Proceedings of the Workshop on Security for Web Services and Service-Oriented Architectures

Web Services are regarded as the premier building blocks of Service-Oriented Architectures (SOA). Founding on specifications for basic communication patterns and message syntax, a lot of additional Web Service specifications that address non-functional requirements have been introduced. The most relevant specifications for these non-functional requirements deal with security aspects of Web Services, like confidentiality and integrity of Web Service messages (e.g. WS-Security), authorization and access control issues (XACML), or definition of security policies (WS-SecurityPolicy).

The existing Web Service specifications offer new perspectives to solve long-standing open problems in IT security, e.g. machine readable descriptions of security policies (WS-Policy) or broad interoperability of cryptographic technologies (WS-Trust). This is, however, achieved by dramatically increasing the semantic complexity of the cryptographic data formats (e.g. XML Signature): As attacks described by Austel and McIntosh from IBM TJ Watson have shown, a Boolean function is no longer sufficient to check the validity of digital signatures.

Further, there are security-related issues that are not covered by the existing specifications. For example, availability considerations for Web Services and security support for Web Service compositions did not receive broad attention yet. Especially the emerging approach of realizing business processes with Web Services (e.g. using WS-BPEL) imposes the necessity for security considerations at the process level in addition to security at the messaging level. Process level security is yet an open issue, both in terms of Web Service specifications and research.

The target of this workshop is to bring together researchers and industry practitioners that are engaged in all kinds of security issues related to Web Services, Web Service compositions and Service-Oriented Architectures in general. It is intended to be a forum for presenting and exchanging new ideas, discussing security problems with existing specifications and exploring new fields in the area of enabling security, privacy and trust for Web Services and Service-Oriented Architecture.

We want to express our thanks to all authors who submitted their papers to this workshop and to our board of reviewers. Though being a rather small workshop in the end, we think the high quality of the resulting proceedings illustrates the importance and necessity of discussion on this hot research topic.

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