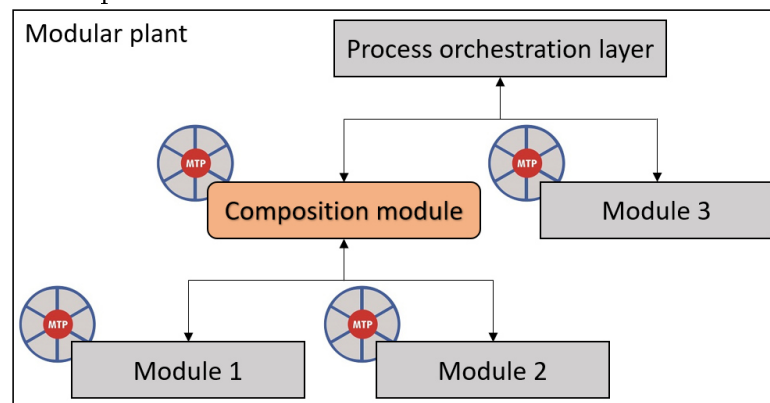


## Derivation of a workflow for the composition of modules using module type package compliant interface specifications

A module composition enables the information-technical combination of modules under a common composition module. The composition module represents an abstraction layer between the used modules and a process orchestration layer or operator. On one hand, it offers MTP-compliant interfaces for orchestration and on the other hand orchestrates the subordinate modules. Thus, an arbitrary nesting of modular plants is possible, while the perceived structure for the individual components remains the same. In addition, the composition module can implement new process-technical steps by combining already existing services across modules.

In this diploma thesis a workflow for the execution of a module composition is derived. The workflow is highly automated and uses the MTPs of the modules to be combined as the informational base for the module composition. In addition, the structure of a composition module for technical implementation is described.



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