Arrowhead Framework development coordination:
181002

ARROWHEAD

Agenda

1) Productive workshop Bilbao
   Agenda

2) Service naming convention, Cristina

3) Security analysis, Adi

4) Interoperability with BaSys, Jerker

5) Interoperability with FiWare, Jens

6) Documentation system, Michelle

7) SysML modelling of Arrowhead Framework

8) Workflow execution, Felix

9) IoT and SoS automation course, LTU, Jerker

10)Walk through of Core services
   ServiceRegistry, v4.1 Csaba
   Orchestration, v4.1 Csaba
   Authorisation, v4.1 Csaba
   CredentialAuthority, v4.0 Csaba

DataManager, v4.0 Jens
EventHandler, v4.1 Csaba
Translation, v4.0 Hasan/Jaime
QoS, v4.1 Michele/Luis
Gatekeeper, v4.1 Csaba
Gateway, v4.1 Csaba
PlantDescription, Jaime
Configuration, Emanuel
WorkflowManager v4.0 Jaime
Choreography, Csaba
SystemRegistry, DeviceRegistry, On-boarding
procedure, v4.1 Ani/Silia
SmartServiceAgreement, Ulf/Emanuel
Safety Manager, Mirren/Daniela
Self Adaptability security, Markus
Integration to legacy systems, Mario
Consumer code generation, Cristina
Autonomic orchestration/configuration, An
Modbus TCP, Nadin/Cristian
PLC 61499 integration, Jose,
Docker containers, Haris

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Agenda

11) Application
   Energy forecast, Thomas
   Semiconductior equipment integration, Francois + Agileo
   Smart parking, Haris

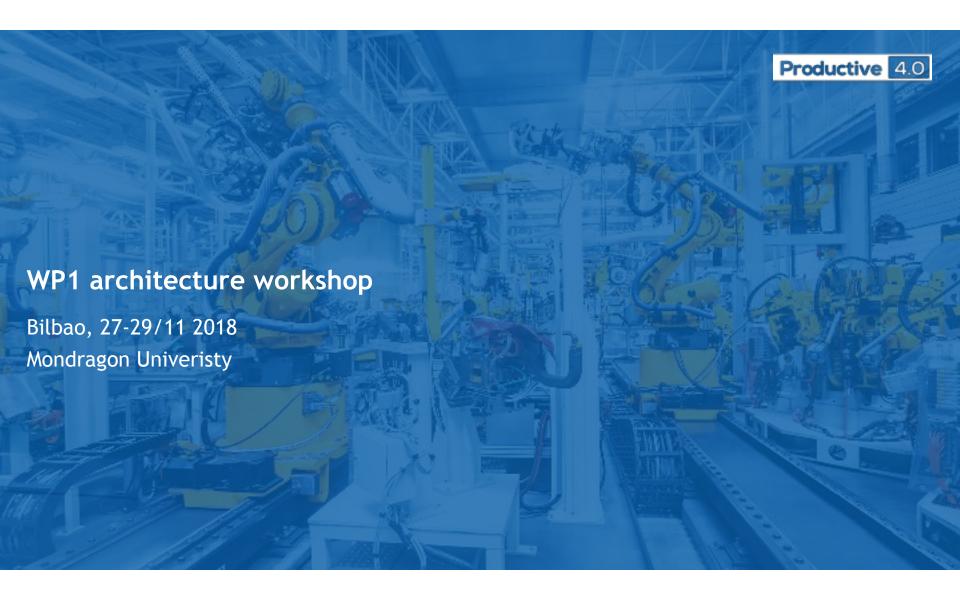12) SoS integration of core systems: verification, Hans

13) AoB

MoM

In Arrowhead Framework wiki, git repository

10_Meetings/Core_system_development/181002/
   AF_development_coordination.xlsx

ARROWHEAD

WP1 architecture workshop

Bilbao, 27-29/11 2018

Mondragon Univeristy

Productive 4.0

Workshop objective

Specifications and implementations of ICT architecture addressing Productive4.0 requirements regarding **optimised supply chain management covering the entire product lifecycle**

Arrowhead Framework v4.0 core services, v4.2 developments

Architecture integration hands-on WS with WP2, 3, 8 and 9

Standardisation, Governance, Dissemination

Productive 4.0

ECSEL JU

Agenda - draft v0.1

- Dag 1: Architecture developments
- Day 2: Architecture usage - use case implementations hands-on workshop
- Day 3: Dissemination, Security, Governance, Standardisation

ECSEL JU

Day 1

9.00 Core systems at v4.0 - 15min per core sys
- ServiceRegistry, Csaba (AITIA), Jens (LTU)
- Authorisation, Csaba (AITIA), Kiran/Jan (LTU)
- Orchestration, Csaba (AITIA)
- Gatekeeper, Csaba (AITIA)
- Gateway, Csaba (AITIA)
- Translation, Jaime (LTU)
- DataManager, Jens (LTU)
- EventHandler, Csaba (AITIA)
- QoS, Michele/Luis (ISEP)

11.00 Core system candidates - 15min per core sys
- WorkflowManager, Jaime (LTU)
- WorkflowExecutor, Jaime (LTU)
- SmartServiceBroker, Emanuel (LTU)
- On-boarding procedure, Silia/Ani (FHB)
- SystemRegistry, Silia/Ani (FHB)
- DeviceRegistry, Silia/Ani (FHB)

12.30 - 13.30 Lunch
- Configuration, Jamie, Emanuel (LTU)
- PlantDescription, Jaime, (LTU)

- Translation - sematics, Jacob (LTU)
- Re-orchestration, An (HIOF)
- Self Adaptability security, Markus/Ani/Silia (FHB)
- CredentialAuthority, Gabor/Csaba
- OPC-UA translation, Jerker
- FiWare translation, Jens/Jerker
- 5G integration, Ericsson?

15.30 Tools - 20 min per tool
- Docker containers, Harris
- Debian installation, Thomas
- Consumercode Generation, Cristina (LTU)
- Test tool, Fredrik (BnearIT)
- Sandboxing tool, Fredrik (BnearIT)
- Legacy Integration Tool, Mario (ifak)
- SecurityManagement, Kiran/Jan
- Modus TCP integration, TWT
- PLC integration

17.30 Closing

Evening - Joint social event

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Day 2

- 9.00 Hands on workshop - Training
  - Local cloud installation, Harris and Thomas, (30 min)
  - Application producer system design and implementation, Csaba (1.5h)
  - Application consumer system design and implementation, Cristina, (1h)
  - Usage of Translation system, Jaime (30 min)

- 12.30 - 13.30 Lunch
  - Legacy system wrapper, Mario, (45 min)

  - Development tools - Fredrik/Hans BnearIT, (1h)

- 15.30 Break-out sessions - 1 or 2h
  - SafetyManager, Daniela, Mirren
  - SecurityManagement, Jan/Kiran
  - SmartServiceBroker, Emanuel and Ulf
  - WorkflowManagement
  - ?
  - ?

- 17.30 Closing of the day

- Joint Social event?

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Day 3

9.00 Governance
- Arrowhead Framework -> Eclipse project, Jerker

10.00 Architecture security report, Adi

11.00 Standardisation, Erwin/Oystein

11.30 Dissemination, Jerker
- 2019
  - Productive4.0 conference March 12-14, Budapest
  - IEEE ICPS Taiwan, SS, Tutorial
  - IEEE INDIN, SS
  - IEEE EFTA,

- IEEE IECON, SS
- Special issue: IEEE Industrial Informatics?, mdpi/
- 2020
  - IEEE ICPS Tampere - June Final project conference
    - SS, Tutorial, Sommerschool (EIT ICT/ Manufacturing-KICK project?)

12.15 Next WP1 workshop, Gothenburg, April 24-25, 2019 Location TBD, Sept 17-19, 2019

12.30 Closing WP1 workshop

14.30 PMT meeting