

Minutes - ICT 2008 Lyon - Networking Session 572

Software-as-a-Service: On the Future of Semantics in SOA

November 27th, 2008 11:00-12:30 - Salle Rhône 5

http://ec.europa.eu/information_society/events/cf/item-display.cfm?id=572



Welcome and Introduction -

John Domingue and Alexander Wahler (STI International)

-Purpose of the networking session is to identify the role of semantic technologies in bringing service-oriented architecture (SOA) technologies to Web-scale, as well as defining the potential role of semantics in enabling a global SaaS model.

-Semantics provisions machine readability, allow for the delegation of manual tasks to machines

-One prominent effort, the European IP project SUPER, focuses on closing the business expert/IT gap through the utility of semantic technologies

-Another European IP project, SOA4All focuses primarily on bringing SOA architectures to Web scale through the utility of semantic technologies

-The coming challenge is to apply the same methodologies and technologies to the SaaS model – allowing for a semantically enabled Internet of Services

SaaS: On the future of Semantics in SOA

Andreas Friesen (SAP Research, CEC Karlsruhe)

-The next innovative steps in fulfilling the vision behind the Internet of Services will focus upon agility and convergences

-Powerful leaders such as Amazon and iTunes have already established a profitable business model based upon the emerging Internet of Services

-Value-added services (the combination of classical and new automated services) will be the core elements of upcoming business models based upon the emerging Internet of Services

-SaaS delivery platforms driven by innovation and demand will be enabled through the application of semantic technologies

Software as an eService – From Semantics to Pragmatics

Jaap Gordijn (VUA Amsterdam)

-The key to innovative service architectures is automation

-“eService networks require thorough engineering & understanding of the business value, or the pragmatics of these systems”

-The e3value methodology, models, and tools calculate economic value across enterprises

Semantics, SaaS and STASIS

Stuart Campbell (TIE Global)

-TIE Business model = SaaS Strategy supported by SOA

-SaaS provides greater stability

-Migrating current products and making new ones with SaaS/SOA focus – but from a customer perspective: SaaS = financial case only

-Key challenges for SaaS:

~Linkage of business applications (probably not with service interfaces) with ‘internet services’

~Semantics and syntax fusion

-Further key challenges:

~Automate the semantic–syntax bridge

~Business–academic bridge – merge business reality/academic principles

~Applicability as a service/SaaS – must be open and accessible

-STASIS project aims to retain semantic knowledge and share all information in a network

NEXOF-RA and Semantics

Stefano De Panfilis (Gruppo Engineering)

-NESSI Open Service Framework – open reference model (concepts and principles) and open reference architecture (standards) – the open reference architecture is called NEXOF-RA

-Within the multiple layers of the NEXOF-RA, semantics plays various roles in:

- ~Context handling
- ~Service coordination
- ~Mediation
- ~Service Discovery
- ~Service modeling
- ~Reasoning

-Candidate Investigation Topics:

- ~Semantic description of non-functional aspects
- ~SLA and service negotiation
- ~Functional and non-functional characteristics of infrastructure services
- ~Access rights framework based on semantics
- ~Behavior analysis and dynamic security in SOA

Open Discussion

Audience members showed concern:

-As to whether companies, including large enterprises, would be willing to adopt such open standards – Campbell reassured they would, citing the successes of current open standards. Campbell reiterated the fact that the difficulty becomes apparent when trying to share *meaningful* services between enterprises

-As to whether companies would be willing to share private or valuable information/services – Domingue replied he believed they indeed would, citing TBL in the context of the initial hesitation in publishing information on the Web, which has now become the status quo.