Software aspect of the Reference architecture

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The SAVOIR-FAIRE working group is the sub group in charge of the on-board software reference architecture. It has produced a document describing architectural principles. The following work is supported by several industrial activities:

- COrDeT and COrDeT2 consolidate the architectural principles and propose a component model to express the application part of the architecture. They look also at some aspects of the execution platform.
- OSRAC (1+2) investigate the application functional chains and verify that they can be implemented with the proposed architecture, the component model and the execution platform services.
- The IMA4S offers a specific configuration of the execution platform including segregation mechanisms such as Time and Space Partitioning, inter partition mechanisms, input/output partitions, and partition kernels. This concept can also be applied for security purpose as well as safety.

The presentation will give an overview of the current activities status and achievements, with a view on the concept of configurable execution platform.