Beyond Middleware and QoS - Service-Oriented Architectures - Cult or Culture?

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Abstract. State-of-the-art middleware such as CORBA, RMI or .NET Remoting represents a stack of interoperability layers to connect different islands of code. While all these existing solutions are widely used for the development of commercial and industrial software, they still lack essential features: First of all, there is no accepted middleware standard to connect different technology platforms with each other. And second, standard middleware promotes a tight coupling between peers. SOA principles introduce loose coupling which is important when even small parts of a distributed system are not under control of the developers. One implementation of these principles, XML Web services, are capable of bridging heterogeneous languages, platforms, and middleware. On the other hand, complain about immature, missing or even competing standards for XML Web services. And it still seems unclear how component-based technologies and services fit together. The keynote tries to illustrate how the upcoming universe of middleware, services and components could look like. Not only from a functional perspective but also keeping quality of service issues in mind.