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Id : 1001740496

Output of the test cases:

Spotbugs raw output:

Test 1

```
<BugInstance type="ST_WRITE_TO_STATIC_FROM_INSTANCE_METHOD" priority="1"
rank="15" abbrev="ST" category="STYLE" first="1"> <Class
classname="secure.SimpleWebServer"> <SourceLine classname="secure.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="secure/SimpleWebServer.java"/> </Class>
<Method classname="secure.SimpleWebServer" name="<init>" signature="()V"
isStatic="false"> <SourceLine classname="secure.SimpleWebServer" start="29" end="31"
startBytecode="0" endBytecode="67" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Field
classname="secure.SimpleWebServer" name="dServerSocket"
signature="Ljava/net/ServerSocket;" isStatic="true"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Field> <SourceLine
classname="secure.SimpleWebServer" start="30" end="30" startBytecode="14"
endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="30" end="30" startBytecode="14"
endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
```

```
<BugInstance type="NP_DEREFERENCE_OF_READLINE_VALUE" priority="2" rank="15"
abbrev="NP" category="STYLE" first="1"> <Class classname="secure.SimpleWebServer">
<SourceLine classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="49" end="84" startBytecode="0"
endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <LocalVariable name="request"
register="4" pc="49" role="LOCAL_VARIABLE_VALUE_OF"/> <SourceLine
classname="secure.SimpleWebServer" start="64" end="64" startBytecode="51"
endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="64" end="64" startBytecode="51"
```

```
endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
```

Test 2

```
<BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1"> <Class classname="secure.SimpleWebServer"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="49" end="84" startBytecode="0"
endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Method
classname="java.io.InputStreamReader" name="<init>" signature="(Ljava/io/InputStream;)V"
isStatic="false" role="METHOD_CALLED"> <SourceLine
classname="java.io.InputStreamReader"/> </Method> <SourceLine
classname="secure.SimpleWebServer" start="50" end="50" startBytecode="12"
endBytecode="12" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="50" end="50" startBytecode="12"
endBytecode="12" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
```

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<BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1"> <Class classname="secure.SimpleWebServer"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="49" end="84" startBytecode="0"
endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Method
classname="java.io.OutputStreamWriter" name="<init>" signature="(Ljava/io/OutputStream;)V"
isStatic="false" role="METHOD_CALLED"> <SourceLine
classname="java.io.OutputStreamWriter"/> </Method> <SourceLine
classname="secure.SimpleWebServer" start="54" end="54" startBytecode="27"
endBytecode="27" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="54" end="54" startBytecode="27"
endBytecode="27" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
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<BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1"> <Class classname="secure.SimpleWebServer"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="88" end="123" startBytecode="0"
endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Method
classname="java.io.FileReader" name="<init>" signature="(Ljava/lang/String;)V" isStatic="false"
role="METHOD_CALLED"> <SourceLine classname="java.io.FileReader"/> </Method>
<SourceLine classname="secure.SimpleWebServer" start="104" end="104" startBytecode="47"
endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="104" end="104" startBytecode="47"
endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
```

```
<BugInstance type="ST_WRITE_TO_STATIC_FROM_INSTANCE_METHOD" priority="1"
rank="15" abbrev="ST" category="STYLE" first="1"> <Class
classname="secure.SimpleWebServer"> <SourceLine classname="secure.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="secure/SimpleWebServer.java"/> </Class>
<Method classname="secure.SimpleWebServer" name="<init>" signature="()V"
isStatic="false"> <SourceLine classname="secure.SimpleWebServer" start="29" end="31"
startBytecode="0" endBytecode="67" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Field
classname="secure.SimpleWebServer" name="dServerSocket"
signature="Ljava/net/ServerSocket;" isStatic="true"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Field> <SourceLine
classname="secure.SimpleWebServer" start="30" end="30" startBytecode="14"
endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="30" end="30" startBytecode="14"
endBytecode="14" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
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```
<BugInstance type="NP_DEREFERENCE_OF_READLINE_VALUE" priority="2" rank="15"
abbrev="NP" category="STYLE" first="1"> <Class classname="secure.SimpleWebServer">
<SourceLine classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="processRequest"
signature="(Ljava/net/Socket;)V" isStatic="false"> <SourceLine
```

```

classname="secure.SimpleWebServer" start="49" end="84" startBytecode="0"
endBytecode="324" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <LocalVariable name="request"
register="4" pc="49" role="LOCAL_VARIABLE_VALUE_OF"/> <SourceLine
classname="secure.SimpleWebServer" start="64" end="64" startBytecode="51"
endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="64" end="64" startBytecode="51"
endBytecode="51" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
<BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1"> <Class classname="secure.SimpleWebServer"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="88" end="123" startBytecode="0"
endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Method
classname="java.io.FileReader" name="<init>" signature="(Ljava/lang/String;)V" isStatic="false"
role="METHOD_CALLED"> <SourceLine classname="java.io.FileReader"/> </Method>
<SourceLine classname="secure.SimpleWebServer" start="104" end="104" startBytecode="47"
endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="104" end="104" startBytecode="47"
endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>

<BugInstance type="DM_DEFAULT_ENCODING" priority="1" rank="19" abbrev="Dm"
category="I18N" first="1"> <Class classname="secure.SimpleWebServer"> <SourceLine
classname="secure.SimpleWebServer" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Class> <Method
classname="secure.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="88" end="123" startBytecode="0"
endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <Method
classname="java.io.FileReader" name="<init>" signature="(Ljava/lang/String;)V" isStatic="false"
role="METHOD_CALLED"> <SourceLine classname="java.io.FileReader"/> </Method>
<SourceLine classname="secure.SimpleWebServer" start="104" end="104" startBytecode="47"
endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="104" end="104" startBytecode="47"

```

```
endBytecode="47" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
```

```
<BugInstance type="REC_CATCH_EXCEPTION" priority="3" rank="20" abbrev="REC"
category="STYLE" first="3" last="5" removedByChange="true"> <Class
classname="secure.SimpleWebServer"> <SourceLine classname="secure.SimpleWebServer"
sourcefile="SimpleWebServer.java" sourcepath="secure/SimpleWebServer.java"/> </Class>
<Method classname="secure.SimpleWebServer" name="serveFile"
signature="(Ljava/io/OutputStreamWriter;Ljava/lang/String;)V" isStatic="false"> <SourceLine
classname="secure.SimpleWebServer" start="88" end="123" startBytecode="0"
endBytecode="320" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </Method> <SourceLine
classname="secure.SimpleWebServer" start="107" end="107" startBytecode="60"
endBytecode="60" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> <SourceLine
classname="secure.SimpleWebServer" start="107" end="107" startBytecode="60"
endBytecode="60" sourcefile="SimpleWebServer.java"
sourcepath="secure/SimpleWebServer.java"/> </BugInstance>
```

Test 3 : no bugs occurred to be reported.

Sonar lint raw output:

Resource Date Description

SimpleWebServer.java null Move the array designator from the variable to the type.

SimpleWebServer.java null Define and throw a dedicated exception instead of using a generic one.

SimpleWebServer.java null Define and throw a dedicated exception instead of using a generic one.

SimpleWebServer.java null Remove this assignment of "dServerSocket".

SimpleWebServer.java null Replace the synchronized class "StringBuffer" by an unsynchronized one such as "StringBuilder".

SimpleWebServer.java null Add an end condition to this loop.

SimpleWebServer.java null Use try-with-resources or close this "FileReader" in a "finally" clause.