Specification of Industrial Control Applications 02-May-2024 - Executive Summary

27 participants

Two presentations

- <u>https://indico.cern.ch/event/1407853/</u>
- Towards DB Driven Specifications for Industrial Control Systems
- Leveraging AI to create UNICOS spec file from functional analysis document

2 May 2024

Towards DB Driven Specifications for Industrial Control Systems

- Presentation of DB driven engineering tool developped by CV
- The proposed approach is not specific to CV and it could be used, in theory, to any UNICOS-CPC application
- The tool/approach is currently in an evaluation phase and CV will make a decision to continue its usage (and development) this year
- It has been pointed out that Vacuum has a lot of experience in developping similar tool and that the two approaches should mutualize effort as much as possible instead of going in separate way (technologies, approaches, etc.)

Leveraging AI to create UNICOS spec file from functional analysis document

- Presentation and initial feedback of using OpenAI to generate UNICOS spec file from functional analysis
- Suggestion to include the IOList file to help have a more complete generation of the spec file
- Suggestion to also breakdown the generation by object type, i.e. Alarms, to ease the process
- The evaluation of open source tool (such as Llama) will be perfomed this summer to compare (effort, price, harware, etc.) with a turn key solution such as OpenAI
- Work in progress project to actually get familiar with the technology for Industrial Control

