**XTS配置和模拟**

|  |  |
| --- | --- |
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| **摘 要：**  本文介绍了两种方法来配置XTS项目并模拟。  第一种方法是：用XTS TOOL来进行配置。这种方法较为简单，也是推荐用这种方式来添加。  第二种方法是：手动添加object方式。缺点是手动配置较为复杂，模块多了容易出错。优点是，懂得手动配置方法后，后期如果只有微小变化的时候，比如想只想加一个动子的时候，不用再去运行一次配置软件。  **关键字：XTS** | |
| **附 件：**   |  |  |  | | --- | --- | --- | | 序 号 | 文件名 | 备注 | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |
| **免责声明：**  我们已对本文档描述的内容做测试。但是差错在所难免，无法保证绝对正确并完全满足您的使用需求。本文档的内容可能随时更新，如有改动，恕不事先通知，也欢迎您提出改进建议。 | |
| **参考信息：** | |

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# 软硬件版本

文章测试功能所用测试环境：

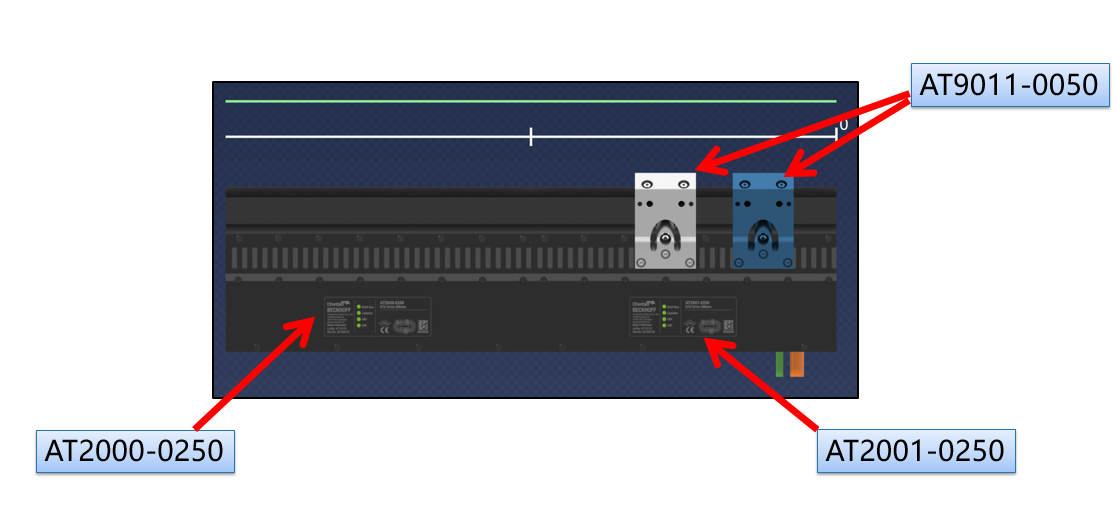
测试电脑版本：

Windows：win10 64位。

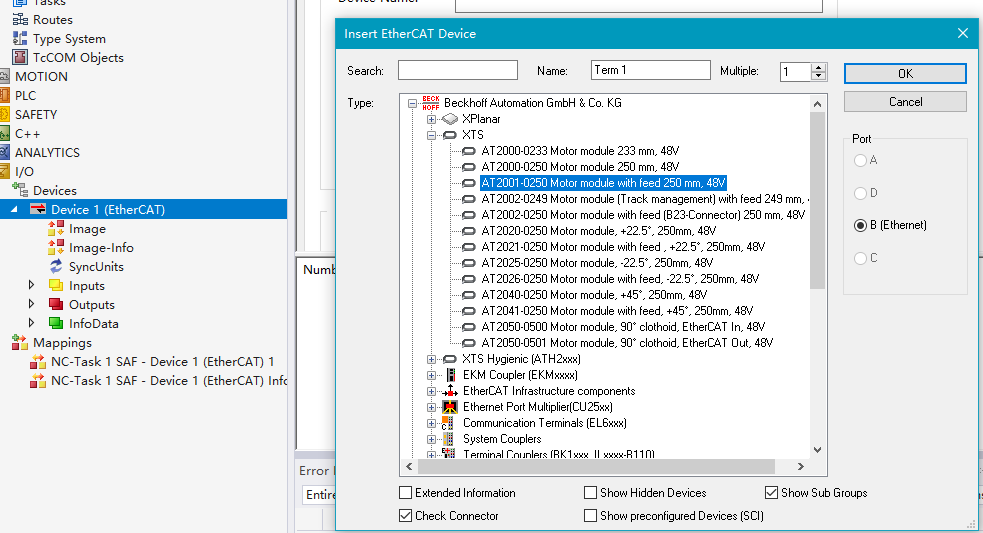
TwinCAT：3.1.4024.7

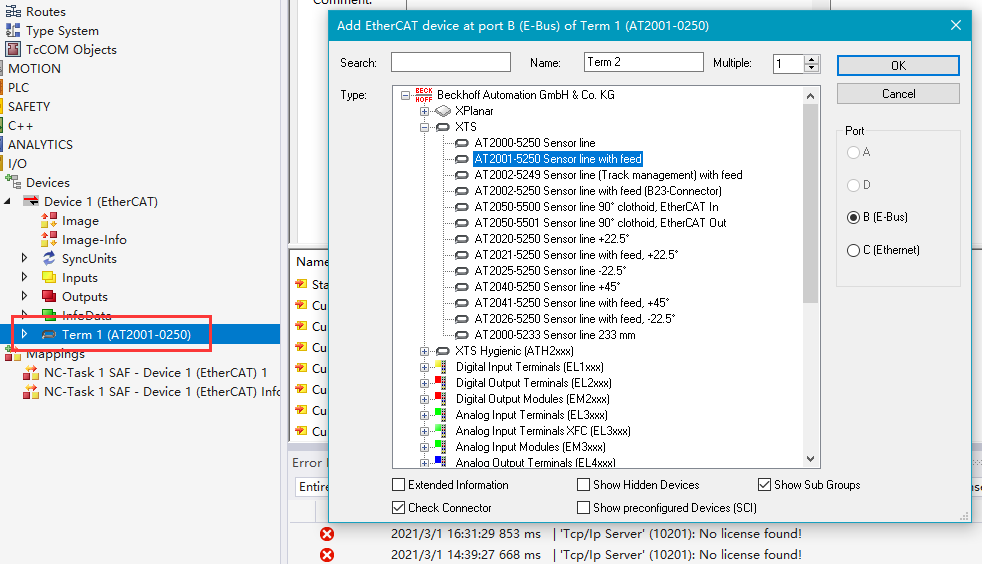
# Ethercat硬件添加

目标项目如下，首先进行硬件添加。后面两种方法都是以此为基础进行配置。

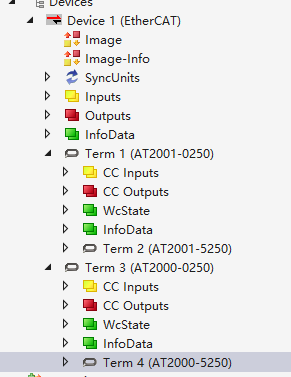


1. 新建device，然后新建motor module模块AT2001-0250，sensor line模块AT2001-5250



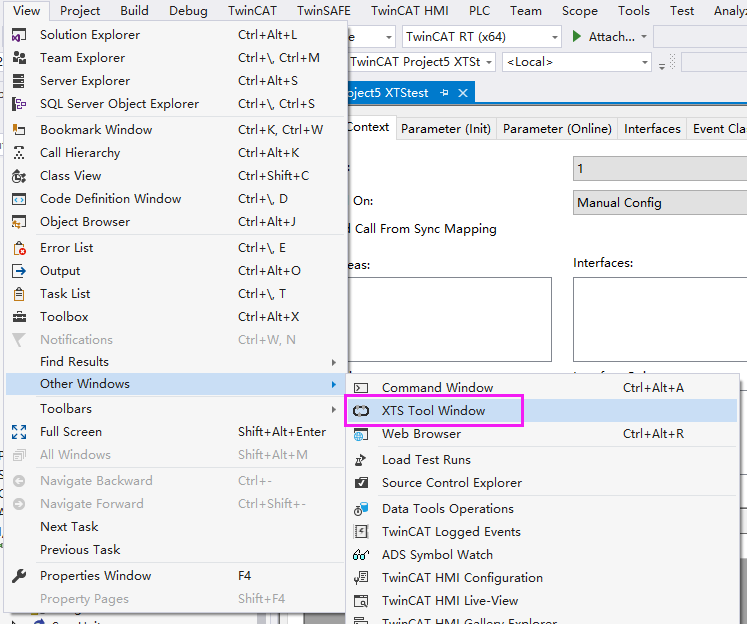


1. 添加完如下

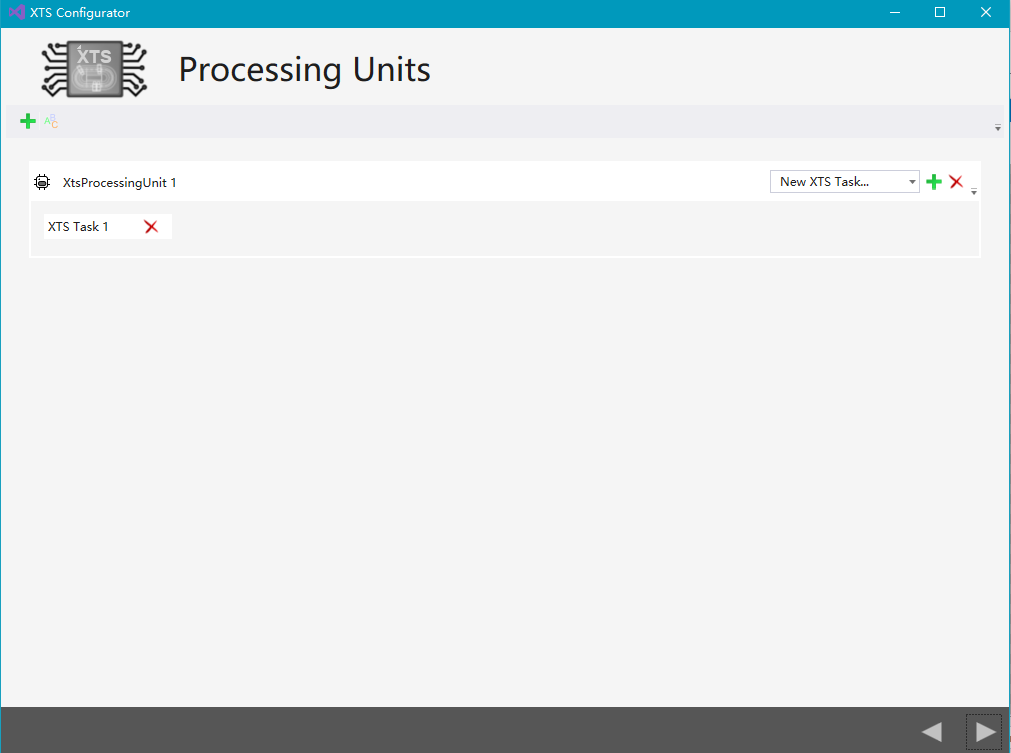


# XTS TOOL方式进行配置

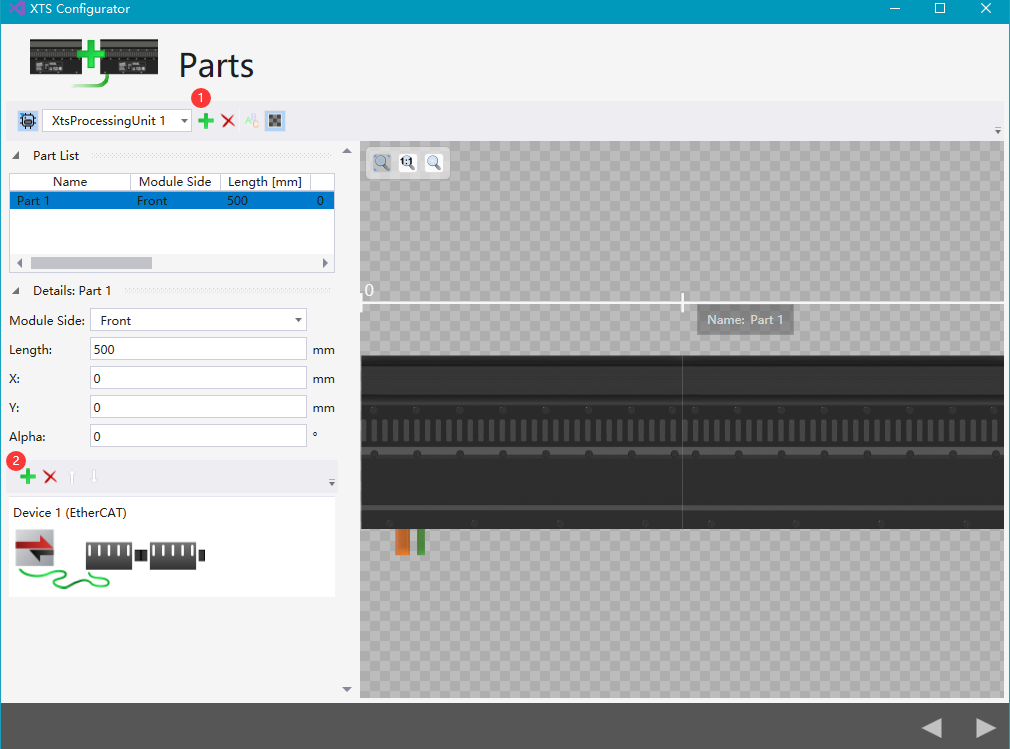
1. 打开XTS TOOL window



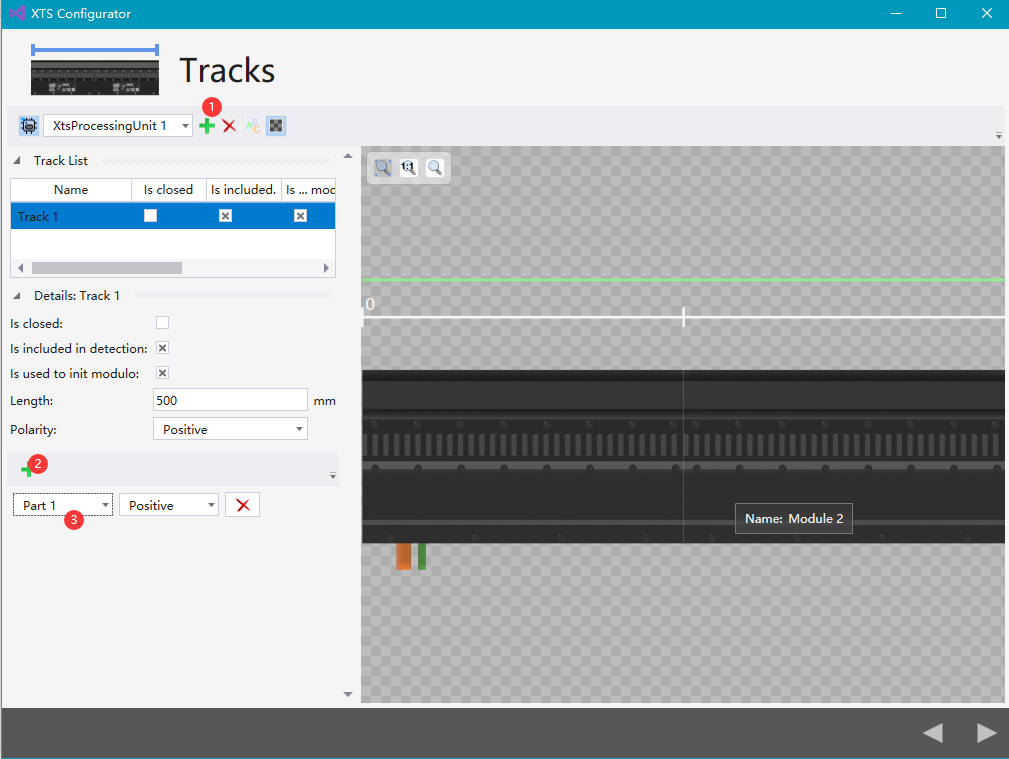
1. 新建一个xts task



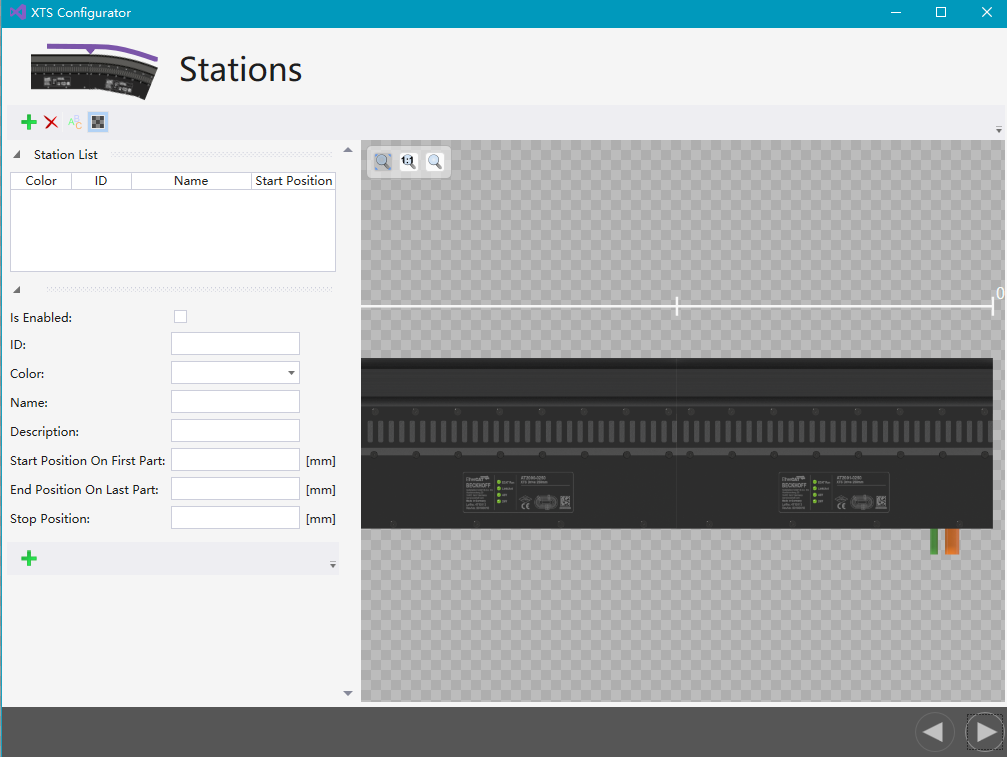
1. 新建part以及添加part中对应的硬件模块



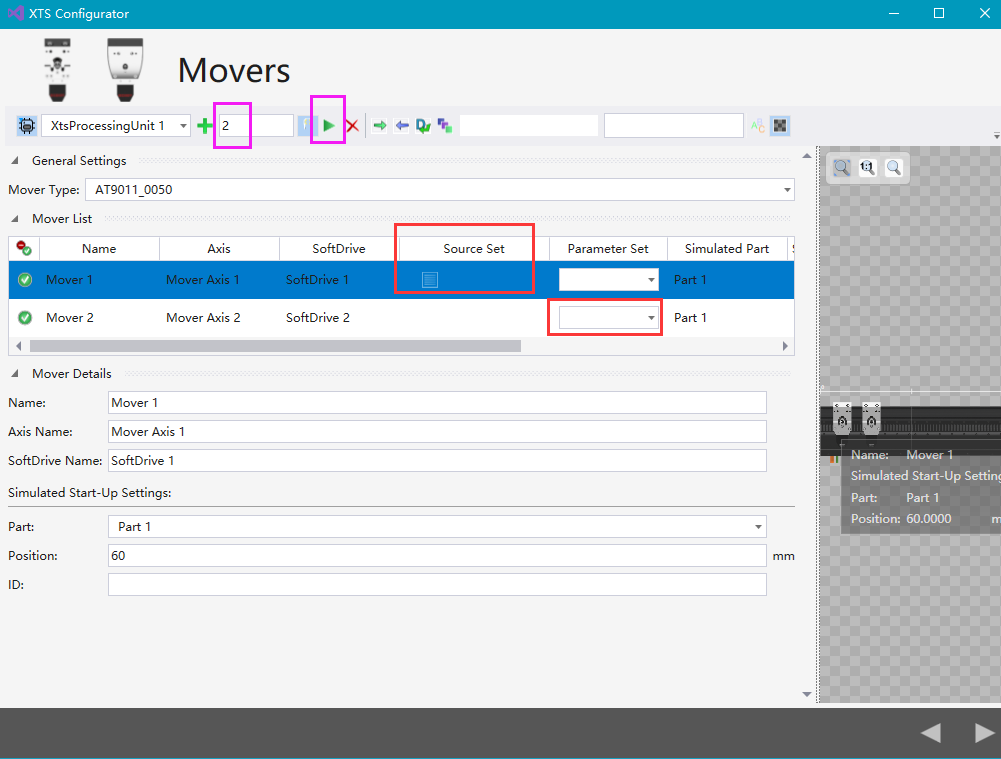
1. 新建导轨，is closed表示是不是闭环，如果是个环形轨道，那么想要一直转圈的，要把is closed勾上



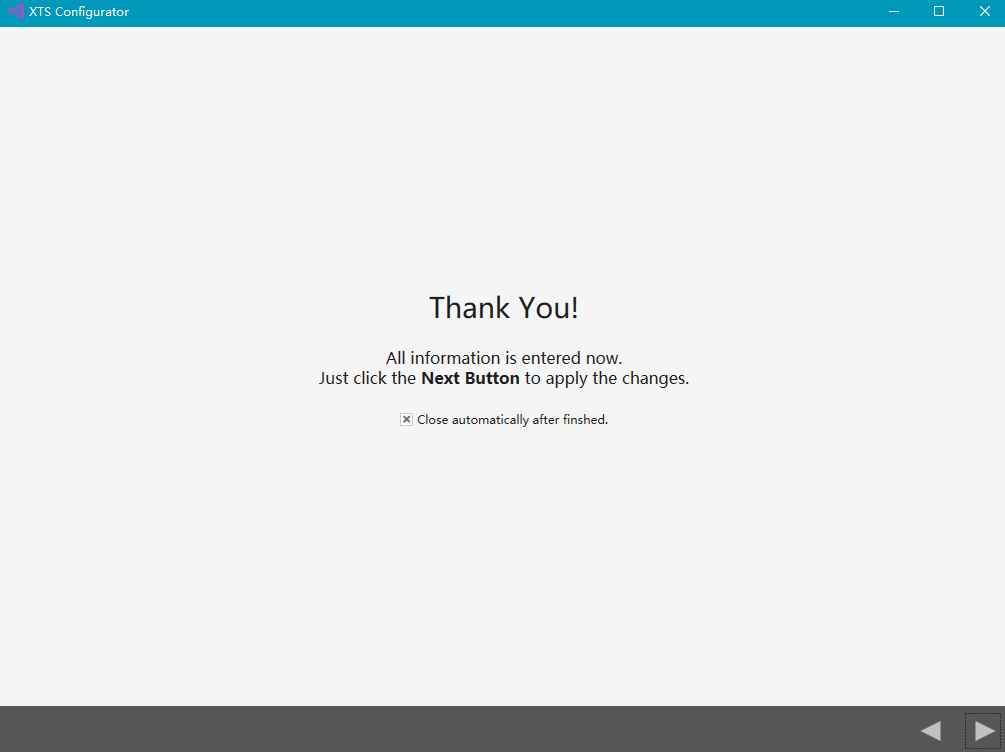
1. station这里是添加工站信息的功能，可以设定工站在XTS中的哪个位置。目前没有工站所以就不添加了（添不添加都不影响等会的使用）



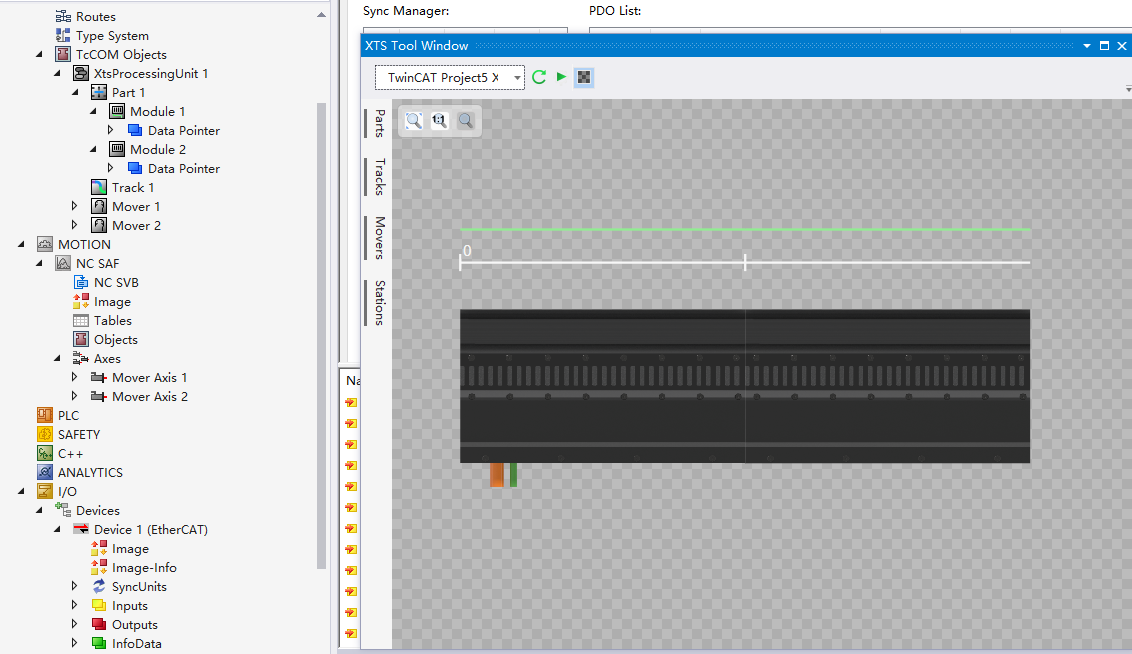
1. 添加两个动子，动子的参数可以自己设置颜色设定哪个是source源参数，然后再parameterset这里是目标，这样以后如果需要配置相同参数的动子多了，只要调好一个动子的参数，就能直接复制给别的动子了



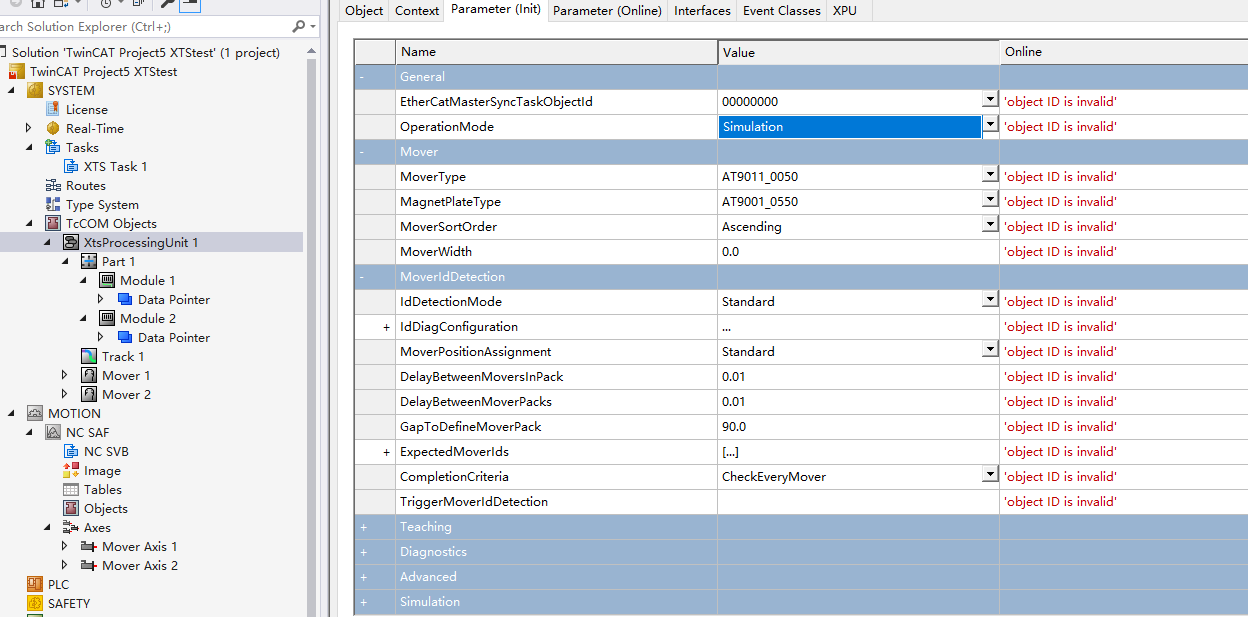
1. 然后就添加完成了



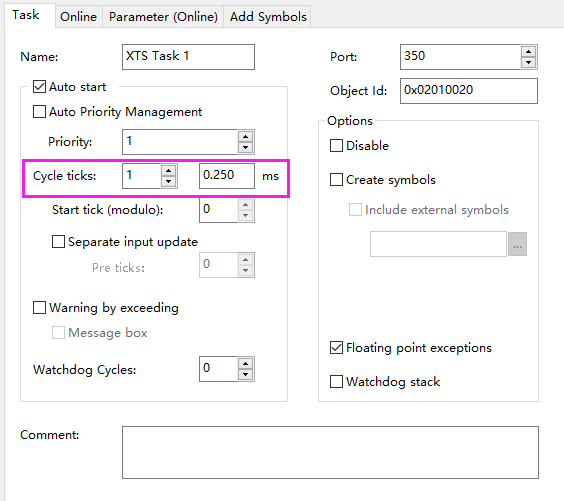
1. 这样之后，项目就会自动添加完成了



1. 如果要仿真运行，记得把device diable 以及记得这里改成simulation



1. 如果是带实物的话，XTS的task需要设置成250us



# 手动配置添加XTS项目

1. 新建一个task 250us
2. 新建一个TcCOM object

License 
Real-Time 
Tasks 
Task 2 
WS Task 
Routes 
Type System 
TcCOM Objects 
MOTION 
PLC 
SAFETY 
ANALYTICS 
Devi 
Device 1 (EtherCAT) 
Image 
Image-lnfo 
SyncUnits 
Inputs 
Outputs 
I nfoDa ta 
Term 1 (AT2001-0250) 
Term 3 (AT2000-0250) 
Mappings 
02000000 RTime 
Insert TcCom Object 
Search: 
Name: 
XTS Modules 
XtsInfoServer [Module] 
XtsStationInfo [Module] 
XtsT rack [Module] 
XtsControIArea [Module] 
XtsMover [Module] 
AT 2000_0250 [Module] 
AT _0250 [Module] 
AT 2002_0250 [Module] 
AT 2050_0500 [Module] 
AT 2050_0501 [Module] 
AT 2020_0250 [Module] 
AT _0250 [Module] 
AT 2025_0250 [Module] 
AT 2028_0250 [Module] 
AT 2040_0250 [Module] 
AT 2041_0250 [Module] 
AT 2000_0233 [Module] 
AT [Module] 
DataRecorder [Module] 
ATH2000 0250 
C: KT 'AinCAT K31 cl cXte tmc 
Cancel 
Multiple: 
Insert 
Reload 
Buil 
Entire Solution 
Code 
I Error 
Description 
3 Warnings 
0 0 24 Messages 
C ear 
+ IntelliSense 

1. object中改成simulation

Object 
p roject) 
Context Parameter (Init) 
Na me 
General 
Parameter (Online) 
I nte rfaces 
Event Classes XPU 
arch Solution Explorer (Ctrl+;) 
Solution TwinCAT Project5 XTStest' (I 
WinCAT Project5 XT Ste st 
SYSTEM 
License 
Real-Time 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
Value 
Simulation 
ATg011 0050 
AT9001 0550 
Asce nd i ng 
Sta rd 
Sta nda rd 
Collaose All 
CS 
EtherCatMa sterSyncTa skObjectId 
Operation Mode 
Mover 
M overType 
Magnet PlateType 
MoverSortOrder 
MoverWidt h 
MaverIdDetectian 
I d Detection Mode 
Mover PositionAssig nment 
Expected Mover Ids 
Trigger MoverIdDetection 
Teaching 
Diag nostics 
Adva nced 
Simulation 
nit 
I (Array Elm 
Objectl (Xtsprocessing nit) 
@ MOTION 
PLC 
SAFETY 
ANALYTICS 
Dev, 
Device 1 (EtherCAT) 
_Je Image 
J' Image-Info 
Syncunits 
Inputs 
e Outputs 
InfoData 
C; Term 1 (AT2001-0250) 
OTCID 
OperationMo... 
M overType 
MagnetPlateTm 
SortOrderEnum 
LREAL 
MoverIdDetec... 
Mover Positiom 
TriggerMover... 
Exoand All 

1. 设置动子宽度，AT9011\_0050是50mm

Object 
Solution Explorer (Ctrl+;) 
Rea -Ti me 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
g] TcCOM Objects 
Objectl (Xtsprocessing nit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
Data Pointer 
Object2 (AT2000 0250) 
Data Pointer 
Object3 (XtsMover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Image 
Tables 
Objects 
Axes 
Axis I 
Enc 
Drive 
Ctrl 
Q] Inputs 
Context Parameter (Init) 
Na me 
General 
Parameter (Online) 
I nterfaces Event Classes 
Value 
Simulation 
ATg011 0050 
AT9001 0550 
Ascending 
Sta nda rd 
Sta nda rd 
XPU 
EtherCatMa sterSyncTa skObjectId 
Operation Mode 
Mover 
M overType 
Magnet PlateType 
MoverSortOrder 
MoverWidt h 
MaverIdDetectian 
I d Detection Mode 
Mover PositionAssig nment 
Expected Mover Ids 
Trigger MoverIdDetection 
Teaching 
Teaching FileNumber 
StartStandStillTeaching 
Sta rtMovementTeachi ng 
Stop MovementTeachi ng 
Z] Show Online Va lues D Show Hidden Pa rameter 
Online 
Simulation 
ATg011 0050 
AT9001 0550 
Ascending 
Sta nda rd 
Sta nda rd 
'invalid index-offset' 
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TQI 
unit 
I (Array... 
OTCID 
Operation... 
M overType 
MagnetPlam 
SortOrd erm 
LREAL 
Mover IdDm 
Mover Posim 
TriggerMo... 
ODIN 
Stop Movem 
OXO... 
OXO... 
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OXO... 
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1. 新建三元素，xtstrack轨道，xtspart电机模块，xtsmover动子

License 
Real-Time 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
Objectl (XtsProcessingUnit) 
Object2 (XtsPart) 
Objectl (AT2001_0250) 
g Object2 (AT2000_0250) 
@ MOTION 
PLC 
SAFETY 
ANALYTICS 
Dev, 
Device 1 (EtherCAT) 
_Je Image 
Image-Info 
Syncunits 
Inputs 
e Outputs 
InfoData 
C; Term 1 (AT2001-0250) 
C; Term 3 (AT2000-0250) 
Mappings 
ModuleSide 
+ OriginTransform 
Insert TcCom Object 
Search: 
Name: 
c::::::::::::::::::::::::::::::::::::::z 
XTS Modules 
XtsInfoServer [Module] 
XtsStationInfo [Module] 
XtsIoDriver [Module] 
XtsProcessingLlnit [Module] 
XtsPart [Module] 
XtsT rack [Module] 
XtsConüoL4rea [Module] 
AT2000_ 
0250 [Module] 
AT 2002_0250 [Module] 
AT 2050_0500 [Module] 
AT 2050_0501 [Module] 
AT 2020_0250 [Module] 
AT _0250 [Module] 
AT 2025_0250 [Module] 
AT 2028_0250 [Module] 
AT 2040_0250 [Module] 
AT 2041 _0250 [Module] 
AT 2000_0233 [Module] 
AT [Module] 
DataRecorder [Module] 
ATH2000 0250 [Modulel 
C: \ T "inC4T clcXte trnc 
Back 
Cancel 
Multiple: 
Inset Instance„ 
Reload 

1. 轨道中修改，是否是闭环，是否包括侦测，以及电机模块的objectid

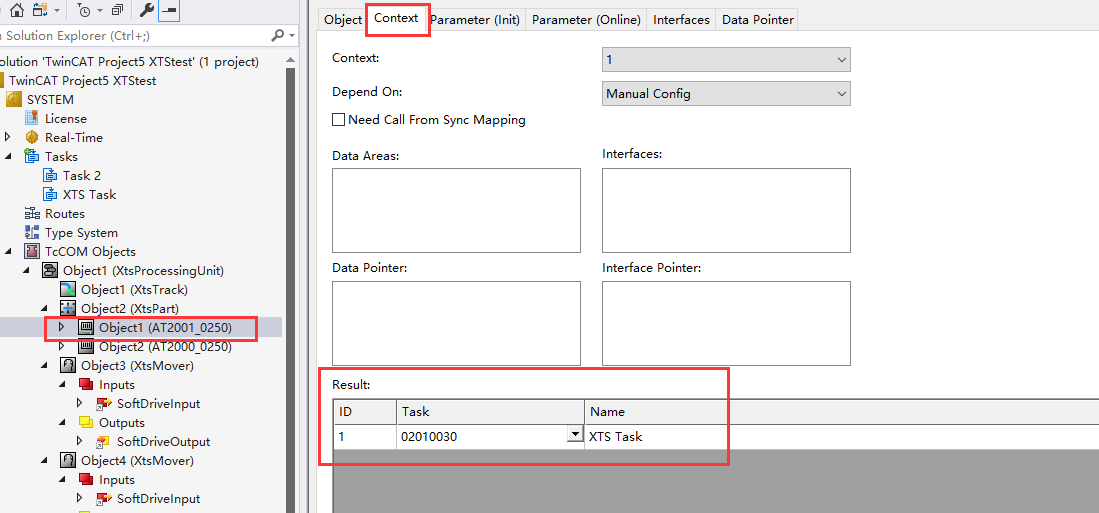
on Explorer 
Solution Explorer (Ctrl+;) 
Solution 'TwinCAT Project5 XTStest' (I 
TwinCAT P roject5 XT Stest 
SYSTEM 
License 
Real-Time 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
p roject) 
TwinCAT Projects XTStest -E X 
Object Context Parameter (Init) 
Na me 
General 
I sClosed 
IslncludedInDetection 
Polarity 
Offset 
Pa rtConfig Items 
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Polarity 
Parameter (Online) 
I nte rfaces 
Value 
FALSE 
TRUE 
Positive 
01010030 
Positive 
Online 
sitive 
01010030 
Positive 
nit 
I (Array Elements) 
Object2 (XtsPart) 
OTCID 
Polarity 
LREAL 
OTCID 
Polarity 
oxo.„ 
Objectl (XtsProcessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
Data Pointer 
Object2 (AT2000_0250) 
Data Pointer 
Object3 (XtsMover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Image 

1. 电机模块中选定对应的motor模块id和内置sensor模块id， 以及模块的序号（从0开始计数）

ton 
Explorer 
Object 
p roject) 
Project:' 
Co ntext 
Na me 
General 
Parameter (Init) 
Parameter (Online) 
I nte rfaces 
-ch Solution Explorer (Ctrl+;) 
Solution 'TwinCAT Project5 XTStest' (I 
WinCAT Project 5 XT Stest 
SYSTEM 
License 
Real-Time 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
Data Pointer 
Value 
ox015f 
02010030 
cccccccc 
01010010 'Objectl (XtsProcessinglJnit)' 
01010020 Objectl (XtsTrack)' 
01010030 Object2 (XtsParty 
01010050 Object2 (AT2000 0250)' 
02010020 'Task 2 
02010030 'XTS Task 1' 
03000011 'I/O Idle Task' 
03010010 'Device 1 EtherCA 
03020001 'Term 1 AT2001-0250 
03020002 'Term 2 (AT2001-5250)' 
03020003 'Term 3 (AT2000-0250)' 
03020004 'Term 4 (AT2000-5250)' 
03040010 'Image' 
03040020 'Image-Info' 
nit 
WORD 
OTCID 
OTCID 
OTCID 
ODIN 
LREAL 
LREAL 
LREAL 
PTCID 
OXO 3m 
OxOOm 
OxOO 
OxOO 
OXO 3m 
OxOO 
OxOO.. 
Comment 
Gets/sets the 
Set the objectm 
Set the objectm 
he index def.„ 
Defines the gm 
Define a n offs m 
Define a Scali.„ 
Properl 
Object 
E Misc 
Disal 
'tenf 
Pathl 
Ad s Port 
TaskOlD 
MotorTerminalOID 
SensorTerminalOID 
Positionlndex 
Gap 
Offset 
Scal i ngFactor 
Objectl (XtsProcessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
g Object2 (AT2000_0250) 
MOTION 
PLC 
SAFETY 
ANALYTICS 

Object 
:h Solution Explorer (Ctrl+;) 
;olution TwinCAT Project5 XTStest' (I 
TwinCAT Project5 XTStest 
SYSTEM 
License 
Real-Time 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
p roject) 
Context Parameter (Init) 
Na me 
General 
TaskOlD 
MotorTerminalOID 
SensorTerminalOID 
Positionlndex 
Gap 
Offset 
Scal i ngFactor 
Parameter (Online) 
I nterfaces Data Poi nter 
Value 
02010030 
03020003 
03020004 
Online 
02010030 
03020003 
03020004 
CS 
nit 
XTS Task I 
Term 3 (ATm 
Term 4 (ATm 
WORD 
OTCID 
OTCID 
OTCID 
ODIN 
LREAL 
LREAL 
LREAL 
Objectl (XtsProcessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
Object2 (AT2000 0250) 
Object3 (XtsMover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 

1. 别忘记电机模块需要绑定task



1. 添加动子

License 
Rea -Ti me 
Ta sks 
Task 2 
XTS Task 
Routes 
Type System 
B] TcCOM Objects 
Objectl (XtsPracessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
g Object2 (AT2000_0250) 
a MOTION 
PLC 
SAFETY 
ANALYTICS 
Devices 
Device 1 (EtherCAT) 
_Je Image 
J' Image-Info 
Syncunits 
Inputs 
e Outputs 
InfoData 
C; Term 1 (AT2001-0250) 
MasterSync as 
OperationMode 
Insert TcCam Object 
Search: 
Name: 
SoftDrive Modules 
Application Runtime 
XTS Modules 
Simulation 
c::::::::::::::::::::::::::::::::::::::z 
Cancel 
Multiple: 
XtsInfoServer [Module] 
XtsStationInfo [Module] 
XtsIoDriver [Module] 
XtsProcessingLlnit [Module] 
XtsPart [Module] 
XtsT rack [Module] 
AT _0250 [Module] 
AT 2002_0250 [Module] 
AT 2050_0500 [Module] 
AT 2050_0501 [Module] 
AT 2020_0250 [Module] 
AT _0250 [Module] 
AT 2025_0250 [Module] 
AT 2028_0250 [Module] 
AT 2040_0250 [Module] 
AT 2041 _0250 [Module] 
AT2000 0233 
C: \ T "inC4T clcXte trnc 
Inset Instanca„ 
Reload 

1. 绑定task

Parameter (Init) 
ch Solution Explorer (Ctrl+;) 
Solution TwinCAT Project5 XTStest' (I 
TwinCAT Project5 XTStest 
SYSTEM 
License 
Real -Ti me 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
p roject) 
Object Context 
Co ntext: 
Depend On: 
Parameter (Online) 
Data Area 
I nte rfaces 
Objectl (XtsProcessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
Object2 (AT2000_0250) 
Object3 (Xts Move r) 
Object4 (XtsMover) 
MOTION 
PLC 
SAFETY 
ANALYTICS 
Dev, 
Need Call From Sync Mapping 
Data Areas: 
'Inputs' 
Outputs' 
Data Pointer: 
Result: 
Task 
02010030 
Manual Config 
I nte rfaces: 
Interface Pointer: 
Na me 
XTS Task 1 
Priority 
cycle 
10000 
Task 
351 
Symbo... 
Sort O... 

1. 绑定track的objectid和part的objectid，一定要设置仿真时动子初始位置，（动子位置是以中间为位置，所以初始位置不能为0，为0的话还有另外一半就在导轨外面了）

lution Explorer 
Search Solution Explorer (Ctrl+;) 
Real-Time 
Tasks 
Task 2 
XTS Task 
Routes 
Type System 
TcCOM Objects 
Objectl (XtsProcessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
Data Pointer 
Object2 (AT2000 0250) 
Data Pointer 
Object3 (Xts Mover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Object 
Projecti 
Co ntext 
Na me 
General 
Parameter (Init) 
Parameter (Online) 
ActiveT rackObjectId 
TaskOlD 
Simulation 
Simulated StartupPart 
Simulated StartupPosition 
SimulatedStartlJpId 
Data Area Interfaces 
Value 
01010020 
02010030 
01010030 
Online 
01010020 
02010030 
01010030 
nit 
Objectl (XtsTrack) 
XTS Task 1 
Object2 (XtsPart) 
WORD 
OTCID 
OTCID 
OTCID 
LREAL 
STRING(3) 
OXO.. 

1. 新建两个NC轴，NC轴中添加standard softdrive

g Object2 (AT2000_0250) 
Object3 (XtsMover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Image 
Tables 
Objects 
Axes 
Insert TcCom Object 
Search: 
Name: 
c::::::::::::::::::::::::::::::::::::::z 
Cancel 
Multiple: 
Inset Instanca„ 
Reload 
Axis I 
Enc 
Drive 
Ctrl 
Q] Inputs 
SoftDrive_ObjI 
Enc 
Drive 
Ctrl 
Q) Inputs 
Outputs 
(CTc Soft Drive) 
SoftDrive_ObjI (CTcSoftDrive) 
PLC 
SAFETY 
ANALYTICS 
Beckhoff Automation GmbH 
T cPonerMonitoring 
NC Obiects 
OPC Unified Architecture 
SoftDrive Modules 
Application Runtime 
XTS Modules 
GigE Vision 
Vision 
Motion Control 
Analytics 
Standard SoftDrive [Configuration] 
T cloEth Modules 
Beckhoff Automation 
C++ Module Vendor 
TEI 400 Module Vendor 
C: \ T "inC4T cSoftDriva trnc 

1. softdrive需要绑定xts task

elution Explorer 
earch Solution Explorer (Ctrl+;) 
Objectl (XtsProcessingUnit) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
g Object2 (AT2000_0250) 
Object3 (XtsMover) 
Inputs 
SoftDriveI nput 
Outputs 
SoftDriveOutput 
Object4 (XtsMover) 
Inputs 
SoftDriveI nput 
Outputs 
SoftDriveOutput 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Image 
Tables 
Objects 
Axes 
Axis I 
Enc 
Drive 
Ctrl 
Q] Inputs 
SoftDrive_ObjI (CTcSaftDrive) 
Enc 
Drive 
Ctrl 
Q) Inputs 
Outputs 
SoftDrive_ObjI (CTcSoftDrive) 
T Project5 
Object Context 
Co ntext: 
Depend On: 
Parameter (Init) 
Parameter (Online) 
Data Area 
I nte rfaces 
Interface Pointer 
Data Pointer 
Need Call From Sync Mapping 
Data Areas: 
Z 1 'SdScopeVariable' 
Z] 2 'SoftDriveCmdFromTC' 
Z] 3 'SoftDriveActualToTC' 
Data Pointer: 
Result: 
Task 
02010030 
Error List 
Manual Config 
I nte rfaces: 
Interface Pointer: 
Na me 
XTS Task 1 
Priority 
Properties 
SoftDrive_Obj 
E Misc 
(Na me) 
Disabled 
Item Type 
Path Name 
Sym bom Sort 0m 
cycle 
10000 
Task 
351 
000f24 Clear + IntelliSense 
Code Descri ption 
2021/3/1 242 ms Tcp/lp Server' (10201): No license found! 
2021/3/1 14:23:29 041 ms Objectl (XtsProcessingUnit) (OXOIOIOOIO): Teaching data TcIoXts.TeachingData.O is missing. 
Search Error List 
P roject 
o 

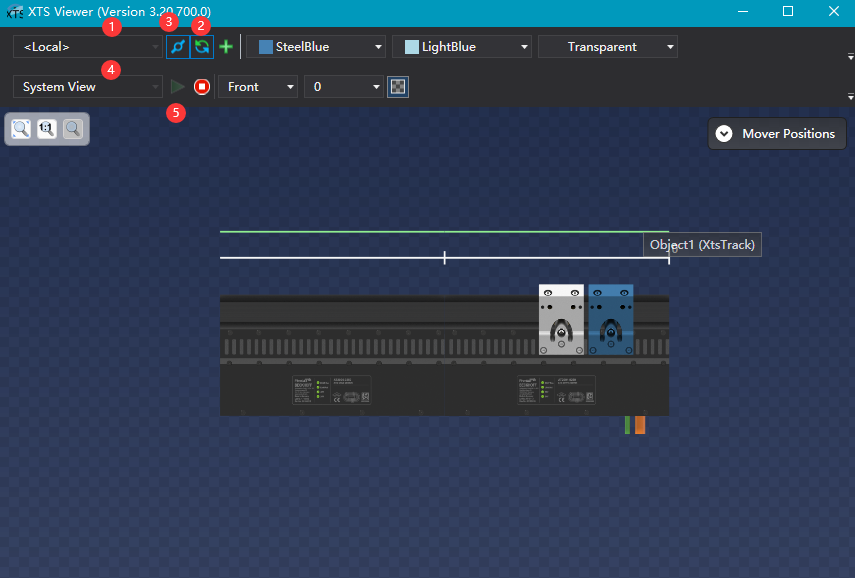
1. 绑定IO到softdrive

Solution Explorer (Ctrl+;) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
g Object2 (AT2000_0250) 
Object3 (XtsMover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Image 
Tables 
Objects 
Axes 
Axis I 
Enc 
D rive 
Ctrl 
Q] Inputs 
Outputs 
a] SoftDrive_ObjI (CTcSoftDrive) 
Axis 2 
Enc 
Drive 
Ctrl 
Q] Inputs 
Outputs 
General Settings 
Link To I/O... 
Link To PLC 
Pa ra meter 
Dynamics Online Functions Coupling Compensation 
SoftDrive Objl (CTcSoftDrive) 
Axis Type: 
Resu It — 
Positio n: 
Soft Drive (Object) 
Display (Only) — 
Position: 
Velocity: 
Velocity: 
m m/ min 
Acceleration: 
m m/s2 
Cycle Time (ms): 
Modulo 
Jerk: 
mm/s3 
Axis Cycle Time / Access Divider 
Divider: 
Modulo: 

1. 绑定inputpointer到mover的object里的变量

ch Solution Explorer (Ctrl+;) 
Objectl (XtsTrack) 
Object2 (XtsPart) 
Objectl (AT2001 0250) 
g Object2 (AT2000_0250) 
Object3 (XtsMover) 
Object4 (XtsMover) 
MOTION 
NC-Task 1 SAF 
NC-Task 1 sva 
Image 
Tables 
Objects 
Axes 
Axis I 
Enc 
Drive 
Ctrl 
Q) Inputs 
Outputs 
SoftDrive_ObjI (CTcSoftDrive) 
Q] SoftDriveCmd FromTC 
SoftDriveActua ToTC 
InputPointerI 
u pu aln er 
g] Interpolator Objl (CTcSdIntf 
SoftDriveEncoder Obj2 (CTc: 
PositionControl Obj3 (CTcSd 
a] VelocityControl_Obj4 (CTcSd 
Filter Obj5 (CTcSdFilter) 
Feed Forwa rd _Obj6 (CTcSd Fe 
Axis 2 
Enc 
Drive 
Ctrl 
Q] Inputs 
Variable 
Na me: 
G rou p: 
Address: 
Flags 
Online 
Inputpointerl 
SoftDriveInput 
Data Pointer 
o (OXO) 
Size: 
user ID: 
104.0 
Linked to... 
Attach Variable InputPointerI 
Search: 
SYSTEM 
T cCOM Obiects 
Obiecä HsProcessingl_lnit) 
Obiect3 CXtsMover) 
SoftDriveInput 
Obiect4 CXtsMover) 
SoftDriveInput 
2021/3/1 405 ms 
2021/3/1 545 ms 
Oil, 
Oil, 
SoftDriveInput [I O] 
SoftDriveInput [I O] 
Show Variables 
Only Unused 
Exclude disabled 
Exclude other Devices 
Exclude same Image 
Show Tooltips 
Sort by Address 
Show Variable Groups 
Collapse last Level 
Show Variable Types 
Matching Type 
Matching Size 
All Types 
Array Mode 
Offsets 
Continuous 
Ignore Gaps 
Show Dialog 
Variable Name / Comment 
Hand over 
T ake over 
Cancel 
+ IntelliSense 
I Objectl (XtsProcessingUnit) (OXOIOIOOIO): Teaching data TcIoXts.TeachingDatm 
'TCOM Server' (10): SoftDrive Obi I (CTcSoftDrive).Encoder.Observer: Bandwidth 

1. 激活配置，然后打开XTS viewer



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