

Quick start guide for mxAutomation V3.0.2

The new serial version mxAutomation 3.0.2 can be installed only with WorkVisual.
It is not anymore necessary to install the Software via USB-stick on the KRC setup.

1 Requirements:

- Minimum KSS8.5.0 with Minimum WorkVisual V5.0.0
- Minimum KUKA.PLC mxAutomation V3.0.2
- Minimum ProConOS 4-1 Ltd V5.0

Optional:

- KUKA.ConveyorTech min. V7.1.1
- KUKA.VectorMove V2.0

[-> free Download](#)

-> free of charge, if you order mxAutomation

-> necessary to use Conveyor FBs

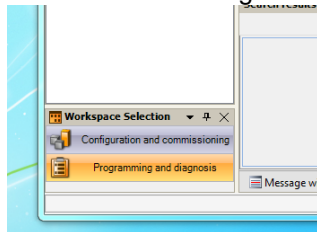
-> necessary to use VectorMove FBs

2 Installation and configuration:

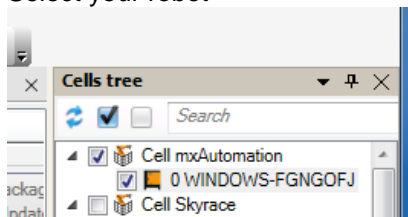
1. Commission the robot as usual, try to move it in T1 mode.
2. Install and open on you WorkVisual
3. Get the KOP-Files of mxAutomation and ProConOS.

There are different ways to get them:

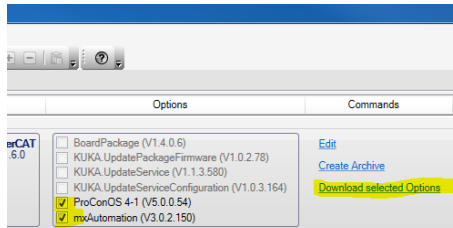
- You will find the KOP-File on the USB-stick of the Media-Kit.
- You can copy them from D:/KUKA_OPT/ of your KRC4
- You can download them by WorkVisual from your KRC4:
 - Switch into the "Programming and diagnosis" mode in WorkVisual



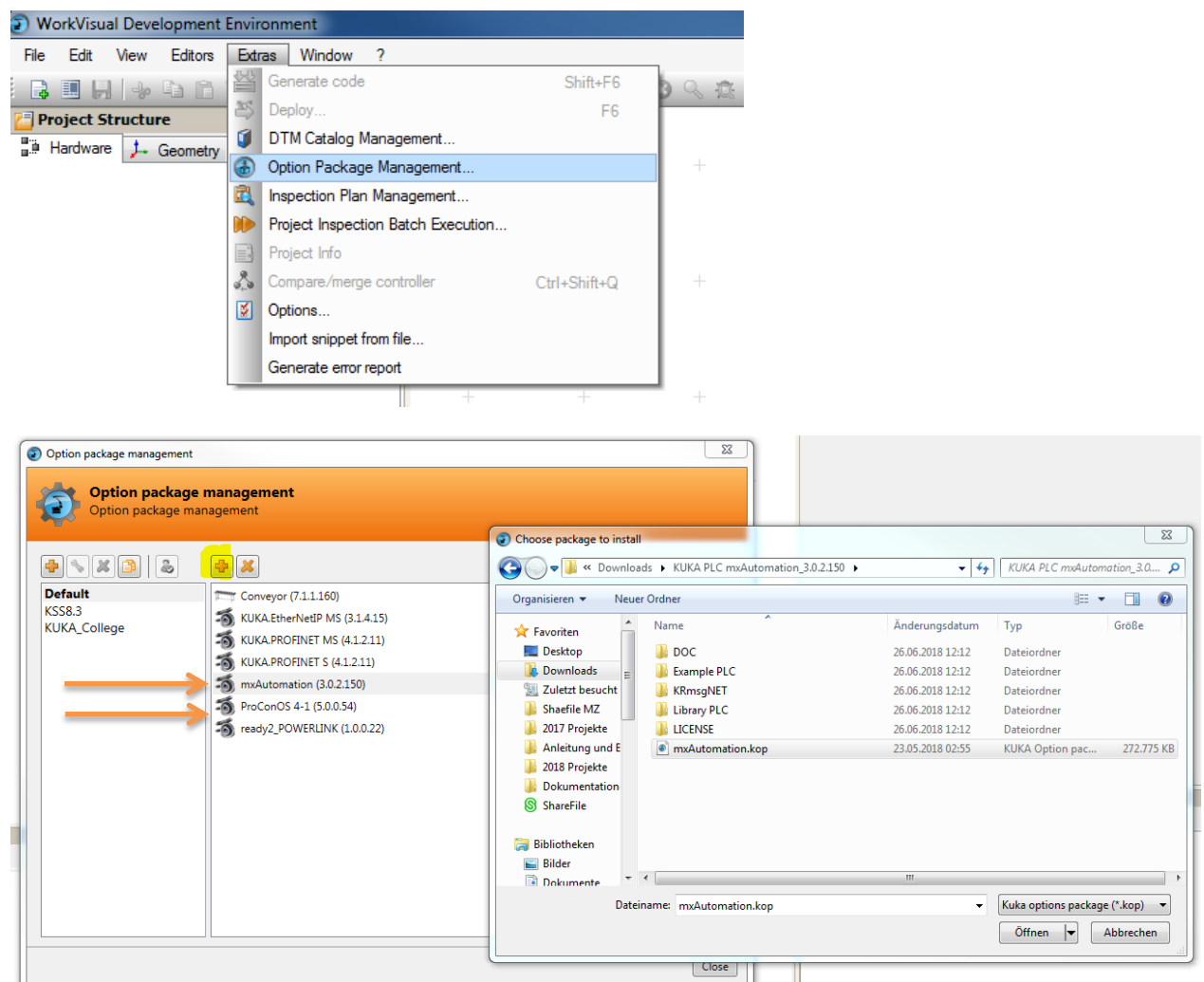
- Select your robot



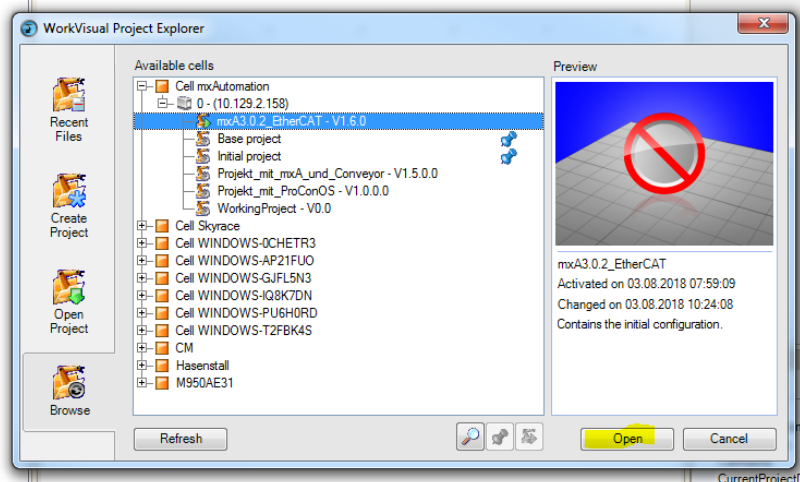
- Download the KOP of ProConOS and mxAutomation



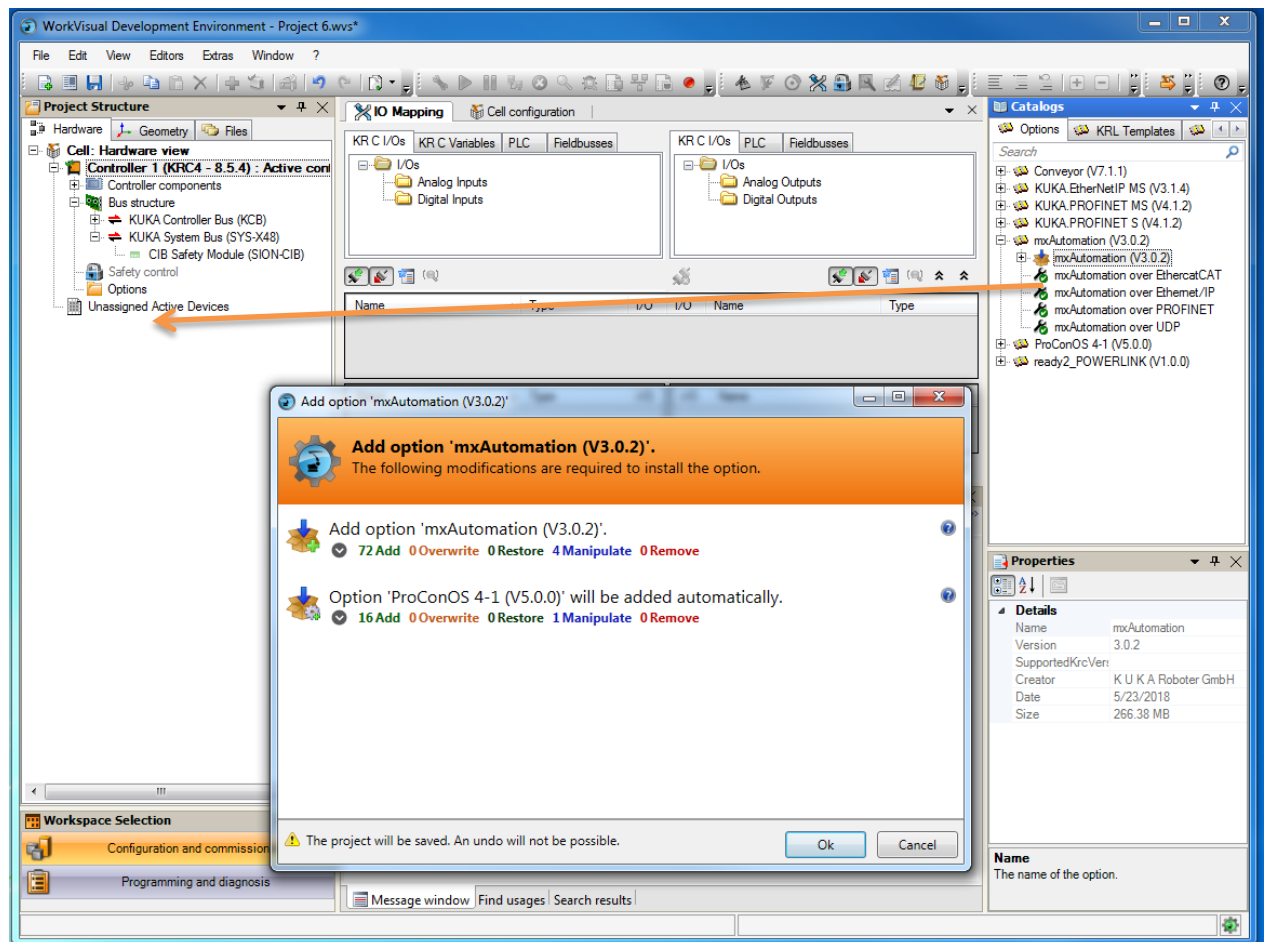
4. Install the KOP-Files in WorkVisual for ProConOS and mxAutomation



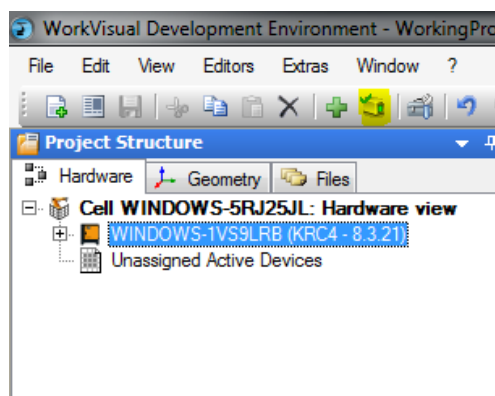
5. After that, pull the WorkVisual project and set the controller as active



6. “Drag and Drop” the option “mxAutomation (V3.0.x)” from the catalogue “Options” into the project.

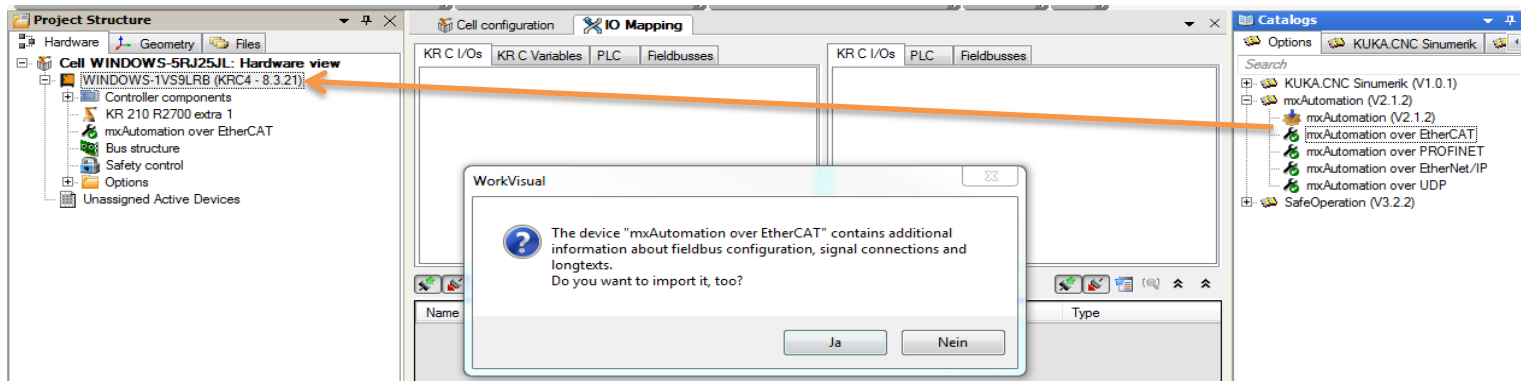


7. Deactivate the controller of the project.

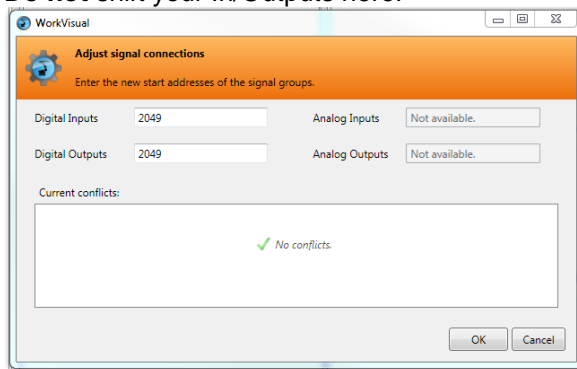


9. Insert your fieldbus system for your mxAutomation Interface.

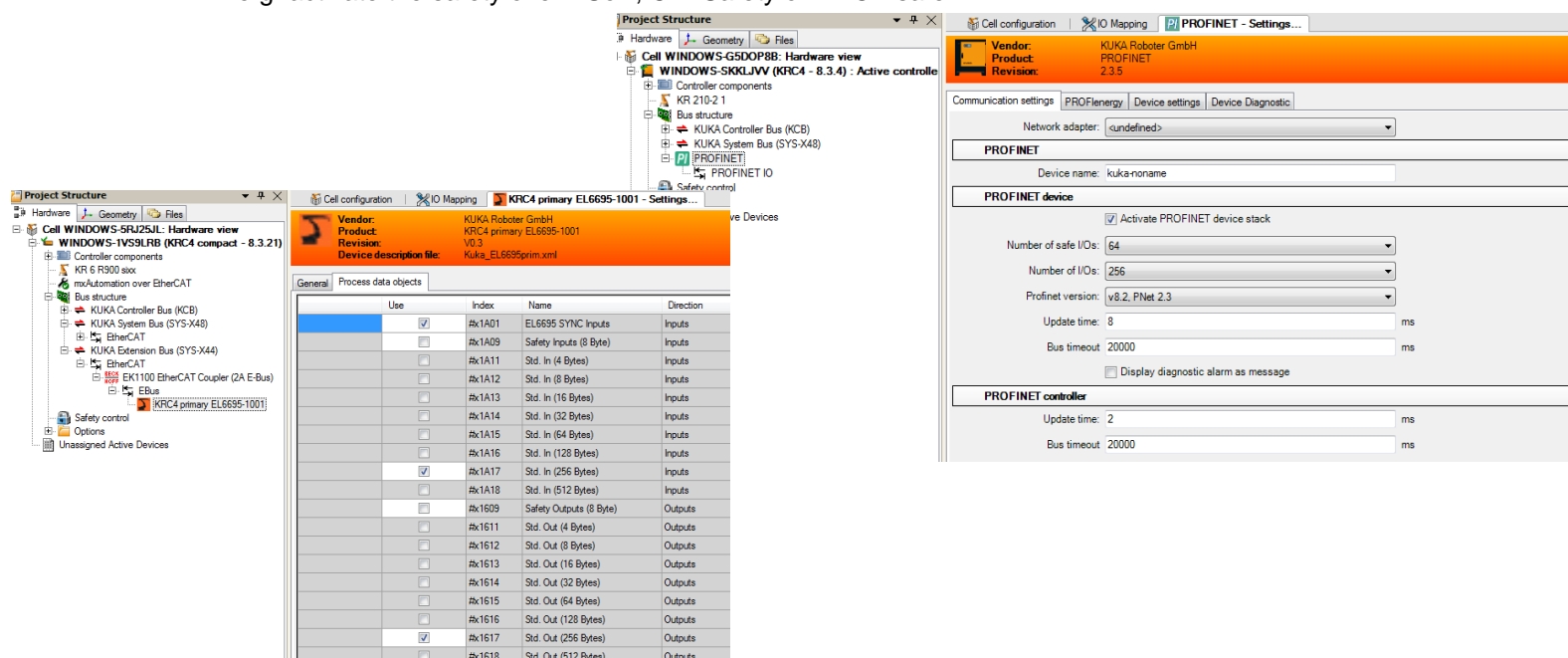
Important: If the fieldbus system was previously already in your project you have to delete it first!
 e.g.: You want to use the EtherCAT for mxA, so there should be no X44 in your project before.



10. The notify message **should display no conflicts**.
Do not shift your In/Outputs here!



11. Set the controller as active in WorkVisual, and compile the project now. (takes up to 5 minutes)
12. Now you can adjust your settings of your used fieldbus system
 e.g. activate the safety over FSoE, CIP Safety or PROFINsafe



12.2. Only necessary if UDP is used as fieldbus

Activate the UDP-Communication by setting the Variable "MXA_COMM_MODE" to "1"

KRC > R1 > TP > mxAuto > mxA_Util > mxA_Config.dat

➔ You can change here also the Timeout

```

452  DECL GLOBAL INT MXA_IDXPLC_IR_Status2=108
453  DECL GLOBAL INT MXA_IDXPLC_IR_Status3=109
454  DECL GLOBAL INT MXA_IDXPLC_IR_Status4=110
455  DECL GLOBAL INT MXA_IDXPLC_IR_Status5=111
456  DECL GLOBAL INT MXA_IDXPLC_IR_Status6=112
457  DECL GLOBAL INT MXA_IDXPLC_IR_Status7=113
458  DECL GLOBAL INT MXA_IDXPLC_IR_Status8=114
459  DECL GLOBAL INT MXA_IDXPLC_OrderIdRet=115
460  DECL GLOBAL INT MXA_IDXPLC_CmdIdRet=116
461  DECL GLOBAL INT MXA_IDXPLC_CmdDataRetCS=117
462
463  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret1=101
464  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret2=102
465  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret3=103
466  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret4=104
467  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret5=105
468  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret6=106
469  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret7=107
470  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret8=108
471  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret9=109
472  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret10=110
473  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret11=111
474  DECL GLOBAL INT MXA_IDXPLC_CmdData_Ret12=112
475
476  ;ENDFOLD
477  ;FOLD USER GLOBALS
478  ;Kommunikationsmodus
479  ; 0 - IO Interface
480  ; 1 - UDP
481  DECL GLOBAL INT MXA_COMM_MODE = 1
482  ; Check UDP connection
483  ; UDP connection timeout, if timer elapsed the robot will stop
484  ; After quitt the message the robot will be ready to move
485  DECL GLOBAL INT gmxA MAX UDP Timeout=50 ;[ms]
486
487  ; maximum index for touch up positions, max. value 100
488  DECL GLOBAL INT MXA_TOUCHIDX_MAX=100
489  ;ENDFOLD
490  ENDDAT
491
    
```

13. Send the project to the robot. (Now the I-KOP will be transmitted, and installed)
14. After the activation of the robot, the project requires a reboot of the controller.
15. Reboot the controller a second time. (This step is necessary to start the ProConOS)
- 16.

Finish ➔ For questions and PLC-examples: [SupportSoftware \(Robotics DE\)](#)