

Towards a Framework for Supporting the Negotiation between Global and Local Business Requirements

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ABSTRACT

The development of service oriented applications very often needs to address the problem of satisfying two conflicting kinds of business needs: *global business requirements*, i.e., the regulations that dictate the rules of engagement between different organizations, and *local business requirements*, i.e., the rules local to each involved partner which derive from its internal business needs. In this paper, we propose a development process where both global and local service requirements, as well as their behaviors, are incrementally agreed among partners and built through negotiation steps. The development process is supported by the explicit definition of both global and local requirements at different levels of abstraction. We express requirements in a language with a clear semantics, and which allows for explicit links to executable business processes, e.g., written in BPEL4WS. This development process opens up the possibility to adopt a variety of supporting techniques. In particular, automated verification is used to detect design or implementation problems. Automated synthesis of executable business processes allows for a speed up in the development process and reduces development effort. Finally, execution monitoring is able to detect run-time problems with respect to specified requirements.