Topic Area/Track: Security / Reliability

Title: Secure Content Management Using the OASIS ebXML Registry Standard

Keywords:
Registry, Repository, Web Services, ebXML, Security, PKI, RBAC, Access Control, Content Management, Meta data, Distributed Systems, E-business, E-Government, eCommerce

Brief Session Description:

This paper provides an update from the OASIS ebXML Registry TC on the state of secure, web-based, distributed metadata and content management using the ebXML Registry V3 standard.

Technical Needs:

No special requirements.

Abstract

The ebXML Registry specification was designed from its inception to manage arbitrary content and standardized yet extensible meta data with an emphasis on data integrity and security through the use of digital signatures to sign content and perform authentication.

With version 3, the ebXML Registry specification has added a flexible and powerful Role Based Access Control (RBAC) capability that is based upon the OASIS XACML 1.0 standard.

This paper provides an overview of the security features of the ebXML Registry.

The intended audience includes those that are interested in a security aspects of managing metadata and content for web services. This includes systems architects, developers as well as managers. The paper assumes moderate technical background in XML and Wed Services.

The audience is first introduced to the various security threats that are of concern when managing metadata and content in a shared environment such as the web. We then identify relevant security standards that address these security concerns. A description of how how ebXML Registry standard addresses these security concerns using relvant security standards follows. This includes authentication and data integrity based upon XML Digital Signature standard and authorization based upon the XACML 1.0 standard. Also discussed is the automatic content validation feature that imporves the quality of content within the registry.

The paper concludes with a road map of future functionality planned for the ebXML Registry standard that will improve security and reliability.