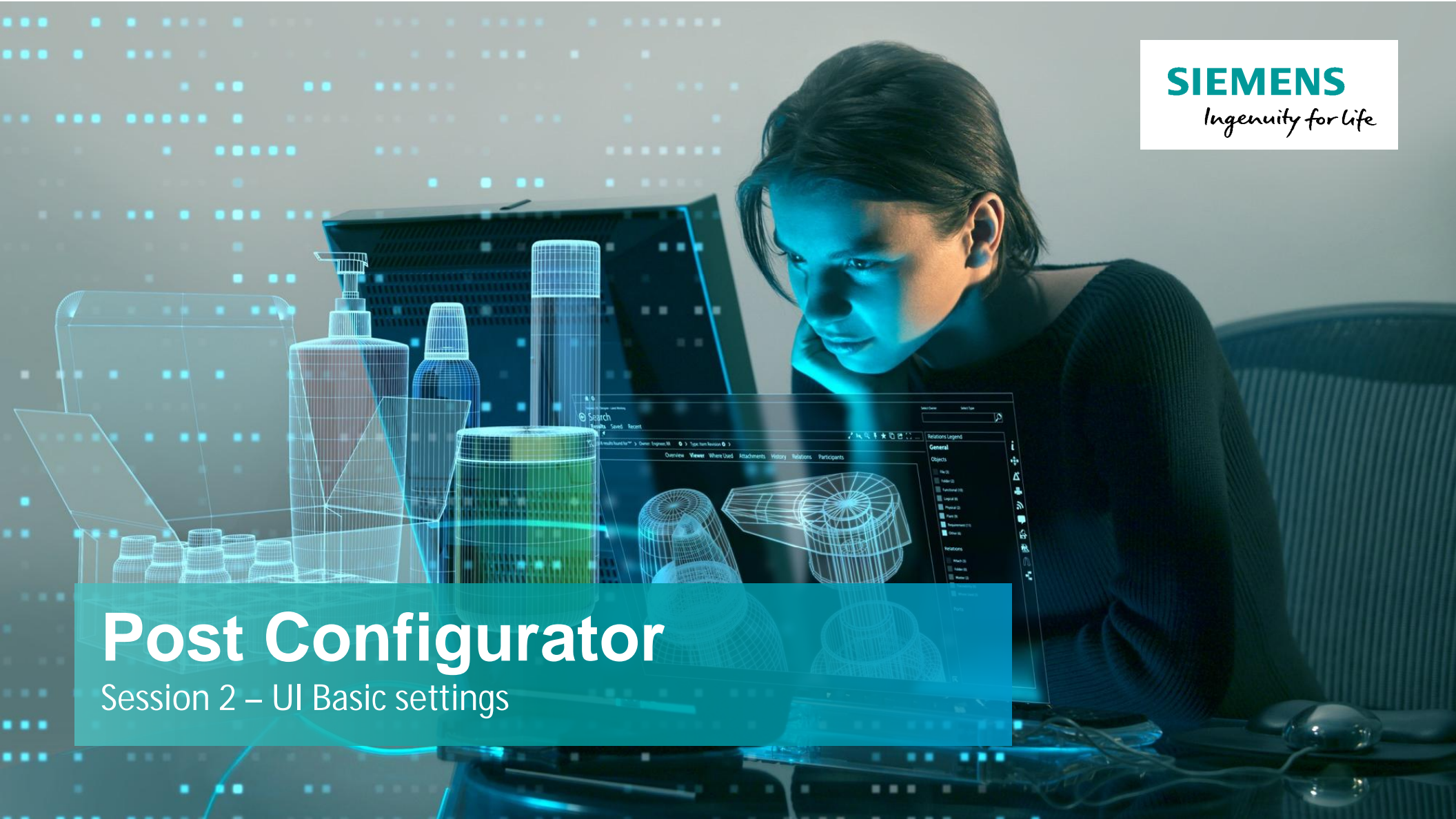


# Post Configurator

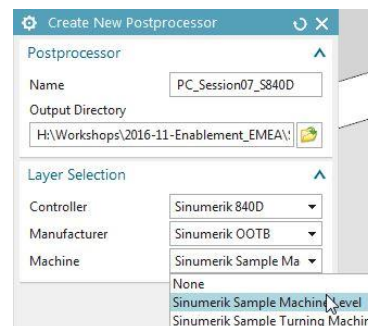
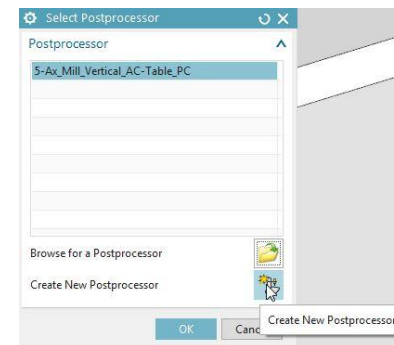
Session 2 – UI Basic settings



## Session - 02

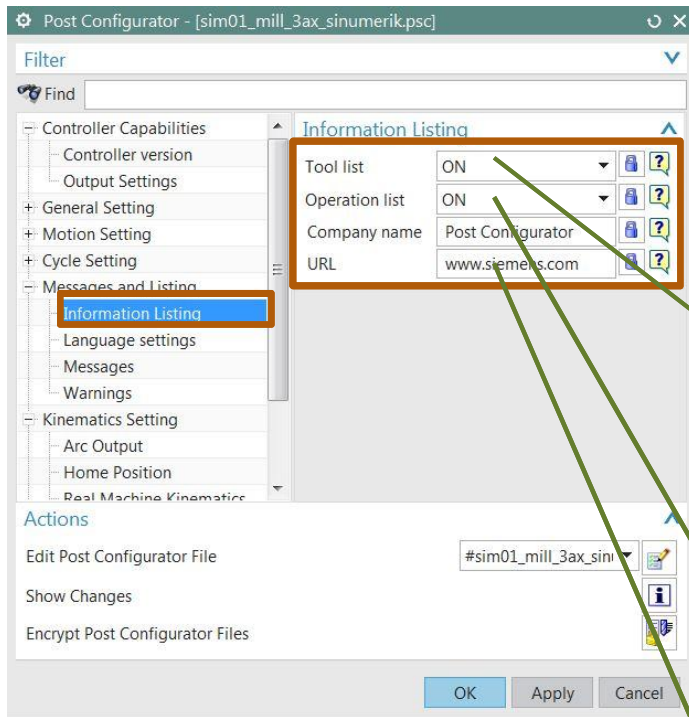
### Create a new Postprocessor based on Sinumerik 840D with OOTB Machine and Manufacturer Level

- Open existing CAM-Setup (sim08\_mill\_5ax\_cam\_sinumerik\_mm.prt)
- Open Post Configurator UI in Ribbon bar
- Select create new Postprocessor
- Browse for a new output folder (e.g. Enablement2016\_EMEA/PC\_Session01)
- Select a unique name for Postprocessor
- Select Sinumerik840D as controller
- Select OOTB Sinumerik Machine Level
- Select OOTB Sinumerik Manufacturing Level
- Create the post and open the post



# Post Configurator – Changing Properties in the UI

## UI settings– Information Listing



Configuration Object	Information Listing
Property	Tool list Operation list Company name URL

ToolList			
Toolnumber	Toolname	Description	Processingtime
1	001002_001	Insert Cutter 40 mm	00:00:00
4	001003_008	Ball End 10 mm	00:00:42
3	001003_088	End mill 10 mm	00:00:39
2	001002_019	End mill 10 mm	00:00:46
9	001003_092	End mill 10 mm	00:00:59
4	001003_088	End Mill 8 mm	00:00:19
5	001003_094	End Mill 11.5 mm	00:00:44
10	001003_092	Ball End 7/16"	00:00:53
7	001004_010	MC-Center Drill 20 mm	00:00:05
8	001003_095	Center Drill 10.0 mm	00:00:06

OperationList			
Refname	Toolname	Operationtype	Cuttingtime
FACE_TOP	001002_001	Volume Based 2.5D Milling	00:00:39
CAVITY_TOP	001003_001	Cavity Milling	00:00:24
CAVITY_MILL	001003_008	Cavity Milling	00:00:42
FLANAR_PROFILE_TOP	001003_088	Flanar Milling	00:00:07
FLANAR_MILL	001003_018	Volume Based 2.5D Milling	00:00:09
FLANAR_MILL	001003_092	Volume Based 2.5D Milling	00:00:14
FACE_SIDES	001002_001	Volume Based 2.5D Milling	00:00:17
FACE_SIDES	001002_001	Volume Based 2.5D Milling	00:00:16
FACE_SIDES	001002_001	Volume Based 2.5D Milling	00:00:16
FACE_SIDES	001002_001	Volume Based 2.5D Milling	00:00:17
FACE_SIDES	001002_001	Volume Based 2.5D Milling	00:00:16
FACE_FRONT	001002_001	Volume Based 2.5D Milling	00:00:13
FACE_FRONT_CHAMFER_BOTTOM	001001_018	Volume Based 2.5D Milling	00:00:04
FACE_FRONT_CHAMFER_TOP	001001_019	Variable-axis Surface Contouring	00:00:03
POCKET_CAVITYMILL	001003_088	Cavity Milling	00:00:13
POCKET_CAVITYMILL	001003_088	Cavity Milling	00:00:13
POCKET_FLANAR_CUTCOMP	001003_088	Flanar Milling	00:00:10
POCKET_FLANAR_CUTCOMP	001003_088	Flanar Milling	00:00:10
FACE_MILL_POCKET_FLOOR	001001_018	Volume Based 2.5D Milling	00:00:04
FACE_MILL_POCKET_FLOOR	001001_018	Volume Based 2.5D Milling	00:00:04
FACE_MILLING_TEXT	001001_096	Volume Based 2.5D Milling	00:00:44
VARIABLE_AXIS_SURFACE	001003_092	Variable-axis Surface Contouring	00:00:13
DRILL_HOLE	001004_010	Hole Making	00:00:05
DRILL_IN_CENTER_HIF	001001_499	Hole Making	00:00:06
Totaltime			00:12:33

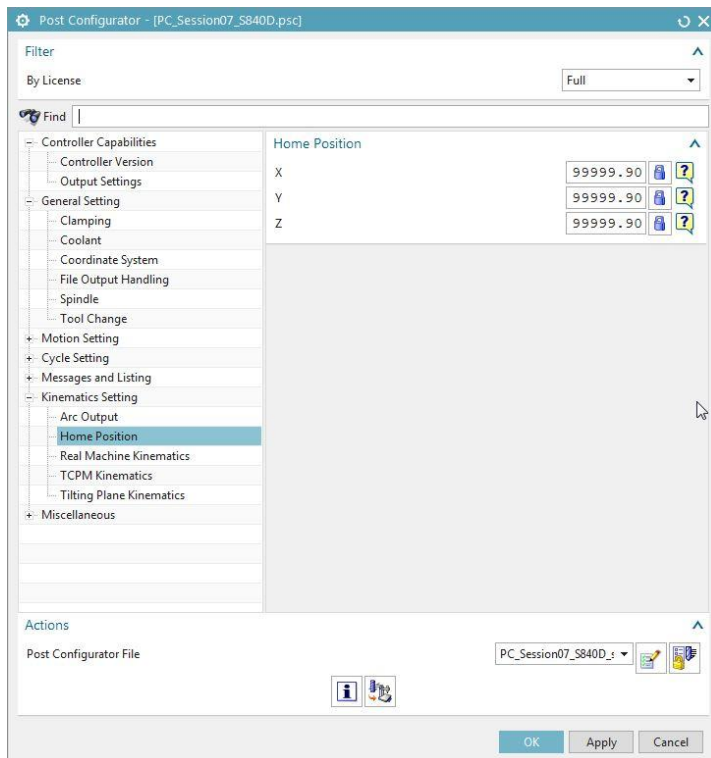
  

Post Configurator	
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- Information listing is only visible in the listing window
- This information is provided by the pretreatment

- Tool List contains Toolnumber, Toolname, Description and Processingtime
- Operationlist contains Operationname, Toolname, Operationtype and Cuttingtime

## Post Configurator – Changing Properties in the UI UI settings– Home Position Setting

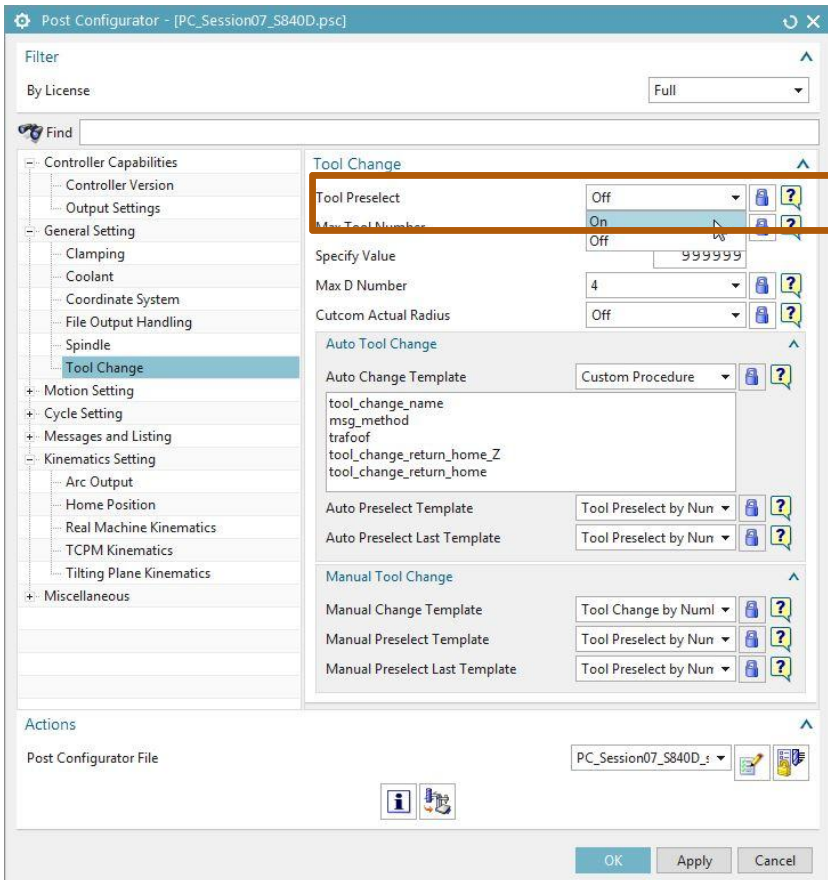


- with creation of post the default value is 99999.9
- must change after creation
- if work with kinematic machine this are normally the initial axis values
- Tip: If you plan to use the post for metric and inch and Home Position is not 0,0,0 you have to add some additional tcl in service layer (see Advanced Modifications)

Configuration Object	Home Position Settings
Property	Z
Value	<b>99999.9</b> N1 G40 G17 G21 G94 G90 (FACE_TOP , TOOL : UGT0202_001) N2 G0 G53 Z99999.9 N3 T01 M6 N370 ;Initial Move
Value	<b>0</b> N1 G40 G17 G21 G94 G90 (FACE_TOP , TOOL : UGT0202_001) N2 G0 G53 Z0 N3 T01 M6 N370 ;Initial Move

# Post Configurator – Changing Properties in the UI

## UI Settings– Tool Preselect



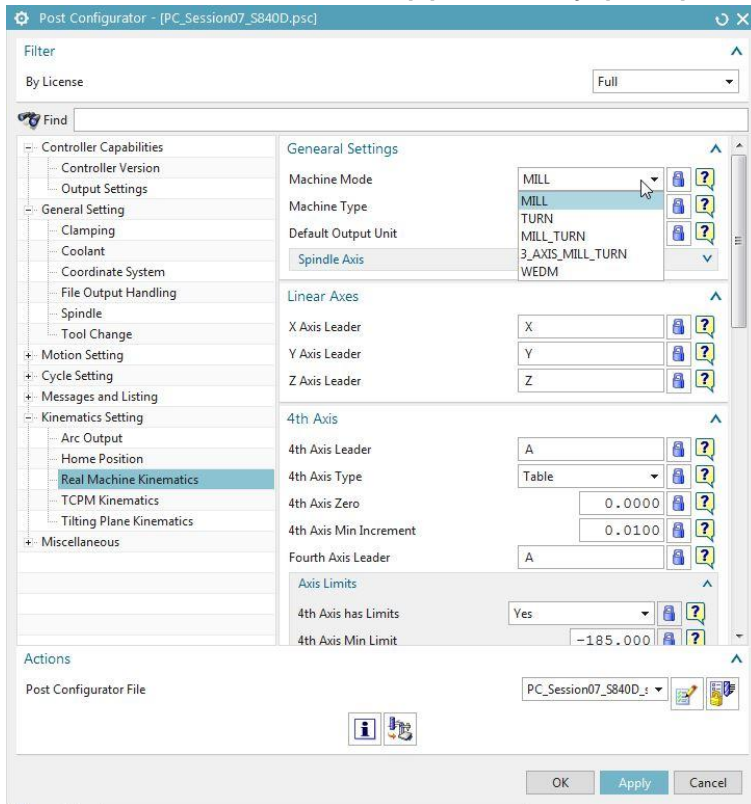
<b>Configuration Object</b>	Tool Change
<b>Property</b>	Tool Preselect
<b>Value</b>	<b>OFF</b> N1 G40 G17 G21 G94 G90 (FACE_TOP , TOOL : UGT0202_001) N2 G0 G53 Z0 N3 T01 M6 N370 ;Initial Move
<b>Value</b>	<b>ON</b> N1 G40 G17 G21 G94 G90 (FACE_TOP , TOOL : UGT0202_001) N2 G0 G53 Z0. N3 T01 M6 N4 T06 N5 G54

# Post Configurator – Changing Properties in the UI

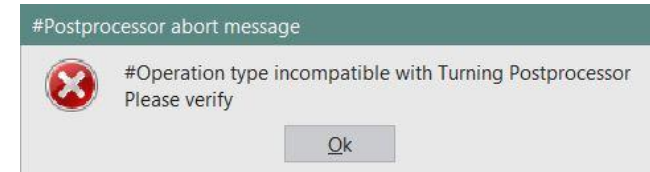
## UI settings– Machine Mode



➤ Machine mode supported by postprocessor. Compatibility will be checked with operation's machine mode.



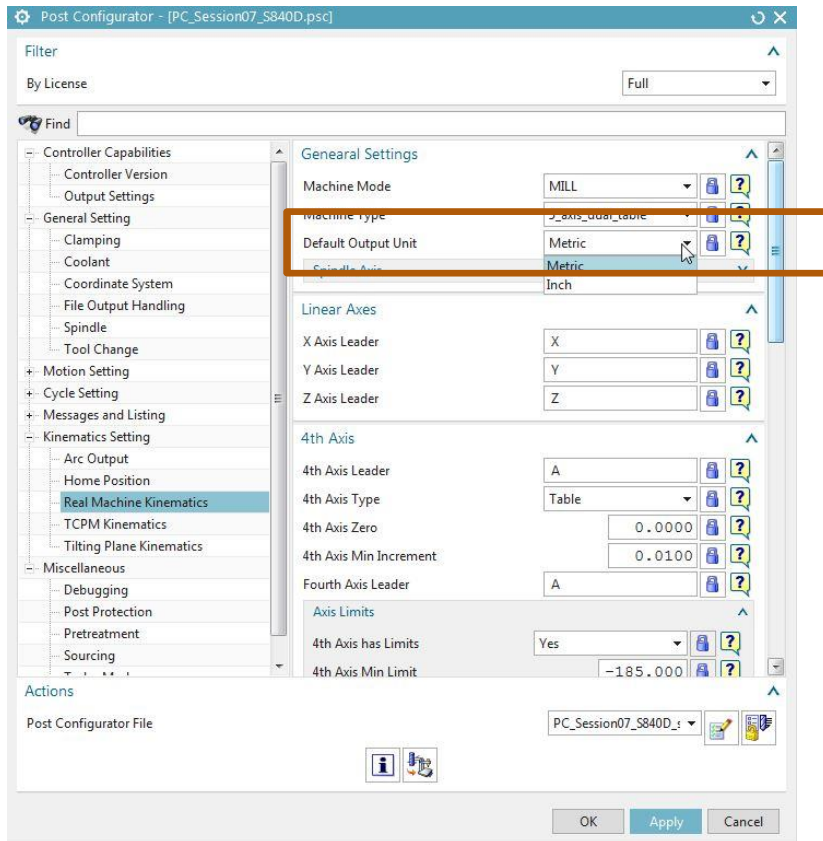
<b>Configuration Object</b>	Machine Mode
<b>Property</b>	Machine Mode
<b>Value</b>	<b>File Based</b> Defined in machine layer
<b>Value</b>	<b>TURN</b> (If operation is milling)



- machine mode and machine type control general output, like templates for home positions or toolchange

# Post Configurator – Changing Properties in the UI

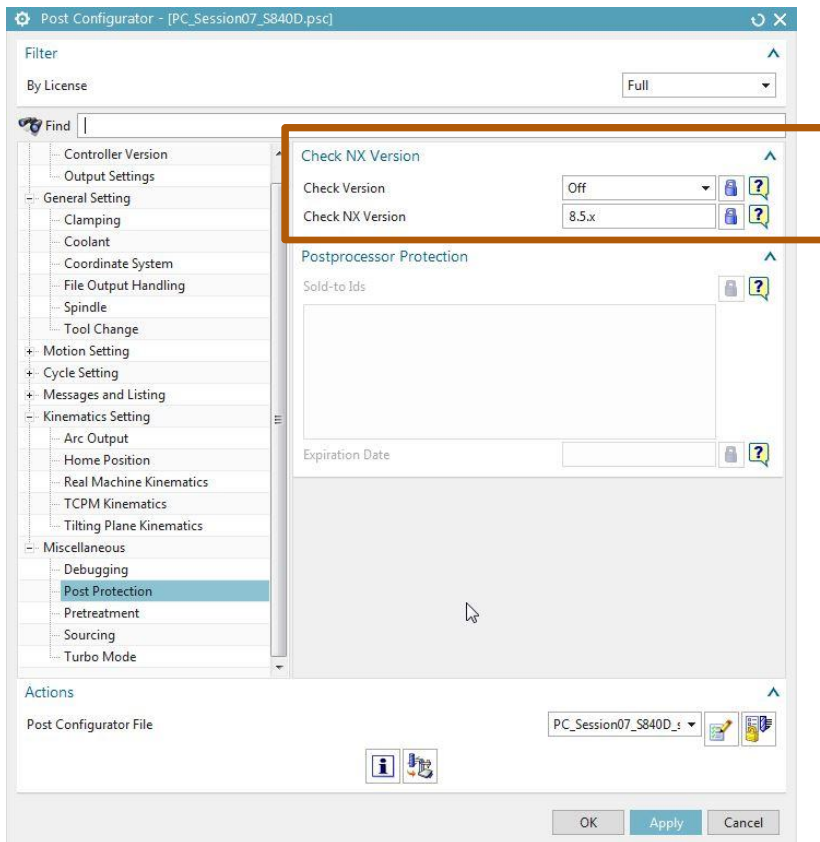
## UI settings– Default Output unit



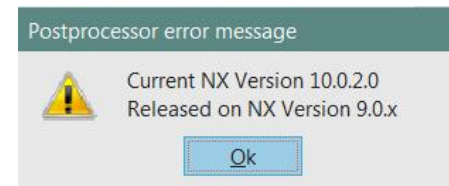
Configuration Object	KinContainer_MTB
Property	Default Output Unit
Value	<b>Metric</b> N220 G0 X-79.599 Y42. Z50. S2228 D1 M3 N230 M8 N240 Z3. N250 G17 G1 G90 Z0. F1203. N260 X-56. N270 X56.
Value	<b>Inch</b> N220 G0 X-3.1338 Y1.6535 Z1.9685 S2228 D1 M3 N230 M8 N240 Z0.1181 N250 G17 G1 G90 Z0. F47.4 N260 X-2.2047 N270 X2.2047

# Post Configurator – Changing Properties in the UI

## UI settings- Check NX Version



<b>Configuration Object</b>	Check NX Version
<b>Property</b>	Check Version
<b>Value</b>	ON
<b>Property</b>	Check NX version
<b>Value</b>	If current version not same as input version



- normally post libraries are backwards compatible without restrictions to NX9.0 and with restrictions to NX8.5
- if add functionality which only works with one NX Version it's recommend to switch this on and check the version

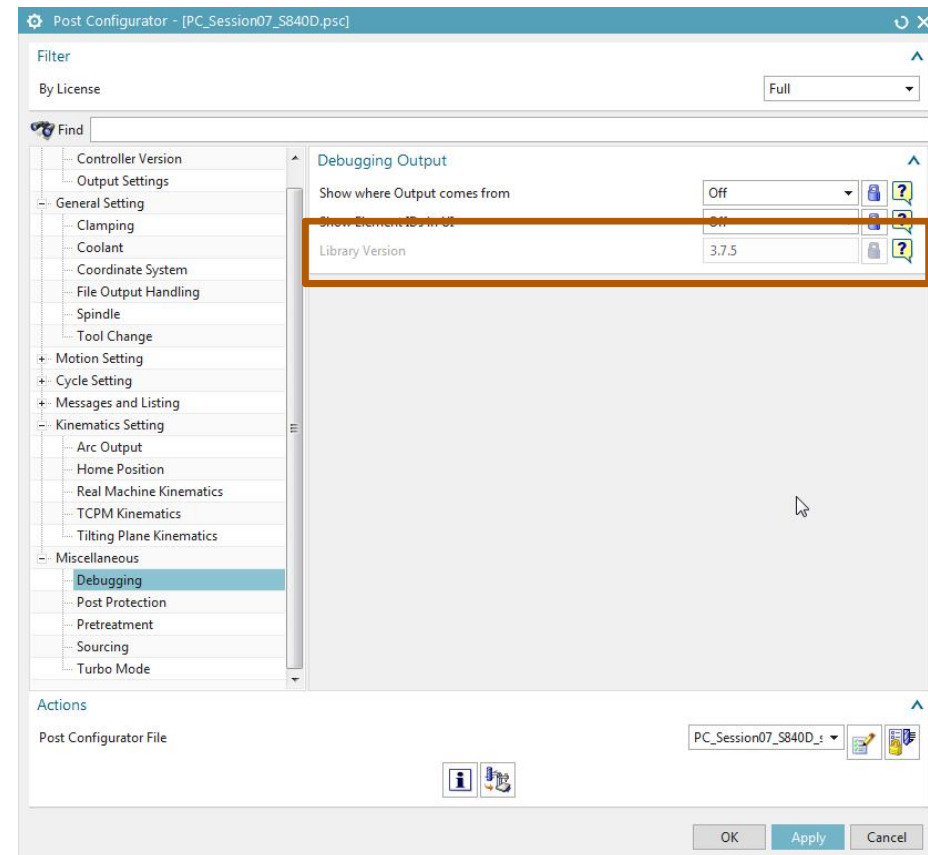


# Post Configurator – Changing Properties in the UI

## UI settings- Check Library Version



- Library version of the used librarys for this post
- It's a read only property
- Useful for updating posts
- Value can read through:  
„set myVersion [LibraryInformation library\_version]“  
Or  
MOM\_output\_to\_listing\_device "----> [LibraryInformation library\_version]"



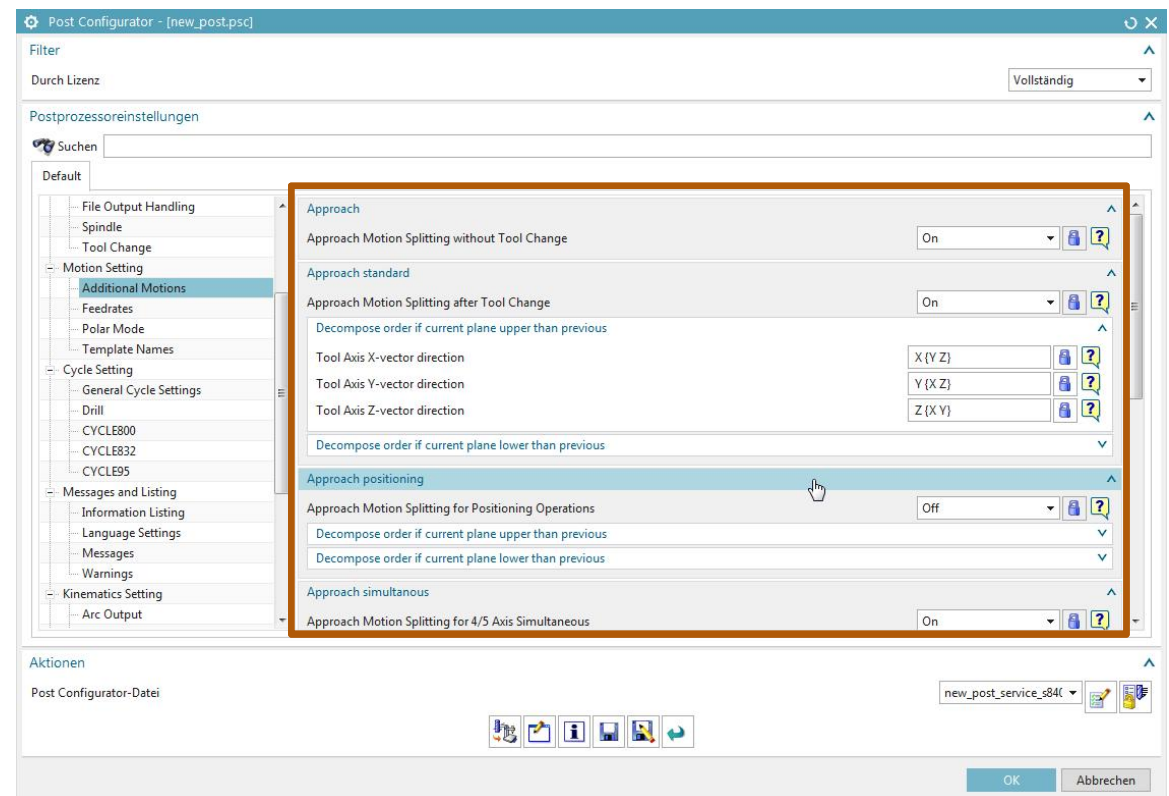
# Post Configurator – Changing Properties in the UI

## UI settings- Approach motion splitting

N310 CYCLE800(1,"R\_DATA",0,57,0,0,0,0,0,0,0,0,0,1,0)  
N320 ;Initial Move  
N330 G0 X-79.599 Y42. Z50. S2228 D1 M3  
N340 M8  
N350 Z3.

- Options to configure different Approach motions easy by one-click

N310 CYCLE800(1,"R\_DATA",0,57,0,0,0,0,0,0,0,0,0,1,0)  
N320 ;Initial Move  
N330 G0 X-79.599 Y42. S2228 D1 M3  
N340 Z50.  
N350 M8  
N360 Z3.

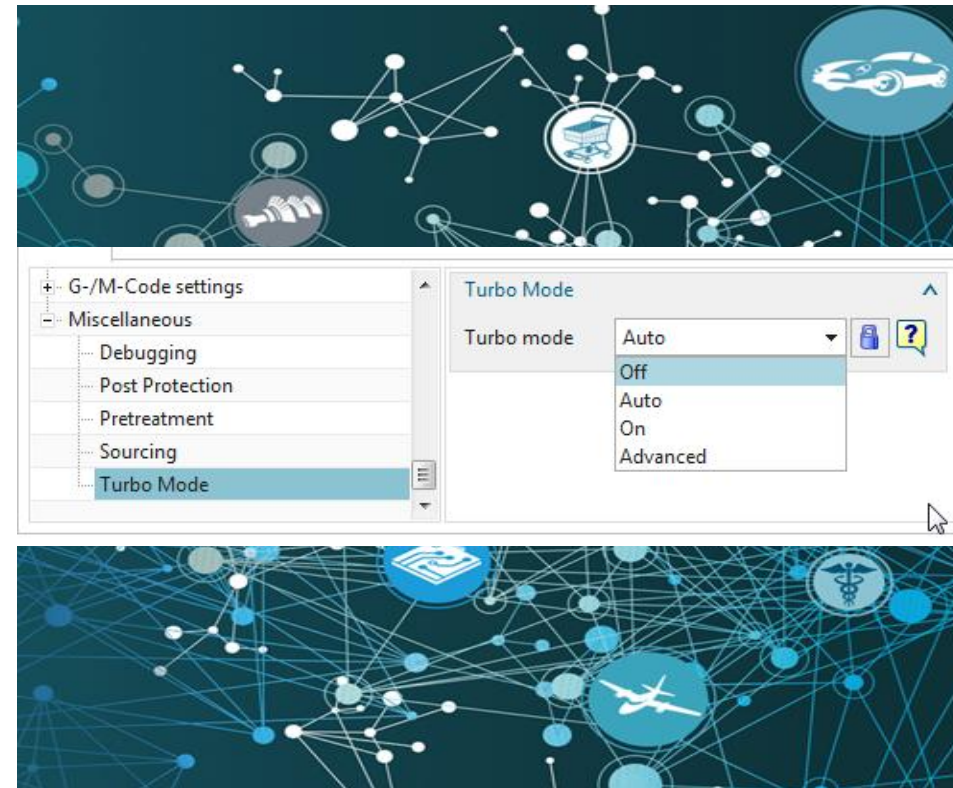


# Turbo Mode

- Turbo Mode can be used to speed up to post processing for simple Movement outputs
- Turbo Mode will bypass the Tcl Interpreter and directly output the code using a C-Routine
- Can speed up post processing for those cases by 6-times

**Note:**

- Its not possible to execute Tcl code for those events
- A lot of standard post MOM functions do not work (Review Tool)
- Output can be wrong in certain situations (Changing tool axis)
  - Off: all events processed due Tcl interpreter
  - Auto: Post decides if using C-Routine or Tcl interpreter
  - On: alle events processed due C-Routine
  - Advanced: previous version of Auto-mode





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Realize innovation.