## **opentext**<sup>™</sup>

# OpenText™ Fortify Remediation Plugin for Eclipse

Software Version: 24.2.0

User Guide

Document Release Date: July 2024 Software Release Date: July 2024

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Open Text Corporation

275 Frank Tompa Drive, Waterloo, Ontario, Canada, N2L 0A1

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### **Documentation Updates**

The title page of this document contains the following identifying information:

- · Software Version number
- Document Release Date, which changes each time the document is updated
- Software Release Date, which indicates the release date of this version of the software

This document was produced on July 09, 2024. To check for recent updates or to verify that you are using the most recent edition of a document, go to:

https://www.microfocus.com/support/documentation

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## **Preface**

## **Contacting Customer Support**

Visit the Support website to:

- Manage licenses and entitlements
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- Download software
- Explore the Community

https://www.microfocus.com/support

## For More Information

For more information about Fortify software products:

https://www.microfocus.com/cyberres/application-security

### About the Documentation Set

The Fortify Software documentation set contains installation, user, and deployment guides for all Fortify Software products and components. In addition, you will find technical notes and release notes that describe new features, known issues, and last-minute updates. You can access the latest versions of these documents from the following Product Documentation website:

https://www.microfocus.com/support/documentation

To be notified of documentation updates between releases, subscribe to Fortify Product Announcements on the OpenText Fortify Community:

https://community.microfocus.com/cyberres/fortify/w/announcements

## Fortify Product Feature Videos

You can find videos that highlight Fortify products and features on the Fortify Unplugged YouTube channel:

https://www.youtube.com/c/FortifyUnplugged

# **Change Log**

The following table lists changes made to this document. Revisions to this document are published only if the changes made affect product functionality.

Software Release / Document Version	Change
24.2.0	<ul> <li>Added:</li> <li>"Configuring Communication with Fortify Software Security Center" on page 10</li> <li>"Auditing Multiple Issues" on page 34</li> </ul>
23.2.0	Added:  • "Suppressing Issues" on page 35  Updated:  • Content added to support overriding issue priority (see "Grouping Issues" on page 15, "Search Modifiers" on page 20, "Auditing Analysis Results" on page 32)
23.1.0	<ul> <li>Updated:</li> <li>Added that you can install the Fortify Remediation Plugin for Eclipse from the Eclipse Marketplace (see "Installing the Fortify Remediation Plugin for Eclipse" on page 9)</li> <li>Added support for custom tags that require comments (see "Auditing Analysis Results" on page 32)</li> </ul>
22.2.0	This new document contains the Fortify Remediation Plugin for Eclipse content that was previously covered in the Micro Focus Fortify Plugins for Eclipse User Guide.  Added:  "Configuration Options" on page 37  Updated:  Added the Engine Priority grouping attribute (see "Grouping Issues" on

Software Release / Document Version	Change
	page 15)
	<ul> <li>Added the engine priority search modifier (see "Search Modifiers" on page 20)</li> </ul>
	<ul> <li>Added how to search for issues based on whether a custom tag is empty (see "Search Modifiers" on page 20)</li> </ul>

# **Getting Started**

This guide describes how to install the Fortify Remediation Plugin for Eclipse and use it to review analysis results stored on a OpenText™ Fortify Software Security Center server.

This section contains the following topics:

About the Fortify Remediation Plugin for Eclipse	8
Requirements for Using the Fortify Remediation Plugin for Eclipse	8
Installing the Fortify Remediation Plugin for Eclipse	9
Configuring Communication with Fortify Software Security Center	10
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## About the Fortify Remediation Plugin for Eclipse

The Fortify Remediation Plugin for Eclipse works together with Fortify Software Security Center to add remediation functionality to your software security analysis. The Fortify Remediation Plugin for Eclipse is a lightweight plugin option for developers who do not need the scanning and auditing capabilities of Fortify Audit Workbench and the Fortify Complete Plugin for Eclipse.

You can use the Fortify Remediation Plugin for Eclipse to:

- Review analysis results for applications in Fortify Software Security Center from within Eclipse
- Audit the analysis results by assigning users or tags to issues, and adding comments to issues
- Fix and eliminate security issues in your code

# Requirements for Using the Fortify Remediation Plugin for Eclipse

To use the Fortify Remediation Plugin for Eclipse, you must have the following:

- A Fortify Software Security Center URL
  - The Fortify Software Security Center version must correspond with the Fortify Remediation Plugin for Eclipse version. The version number format is *year*>.*quarter*>.*quarter*>.*quarter*> (for example, 24.2.0). The *year*> and *quarter*> portions of the and the version numbers must match. For example, versions 24.2.0 and 24.2.1 correspond.
- If your Fortify Software Security Center server uses an SSL connection from an internal certificate
  authority or a self-signed certificate, you must import the trusted certificate into the Java Keystore
  for Eclipse.

- A user account on the Fortify Software Security Center server that has permission to access application versions
  - To log into Fortify Software Security Center, you can use a user name and password or an authentication token.
- To audit issues in the analysis results, your user account must have audit permission.

  In addition to audit permissions, the following audit tasks require additional permissions:
  - To add comments to issues or assign values to custom tags that require comments, your user account must have the permission to comment on issues.
  - To override issue priority, your user account must have the permission to edit restricted custom tag values.

**Note:** You do not need to specify a Fortify license file for the Fortify Remediation Plugin for Eclipse. Only Fortify Software Security Center requires a license file.

## Installing the Fortify Remediation Plugin for Eclipse

You can install the Fortify Remediation Plugin for Eclipse on Windows, Linux, and macOS. The following instructions describe how to install the Fortify Remediation Plugin for Eclipse from a Fortify server. Alternatively, you can install it using the Eclipse Marketplace Client.

To update from an earlier Fortify Remediation Plugin for Eclipse version, you must first remove the existing version.

**Note:** These instructions describe a third-party product and might not match the specific, supported version you are using. See your product documentation for the instructions for your version.

To install the Fortify Remediation Plugin for Eclipse:

- 1. From Eclipse, select **Help > Install New Software**.
- 2. Click Add.

The Add Repository dialog box opens.

- 3. (Optional) In the **Name** box, type a name for the update site.
- 4. In the **Location** box, type https://tools.fortify.com/ssceclipseplugin.
- 5. Click **Add**.

The **Fortify Eclipse Remediation Plugin** node is listed as available software.

- 6. Click **Select All** and then click **Next**.
- 7. To see the version and copyright information for the plugin in the **Details** box, click the plugin name.
- 8. Click **Next**.
- 9. Click Finish.
- 10. To complete the installation and restart Eclipse, click **Restart Now** when prompted.

After Eclipse restarts, the menu bar displays the Fortify menu.

# Configuring Communication with Fortify Software Security Center

You can configure settings to communicate with Fortify Software Security Center including the server address, proxy information, and timeouts.

To configure the connection settings for communicating with Fortify Software Security Center:

- 1. Select Fortify > Remediation Options.
- 2. Configure the options described in the following table.

Option	Description
Server URL	The web address for your Fortify Software Security Center server.
Proxy Server	The proxy server to access the Fortify Software Security Center server.
Proxy Port	The proxy port to access the Fortify Software Security Center server.
Connection	The maximum time (in seconds) to wait for establishing a connection to
Timeout	Fortify Software Security Center. The default value is 10 seconds.
Download	The maximum time (in seconds) to wait for receiving audit results from Fortify
Timeout	Software Security Center. The default value is 60 seconds.
Upload	The maximum time (in seconds) to wait for uploading audit information to
Timeout	Fortify Software Security Center. The default value is 60 seconds.

3. Click **Apply**.

### **Related Documents**

This topic describes documents that provide information about Fortify software products.

**Note:** You can find the Fortify Product Documentation at <a href="https://www.microfocus.com/support/documentation">https://www.microfocus.com/support/documentation</a>. Most guides are available in both PDF and HTML formats.

## Fortify Software Security Center

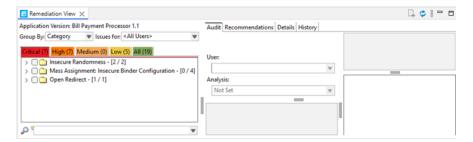
The following document provides information about Fortify Software Security Center. This document is available on the Product Documentation website at

https://www.microfocus.com/documentation/fortify-software-security-center.

Document / File Name	Description
OpenText™ Fortify Software Security Center User Guide SSC_Guide_ <version>.pdf</version>	This document provides Fortify Software Security Center users with detailed information about how to deploy and use Fortify Software Security Center. It provides all the information you need to acquire, install, configure, and use Fortify Software Security Center.
	It is intended for use by system and instance administrators, database administrators (DBAs), enterprise security leads, development team managers, and developers. Fortify Software Security Center provides security team leads with a high-level overview of the history and status of a project.

# Viewing Analysis Results

After you open an application version on Fortify Software Security Center, the Fortify Remediation Plugin for Eclipse displays the analysis results in the **Remediation View**. This view displays all security issues, organized in color-coded tabs (folders) in an issue pane. Issues are organized based on the settings in Fortify Software Security Center. To the right of the issue pane are four tabs that provide information specific to the issue selected in the issue pane.



Color-coded tabs (folders) contain logically defined sets of issues. For example, the **Critical** folder contains all critical issues for a project. Similarly, the **Low** folder contains all low-priority issues. Filters determine which issues are visible. Filters are organized into distinct groups called filter sets. For information on applying filter sets, see "Viewing and Selecting Issues" on page 13.

To remediate issues, the project you have open in Eclipse must correspond to the application version you opened in Fortify Software Security Center (see "Opening a Fortify Software Security Center Application Version" below).

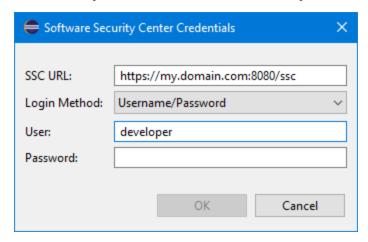
# Opening a Fortify Software Security Center Application Version

To use the Fortify Remediation Plugin for Eclipse, you must first connect to Fortify Software Security Center and open an application version.

**Note:** The Fortify Software Security Center server that you connect to from the Fortify Remediation Plugin for Eclipse must be running continuously during your work session in Eclipse.

To open an application version in the Fortify Remediation Plugin for Eclipse:

1. Select Fortify > Connect to Software Security Center.



- 2. In the **SSC URL** box, specify the web address for your Fortify Software Security Center server.
- 3. From the **Login Method** list, select the login method set up for you on Fortify Software Security Center.
- 4. Depending on the selected login method, use the procedure described in the following table.

Login Method	Procedure
Username/Password	Type your Fortify Software Security Center user name and password.
Authentication Token	In the <b>Token</b> box, specify the decoded value of a Fortify Software Security Center authentication token of type ToolsConnectToken.
	<b>Note:</b> For instructions on how to generate a Fortify Software

Login Method	Procedure
	Security Center authentication token, see the <i>OpenText</i> ™  Fortify Software Security Center User Guide.

5. Click **OK** to connect to Fortify Software Security Center.

The Select Software Security Center Application Version dialog box opens and displays the application versions that your user account has permission to access.

6. Select an application version to open, and then click **OK**.

The Fortify Remediation Plugin for Eclipse displays the analysis results for the selected application version on Fortify Software Security Center.

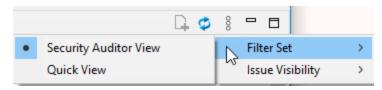
**Note:** To open a different application version on the same Fortify Software Security Center server to which you are already connected, select **Fortify > Open Application Version**. To switch to a different Fortify Software Security Center server, select **Fortify > Disconnect from Software Security Center** and then reconnect to Fortify Software Security Center as described in this topic.

## Viewing and Selecting Issues

To view and select issues in an opened application version:

- From the **Group By** list, select an attribute for sorting issues in all visible folders into groups.
   The default grouping is **Category**. For a description of the available **Group By** attributes, see "Grouping Issues" on page 15.
- 2. By default, issues for your Fortify Software Security Center user name are shown. From the **Issues for** list, you can select one of the following:
  - <All Users>
  - A Fortify Software Security Center user name
- To apply a filter set to the issues, click the View Menu button, and then select Filter Set >

   filter\_set\_name>.



**Note:** The filter sets available depends on the issue template assigned to the application version you opened.

4. Click a color-coded folder (tab) to view the associated issues.

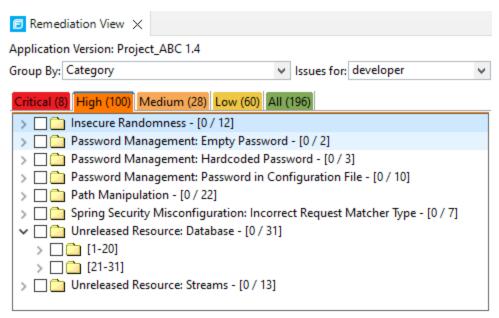
**Note:** The folders shown depend on your **Group By**, **Issues for**, and **Filter Set** selections. It is possible that not all tabs are shown. The folders shown also depend on the issue template associated with the application version.

- The **Critical** folder contains issues that have a high impact and a high likelihood of exploitation. Remediate critical issues immediately.
- The **High** folder contains issues that have a high impact and a low likelihood of exploitation. Remediate these issues with the next patch release.
- The **Medium** folder contains issues that have a low impact and a high likelihood of exploitation. Remediate these issues as time permits.
- The **Low** folder contains issues that have a low impact and a low likelihood of exploitation. Remediate these issues as time permits.
- The All folder lists all issues.

Within each color-coded folder, issues are grouped into subfolders. After each folder name, enclosed in brackets, is the number of audited issues and the total number of issues in the folder. For example, **Command Injection - [2 / 2]** indicates that two out of two issues categorized as Command Injection are audited.

5. Click to expand a folder and view the associated issues.

The Fortify Remediation Plugin for Eclipse retrieves the corresponding issues from Fortify Software Security Center.



**Note:** By default, if a folder contains more than 20 issues, the issues are grouped into subfolders in blocks of 20 with folder names that indicate the issues included. For example, if a folder contains 31 issues, the first 20 issues are in a subfolder labeled **[1-20]** and the last set of issues are in a subfolder labeled **[21-31]**. To change the default pagination setting of 20, set the com.fortify.remediation.PaginationCount property. You can also disable

issue pagination by setting the com.fortify.remediation.PaginateIssues property to false. For more information about these properties, see the "Configuration Options" on page 37.

6. To view the issue information for one issue, click an issue name.

The issue information is displayed in the **Audit** tab.

7. To select multiple issues so you can add the same audit information to them, select the check box for each issue.

Switching to a different folder (tab) clears any previously selected issues.

**Tip:** Right-click an issue to either clear all the selected issues or select all issues in the current folder (tab).

If you select more than one issue, the **Bulk Audit** tab is displayed.

#### See Also

"Grouping Issues" below

"Searching for Issues" on page 18

## **Grouping Issues**

The items visible in the **Remediation View** issue pane vary depending on the selected issue attribute. The attribute you select from the **Group By** list sorts issues in all visible folders into subfolders. Use the issue attributes to group and view the issues in different ways. The following table describes the available issue attributes.

Issue Attribute	Description
Analysis	Groups issues by the audit analysis value assigned, such as Suspicious, Exploitable, and Not an Issue.
Analysis Type	Groups issues by analyzer product, such as SCA, WEBINSPECT, and SECURITYSCOPE (OpenText™ Fortify WebInspect Agent).
Analyzer	Groups issues by analyzer group, such as Control Flow, Data Flow, Pentest, and Structural.
App Defender Protected	Groups issues by whether Application Defender can protect the vulnerability category.
Category	Groups issues by vulnerability category. This is the default grouping.
<custom_tagname></custom_tagname>	Groups issues by the selected custom tag.

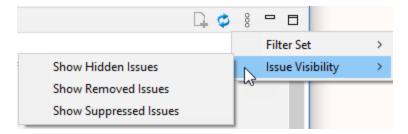
Issue Attribute	Description
Engine Priority	Groups issues based on the original priority value determined by the engine that identified the issue.
	<b>Note:</b> This is only available in Fortify Software Security Center version 22.2.0 or later.
File Name	Groups issues by file name.
Folder	Groups issues by folders defined in the issue template.
Fortify Priority Order	Groups issues as Critical, High, Medium, and Low based on the issue priority.
Introduced date	Groups issues by the date the issue was first detected.
Issue State	Groups audited issues by whether the issue is an open issue or not an issue based on the level of analysis set for the primary tag. Values equivalent to Suspicious and Exploitable are considered open issue states.
Kingdom	Groups issues by the Seven Pernicious Kingdoms classification.
Manual	Groups issues by whether they were manually created by penetration test tools, and not automatically produced by a web crawler such as OpenText™ Fortify WebInspect.
<metadata_listname></metadata_listname>	Groups issues using the alternative metadata external list names (for example, OWASP Top 10 < year >, CWE, PCI SSF < version >, STIG < version >, and others).
New Issue	Shows which issues are new since the last scan. For example, if you run a new scan, any issues that are new are displayed in the tree under the <b>NEW</b> group and the others are displayed in the <b>UPDATED</b> group. If removed issues are visible, issues not found in the latest scan are displayed in the <b>REMOVED</b> list.
Package	Groups issues by package or namespace. Nothing is shown for projects to which this option does not apply, such as C projects.
Primary Context	Groups issues where the primary location or sink node function call occurs in the same code context.

Issue Attribute	Description
Priority Override	Groups issues by the Priority Override tag value assigned.
Sink	Groups issues that share the same dataflow sink function.
Source	Groups issues that share the same dataflow source functions.
Source Context	Groups dataflow issues that have the source function call contained in the same code context.
Source File	Groups dataflow issues by the source code file where the taint originated.
Status	Groups issues by the audit status ( <b>Reviewed</b> , <b>Unreviewed</b> , or <b>Under Review</b> ).
Taint Flag	Groups issues by the taint flags that they contain.
URL	Groups dynamic issues by the request URL.

## **Customizing Issue Visibility**

You can customize the issue list to determine which issues the **Remediation View** displays.

On the top right of the **Remediation View**, click the **View Menu** icon, select **Issue Visibility**, and then select whether to show hidden, removed, or suppressed issues.



Select (or clear) one of the following options:

• To display all issues that are excluded from display by visibility filters in filter sets such as the Quick View filter sets, select **Show Hidden Issues**.

**Note:** The visibility filter settings in the issue template associated with the application version determine which issues are hidden.

• To display all the issues that were uncovered in the previous scan but are no longer evident in the most recent analysis results, select **Show Removed Issues**.

• To display all issues marked as suppressed (either because they are not of high priority or of immediate concern), select **Show Suppressed Issues**.

**Note:** Users who audit issues can suppress specific types of issues that are not considered high priority or of immediate concern. For example, auditors can suppress issues that are fixed, or issues that your organization plans not to fix.

## Searching for Issues

To perform a simple search, do one of the following:

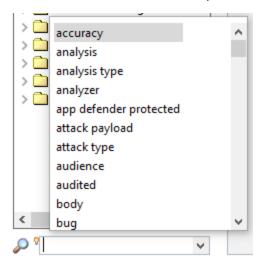
• Type a search query in the search box, and then press **Enter**.



• To select a search query that you used before, click the arrow in the search box, and then select a search query from the list.

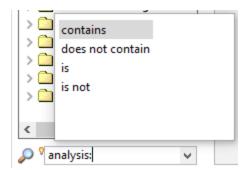
To get assistance to compose a search query, do the following:

1. Click in the search box, and then press **Ctrl** + **Space**.



2. From the displayed list, double-click a search modifier to begin your search query.

3. For assistance to specify the comparison, with your cursor placed after the modifier in the search box, press **Ctrl** + **Space**.



- 4. From the displayed list, double-click a comparison to add it to your search query.
- 5. Type the rest of the search query, and then press **Enter** to perform the search.

#### See Also

"Search Syntax" below

"Search Modifiers" on the next page

"Search Query Examples" on page 26

## Search Syntax

To indicate the type of comparison to perform, wrap search terms with delimiters. The following table describes the syntax to use for a search query.

Comparison	Description
contains	Searches for a term without any special qualifying delimiters
equals	Searches for an exact match when you enclose the term in quotation marks ("")
number range	Searches for a range of numbers using the standard mathematical interval notation of parentheses and/or brackets to indicate whether the endpoints are excluded or included respectively  Example: (2,4] indicates greater than two and less than or equal to four
not equal	Excludes issues specified by the string when you precede the string with the exclamation character (!)  Example: file: !Main.java returns all issues that are not in Main.java

You can further qualify search terms with modifiers. The syntax for using a modifier is <modifier>:<search\_term>.

A search query can contain multiple modifiers and search terms. If you specify more than one modifier, the search returns only issues that match all the modified search terms. For example, file:ApplicationContext.java category:SQL Injection returns only SQL injection issues found in ApplicationContext.java.

If you use the same modifier more than once in a search query, then the search terms qualified by those modifiers are treated as an OR comparison. For example, file:ApplicationContext.java category:SQL Injection category:Cross-Site Scripting returns SQL injection issues and cross-site scripting issues found in ApplicationContext.java.

For complex searches, you can also insert the AND or the OR keyword between your search queries. Note that AND and OR operations have the same priority in searches.

#### See Also

"Search Modifiers" below

"Search Query Examples" on page 26

"Searching for Issues" on page 18

#### **Search Modifiers**

You can use a search modifier to specify to which issue attribute the search term applies. To use a modifier that contains a space in the name, such as the name of the custom tag, you must enclose the modifier in brackets. For example, to search for issues that are new, type [issue age]:new.

A search that is not qualified by a modifier matches the search query based on the following issue attributes: kingdom, primary rule id, analyzer, filename, severity, class name, function name, instance id, package, confidence, type, subtype, taint flags, category, sink, and source.

The following examples describe using the search with and without applying a search modifier:

- To apply the search to all modifiers, type a string such as control flow. This searches all the modifiers and returns any results that contain the "control flow" string.
- To apply the search to a specific modifier, type the modifier name and the string as follows: analyzer:control flow. This returns all results detected by the Control Flow Analyzer.

The following table describes the search modifiers. A few modifiers have a shortened modifier name indicated in parentheses. You can use either modifier string.

Search Modifier (Issue Attribute)	Description
accuracy	Searches for issues based on the accuracy value specified (0.1 through 5.0).
analysis	Searches for issues that have the specified audit analysis value such as exploitable, not an issue, and so on.

Search Modifier (Issue Attribute)	Description
[analysis type]	Searches for issues based on analyzer product such as SCA and WEBINSPECT.
analyzer	Searches the issues for the specified analyzer such as control flow, data flow, structural, and so on.
<pre>[app defender protected] (def)</pre>	Searches for issues based on whether Application Defender can protect the vulnerability category (protected or not protected).
[attack payload]	Searches for issues that contain the search term in the part of the request that caused the vulnerability for penetration test results.
[attack type]	Searches for issues based on the type of penetration test attack conducted (URL, parameter, header, or cookie).
audience	Searches for issues based on intended audience such as dev, targeted, medium, broad, and so on.
	<b>Note:</b> This metadata is legacy information that is no longer used and will be removed in a future release. OpenText recommends that you not use this search modifier.
audited	Searches for issues based on whether the primary tag is set (true or false). The default primary tag is the Analysis tag.
body	Searches for issues that contain the search term in the HTTP message body in penetration test results, which is all the data that is transmitted immediately following the headers.
category (cat)	Searches for the specified category or category substring.
class	Searches for issues based on the specified class name.
comments (comment, com)	Searches for issues that contain the search term in the comments added to the issue.
commentuser	Searches for issues with comments from a specified user.
confidence (con)	Searches for issues that have the specified confidence value

Search Modifier (Issue Attribute)	Description
	0.1 through 5.0 (legacy metadata).
cookies	Searches for issues that contain the search term in the cookie from the HTTP query for penetration test results.
correlated	Searches for issues based on whether the issues are correlated with those detected by another analyzer.
[correlation group]	Searches for issues based on whether the issues are in the same correlation group.
<custom_tagname></custom_tagname>	Searches for issues based on the value of the specified custom tag.
	You can search a list-type custom tag using a range of values.  The values of a list-type custom tag are an enumerated list where the first value is 0, the second is 1, and so on. You can use the search syntax for a range of numbers to search for
	ranges of list-type custom tag values. For example, analysis: [0,2] returns the issues that have the values of the first three analysis values, 0, 1, and 2 (Not an Issue, Reliability Issue, and Bad Practice).
	To search for a specific date in a date-type custom tag, specify the date in the format: yyyy-mm-dd.
	To search for issues that have no value set for a custom tag, use <none> as the search term. For example, to search for all issues that have no value set in the custom tag labeled Target Date, type: [Target Date]:<none>.</none></none>
[engine priority]	Searches for issues based on the original priority value determined by the engine that identified the issue.
	<b>Note:</b> This is only available in Fortify Software Security Center version 22.2.0 or later.
file	Searches for issues where the primary location or sink node function call occurs in the specified file path.
[fortify priority order]	Searches for issues that have a priority level that matches the

Search Modifier (Issue Attribute)	Description
	specified issue priority. Valid values are critical, high, medium, and low
headers	Searches for issues that contain the search term in the request header for penetration test results.
historyuser	Searches for issues that have audit data modified by the specified user.
[http version]	Searches for issues based on the specified HTTP version such as HTTP/1.1.
impact	Searches for issues based on the impact value specified (0.1 through 5.0).
[instance id]	Searches for an issue based on the specified instance ID.
[issue age]	Searches for the issue age, which is new, updated, reintroduced, or removed.
[issue state]	Searches for audited issues based on whether the issue is an open issue or not an issue (determined by the level of analysis set for the primary tag).
kingdom	Searches for all issues in the specified kingdom.
likelihood	Searches for issues based on the specified likelihood value (0.1 through 5.0).
line	Searches for issues on the primary location line number. For dataflow issues, the value is the sink line number. Also see "sourceline" on page 25.
manual	Searches for issues based on whether they were manually created by penetration test tools, and not automatically produced by a web crawler such as Fortify WebInspect.
[mapped category]	Searches for issues based on the specified category that is mapped across the various analyzers (Fortify Static Code Analyzer, Fortify WebInspect, and Fortify WebInspect Agent).
maxconf	Searches for all issues that have a confidence value equal to or

Search Modifier (Issue Attribute)	Description
	less than the number specified as the search term.
maxVirtConf	Searches for dataflow issues that have a virtual call confidence value equal to or less than the number specified as the search term.
<metadata_listname></metadata_listname>	Searches for issues based on the value of the specified metadata external list. Metadata external lists include [owasp top ten <year>], [cwe top 25 <version>], [pci ssf <version>], [stig <version>], and others.</version></version></version></year>
method	Searches for issues based on the method, such as GET, POST, DELETE, and so on.
minconf	Searches for all issues that have a confidence value equal to or greater than the number specified as the search term.
<pre>min_virtual_call_ confidence(virtconf, minVirtConf)</pre>	Searches for dataflow issues that have a virtual call confidence value equal to or greater than the number specified as the search term.
package	Searches for issues where the primary location occurs in the specified package or namespace. For dataflow issues, the primary location is the sink function.
parameters	Searches for issues that contain the search term in the HTTP query parameters.
primary	Searches for issues that have the specified primary tag value. By default, the primary tag is the Analysis tag.
[primary context]	Searches for issues where the primary location or sink node function call occurs in the specified code context. Also see "sink" on the next page and "[source context]" on the next page.
primaryrule(rule)	Searches for all issues related to the specified sink rule.
[priority override]	Searches for all issues that have the specified Priority Override tag value. Valid values are critical, high, medium, and low.

Search Modifier (Issue Attribute)	Description
probability	Searches for issues based on the probability value specified (1.0 through 5.0).
[remediation effort]	Searches for issues based on the remediation effort value specified. The valid values are whole numbers from 1.0 to 12.0.
response	Searches for issues that contain the search term in the response from the protocol used in penetration test results.
severity(sev)	Searches for issues based on the specified severity value (legacy metadata).
sink	Searches for issues that have the specified sink function name.  Also see "[primary context]" on the previous page.
source	Searches for dataflow issues that have the specified source function name. Also see "[source context]" below.
[source context]	Searches for dataflow issues that have the source function call in the specified code context. Also see "source" above and " [primary context]" on the previous page.
sourcefile	Searches for dataflow issues with the source function call that the specified file contains. Also see "file" on page 22.
sourceline	Searches for dataflow issues having taint source entering the flow on the specified line. Also see "line" on page 23.
status	Searches issues that have the status reviewed, not reviewed, or under review.
suppressed	Searches for issues based on whether they are suppressed.
taint	Searches for issues that have the specified taint flag.
trigger	Searches for issues that contain the search term in the part of the response that shows that a vulnerability occurred for penetration test results.
url	Searches for issues based on the specified URL.
user	Searches for issues assigned to the specified user.

## **Search Query Examples**

The following table contains search query examples.

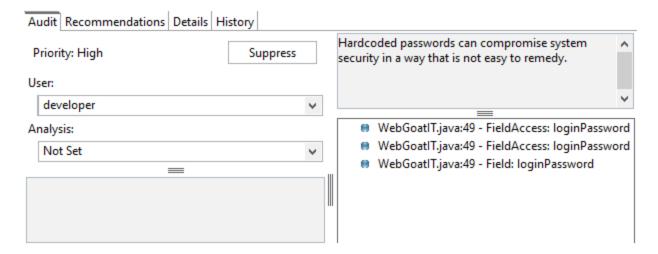
Search task	Search query
All privacy violations in file names that contain jsp with getSSN() as a source	<pre>category:"privacy violation" source:getssn file:jsp</pre>
All file names that contain com/test/123	file:com/test/123
All issues that contain cleanse as part of any modifier	cleanse
All suppressed vulnerabilities with asdf in the comments	suppressed:true comments:asdf
All categories except for SQL Injection	category:!SQL Injection
All issues that have a value specified for a custom tag labeled version	version:! <none></none>

# Viewing Issue Information

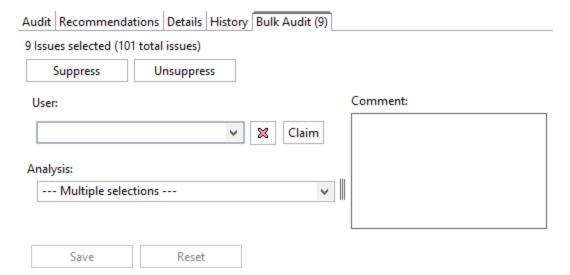
After you select an issue, the Fortify Remediation Plugin for Eclipse displays the issue-specific content on the **Audit**, **Recommendations**, **Details**, and **History** tabs.

## **Audit Tabs**

The **Audit** tab provides a dashboard of analysis information for the selected issue. Any changes you make on the **Audit** tab are automatically uploaded to the application version in Fortify Software Security Center.



The **Bulk Audit** tab displays only the audit settings that you can apply to multiple selected issues. To apply any audit updates for multiple issues to Fortify Software Security Center, click **Save**.



The following table describes the features on the audit tabs.

Element	Description	Tab
User	The user assigned to the selected issue. If the box is empty, no user is assigned to the selected issue.	Audit Bulk Audit
Analysis	Your assessment for the selected issue. To change the assessment, select an item from the list. This is the primary tag defined in Fortify Software Security Center for the application version. The default primary tag is <b>Analysis</b> , but your organization might have a different tag designated as the primary tag.	Audit Bulk Audit
<custom_tagname></custom_tagname>	Any custom tags your organization has defined in Fortify Software Security Center. These are displayed below the <b>Analysis</b> (primary) tag.  If the audit results have been submitted to	Audit Bulk Audit
	OpenText™ Fortify Audit Assistant in Fortify Software Security Center, then in addition to any other custom tags, the tab displays the following tags:	
	• <b>AA_Prediction</b> —Exploitability level that Fortify Audit Assistant assigned to the issue. You cannot change this tag value.	
	AA_Confidence     Confidence level from     Fortify Audit Assistant for the accuracy of     its AA_Prediction value. You cannot     change this tag value.	
	AA_Training—Whether to include or exclude the issue from Fortify Audit Assistant training. You can change this value.	
	For more information about Audit Assistant, see the OpenText™ Fortify Software Security Center User Guide.	

Element	Description	Tab
Comments (bottom left)	Any additional information added to the issue.	Audit
Issue Abstract (top right)	A summary of the selected issue.	Audit
Analysis Trace (bottom right)	The items of evidence that the analyzer uncovered. The analysis trace is presented in the order it was discovered. For information about the Analysis Trace icons, see "Analysis Trace" below.	Audit

#### See Also

"Auditing Analysis Results" on page 32

"Auditing Multiple Issues" on page 34

## **Analysis Trace**

When you select an issue, the **Audit** tab displays the relevant analysis trace. This is a set of program points that show how the analyzer found the issue. For dataflow and control flow issues, the set is presented in the order executed. For dataflow issues, this trace view presents the path that the tainted data follows from the source function to the sink function. For example, if you select an issue that is related to potentially tainted dataflow, the analysis trace box shows the direction the dataflow moves in this section of the source code.

The analysis trace box uses the icons described in the following table to show how the dataflow moves in this section of the source code or execution order.

lcon	Description
:=	Data is assigned to a field or variable
O	Information is read from a source external to the code such as an HTML form or a web address
9	Data is assigned to a globally scoped field or variable
éé	A comparison is made
<b>*</b> 0	The function call receives tainted data

lcon	Description
<b>4</b> ()	The function call returns tainted data
<b>\$</b> 0	Passthrough, tainted data passes from one place to another
	<ul> <li>Note: This is typically shown as functionA(x : y) to indicate that data is transferred from x to y. The x and y values are one of the following:</li> <li>An argument index</li> <li>return—The return value of a function</li> <li>this—The instance of the current object</li> <li>A specific object field or key</li> </ul>
<b>+</b> +	An alias is created for a memory location
¢0	Data is read from a variable
<b>0</b>	Data is read from a global variable
4	Tainted data is returned from a function
&	A pointer is created
*	A pointer is dereferenced
<b>x</b>	The scope of a variable ends
~	The execution jumps
Δ	A branch is taken in the code execution
⅍	A branch is not taken in the code execution
	Generic
OllOI	A runtime source, sink, or validation step
±	Taint change

The analysis trace box can contain inductions. Inductions provide supporting evidence for their parent nodes. Inductions consist of:

- A text node, displayed in italics as a child of the trace node. This text node is expanded by default.
- An induction trace, displayed as a child of the text node (a box surrounds the induction trace).

The italics and the box distinguish the induction from a standard subtrace. To display the induction reference information for that induction, click it.

### **Recommendations Tab**

The **Recommendations** tab provides suggestions and examples on how to secure a vulnerability or remedy a bad practice. The following table describes the sections on this tab.

Section	Description
Recommendations/Custom Recommendations	Describes possible solutions for the selected issue. It can also include examples and recommendations defined by your organization.
Tips/Custom Tips	Provides useful information specific to the selected issue, and any custom tips defined by your organization.
References/Custom References	Lists references for the recommendations provided, including any custom references defined by your organization.

## **Details Tab**

The **Details** tab provides an abstract of the selected issue description, a detailed explanation, and examples. The following table describes the sections on this tab.

Section	Description
Abstract/Custom Abstract	Summary of the selected issue, including any custom abstracts defined by your organization.
Explanation/Custom Explanation	Description of the conditions under which an issue of the selected type occurs. This includes a discussion of the vulnerability, the constructs typically associated with it, ways in which attackers can exploit it, and the potential ramifications of an attack. This section also includes any custom explanations defined by your organization.
Instance ID	Unique identifier for the issue.

Section	Description
Primary Rule ID	Identifier for the primary rule used to uncover the issue.
Priority Metadata Values	Priority metadata values for this issue including impact and likelihood.
Legacy Priority Metadata Values	Legacy priority metadata values for the issue including severity and confidence.

## **History Tab**

The **History** tab displays a history of audit actions, including details such as the time and date, and the name of the user who modified the issue.

# Locating Issues in your Source Code

You can use the Fortify Remediation Plugin for Eclipse to locate security-related issues in your code.

To jump to the line of source code that contains the issue selected in the Fortify Remediation Plugin for Eclipse:

1. Make sure that the revision of the source code open in Eclipse corresponds to the application version you opened on Fortify Software Security Center.

**Note:** If the name of the Eclipse project and the Fortify Software Security Center application name are not the same, then the current open project in Eclipse is used. If you have multiple projects open in Eclipse, then you are prompted to select a project to use for the source code navigation.

- 2. To locate issues in the source code, do one of the following:
  - Select an issue in the issue pane.
  - From the **Audit** tab, select a line in the analysis trace box.

Eclipse places the focus on the line of code that contains the selected security-related issue.

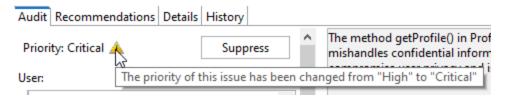
# **Auditing Analysis Results**

After you select and review an issue, you can update the audit information on the **Audit** tab. To audit a batch of issues, see "Auditing Multiple Issues" on page 34. To see any updates to the audit results made on Fortify Software Security Center, click the **Refresh** button .

#### To audit an issue:

- 1. From the issue list in the Remediation View, select an issue.
- 2. To assign a user to the issue, from the **User** list, select a user name.
  - To remove an assigned user, select the blank value from the **User** list.
- 3. From the **Analysis** list, select a value that reflects your assessment of this issue.
  - This is the primary tag as defined in Fortify Software Security Center. The default primary tag is **Analysis**, but it might be different for your organization.
- 4. If the priority override capability is enabled on Fortify Software Security Center, you can override the issue priority value by doing the following:
  - a. From the **Priority Override** list, select the preferred priority value.
  - b. Explain why you changed the value in the Add Comment for Issue dialog box.
  - c. Click OK.

The Priority changes to the value you selected. A warning symbol indicates that the Fortify-determined priority value was changed.



**Note:** The issue is only visible in the newly assigned priority folder after the application metrics are refreshed on Fortify Software Security Center.

5. If additional custom tags are associated with the application version, specify values for those tags.

The Fortify Remediation Plugin for Eclipse displays all custom tags assigned to the application version; however, you can only provide values for tags that your Fortify Software Security Center user account has permission to edit. Use the following instructions to provide values for custom tags:

- For text-type custom tags, you can click the **Edit Text** button to see and edit long text strings. This tag accepts up to 500 characters (HTML/XML tags and newlines are not allowed).
- For date-type custom tags, type the date or click the **Select Date** button **1** to select a date from a calendar.

If any tag requires a comment, then after you provide a value for the tag, the Add Comment for Issue dialog box opens. Type a comment to describe the value you specified for the tag, and then click **OK**.

**Note:** If Fortify Audit Assistant assessed the issues, the following tags are shown **AA\_ Prediction**, **AA\_Confidence**, and **AA\_Training**. For information about these tags, see "Audit Tabs" on page 27.

6. To add a comment for the issue audit:

- a. At the top right of the **Remediation View**, click the **Add Comment** button  $\Box$ .
- b. In the Add Comment for Issue dialog box, type your comment, and then click **OK**.

The Fortify Remediation Plugin for Eclipse applies the updates to the application version in Fortify Software Security Center.

#### See Also

"Suppressing Issues" on the next page

"Auditing Multiple Issues" below

## **Auditing Multiple Issues**

You can evaluate and assign audit information to a batch of issues. To audit a single issue on the **Audit** tab, see "Auditing Analysis Results" on page 32. To see any updates to the audit information made in Fortify Software Security Center, click the **Refresh** button .

To audit multiple issues:

- 1. From the issues list in the Remediation View, select multiple issues.
- 2. To assign a user to the selected issues, do one of the following:
  - Click **Claim** to assign the issues to yourself.
  - From the **User** list, select a user name.

To remove an assigned user, click the **Unassign user** button ...

- 3. From the **Analysis** list, select a value that reflects your assessment of this issue.
  - This is the primary tag defined in Fortify Software Security Center. The default name of this tag is **Analysis**, but it might be different for your organization.
- 4. If the priority override capability is enabled on Fortify Software Security Center, you can override the issue priority value by doing the following:
  - a. From the **Priority Override** list, select the preferred priority value.
  - b. In the box that appears below the list, type a comment to explain why you changed the value.

**Note:** The issues are only visible in the newly assigned priority folder after the application metrics are refreshed on Fortify Software Security Center.

5. If additional custom tags are associated with the application version, specify values for those tags.

The Fortify Remediation Plugin for Eclipse displays all custom tags assigned to the application, but you can only provide values for tags that your Fortify Software Security Center user account has permission to edit. Use the following instructions to provide values for custom tags:

- For text-type custom tags, you can click the **Edit Text** button in to see and edit long text strings. This tag accepts up to 500 characters (HTML/XML tags and newlines are not allowed).
- For date-type custom tags, type the date or click the **Select Date** button to select a date from a calendar.

If any tag requires a comment, then after you provide a value for the tag, you must type a comment in the box that appears under the custom tag.

**Note:** If Fortify Audit Assistant assessed the issues, the following tags are shown **AA\_ Prediction**, **AA\_Confidence**, and **AA\_Training**. For information about these tags, see "Audit Tabs" on page 27.

- 6. To add a comment for the audit of these issues, type your comment in the **Comment** box.
- Click Save.

The Fortify Remediation Plugin for Eclipse makes the updates to the application version in Fortify Software Security Center.

#### See Also

"Viewing and Selecting Issues" on page 13

"Suppressing Issues" below

"Auditing Analysis Results" on page 32

## **Suppressing Issues**

You can suppress issues that are either fixed or that you do not plan to fix. Suppression marks the issue and all future discoveries of this issue as suppressed. As such, it is a semi-permanent marking of a vulnerability.

To suppress issues:

- 1. From the issue list in the Remediation View, select one or more issues.
- 2. On the Audit or Bulk Audit tab, click Suppress.
- 3. (Optional) In the Suppress Issues dialog box, describe the reason for suppressing the issue.
- 4. Click **OK** to confirm the issue suppression.

#### To unsuppress issues:

- Make sure that suppressed issues are visible.
   To display issues that have been suppressed, see "Customizing Issue Visibility" on page 17.
- 2. From the issue list in the Remediation View, select one or more suppressed issues.
- 3. On the Audit or Bulk Audit tab, click Unsuppress.
- 4. (Optional) In the Suppress Issues dialog box, describe the reason for unsuppressing the issue.
- 5. Click **OK** to confirm the issue unsuppression.

# Generating and Downloading Reports

You can generate reports in Fortify Software Security Center from the Fortify Remediation Plugin for Eclipse. You can also download a report that already exists in Fortify Software Security Center.

To generate or download a report, you must connect to Fortify Software Security Center and have an application version opened. You are prompted to sign in to Fortify Software Security Center and select an application version if you have not already done so (see "Opening a Fortify Software Security Center Application Version" on page 12).

## **Generating Reports**

#### To generate a report:

- 1. Select Fortify > Generate Report.
- 2. If prompted, provide your Fortify Software Security Center credentials.
  - Your user account must have permission to generate reports.
- 3. Select an application version and then click  $\mathbf{OK}.$ 
  - The Software Security Center Report Generation dialog box opens.
- 4. Select a report type from the list.
- 5. Select the template version and the options you want to include in the report.

**Note:** The template version and options vary depending on the report type selected.

- To specify the file name for the report and select the report format, click **Report details**.
   You can save the report in the following formats: Portable Document Format (PDF), Microsoft Word, and Microsoft Excel. The default report format is PDF.
- 7. Click **Generate**.
- 8. Navigate to where you want to save the report and click **Save**.

The report is generated and saved in the format you selected.

## **Downloading Reports**

To download a report that has been created in Fortify Software Security Center:

- 1. Select Fortify > Download Generated Report.
- 2. If prompted, provide your Fortify Software Security Center credentials.
- 3. Select the application version from which you want to download the report.
- 4. Select the report you want to download from the list of reports previously generated in Fortify Software Security Center.
- 5. Click Download Report.
- 6. Navigate to where you want to save the report and click **Save**.

# **Configuration Options**

This topic describes the options you can configure for the Fortify Remediation Plugin for Eclipse. The options are stored as properties in a plain text file with the name fortify.properties. In this file, each property consists of a pair of strings: the first string is the property name and the second string is the property value. For example, the following property sets the pagination count to 40:

```
com.fortify.remediation.PaginationCount=40
```

To specify any of these properties:

- 1. Navigate to one of the following directories:
  - If the Eclipse IDE was installed with an installer:

```
<userhome>/.p2/pool/plugins/com.fortify.plugin.remediation_
<version>/Core/config
```

• If the Eclipse IDE was installed without an installer:

```
<eclipse_install_dir>/plugins/com.fortify.plugin.remediation_
<version>/Core/config
```

2. If the file does not already exist, use a text editor to create a fortify. properties file.

The following table describes the properties you can set in the fortify.properties file.

Property	Description
com.fortify. AuthenticationKey	Specifies the directory used to store the encrypted Fortify Software Security Center authentication token.
	Default:
	<pre>\${com.fortify.WorkingDirectory}/config/EclipseRemediation.Pl ugin-<version></version></pre>
com.fortify. InstallationUserName	Specifies the default user name for logging in to Fortify Software Security Center for the first time.
	Default: \${user.name}
com.fortify. remediation.PaginateIssues	If set to true or if no value is specified, the Fortify Remediation Plugin for Eclipse uses pagination during issue download.
	If set to false, the Fortify Remediation Plugin for Eclipse downloads all the issues at once.
	Default: true
com.fortify. remediation.PaginationCoun t	If com.fortify.remediation.PaginateIssues is set to true, specifies the number of issues to display per subfolder.
	Default: 20
com.fortify. WorkingDirectory	Specifies the working directory that contains all user configuration and working files for the plugin. To configure this property, you must have write permission in the directory.
	Defaults:
	• Windows—\${win32.LocalAppdata}/Fortify
	• Non-Windows—\${user.home}/.fortify

# **Locating Log Files**

For help diagnosing a problem with Fortify Remediation Plugin for Eclipse, provide the log files to Customer Support. The default location of the log file is:

- On Windows:
  - C:\Users\<username>\AppData\Local\Fortify\EclipseRemediation.Plugin<version>\log
- On Linux and macOS:

<userhome>/.fortify/EclipseRemediation.Plugin-<version>/log

## Send Documentation Feedback

If you have comments about this document, you can contact the documentation team by email.

**Note:** If you are experiencing a technical issue with our product, do not email the documentation team. Instead, contact Customer Support at <a href="https://www.microfocus.com/support">https://www.microfocus.com/support</a> so they can assist you.

If an email client is configured on this computer, click the link above to contact the documentation team and an email window opens with the following information in the subject line:

#### Feedback on User Guide (Fortify Remediation Plugin for Eclipse 24.2.0)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to fortifydocteam@opentext.com.

We appreciate your feedback!