#### Service Composition: Position Statement

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#### What Will Happen Mid-Term

- Choreography will become <u>the</u> way for building new services (i.e. composed services) as well as applications
- Enterprises will outsource "processes" (i.e. composed services) to become more effective
  - And not only the processes but often the whole associated IT infrastructure

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# Business Impact Of Service Composition

# Web Services → On Demand Computing



### Fundamental Changes

- "Two-Level Programming" will become mainstream
  - Programming in the small, ...in the large
- "Side-effect": To ensure employment, more and more "traditional programmers" (programming in the small) MUST focus on choreography/service composition (programming in the large)
  - "Traditional" programming will be done outside of the EU and the US to reduce programming costs
  - Choreography (=business process modeling) requires understanding of core business, i.e. cannot easily be done "abroad"

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# Technology Required

- Autonomic Technology
  - Self-healing, self-configuring, self-tuning,...
    - → Base for dealing with huge number of interconnected systems
- Additional Web service standardization, e.g.
  - Management of/via WS
  - Versioning, service compatibility
  - Process "glue"
- "Grid" technology for operational applications
  - Function vs data shipping
    - How to make data accessible to services
    - Data-/service-collocation problem

#### Some Issues (Out of A Huge Set)

- Payment
- Testing & debugging
- Service matching, especially matching composed services
  - Process matching

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