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# **A Communication Protocol for Distributed Process Management**

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# Problem

- coordination and cooperation of several sites with a large number of people and sub processes in software development
- How to manage the site autonomy?  
The main open problem remains the systematic definition of distributed process models and their enactment across multiple sites using appropriate abstractions and mechanisms.



# GENESIS architecture for distributed process management

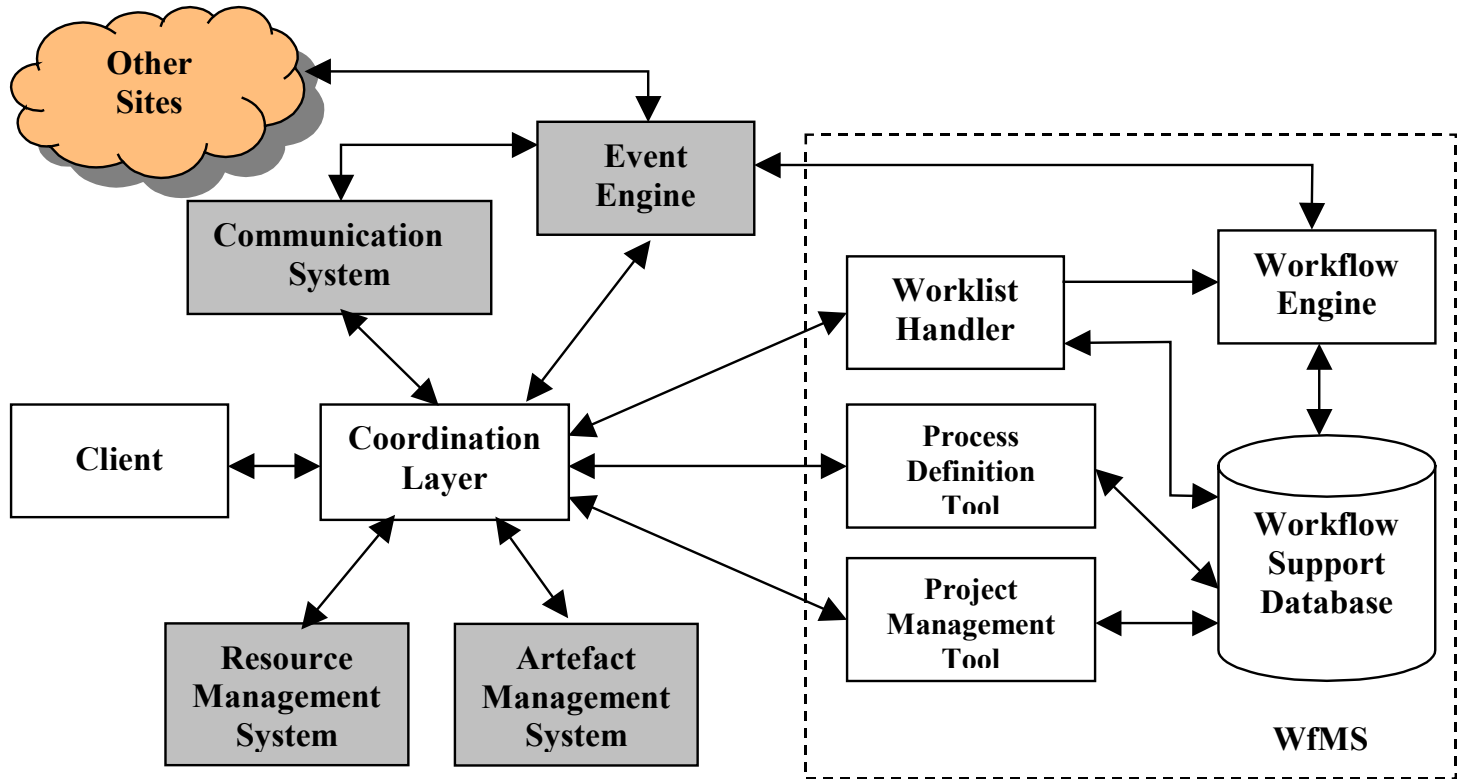
Distributed projects in GENESIS are organized in a hierarchical way. A two level project will include:

- a project coordinator site, and
- a number of local sites.

The coordinator is in charge of modelling and executing the global process, while the local sites are in charge of modelling and executing the sub-processes.



# GENESIS architecture for distributed process management





# Distributed process modeling

an asynchronous protocol has been defined for the communication between the global coordinator level and the local coordinated sites during the instantiation of a distributed software project.

three main phases:

- the creation of the project on both the coordinator site and the local sites, where the resource managers associate people to the project and select the project managers;
- the definition of the global process involving project managers of the different sites; and
- the definition of the local processes, independently defined by the different local project managers.