



**Applications in Practical High-End Computing - Group Project**

Assignment - "Workflow"

**Requirements**

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1. Summary

Task blabla

1. UML 2.0
2. System's Dictionary

In order to avoid as many misunderstandings as possible, authors decided to create dictionary of most terms being used during project.

1. Actors

**User** - person using system.

**Scientist** - User which can run simulation through terminal.

**Administrator** - User responsible for configuration of the workflow.

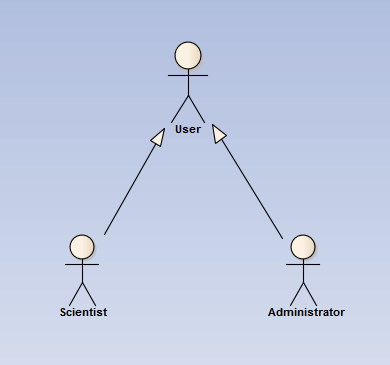


Diagram showing dependencies between actors.

1. Other entities

**System** - all resources and programs used in order to realize project aims. Organised, logically in three layers: access, controlling and calculating one.

### Access layer

**Client** - program which gives Scientist possibility to remotely run simulation or Administrator to change settings of Workflow.

**Terminal** - place where Client runs.

### Control layer

**Workflow** - main program controlling system performance. Starting all managers and therefore, indirectly modules.

**Workflow Server** - logical machine where Workflow runs.

**Workflow Sequence** - ordered, connected list of programs performing actual work of system. Sequence of steps necessary to finish task. Set up by Administrator.

**Workflow Manager** - program which executes and controls Workflow Sequence. Responsible for sending commands and parameters to particular Modules.

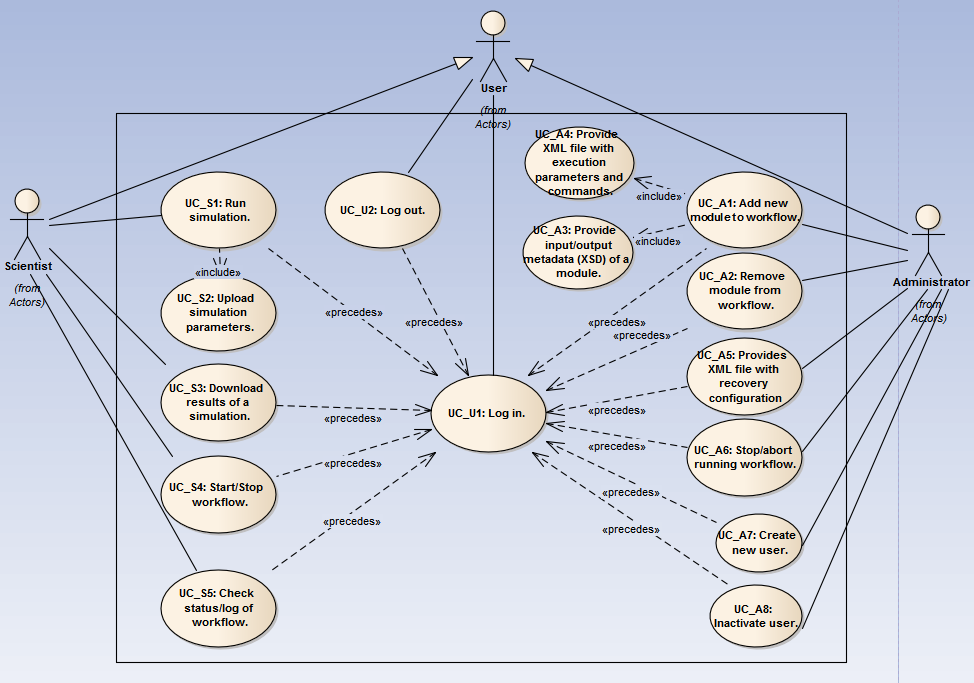
**Module** - single unit-program within Workflow Sequence added by Administrator.

**Recovery Manager** - program which performs all tasks in order to assure safe recovery in case of crush during execution of Workflow Manager.

### Calculation layer

**Calculation Server** - logical place where modules' calculations are being performed.

1. User Requirements
2. Functional requirements
3. Non-functional requirements
4. System Requirements
5. Use case diagram



1. Appendix A: Used Tools