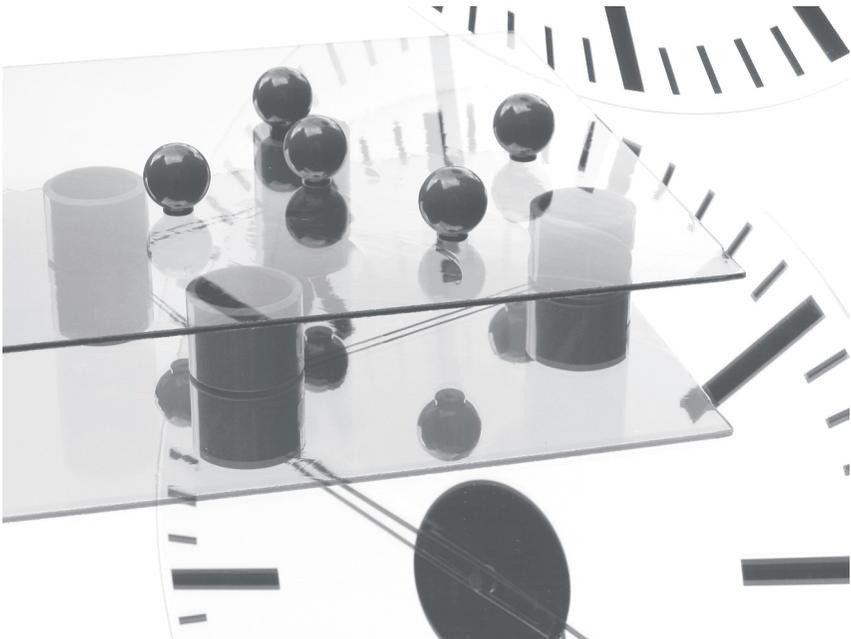


Propositions (stellingen)

supplemental to the PhD thesis

Dynamic Reconfiguration and Load Distribution in Component Middleware



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I

Message reflection is a suitable technique to implement the instrumentation required for middleware-layer QoS mechanisms (Chapter 3).

II

Dynamic reconfiguration can be supported in the middleware layer. This includes support for re-entrant and multi-threaded components (Chapter 4).

III

Load distribution can be supported in a generic and transparent manner using the middleware. However, certain categories of components (e.g., stateful long-lived components with long-lasting invocations) are less suitable for this than others (Chapter 5).

IV

Existing CORBA-based load distribution approaches that use replication often trivialize the transparency and performance issues related to the state synchronization that is needed between replicas (Chapter 5).

V

Full distribution transparency is unachievable, and application developers will always have to account for the fact that the application they are designing is distributed (Chapter 3). However, for a large class of distributed applications we can achieve better transparency than current middleware technologies.

VI

Academic groups in computer science have a tendency to consider other groups with a more formal approach as “too academic to be useful” and groups with a less formal groups approach “too applied for ‘real’ science”, independent of how formal their own approach is.

VII

The pace of developments in certain areas of computer science is such that journals are a too slow medium to disseminate research results. These areas themselves seem to realize this, and rely more on conference proceedings for peer review and dissemination of research results. Unfortunately, more journal-oriented areas sometimes consider the resulting lack of journal publications of research groups in conference-oriented areas as a negative sign with respect their quality.

VIII

Abstraction is sometimes used as a euphemism for “ignoring the actual problem to allow us to focus on a sub-problem that we actually can handle”. Using the term “out of scope” would be more appropriate in these cases.

IX

In some areas of computer science, such as the middleware and distributed systems areas, validation of research results can only be done through large-scale deployments to be able to address scalability, integration issues and human aspects. Since this is economically unfeasible, validation is limited to prototyping and small(er)-scale cases. This contributes to the sometimes semi-religious debates concerning alternative technologies and methodologies.

X

The University of Twente (UT) came up with the abbreviation PNUT (“Personeel Niet UT”, pronounced as peanut) to indicate employees who’s salary is not paid by the university, such as PhD students that are employed by industry. One hopes that this abbreviation refers only to the fact that these employees do not receive a salary from the UT, and does not refer to the expression “if you pay peanuts, you get monkeys”.

