

XML-Related Standards in the Interoperability Context

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Aim

To facilitate the task of getting an overview of relevant standards, how they affect and relate to one another and so on

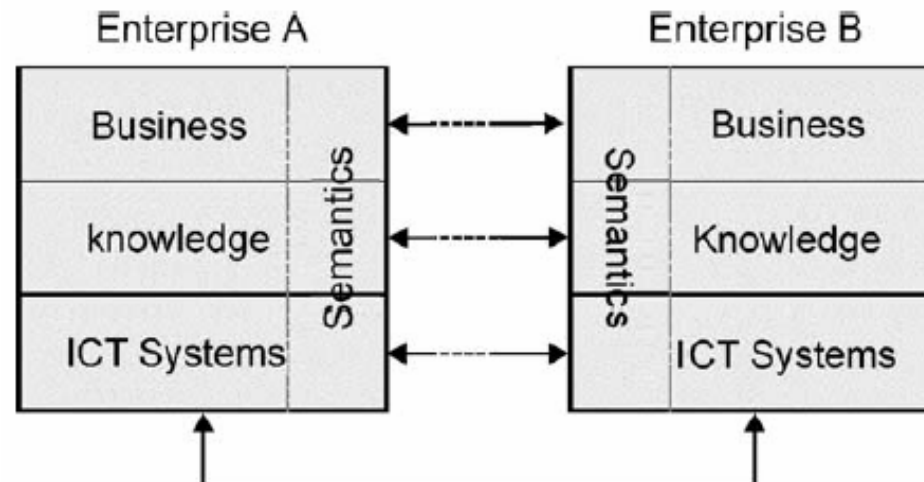
21 XML-related standards are introduced and compared

Here are the contents

- The usual background
 - Interoperability
 - Standards
- XML standards and interoperability
- Comparison and standards relationships
- Summarising discussion

Background

- Standards:
 - documents that provide guidelines or characteristics for activities or their results (ISO-IEC, 1996)
- Interoperability
 - the ability of different systems to interact and exchange information, possibly at different levels (Kosanke, 2004)
 - three levels: data, resource, and business process (Chen and Doumeingts, 2003)



XML standards and interoperability

- Examples:
 - BPEL4WS: a notation for specifying business process behaviour based on Web Services
 - BizTalk: a business process management (BPM) server that enables companies to automate and optimize business processes
 - RosettaNet: a common language for e-business transactions and the foundation for integrating critical processes among partners within the global supply chain
 - XMI: a standard vocabulary for exchanging meta-data between different UML tools
 - WSDL: an XML format for describing network services as a set of endpoints operating on messages containing either document-oriented or procedure-oriented information

Sample comparison

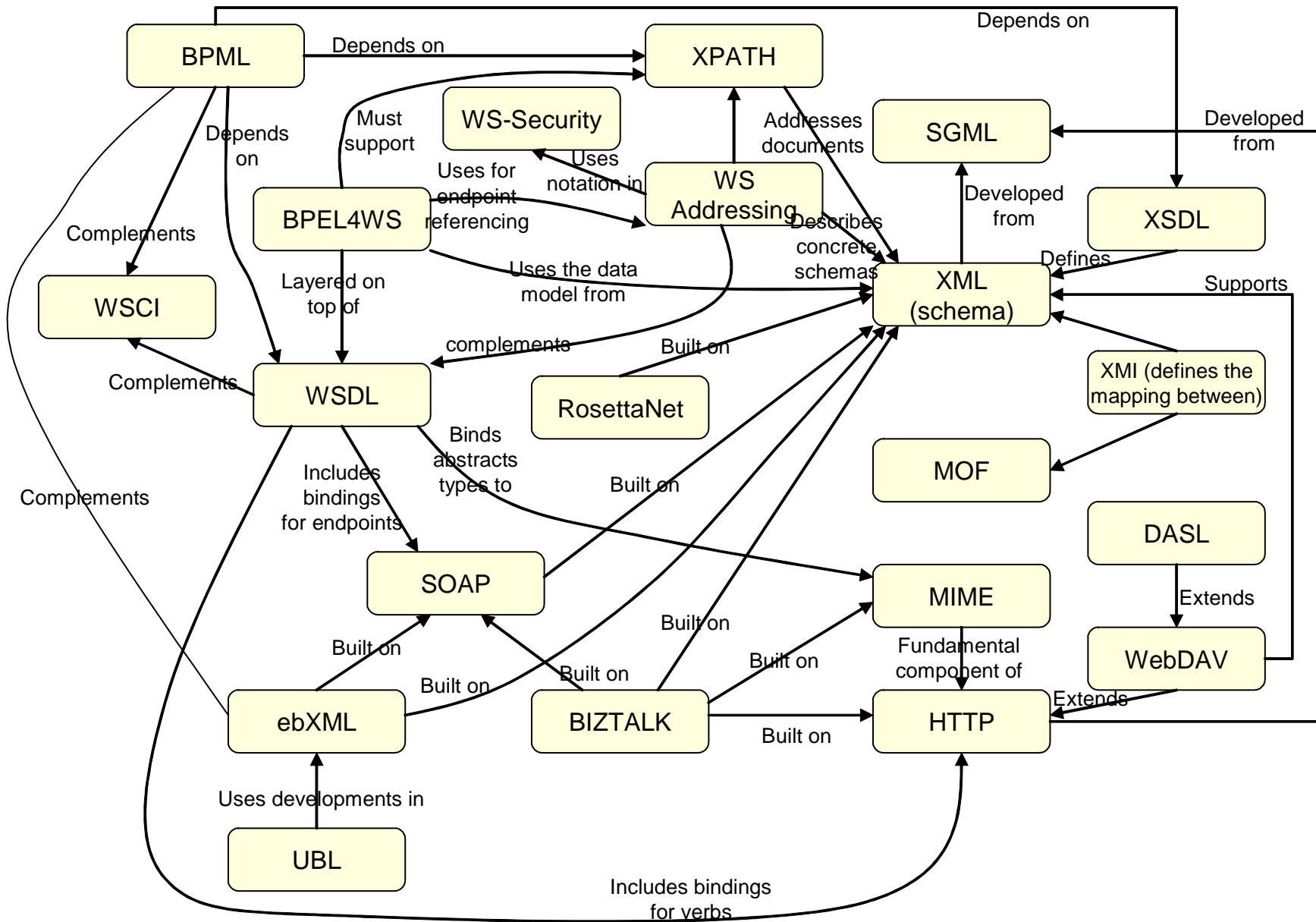
Name	SDO	Business level	Target industry/-ies
BPEL4WS	OASIS	Business	All
BizTalk	Microsoft	ICT	All
RosettaNet	RosettaNet	Business	Six global councils
WSDL	W3C	Knowledge	All
XMI	OMG	All	All

The standards and the interoperability framework

				Semantics
<i>Business</i>	WSCI	BPML	BPEL4WS RosettaNet	UBL ebXML
<i>Knowledge</i>		WSDL	WebDAV	MOF SGML
<i>ICT system</i>	WS Addressing	BizTalk XML	HTTP Security	MIME WS SOAP XPATH

} XMI

Standards relationships



Summarising advice

- Include standards in the overall business strategy
- Establish procedures for how to investigate standards in-depth, including relations and dependability
- Include standards adaptation as well as rigorous testing in the implementation plans
- If possible, participate in standards development as a way of influencing the course of action for the relevant standards at hand
- Include standards education in the organisational plans