

Web Services Security

Ghodrat Moghadampour, PhD

mg@puv.fi

Vaasa University of Applied Sciences

Wolffintie 30

65230 Vaasa

Finland

Web services provide the technology for creating client-server applications, which are capable of communicating with each other over Internet using a standardized XML messaging system. A web service is not tied to any single operating system or programming language. XML messaging can be implemented through XML Remote Procedure Calls (XML-RPC), Simple Object Access Protocol (SOAP), or alternatively through HTTP GET/POST methods. Communicating over Internet poses serious security threats. Therefore, building secure Web services are of high performance. In this paper we provide an overview of available technologies for building secure Web services: WS-Security (Web Services Security, WSS), XML signature, Security Assertion Markup Language (SAML), eXtensible Access Control Markup Language (XACML) and XML Key Management Specification (XKMS).