

# TB0385 Upgrading to winMulti v6

Upgrading to winMulti v6

 Difficulty **Medium**

 Duration **30 minute(s)**

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Step 36 - WIDTH SENSOR SETUP

Step 37 - Verify the width sensor is correctly wired in VS fieldbus device feedback

Step 38 - Map the IO in VS to the correct IO box / channel.

Step 39 - Set width measure parameters

Step 40 - Calibrate the widthMeasureOffset

Step 41 - Ensure all profiles with a rebate

Step 42 - Ensure all profile without a rebate have the rebate measurement set at Zero

Step 43 - Ps\_sideClamp is used now as the delay

Step 44 - Width measuring can be switched off

Comments

## Step 1 - Update TwinCAT on Backend PC

Update TwinCAT on Backend PC using file g:\Design\TwinCAT3\ TC31-XAR-Setup.3.1.4022.2.exe

 ...Can use v4022 if already installed

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## Step 2 - Ensure Camera PC is the front end (TB...)

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## Step 3 - Backup winMulti version – zip up c:\multi folder on front end

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## Step 4 - Copy across latest winMulti version to c:\multi folder

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## Step 5 - Download backend PLC projects and setup

Run VS,  
Open from Target  
select in folder c:\TwinCAT\[BuildNo]Target

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## Step 6 - Archive current PLC

Right click on solution and create an archive project

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## Step 7 - Close VS

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## Step 8 - Rename the [build No] project

Find c:\TwinCAT Projects\Stuga\[BuildNo] folder  
Rename to  
c:\TwinCAT Projects\Stuga\[BuildNo]old

## Step 9 - Open VS and create a new project from the recent archive

Create [buildNo] folder

This will create a fresh folder for updating

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## Step 10 - Export Mapping

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## Step 11 - Rename tc3Multi\*\*\* PLC project file to tc3Multi

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## Step 12 - Rename PLC\_Reset\*\*\* PLC project file to PLC\_Reset

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## Step 13 - Check Mappings

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## Step 14 - Export Mapping

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## Step 15 - Close VS

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## Step 16 - File transfer of PLC projects

File transfer from git tc3Multi

Copy to the [buildNo] folder and overwrite

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## Step 17 - Open VS

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## Step 18 - Check Mappings

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## Step 19 - Rebuild project



...If there are any issues in importing, use ExportOpenXML / ImportOpenXML

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## Step 20 - Ensure Boot Setting are set to start in Run Mode

(Defaults to Config mode after the TwinCAT update)

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## Step 21 - Change V axis Number to Axis 11 from 7

(axis->Settings tab Link to PLC button)

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## Step 22 - Change W axis number to Axis 12 from 8

(axis->Settings tab Link to PLC button)

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## Step 23 - Update axes.mul to new V and W numbers

(field at end of line, NOT the id number at start)

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## Step 24 - Link the reset input on PLC\_Reset to the rest output on tcMulti

This should be there but check

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## Step 25 - Activate the new configuration from VS

Check the EtherCAT devices - May need a reload devices if the devices cannot see the fieldbus boxes

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## Step 26 - Check that the emergency stop InS\_Estop

Check that the emergency stop InS\_Estop when reset gives a high input into the IO screen

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## Step 27 - Update the controlSystems Log

<https://stugaltd.monday.com/boards/304269981>

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## Step 28 - Ensure c:\multi\masterdir.saw is set to two lines of "c:\ddrive\"

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## Step 29 - Run winMulti

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## Step 30 - Settings-> IO Map stoppable outputs set on correct location (MH / Saw).

Only need to update the ones that are ticked

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## Step 31 - Check the inverter program is updated to latest version

This is not needed on a Yaskawa Inverter - follow the process

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## Step 32 - Pauses Update

```
Ps_blowerPulseA=2500  
ps_InvAccelTime300Hz=400  
ps_InvAccelTime50Hz=400  
psInvDecelTime300Hz=400  
psInvDecelTime50Hz=400
```

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## Step 33 - zTurretSawType set to "Stuga" (value 1)

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## Step 34 - Ensure the latest messages.saw is copied into c:\ddrive\

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## Step 35 - Ensure Saw Infeed Gate Alarm not enabled

It is not an alarm and will stop transfer table if opened

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## Step 36 - WIDTH SENSOR SETUP

 ...Only if fitted

## Step 37 - Verify the width sensor is correctly wired in VS fieldbus device feedback

The voltage input is displayed in the "Value" column and should read a low value when clamp is open and above 32000 when clamp closed (CLIS output on)

 ...Only if fitted

## Step 38 - Map the IO in VS to the correct IO box / channel.

This is iAnalogueInputArray[0].

 ...Only if fitted

## Step 39 - Set width measure parameters

- a. widthMeasureOffset=132.8
- b. widthMeasureScale=-0.0030469 <- Note the minus at the beginning
- c. widthMeasuringMode=1

 ...Only if fitted

## Step 40 - Calibrate the widthMeasureOffset

Calibrate the widthMeasureOffset by using CLIS to measure some known profile widths. The measure result can be seen on frmService->Clear Blockages Tab

 ...Only if fitted

## Step 41 - Ensure all profiles with a rebate

Ensure all profiles with a rebate where CLIS will go underneath have the rebate distance correctly set up in the profile settings. This is all Z profiles. These can be set from the Settings->Profiles Tab

 ...Only if fitted

## Step 42 - Ensure all profile without a rebate have the rebate measurement set at Zero

 ...Only if fitted

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## Step 43 - Ps\_sideClamp is used now as the delay

Ps\_sideClamp is used now as the delay for the side clamp before checking the width – this may need to be increased to allow side clamp to close on narrow profiles

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## Step 44 - Width measuring can be switched off

If all fails, width measuring can be switched off with widthMeasuringMode=0

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