Call for Experts

New working-group omlox safety in the omlox universe

Environment:

During the last years a global standard for real-time location has been established through omlox. There is a middle layer (the omlox hub) with a standardized API and a full air-interface protocol for interoperability in the tracking HW (the omlox core-zone) defined. Both specifications are already available in version 2 and the implementations are running at several global market-leaders mainly in Europe. The strongest communities exist in Germany and China with rising interest in the USA. The omlox committee members come from Accenture flowcate, ST Micro and TRUMPF. The new working-group leader omlox safety Philip Kleen comes from Fraunhofer IOSB-INA.

Problem:

In the existing working-groups the main aspects of a real-time location-system (RTLS) were fully specified. Therefore, allowing interoperable operation of different HW and SW elements in one RTLS end-to-end system. For several highly interesting use-cases a safety relevant location needs to be determined. An example is the activation of a safety circuit from a mobile operating panel: this is only allowed from a viewpoint, which allows full overview of the critical working-space. In order to enable such mobile operation, the location of the mobile panel needs to be determined in a safe manner. There are many more safety related location use-cases which need to be addressed by this new working-group.

Task:

The new working-group omlox safety will meet regularly and is intend to stay continuously. The new working-group leader Philip Kleen will also be a member of the omlox committee. After a first phase in which the use-cases are discussed and understood the members will exchange their different understandings and a good knowledge foundation concerning the existing omlox standards will be established. Then the final task will start, and the working-group will draft a first specification proposal as safety enhancement.

We are looking for Experts:

- Omlox-Standard, real-time location-system (RTLS)
- Omlox core zone
- Software for safety application like IEC 61508, IEC 62061
- Experience in development and application for functional safety.
- Member in other PNO safety working groups like PROFIsafe, OPC UA Safety

Result:

Draft of the first omlox safety specification, which describes mechanisms and architectures. Furthermore, requirements for the execution of the infrastructure and possible omlox safety core zone are to be defined. Development of a test specification that explicitly addresses functional safety. The vision is to be able to use omlox as a component of functional safety.

Cooperation:

The working group will closely cooperate with the omlox working-group core-zone and on-demand also with the working group hub. If needed we can also use existing cooperations as with fira to reuse already established processes, like e.g. distance-bounding.

Furthermore, proximity to PROFIsafe and OPC UA Safety is sought to bring proven procedures and existing expertise to omlox.

Appointment, Contact:

The first constitutive meeting will take place on July 2nd, 2024, at 4pm at MS-Teams. For participation contact: Philip Kleen Mail: <u>philip.kleen@iosb-ina.fraunhofer.de</u>