Two-day hands-on workshop:
OPC UA with open62541

November 24 and 25, 2022

The workshop will take place online

Workshop day 1 – November 24, 2022	
Any time between 12:00pm – 01:00pm	Online helpdesk for participants to configure and prepare their systems for the hands-on sessions and familiarize themselves with the video conference system, *Fraunhofer IOSB** and OSADL* Workshop Team*
01:00pm – 2:00pm	**Lunch break**
02:00pm – 03:15pm	**All:** Keynote: OPC UA – THE solution for Industry 4.0 and IIoT, *Alexander Allmendinger, Test Lab Manager, OPC Foundation European Certification Lab* The role of open62541 in the OPC UA technology landscape, *Dr.-Ing. Julius Pfrommer, Fraunhofer IOSB*
03:15pm – 03:30pm	**Coffee break**

03:30pm – 05:00pm	**Parallel hands-on session I (basic):** Introduction to OPC UA (presentation), *Andreas Ebner, Fraunhofer IOSB* First steps to use OPC UA for client-server communication (hands-on), *Fraunhofer IOSB** and OSADL Workshop Team**	**Parallel hands-on session II (advanced):** OPC UA network services and related network communication (presentation), *Jan Hermes, Fraunhofer IOSB* Create suitable information model (hands-on), *Fraunhofer IOSB** and OSADL* Workshop Team*

Workshop day 2 – November 25, 2022

9:00am – 10:30am	**All:** The design of the open62541 OPC UA SDK, *Dr.-Ing. Julius Pfrommer, Fraunhofer IOSB* How to contribute to open62541, *Andreas Ebner, Fraunhofer IOSB* Fullfilling license obligations of MPL-2.0 when conveying the open62541 library to customers, *Caren Kresse, OSADL*
10:30am – 10:45am	**Coffee break**

10:45am – 12:00pm	**Parallel hands-on session I (basic):** Toolchain and build environment, portability and system integration of open62541 (hands-on), Creation of an OPC UA client example application and testing it with a local OPC UA server, *Fraunhofer IOSB** and OSADL* Workshop Team*	**Parallel hands-on session II (advanced):** Implementation and configuration of security features in open62541 (encryption, access control), (hands-on), *Fraunhofer IOSB ** Workshop Team*

12:00pm – 01:30pm	**Lunch break**
01:30pm – 02:45pm	**All:** OSADL OPC UA community project, LOI #4, presentation of the components to be developed, *Jan Altenberg, OSADL* First insight and use of already available LOI #4 components, *Dr.-Ing. Julius Pfrommer, Fraunhofer IOSB and Srđan Usorac, KEBA Group*
02:45pm – 03:00pm	**Coffee break**

03:00pm – 04:00pm	**Parallel hands-on session I** `(advanced level):` PTP resp. IEEE 802.1AS – rev, installation, configuration and testing, *OSADL Workshop Team**	**Parallel hands-on session II** `(advanced level):` PubSub stand-alone server of the open62541 SDK and its usage with multicast networking, *Fraunhofer IOSB Workshop Team***

04:00pm – 04:30pm	**All:** Discussion round

**Fraunhofer IOSB Workshop Team: Dr.-Ing. Julius Pfrommer, Andreas Ebner, Jan Hermes, Florian Düwel, David Meier, Noel Graf
*OSADL Workshop Team: Jan Altenberg, Alexander Bähr, Dr. Carsten Emde, Caren Kresse