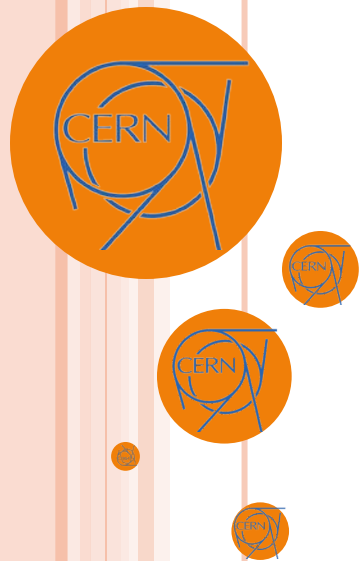


# UNICOS: UNIFIED INDUSTRIAL CONTROL SYSTEM CPC (CONTINUOUS PROCESS CONTROL)

## BASIC COURSE

### SESSION 3: AUTOMATIC PLC CODE GENERATION



UCPC 6

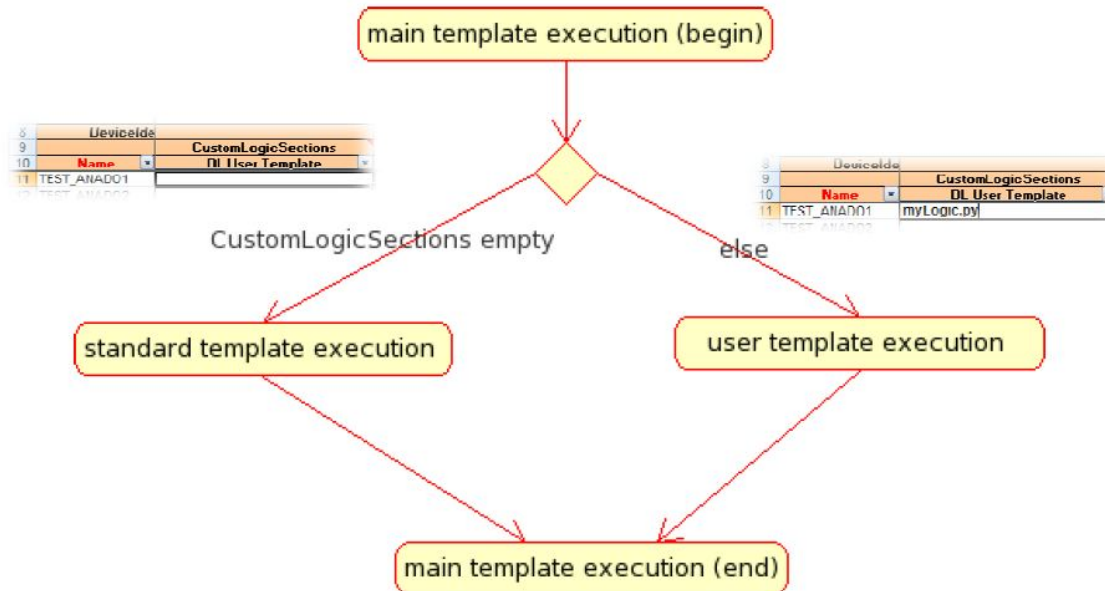
UNICOS-Continuous Process Control

# PRINCIPLE

- Logic Generator uses templates to generate all the PCO sections and Field objects dependant logic.
- Modifying this template the user code is automatically generated.
- Multiple functions available for the model (template).
- Benefits:
  - Higher quality of the generated code (errors, maintainability)
  - Code efficiency
  - More efficient implementation phase.

# GENERATION PROCESS

- Logic template for Dependent logic and PCO sections are split in two files:
  - Main template. Mandatory logic implemented. Not to be modified.
  - Standard Template (default logic) or User template (user logic)



# TEMPLATES LOCATION

- [-] Folder: CPC\_TEST\_BEN\_S7
  - Folder: Baseline
  - Folder: Log
  - [+] Folder: Output
  - [-] Folder: Resources
    - Folder: DeviceTypes
    - Folder: IOCommissioning
    - [+] Folder: S7InstanceGenerator
    - [-] Folder: S7LogicGenerator
      - Folder: Config
      - [-] Folder: Rules
        - Folder: CommonTemplates
        - [-] Folder: DependentLogicTemplates
          - Folder: Main
        - Folder: GlobalTemplates
        - [-] Folder: PCOTemplates
          - Folder: Main
        - [-] Folder: UserSpecific
          - Folder: DL
          - Folder: PCO
    - [+] Folder: SemanticCheckRules
    - Folder: Upgrade
    - [+] Folder: WinCCFlexInstanceGenerator
    - [+] Folder: WinCCOAInstanceGenerator
    - Folder: Specs

Help					
DeviceId					
Name	Parameter7	Parameter8	Parameter9	Parameter10	DL User Template
FSVE_TC01_004					
UAMX_TC04_030					
UAPN_TC02_003					
UAPN_TC03_001					
UAPN_FC06_001					
UAPN_FC05_003					
FSVE_004_PID01					
FSVE_004_PID02					
FSVE_004_PID03					
FSVE_004_PID04					

**User Templates**

- DL/UAPN\_TC.py
- DL/UAPN\_TC.py
- DL/UAPN\_FC.py
- DL/UAPN\_FC.py