



**Hewlett Packard**  
Enterprise

HPE Security Fortify Audit Workbench

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# Developer Workbook

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PS\_INB\_ERX\_Fortify-1.0.2.023

# Table of Contents

[Executive Summary](#)

[Project Description](#)

[Issue Breakdown by Fortify Categories](#)

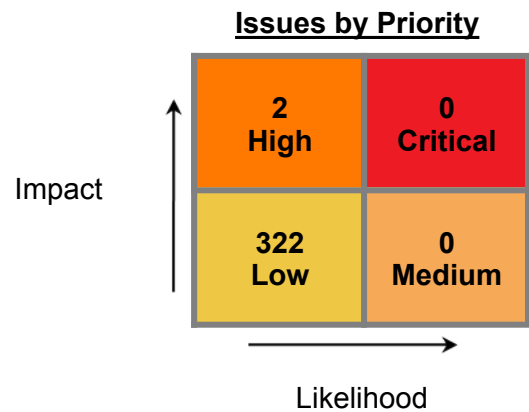
[Results Outline](#)

# 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-1.0.2.023 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-1.0
Project Version:	
SCA:	Results Present
WebInspect:	Results Not Present
SecurityScope:	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 HPE Security Fortify scan engines used for this project, as well as the project meta-information.

### SCA

<b>Date of Last Analysis:</b>	Jan 24, 2017, 8:23 PM	<b>Engine Version:</b>	16.20.0157
<b>Host Name:</b>	HAM-LT51592	<b>Certification:</b>	VALID
<b>Number of Files:</b>	2,105	<b>Lines of Code:</b>	103,470

## 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	
Build Misconfiguration: External Maven Dependency Repository	0	0	0	0 / 7	0 / 7
Code Correctness: Byte Array to String Conversion	0	0	0	0 / 1	0 / 1
Code Correctness: Misleading Method Signature	0	0	0	0 / 4	0 / 4
Cross-Site Request Forgery	0	0	0	0 / 2	0 / 2
Dead Code: Expression is Always false	0	0	0	0 / 1	0 / 1
Dead Code: Expression is Always true	0	0	0	0 / 1	0 / 1
Denial of Service	0	0	0	0 / 1	0 / 1
J2EE Misconfiguration: Excessive Session Timeout	0	0	0	0 / 2	0 / 2
J2EE Misconfiguration: Incomplete Error Handling	0	0	0	0 / 1	0 / 1
J2EE Misconfiguration: Missing Error Handling	0	0	0	0 / 2	0 / 2
Missing Check against Null	0	0	0	0 / 5	0 / 5
Obsolete: Deprecated by ESAPI	0	0	0	0 / 67	0 / 67
Password Management	0	0	0	0 / 2	0 / 2
Password Management: Hardcoded Password	0	2 / 2	0	0	2 / 2
Password Management: Password in Comment	0	0	0	0 / 18	0 / 18
Poor Error Handling: Overly Broad Catch	0	0	0	0 / 10	0 / 10
Poor Error Handling: Overly Broad Throws	0	0	0	0 / 14	0 / 14
Poor Error Handling: Throw Inside Finally	0	0	0	0 / 1	0 / 1
Poor Style: Confusing Naming	0	0	0	0 / 167	0 / 167
Redundant Null Check	0	0	0	0 / 2	0 / 2
System Information Leak: External	0	0	0	0 / 5	0 / 5
System Information Leak: HTML Comment in JSP	0	0	0	0 / 6	0 / 6
System Information Leak: Internal	0	0	0	0 / 3	0 / 3

# Results Outline

## Build Misconfiguration: External Maven Dependency Repository (7 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):

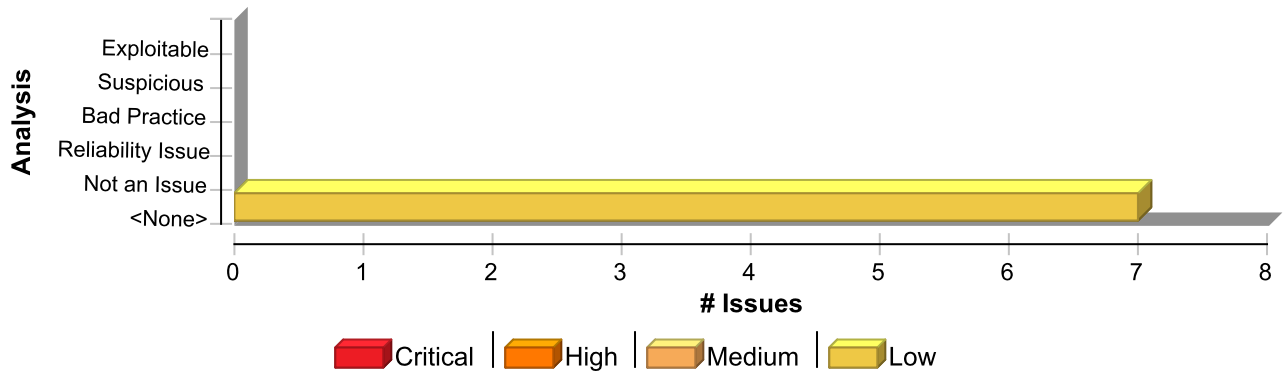
```
<project>
...
<repositories>
  <repository>
    <releases>
      <enabled>true</enabled>
      <updatePolicy>always</updatePolicy>
      <checksumPolicy>warn</checksumPolicy>
    </releases>
    <snapshots>
      <enabled>true</enabled>
      <updatePolicy>never</updatePolicy>
      <checksumPolicy>fail</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	7	0	0	7
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>

<b>Build Misconfiguration: External Maven Dependency Repository</b>	<b>Low</b>
---	------------

**Package: PS\_INB\_ERX\_Common**

<b>PS_INB_ERX_Common/pom.xml, line 2 (Build Misconfiguration: External Maven Dependency Repository)</b>	<b>Low</b>
---	------------

### 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

```



<b>Build Misconfiguration: External Maven Dependency Repository</b>	<b>Low</b>
<b>Package: PS_INB_ERX_Common</b>	
<b>PS_INB_ERX_Common/pom.xml, line 2 (Build Misconfiguration: External Maven Dependency Repository)</b>	<b>Low</b>
7 undefined	

<b>Package: PS_INB_ERX_Fortify</b>	
<b>PS_INB_ERX_Fortify/pom.xml, line 22 (Build Misconfiguration: External Maven Dependency Repository)</b>	<b>Low</b>
<b>Issue Details</b>	

**Kingdom:** Environment  
**Scan Engine:** SCA (Configuration)

#### Sink Details

**Sink:** //project/repositories  
**File:** PS\_INB\_ERX\_Fortify/pom.xml:22  
**Taint Flags:**

```

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

<b>Package: PS_INB_ERX_JMS</b>	
<b>PS_INB_ERX_JMS/pom.xml, line 15 (Build Misconfiguration: External Maven Dependency Repository)</b>	<b>Low</b>
<b>Issue Details</b>	

**Kingdom:** Environment  
**Scan Engine:** SCA (Configuration)

#### Sink Details

**Sink:** //project/repositories  
**File:** PS\_INB\_ERX\_JMS/pom.xml:15  
**Taint Flags:**

```

12 <version>${version.number}</version>
13 <relativePath>../PS_INB_ERX/pom.xml</relativePath>
14 </parent>
15 <repositories>
16 <repository>
17 <id>project.local</id>
18 <name>project</name>
```

<b>Build Misconfiguration: External Maven Dependency Repository</b>		<b>Low</b>
<b>Package: PS_INB_ERX_Model</b>		
<b>PS_INB_ERX_Model/pom.xml, line 2 (Build Misconfiguration: External Maven Dependency Repository)</b>		<b>Low</b>
<b>Issue Details</b>		
<b>Kingdom:</b> Environment <b>Scan Engine:</b> SCA (Configuration)		
<b>Sink Details</b>		
<b>Sink:</b> //project/repositories <b>File:</b> PS_INB_ERX_Model/pom.xml:2 <b>Taint Flags:</b>		
<pre> 1 &lt;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"&gt; 3 4 &lt;modelVersion&gt;4.0.0&lt;/modelVersion&gt; 5 &lt;name&gt;PS_INB_ERX_Model&lt;/name&gt; 6 7 undefined </pre>		
<b>Package: PS_INB_ERX_Service</b>		
<b>PS_INB_ERX_Service/pom.xml, line 16 (Build Misconfiguration: External Maven Dependency Repository)</b>		<b>Low</b>
<b>Issue Details</b>		
<b>Kingdom:</b> Environment <b>Scan Engine:</b> SCA (Configuration)		
<b>Sink Details</b>		
<b>Sink:</b> //project/repositories <b>File:</b> PS_INB_ERX_Service/pom.xml:16 <b>Taint Flags:</b>		
<pre> 13 &lt;relativePath&gt;../PS_INB_ERX/pom.xml&lt;/relativePath&gt; 14 &lt;/parent&gt; 15 16 &lt;repositories&gt; 17 &lt;repository&gt; 18 &lt;id&gt;project.local&lt;/id&gt; 19 &lt;name&gt;project&lt;/name&gt; </pre>		
<b>Package: PS_INB_ERX_UI</b>		
<b>PS_INB_ERX_UI/pom.xml, line 17 (Build Misconfiguration: External Maven Dependency Repository)</b>		<b>Low</b>
<b>Issue Details</b>		

**Build Misconfiguration: External Maven Dependency Repository****Low****Package: PS\_INB\_ERX\_UI****PS\_INB\_ERX\_UI/pom.xml, line 17 (Build Misconfiguration: External Maven Dependency Repository)****Low****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>
14 </parent>
15
16 <repositories>
17 <repository>
18 <id>project.local</id>
19 <name>project</name>
```

## Code Correctness: Byte Array to String Conversion (1 issue)

### Abstract

Converting a byte array into a `String` may lead to data loss.

### Explanation

When data from a byte array is converted into a `String`, it is unspecified what will happen to any data that is outside of the applicable character set. This can lead to data being lost, or a decrease in the level of security when binary data is needed to ensure proper security measures are followed.

**Example 1:** The following code converts data into a `String` in order to create a hash.

```
...
FileInputStream fis = new FileInputStream(myFile);
byte[] byteArr = byte[BUFSIZE];
...
int count = fis.read(byteArr);
...
String fileString = new String(byteArr);
String fileSHA256Hex = DigestUtils.sha256Hex(fileString);
// use fileSHA256Hex to validate file
...
```

Assuming the size of the file is less than `BUFSIZE`, this works fine as long as the information in `myFile` is encoded the same as the default character set, however if it's using a different encoding, or is a binary file, it will lose information. This in turn will cause the resulting SHA hash to be less reliable, and could mean it's far easier to cause collisions, especially if any data outside of the default character set is represented by the same value, such as a question mark.

### Recommendation

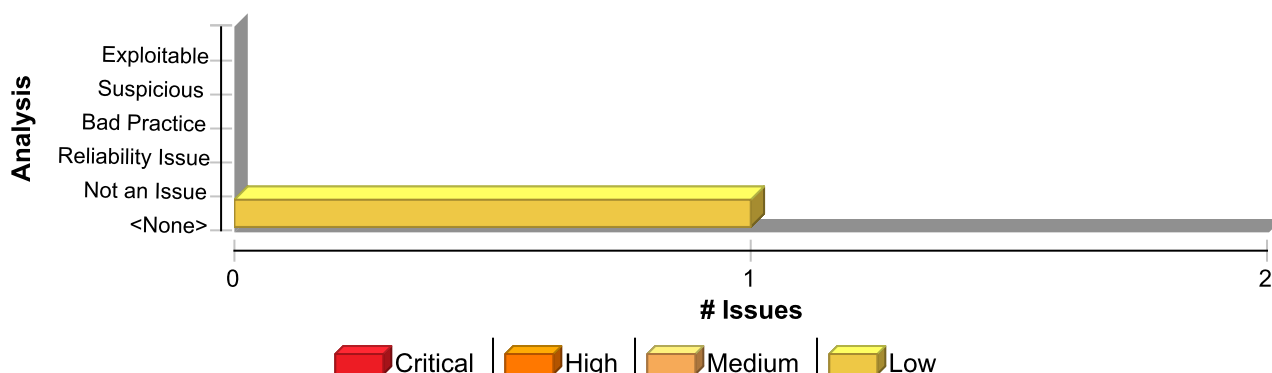
Generally speaking, a byte array potentially containing noncharacter data should never be converted into a `String` object as it may break functionality, but in some cases this can cause much larger security concerns. In a lot of cases there is no need to actually convert a byte array into a `String`, but if there is a specific reason to be able to create a `String` object from binary data, it must first be encoded in a way such that it will fit into the default character set.

**Example 2:** The following uses a different variant of the API in Example 1 to prevent any validation problems.

```
...
FileInputStream fis = new FileInputStream(myFile);
byte[] byteArr = byte[BUFSIZE];
...
int count = fis.read(byteArr);
...
byte[] fileSHA256 = DigestUtils.sha256(byteArr);
// use fileSHA256 to validate file, comparing hash byte-by-byte.
...
```

In this case it is straightforward to rectify, since this API has overloaded variants including one that accepts a byte array, and this could be simplified even further by using another overloaded variant of `DigestUtils.sha256()` that accepts a `FileInputStream` object as its argument. Other scenarios may need careful consideration as to whether it's possible that the byte array could contain data outside of the character set, and further refactoring may be required.

## Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Code Correctness: Byte Array to String Conversion	1	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

### Code Correctness: Byte Array to String Conversion

Low

Package: gov.va.med.pharmacy.jms.messaging

PS\_INB\_ERX\_JMS/src/main/java/gov/va/med/pharmacy/jms/messaging/InboundMsgProcessor.java, line 43 (Code Correctness: Byte Array to String Conversion)

Low

### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Semantic)

### Sink Details

**Sink:** String()

**Enclosing Method:** getERxMessage()

**File:** PS\_INB\_ERX\_JMS/src/main/java/gov/va/med/pharmacy/jms/messaging/InboundMsgProcessor.java:43

**Taint Flags:**

```

40
41 eRxMessage.readBytes(messageByteArray, messageLength);
42
43 String message = new String(messageByteArray);
44
45 inbounderx.setMessage(message);
46

```

## 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.

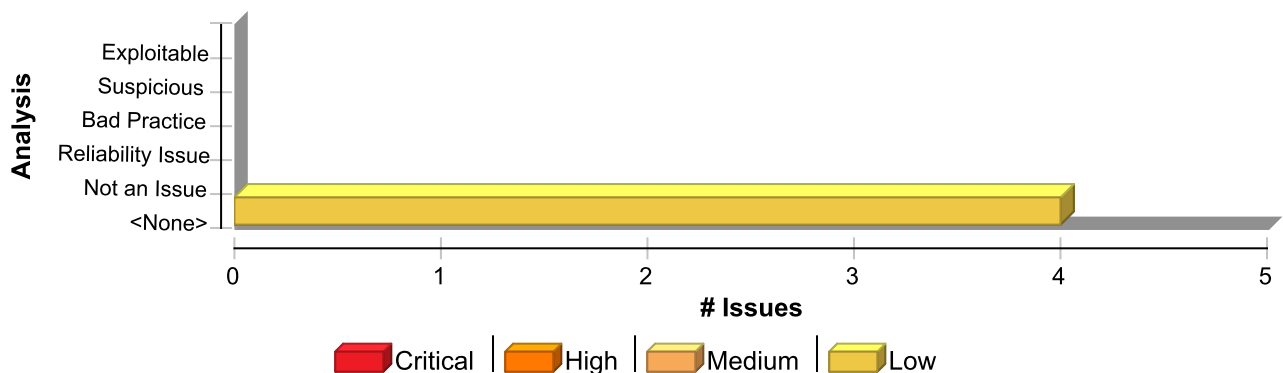
### Recommendation

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 56 (Code Correctness: Misleading Method Signature)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**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:56**Taint Flags:**

```
53  }  
54  
55  @Override  
56  public int hashCode(final Object x) {  
57  return (x != null) ? x.hashCode() : 0;  
58  }  
59
```

**PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java, line 49 (Code Correctness: Misleading Method Signature)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**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:49**Taint Flags:**

```
46  }  
47  
48  @Override  
49  public int hashCode(final Object x) {  
50  return (x != null) ? x.hashCode() : 0;  
51  }  
52
```

<b>Code Correctness: Misleading Method Signature</b>	<b>Low</b>
<b>Package:</b> gov.va.med.pharmacy.persistence.model.usertypes	
<b>PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/InboundNcpdpMsgUserType.java, line 44 (Code Correctness: Misleading Method Signature)</b>	<b>Low</b>

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

#### 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(final Object x, final Object y) {
45      return (x != null) && x.equals(y);
46  }
47

```

<b>PS_INB_ERX_Model/src/main/java/gov/va/med/pharmacy/persistence/model/usertypes/OutboundNcpdpMsgUserType.java, line 51 (Code Correctness: Misleading Method Signature)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

#### 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:51

**Taint Flags:**

```

48  }
49
50  @Override
51  public boolean equals(final Object x, final Object y) {
52      return (x != null) && x.equals(y);
53  }
54

```



## Cross-Site Request Forgery (2 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.

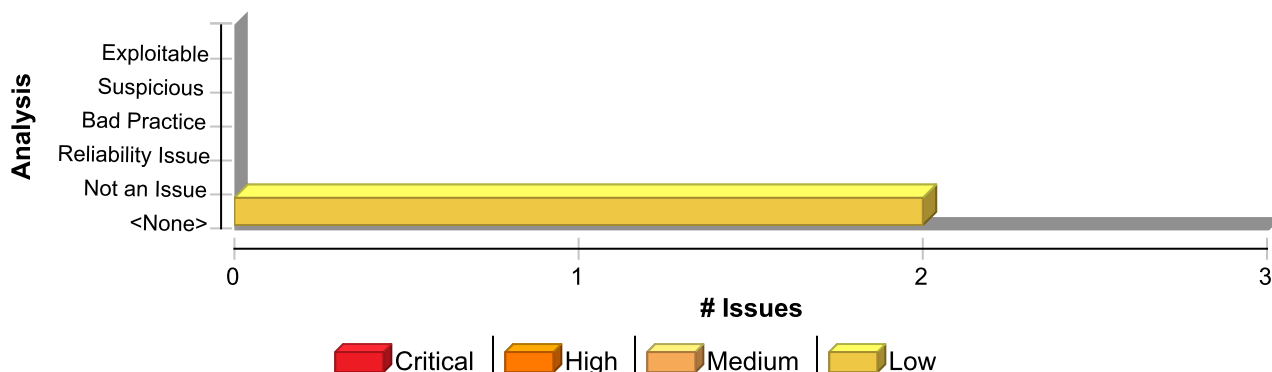
**Check HTTP Referer/Origin headers:** An attacker won't be able to spoof these headers while performing a CSRF attack. This makes these headers a useful method to prevent CSRF attacks.

**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	2	0	0	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### Cross-Site Request Forgery

Low

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

PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/managepharmacy.jsp, line 11 (Cross-Site Request Forgery)

Low

#### Issue Details

**Kingdom:** Encapsulation

**Scan Engine:** SCA (Content)

#### Sink Details

**File:** PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/managepharmacy.jsp:11

**Taint Flags:**

```

8 <h1 class="titleBar"><span class="headerText">Pharmacy Management</span></h1>
9
10 <div id="pharmacyManagement">
11 <form id="pharmacyFilterForm">
12
13 <label for="visnSelection" style="width: 40px; padding-top: 6px; padding-left: 5px;">VISN:
</label>
14 <div id="visnSelect" tabindex="0" style="width: 40px; ">

```

PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/landing.jsp, line 29 (Cross-Site Request Forgery)

Low

#### Issue Details

**Kingdom:** Encapsulation

**Scan Engine:** SCA (Content)

#### Sink Details

**File:** PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/landing.jsp:29

**Taint Flags:**



## Dead Code: Expression is Always false (1 issue)

### Abstract

This expression (or part of it) will always evaluate to `false`.

### Explanation

This expression (or part of it) will always evaluate to `false`; the program could be rewritten in a simpler form. The nearby code may be present for debugging purposes, or it may not have been maintained along with the rest of the program. The expression may also be indicative of a bug earlier in the method.

**Example 1:** The following method never sets the variable `secondCall` after initializing it to `false`. (The variable `firstCall` is mistakenly used twice.) The result is that the expression `firstCall && secondCall` will always evaluate to `false`, so `setUpDualCall()` will never be invoked.

```
public void setUpCalls() {
    boolean firstCall = false;
    boolean secondCall = false;

    if (fCall > 0) {
        setUpFCall();
        firstCall = true;
    }
    if (sCall > 0) {
        setUpSCall();
        firstCall = true;
    }

    if (firstCall && secondCall) {
        setUpDualCall();
    }
}
```

**Example 2:** The following method never sets the variable `firstCall` to `true`. (The variable `firstCall` is mistakenly set to `false` after the first conditional statement.) The result is that the first part of the expression `firstCall && secondCall` will always evaluate to `false`.

```
public void setUpCalls() {
    boolean firstCall = false;
    boolean secondCall = false;

    if (fCall > 0) {
        setUpFCall();
        firstCall = false;
    }
    if (sCall > 0) {
        setUpSCall();
        secondCall = true;
    }

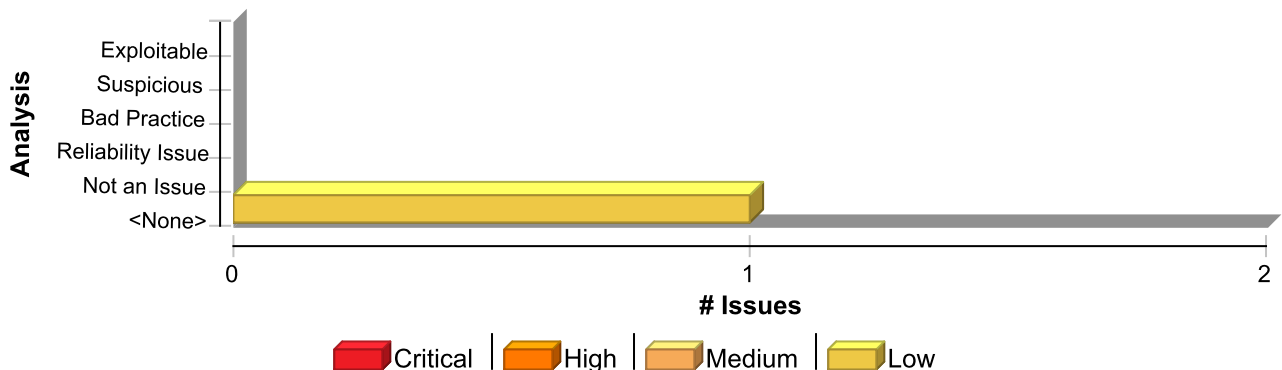
    if (firstCall || secondCall) {
        setUpForCall();
    }
}
```

```
}
}
```

## Recommendation

In general, you should repair or remove unused code. It causes additional complexity and maintenance burden without contributing to the functionality of the program.

## Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Dead Code: Expression is Always false	1	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

<b>Dead Code: Expression is Always false</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.jaxrs.eAnde.dao.impl</b>	
<b>PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/dao/impl/PatientInfoWSDao.java, line 19 (Dead Code: Expression is Always false)</b>	<b>Low</b>
<b>Issue Details</b>	

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

## Sink Details

**Sink:** IfStatement  
**Enclosing Method:** lookupPatientByKey()  
**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/dao/impl/PatientInfoWSDao.java:19  
**Taint Flags:**

```
16
17 try {
18     getEESummaryResponse eeSummaryResponse = eeClient.returnResponse(key);
19     if (eeSummaryResponse != null){
20         patientInfo.setEligibilityStatus(eeSummaryResponse.getSummary().getEligibilityVerificationInfo())
21         patientInfo.setEnrollmentStatus(eeSummaryResponse.getSummary().getEnrollmentDeterminationInfo())
22     };
```

<b>Dead Code: Expression is Always false</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.jaxrs.eAnde.dao.impl</b>	
<b>PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/dao/impl/ PatientInfoWSDao.java, line 19 (Dead Code: Expression is Always false)</b>	<b>Low</b>

## Dead Code: Expression is Always true (1 issue)

### Abstract

This expression (or part of it) will always evaluate to `true`.

### Explanation

This expression (or part of it) will always evaluate to `true`; the program could be rewritten in a simpler form. The nearby code may be present for debugging purposes, or it may not have been maintained along with the rest of the program. The expression may also be indicative of a bug earlier in the method.

**Example 1:** The following method never sets the variable `secondCall` after initializing it to `true`. (The variable `firstCall` is mistakenly used twice.) The result is that the expression `firstCall || secondCall` will always evaluate to `true`, so `setUpForCall()` will always be invoked.

```
public void setUpCalls() {
    boolean firstCall = true;
    boolean secondCall = true;

    if (fCall < 0) {
        cancelFCall();
        firstCall = false;
    }
    if (sCall < 0) {
        cancelSCall();
        firstCall = false;
    }

    if (firstCall || secondCall) {
        setUpForCall();
    }
}
```

**Example 2:** The following method tries to check the variables `firstCall` and `secondCall`. (The variable `firstCall` is mistakenly set to `true` instead of being checked.) The result is that the first part of the expression `firstCall = true && secondCall == true` will always evaluate to `true`.

```
public void setUpCalls() {
    boolean firstCall = false;
    boolean secondCall = false;

    if (fCall > 0) {
        setUpFCall();
        firstCall = true;
    }
    if (sCall > 0) {
        setUpSCall();
        secondCall = true;
    }

    if (firstCall = true && secondCall == true) {
        setUpDualCall();
    }
}
```

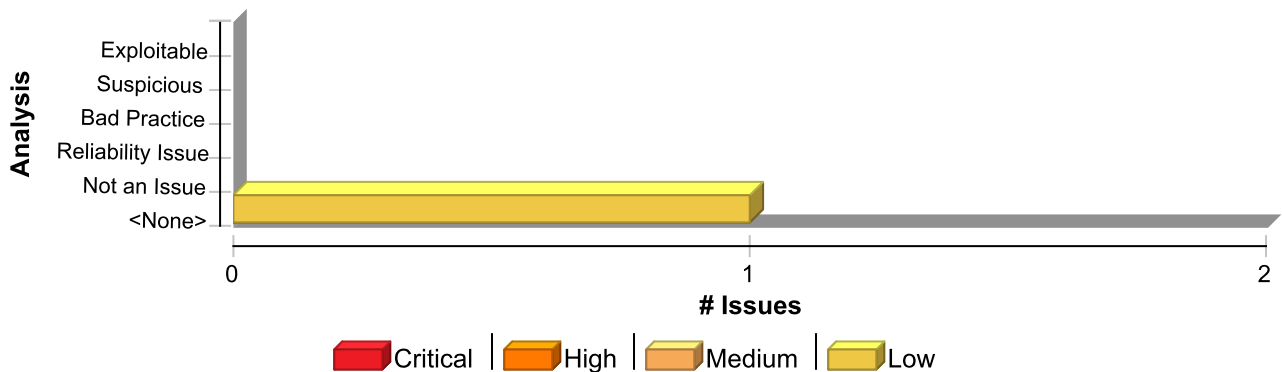


```
}
}
```

## Recommendation

In general, you should repair or remove unused code. It causes additional complexity and maintenance burden without contributing to the functionality of the program.

## Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Dead Code: Expression is Always true	1	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

<b>Dead Code: Expression is Always true</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.jaxrs.eAnde.services.impl</b>	
<b>PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary_Client.java, line 72 (Dead Code: Expression is Always true)</b>	<b>Low</b>
<b>Issue Details</b>	

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

## Sink Details

**Sink:** IfStatement  
**Enclosing Method:** returnResponse()  
**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java:72  
**Taint Flags:**

```
69
70 URL wsdlURL = EeSummaryPortService.WSDL_LOCATION;
71
72 if (url.length() > 0 && url != null && !"".equals(url)) {
73     File wsdlFile = new File(url);
74     try {
75         if (wsdlFile.exists()) {
```

## 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.

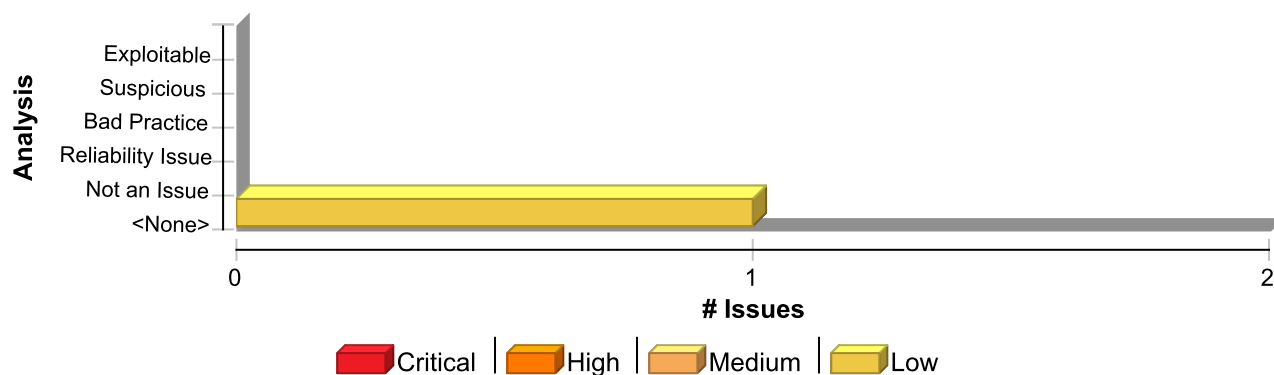
```
InputStream zipInput = zipFile.getInputStream(zipEntry);
```

```

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
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

### 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 67 (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:67  
**Taint Flags:**

64 String line = null;

**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 67 (Denial of Service)****Low**

```
65  int i = 0;
66  try{
67  while(null != (line = br.readLine())) {
68  xmlList.add(i, line.trim()+ "\r\n");
69  System.out.println("xml("+ i +")=" +line.trim());
70  i++;
```

## J2EE Misconfiguration: Excessive Session Timeout (2 issues)

### 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 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/>

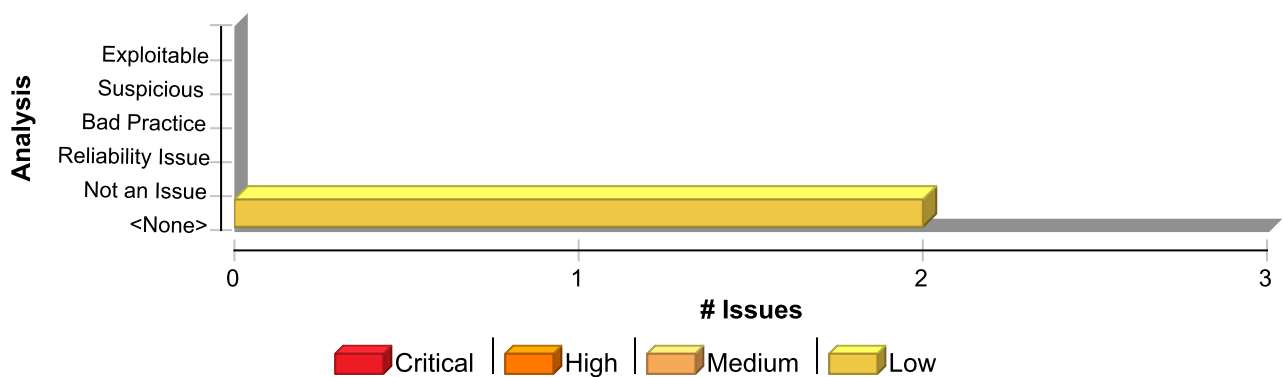
### Recommendation

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	2	0	0	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### J2EE Misconfiguration: Excessive Session Timeout

Low

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

PS\_INB\_ERX\_JMS/src/main/webapp/WEB-INF/web.xml, line 5 (J2EE Misconfiguration: Excessive Session Timeout)

Low

#### Issue Details

**Kingdom:** Environment

**Scan Engine:** SCA (Configuration)

#### Sink Details

**File:** PS\_INB\_ERX\_JMS/src/main/webapp/WEB-INF/web.xml:5

**Taint Flags:**

```
2 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3 xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
4 http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
5 version="3.0">
6 <display-name>Inbound eRx JMS Receiver</display-name>
7
8 <listener>
```

PS\_INB\_ERX\_WS/src/main/webapp/WEB-INF/web.xml, line 6 (J2EE Misconfiguration: Excessive Session Timeout)

Low

#### Issue Details

**Kingdom:** Environment

**Scan Engine:** SCA (Configuration)

#### Sink Details

**File:** PS\_INB\_ERX\_WS/src/main/webapp/WEB-INF/web.xml:6

**Taint Flags:**

```
3 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4 xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
5 http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
6 metadata-complete="true">
7
8 <display-name>Inbound eRx WS Application</display-name>
9 <description></description>
```

## J2EE Misconfiguration: Incomplete Error Handling (1 issue)

### Abstract

A web application must define a default error page for 500 errors to prevent attackers from mining information from the application container's built-in error response.

### Explanation

When an attacker explores a web site looking for vulnerabilities, the amount of information that the site provides is crucial to the eventual success or failure of any attempted attacks. If the application shows the attacker a stack trace, it relinquishes information that makes the attacker's job significantly easier. For example, a stack trace might show the attacker a malformed SQL query string, the type of database being used, and the version of the application container. This information enables the attacker to target known vulnerabilities in these components.

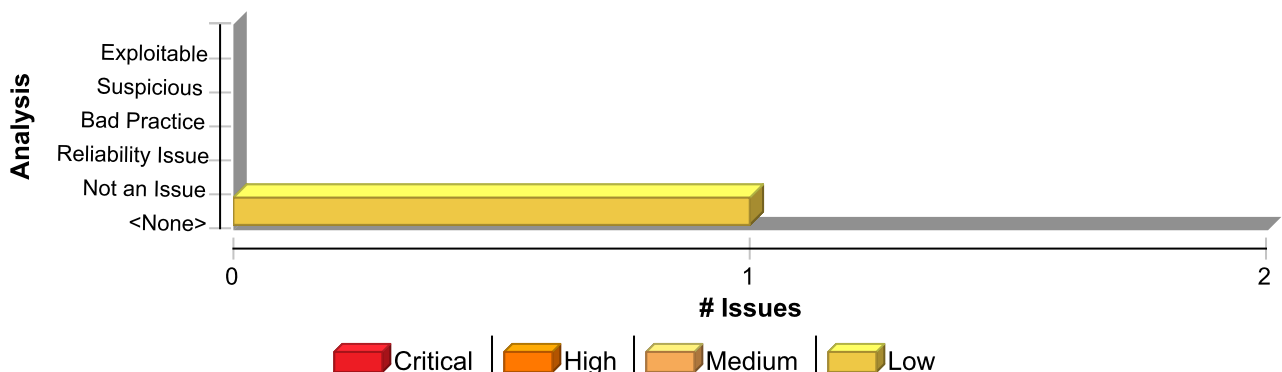
The application configuration should specify a default error page in order to guarantee that the application will never leak error messages to an attacker. Handling standard HTTP error codes is useful and user-friendly in addition to being a good security practice, and a good configuration will also define a last-chance error handler that catches any exception that could possibly be thrown by the application.

### Recommendation

A web application must be configured with a default error page. Your `web.xml` should include at least the following entries:

```
<error-page>
  <exception-type>java.lang.Throwable</exception-type>
<location>/error.jsp</location>
</error-page>
<error-page>
  <error-code>404</error-code>
<location>/error.jsp</location>
</error-page>
<error-page>
  <error-code>500</error-code>
<location>/error.jsp</location>
</error-page>
```

### Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
J2EE Misconfiguration: Incomplete Error Handling	1	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

### J2EE Misconfiguration: Incomplete Error Handling

Low

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

PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/web.xml, line 84 (J2EE Misconfiguration: Incomplete Error Handling)

Low

#### Issue Details

**Kingdom:** Environment

**Scan Engine:** SCA (Configuration)

#### Sink Details

**Sink:** /web-app/error-page/error-code

**File:** PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/web.xml:84

**Taint Flags:**

```
81
82 -->
83 <error-page>
84 <error-code>404</error-code>
85 <location>/WEB-INF/page404.jsp</location>
86 </error-page>
87
```



## J2EE Misconfiguration: Missing Error Handling (2 issues)

### Abstract

A web application must define default error pages in order to prevent attackers from mining information from the application container's built-in error response.

### Explanation

When an attacker explores a web site looking for vulnerabilities, the amount of information that the site provides is crucial to the eventual success or failure of any attempted attacks. If the application shows the attacker a stack trace, it relinquishes information that makes the attacker's job significantly easier. For example, a stack trace might show the attacker a malformed SQL query string, the type of database being used, and the version of the application container. This information enables the attacker to target known vulnerabilities in these components.

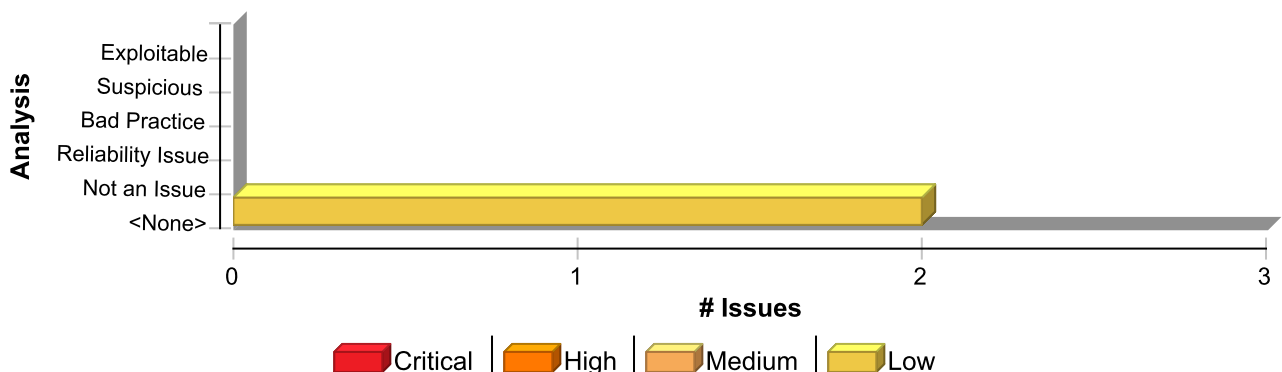
The application configuration should specify a default error page in order to guarantee that the application will never leak error messages to an attacker. Handling standard HTTP error codes is useful and user-friendly in addition to being a good security practice, and a good configuration will also define a last-chance error handler that catches any exception that could possibly be thrown by the application.

### Recommendation

A web application must be configured with a default error page. Your `web.xml` should include at least the following entries:

```
<error-page>
  <exception-type>java.lang.Throwable</exception-type>
<location>/error.jsp</location>
</error-page>
<error-page>
  <error-code>404</error-code>
<location>/error.jsp</location>
</error-page>
<error-page>
  <error-code>500</error-code>
<location>/error.jsp</location>
</error-page>
```

### Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
J2EE Misconfiguration: Missing Error Handling	2	0	0	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### J2EE Misconfiguration: Missing Error Handling

Low

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

PS\_INB\_ERX\_JMS/src/main/webapp/WEB-INF/web.xml, line 5 (J2EE Misconfiguration: Missing Error Handling)

Low

#### Issue Details

**Kingdom:** Environment

**Scan Engine:** SCA (Configuration)

#### Sink Details

**Sink:** /web-app

**File:** PS\_INB\_ERX\_JMS/src/main/webapp/WEB-INF/web.xml:5

**Taint Flags:**

```
2 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3 xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
4 http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
5 version="3.0">
6 <display-name>Inbound eRx JMS Receiver</display-name>
7
8 <listener>
```

PS\_INB\_ERX\_WS/src/main/webapp/WEB-INF/web.xml, line 6 (J2EE Misconfiguration: Missing Error Handling)

Low

#### Issue Details

**Kingdom:** Environment

**Scan Engine:** SCA (Configuration)

#### Sink Details

**Sink:** /web-app

**File:** PS\_INB\_ERX\_WS/src/main/webapp/WEB-INF/web.xml:6

**Taint Flags:**

```
3 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4 xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
5 http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
6 metadata-complete="true">
7
8 <display-name>Inbound eRx WS Application</display-name>
9 <description></description>
```

## Missing Check against Null (5 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

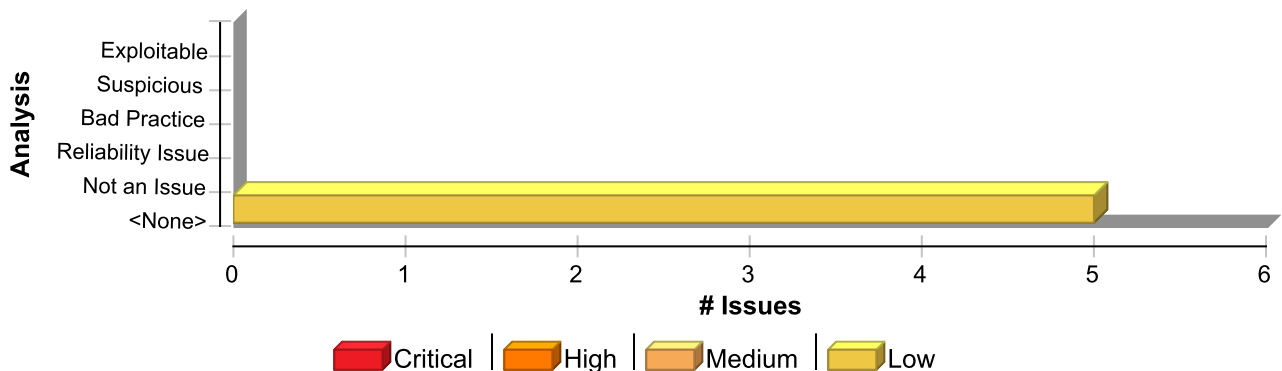
value.

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	5	0	0	5
Total	5	0	0	5

Missing Check against Null	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 50 (Missing Check against Null)	Low

#### Issue Details

**Kingdom:** API Abuse  
**Scan Engine:** SCA (Control Flow)

#### Sink Details

**Missing Check against Null****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 50 (Missing Check against Null)****Low****Sink:** getClassLoader() : Class.getClassLoader may return NULL**Enclosing Method:** returnResponse()**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java:50**Taint Flags:**

```
47
48  InputStream inputStream = null;
49
50  inputStream =
this.getClass().getClassLoader().getResourceAsStream("gov.va.med.pharmacy.wsclients.properties")
51  try{
52  if(null!=inputStream){
53  properties.load(inputStream);
```

**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 733 (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:733**Taint Flags:**

```
730  */
731  private void setupTLS(VAIdMPort port, Properties properties) throws
FileNotFoundException, IOException, GeneralSecurityException {
732
733  ClassLoader classloader = this.getClass().getClassLoader();
734
735  File file = new
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile
736  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 162 (Missing Check against Null)****Low****Issue Details****Kingdom:** API Abuse**Scan Engine:** SCA (Control Flow)**Sink Details**

## 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 162 (Missing Check against Null)

Low

**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:162

**Taint Flags:**

```
159
160 InputStream inputStream = null;
161 try {
162     inputStream = this.getClass().getClassLoader()
163         .getResourceAsStream("gov.va.med.pharmacy.wsclients.properties");
164     if (null != inputStream) {
165         properties.load(inputStream);
```

Package: gov.va.med.pharmacy.utility

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 68 (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:68

**Taint Flags:**

```
65
66 InputStream inputStream = null;
67 try{
68     inputStream =
69     this.getClass().getClassLoader().getResourceAsStream("gov.va.med.pharmacy.vistalink.properties")
70     if (null!=inputStream) {
71         properties.load(inputStream);
```

Package: gov.va.med.pharmacy.wsclients.eAnde

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 30 (Missing Check against Null)

Low

### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Control Flow)

### Sink Details

**Missing Check against Null****Low****Package:** gov.va.med.pharmacy.wsclients.eAnde**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 30 (Missing Check against Null)****Low****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:30**Taint Flags:**

```
27
28 String password = null;
29
30 inputStream =
this.getClass().getClassLoader().getResourceAsStream("gov.va.med.pharmacy.wsclients.properties")
31 try{
32 if (null != inputStream) {
33 properties.load(inputStream);
```

## Obsolete: Deprecated by ESAPI (67 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.

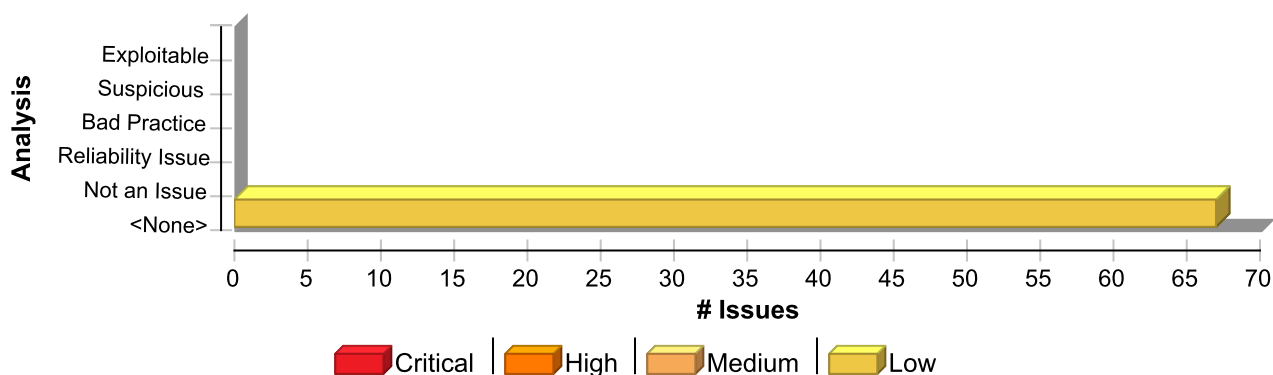
#### **The list of banned and replacement API's:**

**Banned 001** System.out.println()  
ESAPI Replacement: Logger.\*  
**Banned 002** Throwable.printStackTrace()  
ESAPI Replacement: Logger.\*  
**Banned 003** Runtime.exec()  
ESAPI Replacement: Executor.safeExec()  
**Banned 004** Session.getId()  
ESAPI Replacement: Randomizer.getRandomString (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.safeSendRedirect()  
**Banned 012** RequestDispatcher.forward()  
 ESAPI Replacement: HTTPUtilities.safeSendForward()  
**Banned 013** ServletResponse.addHeader()  
 ESAPI Replacement: HTTPUtilities.safeSetHeader()/safeSetHeader()  
**Banned 014** ServletResponse.addCookie()  
 ESAPI Replacement: HTTPUtilities.safeAddCookie()  
**Banned 015** ServletRequest.isSecure()  
 ESAPI Replacement: HTTPUtilities.isSecureChannel()  
**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: HTTPUtilities.safeEncodeURL() (better not to use at all)  
**Banned 022** ServletResponse.encodeRedirectURL  
 ESAPI Replacement: HTTPUtilities.safeEncodeRedirectURL() (better not to use at all)  
**Banned 023** javax.servlet.ServletInputStream.readLine  
 ESAPI Replacement: Validator.safeReadLine()

## Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Obsolete: Deprecated by ESAPI	67	0	0	67
<b>Total</b>	<b>67</b>	<b>0</b>	<b>0</b>	<b>67</b>

**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 61 (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:61

**Taint Flags:**

```
58 StreamUtilities.safeClose(inputStream);
59 }
60 }
61 eAndeEndpoint = properties.getProperty(E_AND_E_CLIENT_ENDPOINT).trim();
62
63 username = properties.getProperty(E_AND_E_USERNAME).trim();
64
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java, line 42 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Semantic)

#### Sink Details

**Sink:** Properties()

**Enclosing Method:** returnResponse()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java:42

**Taint Flags:**

```
39
40 public getEESummaryResponse returnResponse(String key) throws java.lang.Exception {
41
42 Properties properties = new Properties();
43
44 String username = null;
45 String eAndeEndpoint = null;
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java, line 63 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Semantic)

**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 63 (Obsolete: Deprecated by ESAPI)**

**Low**

#### 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:63

**Taint Flags:**

```
60 }
61 eAndeEndpoint = properties.getProperty(E_AND_E_CLIENT_ENDPOINT).trim();
62
63 username = properties.getProperty(E_AND_E_USERNAME).trim();
64
65 eAndeRequestName = properties.getProperty(E_AND_E_REQUEST_NAME).trim();
66
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java, line 53 (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:53

**Taint Flags:**

```
50 inputStream =
this.getClass().getClassLoader().getResourceAsStream("gov.va.med.pharmacy.wsclients.properties")
51 try{
52 if(null!=inputStream){
53 properties.load(inputStream);
54 }
55 }
56 finally{
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java, line 65 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Semantic)

#### Sink Details

**Sink:** getProperty()

**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 65 (Obsolete: Deprecated by ESAPI)**

**Low**

**File: PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java:65**

**Taint Flags:**

```
62
63 username = properties.getProperty(E_AND_E_USERNAME).trim();
64
65 eAndeRequestName = properties.getProperty(E_AND_E_REQUEST_NAME).trim();
66
67 String url = "";
68
```

**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 165 (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:165

**Taint Flags:**

```
162 inputStream = this.getClass().getClassLoader()
163 .getResourceAsStream("gov.va.med.pharmacy.wsclients.properties");
164 if (null != inputStream) {
165     properties.load(inputStream);
166 }
167 } finally {
168 if (null != inputStream) {
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 158 (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:158

**Taint Flags:**

**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 158 (Obsolete: Deprecated by ESAPI)**

**Low**

```
155
156 // System.setProperty("javax.net.debug", "ssl, handshake");
157
158 Properties properties = new Properties();
159
160 InputStream inputStream = null;
161 try {
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 745 (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:745

**Taint Flags:**

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

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 735 (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:735

**Taint Flags:**

```
732
733 ClassLoader classloader = this.getClass().getClassLoader();
734
735 File file = new
```

**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 735 (Obsolete: Deprecated by ESAPI)**

**Low**

```
File(classloader.getResource(properties.getProperty(KEYSTORE_FILE_NAME_PROPERTY).trim()).getFile  
736 HTTPConduit httpConduit = (HTTPConduit) ClientProxy.getClient(port).getConduit();  
737  
738 // We do two FileInpustreams otherwise it gives EOFException as the file
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 192 (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:192

**Taint Flags:**

```
189 VAIdMPort port = ss.getVAIdMPort();  
190  
191  
192 mviClientEndpoint = properties.getProperty(MVI_CLIENT_ENDPOINT_PROPERTY).trim(); // trim  
the value for any potential whitespace.  
193 // Secure Dev  
194 ((BindingProvider)  
port).getRequestContext().put(BindingProvider.ENDPOINT_ADDRESS_PROPERTY, mviClientEndpoint);  
195
```

**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 42 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendOutboundMessage()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:42

**Taint Flags:**

```
39 OutboundNCPDPMMessageResponse wsResponse = new OutboundNCPDPMMessageResponse();
```

**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 42 (Obsolete: Deprecated by ESAPI)**

**Low**

```
40 try {
41
42 System.out.println("----- getting outbound entity ---- ");
43
44 OutboundNcpdpMsgEntity outboundMsgEntity = null;
45
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 57 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendOutboundMessage()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:57

**Taint Flags:**

```
54
55 wsResponse.setSuccess(true);
56
57 System.out.println("----- entity id
returned---- :"+outboundMsgEntity.getOutboundNcpdpMsgId());
58
59 MessageType outboundMessage = null;
60
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 77 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendOutboundMessage()

**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 77 (Obsolete: Deprecated by ESAPI)**

**Low**

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:77

**Taint Flags:**

```
74
75 Response res = client.post(outboundMessage);
76
77 System.out.println("----- DAS Web Service Response Start ----- ");
78
79 System.out.println(res.getStatus());
80
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 79 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendOutboundMessage()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:79

**Taint Flags:**

```
76
77 System.out.println("----- DAS Web Service Response Start ----- ");
78
79 System.out.println(res.getStatus());
80
81 System.out.println("----- DAS Web Service Response End ----- ");
82
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 81 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)



**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 81 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendOutboundMessage()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:81

**Taint Flags:**

```
78
79 System.out.println(res.getStatus());
80
81 System.out.println("----- DAS Web Service Response End ----- ");
82
83
84
```

**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/VistalboundRpc.java, line 69 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

**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/VistaInboundRpc.java, line 69 (Obsolete: Deprecated by ESAPI)**

**Low**

### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendMessage()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundRpc.java:69

**Taint Flags:**

```
66 try{
67 while(null != (line = br.readLine())) {
68 xmlList.add(i, line.trim()+ "\r\n");
69 System.out.println("xml("+ i +")=" +line.trim());
70 i++;
71 }
72 }
```

**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundDaoImpl.java, line 33 (Obsolete: Deprecated by ESAPI)**

**Low**

### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Semantic)

### Sink Details

**Sink:** printStackTrace()

**Enclosing Method:** sendMessage()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundDaoImpl.java:33

**Taint Flags:**

```
30 sendResults = vistaInboundRpc.sendMessage(vistaInboundObj);
31
32 } catch (Exception e) {
33 e.printStackTrace();
34 throw new Exception(e); // let the exception go all the way up.
35 }
36
```

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

**PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/SummaryReportDaoImpl.java, line 94 (Obsolete: Deprecated by ESAPI)**

**Low**

### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** FunctionCall: println

**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/SummaryReportDaoImpl.java, line 94 (Obsolete: Deprecated by ESAPI)**

**Low**

**Enclosing Method:** find()

**File:** PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/SummaryReportDaoImpl.java:94

**Taint Flags:**

```
91 if (visn.compareTo("") == 0){ //check for All value
92 visn = "%";
93 }
94 System.out.println("visn for stationId query is: "+ visn);
95 criteria.add(Restrictions.like("visn", visn));
96 List<SummaryReportVw> selectRows = (List<SummaryReportVw>) criteria.list();
97
```

**PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/SummaryReportDaoImpl.java, line 45 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: print

**Enclosing Method:** find()

**File:** PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/SummaryReportDaoImpl.java:45

**Taint Flags:**

```
42 @Override
43 public List<SummaryReportVw> find(SummaryReportFilter summaryReportFilter) {
44
45 System.out.print("DateFrom: " + summaryReportFilter.getDateFrom()
46 + " DateTo: " + summaryReportFilter.getDateTo() + "VISN: " + summaryReportFilter.getVisn()
47 + "Station ID: " + summaryReportFilter.getStationId());
48 Criteria criteria = createEntityCriteria().addOrder(Order.asc("pharmacyDivisionName"));
```

**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**

#### 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:25

**Taint Flags:**

**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**

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

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/  
VistaLinkConnectionUtility.java, line 64 (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:64

**Taint Flags:**

```
61 try {
62
63
64     Properties properties = new Properties();
65
66     InputStream inputStream = null;
67     try{
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/  
VistaLinkConnectionUtility.java, line 91 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendRequest()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:91

**Taint Flags:**

```
88 rpcRequest.setUseProprietaryMessageFormat(true);
89 if (rpcParams != null) {
90     rpcRequest.setParams(rpcParams);
91     System.out.println(rpcParams.toString());
```

**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 91 (Obsolete: Deprecated by ESAPI)**

**Low**

```
92 } //else {  
93 //rpcRequest.getParams().setParam(1, "array", rpcParam);  
94 //System.out.println(rpcParam.toString());
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 72 (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:72

**Taint Flags:**

```
69  
70 if(null!=inputStream) {  
71 properties.load(inputStream);  
72 division = properties.getProperty("vistalink.division").trim();  
73 proxyUser = properties.getProperty("vistalink.proxyuser").trim();  
74 }  
75 } finally {
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 71 (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:71

**Taint Flags:**

```
68 inputStream =  
this.getClass().getClassLoader().getResourceAsStream("gov.va.med.pharmacy.vistalink.properties")  
69  
70 if(null!=inputStream) {  
71 properties.load(inputStream);  
72 division = properties.getProperty("vistalink.division").trim();  
73 proxyUser = properties.getProperty("vistalink.proxyuser").trim();  
74 }
```

**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 71 (Obsolete: Deprecated by ESAPI)**

**Low**

**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

**Taint Flags:**

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

**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(e);  
36 }  
37 }  
38 }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/  
VistaLinkConnectionUtility.java, line 110 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**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 110 (Obsolete: Deprecated by ESAPI)**

**Low**

**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:110

**Taint Flags:**

```
107 connection.close();
108 } catch (ResourceException e) {
109 //LOG.error("Error closing VistaLink connection.", e);
110 e.printStackTrace();
111 }
112 }
113 }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 110 (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:110

**Taint Flags:**

```
107 connection.close();
108 } catch (ResourceException e) {
109 //LOG.error("Error closing VistaLink connection.", e);
110 e.printStackTrace();
111 }
112 }
113 }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 110 (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.utility

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 110 (Obsolete: Deprecated by ESAPI)**

**Low**

**Sink:** printStackTrace()

**Enclosing Method:** sendRequest()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:110

**Taint Flags:**

```
107 connection.close();
108 } catch (ResourceException e) {
109 //LOG.error("Error closing VistaLink connection.", e);
110 e.printStackTrace();
111 }
112 }
113 }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 110 (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:110

**Taint Flags:**

```
107 connection.close();
108 } catch (ResourceException e) {
109 //LOG.error("Error closing VistaLink connection.", e);
110 e.printStackTrace();
111 }
112 }
113 }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 110 (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:110

**Taint Flags:**



**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 110 (Obsolete: Deprecated by ESAPI)**

**Low**

```
107 connection.close();
108 } catch (ResourceException e) {
109 //LOG.error("Error closing VistaLink connection.", e);
110 e.printStackTrace();
111 }
112 }
113 }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 73 (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:73

**Taint Flags:**

```
70 if(null!=inputStream) {
71 properties.load(inputStream);
72 division = properties.getProperty("vistalink.division").trim();
73 proxyUser = properties.getProperty("vistalink.proxyuser").trim();
74 }
75 } finally {
76 if (null != inputStream) {
```

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

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java, line 44 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getPharmacyList()

**File:** PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/administration/PharmacyManagementController.java:44

**Taint Flags:**

```
41 public List<Pharmacy> getPharmacyList(HttpServletRequest request, @RequestParam("json")
String json) throws JsonParseException, JsonMappingException, IOException {
42
```

**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 44 (Obsolete: Deprecated by ESAPI)**

**Low**

```
43 String jsonString = JsonSanitizer.sanitize(json); // Sanitize the JSON coming from client
44 System.out.println("json is:" + jsonString);
45
46 List<Pharmacy> pharmacyList = new ArrayList<Pharmacy>();
47
```

**Package: gov.va.med.pharmacy.web.auth**

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/auth/LogoutController.java, line 20 (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:20

**Taint Flags:**

```
17 HttpSession session = request.getSession(false);
18
19 session.removeAttribute(Constants.SESSION_USER);
20 session.invalidate();
21 String logoutMessage;
22
23
```

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 81 (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:81

**Taint Flags:**

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

**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 81 (Obsolete: Deprecated by ESAPI)**

**Low**

```
83 session.removeAttribute("loginErrorMessage");
84
```

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 78 (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:78

**Taint Flags:**

```
75 session.setAttribute(Constants.SESSION_USER, ESAPI.validator().getValidInput("vaUserid",
user.getVaUserid(), "AccountName", 20, false, false));
76 } catch (IntrusionException e) {
77 // TODO Auto-generated catch block
78 e.printStackTrace();
79 } catch (ValidationException e) {
80 // TODO Auto-generated catch block
81 e.printStackTrace();
```

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java, line 71 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** authenticateUser()

**File:** PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/auth/LoginController.java:71

**Taint Flags:**

```
68
69 if(user != null){
70
71 System.out.println("user is:" + user.getVaUserid());
72
73 session.removeAttribute(Constants.SESSION_USER);
74 try {
```

**Obsolete: Deprecated by ESAPI**

**Low**

**Package:** gov.va.med.pharmacy.web.interceptor

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/interceptor/LoginInterceptor.java, line 41 (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:41

**Taint Flags:**

```
38 }
39 if (session.getAttribute("sessionUser") == null) {
40 // logger.debug("no user redirecting to welcome page");
41 response.sendRedirect("/inbound/public/landing");
42 return false;
43 }
44
```

**Package:** gov.va.med.pharmacy.web.reports

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java, line 42 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getSummaryReport()

**File:** PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:42

**Taint Flags:**

```
39 List<SummaryReportVw> summaryReportVwList = new ArrayList<SummaryReportVw>();
40
41 String jsonString = JsonSanitizer.sanitize(json); // Sanitize the JSON coming from client
42 System.out.println("json is:" + jsonString);
43 ObjectMapper jsonMapper = new ObjectMapper();
44 //
45 jsonMapper.configure(com.fasterxml.jackson.databind.DeserializationFeature.ADJUST_DATES_TO_CONTEXT,
46 // false);
```

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java, line 66 (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/SummaryReportController.java, line 66 (Obsolete: Deprecated by ESAPI)**

**Low**

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getStationIdSelect()

**File:** PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:66

**Taint Flags:**

```
63 visn = "";
64 }
65
66 System.out.println("visn is: " + visn);
67
68 summaryReportVwList.addAll(summaryReportService.find(visn));
69
```

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java, line 73 (Obsolete: Deprecated by ESAPI)**

**Low**

### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getStationIdSelect()

**File:** PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:73

**Taint Flags:**

```
70 int i = 0;
71 while (i < summaryReportVwList.size()) {
72     StationIdSelectModel stationIdSelectModel = new StationIdSelectModel();
73     System.out.println("station id: " + summaryReportVwList.get(i).getPharmacyVaStationId());
74     stationIdSelectModel.setId(summaryReportVwList.get(i).getPharmacyVaStationId());
75     stationIdSelectModel.setLabel(summaryReportVwList.get(i).getPharmacyVaStationId());
76     stationIdSelectModelList.add(i, stationIdSelectModel);
77 }
```

**PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java, line 79 (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/SummaryReportController.java, line 79 (Obsolete: Deprecated by ESAPI)**

**Low**

**Sink:** FunctionCall: println

**Enclosing Method:** getStationIdSelect()

**File:** PS\_INB\_ERX\_UI/src/main/java/gov/va/med/pharmacy/web/reports/SummaryReportController.java:79

**Taint Flags:**

```
76 stationIdSelectModelList.add(i, stationIdSelectModel);
77 i++;
78 }
79 System.out.println("list index: " + i);
80 StationIdSelectModel stationIdSelectModel = new StationIdSelectModel();
81 stationIdSelectModel.setId("All");
82 stationIdSelectModel.setLabel(" All ");
```

**Package:** gov.va.med.pharmacy.wsclients.eAnde

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 40 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** updateIVMRecordStatus()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:40

**Taint Flags:**

```
37 */
38 public gov.va.med.pharmacy.wsclients.eAnde.UpdateIVMRecordStatusResponse
updateIVMRecordStatus(UpdateIVMRecordStatusRequest updateIVMRecordStatusRequest) {
39 LOG.info("Executing operation updateIVMRecordStatus");
40 System.out.println(updateIVMRecordStatusRequest);
41 try {
42 gov.va.med.pharmacy.wsclients.eAnde.UpdateIVMRecordStatusResponse _return = null;
43 return _return;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 115 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** sendIVMUpdates()

**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 115 (Obsolete: Deprecated by ESAPI)**

**Low**

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:115

**Taint Flags:**

```
112 */
113 public gov.va.med.pharmacy.wsclients.eAnde.SendIVMUpdatesResponse
sendIVMUpdates(SendIVMUpdatesRequest sendIVMUpdatesRequest) {
114     LOG.info("Executing operation sendIVMUpdates");
115     System.out.println(sendIVMUpdatesRequest);
116     try {
117         gov.va.med.pharmacy.wsclients.eAnde.SendIVMUpdatesResponse _return = null;
118         return _return;
```

**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 }
```

**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;
```

**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**

```
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 145 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** updateDeliveryPreference()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:145

**Taint Flags:**

```
142 */
143 public gov.va.med.pharmacy.wsclients.eAnde.UpdateDeliveryPreferenceResponse
updateDeliveryPreference(UpdateDeliveryPreferenceRequest updateDeliveryPreferenceRequest) {
144 LOG.info("Executing operation updateDeliveryPreference");
145 System.out.println(updateDeliveryPreferenceRequest);
146 try {
147 gov.va.med.pharmacy.wsclients.eAnde.UpdateDeliveryPreferenceResponse _return = null;
148 return _return;
```

**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();
```



**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 180 (Obsolete: Deprecated by ESAPI)**

**Low**

```
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

**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/EeSummaryPortSoap11Impl.java, line 100 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getIVMLetterStatuses()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:100

**Taint Flags:**

```
97 */
98 public gov.va.med.pharmacy.wsclients.eAnde.GetIVMLetterStatusesResponse
getIVMLetterStatuses(GetIVMLetterStatusesRequest getIVMLetterStatusesRequest) {
99 LOG.info("Executing operation getIVMLetterStatuses");
100 System.out.println(getIVMLetterStatusesRequest);
101 try {
102 gov.va.med.pharmacy.wsclients.eAnde.GetIVMLetterStatusesResponse _return = null;
103 return _return;
```

**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 100 (Obsolete: Deprecated by ESAPI)**

**Low**

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 22 (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:22

**Taint Flags:**

```
19
20 public void handle(Callback[] callbacks) throws IOException, UnsupportedCallbackException {
21
22     Properties properties = new Properties();
23
24     InputStream inputStream = null;
25
```

**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)

#### 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 55 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**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 55 (Obsolete: Deprecated by ESAPI)**

**Low**

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getDeliveryPreference()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:55

**Taint Flags:**

```
52  */
53  public gov.va.med.pharmacy.wsclients.eAnde.GetDeliveryPreferenceResponse
getDeliveryPreference(GetDeliveryPreferenceRequest getDeliveryPreferenceRequest) {
54  LOG.info("Executing operation getDeliveryPreference");
55  System.out.println(getDeliveryPreferenceRequest);
56  try {
57  gov.va.med.pharmacy.wsclients.eAnde.GetDeliveryPreferenceResponse _return = null;
58  return _return;
```

**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)

**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**

#### Sink Details

**Sink:** printStackTrace()

**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 85 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getPersonNotification()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:85

**Taint Flags:**

```
82 */
83 public gov.va.med.pharmacy.wsclients.eAnde.GetPersonNotificationResponse
getPersonNotification(GetPersonNotificationRequest getPersonNotificationRequest) {
84 LOG.info("Executing operation getPersonNotification");
85 System.out.println(getPersonNotificationRequest);
86 try {
87 gov.va.med.pharmacy.wsclients.eAnde.GetPersonNotificationResponse _return = null;
88 return _return;
```

**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:** getIVMLetterStatueses()

**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 105 (Obsolete: Deprecated by ESAPI)**

**Low**

**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 33 (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:33

**Taint Flags:**

```
30 inputStream =
this.getClass().getClassLoader().getResourceAsStream("gov.va.med.pharmacy.wsclients.properties")
31 try{
32     if (null != inputStream) {
33         properties.load(inputStream);
34     }
35 }
36 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 }
```

**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 42 (Obsolete: Deprecated by ESAPI)**

**Low**

```
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 160 (Obsolete: Deprecated by ESAPI)**

**Low**

### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getEligibilityDetermination()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:160

**Taint Flags:**

```
157 */
158 public gov.va.med.pharmacy.wsclients.eAnde.GetEligibilityDeterminationResponse
getEligibilityDetermination(GetEligibilityDeterminationRequest
getEligibilityDeterminationRequest) {
159 LOG.info("Executing operation getEligibilityDetermination");
160 System.out.println(getEligibilityDeterminationRequest);
161 try {
162 gov.va.med.pharmacy.wsclients.eAnde.GetEligibilityDeterminationResponse _return = null;
163 return _return;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 70 (Obsolete: Deprecated by ESAPI)**

**Low**

### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** retrieveIVMCandidates()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:70

**Taint Flags:**

```
67 */
68 public gov.va.med.pharmacy.wsclients.eAnde.RetrieveIVMCandidatesResponse
retrieveIVMCandidates(RetrieveIVMCandidatesRequest retrieveIVMCandidatesRequest) {
69 LOG.info("Executing operation retrieveIVMCandidates");
```

**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 70 (Obsolete: Deprecated by ESAPI)**

**Low**

```
70 System.out.println(retrieveIVMCandidatesRequest);
71 try {
72     gov.va.med.pharmacy.wsclients.eAnde.RetrieveIVMCandidatesResponse _return = null;
73     return _return;
```

**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;
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 130 (Obsolete: Deprecated by ESAPI)**

**Low**

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getEESummaryHistory()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:130

**Taint Flags:**

```
127 */
128 public gov.va.med.pharmacy.wsclients.eAnde.GetEESummaryHistoryResponse
getEESummaryHistory(GetEESummaryHistoryRequest getEESummaryHistoryRequest) {
129     LOG.info("Executing operation getEESummaryHistory");
130     System.out.println(getEESummaryHistoryRequest);
131     try {
132         gov.va.med.pharmacy.wsclients.eAnde.GetEESummaryHistoryResponse _return = null;
```

<b>Obsolete: Deprecated by ESAPI</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.wsclients.eAnde</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 130 (Obsolete: Deprecated by ESAPI)</b>	<b>Low</b>

```
133 return _return;
```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 175 (Obsolete: Deprecated by ESAPI)</b>	<b>Low</b>
---	------------

#### Issue Details

**Kingdom:** API Abuse

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** FunctionCall: println

**Enclosing Method:** getEESummary()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java:175

**Taint Flags:**

```
172 */
173 public gov.va.med.pharmacy.wsclients.eAnde.getEESummaryResponse
getEESummary(GetEESummaryRequest getEESummaryRequest) {
174 LOG.info("Executing operation getEESummary");
175 System.out.println(getEESummaryRequest);
176 try {
177 gov.va.med.pharmacy.wsclients.eAnde.getEESummaryResponse _return = null;
178 return _return;
```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/EeSummaryPortSoap11Impl.java, line 45 (Obsolete: Deprecated by ESAPI)</b>	<b>Low</b>
--	------------

#### 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 }
```



**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**

### 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 StreamUtilities.safeClose(inputStream);
39 }
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++) {
```

## Password Management (2 issues)

### Abstract

Storing a password in plaintext can result in a system compromise.

### Explanation

Password management issues occur when a password is stored in plaintext 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. If a devious employee has access to this information, they can use it to break into the system.

In the mobile world, password management is even trickier, considering a much higher 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 plaintext 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 plaintext. Instead, the password should be entered by an administrator 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. For a secure generic solution, the best option today appears to be a proprietary mechanism that you create.

For Android, as well as any other platform that uses SQLite database, a good option is SQLCipher -- an extension to SQLite database that provides transparent 256-bit AES encryption of database files. Thus, credentials can be stored in an encrypted database.

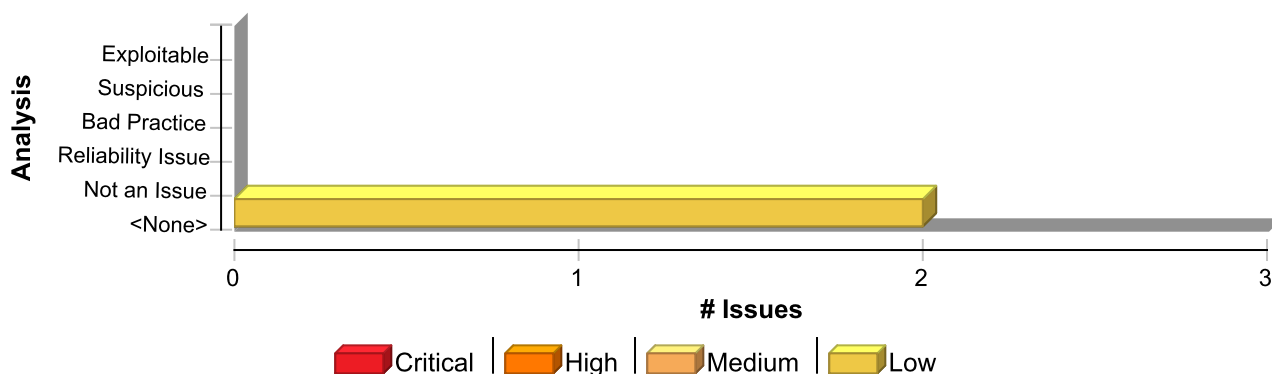
**Example 3:** The code below demonstrates how to integrate SQLCipher into an Android application after downloading the necessary binaries, and store credentials into the database file.

```
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	2	0	0	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

<b>Password Management</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.jaxrs.mvi.dao.impl</b>	
<b>PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 762 (Password Management)</b>	<b>Low</b>

#### 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:165

```

162  inputStream = this.getClass().getClassLoader()
163  .getResourceAsStream("gov.va.med.pharmacy.wsclients.properties");
164  if (null != inputStream) {
165  properties.load(inputStream);
166  }
167  } finally {
168  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:762  
**Taint Flags:** PROPERTY

```

759  try {
760  fileIn2 = new FileInputStream(file);
761  KeyStore trustStore = KeyStore.getInstance(KEYSTORE_FILE_TYPE);
762  trustStore.load(fileIn2, keyPasswd.toCharArray());
763  TrustManager[] myTrustStoreKeyManagers = getTrustManagers(trustStore);
764  tlsCP.setTrustManagers(myTrustStoreKeyManagers);
765  httpConduit.setTlsClientParameters(tlsCP);

```

<b>PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java, line 750 (Password Management)</b>	<b>Low</b>
--	------------

#### 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:165

## 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 750 (Password Management)

Low

```
162 inputStream = this.getClass().getClassLoader()  
163 .getResourceAsStream("gov.va.med.pharmacy.wsclients.properties");  
164 if (null != inputStream) {  
165     properties.load(inputStream);  
166 }  
167 } finally {  
168     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:750

**Taint Flags:** PROPERTY

```
747  
748 try {  
749     fileIn1 = new FileInputStream(file);  
750     keyStore.load(fileIn1, keyPasswd.toCharArray());  
751     KeyManager[] myKeyManagers = getKeyManagers(keyStore, keyPasswd);  
752     tlsCP.setKeyManagers(myKeyManagers);  
753 } finally {
```

## Password Management: Hardcoded Password (2 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. Once 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 will be forced to 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. Once 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 could 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 world, password management is even trickier, considering a much higher 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 plaintext 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. For a secure generic solution, the best option today appears to be a proprietary mechanism that you create.

For Android, as well as any other platform that uses SQLite database, a good option is SQLCipher -- an extension to SQLite database that provides transparent 256-bit AES encryption of database files. Thus, credentials can be stored in an encrypted database.

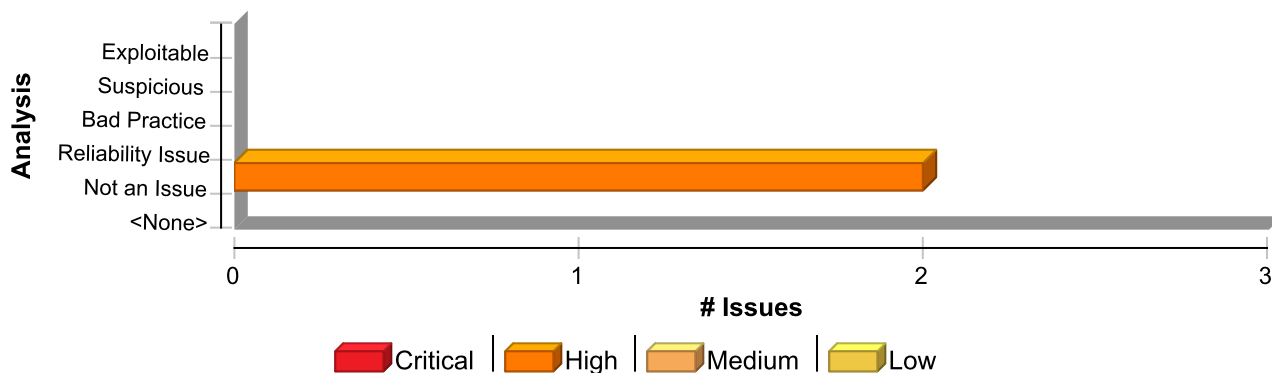
**Example 3:** The code below demonstrates how to integrate SQLCipher into an Android application after downloading the necessary binaries, and store credentials into the database file.

```
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	2	0	0	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### Password Management: Hardcoded Password

High

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 98 (Password Management: Hardcoded Password)

High

#### Issue Details

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

#### Audit Details

Analysis Not an Issue

#### Audit Comments

**VHAHAMWandIJ:** Sun Dec 18 2016 17:51:45 GMT-0500 (EST)  
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:98  
**Taint Flags:**

```
95 private static final String MVI_CLIENT_ENDPOINT_PROPERTY = "mvi.client.endpoint";
96 private static final String KEYSTORE_FILE_TYPE = "JKS";
97 private static final String KEYSTORE_FILE_NAME_PROPERTY = "keystore.filename";
98 private static final String KEYSTORE_PASSWD_PROPERTY = "keystore.password";
99 private static final String LEGAL_NAME = "Legal Name";
100 private static final String L_CHARACTER = "L";
101 private static final String EMPTY_STRING = "";
```

Package: gov.va.med.pharmacy.wsclients.eAnde

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/  
ClientPasswordCallback.java, line 17 (Password Management: Hardcoded  
Password)

High

#### Issue Details

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

#### Audit Details

Analysis Not an Issue

#### Audit Comments

**VHAHAMWandIJ:** Sun Dec 18 2016 17:51:45 GMT-0500 (EST)  
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.wsclients.eAnde**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java, line 17 (Password Management: Hardcoded Password)****High****Sink:** FieldAccess: E\_AND\_E\_PASSWD**Enclosing Method:** ()**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/ClientPasswordCallback.java:17**Taint Flags:**

```
14
15 public class ClientPasswordCallback implements CallbackHandler {
16
17     private static final String E_AND_E_PASSWD = "eAnde.password";
18     private static final String E_AND_E_USERNAME = "eAnde.username";
19
20     public void handle(Callback[] callbacks) throws IOException, UnsupportedCallbackException {
```

## Password Management: Password in Comment (18 issues)

### Abstract

Storing passwords or password details in plaintext 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. Once 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 will be forced to choose between security and availability.

**Example:** The following comment specifies the default password to connect to a database:

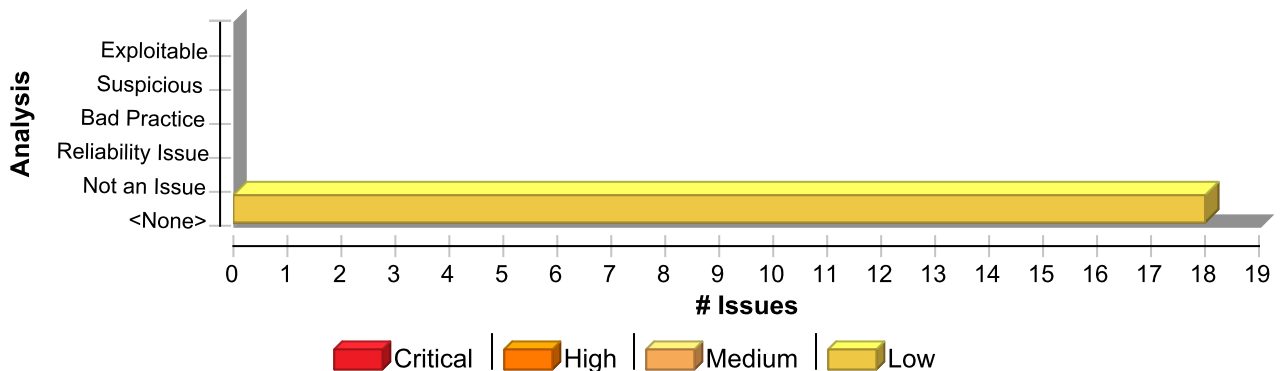
```
...  
// Default username for database connection is "scott"  
// Default password for database connection is "tiger"  
...
```

This code will run successfully, but anyone who has access to it will have access to the password. Once 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 could 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 plaintext 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
<b>Total</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>18</b>

### 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/  
PasswordType.java, line 19 (Password Management: Password in Comment)

Low

#### Issue Details

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Comment  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/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/ncpdpmmsgs/  
PasswordRequestType.java, line 61 (Password Management: Password in  
Comment)

Low

#### Issue Details

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Comment  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncpdpmmsgs/PasswordRequestType.java:61  
**Taint Flags:**

```
58 return oldPassword;
59 }
60
61 /**
62  * Sets the value of the oldPassword property.
63  *
64  * @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/UsernameTokenType.java, line 96 (Password Management: Password in Comment)****Low****Issue Details**

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

**Sink Details**

**Sink:** Comment  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/UsernameTokenType.java:96  
**Taint Flags:**

```
93 return password;  
94 }  
95  
96 /**  
97  * Sets the value of the password property.  
98  *  
99  * @param value
```

**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)

**Sink Details**

**Sink:** Comment  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java:59  
**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/ncdpmsgs/PasswordRequestType.java, line 49 (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/PasswordRequestType.java, line 49 (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: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/ncdpmsgs/ObjectFactory.java, line 828 (Password Management: Password in Comment)****Low****Issue Details****Kingdom:** Security Features**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Comment**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/ObjectFactory.java:828**Taint Flags:**

```
825 return new SecurityIdentificationType();
826 }
827
828 /**
829  * Create an instance of {@link PasswordType }
830  *
831  */
```

**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)**Sink Details****Sink:** Comment**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java:17**Taint Flags:**

**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/  
BodyType.java, line 17 (Password Management: Password in Comment)****Low**

```
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.
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/  
ObjectFactory.java, line 524 (Password Management: Password in Comment)****Low****Issue Details**

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

**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)

**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 /**
```

**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**

```
85  * Gets the value of the password property.  
86  *  
87  * @return
```

**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)

**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)

**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  }  
515  
516  /**  
517  * Create an instance of {@link PasswordChange }  
518  *  
519  */
```

<b>Password Management: Password in Comment</b>	<b>Low</b>
---	------------

**Package:** .src.main.java.gov.va.med.pharmacy.ncdpmsgs

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java, line 17 (Password Management: Password in Comment)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Comment  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/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.
```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordRequestType.java, line 85 (Password Management: Password in Comment)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Security Features  
**Scan Engine:** SCA (Structural)

#### 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
```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/PasswordChange.java, line 18 (Password Management: Password in Comment)</b>	<b>Low</b>
---	------------

#### 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/PasswordChange.java, line 18 (Password Management: Password in Comment)****Low****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)**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)**Sink Details****Sink:** Comment**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/ncdpmsgs/BodyType.java:361

**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/  
BodyType.java, line 361 (Password Management: Password in Comment)****Low****Taint Flags:**

```
358 return passwordChange;  
359 }  
360  
361 /**  
362  * Sets the value of the passwordChange property.  
363  *  
364  * @param value
```

**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)

**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)

**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
```

<b>Password Management: Password in Comment</b>		<b>Low</b>
<b>Package: .src.main.java.gov.va.med.pharmacy.ncpdmsgs</b>		
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/ncpdmsgs/PasswordChange.java, line 47 (Password Management: Password in Comment)</b>		<b>Low</b>
<pre> 47  /** 48   * Gets the value of the request property. 49   * 50   * @return </pre>		

## Poor Error Handling: Overly Broad Catch (10 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 ugly and repetitive, but "condensing" catch blocks by catching a high-level class like `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:

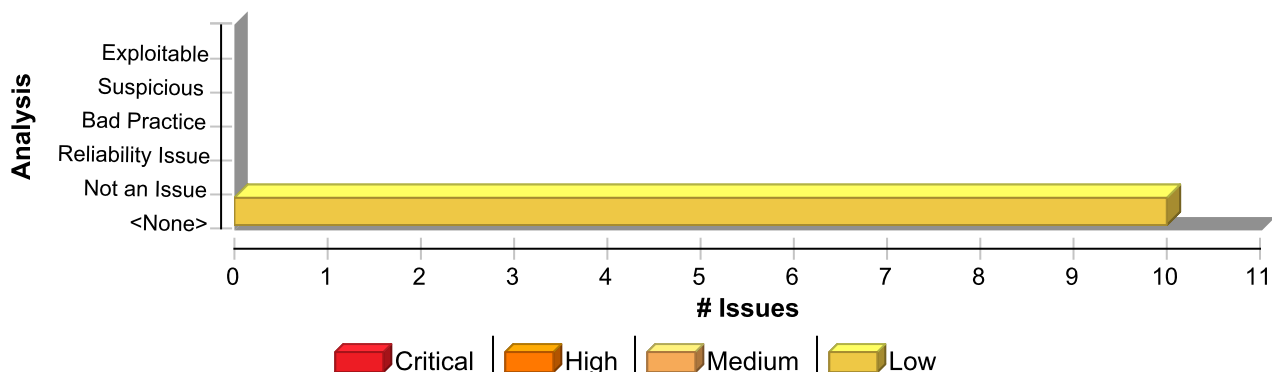
```
try {
    doExchange();
}
catch (Exception e) {
    logger.error("doExchange failed", e);
}
```

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 like `Exception`, `Throwable`, `Error`, or `Exception` 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	10	0	0	10
<b>Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>

### 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

#### 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/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

**Poor Error Handling: Overly Broad Catch****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/PatientInfoService.java, line 47 (Poor Error Handling: Overly Broad Catch)****Low****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.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.outboundncpdpmmessage.service.impl**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 96 (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.outboundncpdpmessage.service.impl**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java, line 96 (Poor Error Handling: Overly Broad Catch)****Low****Sink:** CatchBlock**Enclosing Method:** sendOutboundMessage()**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/outboundncpdpmessage/service/impl/OutboundNCPDPMMessageServiceImpl.java:96**Taint Flags:**

```
93  }  
94  
95  
96  } catch (Exception e) {  
97  
98  LOG.error("Error in OutboundNCPDPMMessageServiceImpl:"+e.getMessage());  
99
```

**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.tovista.service.impl**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistaInboundSendImpl.java, line 47 (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.tovista.service.impl**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistaInboundSendImpl.java, line 47 (Poor Error Handling: Overly Broad Catch)****Low****Sink Details****Sink:** CatchBlock**Enclosing Method:** send()**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistaInboundSendImpl.java:47**Taint Flags:**

```
44  sendResponse.setSuccess(sendResults.getSuccess());
45
46
47  } catch (Exception e) {
48  sendResponse.setSuccess(false);
49
50  sendResponse.setErrorMessage("Error while sending vista inbound message: " +
e.getMessage());
```

**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 82 (Poor Error Handling: Overly Broad Catch)****Low****Issue Details****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:82**Taint Flags:**

```
79  wsResponse.setSuccess(true);
80
81
82  } catch (Exception e) {
83
84  LOG.error("Error in VistaOutboundMsgImpl:"+e.getMessage());
85
```

**Package:** gov.va.med.pharmacy.jms.messaging**PS\_INB\_ERX\_JMS/src/main/java/gov/va/med/pharmacy/jms/messaging/InboundMsgProcessor.java, line 57 (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.jms.messaging**PS\_INB\_ERX\_JMS/src/main/java/gov/va/med/pharmacy/jms/messaging/InboundMsgProcessor.java, line 57 (Poor Error Handling: Overly Broad Catch)****Low****Sink Details****Sink:** CatchBlock**Enclosing Method:** getERxMessage()**File:** PS\_INB\_ERX\_JMS/src/main/java/gov/va/med/pharmacy/jms/messaging/InboundMsgProcessor.java:57**Taint Flags:**

```
54
55 inboundNcpdpMsgService.saveInboundERx(inboundERx);
56
57 } catch (Exception e) {
58
59 LOG.error("Error in getERxMessage:"+e.getMessage());
60 }
```

**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)**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/VALdM.java, line 30 (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.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****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 (14 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

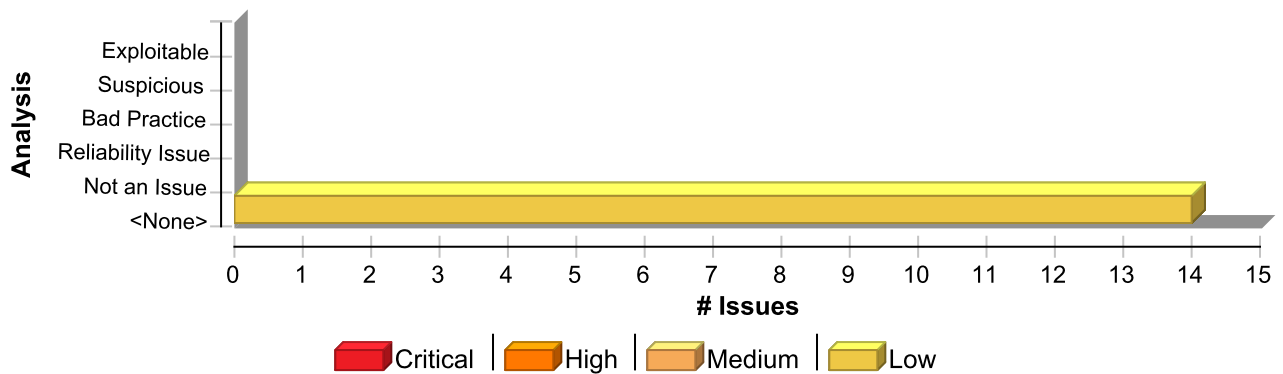
```
public void doExchange()  
    throws Exception {  
    ...  
}
```

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	14	0	0	14
<b>Total</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>

### 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

## Poor Error Handling: Overly Broad Throws

Low

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

**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
```

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 40 (Poor Error Handling: Overly Broad Throws)

Low

### Issue Details

**Kingdom:** Errors

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** Function: returnResponse

**Poor Error Handling: Overly Broad Throws****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 40 (Poor Error Handling: Overly Broad Throws)****Low****Enclosing Method:** returnResponse()**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java:40**Taint Flags:**

```
37 private static final String E_AND_E_CLIENT_ENDPOINT = "eAnde.client.endpoint";
38 private static final QName SERVICE_NAME = new QName("http://
jaxws.webservices.esr.med.va.gov/schemas", "eeSummaryPortService");
39
40 public getEESummaryResponse returnResponse(String key) throws java.lang.Exception {
41
42 Properties properties = new Properties();
43
```

**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****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 150 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: getMVIData

**Poor Error Handling: Overly Broad Throws****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 150 (Poor Error Handling: Overly Broad Throws)****Low****Enclosing Method:** getMVIData()**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/mvi/dao/impl/MVIClient.java:150**Taint Flags:**

```
147 // @Autowired
148 // private Environment environment;
149
150 public Patient getMVIData(Patient patientSearchObj) throws java.lang.Exception {
151
152 // The following prints out a lot of debug information.
153 // 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**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()

**Poor Error Handling: Overly Broad Throws****Low****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****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.jaxrs.tovista.dao**PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/VistaInboundDao.java, line 13 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: sendMessage**Enclosing Method:** sendMessage()**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/VistaInboundDao.java:13**Taint Flags:**

```
10 * @return
11 * @throws Exception
12 */
13 public VistaInbound sendMessage(VistaInbound vistaInboundObj) throws Exception;
14 }
15
16 undefined
```

**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 42 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Function: sendMessage**Enclosing Method:** sendMessage()



**Poor Error Handling: Overly Broad Throws****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 42 (Poor Error Handling: Overly Broad Throws)****Low****File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/dao/impl/VistaInboundRpc.java:42**Taint Flags:**

```
39  }
40
41
42  public VistaInbound sendMessage(VistaInbound sendObj) throws Exception {
43
44
45  VistaInbound searchResults = new VistaInbound();
```

**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****Issue Details****Kingdom:** Errors**Scan Engine:** SCA (Structural)**Sink Details****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 void 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/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()

**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/InboundNcpdpMsgService.java, line 7 (Poor Error Handling: Overly Broad Throws)****Low**

**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
```

**Package:** gov.va.med.pharmacy.utility**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 50 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details**

**Kingdom:** Errors  
**Scan Engine:** SCA (Structural)

**Sink Details**

**Sink:** Function: sendRequest  
**Enclosing Method:** sendRequest()  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:50  
**Taint Flags:**

```
47 * @return The RpcResponse.
48 * @throws Exception
49 */
50 public RpcResponse sendRequest(String rpcContext, String rpcName, ArrayList<Object>
rpcParams) throws Exception {
51
52 // LOG.debug("Vista request [" + rpcContext + ", " + rpcName + "] with parameters: " +
rpcParams);
53
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 122 (Poor Error Handling: Overly Broad Throws)****Low****Issue Details**

**Kingdom:** Errors  
**Scan Engine:** SCA (Structural)

**Sink Details**

<b>Poor Error Handling: Overly Broad Throws</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.utility</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java, line 122 (Poor Error Handling: Overly Broad Throws)</b>	<b>Low</b>

**Sink:** Function: getConnection

**Enclosing Method:** getConnection()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/VistaLinkConnectionUtility.java:122

**Taint Flags:**

```

119  * @return A VistaLinkConnection.
120  * @throws Exception
121  */
122  private VistaLinkConnection getConnection(String division, String proxyUser) throws
Exception {
123
124
125

```

## 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**

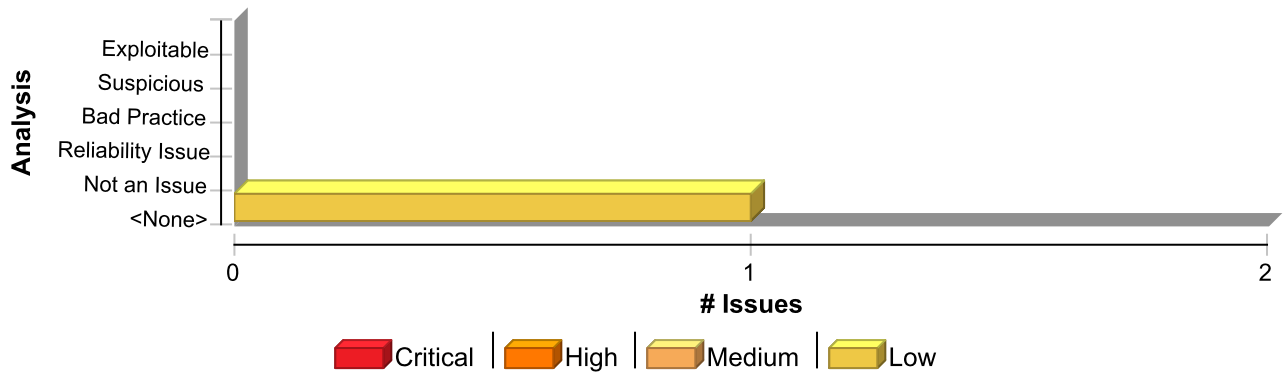
Never throw exceptions from within `finally` blocks. If you must re-throw an exception, do it inside a `catch` block so as not to interrupt the normal execution of the `finally` block.

**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
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

### 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 150 (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:150

**Taint Flags:**

```

147 // LOG.error("VistALink error while retrieving connection.", e);
148 //throw new InterfaceException(e, InterfaceException.INTERFACE_ERROR,
InterfaceException.PRE_ENCAPSULATION);
149 throw new Exception (e);
150 } finally {
151 if (ic != null){
152 ic.close();
153 };

```

## Poor Style: Confusing Naming (167 issues)

### Abstract

The class contains a field and a method with the same name.

### Explanation

It is confusing to have a member field and a method with the same name. It makes it easy for a programmer to accidentally call the method when attempting to access the field or vice versa.

### **Example 1:**

```
public class Totaller {  
    private int total;  
    public int total() {  
        ...  
    }  
}
```

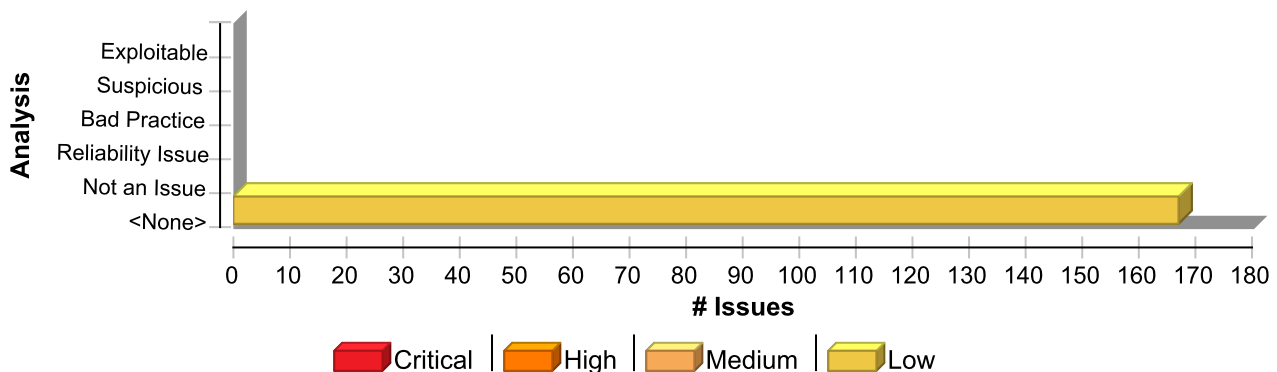
### Recommendation

Rename either the method or the field. If the method returns the field, consider following the standard getter/setter naming convention.

**Example 2:** The code in Example 1 could be rewritten in the following way:

```
public class Totaller {  
    private int total;  
    public int getTotal() {  
        ...  
    }  
}
```

### Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Poor Style: Confusing Naming	167	0	0	167
<b>Total</b>	<b>167</b>	<b>0</b>	<b>0</b>	<b>167</b>

### Poor Style: Confusing Naming

Low

Package: gov.va.med.pharmacy.wsclients.eAnde

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/NotificationType.java, line 35 (Poor Style: Confusing Naming)

Low

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/eAnde/NotificationType.java:35

**Taint Flags:**

```
32 LINK("Link"),
33 @XmlEnumValue("Move")
34 MOVE("Move");
35 private final String value;
36
37 NotificationType(String v) {
38     value = v;
```

Package: gov.va.med.pharmacy.wsclients.mvi

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableCellVerticalAlign.java, line 38 (Poor Style: Confusing Naming)

Low

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableCellVerticalAlign.java:38

**Taint Flags:**

```
35 MIDDLE("middle"),
36 @XmlEnumValue("top")
37 TOP("top");
38 private final String value;
39
40 TableCellVerticalAlign(String v) {
41     value = v;
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeInterval.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeInterval.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("IVL<T>")
28 IVL_T("IVL<T>");
29 private final String value;
30
31 ParameterizedDataTypeInterval(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainProbabilisticConceptDescriptor.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainProbabilisticConceptDescriptor.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("UVP<CD>")
28 UVP_CD("UVP<CD>");
29 private final String value;
30
31 DataTypeUncertainProbabilisticConceptDescriptor(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CentralNumic.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
CentralNumic.java, line 35 (Poor Style: Confusing Naming)****Low****Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CentralNumic.java:35**Taint Flags:**

```
32 X_PAR("x-PAR"),  
33 @XmlEnumValue("x-SHH")  
34 X_SHH("x-SHH");  
35 private final String value;  
36  
37 CentralNumic(String v) {  
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataSetOfCharacterStrings.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfCharacterStrings.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("SET<ST>")  
28 SET_ST("SET<ST>");  
29 private final String value;  
30  
31 DataSetOfCharacterStrings(String v) {  
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypeHistorical.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeHistorical.java:  
29**Taint Flags:**

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypeHistorical.java, line 29 (Poor Style: Confusing Naming)****Low**

```
26
27 @XmlEnumValue("HXIT<T>")
28 HXIT_T("HXIT<T>");
29 private final String value;
30
31 ParameterizedDataTypeHistorical(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ConceptCodeRelationship.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ConceptCodeRelationship.java:35**Taint Flags:**

```
32 HAS_SUBTYPE("hasSubtype"),
33 @XmlEnumValue("smallerThan")
34 SMALLER_THAN("smallerThan");
35 private final String value;
36
37 ConceptCodeRelationship(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Pai.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Pai.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-YUF")
28 X_YUF("x-YUF");
29 private final String value;
30
31 Pai(String v) {
```

<b>Poor Style: Confusing Naming</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.wsclients.mvi</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Pai.java, line 29 (Poor Style: Confusing Naming)</b>	<b>Low</b>

```
32 value = v;
```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/RealmOfUse.java, line 36 (Poor Style: Confusing Naming)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/RealmOfUse.java:36  
**Taint Flags:**

```
33 NORTH_AMERICA("NorthAmerica"),
34 USA("USA"),
35 UV("UV");
36 private final String value;
37
38 RealmOfUse(String v) {
39 value = v;
```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TextMediaType.java, line 44 (Poor Style: Confusing Naming)</b>	<b>Low</b>
---	------------

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TextMediaType.java:44  
**Taint Flags:**

```
41 TEXT_SGML("text/sgml"),
42 @XmlEnumValue("text/xml")
43 TEXT_XML("text/xml");
44 private final String value;
45
46 TextMediaType(String v) {
47 value = v;
```

<b>Poor Style: Confusing Naming</b>	<b>Low</b>
-------------------------------------	------------

Package: gov.va.med.pharmacy.wsclients.mvi

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeParametricProbabilityDistribution.java, line 29 (Poor Style: Confusing Naming)</b>	<b>Low</b>
---	------------

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeParametricProbabilityDistribution.java:29

**Taint Flags:**

```

26
27 @XmlEnumValue("PPD<QTY>")
28 PPD_QTY("PPD<QTY>");
29 private final String value;
30
31 DataTypeParametricProbabilityDistribution(String v) {
32 value = v;

```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeUncertainValueProbabilistic.java, line 29 (Poor Style: Confusing Naming)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeUncertainValueProbabilistic.java:29

**Taint Flags:**

```

26
27 @XmlEnumValue("UVP<T>")
28 UVP_T("UVP<T>");
29 private final String value;
30
31 ParameterizedDataTypeUncertainValueProbabilistic(String v) {
32 value = v;

```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/OregonAthapaskan.java, line 32 (Poor Style: Confusing Naming)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
OregonAthapaskan.java, line 32 (Poor Style: Confusing Naming)****Low****Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/OregonAthapaskan.java:32**Taint Flags:**

```
29 X_TOL("x-TOL"),  
30 @XmlEnumValue("x-TUU")  
31 X_TUU("x-TUU");  
32 private final String value;  
33  
34 OregonAthapaskan(String v) {  
35 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Palaihnihan.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Palaihnihan.java:32**Taint Flags:**

```
29 X_ACH("x-ACH"),  
30 @XmlEnumValue("x-ATW")  
31 X_ATW("x-ATW");  
32 private final String value;  
33  
34 Palaihnihan(String v) {  
35 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
XLabSpecimenCollectionProviders.java, line 47 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XLabSpecimenCollectionProviders.java:

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XLabSpecimenCollectionProviders.java, line 47 (Poor Style: Confusing Naming)****Low**

47

**Taint Flags:**

```
44 SELF("self"),
45 @XmlEnumValue("thirdParty")
46 THIRD_PARTY("thirdParty");
47 private final String value;
48
49 XLabSpecimenCollectionProviders(String v) {
50 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ApplicationMediaType.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ApplicationMediaType.java:35**Taint Flags:**

```
32 APPLICATION_MSWORD("application/msword"),
33 @XmlEnumValue("application/pdf")
34 APPLICATION_PDF("application/pdf");
35 private final String value;
36
37 ApplicationMediaType(String v) {
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActExposureCode.java, line 63 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActExposureCode.java:63**Taint Flags:**

```
60 SOCIAL_2("SOCIAL2"),
61 @XmlEnumValue("WORK2")
62 WORK_2("WORK2");
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActExposureCode.java, line 63 (Poor Style: Confusing Naming)****Low**

```
63 private final String value;  
64  
65 ActExposureCode(String v) {  
66 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CodingRationale.java, line 33 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CodingRationale.java:33**Taint Flags:**

```
30 @XmlEnumValue("HL7")  
31 HL_7("HL7"),  
32 SRC("SRC");  
33 private final String value;  
34  
35 CodingRationale(String v) {  
36 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tsimshianic.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tsimshianic.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("x-TSI")  
28 X_TSI("x-TSI");  
29 private final String value;  
30  
31 Tsimshianic(String v) {  
32 value = v;
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MdfRmimRowType.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MdfRmimRowType.java:41**Taint Flags:**

```
38 RMIM("rmim"),
39 @XmlEnumValue("stc")
40 STC("stc");
41 private final String value;
42
43 MdfRmimRowType(String v) {
44     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XPhoneOrEmailURLScheme.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XPhoneOrEmailURLScheme.java:35**Taint Flags:**

```
32 MAILTO("mailto"),
33 @XmlEnumValue("tel")
34 TEL("tel");
35 private final String value;
36
37 XPhoneOrEmailURLScheme(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ValueSetPropertyId.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ValueSetPropertyId.java, line 35 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ValueSetPropertyId.java:35**Taint Flags:**

```
32 HOW_APPLIES("howApplies"),
33 @XmlEnumValue("openIssue")
34 OPEN_ISSUE("openIssue");
35 private final String value;
36
37 ValueSetPropertyId(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/KutchinHan.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/KutchinHan.java:32**Taint Flags:**

```
29 X_HAA("x-HAA"),
30 @XmlEnumValue("x-KUC")
31 X_KUC("x-KUC");
32 private final String value;
33
34 KutchinHan(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActMoodCriterion.java, line 31 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActMoodCriterion.java:31**Taint Flags:**

```
28 CRT("CRT"),
29 @XmlEnumValue("EVN.CRT")
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActMoodCriterion.java, line 31 (Poor Style: Confusing Naming)****Low**

```
30 EVN_CRT("EVN.CRT");
31 private final String value;
32
33 ActMoodCriterion(String v) {
34     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Pomoan.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Pomoan.java:41**Taint Flags:**

```
38 X_PEO("x-PEO"),
39 @XmlEnumValue("x-PEQ")
40 X_PEQ("x-PEQ");
41 private final String value;
42
43 Pomoan(String v) {
44     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternMiwok.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternMiwok.java:32**Taint Flags:**

```
29 X_CSI("x-CSI"),
30 @XmlEnumValue("x-LMW")
31 X_LMW("x-LMW");
32 private final String value;
33
34 WesternMiwok(String v) {
35     value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tsamosan.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tsamosan.java:38**Taint Flags:**

```
35 X_QUN("x-QUN"),
36 @XmlEnumValue("x-CJH")
37 X_CJH("x-CJH");
38 private final String value;
39
40 Tsamosan(String v) {
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeBagOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeBagOfPhysicalQuantities.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("BAG<PQ>")
28 BAG_PQ("BAG<PQ>");
29 private final String value;
30
31 DataTypeBagOfPhysicalQuantities(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeEventRelatedInterval.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeEventRelatedInterval.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeEventRelatedInterval.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("EIVL<TS>")
28 EIVL_TS("EIVL<TS>");
29 private final String value;
30
31 DataTypeEventRelatedInterval(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/UnitOfMeasureAtomBaseUnitSens.java, line 45 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/UnitOfMeasureAtomBaseUnitSens.java:45**Taint Flags:**

```
42 RAD("rad"),
43 @XmlEnumValue("s")
44 S("s");
45 private final String value;
46
47 UnitOfMeasureAtomBaseUnitSens(String v) {
48 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ArtificialDentition.java, line 578 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ArtificialDentition.java:578**Taint Flags:**

```
575 TID_9_PD("TID9pd"),
576 @XmlEnumValue("TID9pm")
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ArtificialDentition.java, line 578 (Poor Style: Confusing Naming)****Low**

```
577 TID_9_PM("TID9pm");  
578 private final String value;  
579  
580 ArtificialDentition(String v) {  
581 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeParametricProbabilityDistributionOfPhysicalQuantities.java, line 29  
(Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeParametricProbabilityDistributionOfPhysicalQuantities.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("PPD<PQ>")  
28 PPD_PQ("PPD<PQ>");  
29 private final String value;  
30  
31 DataTypeParametricProbabilityDistributionOfPhysicalQuantities(String v) {  
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ChiwereWinnebago.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ChiwereWinnebago.java:32**Taint Flags:**

```
29 X_IOW("x-IOW"),  
30 @XmlEnumValue("x-WIN")  
31 X_WIN("x-WIN");  
32 private final String value;  
33  
34 ChiwereWinnebago(String v) {
```

<b>Poor Style: Confusing Naming</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.wsclients.mvi</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ChiwereWinnebago.java, line 32 (Poor Style: Confusing Naming)</b>	<b>Low</b>
<pre> 35  value = v; </pre>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XActStatusActiveComplete.java, line 32 (Poor Style: Confusing Naming)</b>	<b>Low</b>
<b>Issue Details</b>	
<b>Kingdom:</b> Code Quality <b>Scan Engine:</b> SCA (Structural)	
<b>Sink Details</b>	
<b>Sink:</b> Field: value <b>File:</b> PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XActStatusActiveComplete.java:32 <b>Taint Flags:</b>	
<pre> 29  ACTIVE("active"), 30  @XmlEnumValue("completed") 31  COMPLETED("completed"); 32  private final String value; 33 34  XActStatusActiveComplete(String v) { 35  value = v; </pre>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/InuitInupiaq.java, line 32 (Poor Style: Confusing Naming)</b>	<b>Low</b>
<b>Issue Details</b>	
<b>Kingdom:</b> Code Quality <b>Scan Engine:</b> SCA (Structural)	
<b>Sink Details</b>	
<b>Sink:</b> Field: value <b>File:</b> PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/InuitInupiaq.java:32 <b>Taint Flags:</b>	
<pre> 29  X_ESI("x-ESI"), 30  @XmlEnumValue("x-ESK") 31  X_ESK("x-ESK"); 32  private final String value; 33 34  InuitInupiaq(String v) { 35  value = v; </pre>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActSupplyFulfillmentRefusalReason.java, line 44 (Poor Style: Confusing Naming)</b>	<b>Low</b>
<b>Issue Details</b>	

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActSupplyFulfillmentRefusalReason.java, line 44 (Poor Style: Confusing Naming)****Low****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActSupplyFulfillmentRefusalReason.java:44**Taint Flags:**

```
41 FRR_02("FRR02"),
42 @XmlEnumValue("FRR06")
43 FRR_06("FRR06");
44 private final String value;
45
46 ActSupplyFulfillmentRefusalReason(String v) {
47     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeNonParametricProbabilityDistribution.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeNonParametricProbabilityDistribution.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("NPPD<T>")
28 NPPD_T("NPPD<T>");
29 private final String value;
30
31 ParameterizedDataTypeNonParametricProbabilityDistribution(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ManagedParticipationStatusNormal.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ManagedParticipationStatusNormal.java, line 41 (Poor Style: Confusing Naming)****Low****Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ManagedParticipationStatusNormal.java:41**Taint Flags:**

```
38 COMPLETED("completed"),
39 @XmlEnumValue("pending")
40 PENDING("pending");
41 private final String value;
42
43 ManagedParticipationStatusNormal(String v) {
44     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/IntegrityCheckAlgorithm.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/IntegrityCheckAlgorithm.java:32**Taint Flags:**

```
29 SHA_1("SHA-1"),
30 @XmlEnumValue("SHA-256")
31 SHA_256("SHA-256");
32 private final String value;
33
34 IntegrityCheckAlgorithm(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Nootkan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Nootkan.java:29**Taint Flags:**

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Nootkan.java, line 29 (Poor Style: Confusing Naming)****Low**

```
26
27 @XmlEnumValue("x-MYH")
28 X_MYH("x-MYH");
29 private final String value;
30
31 Nootkan(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
WesternNumic.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternNumic.java:32**Taint Flags:**

```
29 X_MON("x-MON"),
30 @XmlEnumValue("x-PAO")
31 X_PAO("x-PAO");
32 private final String value;
33
34 WesternNumic(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
TableCellHorizontalAlign.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableCellHorizontalAlign.java:41**Taint Flags:**

```
38 LEFT("left"),
39 @XmlEnumValue("right")
40 RIGHT("right");
41 private final String value;
42
43 TableCellHorizontalAlign(String v) {
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
TableCellHorizontalAlign.java, line 41 (Poor Style: Confusing Naming)****Low**

```
44 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Sahaptian.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Sahaptian.java:38**Taint Flags:**

```
35 X_WAA("x-WAA"),  
36 @XmlEnumValue("x-YAK")  
37 X_YAK("x-YAK");  
38 private final String value;  
39  
40 Sahaptian(String v) {  
41 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Sireniskiyupik.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Sireniskiyupik.java:35**Taint Flags:**

```
32 X_ESS("x-ESS"),  
33 @XmlEnumValue("x-EMS")  
34 X_EMS("x-EMS");  
35 private final String value;  
36  
37 Sireniskiyupik(String v) {  
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
WesternMuskogean.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternMuskogean.java, line 32 (Poor Style: Confusing Naming)****Low****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternMuskogean.java:32**Taint Flags:**

```
29 X_CIC("x-CIC"),
30 @XmlEnumValue("x-CCT")
31 X_CCT("x-CCT");
32 private final String value;
33
34 WesternMuskogean(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SerranoGabrielino.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SerranoGabrielino.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-SER")
28 X_SER("x-SER");
29 private final String value;
30
31 SerranoGabrielino(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Maiduan.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Maiduan.java, line 35 (Poor Style: Confusing Naming)****Low****File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Maiduan.java:35**Taint Flags:**

```
32 X_NMU("x-NMU"),  
33 @XmlEnumValue("x-MAI")  
34 X_MAI("x-MAI");  
35 private final String value;  
36  
37 Maiduan(String v) {  
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Coosan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Coosan.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("x-COS")  
28 X_COS("x-COS");  
29 private final String value;  
30  
31 Coosan(String v) {  
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
WesternApachean.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternApachean.java:35**Taint Flags:**

```
32 X_APM("x-APM"),  
33 @XmlEnumValue("x-APW")  
34 X_APW("x-APW");
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/WesternApachean.java, line 35 (Poor Style: Confusing Naming)****Low**

```
35 private final String value;  
36  
37 WesternApachean(String v) {  
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Charset.java, line 55 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Charset.java:55**Taint Flags:**

```
52 UTF_7("UTF-7"),  
53 @XmlEnumValue("UTF-8")  
54 UTF_8("UTF-8");  
55 private final String value;  
56  
57 Charset(String v) {  
58 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/PermanentDentition.java, line 158 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/PermanentDentition.java:158**Taint Flags:**

```
155 TID_8("TID8"),  
156 @XmlEnumValue("TID9")  
157 TID_9("TID9");  
158 private final String value;  
159  
160 PermanentDentition(String v) {  
161 value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/KoyukonIngalik.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/KoyukonIngalik.java:35**Taint Flags:**

```
32 X_HOI("x-HOI"),
33 @XmlEnumValue("x-KOY")
34 X_KOY("x-KOY");
35 private final String value;
36
37 KoyukonIngalik(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ConceptPropertyId.java, line 43 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ConceptPropertyId.java:43**Taint Flags:**

```
40 INVERSE_RELATIONSHIP("inverseRelationship"),
41 @XmlEnumValue("openIssue")
42 OPEN_ISSUE("openIssue");
43 private final String value;
44
45 ConceptPropertyId(String v) {
46     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XActStatusActiveSuspended.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XActStatusActiveSuspended.java, line 32 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XActStatusActiveSuspended.java:32**Taint Flags:**

```
29 ACTIVE("active"),
30 @XmlEnumValue("suspended")
31 SUSPENDED("suspended");
32 private final String value;
33
34 XActStatusActiveSuspended(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeEventRelatedInterval.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeEventRelatedInterval.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("EIVL<T>")
28 EIVL_T("EIVL<T>");
29 private final String value;
30
31 ParameterizedDataTypeEventRelatedInterval(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CentralSalish.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CentralSalish.java:35**Taint Flags:**

```
32 X_LUT("x-LUT"),
```



**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
CentralSalish.java, line 35 (Poor Style: Confusing Naming)****Low**

```
33 @XmlEnumValue("x-STR")
34 X_STR("x-STR");
35 private final String value;
36
37 CentralSalish(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
AudioMediaType.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AudioMediaType.java:35**Taint Flags:**

```
32 AUDIO_K_32_ADPCM("audio/k32adpcm"),
33 @XmlEnumValue("audio/mpeg")
34 AUDIO_MPEG("audio/mpeg");
35 private final String value;
36
37 AudioMediaType(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
MissouriRiver.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MissouriRiver.java:32**Taint Flags:**

```
29 X_CRO("x-CRO"),
30 @XmlEnumValue("x-HID")
31 X_HID("x-HID");
32 private final String value;
33
34 MissouriRiver(String v) {
35     value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MissouriRiver.java, line 32 (Poor Style: Confusing Naming)****Low****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableFrame.java, line 53 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableFrame.java:53**Taint Flags:**

```
50 VOID("void"),
51 @XmlEnumValue("vsides")
52 VSIDES("vsides");
53 private final String value;
54
55 TableFrame(String v) {
56     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SupernumeraryTooth.java, line 182 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SupernumeraryTooth.java:182**Taint Flags:**

```
179 TID_SS("TIDSS"),
180 @XmlEnumValue("TIDTs")
181 TID_TS("TIDTs");
182 private final String value;
183
184 SupernumeraryTooth(String v) {
185     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Chimakuan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Chimakuan.java, line 29 (Poor Style: Confusing Naming)****Low****Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Chimakuan.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-QUI")
28 X_QUI("x-QUI");
29 private final String value;
30
31 Chimakuan(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/PaymentTerms.java, line 37 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/PaymentTerms.java:37**Taint Flags:**

```
34 N_60("N60"),
35 @XmlEnumValue("N90")
36 N_90("N90");
37 private final String value;
38
39 PaymentTerms(String v) {
40     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SouthernNumic.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SouthernNumic.java:32

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
SouthernNumic.java, line 32 (Poor Style: Confusing Naming)****Low****Taint Flags:**

```
29 X_KAW("x-KAW"),
30 @XmlEnumValue("x-UTE")
31 X_UTE("x-UTE");
32 private final String value;
33
34 SouthernNumic(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Diegueno.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Diegueno.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-DIH")
28 X_DIH("x-DIH");
29 private final String value;
30
31 Diegueno(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Aleut.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Aleut.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-ALW")
28 X_ALW("x-ALW");
29 private final String value;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Aleut.java, line 29 (Poor Style: Confusing Naming)****Low**

```
30
31 Aleut(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfCodedSimpleValue.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfCodedSimpleValue.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("SET<CS>")
28 SET_CS("SET<CS>");
29 private final String value;
30
31 DataSetOfCodedSimpleValue(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeNonParametricProbabilityDistributionOfIntervalOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeNonParametricProbabilityDistributionOfIntervalOfPhysicalQuantities.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("NPPD<IVL<PQ>>")
28 NPPD_IVL_PQ("NPPD<IVL<PQ>>");
29 private final String value;
30
31 DataTypeNonParametricProbabilityDistributionOfIntervalOfPhysicalQuantities(String v) {
32     value = v;
```

<b>Poor Style: Confusing Naming</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.wsclients.mvi</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeNonParametricProbabilityDistributionOfIntervalOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)</b>	<b>Low</b>

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/OrderedListStyle.java, line 41 (Poor Style: Confusing Naming)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/OrderedListStyle.java:41  
**Taint Flags:**

```

38  LITTLE_ALPHA("LittleAlpha"),
39  @XmlEnumValue("LittleRoman")
40  LITTLE_ROMAN("LittleRoman");
41  private final String value;
42
43  OrderedListStyle(String v) {
44  value = v;

```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/RoleStatusNormal.java, line 44 (Poor Style: Confusing Naming)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/RoleStatusNormal.java:44  
**Taint Flags:**

```

41  SUSPENDED("suspended"),
42  @XmlEnumValue("terminated")
43  TERMINATED("terminated");
44  private final String value;
45
46  RoleStatusNormal(String v) {
47  value = v;

```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/QueryStatusCode.java, line 41 (Poor Style: Confusing Naming)</b>	<b>Low</b>
---	------------

#### Issue Details

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/QueryStatusCode.java, line 41 (Poor Style: Confusing Naming)****Low****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/QueryStatusCode.java:41**Taint Flags:**

```
38 NEW("new"),
39 @XmlEnumValue("waitContinuedQueryResponse")
40 WAIT_CONTINUED_QUERY_RESPONSE("waitContinuedQueryResponse");
41 private final String value;
42
43 QueryStatusCode(String v) {
44     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/InteriorSalish.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/InteriorSalish.java:38**Taint Flags:**

```
35 X_FLA("x-FLA"),
36 @XmlEnumValue("x-OKA")
37 X_OKA("x-OKA");
38 private final String value;
39
40 InteriorSalish(String v) {
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EasternMiwok.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
EasternMiwok.java, line 38 (Poor Style: Confusing Naming)****Low****File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EasternMiwok.java:38**Taint Flags:**

```
35 X_PMW("x-PMW"),  
36 @XmlEnumValue("x-SKD")  
37 X_SKD("x-SKD");  
38 private final String value;  
39  
40 EasternMiwok(String v) {  
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeIntervalOfIntegerNumbers.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeIntervalOfIntegerNumbers.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("IVL<INT>")  
28 IVL_INT("IVL<INT>");  
29 private final String value;  
30  
31 DataTypeIntervalOfIntegerNumbers(String v) {  
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
FontStyle.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/FontStyle.java:38**Taint Flags:**

```
35 ITALICS("italics"),  
36 @XmlEnumValue("underline")
```



**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/FontStyle.java, line 38 (Poor Style: Confusing Naming)****Low**

```
37 UNDERLINE("underline");
38 private final String value;
39
40 FontStyle(String v) {
41 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/LocalMarkupIgnore.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/LocalMarkupIgnore.java:32**Taint Flags:**

```
29 ALL("all"),
30 @XmlEnumValue("markup")
31 MARKUP("markup");
32 private final String value;
33
34 LocalMarkupIgnore(String v) {
35 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActSpecObsDilutionCode.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActSpecObsDilutionCode.java:38**Taint Flags:**

```
35 AUTO_LOW("AUTO-LOW"),
36 PRE("PRE"),
37 RERUN("RERUN");
38 private final String value;
39
40 ActSpecObsDilutionCode(String v) {
41 value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SouthernCaddoan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SouthernCaddoan.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-CAD")
28 X_CAD("x-CAD");
29 private final String value;
30
31 SouthernCaddoan(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ExtendedReleaseSuspension.java, line 34 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ExtendedReleaseSuspension.java:34**Taint Flags:**

```
31 ERSUSP_12("ERSUSP12"),
32 @XmlEnumValue("ERSUSP24")
33 ERSUSP_24("ERSUSP24");
34 private final String value;
35
36 ExtendedReleaseSuspension(String v) {
37     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeSetOfCodedValue.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataSetOfCodedValue.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfCodedValue.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("SET<CV>")
28 SET_CV("SET<CV>");
29 private final String value;
30
31 DataSetOfCodedValue(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ImageMediaType.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ImageMediaType.java:41**Taint Flags:**

```
38 IMAGE_PNG("image/png"),
39 @XmlEnumValue("image/tiff")
40 IMAGE_TIFF("image/tiff");
41 private final String value;
42
43 ImageMediaType(String v) {
44     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ExtendedReleaseTablet.java, line 36 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ExtendedReleaseTablet.java:36**Taint Flags:**

```
33 @XmlEnumValue("ERTAB24")
34 ERTAB_24("ERTAB24"),
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ExtendedReleaseTablet.java, line 36 (Poor Style: Confusing Naming)****Low**

```
35  ERECTAB("ERECTAB");  
36  private final String value;  
37  
38  ExtendedReleaseTablet(String v) {  
39  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Kalapuyan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Kalapuyan.java:29**Taint Flags:**

```
26  
27  @XmlEnumValue("x-KAL")  
28  X_KAL("x-KAL");  
29  private final String value;  
30  
31  Kalapuyan(String v) {  
32  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypeBag.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeBag.java:29**Taint Flags:**

```
26  
27  @XmlEnumValue("BAG<T>")  
28  BAG_T("BAG<T>");  
29  private final String value;  
30  
31  ParameterizedDataTypeBag(String v) {  
32  value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeIntervalOfRealNumbers.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeIntervalOfRealNumbers.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("IVL<REAL>")
28 IVL_REAL("IVL<REAL>");
29 private final String value;
30
31 DataTypeIntervalOfRealNumbers(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ExtendedReleaseCapsule.java, line 36 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ExtendedReleaseCapsule.java:36**Taint Flags:**

```
33 @XmlEnumValue("ERCAP24")
34 ERCAP_24("ERCAP24"),
35 ERECCAP("ERECCAP");
36 private final String value;
37
38 ExtendedReleaseCapsule(String v) {
39     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Delawaran.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Delawaran.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Delawaran.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-DEL")
28 X_DEL("x-DEL");
29 private final String value;
30
31 Delawaran(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Shasta.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Shasta.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-SHT")
28 X_SHT("x-SHT");
29 private final String value;
30
31 Shasta(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AcknowledgementDetailNotSupportedCode.java, line 44 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AcknowledgementDetailNotSupportedCode.java:44**Taint Flags:**

```
41 NS_202("NS202"),
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AcknowledgementDetailNotSupportedCode.java, line 44 (Poor Style: Confusing Naming)****Low**

```
42 @XmlEnumValue("NS203")
43 NS_203("NS203");
44 private final String value;
45
46 AcknowledgementDetailNotSupportedCode(String v) {
47     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeSequence.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeSequence.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("LIST<T>")
28 LIST_T("LIST<T>");
29 private final String value;
30
31 ParameterizedDataTypeSequence(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeSetOfCodedWithEquivalents.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeSetOfCodedWithEquivalents.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("SET<CE>")
28 SET_CE("SET<CE>");
29 private final String value;
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeSetOfCodedWithEquivalents.java, line 29 (Poor Style: Confusing Naming)****Low**

```
30
31  DataTypeSetOfCodedWithEquivalents(String v) {
32  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActNonObservationIndicationCode.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActNonObservationIndicationCode.java:41**Taint Flags:**

```
38  IND_03("IND03"),
39  @XmlEnumValue("IND04")
40  IND_04("IND04");
41  private final String value;
42
43  ActNonObservationIndicationCode(String v) {
44  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EntityStatusNormal.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EntityStatusNormal.java:35**Taint Flags:**

```
32  ACTIVE("active"),
33  @XmlEnumValue("inactive")
34  INACTIVE("inactive");
35  private final String value;
36
37  EntityStatusNormal(String v) {
38  value = v;
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7DefinedRoseProperty.java, line 120 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7DefinedRoseProperty.java:120**Taint Flags:**

```
117 VOCAB_DOMAIN("Vocab_domain"),
118 @XmlEnumValue("Vocab_strength")
119 VOCAB_STRENGTH("Vocab_strength");
120 private final String value;
121
122 HL7DefinedRoseProperty(String v) {
123     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ProbabilityDistributionType.java, line 45 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ProbabilityDistributionType.java:45**Taint Flags:**

```
42 LN("LN"),
43 N("N"),
44 U("U");
45 private final String value;
46
47 ProbabilityDistributionType(String v) {
48     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HtmlLinkType.java, line 71 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HtmlLinkType.java, line 71 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HtmlLinkType.java:71**Taint Flags:**

```
68  STYLE SHEET("stylesheet"),
69  @Xm lEnumValue("subsection")
70  SUBSECTION("subsection");
71  private final String value;
72
73  HtmlLinkType(String v) {
74  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CodeSystem.java, line 709 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CodeSystem.java:709**Taint Flags:**

```
706  W_4("W4"),
707  @Xm lEnumValue("W1-W2")
708  W_1_W_2("W1-W2");
709  private final String value;
710
711  CodeSystem(String v) {
712  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cahitan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cahitan.java:29**Taint Flags:**

```
26
27  @Xm lEnumValue("x-YAQ")
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cahitan.java, line 29 (Poor Style: Confusing Naming)****Low**

```
28 X_YAQ("x-YAQ");
29 private final String value;
30
31 Cahitan(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Dhegiha.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Dhegiha.java:38**Taint Flags:**

```
35 X_OSA("x-OSA"),
36 @XmlEnumValue("x-QUA")
37 X_QUA("x-QUA");
38 private final String value;
39
40 Dhegiha(String v) {
41 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainNarrativeConceptDescriptor.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainNarrativeConceptDescriptor.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("UVN<CD>")
28 UVN_CD("UVN<CD>");
29 private final String value;
30
31 DataTypeUncertainNarrativeConceptDescriptor(String v) {
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainNarrativeConceptDescriptor.java, line 29 (Poor Style: Confusing Naming)****Low**

```
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ArapahoGrosVentre.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ArapahoGrosVentre.java:32**Taint Flags:**

```
29 X_ARP("x-ARP"),
30 @XmlEnumValue("x-ATS")
31 X_ATS("x-ATS");
32 private final String value;
33
34 ArapahoGrosVentre(String v) {
35 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Ojibwayan.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Ojibwayan.java:32**Taint Flags:**

```
29 X_POT("x-POT"),
30 @XmlEnumValue("x-OJB")
31 X_OJB("x-OJB");
32 private final String value;
33
34 Ojibwayan(String v) {
35 value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableCellScope.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableCellScope.java:38**Taint Flags:**

```
35 ROW("row"),
36 @XmlEnumValue("rowgroup")
37 ROWGROUP("rowgroup");
38 private final String value;
39
40 TableCellScope(String v) {
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TransdermalPatch.java, line 42 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TransdermalPatch.java:42**Taint Flags:**

```
39 @XmlEnumValue("TPATH2WK")
40 TPATH_2_WK("TPATH2WK"),
41 TPATHWK("TPATHWK");
42 private final String value;
43
44 TransdermalPatch(String v) {
45     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainProbabilisticIntervalOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainProbabilisticIntervalOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeUncertainProbabilisticIntervalOfPhysicalQuantities.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("UVP<IVL<PQ>>")
28 UVP_IVL_PQ("UVP<IVL<PQ>>");
29 private final String value;
30
31 DataTypeUncertainProbabilisticIntervalOfPhysicalQuantities(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableRules.java, line 41 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableRules.java:41**Taint Flags:**

```
38 NONE("none"),
39 @XmlEnumValue("rows")
40 ROWS("rows");
41 private final String value;
42
43 TableRules(String v) {
44 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/BinaryDataEncoding.java, line 31 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/BinaryDataEncoding.java:31**Taint Flags:**

```
28 @XmlEnumValue("B64")
```

## Poor Style: Confusing Naming

Low

Package: gov.va.med.pharmacy.wsclients.mvi

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
BinaryDataEncoding.java, line 31 (Poor Style: Confusing Naming)

Low

```
29 B_64("B64"),  
30 TXT("TXT");  
31 private final String value;  
32  
33 BinaryDataEncoding(String v) {  
34     value = v;
```

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypeParametricProbabilityDistribution.java, line 29 (Poor  
Style: Confusing Naming)

Low

### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** Field: value

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypeParametricProbabilityDistribution.java:29

**Taint Flags:**

```
26  
27 @XmlEnumValue("PPD<T>")  
28 PPD_T("PPD<T>");  
29 private final String value;  
30  
31 ParameterizedDataTypeParametricProbabilityDistribution(String v) {  
32     value = v;
```

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeNonParametricProbabilityDistribution.java, line 29 (Poor Style:  
Confusing Naming)

Low

### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Structural)

### Sink Details

**Sink:** Field: value

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeNonParametricProbabilityDistribution.java:29

**Taint Flags:**

```
26  
27 @XmlEnumValue("NPPD<ANY>")  
28 NPPD_ANY("NPPD<ANY>");
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeNonParametricProbabilityDistribution.java, line 29 (Poor Style: Confusing Naming)****Low**

```
29 private final String value;  
30  
31 DataTypeNonParametricProbabilityDistribution(String v) {  
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SaukFoxKickapoo.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SaukFoxKickapoo.java:35**Taint Flags:**

```
32 X_SAC("x-SAC"),  
33 @XmlEnumValue("x-SJW")  
34 X_SJW("x-SJW");  
35 private final String value;  
36  
37 SaukFoxKickapoo(String v) {  
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AcknowledgementDetailSyntaxErrorCode.java, line 49 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AcknowledgementDetailSyntaxErrorCode.java:49**Taint Flags:**

```
46 SYN_101("SYN101"),  
47 @XmlEnumValue("SYN103")  
48 SYN_103("SYN103");  
49 private final String value;  
50  
51 AcknowledgementDetailSyntaxErrorCode(String v) {
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/AcknowledgementDetailSyntaxErrorCode.java, line 49 (Poor Style: Confusing Naming)****Low**

```
52 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tepiman.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tepiman.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-PAP")
28 X_PAP("x-PAP");
29 private final String value;
30
31 Tepiman(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cupan.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cupan.java:35**Taint Flags:**

```
32 X_CUP("x-CUP"),
33 @XmlEnumValue("x-LUI")
34 X_LUI("x-LUI");
35 private final String value;
36
37 Cupan(String v) {
38 value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeNonParametricProbabilityDistributionOfConceptDescriptor.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeNonParametricProbabilityDistributionOfConceptDescriptor.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("NPPD<CD>")
28 NPPD_CD("NPPD<CD>");
29 private final String value;
30
31 DataTypeNonParametricProbabilityDistributionOfConceptDescriptor(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CombinedPharmacyOrderSuspendReasonCode.java, line 53 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CombinedPharmacyOrderSuspendReasonCode.java:53**Taint Flags:**

```
50 CLARIF("CLARIF"),
51 ALTCHOICE("ALTCHOICE"),
52 WASHOUT("WASHOUT");
53 private final String value;
54
55 CombinedPharmacyOrderSuspendReasonCode(String v) {
56 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfRealNumbers.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeSetOfRealNumbers.java, line 32 (Poor Style: Confusing Naming)****Low****Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeSetOfRealNumbers.java:32**Taint Flags:**

```
29 SET_REAL("SET<REAL>"),
30 @XmlEnumValue("IVL<REAL>")
31 IVL_REAL("IVL<REAL>");
32 private final String value;
33
34 DataTypeSetOfRealNumbers(String v) {
35 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
SetOperator.java, line 39 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SetOperator.java:39**Taint Flags:**

```
36 I("I"),
37 A("A"),
38 P("P");
39 private final String value;
40
41 SetOperator(String v) {
42 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Pidgin.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Pidgin.java:29

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Pidgin.java, line 29 (Poor Style: Confusing Naming)****Low****Taint Flags:**

```
26
27 @XmlEnumValue("x-CHH")
28 X_CHH("x-CHH");
29 private final String value;
30
31 Pidgin(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Abenakian.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Abenakian.java:35**Taint Flags:**

```
32 X_MAC("x-MAC"),
33 @XmlEnumValue("x-ABE")
34 X_ABE("x-ABE");
35 private final String value;
36
37 Abenakian(String v) {
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
NonDrugAgentEntity.java, line 77 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/NonDrugAgentEntity.java:77**Taint Flags:**

```
74 NDA_11("NDA11"),
75 @XmlEnumValue("NDA07")
76 NDA_07("NDA07");
77 private final String value;
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
NonDrugAgentEntity.java, line 77 (Poor Style: Confusing Naming)****Low**

```
78  
79 NonDrugAgentEntity(String v) {  
80     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Dakotan.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Dakotan.java:38**Taint Flags:**

```
35 X_LKT("x-LKT"),  
36 @XmlEnumValue("x-NKT")  
37 X_NKT("x-NKT");  
38 private final String value;  
39  
40 Dakotan(String v) {  
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
River.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/River.java:35**Taint Flags:**

```
32 X_MOV("x-MOV"),  
33 @XmlEnumValue("x-YUM")  
34 X_YUM("x-YUM");  
35 private final String value;  
36  
37 River(String v) {  
38     value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XPhoneURLScheme.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XPhoneURLScheme.java:32**Taint Flags:**

```
29 FAX("fax"),
30 @XmlEnumValue("tel")
31 TEL("tel");
32 private final String value;
33
34 XPhoneURLScheme(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cree.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Cree.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-CRP")
28 X_CRP("x-CRP");
29 private final String value;
30
31 Cree(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeAnnotated.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeAnnotated.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeAnnotated.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("ANT<T>")
28 ANT_T("ANT<T>");
29 private final String value;
30
31 ParameterizedDataTypeAnnotated(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeBagOfConceptDescriptors.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeBagOfConceptDescriptors.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("BAG<CD>")
28 BAG_CD("BAG<CD>");
29 private final String value;
30
31 DataTypeBagOfConceptDescriptors(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ModelMediaType.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ModelMediaType.java:29**Taint Flags:**

```
26
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ModelMediaType.java, line 29 (Poor Style: Confusing Naming)****Low**

```
27 @XmlEnumValue("model/vrml")
28 MODEL_VRML("model/vrml");
29 private final String value;
30
31 ModelMediaType(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Tanana.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tanana.java:35**Taint Flags:**

```
32 X_TCB("x-TCB"),
33 @XmlEnumValue("x-TAU")
34 X_TAU("x-TAU");
35 private final String value;
36
37 Tanana(String v) {
38     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataSetOfIntegerNumbers.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfIntegerNumbers.java:32**Taint Flags:**

```
29 SET_INT("SET<INT>"),
30 @XmlEnumValue("IVL<INT>")
31 IVL_INT("IVL<INT>");
32 private final String value;
33
34 DataSetOfIntegerNumbers(String v) {
35     value = v;
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/**  
**DataSetOfIntegerNumbers.java, line 32 (Poor Style: Confusing Naming)****Low****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/**  
**UnorderedListStyle.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/UnorderedListStyle.java:35**Taint Flags:**

```
32  DISC("Disc"),  
33  @XmlEnumValue("Square")  
34  SQUARE("Square");  
35  private final String value;  
36  
37  UnorderedListStyle(String v) {  
38  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/**  
**ActStatusNormal.java, line 50 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActStatusNormal.java:50**Taint Flags:**

```
47  NEW("new"),  
48  @XmlEnumValue("suspended")  
49  SUSPENDED("suspended");  
50  private final String value;  
51  
52  ActStatusNormal(String v) {  
53  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/**  
**DataSetAnnotatedPhysicalQuantity.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeAnnotatedPhysicalQuantity.java, line 29 (Poor Style: Confusing Naming)** **Low****Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeAnnotatedPhysicalQuantity.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("ANT<PQ>")
28 ANT_PQ("ANT<PQ>");
29 private final String value;
30
31 DataTypeAnnotatedPhysicalQuantity(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/UpperChinook.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/UpperChinook.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-WAC")
28 X_WAC("x-WAC");
29 private final String value;
30
31 UpperChinook(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/GTSAbbreviationHolidaysUSNational.java, line 59 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/GTSAbbreviationHolidaysUSNational.java, line 59 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/GTSAbbreviationHolidaysUSNational.java:59**Taint Flags:**

```
56 @XmlEnumValue("JHNUSTKS5")
57 JHNUSTKS_5("JHNUSTKS5"),
58 JHNUSVET("JHNUSVET");
59 private final String value;
60
61 GTSAbbreviationHolidaysUSNational(String v) {
62     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MaterialEntityAdditive.java, line 147 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MaterialEntityAdditive.java:147**Taint Flags:**

```
144 TOLU("TOLU"),
145 URETM("URETM"),
146 VIRTM("VIRTM");
147 private final String value;
148
149 MaterialEntityAdditive(String v) {
150     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeUncertainValueNarrative.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeUncertainValueNarrative.java:29

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ParameterizedDataTypeUncertainValueNarrative.java, line 29 (Poor Style: Confusing Naming)****Low****Taint Flags:**

```
26
27 @XmlEnumValue("UVN<T>")
28 UVN_T("UVN<T>");
29 private final String value;
30
31 ParameterizedDataTypeUncertainValueNarrative(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EasternApachean.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EasternApachean.java:32**Taint Flags:**

```
29 X_APJ("x-APJ"),
30 @XmlEnumValue("x-APL")
31 X_APL("x-APL");
32 private final String value;
33
34 EasternApachean(String v) {
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CaliforniaAthapaskan.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CaliforniaAthapaskan.java:32**Taint Flags:**

```
29 X_KTW("x-KTW"),
30 @XmlEnumValue("x-HUP")
31 X_HUP("x-HUP");
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
CaliforniaAthapaskan.java, line 32 (Poor Style: Confusing Naming)****Low**

```
32 private final String value;  
33  
34 CaliforniaAthapaskan(String v) {  
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
TableRuleStyle.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/TableRuleStyle.java:38**Taint Flags:**

```
35 RRULE("Rrule"),  
36 @XmlEnumValue("Toprule")  
37 TOPRULE("Toprule");  
38 private final String value;  
39  
40 TableRuleStyle(String v) {  
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Wintuan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Wintuan.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("x-WIT")  
28 X_WIT("x-WIT");  
29 private final String value;  
30  
31 Wintuan(String v) {  
32     value = v;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
VideoMediaType.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/VideoMediaType.java:32**Taint Flags:**

```
29 VIDEO_MPEG("video/mpeg"),  
30 @XmlEnumValue("video/x-avi")  
31 VIDEO_X_AVI("video/x-avi");  
32 private final String value;  
33  
34 VideoMediaType(String v) {  
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
MultipartMediaType.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MultipartMediaType.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("multipart/x-hl7-cda-level-one")  
28 MULTIPART_X_HL_7_CDA_LEVEL_ONE("multipart/x-hl7-cda-level-one");  
29 private final String value;  
30  
31 MultipartMediaType(String v) {  
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
NorthernIroquoian.java, line 44 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
NorthernIroquoian.java, line 44 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/NorthernIroquoian.java:44**Taint Flags:**

```
41 X_SEE("x-SEE"),  
42 @XmlEnumValue("x-TUS")  
43 X_TUS("x-TUS");  
44 private final String value;  
45  
46 NorthernIroquoian(String v) {  
47     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeHistoryOfAddress.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeHistoryOfAddress.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("HIST<AD>")  
28 HIST_AD("HIST<AD>");  
29 private final String value;  
30  
31 DataTypeHistoryOfAddress(String v) {  
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
CentralMuskogean.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/CentralMuskogean.java:35**Taint Flags:**

```
32 X_CKU("x-CKU"),  
33 @XmlEnumValue("x-MIK")
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
CentralMuskogean.java, line 35 (Poor Style: Confusing Naming)****Low**

```
34 X_MIK("x-MIK");  
35 private final String value;  
36  
37 CentralMuskogean(String v) {  
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
OtherIndicationValue.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/OtherIndicationValue.java:35**Taint Flags:**

```
32 INDICATION_VALUE("_IndicationValue"),  
33 @XmlEnumValue("_SymptomValue")  
34 SYMPTOM_VALUE("_SymptomValue");  
35 private final String value;  
36  
37 OtherIndicationValue(String v) {  
38 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
HL7CommitteeIDInRIM.java, line 59 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7CommitteeIDInRIM.java:59**Taint Flags:**

```
56 C_01("C01"),  
57 @XmlEnumValue("C21")  
58 C_21("C21");  
59 private final String value;  
60  
61 HL7CommitteeIDInRIM(String v) {  
62 value = v;
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Yokutsan.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Yokutsan.java:38**Taint Flags:**

```
35 X_PYL("x-PYL"),
36 @XmlEnumValue("x-TKH")
37 X_TKH("x-TKH");
38 private final String value;
39
40 Yokutsan(String v) {
41     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7StandardVersionCode.java, line 57 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7StandardVersionCode.java:57**Taint Flags:**

```
54 PAST("PAST"),
55 PREVSUM("PREVSUM"),
56 SUM("SUM");
57 private final String value;
58
59 HL7StandardVersionCode(String v) {
60     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details**

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataSetOfPhysicalQuantities.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataSetOfPhysicalQuantities.java:  
29**Taint Flags:**

```
26
27 @XmlEnumValue("SET<PQ>")
28 SET_PQ("SET<PQ>");
29 private final String value;
30
31 DataSetOfPhysicalQuantities(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypePeriodicInterval.java, line 29 (Poor Style: Confusing  
Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
ParameterizedDataTypePeriodicInterval.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("PIVL<T>")
28 PIVL_T("PIVL<T>");
29 private final String value;
30
31 ParameterizedDataTypePeriodicInterval(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Keresan.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Keresan.java:32**Taint Flags:**

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Keresan.java, line 32 (Poor Style: Confusing Naming)****Low**

```
29 X_KJQ("x-KJQ"),  
30 @XmlEnumValue("x-KEE")  
31 X_KEE("x-KEE");  
32 private final String value;  
33  
34 Keresan(String v) {  
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Yukian.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Yukian.java:32**Taint Flags:**

```
29 X_WAO("x-WAO"),  
30 @XmlEnumValue("x-YUK")  
31 X_YUK("x-YUK");  
32 private final String value;  
33  
34 Yukian(String v) {  
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeParametricProbabilityDistributionOfRealNumbers.java, line 29 (Poor  
Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
DataTypeParametricProbabilityDistributionOfRealNumbers.java:29**Taint Flags:**

```
26  
27 @XmlEnumValue("PPD<REAL>")  
28 PPD_REAL("PPD<REAL>");  
29 private final String value;
```

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeParametricProbabilityDistributionOfRealNumbers.java, line 29 (Poor Style: Confusing Naming)****Low**

```
30
31  DataTypeParametricProbabilityDistributionOfRealNumbers (String v) {
32  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeAnnotatedConceptDescriptor.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeAnnotatedConceptDescriptor.java:29**Taint Flags:**

```
26
27  @XmlEnumValue ("ANT<CD>")
28  ANT_CD ("ANT<CD>");
29  private final String value;
30
31  DataTypeAnnotatedConceptDescriptor (String v) {
32  value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActAdministrativeRuleDetectedIssueCode.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActAdministrativeRuleDetectedIssueCode.java:32**Taint Flags:**

```
29  KEY_205 ("KEY205"),
30  @XmlEnumValue ("KEY204")
31  KEY_204 ("KEY204");
32  private final String value;
33
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActAdministrativeRuleDetectedIssueCode.java, line 32 (Poor Style: Confusing Naming)****Low**

```
34 ActAdministrativeRuleDetectedIssueCode(String v) {  
35     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EntityHandling.java, line 63 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/EntityHandling.java:63**Taint Flags:**

```
60 NTR("NTR"),  
61 PSO("PSO"),  
62 UPR("UPR");  
63 private final String value;  
64  
65 EntityHandling(String v) {  
66     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActRelationshipSplit.java, line 36 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/ActRelationshipSplit.java:36**Taint Flags:**

```
33 @XmlEnumValue("I1")  
34 I_1("I1"),  
35 IW("IW");  
36 private final String value;  
37  
38 ActRelationshipSplit(String v) {  
39     value = v;
```

<b>Poor Style: Confusing Naming</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.wsclients.mvi</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SouthernAlaska.java, line 32 (Poor Style: Confusing Naming)</b>	<b>Low</b>

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/SouthernAlaska.java:32  
**Taint Flags:**

```

29 X_AHT("x-AHT"),
30 @XmlEnumValue("x-TFN")
31 X_TFN("x-TFN");
32 private final String value;
33
34 SouthernAlaska(String v) {
35     value = v;

```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7ITSVersionCode.java, line 29 (Poor Style: Confusing Naming)</b>	<b>Low</b>
---	------------

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Sink:** Field: value  
**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/HL7ITSVersionCode.java:29  
**Taint Flags:**

```

26
27 @XmlEnumValue("XMLV1PR1")
28 XMLV_1_PR_1("XMLV1PR1");
29 private final String value;
30
31 HL7ITSVersionCode(String v) {
32     value = v;

```

<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypePeriodicIntervalOfTime.java, line 29 (Poor Style: Confusing Naming)</b>	<b>Low</b>
--	------------

#### Issue Details

**Kingdom:** Code Quality  
**Scan Engine:** SCA (Structural)

#### Sink Details

**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypePeriodicIntervalOfTime.java, line 29 (Poor Style: Confusing Naming)****Low****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypePeriodicIntervalOfTime.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("PIVL<TS>")
28 PIVL_TS("PIVL<TS>");
29 private final String value;
30
31 DataTypePeriodicIntervalOfTime(String v) {
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tiwa.java, line 32 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Tiwa.java:32**Taint Flags:**

```
29 X_TAO("x-TAO"),
30 @XmlEnumValue("x-TIX")
31 X_TIX("x-TIX");
32 private final String value;
33
34 Tiwa(String v) {
35 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Ritwan.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/Ritwan.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("x-YUR")
```

**Poor Style: Confusing Naming****Low****Package: gov.va.med.pharmacy.wsclients.mvi****PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
Ritwan.java, line 29 (Poor Style: Confusing Naming)****Low**

```
28 X_YUR("x-YUR");  
29 private final String value;  
30  
31 Ritwan(String v) {  
32 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
XDocumentStatus.java, line 38 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/XDocumentStatus.java:38**Taint Flags:**

```
35 NEW("new"),  
36 @XmlEnumValue("obsolete")  
37 OBSOLETE("obsolete");  
38 private final String value;  
39  
40 XDocumentStatus(String v) {  
41 value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/  
NorthernCaddoan.java, line 35 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/NorthernCaddoan.java:35**Taint Flags:**

```
32 X_PAW("x-PAW"),  
33 @XmlEnumValue("x-WIC")  
34 X_WIC("x-WIC");  
35 private final String value;  
36  
37 NorthernCaddoan(String v) {  
38 value = v;
```



**Poor Style: Confusing Naming****Low****Package:** gov.va.med.pharmacy.wsclients.mvi**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeHistoricalAddress.java, line 29 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/DataTypeHistoricalAddress.java:29**Taint Flags:**

```
26
27 @XmlEnumValue("HXIT<AD>")
28 HXIT_AD("HXIT<AD>");
29 private final String value;
30
31 DataTypeHistoricalAddress(String v) {
32     value = v;
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MdfHmdRowType.java, line 44 (Poor Style: Confusing Naming)****Low****Issue Details****Kingdom:** Code Quality**Scan Engine:** SCA (Structural)**Sink Details****Sink:** Field: value**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/wsclients/mvi/MdfHmdRowType.java:44**Taint Flags:**

```
41 CLASS("class"),
42 @XmlEnumValue("stc")
43 STC("stc");
44 private final String value;
45
46 MdfHmdRowType(String v) {
47     value = v;
```

## Redundant Null Check (2 issues)

### Abstract

The program can potentially dereference a null pointer, thereby causing a null pointer exception.

### Explanation

Null pointer exceptions usually occur when one or more of the programmer's assumptions is violated. A check-after-dereference error occurs when a program dereferences an object that can be `null` before checking if the object is `null`.

Most null pointer issues result in general software reliability problems, but if attackers can intentionally trigger a null pointer dereference, they can use the resulting exception to bypass security logic or to cause the application to reveal debugging information that will be valuable in planning subsequent attacks.

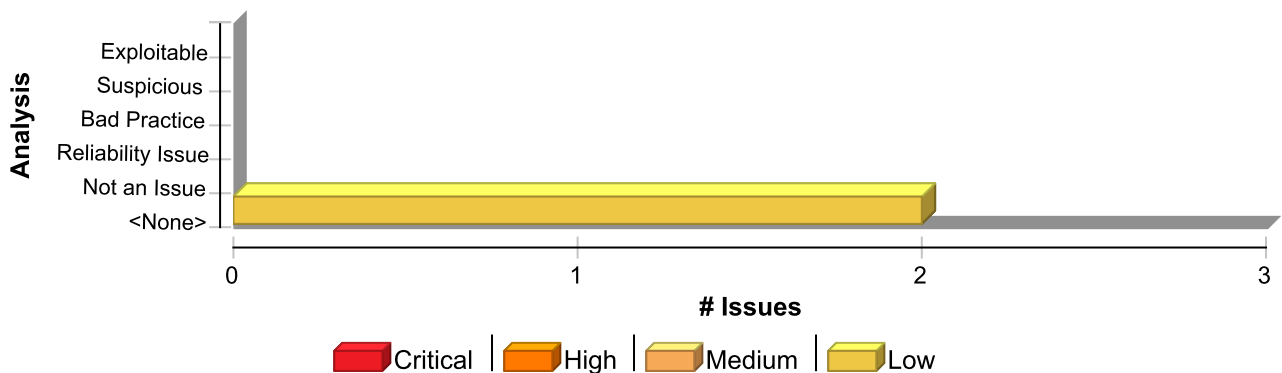
**Example:** In the following code, the programmer assumes that the variable `foo` is not `null` and confirms this assumption by dereferencing the object. However, the programmer later contradicts the assumption by checking `foo` against `null`. If `foo` can be `null` when it is checked in the `if` statement then it can also be `null` when it is dereferenced and might cause a null pointer exception. Either the dereference is unsafe or the subsequent check is unnecessary.

```
foo.setBar(val);  
...  
if (foo != null) {  
    ...  
}
```

### Recommendation

Implement careful checks before dereferencing objects that might be `null`. When possible, abstract null checks into wrappers around code that manipulates resources to ensure that they are applied in all cases and to minimize the places where mistakes can occur.

### Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
Redundant Null Check	2	0	0	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

### Redundant Null Check

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 72 (Redundant Null Check)

Low

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Control Flow)

#### Sink Details

**Sink:** Dereferenced : url

**Enclosing Method:** returnResponse()

**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/eAnde/services/impl/EESummary\_Client.java:72

**Taint Flags:**

```
69
70 URL wsdlURL = EeSummaryPortService.WSDL_LOCATION;
71
72 if (url.length() > 0 && url != null && !"".equals(url)) {
73     File wsdlFile = new File(url);
74     try {
75         if (wsdlFile.exists()) {
```

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

PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/SummaryReportDaoImpl.java, line 91 (Redundant Null Check)

Low

#### Issue Details

**Kingdom:** Code Quality

**Scan Engine:** SCA (Control Flow)

#### Sink Details

**Sink:** Dereferenced : visn

**Enclosing Method:** find()

**File:** PS\_INB\_ERX\_Model/src/main/java/gov/va/med/pharmacy/persistence/dao/impl/SummaryReportDaoImpl.java:91

**Taint Flags:**

```
88 if (visn != null && visn.length() > 0){
89     visn = visn.substring(0, visn.length()-1);
90 }
91 if (visn.compareTo("") == 0){ //check for All value
92     visn = "%";
93 }
94 System.out.println("visn for stationId query is: "+ visn);
```

## System Information Leak: External (5 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 =
    (TelephonyManager)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.

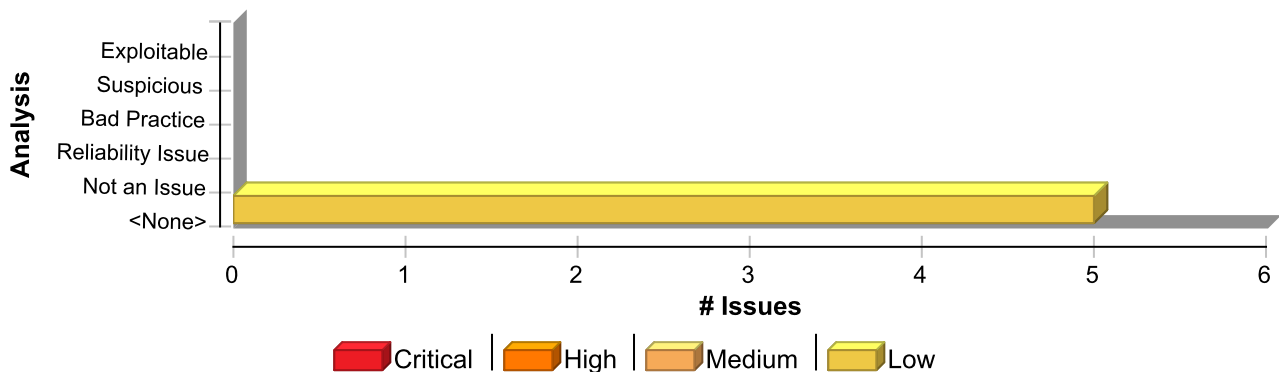
```

...
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	5	0	0	5
<b>Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>

<b>System Information Leak: External</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.jaxrs.drug.service.impl</b>	
<b>PS_INB_ERX_WS/src/main/java/gov/va/med/pharmacy/jaxrs/drug/service/impl/DrugSearchImpl.java, line 62 (System Information Leak: External)</b>	<b>Low</b>
<b>Issue Details</b>	

**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

**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**

```
54 } catch (Exception e) {
55     searchResponse.setSuccess(false);
56
57     searchResponse.setErrorMessage("Error while searching drug: " +
58     e.getMessage());
59
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;
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: " +
99 e.getMessage());
100 }
```

**System Information Leak: External****Low****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**

```
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 }
```

**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)**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()



**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****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/VistaInboundSendImpl.java, line 53 (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.VistaInboundSendImpl.send**File:** PS\_INB\_ERX\_WS/src/main/java/gov/va/med/pharmacy/jaxrs/tovista/service/impl/VistaInboundSendImpl.java:50

```
47 } catch (Exception e) {
48     sendResponse.setSuccess(false);
49
50     sendResponse.setErrorMessage("Error while sending vista inbound message: " + e.getMessage());
51 }
52
53 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:53**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

```
50 sendResponse.setErrorMessage("Error while sending vista inbound message: " + e.getMessage());
51 }
52
53 return sendResponse;
```

**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 53 (System Information Leak: External)****Low**

```
54 }
55
56 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 91 (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:88

```
85
86 wsResponse.setSuccess(false);
87
88 wsResponse.setErrorMessage("Error while saving vista outbound message: "
+ e.getMessage());
89 }
90
91 return wsResponse;
```

**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:91**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

```
88 wsResponse.setErrorMessage("Error while saving vista outbound message: " + e.getMessage());
89 }
90
91 return wsResponse;
92 }
93
94 undefined
```

## System Information Leak: HTML Comment in JSP (6 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.

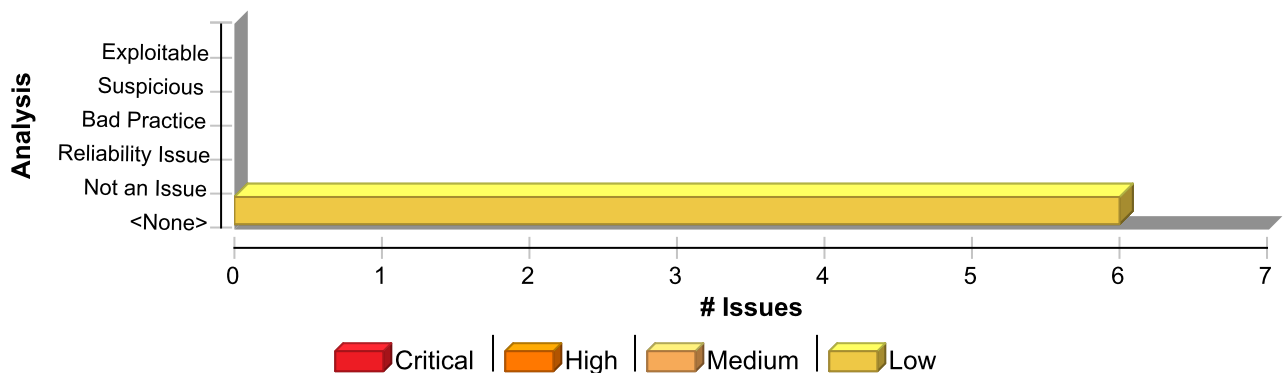
### Recommendation

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	6	0	0	6
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>

### System Information Leak: HTML Comment in JSP

Low

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

PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/logout.jsp, line 30 (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/logout.jsp:30

**Taint Flags:**

```
27 <hr />
28 </div>
29 </body>
30 <!-- Included to resolve IE caching bugs -->
31 <head>
32 <meta http-equiv="pragma" content="no-cache" />
33 <meta http-equiv="cache-control" content="no-cache" />
```

PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/reports.jsp, line 45 (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/reports.jsp:45

**Taint Flags:**

```
42 <input type="text" name="dateTo" id="dateTo" value="now"
43 data-dojo-type="dijit/form/DateTextBox" required="true" />
44
45 <!-- <button id="runReportButton" type="button" >Run Report</button> -->
46 <button dojoType="dijit.form.Button" type="button">Run Report
47 <script type="dojo/method" event="onClick" args="evt">
48 console.log("button clicked");
```

**System Information Leak: HTML Comment in JSP****Low****Package:** .src.main.webapp.WEB-INF**PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/errorPage.jsp, line 32 (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/errorPage.jsp:32**Taint Flags:**

```
29 <br>
30 </p>
31 <br />
32 <!--
33 <p>
34 Please <a href="{pageContext.request.contextPath}/public/welcome">login</a> again.
35 </p>
```

**Package:** .src.main.webapp.WEB-INF.includes**PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/includes/navigation.jsp, line 10 (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/includes/navigation.jsp:10**Taint Flags:**

```
7 <ul class="tabNavigation" id="tabMenu">
8
9 <inb-erx:menuItem name="Home" path="inb-erx/homepage" id="index"/>
10 <!-- <inb-erx:menuItem name="View eRx" path="inb-erx/vieweRx/main" id="vieweRx"/> -->
11 <inb-erx:menuItem name="Pharmacy Management" path="inb-erx/managePharm/main"
id="managepharmacy"/>
12 <inb-erx:menuItem name="Track/Audit" path="inb-erx/track/main" id="trackeRx"/>
13 <inb-erx:menuItem name="Reports" path="inb-erx/reports/main" id="reports"/>
```

**PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/includes/footer.jsp, line 10 (System Information Leak: HTML Comment in JSP)****Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Structural)

**System Information Leak: HTML Comment in JSP****Low****Package:** .src.main.webapp.WEB-INF.includes**PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/includes/footer.jsp, line 10 (System Information Leak: HTML Comment in JSP)****Low****Sink Details****Sink:** Comment**File:** PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/includes/footer.jsp:10**Taint Flags:**

```
7 <div id="footerLinks" accesskey="y">
8 <ul class="footerMenu">
9 <inb-erx:menuItem name="Home" path="inb-erx/homepage" id="index"/>
10 <!-- <inb-erx:menuItem name="View eRx" path="inb-erx/vieweRx" id="vieweRx"/> -->
11 <inb-erx:menuItem name="Pharmacy Management" path="inb-erx/managePharm/main"
id="enableDisablePharm"/>
12 <inb-erx:menuItem name="Track/Audit" path="inb-erx/track/main" id="trackAudit"/>
13 <inb-erx:menuItem name="Reports" path="inb-erx/reports/main" id="reports"/>
```

**Package:** .src.main.webapp.WEB-INF.layouts**PS\_INB\_ERX\_UI/src/main/webapp/WEB-INF/layouts/basicLayout.jsp, line 18 (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/layouts/basicLayout.jsp:18**Taint Flags:**

```
15
16 <body id="home" class="claro">
17
18 <!--
19 <div id="preloader"></div>
20 -->
21
```

## System Information Leak: Internal (3 issues)

### Abstract

Revealing system data or debugging information helps an adversary learn about the system and form a plan of attack.

### Explanation

An internal information leak occurs when system data or debugging information is sent to a local file, console, or screen via printing or logging.

**Example 1:** The following code prints an exception to the standard error stream:

```
try {  
    ...  
} catch (Exception e) {  
    e.printStackTrace();  
}
```

Depending upon the system configuration, this information can be dumped to a console, written to a log file, or exposed to a 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.

**Example 2:** The code below logs the stack trace of a caught exception on the Android platform.

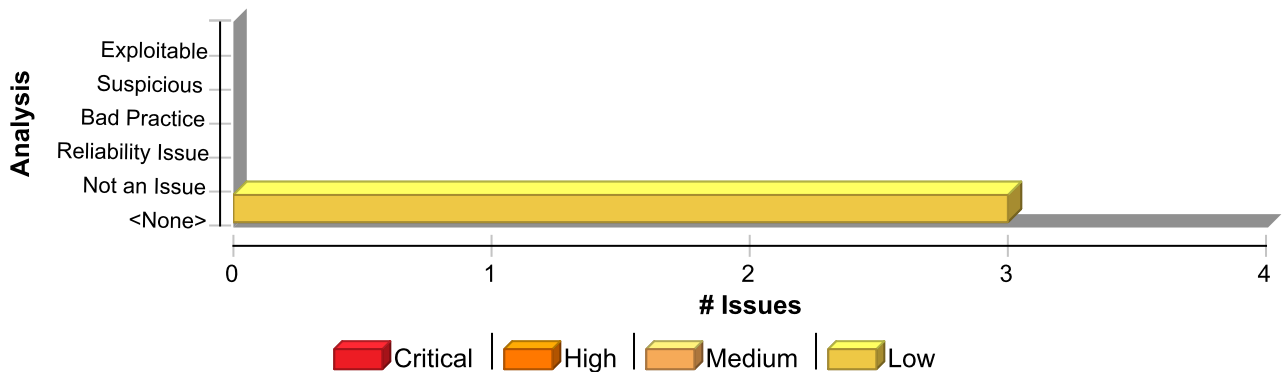
```
...  
try {  
    ...  
} catch (Exception e) {  
    Log.e(TAG, Log.getStackTraceString(e));  
}  
...
```

### 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.

## Issue Summary



## Engine Breakdown

	SCA	WebInspect	SecurityScope	Total
System Information Leak: Internal	3	0	0	3
Total	3	0	0	3

### System Information Leak: Internal

Low

Package: gov.va.med.pharmacy.utility

PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/  
StreamUtilities.java, line 15 (System Information Leak: Internal)

Low

### Issue Details

**Kingdom:** Encapsulation

**Scan Engine:** SCA (Data Flow)

### Source Details

**Source:** Read e

**From:** gov.va.med.pharmacy.utility.StreamUtilities.safeClose

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:15

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

### Sink Details

**Sink:** java.io.PrintStream.print()

**Enclosing Method:** safeClose()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:15

**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

```
12 try {
```



**System Information Leak: Internal****Low****Package:** gov.va.med.pharmacy.utility**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 15 (System Information Leak: Internal)****Low**

```
13  fileInputStream.close();
14  } catch (IOException e) {
15  System.out.print(e);
16  }
17  }
18  }
```

**PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 25 (System Information Leak: Internal)****Low****Issue Details****Kingdom:** Encapsulation**Scan Engine:** SCA (Data Flow)**Source Details****Source:** Read e**From:** gov.va.med.pharmacy.utility.StreamUtilities.safeClose**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:25

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

**Sink Details****Sink:** java.io.PrintStream.print()**Enclosing Method:** safeClose()**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:25**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

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

<b>System Information Leak: Internal</b>	<b>Low</b>
<b>Package: gov.va.med.pharmacy.utility</b>	
<b>PS_INB_ERX_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java, line 35 (System Information Leak: Internal)</b>	<b>Low</b>

#### Issue Details

**Kingdom:** Encapsulation

**Scan Engine:** SCA (Data Flow)

#### Source Details

**Source:** Read e

**From:** gov.va.med.pharmacy.utility.StreamUtilities.safeClose

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:35

```

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

#### Sink Details

**Sink:** java.io.PrintStream.print()

**Enclosing Method:** safeClose()

**File:** PS\_INB\_ERX\_Common/src/main/java/gov/va/med/pharmacy/utility/StreamUtilities.java:35

**Taint Flags:** EXCEPTIONINFO, SYSTEMINFO

```

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

