A3.Sys4 - Modelling Industrial Production Systems

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1. Keyfacts

Duration	3 days
Language	English or German
Setting	on-site or remote

2. Target Group

System Architects, Process Owners and everyone who is involved in development of solutions for Industrial Production Systems

3. Training Goal

The ultimate goal of this training is to learn how to exploit domain-specific concepts for developing solution architectures for Industrial Production Systems. A major focus in that case is put on the integration of "processes" and "architecture". As such, the particular goals of this training are:

#1 - Domain-Specific Concepts
Participants know about existing concepts for modelling Industrial Production Systems

#2 - Enterprise Architecture, Process Models and IT/OT Integration
Participants know established concepts to model Enterprise Architectures and processes. Further, they are aware of IT/OT integration aspects and understand how this task can be approached.

#3 - Specific modelling concepts for Industrial Production Systems
Participants know Smart Grid specific Architecture Frameworks, Reference Architectures, and modelling environments to develop architectural solutions

3. Training Content (AVISO: Training under Development)

Introduction / Recap
- The Generic Modeling Stack and where to integrate domain-specific concepts

Specific Concepts for Industrial Production Systems
- Business and Production Processes vs. Technical Architecture
- IT/OT integration

Modelling Enterprise Architecture
- Enterprise Architecture Frameworks (TOGAF, Zachman, Archimate)
- Enterprise Architecture Modelling Languages (BPMN, TOGAR, Archimate)

Frameworks for Industrial Production Systems
- The "Reference Architecture Model for Industry 4.0"
- Modelling Industrial Production Systems: The "RAMI Toolbox"

Reference Architectures and Brownfield Approaches
- Reverse Engineering of existing production systems
- Creating "as-is" Models

    • Creating "to-be" Models

Making it yours: Tayloring the Modelling Environment and Modelling Languages
    • How to extend the existing DSL
    • Working with Reference Architectures and Blue-Prints

4. Learning Methods and Didactics

Theory input and practical exercises; don't forget to bring your computer!

5. Your Benefit

In this training you will learn how to create system models on basis of existing, Industrial Production System specific concepts. By doing so, your models will be created in the "lingua franca" of the Industrial Production domain which provides the basis for having all stakeholders on board. Special benefits are the learning on how to integrate Process/Architecture Stakeholders and IT/OT aspects

6. Your Trainer

FH-Prof. Dr. Christian Neureiter
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Christian is Professor at the School of Information Technology and Digitalisation at Salzburg University of Applied Sciences. As head of the "Center for Dependable Systems Engineering" he is an expert in this field and has profound knowledge on the matter.

Asides his academic role, Christian has 10+ years of experience as consultant and trainer at the Successfactory Consulting group with a particular focus on Leadership, Software, and Systems Engineering related topics.

For more information on scheduled trainings or the organisation of a closed group contact us:

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