Accepted Tutorials, May 31st

Semantic Web Services and their role within Enterprise Processes and a Service Web (Full Day)

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Part I: Introduction to SWS
Part II: SWS within the Enterprise
Part III: SWS and the Service Web
Part IV: Hands-on session

Service-Oriented Computing is commonly lauded as a silver bullet for Enterprise Application Integration, inter-organizational business processes implementation, and even as a general solution for all complex applications. Still, the level of automation provided by traditional technologies is limiting the benefits that can be achieved. Semantic Web Services extend Web Services with semantic annotations in order to circumvent these limitations, better supporting the automation of service discovery, composition, mediation and execution. In this tutorial we present an introduction to Semantic Web Services technologies covering a wide range of topics ranging from formalisms, to their interpretation and use within concrete scenarios. We briefly introduce current Web Services technologies and standards. We present WSMO, a highly expressive formalism for describing Semantic Web Services. We describe a reference architecture for Semantic Execution Environments able to process WSMO descriptions in order to automate the discovery, composition and mediation of Web Services and how this can support further automation within the life-cycle of Business Process Management systems. We

additionally introduce a lighter set of formalisms, namely WSMO-Lite and MicroWSMO, aimed at supporting a scalable application of Semantic Web Services technologies over the Web. Finally, we help attendants to get better acquainted with the notions exposed through a hands-on session using state of the art technologies.
Homepage: http://kmi.open.ac.uk/events/tutorials/eswc09/