



# WhiteHat Sentinel Source: Directed Remediation

## Targeted Remediation Fixes for Application Vulnerabilities

The software developer's role has become multifaceted, with increasing responsibilities, yet shorter timelines. Today's developers are expected to innovate and be responsive to the changing business needs all while keeping application security, scalability and performance in mind. As a result, speed of development and security end up in conflict, with security often de-prioritized. Research shows that it takes roughly 85 days to remediate only an average of 52% of all vulnerabilities detected. In today's security climate, that is not enough.

Often times, there are too many vulnerabilities to fix and not enough information on the right way to fix them, which can leave the development team feeling overwhelmed. Directed Remediation is a WhiteHat Sentinel Source feature that offers targeted and customized code fixes for critical vulnerabilities, which significantly reduces the burden on the development team.

### Precise, Ready-to-Implement Code Patches

**WhiteHat SENTINEL** Jack B

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**APPLICATION: WEBGOAT**

Overview App Findings

**Vulnerability Detail**

Vulnerability Class: Unencrypted CDN Storage (Cryptography.Persist.Cdn.Unencrypted)

Vulnerability ID: 166

Located In: file:///usr/local/share/SCA/java/mock-repo/webgoat/src/main/webapp/JavaSource/org/owasp/webgoat/lessons/RoleBasedAccessControl/UpdateProfile.java

Opened On: 17-04 UTC 2015-06-22

Days Open: 0 days

Status: **Open**

Compliance: No Compliance Policy

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**Customized code patch, immediately ready to implement**

Vulnerability Elements Description Solution Ask a Question **Suggested Fix**

**Suggested Change1** Download Patch

```

--- 1/webgoat/src/main/webapp/JavaSource/org/owasp/webgoat/lessons/RoleBasedAccessControl/UpdateProfile.java
+++ 1/webgoat/src/main/webapp/JavaSource/org/owasp/webgoat/lessons/RoleBasedAccessControl/UpdateProfile.java
@@ -132,21 +132,21 @@
 
 ps.setString(1, employee.getFirstName());
 ps.setString(2, employee.getLastName());
 ps.setString(3, employee.getSex());
 ps.setString(4, employee.getTitle());
 ps.setString(5, employee.getPhoneNumber());
 ps.setString(6, employee.getAddress());

```

## How it Works

- Sentinel Source scans the entire source code and identifies security vulnerabilities.
- Sentinel Source Remediation Engine expresses a security fix using state-of-the-art algorithms utilizing positional analysis and data flow analysis and each security fix is verified by security experts in WhiteHat Security's Threat Research Center (TRC).
- The end user views the recommended security fix in Sentinel Source and chooses to apply the fix to their source code or to adjust the proposed solution according to their environment.
- The end user then runs a new scan and confirms that the vulnerability has been fixed.

**WhiteHat SENTINEL**

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**FINDINGS** Help

Sites Apps Groups

Below are your vulnerability findings for all your applications. Clicking on a vulnerability ID will allow you to drill down to detailed vulnerability information.

Filter: Use the filter to reduce the amount of items shown.

Vuln ID Remediation Available Application Name Class Rating Status Date Range Location Filter Reset

Enter Vuln ID: [ ] Both: [ ] All: [ ] All: [ ] All: [ ] Start Date: [ ] End Date: [ ]

Export CSV File

| Vuln ID | Remediation Available   | Application Name | Class  | Rating       | Status | Date Range              | Location   | Compliance           | Service Level |
|---------|---|------------------|--|--------------|--------|-------------------------|--|----------------------|---------------|
| 1234567 | Directed Remediation findings are available for this vulnerability. |                  | Cryptography: Improper Pseudo-Random Generator |              |        | 25, 2011 - May 26, 2011 | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 |   |                  | Cryptography: Insecure Digest                  |              |        | 25, 2011 - --           | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 | Medium  | Open             | May 25, 2011                                   | --           |        |                         | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 | High  | Open             | May 25, 2011                                   | --           |        |                         | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 | Critical  | Open             | May 25, 2011                                   | --           |        |                         | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 | Low   | Open             | May 25, 2011                                   | --           |        |                         | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 | High  | Open             | May 25, 2011                                   | May 27, 2011 |        |                         | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |
| 1234567 | Critical  | Open             | May 25, 2011                                   | --           |        |                         | http://webgoat.googlecode.com/svn/trunk/webgoat/src/main/java/ | No Compliance Policy | Source        |

## Sentinel Source Directed Remediation Benefits

- Easily fix the vulnerabilities in the source code by utilizing precise code patches that are immediately ready to implement.
- Remediate earlier and quicker in the SDLC, saving countless hours of work and frustration.
- Utilize WhiteHat's secure libraries to protect applications.
- Establish security best practices for the development teams by emulating WhiteHat's security fixes in other development areas.

## About WhiteHat Security

Founded in 2001 and headquartered in Santa Clara, California, WhiteHat Security provides end-to-end solutions for application security. The company's cloud website vulnerability management platform and leading security engineers turn verified security intelligence into actionable insights for customers. Through a combination of core products and strategic partnerships, WhiteHat Security provides complete application security at a scale and accuracy unmatched in the industry. WhiteHat Sentinel, the company's flagship product line, currently manages thousands of websites - including sites in highly regulated industries such as e-commerce, financial services and healthcare companies. For more information, visit [www.whitehatsec.com](http://www.whitehatsec.com).

