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PLC test stand & PLC code development



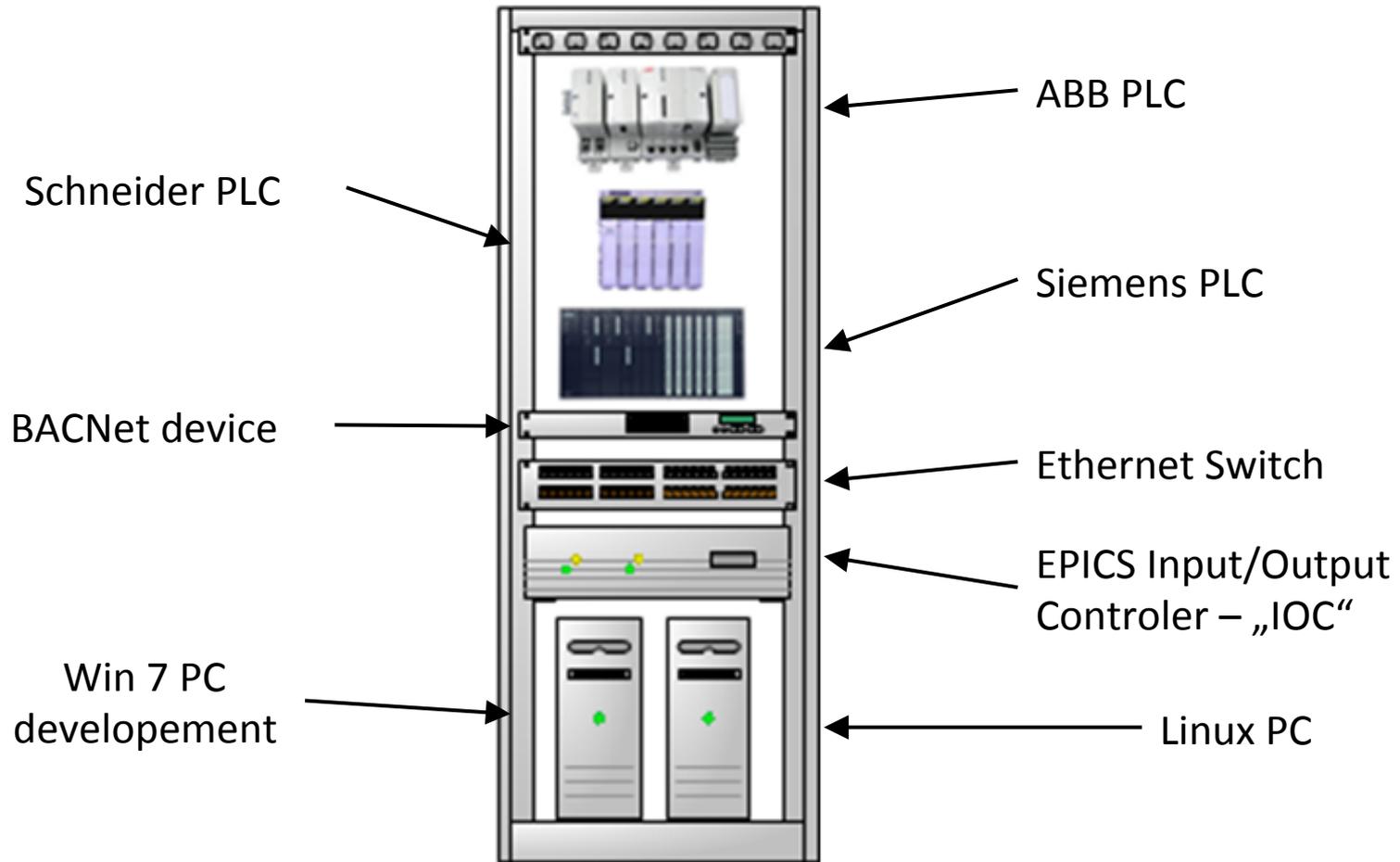
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Overview

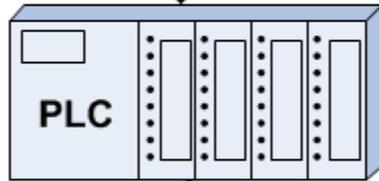
- PLC test stand overview
- PLC Framework
- Automated PLC code generation
- NTP time synchronization

- Questions and discussion during the presentation

PLC test stand hardware



PLC test stand – PLC & IOC



Different Communication protocols:

- ✓ - MODBUS TCP
- ✗ - PROFIBUS
- ✗ - PROFINET
- ✓ - SIEMENS PLC PROPRIETRY (s7plc)

Different PLC vendors:

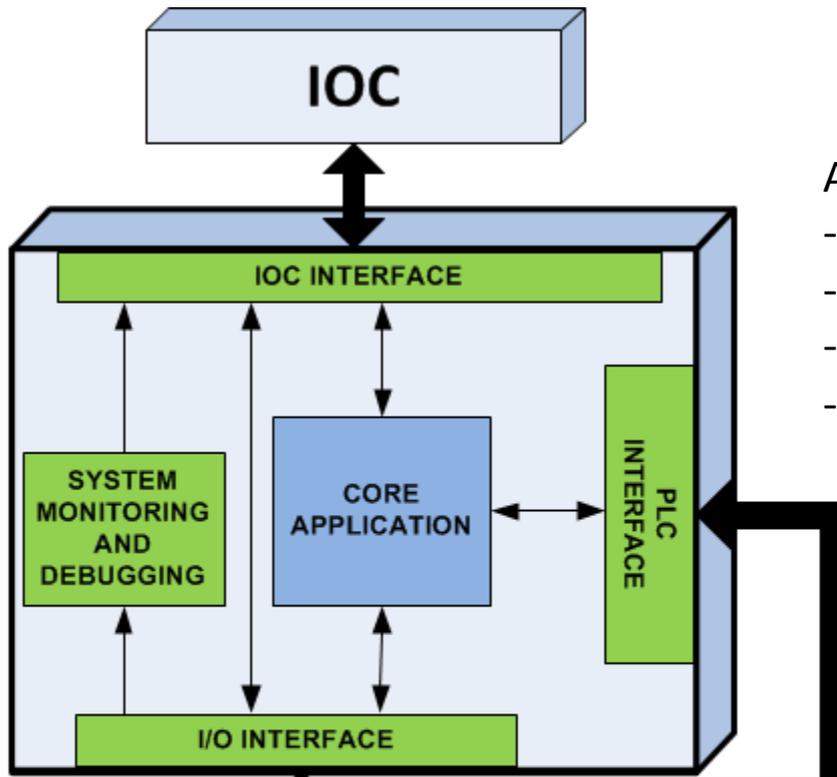
- ✓ - SIEMENS
- ? - SCHNEIDER
- ? - ABB

Is there any other communication protocol that we should test ?

Which PLC vendor will you suggest or will you not suggest ?

When will be the most appropriate time to switch from S7-300 and S7-400 to the new family S7-1500 ?

Framework overview



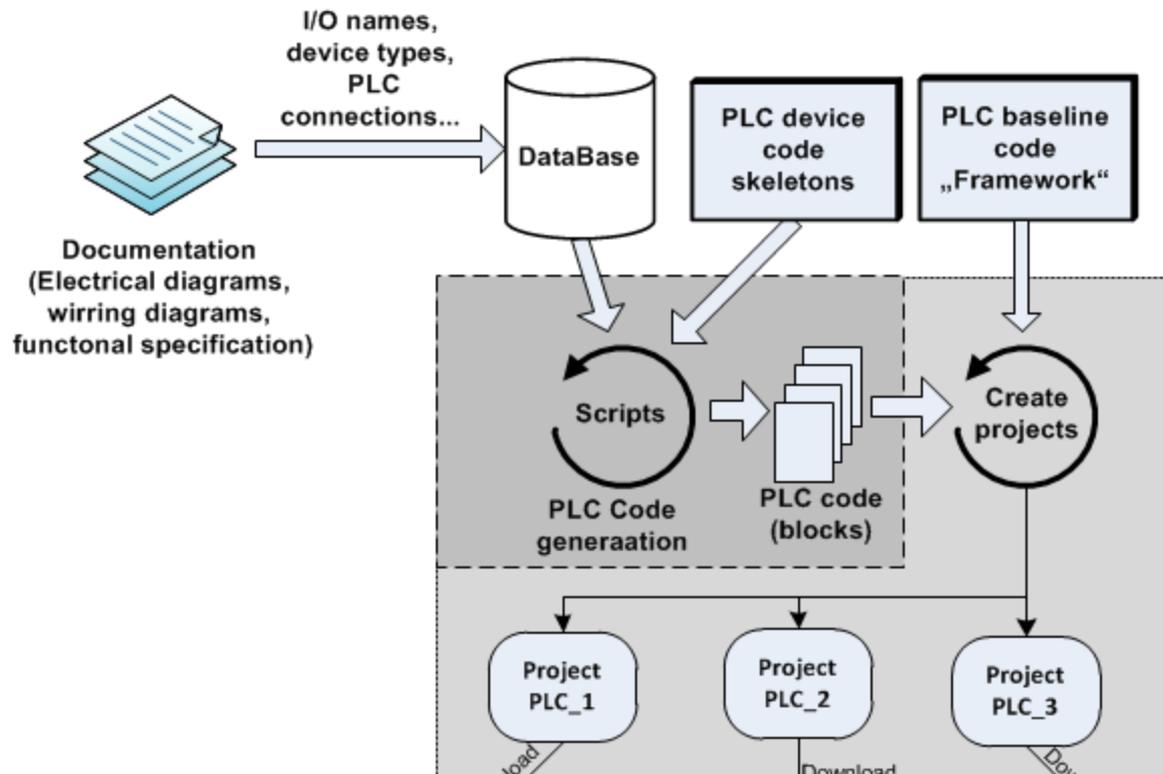
- ADVANTAGES:
- copy for all PLCs
 - easy to maintain
 - use partially to SPS PLC framework.
 - allow to create PLC code
 - get data from various blocks
 - Other PLC information

How important it is to have a framework ?

What is your opinion about this framework ?

Is it a good idea to use a framework in the slow interlock system?

PLC code generation

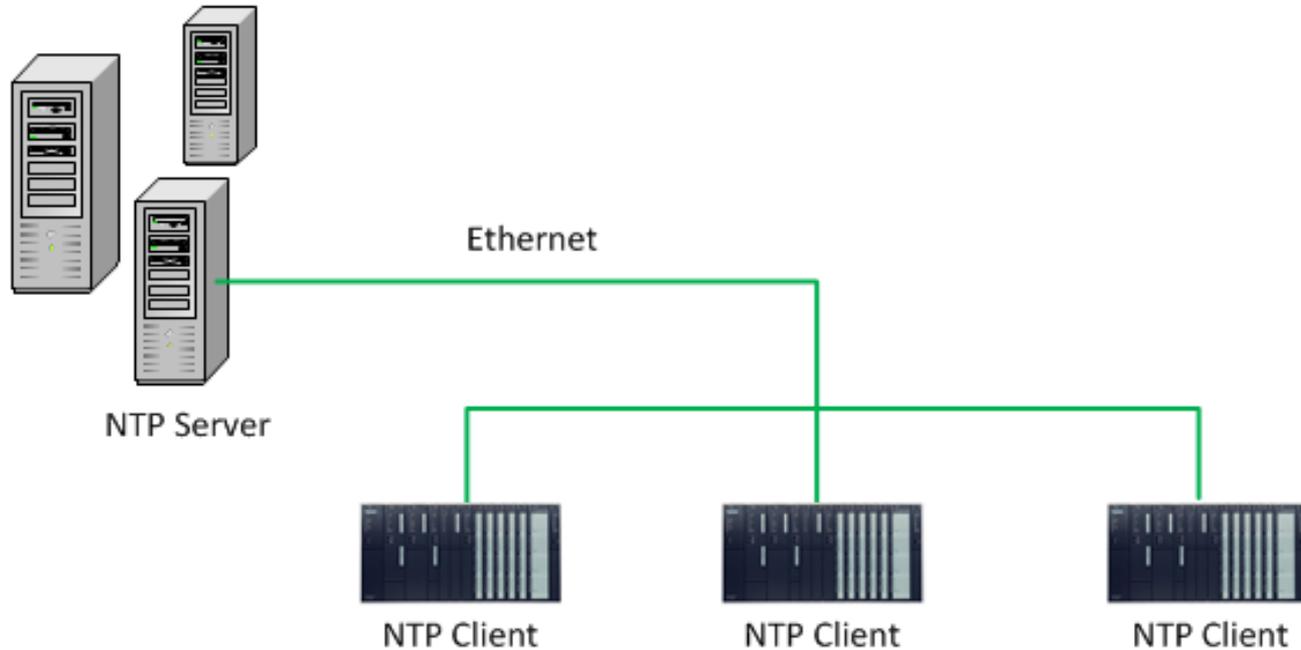


Is there a tool like „Siemens command interface“ available for ABB and Schneider ?

How much is it possible to automate the importation of the data into the database ?

Time synchronization in PLC

ESS timing infrastructure



What is the accuracy of the PLC time when it is synchronized with the NTP protocol ? <1ms, <10ms, <100ms

Will you suggest any other method for the PLC time synchronization?

Questions ?



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THANK YOU !



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