MMP

Milestone MS1

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Responsible Partner:	CTU
Contributors:	TNO, Tue, CTU, Access, VTT, CelSian, Philips, Abengoa
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The structure of proposed integration framework is based on object-oriented design principles and consists of set of high level abstract classes defining common interface. This interface is represented by a set of services that should be exclusively used to communicate with individual objects. This interface concept allows using any derived class on a very abstract level, using the services defined by common interface, without being concerned with the implementation details of individual component. The focus is therefore on services provided by objects (object interface) and not on underlying data, which allows to abstract from particular data and storage format. The abstract classes represent fundamental entities in the model space, such as simulation tool(s), fields, discretizations, properties, etc. The identification of individual objects and their mutual interaction has been based on expertise of project partners, and later refined by analysis of simulation scenarios considered in the project.

The top level classes and corresponding interfaces define application or framework interface. The specification is the result of collaborative effort of all project partners during the first six months. Starting form initial description of foreseen simulation chains, followed by initial API proposal and several iterations, the process has resulted into a final API specification, revived and agreed by all project partners. The specification is described in detail in D1.1, delivered in M6. The specification contains description of individual top level classes and their interfaces are described in detail. For each class a table is provided with desription of all services, their input/output arguments and return values.

The initial class structure with interface definitions corresponding to API specification has been uploaded to framework repository hosted at SourceForge, from which the initial source code is publicaly available (https://sourceforge.net/projects/mupif).