Network SOA: Where Complexity Requires Autonomicity

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WAC 2005 Panel

Autonomicity vs Complexity,

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SOA is a Requirement

Autonomic Communication Vs Complexity

- Network oriented R&D [in EU] these days is largely driven by commercial interests, by expectations of new services
 - FET S&AC is a rare exception
- In service-oriented computing autonomous, platformindependent computational entities are dynamically assembled into massively distributed evolvable systems
- Services traded to users on a retail interface (RI) need to be supported on a wholesale interface (WI)
 - RI complexity ~ WI complexity
 - E2E broken?



AC Design Umbrella

Autonomic Communication Vs Complexity

The "end-to-end argument" postulates that no functionality, and/or intelligence critical for end-to-end communication should be placed inside the network



The AC "end-to-end argument" postulates that no functionality, and/or intelligence that can not self-recover should be placed inside the network

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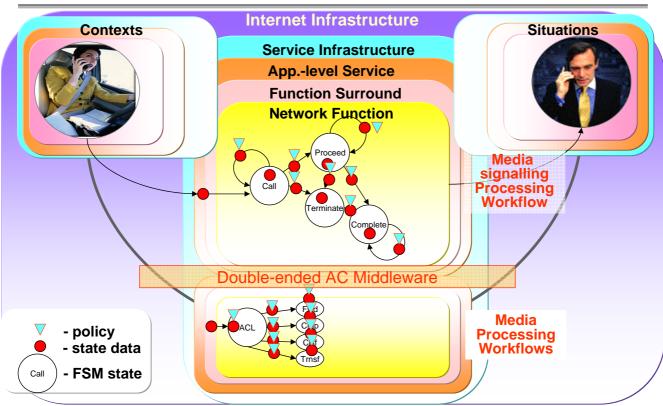
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Multi-tier Dependencies

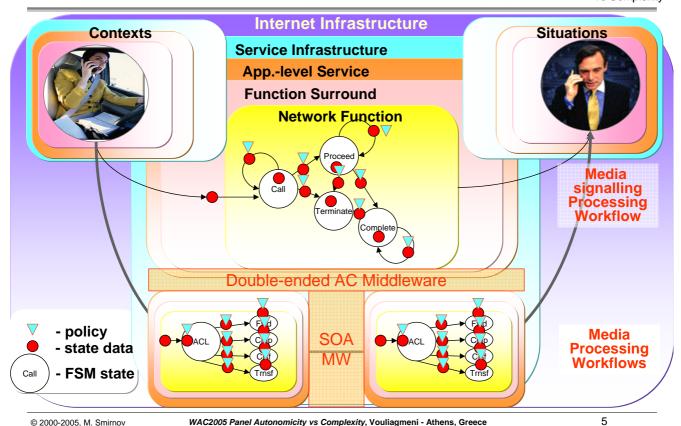
Autonomic Communication Vs Complexity





Multi-tier Dependencies (2)

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New Abstractions!

Autonomic Communication Vs Complexity

Network service-oriented architecture requires new abstraction layers

