Extending Web Service Technology towards an Earth Observation Integration Framework

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Abstract. In this paper we describe the implementation of a service-based application integration solution for the complex domain of Earth Observation (EO) application systems. The presented approach is based on an EO integration framework. It supports the concatenation of disparate software applications to flexible EO process chains. Resulting EO services are provided to end users by means of Web Service technology. We demonstrate that current standard technology is not sufficient to dynamically publish and interactively invoke EO services over the Web. We describe necessary extensions and adaptations.