sps connect
The digital automation hub

Mit Marktübersicht!

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Die SPS – Smart Production Solutions – feiert eine Premiere: Aufgrund der Corona-Pandemie findet der Branchentreff der Automatisierungstechnik erstmals als virtuelle Networking-Plattform SPS Connect statt.

Bild: Mesago / Malte Kirchner

Die erste SPS Connect

Erstmals in ihrer Geschichte findet die SPS – Smart Production Solutions – nicht als Präsenzveranstaltung statt. Grund dafür ist die Corona-Pandemie. Doch die Verantwortlichen der Mesago Messe Frankfurt haben mit der SPS Connect eine virtuelle Match-Making-Plattform für die Automatisierungsbranche auf die Beine gestellt. Diese bietet den rund 250 Ausstellern bis 4. Dezember die Möglichkeit, sich digital und multimedial mit den Besuchern über die aktuellsten Trends und Entwicklungen in der Automatisierungstechnik auszutauschen.


Bild: Mesago Messe Frankfurt

Virtuelles Matchmaking

Die SPS Connect unterscheidet sich natürlich von einer physischen Messe. Damit Besucher jedoch den passenden Aussteller für ihre Anforderungen finden, steht im Hintergrund der virtuellen Plattform ein KI-gestütztes Matchmaking bereit. Dieses sorgt dafür, dass Aussteller und Besucher aufgrund ihrer Angaben im Bereich Suche/Biete zusammengebracht werden. Die Daten der individuellen Profile sowie das Nutzerverhalten jedes Teilnehmers nutzt die KI, um die richtigen Personen einander vorzuschlagen. Teilnehmer können für sie relevante Kontakte sehen, Interesse bekunden und proaktiv Termine vereinbaren. Bei der Planung unterstützt ein persönlicher Messe-Terminkalender.

Auch auf das gewohnte Vortragsprogramm müssen Teilnehmer der SPS Connect nicht verzichten. An allen drei Messetagen können sich Besucher ihr persönliches Vortragsprogramm zusammenstellen. Die Vorträge stehen zudem als Aufzeichnung bis Ende des Jahres zur Verfügung.

Andrea Gillhuber

Sylke Schulz-Metzner, Vice President SPS, spricht im Videointerview über die Highlights der SPS Connect und was Sie auf der Matchmaking-Plattform erwartet. Um das Video anzusehen, klicken Sie bitte auf das Play-Symbol im Bild.

DAY 1

24. November 2020

Dr. Markus Söder speaks on the Main Stage

At 10 am, SPS Connect begins with its extensive lecture program. The highlight today is the presentation by Dr. Markus Söder, Bavarian Prime Minister, at 2:30 pm. Afterwards, the CSU chairman will be available for questions.

Six billion euros from 2015 to 2022: the ‚BAYERN DIGITAL' program created the foundations for digitization in Bavaria. Further efforts followed, including the ‚Hightech Agenda Bayern' in October.

The ‚Hightech Agenda Bayern' is particularly close to the heart of Minister President Dr. Markus Söder. The aim of the agenda is to invest more in artificial intelligence and SuperTech, to strengthen Bavaria and thus Germany in the global competition for technological dominance. As well as strengthening teaching and research, this project also includes a sustainable SME offensive for Bavarian industry.

Andrea Gillhuber

Bild: Bayerische Staatskanzlei

What's about Open Source license?

OPC UA PubSub via TSN as Open Source License: This is the goal that Fraunhofer IOSB, Kalycito and OSADL have been pursuing since SPS 2018 with the open62541.org project. How far has the work progressed? Dr. Carsten Emde provides an update.

Dr. Emde, how are you progressing with the open source implementation of OPC UA PubSub via TSN? Why is it taking so long?
Dr. Carsten Emde: We are often asked about the latter in particular. Many suspect that there are some slowing down forces at work here. – But this is definitely not the case! It's just that when a proprietary software is developed by a company, the development work often takes six years in private and the project work is not published until the final year. With an Open Source project like ours, however, the public is involved from the very beginning. And then everyone thinks that the development took seven times longer than usual.

Dr. Carsten Emde, managing director of OSADL, dispels rumors: „There are no ‚brakemen' at work who want proprietary protocols, which have been declared dead, to live longer than expected."

So what is available after two years?
I would like to answer this question separately for OPC UA PubSub and Time-Sensitive Networking. Regarding the open source implementation of OPC UA PubSub, we have made remarkable progress. Among other things, the OPC Foundation has certified an OPC UA server developed with the help of this software according to the ‚Micro Embedded Device Server' profile. Furthermore, PubSub server and client have been developed and successfully tested on different architectures and systems. The development of this software in its current implementation can already be used productively. Several larger companies active in the automation environment have already decided to use this implementation.

And what about Time Sensitive Networking?
Most of the realization of TSN is done in hardware. Progress in this area is therefore highly dependent on the availability of suitable hardware components. OPC UA PubSub via TSN is completely supported by the Intel network adapter I210 starting with Linux kernel 4.19. The successor I225 from the same manufacturer has just been released and is currently being adapted. But for the development of a manufacturer-independent kernel interface we need more hardware, also from other manufacturers. This may still take a while.

Can we already see the results somewhere?
The OSADL QA farm on our website, which was originally set up to determine and make publicly available real-time behavior, long-term stability and other key performance indicators of embedded systems that are important for production systems, has now been expanded to test network connections – peer-to-peer and star topology – with OPC UA PubSub via TSN. The long-term measurements performed there concern the quality of time synchronization between network and system as well as the maximum jitter in roundtrip measurements. The measurement results are publicly available on the website.

Meinrad Happacher

Photo: OSADL