OPC DAY FINLAND 2017
11.10.2017 #OPCUA #OPCDAYFINLAND #AUTOMATION #OPCDAY

SPONSORS

BECKHOFF
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VTT
TO ERR IS HUMAN,
TO IMPROVE IS NAPCON.

Andreas Frejborg, Technical Sales Manager, NAPCON
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Andreas Frejborg has 20 years of experience in real time information. He has deep knowledge in design, configuration, testing and commissioning real time information system. Furthermore Andreas has acted as Project Manager and Project Lead in several real time information related projects ranging from study phase to execution. For the past years Andreas has acted as advisor to several clients in their efforts to push digitalization of their process to the next level.
NESTE JACOBS

Personnel 1300

No. 1 Engineering Company in Finland on Industry Sector*

No. 2 Engineering Company in Finland measured on Exports*

Customers 100% ready to use us again.

* Source: SKOL Statistics and Customer survey 2015
CUSTOMER SEGMENTS

- Biopharma
- Food Industry
- Biochemicals
- Biorefining
- Petroleum Refining
- Petrochemicals
- Gas
- Industrial Infrastructure

Natural Gas – Biogas - LNG
OUR FOCUS AREAS

- BUSINESS OPTIMIZATION
- QUALITY OPTIMIZATION
- SAFETY
- PRODUCTION OPTIMIZATION
- ENERGY EFFICIENCY
- LOGISTICS
- BIG DATA
- ENVIRONMENT
OUR PRODUCTS

UNDERSTAND
NAPCON Understand solutions will turn the data provided by your plant into relevant information that help optimize your company’s production.

IMPROVE
NAPCON Improve solutions will bring out the maximum potential of your operations and help you ensure that your investments meet your strategic goals.

TRAIN
NAPCON Train solutions will bring the real life plant into the virtual world, making training operators and testing the limits of your plant safe and exciting.

DECIDE
NAPCON Decision support enables you to make the right decisions, even in complex conditions.
NAPCON INFORMER KNOWS IT ALL.
NAPCON INFORMER KEY FEATURES

AUTOMATION
Built-in information models that allow true system-to-system communication improving performance and scalability without requiring any human interface.

SAFETY
OPC UA technology that provides user authentication by certificates and enables cyber secure communication between server and client.

EFFICIENCY
Time series database (TSDB) enables efficient data handling that truly matches your needs.

STANDARDIZED
Standardized interface through OPC UA real-time database build on top of time series database with premium performance.
NAPCON ANALYTICS IS THE LINK BETWEEN DATA AND REAL KNOWLEDGE.
NAPCON ANALYTICS BENEFITS

INTELLIGENCE
NAPCON Analytics makes your existing operational and business intelligence systems even smarter.

EXPERTISE
We offer in-depth knowledge of industry specific calculations including calculation packages designed for process industry.

UNDERSTANDABILITY
NAPCON Analytics provides one coherent view of information.

RELIABILITY
Our solid experience of calculating models is fully at your service.

CUSTOMIZATION
We provide customizable, easily tailored solutions.
PULLING THE INFORMATION OUT OF YOUR PROCESS INSTRUMENTS – UTILIZE AVAILABLE OPC UA INFORMATION INTEGRATION
A DIGITAL PLANT – WHAT WOULD BE THE ULTIMATE GOAL?

Key features of a modern digitalized plant

• Current state of plant is **transparent** and **visible** to every stakeholder

• Information gathered is transformed to **wisdom**

• Operations are **Cyber Secure** in every aspect

• Production is **Optimized** on every level of the Enterprise and Plant
LET'S TALK ABOUT INDUSTRIAL INTERNET OF THINGS INSTEAD
HOW TO COMMUNICATE – THERE IS A PLETHORA OF WAYS TO DO IT
THE INFORMATION PYRAMID

0 LEVEL
PHYSICAL PRODUCTION PROCESS

1 LEVEL
SENSING PRODUCTION PROCESS, MANIPULATING SAFETY

ms
SIS, I/O

2 LEVEL
OPERATION, MONITORING, SUPERVISORY CONTROL AND AUTOMATED CONTROL

ms
SCADA
HMI, DCS, PLC

3 LEVEL
WORKFLOW / RECIPE CONTROL, MAINTAINING RECORDS, OPTIMIZATION

SHIFT
H, MIN, S
MES
LIMS, WMS, CMMS

4 LEVEL
ESTABLISH THE PLANT SCHEDULE - PRODUCTION, MATERIAL USE, DELIVERY AND SHIPPING

MTH
WK, D
ERP
PLM, CRM, HRM
ANALYZER INTEGRATION IN PROCESS INDUSTRY

CASE EXAMPLE
HOW DO WE CONNECT TO A PROCESS ANALYZER?

Two ways to do it

The old fashion way with mA signal, by picking only those few needed for plant operations.

OR

Select an analyzer vendor that do OPC UA (with or without ADI) and one get all in no time!
SOMETHING LIKE THIS.....
SO ONLY A FEW CLICKS AWAY

1. Browse up the analyzer

2. And start taking use of the information
WHAT DID WE GET…?

With a click

• 37 components
• Each containing 4 information points

Which makes

• 148 information points!!!
WHAT DOES IT LOOK LIKE?
Data is the king! In this case instead of just getting 4 measurements, one can collect store and analyze a bit over 100 measurements.

Built in Cyber Security

A lot less of very expensive field wiring works

And you get the data in no time!
Thank you!

Any questions?