DEV-302: Security Patterns and Best Practices for J2EE, Web Services and Identity Management

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&

Brian Chess (Moderator)

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About the Panelists

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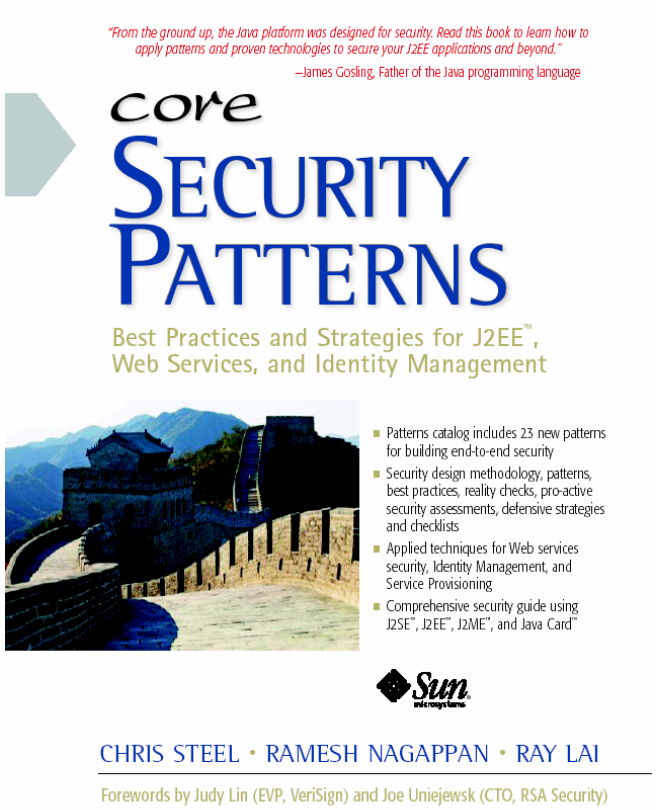
About the Session



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Objectives

- Introduce a radical approach for building trustworthy applications
- Proactive and prescriptive guidance
- Patterns-driven security development and deployment
- Best practices and reality checks

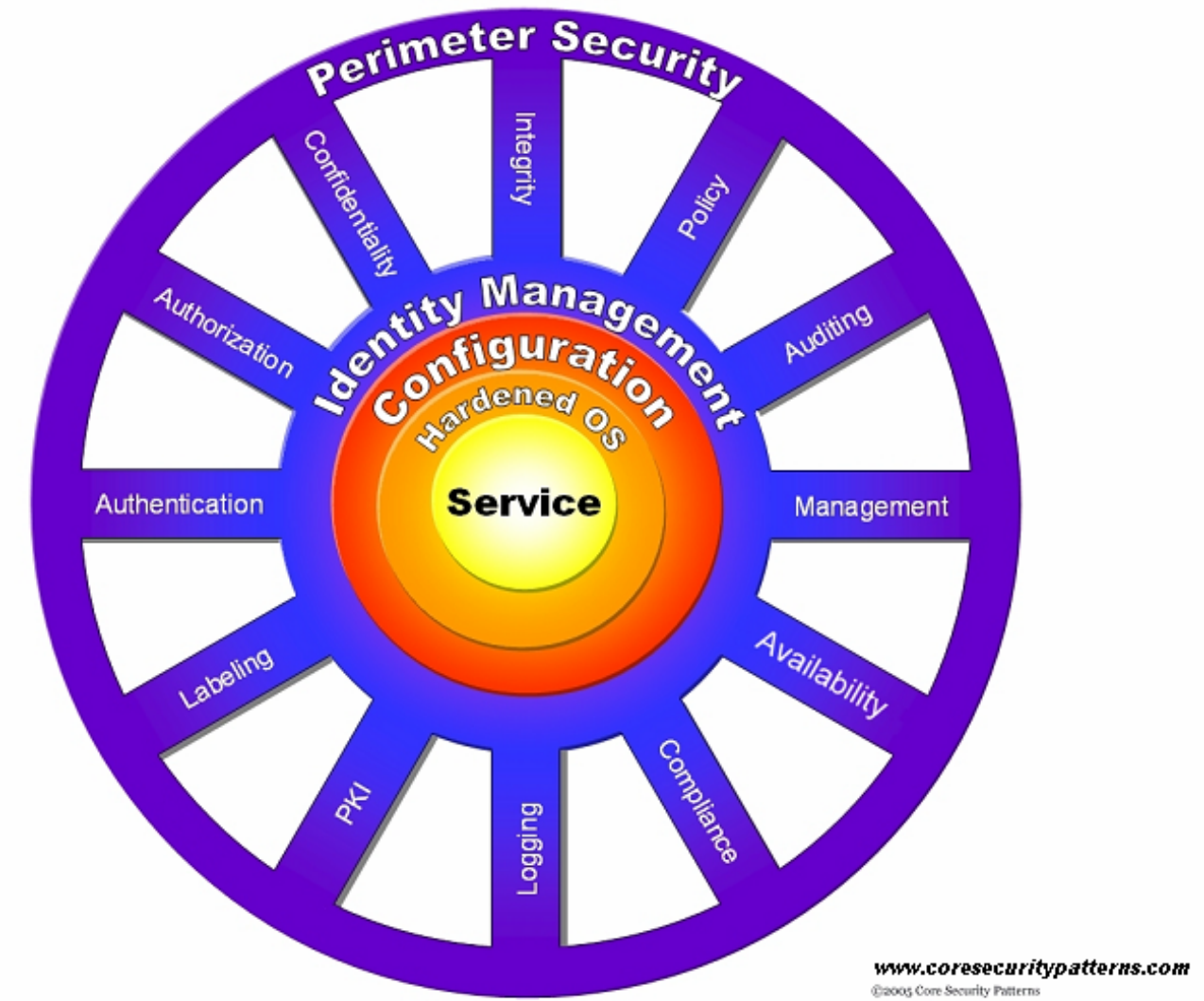
Common Security Issues

- Security as an add-on
- Architectural inefficiencies
- Proprietary and incompatibility issues
- Poor infrastructure choices
- Poor operational practices
- Poor identification and verification
- Poor configuration management
- Poor security policies and controls
- Lack of awareness and expertise
- Lack of management priorities

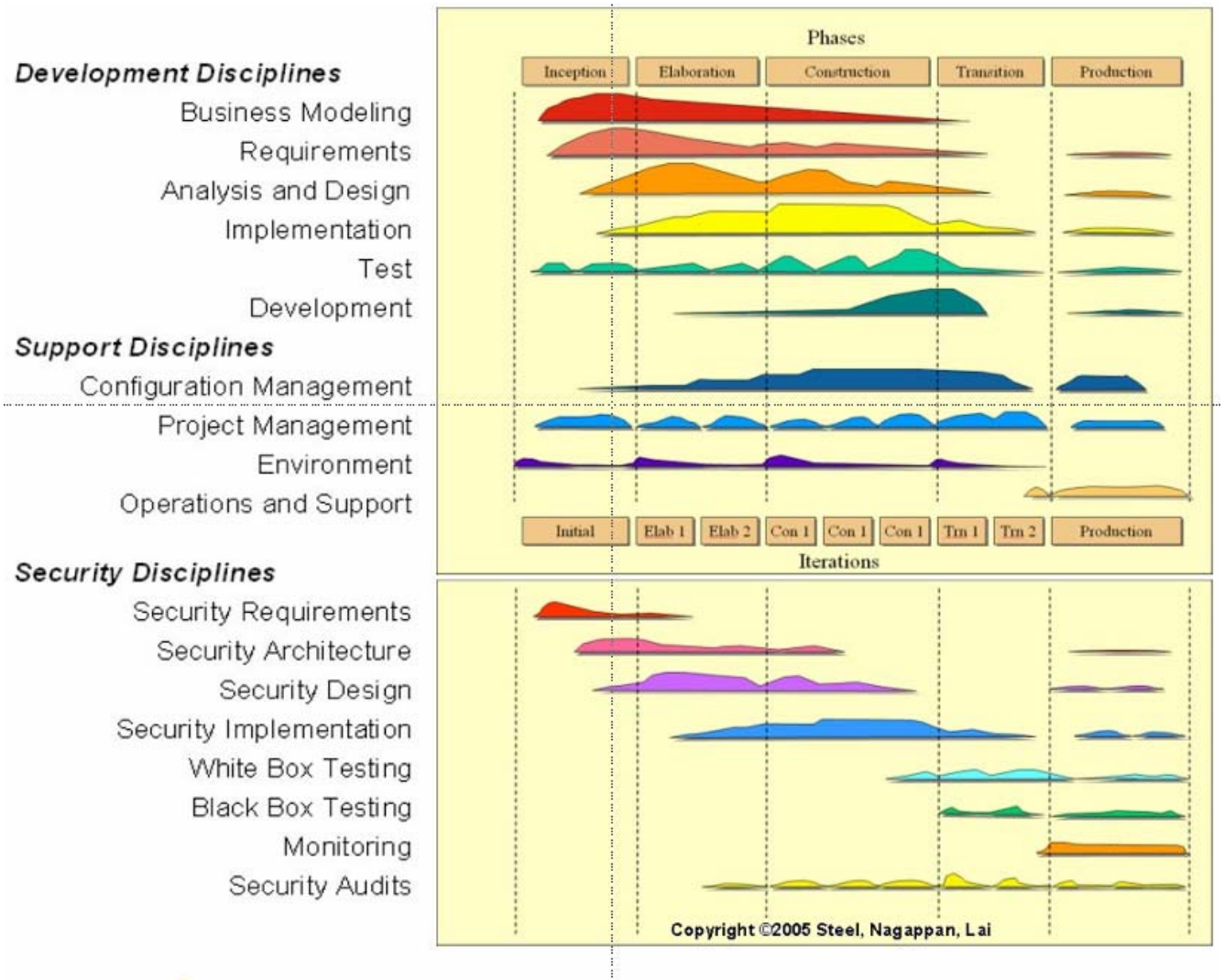
Common Application Security Issues

- Input validation failures
- Output sanitation
- Buffer overflow
- Data injection flaw
- Improper error handling
- Weak session identifiers
- Weak security tokens
- Weak password exploits
- Cross-site scripting
- Session theft
- Insecure configuration data
- Broken authentication
- Access control failure
- Policy failure
- Audit & logging failure
- Denial of Service / XML DOS
- Replay
- Man in the middle
- Multiple sign-on
- Deployment problems
- … A growing list

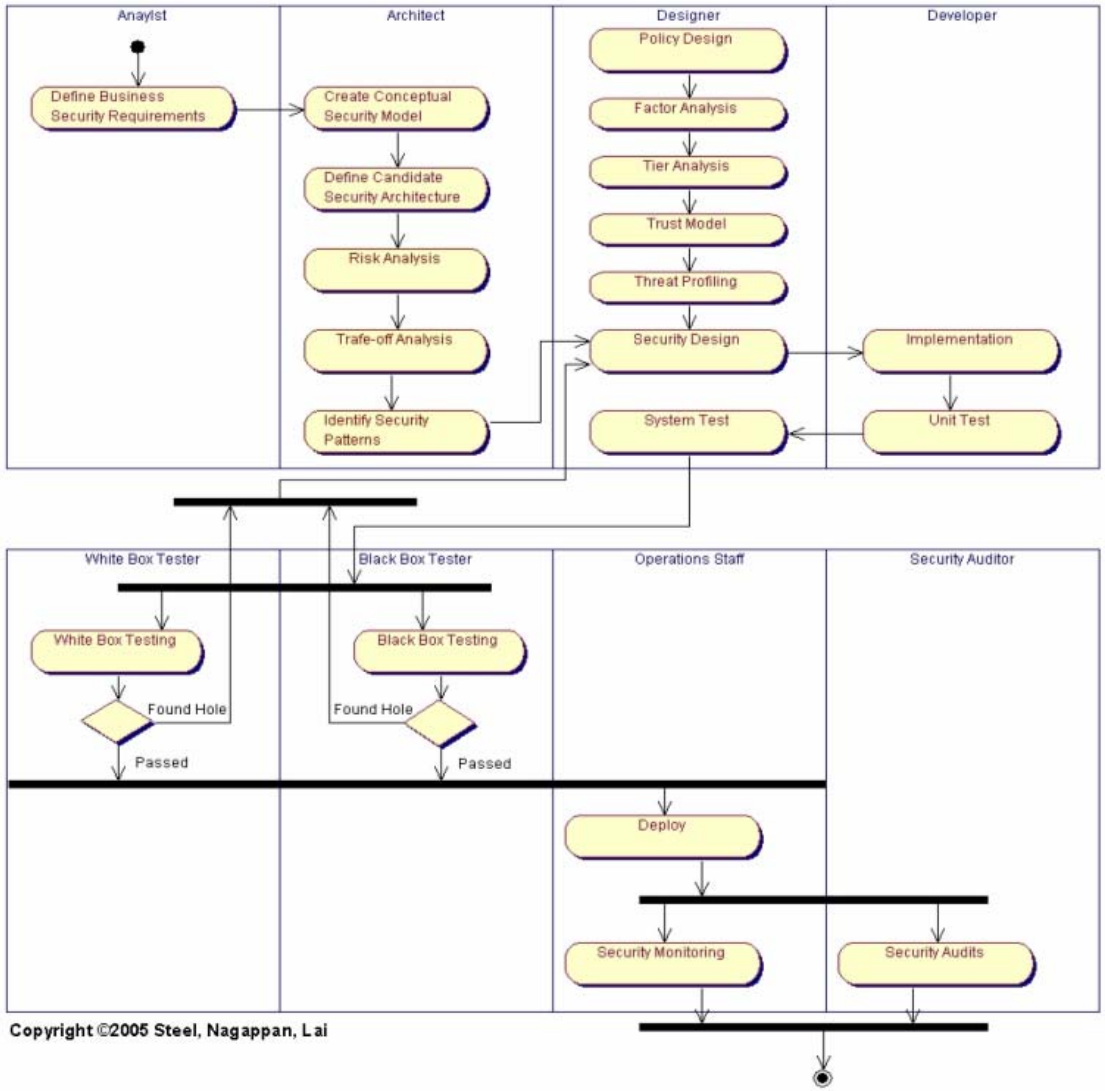
Security Wheel



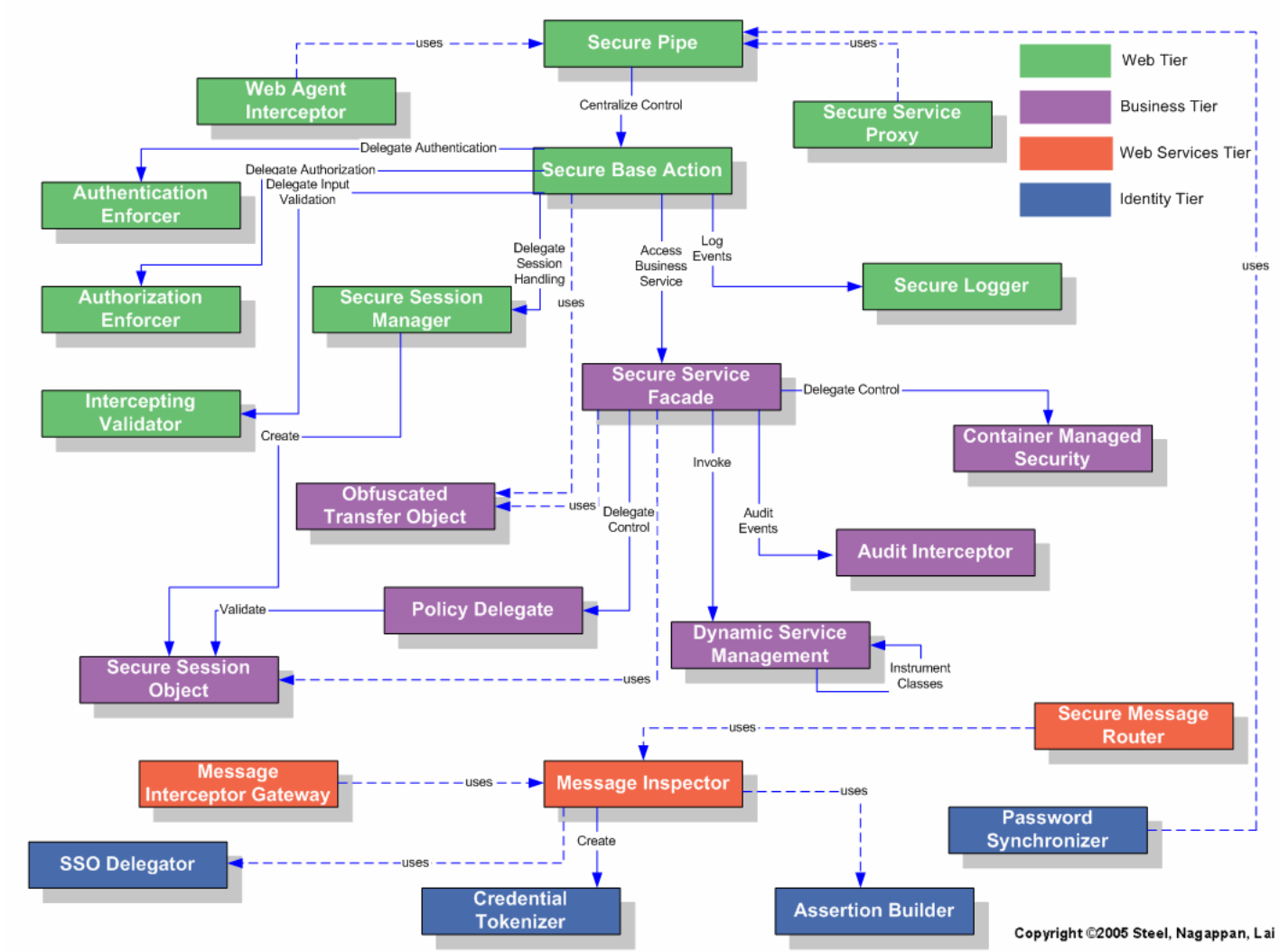
Secure Unified Process



Secure UP Workflow



Patterns Catalog



Pattern Format

- Problem
- Forces
- Solution
- Structure
  - Participants
  - Responsibilities
- Strategies
- Consequences
- Security factors and risks
- Reality Checks

Questions