



SECOND GENERATION WEB SERVICES TECHNOLOGIES

Problems

- Context and transaction management
 - Lack of structural management
 - Stateful
 - Activities
 - Lack of distributed transaction
- WS-Coordination
- WS-Transaction

Problem

- Business Processes
 - More and more business running in web
 - No suitable web language for business
- Business Process Execution Language for Web Services
 - WPEL₄WS

Problem

- Security
 - No real security standards
 - Organizations were reluctant to expose their business process
- WS-Security
 - Through a security message path for SOAP
 - A series of XML security standards



Problem

- Reliable Messaging
 - There is no truly robust transmission
 - How to deliver failure transmission
- WS-ReliableMessaging

Problem

- Policies
 - Abstract and High Level
 - Business Rules
 - Security Rules
 - Descriptive Properties
- WS-Policies

Problem

- Attachments
 - Original SOAP only carries pre-defined format
- WS-Attachment
 - Allows SOAP attaches files with arbitrary formats

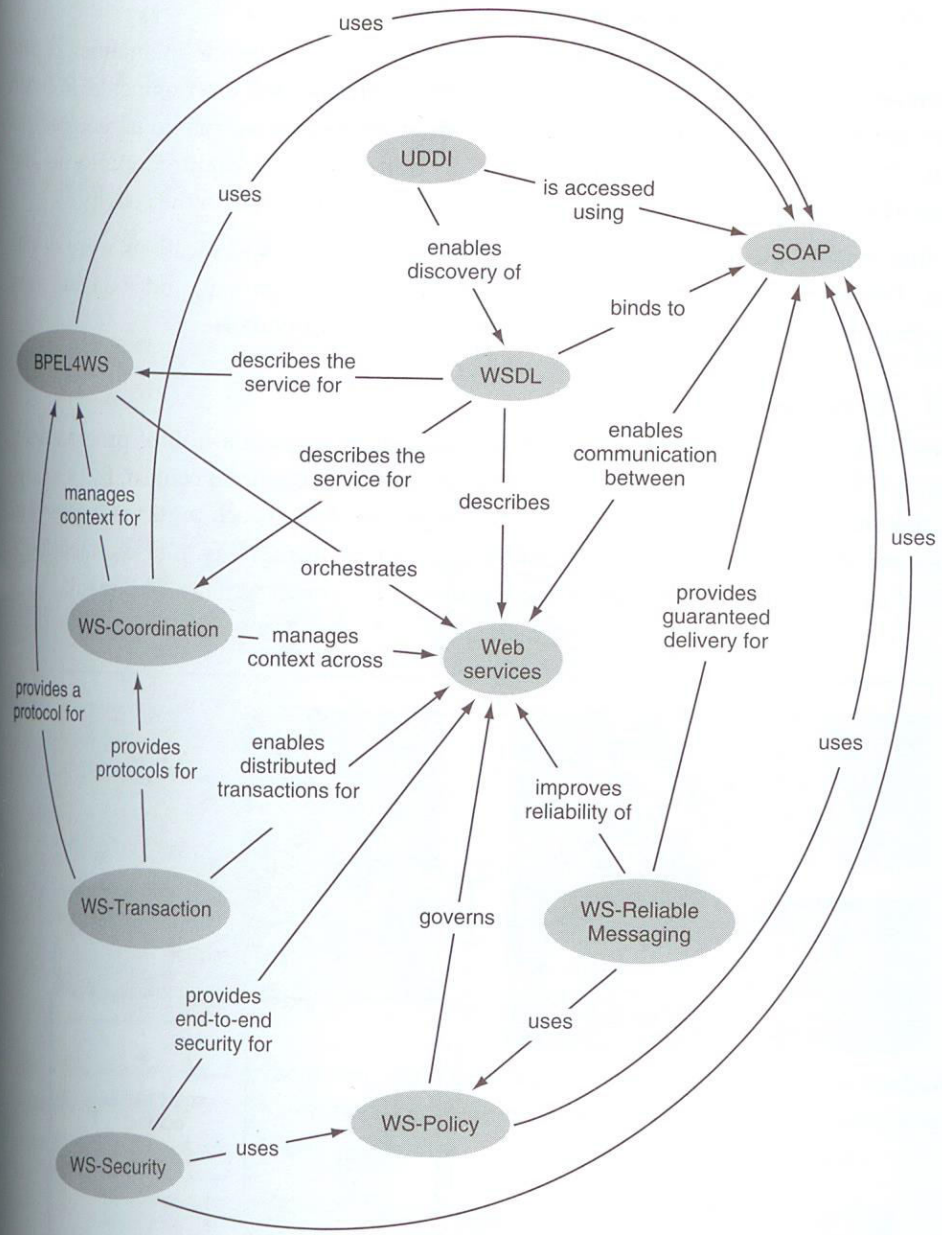


Figure 4.2 High-level relationships between first- and second-generation standards.