Rogue Secure Development

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SecTor

Who are you?

BSIMM2

SECURITY NINJA™
SECURITY RESEARCH, NEWS & GUIDANCE

VERACODE

WHS

Microsoft

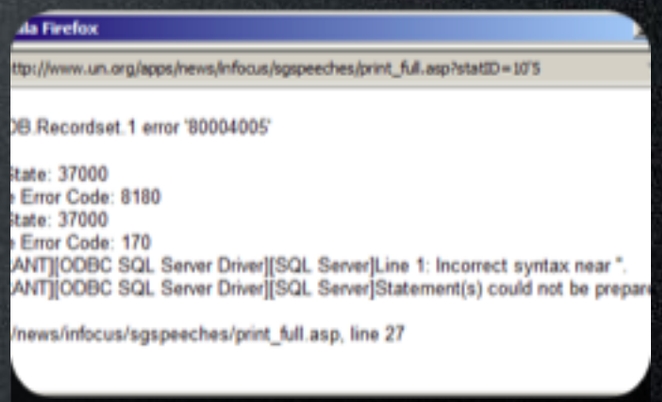
5 Tampering
An attacker can replay data without detection because your code doesn't provide timestamps or sequence numbers

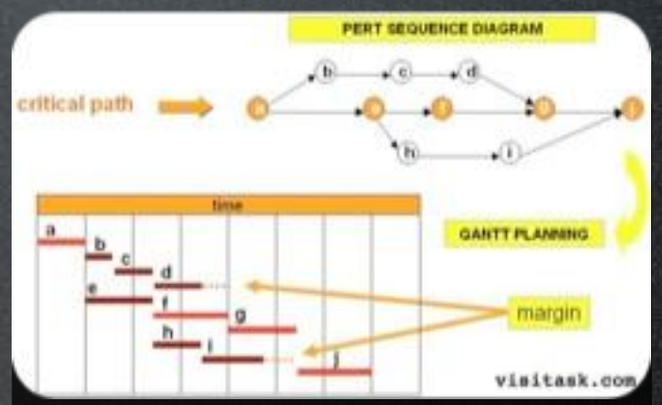
ERRATA SECURITY

Securosis

What's the problem?

- Microsoft & Cisco leading by example
- Developers don't believe SQLi is real
- Managers only care about time to market
- Compliance diverts attention from risks

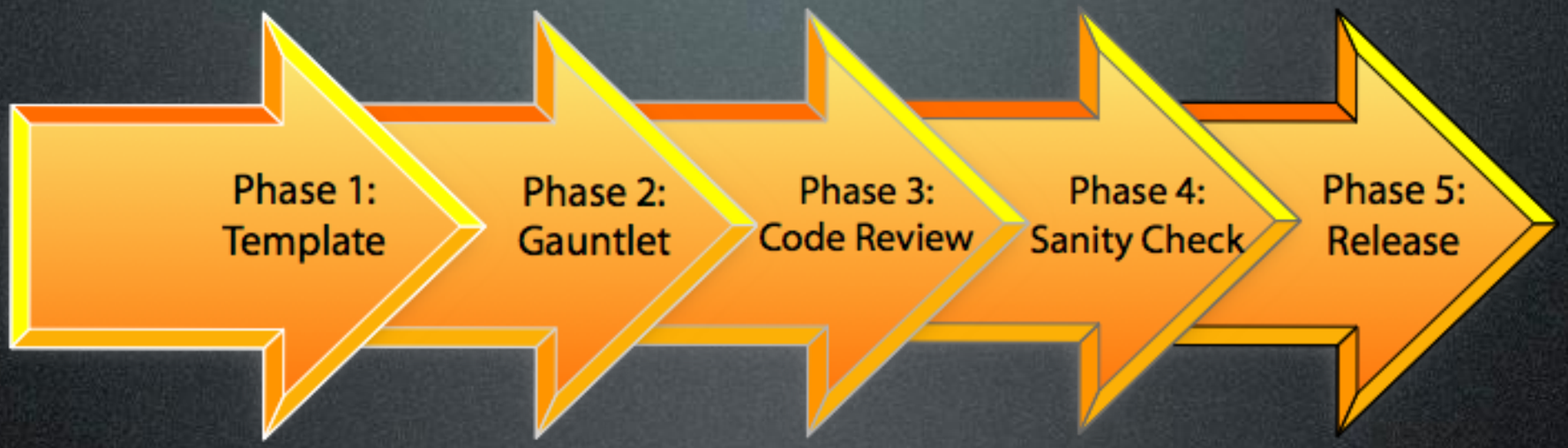




Is there a solution?

- Before you begin:
  - Know what you can do
  - Know how much you can spend
  - Know who you have
- Do we need another secure coding program?

Rogue Secure Development



Phase 0: The Incident

- A realistic approach
- Begin with a breach
- Initiate Incident Response Plan
- Now, let’s stop that *kind* of bug from happening again

Phase 1: The Template

- Types of software and bugs
- Choose the template
- Is this right for you?
- Build Requirements Document

Requirements

Web Application

Security Requirements

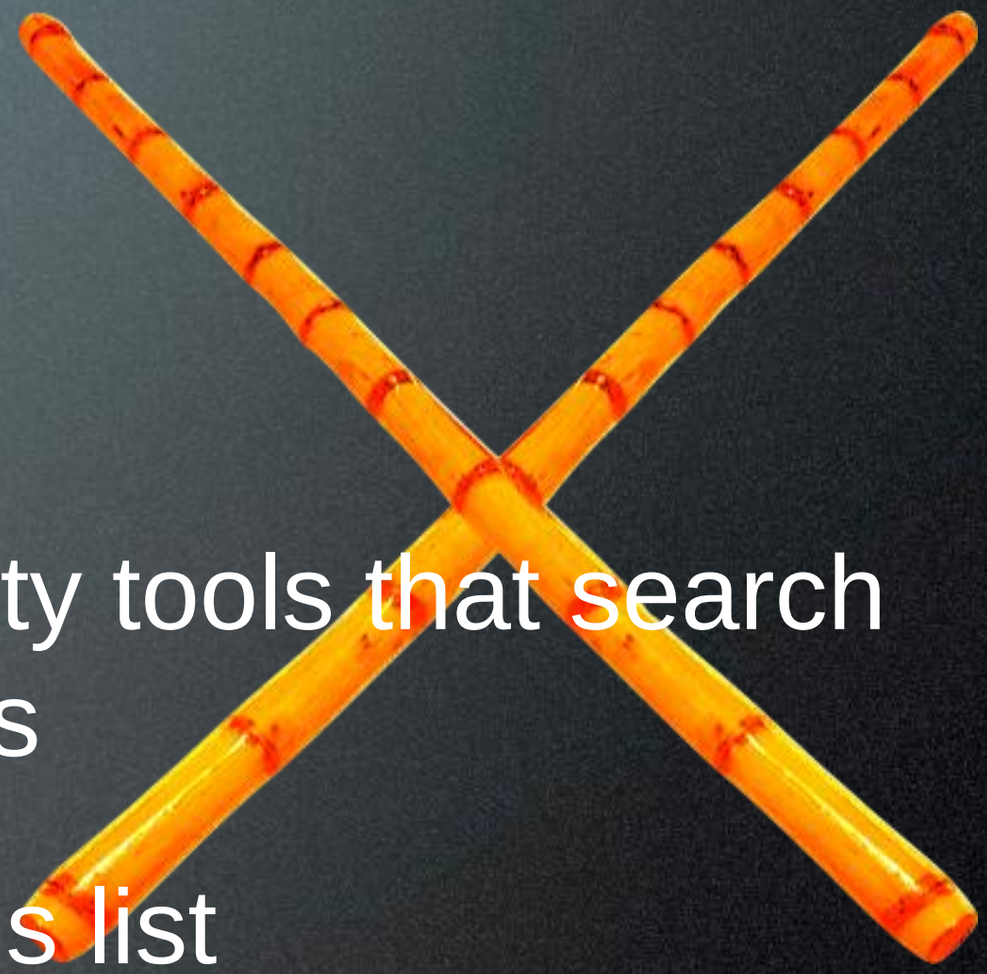
1. Authentication

Threat Model

1.Normalization
1.a SQL Injection
1.b XSS
2. Authentication
3.Encryption
4. Directory Traversal

Example: Apple iPad registration exposed on web

Phase 2: The Gauntlet



- Bring up QA testers
- Run automated security tools that search code for common bugs
- Use the Common Bugs list
- Pass to the Coders for remediation

Example: Adobe strcat

Phase 3:
The Code Review

- Coders check the list
- Fix the Highs and the Lows
- Code Managers check the Coders
- Unit tests in isolation
- Remediation

Example: Perl URL directory traversal attack

Phase 4:
The Sanity Check

- QA - Classic functionality test
- QA - Verify the known bugs have been patched
  - Defense in Depth
- SE - Sign off for release OR send back to coder for Phase 3

Example: Windows DLL Preloading Attack

Phase 5: The Release

- PM - Hand off product to Marketing/Distribution
- PM - Edit SDLC to learn from the process
- Attempt to make less "top 20" mistakes next time

Remember: Focus on the incident
Example: Apple Quicktime “_MARSHALED_PUNK” backdoor

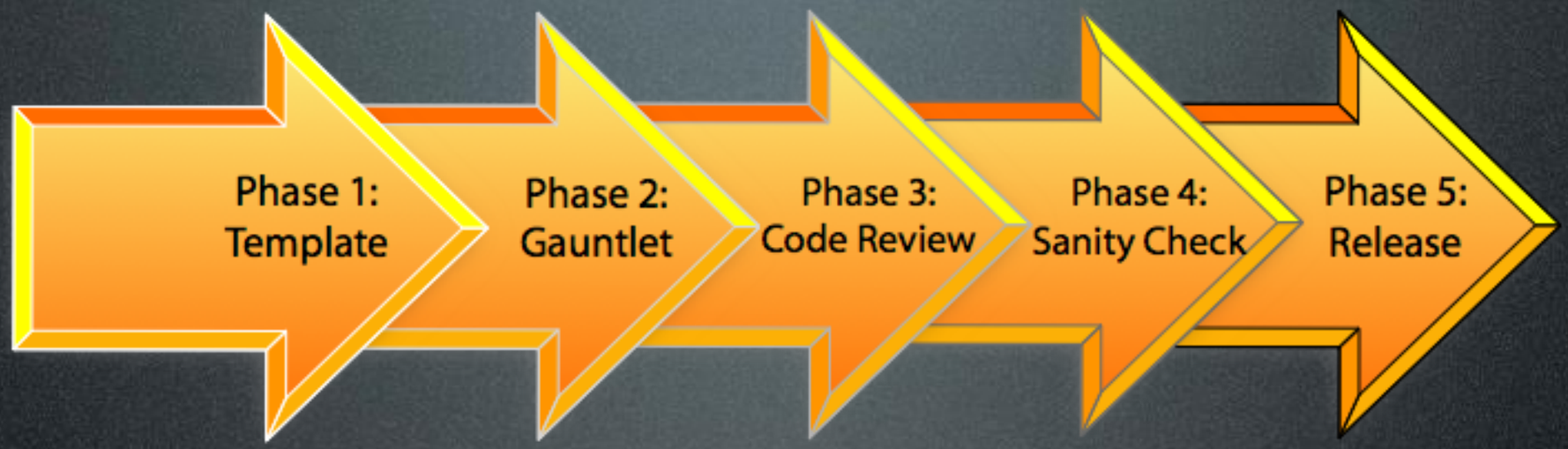
But why?

- Maybe this isn’t right for you
- If it is,
  - You save money
  - Better code
  - Customers expect it
  - Stay off the headlines

The future

- Doesn’t look good
- Hackers always one step ahead
- Can’t be secure “once and for all”
- Low Hanging Fruit
- Reduce spending!

Questions/Comments?



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