Model Driven Service Composition

Bart Orriëns, Jian Yang, and Mike. P. Papazoglou

Tilburg University, Infolab PO Box 90153, 5000 LE, Tilburg, Netherlands {b.orriens,jian,mikep}@kub.nl

Abstract. The current standards for web service composition, e.g. BPEL. neither cater for dynamic service composition nor for dynamic business configuration. Our firm belief is that business processes can be built dynamically by composing web services in a model driven fashion where the design process is controlled and governed by a series of business rules. In this paper we examine the functional requirements of service composition and introduce a phased approach to the development of service compositions that spans abstract definition, scheduling, construction and execution. Subsequently, we analyze the information requirements for developing service compositions by identifying the basic elements in a web service composition and the business rules that are used to govern the development of service compositions.