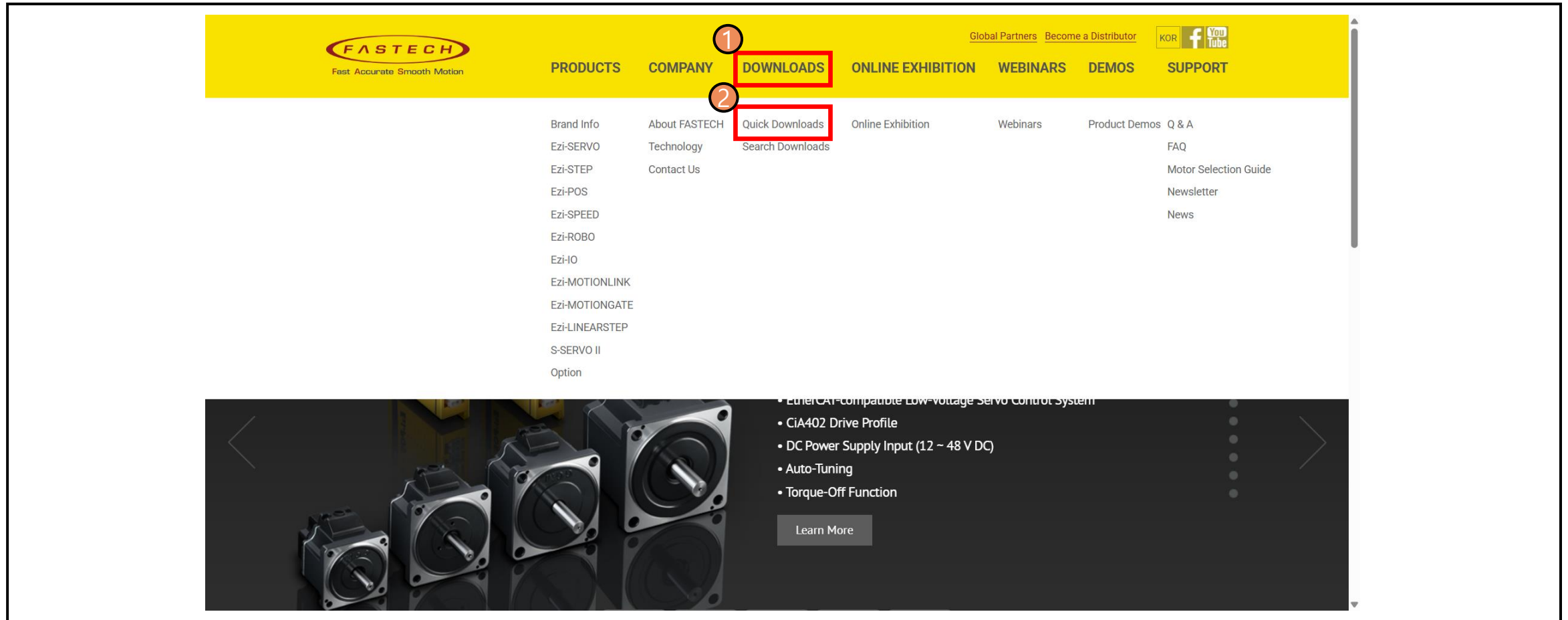




Ezi-SERVOII EtherCAT Connection Manual (WMX3)

1. Download the ESI file



1. Go to the website (www.fastech-motions.com) > ① Click Download at the top > ② Click Quick Download

1. Download the ESI file

The screenshot displays the FASTECH website interface. The top navigation bar includes links for Global Partners, Become a Distributor, and a language selector (KOR). The main menu features categories like PRODUCTS, COMPANY, DOWNLOADS, ONLINE EXHIBITION, WEBINARS, DEMOS, and SUPPORT. On the left, there are banners for EtherCAT and Ethernet General Catalogs. The central area lists various Ezi-SERVO products, each with a set of download icons: Catalogue, Manual, 2D Drawing, 3D Drawing, Program, Video, XML, and Network Manual. A red box highlights the 'XML' icon for the 'Ezi-SERVO II EtherCAT ALL' series, with a circled '1' indicating the selection step. To the right, a browser window titled 'FASTECH - Chrome' shows the 'XML Files' page. A red box highlights the 'EtherCAT Master' link, with a circled '2' indicating the second step in the process. Below this link, other options like 'ACS EtherCAT Master' and 'OMRON EtherCAT Master' are visible.

2. Ezi-SERVO Product > Ezi-SERVOII EtherCAT Series > ① Click XML

3. XML Files > ② Click EtherCAT Master

1. Download the ESI file

The diagram illustrates the process of downloading and installing the ESI file. It shows a file named `260128_ESI_Ezi-SERVOII Ezi-STEPII EtherCAT_rev.46.zip` being unzipped into a file named `FASTECH_Ezi-SERVO2_EtherCAT.xml`. An arrow labeled '1 Unzip' points from the zip file to the XML file. Another arrow labeled '2 Move' points from the XML file to a Windows File Explorer window showing the directory `C:\Program Files\SoftServo\WMX3\ESI`. The File Explorer window displays a list of files, including `250805_Hi-IO_EtherCAT_PISCO.xml`, `Beckhoff.zip`, `Delta.zip`, `Fastech.zip`, `FASTECH_Ezi-POS_EtherCAT.xml`, `FASTECH_Ezi-SERVO2_EtherCAT.xml`, `FASTECH_Ezi-SPEED_EtherCAT.xml`, `Omron.zip`, `Panasonic_MINAS-A5B_V0_22.xml`, `Panasonic_MINAS-A6BE_V1_3_with_OD.xml`, `Panasonic_MINAS-A6BF_V1_3.xml`, `Panasonic_MINAS-A6BL_V1_3.xml`, `SoftServo.zip`, `Weidmueller_UR20_FBC.xml`, and `Weidmueller_UR20_IO.xml`.

260128_ESI_Ezi-SERVOII Ezi-STEPII EtherCAT_rev.46.zip

1 Unzip

2 Move

FASTECH_Ezi-SERVO2_EtherCAT.xml

File Explorer window showing the directory structure:

- Local Disk (C:) > Program Files > SoftServo > WMX3 > ESI

Name	Date modified	Type	Size
250805_Hi-IO_EtherCAT_PISCO.xml	8/12/2025 11:01 AM	XML Document	248 KB
Beckhoff.zip	5/24/2021 10:03 AM	Compressed (zipp...	9,036 KB
Delta.zip	5/24/2021 10:03 AM	Compressed (zipp...	51 KB
Fastech.zip	5/24/2021 10:03 AM	Compressed (zipp...	13 KB
FASTECH_Ezi-POS_EtherCAT.xml	3/10/2025 5:15 PM	XML Document	340 KB
FASTECH_Ezi-SERVO2_EtherCAT.xml	10/27/2023 3:22 PM	XML Document	2,981 KB
FASTECH_Ezi-SPEED_EtherCAT.xml	1/13/2026 4:17 PM	XML Document	371 KB
Omron.zip	5/24/2021 10:03 AM	Compressed (zipp...	1,432 KB
Panasonic_MINAS-A5B_V0_22.xml	5/24/2021 10:03 AM	XML Document	1,689 KB
Panasonic_MINAS-A6BE_V1_3_with_OD.xml	5/24/2021 10:04 AM	XML Document	16,716 KB
Panasonic_MINAS-A6BF_V1_3.xml	5/24/2021 10:04 AM	XML Document	679 KB
Panasonic_MINAS-A6BL_V1_3.xml	5/24/2021 10:04 AM	XML Document	679 KB
SoftServo.zip	5/24/2021 10:03 AM	Compressed (zipp...	6 KB
Weidmueller_UR20_FBC.xml	5/24/2021 10:04 AM	XML Document	203 KB
Weidmueller_UR20_IO.xml	5/24/2021 10:04 AM	XML Document	1,553 KB

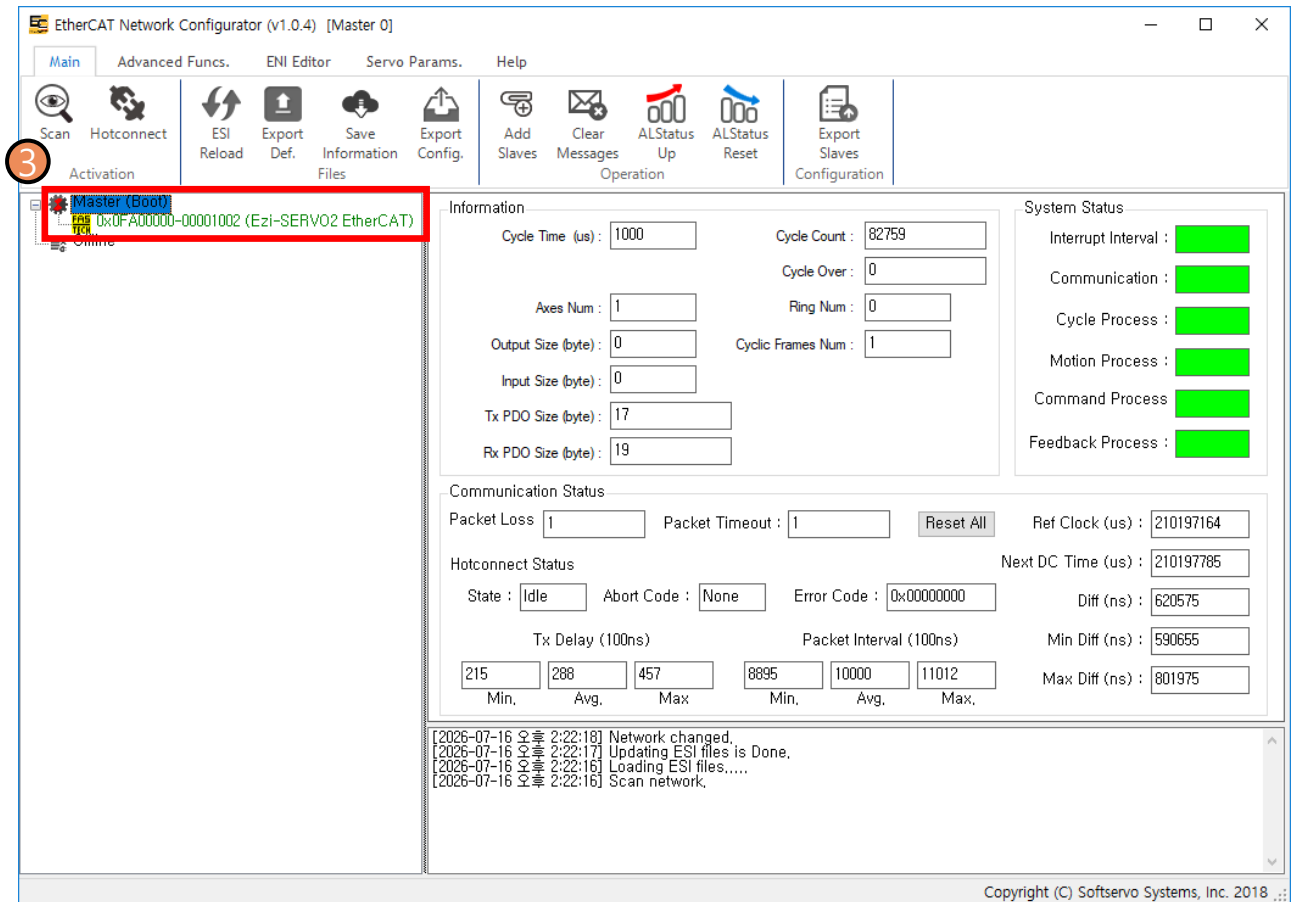
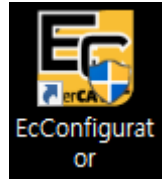
3. ① Unzip the downloaded ESI file
4. ② Move the ESI file to the TwinCAT ESI directory
(default path: C:\Program Files\SoftServo\WMX3\ESI\)

2. Creating an ENI file

1 Run

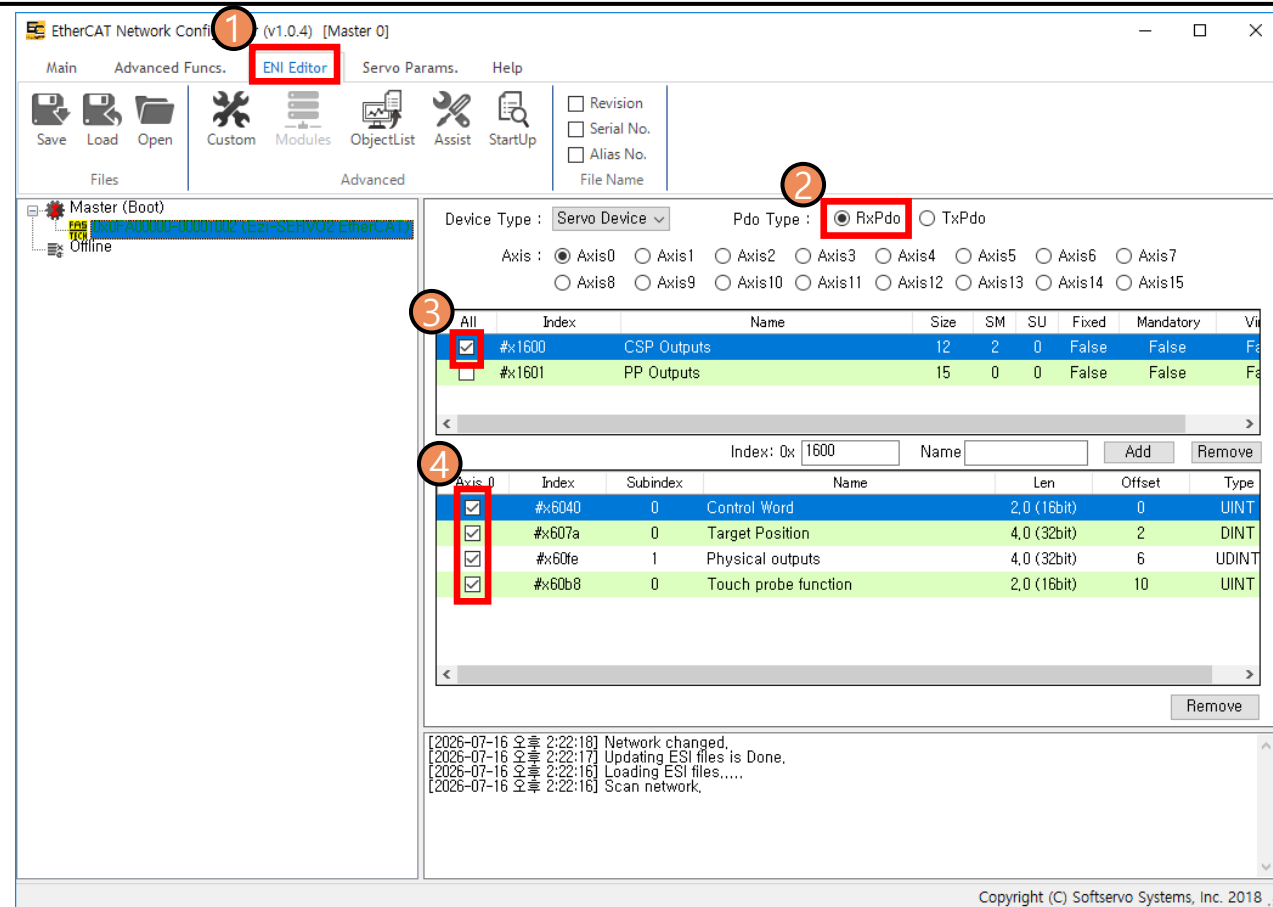


2 Run



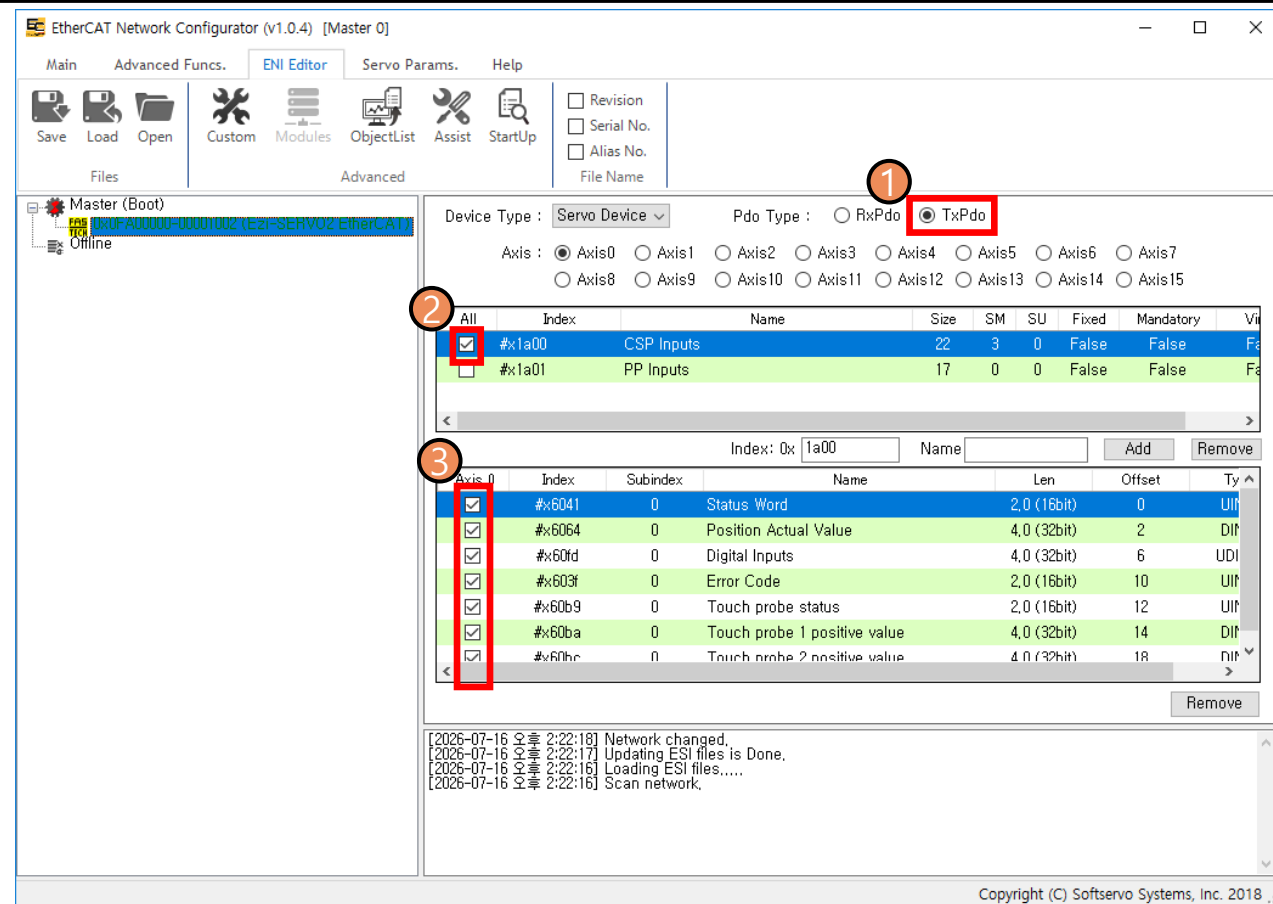
1. ①Run WOS > Verify that the engine(WOS program) has finished running >
②Run EcConfigurator
2. ③Verify that Ezi-SERVO2 EtherCAT Drive is connected on the left side of EcConfigurator

2. Creating an ENI file



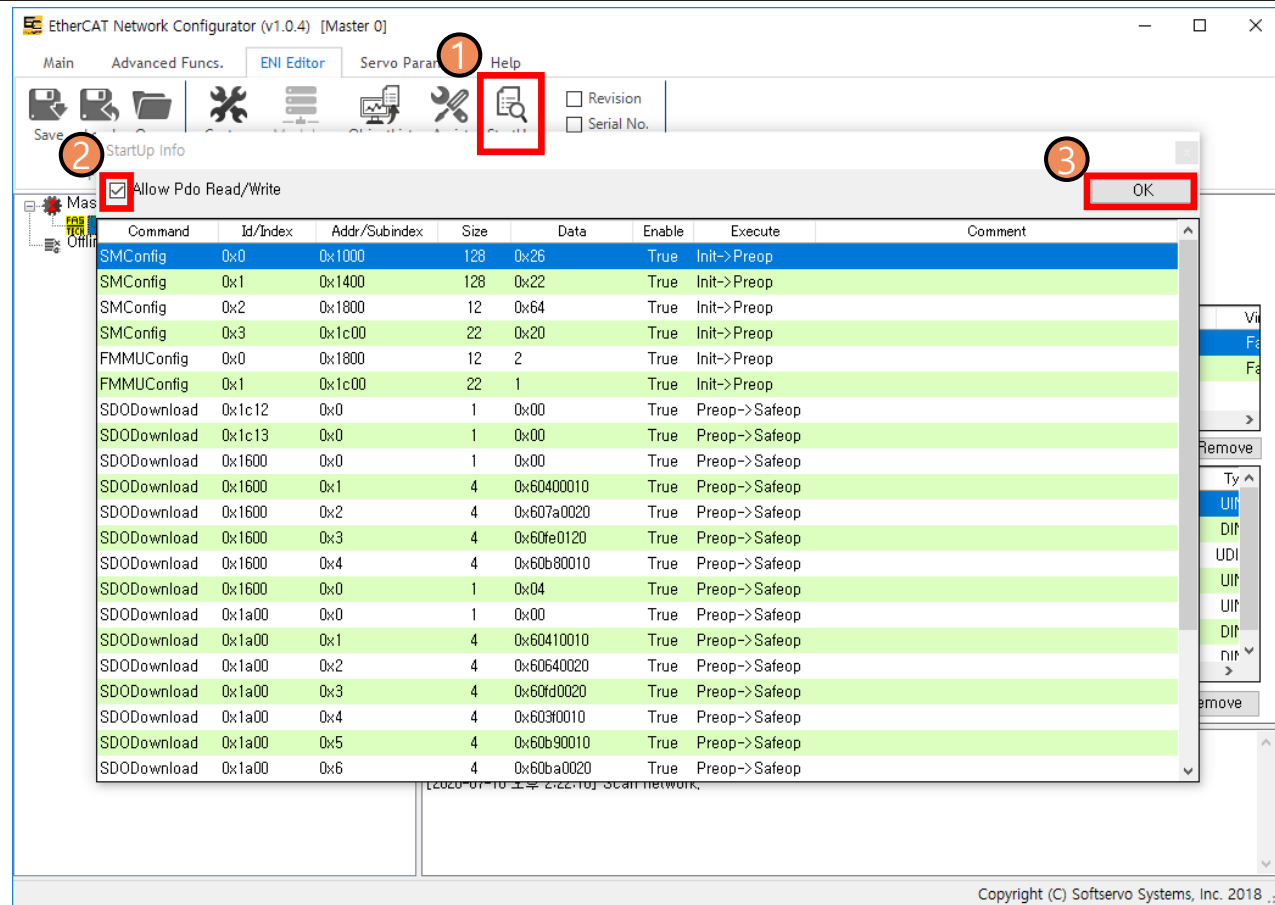
- 1 Click ENI Editor > 2 RxPdo > 3 Check VL Outputs (uncheck all others)
- 4 Verify that RxPDO is checked in VL mode (Control Word, Target Position, Physical Outputs, ...)

2. Creating an ENI file



5. ①TxPdo > ②Check VL Inputs (uncheck all others)
6. ③Verify that TxPDO is checked in VL mode (Status Word, Position Actual Value, Digital Inputs, ...)

2. Creating an ENI file



7. ①Click StartUp > ②Check Allow PDO Read/Write > ③Click OK

2. Creating an ENI file

1

Save Load Open Custom Modules ObjectList Assist StartUp

Files Advanced

Master (Boot) Offline

Device Type : Servo Device Pdo Type : ☐ RxPdo ☒ TxPdo

Axis : ☒ Axis0 ☐ Axis1 ☐ Axis2 ☐ Axis3 ☐ Axis4 ☐ Axis5 ☐ Axis6 ☐ Axis7 ☐ Axis8 ☐ Axis9 ☐ Axis10 ☐ Axis11 ☐ Axis12 ☐ Axis13 ☐ Axis14 ☐ Axis15

All	Index	Name	Size	SM	SU	Fixed	Mandatory	Vi
☒	#x1a00	CSP Inputs	22	3	0	False	False	Fa
☐	#x1a01	PP Inputs	17	0	0	False	False	Fa

Index: 0x 1a00 Name Add Remove

Axis 0	Index	Subindex	Name	Len	Offset	Ty
☒	#x6041	0	Status Word	2.0 (16bit)	0	UIP
☒	#x6064	0	Position Actual Value	4.0 (32bit)	2	DIP
☒	#x60fd	0	Digital Inputs	4.0 (32bit)	6	UDI
☒	#x603f	0	Error Code	2.0 (16bit)	10	UIP
☒	#x60b9	0	Touch probe status	2.0 (16bit)	12	UIP
☒	#x60ba	0	Touch probe 1 positive value	4.0 (32bit)	14	DIP
☒	#x60bc	0	Touch probe 2 positive value	4.0 (32bit)	18	DIP

Remove

[2026-07-16 오후 2:22:18] Network changed.
[2026-07-16 오후 2:22:17] Updating ESI files is Done.
[2026-07-16 오후 2:22:16] Loading ESI files.....
[2026-07-16 오후 2:22:16] Scan network.

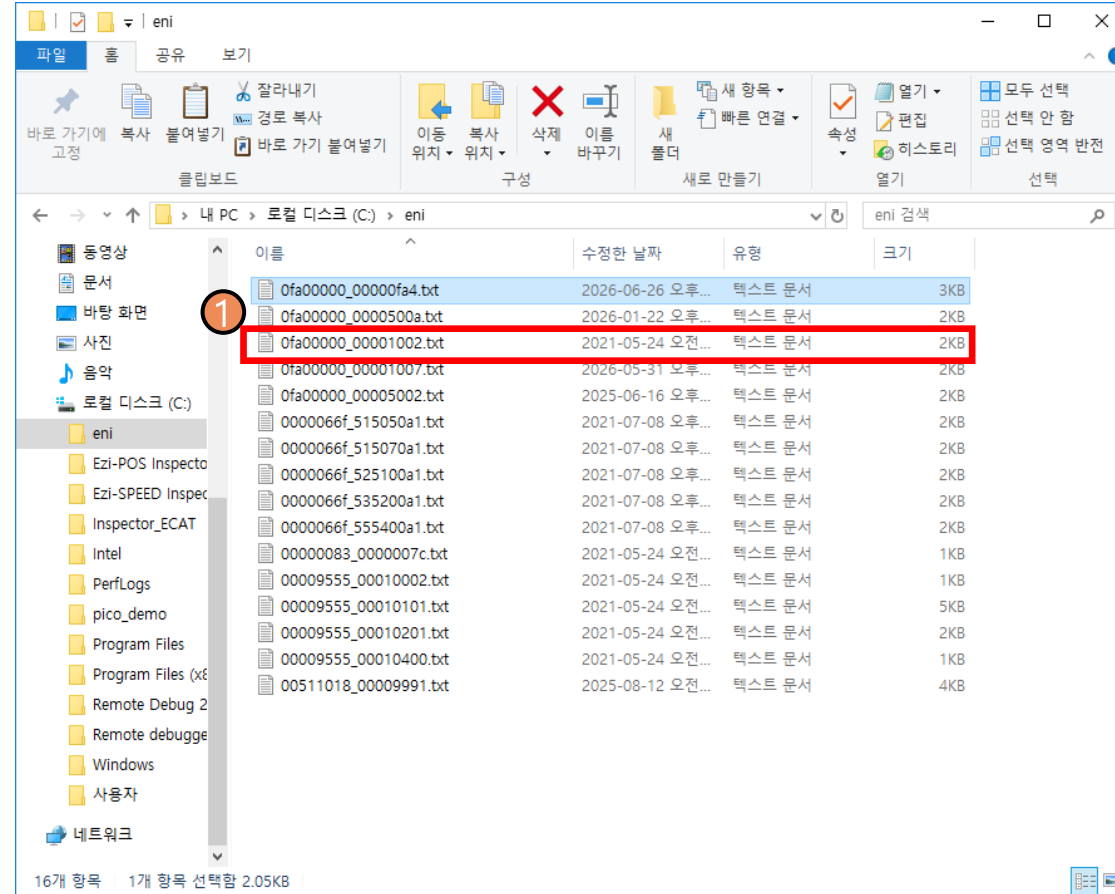
Copyright (C) Softservo Systems, Inc. 2018

Eni File is generated successfully.

2 OK

8. 1 Click Save > 2 Click OK

2. Creating an ENI file



9. ① Check the file created in the ENI file path
(default path: C:WeniW)

3. Connect and Verify the Drive

WOS(WMX3 Operating Station) - Engine Info

Engine Status: **Communicating** (2)

Comm Status: **Communicating** (2)

Engine Stop (1) Engine Restart

Engine Version: 3.4.3.1 Licensed Axes Num: 128

IMLib Version: 3.0 Loaded Modules Count: 7

Comm Cycle Info: EtherCAT: 1ms

Platform Setting: EtherCAT(SingleMaster) Load Save

Platform Setting 0: Mode Setting: EtherCAT, DllName: EcPlatform, Enable: Enable, NumOfMaster: 1

Platform Setting 1: Mode Setting: Simulation, DllName: SimuPlatform, Enable: Disable, NumOfMaster: 1

Platform Setting 2: Mode Setting: None, DllName: , Enable: Disable, NumOfMaster: 1

Common Setting: Message Level: Warning, Print Log: Off, NumOfInterrupt: 1, Location: .\motion\, Get Engine Message: Disable, Auto Close Device: Enable

Platform Status

Name	MasterNum	Version	Status
EtherCAT	1	3.4.4.0	Running

Devices Status

ID	Type	Name	Status
0	LowPriority	WMX3Manager	0.014/15sec
1	LowPriority	WOS - Platform	0.032/15sec
2	LowPriority	WOS - Motion	0.032/15sec
3	ExitWOCnt	EcConfigurator 0	0.014/15sec

System Messages

Messages: Infos: 08 Warnings: 00 Errors: 00

> Time Information

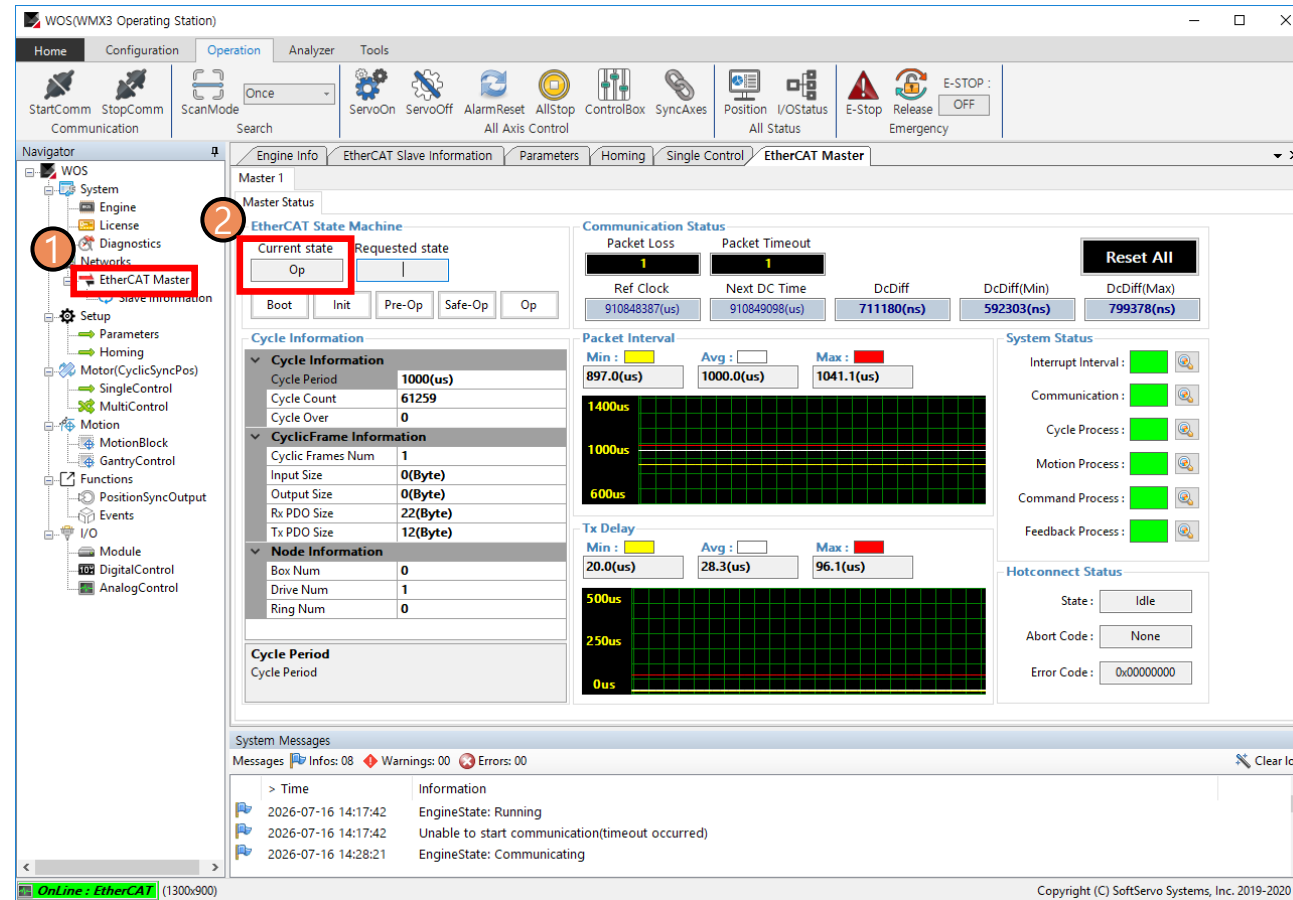
- 2026-06-26 15:00:50 Unable to start communication(timeout occurred)
- 2026-06-26 15:01:03 EngineState: Running
- 2026-06-26 15:01:39 EngineState: Communicating

Online: EtherCAT (1237x900)

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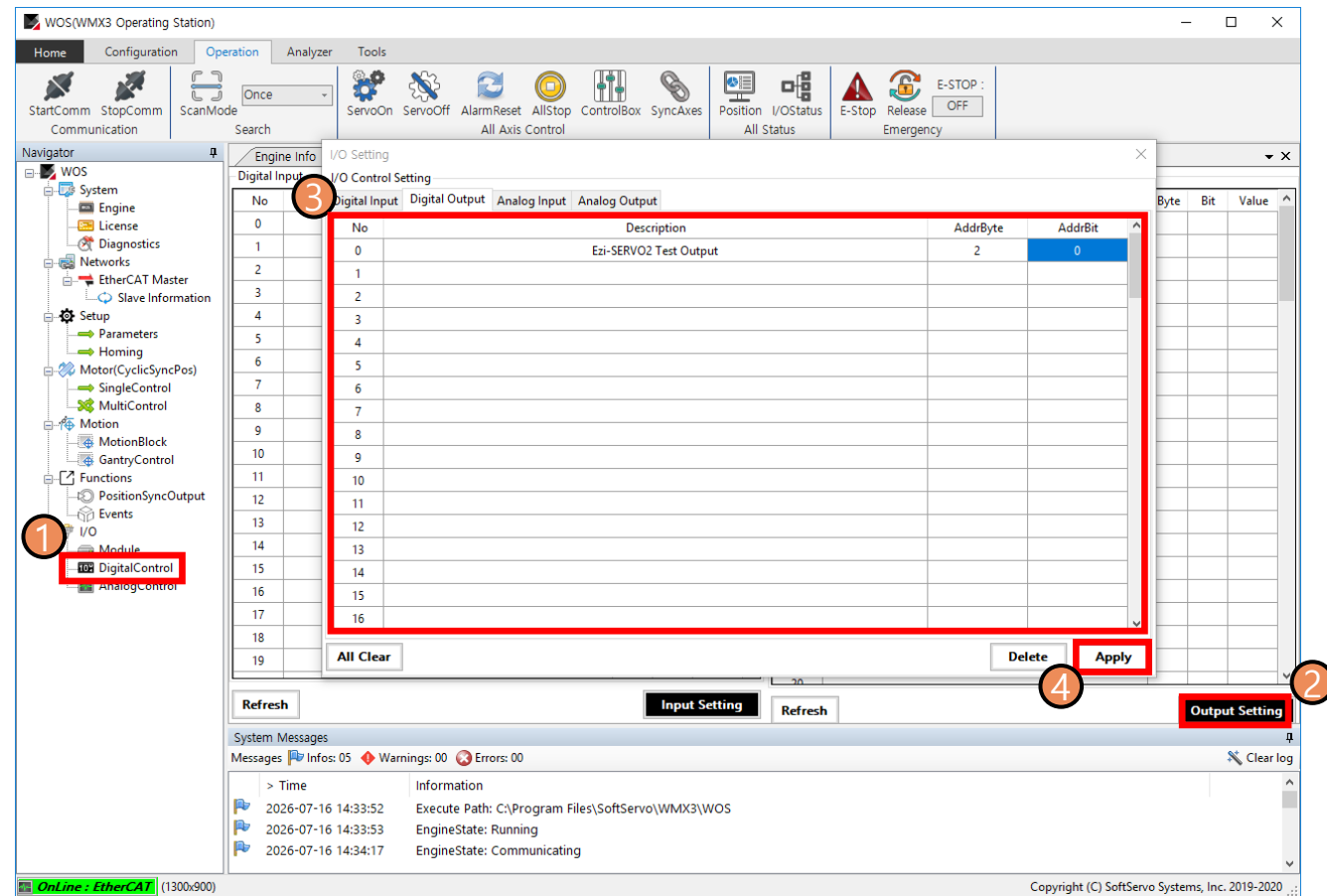
1. WOS > ①Click Communication > ②Verify that Comm Status shows “Communicating”

3. Connect and Verify the Drive

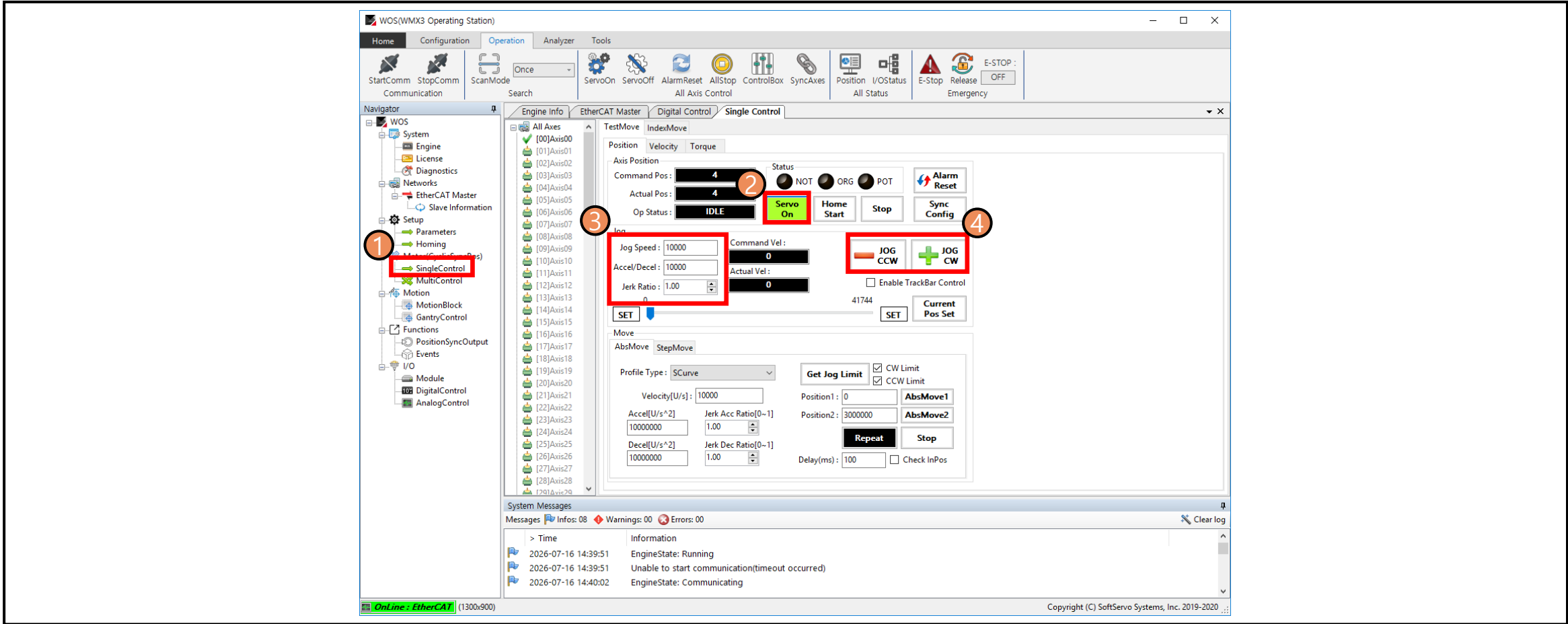


1. ①Network > Click EtherCATMaster> ②Verify that Current state is "OP"

4. I/O Test

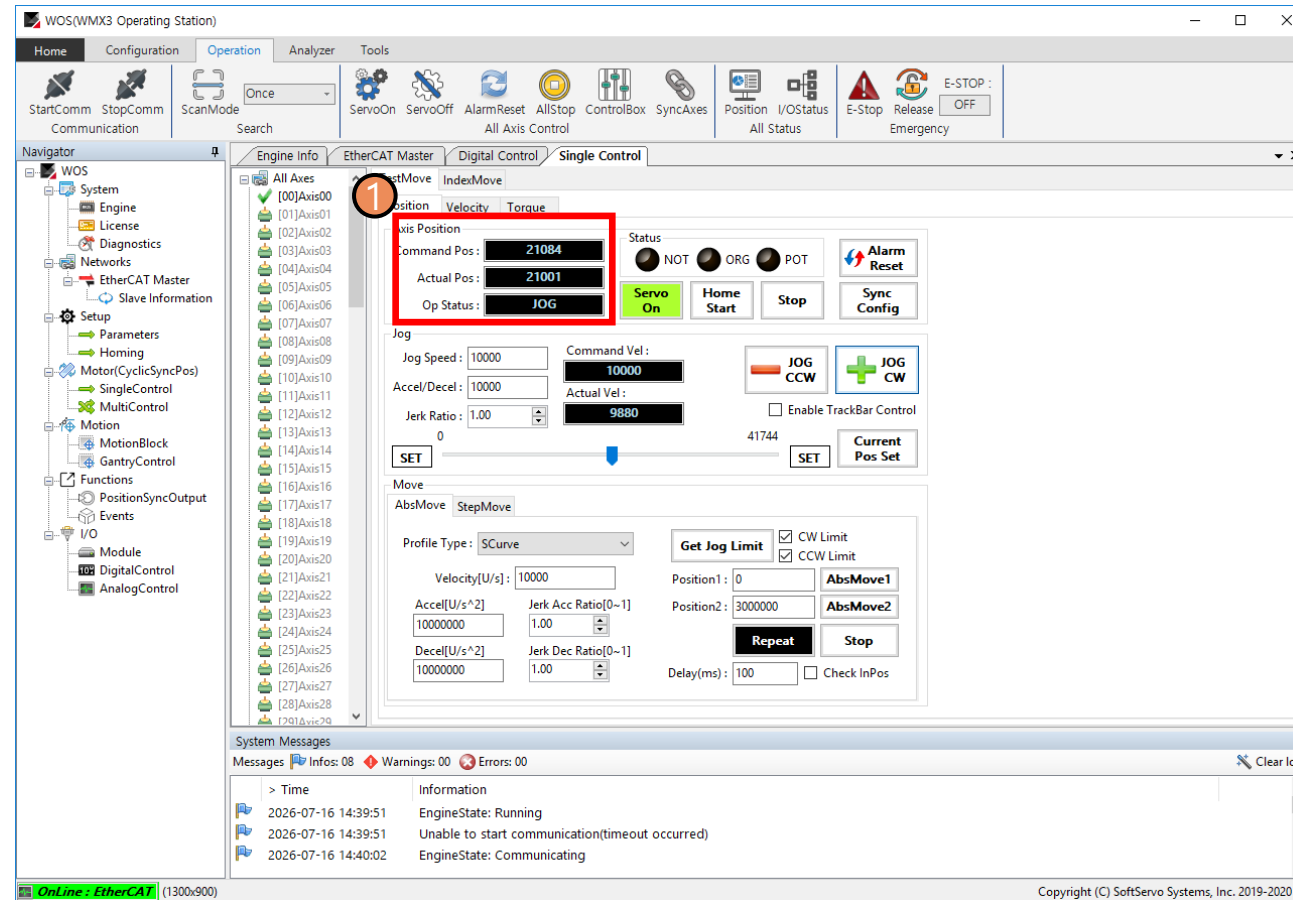


1. ① I/O > Click DigitalControl > ② Click Output Setting > ③ Setting I/O > ④ Click Apply
2. Verify the applied I/O signals



1. **①Motor(CyclicSyncPos > Click SingleControl > ②Click Servo On > ③Setting Speed options > ④Hold down the Jog button**

5. Motor Control



2. ① Verify Jog operation

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