

THTH Autumn webinar 2024

20.11.2024 via Teams



Some instructions

- The webinar will be recorded
- The presentation materials and the recording will be shared after the webinar
- Please, preferably use the Teams chat button to ask questions
- Please, keep your microphone muted and unmute it only when you want ask or answer a question
- Autumn Webinar 20.10.2024 | THTH (ththry.org)



Agenda

- 12:30 Opening words, Teppo Kainulainen THTH Chairman of the Board Agenda and a brief THTH status review Arto Marttinen, THTH
- 12:45 Going Beyond Digital Twins with the Smart Digital Reality Adrian Park, Hexagon
- 13:15 Optimum operation of ships' energy systems with Digital Twin Alpi Rimppi, Semantum
- 13:45 Holistic approach to project lifecycles a software perspective Henri Särkkä, Aveva
- 14:15 Break
- 14:25 Asset 360 Harri Ranta Fortum
- 14:55 DTw in standarization and implementation- examples from ISO TC184/SC4 and Arrowhead fPVN Torbjörn Holm, TBH Konsult
- 15:25 Standardising the Digital Twin with the Asset Administration Shell Christian Mosch, IDTA
- 16:55 Closing comments
- 16:00 Closing



THTH briefly

- Non-profit industry association in Finland
- Currently over 30 member companies (<u>see members and partners</u>)
- Process industry supply-chain collaboration forum to promote digitalisation and digital-twin
- Simantics division
 - develop and maintain open-source code applications for modeling and simulation and for environmental lifecycle assessment and footprint calculations via its
 - SIMANTICS, Eclipse Public License EPL
 - SULCA Sustainability tool for Ecodesign, Footprints & LCA
 - Simantics System Dynamics tools (<u>Sysdyn</u>)

TIE division

- Promote and develop digitalization in projects and O&M based on existing standards
- National and international standardization networks and collaboration (key partners SEIIA/Sweden, PCA/Norway, DEXPI/Germany, USPI/Netherlands, MIMOSA/USA, CFIHOS/IOGP, ISO/TC184 and on national level PSK, METSTA, SESKO)
- EU KDT/ChipsJU funded Arrowhead fPVN project started in June 2023 and will end August 2026





Arrowhead fPVN

ARROWHEAD

- Improving productivity in Production Value Networks
- Pilots in process, aerospace and automotive industries
- Finland, Sweden and Norway focus on process industry
- EU ChipsJU, national organizations and companies funds the development
- Budget 35M€ and duration 6/2023 8/2026
- Coordinator Luleå University/Sweden
- Involves 40 organizations from 12 countries
- Common technology base Eclipse Arrowhead
 - Eclipse Arrowhead YouTube
 - Eclipse Arrowhead: Posts | LinkedIn





المَّا المَّ Arrowhead fPVN development tasks in Finland

Common tasks

Micro-services (integration, API) (WP2)

Major digital languages (standards) (WP3)

Translations (mapping between standards) (WP4)

Exploitation and digital transformation management (WP10)

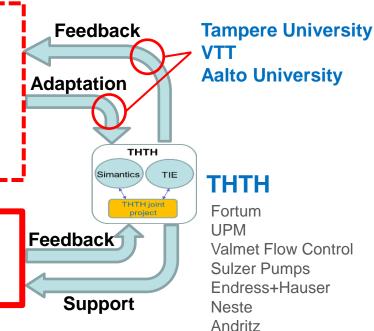
Dissemination and standardization (WP11)

Process industry pilots

Stora Enso, Afry, Semantum from Finland

Automotive pilots (batteries)

Aerospace pilots



Sweco Midagon Trimble

Etteplan



THTH vision

Commercial information





THANKS