SELFMAN

Self Management for Large-scale Distributed Systems Based on Structured Overlay Networks and Components (2006 – 2009)

The FP6 project SELFMAN focused on a key aspect of ASCENS and a key expected impact of call ICT 2009.8.5: Lowering management costs and of large distributed systems and more efficient usage of available resources. The goal of SELFMAN was to combine the strengths of structured overlay networks and advanced component models – an approach that is close to the ASCENS approach – in order to build systems that self-configure, self-heal, self-tune, and self-protect. However, the systems constructed following the SELFMAN guidelines perform these tasks without featuring two key ingredients of software components and software component ensembles: self-awareness and dynamic selfexpression.

Furthermore, the research performed in SELFMAN focused on pragmatic insights into the engineering of self-managing distributed systems without a deep understanding based on formal methods. The ASCENS project will therefore take careful account of the practical insights gained in SELFMAN, extend them to SCEs and underlay them with formal models.

SELFMAN website