

## Web Services Security Tutorial - Wrap-up

A Web Services Security Overview and  
Implementation Tutorial

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## Modules Covered

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- Web Services Security Requirements
- Web Services Security Framework
- Web Services Usage Scenarios
- Security Credentials and Identity
- Emerging XML Security Standards
- Security Implementation using Interceptors
- Lessons from Implementing Web Services Security

## Lessons from the First Wave

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- Existing Web tier security infrastructure usually sufficient for many internal projects
- Necessary to accommodate third-party security products already in use in the organization
- End-to-end framework is necessary to avoid security gaps
- Operational security procedure best practices for Web services have yet to be developed
- XML security specifications have not yet been widely adopted
- Rival XML security specifications are still emerging
- Lack of experience and training on XML security standards is holding back adoption

## Recommendations for the future

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- Track usage scenarios in an organization to determine security levels
- Start with “proof-of-concept” projects to gain experience
- Integration with Microsoft .NET security schemes will be vital
- WS-I Basic Security Profile will reduce interoperability problems with current XML Security standards.
- Don’t throw away the organization’s existing security infrastructure
- Plan to implement end-to-end security