

The Business Grid: Providing Transactional Business Processes via Grid Services

Frank Leymann¹ and Kai Güntzel²

¹ IBM Software Group, Schönaicherstr. 220,
71032 Böblingen, Germany
Ley1@de.ibm.com

² Fraunhofer Institut für Arbeitswirtschaft und Organisation IAO, Nobelstr. 12,
70569 Stuttgart, Germany
Kai.Guentzel@iao.fraunhofer.de

Abstract. Web Services provide a suitable technical foundation for making business processes accessible within and across enterprises. The business logic encapsulated inside Web Services often resides in already existing transactional backend-systems. However, the scope of these systems is normally limited to their domain and is not distributed across heterogeneous environments.

In this paper, we investigate the impact of the emerging Web Service technology on transactional backend-systems: Transactional context needs to propagate from activities or even business processes to services they use. Negotiations between service requestors and services on context to be propagate can be done automatically based on policies attached to the corresponding Web Service descriptions. Corresponding standards and mechanisms form the basis of a new computing and middleware paradigm: the Business Grid.

Some exemplary research work to be done to actually build the outlined Business Grid environment is sketched.