

# Requirements Engineering with Grail/Kaos :

## Tell the Requirements, All the Requirements, and Nothing Else but the Requirements

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A lot of IT projects nowadays experiment delivery delays and overrun costs because the requirements elicitation phase fails to capture the requirements completely and unambiguously.

Software engineering tools currently available on the market are focused on *solution* design rather than on *problem* description. So-called requirement engineering (RE) tools enable companies to *manage* their requirements only once they got them out. But poor requirements, even well-managed, will cause projects to fail.

The presentation shows how CEDITI engineers proceed to produce requirements documents with **GRAIL**, a tool designed by RE practionners for RE practionners to enable them to do real **requirements engineering**. The tool relies on **KAOS**, the goal-driven requirements methodology. KAOS [1,2] advocates for modelling problems in the same flavor as engineers build models to describe solutions but with an appropriate ontology and notation.

The presentation

- outlines the process typically followed to build a requirements document with KAOS
- describes in details how CEDITI engineers proceed to build KAOS models for industrial customers
- briefly describes several industrial projects on which the approach has been successfully applied.
- describes how GRAIL (the tool that supports the KAOS methodology) helps analysts **engineer** their requirements and write their requirements documents
- summarizes the benefits of the approach and explains the reasons why CEDITI is now releasing GRAIL for broad distribution.

### References

- [1] Seminal paper : Dardenne, A., van Lamsweerde, A., Fickas, S., *Goal-directed Requirements Acquisition*, in Science of Computer Programming, Vol 20, 1993
- [2] A full bibliography of publications on KAOS can be found at URL <http://www.info.ucl.ac.be/research/projects/AVL/ReqEng.html>.

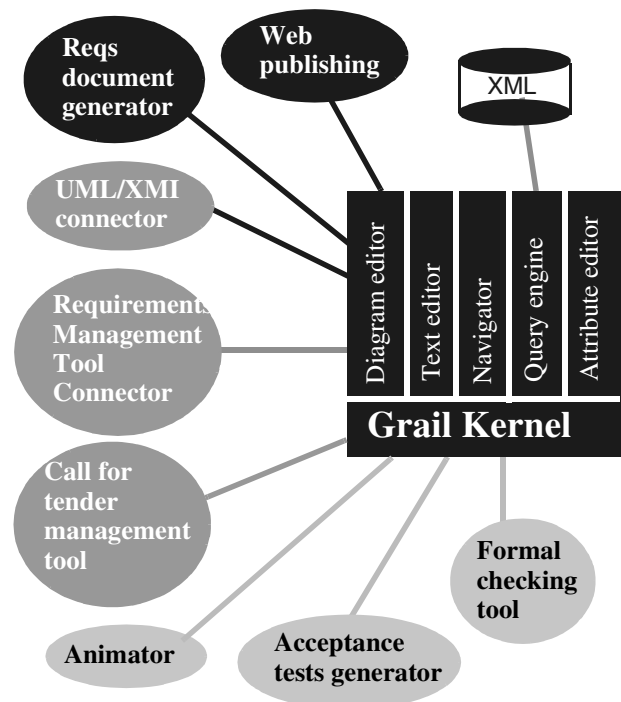


Figure 1. Grail architecture