

Agent-Oriented Compositional Approaches to Services-Based Cross-Organizational Workflow

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Abstract. *With the sophistication and maturity of distributed component-based services and semantic web services, the idea of specification-driven service composition is becoming a reality. One such approach is workflow composition of services that span multiple, distributed web-accessible locations. Given the dynamic nature of this domain, the autonomy and adaptation of software agents represent a possible solution for the composition and enactment of cross-organizational services. In this work, we address several aspects of such a domain. We detail design aspects of an architecture that would support this evolvable service-based workflow composition. We discuss the internal coordination and control aspects of such an architecture. A further overarching concern is the alignment of agent developmental processes with current industry standard software engineering processes.*

Keywords. Agent architectures, Workflow modeling, Coordination, UML, Web Services

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