ASAM SCDL Security Extension

Workshop on Mar 29, 2022

Workshop Results

Summary of the workshop results:
The security extension will be integrated into the current SCDL process model. The extension is considered for the exchange information between security designer and safety designer.
The extended model will be clarified in subsequent meetings and a proposal workshop will be prepared. The planned extension will be described in more detail in the project proposal which is currently being prepared.

Points of discussion and consideration within the workshop:

1) Comparison between safety and security:
   - Scope: Security has broader scope than safety (e.g., Privacy information).
   - Attack Tree of security and Fault Tree of safety: How the trees are related to each other. Some items of the tree are overlapping.
   - Conceptional level: Pragmatic and implementation topics are often assigned to security while concept and design topics are assigned to safety. Security design has just started.
2) Perspective from the design of the overall system
   - How are safety and security designed and integrated in the system?
   - Order of the designs: Either safety is first, or security is first. Otherwise, there will be an iteration process.
   - Effectiveness between safety and security: safety errors lead to a security errors and vice versa.
   - Duplicate information between safety and security should be avoided. Only one piece of information is described and referenced.
   - Duplicate design leads to duplicate implementations. This would have disadvantageous effects on resources and performance.
3) Reference of the standards
   At the moment, security standards refer to safety standards, however safety standards do not refer to security standards.
4) Goal of the safety and security design
   The shared information of safety and security shall be described in one architecture. Currently, ASAM SCDL describes the safety architecture. The security architecture will be available in the future.

Next steps:
The elements of the extension will be discussed and concluded in the follow-up meetings. The extension is based on the current SCDL process model which is one of the basic concepts of ASAM SCDL. The items will be considered for the information exchange between security designer and safety designer, to archive common information of the system. A proposal workshop for a future ASAM SCDL standard extension will now be prepared detailing what has been decided by then.