Integration of Industry 4.0 Standards

Integration of Industry 4.0 Standards is a process of receiving input data in AML and/or OPC UA format, converting it into RDF triples and outputting a matched integrated file.

Useful links

Git-hub: https://github.com/IntegrationI40StandardsSemLab/Integration-I4.0
Documentation: https://github.com/IntegrationI40StandardsSemLab/Integration-I4.0/tree/master/Docs
Demo-version: https://youtu.be/-XkQ0r8_UKo

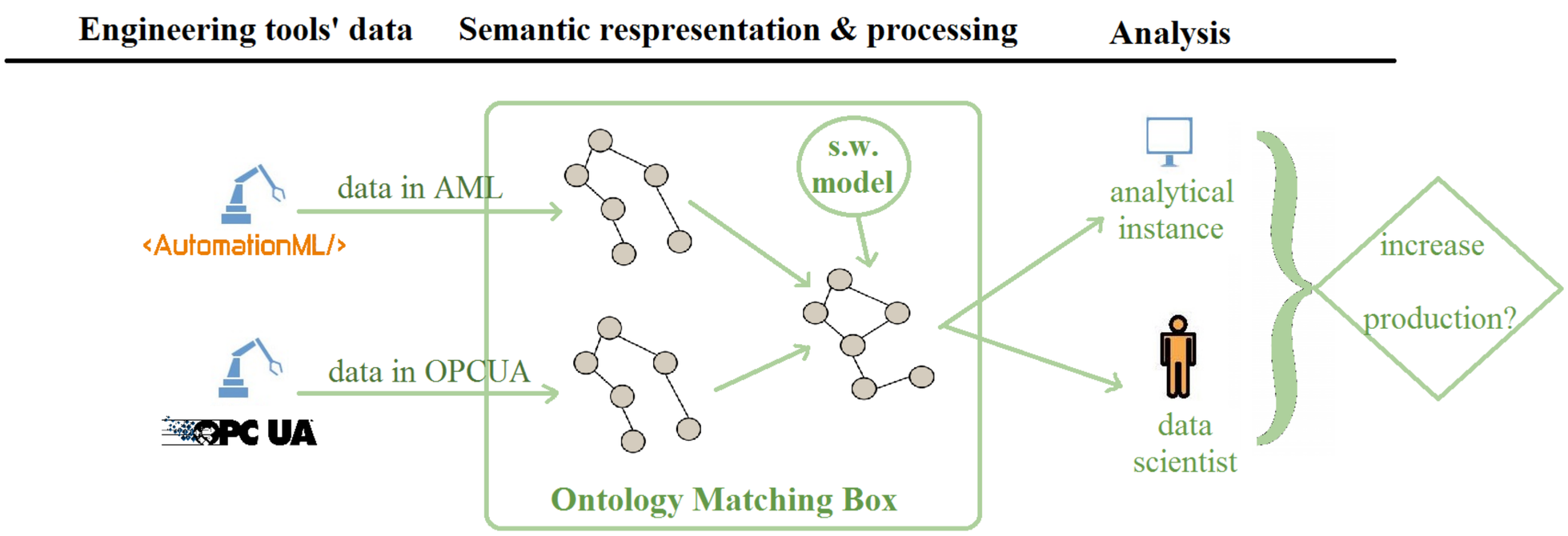
Components

The frontend module:
- User interface with browsing;
- Visualization of the data;
- Testing the correctness of the result.

The backend module:
- Input validation;
- Integration with existing model;
- Matching and transformation into RDF.

Motivation

Problems: manual object notation transcription, existence of different industrial standards



Project

Objective: to provide a flexible tool for modern industry integration standards mapping and visualization.

Major challenge: matching quality.

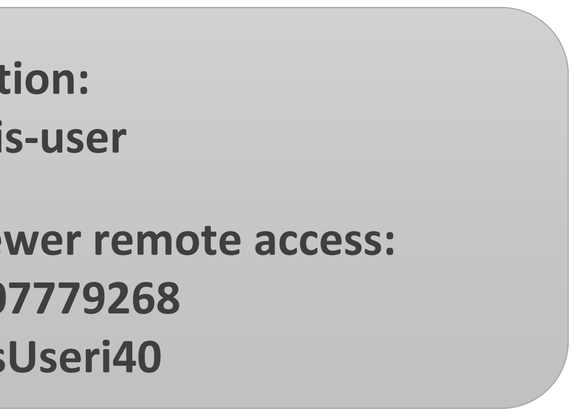
Add-ons

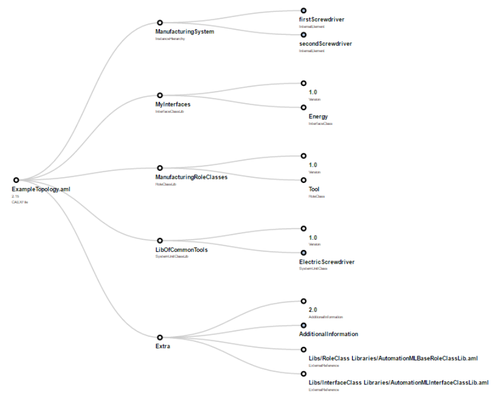
- SPARQL queries execution using output data;
- Prediction of document matching rate.

Results

Workstation:
EIS03: eis-user

TeamViewer remote access:
Login: 507779268
Pass: E1sUseri40





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