



Fortify Audit Workbench

Developer Workbook

PS_INB_ERX_Fortify-3.0.1.005



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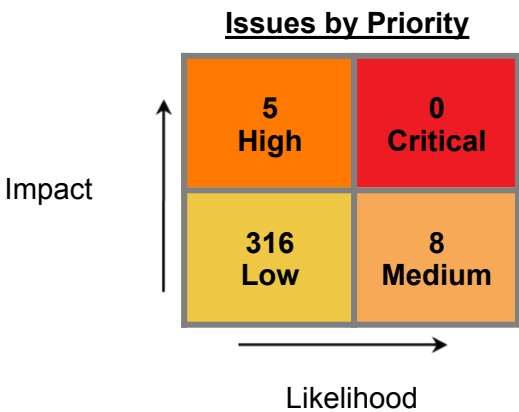


Executive Summary

This workbook is intended to provide all necessary details and information for a developer to understand and remediate the different issues discovered during the PS_INB_ERX_Fortify-3.0.1.005 project audit. The information contained in this workbook is targeted at project managers and developers.

This section provides an overview of the issues uncovered during analysis.

| | |
|-------------------|------------------------------|
| Project Name: | PS_INB_ERX_Fortify-3.0.1.005 |
| Project Version: | |
| SCA: | Results Present |
| WebInspect: | Results Not Present |
| WebInspect Agent: | Results Not Present |
| Other: | Results Not Present |



Top Ten Critical Categories

This project does not contain any critical issues



Project Description

This section provides an overview of the Fortify scan engines used for this project, as well as the project meta-information.

SCA

| | | | |
|-------------------------------|----------------------|------------------------|------------|
| Date of Last Analysis: | Jun 6, 2019, 9:48 AM | Engine Version: | 18.20.1071 |
| Host Name: | HAM-LT51592 | Certification: | VALID |
| Number of Files: | 2,175 | Lines of Code: | 113,961 |



Issue Breakdown by Fortify Categories

The following table depicts a summary of all issues grouped vertically by Fortify Category. For each category, the total number of issues is shown by Fortify Priority Order, including information about the number of audited issues.

| Category | Fortify Priority (audited/total) | | | | Total Issues |
|--|----------------------------------|-------|--------|---------|--------------|
| | Critical | High | Medium | Low | |
| Access Control: Database | 0 | 0 | 0 | 0 / 2 | 0 / 2 |
| Build Misconfiguration: External Maven Dependency Repository | 0 | 0 | 0 | 0 / 6 | 0 / 6 |
| Code Correctness: Misleading Method Signature | 0 | 0 | 0 | 4 / 4 | 4 / 4 |
| Cross-Site Request Forgery | 0 | 0 | 0 | 6 / 6 | 6 / 6 |
| Cross-Site Scripting: Poor Validation | 0 | 0 | 8 / 8 | 32 / 32 | 40 / 40 |
| Denial of Service | 0 | 0 | 0 | 0 / 1 | 0 / 1 |
| Hidden Field | 0 | 0 | 0 | 0 / 11 | 0 / 11 |
| J2EE Misconfiguration: Excessive Session Timeout | 0 | 0 | 0 | 0 / 1 | 0 / 1 |
| Missing Check against Null | 0 | 0 | 0 | 1 / 11 | 1 / 11 |
| Obsolete: Deprecated by ESAPI | 0 | 0 | 0 | 0 / 77 | 0 / 77 |
| Password Management | 0 | 0 | 0 | 0 / 5 | 0 / 5 |
| Password Management: Hardcoded Password | 0 | 4 / 4 | 0 | 0 | 4 / 4 |
| Password Management: Password in Comment | 0 | 0 | 0 | 18 / 18 | 18 / 18 |
| Poor Error Handling: Overly Broad Catch | 0 | 0 | 0 | 0 / 29 | 0 / 29 |
| Poor Error Handling: Overly Broad Throws | 0 | 0 | 0 | 0 / 17 | 0 / 17 |
| Poor Error Handling: Throw Inside Finally | 0 | 0 | 0 | 0 / 1 | 0 / 1 |
| Poor Style: Value Never Read | 0 | 0 | 0 | 31 / 31 | 31 / 31 |
| SQL Injection | 0 | 0 | 0 | 0 / 1 | 0 / 1 |
| System Information Leak: External | 0 | 1 / 1 | 0 | 0 / 7 | 1 / 8 |
| System Information Leak: HTML Comment in JSP | 0 | 0 | 0 | 0 / 27 | 0 / 27 |
| Trust Boundary Violation | 0 | 0 | 0 | 0 / 29 | 0 / 29 |



Results Outline

Access Control: Database (2 issues)

Abstract

Without proper access control, executing a SQL statement that contains a user-controlled primary key can allow an attacker to view unauthorized records.

Explanation

Database access control errors occur when: 1. Data enters a program from an untrusted source. 2. The data is used to specify the value of a primary key in a SQL query. **Example 1:** The following code uses a parameterized statement, which escapes metacharacters and prevents SQL injection vulnerabilities, to construct and execute a SQL query that searches for an invoice matching the specified identifier [1]. The identifier is selected from a list of all invoices associated with the current authenticated user.

```
...
id = Integer.decode(request.getParameter("invoiceID"));
String query = "SELECT * FROM invoices WHERE id = ?";
PreparedStatement stmt = conn.prepareStatement(query);
stmt.setInt(1, id);
ResultSet results = stmt.execute();
...
```

The problem is that the developer has failed to consider all of the possible values of `id`. Although the interface generates a list of invoice identifiers that belong to the current user, an attacker may bypass this interface to request any desired invoice. Because the code in this example does not check to ensure that the user has permission to access the requested invoice, it will display any invoice, even if it does not belong to the current user. Some think that in the mobile world, classic web application vulnerabilities, such as database access control errors, do not make sense -- why would the user attack themselves? However, keep in mind that the essence of mobile platforms is applications that are downloaded from various sources and run alongside each other on the same device. The likelihood of running a piece of malware next to a banking application is high, which necessitates expanding the attack surface of mobile applications to include inter-process communication. **Example 2:** The following code adapts Example 1 to the Android platform.

```
...
String id = this.getIntent().getExtras().getString("invoiceID");
String query = "SELECT * FROM invoices WHERE id = ?";
SQLiteDatabase db = this.openOrCreateDatabase("DB", MODE_PRIVATE,
null);
Cursor c = db.rawQuery(query, new Object[]{id});
...
```

A number of modern web frameworks provide mechanisms for performing validation of user input. Struts and Spring MVC are among them. To highlight the unvalidated sources of input, the rulepacks dynamically re-prioritize the issues reported by Fortify Static Code Analyzer by lowering their probability of exploit and providing pointers to the supporting evidence whenever the framework validation mechanism is in use. We refer to this feature as Context-Sensitive Ranking. To further assist the Fortify user with the auditing process, the Fortify Software Security Research group makes available the Data Validation project template that groups the issues into folders based on the validation mechanism applied to their source of input.

Recommendation

Rather than relying on the presentation layer to restrict values submitted by the user, access control should be handled by the application and database layers. Under no circumstances should a user be allowed to retrieve or modify a row in the database without the appropriate permissions. Every query that accesses



the database should enforce this policy, which can often be accomplished by simply including the current authenticated username as part of the query. **Example 3:** The following code implements the same functionality as Example 1 but imposes an additional constraint requiring that the current authenticated user have specific access to the invoice.

```
...
userName = ctx.getAuthenticatedUserName();
id = Integer.decode(request.getParameter("invoiceID"));
String query =
    "SELECT * FROM invoices WHERE id = ? AND user = ?";
PreparedStatement stmt = conn.prepareStatement(query);
stmt.setInt(1, id);
stmt.setString(2, userName);
ResultSet results = stmt.execute();
...

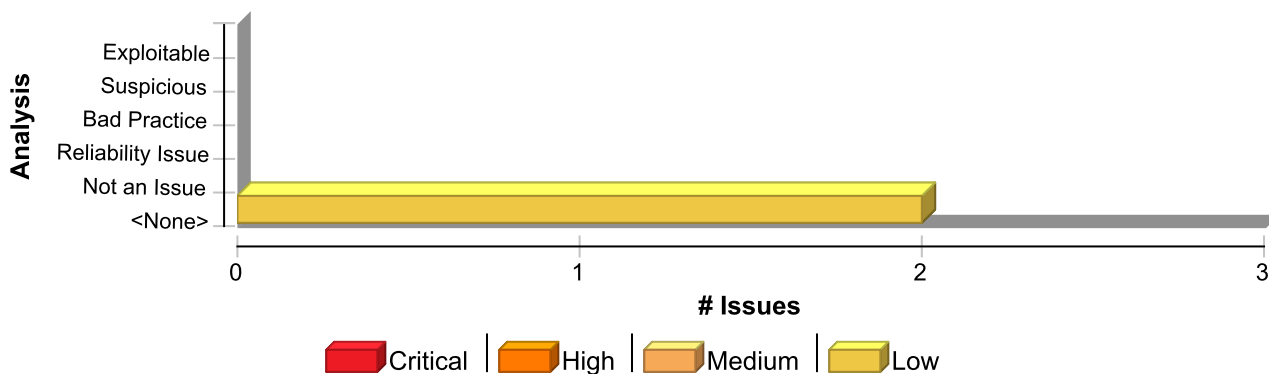
```

And here is an Android equivalent:

```
...
PasswordAuthentication pa = authenticator.getPasswordAuthentication();
String userName = pa.getUserName();
String id = this.getIntent().getExtras().getString("invoiceID");
String query = "SELECT * FROM invoices WHERE id = ? AND user = ?";
 SQLiteDatabase db = this.openOrCreateDatabase("DB", MODE_PRIVATE,
null);
    Cursor c = db.rawQuery(query, new Object[]{id, userName});
...

```

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--------------------------|----------|------------|---------------|----------|
| Access Control: Database | 2 | 0 | 0 | 2 |
| Total | 2 | 0 | 0 | 2 |

| | |
|--|------------|
| Access Control: Database | Low |
| URL: /managePharm/getStationIdsForSelect | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 260 (Access Control: Database) | Low |

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Data Flow)



| | |
|--|------------|
| Access Control: Database | Low |
| URL: /managePharm/getStationIdsForSelect | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 260 (Access Control: Database) | Low |

Source Details

Source: getStationIdsForSelect(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.getStationIdsForSelect
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:837
URL: /managePharm/getStationIdsForSelect

```

834 @RequestMapping(value = "/getStationIdsForSelect", method =
RequestMethod.GET, produces = "application/json")
835 @CacheControl(policy = {CachePolicy.NO_CACHE})
836 @ResponseBody
837 public List<StationIdSelectModel>
getStationIdsForSelect(HttpServletRequest request, @RequestParam("visn")
String visn)
838 throws JsonParseException, JsonMappingException, IOException {
839
840

```

Sink Details

Sink: org.hibernate.Criteria.add()
Enclosing Method: getSelectedStationIdsByVisn()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:260
Taint Flags: NUMBER, WEB

```

257
258 if(!"All".equalsIgnoreCase(visn)){
259
260 criteria.add(Restrictions.eq("visn", Long.valueOf(visn)));
261
262 criteria.add(buildStringInCriterion("vaStationId", userStationIds));
263

```

| | |
|--|------------|
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 224 (Access Control: Database) | Low |
|--|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Data Flow)

Source Details

Source: getStationIdsForSelect(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.getStationIdsForSelect



| | |
|--|------------|
| Access Control: Database | Low |
| URL: /managePharm/getStationIdsForSelect | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 224 (Access Control: Database) | Low |

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:837
URL: /managePharm/getStationIdsForSelect

```

834  @RequestMapping(value = "/getStationIdsForSelect", method =
RequestMethod.GET, produces = "application/json")
835  @CacheControl(policy = {CachePolicy.NO_CACHE})
836  @ResponseBody
837  public List<StationIdSelectModel>
getStationIdsForSelect(HttpServletRequest request, @RequestParam("visn")
String visn)
838  throws JsonParseException, JsonMappingException, IOException {
839
840

```

Sink Details

Sink: org.hibernate.Criteria.add()
Enclosing Method: getPharmacyStationIdsByVisn()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:224
Taint Flags: NUMBER, WEB

```

221
222  if(!"All".equalsIgnoreCase(visn)){
223
224  criteria.add(Restrictions.eq("visn", Long.valueOf(visn)));
225
226  try
227  {

```

Build Misconfiguration: External Maven Dependency Repository (6 issues)

Abstract

This maven build script relies on external sources, which could allow an attacker to insert malicious code into the final product or to take control of the build machine.

Explanation

Several tools exist within the Java development world to aid in dependency management: both Apache Ant and Apache Maven build systems include functionality specifically designed to help manage dependencies and Apache Ivy is developed explicitly as a dependency manager. Although there are differences in their behavior, these tools share the common functionality that they automatically download external dependencies specified in the build process at build time. This makes it much easier for developer B to build software in the same manner as developer A. Developers just store dependency information in the build file, which means that each developer and build engineer has a consistent way to obtain dependencies, compile the code, and deploy without the dependency management hassles involved in manual dependency management. The following examples illustrate how Ivy, Ant and Maven can be used to manage external dependencies as part of a build process. Under Maven, instead of listing explicit URLs from which to retrieve the dependencies, developers specify the dependency names and versions and Maven relies on its underlying configuration to identify the server(s) from which to retrieve the dependencies. For commonly used components this saves the developer from having to researching dependency locations. **Example 1:** The following excerpt from a Maven pom.xml file shows how a developer can specify multiple external dependencies using their name and version:

```
<dependencies>
  <dependency>
    <groupId>commons-logging</groupId>
    <artifactId>commons-logging</artifactId>
    <version>1.1</version>
  </dependency>
  <dependency>
    <groupId>javax.jms</groupId>
    <artifactId>jms</artifactId>
    <version>1.1</version>
  </dependency>
  ...
</dependencies>
```

Two distinct types of attack scenarios affect these systems: An attacker could either compromise the server hosting the dependency or compromise the DNS server the build machine uses to redirect requests for hostname of the server hosting the dependency to a machine controlled by the attacker. Both scenarios result in the attacker gaining the ability to inject a malicious version of a dependency into a build running on an otherwise uncompromised machine. Regardless of the attack vector used to deliver the Trojan dependency, these scenarios share the common element that the build system blindly accepts the malicious binary and includes it in the build. Because the build system has no recourse for rejecting the malicious binary and existing security mechanisms, such as code review, typically focus on internally-developed code rather than external dependencies, this type of attack has a strong potential to go unnoticed as it spreads through the development environment and potentially into production. Although there is some risk of a compromised dependency being introduced into a manual build process, by the tendency of automated build systems to retrieve the dependency from an external source each time the build system is run in a new environment greatly increases the window of opportunity for an attacker. An attacker need only compromise the dependency server or the DNS server during one of the many times the dependency is retrieved in order to compromise the machine on which the build is occurring.



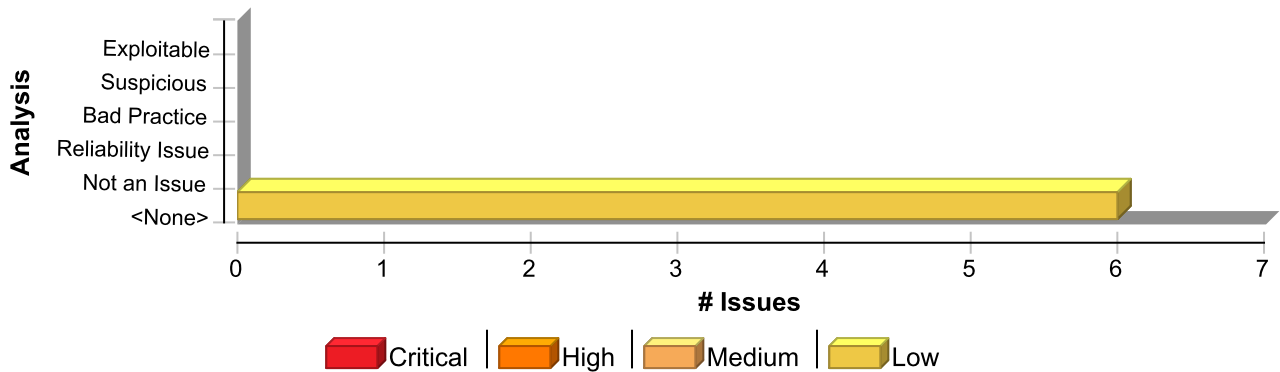
Recommendation

The simplest solution is to refrain from adopting automated dependency management systems altogether. Managing dependencies manually eliminates the potential for unexpected behavior caused by the build system. Obviously, the an attacker could still mount one of the attacks described above to coincide with the manual retrieval of a dependency, but limiting the frequency with which the dependency must be retrieved significantly reduces the window of opportunity for an attacker. Finally, this solution forces the development organization to rely on what is ostensibly an antiquated build system. A system based on manual dependency management is often more difficult to use and maintain, and may be unacceptable in some software development environments. The second solution is a hybrid of the traditional manual dependency management approach and the fully automated solution that is popular today. The biggest advantage of the manual build process is the decreased window of attack, which can be achieved in a semi-automated system by replicating external dependency servers internally. Any build system that requires an external dependency can then point to the internal server using a hard-coded internal IP address to bypass the risk of DNS-based attacks. As new dependencies are added and new versions released, they can be downloaded once and included on the internal repository. This solution reduces the attack opportunities and allows the organization leverage existing internal network security infrastructure. To implement this solution using Maven, a project should have the IP address for an internal repository hard coded the pom.xml. Specifying the IP address in the pom.xml ensures the internal repository will be used by the corresponding build, but is tied to a specific project. Alternatively, the IP address can be specified in settings.xml, which makes the configuration easier to share across multiple projects. **Example 2:** The following Maven pom.xml demonstrates the use of an explicit internal IP address (the entries can also be used in settings.xml):

```
<project>
...
<repositories>
  <repository>
    <releases>
      <enabled>true</enabled>
      <updatePolicy>always</updatePolicy>
      <checksumPolicy>warn</checksumPolicy>
    </releases>
    <snapshots>
      <enabled>true</enabled>
      <updatePolicy>never</updatePolicy>
      <checksumPolicy>fail</checksumPolicy>
    </snapshots>
    <id>central</id>
    <name>Internal Repository</name>
    <url>http://172.16.1.13/maven2</url>
    <layout>default</layout>
  </repository>
</repositories>
<pluginRepositories>
...
</pluginRepositories>
...
</project>
```

Issue Summary





Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--|----------|------------|---------------|----------|
| Build Misconfiguration: External Maven Dependency Repository | 6 | 0 | 0 | 6 |
| Total | 6 | 0 | 0 | 6 |

Build Misconfiguration: External Maven Dependency Repository

Low

Package: PS_INB_ERX_Common

PS_INB_ERX_Common/pom.xml, line 2 (Build Misconfiguration: External Maven Dependency Repository)

Low

Issue Details

Kingdom: Environment
Scan Engine: SCA (Configuration)

Sink Details

Sink: //project/repositories
File: PS_INB_ERX_Common/pom.xml:2
Taint Flags:

```

1 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance"
2   xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-
v4_0_0.xsd">
3
4   <modelVersion>4.0.0</modelVersion>
5   <artifactId>PS_INB_ERX_Common</artifactId>
6
7 undefined

```

Package: PS_INB_ERX_Fortify

PS_INB_ERX_Fortify/pom.xml, line 21 (Build Misconfiguration: External Maven Dependency Repository)

Low

Issue Details

Kingdom: Environment
Scan Engine: SCA (Configuration)

Sink Details



Build Misconfiguration: External Maven Dependency Repository**Low****Package: PS_INB_ERX_Fortify****PS_INB_ERX_Fortify/pom.xml, line 21 (Build Misconfiguration: External Maven Dependency Repository)****Low**

Sink: //project/repositories
File: PS_INB_ERX_Fortify/pom.xml:21
Taint Flags:

```
18
19 </modules>
20
21 <repositories>
22 <repository>
23 <id>project.local</id>
24 <name>project</name>
```

Package: PS_INB_ERX_Model**PS_INB_ERX_Model/pom.xml, line 2 (Build Misconfiguration: External Maven Dependency Repository)****Low****Issue Details**

Kingdom: Environment
Scan Engine: SCA (Configuration)

Sink Details

Sink: //project/repositories
File: PS_INB_ERX_Model/pom.xml:2
Taint Flags:

```
1 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance"
2   xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-
v4_0_0.xsd">
3
4   <modelVersion>4.0.0</modelVersion>
5   <name>PS_INB_ERX_Model</name>
6
7 undefined
```

Package: PS_INB_ERX_Service**PS_INB_ERX_Service/pom.xml, line 16 (Build Misconfiguration: External Maven Dependency Repository)****Low****Issue Details**

Kingdom: Environment
Scan Engine: SCA (Configuration)

Sink Details

Sink: //project/repositories



Build Misconfiguration: External Maven Dependency Repository**Low****Package: PS_INB_ERX_Service****PS_INB_ERX_Service/pom.xml, line 16 (Build Misconfiguration: External Maven Dependency Repository)****Low****File:** PS_INB_ERX_Service/pom.xml:16**Taint Flags:**

```
13 <relativePath>../PS_INB_ERX/pom.xml</relativePath>
14 </parent>
15
16 <repositories>
17 <repository>
18 <id>project.local</id>
19 <name>project</name>
```

Package: PS_INB_ERX_UI**PS_INB_ERX_UI/pom.xml, line 17 (Build Misconfiguration: External Maven Dependency Repository)****Low****Issue Details****Kingdom:** Environment**Scan Engine:** SCA (Configuration)**Sink Details****Sink:** //project/repositories**File:** PS_INB_ERX_UI/pom.xml:17**Taint Flags:**

```
14 </parent>
15
16
17 <repositories>
18 <repository>
19 <id>project.local</id>
20 <name>project</name>
```

Package: PS_INB_ERX_WS**PS_INB_ERX_WS/pom.xml, line 16 (Build Misconfiguration: External Maven Dependency Repository)****Low****Issue Details****Kingdom:** Environment**Scan Engine:** SCA (Configuration)**Sink Details****Sink:** //project/repositories**File:** PS_INB_ERX_WS/pom.xml:16**Taint Flags:**

```
13 <relativePath>../PS_INB_ERX/pom.xml</relativePath>
```



| | |
|--|------------|
| Build Misconfiguration: External Maven Dependency Repository | Low |
| Package: PS_INB_ERX_WS | |
| PS_INB_ERX_WS/pom.xml, line 16 (Build Misconfiguration: External Maven Dependency Repository) | Low |

```

14  </parent>
15
16  <repositories>
17  <repository>
18  <id>project.local</id>
19  <name>project</name>

```



Code Correctness: Misleading Method Signature (4 issues)

Abstract

This looks like an effort to override a common Java method, but it probably does not have the intended effect.

Explanation

This method's name is similar to a common Java method name, but it is either spelled incorrectly or the argument list causes it to not override the intended method. **Example 1:** The following method is meant to override `Object.equals()`:

```
public boolean equals(Object obj1, Object obj2) {  
    ...  
}
```

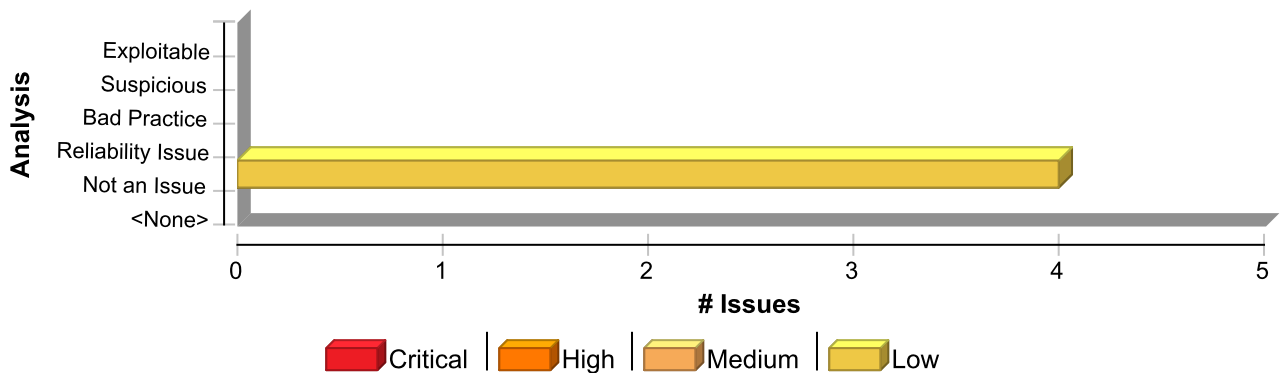
But since `Object.equals()` only takes a single argument, the method above is never called.

Recommendation

Carefully check to make sure the method does what was intended. **Example 2:** The code in Example 1 could be rewritten in the following way:

```
public boolean equals(Object obj) {  
    ...  
}
```

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---|----------|------------|---------------|----------|
| Code Correctness: Misleading Method Signature | 4 | 0 | 0 | 4 |
| Total | 4 | 0 | 0 | 4 |

| | |
|--|------------|
| Code Correctness: Misleading Method Signature | Low |
| Package: gov.va.med.pharmacy.persistence.model.usertypes | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java, line 57 (Code Correctness: Misleading Method Signature) | Low |
| Issue Details | |



Code Correctness: Misleading Method Signature**Low****Package:** gov.va.med.pharmacy.persistence.model.usertypes**PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java, line 57 (Code Correctness: Misleading Method Signature)****Low**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Sep 26 2017 09:42:49 GMT-0400 (EDT)
The method does not override Object.hashCode. It overrides gov.va.med.pharmacy.persistence.model.usertypes.InboundNcpdpMsgUserType.hashCode and has the desired effect.

Sink Details

Sink: Function: hashCode
Enclosing Method: hashCode()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java:57
Taint Flags:

```
54 }  
55  
56 @Override  
57 public int hashCode(Object x) throws HibernateException {  
58     return (x != null) ? x.hashCode() : 0;  
59 }  
60
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java, line 51 (Code Correctness: Misleading Method Signature)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Sep 26 2017 09:42:49 GMT-0400 (EDT)
The method does not override Object.hashCode. It overrides gov.va.med.pharmacy.persistence.model.usertypes.InboundNcpdpMsgUserType.hashCode and has the desired effect.

Sink Details

Sink: Function: hashCode
Enclosing Method: hashCode()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java:51



Code Correctness: Misleading Method Signature**Low****Package: gov.va.med.pharmacy.persistence.model.usertypes****PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java, line 51 (Code Correctness: Misleading Method Signature)****Low****Taint Flags:**

```
48  }  
49  
50  @Override  
51  public int hashCode(Object x) throws HibernateException {  
52  
53  return (x != null) ? x.hashCode() : 0;  
54
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java, line 44 (Code Correctness: Misleading Method Signature)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Sep 26 2017 09:41:19 GMT-0400 (EDT)

The method does not override Object.equals. It overrides gov.va.med.pharmacy.persistence.model.usertypes.InboundNcpdpMsgUserType.equals and has the desired effect.

Sink Details**Sink:** Function: equals**Enclosing Method:** equals()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java:44**Taint Flags:**

```
41  }  
42  
43  @Override  
44  public boolean equals(Object x, Object y) throws HibernateException {  
45  
46  return (x != null) && x.equals(y);  
47
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java, line 52 (Code Correctness: Misleading Method Signature)**Low****Issue Details****Kingdom:** Code Quality

Code Correctness: Misleading Method Signature**Low****Package:** gov.va.med.pharmacy.persistence.model.usertypes**PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java, line 52 (Code Correctness: Misleading Method Signature)****Low**

Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Sep 26 2017 09:41:19 GMT-0400 (EDT)

The method does not override Object.equals. It overrides gov.va.med.pharmacy.persistence.model.usertypes.InboundNcpdpMsgUserType.equals and has the desired effect.

Sink Details**Sink:** Function: equals**Enclosing Method:** equals()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java:52**Taint Flags:**

```
49  }
50
51  @Override
52  public boolean equals(Object x, Object y) throws HibernateException {
53      return (x != null) && x.equals(y);
54  }
55
```



Cross-Site Request Forgery (6 issues)

Abstract

Form posts must contain a user-specific secret in order to prevent an attacker from making unauthorized requests.

Explanation

A cross-site request forgery (CSRF) vulnerability occurs when: 1. A Web application uses session cookies. 2. The application acts on an HTTP request without verifying that the request was made with the user's consent. A nonce is a cryptographic random value that is sent with a message to prevent replay attacks. If the request does not contain a nonce that proves its provenance, the code that handles the request is vulnerable to a CSRF attack (unless it does not change the state of the application). This means a Web application that uses session cookies has to take special precautions in order to ensure that an attacker can't trick users into submitting bogus requests. Imagine a Web application that allows administrators to create new accounts by submitting this form:

```
<form method="POST" action="/new_user" >
  Name of new user: <input type="text" name="username">
  Password for new user: <input type="password" name="user_passwd">
  <input type="submit" name="action" value="Create User">
</form>
```

An attacker might set up a Web site with the following:

```
<form method="POST" action="http://www.example.com/new_user">
  <input type="hidden" name="username" value="hacker">
  <input type="hidden" name="user_passwd" value="hacked">
</form>
<script>
  document.usr_form.submit();
</script>
```

If an administrator for `example.com` visits the malicious page while she has an active session on the site, she will unwittingly create an account for the attacker. This is a CSRF attack. It is possible because the application does not have a way to determine the provenance of the request. Any request could be a legitimate action chosen by the user or a faked action set up by an attacker. The attacker does not get to see the Web page that the bogus request generates, so the attack technique is only useful for requests that alter the state of the application. Applications that pass the session identifier in the URL rather than as a cookie do not have CSRF problems because there is no way for the attacker to access the session identifier and include it as part of the bogus request. CSRF is entry number five on the 2007 OWASP Top 10 list.

Recommendation

Applications that use session cookies must include some piece of information in every form post that the back-end code can use to validate the provenance of the request. One way to do that is to include a random request identifier or nonce, like this:

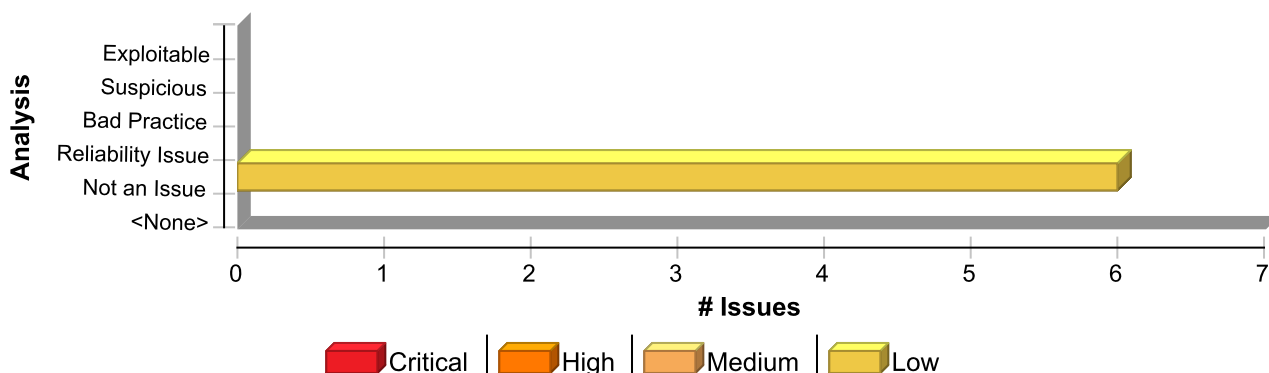
```
RequestBuilder rb = new RequestBuilder(RequestBuilder.POST, "/new_user");
body = addToPost(body, new_username);
body = addToPost(body, new_passwd);
body = addToPost(body, request_id);
rb.sendRequest(body, new NewAccountCallback(callback));
```

Then the back-end logic can validate the request identifier before processing the rest of the form data. When possible, the request identifier should be unique to each server request rather than shared across every request for a particular session. As with session identifiers, the harder it is for an attacker to guess the request identifier, the harder it is to conduct a successful CSRF attack. The token should not be easily guessed and it should be protected in the same way that session tokens are protected, such as using SSLv3. Additional mitigation techniques include: **Framework protection:** Most modern web application



frameworks embed CSRF protection and they will automatically include and verify CSRF tokens. **Use a Challenge-Response control:** Forcing the customer to respond to a challenge sent by the server is a strong defense against CSRF. Some of the challenges that can be used for this purpose are: CAPTCHAs, password re-authentication and one-time tokens. **Check HTTP Referer/Origin headers:** An attacker won't be able to spoof these headers while performing a CSRF attack. This makes these headers a useful method to prevent CSRF attacks. **Double-submit Session Cookie:** Sending the session ID Cookie as a hidden form value in addition to the actual session ID Cookie is a good protection against CSRF attacks. The server will check both values and make sure they are identical before processing the rest of the form data. If an attacker submits a form in behalf of a user, he won't be able to modify the session ID cookie value as per the same-origin-policy. **Limit Session Lifetime:** When accessing protected resources using a CSRF attack, the attack will only be valid as long as the session ID sent as part of the attack is still valid on the server. Limiting the Session lifetime will reduce the probability of a successful attack. The techniques described here can be defeated with XSS attacks. Effective CSRF mitigation includes XSS mitigation techniques.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|----------------------------|----------|------------|---------------|----------|
| Cross-Site Request Forgery | 6 | 0 | 0 | 6 |
| Total | 6 | 0 | 0 | 6 |

Cross-Site Request Forgery

Low

Package: .src.main.webapp.WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 11 (Cross-Site Request Forgery)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Content)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 15:02:49 GMT-0400 (EDT)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Sink Details



Cross-Site Request Forgery

Low

Package: .src.main.webapp.WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 11 (Cross-Site Request Forgery)

Low

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:11

Taint Flags:

```
8
9 <div id="AddPharm">
10 <h1 class="titleBar"><span class="headerText">Add Pharmacy</span></h1>
11 <form:form id="pharmacyAddForm" name="pharmacyAddForm" commandName="pharmacyAddForm"
method="POST" action="${pageContext.request.contextPath}/inb-erx/managePharm/addNewPharmacy">
12 <div id="warningMessage" class="warning" aria-describedby="Informational message or warning
message section" tabindex="0">
13 <p id="errorTitle">
14 <font class="warningHeader">Warning Message: </font>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/reports.jsp, line 22 (Cross-Site Request Forgery)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Content)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:24:12 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/reports.jsp:22

Taint Flags:

```
19 </div>
20
21 <div id="summaryReportFilter">
22 <form id="summaryReportForm" >
23 <h2 class="h2title"><span class="reportTitle"></span></h2>
24 <label for="visnSelection">VISN:&nbsp;&nbsp;&nbsp;</label>
25 <div id="summaryReportFormVisnSelect" tabindex="0" style="width: 40px; ">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 10 (Cross-Site Request Forgery)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Content)

Audit Details

Analysis Not an Issue



| | |
|--|------------|
| Cross-Site Request Forgery | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 10 (Cross-Site Request Forgery) | Low |

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:24:12 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:10
Taint Flags:

```

7 <div id="userRoles">
8   <h2 class="titleBar"><span>&nbsp;User Management</span>
9 </h2>
10  <form:form name="manageUsersForm" id="manageUsersForm"
modelAttribute="userManagementModel" method="POST" action="${pageContext.request.contextPath}/
inb-erx/manageUsers/saveUserData">
11  <c:if test="${not empty data.errorMessage}">
12  <div id="errorMessages" class="error" aria-describedby="message section" tabindex="0">
13  <p id="errorTitle">
```

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/loginErrorLayout.jsp, line 23 (Cross-Site Request Forgery) | Low |
|---|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 15:02:49 GMT-0400 (EDT)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/loginErrorLayout.jsp:23
Taint Flags:

```

20 <hr />
21 <div id="content">
22 <br/>
23 <form action="${index}" method="post" >
24
25 <div align="center">
26 <br/>
```



| | |
|-----------------------------------|------------|
| Cross-Site Request Forgery | Low |
|-----------------------------------|------------|

Package: .src.main.webapp.WEB-INF

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 12 (Cross-Site Request Forgery) | Low |
|---|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 15:02:49 GMT-0400 (EDT)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:12
Taint Flags:

```

9 <div id="EditPharm">
10
11 <h1 class="titleBar"><span class="headerText">Edit Pharmacy</span></h1>
12 <form:form id="pharmacyEditForm" name="pharmacyEditForm" commandName="pharmacyEditForm"
method="POST" action="{pageContext.request.contextPath}/inb-erx/managePharm/updatePharmacy">
13 <div id="warningMessage" class="warning" aria-describedby="message section" tabindex="0">
14 <p id="errorTitle">
15 <font class="warningHeader">Warning Message: </font>

```

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 35 (Cross-Site Request Forgery) | Low |
|---|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:24:12 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp:35
Taint Flags:

```

32 </c:if>
33
34 <div id="pharmacyManagement">
35 <form:form id="pharmacyFilterForm" name="pharmacyFilterForm">
36
37

```



| | |
|--|------------|
| Cross-Site Request Forgery | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 35 (Cross-Site Request Forgery) | Low |
| 38 <div id="NCPDP_ID_DIV" class="pharmacyManagementNCPDPIDDiv" style="display: block; opacity: 1;"> | |



Cross-Site Scripting: Poor Validation (40 issues)

Abstract

Relying on HTML, XML and other types of encoding to validate user input can result in the browser executing malicious code.

Explanation

The use of certain encoding constructs, such as the `tag` with the `escapeXml="true"` attribute (the default behavior), will prevent some, but not all cross-site scripting attacks. Depending on the context in which the data appear, characters beyond the basic `<`, `>`, `&`, and `"` that are HTML-encoded and those beyond `<`, `>`, `&`, `"`, and `'` that are XML-encoded may take on meta-meaning. Relying on such encoding constructs is equivalent to using a weak blacklist to prevent cross-site scripting and might allow an attacker to inject malicious code that will be executed in the browser. Because accurately identifying the context in which the data appear statically is not always possible, Fortify Static Code Analyzer reports cross-site scripting findings even when encoding is applied and presents them as Cross-Site Scripting: Poor Validation issues. Cross-site scripting (XSS) vulnerabilities occur when: 1. Data enters a web application through an untrusted source. In the case of reflected XSS, an untrusted source is most frequently a web request, and in the case of persistent (also known as stored) XSS -- it is the results of a database query. 2. The data is included in dynamic content that is sent to a web user without being validated. The malicious content sent to the web browser often takes the form of a segment of JavaScript, but may also include HTML, Flash or any other type of code that the browser executes. The variety of attacks based on XSS is almost limitless, but they commonly include transmitting private data like cookies or other session information to the attacker, redirecting the victim to web content controlled by the attacker, or performing other malicious operations on the user's machine under the guise of the vulnerable site. **Example 1:** The following JSP code segment reads an employee ID, `eid`, from an HTTP request and displays it to the user via the `tag`.

```
Employee ID: <c:out value="${param.eid}"/>
```

The code in this example operates correctly if `eid` contains only standard alphanumeric text. If `eid` has a value that includes meta-characters or source code, then the code will be executed by the web browser as it displays the HTTP response. Initially this might not appear to be much of a vulnerability. After all, why would someone enter a URL that causes malicious code to run on their own computer? The real danger is that an attacker will create the malicious URL, then use e-mail or social engineering tricks to lure victims into visiting a link to the URL. When victims click the link, they unwittingly reflect the malicious content through the vulnerable web application back to their own computers. This mechanism of exploiting vulnerable web applications is known as Reflected XSS. **Example 2:** The following JSP code segment queries a database for an employee with a given ID and prints the corresponding employee's name via the `tag`.

```
<%...
Statement stmt = conn.createStatement();
ResultSet rs = stmt.executeQuery("select * from emp where id="+eid);
if (rs != null) {
    rs.next();
    String name = rs.getString("name");
}
%>
```

```
Employee Name: <c:out value="${name}"/>
```

As in Example 1, this code functions correctly when the values of `name` are well-behaved, but it does nothing to prevent exploits if they are not. Again, this code can appear less dangerous because the value of `name` is read from a database, whose contents are apparently managed by the application. However, if the value of `name` originates from user-supplied data, then the database can be a conduit for malicious content. Without proper input validation on all data stored in the database, an attacker may execute malicious commands in the user's web browser. This type of exploit, known as Persistent (or Stored) XSS,



is particularly insidious because the indirection caused by the data store makes it more difficult to identify the threat and increases the possibility that the attack will affect multiple users. XSS got its start in this form with web sites that offered a "guestbook" to visitors. Attackers would include JavaScript in their guestbook entries, and all subsequent visitors to the guestbook page would execute the malicious code. Some think that in the mobile world, classic web application vulnerabilities, such as cross-site scripting, do not make sense -- why would the user attack themselves? However, keep in mind that the essence of mobile platforms is applications that are downloaded from various sources and run alongside each other on the same device. The likelihood of running a piece of malware next to a banking application is high, which necessitates expanding the attack surface of mobile applications to include inter-process communication.

Example 3: The following code enables JavaScript in Android's WebView (by default, JavaScript is disabled) and loads a page based on the value received from an Android intent.

```
...  
    WebView webview = (WebView) findViewById(R.id.webview);  
    webview.getSettings().setJavaScriptEnabled(true);  
    String url = this getIntent().getExtras().getString("url");  
    webview.loadUrl(URLEncoder.encode(url));  
...
```

If the value of `url` starts with `javascript:`, JavaScript code that follows will execute within the context of the web page inside WebView. As the examples demonstrate, XSS vulnerabilities are caused by code that includes unvalidated data in an HTTP response. There are three vectors by which an XSS attack can reach a victim: - As in Example 1, data is read directly from the HTTP request and reflected back in the HTTP response. Reflected XSS exploits occur when an attacker causes a user to supply dangerous content to a vulnerable web application, which is then reflected back to the user and executed by the web browser. The most common mechanism for delivering malicious content is to include it as a parameter in a URL that is posted publicly or e-mailed directly to victims. URLs constructed in this manner constitute the core of many phishing schemes, whereby an attacker convinces victims to visit a URL that refers to a vulnerable site. After the site reflects the attacker's content back to the user, the content is executed and proceeds to transfer private information, such as cookies that may include session information, from the user's machine to the attacker or perform other nefarious activities. - As in Example 2, the application stores dangerous data in a database or other trusted data store. The dangerous data is subsequently read back into the application and included in dynamic content. Persistent XSS exploits occur when an attacker injects dangerous content into a data store that is later read and included in dynamic content. From an attacker's perspective, the optimal place to inject malicious content is in an area that is displayed to either many users or particularly interesting users. Interesting users typically have elevated privileges in the application or interact with sensitive data that is valuable to the attacker. If one of these users executes malicious content, the attacker may be able to perform privileged operations on behalf of the user or gain access to sensitive data belonging to the user. - As in Example 3, a source outside the application stores dangerous data in a database or other data store, and the dangerous data is subsequently read back into the application as trusted data and included in dynamic content. A number of modern web frameworks provide mechanisms for performing validation of user input. Struts and Spring MVC are two examples. To highlight the unvalidated sources of input, the rulepacks dynamically re-prioritize the issues reported by Fortify Static Code Analyzer by lowering their probability of exploit and providing pointers to the supporting evidence whenever the framework validation mechanism is in use. We refer to this feature as Context-Sensitive Ranking. To further assist the Fortify user with the auditing process, the Fortify Software Security Research group makes available the Data Validation project template that groups the issues into folders based on the validation mechanism applied to their source of input.

Recommendation

The solution to XSS is to ensure that validation occurs in the correct places and checks are made for the correct properties. Since XSS vulnerabilities occur when an application includes malicious data in its output, one logical approach is to validate data immediately before it leaves the application. However, because web applications often have complex and intricate code for generating dynamic content, this method is prone to errors of omission (missing validation). An effective way to mitigate this risk is to also perform input validation for XSS. Web applications must validate their input to prevent other vulnerabilities, such as SQL injection, so augmenting an application's existing input validation mechanism to include

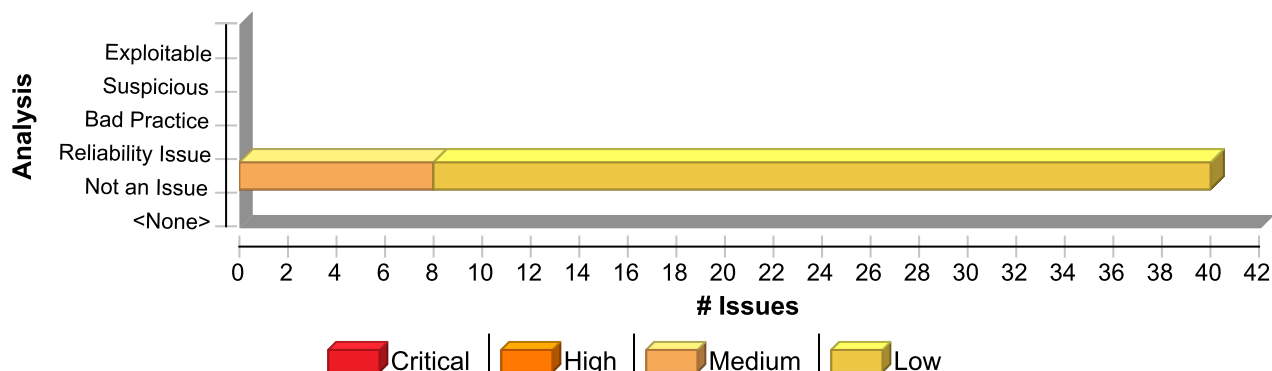


checks for XSS is generally relatively easy. Despite its value, input validation for XSS does not take the place of rigorous output validation. An application may accept input through a shared data store or other trusted source, and that data store may accept input from a source that does not perform adequate input validation. Therefore, the application cannot implicitly rely on the safety of this or any other data. This means the best way to prevent XSS vulnerabilities is to validate everything that enters the application and leaves the application destined for the user. The most secure approach to validation for XSS is to create a whitelist of safe characters that are allowed to appear in HTTP content and accept input composed exclusively of characters in the approved set. For example, a valid username might only include alpha-numeric characters or a phone number might only include digits 0-9. However, this solution is often infeasible in web applications because many characters that have special meaning to the browser should still be considered valid input once they are encoded, such as a web design bulletin board that must accept HTML fragments from its users. A more flexible, but less secure approach is known as blacklisting, which selectively rejects or escapes potentially dangerous characters before using the input. In order to form such a list, you first need to understand the set of characters that hold special meaning for web browsers. Although the HTML standard defines what characters have special meaning, many web browsers try to correct common mistakes in HTML and may treat other characters as special in certain contexts, which is why we do not encourage the use of blacklists as a means to prevent XSS. The CERT(R) Coordination Center at the Software Engineering Institute at Carnegie Mellon University provides the following details about special characters in various contexts [1]: In the content of a block-level element (in the middle of a paragraph of text): - "<" is special because it introduces a tag. - "&" is special because it introduces a character entity. - ">" is special because some browsers treat it as special, on the assumption that the author of the page intended to include an opening "<", but omitted it in error. The following principles apply to attribute values: - In attribute values enclosed with double quotes, the double quotes are special because they mark the end of the attribute value. - In attribute values enclosed with single quote, the single quotes are special because they mark the end of the attribute value. - In attribute values without any quotes, white-space characters, such as space and tab, are special. - "&" is special when used with certain attributes, because it introduces a character entity. In URLs, for example, a search engine might provide a link within the results page that the user can click to re-run the search. This can be implemented by encoding the search query inside the URL, which introduces additional special characters: - Space, tab, and new line are special because they mark the end of the URL. - "&" is special because it either introduces a character entity or separates CGI parameters. - Non-ASCII characters (that is, everything above 128 in the ISO-8859-1 encoding) are not allowed in URLs, so they are considered to be special in this context. - The "%" symbol must be filtered from input anywhere parameters encoded with HTTP escape sequences are decoded by server-side code. For example, "%" must be filtered if input such as "%68%65%6C%6C%6F" becomes "hello" when it appears on the web page in question. Within the body of a : - Semicolons, parentheses, curly braces, and new line characters should be filtered out in situations where text could be inserted directly into a pre-existing script tag. Server-side scripts: - Server-side scripts that convert any exclamation characters (!) in input to double-quote characters (") on output might require additional filtering. Other possibilities: - If an attacker submits a request in UTF-7, the special character '<' appears as '+ADw-' and may bypass filtering. If the output is included in a page that does not explicitly specify an encoding format, then some browsers try to intelligently identify the encoding based on the content (in this case, UTF-7). After you identify the correct points in an application to perform validation for XSS attacks and what special characters the validation should consider, the next challenge is to identify how your validation handles special characters. If special characters are not considered valid input to the application, then you can reject any input that contains special characters as invalid. A second option in this situation is to remove special characters with filtering. However, filtering has the side effect of changing any visual representation of the filtered content and may be unacceptable in circumstances where the integrity of the input must be preserved for display. If input containing special characters must be accepted and displayed accurately, validation must encode any special characters to remove their significance. A complete list of ISO 8859-1 encoded values for special characters is provided as part of the official HTML specification [2]. Many application servers attempt to limit an application's exposure to cross-site scripting vulnerabilities by providing implementations for the functions responsible for setting certain specific HTTP response content that perform validation for the characters essential to a cross-site scripting attack. Do not rely on the server running your application to make it secure. When an application is developed there are no guarantees about what application servers it will run on during its lifetime. As standards and known



exploits evolve, there are no guarantees that application servers will also stay in sync.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---------------------------------------|-----------|------------|---------------|-----------|
| Cross-Site Scripting: Poor Validation | 40 | 0 | 0 | 40 |
| Total | 40 | 0 | 0 | 40 |

Cross-Site Scripting: Poor Validation

Medium

Package: /WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)

Medium

Issue Details

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
 Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:66

```

63
64 try {
65
66 visnList = jdbcTemplate.query(sql, new VisnListRowMapper());
67 } catch (DataAccessException e) {
68
69

```



Cross-Site Scripting: Poor Validation**Medium****Package:** /WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)****Medium****Sink Details**

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp:60
Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
57
58 <select name="pharmacyFilterFormVisnSelect" id="pharmacyFilterFormVisnSelect"
onchange="getPharmStationIdSelect(this);">
59 <c:forEach var="item" items="${visnList}">
60 <option value="${item.label}">${item.id}</option>
61 </c:forEach>
62 </select>
63
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)**Medium****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:66

```
63
64 try {
65
66 visnList = jdbcTemplate.query(sql,new VisnListRowMapper());
67 } catch (DataAccessException e) {
68
69
```



Cross-Site Scripting: Poor Validation**Medium****Package:** /WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)****Medium****Sink Details**

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp:60
Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
57
58 <select name="pharmacyFilterFormVisnSelect" id="pharmacyFilterFormVisnSelect"
onchange="getPharmStationIdSelect(this);">
59 <c:forEach var="item" items="${visnList}">
60 <option value="${item.label}">${item.id}</option>
61 </c:forEach>
62 </select>
63
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)**Medium****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:66

```
63
64 try {
65
66 visnList = jdbcTemplate.query(sql,new VisnListRowMapper());
67 } catch (DataAccessException e) {
68
69
```



Cross-Site Scripting: Poor Validation**Medium****Package: /WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)****Medium****Sink Details****Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp:23**Taint Flags:** DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
20
21 <select name="trackauditVisnSelection" id="trackauditVisnSelection" class="diigit
diigitReset diigitInline diigitLeft diigitSelect diigitValidationTextBox diigitDownArrowButton
diigitSelectFixedWidth diigitValidationTextBoxFixedWidth diigitSelectLabel ">
22 <c:forEach var="item" items="${trackVisnList}">
23 <option value="${item.label}">${item.id}</option>
24 </c:forEach>
25 </select>
26
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)**Medium****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButts:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** org.springframework.jdbc.core.JdbcTemplate.query()**From:** gov.va.med.pharmacy.persistance.track.impl.VisnSelectDaoImpl.getVisns**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistance/track/impl/VisnSelectDaoImpl.java:66

```
63
64 try {
65
66 visnList = jdbcTemplate.query(sql,new VisnListRowMapper());
67 } catch (DataAccessException e) {
68
```



Cross-Site Scripting: Poor Validation**Medium****Package: /WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)****Medium**

69

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:23**Taint Flags:** DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

20

```
21 <select name="trackauditVisnSelection" id="trackauditVisnSelection" class="dijs  
dijsReset dijsInline dijsLeft dijsSelect dijsValidationTextBox dijsDownArrowButton  
dijsSelectFixedWidth dijsValidationTextBoxFixedWidth dijsSelectLabel ">
```

```
22 <c:forEach var="item" items="${trackVisnList}">
```

```
23 <option value="${item.label}">${item.id}</option>
```

```
24 </c:forEach>
```

```
25 </select>
```

26

PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)**Medium****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()**From:** gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getSelectedVisns**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:94

```
91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();
```

92

```
93 try {
```

```
94 visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
```

```
95 } catch (DataAccessException e) {
```



Cross-Site Scripting: Poor Validation

Medium

Package: /WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)

Medium

96

```
97 LOG.info("Exception retrieving selected visn from pharmacy." +  
e.getMessage());
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()

Enclosing Method: _jspService()

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp:60

Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

57

```
58 <select name="pharmacyFilterFormVisnSelect" id="pharmacyFilterFormVisnSelect"  
onchange="getPharmStationIdSelect(this);">
```

```
59 <c:forEach var="item" items="${visnList}">
```

```
60 <option value="${item.label}">${item.id}</option>
```

```
61 </c:forEach>
```

```
62 </select>
```

63

PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)

Medium

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()

From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getSelectedVisns

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:94

```
91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();
```

```
92
```

```
93 try {
```

```
94 visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
```



Cross-Site Scripting: Poor Validation

Medium

Package: /WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 60 (Cross-Site Scripting: Poor Validation)

Medium

```
95 } catch (DataAccessException e) {  
96  
97 LOG.info("Exception retrieving selected visn from pharmacy." +  
e.getMessage());
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/managepharmacy.jsp:60
Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
57  
58 <select name="pharmacyFilterFormVisnSelect" id="pharmacyFilterFormVisnSelect"  
onchange="getPharmStationIdSelect(this);">  
59 <c:forEach var="item" items="${visnList}">  
60 <option value="${item.label}">${item.id}</option>  
61 </c:forEach>  
62 </select>  
63
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)

Medium

Issue Details

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()
From: gov.va.med.pharmacy.persistance.track.impl.VisnSelectDaoImpl.getSelectedVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistance/track/impl/VisnSelectDaoImpl.java:94

```
91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();  
92  
93 try {
```



Cross-Site Scripting: Poor Validation

Medium

Package: /WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)

Medium

```
94 visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
95 } catch (DataAccessException e) {
96
97 LOG.info("Exception retrieving selected visn from pharmacy." +
e.getMessage());
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()

Enclosing Method: _jspService()

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:23

Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
20
21 <select name="trackauditVisnSelection" id="trackauditVisnSelection" class="di
diitReset dijitInline dijitLeft dijitSelect dijitValidationTextBox dijitDownArrowButton
dijitSelectFixedWidth dijitValidationTextBoxFixedWidth dijitSelectLabel ">
22 <c:forEach var="item" items="${trackVisnList}">
23 <option value="${item.label}">${item.id}</option>
24 </c:forEach>
25 </select>
26
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)

Medium

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()

From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getSelectedVisns

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:94

```
91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();
```



Cross-Site Scripting: Poor Validation**Medium****Package: /WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp, line 23 (Cross-Site Scripting: Poor Validation)****Medium**

```
92
93 try {
94     visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
95 } catch (DataAccessException e) {
96
97     LOG.info("Exception retrieving selected visn from pharmacy." +
e.getMessage());
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp:23**Taint Flags:** DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
20
21 <select name="trackauditVisnSelection" id="trackauditVisnSelection" class="di
diitReset dijitInline dijitLeft dijitSelect dijitValidationTextBox dijitDownArrowButton
dijitSelectFixedWidth dijitValidationTextBoxFixedWidth dijitSelectLabel ">
22 <c:forEach var="item" items="${trackVisnList}">
23 <option value="${item.label}">${item.id}</option>
24 </c:forEach>
25 </select>
26
```

Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 112 (Cross-Site Scripting: Poor Validation)****Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 112 (Cross-Site Scripting: Poor Validation)****Low****Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:112**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
109 <span class="required">(Required)</span>
110 </span>
111 </label>
112 <input id="pharmacyAddressLine1" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.pharmacyAddressLine1}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacyAddressLine1" title="First line of pharmacy's address">
113 </div>
114
115 <div id="PHARMACY_ADDRESS_LINE_2" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 102 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details****Analysis** Not an Issue**Audit Comments****VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Cross-Site Scripting: Poor Validation**Low****URL:** /managePharm/addNewPharmacy**PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 102 (Cross-Site Scripting: Poor Validation)****Low****Audit Comments**

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }  
474  
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)  
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid  
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult  
bindingResult) throws IOException {  
477  
478 LOG.info("Trying to persist pharmacy information.");  
479
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:102**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
99 <span class="required">(Required)</span>  
100 </span>  
101 </label>  
102 <input id="divisionName" class="editable pharmAddScreen" type="text" value="$  
{ pharmacyInfo.divisionName}" size="20" maxlength="35" style="display: block; opacity: 1;"  
name="divisionName" title="Pharmacy's division name">  
103 </div>  
104  
105 <div id="PHARMACY_ADDRESS_LINE_1" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 237 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)

| | |
|--|------------|
| Cross-Site Scripting: Poor Validation | Low |
| URL: /managePharm/addNewPharmacy | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 237 (Cross-Site Scripting: Poor Validation) | Low |

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: addNewPharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476
URL: /managePharm/addNewPharmacy

```

473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479

```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:237
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```

234 <label for="pharmacistSuffix">
235 Pharmacist Suffix:
236 </label>
237 <input id="pharmacistSuffix" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.pharmacistSuffix}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="pharmacistSuffix" title="Pharmacist's suffix">
238 </div>
239
240 <div id="EAndE_CHECK_ENABLED" class="displayable" style="display: block; opacity: 1;"
title="Disable or enable enrollment and eligibility check.">

```



| | | |
|---|---|-----|
| Cross-Site Scripting: Poor Validation | | Low |
| URL: /managePharm/addNewPharmacy | | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 180 (Cross-Site Scripting: Poor Validation) | | Low |
| Issue Details | | |
| Kingdom: Input Validation and Representation Scan Engine: SCA (Data Flow) | | |
| Audit Details | | |
| Analysis | Not an Issue | |
| Audit Comments | | |
| VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST) Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens. | | |
| Source Details | | |
| Source: addNewPharmacy(1) From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476 URL: /managePharm/addNewPharmacy | | |
| 473 | } | |
| 474 | | |
| 475 | @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST) | |
| 476 | public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid @ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult bindingResult) throws IOException { | |
| 477 | | |
| 478 | LOG.info("Trying to persist pharmacy information."); | |
| 479 | | |
| Sink Details | | |
| Sink: javax.servlet.jsp.JspWriter.print() Enclosing Method: _jspService() File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:180 Taint Flags: HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS | | |
| 177 | (Required) | |
| 178 | | |
| 179 | </label> | |
| 180 | <input id="pharmacyFaxNumber" class="editable pharmAddScreen" type="text" value="\$ { pharmacyInfo.pharmacyFaxNumber}" size="20" maxlength="19" style="display: block; opacity: 1;" name="pharmacyFaxNumber" title="Pharmacy's fax number"> | |
| 181 | </div> | |
| 182 | | |



| | |
|--|--------------|
| Cross-Site Scripting: Poor Validation | Low |
| URL: /managePharm/addNewPharmacy | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 180 (Cross-Site Scripting: Poor Validation) | Low |
| 183 <div id="NCPDP_ID" class="displayable" style="display: block; opacity: 1;"> | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 129 (Cross-Site Scripting: Poor Validation) | Low |
| Issue Details | |
| Kingdom: Input Validation and Representation Scan Engine: SCA (Data Flow) | |
| Audit Details | |
| Analysis | Not an Issue |
| Audit Comments | |
| VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST) Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens. | |
| Source Details | |
| Source: addNewPharmacy(1) From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476 URL: /managePharm/addNewPharmacy | |
| 473 } | |
| 474 | |
| 475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST) | |
| 476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid @ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult bindingResult) throws IOException { | |
| 477 | |
| 478 LOG.info("Trying to persist pharmacy information."); | |
| 479 | |
| Sink Details | |
| Sink: javax.servlet.jsp.JspWriter.print() Enclosing Method: _jspService() File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:129 Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS | |
| 126 (Required) | |
| 127 | |
| 128 </label> | |
| 129 <input id="pharmacyCity" class="editable pharmAddScreen" type="text" value="\$ | |



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 129 (Cross-Site Scripting: Poor Validation)****Low**

```
{ pharmacyInfo.pharmacyCity}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="pharmacyCity" title="Pharmacy's city">
130 </div>
131
132 <div id="PHARMACY_STATE" class="displayable" style="display: block; opacity: 1;"
title="Pharmacy's state">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 190 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: addNewPharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476
URL: /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:190
Taint Flags: HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 190 (Cross-Site Scripting: Poor Validation)****Low**

VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
187 <span class="required">(Required)</span>
188 </span>
189 </label>
190 <input id="ncdpdId" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.ncdpdId}" size="20" maxlength="7" style="display: block; opacity: 1;"
name="ncdpdId" title="Seven-digit NCPDP Provider ID Number">
191 </div>
192
193
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 160 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()

Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 160 (Cross-Site Scripting: Poor Validation)****Low****Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:160**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
157 <label for="crossStreet">
158 Cross Street:
159 </label>
160 <input id="crossStreet" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.crossStreet}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="crossStreet" title="Major intersection nearest to pharmacy">
161 </div>
162
163 <div id="PHARMACY_PHONE_NUMBER" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 216 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 216 (Cross-Site Scripting: Poor Validation)****Low****Sink Details****Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:216**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
213 <label for="pharmacistFirstName">
214 Pharmacist First Name:
215 </label>
216 <input id="pharmacistFirstName" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.pharmacistFirstName}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacistFirstName" title="Pharmacist's first name">
217 </div>
218
219 <div id="PHARMACIST_MIDDLE_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 209 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 209 (Cross-Site Scripting: Poor Validation)****Low**

477

478 LOG.info("Trying to persist pharmacy information.");

479

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:209**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

206 <label for="pharmacistPrefix">

207 Pharmacist Prefix:

208 </label>

209 <input id="pharmacistPrefix" class="editable pharmAddScreen" type="text" value="\$
{ pharmacyInfo.pharmacistPrefix}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="pharmacistPrefix" title="Pharmacist's prefix">

210 </div>

211

212 <div id="PHARMACIST_FIRST_NAME" class="displayable" style="display: block; opacity: 1;">

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 92 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

473 }

474



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 92 (Cross-Site Scripting: Poor Validation)****Low**

```
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:92
Taint Flags: HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
89 <span class="required">(Required)</span>
90 </span>:
91 </label>
92 <input id="vaStationId" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.vaStationId}" size="20" maxlength="10" style="display: block; opacity: 1;"
name="vaStationId" title="VA Station ID of pharmacy">
93 </div>
94
95 <div id="DIVISION_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 230 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: addNewPharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyMa



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 230 (Cross-Site Scripting: Poor Validation)****Low**

nagementController.java:476

URL: /managePharm/addNewPharmacy

```
473 }  
474  
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)  
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid  
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult  
bindingResult) throws IOException {  
477  
478 LOG.info("Trying to persist pharmacy information.");  
479
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:230**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM,
VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
227 <label for="pharmacistLastName">  
228 Pharmacist Last Name:  
229 </label>  
230 <input id="pharmacistLastName" class="editable pharmAddScreen" type="text" value="$  
{ pharmacyInfo.pharmacistLastName}" size="20" maxlength="35" style="display: block; opacity:  
1;" name="pharmacistLastName" title="Pharmacist's last name">  
231 </div>  
232  
233 <div id="PHARMACIST_SUFFIX" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 170 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 170 (Cross-Site Scripting: Poor Validation)****Low**

Source: addNewPharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476
URL: /managePharm/addNewPharmacy

```
473 }  
474  
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)  
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid  
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult  
bindingResult) throws IOException {  
477  
478 LOG.info("Trying to persist pharmacy information.");  
479
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:170
Taint Flags: HTML_ENCODE, POORVALIDATION, PRIMARY_KEY,
VALIDATED_CROSS_SITE_SCRIPTING_DOM,
VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
167 <span class="required">(Required)</span>  
168 </span>  
169 </label>  
170 <input id="pharmacyPhoneNumber" class="editable pharmAddScreen" type="text" value="$  
{ pharmacyInfo.pharmacyPhoneNumber}" size="20" maxlength="19" style="display: block; opacity:  
1;" name="pharmacyPhoneNumber" title="Pharmacy's phone number">  
171 </div>  
172  
173 <div id="PHARMACY_FAX_NUMBER" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 223 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 223 (Cross-Site Scripting: Poor Validation)****Low****Audit Comments****VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:223**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
220 <label for="pharmacistMiddleName">
221 Pharmacist Middle Name:
222 </label>
223 <input id="pharmacistMiddleName" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.pharmacistMiddleName}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacistMiddleName" title="Pharmacist's middle name">
224 </div>
225
226 <div id="PHARMACIST_LAST_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 61 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation

Cross-Site Scripting: Poor Validation**Low****URL:** /managePharm/addNewPharmacy**PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 61 (Cross-Site Scripting: Poor Validation)****Low****Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: addNewPharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476
URL: /managePharm/addNewPharmacy

```
473 }  
474  
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)  
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid  
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult  
bindingResult) throws IOException {  
477  
478 LOG.info("Trying to persist pharmacy information.");  
479
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:61
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
58 <span class="required">(Required)</span>  
59 </span>  
60 </label>  
61 <input id="storeName" class="editable pharmAddScreen" type="text" value="$  
{ pharmacyInfo.storeName}" size="20" maxlength="35" style="display: block; opacity: 1;"  
name="storeName" title="Pharmacy's name. This is the published name visible to outside  
providers">  
62 </div>  
63  
64 <div id="INBOUND_ERX_ENABLED" class="displayable" style="display: block; opacity: 1;"  
title="Disable or enable delivery of electronic prescriptions to pharmacy">
```



Cross-Site Scripting: Poor Validation**Low****URL:** /managePharm/addNewPharmacy**PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 119 (Cross-Site Scripting: Poor Validation)****Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** addNewPharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476**URL:** /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:119**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
116 <label for="pharmacyAddressLine2">
117 Pharmacy Address Line 2:
118 </label>
119 <input id="pharmacyAddressLine2" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.pharmacyAddressLine2}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacyAddressLine2" title="Second line of pharmacy's address">
120 </div>
121
122 <div id="PHARMACY_CITY" class="displayable" style="display: block; opacity: 1;">
```



| | |
|--|------------|
| Cross-Site Scripting: Poor Validation | Low |
| URL: /managePharm/addNewPharmacy | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 119 (Cross-Site Scripting: Poor Validation) | Low |

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 153 (Cross-Site Scripting: Poor Validation) | Low |
|--|------------|

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: addNewPharmacy(1)

From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476

URL: /managePharm/addNewPharmacy

```

473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479

```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()

Enclosing Method: _jspService()

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp:153

Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```

150 <span class="required">(Required)</span>
151 </span>
152 </label>
153 <input id="pharmacyZipcode" class="editable pharmAddScreen" type="text" value="$
{ pharmacyInfo.pharmacyZipcode}" size="20" maxlength="10" style="display: block; opacity: 1;"

```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/addNewPharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/addpharmacy.jsp, line 153 (Cross-Site Scripting: Poor Validation)****Low**

```
name="pharmacyZipcode" title="Pharmacy's zip code">
154 </div>
155
156 <div id="CROSS_STREET" class="displayable" style="display: block; opacity: 1;">
```

URL: /managePharm/updatePharmacy**PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 61 (Cross-Site Scripting: Poor Validation)****Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:61
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 61 (Cross-Site Scripting: Poor Validation)****Low**

```
58 <span class="required">(Required)</span>
59 </span>
60 </label>
61 <input id="storeName" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.storeName}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="storeName" title="Pharmacy's name. This is the published name visible to outside
providers">
62 </div>
63
64 <div id="INBOUND_ERX_ENABLED" class="displayable" style="display: block; opacity: 1;"
title="Disable or enable delivery of electronic prescriptions to pharmacy">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 92 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197**URL:** /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()

Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 92 (Cross-Site Scripting: Poor Validation)****Low****Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:92**Taint Flags:** HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
89 <span class="required">(Required)</span>
90 </span>:
91 </label>
92 <input id="vaStationId" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.vaStationId}" size="20" maxlength="10" style="display: block; opacity: 1;"
name="vaStationId" title="VA Station ID of pharmacy">
93 </div>
94
95 <div id="DIVISION_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 102 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197**URL:** /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
```



Cross-Site Scripting: Poor Validation

Low

URL: /managePharm/updatePharmacy

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 102 (Cross-Site Scripting: Poor Validation)

Low

200

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()

Enclosing Method: _jspService()

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:102

Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
99 <span class="required">(Required)</span>
100 </span>
101 </label>
102 <input id="divisionName" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.divisionName}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="divisionName" title="Pharmacy's division name">
103 </div>
104
105 <div id="PHARMACY_ADDRESS_LINE_1" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 112 (Cross-Site Scripting: Poor Validation)

Low

Issue Details

Kingdom: Input Validation and Representation

Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)

From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197

URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 112 (Cross-Site Scripting: Poor Validation)****Low**

```
bindingResult) throws IOException {  
198  
199 LOG.info("Trying to persist pharmacy information.");  
200
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:112**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
109 <span class="required">(Required)</span>  
110 </span>  
111 </label>  
112 <input id="pharmacyAddressLine1" class="editable pharmEditScreen" type="text" value="$  
{ pharmacyInfo.pharmacyAddressLine1}" size="20" maxlength="35" style="display: block; opacity:  
1;" name="pharmacyAddressLine1" title="First line of pharmacy's address">  
113 </div>  
114  
115 <div id="PHARMACY_ADDRESS_LINE_2" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 119 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197**URL:** /managePharm/updatePharmacy

```
194 }
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 119 (Cross-Site Scripting: Poor Validation)****Low**

195

196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)

197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {

198

199 LOG.info("Trying to persist pharmacy information.");

200

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:119**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM,
VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

116 <label for="pharmacyAddressLine2">

117 Pharmacy Address Line 2:

118 </label>

119 <input id="pharmacyAddressLine2" class="editable pharmEditScreen" type="text" value="\$
{ pharmacyInfo.pharmacyAddressLine2}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacyAddressLine2" title="Second line of pharmacy's address">

120 </div>

121

122 <div id="PHARMACY_CITY" class="displayable" style="display: block; opacity: 1;">

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 129 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF
tokens and verifying CSRF tokens.**Source Details****Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePha
rmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyMa

Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 129 (Cross-Site Scripting: Poor Validation)****Low**

nagementController.java:197
URL: /managePharm/updatePharmacy

```
194  }  
195  
196  @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)  
197  public ModelAndView updatePharmacy(HttpServletRequest request, @Valid  
    @ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult  
    bindingResult) throws IOException {  
198  
199  LOG.info("Trying to persist pharmacy information.");  
200
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:129
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM,
VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
126  <span class="required">(Required)</span>  
127  </span>  
128  </label>  
129  <input id="pharmacyCity" class="editable pharmEditScreen" type="text" value="$  
    { pharmacyInfo.pharmacyCity}" size="20" maxlength="35" style="display: block; opacity: 1;"  
    name="pharmacyCity" title="Pharmacy's city">  
130  </div>  
131  
132  <div id="PHARMACY_STATE" class="displayable" style="display: block; opacity: 1;"  
    title="Pharmacy's state">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 153 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.



| | |
|---|------------|
| Cross-Site Scripting: Poor Validation | Low |
| URL: /managePharm/updatePharmacy | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 153 (Cross-Site Scripting: Poor Validation) | Low |

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```

194  }
195
196  @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197  public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
  @ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
  bindingResult) throws IOException {
198
199  LOG.info("Trying to persist pharmacy information.");
200
  
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:153
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```

150  <span class="required">(Required)</span>
151  </span>
152  </label>
153  <input id="pharmacyZipcode" class="editable pharmEditScreen" type="text" value="$
  { pharmacyInfo.pharmacyZipcode}" size="20" maxlength="10" style="display: block; opacity: 1;"
  name="pharmacyZipcode" title="Pharmacy's zip code">
154  </div>
155
156  <div id="CROSS_STREET" class="displayable" style="display: block; opacity: 1;">
  
```

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 160 (Cross-Site Scripting: Poor Validation) | Low |
|---|------------|

Issue Details

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 160 (Cross-Site Scripting: Poor Validation)****Low****Audit Comments****VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197**URL:** /managePharm/updatePharmacy

```
194  }
195
196  @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197  public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
  @ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
  bindingResult) throws IOException {
198
199  LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:160**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
157  <label for="crossStreet">
158  Cross Street:
159  </label>
160  <input id="crossStreet" class="editable pharmEditScreen" type="text" value="$
  { pharmacyInfo.crossStreet}" size="20" maxlength="35" style="display: block; opacity: 1;"
  name="crossStreet" title="Major intersection nearest to pharmacy">
161  </div>
162
163  <div id="PHARMACY_PHONE_NUMBER" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 170 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation

Cross-Site Scripting: Poor Validation**Low****URL:** /managePharm/updatePharmacy**PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 170 (Cross-Site Scripting: Poor Validation)****Low****Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197**URL:** /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:170**Taint Flags:** HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
167 <span class="required"> (Required) </span>
168 </span>
169 </label>
170 <input id="pharmacyPhoneNumber" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.pharmacyPhoneNumber}" size="20" maxlength="19" style="display: block; opacity:
1;" name="pharmacyPhoneNumber" title="Pharmacy's phone number">
171 </div>
172
173 <div id="PHARMACY_FAX_NUMBER" class="displayable" style="display: block; opacity: 1;">
```



| | |
|---|------------|
| Cross-Site Scripting: Poor Validation | Low |
| URL: /managePharm/updatePharmacy | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 180 (Cross-Site Scripting: Poor Validation) | Low |

Issue Details

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```

194  }
195
196  @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197  public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199  LOG.info("Trying to persist pharmacy information.");
200

```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:180
Taint Flags: HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```

177  <span class="required">(Required)</span>
178  </span>
179  </label>
180  <input id="pharmacyFaxNumber" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.pharmacyFaxNumber}" size="20" maxlength="19" style="display: block; opacity:
1;" name="pharmacyFaxNumber" title="Pharmacy's fax number">
181  </div>
182

```



| | |
|--|--------------|
| Cross-Site Scripting: Poor Validation | Low |
| URL: /managePharm/updatePharmacy | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 180 (Cross-Site Scripting: Poor Validation) | Low |
| <pre>183 <div id="NCPDP_ID" class="displayable" style="display: block; opacity: 1;"></pre> | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 190 (Cross-Site Scripting: Poor Validation) | Low |
| Issue Details | |
| Kingdom: Input Validation and Representation Scan Engine: SCA (Data Flow) | |
| Audit Details | |
| Analysis | Not an Issue |
| Audit Comments | |
| VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST) Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens. | |
| Source Details | |
| Source: updatePharmacy(1) From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197 URL: /managePharm/updatePharmacy | |
| <pre>194 } 195 196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST) 197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid @ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult bindingResult) throws IOException { 198 199 LOG.info("Trying to persist pharmacy information."); 200</pre> | |
| Sink Details | |
| Sink: javax.servlet.jsp.JspWriter.print() Enclosing Method: _jspService() File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:190 Taint Flags: HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS | |
| <pre>187 (Required) 188 189 </label></pre> | |



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 190 (Cross-Site Scripting: Poor Validation)****Low**

```
190 <input id="ncdpdId" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.ncdpdId}" size="20" maxlength="7" style="display: block; opacity: 1;"
name="ncdpdId" title="Seven-digit NCPDP Provider ID Number">
191 </div>
192
193 <div id="NPI" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 207 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:207
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 207 (Cross-Site Scripting: Poor Validation)****Low**

```
204 <label for="pharmacistPrefix">
205 Pharmacist Prefix:
206 </label>
207 <input id="pharmacistPrefix" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.pharmacistPrefix}" size="20" maxlength="35" style="display: block; opacity: 1;"
name="pharmacistPrefix" title="Pharmacist's prefix">
208 </div>
209
210 <div id="PHARMACIST_FIRST_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 214 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:214



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 214 (Cross-Site Scripting: Poor Validation)****Low**

Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
211 <label for="pharmacistFirstName">
212 Pharmacist First Name:
213 </label>
214 <input id="pharmacistFirstName" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.pharmacistFirstName}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacistFirstName" title="Pharmacist's first name">
215 </div>
216
217 <div id="PHARMACIST_MIDDLE_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 221 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
199 LOG.info("Trying to persist pharmacy information.");
200
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 221 (Cross-Site Scripting: Poor Validation)****Low****Sink Details****Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:221**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
218 <label for="pharmacistMiddleName">
219 Pharmacist Middle Name:
220 </label>
221 <input id="pharmacistMiddleName" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.pharmacistMiddleName}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacistMiddleName" title="Pharmacist's middle name">
222 </div>
223
224 <div id="PHARMACIST_LAST_NAME" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 228 (Cross-Site Scripting: Poor Validation)**Low****Issue Details****Kingdom:** Input Validation and Representation**Scan Engine:** SCA (Data Flow)**Audit Details**

Analysis Not an Issue

Audit Comments**VHADURButtS:** Wed Nov 07 2018 14:15:39 GMT-0500 (EST)

Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details**Source:** updatePharmacy(1)**From:** gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197**URL:** /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
198
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 228 (Cross-Site Scripting: Poor Validation)****Low**

```
199 LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:228
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
225 <label for="pharmacistLastName">
226 Pharmacist Last Name:
227 </label>
228 <input id="pharmacistLastName" class="editable pharmEditScreen" type="text" value="$
{ pharmacyInfo.pharmacistLastName}" size="20" maxlength="35" style="display: block; opacity:
1;" name="pharmacistLastName" title="Pharmacist's last name">
229 </div>
230
231 <div id="PHARMACIST_SUFFIX" class="displayable" style="display: block; opacity: 1;">
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 235 (Cross-Site Scripting: Poor Validation)**Low****Issue Details**

Kingdom: Input Validation and Representation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:15:39 GMT-0500 (EST)
Spring MVC Framework is in use and providing protection. Spring is automatically embedding/include CSRF tokens and verifying CSRF tokens.

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
```



Cross-Site Scripting: Poor Validation**Low****URL: /managePharm/updatePharmacy****PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp, line 235 (Cross-Site Scripting: Poor Validation)****Low**

```
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
    @ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
    bindingResult) throws IOException {
198
199     LOG.info("Trying to persist pharmacy information.");
200
```

Sink Details**Sink:** javax.servlet.jsp.JspWriter.print()**Enclosing Method:** _jspService()**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/editpharmacy.jsp:235**Taint Flags:** HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
232 <label for="pharmacistSuffix">
233 Pharmacist Suffix:
234 </label>
235 <input id="pharmacistSuffix" class="editable pharmEditScreen" type="text" value="$
    { pharmacyInfo.pharmacistSuffix}" size="20" maxlength="35" style="display: block; opacity: 1;"
    name="pharmacistSuffix" title="Pharmacist's suffix">
236 </div>
237
238 <div id="EAndE_CHECK_ENABLED" class="displayable" style="display: block; opacity: 1;"
    title="Disable or enable enrollment and eligibility check.">
```


Denial of Service (1 issue)

Abstract

An attacker could cause the program to crash or otherwise become unavailable to legitimate users.

Explanation

Attackers may be able to deny service to legitimate users by flooding the application with requests, but flooding attacks can often be defused at the network layer. More problematic are bugs that allow an attacker to overload the application using a small number of requests. Such bugs allow the attacker to specify the quantity of system resources their requests will consume or the duration for which they will use them. **Example 1:** The following code allows a user to specify the amount of time for which a thread will sleep. By specifying a large number, an attacker may tie up the thread indefinitely. With a small number of requests, the attacker may deplete the application's thread pool.

```
int usrSleepTime = Integer.parseInt(usrInput);
Thread.sleep(usrSleepTime);
```

Example 2: The following code reads a String from a zip file. Because it uses the `readLine()` method, it will read an unbounded amount of input. An attacker may take advantage of this code to cause an `OutOfMemoryException` or to consume a large amount of memory so that the program spends more time performing garbage collection or runs out of memory during some subsequent operation.

```
InputStream zipInput = zipFile.getInputStream(zipEntry);
Reader zipReader = new InputStreamReader(zipInput);
BufferedReader br = new BufferedReader(zipReader);
String line = br.readLine();
```

Recommendation

Validate user input to ensure that it will not cause inappropriate resource utilization. **Example 3:** The following code allows a user to specify the amount of time for which a thread will sleep just as in Example 1, but only if the value is within reasonable bounds.

```
int usrSleepTime = Integer.parseInt(usrInput);
if (usrSleepTime >= SLEEP_MIN &&
    usrSleepTime <= SLEEP_MAX) {
    Thread.sleep(usrSleepTime);
} else {
    throw new Exception("Invalid sleep duration");
}
```

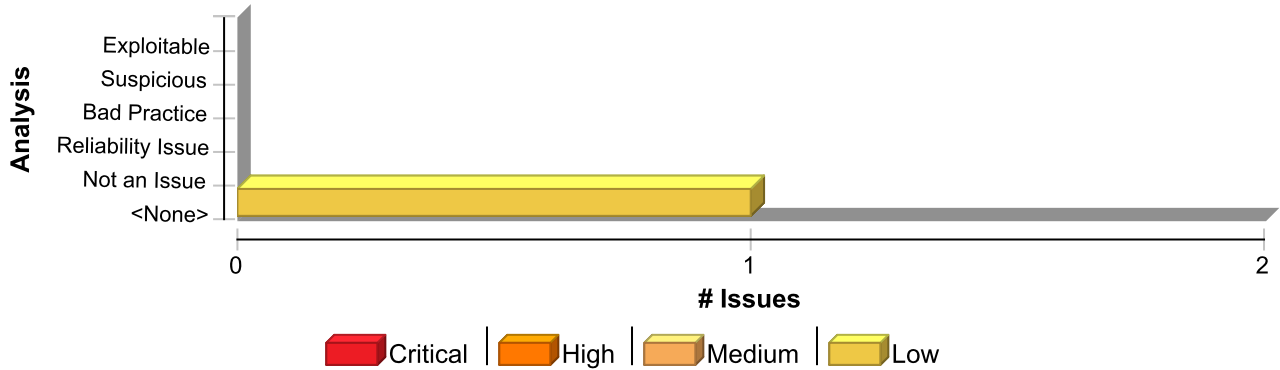
Example 4: The following code reads a String from a zip file just as in Example 2, but the maximum string length it will read is `MAX_STR_LEN` characters.

```
InputStream zipInput = zipFile.getInputStream(zipEntry);
Reader zipReader = new InputStreamReader(zipInput);
BufferedReader br = new BufferedReader(zipReader);
StringBuffer sb = new StringBuffer();
int intC;
while ((intC = br.read()) != -1) {
    char c = (char) intC;
    if (c == '\n') {
        break;
    }
    if (sb.length() >= MAX_STR_LEN) {
        throw new Exception("input too long");
    }
    sb.append(c);
}
```



```
}
String line = sb.toString();
```

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|-------------------|----------|------------|---------------|----------|
| Denial of Service | 1 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 |

| | |
|---|------------|
| Denial of Service | Low |
| Package: gov.va.med.pharmacy.jaxrs.tovista.dao.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundRpc.java, line 80 (Denial of Service) | Low |

Issue Details

Kingdom: Input Validation and Representation
Scan Engine: SCA (Semantic)

Sink Details

Sink: readLine()
Enclosing Method: sendMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundRpc.java:80
Taint Flags:

```
77 sb.setLength(0);
78 i = 0;
79 sb2.append("<SIG>");
80 while(null != (line = br.readLine())) {
81
82 if (line.trim().equalsIgnoreCase("<StructuredSIG>")) {
83 addLine = false;
```

Hidden Field (11 issues)

Abstract

A hidden form field is used.

Explanation

Programmers often trust the contents of hidden fields, expecting that users will not be able to view them or manipulate their contents. Attackers will violate these assumptions. They will examine the values written to hidden fields and alter them or replace the contents with attack data. **Example:** An `input` tag of type `hidden` indicates the use of a hidden field.

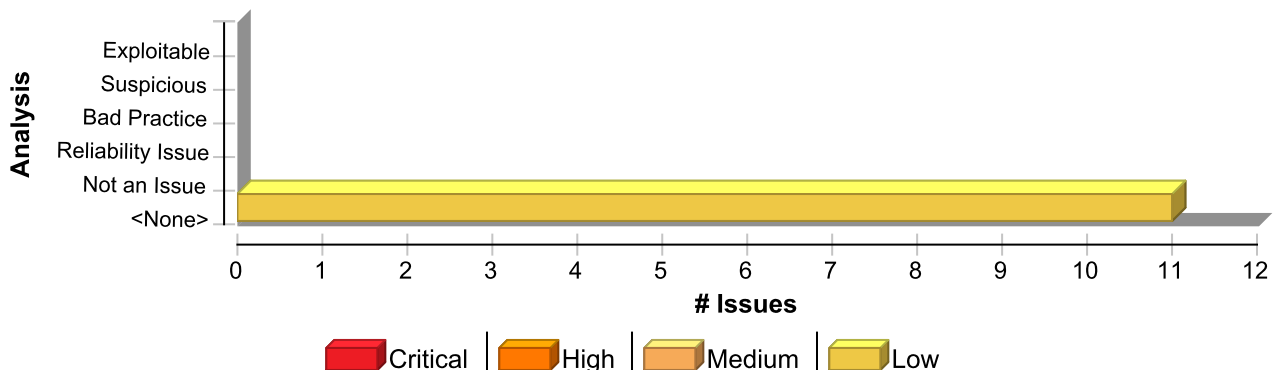
```
<input type="hidden">
```

If hidden fields carry sensitive information, this information will be cached the same way the rest of the page is cached. This can lead to sensitive information being tucked away in the browser cache without the user's knowledge.

Recommendation

Expect that attackers will study and decode all uses of hidden fields in the application. Treat hidden fields as untrusted input. Don't store information in hidden fields if the information should not be cached along with the rest of the page.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--------------|-----|------------|---------------|-------|
| Hidden Field | 11 | 0 | 0 | 11 |
| Total | 11 | 0 | 0 | 11 |

| | |
|--|-----|
| Hidden Field | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 248 (Hidden Field) | Low |
| Issue Details | |

Kingdom: Encapsulation
Scan Engine: SCA (Content)



| | |
|---|------------|
| Hidden Field | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 248 (Hidden Field) | Low |

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:248

Taint Flags:

```

245 <option value="${item.id}">${item.label}</option>
246 </c:forEach>
247 </select>
248 <input type="hidden" id="stationIdTempIdentifier" value="">
249 </div>
250
251 <%-- Hidden multiselect for compare end --%>

```

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1210 (Hidden Field) | Low |
|--|------------|

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:1210

Taint Flags:

```

1207 </div>
1208 </div>
1209 </div>
1210 <input id="trackMsgIdHidden" name="trackMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1211 <input id="trackHubMsgIdHidden" name="trackHubMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1212 <input id="trackMsgTypeHidden" name="trackMsgTypeHidden" type="hidden" value=""
style="display: none;"></input>
1213 <input id="trackParentMsgStatusHidden" name="trackParentMsgStatusHidden" type="hidden"
value="" style="display: none;"></input>

```

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1211 (Hidden Field) | Low |
|--|------------|

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:1211

Taint Flags:

```

1208 </div>
1209 </div>
1210 <input id="trackMsgIdHidden" name="trackMsgIdHidden" type="hidden" value=""

```



Hidden Field

Low

Package: .src.main.webapp.WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1211 (Hidden Field) Low

```
style="display: none;"></input>
1211 <input id="trackHubMsgIdHidden" name="trackHubMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1212 <input id="trackMsgTypeHidden" name="trackMsgTypeHidden" type="hidden" value=""
style="display: none;"></input>
1213 <input id="trackParentMsgStatusHidden" name="trackParentMsgStatusHidden" type="hidden"
value="" style="display: none;"></input>
1214 </div><%--result1 div end --%>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1212 (Hidden Field) Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:1212
Taint Flags:

```
1209 </div>
1210 <input id="trackMsgIdHidden" name="trackMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1211 <input id="trackHubMsgIdHidden" name="trackHubMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1212 <input id="trackMsgTypeHidden" name="trackMsgTypeHidden" type="hidden" value=""
style="display: none;"></input>
1213 <input id="trackParentMsgStatusHidden" name="trackParentMsgStatusHidden" type="hidden"
value="" style="display: none;"></input>
1214 </div><%--result1 div end --%>
1215
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1213 (Hidden Field) Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:1213
Taint Flags:

```
1210 <input id="trackMsgIdHidden" name="trackMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1211 <input id="trackHubMsgIdHidden" name="trackHubMsgIdHidden" type="hidden" value=""
style="display: none;"></input>
1212 <input id="trackMsgTypeHidden" name="trackMsgTypeHidden" type="hidden" value=""
style="display: none;"></input>
1213 <input id="trackParentMsgStatusHidden" name="trackParentMsgStatusHidden" type="hidden"
value="" style="display: none;"></input>
```



| | |
|---------------------|------------|
| Hidden Field | Low |
|---------------------|------------|

Package: .src.main.webapp.WEB-INF

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1213 (Hidden Field) Low

```
1214 </div><%--result1 div end --%>
1215
1216
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 31 (Hidden Field) Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:31
Taint Flags:

```
28 <div id="successMessages" class="warning">${data.successMessage} </div>
29 </c:if>
30
31 <form:hidden path="modifiedIds" value="" />
32 <form:hidden path="modifiedFields" value="" />
33 <form:hidden path="enableDisableRecords" value="" />
34 <form:hidden path="stationIdsSelected" value="" />
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 32 (Hidden Field) Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:32
Taint Flags:

```
29 </c:if>
30
31 <form:hidden path="modifiedIds" value="" />
32 <form:hidden path="modifiedFields" value="" />
33 <form:hidden path="enableDisableRecords" value="" />
34 <form:hidden path="stationIdsSelected" value="" />
35 <form:hidden path="modifiedStationIds" value="" />
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 33 (Hidden Field) Low

Issue Details

Kingdom: Encapsulation



| | |
|--|------------|
| Hidden Field | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 33 (Hidden Field) | Low |

Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:33
Taint Flags:

```

30
31 <form:hidden path="modifiedIds" value="" />
32 <form:hidden path="modifiedFields" value="" />
33 <form:hidden path="enableDisableRecords" value="" />
34 <form:hidden path="stationIdsSelected" value="" />
35 <form:hidden path="modifiedStationIds" value="" />
36

```

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 34 (Hidden Field) | Low |
|--|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:34
Taint Flags:

```

31 <form:hidden path="modifiedIds" value="" />
32 <form:hidden path="modifiedFields" value="" />
33 <form:hidden path="enableDisableRecords" value="" />
34 <form:hidden path="stationIdsSelected" value="" />
35 <form:hidden path="modifiedStationIds" value="" />
36
37 <div class="divUserMgmtTable" tabindex="0" role="table" aria-label="Users" aria-
describedby="current users in the system.">

```

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 35 (Hidden Field) | Low |
|--|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp:35
Taint Flags:

```

32 <form:hidden path="modifiedFields" value="" />

```



| | |
|--|------------|
| Hidden Field | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/manageusers.jsp, line 35 (Hidden Field) | Low |

```

33 <form:hidden path="enableDisableRecords" value="" />
34 <form:hidden path="stationIdsSelected" value="" />
35 <form:hidden path="modifiedStationIds" value="" />
36
37 <div class="divUserMgmtTable" tabindex="0" role="table" aria-label="Users" aria-
describedby="current users in the system.">
38 <div class="divUserMgmtTableBody">

```

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/landing.jsp, line 50 (Hidden Field) | Low |
| Issue Details | |

Kingdom: Encapsulation
Scan Engine: SCA (Content)

Sink Details

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/landing.jsp:50
Taint Flags:

```

47 <p>${ sessionScope.loginErrorMessage}</p>
48 </div>
49
50 <input type="hidden" name="${_csrf.parameterName}" value="${_csrf.token}"/>
51 </form>
52 </div>
53 <br/>

```



J2EE Misconfiguration: Excessive Session Timeout (1 issue)

Abstract

An overly long session timeout gives attackers more time to potentially compromise user accounts.

Explanation

The longer a session stays open, the larger the window of opportunity an attacker has to compromise user accounts. While a session remains active, an attacker may be able to brute-force a user's password, crack a user's wireless encryption key, or commandeer a session from an open browser. Longer session timeouts can also prevent memory from being released and eventually result in a denial of service if a sufficiently large number of sessions are created. **Example 1:** If the session timeout is zero or less than zero, the session never expires. The following example shows a session timeout set to -1, which will cause the session to remain active indefinitely.

```
<session-config>
  <session-timeout>-1</session-timeout>
</session-config>
```

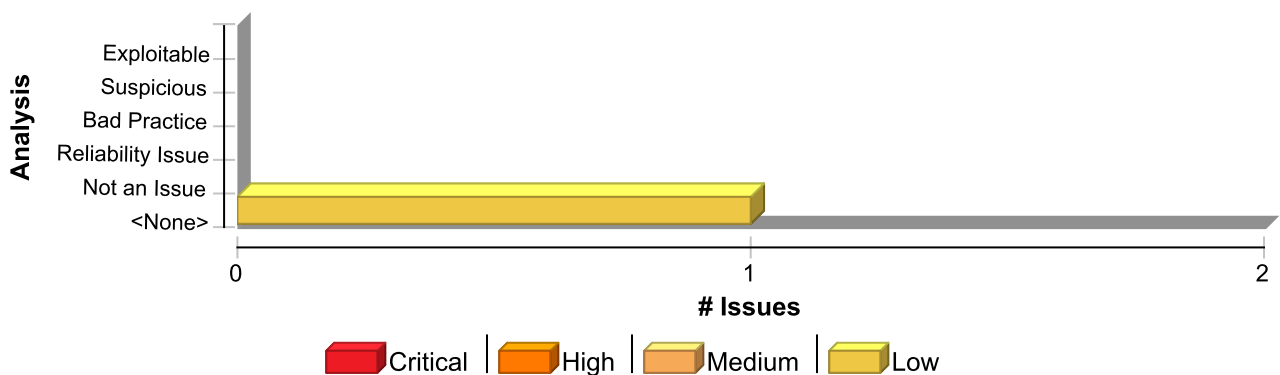
The `session-timeout` tag defines the default session timeout interval for all sessions in the web application. If the `session-timeout` tag is missing, it is left to the container to set the default timeout. This category was derived from the Cigital Java Rulepack. <http://www.cigital.com/>

Recommendation

Set a session timeout that is 30 minutes or less, which both allows users to interact with the application over a period of time and provides a reasonable bound for the window of attack. **Example 2:** The following example sets the session timeout to 20 minutes.

```
<session-config>
  <session-timeout>20</session-timeout>
</session-config>
```

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--|----------|------------|---------------|----------|
| J2EE Misconfiguration: Excessive Session Timeout | 1 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 |



J2EE Misconfiguration: Excessive Session Timeout**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/web.xml, line 103 (J2EE Misconfiguration: Excessive Session Timeout)****Low****Issue Details****Kingdom:** Environment**Scan Engine:** SCA (Configuration)**Sink Details****File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/web.xml:103**Taint Flags:**

```
100 </servlet-mapping>
101
102 <!-- Let javascript timeout on the UI first which is 30 minutes. -->
103 <session-config>
104 <!-- Defect 767939 set now in SessionExtensionController
105 <session-timeout>31</session-timeout>
106 -->
```



Missing Check against Null (11 issues)

Abstract

The program can dereference a null pointer because it does not check the return value of a function that might return null.

Explanation

Just about every serious attack on a software system begins with the violation of a programmer's assumptions. After the attack, the programmer's assumptions seem flimsy and poorly founded, but before an attack many programmers would defend their assumptions well past the end of their lunch break. Two dubious assumptions that are easy to spot in code are "this function call can never fail" and "it doesn't matter if this function call fails". When a programmer ignores the return value from a function, they implicitly state that they are operating under one of these assumptions. **Example 1:** The following code does not check to see if the string returned by `getParameter()` is null before calling the member function `compareTo()`, potentially causing a null dereference.

```
String itemName = request.getParameter(ITEM_NAME);
    if (itemName.compareTo(IMPORTANT_ITEM)) {
        ...
    }
    ...
```

Example 2: The following code shows a system property that is set to null and later dereferenced by a programmer who mistakenly assumes it will always be defined.

```
System.clearProperty("os.name");
...
String os = System.getProperty("os.name");
if (os.equalsIgnoreCase("Windows 95") )
    System.out.println("Not supported");
```

The traditional defense of this coding error is: "I know the requested value will always exist because.... If it does not exist, the program cannot perform the desired behavior so it doesn't matter whether I handle the error or simply allow the program to die dereferencing a null value." But attackers are skilled at finding unexpected paths through programs, particularly when exceptions are involved.

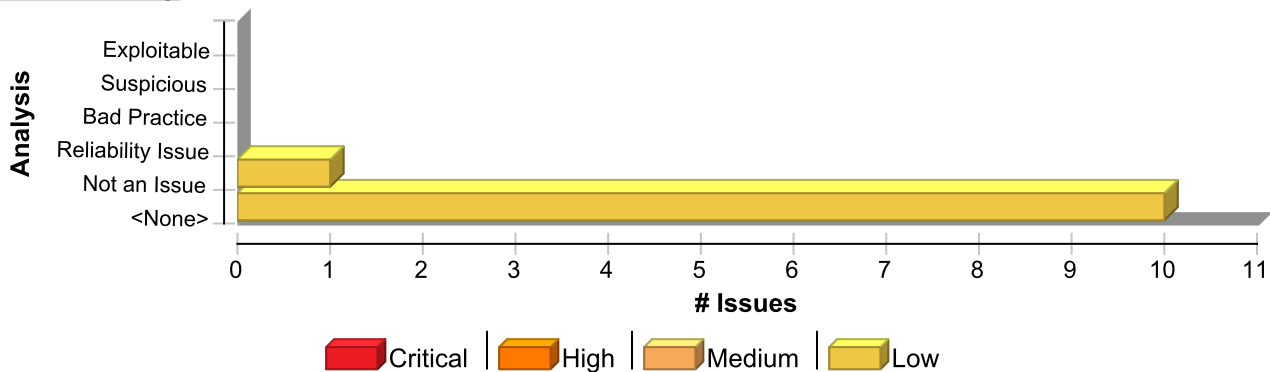
Recommendation

If a function can return an error code or any other evidence of its success or failure, always check for the error condition, even if there is no obvious way for it to occur. In addition to preventing security errors, many initially mysterious bugs have eventually led back to a failed method call with an unchecked return value. Create an easy to use and standard way for dealing with failure in your application. If error handling is straightforward, programmers will be less inclined to omit it. One approach to standardized error handling is to write wrappers around commonly-used functions that check and handle error conditions without additional programmer intervention. When wrappers are implemented and adopted, the use of non-wrapped equivalents can be prohibited and enforced by using custom rules. **Example 3:** The following code implements a wrapper around `getParameter()` that checks the return value of `getParameter()` against null and uses a default value if the requested parameter is not defined.

```
String safeGetParameter (HttpRequest request, String name)
{
    String value = request.getParameter(name);
    if (value == null) {
        return getDefaultValue(name)
    }
    return value;
}
```



Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|----------------------------|-----------|------------|---------------|-----------|
| Missing Check against Null | 11 | 0 | 0 | 11 |
| Total | 11 | 0 | 0 | 11 |

Missing Check against Null

Low

Package: gov.va.med.pharmacy.jaxrs.eAde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAde/services/impl/EESummary_Client.java, line 152 (Missing Check against Null)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Control Flow)

Audit Details

Analysis: Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:42:45 GMT-0400 (EDT)
Line 150 is checking for a null getClassLoader()

Sink Details

Sink: classloader = getClassLoader() : Class.getClassLoader may return NULL

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAde/services/impl/EESummary_Client.java: 152

Taint Flags:

```

149 private void setupTLS(EeSummaryPort port, Properties properties) throws
FileNotFoundException, IOException, GeneralSecurityException {
150
151 if (this.getClass().getClassLoader() != null){
152 ClassLoader classloader = this.getClass().getClassLoader();
153 File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
154
155 HTTPConduit httpConduit = (HTTPConduit) ClientProxy.getClient(port).getConduit();

```

Missing Check against Null

Low

Package: gov.va.med.pharmacy.jaxrs.eAde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAde/services/impl/EESummary_Client.java, line 67 (Missing Check against Null)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Control Flow)

Sink Details

Sink: getClassLoader() : Class.getClassLoader may return NULL

Enclosing Method: returnResponse()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAde/services/impl/EESummary_Client.java:67

Taint Flags:

```
64
65  InputStream inputStream = null;
66  try{
67    inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSClients_PROPERTIES_FILE);
68    if(null != inputStream){
69      properties.load(inputStream);
70    } else
```

Package: gov.va.med.pharmacy.jaxrs.inboundncdpdpmessage.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 242 (Missing Check against Null)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Control Flow)

Sink Details

Sink: getClassLoader() : Class.getClassLoader may return NULL

Enclosing Method: getInboundMessage()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java:242

Taint Flags:

```
239  SchemaFactory schemaFactory =
SchemaFactory.newInstance(XMLConstants.W3C_XML_SCHEMA_NS_URI);
240
241  // fortify get inputStream and then close it
242  inputStream =
this.getClass().getClassLoader().getResourceAsStream(VA_EMD_NCPDP_SCRIPT_10_6_XSD);
243
244  xsdStreamSource = new StreamSource(inputStream);
245
```



Missing Check against Null**Low****Package:** gov.va.med.pharmacy.jaxrs.mvi.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 732 (Missing Check against Null)****Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** classloader = getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:732**Taint Flags:**

```
729 */
730 private void setupTLS(VAIdMPort port, Properties properties) throws
FileNotFoundException, IOException, GeneralSecurityException {
731
732     ClassLoader classloader = this.getClass().getClassLoader();
733
734     File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
735     HTTPConduit httpConduit = (HTTPConduit) ClientProxy.getClient(port).getConduit();
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 161 (Missing Check against Null)**Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:161**Taint Flags:**

```
158
159 InputStream inputStream = null;
160 try {
161     inputStream = this.getClass().getClassLoader()
162     .getResourceAsStream(WSClients_PROPERTIES_FILE);
163     if (null != inputStream) {
164         properties.load(inputStream);
```

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 122 (Missing Check against Null)****Low****Issue Details**

Missing Check against Null**Low****Package:** gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 122 (Missing Check against Null)****Low****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** sendOutboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:122**Taint Flags:**

```
119 InputStream inputStream = null;
120 try
121 {
122     inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSCIENTS_PROPERTIES_FILE);
123
124     if (null != inputStream) {
125         properties.load(inputStream);
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 225 (Missing Check against Null)**Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** classloader = getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:225**Taint Flags:**

```
222 */
223 private void setupTLS(WebClient client, Properties properties) throws
FileNotFoundException, IOException, GeneralSecurityException {
224
225     ClassLoader classloader = this.getClass().getClassLoader();
226
227     File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
228
```



Missing Check against Null**Low****Package:** gov.va.med.pharmacy.utility**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 73 (Missing Check against Null)****Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** sendRequest()**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:73**Taint Flags:**

```
70  InputStream inputStream = null;
71  try{
72
73  inputStream =
this.getClass().getClassLoader().getResourceAsStream(VISTALINK_PROPERTIES_FILE);
74
75  if(null!=inputStream){
76  properties.load(inputStream);
```

Package: gov.va.med.pharmacy.web.filter**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/filter/XSSRequestWrapper.java, line 436 (Missing Check against Null)****Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** getParameterMap() : XSSRequestWrapper.getParameterMap may return NULL**Enclosing Method:** getParameter()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/filter/XSSRequestWrapper.java:436**Taint Flags:**

```
433  public String getParameter(String name) {
434  String parameter = null;
435
436  String[] vals = getParameterMap().get(name);
437
438  if (vals != null && vals.length > 0) {
439  parameter = vals[0];
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/filter/XSSRequestWrapper.java, line 414 (Missing Check against Null)**Low****Issue Details****Kingdom:** API Abuse

Missing Check against Null**Low****Package:** gov.va.med.pharmacy.web.filter**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/filter/XSSRequestWrapper.java, line 414 (Missing Check against Null)****Low****Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** getParameterMap() : XSSRequestWrapper.getParameterMap may return NULL**Enclosing Method:** getParameterValues()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/filter/XSSRequestWrapper.java:414**Taint Flags:**

```
411
412 @Override
413 public String[] getParameterValues(String name) {
414     return getParameterMap().get(name);
415 }
416
417 @Override
```

Package: gov.va.med.pharmacy.wsclients.eAnde**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 31 (Missing Check against Null)****Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details****Sink:** getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** handle()**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:31**Taint Flags:**

```
28
29 String password = null;
30
31 inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSCIENTIS_PROPERTIES_FILE);
32
33 try{
34     if (null != inputStream) {
```



Obsolete: Deprecated by ESAPI (77 issues)

Abstract

ESAPI offers a safer version of this method.

Explanation

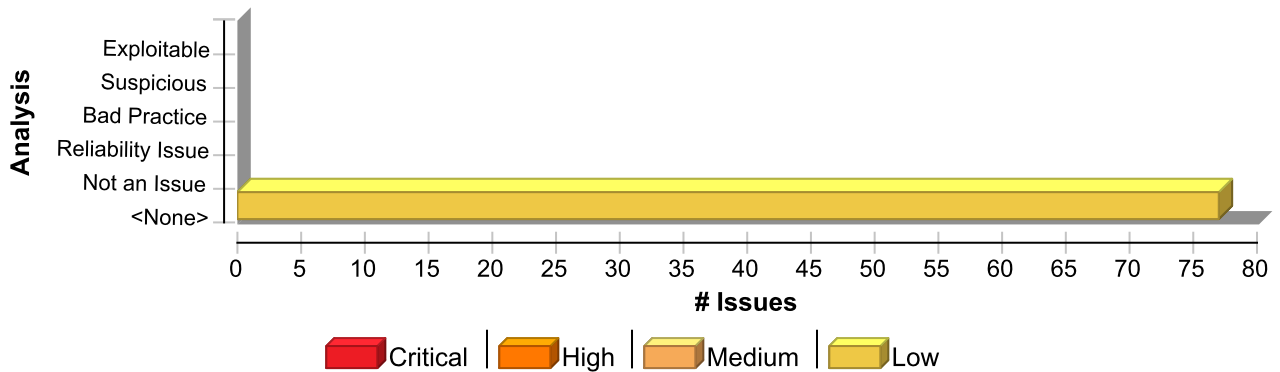
The ESAPI secure coding guidelines contain a list of banned APIs for which a safer alternative is available in ESAPI. **The list of banned and substitute API's:** **Banned 001** System.out.println() **Banned 002** Throwable.printStackTrace() **Banned 003** Runtime.exec() **Banned 004** Session.getId() **Banned 005** ServletRequest.getUserPrincipal() **Banned 006** ServletRequest.isUserInRole() **Banned 007** Session.invalidate() **Banned 008** Math.Random.* **Banned 009** File.createTempFile() **Banned 010** ServletResponse.setContentType() **Banned 011** ServletResponse.sendRedirect() **Banned 012** RequestDispatcher.forward() **Banned 013** ServletResponse.addHeader() **Banned 014** ServletResponse.addCookie() **Banned 015** ServletRequest.isSecure() **Banned 016** Properties.* **Banned 017** ServletContext.log() **Banned 018** java.security and javax.crypto **Banned 019** java.net.URLEncoder/Decoder **Banned 021** ServletResponse.encodeURL **Banned 022** ServletResponse.encodeRedirectURL **Banned 023** javax.servlet.ServletInputStream.readLine

Recommendation

Replace banned API calls with the recommended safer version provided by ESAPI. **The list of banned and replacement API's:** **Banned 001** System.out.println() ESAPI Replacement: Logger.* **Banned 002** Throwable.printStackTrace() ESAPI Replacement: Logger.* **Banned 003** Runtime.exec() ESAPI Replacement: Executor.executeSystemCommand() **Banned 004** Session.getId() ESAPI Replacement: Randomizer.getRandom* (better not to use at all) **Banned 005** ServletRequest.getUserPrincipal() ESAPI Replacement: Authenticator.getCurrentUser() **Banned 006** ServletRequest.isUserInRole() ESAPI Replacement: AccessController.isAuthorized*() **Banned 007** Session.invalidate() ESAPI Replacement: Authenticator.logout() **Banned 008** Math.Random.* ESAPI Replacement: Randomizer.* **Banned 009** File.createTempFile() ESAPI Replacement: Randomizer.getRandomFilename() **Banned 010** ServletResponse.setContentType() ESAPI Replacement: HTTPUtilities.setContentType() **Banned 011** ServletResponse.sendRedirect() ESAPI Replacement: HTTPUtilities.sendRedirect() **Banned 012** RequestDispatcher.forward() ESAPI Replacement: HTTPUtilities.sendForward() **Banned 013** ServletResponse.addHeader() ESAPI Replacement: HTTPUtilities.setHeader()/addHeader() **Banned 014** ServletResponse.addCookie() ESAPI Replacement: HTTPUtilities.addCookie() **Banned 015** ServletRequest.isSecure() ESAPI Replacement: HTTPUtilities.assertSecureChannel() **Banned 016** Properties.* ESAPI Replacement: EncryptedProperties.* **Banned 017** ServletContext.log() ESAPI Replacement: Logger.* **Banned 018** java.security and javax.crypto ESAPI Replacement: Encryptor.* **Banned 019** java.net.URLEncoder/Decoder ESAPI Replacement: Encoder.encodeForURL()/decodeForURL() **Banned 021** ServletResponse.encodeURL ESAPI Replacement: Encoder.encodeForURL()/decodeForURL() **Banned 022** ServletResponse.encodeRedirectURL ESAPI Replacement: Encoder.encodeForURL()/decodeForURL() ESAPI Replacement: HTTPUtilities.sendRedirect() **Banned 023** javax.servlet.ServletInputStream.readLine ESAPI Replacement: Validator.safeReadLine()

Issue Summary





Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|-------------------------------|-----------|------------|---------------|-----------|
| Obsolete: Deprecated by ESAPI | 77 | 0 | 0 | 77 |
| Total | 77 | 0 | 0 | 77 |

Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.admin.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/admin/dao/impl/AppInfoDaoImpl.java, line 34 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()
Enclosing Method: getAppInfo()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/admin/dao/impl/AppInfoDaoImpl.java:34
Taint Flags:

```

31 AppInfoResponse appInfoResponseObj = new AppInfoResponse();
32 try {
33     if(buildProperties!=null){
34         String buildInfo = buildProperties.getProperty("buildinformation");
35         appInfoResponseObj.setAppVersion(buildInfo);}
36     } catch (Exception e) {
37         LOG.error("Error in AppInfoDaoImpl:"+e.getMessage());

```

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 153 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 153 (Obsolete: Deprecated by ESAPI)

Low

Sink: getProperty()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java: 153

Taint Flags:

```
150
151  if (this.getClass().getClassLoader() != null){
152    ClassLoader classloader = this.getClass().getClassLoader();
153    File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
154
155    HTTPConduit httpConduit = (HTTPConduit) ClientProxy.getClient(port).getConduit();
156
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 80 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: returnResponse()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java: 80

Taint Flags:

```
77  }
78
79
80  eAndeEndpoint = properties.getProperty(E_AND_E_CLIENT_ENDPOINT).trim();
81
82  username = properties.getProperty(E_AND_E_USERNAME).trim();
83
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 59 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: Properties()

Enclosing Method: returnResponse()



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 59 (Obsolete: Deprecated by ESAPI)

Low

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:
59

Taint Flags:

```
56
57 public getEESummaryResponse returnResponse(String key) throws java.lang.Exception {
58
59 Properties properties = new Properties();
60
61 String username = null;
62 String eAndeEndpoint = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 82 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: returnResponse()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:
82

Taint Flags:

```
79
80 eAndeEndpoint = properties.getProperty(E_AND_E_CLIENT_ENDPOINT).trim();
81
82 username = properties.getProperty(E_AND_E_USERNAME).trim();
83
84 eAndeRequestName = properties.getProperty(E_AND_E_REQUEST_NAME).trim();
85
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 159 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:
159

Taint Flags:



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 159 (Obsolete: Deprecated by ESAPI)

Low

```
156
157 FileInputStream fileIn2 = null;
158 TLSClientParameters tlsCP = new TLSClientParameters();
159 String keyPasswd = properties.getProperty(KEYSTORE_PASSWD_PROPERTY).trim();
160
161 try {
162 fileIn2 = new FileInputStream(file);
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 69 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: load()

Enclosing Method: returnResponse()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java: 69

Taint Flags:

```
66 try{
67 inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSClients_PROPERTIES_FILE);
68 if(null != inputStream){
69 properties.load(inputStream);
70 } else
71 {
72 LOG.error("Property file not loaded/found.");
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 84 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: returnResponse()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java: 84

Taint Flags:

```
81
82 username = properties.getProperty(E_AND_E_USERNAME).trim();
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 84 (Obsolete: Deprecated by ESAPI)

Low

```
83
84 eAndeRequestName = properties.getProperty(E_AND_E_REQUEST_NAME).trim();
85
86 String url = "";
87
```

Package: gov.va.med.pharmacy.jaxrs.inboundncdpdpmessage.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 190 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: current()
Enclosing Method: getInboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java:190
Taint Flags:

```
187
188
189 // 9 digit random number.
190 int randomNumber = ThreadLocalRandom.current().nextInt(1, 100000000 + 1);
191
192 newMessageID = new StringBuffer(dateString).append(randomNumber).toString();
193
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 190 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: nextInt()
Enclosing Method: getInboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java:190
Taint Flags:

```
187
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.inboundncpdpmmessage.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 190 (Obsolete: Deprecated by ESAPI)

Low

```
188
189 // 9 digit random number.
190 int randomNumber = ThreadLocalRandom.current().nextInt(1, 100000000 + 1);
191
192 newMessageID = new StringBuffer(dateString).append(randomNumber).toString();
193
```

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 164 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: load()

Enclosing Method: getMVIData()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:164

Taint Flags:

```
161 inputStream = this.getClass().getClassLoader()
162 .getResourceAsStream(WSCIENTS_PROPERTIES_FILE);
163 if (null != inputStream) {
164     properties.load(inputStream);
165 }
166 } finally {
167     if (null != inputStream) {
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 157 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: Properties()

Enclosing Method: getMVIData()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:157

Taint Flags:

```
154
155 // System.setProperty("javax.net.debug", "ssl, handshake");
156
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 157 (Obsolete: Deprecated by ESAPI)

Low

```
157 Properties properties = new Properties();
158
159 InputStream inputStream = null;
160 try {
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 744 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:744

Taint Flags:

```
741 FileInputStream fileIn1 = null;
742 FileInputStream fileIn2 = null;
743 TLSClientParameters tlsCP = new TLSClientParameters();
744 String keyPasswd = properties.getProperty(KEYSTORE_PASSWD_PROPERTY).trim();
745 KeyStore keyStore = KeyStore.getInstance(KEYSTORE_FILE_TYPE);
746
747 try {
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 734 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:734

Taint Flags:

```
731
732 ClassLoader classloader = this.getClass().getClassLoader();
733
734 File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
735 HTTPConduit httpConduit = (HTTPConduit) ClientProxy.getClient(port).getConduit();
736
737 // We do two FileInpustreams otherwise it gives EOFException as the file
```



| | |
|--|------------|
| Obsolete: Deprecated by ESAPI | Low |
| Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 734 (Obsolete: Deprecated by ESAPI) | Low |

| | |
|--|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 191 (Obsolete: Deprecated by ESAPI) | Low |
|--|------------|

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()
Enclosing Method: getMVIData()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:191
Taint Flags:

```

188  VAIdMPort port = ss.getVAIdMPort();
189
190
191  mviClientEndpoint = properties.getProperty(MVI_CLIENT_ENDPOINT_PROPERTY).trim(); // trim
the value for any potential whitespace.
192  // Secure Dev
193  ((BindingProvider)
port).getRequestContext().put(BindingProvider.ENDPOINT_ADDRESS_PROPERTY, mviClientEndpoint);
194

```

| | |
|---|------------|
| Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 117 (Obsolete: Deprecated by ESAPI) | Low |

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: Properties()
Enclosing Method: sendOutboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:117
Taint Flags:

```

114
115  // TODO - Asynchronous invocation with future.....
116
117  Properties properties = new Properties();
118
119  InputStream inputStream = null;

```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 117 (Obsolete: Deprecated by ESAPI)

Low

```
120 try
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 248 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:248

Taint Flags:

```
245 FileInputStream fileIn1 = null;
246 FileInputStream fileIn2 = null;
247 TLSClientParameters tlsCP = new TLSClientParameters();
248 String keyPasswd = properties.getProperty(KEYSTORE_PASSWD_PROPERTY).trim();
249 KeyStore keyStore = KeyStore.getInstance(KEYSTORE_FILE_TYPE);
250
251 try {
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 227 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:227

Taint Flags:

```
224
225 ClassLoader classloader = this.getClass().getClassLoader();
226
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 227 (Obsolete: Deprecated by ESAPI)

Low

```
227 File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
228
229 HTTPConduit httpConduit = WebClient.getConfig(client).getHttpConduit();
230
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 135 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: sendOutboundMessage()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:135

Taint Flags:

```
132 }
133 }
134
135 String dasOutboundEndpoint = properties.getProperty(DAS_OUTBOUND_ENDPOINT).trim();
136
137 WebClient webclient = WebClient.create(dasOutboundEndpoint);
138
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 125 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: load()

Enclosing Method: sendOutboundMessage()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:125

Taint Flags:



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 125 (Obsolete: Deprecated by ESAPI)

Low

```
122 inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSCIENTIS_PROPERTIES_FILE);
123
124 if (null != inputStream) {
125     properties.load(inputStream);
126 }
127 }
128 finally
```

Package: gov.va.med.pharmacy.jaxrs.provider.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/impl/ProviderSearchDaoImpl.java, line 29 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: lookupProvider()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/impl/ProviderSearchDaoImpl.java:29

Taint Flags:

```
26
27 } catch (Exception e) {
28     LOG.error("Error in ProviderSearchDaoImpl:" + e.getMessage());
29     e.printStackTrace();
30     throw new Exception(e); // let the exception go all the way up.
31 }
32
```

Package: gov.va.med.pharmacy.jaxrs.tovista.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundDaoImpl.java, line 35 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: sendMessage()



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.jaxrs.tovista.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundDaoImpl.java, line 35 (Obsolete: Deprecated by ESAPI)

Low

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundDaoImpl.java:35
Taint Flags:

```
32  sendResults = vistaInboundRpc.sendMessage(vistaInboundObj);
33
34  } catch (Exception e) {
35  e.printStackTrace();
36  throw new IOException(e); // let the exception go all the way up.
37  }
38
```

Package: gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 64 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: println
Enclosing Method: persistMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:64
Taint Flags:

```
61
62  long outboundMsgId = outboundNcpdpMsgService.saveOutboundMsg(outboundMsg);
63
64  System.out.println("----- Return id:"+outboundMsgId);
65
66  wsResponse.setErrorMessage(null);
67
```

Package: gov.va.med.pharmacy.persistence.dao.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 270 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.persistence.dao.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 270 (Obsolete: Deprecated by ESAPI)

Low

Enclosing Method: getSelectedStationIdsByVisn()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:
270

Taint Flags:

```
267
268 } catch (HibernateException e) {
269
270 e.printStackTrace();
271 }
272
273 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java, line 232 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: getPharmacyStationIdsByVisn()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:
232

Taint Flags:

```
229
230 } catch (HibernateException e) {
231 // TODO Auto-generated catch block
232 e.printStackTrace();
233 }
234
235 }
```

Package: gov.va.med.pharmacy.persistence.service.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 165 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: updateUser()



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.persistence.service.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 165 (Obsolete: Deprecated by ESAPI)

Low

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java:
165

Taint Flags:

```
162
163 } catch (Exception e) {
164 // TODO Auto-generated catch block
165 e.printStackTrace();
166
167 throw new Exception(e);
168 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 45 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: addNewVAUser()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java:
45

Taint Flags:

```
42
43 } catch (Exception e) {
44 // TODO Auto-generated catch block
45 e.printStackTrace();
46
47 throw new Exception(e);
48 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java, line 71 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: findByNCPDId()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java:71

Taint Flags:



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.persistence.service.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java, line 71 (Obsolete: Deprecated by ESAPI)

Low

```
68
69 } catch (Exception e) {
70 // TODO Auto-generated catch block
71 e.printStackTrace();
72 }
73
74 return filteredPharmacyEntity;
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java, line 50 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: find()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java:50

Taint Flags:

```
47
48 } catch (Exception e) {
49 // TODO Auto-generated catch block
50 e.printStackTrace();
51 }
52
53 return filteredPharmaciesList;
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java, line 39 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: findByNCPDId()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java:39

Taint Flags:

```
36 } catch (Exception e) {
37
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.persistence.service.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java, line 39 (Obsolete: Deprecated by ESAPI)

Low

```
38
39 e.printStackTrace();
40 }
41
42 LOG.info("queried pharmacy by NCPDPIId for migration.");
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java, line 60 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: findByKey()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java:60
Taint Flags:

```
57 } catch (Exception e) {
58
59
60 e.printStackTrace();
61 }
62
63 LOG.info("queried app config by key for migration ws url.");
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 59 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: updateVAUser()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java:59
Taint Flags:

```
56 userDao.save(user);
57
58 } catch (Exception e) {
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.persistence.service.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 59 (Obsolete: Deprecated by ESAPI)

Low

```
59 e.printStackTrace();
60
61 throw new Exception(e);
62 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 206 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: enableDisableUsers()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java:206

Taint Flags:

```
203
204 } catch (Exception e) {
205 // TODO Auto-generated catch block
206 e.printStackTrace();
207
208 throw new Exception(e);
209 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 81 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: updateUserInfo()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java:81

Taint Flags:

```
78 }
79 catch (Exception e) {
80 // TODO Auto-generated catch block
81 e.printStackTrace();
82
83 throw new Exception(e);
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.persistence.service.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/UserServiceImpl.java, line 81 (Obsolete: Deprecated by ESAPI)

Low

```
84 }
```

Package: gov.va.med.pharmacy.utility

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 68 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: Properties()

Enclosing Method: sendRequest()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:68

Taint Flags:

```
65 try {
66
67
68 Properties properties = new Properties();
69
70 InputStream inputStream = null;
71 try{
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 77 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: sendRequest()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:77

Taint Flags:

```
74
75 if(null!=inputStream) {
76 properties.load(inputStream);
77 proxyUser = properties.getProperty(VISTALINK_PROXYUSER).trim();
78 }
79
80 } finally {
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.utility

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 76 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: load()

Enclosing Method: sendRequest()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:76

Taint Flags:

```
73 inputStream =  
this.getClass().getClassLoader().getResourceAsStream(VISTALINK_PROPERTIES_FILE);  
74  
75 if(null!=inputStream) {  
76 properties.load(inputStream);  
77 proxyUser = properties.getProperty(VISTALINK_PROXYUSER).trim();  
78 }  
79
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 35 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: print

Enclosing Method: safeClose()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:35

Taint Flags:

```
32 try {  
33 bufferedReader.close();  
34 } catch (IOException e) {  
35 System.out.print("StreamUtilities: Unable to close bufferedReader");  
36 }  
37 }  
38 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 25 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Structural)



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.utility

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 25 (Obsolete: Deprecated by ESAPI)

Low

Sink Details

Sink: FunctionCall: print

Enclosing Method: safeClose()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:25

Taint Flags:

```
22 try {
23     inputStream.close();
24 } catch (IOException e) {
25     System.out.print("StreamUtilities: Unable to close inputStream");
26 }
27 }
28 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 115 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: sendRequest()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:115

Taint Flags:

```
112 connection.close();
113 } catch (ResourceException e) {
114     //LOG.error("Error closing VistaLink connection.", e);
115     e.printStackTrace();
116 }
117 }
118 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 15 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: print

Enclosing Method: safeClose()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:15



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.utility

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 15 (Obsolete: Deprecated by ESAPI)

Low

Taint Flags:

```
12 try {
13   fileInputStream.close();
14 } catch (IOException e) {
15   System.out.print("StreamUtilities: Unable to close fileInputStream");
16 }
17 }
18 }
```

Package: gov.va.med.pharmacy.web

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/SessionExtensionController.java, line 35 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: index()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/SessionExtensionController.java:35

Taint Flags:

```
32
33 } catch (IllegalStateException e) {
34   // TODO Auto-generated catch block
35   e.printStackTrace();
36
37   responseMsg ="failed";
38 }
```

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 785 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:785



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.administration

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 785 (Obsolete: Deprecated by ESAPI)**

Low

Taint Flags:

```
782
783 } catch (Exception e) {
784 // TODO Auto-generated catch block
785 e.printStackTrace();
786 }
787
788 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 762 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: setContentType
Enclosing Method: csvExport()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:762
Taint Flags:

```
759
760 }
761
762 response.setContentType("text/csv");
763
764 response.setHeader(responseHeaderKey, responseHeaderValue);
765
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 647 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: addNewPharmacy()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:647
Taint Flags:

```
644 }
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.administration

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 647 (Obsolete: Deprecated by ESAPI)**

Low

```
645 catch (Exception e) {  
646  
647 e.printStackTrace();  
648  
649 errorsList.add("Add Failed. Unable to save record. Please contact production support.");  
650
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 608 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: addNewPharmacy()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:608

Taint Flags:

```
605  
606 } catch (PersistenceException e) {  
607  
608 e.printStackTrace();  
609  
610 Throwable cause = e.getCause();  
611
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 325 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: updatePharmacy()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:325

Taint Flags:

```
322 }  
323 catch (Exception e) {  
324  
325 e.printStackTrace();
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.administration

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 325 (Obsolete: Deprecated by ESAPI)**

Low

326

```
327 errorsList.add("Update Failed. Unable to save record. Please contact production  
support.");
```

328

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 287 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: updatePharmacy()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:287

Taint Flags:

284

```
285 } catch (PersistenceException e) {
```

286

```
287 e.printStackTrace();
```

288

```
289 Throwable cause = e.getCause();
```

290

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 160 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: getPharmacyList()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:160

Taint Flags:

157

```
158 } catch (Exception e) {
```

```
159 // TODO Auto-generated catch block
```

```
160 e.printStackTrace();
```

161 }

162



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 160 (Obsolete: Deprecated by ESAPI)

Low

```
163 mav.addObject("items", pharmacyList);
```

Package: gov.va.med.pharmacy.web.auth

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LogoutController.java, line 37 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: invalidate()

Enclosing Method: logout()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LogoutController.java:37

Taint Flags:

```
34  
35 session.removeAttribute(Constants.SESSION_USER);  
36  
37 session.invalidate(); // invalidate here after getting value from it.  
38  
39 if(logoutURL!=null){  
40
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 139 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: authenticateUser()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:139

Taint Flags:

```
136 e.printStackTrace();  
137 } catch (Exception e) {  
138 // TODO Auto-generated catch block  
139 e.printStackTrace();  
140 }  
141 session.removeAttribute("loginErrorMessage");  
142
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.auth

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 136 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: authenticateUser()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:136

Taint Flags:

```
133 session.setAttribute(Constants.SESSION_USER, user);
134 } catch (IntrusionException e) {
135 // TODO Auto-generated catch block
136 e.printStackTrace();
137 } catch (Exception e) {
138 // TODO Auto-generated catch block
139 e.printStackTrace();
```

Package: gov.va.med.pharmacy.web.interceptor

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/interceptor/LoginInterceptor.java, line 44 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: sendRedirect()

Enclosing Method: preHandle()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/interceptor/LoginInterceptor.java:44

Taint Flags:

```
41 if (session.getAttribute(Constants.SESSION_USER) == null) {
42
43
44 response.sendRedirect("/inbound/public/landing");
45 return false;
46 }
47
```

Package: gov.va.med.pharmacy.web.reports

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/AutoCheckReportController.java, line 172 (Obsolete: Deprecated by ESAPI)

Low

Issue Details



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.reports

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
AutoCheckReportController.java, line 172 (Obsolete: Deprecated by ESAPI)**

Low

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/AutoCheckReportController.java:172

Taint Flags:

```
169
170 } catch (Exception e) {
171 // TODO Auto-generated catch block
172 e.printStackTrace();
173 }
174
175 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
ErxSummaryReportController.java, line 173 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/ErxSummaryReportController.java:173

Taint Flags:

```
170
171 } catch (Exception e) {
172 // TODO Auto-generated catch block
173 e.printStackTrace();
174 }
175
176 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
RejectReasonsReportController.java, line 151 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Structural)

Sink Details



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.reports

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
RejectReasonsReportController.java, line 151 (Obsolete: Deprecated by ESAPI)**

Low

Sink: FunctionCall: setContentType

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/RejectReasonsReportController.java:
151

Taint Flags:

```
148
149
150
151 response.setContentType("text/csv");
152
153 response.setHeader(responseHeaderKey, responseHeaderValue);
154
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
AutoCheckReportController.java, line 149 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: setContentType

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/AutoCheckReportController.java:149

Taint Flags:

```
146 }
147
148
149 response.setContentType("text/csv");
150
151 response.setHeader(responseHeaderKey, responseHeaderValue);
152
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
RejectReasonsReportController.java, line 174 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/RejectReasonsReportController.java:
174



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.reports

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
RejectReasonsReportController.java, line 174 (Obsolete: Deprecated by ESAPI)**

Low

Taint Flags:

```
171
172 } catch (Exception e) {
173 // TODO Auto-generated catch block
174 e.printStackTrace();
175 }
176
177 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
SummaryReportController.java, line 178 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: csvExport()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:178
Taint Flags:

```
175
176 } catch (Exception e) {
177 // TODO Auto-generated catch block
178 e.printStackTrace();
179 }
180
181 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
ErxSummaryReportController.java, line 150 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: setContentType
Enclosing Method: csvExport()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/ErxSummaryReportController.java:150
Taint Flags:

```
147
148 }
149
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.web.reports

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
ErxSummaryReportController.java, line 150 (Obsolete: Deprecated by ESAPI)**

Low

```
150 response.setContentType("text/csv");  
151  
152 response.setHeader(responseHeaderKey, responseHeaderValue);  
153
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
SummaryReportController.java, line 155 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: setContentType

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:155

Taint Flags:

```
152  
153  
154  
155 response.setContentType("text/csv");  
156  
157 response.setHeader(responseHeaderKey, responseHeaderValue);  
158
```

Package: gov.va.med.pharmacy.web.track

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/
TrackRxController.java, line 308 (Obsolete: Deprecated by ESAPI)**

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: csvExport()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:308

Taint Flags:

```
305  
306 } catch (Exception e) {  
307 // TODO Auto-generated catch block  
308 e.printStackTrace();  
309 }  
310
```



| | |
|---|------------|
| Obsolete: Deprecated by ESAPI | Low |
| Package: gov.va.med.pharmacy.web.track | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 308 (Obsolete: Deprecated by ESAPI) | Low |
| 311 } | |

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 286 (Obsolete: Deprecated by ESAPI) | Low |
|---|------------|

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Structural)

Sink Details

Sink: FunctionCall: setContentType
Enclosing Method: csvExport()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:286
Taint Flags:

```

283
284 }
285
286 response.setContentType("text/csv");
287
288 response.setHeader(responseHeaderKey, responseHeaderValue);
289

```

| | |
|---|------------|
| Package: gov.va.med.pharmacy.wsclients.eAnde | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 135 (Obsolete: Deprecated by ESAPI) | Low |

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: getEESummaryHistory()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:135
Taint Flags:

```

132 gov.va.med.pharmacy.wsclients.eAnde.GetEESummaryHistoryResponse _return = null;
133 return _return;
134 } catch (java.lang.Exception ex) {
135 ex.printStackTrace();
136 throw new RuntimeException(ex);
137 }
138 }

```



| | |
|--|------------|
| Obsolete: Deprecated by ESAPI | Low |
| Package: gov.va.med.pharmacy.wsclients.eAnde | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 60 (Obsolete: Deprecated by ESAPI) | Low |

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: getDeliveryPreference()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:60
Taint Flags:

```

57 gov.va.med.pharmacy.wsclients.eAnde.GetDeliveryPreferenceResponse _return = null;
58 return _return;
59 } catch (java.lang.Exception ex) {
60 ex.printStackTrace();
61 throw new RuntimeException(ex);
62 }
63 }
```

| | |
|---|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 180 (Obsolete: Deprecated by ESAPI) | Low |
|---|------------|

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: getEESummary()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:180
Taint Flags:

```

177 gov.va.med.pharmacy.wsclients.eAnde.getEESummaryResponse _return = null;
178 return _return;
179 } catch (java.lang.Exception ex) {
180 ex.printStackTrace();
181 throw new RuntimeException(ex);
182 }
183 }
```

| | |
|--|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 75 (Obsolete: Deprecated by ESAPI) | Low |
|--|------------|

Issue Details

Kingdom: API Abuse



| | |
|--|------------|
| Obsolete: Deprecated by ESAPI | Low |
| Package: gov.va.med.pharmacy.wsclients.eAnde | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 75 (Obsolete: Deprecated by ESAPI) | Low |

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: retrieveIVMCandidates()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:75

Taint Flags:

```

72 gov.va.med.pharmacy.wsclients.eAnde.RetrieveIVMCandidatesResponse _return = null;
73 return _return;
74 } catch (java.lang.Exception ex) {
75     ex.printStackTrace();
76     throw new RuntimeException(ex);
77 }
78 }
```

| | |
|---|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 23 (Obsolete: Deprecated by ESAPI) | Low |
|---|------------|

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: Properties()

Enclosing Method: handle()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:23

Taint Flags:

```

20
21 public void handle(Callback[] callbacks) throws IOException, UnsupportedCallbackException {
22
23     Properties properties = new Properties();
24
25     InputStream inputStream = null;
26 }
```

| | |
|---|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 165 (Obsolete: Deprecated by ESAPI) | Low |
|---|------------|

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.wsclients.eAnde

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 165 (Obsolete: Deprecated by ESAPI)

Low

Sink Details

Sink: printStackTrace()

Enclosing Method: getEligibilityDetermination()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:165

Taint Flags:

```
162 gov.va.med.pharmacy.wsclients.eAnde.GetEligibilityDeterminationResponse _return = null;
163 return _return;
164 } catch (java.lang.Exception ex) {
165     ex.printStackTrace();
166     throw new RuntimeException(ex);
167 }
168 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 150 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: updateDeliveryPreference()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:150

Taint Flags:

```
147 gov.va.med.pharmacy.wsclients.eAnde.UpdateDeliveryPreferenceResponse _return = null;
148 return _return;
149 } catch (java.lang.Exception ex) {
150     ex.printStackTrace();
151     throw new RuntimeException(ex);
152 }
153 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 90 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.wsclients.eAnde

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 90 (Obsolete: Deprecated by ESAPI)

Low

Enclosing Method: getPersonNotification()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:90

Taint Flags:

```
87 gov.va.med.pharmacy.wsclients.eAnde.GetPersonNotificationResponse _return = null;
88 return _return;
89 } catch (java.lang.Exception ex) {
90 ex.printStackTrace();
91 throw new RuntimeException(ex);
92 }
93 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 105 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: getIVMLetterStatuses()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:105

Taint Flags:

```
102 gov.va.med.pharmacy.wsclients.eAnde.GetIVMLetterStatusesResponse _return = null;
103 return _return;
104 } catch (java.lang.Exception ex) {
105 ex.printStackTrace();
106 throw new RuntimeException(ex);
107 }
108 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 35 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: load()

Enclosing Method: handle()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:35



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.wsclients.eAnde

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 35 (Obsolete: Deprecated by ESAPI)

Low

Taint Flags:

```
32
33 try{
34 if (null != inputStream) {
35 properties.load(inputStream);
36 }
37 }
38 finally{
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 42 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()

Enclosing Method: handle()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:42

Taint Flags:

```
39 StreamUtilities.safeClose(inputStream);
40 }
41 username = properties.getProperty(E_AND_E_USERNAME).trim();
42 password = properties.getProperty(E_AND_E_PASSWD).trim();
43
44 for (int i = 0; i < callbacks.length; i++) {
45 WSPasswordCallback pc = (WSPasswordCallback) callbacks[i];
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 120 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse

Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()

Enclosing Method: sendIVMUpdates()

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:120

Taint Flags:

```
117 gov.va.med.pharmacy.wsclients.eAnde.SendIVMUpdatesResponse _return = null;
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.wsclients.eAnde

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 120 (Obsolete: Deprecated by ESAPI)

Low

```
118 return _return;
119 } catch (java.lang.Exception ex) {
120 ex.printStackTrace();
121 throw new RuntimeException(ex);
122 }
123 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 45 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: printStackTrace()
Enclosing Method: updateIVMRecordStatus()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:45
Taint Flags:

```
42 gov.va.med.pharmacy.wsclients.eAnde.UpdateIVMRecordStatusResponse _return = null;
43 return _return;
44 } catch (java.lang.Exception ex) {
45 ex.printStackTrace();
46 throw new RuntimeException(ex);
47 }
48 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 41 (Obsolete: Deprecated by ESAPI)

Low

Issue Details

Kingdom: API Abuse
Scan Engine: SCA (Semantic)

Sink Details

Sink: getProperty()
Enclosing Method: handle()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:41
Taint Flags:

```
38 finally{
39 StreamUtilities.safeClose(inputStream);
40 }
41 username = properties.getProperty(E_AND_E_USERNAME).trim();
```



Obsolete: Deprecated by ESAPI

Low

Package: gov.va.med.pharmacy.wsclients.eAnde

**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/
ClientPasswordCallback.java, line 41 (Obsolete: Deprecated by ESAPI)**

Low

```
42 password = properties.getProperty(E_AND_E_PASSWD).trim();  
43  
44 for (int i = 0; i < callbacks.length; i++) {
```



Password Management (5 issues)

Abstract

Storing a password in plain text can result in a system compromise.

Explanation

Password management issues occur when a password is stored in plain text in an application's properties or configuration file. **Example 1:** The following code reads a password from a properties file and uses the password to connect to a database.

```
...
Properties prop = new Properties();
prop.load(new FileInputStream("config.properties"));
String password = prop.getProperty("password");

DriverManager.getConnection(url, usr, password);
...
```

This code will run successfully, but anyone who has access to config.properties can read the value of password. Any devious employee with access to this information can use it to break into the system. In the mobile environment, password management is especially important given that there is such a high chance of device loss. **Example 2:** The code below reads username and password from an Android WebView store and uses them to setup authentication for viewing protected pages.

```
...
webview.setWebViewClient(new WebViewClient() {
    public void onReceivedHttpAuthRequest(WebView view,
        HttpAuthHandler handler, String host, String realm) {
        String[] credentials = view.getHttpAuthUsernamePassword(host, realm);
        String username = credentials[0];
        String password = credentials[1];
        handler.proceed(username, password);
    }
});
...
```

By default, WebView credentials are stored in plain text and are not hashed. So if a user has a rooted device (or uses an emulator), she is able to read stored passwords for given sites.

Recommendation

A password should never be stored in plain text. An administrator should be required to enter the password when the system starts. If that approach is impractical, a less secure but often adequate solution is to obfuscate the password and scatter the de-obfuscation material around the system so that an attacker has to obtain and correctly combine multiple system resources to decipher the password. At the very least, passwords should be hashed before being stored. Some third-party products claim the ability to manage passwords in a more secure way. For example, WebSphere Application Server 4.x uses a simple XOR encryption algorithm for obfuscating values, but be skeptical about such facilities. WebSphere and other application servers offer outdated and relatively weak encryption mechanisms that are insufficient for security-sensitive environments. Today, the best option for a secure generic solution is to create a proprietary mechanism yourself. For Android, as well as any other platform that uses SQLite database, SQLCipher is a good alternative. SQLCipher is an extension to the SQLite database that provides transparent 256-bit AES encryption of database files. Thus, credentials can be stored in an encrypted database. **Example 3:** The code below demonstrates how to integrate SQLCipher into an Android application after downloading the necessary binaries, and store credentials into the database file.

```
import net.sqlcipher.database.SQLiteDatabase;

...
SQLiteDatabase.loadLibs(this);
```



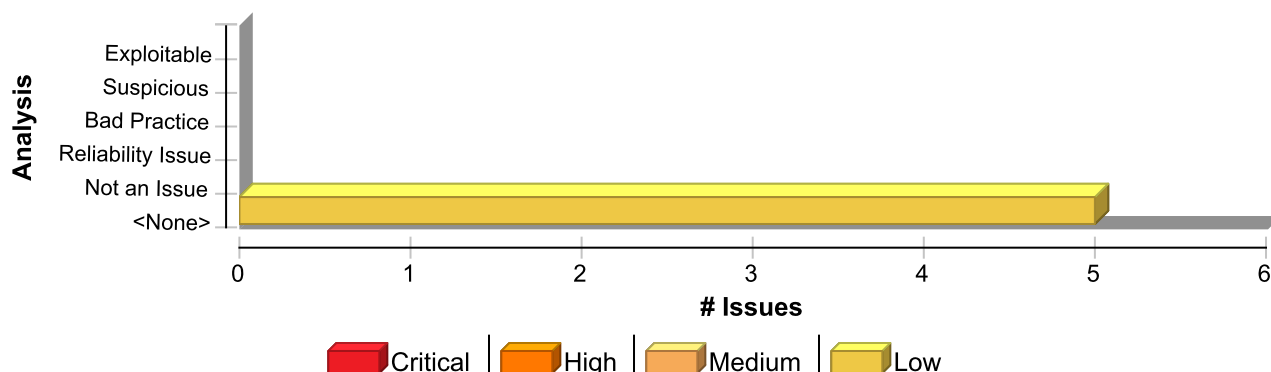
```

File dbFile = getDatabasePath("credentials.db");
dbFile.mkdirs();
dbFile.delete();
SQLiteDatabase db = SQLiteDatabase.openOrCreateDatabase(dbFile,
"credentials", null);
db.execSQL("create table credentials(u, p)");
db.execSQL("insert into credentials(u, p) values(?, ?)", new Object[]
{username, password});
...

```

Note that references to `android.database.sqlite.SQLiteDatabase` are substituted with those of `net.sqlcipher.database.SQLiteDatabase`. To enable encryption on the WebView store, WebKit has to be re-compiled with the `sqlcipher.so` library.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---------------------|----------|------------|---------------|----------|
| Password Management | 5 | 0 | 0 | 5 |
| Total | 5 | 0 | 0 | 5 |

Password Management

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 164 (Password Management)

Low

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Data Flow)

Source Details

Source: java.util.Properties.load()
From: gov.va.med.pharmacy.jaxrs.eAnde.services.impl.EESummary_Client.returnResponse
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:69

```

66  try{
67  inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSClients_PROPERTIES_FILE)
68  if(null != inputStream){

```



Password Management

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 164 (Password Management)

Low

```
69 properties.load(inputStream);
70 } else
71 {
72 LOG.error("Property file not loaded/found.");
```

Sink Details

Sink: java.security.KeyStore.load()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:164

Taint Flags: PROPERTY

```
161 try {
162 fileIn2 = new FileInputStream(file);
163 KeyStore trustStore = KeyStore.getInstance(KEYSTORE_FILE_TYPE);
164 trustStore.load(fileIn2, keyPasswd.toCharArray());
165 TrustManager[] myTrustStoreKeyManagers = getTrustManagers(trustStore);
166 tlsCP.setTrustManagers(myTrustStoreKeyManagers);
167 httpConduit.setTlsClientParameters(tlsCP);
```

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 763 (Password Management)

Low

Issue Details

Kingdom: Security Features

Scan Engine: SCA (Data Flow)

Source Details

Source: java.util.Properties.load()

From: gov.va.med.pharmacy.jaxrs.mvi.dao.impl.MVIClient.getMVIData

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:164

```
161 inputStream = this.getClass().getClassLoader()
162 .getResourceAsStream(WSCIENTS_PROPERTIES_FILE);
163 if (null != inputStream) {
164 properties.load(inputStream);
165 }
166 } finally {
167 if (null != inputStream) {
```

Sink Details



Password Management

Low

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 763 (Password Management)

Low

Sink: java.security.KeyStore.load()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:763

Taint Flags: PROPERTY

```
760 try {
761     fileIn2 = new FileInputStream(file);
762     KeyStore trustStore = KeyStore.getInstance(KEYSTORE_FILE_TYPE);
763     trustStore.load(fileIn2, keyPasswd.toCharArray());
764     TrustManager[] myTrustStoreKeyManagers = getTrustManagers(trustStore);
765     tlsCP.setTrustManagers(myTrustStoreKeyManagers);
766     httpConduit.setTlsClientParameters(tlsCP);
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 749 (Password Management)

Low

Issue Details

Kingdom: Security Features

Scan Engine: SCA (Data Flow)

Source Details

Source: java.util.Properties.load()

From: gov.va.med.pharmacy.jaxrs.mvi.dao.impl.MVIClient.getMVIData

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:164

```
161 inputStream = this.getClass().getClassLoader()
162     .getResourceAsStream(WSClients_PROPERTIES_FILE);
163 if (null != inputStream) {
164     properties.load(inputStream);
165 }
166 } finally {
167     if (null != inputStream) {
```

Sink Details

Sink: java.security.KeyStore.load()

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:749

Taint Flags: PROPERTY

```
746
747 try {
748     fileIn1 = new FileInputStream(file);
749     keyStore.load(fileIn1, keyPasswd.toCharArray());
750     KeyManager[] myKeyManagers = getKeyManagers(keyStore, keyPasswd);
751     tlsCP.setKeyManagers(myKeyManagers);
```



| | |
|--|------------|
| Password Management | Low |
| Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 749 (Password Management) | Low |

```
752 } finally {
```

| | |
|---|------------|
| Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmessag.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessag/service/impl/OutboundNCPDPMessagServiceImpl.java, line 253 (Password Management) | Low |

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Data Flow)

Source Details

Source: java.util.Properties.load()
From: gov.va.med.pharmacy.jaxrs.outboundncpdpmessag.service.impl.OutboundNCPDPMessagServiceImpl.sendOutboundMessage
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessag/service/impl/OutboundNCPDPMessagServiceImpl.java:125

```
122 inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSClients_PROPERTIES_FILE)
123
124 if (null != inputStream) {
125     properties.load(inputStream);
126 }
127 }
128 finally
```

Sink Details

Sink: java.security.KeyStore.load()
Enclosing Method: setupTLS()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessag/service/impl/OutboundNCPDPMessagServiceImpl.java:253
Taint Flags: PROPERTY

```
250
251 try {
252     fileIn1 = new FileInputStream(file);
253     keyStore.load(fileIn1, keyPasswd.toCharArray());
254     KeyManager[] myKeyManagers = getKeyManagers(keyStore, keyPasswd);
255     tlsCP.setKeyManagers(myKeyManagers);
256 } finally {
```



| | |
|---|------------|
| Password Management | Low |
| Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 267 (Password Management) | Low |

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Data Flow)

Source Details

Source: java.util.Properties.load()
From: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl.OutboundNCPDPMMessageServiceImpl.sendOutboundMessage
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:125

```

122  inputStream =
this.getClass().getClassLoader().getResourceAsStream(WSClients_PROPERTIES_FILE)
123
124  if (null != inputStream) {
125    properties.load(inputStream);
126  }
127  }
128  finally

```

Sink Details

Sink: java.security.KeyStore.load()
Enclosing Method: setupTLS()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:267
Taint Flags: PROPERTY

```

264  try {
265    fileIn2 = new FileInputStream(file);
266    KeyStore trustStore = KeyStore.getInstance(KEYSTORE_FILE_TYPE);
267    trustStore.load(fileIn2, keyPasswd.toCharArray());
268    TrustManager[] myTrustStoreKeyManagers = getTrustManagers(trustStore);
269    tlsCP.setTrustManagers(myTrustStoreKeyManagers);
270    httpConduit.setTlsClientParameters(tlsCP);

```



Password Management: Hardcoded Password (4 issues)

Abstract

Hardcoded passwords may compromise system security in a way that cannot be easily remedied.

Explanation

It is never a good idea to hardcode a password. Not only does hardcoding a password allow all of the project's developers to view the password, it also makes fixing the problem extremely difficult. After the code is in production, the password cannot be changed without patching the software. If the account protected by the password is compromised, the owners of the system must choose between security and availability. **Example 1:** The following code uses a hardcoded password to connect to a database:

```
...
DriverManager.getConnection(url, "scott", "tiger");
...
```

This code will run successfully, but anyone who has access to it will have access to the password. After the program has shipped, there is likely no way to change the database user "scott" with a password of "tiger" unless the program is patched. An employee with access to this information can use it to break into the system. Even worse, if attackers have access to the bytecode for the application they can use the `javap -c` command to access the disassembled code, which will contain the values of the passwords used. The result of this operation might look something like the following for the example above:

```
javap -c ConnMngr.class

22: ldc    #36; //String jdbc:mysql://ixne.com/rxsql
24: ldc    #38; //String scott
26: ldc    #17; //String tiger
```

In the mobile environment, password management is especially important given that there is such a high chance of device loss. **Example 2:** The code below uses hardcoded username and password to setup authentication for viewing protected pages with Android's WebView.

```
...
webView.setWebViewClient(new WebViewClient() {
    public void onReceivedHttpAuthRequest(WebView view,
        HttpAuthHandler handler, String host, String realm) {
        handler.proceed("guest", "allow");
    }
});
...
```

Similar to Example 1, this code will run successfully, but anyone who has access to it will have access to the password.

Recommendation

Passwords should never be hardcoded and should generally be obfuscated and managed in an external source. Storing passwords in plain text anywhere on the system allows anyone with sufficient permissions to read and potentially misuse the password. At the very least, passwords should be hashed before being stored. Some third-party products claim the ability to manage passwords in a more secure way. For example, WebSphere Application Server 4.x uses a simple XOR encryption algorithm for obfuscating values, but be skeptical about such facilities. WebSphere and other application servers offer outdated and relatively weak encryption mechanisms that are insufficient for security-sensitive environments. Today, the best option for a secure generic solution is to create a proprietary mechanism yourself. For Android, as well as any other platform that uses SQLite database, SQLCipher is a good alternative. SQLCipher is an extension to the SQLite database that provides transparent 256-bit AES encryption of database files. Thus, credentials can be stored in an encrypted database. **Example 3:** The code below demonstrates how to integrate SQLCipher into an Android application after downloading the necessary binaries, and store

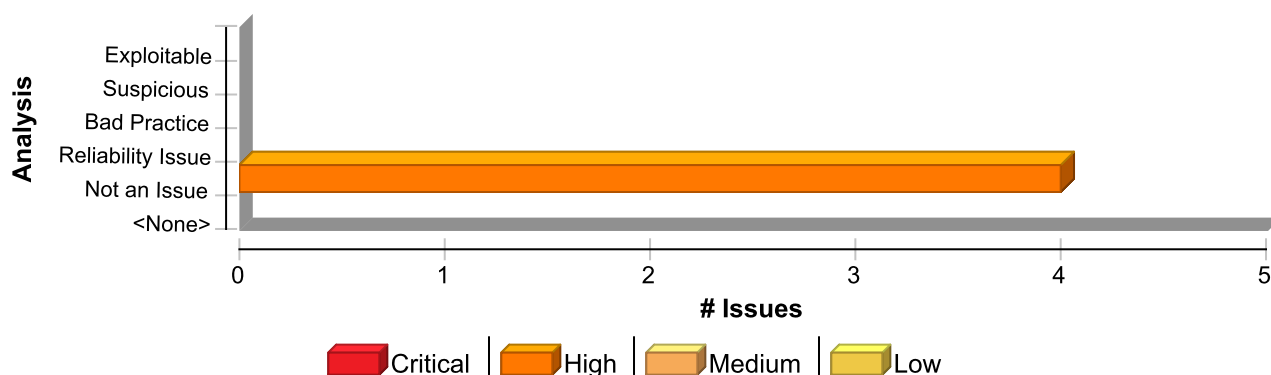


credentials into the database file.

```
import net.sqlcipher.database.SQLiteDatabase;
...
    SQLiteDatabase.loadLibs(this);
    File dbFile = getDatabasePath("credentials.db");
    dbFile.mkdirs();
    dbFile.delete();
    SQLiteDatabase db = SQLiteDatabase.openOrCreateDatabase(dbFile,
"credentials", null);
    db.execSQL("create table credentials(u, p)");
    db.execSQL("insert into credentials(u, p) values(?, ?)", new Object[]
{username, password});
    ...
```

Note that references to `android.database.sqlite.SQLiteDatabase` are substituted with those of `net.sqlcipher.database.SQLiteDatabase`. To enable encryption on the WebView store, WebKit has to be re-compiled with the `sqlcipher.so` library.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---|----------|------------|---------------|----------|
| Password Management: Hardcoded Password | 4 | 0 | 0 | 4 |
| Total | 4 | 0 | 0 | 4 |

| | |
|---|-------------|
| Password Management: Hardcoded Password | High |
| Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 55 (Password Management: Hardcoded Password) | High |

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis: Not an Issue

Audit Comments

VHAHAMWandIJ: Thu Sep 14 2017 16:55:47 GMT-0400 (EDT)
The references are not hardcoded passwords, but System Property names that refer to passwords

Sink Details



Password Management: Hardcoded Password**High****Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 55 (Password Management: Hardcoded Password)****High****Sink:** FieldAccess: KEYSTORE_PASSWD_PROPERTY**Enclosing Method:** ()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:55**Taint Flags:**

```
52 private static final QName SERVICE_NAME = new QName("http://
jaxws.webservices.esr.med.va.gov/schemas", "eeSummaryPortService");
53 private static final String KEYSTORE_FILE_TYPE = "JKS";
54 private static final String KEYSTORE_FILE_NAME_PROPERTY = "keystore.filename";
55 private static final String KEYSTORE_PASSWD_PROPERTY = "keystore.password";
56
57 public getEESummaryResponse returnResponse(String key) throws java.lang.Exception {
58
```

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 97 (Password Management: Hardcoded Password)****High****Issue Details****Kingdom:** Security Features**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Wed May 10 2017 11:28:37 GMT-0400 (EDT)

The references are not hardcoded passwords, but System Property names that refer to passwords

Sink Details**Sink:** FieldAccess: KEYSTORE_PASSWD_PROPERTY**Enclosing Method:** ()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:97**Taint Flags:**

```
94 private static final String MVI_CLIENT_ENDPOINT_PROPERTY = "mvi.client.endpoint";
95 private static final String KEYSTORE_FILE_TYPE = "JKS";
96 private static final String KEYSTORE_FILE_NAME_PROPERTY = "keystore.filename";
97 private static final String KEYSTORE_PASSWD_PROPERTY = "keystore.password";
98 private static final String LEGAL_NAME = "Legal Name";
99 private static final String L_CHARACTER = "L";
100 private static final String EMPTY_STRING = "";
```



| | |
|--|-------------|
| Password Management: Hardcoded Password | High |
|--|-------------|

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl

| | |
|--|-------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 77 (Password Management: Hardcoded Password) | High |
|--|-------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Wed May 10 2017 11:28:46 GMT-0400 (EDT)
The references are not hardcoded passwords, but System Property names that refer to passwords

Sink Details

Sink: FieldAccess: KEYSTORE_PASSWD_PROPERTY
Enclosing Method: ()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:77
Taint Flags:

```

74
75 private static final String KEYSTORE_FILE_TYPE = "JKS";
76 private static final String KEYSTORE_FILE_NAME_PROPERTY = "keystore.filename";
77 private static final String KEYSTORE_PASSWD_PROPERTY = "keystore.password";
78
79 @Autowired
80 private OutboundNcpdpMsgService outboundNcpdpMsgService;
```

Package: gov.va.med.pharmacy.wsclients.eAnde

| | |
|---|-------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 18 (Password Management: Hardcoded Password) | High |
|---|-------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Wed May 10 2017 11:28:30 GMT-0400 (EDT)
The references are not hardcoded passwords, but System Property names that refer to passwords

Sink Details

Sink: FieldAccess: E_AND_E_PASSWD
Enclosing Method: ()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:18



| | |
|---|-------------|
| Password Management: Hardcoded Password | High |
| Package: gov.va.med.pharmacy.wsclients.eAnde | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 18 (Password Management: Hardcoded Password) | High |

Taint Flags:

```

15 public class ClientPasswordCallback implements CallbackHandler {
16
17     private static final String WSCLIENTS_PROPERTIES_FILE =
"gov.va.med.pharmacy.inboundRx.properties";
18     private static final String E_AND_E_PASSWD = "eAnde.password";
19     private static final String E_AND_E_USERNAME = "eAnde.username";
20
21     public void handle(Callback[] callbacks) throws IOException, UnsupportedCallbackException {

```

Password Management: Password in Comment (18 issues)

Abstract

Storing passwords or password details in plain text anywhere in the system or system code may compromise system security in a way that cannot be easily remedied.

Explanation

It is never a good idea to hardcode a password. Storing password details within comments is equivalent to hardcoding passwords. Not only does it allow all of the project's developers to view the password, it also makes fixing the problem extremely difficult. After the code is in production, the password is now leaked to the outside world and cannot be protected or changed without patching the software. If the account protected by the password is compromised, the owners of the system must choose between security and availability. **Example:** The following comment specifies the default password to connect to a database:

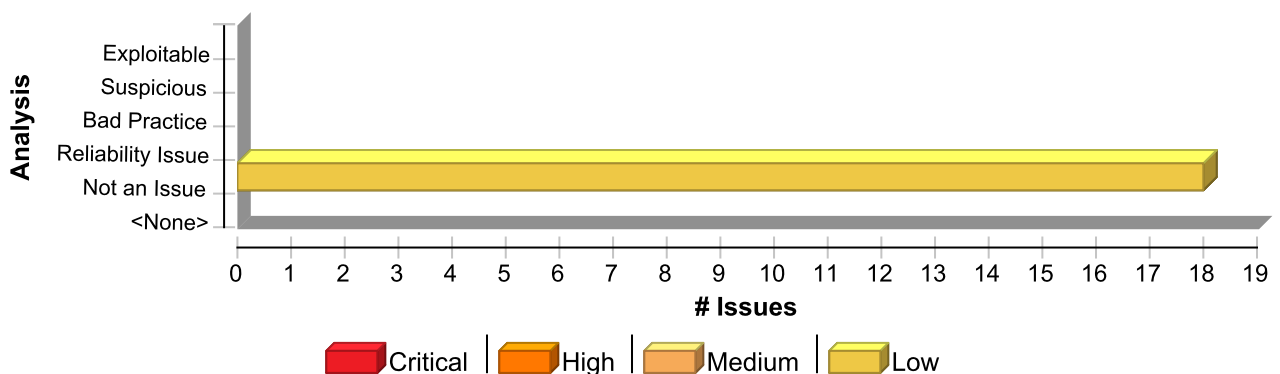
```
...  
// Default username for database connection is "scott"  
// Default password for database connection is "tiger"  
...
```

This code will run successfully, but anyone who has access to it will have access to the password. After the program has shipped, there is likely no way to change the database user "scott" with a password of "tiger" unless the program is patched. An employee with access to this information can use it to break into the system.

Recommendation

Passwords should never be hardcoded and should generally be obfuscated and managed in an external source. Storing passwords in plain text anywhere on the system allows anyone with sufficient permissions to read and potentially misuse the password.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--|-----------|------------|---------------|-----------|
| Password Management: Password in Comment | 18 | 0 | 0 | 18 |
| Total | 18 | 0 | 0 | 18 |



| | |
|---|------------|
| Password Management: Password in Comment | Low |
|---|------------|

Package: .src.main.java.gov.va.med.pharmacy.ncdpmsgs

| | |
|---|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordType.java, line 19 (Password Management: Password in Comment) | Low |
|---|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordType.java:19
Taint Flags:

```
16 import javax.xml.bind.annotation.XmlValue;
17
18
19 /**
20  * <p>Java class for PasswordType complex type.
21  *
22  * <p>The following schema fragment specifies the expected content contained within this
class.
```

| | |
|--|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java, line 61 (Password Management: Password in Comment) | Low |
|--|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java:61
Taint Flags:

```
58 return oldPassword;
59 }
60
61 /**
62  * Sets the value of the oldPassword property.
```



| | | |
|---|--|--------------|
| Password Management: Password in Comment | | Low |
| Package: .src.main.java.gov.va.med.pharmacy.ncdpmsgs | | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java, line 61 (Password Management: Password in Comment) | | Low |
| <pre> 63 * 64 * @param value </pre> | | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java, line 96 (Password Management: Password in Comment) | | Low |
| Issue Details | | |
| Kingdom: Security Features Scan Engine: SCA (Structural) | | |
| Audit Details | | |
| Analysis | | Not an Issue |
| Audit Comments | | |
| VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT) Password is not stored in comments. Comment is only documenting a field/variable called "Password". | | |
| Sink Details | | |
| Sink: Comment File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java:96 Taint Flags: | | |
| <pre> 93 return password; 94 } 95 96 /** 97 * Sets the value of the password property. 98 * 99 * @param value </pre> | | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java, line 59 (Password Management: Password in Comment) | | Low |
| Issue Details | | |
| Kingdom: Security Features Scan Engine: SCA (Structural) | | |
| Audit Details | | |
| Analysis | | Not an Issue |
| Audit Comments | | |
| VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT) Password is not stored in comments. Comment is only documenting a field/variable called "Password". | | |
| Sink Details | | |
| Sink: Comment File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java:59 | | |



Password Management: Password in Comment**Low****Package: .src.main.java.gov.va.med.pharmacy.ncpdpmmsgs****PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/
PasswordChange.java, line 59 (Password Management: Password in Comment)****Low****Taint Flags:**

```
56 return request;  
57 }  
58  
59 /**  
60 * Sets the value of the request property.  
61 *  
62 * @param value
```

**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/
PasswordRequestType.java, line 49 (Password Management: Password in
Comment)****Low****Issue Details****Kingdom:** Security Features
Scan Engine: SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".**Sink Details****Sink:** Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/PasswordRequestType.java:49
Taint Flags:

```
46 @XmlElement(name = "NewPassword", required = true)  
47 protected Object newPassword;  
48  
49 /**  
50 * Gets the value of the oldPassword property.  
51 *  
52 * @return
```

**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/
ObjectFactory.java, line 828 (Password Management: Password in Comment)****Low****Issue Details****Kingdom:** Security Features
Scan Engine: SCA (Structural)**Audit Details**

Analysis Not an Issue



| | | |
|---|--|--------------|
| Password Management: Password in Comment | | Low |
| Package: .src.main.java.gov.va.med.pharmacy.ncdpmsgs | | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java, line 828 (Password Management: Password in Comment) | | Low |
| Audit Comments | | |
| VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT) Password is not stored in comments. Comment is only documenting a field/variable called "Password". | | |
| Sink Details | | |
| Sink: Comment File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java:828 Taint Flags: | | |
| <pre> 825 return new SecurityIdentificationType(); 826 } 827 828 /** 829 * Create an instance of {@link PasswordType } 830 * 831 */ </pre> | | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java, line 17 (Password Management: Password in Comment) | | Low |
| Issue Details | | |
| Kingdom: Security Features Scan Engine: SCA (Structural) | | |
| Audit Details | | |
| Analysis | | Not an Issue |
| Audit Comments | | |
| VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT) Password is not stored in comments. Comment is only documenting a field/variable called "Password". | | |
| Sink Details | | |
| Sink: Comment File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java:17 Taint Flags: | | |
| <pre> 14 import javax.xml.bind.annotation.XmlType; 15 16 17 /** 18 * <p>Java class for BodyType complex type. 19 * 20 * <p>The following schema fragment specifies the expected content contained within this class. </pre> | | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java, line 524 (Password Management: Password in Comment) | | Low |
| Issue Details | | |



Password Management: Password in Comment**Low****Package:** .src.main.java.gov.va.med.pharmacy.ncdpmsgs**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/**
ObjectFactory.java, line 524 (Password Management: Password in Comment)**Low****Kingdom:** Security Features
Scan Engine: SCA (Structural)**Audit Details****Analysis** Not an Issue**Audit Comments****VHAHAMWandIJ:** Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".**Sink Details****Sink:** Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java:524
Taint Flags:

```
521 return new PasswordChange();  
522 }  
523  
524 /**  
525  * Create an instance of {@link PasswordRequestType }  
526  *  
527  */
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/
UsernameTokenType.java, line 84 (Password Management: Password in
Comment)**Low****Issue Details****Kingdom:** Security Features
Scan Engine: SCA (Structural)**Audit Details****Analysis** Not an Issue**Audit Comments****VHAHAMWandIJ:** Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".**Sink Details****Sink:** Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java:84
Taint Flags:

```
81 this.username = value;  
82 }  
83  
84 /**  
85  * Gets the value of the password property.  
86  *  
87  * @return
```



| | |
|--|------------|
| Password Management: Password in Comment | Low |
| Package: .src.main.java.gov.va.med.pharmacy.ncdpmsgs | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java, line 84 (Password Management: Password in Comment) | Low |

| | |
|--|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java, line 349 (Password Management: Password in Comment) | Low |
|--|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
 Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java:349
Taint Flags:

```

346 this.getMessage = value;
347 }
348
349 /**
350  * Gets the value of the passwordChange property.
351  *
352  * @return
  
```

| | |
|---|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java, line 516 (Password Management: Password in Comment) | Low |
|---|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
 Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java:516
Taint Flags:

```

513 return new GetMessage();
514 }
  
```



Password Management: Password in Comment**Low****Package: .src.main.java.gov.va.med.pharmacy.ncpdpmmsgs****PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/
ObjectFactory.java, line 516 (Password Management: Password in Comment)****Low**

```
515
516  /**
517   * Create an instance of {@link PasswordChange }
518   *
519   */
```

**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/
PasswordRequestType.java, line 17 (Password Management: Password in
Comment)****Low****Issue Details**

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/PasswordRequestType.java:17
Taint Flags:

```
14 import javax.xml.bind.annotation.XmlType;
15
16
17 /**
18  * <p>Java class for PasswordRequestType complex type.
19  *
20  * <p>The following schema fragment specifies the expected content contained within this
  class.
```

**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/
PasswordRequestType.java, line 85 (Password Management: Password in
Comment)****Low****Issue Details**

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".



Password Management: Password in Comment**Low****Package:** .src.main.java.gov.va.med.pharmacy.ncdpmsgs**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java, line 85 (Password Management: Password in Comment)****Low****Sink Details****Sink:** Comment**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java:85**Taint Flags:**

```
82 return newPassword;  
83 }  
84  
85 /**  
86  * Sets the value of the newPassword property.  
87  *  
88  * @param value
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java, line 18 (Password Management: Password in Comment)**Low****Issue Details****Kingdom:** Security Features**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)

Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details**Sink:** Comment**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java:18**Taint Flags:**

```
15 import javax.xml.bind.annotation.XmlType;  
16  
17  
18 /**  
19  * <p>Java class for anonymous complex type.  
20  *  
21  * <p>The following schema fragment specifies the expected content contained within this  
class.
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java, line 19 (Password Management: Password in Comment)**Low****Issue Details****Kingdom:** Security Features**Scan Engine:** SCA (Structural)

| | |
|---|------------|
| Password Management: Password in Comment | Low |
|---|------------|

Package: .src.main.java.gov.va.med.pharmacy.ncdpmsgs

| | |
|--|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java, line 19 (Password Management: Password in Comment) | Low |
|--|------------|

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java:19

Taint Flags:

```

16 import javax.xml.datatype.XMLGregorianCalendar;
17
18
19 /**
20  * <p>Java class for UsernameTokenType complex type.
21  *
22  * <p>The following schema fragment specifies the expected content contained within this
class.
```

| | |
|--|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java, line 361 (Password Management: Password in Comment) | Low |
|--|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment

File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java:361

Taint Flags:

```

358 return passwordChange;
359 }
360
361 /**
362  * Sets the value of the passwordChange property.
363  *
364  * @param value
```



| | |
|---|------------|
| Password Management: Password in Comment | Low |
|---|------------|

Package: .src.main.java.gov.va.med.pharmacy.ncdpmsgs

| | |
|--|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java, line 73 (Password Management: Password in Comment) | Low |
|--|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
 Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java:73
Taint Flags:

```

70  this.oldPassword = value;
71  }
72
73  /**
74   * Gets the value of the newPassword property.
75   *
76   * @return
  
```

| | |
|---|------------|
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java, line 47 (Password Management: Password in Comment) | Low |
|---|------------|

Issue Details

Kingdom: Security Features
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Fri Sep 22 2017 14:56:16 GMT-0400 (EDT)
 Password is not stored in comments. Comment is only documenting a field/variable called "Password".

Sink Details

Sink: Comment
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java:47
Taint Flags:

```

44  @XmlElement(name = "Request", required = true)
45  protected PasswordRequestType request;
46
47  /**
48   * Gets the value of the request property.
  
```



Password Management: Password in Comment**Low****Package: .src.main.java.gov.va.med.pharmacy.ncpdmsgs****PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdmsgs/
PasswordChange.java, line 47 (Password Management: Password in Comment)****Low**

```
49  *  
50  * @return
```



Poor Error Handling: Overly Broad Catch (29 issues)

Abstract

The catch block handles a broad swath of exceptions, potentially trapping dissimilar issues or problems that should not be dealt with at this point in the program.

Explanation

Multiple catch blocks can get repetitive, but "condensing" catch blocks by catching a high-level class such as `Exception` can obscure exceptions that deserve special treatment or that should not be caught at this point in the program. Catching an overly broad exception essentially defeats the purpose of Java's typed exceptions, and can become particularly dangerous if the program grows and begins to throw new types of exceptions. The new exception types will not receive any attention. **Example:** The following code excerpt handles three types of exceptions in an identical fashion.

```
try {
    doExchange();
}
catch (IOException e) {
    logger.error("doExchange failed", e);
}
catch (InvocationTargetException e) {
    logger.error("doExchange failed", e);
}
catch (SQLException e) {
    logger.error("doExchange failed", e);
}
```

At first blush, it may seem preferable to deal with these exceptions in a single catch block, as follows:

```
try {
    doExchange();
}
catch (Exception e) {
    logger.error("doExchange failed", e);
}
```

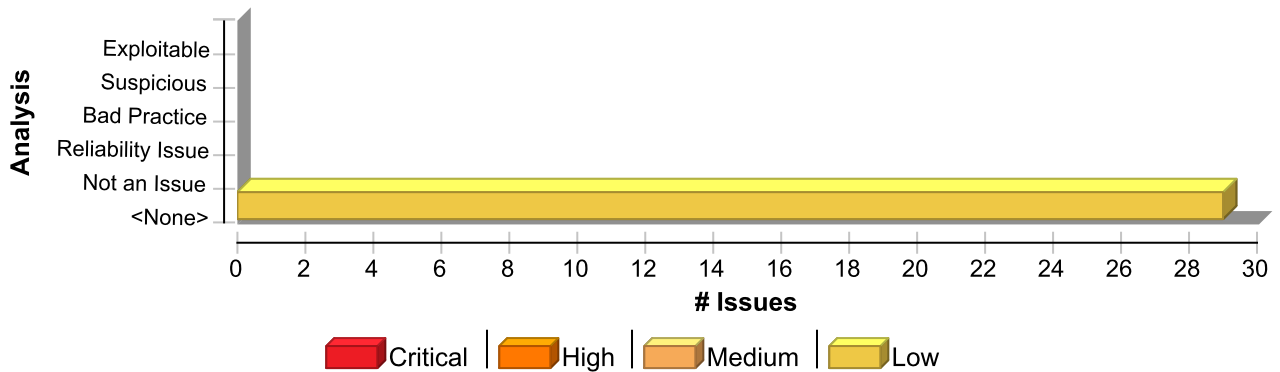
However, if `doExchange()` is modified to throw a new type of exception that should be handled in some different kind of way, the broad catch block will prevent the compiler from pointing out the situation. Further, the new catch block will now also handle exceptions derived from `RuntimeException` such as `ClassCastException`, and `NullPointerException`, which is not the programmer's intent.

Recommendation

Do not catch broad exception classes such as `Exception`, `Throwable`, `Error`, or `RuntimeException` except at the very top level of the program or thread.

Issue Summary





Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---|-----------|------------|---------------|-----------|
| Poor Error Handling: Overly Broad Catch | 29 | 0 | 0 | 29 |
| Total | 29 | 0 | 0 | 29 |

Poor Error Handling: Overly Broad Catch

Low

Package: gov.va.med.pharmacy.jaxrs.admin.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/admin/service/impl/AppInfoSearchImpl.java, line 49 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock

Enclosing Method: view()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/admin/service/impl/AppInfoSearchImpl.java: 49

Taint Flags:

```

46
47 searchResponse = appInfoDao.getAppInfo();
48
49 } catch (Exception e) {
50 searchResponse.setAppVersion("Unknown");
51
52 LOG.error("Error in AppInfoSearchImpl:"+e.getMessage());

```

Package: gov.va.med.pharmacy.jaxrs.drug.service.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java, line 54 (Poor Error Handling: Overly Broad Catch)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details



Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.jaxrs.drug.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java, line 54 (Poor Error Handling: Overly Broad Catch)****Low****Sink:** CatchBlock**Enclosing Method:** search()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java:54**Taint Flags:**

```
51  searchResponse.setSuccess(searchResults.getSuccess());
52
53
54  } catch (Exception e) {
55  searchResponse.setSuccess(false);
56
57  searchResponse.setErrorMessage("Error while searching drug: " + e.getMessage());
```

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/PatientInfoService.java, line 47 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** fetchEligibilityStatusByKey()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/PatientInfoService.java:47**Taint Flags:**

```
44  // response.setEnrollmentStatus(getPatientInfoDao().lookupPatientByKey(
45  //request.getPatientInfo().getKey()).getEnrollmentStatus());
46  }
47  catch (Exception e)
48  {
49  response.setSuccess(false);
50  response.setErrorMessage(e.getClass() + ": " + e.getMessage());
```

Package: gov.va.med.pharmacy.jaxrs.inboundncdpdpmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 368 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details**

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.jaxrs.inboundncdpdpmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessagesServiceImpl.java, line 368 (Poor Error Handling: Overly Broad Catch)****Low****Sink:** CatchBlock**Enclosing Method:** getInboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessagesServiceImpl.java:368**Taint Flags:**

```
365
366 response = responseBuffer.toString();
367
368 } catch (Exception e) {
369
370 LOG.error("Error in InboundNCPDPMessagesServiceImpl:" + e.getMessage());
371
```

Package: gov.va.med.pharmacy.jaxrs.mvi.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/service/impl/PatientSearchImpl.java, line 93 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** searchPatientByName()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/service/impl/PatientSearchImpl.java:93**Taint Flags:**

```
90 break;
91 }
92
93 } catch (Exception e) {
94 LOG.error("Error in PatientSearchImpl:"+e.getMessage());
95
96 searchResponse.setSuccess(false);
```

Package: gov.va.med.pharmacy.jaxrs.outboundncdpdpmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncdpdpmessage/service/impl/OutboundNCPDPMessagesServiceImpl.java, line 198 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.jaxrs.outboundncpdpmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMessageServiceImpl.java, line 198 (Poor Error Handling: Overly Broad Catch)****Low****Sink Details****Sink:** CatchBlock**Enclosing Method:** sendOutboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMessageServiceImpl.java:198**Taint Flags:**

```
195 wsResponse.setSuccess(false);
196 }
197
198 } catch (Exception e) {
199
200 LOG.error("Error in OutboundNCPDPMessageServiceImpl:" + e.getMessage());
201
```

Package: gov.va.med.pharmacy.jaxrs.provider.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/service/impl/ProviderSearchImpl.java, line 53 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** search()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/service/impl/ProviderSearchImpl.java:53**Taint Flags:**

```
50
51
52
53 } catch (Exception e) {
54
55 LOG.error("Error in ProviderSearchImpl:"+e.getMessage());
56
```

Package: gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 73 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details**

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 73 (Poor Error Handling: Overly Broad Catch)****Low****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** persistMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:73**Taint Flags:**

```
70 wsResponse.setOutboundMsgId(outboundMsgId);
71
72
73 } catch (Exception e) {
74
75 LOG.error("Error in VistaOutboundMsgImpl:"+e.getMessage());
76
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 119 (Poor Error Handling: Overly Broad Catch)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** persistXMLMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:119**Taint Flags:**

```
116 wsResponse.setOutboundMsgId(outboundMsgId);
117
118
119 } catch (Exception e) {
120
121 LOG.error("Error in VistaOutboundMsgImpl:"+e.getMessage());
122
```



| | |
|---|------------|
| Poor Error Handling: Overly Broad Catch | Low |
| Package: gov.va.med.pharmacy.persistence.service.impl | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java, line 36 (Poor Error Handling: Overly Broad Catch) | Low |

Issue Details

Kingdom: Errors
Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock
Enclosing Method: findByNCPDPIId()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java:36
Taint Flags:

```

33
34 pharmacyMigration = pharmacyMigrationDao.findByNCPDPIId(NCPDPIId);
35
36 } catch (Exception e) {
37
38
39 e.printStackTrace();

```

| | |
|--|------------|
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java, line 48 (Poor Error Handling: Overly Broad Catch) | Low |
|--|------------|

Issue Details

Kingdom: Errors
Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock
Enclosing Method: find()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java:48
Taint Flags:

```

45
46
47
48 } catch (Exception e) {
49 // TODO Auto-generated catch block
50 e.printStackTrace();
51 }

```



| | |
|---|------------|
| Poor Error Handling: Overly Broad Catch | Low |
| Package: gov.va.med.pharmacy.persistence.service.impl | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java, line 57 (Poor Error Handling: Overly Broad Catch) | Low |

Issue Details

Kingdom: Errors
Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock
Enclosing Method: findByKey()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyMigrationServiceImpl.java:57
Taint Flags:

```

54
55 appConfiguration = appConfigurationDao.findByKey(key);
56
57 } catch (Exception e) {
58
59
60 e.printStackTrace();

```

| | |
|--|------------|
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java, line 69 (Poor Error Handling: Overly Broad Catch) | Low |
|--|------------|

Issue Details

Kingdom: Errors
Scan Engine: SCA (Structural)

Sink Details

Sink: CatchBlock
Enclosing Method: findByNCPDId()
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/impl/PharmacyServiceImpl.java:69
Taint Flags:

```

66
67 filteredPharmacyEntity = filterPharmacyEntityForXSS(filteredPharmacyEntity,
68 pharmacyEntity);
69 } catch (Exception e) {
70 // TODO Auto-generated catch block
71 e.printStackTrace();
72 }

```



Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.utility**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/ESAPIValidator.java, line 257 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** isValidInput()**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/ESAPIValidator.java:257**Taint Flags:**

```
254 try {
255     validateStringInput(input, type);
256     return true;
257 } catch (Exception e) {
258     return false;
259 }
260 }
```

PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/ESAPIValidator.java, line 98 (Poor Error Handling: Overly Broad Catch)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** validateStringInput()**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/ESAPIValidator.java:98**Taint Flags:**

```
95 input = input.replace('\n', ' ').replace('\r', ' ');
96 try {
97     return validator().getValidInput("logForging", input, "logForging", Integer.MAX_VALUE,
false, false);
98 } catch (Exception e) {
99     return null;
100 }
101 // commented out as not currently used and for Fortify code quality fix.
```

Package: gov.va.med.pharmacy.web.administration**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 623 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details**

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.web.administration**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 623 (Poor Error Handling: Overly Broad Catch)****Low****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** processForm()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:623**Taint Flags:**

```
620
621 // one exception for any error (add, update or delete).
622
623 } catch (Exception ex) {
624     result.addError(new ObjectError(USER_MANAGEMENT_MODEL, "A system problem is preventing
the action to update the user at this time. Please report this error to the production
support."));
625
626 }
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 323 (Poor Error Handling: Overly Broad Catch)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** updatePharmacy()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:323**Taint Flags:**

```
320 errorsList.add("Update Failed. Unable to save record. Please contact production
support.");
321 }
322 }
323 catch (Exception e) {
324
325     e.printStackTrace();
326 }
```



Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.web.administration**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 735 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** processForm()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:735**Taint Flags:**

```
732  }  
733  
734  
735  } catch (Exception ex) {  
736  
737    result.addError(new ObjectError(USER_MANAGEMENT_MODEL, "A system problem is preventing  
the action to add a new user at this time. Please report this error to the production  
support."));  
738    responseMessage.setSuccessMessage("");
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 645 (Poor Error Handling: Overly Broad Catch)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** addNewPharmacy()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:645**Taint Flags:**

```
642  
643  hasErrors = true;  
644  }  
645  catch (Exception e) {  
646  
647    e.printStackTrace();  
648
```



Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.web.administration**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 158 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** getPharmacyList()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:158**Taint Flags:**

```
155 pharmacyList =
pharmacyService.findSelectedPharmacies (managePharmacyFilter, stationIdsList);
156 }
157
158 } catch (Exception e) {
159 // TODO Auto-generated catch block
160 e.printStackTrace();
161 }
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 783 (Poor Error Handling: Overly Broad Catch)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** csvExport()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:783**Taint Flags:**

```
780 response.getOutputStream().flush();
781
782
783 } catch (Exception e) {
784 // TODO Auto-generated catch block
785 e.printStackTrace();
786 }
```



Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.web.auth**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 137 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** authenticateUser()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:137**Taint Flags:**

```
134 } catch (IntrusionException e) {  
135 // TODO Auto-generated catch block  
136 e.printStackTrace();  
137 } catch (Exception e) {  
138 // TODO Auto-generated catch block  
139 e.printStackTrace();  
140 }
```

Package: gov.va.med.pharmacy.web.reports**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/AutoCheckReportController.java, line 170 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** csvExport()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/AutoCheckReportController.java:170**Taint Flags:**

```
167 response.getOutputStream().flush();  
168  
169  
170 } catch (Exception e) {  
171 // TODO Auto-generated catch block  
172 e.printStackTrace();  
173 }
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/ErxSummaryReportController.java, line 171 (Poor Error Handling: Overly Broad Catch)**Low****Issue Details**

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.web.reports**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
ErxSummaryReportController.java, line 171 (Poor Error Handling: Overly Broad
Catch)****Low****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** csvExport()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/ErxSummaryReportController.java:171**Taint Flags:**

```
168 response.getOutputStream().flush();
169
170
171 } catch (Exception e) {
172 // TODO Auto-generated catch block
173 e.printStackTrace();
174 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
SummaryReportController.java, line 176 (Poor Error Handling: Overly Broad
Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** csvExport()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:176**Taint Flags:**

```
173 response.getOutputStream().flush();
174
175
176 } catch (Exception e) {
177 // TODO Auto-generated catch block
178 e.printStackTrace();
179 }
```

**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/
RejectReasonsReportController.java, line 172 (Poor Error Handling: Overly
Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.web.reports**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/RejectReasonsReportController.java, line 172 (Poor Error Handling: Overly Broad Catch)****Low****Sink Details****Sink:** CatchBlock**Enclosing Method:** csvExport()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/reports/RejectReasonsReportController.java:172**Taint Flags:**

```
169 response.getOutputStream().flush();
170
171
172 } catch (Exception e) {
173 // TODO Auto-generated catch block
174 e.printStackTrace();
175 }
```

Package: gov.va.med.pharmacy.web.track**PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 306 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** csvExport()**File:** PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:306**Taint Flags:**

```
303
304 response.getOutputStream().flush();
305
306 } catch (Exception e) {
307 // TODO Auto-generated catch block
308 e.printStackTrace();
309 }
```

Package: gov.va.med.pharmacy.wsclients.eAnde**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortService.java, line 33 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)

Poor Error Handling: Overly Broad Catch**Low****Package:** gov.va.med.pharmacy.wsclients.eAnde**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortService.java, line 33 (Poor Error Handling: Overly Broad Catch)****Low****Sink Details****Sink:** CatchBlock**Enclosing Method:** ()**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortService.java:33**Taint Flags:**

```
30 URL url = null;
31 try {
32 url = EeSummaryPortService.class.getResource("wsdl/eAnde/eeSummary.wsdl");
33 } catch (Exception e) {
34 java.util.logging.Logger.getLogger(EeSummaryPortService.class.getName())
35 .log(java.util.logging.Level.INFO,
36 "Can not initialize the default wsdl from {0}", "wsdl/eAnde/eeSummary.wsdl");
```

Package: gov.va.med.pharmacy.wsclients.mvi**PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/VAIdM.java, line 30 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** CatchBlock**Enclosing Method:** ()**File:** PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/VAIdM.java:30**Taint Flags:**

```
27 URL url = null;
28 try {
29 url = VAIdM.class.getResource("wsdl/mvi/PREeRX_IdmHl7v3_FlatFile.wsdl");
30 } catch (Exception e) {
31 java.util.logging.Logger.getLogger(VAIdM.class.getName())
32 .log(java.util.logging.Level.INFO,
33 "Can not initialize the default wsdl from {0}", "wsdl/mvi/PREeRX_IdmHl7v3_FlatFile.wsdl");
```



Poor Error Handling: Overly Broad Throws (17 issues)

Abstract

The method throws a generic exception making it harder for callers to do a good job of error handling and recovery.

Explanation

Declaring a method to throw `Exception` or `Throwable` makes it difficult for callers to do good error handling and error recovery. Java's exception mechanism is set up to make it easy for callers to anticipate what can go wrong and write code to handle each specific exceptional circumstance. Declaring that a method throws a generic form of exception defeats this system. **Example:** The following method throws three types of exceptions.

```
public void doExchange()  
    throws IOException, InvocationTargetException,  
           SQLException {  
    ...  
}
```

While it might seem tidier to write

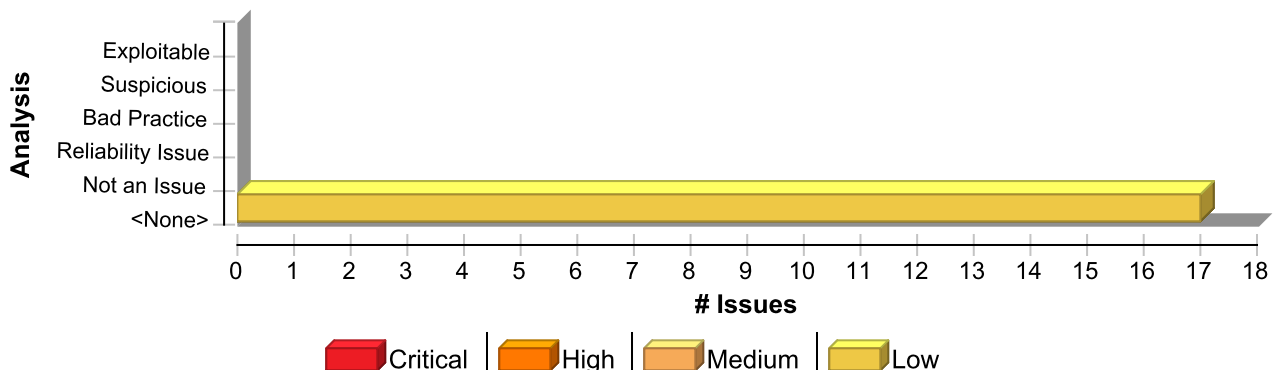
```
public void doExchange()  
    throws Exception {  
    ...  
}
```

doing so hampers the caller's ability to understand and handle the exceptions that occur. Further, if a later revision of `doExchange()` introduces a new type of exception that should be treated differently than previous exceptions, there is no easy way to enforce this requirement.

Recommendation

Do not declare methods to throw `Exception` or `Throwable`. If the exceptions thrown by a method are not recoverable or should not generally be caught by the caller, consider throwing unchecked exceptions rather than checked exceptions. This can be accomplished by implementing exception classes that extend `RuntimeException` or `Error` instead of `Exception`, or add a try/catch wrapper in your method to convert checked exceptions to unchecked exceptions.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--|-----------|------------|---------------|-----------|
| Poor Error Handling: Overly Broad Throws | 17 | 0 | 0 | 17 |
| Total | 17 | 0 | 0 | 17 |

Poor Error Handling: Overly Broad Throws

Low

Package: gov.va.med.pharmacy.jaxrs.drug.dao

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/dao/
DrugSearchDao.java, line 13 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: lookupDrug

Enclosing Method: lookupDrug()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/dao/DrugSearchDao.java:13

Taint Flags:

```
10 * @return
11 * @throws Exception
12 */
13 public Drug lookupDrug(Drug drugObj) throws Exception;
14 }
15
16 undefined
```

Package: gov.va.med.pharmacy.jaxrs.drug.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/dao/impl/
DrugRpc.java, line 27 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: lookupDrug

Enclosing Method: lookupDrug()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/dao/impl/DrugRpc.java:27

Taint Flags:

```
24 this.vistaLinkConnectionUtility = vistaLinkConnectionUtility;
25 }
26
27 public Drug lookupDrug(Drug searchObj) throws Exception {
28
29     Drug searchResults = new Drug();
30     //inject
```



Poor Error Handling: Overly Broad Throws**Low****Package:** gov.va.med.pharmacy.jaxrs.eAnde.dao**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/dao/PatientInfoDao.java, line 7 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: lookupPatientByKey**Enclosing Method:** lookupPatientByKey()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/dao/PatientInfoDao.java:7**Taint Flags:**

```
4
5 public interface PatientInfoDao {
6
7     public PatientInfo lookupPatientByKey(String key) throws Exception;
8 }
9
10 undefined
```

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 57 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: returnResponse**Enclosing Method:** returnResponse()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:57**Taint Flags:**

```
54 private static final String KEYSTORE_FILE_NAME_PROPERTY = "keystore.filename";
55 private static final String KEYSTORE_PASSWD_PROPERTY = "keystore.password";
56
57 public getEESummaryResponse returnResponse(String key) throws java.lang.Exception {
58
59     Properties properties = new Properties();
60
```

Package: gov.va.med.pharmacy.jaxrs.mvi.dao**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/PatientSearchDao.java, line 15 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details**

Poor Error Handling: Overly Broad Throws

Low

Package: gov.va.med.pharmacy.jaxrs.mvi.dao

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/
PatientSearchDao.java, line 15 (Poor Error Handling: Overly Broad Throws)

Low

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: lookupPatientByName

Enclosing Method: lookupPatientByName()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/PatientSearchDao.java:15

Taint Flags:

```
12 * @return Patient
13 * @throws Exception
14 */
15 public Patient lookupPatientByName(Patient patientObj) throws Exception;
16 }
17
18 undefined
```

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/
MVIClient.java, line 149 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors

Scan Engine: SCA (Structural)

Sink Details

Sink: Function: getMVIData

Enclosing Method: getMVIData()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:149

Taint Flags:

```
146 // @Autowired
147 // private Environment environment;
148
149 public Patient getMVIData(Patient patientSearchObj) throws java.lang.Exception {
150
151 // The following prints out a lot of debug information.
152 // It should only be uncommented in dev environment or for
```

Package: gov.va.med.pharmacy.jaxrs.provider.dao

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/
ProviderSearchDao.java, line 14 (Poor Error Handling: Overly Broad Throws)

Low

Issue Details

Kingdom: Errors



Poor Error Handling: Overly Broad Throws**Low****Package:** gov.va.med.pharmacy.jaxrs.provider.dao**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/ProviderSearchDao.java, line 14 (Poor Error Handling: Overly Broad Throws)****Low****Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: lookupProvider**Enclosing Method:** lookupProvider()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/ProviderSearchDao.java:14**Taint Flags:**

```
11 * @return Provider
12 * @throws Exception
13 */
14 public Provider lookupProvider(Provider providerObj) throws Exception;
15 }
16
17 undefined
```

Package: gov.va.med.pharmacy.jaxrs.provider.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/impl/ProviderRPC.java, line 19 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: lookupProvider**Enclosing Method:** lookupProvider()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/dao/impl/ProviderRPC.java:19**Taint Flags:**

```
16
17 private static final org.apache.logging.log4j.Logger LOG =
org.apache.logging.log4j.LogManager.getLogger(ProviderRPC.class);
18
19 public Provider lookupProvider(Provider searchObj) throws Exception {
20
21 Provider searchResults = new Provider();
22
```

Package: gov.va.med.pharmacy.persistence.service**PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java, line 21 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors

Poor Error Handling: Overly Broad Throws**Low****Package:** gov.va.med.pharmacy.persistence.service**PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/ UserService.java, line 21 (Poor Error Handling: Overly Broad Throws)****Low****Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: updateUserers**Enclosing Method:** updateUserers()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java:21**Taint Flags:**

```
18
19 public void updateUserInfo(VaUser user) throws Exception;
20
21 public void updateUserers(List<VaUser> users) throws Exception;
22
23 public void enableDisableteUsers(List<VaUser> users) throws Exception;
24
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/ UserService.java, line 23 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: enableDisableteUsers**Enclosing Method:** enableDisableteUsers()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java:23**Taint Flags:**

```
20
21 public void updateUserers(List<VaUser> users) throws Exception;
22
23 public void enableDisableteUsers(List<VaUser> users) throws Exception;
24
25 public List<VaUser> getUsersByStationIds(String stationIds, List<String> stationIdsList);
26 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/ OutboundNcpdpMsgService.java, line 7 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details**

Poor Error Handling: Overly Broad Throws**Low****Package:** gov.va.med.pharmacy.persistence.service**PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/OutboundNcpdpMsgService.java, line 7 (Poor Error Handling: Overly Broad Throws)****Low****Sink:** Function: saveOutboundMsg**Enclosing Method:** saveOutboundMsg()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/OutboundNcpdpMsgService.java:7**Taint Flags:**

```
4
5 public interface OutboundNcpdpMsgService {
6
7 public long saveOutboundMsg(OutboundNcpdpMsgEntity outboundMsg) throws Exception ;
8
9 public OutboundNcpdpMsgEntity findById(long id);
10 }
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java, line 13 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: addNewVAUser**Enclosing Method:** addNewVAUser()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java:13**Taint Flags:**

```
10
11 public VaUser findByVAUserID(String networkID);
12
13 public void addNewVAUser(VaUser user) throws Exception;
14
15 public void updateVAUser(VaUser user) throws Exception;
16
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/PharmacyService.java, line 18 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: findById**Enclosing Method:** findById()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/PharmacyService.java:18

Poor Error Handling: Overly Broad Throws**Low****Package:** gov.va.med.pharmacy.persistence.service**PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/PharmacyService.java, line 18 (Poor Error Handling: Overly Broad Throws)****Low****Taint Flags:**

```
15
16 public PharmacyEntity findByNCPDPID(String NCPDPID);
17
18 public PharmacyEntity findById(Long pharmacyId) throws Exception;
19
20 public void updatePharmacyInfo(PharmacyEntity pharmacy) throws HibernateException;
21
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/InboundNcpdpMsgService.java, line 7 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: saveInboundERx**Enclosing Method:** saveInboundERx()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/InboundNcpdpMsgService.java:7**Taint Flags:**

```
4
5 public interface InboundNcpdpMsgService {
6
7 void saveInboundERx(InboundNcpdpMsgEntity inboundERx) throws Exception ;
8
9 }
10
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java, line 15 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: updateVAUser**Enclosing Method:** updateVAUser()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java:15**Taint Flags:**

```
12
```



Poor Error Handling: Overly Broad Throws**Low****Package: gov.va.med.pharmacy.persistence.service****PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java, line 15 (Poor Error Handling: Overly Broad Throws)****Low**

```
13 public void addNewVAUser(VaUser user) throws Exception;
14
15 public void updateVAUser(VaUser user) throws Exception;
16
17 public List<VaUser> findAllUsers();
18
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java, line 19 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: updateUserInfo**Enclosing Method:** updateUserInfo()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/UserService.java:19**Taint Flags:**

```
16
17 public List<VaUser> findAllUsers();
18
19 public void updateUserInfo(VaUser user) throws Exception;
20
21 public void updateUserList(List<VaUser> users) throws Exception;
22
```

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/PharmacyService.java, line 14 (Poor Error Handling: Overly Broad Throws)**Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: find**Enclosing Method:** find()**File:** PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/PharmacyService.java:14**Taint Flags:**

```
11
12 public interface PharmacyService {
13
14 public List<PharmacyEntity> find(ManagePharmacyFilter managePharmacyFilter) throws
Exception;
15
```



| | | |
|--|--|------------|
| Poor Error Handling: Overly Broad Throws | | Low |
| Package: gov.va.med.pharmacy.persistence.service | | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/service/PharmacyService.java, line 14 (Poor Error Handling: Overly Broad Throws) | | Low |
| <pre> 16 public PharmacyEntity findByNCPDPIId(String NCPDPIId); 17 </pre> | | |



Poor Error Handling: Throw Inside Finally (1 issue)

Abstract

Using a `throw` statement inside a `finally` block breaks the logical progression through the `try-catch-finally`.

Explanation

In Java, `finally` blocks are always executed after their corresponding `try-catch` blocks and are often used to free allocated resources, such as file handles or database cursors. Throwing an exception in a `finally` block can bypass critical cleanup code since normal program execution will be disrupted.

Example 1: In the following code, the call to `stmt.close()` is bypassed when the `FileNotFoundException` is thrown.

```
public void processTransaction(Connection conn) throws FileNotFoundException
{
    FileInputStream fis = null;
    Statement stmt = null;
    try
    {
        stmt = conn.createStatement();
        fis = new FileInputStream("badFile.txt");
        ...
    }
    catch (FileNotFoundException fe)
    {
        log("File not found.");
    }
    catch (SQLException se)
    {
        //handle error
    }
    finally
    {
        if (fis == null)
        {
            throw new FileNotFoundException();
        }

        if (stmt != null)
        {
            try
            {
                stmt.close();
            }
            catch (SQLException e)
            {
                log(e);
            }
        }
    }
}
```

This category is from the Cigital Java Rulepack. <http://www.cigital.com/>

Recommendation

Never throw exceptions from within `finally` blocks. If you must re-throw an exception, do it inside a



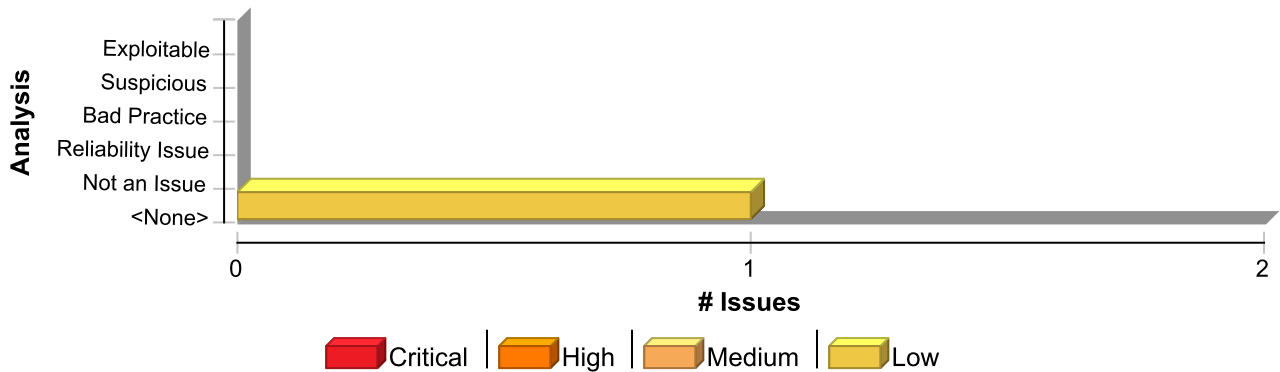
catch block so as not to interrupt the normal execution of the finally block. **Example 2:** The following code re-throws the FileNotFoundException in the catch block.

```
public void processTransaction(Connection conn) throws FileNotFoundException
{
    FileInputStream fis = null;
    Statement stmt = null;
    try
    {
        stmt = conn.createStatement();
        fis = new FileInputStream("badFile.txt");
        ...
    }
    catch (FileNotFoundException fe)
    {
        log("File not found.");
        throw fe;
    }
    catch (SQLException se)
    {
        //handle error
    }
    finally
    {
        if (fis != null)
        {
            try
            {
                fis.close();
            }
            catch (IOException ie)
            {
                log(ie);
            }
        }

        if (stmt != null)
        {
            try
            {
                stmt.close();
            }
            catch (SQLException e)
            {
                log(e);
            }
        }
    }
}
```

Issue Summary





Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---|----------|------------|---------------|----------|
| Poor Error Handling: Throw Inside Finally | 1 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 |

| | |
|--|------------|
| Poor Error Handling: Throw Inside Finally | Low |
| Package: gov.va.med.pharmacy.utility | |
| PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 160 (Poor Error Handling: Throw Inside Finally) | Low |

Issue Details

Kingdom: Errors
Scan Engine: SCA (Structural)

Sink Details

Sink: FinallyBlock
Enclosing Method: getConnection()
File: PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:160
Taint Flags:

```

157 catch (ResourceException e) {
158 //LOG.error("VistaLink error while retrieving connection.", e);
159 throw new ResourceException(e);
160 }finally {
161 if (ic != null){
162 ic.close();
163 };

```

Poor Style: Value Never Read (31 issues)

Abstract

The variable's value is assigned but never used, making it a dead store.

Explanation

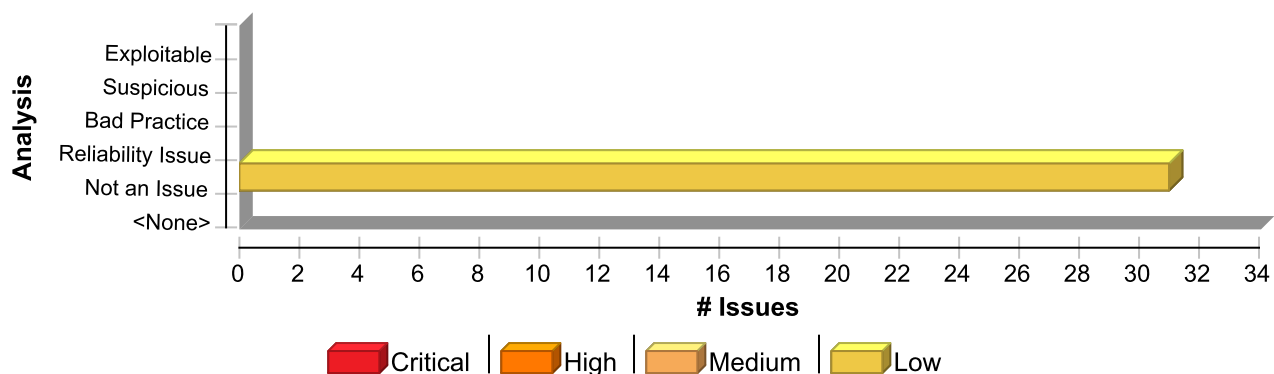
This variable's value is not used. After the assignment, the variable is either assigned another value or goes out of scope. **Example:** The following code excerpt assigns to the variable `r` and then overwrites the value without using it.

```
r = getName();  
r = getNewBuffer(buf);
```

Recommendation

Remove unnecessary assignments in order to make the code easier to understand and maintain.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|------------------------------|-----|------------|---------------|-------|
| Poor Style: Value Never Read | 31 | 0 | 0 | 31 |
| Total | 31 | 0 | 0 | 31 |

Poor Style: Value Never Read

Low

Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/
EESummary_Client.java, line 173 (Poor Style: Value Never Read)

Low

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)



| | |
|---|------------|
| Poor Style: Value Never Read | Low |
| Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 173 (Poor Style: Value Never Read) | Low |
| Audit Comments | |

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: file

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java: 173

Taint Flags:

```

170 StreamUtilities.safeClose(fileIn2);
171 }
172
173 file = null;
174 tlsCP = null;
175 fileIn2 = null;
176 }
```

| | |
|---|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 175 (Poor Style: Value Never Read) | Low |
|---|------------|

Issue Details

Kingdom: Code Quality

Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:20:19 GMT-0500 (EST)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: fileIn2

Enclosing Method: setupTLS()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java: 175

Taint Flags:

```

172
173 file = null;
174 tlsCP = null;
175 fileIn2 = null;
176 }
177
178
```



Poor Style: Value Never Read**Low****Package:** gov.va.med.pharmacy.jaxrs.eAnde.services.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 174 (Poor Style: Value Never Read)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: tlsCP**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java:174**Taint Flags:**

```
171 }
172
173 file = null;
174 tlsCP = null;
175 fileIn2 = null;
176 }
177
```

Package: gov.va.med.pharmacy.jaxrs.inboundncpdpmmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 405 (Poor Style: Value Never Read)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: relatesToMessageID**Enclosing Method:** getInboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java:405**Taint Flags:**

```
402 StreamUtilities.safeClose(inputStream);
```



Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.inboundncpdpmmessage.service.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 405 (Poor Style: Value Never Read)****Low**

```
403
404 inbounderX = null;
405 relatesToMessageID = null;
406 messageFrom = null;
407 messageTo = null;
408 incomingMessageID = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 406 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: messageFrom
Enclosing Method: getInboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java:406
Taint Flags:

```
403
404 inbounderX = null;
405 relatesToMessageID = null;
406 messageFrom = null;
407 messageTo = null;
408 incomingMessageID = null;
409
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 411 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue



| | |
|-------------------------------------|------------|
| Poor Style: Value Never Read | Low |
|-------------------------------------|------------|

Package: gov.va.med.pharmacy.jaxrs.inboundncdpdpmessage.service.impl

| | |
|--|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 411 (Poor Style: Value Never Read) | Low |
|--|------------|

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: xsdStreamSource
Enclosing Method: getInboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java:411
Taint Flags:

```

408 incomingMessageID = null;
409
410 xsdSource = null;
411 xsdStreamSource = null;
412 responseBuffer = null;
413 }
414

```

| | |
|--|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 412 (Poor Style: Value Never Read) | Low |
|--|------------|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: responseBuffer
Enclosing Method: getInboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java:412
Taint Flags:

```

409
410 xsdSource = null;
411 xsdStreamSource = null;
412 responseBuffer = null;
413 }
414
415 return response;

```



| | |
|---|------------|
| Poor Style: Value Never Read | Low |
| Package: gov.va.med.pharmacy.jaxrs.inboundncdpdpmessage.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 412 (Poor Style: Value Never Read) | Low |

| | |
|---|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 404 (Poor Style: Value Never Read) | Low |
|---|------------|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
 Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: inbounderX
Enclosing Method: getInboundMessage()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java:404
Taint Flags:

```

401
402 StreamUtilities.safeClose(inputStream);
403
404 inbounderX = null;
405 relatesToMessageID = null;
406 messageFrom = null;
407 messageTo = null;

```

| | |
|---|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncdpdpmessage/service/impl/InboundNCPDPMessageServiceImpl.java, line 408 (Poor Style: Value Never Read) | Low |
|---|------------|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
 Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: incomingMessageID



Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.inboundncpdpmmessage.service.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 408 (Poor Style: Value Never Read)****Low****Enclosing Method:** getInboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java:408**Taint Flags:**

```
405 relatesToMessageID = null;
406 messageFrom = null;
407 messageTo = null;
408 incomingMessageID = null;
409
410 xsdSource = null;
411 xsdStreamSource = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 410 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: xsdSource**Enclosing Method:** getInboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java:410**Taint Flags:**

```
407 messageTo = null;
408 incomingMessageID = null;
409
410 xsdSource = null;
411 xsdStreamSource = null;
412 responseBuffer = null;
413 }
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 407 (Poor Style: Value Never Read)**Low****Issue Details**

Poor Style: Value Never Read**Low****Package:** gov.va.med.pharmacy.jaxrs.inboundncpdpmmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java, line 407 (Poor Style: Value Never Read)****Low****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: messageTo**Enclosing Method:** getInboundMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/inboundncpdpmmessage/service/impl/InboundNCPDPMMessageServiceImpl.java:407**Taint Flags:**

```
404 inboundeRx = null;
405 relatesToMessageID = null;
406 messageFrom = null;
407 messageTo = null;
408 incomingMessageID = null;
409
410 xsdSource = null;
```

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 685 (Poor Style: Value Never Read)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: returnedGivenNameElement**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:685**Taint Flags:**

```
682
683 // clean up.
684 returnedElement = null;
```



Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 685 (Poor Style: Value Never Read)****Low**

```
685 returnedGivenNameElement = null;
686 returnedFamilyNameElement = null;
687 stationIds = null;
688 givenNameQName = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 691 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: ICN**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:691**Taint Flags:**

```
688 givenNameQName = null;
689 familyNameQName = null;
690
691 ICN = null;
692 mviRequestObj = null;
693 mviResponseObj = null;
694 acknowledgementCode = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 688 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: givenNameQName

Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 688 (Poor Style: Value Never Read)****Low****Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:688**Taint Flags:**

```
685 returnedGivenNameElement = null;
686 returnedFamilyNameElement = null;
687 stationIds = null;
688 givenNameQName = null;
689 familyNameQName = null;
690
691 ICN = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 694 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: acknowledgementCode**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:694**Taint Flags:**

```
691 ICN = null;
692 mviRequestObj = null;
693 mviResponseObj = null;
694 acknowledgementCode = null;
695 dateOfBirth = null;
696
697 } // End Happy Path
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 776 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue



Poor Style: Value Never Read**Low****Package:** gov.va.med.pharmacy.jaxrs.mvi.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 776 (Poor Style: Value Never Read)****Low****Audit Comments****VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: tlsCP**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:776**Taint Flags:**

```
773 }  
774  
775 file = null;  
776 tlsCP = null;  
777  
778  
779 }
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 692 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: mviRequestObj**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:692**Taint Flags:**

```
689 familyNameQName = null;  
690  
691 ICN = null;  
692 mviRequestObj = null;  
693 mviResponseObj = null;  
694 acknowledgementCode = null;  
695 dateOfBirth = null;
```



| | |
|-------------------------------------|------------|
| Poor Style: Value Never Read | Low |
|-------------------------------------|------------|

Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl

| | |
|--|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 686 (Poor Style: Value Never Read) | Low |
|--|------------|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: returnedFamilyNameElement
Enclosing Method: getMVIData()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:686
Taint Flags:

```
683 // clean up.
684 returnedElement = null;
685 returnedGivenNameElement = null;
686 returnedFamilyNameElement = null;
687 stationIds = null;
688 givenNameQName = null;
689 familyNameQName = null;
```

| | |
|--|------------|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 684 (Poor Style: Value Never Read) | Low |
|--|------------|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: returnedElement
Enclosing Method: getMVIData()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:684
Taint Flags:

```
681 patientSearchResults.setQueryReturnCode(acknowledgementCode);
682
683 // clean up.
684 returnedElement = null;
685 returnedGivenNameElement = null;
```



Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 684 (Poor Style: Value Never Read)****Low**

```
686 returnedFamilyNameElement = null;
687 stationIds = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 689 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: familyNameQName
Enclosing Method: getMVIData()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:689
Taint Flags:

```
686 returnedFamilyNameElement = null;
687 stationIds = null;
688 givenNameQName = null;
689 familyNameQName = null;
690
691 ICN = null;
692 mviRequestObj = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 693 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: mviResponseObj
Enclosing Method: getMVIData()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:693



Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 693 (Poor Style: Value Never Read)****Low****Taint Flags:**

```
690
691 ICN = null;
692 mviRequestObj = null;
693 mviResponseObj = null;
694 acknowledgementCode = null;
695 dateOfBirth = null;
696
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 757 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:20:19 GMT-0500 (EST)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: fileIn1
Enclosing Method: setupTLS()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:757
Taint Flags:

```
754 StreamUtilities.safeClose(fileIn1);
755 }
756
757 fileIn1 = null;
758 }
759
760 try {
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 772 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue



Poor Style: Value Never Read**Low****Package:** gov.va.med.pharmacy.jaxrs.mvi.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java**, line 772 (**Poor Style: Value Never Read**)**Low****Audit Comments****VHADURButtS:** Wed Nov 07 2018 14:20:19 GMT-0500 (EST)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: fileIn2**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:772**Taint Flags:**

```
769 StreamUtilities.safeClose(fileIn2);
770 }
771
772 fileIn2 = null;
773 }
774
775 file = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 687 (**Poor Style: Value Never Read**)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: stationIds**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:687**Taint Flags:**

```
684 returnedElement = null;
685 returnedGivenNameElement = null;
686 returnedFamilyNameElement = null;
687 stationIds = null;
688 givenNameQName = null;
689 familyNameQName = null;
690
```



Poor Style: Value Never Read**Low****Package:** gov.va.med.pharmacy.jaxrs.mvi.dao.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java**, line 775 (**Poor Style: Value Never Read**)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: file**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:775**Taint Flags:**

```
772 fileIn2 = null;
773 }
774
775 file = null;
776 tlsCP = null;
777
778
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 695 (**Poor Style: Value Never Read**)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: dateOfBirth**Enclosing Method:** getMVIData()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:695**Taint Flags:**

```
692 mviRequestObj = null;
693 mviResponseObj = null;
694 acknowledgementCode = null;
695 dateOfBirth = null;
696
```



Poor Style: Value Never Read**Low****Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl****PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 695 (Poor Style: Value Never Read)****Low**

```
697 } // End Happy Path
698 else if (QE_STATUS.equalsIgnoreCase(acknowledgementCode)) {
```

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMessageServiceImpl.java, line 276 (Poor Style: Value Never Read)****Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:20:19 GMT-0500 (EST)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: fileIn2
Enclosing Method: setupTLS()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMessageServiceImpl.java:276
Taint Flags:

```
273 StreamUtilities.safeClose(fileIn2);
274 }
275
276 fileIn2 = null;
277 }
278
279 file = null;
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMessageServiceImpl.java, line 280 (Poor Style: Value Never Read)**Low****Issue Details**

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)



Poor Style: Value Never Read**Low****Package:** gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 280 (Poor Style: Value Never Read)****Low****Audit Comments**

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: tlsCP**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:280**Taint Flags:**

```
277 }
278
279 file = null;
280 tlsCP = null;
281
282 }
283
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 279 (Poor Style: Value Never Read)**Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Audit Details**

Analysis Not an Issue

Audit Comments**VHAHAMWandIJ:** Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)

Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details**Sink:** VariableAccess: file**Enclosing Method:** setupTLS()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:279**Taint Flags:**

```
276 fileIn2 = null;
277 }
278
279 file = null;
280 tlsCP = null;
281
```



| | |
|------------------------------|-----|
| Poor Style: Value Never Read | Low |
|------------------------------|-----|

Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl

| | |
|---|-----|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 279 (Poor Style: Value Never Read) | Low |
|---|-----|

```
282 }
```

| | |
|---|-----|
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 261 (Poor Style: Value Never Read) | Low |
|---|-----|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHADURButtS: Wed Nov 07 2018 14:20:19 GMT-0500 (EST)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.

Sink Details

Sink: VariableAccess: fileIn1
Enclosing Method: setupTLS()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:261
Taint Flags:

```
258 StreamUtilities.safeClose(fileIn1);
259 }
260
261 fileIn1 = null;
262 }
263
264 try {
```

Package: gov.va.med.pharmacy.web.administration

| | |
|---|-----|
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 134 (Poor Style: Value Never Read) | Low |
|---|-----|

Issue Details

Kingdom: Code Quality
Scan Engine: SCA (Structural)

Audit Details

Analysis Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Mar 13 2018 14:32:37 GMT-0400 (EDT)
Explicitly assigning a null value to variables that are no longer needed to aid garbage collection.



| | | |
|--|--|------------|
| Poor Style: Value Never Read | | Low |
| Package: gov.va.med.pharmacy.web.administration | | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 134 (Poor Style: Value Never Read) | | Low |
| Sink Details | | |

Sink: VariableAccess: tempBuf

Enclosing Method: getAllStationIds()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
134

Taint Flags:

```

131
132 }
133
134 tempBuf = null;
135 return stationIdsList;
136 }
137

```



SQL Injection (1 issue)

Abstract

Constructing a dynamic SQL statement with input that comes from an untrusted source could allow an attacker to modify the statement's meaning or to execute arbitrary SQL commands.

Explanation

SQL injection errors occur when: 1. Data enters a program from an untrusted source. In this case, Fortify Static Code Analyzer could not determine that the source of the data is trusted. 2. The data is used to dynamically construct a SQL query. **Example 1:** The following code dynamically constructs and executes a SQL query that searches for items matching a specified name. The query restricts the items displayed to those where the owner matches the user name of the currently-authenticated user.

```
...
String userName = ctx.getAuthenticatedUserName();
String itemName = request.getParameter("itemName");
String query = "SELECT * FROM items WHERE owner = '"
               + userName + "' AND itemname = '"
               + itemName + "'";
ResultSet rs = stmt.execute(query);
```

The query intends to execute the following code:

```
SELECT * FROM items
WHERE owner = <userName>
AND itemname = <itemName>;
```

However, because the query is constructed dynamically by concatenating a constant base query string and a user input string, the query only behaves correctly if `itemName` does not contain a single-quote character. If an attacker with the user name `wiley` enters the string `"name' OR 'a'='a"` for `itemName`, then the query becomes the following:

```
SELECT * FROM items
WHERE owner = 'wiley'
AND itemname = 'name' OR 'a'='a';
```

The addition of the `OR 'a'='a'` condition causes the where clause to always evaluate to true, so the query becomes logically equivalent to the much simpler query:

```
SELECT * FROM items;
```

This simplification of the query allows the attacker to bypass the requirement that the query only return items owned by the authenticated user. The query now returns all entries stored in the `items` table, regardless of their specified owner. **Example 2:** This example examines the effects of a different malicious value passed to the query constructed and executed in Example 1. If an attacker with the user name `wiley` enters the string `"name'; DELETE FROM items; --"` for `itemName`, then the query becomes the following two queries:

```
SELECT * FROM items
WHERE owner = 'wiley'
AND itemname = 'name';
```

```
DELETE FROM items;
```

```
--'
```

Many database servers, including Microsoft(R) SQL Server 2000, allow multiple SQL statements separated by semicolons to be executed at once. While this attack string results in an error on Oracle and other database servers that do not allow the batch-execution of statements separated by semicolons, on databases that do allow batch execution, this type of attack allows the attacker to execute arbitrary commands against the database. Notice the trailing pair of hyphens (`--`), which specifies to most database servers that the remainder of the statement is to be treated as a comment and not executed [4]. In this



case the comment character serves to remove the trailing single-quote left over from the modified query. On a database where comments are not allowed to be used in this way, the general attack could still be made effective using a trick similar to the one used in Example 1. If an attacker enters the string "name'); DELETE FROM items; SELECT * FROM items WHERE 'a'='a", the following three valid statements will be created:

```
SELECT * FROM items
WHERE owner = 'wiley'
AND itemname = 'name';
```

```
DELETE FROM items;
```

```
SELECT * FROM items WHERE 'a'='a';
```

Some think that in the mobile world, classic web application vulnerabilities, such as SQL injection, do not make sense -- why would the user attack themselves? However, keep in mind that the essence of mobile platforms is applications that are downloaded from various sources and run alongside each other on the same device. The likelihood of running a piece of malware next to a banking application is high, which necessitates expanding the attack surface of mobile applications to include inter-process communication.

Example 3: The following code adapts Example 1 to the Android platform.

```
...
    PasswordAuthentication pa = authenticator.getPasswordAuthentication();
    String userName = pa.getUserName();
    String itemName = this.getIntent().getExtras().getString("itemName");
    String query = "SELECT * FROM items WHERE owner = '"
                  + userName + "' AND itemname = '"
                  + itemName + "'";
    SQLiteDatabase db = this.openOrCreateDatabase("DB", MODE_PRIVATE,
null);
    Cursor c = db.rawQuery(query, null);
```

One traditional approach to preventing SQL injection attacks is to handle them as an input validation problem and either accept only characters from a whitelist of safe values or identify and escape a blacklist of potentially malicious values. Whitelisting can be a very effective means of enforcing strict input validation rules, but parameterized SQL statements require less maintenance and can offer more guarantees with respect to security. As is almost always the case, blacklisting is riddled with loopholes that make it ineffective at preventing SQL injection attacks. For example, attackers may: - Target fields that are not quoted - Find ways to bypass the need for certain escaped meta-characters - Use stored procedures to hide the injected meta-characters Manually escaping characters in input to SQL queries can help, but it will not make your application secure from SQL injection attacks. Another solution commonly proposed for dealing with SQL injection attacks is to use stored procedures. Although stored procedures prevent some types of SQL injection attacks, they fail to protect against many others. Stored procedures typically help prevent SQL injection attacks by limiting the types of statements that can be passed to their parameters. However, there are many ways around the limitations and many interesting statements that can still be passed to stored procedures. Again, stored procedures can prevent some exploits, but they will not make your application secure against SQL injection attacks.

Recommendation

The root cause of a SQL injection vulnerability is the ability of an attacker to change context in the SQL query, causing a value that the programmer intended to be interpreted as data to be interpreted as a command instead. When a SQL query is constructed, the programmer knows what should be interpreted as part of the command and what should be interpreted as data. Parameterized SQL statements can enforce this behavior by disallowing data-directed context changes and preventing nearly all SQL injection attacks. Parameterized SQL statements are constructed using strings of regular SQL, but when user-supplied data needs to be included, they create bind parameters, which are placeholders for data that is subsequently inserted. Bind parameters allow the program to explicitly specify to the database what should be treated as a command and what should be treated as data. When the program is ready to execute a statement, it specifies to the database the runtime values to use for the value of each of the bind



parameters, without the risk of the data being interpreted as commands. Example 1 can be rewritten to use parameterized SQL statements (instead of concatenating user supplied strings) as follows:

```
...
String userName = ctx.getAuthenticatedUserName();
String itemName = request.getParameter("itemName");
String query =
    "SELECT * FROM items WHERE itemname=? AND owner=?";
PreparedStatement stmt = conn.prepareStatement(query);
stmt.setString(1, itemName);
stmt.setString(2, userName);
ResultSet results = stmt.execute();
...

```

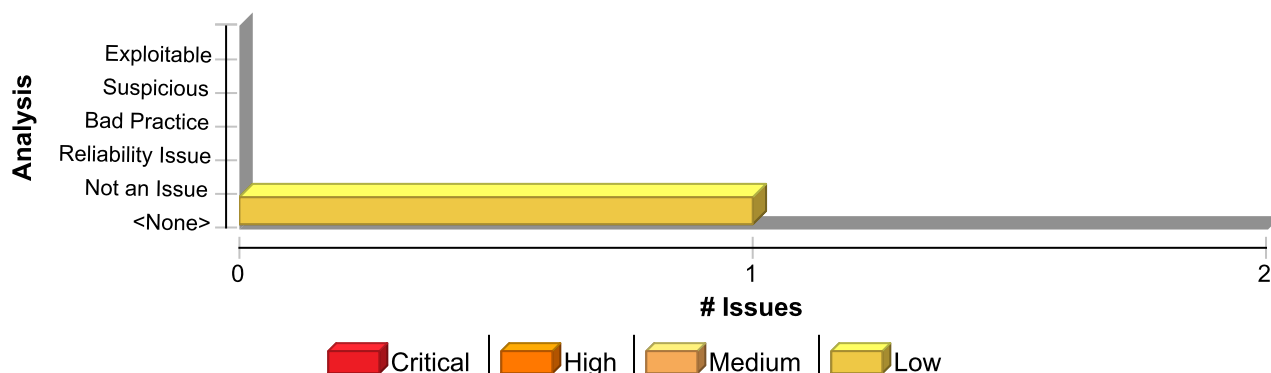
And here is an Android equivalent:

```
...
PasswordAuthentication pa = authenticator.getPasswordAuthentication();
String userName = pa.getUserName();
String itemName = this.getIntent().getExtras().getString("itemName");
String query = "SELECT * FROM items WHERE itemname=? AND owner=?";
SQLiteDatabase db = this.openOrCreateDatabase("DB", MODE_PRIVATE, null);
Cursor c = db.rawQuery(query, new Object[]{itemName, userName});
...

```

More complicated scenarios, often found in report generation code, require that user input affect the command structure of the SQL statement, such as the addition of dynamic constraints in the `WHERE` clause. Do not use this requirement to justify concatenating user input into query strings. Prevent SQL injection attacks where user input must affect statement command structure with a level of indirection: create a set of legitimate strings that correspond to different elements you might include in a SQL statement. When constructing a statement, use input from the user to select from this set of application-controlled values.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|---------------|----------|------------|---------------|----------|
| SQL Injection | 1 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 1 |

SQL Injection

Low

Package: gov.va.med.pharmacy.persistence.track.impl

PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/NcpdpMessagesDaoImpl.java, line 1378 (SQL Injection)

Low

Issue Details



| | |
|---|------------|
| SQL Injection | Low |
| Package: gov.va.med.pharmacy.persistence.track.impl | |
| PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/NcpdpMessagesDaoImpl.java, line 1378 (SQL Injection) | Low |

Kingdom: Input Validation and Representation

Scan Engine: SCA (Semantic)

Sink Details

Sink: query()

Enclosing Method: searchMessages()

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/NcpdpMessagesDaoImpl.java:1378

Taint Flags:

```

1375 try {
1376 //LOG.info("Retrieving NCPDP message details.");
1377 //System.out.println("Retrieving NCPDP message details.");
1378 ncpdpMsgList = jdbcTemplate.query(sql,new NcpdpMsgListRowMapper(),messageId,
relatesToId, vaStationId, patientLastName, patientFirstName, prescriberLastName,
prescriberFirstName, prescriberDEA, prescriberNpi, prescribedDrug, inboundNcpdpMsgId);
1379 } catch (DataAccessException e) {
1380 //ncpdpMsg.setDataError(e.getMessage());
1381 //System.out.println("data error is:" + e.getMessage());

```



System Information Leak: External (8 issues)

Abstract

Revealing system data or debugging information helps an adversary learn about the system and form a plan of attack.

Explanation

An external information leak occurs when system data or debugging information leaves the program to a remote machine via a socket or network connection. External leaks can help an attacker by revealing specific data about operating systems, full pathnames, the existence of usernames, or locations of configuration files, and are more serious than internal information leaks which are more difficult for an attacker to access. **Example 1:** The following code leaks Exception information in the HTTP response: `protected void doPost (HttpServletRequest req, HttpServletResponse res) throws IOException {`

```
...
PrintWriter out = res.getWriter();
try {
    ...
} catch (Exception e) {
    out.println(e.getMessage());
}
}
```

This information can be exposed to a remote user. In some cases the error message tells the attacker precisely what sort of an attack the system is vulnerable to. For example, a database error message can reveal that the application is vulnerable to a SQL injection attack. Other error messages can reveal more oblique clues about the system. In the example above, the leaked information could imply information about the type of operating system, the applications installed on the system, and the amount of care that the administrators have put into configuring the program. In the mobile world, information leaks are also a concern. The essence of mobile platforms is applications that are downloaded from various sources and run alongside each other on the same device. The likelihood of running a piece of malware next to a banking application is high, which is why application authors need to be careful about what information they include in messages addressed to other applications running on the device. **Example 2:** The code below broadcasts the stack trace of a caught exception to all the registered Android receivers.

```
...
try {
    ...
} catch (Exception e) {
    String exception = Log.getStackTraceString(e);
    Intent i = new Intent();
    i.setAction("SEND_EXCEPTION");
    i.putExtra("exception", exception);
    view.getContext().sendBroadcast(i);
}
}
```

Here is another scenario specific to the mobile world. Most mobile devices now implement a Near-Field Communication (NFC) protocol for quickly sharing information between devices using radio communication. It works by bringing devices to close proximity or simply having them touch each other. Even though the communication range of NFC is limited to just a few centimeters, eavesdropping, data modification and various other types of attacks are possible, since NFC alone does not ensure secure communication. **Example 3:** The Android platform provides support for NFC. The following code creates a message that gets pushed to the other device within the range.

```
...
public static final String TAG = "NfcActivity";
private static final String DATA_SPLITTER = "___:DATA:___";
```



```

private static final String MIME_TYPE = "application/my.applications.mimetype";
...
TelephonyManager tm =
(Context.getSystemService(Context.TELEPHONY_SERVICE));
String VERSION = tm.getDeviceSoftwareVersion();
...
NfcAdapter nfcAdapter = NfcAdapter.getDefaultAdapter(this);
if (nfcAdapter == null)
    return;

String text = TAG + DATA_SPLITTER + VERSION;
NdefRecord record = new NdefRecord(NdefRecord.TNF_MIME_MEDIA,
    MIME_TYPE.getBytes(), new byte[0], text.getBytes());
NdefRecord[] records = { record };
NdefMessage msg = new NdefMessage(records);
nfcAdapter.setNdefPushMessage(msg, this);
...

```

NFC Data Exchange Format (NDEF) message contains typed data, a URI, or a custom application payload. If the message contains information about the application, such as its name, MIME type, or device software version, this information could be leaked to an eavesdropper.

Recommendation

Write error messages with security in mind. In production environments, turn off detailed error information in favor of brief messages. Restrict the generation and storage of detailed output that can help administrators and programmers diagnose problems. Be careful, debugging traces can sometimes appear in non-obvious places (embedded in comments in the HTML for an error page, for example). Even brief error messages that do not reveal stack traces or database dumps can potentially aid an attacker. For example, an "Access Denied" message can reveal that a file or user exists on the system. Due to this, it's advised to always keep information instead of sending it to a resource directly outside the program.

Example 4: The code below broadcasts the stack trace of a caught exception within your app only, so that it cannot be leaked to other apps on the system. There is also the added bonus that this is more efficient than globally broadcasting through the system.

```

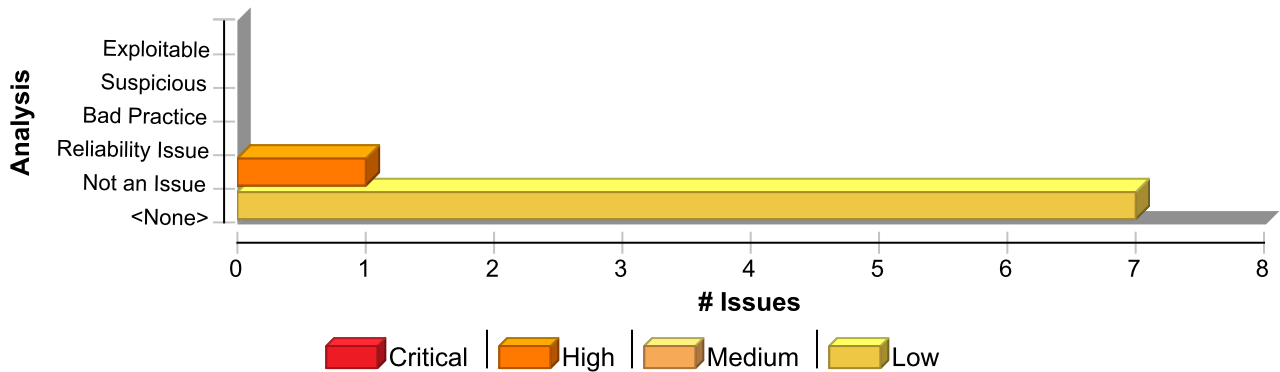
...
try {
    ...
} catch (Exception e) {
    String exception = Log.getStackTraceString(e);
    Intent i = new Intent();
    i.setAction("SEND_EXCEPTION");
    i.putExtra("exception", exception);
    LocalBroadcastManager.getInstance(view.getContext()).sendBroadcast(i);
}
...

```

If you are concerned about leaking system data via NFC on an Android device, you could do one of the following three things. Either do not include system data in the messages pushed to other devices in range, or encrypt the payload of the message, or establish secure communication channel at a higher layer.

Issue Summary





Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|-----------------------------------|----------|------------|---------------|----------|
| System Information Leak: External | 8 | 0 | 0 | 8 |
| Total | 8 | 0 | 0 | 8 |

System Information Leak: External

High

Package: /WEB-INF/includes

PS_INB_ERX_UI/src/main/webapp/WEB-INF/includes/footer.jsp, line 15 (System Information Leak: External)

High

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Audit Details

Analysis: Not an Issue

Audit Comments

VHAHAMWandIJ: Tue Oct 17 2017 09:28:20 GMT-0400 (EDT)
 The statement on line 15 only displays the current version and build number of the application and does not display other system, debugging or error information.

Source Details

Source: org.springframework.core.env.PropertyResolver.getProperty()
From: gov.va.med.pharmacy.web.auth.LoginController.authenticateUser
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java
 :72

```

69
70  if (environment != null) {
71
72  buildInfo = environment.getProperty("buildinformation");
73
74  session.removeAttribute(Constants.BUILLI_NFO);
75

```

Sink Details

Sink: javax.servlet.jsp.JspWriter.print()
Enclosing Method: _jspService()



| | |
|---|-------------|
| System Information Leak: External | High |
| Package: /WEB-INF/includes | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/includes/footer.jsp, line 15 (System Information Leak: External) | High |

File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/includes/footer.jsp:15

Taint Flags: ARGS, ENVIRONMENT, PROPERTY

```

12 <div id="buildInfo" align="center">
13 <c:if test="${ buildInfo != null }">
14   <p>
15     <label style="font-weight: bold;">Build:</label>&nbsp;<b>${buildInfo}</b>
16   </p>
17 </c:if>
18 </div>

```

| | |
|---|------------|
| System Information Leak: External | Low |
| Package: gov.va.med.pharmacy.jaxrs.drug.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java, line 62 (System Information Leak: External) | Low |

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: java.lang.Throwable.getMessage()

From: gov.va.med.pharmacy.jaxrs.drug.service.impl.DrugSearchImpl.search

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java:57

```

54 } catch (Exception e) {
55   searchResponse.setSuccess(false);
56
57   searchResponse.setErrorMessage("Error while searching drug: " +
58     e.getMessage());
59   LOG.error("Error in DrugSearchImpl:" + e.getMessage());
60 }

```

Sink Details

Sink: Return searchResponse

Enclosing Method: search()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java:62

Taint Flags: EXCEPTIONINFO, SYSTEMINFO

```

59 LOG.error("Error in DrugSearchImpl:" + e.getMessage());
60 }
61
62 return searchResponse;

```



System Information Leak: External**Low****Package:** gov.va.med.pharmacy.jaxrs.drug.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java, line 62 (System Information Leak: External)****Low**

```
63  }  
64  
65  undefined
```

Package: gov.va.med.pharmacy.jaxrs.mvi.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/service/impl/PatientSearchImpl.java, line 101 (System Information Leak: External)****Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: java.lang.Throwable.getMessage()
From: gov.va.med.pharmacy.jaxrs.mvi.service.impl.PatientSearchImpl.searchPatientByName
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/service/impl/PatientSearchImpl.java:98

```
95  
96  searchResponse.setSuccess(false);  
97  
98  searchResponse.setErrorMessage("Error while searching patient: " +  
e.getMessage());  
99  }  
100  
101  return searchResponse;
```

Sink Details

Sink: Return searchResponse
Enclosing Method: searchPatientByName()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/service/impl/PatientSearchImpl.java:101
Taint Flags: EXCEPTIONINFO, SYSTEMINFO

```
98  searchResponse.setErrorMessage("Error while searching patient: " + e.getMessage());  
99  }  
100  
101  return searchResponse;  
102  }  
103  
104  }
```



| | |
|--|------------|
| System Information Leak: External | Low |
| Package: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 207 (System Information Leak: External) | Low |
| Issue Details | |
| Kingdom: Encapsulation Scan Engine: SCA (Data Flow) | |
| Source Details | |
| Source: java.lang.Throwable.getMessage() From: gov.va.med.pharmacy.jaxrs.outboundncpdpmmessage.service.impl.OutboundNCPDPMMessageServiceImpl.sendOutboundMessage File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:204 | |
| <pre> 201 202 wsResponse.setSuccess(false); 203 204 wsResponse.setErrorMessage("Error while processing outbound message: " + e.getMessage()); 205 } 206 207 return wsResponse; </pre> | |
| Sink Details | |
| Sink: Return wsResponse Enclosing Method: sendOutboundMessage() File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:207 Taint Flags: EXCEPTIONINFO, SYSTEMINFO | |
| <pre> 204 wsResponse.setErrorMessage("Error while processing outbound message: " + e.getMessage()); 205 } 206 207 return wsResponse; 208 } 209 210 /* </pre> | |
| Package: gov.va.med.pharmacy.jaxrs.provider.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/service/impl/ProviderSearchImpl.java, line 62 (System Information Leak: External) | Low |
| Issue Details | |
| Kingdom: Encapsulation Scan Engine: SCA (Data Flow) | |



| | |
|---|------------|
| System Information Leak: External | Low |
| Package: gov.va.med.pharmacy.jaxrs.provider.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/service/impl/ProviderSearchImpl.java, line 62 (System Information Leak: External) | Low |

Source Details

Source: java.lang.Throwable.getMessage()
From: gov.va.med.pharmacy.jaxrs.provider.service.impl.ProviderSearchImpl.search
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/service/impl/ProviderSearchImpl.java:59

```

56
57  searchResponse.setSuccess(false);
58
59  searchResponse.setErrorMessage("Error while searching provider: " +
e.getMessage());
60  }
61
62  return searchResponse;

```

Sink Details

Sink: Return searchResponse
Enclosing Method: search()
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/provider/service/impl/ProviderSearchImpl.java:62
Taint Flags: EXCEPTIONINFO, SYSTEMINFO

```

59  searchResponse.setErrorMessage("Error while searching provider: " + e.getMessage());
60  }
61
62  return searchResponse;
63  }
64
65  undefined

```

| | |
|--|------------|
| Package: gov.va.med.pharmacy.jaxrs.tovista.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistalnboundSendImpl.java, line 55 (System Information Leak: External) | Low |

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: java.lang.Throwable.getMessage()
From: gov.va.med.pharmacy.jaxrs.tovista.service.impl.VistalnboundSendImpl.send
File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistalnboundSendImpl.java:52

```

49  } catch (IOException e) {

```



System Information Leak: External**Low****Package:** gov.va.med.pharmacy.jaxrs.tovista.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistaInboundSendImpl.java, line 55 (System Information Leak: External)****Low**

```
50  sendResponse.setSuccess(false);
51
52  sendResponse.setErrorMessage("Error while sending vista inbound message: " + e.getMessage());
53  }
54
55  return sendResponse;
```

Sink Details**Sink:** Return sendResponse**Enclosing Method:** send()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistaInboundSendImpl.java:55**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

```
52  sendResponse.setErrorMessage("Error while sending vista inbound message: " + e.getMessage());
53  }
54
55  return sendResponse;
56  }
57
58  undefined
```

Package: gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 84 (System Information Leak: External)****Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Data Flow)**Source Details****Source:** java.lang.Throwable.getMessage()**From:** gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl.VistaOutboundMsgImpl.persistMessage**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:79

```
76
77  wsResponse.setSuccess(false);
78
79  wsResponse.setErrorMessage("Error while saving vista outbound message: " + e.getMessage());
```



System Information Leak: External**Low****Package:** gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl**PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 84 (System Information Leak: External)****Low**

```
80
81  wsResponse.setOutboundMsgId(0);
82  }
```

Sink Details**Sink:** Return wsResponse**Enclosing Method:** persistMessage()**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:84**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

```
81  wsResponse.setOutboundMsgId(0);
82  }
83
84  return wsResponse;
85  }
86
87  @POST
```

PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 130 (System Information Leak: External)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Data Flow)**Source Details****Source:** java.lang.Throwable.getMessage()**From:** gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl.VistaOutboundMsgImpl.persistXMLMessage**File:** PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:125

```
122
123  wsResponse.setSuccess(false);
124
125  wsResponse.setErrorMessage("Error while saving vista outbound message: "
+ e.getMessage());
126
127  wsResponse.setOutboundMsgId(0);
128  }
```

Sink Details

| | |
|--|------------|
| System Information Leak: External | Low |
| Package: gov.va.med.pharmacy.jaxrs.vistaoutboundmsg.service.impl | |
| PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java, line 130 (System Information Leak: External) | Low |

Sink: Return wsResponse

Enclosing Method: persistXMLMessage()

File: PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/vistaoutboundmsg/service/impl/VistaOutboundMsgImpl.java:130

Taint Flags: EXCEPTIONINFO, SYSTEMINFO

```

127  wsResponse.setOutboundMsgId(0);
128  }
129
130  return wsResponse;
131  }
132
133  undefined

```

System Information Leak: HTML Comment in JSP (27 issues)

Abstract

Any information revealed in an HTML comment might help an adversary learn about the system and form a plan of attack.

Explanation

HTML comments provide an attacker with an easy source of information about a dynamically generated web page. **Example 1:**

```
<!-- TBD: this needs a security audit -->
<form method="POST" action="recalcOrbit">
...
```

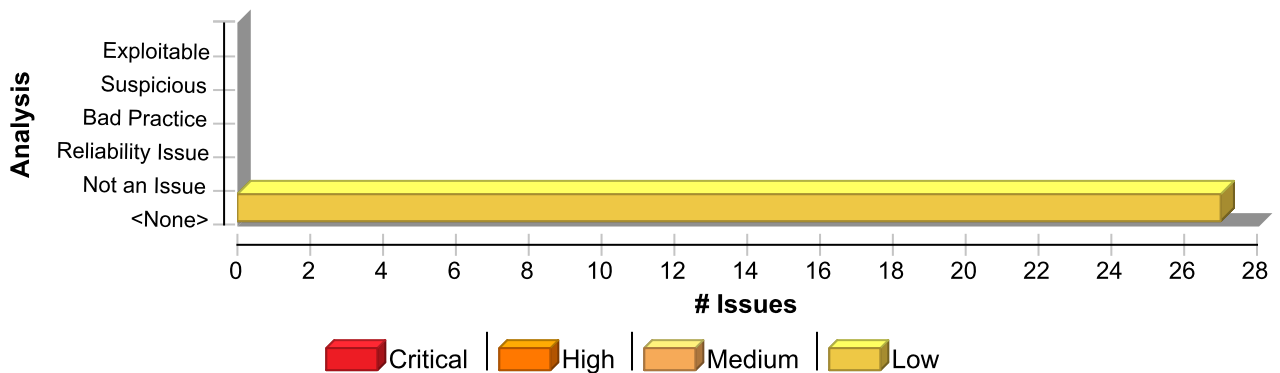
Even comments that seem innocuous may be useful to someone trying to understand the way the system is built.

Recommendation

Replace HTML comments with JSP comments (which will not be transmitted to the user). **Example 2:** The previous example is rewritten to use JSP comments, which will not be displayed to the user.

```
<%-- TBD: this needs a security audit --%>
<form method="POST" action="recalcOrbit">
...
```

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--|-----------|------------|---------------|-----------|
| System Information Leak: HTML Comment in JSP | 27 | 0 | 0 | 27 |
| Total | 27 | 0 | 0 | 27 |

| | |
|---|------------|
| System Information Leak: HTML Comment in JSP | Low |
| Package: .src.main.webapp.WEB-INF | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 44 (System Information Leak: HTML Comment in JSP) | Low |
| Issue Details | |

System Information Leak: HTML Comment in JSP**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 44 (System Information Leak: HTML Comment in JSP)****Low****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:44**Taint Flags:**

```
41 color: black
42 }
43
44 <!-- /* Font Definitions */
45 @font-face {
46 font-family: Wingdings;
47 panose-1: 5 0 0 0 0 0 0 0 0 0;
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1051 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1051**Taint Flags:**

```
1048 </div>
1049
1050 <div role="main">
1051 <!-- role main -->
1052
1053 <span
1054 style='font-size: 11.0pt; line-height: 115%; font-family: "Arial", sans-serif'><br
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 7871 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:7871

System Information Leak: HTML Comment in JSP**Low****Package: .src.main.webapp.WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 7871 (System Information Leak: HTML Comment in JSP)****Low****Taint Flags:**

```
7868 </div>
7869 <!-- end role main div-->
7870 </div>
7871 <!-- End of document role.-->
7872 </body>
7873
7874 </html>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 1106 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:1106
Taint Flags:

```
1103 </div>
1104
1105 </div>
1106 <!--9-->
1107 <div id="trackMedRequested9" style="display: none;">
1108 <div role="row">
1109 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #9</div>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1086 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1086
Taint Flags:

```
1083 </span>
1084 </p>
1085 <div >
1086 <!-- ordered list -->
```



System Information Leak: HTML Comment in JSP**Low****Package: .src.main.webapp.WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1086 (System Information Leak: HTML Comment in JSP)****Low**

```
1087
1088 <ol>
1089 <li ><p class=BodyTextNumbered1
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1189 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1189
Taint Flags:

```
1186 </p>
1187
1188 <div >
1189 <!-- ordered list -->
1190 <ol>
1191 <li ><p class=BodyTextNumbered1
1192 style='margin-top: 1.0pt; margin-right: 0in; margin-bottom: 1.0pt; margin-left: .3in;
line-height: 115%'
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1251 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1251
Taint Flags:

```
1248 Processing Hub before being sent down to VistA:</span>
1249 </p>
1250 <div >
1251 <!-- ordered list -->
1252 <ul>
1253 <li ><p class=MsoBodyText
1254 style='margin-left: .3in; text-indent: -.5in'>
```



System Information Leak: HTML Comment in JSP**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1341 (System Information Leak: HTML Comment in JSP)****Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1341**Taint Flags:**

```
1338 </p>
1339
1340 <div >
1341 <!-- ordered list -->
1342
1343 <ul>
1344 <li ><p class=MsoBodyText
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1393 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1393**Taint Flags:**

```
1390 </p>
1391
1392 <div >
1393 <!-- ordered list -->
1394
1395 <ol>
1396 <li ><p class=BodyTextNumbered1
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1780 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details**

System Information Leak: HTML Comment in JSP**Low****Package: .src.main.webapp.WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1780 (System Information Leak: HTML Comment in JSP)****Low****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1780**Taint Flags:**

```
1777 <a name="_Toc517947818">Screen Navigation and Description</a>
1778 </h2>
1779 <div >
1780 <!-- ordered list -->
1781 <p class=MsoBodyText>
1782 <span style='font-family: "Arial", sans-serif'>The
1783 following figure outlines the key areas of the screen layout.
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1854 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1854**Taint Flags:**

```
1851 </p>
1852
1853 <div >
1854 <!-- ordered list -->
1855
1856 <ul>
1857 <li ><p class=MsoBodyText
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1977 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1977**Taint Flags:**

```
1974
1975 <p class=MsoBodyText>&nbsp;</p>
1976 <div >
```



System Information Leak: HTML Comment in JSP**Low****Package: .src.main.webapp.WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1977 (System Information Leak: HTML Comment in JSP)****Low**

```
1977 <!-- ordered list -->
1978
1979 <ol>
1980 <li ><p class=BodyTextNumbered1
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 978 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:978
Taint Flags:

```
975 </div>
976 </div>
977 </div>
978 <!--7-->
979 <div id="trackMedRequested7" style="display: none;">
980 <div role="row">
981 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #7</div>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 656 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:656
Taint Flags:

```
653 <div role="rowheader" class="trackLbl">Comments: </div> <div role="cell"
id="rxCommentsRequested" style="width: 1000px;" class="trackDataRight"> </div>
654 </div>
655 </div>
656 <!--2-->
657 <div id="trackMedRequested2" style="display: none;">
658 <div role="row">
659 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #2</div>
```



System Information Leak: HTML Comment in JSP**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackerRx.jsp, line 780 (System Information Leak: HTML Comment in JSP)****Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackerRx.jsp:780**Taint Flags:**

```
777 <div role="rowheader" class="trackLbl">Comments: </div> <div role="cell"
id="rxCommentsRequested3" style="width: 1000px;" class="trackDataRight"> </div>
778 </div>
779 </div>
780 <!--4-->
781 <div id="trackMedRequested4" style="display: none;">
782 <div role="row">
783 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #4</div>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackerRx.jsp, line 1042 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackerRx.jsp:1042**Taint Flags:**

```
1039 </div>
1040
1041 </div>
1042 <!--8-->
1043 <div id="trackMedRequested8" style="display: none;">
1044 <div role="row">
1045 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #8</div>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 7869 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details**

System Information Leak: HTML Comment in JSP**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 7869 (System Information Leak: HTML Comment in JSP)****Low****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:7869**Taint Flags:**

```
7866
7867 </div>
7868 </div>
7869 <!-- end role main div-->
7870 </div>
7871 <!-- End of document role.-->
7872 </body>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 915 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:915**Taint Flags:**

```
912 </div>
913 </div>
914 </div>
915 <!--6-->
916 <div id="trackMedRequested6" style="display: none;">
917 <div role="row">
918 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #6</div>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp, line 844 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackRx.jsp:844**Taint Flags:**

```
841 </div>
842
843 </div>
```



System Information Leak: HTML Comment in JSP**Low****Package: .src.main.webapp.WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackerX.jsp, line 844 (System Information Leak: HTML Comment in JSP)****Low**

```
844 <!--5-->
845 <div id="trackMedRequested5" style="display: none;">
846 <div role="row">
847 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #5</div>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1176 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1176
Taint Flags:

```
1173 </ol>
1174
1175 </div>
1176 <!-- ordered list End -->
1177
1178 <h2>
1179 <a name="_Toc517947811">User Interfaces</a>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1210 (System Information Leak: HTML Comment in JSP)**Low****Issue Details**

Kingdom: Encapsulation
Scan Engine: SCA (Structural)

Sink Details

Sink: Comment
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1210
Taint Flags:

```
1207
1208
1209 </div>
1210 <!-- ordered list End -->
1211 <p class=MsoBodyText style='margin-top: 5.0pt'>
1212 <span style='font-family: "Arial", sans-serif'>&nbsp;  </span>
1213 </p>
```



System Information Leak: HTML Comment in JSP**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1313 (System Information Leak: HTML Comment in JSP)****Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1313**Taint Flags:**

```
1310
1311
1312 </div>
1313 <!-- ordered list End -->
1314 <h3>
1315 <a name="_Toc517947814"><span style='font-size: 12.0pt'>Provider
1316 Autochecks</span></a>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1377 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1377**Taint Flags:**

```
1374 </p></li>
1375 </ul>
1376 </div>
1377 <!-- ordered list End -->
1378
1379 <h2>
1380 <a name="_Toc517947816">Logging In/Out</a>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1483 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details**

System Information Leak: HTML Comment in JSP**Low****Package: .src.main.webapp.WEB-INF****PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1483 (System Information Leak: HTML Comment in JSP)****Low****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1483**Taint Flags:**

```
1480 and Capabilities
1481 </h2>
1482 </div>
1483 <!-- ordered list End -->
1484
1485 <p class=MsoBodyText>
1486 <span style='font-family: "Arial", sans-serif'>The following
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1836 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1836**Taint Flags:**

```
1833
1834
1835 </div>
1836 <!-- ordered list End -->
1837
1838 <p class=MsoCaption>Figure 1: Screen Navigation</p>
1839
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1920 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp:1920**Taint Flags:**

```
1917
1918
1919 </div>
```



System Information Leak: HTML Comment in JSP**Low****Package:** .src.main.webapp.WEB-INF**PS_INB_ERX_UI/src/main/webapp/WEB-INF/help.jsp, line 1920 (System Information Leak: HTML Comment in JSP)****Low**

```
1920 <!-- ordered list End -->
1921
1922 <p class=MsoBodyText>
1923 <span style='font-family: "Arial", sans-serif'>&nbsp;</span>
```

PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp, line 718 (System Information Leak: HTML Comment in JSP)**Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS_INB_ERX_UI/src/main/webapp/WEB-INF/trackeRx.jsp:718**Taint Flags:**

```
715 </div>
716 </div>
717 </div>
718 <!--3-->
719 <div id="trackMedRequested3" style="display: none;">
720 <div role="row">
721 <div role="rowheader" class="trackH1">MEDICATION REQUESTED #3</div>
```



Trust Boundary Violation (29 issues)

Abstract

Commingling trusted and untrusted data in the same data structure encourages programmers to mistakenly trust unvalidated data.

Explanation

A trust boundary can be thought of as line drawn through a program. On one side of the line, data is untrusted. On the other side of the line, data is assumed to be trustworthy. The purpose of validation logic is to allow data to safely cross the trust boundary--to move from untrusted to trusted. A trust boundary violation occurs when a program blurs the line between what is trusted and what is untrusted. The most common way to make this mistake is to allow trusted and untrusted data to commingle in the same data structure. **Example:** The following Java code accepts an HTTP request and stores the `username` parameter in the HTTP session object before checking to ensure that the user has been authenticated.

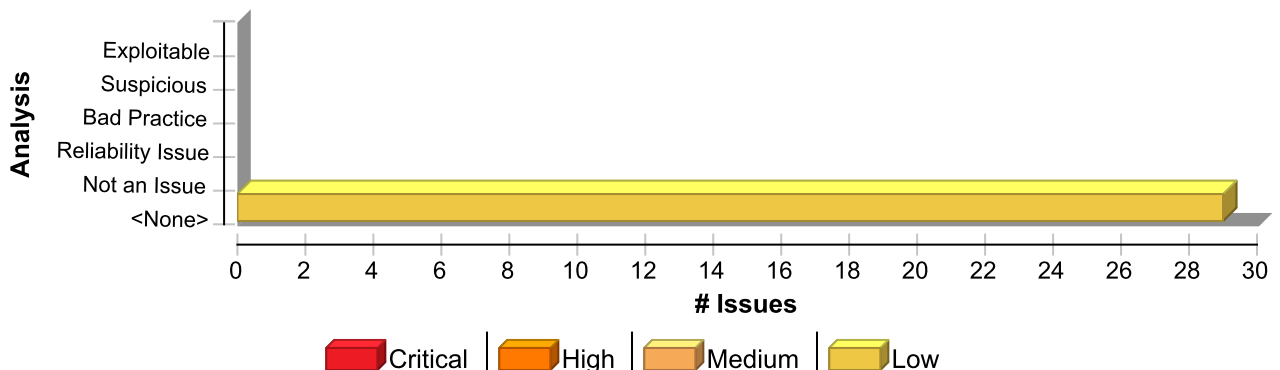
```
username = request.getParameter("username");
if (session.getAttribute(ATTR_USR) != null) {
    session.setAttribute(ATTR_USR, username);
}
```

Without well-established and maintained trust boundaries, programmers will inevitably lose track of which pieces of data have been validated and which have not. This confusion will eventually allow some data to be used without first being validated.

Recommendation

Define clear trust boundaries in the application. Do not use the same data structure to hold trusted data in some contexts and untrusted data in other contexts. Minimize the number of ways that data can move across a trust boundary. Trust boundary violations sometimes occur when input needs to be built up over a series of user interactions before being processed. It may not be possible to do complete input validation until all of the data has arrived. In these situations, it is still important to maintain a trust boundary. The untrusted data should be built up in a single untrusted data structure, validated, and then moved into a trusted location.

Issue Summary



Engine Breakdown

| | SCA | WebInspect | SecurityScope | Total |
|--------------------------|-----|------------|---------------|-------|
| Trust Boundary Violation | 29 | 0 | 0 | 29 |
| Total | 29 | 0 | 0 | 29 |



| | |
|---|------------|
| Trust Boundary Violation | Low |
| Package: /WEB-INF/includes | |
| PS_INB_ERX_UI/src/main/webapp/WEB-INF/includes/footer.jsp, line 3 (Trust Boundary Violation) | Low |

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.core.env.PropertyResolver.getProperty()
From: gov.va.med.pharmacy.web.auth.LoginController.authenticateUser
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:72

```

69
70  if (environment != null) {
71
72  buildInfo = environment.getProperty("buildinformation");
73
74  session.removeAttribute(Constants.BUILD_INFO);
75

```

Sink Details

Sink: http://java.sun.com/jsp/jstl/core/set/_jspService
Enclosing Method: _jspService()
File: PS_INB_ERX_UI/src/main/webapp/WEB-INF/includes/footer.jsp:3
Taint Flags: ARGS, ENVIRONMENT, PROPERTY

```

1  <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
2  <%@ taglib uri="http://www.springframework.org/tags" prefix="spring"%>
3  <c:set var="buildInfo" value="${sessionScope.buildInformation}" />
4  <div id="footer">
5  <hr/>
6  <div id="footerLinks" accesskey="y">
7

```

| | |
|--|------------|
| Package: gov.va.med.pharmacy.web.administration | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 109 (Trust Boundary Violation) | Low |

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getSelectedVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/Vis



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 109 (Trust Boundary Violation)

Low

nSelectDaoImpl.java:94

```
91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();
92
93 try {
94     visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
95 } catch (DataAccessException e) {
96
97     LOG.info("Exception retrieving selected visn from pharmacy." +
e.getMessage());
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: getMainPage()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:109

Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY,
VALIDATED_CROSS_SITE_SCRIPTING_DOM,
VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
106
107 List<VisnSelectModel> visnList = getVisnSelect(currentUser.getVaStationIds());
108
109 view.addObject("visnList", visnList);
110
111 // when redirected after add pharmacy.
112 if(null!=session.getAttribute("messageData")){
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 163 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.PharmacyDaoImpl.findSelectedPharmaci
es

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/Pharm
acyDaoImpl.java:331

```
328
329 criteria.setResultTransformer(Criteria.ALIAS_TO_ENTITY_MAP);
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 163 (Trust Boundary Violation)

Low

```
330
331 List<PharmacyEntity> pharmacies = criteria.list();
332
333 return pharmacies;
334 }
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: getPharmacyList()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:163

Taint Flags: DATABASE, XSS

```
160 e.printStackTrace();
161 }
162
163 mav.addObject("items", pharmacyList);
164
165 return mav;
166 }
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 84 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findUsersByStationIds

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:107

```
104
105 criteriaEq.add(Restrictions.eq("vaStationIds", stationIds));
106
107 List<VaUser> usersEq = (List<VaUser>) criteriaEq.list();
108
109 users.addAll(usersEq);
110
```

Sink Details



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 84 (Trust Boundary Violation)

Low

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: getMainPage()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
84

Taint Flags: DATABASE, NUMBER, XSS

```
81
82 mav.addObject("userMgmtStationIds", stationIdsList);
83
84 mav.addObject("userMgmt", userRoles);
85
86
87
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 228 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findUsersByStationIds

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:99

```
96
97 criteria.add(buildStringInCriterion("vaStationIds", stationIdsList));
98
99 users = (List<VaUser>) criteria.list();
100 }
101
102
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: saveUsers()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
228

Taint Flags: DATABASE, NUMBER, XSS

```
225
226 List<UserManagementModel> userRoles = getUsersAndRoles();
227
228 mav.addObject("userMgmt", userRoles);
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 228 (Trust Boundary Violation)

Low

```
229
230 // populate station ids.
231 List<StationIdSelectModel> stationIdsList = getAllStationIds();
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 242 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()
From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findUsersByStationIds
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:99

```
96
97 criteria.add(buildStringInCriterion("vaStationIds", stationIdsList));
98
99 users = (List<VaUser>) criteria.list();
100 }
101
102
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: saveUsers()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
242
Taint Flags: DATABASE, NUMBER, XSS

```
239
240 List<UserManagementModel> userRoles = getUsersAndRoles();
241
242 mav.addObject("userMgmt", userRoles);
243
244
245 // populate station ids.
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 674 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation



| | |
|--|------------|
| Trust Boundary Violation | Low |
| Package: gov.va.med.pharmacy.web.administration | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 674 (Trust Boundary Violation) | Low |

Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getSelectedVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:94

```

91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();
92
93 try {
94     visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
95 } catch (DataAccessException e) {
96
97     LOG.info("Exception retrieving selected visn from pharmacy." +
e.getMessage());

```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: addNewPharmacy()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:674
Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```

671
672 List<VisnSelectModel> visnList = getVisnSelect(userStationIds);
673
674 view.addObject("visnList", visnList);
675 }
676 }
677

```

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 84 (Trust Boundary Violation) | Low |
|---|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 84 (Trust Boundary Violation)

Low

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findUsersByStationIds
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:99

```
96
97 criteria.add(buildStringInCriterion("vaStationIds", stationIdsList));
98
99 users = (List<VaUser>) criteria.list();
100 }
101
102
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: getMainPage()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
84
Taint Flags: DATABASE, NUMBER, XSS

```
81
82 mav.addObject("userMgmtStationIds", stationIdsList);
83
84 mav.addObject("userMgmt", userRoles);
85
86
87
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 103 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.uniqueResult()
From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findByVAUserID
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:34

```
31
32 crit.add(Restrictions.eq("vaUserid", networkID));
33
34 VaUser users = (VaUser) crit.uniqueResult();
35
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 103 (Trust Boundary Violation)

Low

```
36 return users;
37 }
```

Sink Details

Sink: javax.servlet.http.HttpSession.setAttribute()

Enclosing Method: getMainPage()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:103

Taint Flags: DATABASE, XSS

```
100
101 session.removeAttribute("USER_STATIONS_IDS");
102
103 session.setAttribute("USER_STATIONS_IDS", currentUser.getVaStationIds());
104
105 ModelAndView view = new ModelAndView("managepharmacy.homepage");
106
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 228 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findAll

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:66

```
63
64 criteria.setResultTransformer(Criteria.DISTINCT_ROOT_ENTITY); // for
unique results
65
66 List<VaUser> users = (List<VaUser>) criteria.list();
67
68 return users;
69 }
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: saveUsers()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 228 (Trust Boundary Violation)

Low

228

Taint Flags: DATABASE, NUMBER, XSS

225

```
226 List<UserManagementModel> userRoles = getUsersAndRoles();
```

227

```
228 mav.addObject("userMgmt", userRoles);
```

229

```
230 // populate station ids.
```

```
231 List<StationIdSelectModel> stationIdsList = getAllStationIds();
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 242 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findAll

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:66

63

```
64 criteria.setResultTransformer(Criteria.DISTINCT_ROOT_ENTITY); // for  
unique results
```

65

```
66 List<VaUser> users = (List<VaUser>) criteria.list();
```

67

```
68 return users;
```

69 }

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: saveUsers()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
242

Taint Flags: DATABASE, NUMBER, XSS

239

```
240 List<UserManagementModel> userRoles = getUsersAndRoles();
```

241

```
242 mav.addObject("userMgmt", userRoles);
```

243

244



| | |
|--|------------|
| Trust Boundary Violation | Low |
| Package: gov.va.med.pharmacy.web.administration | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 242 (Trust Boundary Violation) | Low |
| <pre>245 // populate station ids.</pre> | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 109 (Trust Boundary Violation) | Low |
| Issue Details | |
| Kingdom: Encapsulation Scan Engine: SCA (Data Flow) | |
| Source Details | |
| Source: org.springframework.jdbc.core.JdbcTemplate.query() From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getVisns File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:66 | |
| <pre>63 64 try { 65 66 visnList = jdbcTemplate.query(sql,new VisnListRowMapper()); 67 } catch (DataAccessException e) { 68 69</pre> | |
| Sink Details | |
| Sink: org.springframework.web.servlet.ModelAndView.addObject() Enclosing Method: getMainPage() File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:109 Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS | |
| <pre>106 107 List<VisnSelectModel> visnList = getVisnSelect(currentUser.getVaStationIds()); 108 109 view.addObject("visnList", visnList); 110 111 // when redirected after add pharmacy. 112 if(null!=session.getAttribute("messageData")){</pre> | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 82 (Trust Boundary Violation) | Low |
| Issue Details | |



| | |
|---|------------|
| Trust Boundary Violation | Low |
| Package: gov.va.med.pharmacy.web.administration | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 82 (Trust Boundary Violation) | Low |

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()
From: gov.va.med.pharmacy.persistence.dao.impl.PharmacyDaoImpl.getAllStations
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:141

```

138
139
criteria.setResultTransformer(Transformers.aliasToBean(PharmacyEntity.class));
140
141 List<PharmacyEntity> pharmacies = criteria.list();
142
143 return pharmacies;
144 }
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: getMainPage()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:82
Taint Flags: DATABASE, PRIMARY_KEY, XSS

```

79
80 List<StationIdSelectModel> stationIdsList = getAllStationIds();
81
82 mav.addObject("userMgmtStationIds", stationIdsList);
83
84 mav.addObject("userMgmt", userRoles);
85
```

| | |
|--|------------|
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 674 (Trust Boundary Violation) | Low |
|--|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:66



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java, line 674 (Trust Boundary Violation)

Low

```
63
64 try {
65
66     visnList = jdbcTemplate.query(sql, new VisnListRowMapper());
67 } catch (DataAccessException e) {
68
69
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: addNewPharmacy()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
PharmacyManagementController.java:674

Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY,
VALIDATED_CROSS_SITE_SCRIPTING_DOM,
VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```
671
672 List<VisnSelectModel> visnList = getVisnSelect(userStationIds);
673
674 view.addObject("visnList", visnList);
675 }
676 }
677
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 84 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findAll

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:66

```
63
64 criteria.setResultTransformer(Criteria.DISTINCT_ROOT_ENTITY); // for
unique results
65
66 List<VaUser> users = (List<VaUser>) criteria.list();
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 84 (Trust Boundary Violation)

Low

```
67  
68 return users;  
69 }
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: getMainPage()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
84

Taint Flags: DATABASE, NUMBER, XSS

```
81  
82 mav.addObject("userMgmtStationIds", stationIdsList);  
83  
84 mav.addObject("userMgmt", userRoles);  
85  
86  
87
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 228 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findUsersByStationIds

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:107

```
104  
105 criteriaEq.add(Restrictions.eq("vaStationIds", stationIds));  
106  
107 List<VaUser> usersEq = (List<VaUser>) criteriaEq.list();  
108  
109 users.addAll(usersEq);  
110
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: saveUsers()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 228 (Trust Boundary Violation)

Low

228

Taint Flags: DATABASE, NUMBER, XSS

225

```
226 List<UserManagementModel> userRoles = getUsersAndRoles();
```

227

```
228 mav.addObject("userMgmt", userRoles);
```

229

```
230 // populate station ids.
```

```
231 List<StationIdSelectModel> stationIdsList = getAllStationIds();
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 242 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.hibernate.Criteria.list()

From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findUsersByStationIds

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserD
aoImpl.java:107

104

```
105 criteriaEq.add(Restrictions.eq("vaStationIds", stationIds));
```

106

```
107 List<VaUser> usersEq = (List<VaUser>) criteriaEq.list();
```

108

```
109 users.addAll(usersEq);
```

110

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: saveUsers()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:
242

Taint Flags: DATABASE, NUMBER, XSS

239

```
240 List<UserManagementModel> userRoles = getUsersAndRoles();
```

241

```
242 mav.addObject("userMgmt", userRoles);
```

243

244

```
245 // populate station ids.
```



| | |
|--|------------|
| Trust Boundary Violation | Low |
| Package: gov.va.med.pharmacy.web.administration | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 242 (Trust Boundary Violation) | Low |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 233 (Trust Boundary Violation) | Low |
| Issue Details | |
| Kingdom: Encapsulation Scan Engine: SCA (Data Flow) | |
| Source Details | |
| Source: org.hibernate.Criteria.list() From: gov.va.med.pharmacy.persistence.dao.impl.PharmacyDaoImpl.getAllStations File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:141 | |
| <pre> 138 139 criteria.setResultTransformer(Transformers.aliasToBean(PharmacyEntity.class)); 140 141 List<PharmacyEntity> pharmacies = criteria.list(); 142 143 return pharmacies; 144 }</pre> | |
| Sink Details | |
| Sink: org.springframework.web.servlet.ModelAndView.addObject() Enclosing Method: saveUsers() File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:233 Taint Flags: DATABASE, PRIMARY_KEY, XSS | |
| <pre> 230 // populate station ids. 231 List<StationIdSelectModel> stationIdsList = getAllStationIds(); 232 233 mav.addObject("userMgmtStationIds", stationIdsList); 234 235 return mav; 236 }</pre> | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java, line 248 (Trust Boundary Violation) | Low |
| Issue Details | |
| Kingdom: Encapsulation Scan Engine: SCA (Data Flow) | |



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.administration

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/
UserManagementController.java, line 248 (Trust Boundary Violation)

Low

Source Details

Source: org.hibernate.Criteria.list()
From: gov.va.med.pharmacy.persistence.dao.impl.PharmacyDaoImpl.getAllStations
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/PharmacyDaoImpl.java:141

```
138
139
criteria.setResultTransformer(Transformers.aliasToBean(PharmacyEntity.class));
140
141 List<PharmacyEntity> pharmacies = criteria.list();
142
143 return pharmacies;
144 }
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: saveUsers()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/UserManagementController.java:248
Taint Flags: DATABASE, PRIMARY_KEY, XSS

```
245 // populate station ids.
246 List<StationIdSelectModel> stationIdsList = getAllStationIds();
247
248 mav.addObject("userMgmtStationIds", stationIdsList);
249
250 if (result.hasErrors()) {
251
```

Package: gov.va.med.pharmacy.web.auth

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/
LoginController.java, line 103 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: javax.servlet.http.HttpServletRequestWrapper.getHeader()
From: gov.va.med.pharmacy.web.filter.XSSRequestWrapper.getHeader
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/filter/XSSRequestWrapper.java:507

```
504 @Override
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.auth

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 103 (Trust Boundary Violation)

Low

```
505 public String getHeader(String name) {  
506  
507     String value = super.getHeader(name);  
508  
509     return stripXSS(value);  
510 }
```

Sink Details

Sink: javax.servlet.http.HttpSession.setAttribute()

Enclosing Method: authenticateUser()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:103

Taint Flags: VALIDATED_PORTABILITY_FLAWE_FILE_SEPARATOR, WEB, XSS

```
100 {  
101     session.removeAttribute(Constants.SSOI_LANDING_URL);  
102  
103     session.setAttribute(Constants.SSOI_LANDING_URL, logoutURL);  
104 }  
105  
106 }
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 76 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.core.env.PropertyResolver.getProperty()

From: gov.va.med.pharmacy.web.auth.LoginController.authenticateUser

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:72

```
69  
70 if (environment != null) {  
71  
72     buildInfo = environment.getProperty("buildinformation");  
73  
74     session.removeAttribute(Constants.BUILD_INFO);  
75 }
```

Sink Details



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.auth

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 76 (Trust Boundary Violation)

Low

Sink: javax.servlet.http.HttpSession.setAttribute()

Enclosing Method: authenticateUser()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:76

Taint Flags: ARGS, ENVIRONMENT, PROPERTY

```
73
74 session.removeAttribute(Constants.BUILLI_NFO);
75
76 session.setAttribute(Constants.BUILLI_NFO, buildInfo);
77 }
78 }
79
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 103 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: javax.servlet.http.HttpServletRequest.getHeader()

From: gov.va.med.pharmacy.web.auth.LoginController.authenticateUser

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:97

```
94 // logout should take to the IAM Landing.
95 if(request.getHeader(Constants.SSOI_LANDING_URL)!=null)
96 {
97 String logoutURL = request.getHeader(Constants.SSOI_LANDING_URL);
98
99
100 if(ESAPIValidator.isValidInput(logoutURL,ESAPIValidationType.IAM_LOGOUT_URL) )
101 {
```

Sink Details

Sink: javax.servlet.http.HttpSession.setAttribute()

Enclosing Method: authenticateUser()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:103

Taint Flags: WEB, XSS

```
100 {
101 session.removeAttribute(Constants.SSOI_LANDING_URL);
102
103 session.setAttribute(Constants.SSOI_LANDING_URL, logoutURL);
104 }
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.auth

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 103 (Trust Boundary Violation)

Low

105

106 }

Package: gov.va.med.pharmacy.web.track

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 116 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()

From: gov.va.med.pharmacy.persistence.track.impl.NcpdpMessagesDaoImpl.searchMessages

File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/NcpdpMessagesDaoImpl.java:1378

```
1375 try {
1376 //LOG.info("Retrieving NCPDP message details.");
1377 //System.out.println("Retrieving NCPDP message details.");
1378 ncpdpMsgList = jdbcTemplate.query(sql,new
NcpdpMsgListRowMapper(),messageId, relatesToId, vaStationId, patientLastName,
patientFirstName, prescriberLastName, prescriberFirstName, prescriberDEA,
prescriberNpi, prescribedDrug, inboundNcpdpMsgId);
1379 } catch (DataAccessException e) {
1380 //ncpdpMsg.setDataError(e.getMessage());
1381 //System.out.println("data error is:" + e.getMessage());
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: getMessages()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:116

Taint Flags: DATABASE, XSS

```
113 // Refactored code into a method to be shared between the UI and the CSV as both use same
parameters to avoid code duplication.
114 List<NcpdpMessageListModel> eRxMessageList = trackAuditSearch(request,json);
115
116 mav.addObject("items", eRxMessageList);
117
118 return mav;
119 }
```



| | |
|---|------------|
| Trust Boundary Violation | Low |
| Package: gov.va.med.pharmacy.web.track | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 75 (Trust Boundary Violation) | Low |

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.namedparam.NamedParameterJdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getSelectedVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:94

```

91 List<VisnSelectModel> visnList = new ArrayList<VisnSelectModel>();
92
93 try {
94     visnList = jdbcTemplate.query(sql,params, new VisnListRowMapper());
95 } catch (DataAccessException e) {
96
97     LOG.info("Exception retrieving selected visn from pharmacy." +
e.getMessage());

```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: getMainPage()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:75
Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

```

72
73 List<VisnSelectModel> visnList = getVisnSelect(currentUser.getVaStationIds());
74
75 view.addObject("trackVisnList", visnList);
76
77 return view;
78 }

```

| | |
|---|------------|
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 69 (Trust Boundary Violation) | Low |
|---|------------|

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.track

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/
TrackRxController.java, line 69 (Trust Boundary Violation)

Low

Source: org.hibernate.Criteria.uniqueResult()
From: gov.va.med.pharmacy.persistence.dao.impl.UserDaoImpl.findByVAUserID
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/UserDaoImpl.java:34

```
31
32 crit.add(Restrictions.eq("vaUserid", networkID));
33
34 VaUser users = (VaUser)crit.uniqueResult();
35
36 return users;
37 }
```

Sink Details

Sink: javax.servlet.http.HttpSession.setAttribute()
Enclosing Method: getMainPage()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:69
Taint Flags: DATABASE, XSS

```
66
67 session.removeAttribute("USER_STATIONS_IDS");
68
69 session.setAttribute("USER_STATIONS_IDS", currentUser.getVaStationIds());
70
71 ModelAndView view = new ModelAndView("trackRx.homepage");
72
```

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/
TrackRxController.java, line 75 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.VisnSelectDaoImpl.getVisns
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/VisnSelectDaoImpl.java:66

```
63
64 try {
65
66 visnList = jdbcTemplate.query(sql, new VisnListRowMapper());
67 } catch (DataAccessException e) {
```



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.track

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 75 (Trust Boundary Violation)

Low

68

69

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: getMainPage()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:75
Taint Flags: DATABASE, HTML_ENCODE, POORVALIDATION, PRIMARY_KEY, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION, VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT, VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, XSS

72

73 List<VisnSelectModel> visnList = getVisnSelect(currentUser.getVaStationIds());

74

75 view.addObject("trackVisnList", visnList);

76

77 return view;

78 }

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 381 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: org.springframework.jdbc.core.JdbcTemplate.query()
From: gov.va.med.pharmacy.persistence.track.impl.NcpdpMessagesDaoImpl.searchRelatedMessages
File: PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/track/impl/NcpdpMessagesDaoImpl.java:1565

1562

1563 try {

1564

1565 ncpdpMsgList = jdbcTemplate.query(sqlBuffer.toString(), new NcpdpMsgListRowMapper(), messageId, messageId);

1566

1567 } catch (DataAccessException e) {

1568

Sink Details



Trust Boundary Violation

Low

Package: gov.va.med.pharmacy.web.track

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java, line 381 (Trust Boundary Violation)

Low

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: getRelatedMessages()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/track/TrackRxController.java:381

Taint Flags: DATABASE, XSS

```
378
379 eRxMessageList = trackMessageService.searchRelatedMessages(inboundNcpdpMsgId);
380
381 mav.addObject("items", eRxMessageList);
382
383 return mav;
384 }
```

URL: /managePharm/addNewPharmacy

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 691 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation

Scan Engine: SCA (Data Flow)

Source Details

Source: addNewPharmacy(1)

From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.addNewPharmacy

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:476

URL: /managePharm/addNewPharmacy

```
473 }
474
475 @RequestMapping(value = "/addNewPharmacy", method = RequestMethod.POST)
476 public ModelAndView addNewPharmacy(HttpServletRequest request, @Valid
@ModelAttribute("pharmacyAddForm") PharmacyForm pharmacyForm, BindingResult
bindingResult) throws IOException {
477
478 LOG.info("Trying to persist pharmacy information.");
479 }
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()

Enclosing Method: addNewPharmacy()

File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:691

Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM,



Trust Boundary Violation

Low

URL: /managePharm/addNewPharmacy

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 691 (Trust Boundary Violation)

Low

VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,
VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```
688 session.setAttribute("messageData", responseMessage);
689 }
690
691 view.addObject("pharmacyInfo", pharmacyInfo );
692
693 Map<String, String> statesMap = getStatesHashMap();
694
```

URL: /managePharm/updatePharmacy

PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 342 (Trust Boundary Violation)

Low

Issue Details

Kingdom: Encapsulation
Scan Engine: SCA (Data Flow)

Source Details

Source: updatePharmacy(1)
From: gov.va.med.pharmacy.web.administration.PharmacyManagementController.updatePharmacy
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:197
URL: /managePharm/updatePharmacy

```
194 }
195
196 @RequestMapping(value = "/updatePharmacy", method = RequestMethod.POST)
197 public ModelAndView updatePharmacy(HttpServletRequest request, @Valid
198 @ModelAttribute("pharmacyEditForm") PharmacyForm pharmacyForm, BindingResult
199 bindingResult) throws IOException {
200
201 LOG.info("Trying to persist pharmacy information.");
202
```

Sink Details

Sink: org.springframework.web.servlet.ModelAndView.addObject()
Enclosing Method: updatePharmacy()
File: PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:342
Taint Flags: HTML_ENCODE, POORVALIDATION, VALIDATED_CROSS_SITE_SCRIPTING_DOM, VALIDATED_CROSS_SITE_SCRIPTING_INTER_COMPONENT_COMMUNICATION,



| | |
|--|------------|
| Trust Boundary Violation | Low |
| URL: /managePharm/updatePharmacy | |
| PS_INB_ERX_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 342 (Trust Boundary Violation) | Low |

VALIDATED_CROSS_SITE_SCRIPTING_PERSISTENT,
VALIDATED_CROSS_SITE_SCRIPTING_REFLECTED, WEB, XSS

```

339  }
340
341
342  view.addObject("pharmacyInfo", pharmacyInfo );
343
344  Map<String, String> statesMap = getStatesHashMap();
345

```

