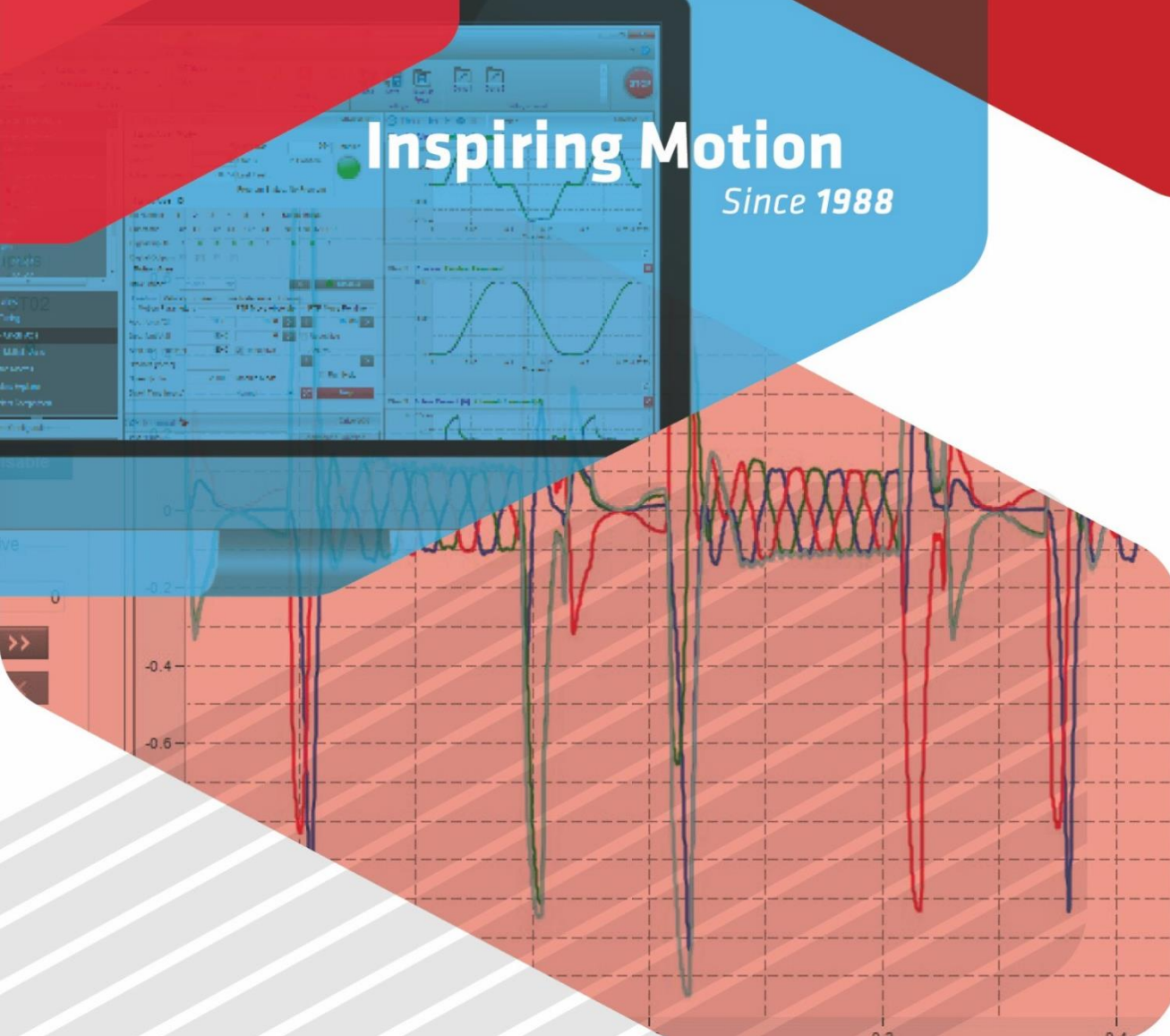


Inspiring Motion

Since 1988



Exercise #2

Auto Tuning

The key points of this exercise show:

- How to calibrate current, velocity and position in 1 minute.
- Elmo's tuning algorithms are based on high precision mathematical methods.
- Even though the application is smarter and faster, tuning is still simple and friendly.
- Elmo's software package offers multiple tools for additional "tweaking" and customization.

List of parameters for this demo:				
Parameter	Value		Parameter	Value
Motor type	Rot. Brushless		Feedback, Socket 1	Enc. Quad, port A
Cont. stall current	1		Comm. Resolution	2500
Peak current	2			
Max speed	3000		G-MAS IP	192.168.1.3
# Pole pairs	4		Computer IP	192.168.1.XXX

Exercise #2: Auto Tuning

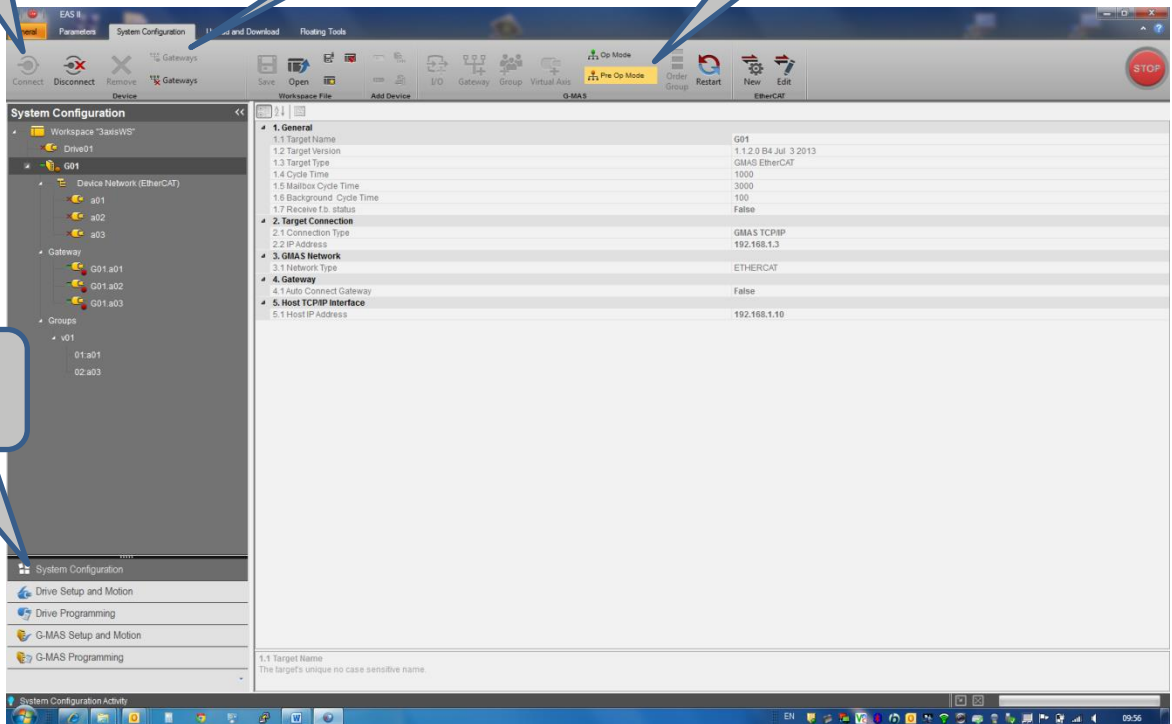
1. Start by connecting to the relevant drive via System Configuration.

2. G-MAS connection

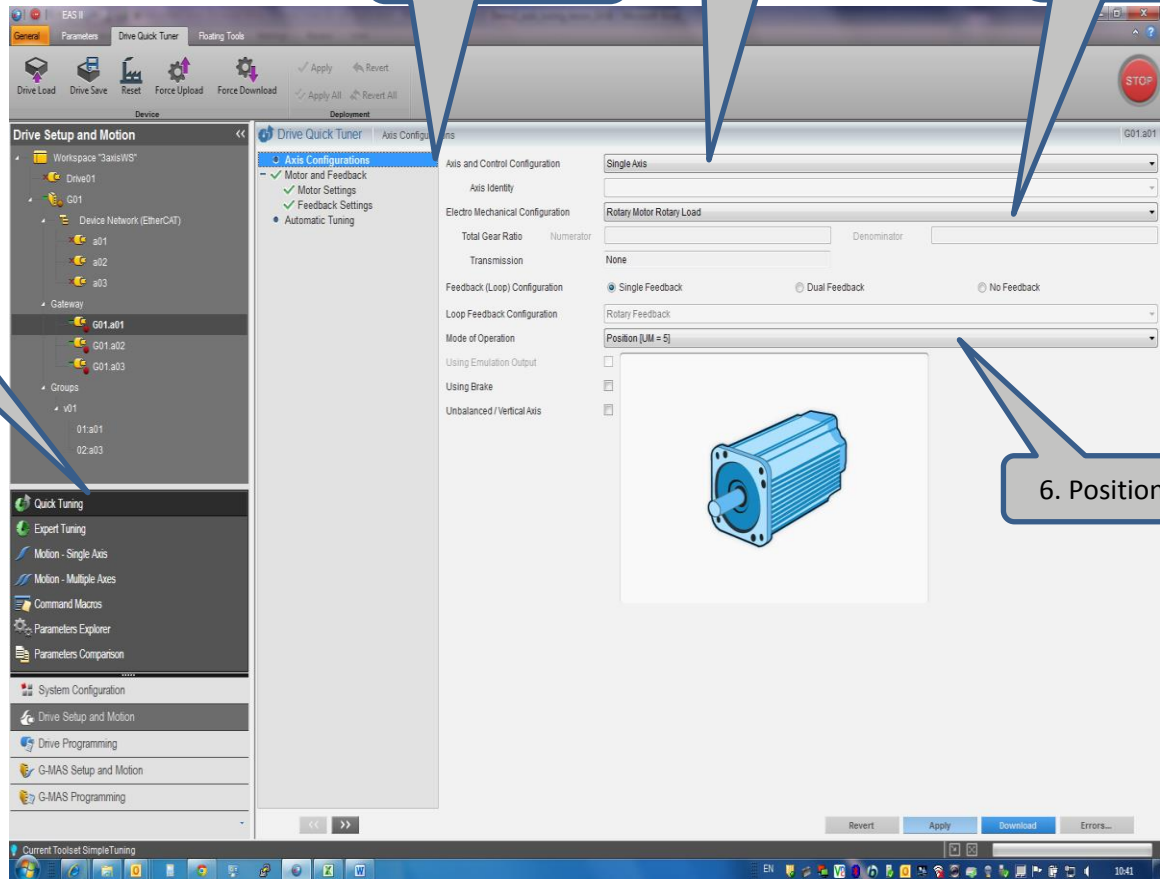
4. Gateways connection

3. Pre Op Mode

1. System Configuration

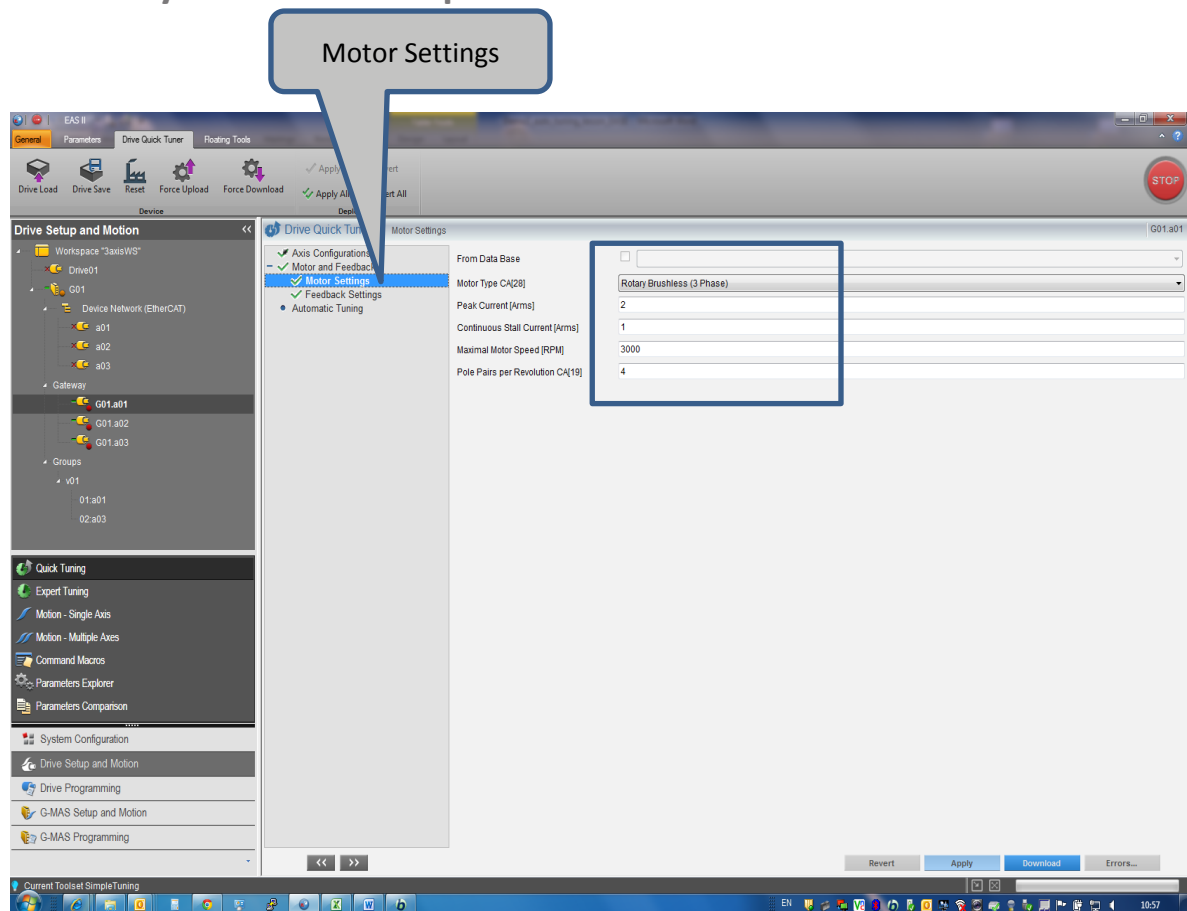


2. Define the parameters for Axis Configurations.



Exercise #2: Auto Tuning

3. Verify that all motor parameters are correct.



Exercise #2: Auto Tuning

4. Verify that all the Feedback parameters are correct.

Feedback Settings

Feedback Settings

Feedback on Motor	Position	2525
Encoder Quad, Port A		
1. General		
Sensor Name	Encoder Quad, Port A	
Sensor Type	Rotary	
Feedback control function	Position + Velocity + Commutation	
Use Digital Halls	Yes	
2. Sensor Parameters		
Direction	Invert	
Gain Filter (cnt/sec)	5000000	
Velocity FIR Filter Window	Disabled	
3. Resolution		
Lines/revolution	2500	
counts/revolution	10000	

Advanced

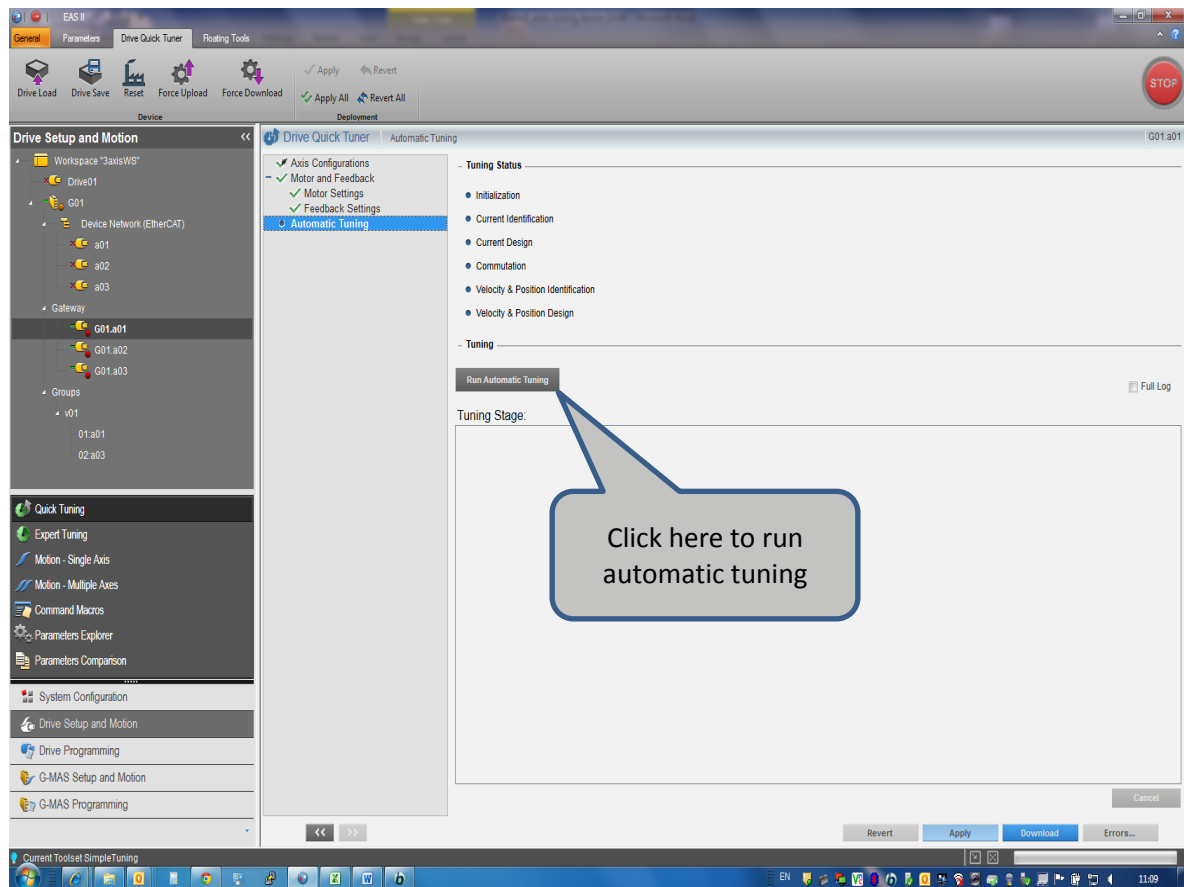
Revert Apply Download Errors...

Current Toolset Simple Tuning

11:02

Exercise #2: Auto Tuning

5. Run automatic tuning.



Exercise #2: Auto Tuning

6. View the Auto Tuning result.

