

Supporting the Composition of Distributed Business Processes

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Abstract. Web services provide a universal basis for the integration of business processes that are distributed among the most disparate entities, both within an organization and across organizational borders. One of the major challenges for industry-wide adoption of Web services is the automated composition of distributed business processes, i.e., the development of techniques and tools supporting an effective, reliable, low-cost, and time-efficient composition of distributed business processes. Such tools should provide an automated, transparent, and user centered support to the entire business process life-cycle, from analysis to execution. They should automatically perform the time consuming and error prone task of analyzing business processes in detail, selecting and composing suitable Web services, detecting problems in the interactions, and monitoring execution step by step. They should operate in a transparent and user centered way by suggesting solutions that can be adopted, refused, or refined by business analysts, designers, and programmers. In the talk, we will discuss some of the main research challenges in this scenario, and some solutions to these challenges. We will focus on supporting tasks such as verification, synthesis and monitoring of distributed business processes.