Siemens S7-400 (Ethernet)

Supported Series: Siemens S7-400 Ethernet PLC.
Website: http://www.siemens.com/entry/cc/en/

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Siemens S7-400 (Ethernet)		
PLC I/F	Ethernet		
Port no.	102		
Link type	PG	PC, OP	
Rack	0	0-7	
CPU slot	3	1-31	To Connect with S7-1200, Slot 1 must be selected.
PLC sta. no.	0	0-31	

Device Address:

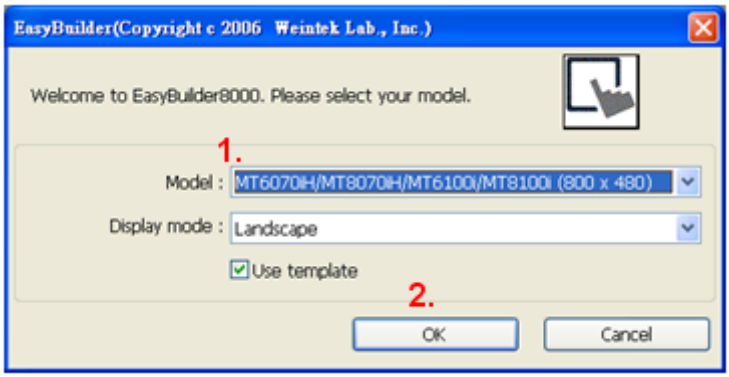
Bit/Wor	Device type	Format	Range	Memo
B	I	DDDDo	0 ~ 40957	Input (I)
B	Q	DDDDo	0 ~ 40957	Output (O)
B	M	DDDDo	0 ~ 40957	Bit Memory
B	DBnBit	FFFFFDDDDo	0 ~ 6553599997	
B	DBxBit	FFFFFDDDDD	0 ~ 10700655357	
B	DB1Bit-DB99Bit	DDDDDo	0 ~ 655357	Data Register Bit
W	IW	DDDD	0 ~ 4095	Input (I)
W	QW	DDDD	0 ~ 4095	Output (O)
Byte	MB	DDDD	0 ~ 4095	Bit Memory Byte
W	MW	DDDD	0 ~ 4095	Bit Memory
DW	MD	DDDD	0 ~ 4094	
Byte	DBBn	FFFFFDDDD	0 ~ 655359999	Data Register Byte
Byte	DBBx	FFFFFDDDDD	0 ~ 1070065535	
W	DBn	FFFFFDDDD	0 ~ 655359999	Data Register (must be even)
W	DBx	FFFFFDDDDD	0 ~ 1070065535	
DW	DBDn	FFFFFDDDD	0 ~ 655359999	Data Register Double Word (must be even)
DW	DBDx	FFFFFDDDDD	0 ~ 1070065535	

Bit/Wor	Device type	Format	Range	Memo
W	DBn_String	FFFFFDDDD	0 ~ 655359999	
W	DBx_String	FFFFFDDDDD	0 ~ 1070065535	
W	DBn_String1	FFFFDDDD	0 ~ 40969999	
W	DBx_String1	FFFFFDDDDD	0 ~ 1070065535	
DW	DBDn_String	FFFFFDDDD	0 ~ 655359999	
DW	DBDn_String	FFFFFDDDDD	0 ~ 1070065535	
W	DB1 ~ DB99	DDDDD	0 ~ 65535	Data Register (must be even)

* Double word and floating point value must use DBDn device type.

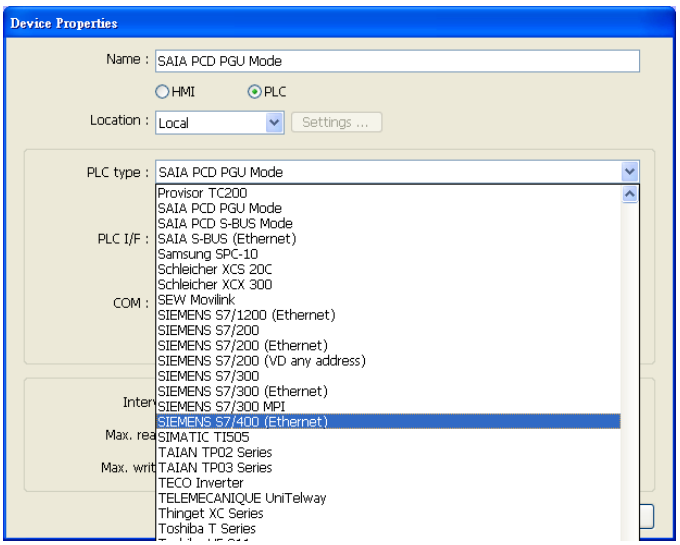
EasyBuilder Device Setting Steps

1. Open EasyBuilder, File/NEW, select HMI model and press [OK].



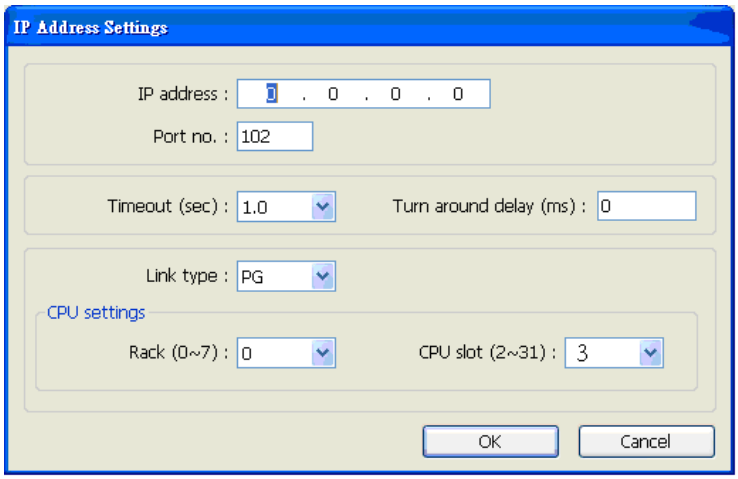
2. ”System Parameter Settings” window is shown, click [New].

3. Select “SIEMENS S7-400(ETHERNET)”.

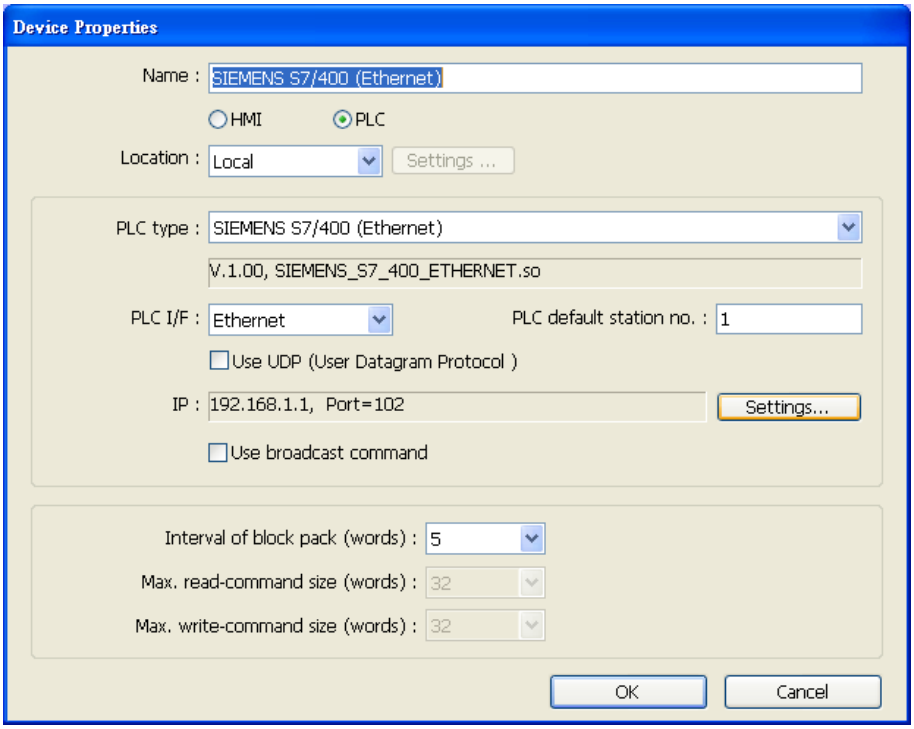


4. Press [Settings].

5. Set S7-400 IP, Port no., Link type, Rack and CPU slot. (must match PLC settings)



6. The setting will be finished as below.

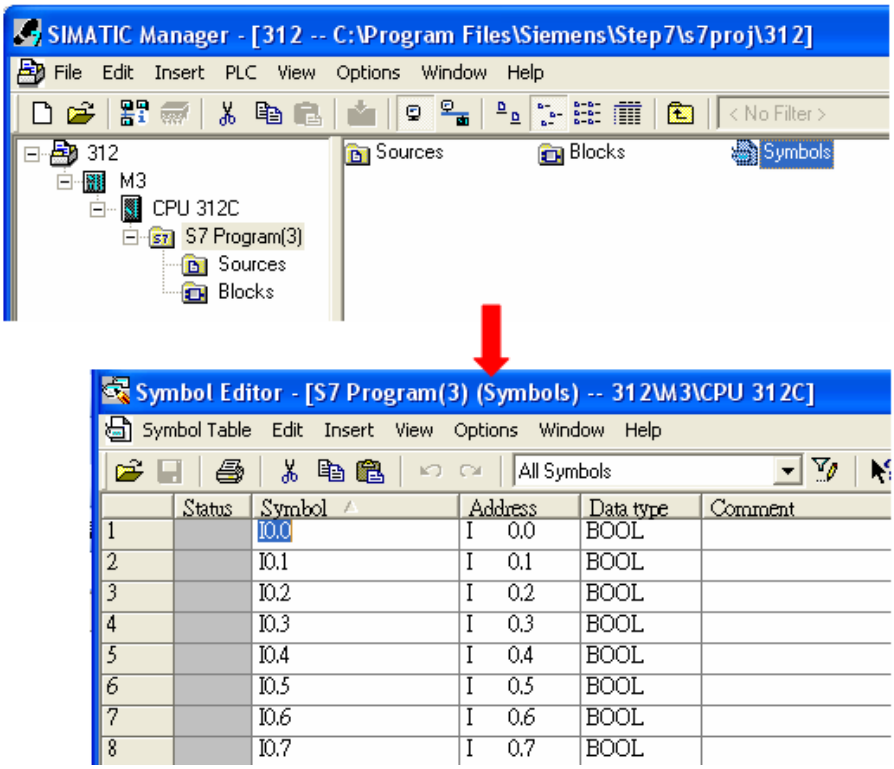


How to Import Tag:

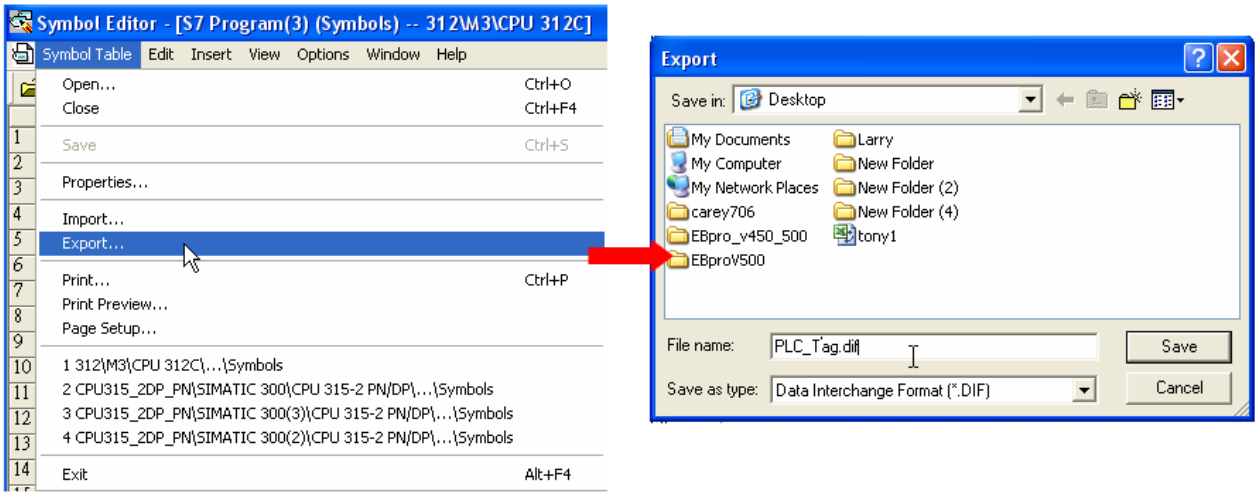
SIEMENS STEP 7 program allows building files of user-defined tag (***.dif** file and ***.AWL** file), and import these files in EasyBuilder8000/EasyBuilderPro -> System Parameter Settings. The following describes how to build and import these two types of files.

1. Building *.dif File

a、 In “Symbols” create user-defined tag.

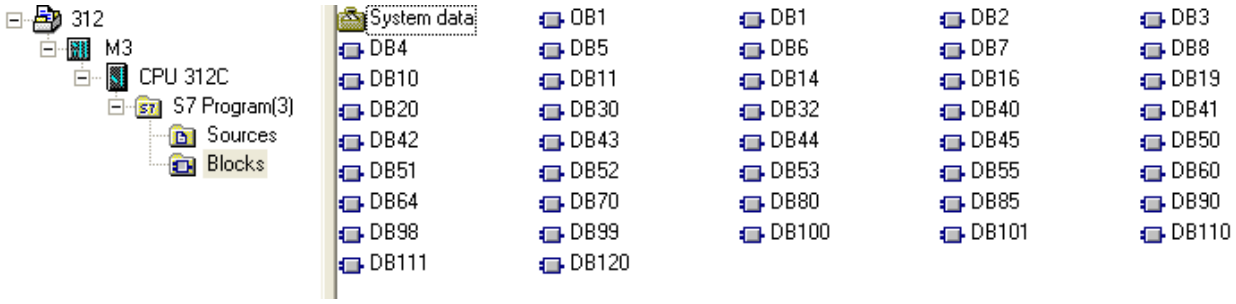


b、 Click **Export** to export the edited file and click **Save**.

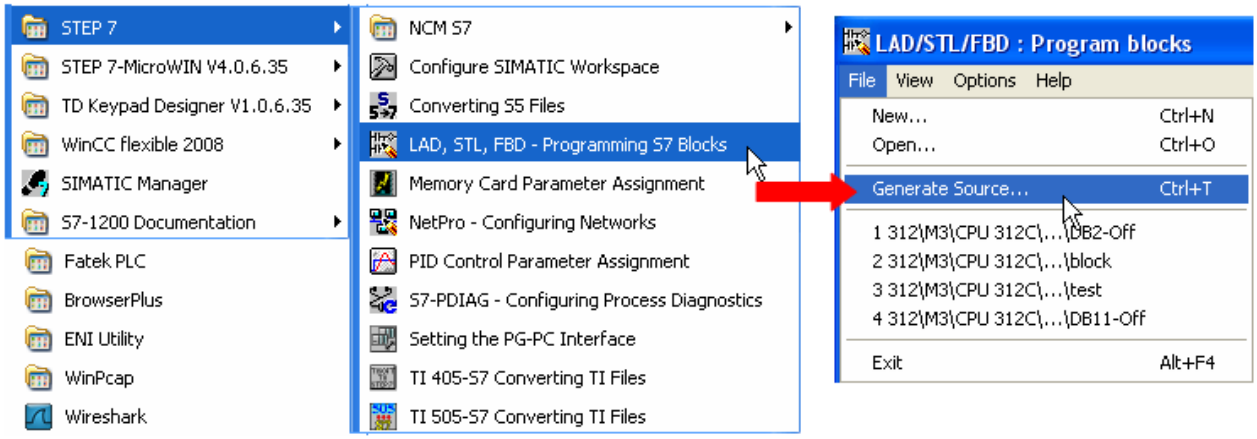


2. Building *.AWF File

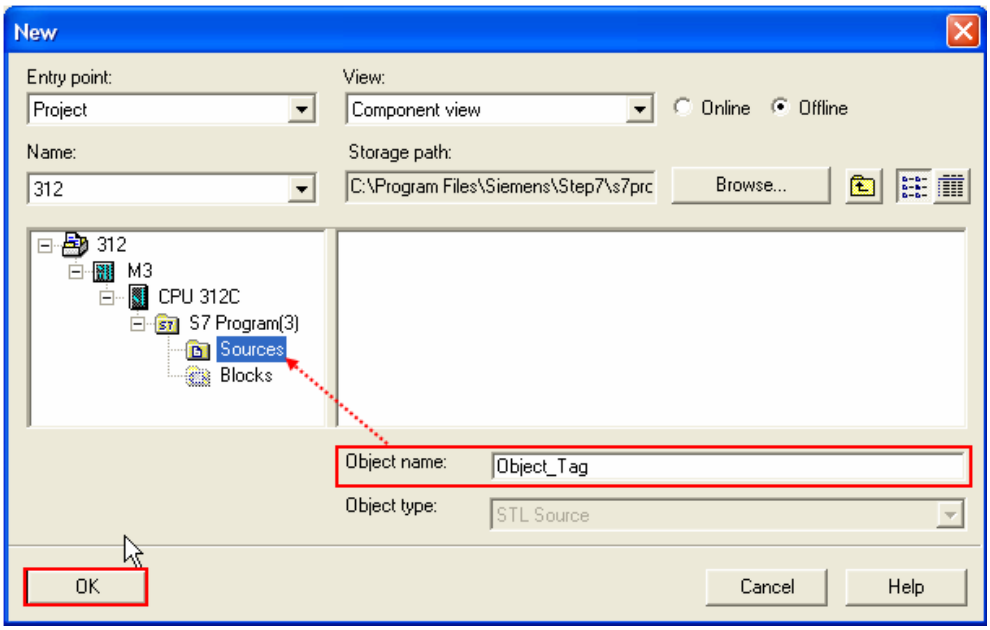
a、 In **Blocks** create items as shown below:



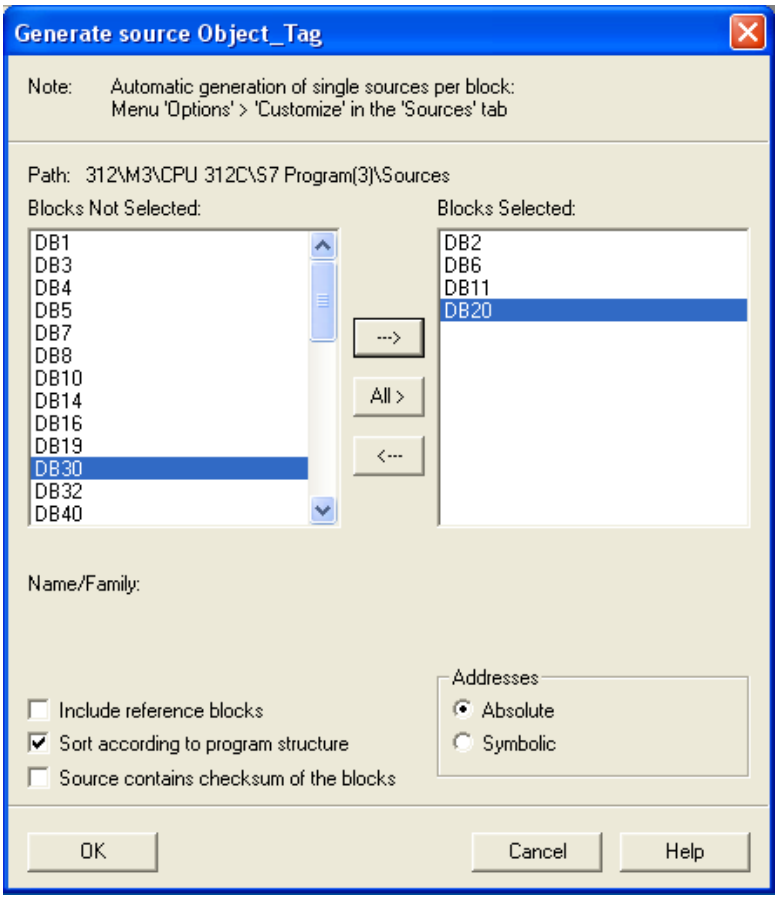
b、 Open **LAD/STL, FBD – Programming S7 Blocks**, click **File** -> **Generate Source.**



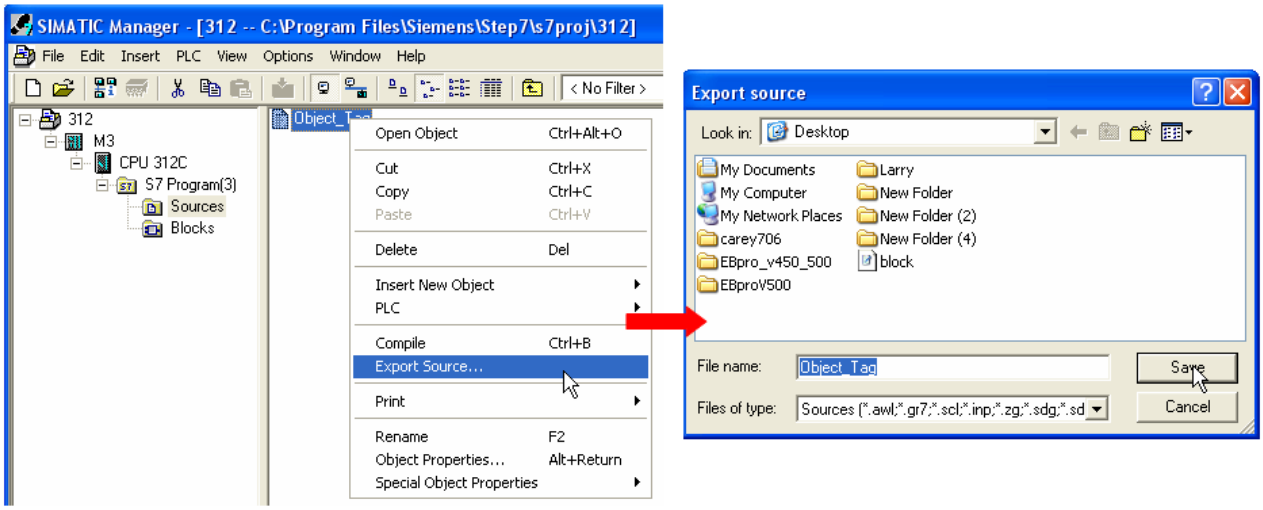
c、 Select **Sources** as storage path, specify the file name then click **OK**.



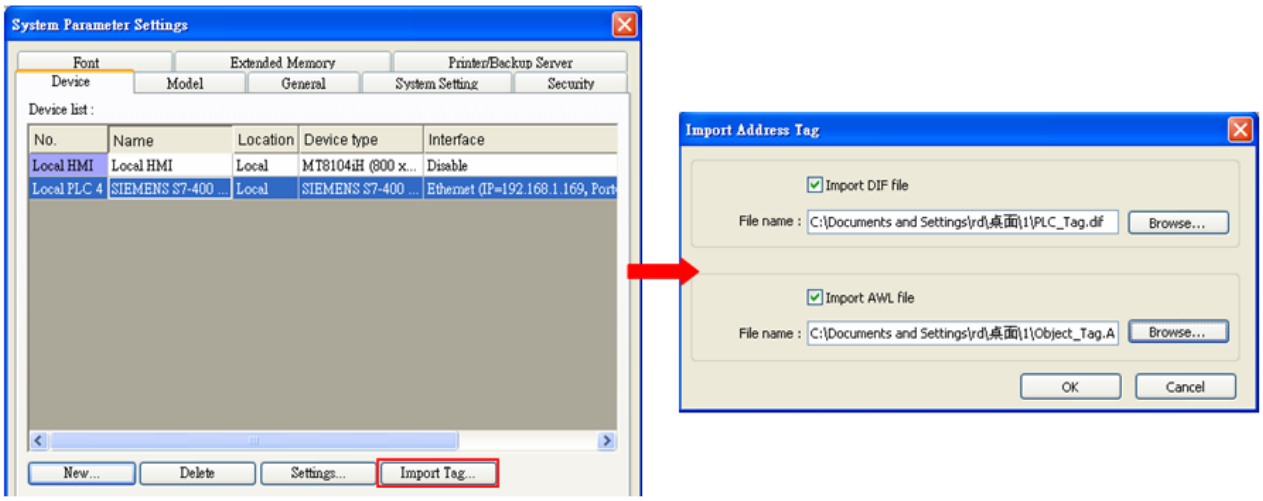
d、 Select the objects to be exported then click **OK**.



e、 Under **Sources** there will be names of the saved files, select **Export Source** to build ***.AWL** file.



The generated *.dif and *.AWL files can be imported in EasyBuilder8000/EasyBuilderPro **System Parameter Settings**, by clicking **Import Tag**.



Tag information successfully imported.

Wiring Diagram:

Ethernet cable: