OPC UA scalability:
From small ARM device to SAP

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UA solutions: Device to Mainframe

- Toolkits and SDKs (C / C++ / Java)
- used by all large automation vendors
- all platforms, all architectures
  (x86, ARM, PPC, x64, Mips, ... <> WinCE, vxWorks, Linux, QNX,...)
- UaModeler - Code Generator
- OEM solutions for legacy OPC

Solutions:
- PC, IPC, Panel
- Embedded Device
- Smart-Phone
UA solutions: UA Server Device

- ARM 9 rack mount UA Server Gateway
- Embedded Linux
- S7, Modbus, CAN, ...
- Ring Buffer Data Storage
- Configured through UA

OPC UA goes Mobile: Android and Apple (iPhone and iPad)

- ARM Cortex A8
- Android 2.2
- UA Client
- UA Security

UA solutions: @ ProsysOPC

- Prosys OPC UA Java SDK
- Brings OPC UA on any Java capable platform:
  - Windows, Unix, Linux, OSX...
- Google Android is also “natively” a Java platform
- Enables full OPC UA development capabilities together with Android SDK

- ProsysOPC UA Android Client
- Android 2.3 and up
UA solutions: @ Softing

- **Company:** Softing
- **Product:** Development Toolkit for Windows, VxWorks, Linux, QNX
- **OPC UA:** UA Data Access, Alarms&Conditions, Client, Server

UA solutions: @ EmbeddedLabs

- **Company:** Embedded Labs
- **Product:** fasalink – OPC-UA Server Module
- **OPC UA:** OPC-UA Server
UA solutions: @ Siemens

Penetration at all automation levels

- Openness of OPC
- Consistency of Totally Integrated Automation
- Your benefit

**SIEMENS**

**Enterprise Resource Planning**
- SIMATIC IT, SIPLUS CMS

**Management Level**
- MES

**Operations Level**
- SCADA
- WinCC, SIMATIC PCS 7, ...
- SIMATIC Net OPC, S7 OPC Redundancy, SIENMA Server, SIPLUS CMS, SIMATIC

**Control Level**
- SINUMERIK, SIMATIC S7, SIMOTION, ...
- SIMATIC Net OPC, SIMATIC
- WinAC RTX, SIMATIC HMI Panels

**Field Level**
- Sirius, SIMOCODE pro V PN
- Motormanagement System

**UA solutions: @ Siemens**

OPC-UA in field-devices
**Product:** Sirius, SIMOCODE pro V PN Motormanagement System

Produktinformationenblatt 3UF7011-1AU00-0

- GRUNDGERÄT 3 SIMOCODE PRO V PN ETHERNET / PROFINET IO
- OPC UA SERVER / WEBSERVER
- UEBERTRAGUNGSRATE 100MBIT/S
- 2 X BUSSCHLUSS UEBER RJ45 4P/8A FREI
- PARAMETERBAH
- US. AC/DI 110-240V
- EINGANG F. THERMISTORANSLUS
- MONOSTABLE RELAUSGAENGE
- ERWEITERBAR DURCH ERWEITERUNGMODULE

**SIEMENS**
UA solutions: @ BECKHOFF

Automation Controller series with PLC, Motion and GUI

- OPC-UA Server integrated:
  - DA: Data Access
  - HA: Historical Access
  - AC: Alarm & Condition

- OPC-UA client integrated
  - UA client functionality as FUNCTIONSBLOCKS out of the IEC61131-3 PLC

- Certified in OPC-Europe Lab

UA solutions: @ BECKHOFF

- Company: Beckhoff
- Product: IPC-Diagnostic (royalty free)
- OPC UA: OPC-UA Server

Access to all parameters:
- Hardware
  - CPU usage
  - CPU temperature
  - Fan speed
  - ...
- Software
  - IP address
  - Free space on HDD
  - ...

OPC AND MES DAY FINLAND 2012
UA solutions: @ Bosch-Rexroth

- Company: Bosch-Rexroth
- Product: IndraLogic
- OPC UA: OPC-UA Server

UA solutions: @ Prediktor

- Company: Prediktor AS
- Product: UA Box – hookup IO directly to business systems
- OPC UA: OPC-UA Server
UA solutions: @ Prediktor

- Company: Prediktor AS
- Product: APIS OPC Historian – efficient BI on huge production volumes
- OPC UA: OPC-UA Client and Server

UA solutions: @ Matrikon

- Company: MatrikonOPC
- Product: Universal Connectivity Server
- OPC UA: OPC-UA Server
UA solutions: @ SAP

- Company: SAP AG
- Product: SAP Plant Connectivity (PCo)
- OPC UA: OPC-UA Client (PCo Agent)

SAP support UA: The Perfect Plant

Harmonizes Complex Manufacturing Network Interdependencies
SAP product „SAP Plant Connectivity“ provides OPC-UA