

ΟСμ

Organic Computing Middleware for Ubiquitous Environments

Michael Roth, Benjamin Satzger, Julia Schmitt, Theo Ungerer

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Outline

- Achievements and Problems
- Approach
- Architecture of OCµ
- Conclusion and Future Work



Achievements and Problems

- State in 2009: All self-X services are well investigated, implemented and evaluated on simulators as well as on the middleware running a Smart Doorplate application
- The self-X services partly use the same monitor database, but are not interconnected
 - No synergy between the different algorithms exists so far
- The automated distributed planning of the selfhealing service can be resource-intensive and takes a long time



- Create synergy beetween different self-xproperties
- Use of a Planner to respond to unknown events
- Reflexes for quick responses by recurring events

University of Augsburg



Architecture of OCµ





Conclusion and Future Work

- Integrate self-configuration, self-optimization and self-healing more closely using the same planning engine
- Two-level planner with
 - an elaborate High-level Planner and
 - Low-level Reflexes
- Implement only reflexes on resource-restricted nodes