OPC

Open Platform Communications

Presented by :

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OPC

Open Platform Communications

Outlines

1. Main Problem
2. introduction to OPC
3. Classic OPC
4. OPC DA with Wincc Flexible and Fatek

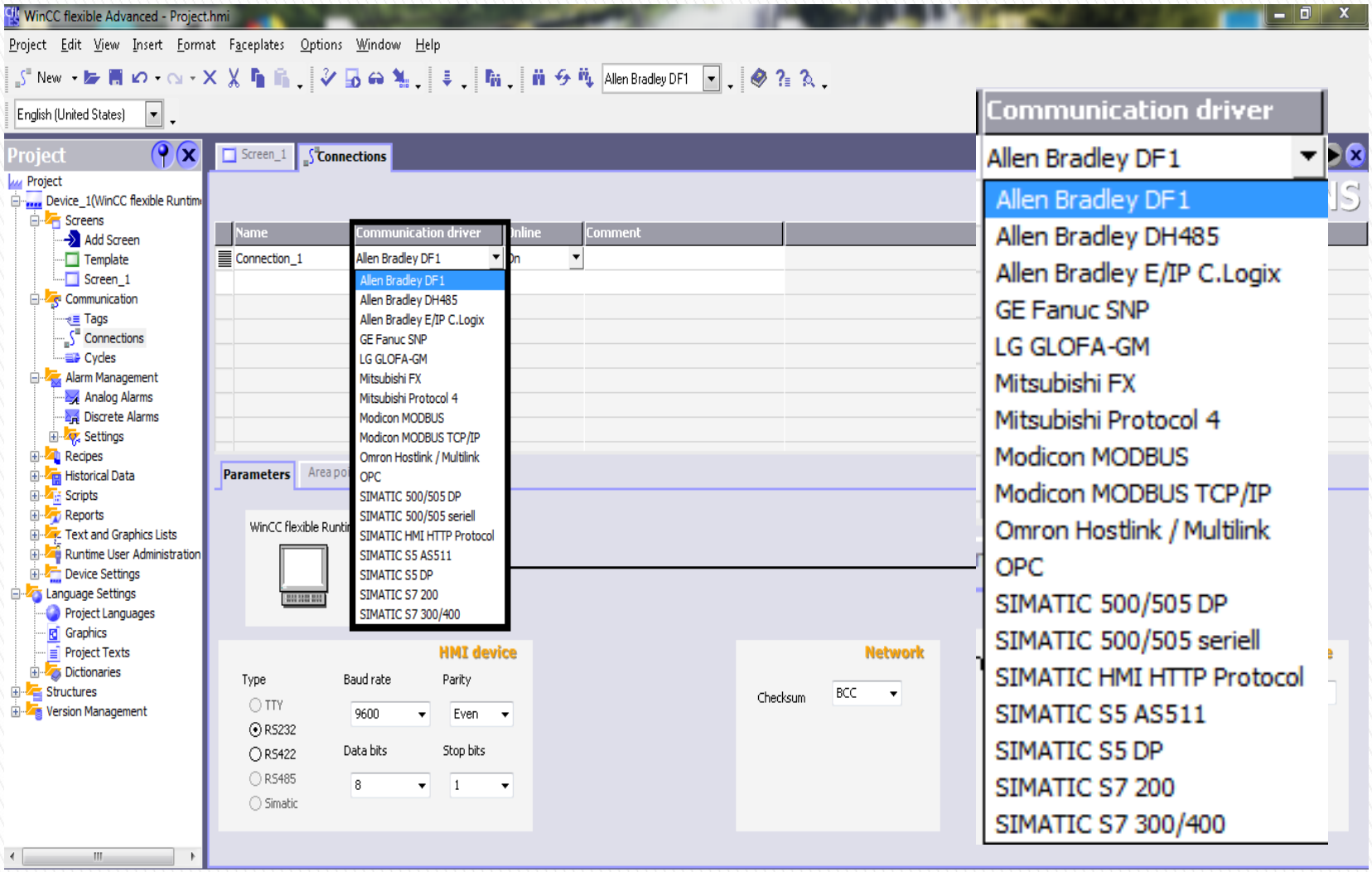
Main Problem

PLC FATEK

???

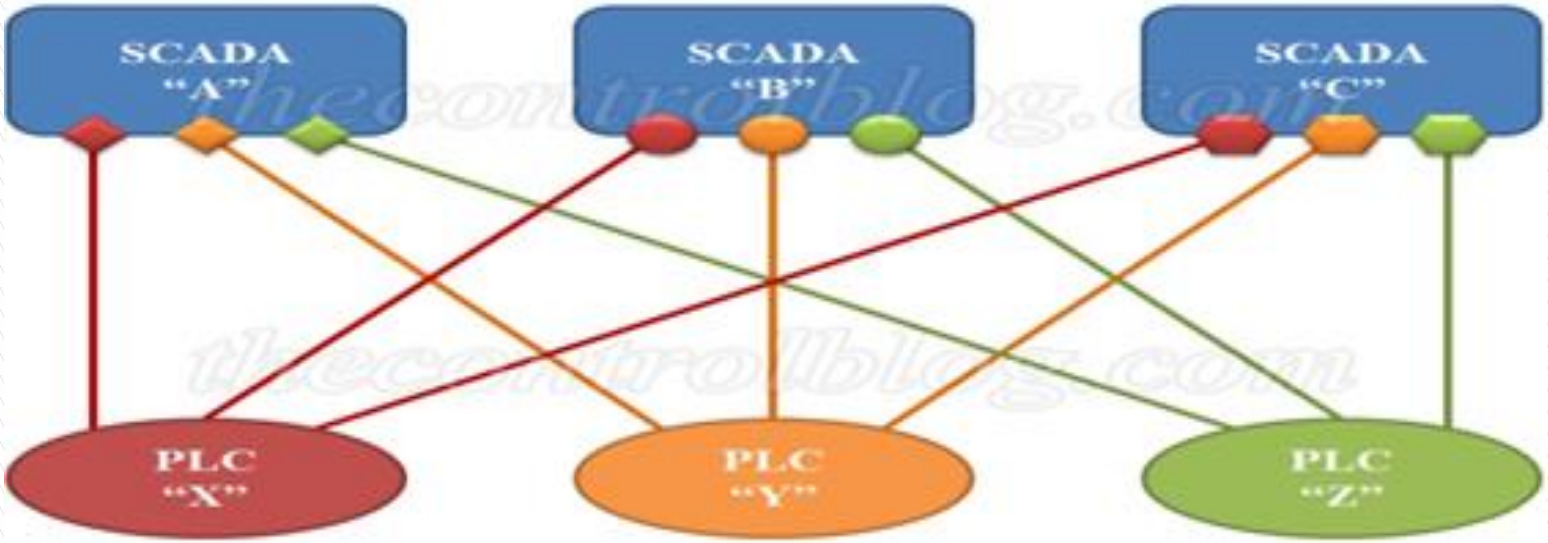
SCADA Wincc flexible

Main Problem



Main Problem

Each application requires a specific driver to allow it to communicate with each respective device.

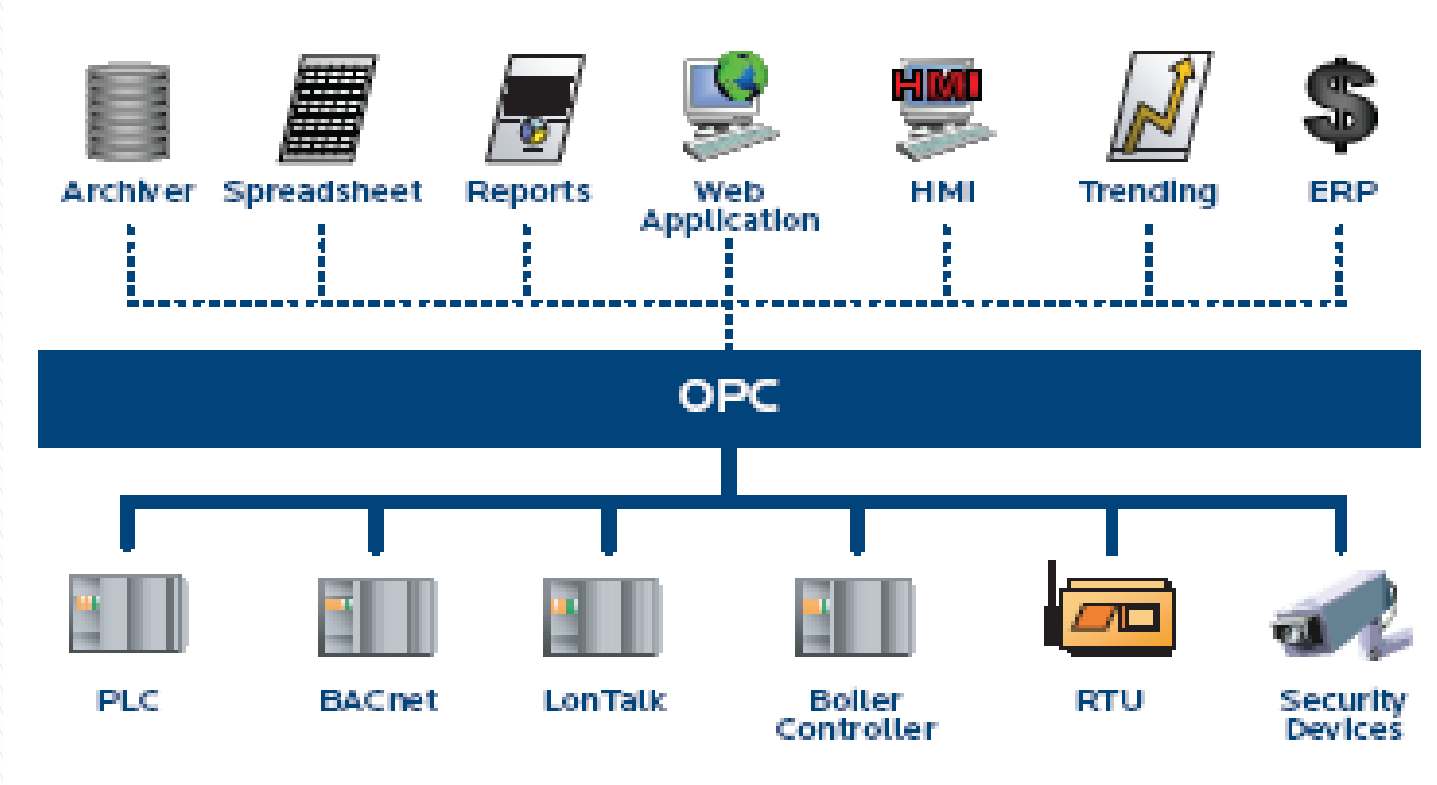


Main Problem

Thus , it was necessary to define a standard for device drivers providing a standardized access to automation data on Windows-based systems

Introduction to OPC

OPC is standard that defines the communication of data between devices from different manufactures



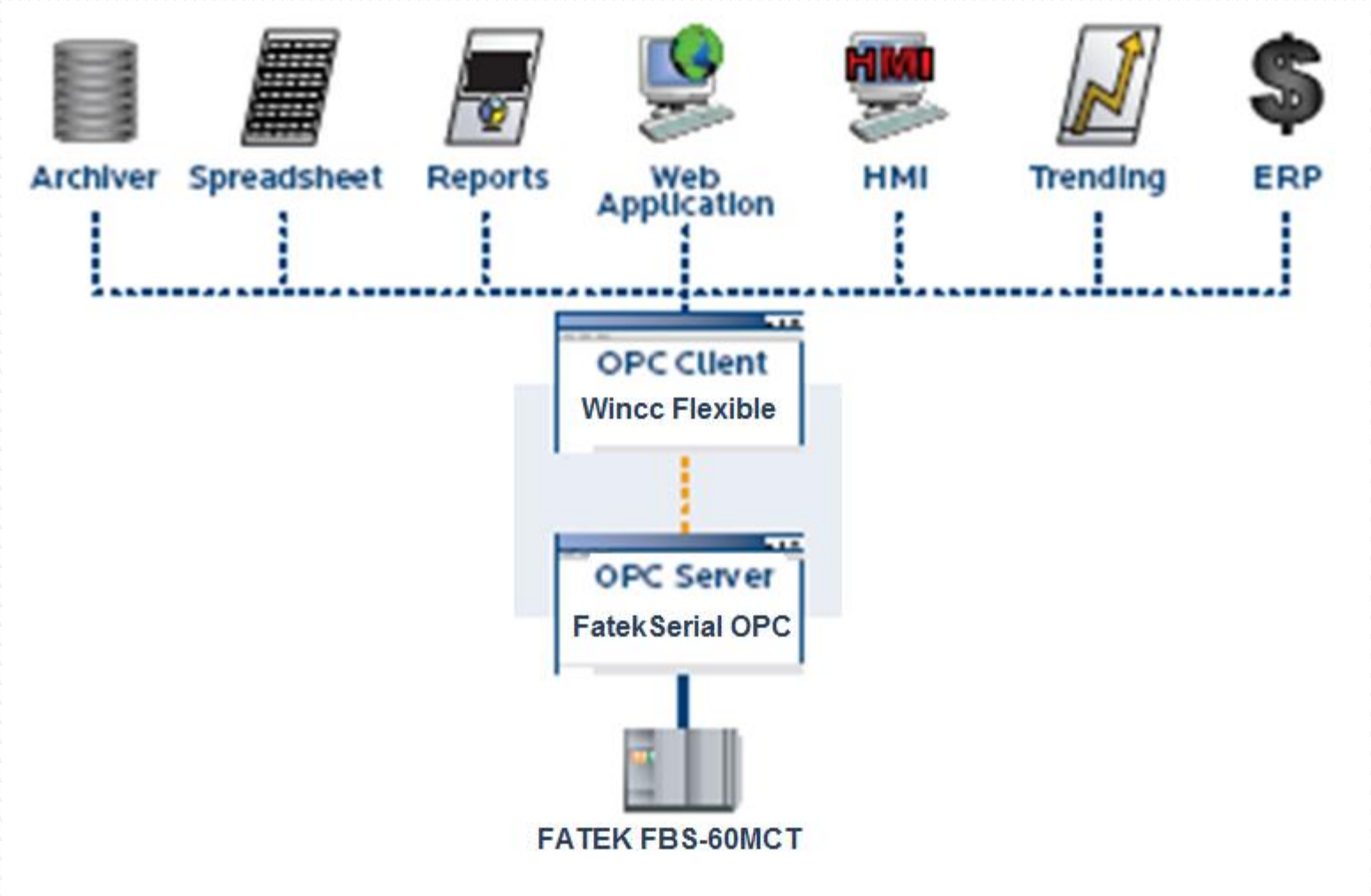
Introduction to OPC

OPC uses of a client/ server approach for the information exchange

OPC Server : software takes care of communicating natively with a device (data source).

OPC Client : software, natively communicates with the Application (data sink)

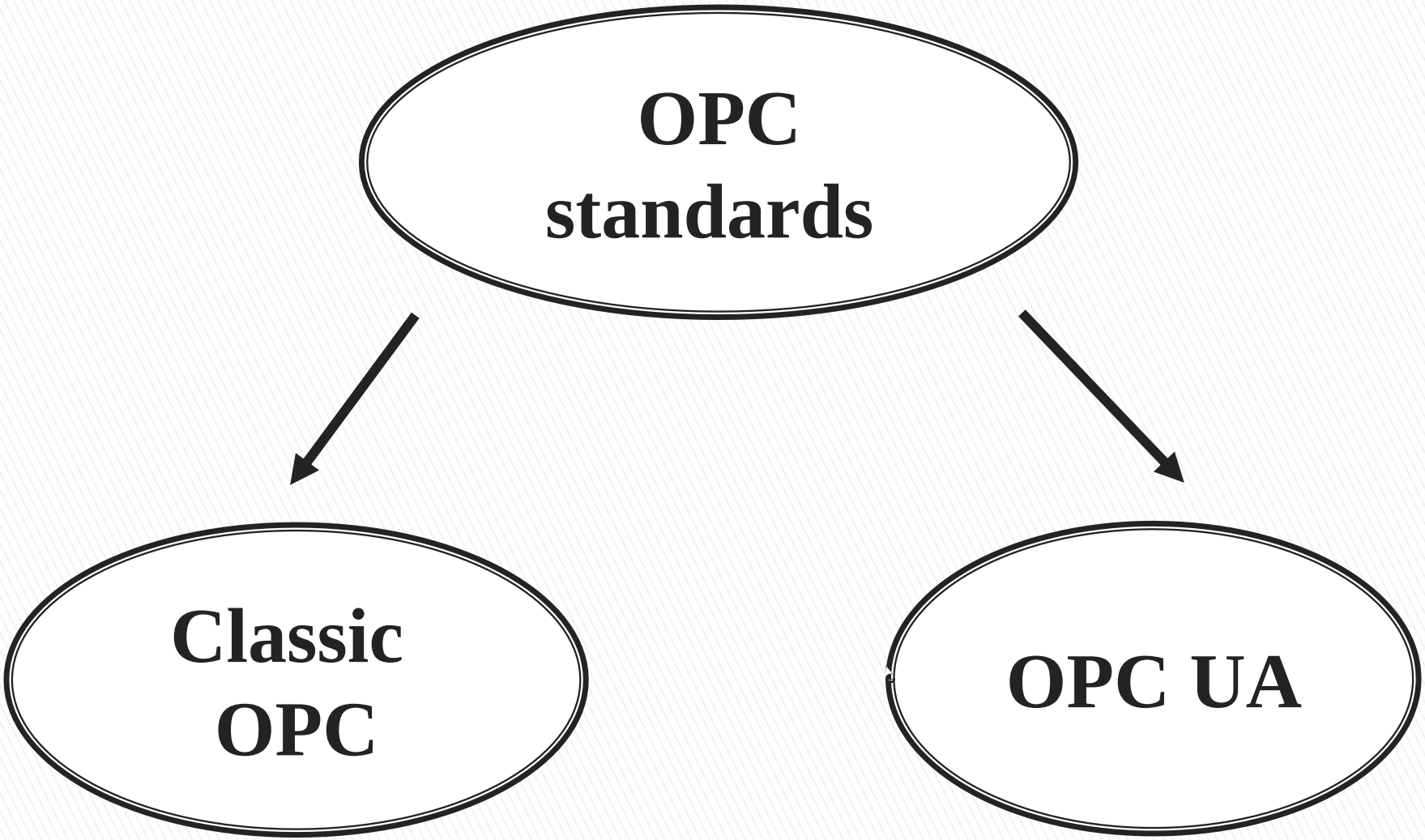
Introduction to OPC



Introduction to OPC

According to the different requirements within industrial applications different OPC standards have been developed.

Introduction to OPC



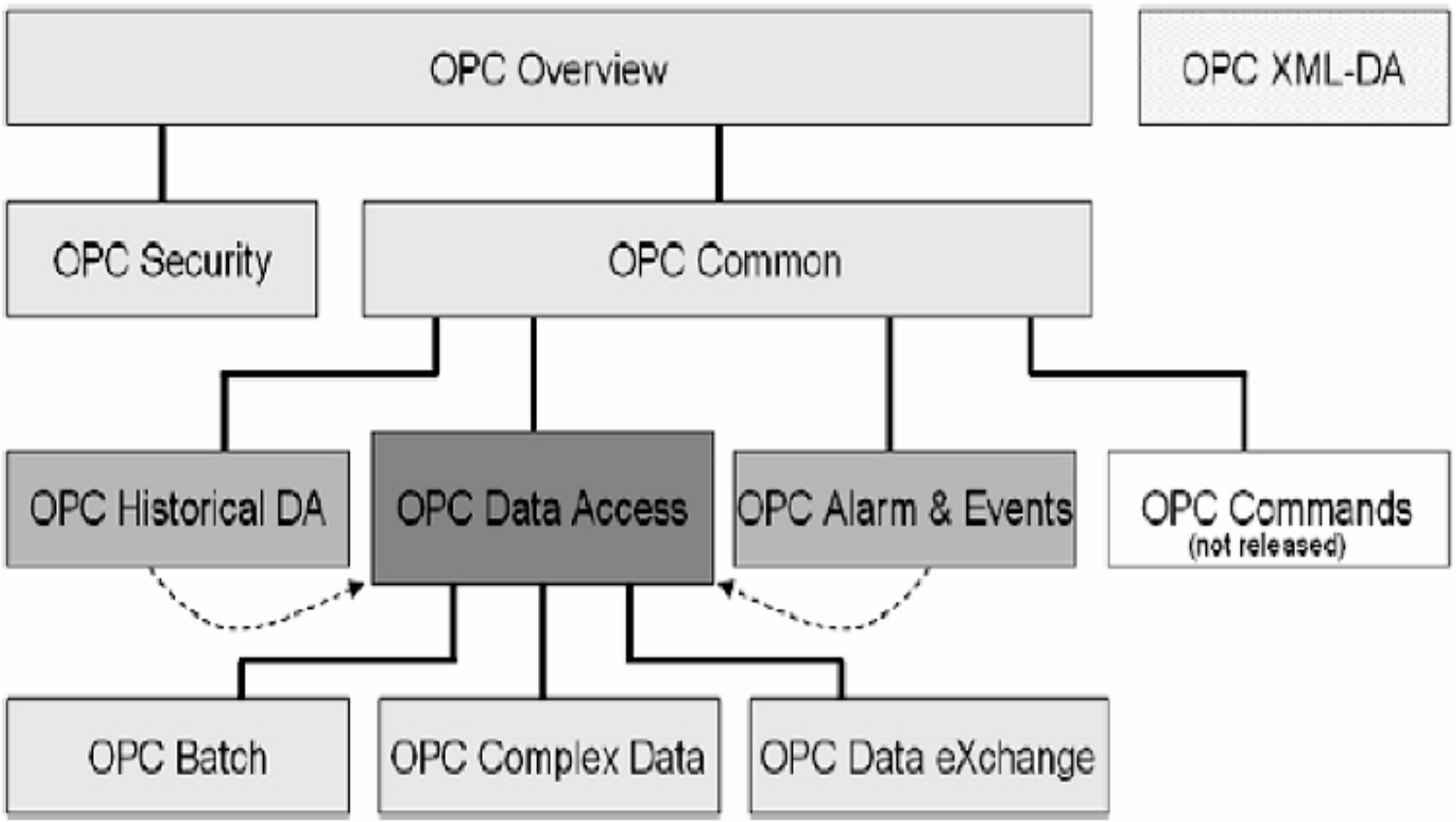
Classic OPC

Classic OPC interfaces are based on the COM and DCOM technology from Microsoft.

Classic OPC specifications :

1. Data Access (DA) : for real time data access
2. Alarm & Events (A&E) : process alarms and events
3. Historical Data Access (HDA) : for historical (stored) data
4. Security control client access to servers
5. PC Complex Data, OPC Batch, and OPC Data eXchange (DX) are extensions to OPC DA

Classic OPC


OPC Overview
OPC XML-DA
OPC Security
OPC Common
OPC Historical DA
OPC Data Access
OPC Alarm & Events
OPC Commands
(not released)
OPC Batch
OPC Complex Data
OPC Data eXchange

Classic OPC

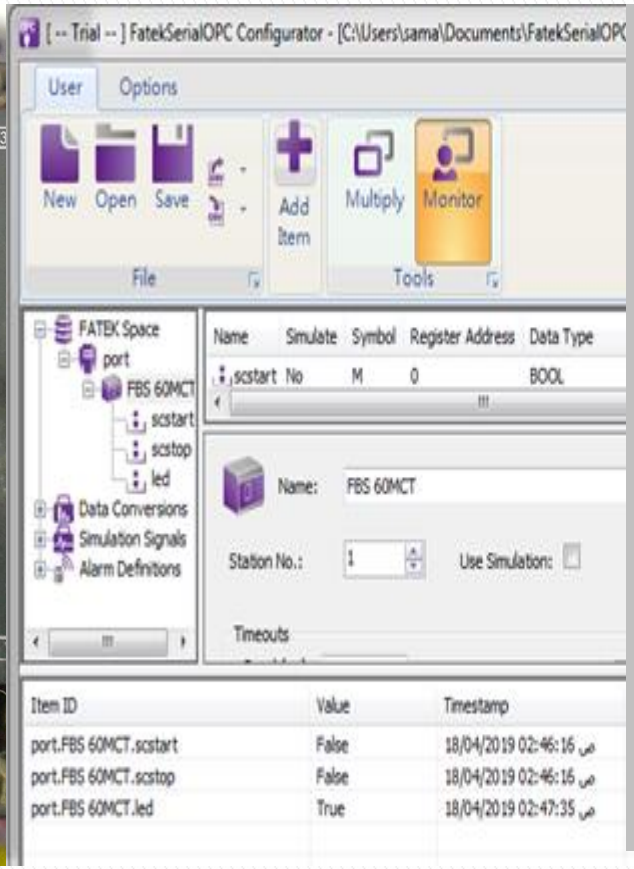
The main disadvantages of Classic OPC :

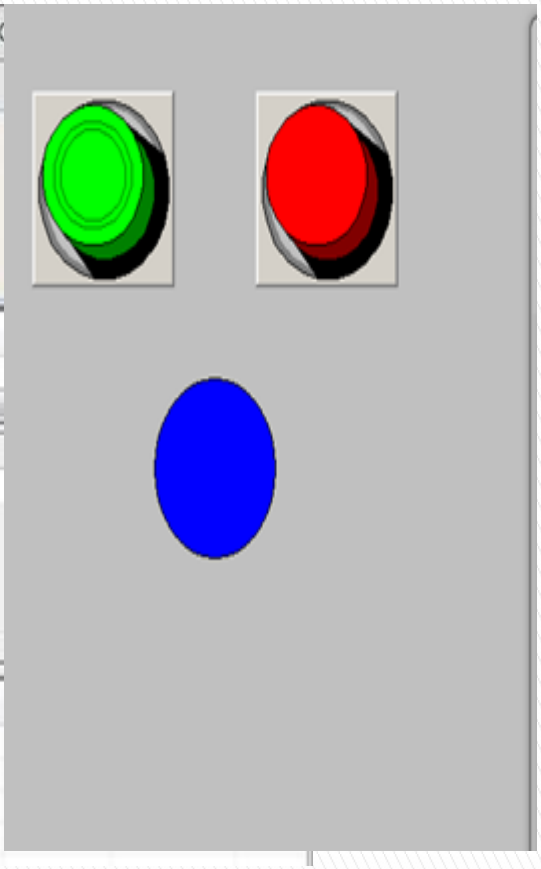
1. Windows-platform-dependency

2. the DCOM issues when using remote communication with OPC. DCOM is difficult to configure .

OPC DA with Wincc Flexible and Fatek

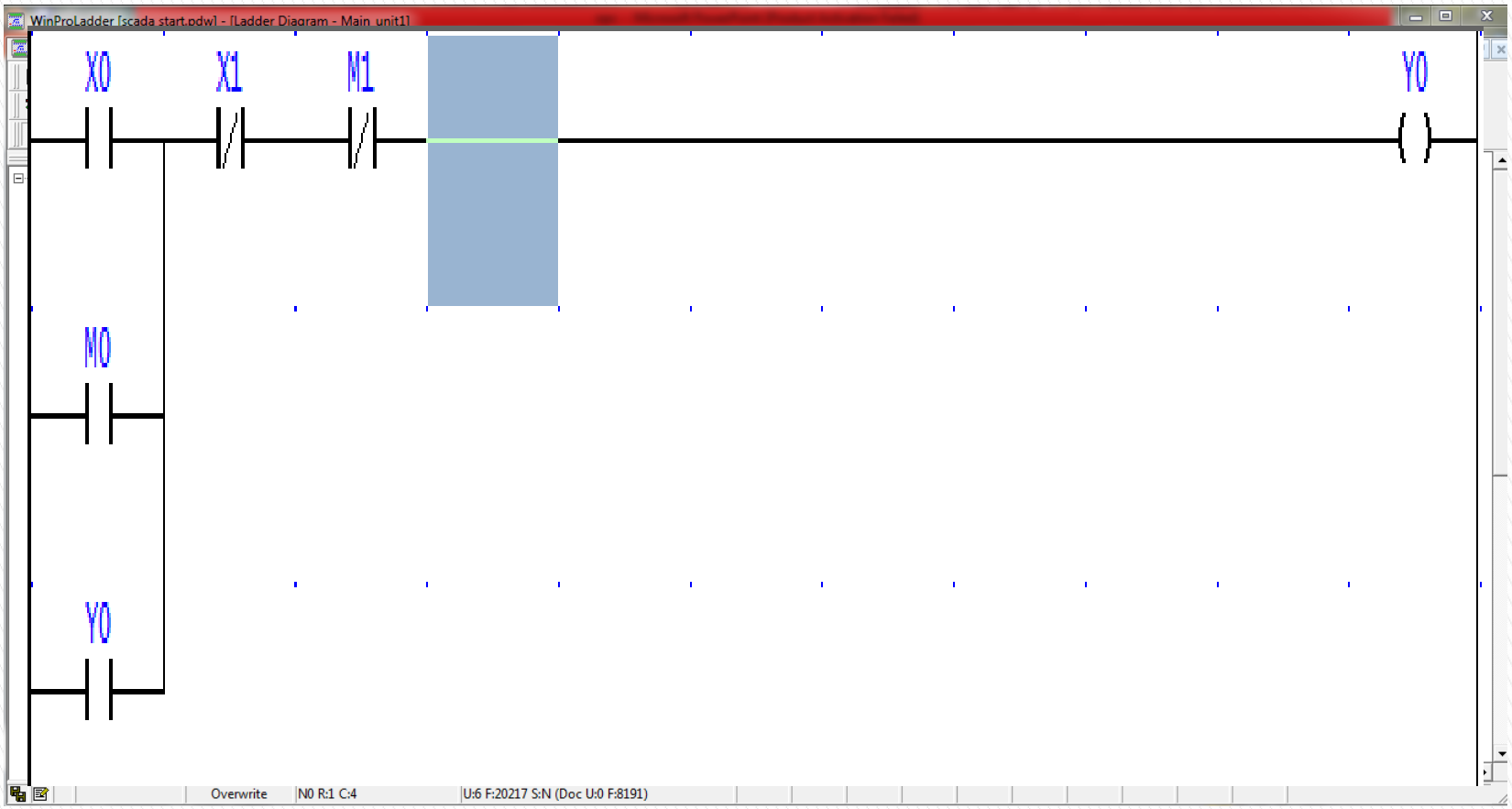
PLC **OPC Server** **SCADA**





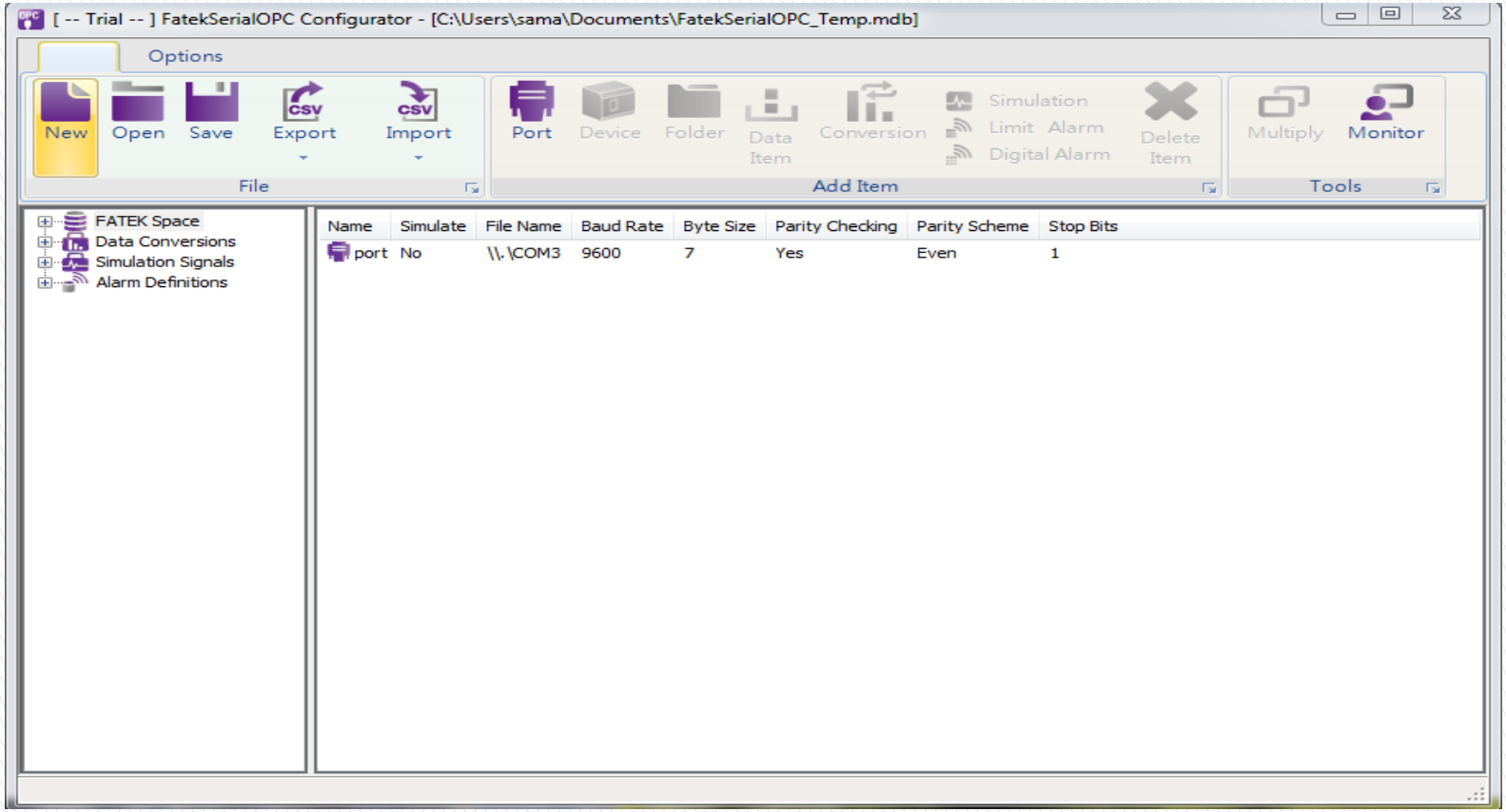
OPC DA with Wincc Flexible and Fatek

PLC Program



OPC DA with Wincc Flexible and Fatek

OPC Server (FATEK Serial OPC Configurator)



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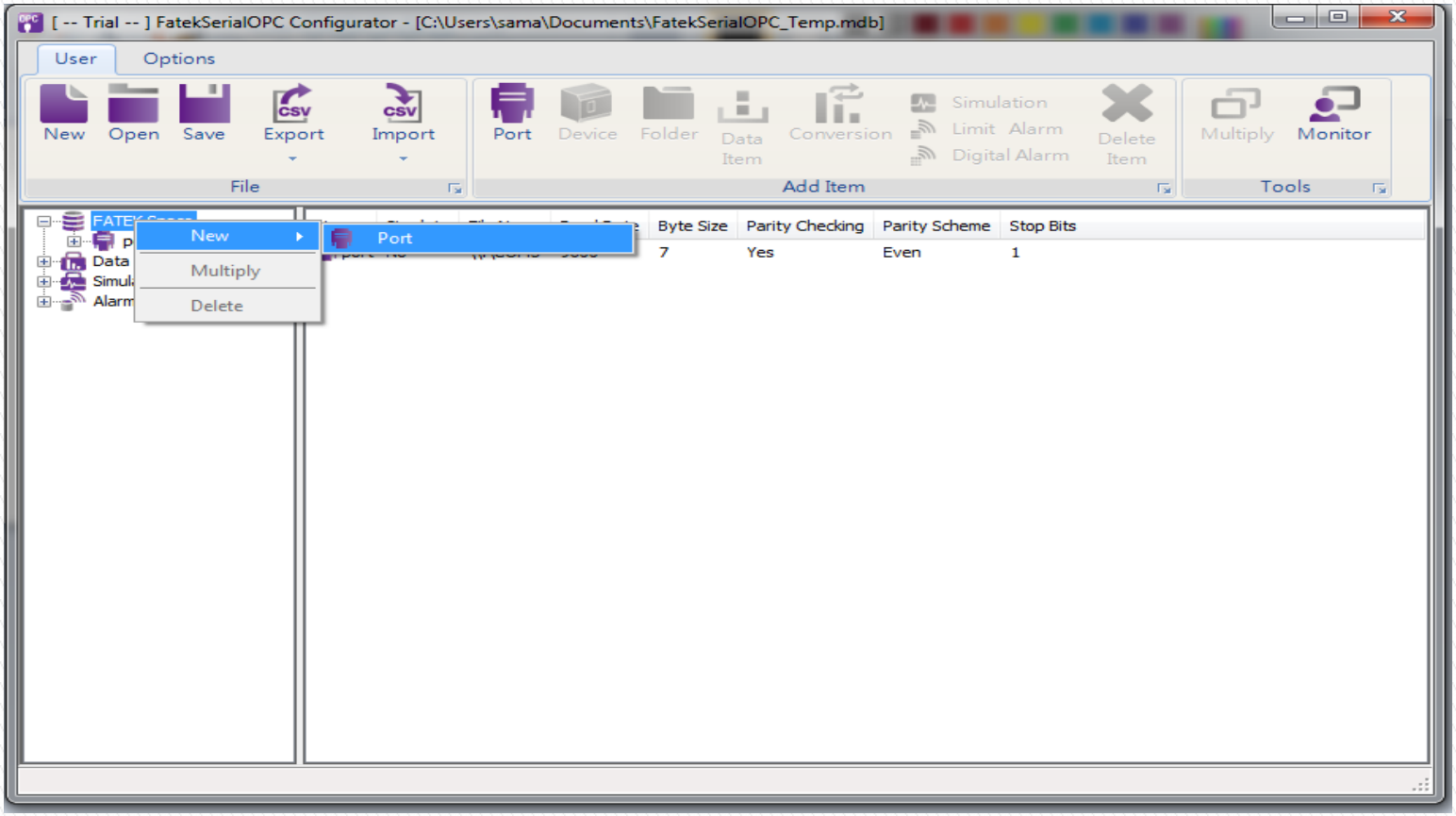

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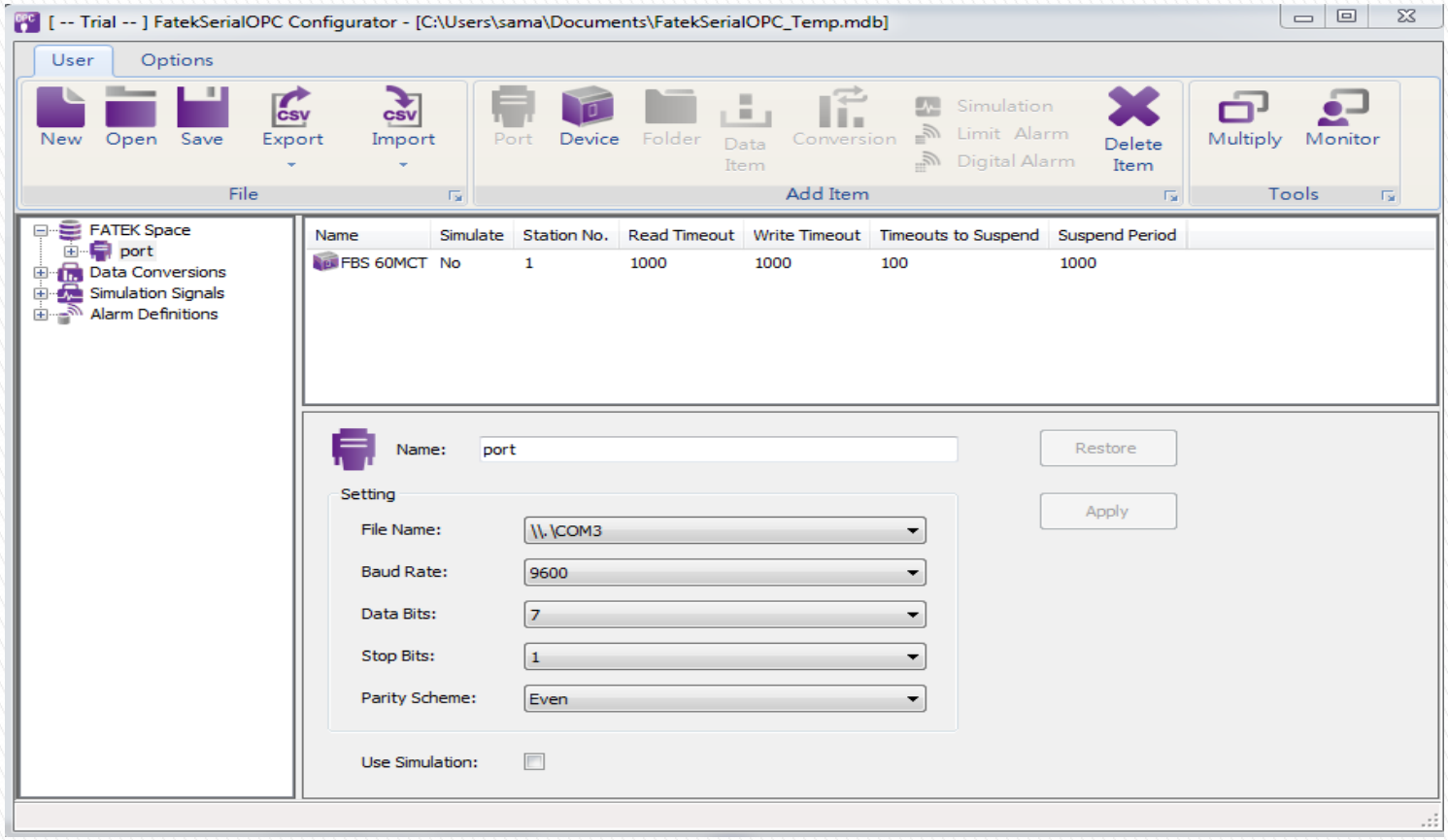

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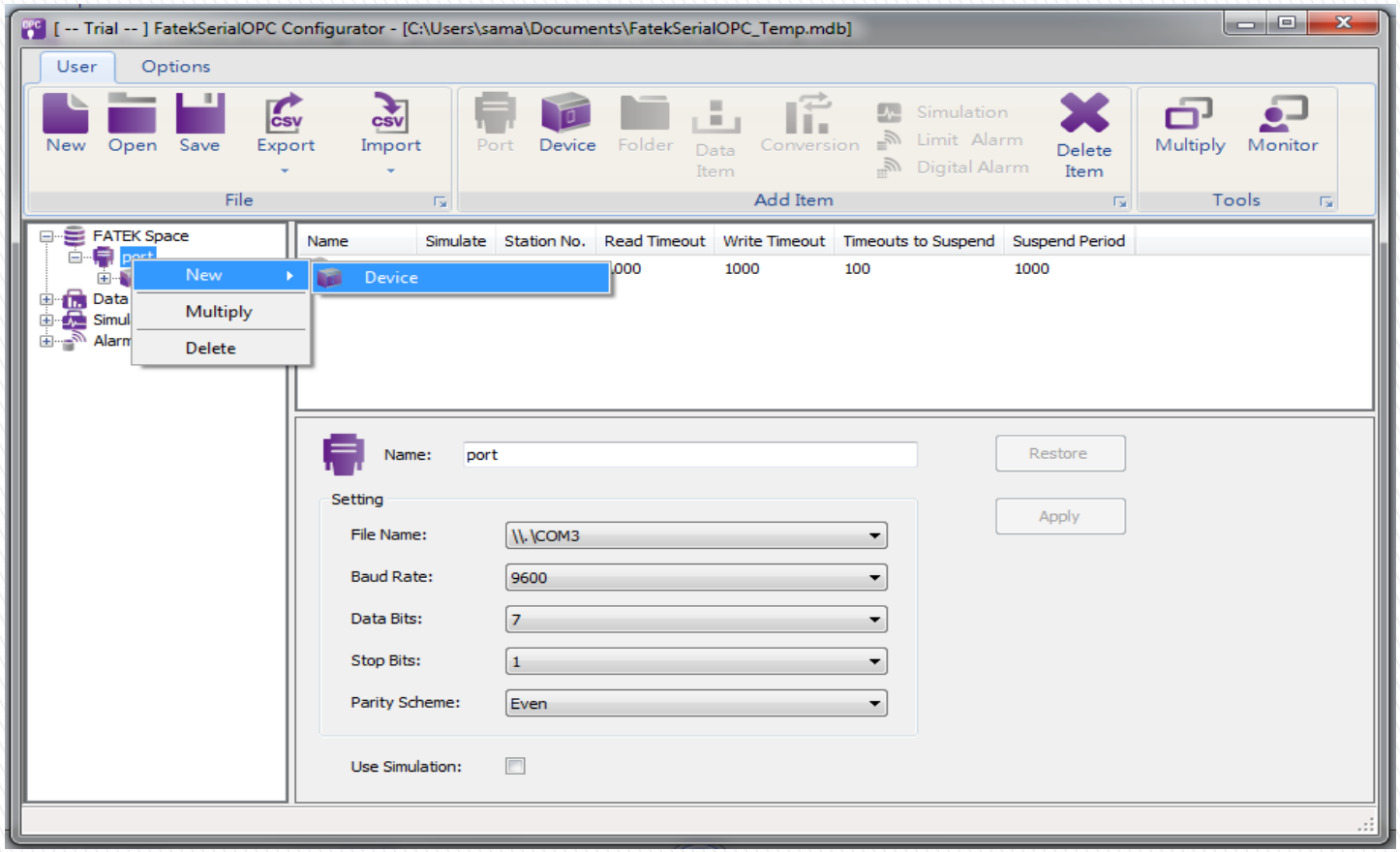

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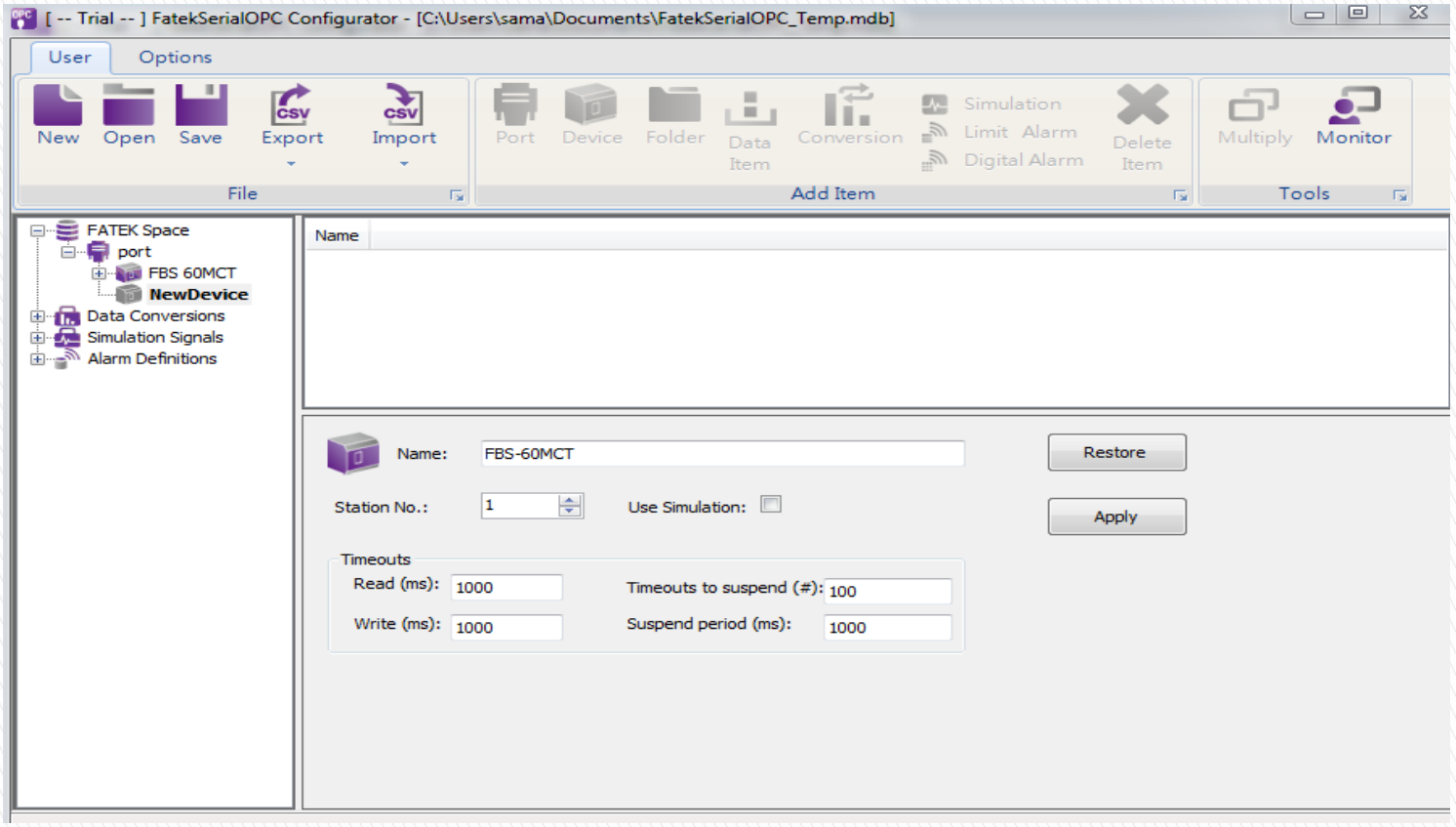

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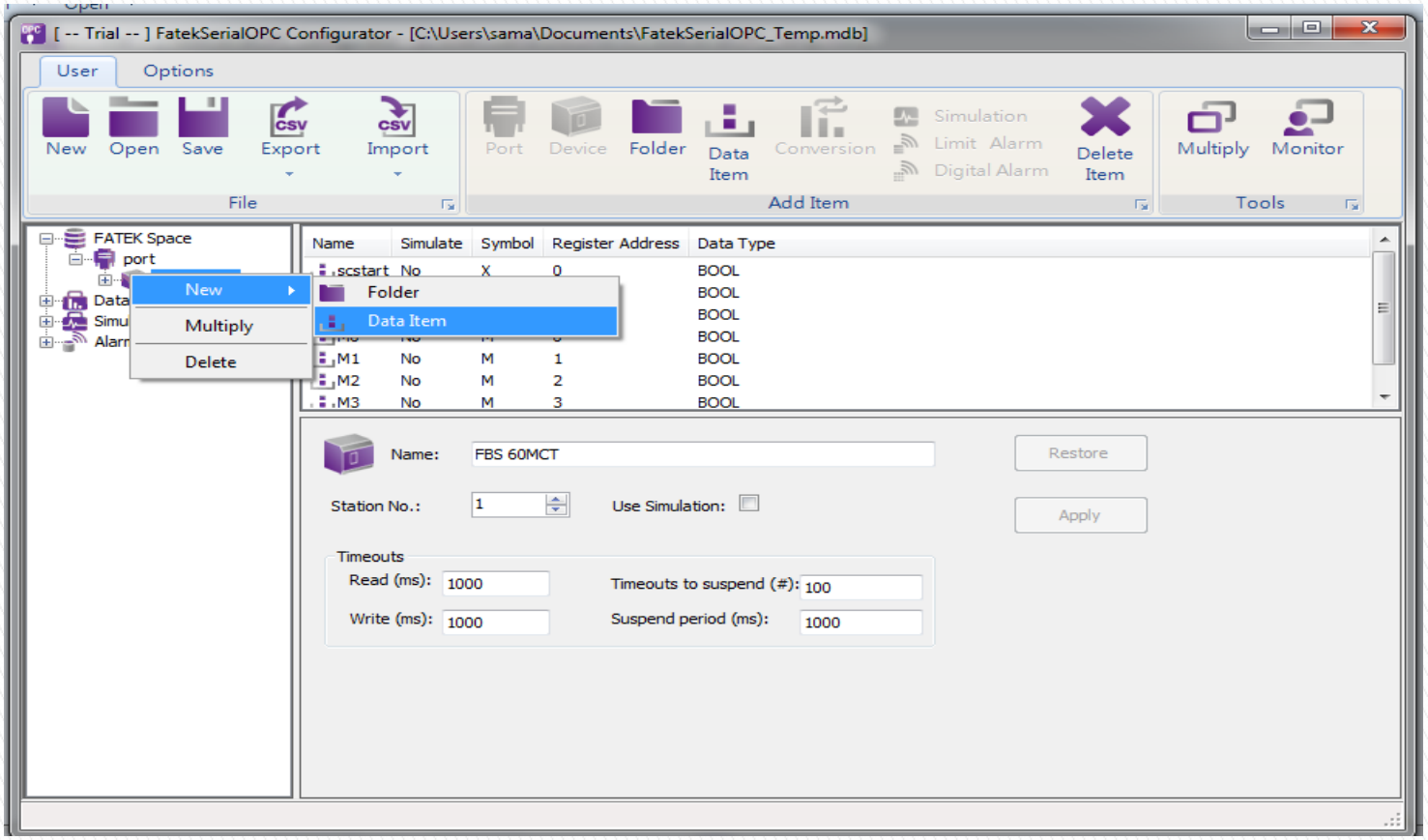

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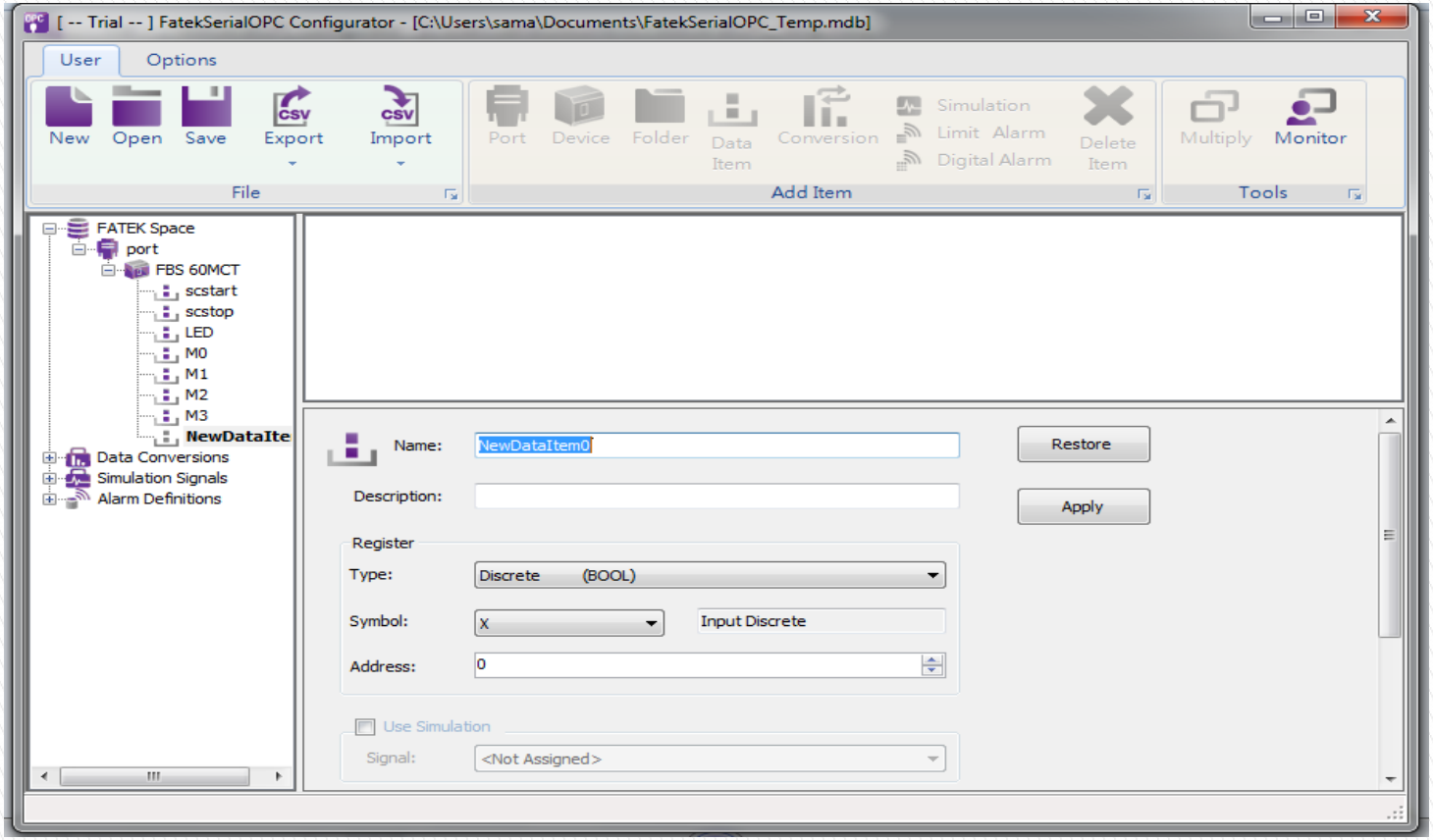

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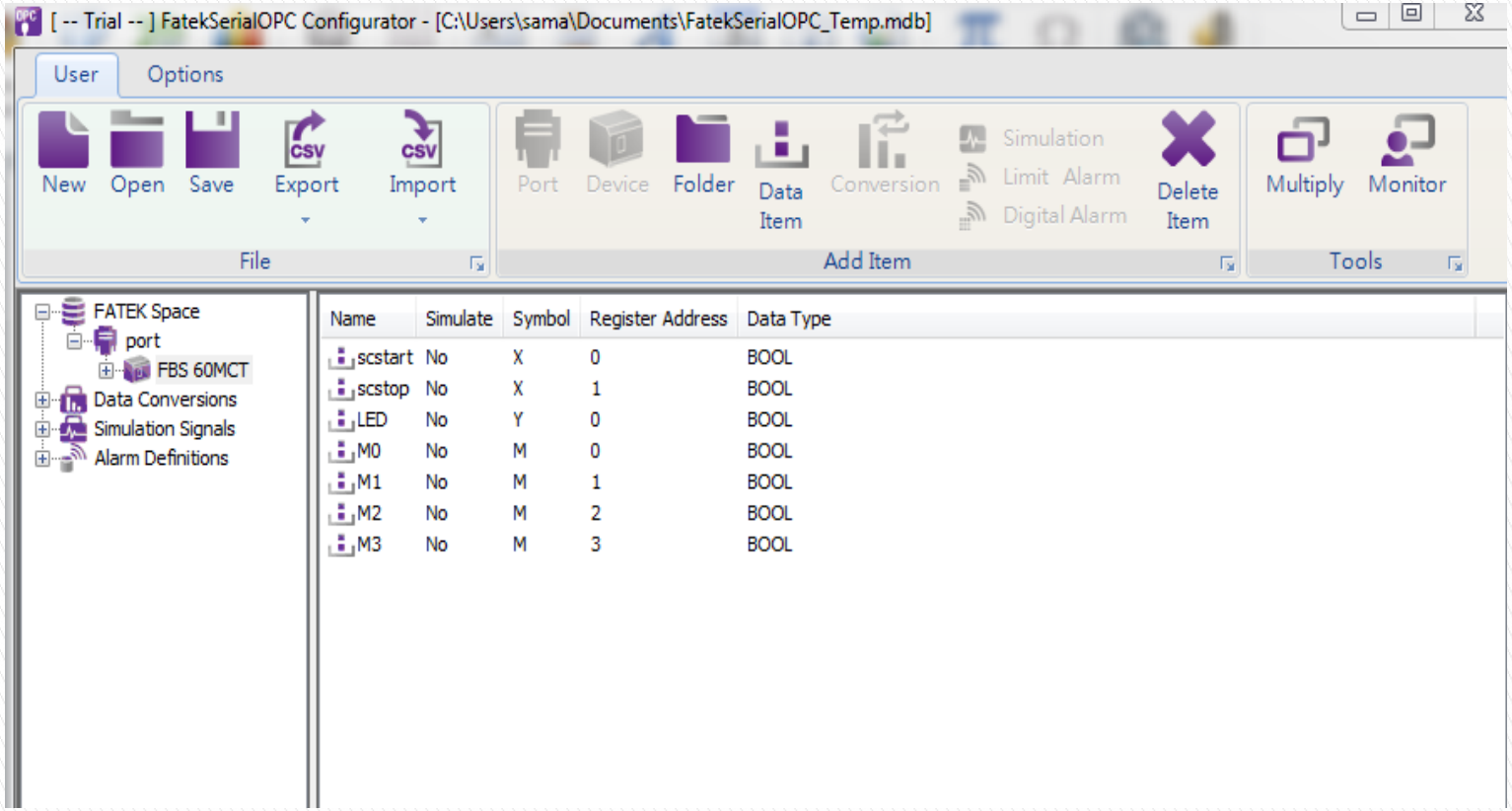

OPC DA with Wincc Flexible and Fatek

Wincc Program