"Everything Personal, Not Just Business": Improving User Experience Through Rule-based Service Customization

Richard Hull, Bharat Kumar, Daniel Lieuwen, Peter F. Patel-Schneider, Arnaud Sahuguet, Sriram Varadarajan, and Avinash Vyas

> Bell Labs, Lucent Technologies 600 Mountain Avenue Murray Hill, NJ 07974

Abstract. The web and converged services paradigm promises tremendous flexibility in the creation of rich composite services for enterprises and end-users. The flexibility and richness offers the possibility of highly customized, individualized services for the end user and hence revenue generating services for service providers (*e.g.*, ASPs, telecom network operators, ISPs). But how can end-users (and enterprises) specify their preferences when a myriad of possibilities and potential circumstances need to be addressed? In this paper we advocate a solution based on policy management where user preferences are specified through forms but translated into rules in a high-level policy language. This paper identifies the requirements for this kind of interpretation, and describes the Houdini system (under development at Bell Labs) which offers a rich rule-based language and a framework that supports intuitive, forms-based provisioning interfaces.