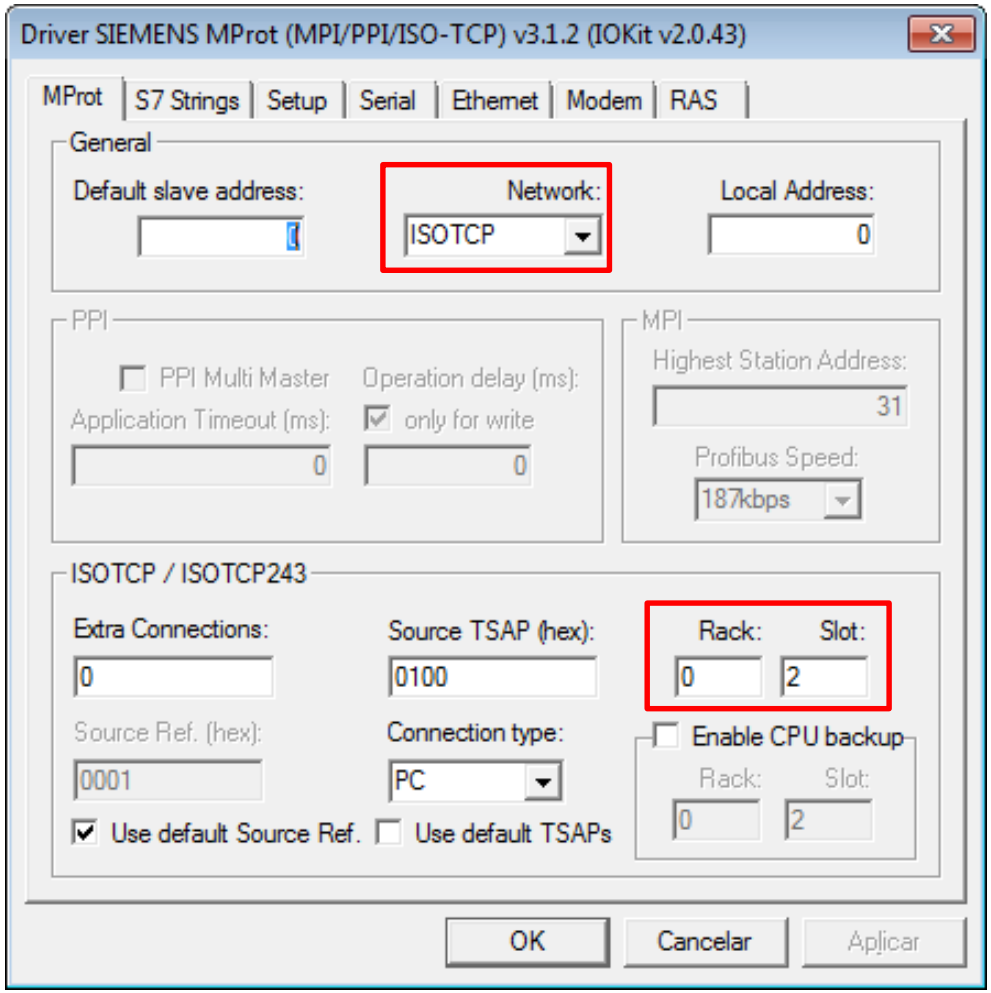

Prog_Siemens_MPROT ▸ S7-400 [CPU 414-3 PN/DP]
S7-400 [CPU 414-3 PN/DP]
1 2 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
UR1_0
PROFINET interface_1 [PN-IO]
General
IO tags
System constants
Texts
General
Ethernet addresses
Time synchronization
Advanced options
Diagnostics addresses
Ethernet addresses
Interface networked with
Subnet:
Not networked
Add new subnet
IP protocol
IP address:
192 . 168 . 1 . 1
Subnet mask:
255 . 255 . 255 . 0
Use router
Router address:
0 . 0 . 0 . 0

# DB de Comunicação

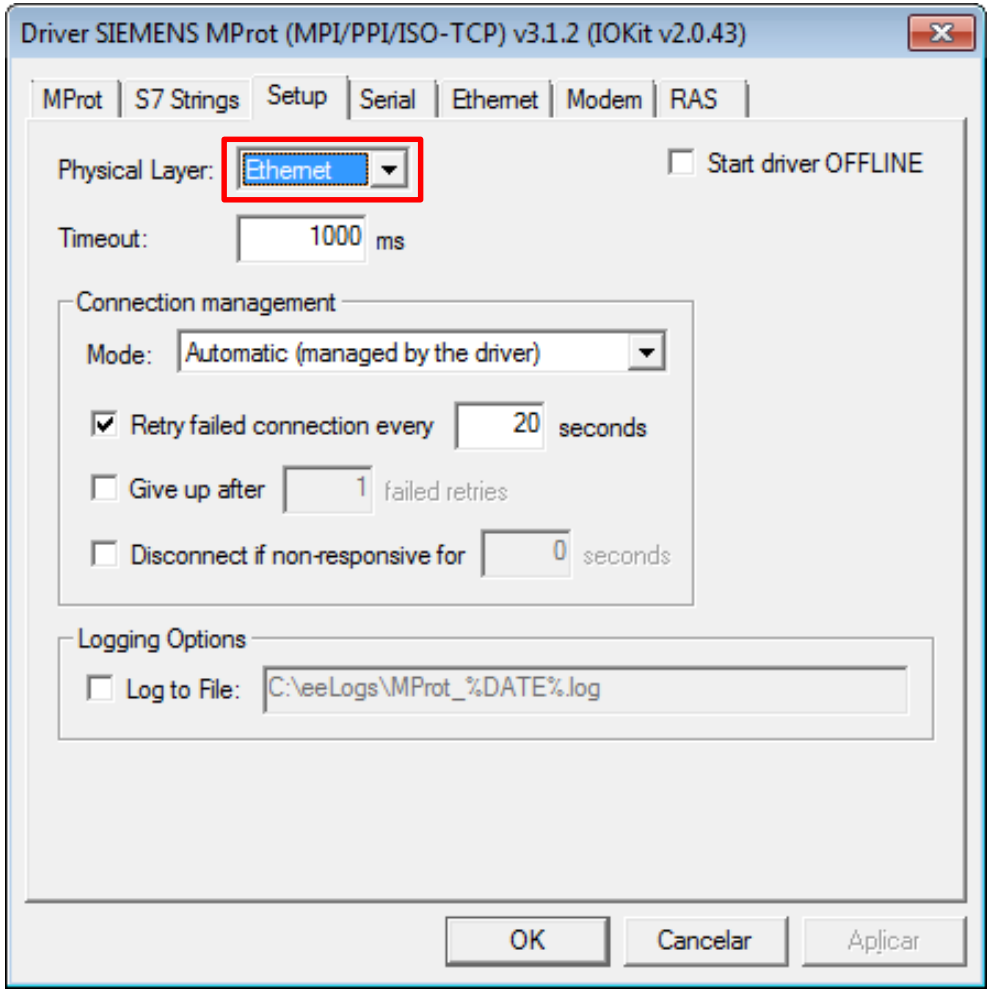



| | Name | Data type | Offset | Start value | Monitor value | Retain | Accessible f... | Writa... | Visible in ... | Setpoi... |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Static | | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2 | Valor_String | String[20] | 0.0 | '' | 'Teste 400' | ☐ | ☑ | ☑ | ☑ | ☐ |
| 3 | Valor_Bit | Bool | 22.0 | false | TRUE | ☐ | ☑ | ☑ | ☑ | ☐ |
| 4 | Valor_Real | Real | 24.0 | 0.0 | 1234.567 | ☐ | ☑ | ☑ | ☑ | ☐ |
| 5 | Valor_Int | Int | 28.0 | 0 | 32767 | ☐ | ☑ | ☑ | ☑ | ☐ |
| 6 | Valor_Dint | DInt | 30.0 | 0 | 2_147_483_647 | ☐ | ☑ | ☑ | ☑ | ☐ |
| 7 | Valor_Byte | Byte | 34.0 | 16#0 | 16#FF | ☐ | ☑ | ☑ | ☑ | ☐ |

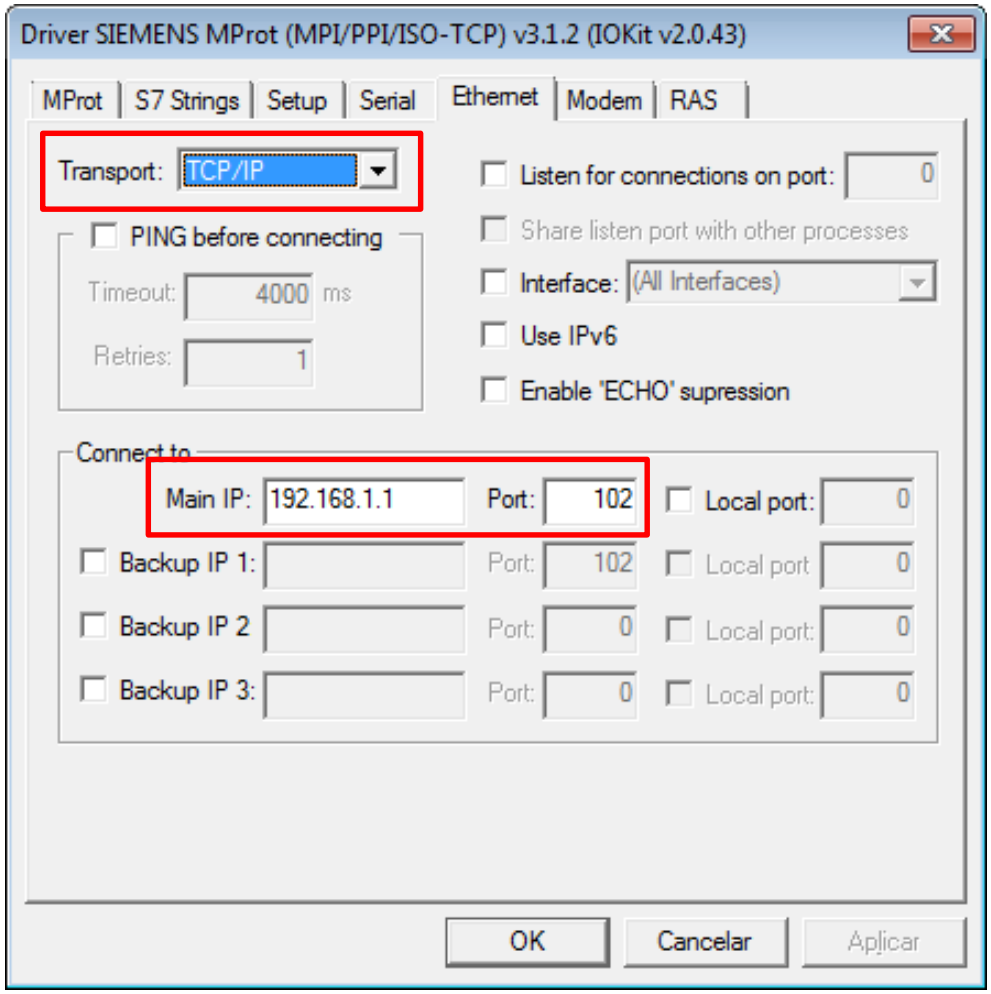
# Protocolo e Slot



# Meio Físico


Driver SIEMENS MProt (MPI/PPI/ISO-TCP) v3.1.2 (IOKit v2.0.43)
MProt
S7 Strings
Setup
Serial
Ethernet
Modem
RAS
Physical Layer:
Ethernet
Start driver OFFLINE
Timeout:
1000
ms
Connection management
Mode:
Automatic (managed by the driver)
Retry failed connection every
20
seconds
Give up after
1
failed retries
Disconnect if non-responsive for
0
seconds
Logging Options
Log to File:
C:\eeLogs\MProt_%DATE%.log
OK
Cancelar
Aplicar

# Transporte e Número IP



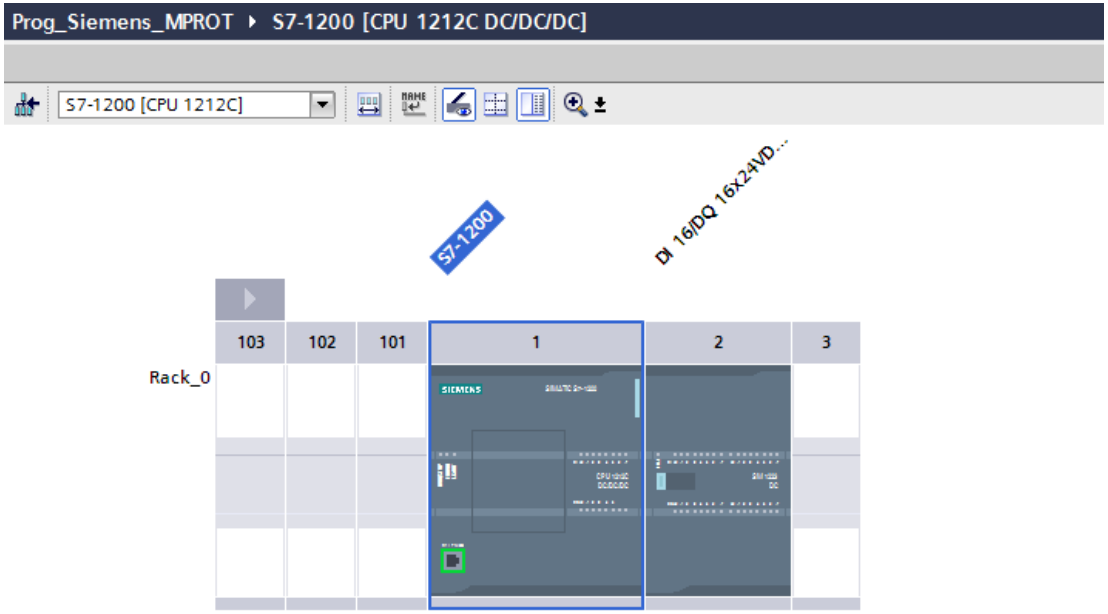
# Tags de Comunicação

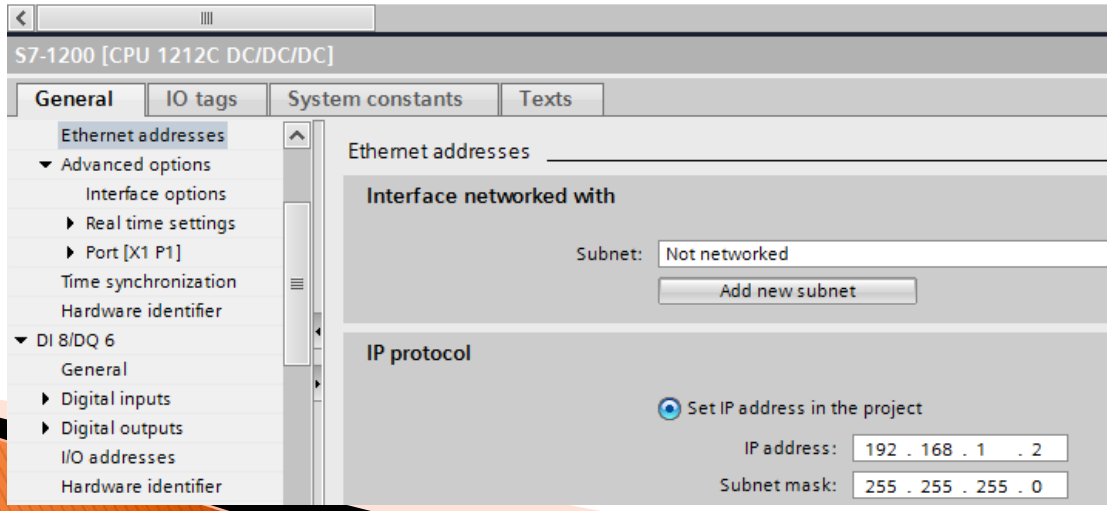
MProt400 | MProt1200

| Nome | Dispo... | Item | P1/N1... | P2/N2... | P3/N3... | P4/N4... | Ta... | Var... | Valor | Qualid... | Estampa de tempo | Valor (sem escala) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MProt400 | | | 0 | 0 | 0 | 0 | | | | | | |
| Valor_String | 0 | DB5.DBS1[20] | 0 | 0 | 0 | 0 | | 1000 | Teste 400 | 192 | 25/10/2018 09:58:57,659 | Teste 400 |
| Valor_Bit | 0 | DB5.DBX22.0 | 0 | 0 | 0 | 0 | | 1000 | 1 | 192 | 25/10/2018 09:58:57,676 | 1 |
| Valor_Bit_Param | | | 0 | 109 | 5 | 0 | | 1000 | 20 | 192 | 25/10/2018 09:58:57,676 | 20 |
| Valor_Real | 0 | DB5.DBF24 | 0 | 0 | 0 | 0 | | 1000 | 1234,567 | 192 | 25/10/2018 09:58:57,676 | 1234,567 |
| Valor_Real_Param | | | 0 | 709 | 5 | 24 | | 1000 | 1234,567 | 192 | 25/10/2018 09:58:57,676 | 1234,567 |
| Valor_Int | 0 | DB5.DBW28 | 0 | 0 | 0 | 0 | | 1000 | 32767 | 192 | 25/10/2018 09:58:57,676 | 32767 |
| Valor_Int_Param | | | 0 | 409 | 5 | 28 | | 1000 | 32767 | 192 | 25/10/2018 09:58:57,676 | 32767 |
| Valor_Dint | 0 | DB5.DBD30 | 0 | 0 | 0 | 0 | | 1000 | 2147483647 | 192 | 25/10/2018 09:58:57,676 | 2147483647 |
| Valor_Dint_Param | | | 0 | 609 | 5 | 30 | | 1000 | 2147483647 | 192 | 25/10/2018 09:58:57,676 | 2147483647 |
| Valor_Byte | 0 | DB5.DBB34 | 0 | 0 | 0 | 0 | | 1000 | 255 | 192 | 25/10/2018 09:58:57,676 | 255 |
| Valor_Byte_Param | | | 0 | 209 | 5 | 34 | | 1000 | 255 | 192 | 25/10/2018 09:58:57,676 | 255 |

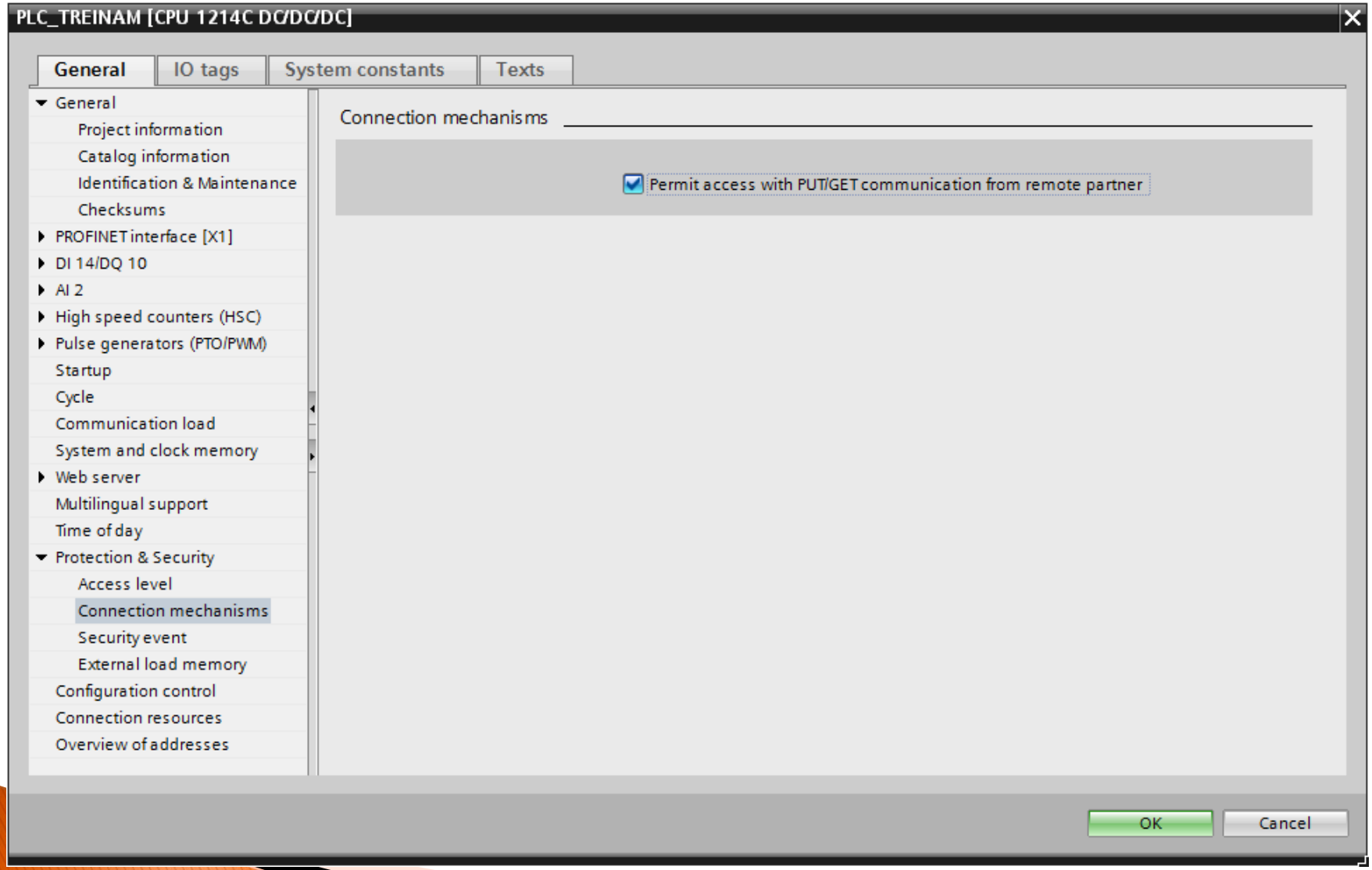
# Configurando Driver Mprot CLP S7-1200

# Endereço IP

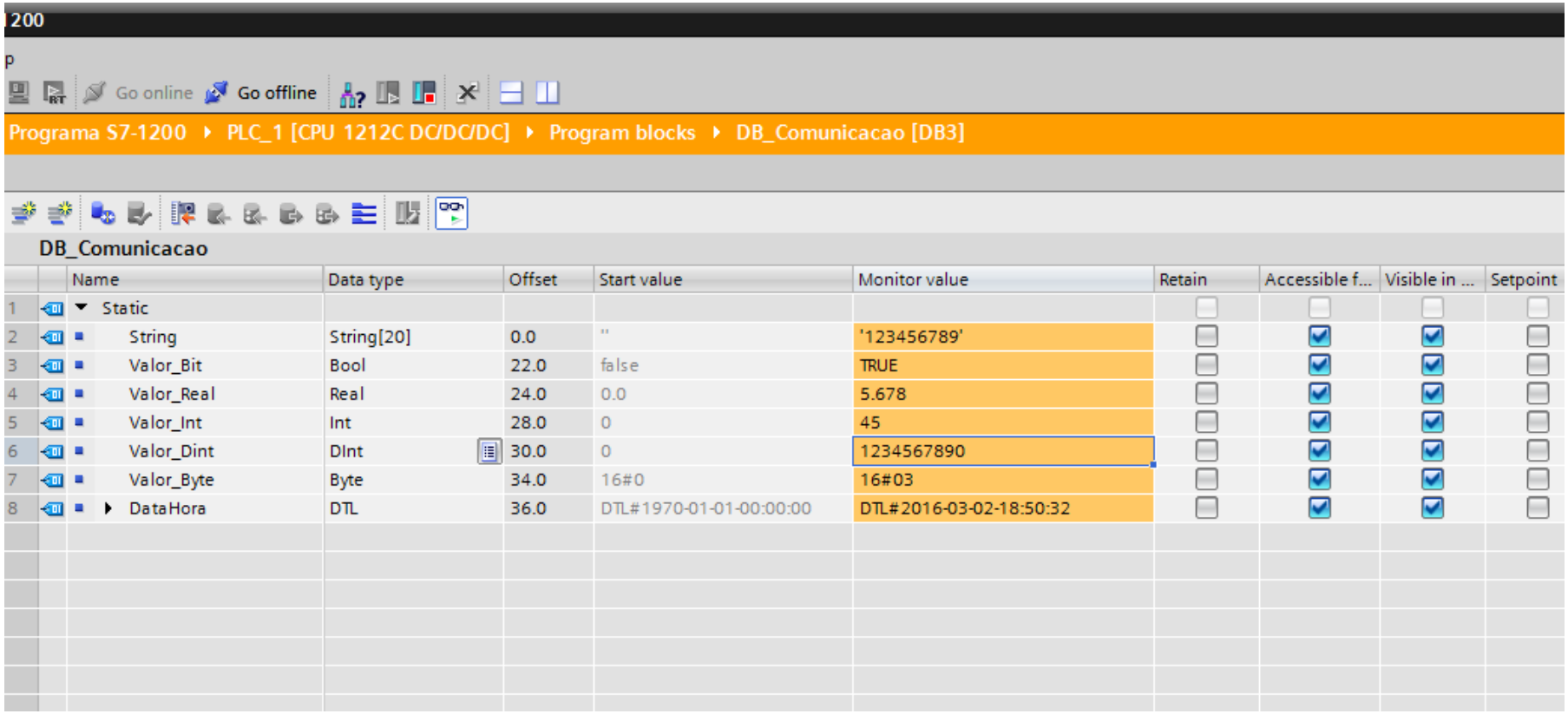

Prog_Siemens_MPROT ▸ S7-1200 [CPU 1212C DC/DC/DC]
S7-1200 [CPU 1212C]
S7-1200
DI 16/DQ 16x24VD...
103
102
101
1
2
3
Rack_0


S7-1200 [CPU 1212C DC/DC/DC]
General
IO tags
System constants
Texts
Ethernet addresses
Advanced options
Interface options
Real time settings
Port [X1 P1]
Time synchronization
Hardware identifier
DI 8/DQ 6
General
Digital inputs
Digital outputs
I/O addresses
Hardware identifier
Ethernet addresses
Interface networked with
Subnet:
Not networked
Add new subnet
IP protocol
Set IP address in the project
IP address:
192 . 168 . 1 . 2
Subnet mask:
255 . 255 . 255 . 0

# Permite Put / Get (Depende Firmware)



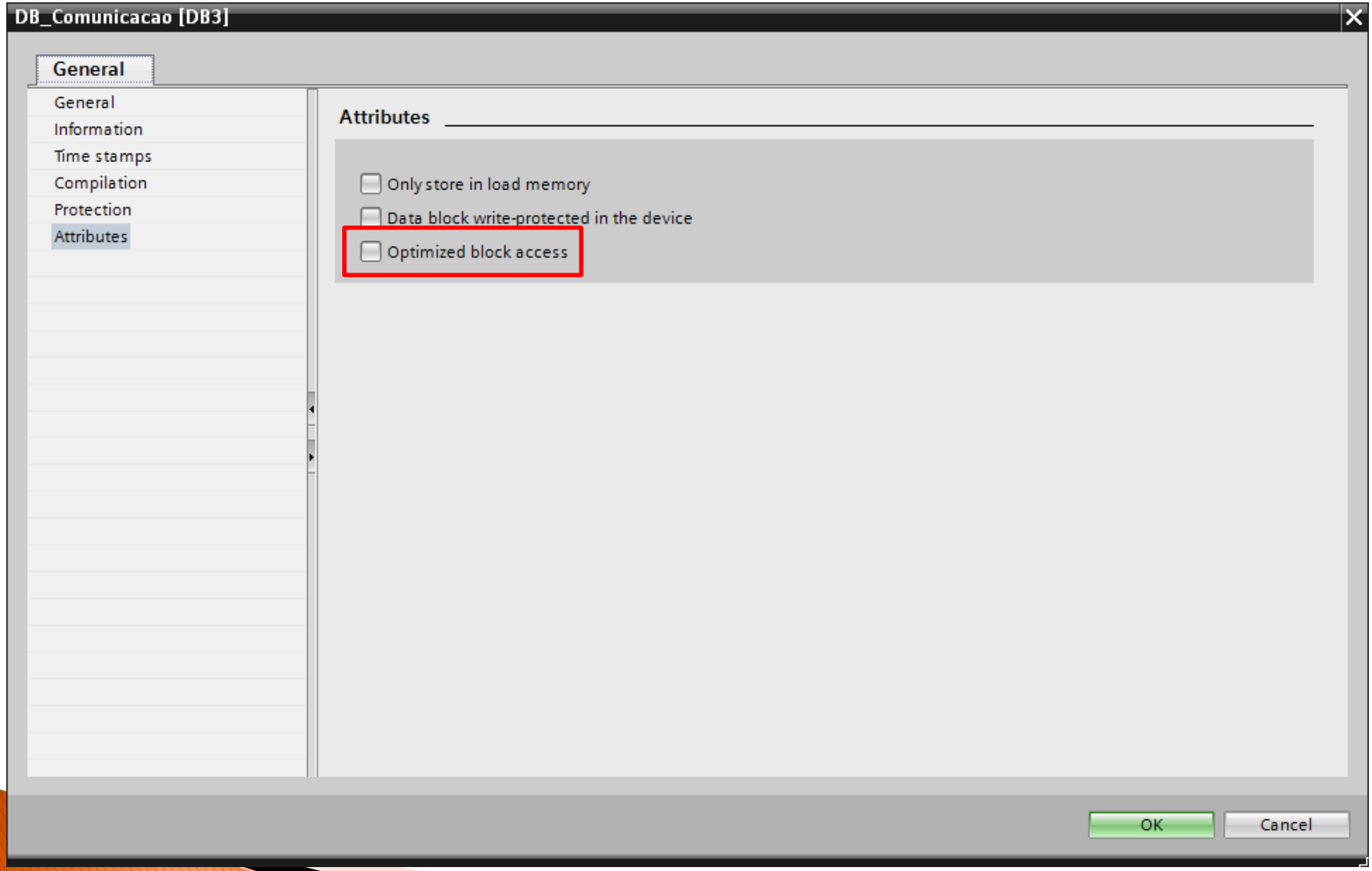
# DB de Comunicação



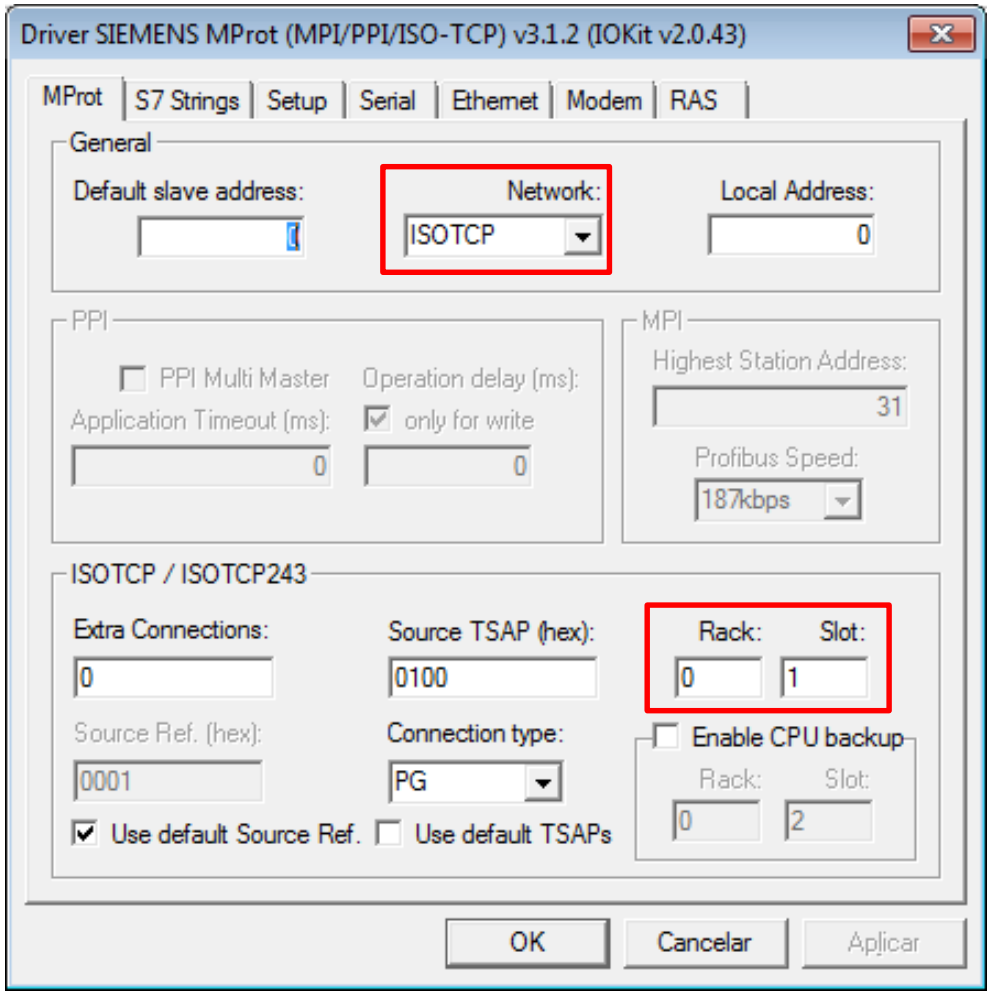

DB_Comunicacao

| | Name | Data type | Offset | Start value | Monitor value | Retain | Accessible f... | Visible in ... | Setpoint |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Static | | | | | | | | |
| 2 | String | String[20] | 0.0 | '' | '123456789' | | | | |
| 3 | Valor_Bit | Bool | 22.0 | false | TRUE | | | | |
| 4 | Valor_Real | Real | 24.0 | 0.0 | 5.678 | | | | |
| 5 | Valor_Int | Int | 28.0 | 0 | 45 | | | | |
| 6 | Valor_Dint | DInt | 30.0 | 0 | 1234567890 | | | | |
| 7 | Valor_Byte | Byte | 34.0 | 16#0 | 16#03 | | | | |
| 8 | DataHora | DTL | 36.0 | DTL#1970-01-01-00:00:00 | DTL#2016-03-02-18:50:32 | | | | |

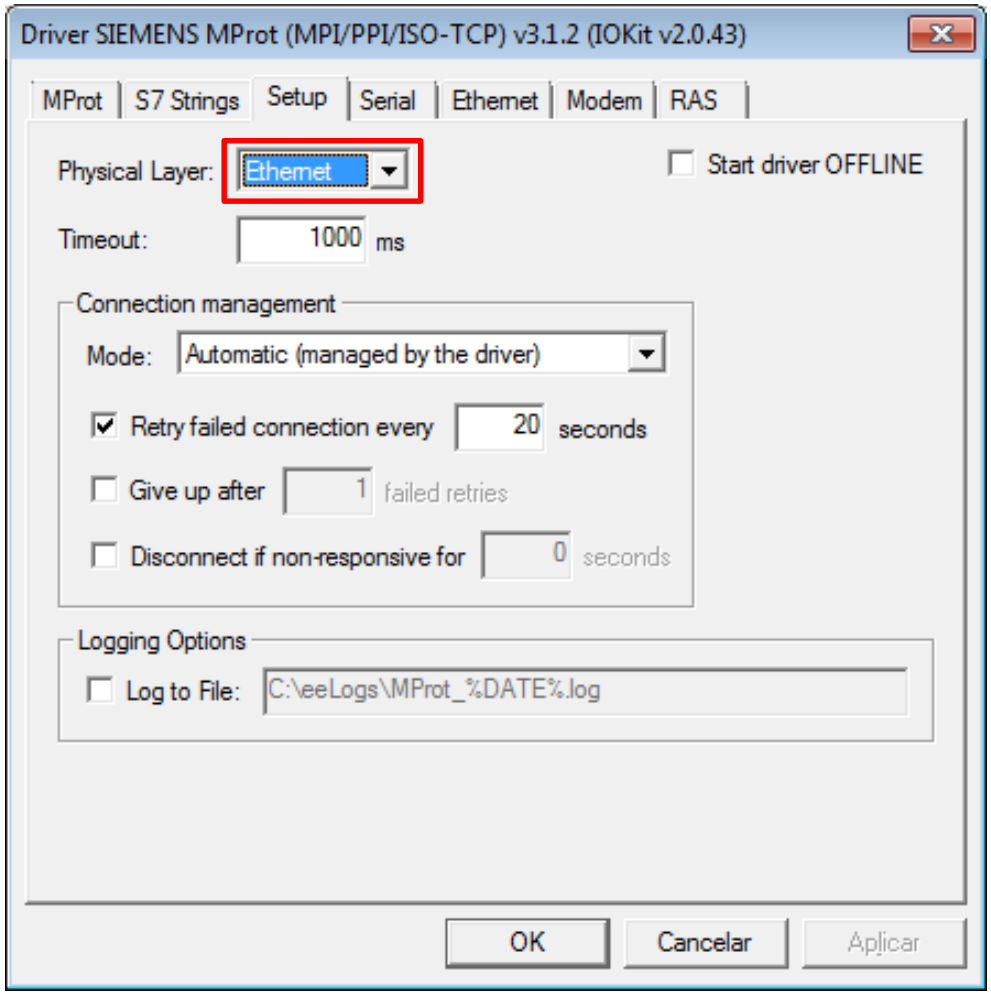
# Não pode ser DB Otimizado



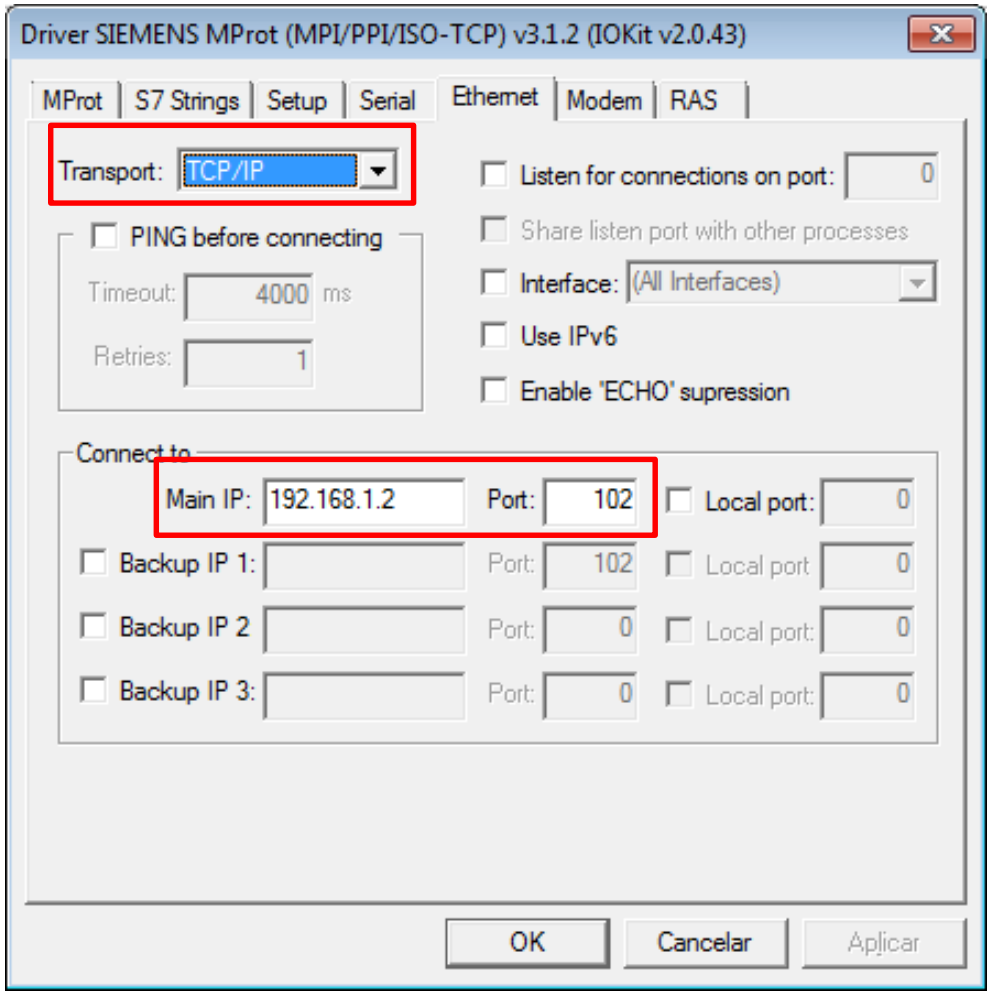
# Protocolo e Slot



# Meio Físico


Driver SIEMENS MProt (MPI/PPI/ISO-TCP) v3.1.2 (IOKit v2.0.43)
MProt
S7 Strings
Setup
Serial
Ethernet
Modem
RAS
Physical Layer:
Ethernet
Start driver OFFLINE
Timeout:
1000
ms
Connection management
Mode:
Automatic (managed by the driver)
Retry failed connection every
20
seconds
Give up after
1
failed retries
Disconnect if non-responsive for
0
seconds
Logging Options
Log to File:
C:\eeLogs\MProt_%DATE%.log
OK
Cancelar
Aplicar

# Transporte e Número IP



# Tags de Comunicação

MProt400 | **MProt1200** ×

| Nome | Dispo... | Item | P1/N1... | P2/N2... | P3/N3... | P4/N4... | Ta... | Var... | Valor | Qualid... | Estampa de tempo | Valor (sem escala) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MProt1200 | | | 0 | 0 | 0 | 0 | | | | | | |
| Valor_String | 0 | DB3.DBS1[20] | 0 | 0 | 0 | 0 | | 1000 | A Teste 1200 | 192 | 25/10/2018 09:58:53,747 | A Teste 1200 |
| Valor_Bit | 0 | DB3.DBX22.0 | 0 | 0 | 0 | 0 | | 1000 | 9 1 | 192 | 25/10/2018 09:58:53,777 | 9 1 |
| Valor_Bit_Param | | | 0 | 109 | 3 | 22 | | 1000 | 9 1 | 192 | 25/10/2018 09:58:53,777 | 9 1 |
| Valor_Real | 0 | DB3.DBF24 | 0 | 0 | 0 | 0 | | 1000 | 9 1234,567 | 192 | 25/10/2018 09:58:53,777 | 9 1234,567 |
| Valor_Real_Param | | | 0 | 709 | 3 | 24 | | 1000 | 9 1234,567 | 192 | 25/10/2018 09:58:53,777 | 9 1234,567 |
| Valor_Int | 0 | DB3.DBW28 | 0 | 0 | 0 | 0 | | 1000 | 9 32767 | 192 | 25/10/2018 09:58:53,777 | 9 32767 |
| Valor_Int_Param | | | 0 | 409 | 3 | 28 | | 1000 | 9 32767 | 192 | 25/10/2018 09:58:53,777 | 9 32767 |
| Valor_Dint | 0 | DB3.DBD30 | 0 | 0 | 0 | 0 | | 1000 | 9 2147483647 | 192 | 25/10/2018 09:58:53,777 | 9 2147483647 |
| Valor_Dint_Param | | | 0 | 609 | 3 | 30 | | 1000 | 9 2147483647 | 192 | 25/10/2018 09:58:53,777 | 9 2147483647 |
| Valor_Byte | 0 | DB3.DBB34 | 0 | 0 | 0 | 0 | | 1000 | 9 255 | 192 | 25/10/2018 09:58:53,777 | 9 255 |
| Valor_Byte_Param | | | 0 | 209 | 3 | 34 | | 1000 | 9 255 | 192 | 25/10/2018 09:58:53,777 | 9 255 |
| DataHora | | | 0 | 209 | 3 | 36 | 10 | 1000 | | 192 | 25/10/2018 09:58:53,777 | |
| Ano_Byte1 | | | | | | | 0 | | 9 7 | 192 | | 9 7 |
| Ano_Byte2 | | | | | | | 1 | | 9 226 | 192 | | 9 226 |
| Mes | | | | | | | 2 | | 9 10 | 192 | | 9 10 |
| Dia | | | | | | | 3 | | 9 25 | 192 | | 9 25 |
| TimeZone | | | | | | | 4 | | 9 5 | 192 | | 9 5 |
| Hora | | | | | | | 5 | | 9 9 | 192 | | 9 9 |
| Minuto | | | | | | | 6 | | 9 41 | 192 | | 9 41 |
| Segundo | | | | | | | 7 | | 9 52 | 192 | | 9 52 |
| MiliSegundo_Byte1 | | | | | | | 8 | | 9 0 | 192 | | 9 0 |
| MiliSegundo_Byte2 | | | | | | | 9 | | 9 0 | 192 | | 9 0 |

# Duas Maneiras

- A primeira maneira é escrever o endereço de forma semelhante a usada na Siemens. O valor real é escrito como "DBF" ao invés de "DBD";
- A segunda maneira é usar os parâmetros B1/N1, B2/N2, B3/N3 e B4/N4.

# Data e Hora

- Leitura é feita em bloco de bytes;
- O ano é calculado da seguinte forma: Byte_1 * 256 + Byte_2;
- 7*256 + 224 = 2016;
- Esse algoritmo pode ser usado para calcular os milissegundos se necessário.

# Aplicação Exemplo

# Obrigado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