

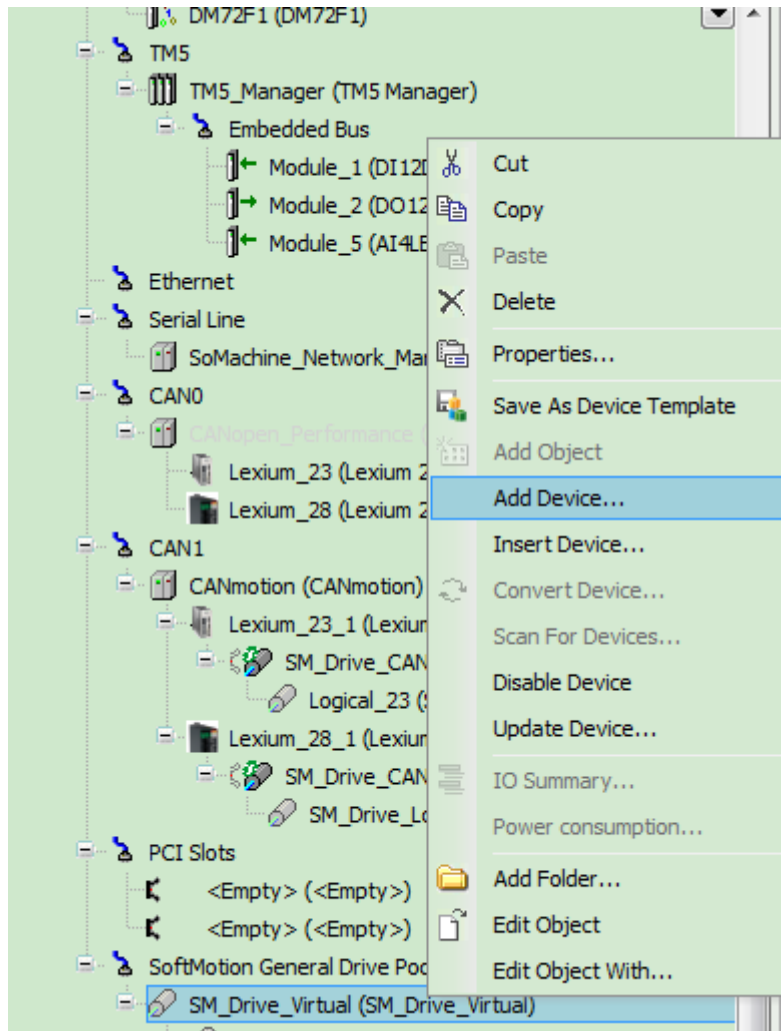
Synchronization offset in SoMachine

Hardware structure : LMC058 + Lexium28

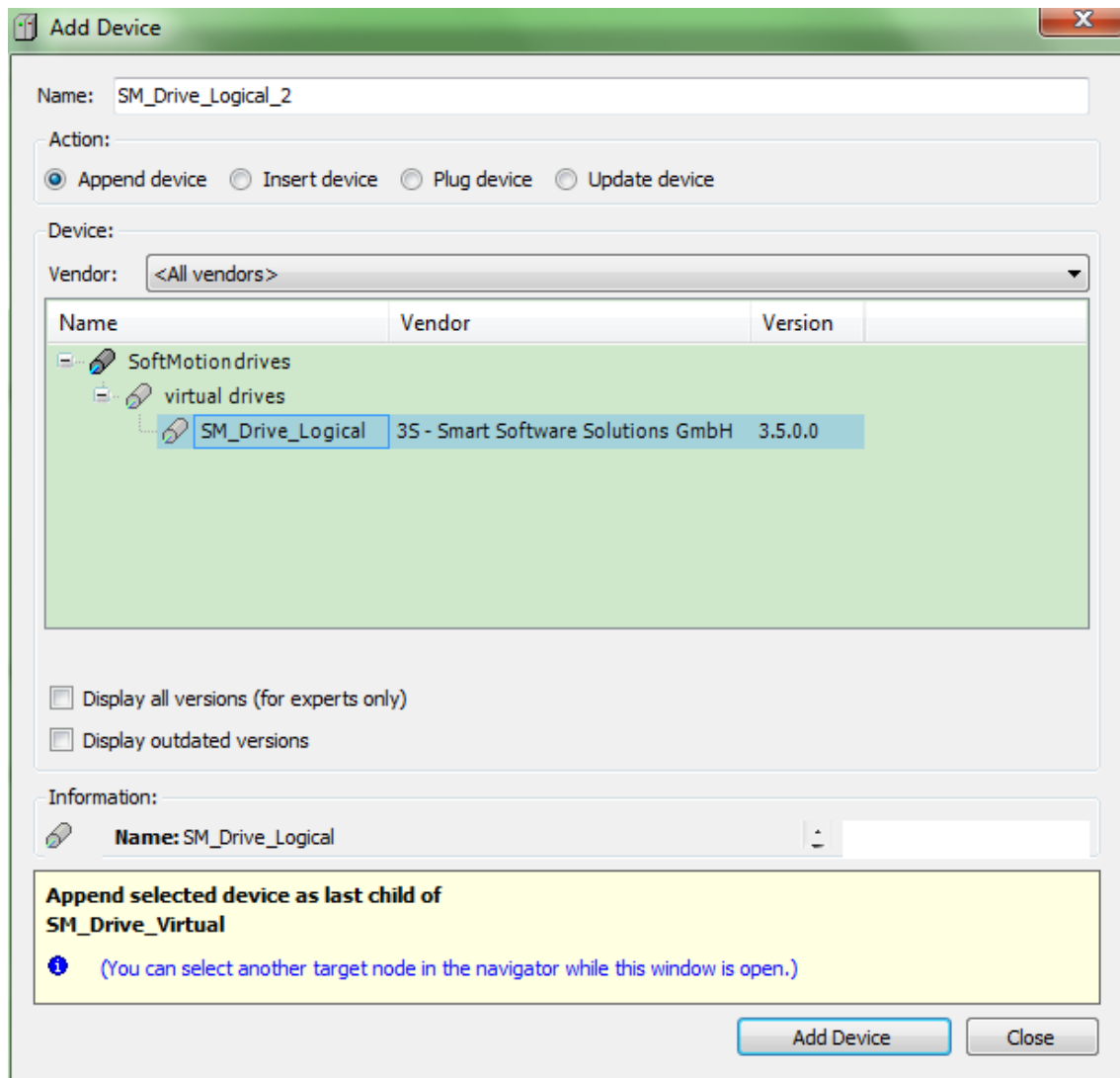
Synchronization offset is very popular when axis is in synchronization status. Using logical encoder is preferred.

The detail you can see the following steps:

1. Create the logical encoder of master. Right click the SM_Drive_Virtual → Add device



2. Select the SM_Drive_Logical



3. SM_Drive_Logical as master axis in FB MC_CamIn or MC_GearInPos

```

FB_CAM_LXm28(
Master:= SM_Drive_Logical,
Slave:= SM_Drive_CAN_Schneider_Lexium_28,
Execute:=Execute_CamIn ,
MasterOffset:=MasterOffset_1 ,
SlaveOffset:= SlaveOffset_1,
MasterScaling:=MasterScaling_1 ,
SlaveScaling:= SlaveScaling_1,
StartMode:= StartMode_1,
CamTableID:=CamTableID_1 ,
VelocityDiff:=VelocityDiff ,
Acceleration:= 1000,
Deceleration:=1000 ,
Jerk:= ,
TappetHysteresis:= ,
InSync=> ,
Busy=> ,
CommandAborted=> ,
Error=> ,
ErrorID=> ,
EndOfProfile=> ,
Tappets=> );

```

4. You can direct set the logical encoder parameter.

SM_Drive_Logical .fLogicalOffsetPosition : if you set the value of fLogicalOffsetPosition , it is immediately active.

SM_Drive_Logical.fManualShiftDistance is not immediately active. It is controlled by SM_Drive_Logical .bManualShiftMode.

When SM_Drive_Logical .bManualShiftMode is true , SM_Drive_Logical.fManualShiftDistance is active.

```

39 SM_Drive_Logical.fLogicalOffsetPosition;
40 SM_Drive_Logical.fManualShiftDistance;
41 SM_Drive_Logical.bManualShiftMode;

```