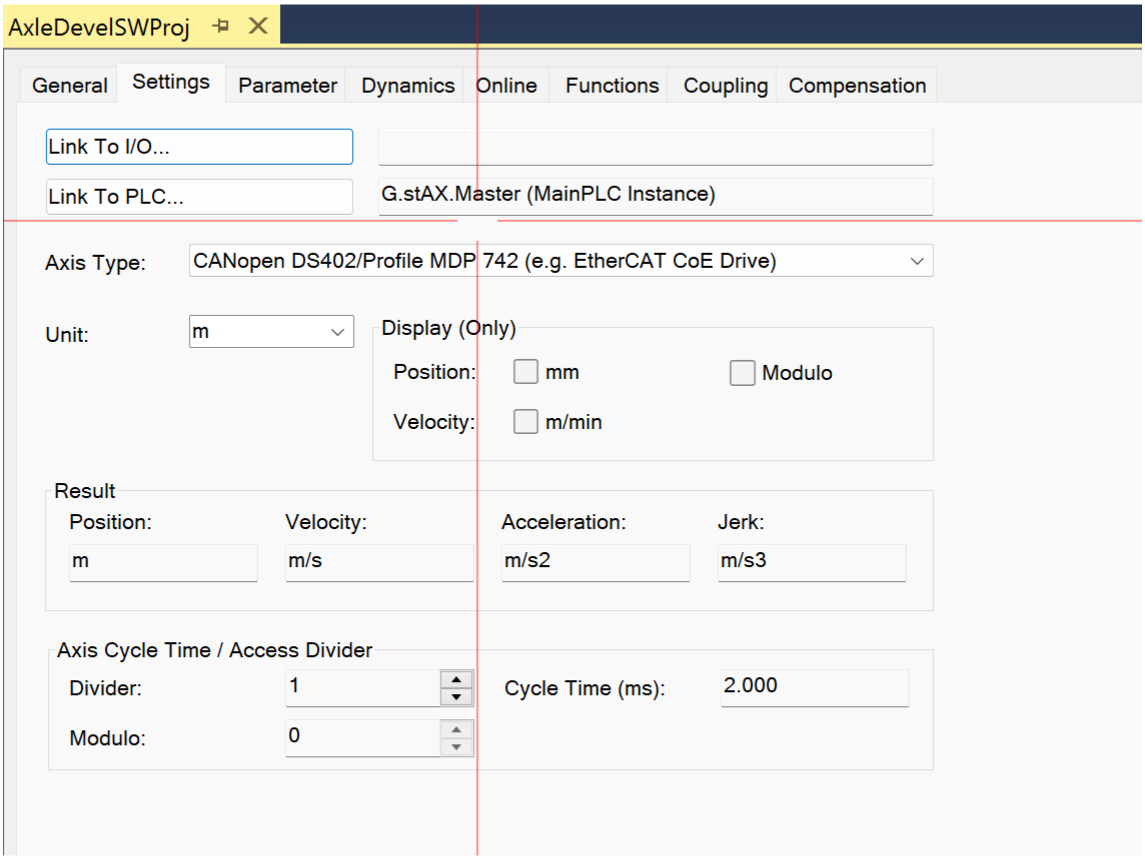
Configuration CGSMini_Robot01AxisMaster



G.stAX.Master (MainPLC Instance)

Axis Type: CANopen DS402/Profile MDP 742 (e.g. EtherCAT CoE Drive)

Unit: m

Display (Only)

Position: □ mm □ Modulo

Velocity: □ m/min

Result

Position:	Velocity:	Acceleration:	Jerk:
m	m/s	m/s2	m/s3

Axis Cycle Time / Access Divider

Divider: 1

Modulo: 0

Cycle Time (ms): 2.000

Link with the global variable

```
{attribute 'TcNcAxis' := '.Line1Front          := CGSMini_Robot01AxisLine1Front;
                  .Line1Back           := CGSMini_Robot01AxisLine1Back;
                  .Line2Front          := CGSMini_Robot01AxisLine2Front;
                  .Line2Back           := CGSMini_Robot01AxisLine2Back;
                  .Master              := CGSMini_Robot01AxisMaster'}
 stAX : ST_Robot_Axes;
```

Test code to Power-on (enable) virtual axis

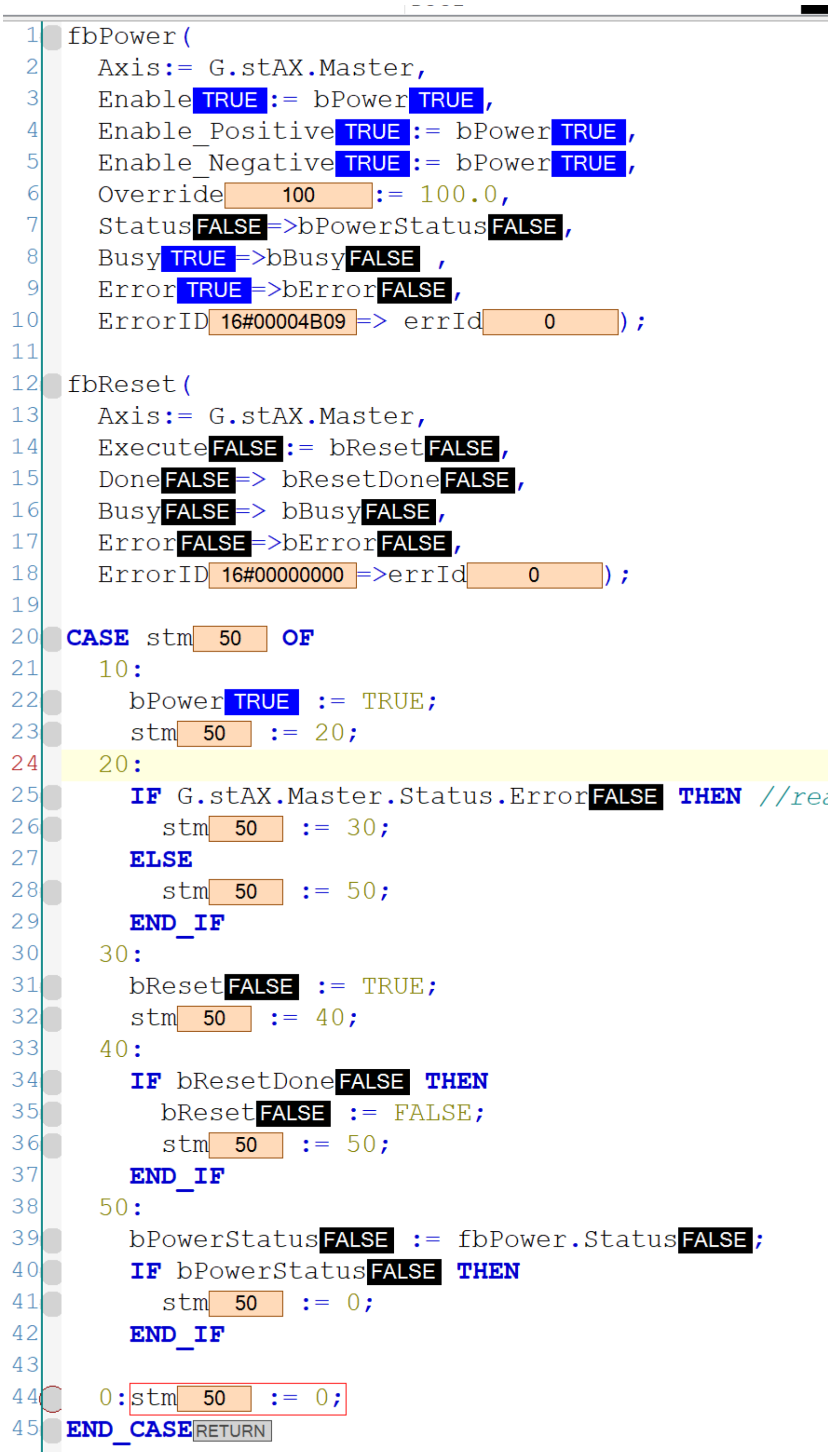
```
fbPower(
        Axis:= G.stAX.Master,
        Enable:= bPower,
        Enable_Positive:= bPower,
        Enable_Negative:= bPower,
        Override:= 100.0,
        Status=>bPowerStatus,
        Busy=>bBusy ,
        Error=>bError,
        ErrorID=> errId);
```

```
fbReset(
        Axis:= G.stAX.Master,
        Execute:= bReset,
        Done=> bResetDone,
        Busy=> bBusy,
        Error=>bError,
        ErrorID=>errId);

CASE stm OF
 10:
            bPower := TRUE;
            stm := 20;
        20:
            IF G.stAX.Master.Status.Error THEN //really at the level of NC
                    stm := 30;
            ELSE
                    stm := 50;
            END_IF
        30:
            bReset := TRUE;
            stm := 40;
        40:
            IF bResetDone THEN
                    bReset := FALSE;
                    stm := 50;
            END_IF
        50:
  bPowerStatus := fbPower.Status;
            IF bPowerStatus THEN
                    stm := 0;
            END_IF

 0:stm := 0;
END_CASE
```

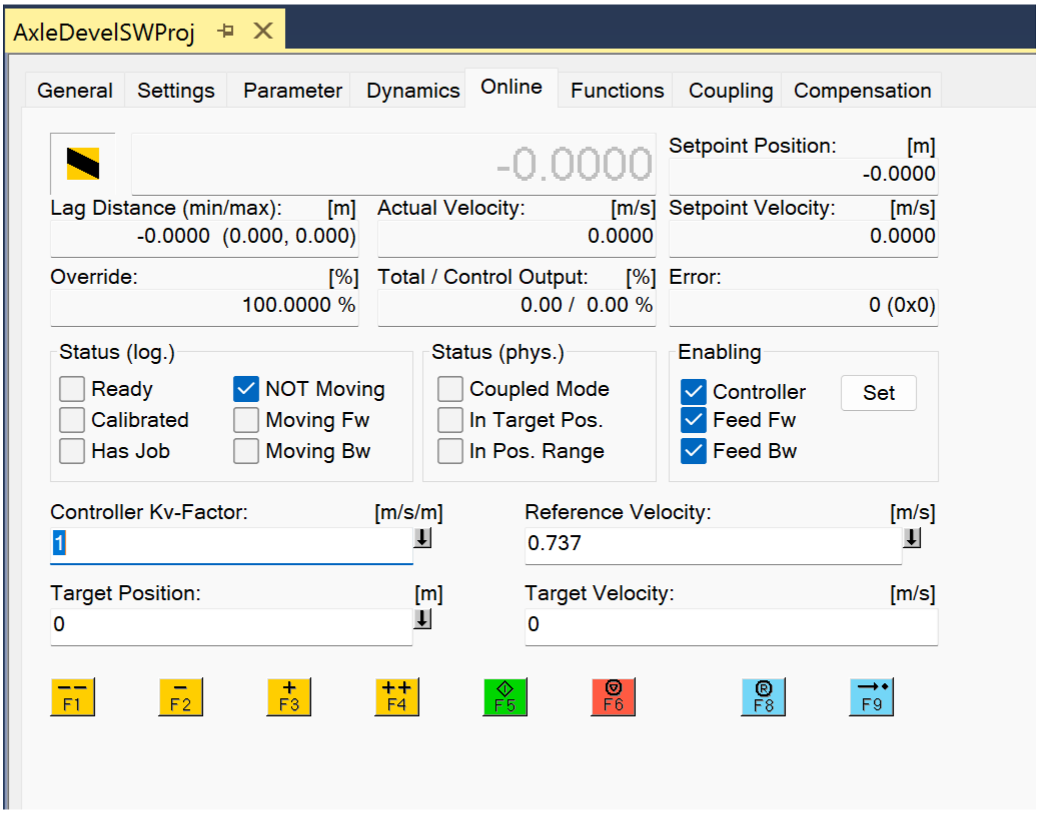
Results when running the code:

fbPower.Status RETURN always FALSE, but the virtual axis is enabled!!! Why??

I want to underline that the same code can enable axis linked with real hardware without any issue.



```
fbPower(
  Axis:= G.stAX.Master,
  Enable TRUE := bPower TRUE ,
  Enable_Positive TRUE := bPower TRUE ,
  Enable_Negative TRUE := bPower TRUE ,
  Override 100 := 100.0,
  Status FALSE =>bPowerStatus FALSE ,
  Busy TRUE =>bBusy FALSE  ,
  Error TRUE =>bError FALSE ,
  ErrorID 16#00004B09 => errId 0 );

fbReset(
  Axis:= G.stAX.Master,
  Execute FALSE := bReset FALSE ,
  Done FALSE => bResetDone FALSE ,
  Busy FALSE => bBusy FALSE ,
  Error FALSE =>bError FALSE ,
  ErrorID 16#00000000 =>errId 0 );

CASE stm 50 OF
  10:
    bPower TRUE  := TRUE;
    stm 50  := 20;
  20:
    IF G.stAX.Master.Status.Error FALSE THEN //rea
      stm 50  := 30;
    ELSE
      stm 50  := 50;
    END_IF
  30:
    bReset FALSE  := TRUE;
    stm 50  := 40;
  40:
    IF bResetDone FALSE THEN
      bReset FALSE  := FALSE;
      stm 50  := 50;
    END_IF
  50:
    bPowerStatus FALSE  := fbPower.Status FALSE ;
    IF bPowerStatus FALSE THEN
      stm 50  := 0;
    END_IF

  0:stm 50  := 0;
END_CASE RETURN
```



-0.0000

Setpoint Position: [m] -0.0000

Lag Distance (min/max): [m] -0.0000 (0.000, 0.000)

Actual Velocity: [m/s] 0.0000

Setpoint Velocity: [m/s] 0.0000

Override: [%] 100.0000 %

Total / Control Output: [%] 0.00 / 0.00 %

Error: 0 (0x0)

Status (log.)
- □ Ready
- □ Calibrated
- □ Has Job
- ☑ NOT Moving
- □ Moving Fw
- □ Moving Bw

Status (phys.)
- □ Coupled Mode
- □ In Target Pos.
- □ In Pos. Range

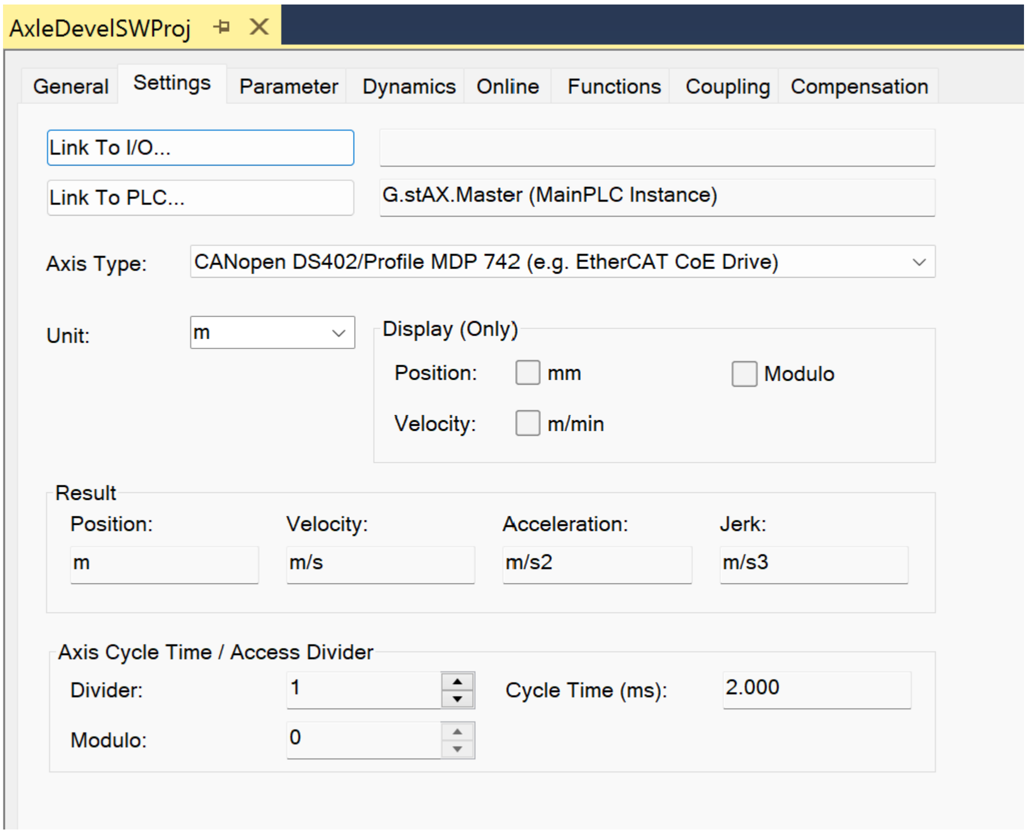
Enabling
- ☑ Controller
- ☑ Feed Fw
- ☑ Feed Bw

Controller Kv-Factor: [m/s/m] 1

Reference Velocity: [m/s] 0.737

Target Position: [m] 0

Target Velocity: [m/s] 0



Link To PLC... G.stAX.Master (MainPLC Instance)

Axis Type: CANopen DS402/Profile MDP 742 (e.g. EtherCAT CoE Drive)

Unit: m

Display (Only)
- Position: □ mm □ Modulo
- Velocity: □ m/min

Result

Position:	Velocity:	Acceleration:	Jerk:
m	m/s	m/s2	m/s3

Axis Cycle Time / Access Divider
- Divider: 1
- Cycle Time (ms): 2.000
- Modulo: 0