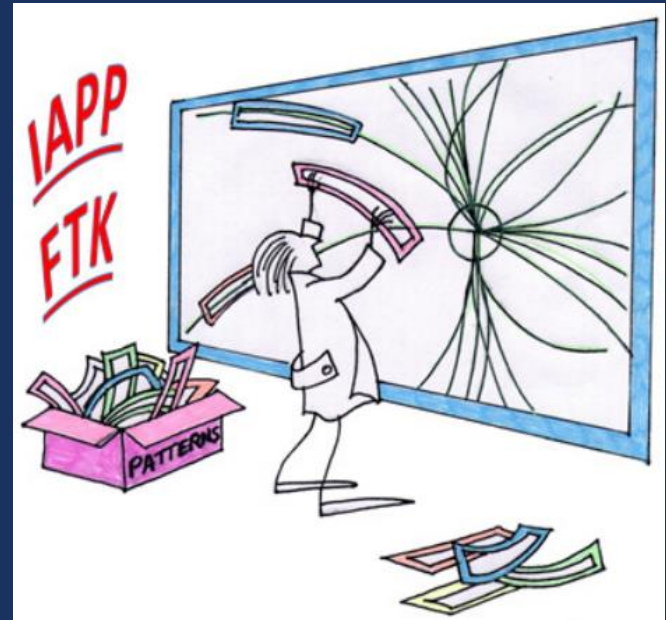


# EXPERIENCE ON DCS

JUNE 16<sup>TH</sup> – JULY 15<sup>TH</sup> 2015, CERN, CH

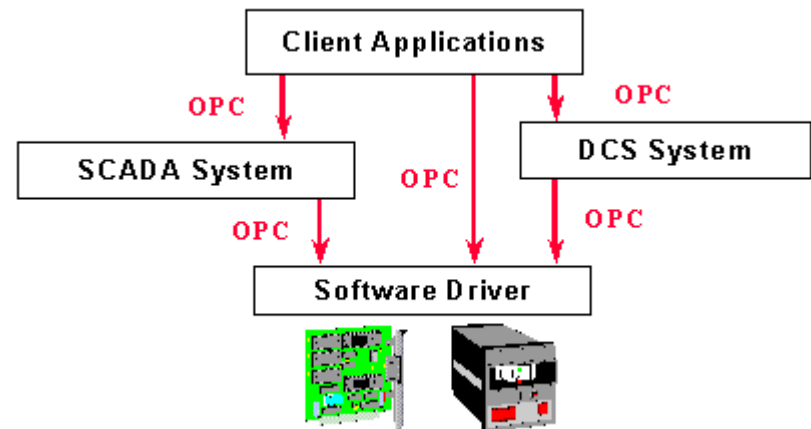
**Konstantina I. Mermikli**

Software Engineer, Prisma Electronics  
Seconded to CERN from PRIELE



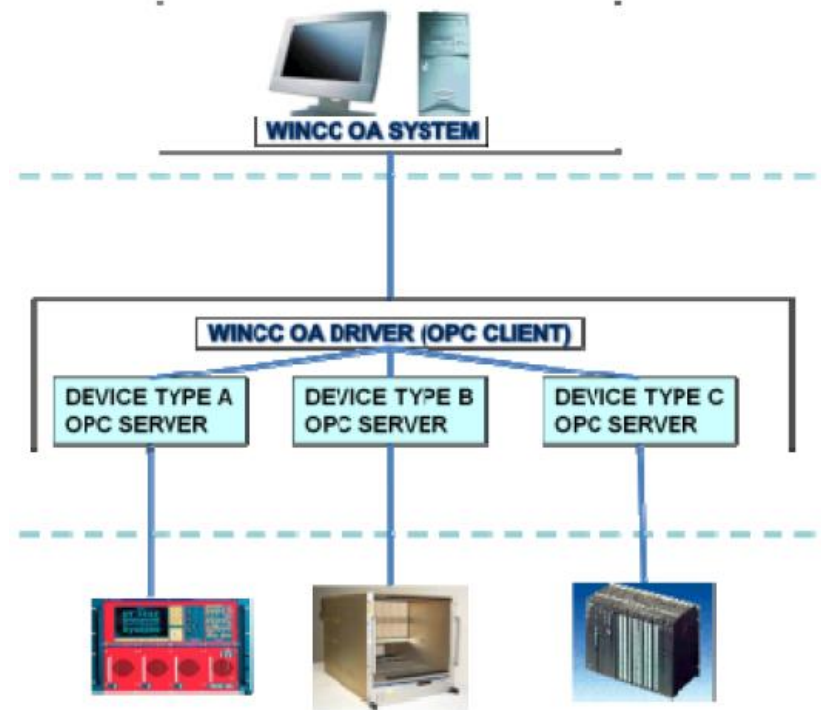
# OPEN PLATFORM COMMUNICATIONS (OPC)

- Industrial telecommunication standard
- Based on client/server architecture
- Interface between software applications and industrial data sources
- Regardless of hardware vendor



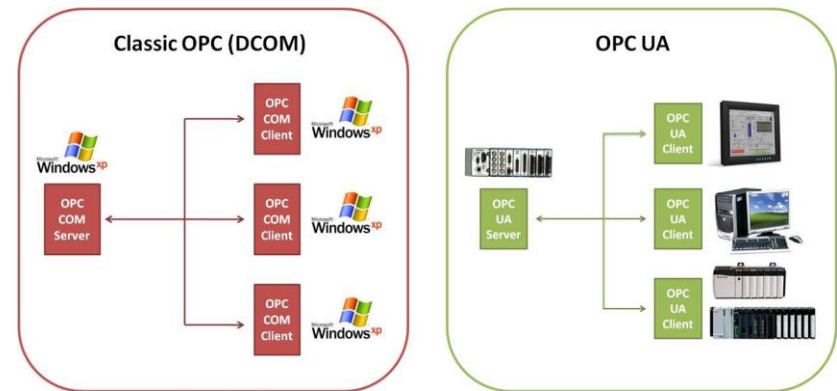
# OPC @ CERN

- Common OPC Implementation at CERN:
  - WinCC OA: SCADA software tool
  - WinCC OA communicates via its built-in OPC driver (an OPC Client) with an OPC server and
  - the OPC Server communicates with the physical device



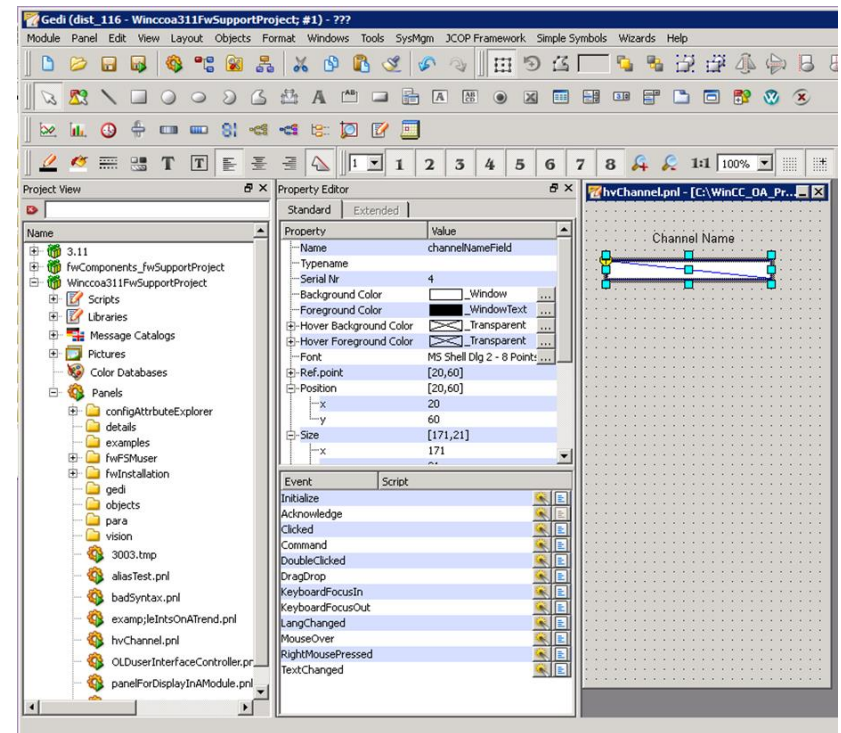
# OPC @ FTK

- Equipment was not available at that time
- OPC Server/Client communication tests using Matrikon simulator
- Gather study material on
  - OPC DA Server Configuration:
    - Running ONLY on Windows
    - Given in standard Wiener-CAEN equipment
  - OPC UA Server Development:
    - Multi platform implementation
    - To be used in monitoring the VME boards temperatures



# WINCC-OA CLIENT

- SCADA software tool by Siemens
- Monitor and control physical processes
- Graphical editor to design user interface
- Scalable to large distributed systems
- Used extensively in CERN and industry
- Design simple widgets to be used in order to monitor FTK VME temperatures





# THANK YOU!

- Many thanks to:
    - Paola Giannetti, Project Leader, UNIP
    - Ioannis Maznas, PhD student, AUTH
- for their support and guidance!