Code Insight 6.14.2
Release Notes

November 2020

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Introduction

These Release Notes pertain to the 6.14.2 release of Code Insight, formerly known as Palamida Enterprise Edition (EE). The product features, enhancements, changes, and upgrade details described in this document apply only to the 6.14.2 version of the product. For information specific to earlier versions, refer to previous Release Notes documents.

This document contains the following major topics:

- Payload Summary for Code Insight 6.14.2
- Supported Platforms and Technology
- Resolved Issues
- New Features and Enhancements
- Deprecations and Other Notifications
- Technical Notes & Known Issues
- Configuring Dynamic Selection of a Request Reviewer
- Migrating Your Current Code Insight Version to 6.14.2
- Product Support Resources
- Legal Information

Payload Summary for Code Insight 6.14.2

The following is a summary of the functionality that has been added or updated in Code Insight in version 6.14.2:

- New functionality and enhancements, as described in New Features and Enhancements.
- Resolved issues, as described in Resolved Issues.

Supported Platforms and Technology

The following sections list the platforms and technology currently supported by Code Insight systems:

- Operating Systems
- Databases
- Hardware
- Software
- Ports
- Source Code Management
Operating Systems

Code Insight is tested and validated on the following operating systems:

<table>
<thead>
<tr>
<th>Supported</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ubuntu 18.04</td>
<td>Ubuntu 18.0.4</td>
</tr>
<tr>
<td>Ubuntu 16.04</td>
<td>RHEL 7.2, 7.8, or 8.2 Enterprise (64-bit)</td>
</tr>
<tr>
<td>Ubuntu 14.0.4</td>
<td>CentOS 7 (64-bit)</td>
</tr>
<tr>
<td>RHEL 7.2, 7.8, or 8.2 Enterprise (64-bit)</td>
<td>Win 10 Enterprise or Professional (64-bit)</td>
</tr>
<tr>
<td>RHEL 7.0 (64-bit)</td>
<td>Windows Server 2016 Datacenter</td>
</tr>
<tr>
<td>RHEL 6.5 (64-bit)</td>
<td></td>
</tr>
<tr>
<td>CentOS 7 (64-bit)</td>
<td></td>
</tr>
<tr>
<td>CentOS 6.5 (64-bit)</td>
<td></td>
</tr>
<tr>
<td>Win 10 Enterprise or Professional (64-bit)</td>
<td></td>
</tr>
<tr>
<td>Win 8.1 Enterprise or Professional (64-bit)</td>
<td></td>
</tr>
<tr>
<td>Win 7 Enterprise or Professional (64-bit)</td>
<td></td>
</tr>
<tr>
<td>Windows Server 2016 Standard</td>
<td></td>
</tr>
<tr>
<td>Windows Server 2012 Enterprise or Professional (64-bit)</td>
<td></td>
</tr>
</tbody>
</table>

Possible Compatible Operating Systems

The following operating systems might be compatible but are not tested with each release:

- Mac OS (all versions)
- Windows Server 2008 R2 Enterprise Edition (64-bit)
- Windows XP Professional (64-bit)
- Windows 7 Ultimate (64-bit)
- CentOS 5 (64-bit)
- Others (contact technical support)

Additional Notes About Supported Operating Systems

Note the following additional information about supported operating systems:

- CentOS 6x versions reach EOL (End of Life) status on November 30, 2020.
- Code Insight does not support a configuration in which the Core Server runs on a Windows instance and a Scan Server runs on Linux instance. For more information, see “Single Server vs. Multiple Server Deployments” in the Code Insight Installation and Administration Guide.
Databases

Code Insight is tested and validated on the following databases.

<table>
<thead>
<tr>
<th>Supported</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySQL 5.6, 5.7, 8</td>
<td>MySQL 5.7, 8</td>
</tr>
<tr>
<td>Oracle 11g, 12c, 18c, 19c</td>
<td>Oracle 12c, 19c</td>
</tr>
<tr>
<td>MS SQL Server</td>
<td>MS SQL Server</td>
</tr>
<tr>
<td>2012 r2 Enterprise</td>
<td>2012 r2 Enterprise</td>
</tr>
<tr>
<td>2014 Enterprise</td>
<td>2014 Enterprise</td>
</tr>
<tr>
<td>2016 Enterprise</td>
<td>2016 Enterprise</td>
</tr>
</tbody>
</table>

Additional Notes About Database Support

Note the following about database support:

- Oracle 11g has an end-of-life status. There is no guarantee that this Oracle version continues to work properly with Code Insight.
- MS SQL Server 2012 is not recommended for use in large-scale and high-volume scanning environments.
- The MySQL 5.0-5.5 database version has been used to run Code Insight in the past but has not been fully verified as part of the current release.

Note: Ensure that you use appropriate supported database driver with Code Insight. Other versions are not guaranteed to be compatible. See Software for details.

Hardware

The following describes hardware requirement:

- Supported Hardware Configurations
- CPU Specifications
## Supported Hardware Configurations

Use the following table to determine hardware requirements for Code Insight components. (Also see CPU Specifications.)

<table>
<thead>
<tr>
<th>Component</th>
<th>Supported</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan Server</td>
<td>• 32 GB RAM</td>
<td>• 32 GB or 64 GB RAM depending on expected load</td>
</tr>
<tr>
<td></td>
<td>• At least 1.25 TB hard disk space for the</td>
<td>• 1.5 TB hard disk space for the following</td>
</tr>
<tr>
<td></td>
<td>following (assuming that the Scan Server and</td>
<td>(assuming that the Scan Server and</td>
</tr>
<tr>
<td></td>
<td>Compliance Library are hosted on the same</td>
<td>Compliance Library are hosted on the same</td>
</tr>
<tr>
<td></td>
<td>instance):</td>
<td>instance):</td>
</tr>
<tr>
<td></td>
<td>• Codebases (materials to be scanned)</td>
<td>• Codebases (materials to be scanned)</td>
</tr>
<tr>
<td></td>
<td>• Workspaces (scanned results)</td>
<td>• Workspaces (scanned results)*</td>
</tr>
<tr>
<td></td>
<td>• Compliance Library (approximately 1 TB)</td>
<td>• Compliance Library (approximately 1 TB)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Performance can benefit significantly if the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>workspace directory is located on a Solid State Drive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(SSD) drive</td>
</tr>
<tr>
<td>Core Server</td>
<td>• 16 GB RAM</td>
<td>• 32 GB RAM (required if Core Server and</td>
</tr>
<tr>
<td></td>
<td>• At least 650 MB of space for product and</td>
<td>database reside on same machine)</td>
</tr>
<tr>
<td></td>
<td>attachments</td>
<td>• 30 GB of space for product and attachments</td>
</tr>
<tr>
<td></td>
<td>See the Database Server entry below if hosting</td>
<td>See the Database Server entry below if hosting</td>
</tr>
<tr>
<td></td>
<td>both Core Server and database on the same</td>
<td>both Core Server and database on the same</td>
</tr>
<tr>
<td></td>
<td>machine</td>
<td>machine</td>
</tr>
<tr>
<td>Client</td>
<td>• 8 GB RAM</td>
<td>• 16 GB RAM</td>
</tr>
<tr>
<td>Database</td>
<td>Database Sizing:</td>
<td></td>
</tr>
<tr>
<td>Server</td>
<td>• The recommendation is that you have a DBA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>configure your database as you would for any</td>
<td></td>
</tr>
<tr>
<td></td>
<td>other Enterprise Web Application.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• For disk space, the recommendation is to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>start with a base of 30 GB (for SQL Server, 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GB) to accommodate the Code Insight Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Libraries and other data related to users,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>teams, projects, and such.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you install the database on the same</td>
<td></td>
</tr>
<tr>
<td></td>
<td>machine as the Core Server, calculate the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hard-drive requirement by adding the database</td>
<td></td>
</tr>
<tr>
<td></td>
<td>base size to the recommended Core Server disk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>space. (Also see Additional Notes about</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardware Requirements.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• After starting with the base size, scale up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>by 2 MB for every 5,000 files scanned. Begin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>by estimating how much you will scan in the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>first 6 months, and add that to the 30 GB base</td>
<td></td>
</tr>
<tr>
<td></td>
<td>size.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• As for data volume, Code Insight does not</td>
<td></td>
</tr>
<tr>
<td></td>
<td>move enormous amounts of data, nor does it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>have extremely high concurrent transaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>rates.</td>
<td></td>
</tr>
</tbody>
</table>
Additional Notes about Hardware Requirements

Note the following about hardware requirements:

- Ensure that you allocate sufficient buffer pool size to the database. Otherwise, the Electronic Update might not complete. For MySQL, set the innodb buffer pool size to a minimum of 1 G (innodb_buffer_pool_size = 1G).
- For SQL Server, it is strongly recommended that the database and the Core Server reside on the same machine (with a minimum hard-drive requirement of 50 GB for the database and 30 GB for the Core Server, for a total of 80 GB).

CPU Specifications

The following table lists CPU specifications based on the memory requirements for your Code Insight hardware configuration, as described in Supported Hardware Configurations.

For example, if you intend to use the recommended 32 GB RAM for the Core Server (as listed in Supported Hardware Configurations), the CPU specifications for the machine running the Core Server include 2-CPU, each at least 2 GHZ+, with 8+ cores (as listed below).

<table>
<thead>
<tr>
<th>Memory</th>
<th>CPU (Cores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64 GB</td>
<td>2-CPU (each at least 2 GHZ+) with 8+ cores</td>
</tr>
<tr>
<td>32 GB</td>
<td>2-CPU (each at least 2 GHZ+) with 8+ cores</td>
</tr>
<tr>
<td>16 GB</td>
<td>2-CPU (each at least 2 GHZ+) with 4+ cores</td>
</tr>
</tbody>
</table>

Software

Code Insight requires or supports the following software:

- Software Packages
- Supported Browsers
# Software Packages

The following software packages are supported and/or required:

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
<th>Download URL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Java JDK</strong></td>
<td>Required on each instance where a Code Insight server—the Core Server and each remote Scan Server—is installed. Select one of these JDK types. (Use the latest Java update when possible.)</td>
<td>Oracle JDK 8 <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html">download</a></td>
</tr>
<tr>
<td></td>
<td>• Oracle JDK 8 (64-bit) (update 181)</td>
<td>Zulu OpenJDK 8 <a href="https://www.azul.com/downloads/zulu/">download</a></td>
</tr>
<tr>
<td></td>
<td>You must purchase a license from Oracle to ensure that you receive updates.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Zulu OpenJDK 8 8u192 (64-bit) (from Azul)</td>
<td></td>
</tr>
<tr>
<td><strong>Java JRE</strong></td>
<td>Oracle JRE 8 (64-bit) (update 172) required on client server to launch Detector.</td>
<td>Oracle JRE 8 <a href="http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html">download</a></td>
</tr>
<tr>
<td></td>
<td>In general, use the latest Java update when possible. You must purchase a license from Oracle to ensure that you receive updates.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong> • <em>Not required for Workflow-only installations or on client servers that already have the JDK installed.</em></td>
<td></td>
</tr>
<tr>
<td><strong>Database Client</strong></td>
<td>Required to access the Code Insight database server and to execute database scripts (but not required if the database is to be managed directly from the database server). Any basic client application or command line client interface may be used. Several options are listed on the right.</td>
<td>MySQL <a href="http://www.heidisql.com/download.php">download</a></td>
</tr>
</tbody>
</table>
**Additional Notes about Software Requirements**

Note the following about software requirements:

- Support for Java 7 (JDK and JRE) was removed in Code Insight 6.12.0. Ensure that you use Java 8 (JDK and JRE) with a compatible update version.

- Code Insight provides support for Zulu OpenJDK 8 only. Other OpenJDK applications might work with Code Insight but are not recommended.

- Support for Java 11 is not available.

- Java software updates released after the Code Insight 6.12.3 release date are not guaranteed to be compatible. If you encounter an issue running a newer update, notify support, which will resolve these issues on a best effort basis and issue a hotfix as needed.

- For the Oracle 19c database, the recommendation is to use the ojdbc8.jar database driver (as listed in this table), not the ojdbc10.jar driver.

---

### JDBC Database Driver

<table>
<thead>
<tr>
<th>Software</th>
<th>Description</th>
<th>Download URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySQL</td>
<td>Required on each instance where a Code Insight server—the Core Server and each remote Scan Server—is installed to enable access to the database.</td>
<td>Requires a database driver for each instance.</td>
</tr>
<tr>
<td></td>
<td>Download the driver corresponding to your database type and do one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If using the supplied installer (codeInsight_6.x.jar) to install Code Insight, copy the .jar file to the directory containing the installer. The installation process automatically copies the driver to the tomcat\lib location.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If manually installing Code Insight, copy the downloaded .jar file to the following location:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;Code Insight_ROOT_DIR&gt;&lt;version&gt;\tomcat\lib\</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MySQL mysql-connector-java-5.1.45.jar (MySQL 8):</td>
<td><a href="https://downloads.mysql.com/archives/c-j/">https://downloads.mysql.com/archives/c-j/</a> (select Product Version 5.1.45 and download)</td>
</tr>
<tr>
<td></td>
<td>mysql-connector-java-5.1.x-bin.jar (MySQL 5.6, 5.7):</td>
<td><a href="http://dev.mysql.com/downloads/connector/j/5.1.html">http://dev.mysql.com/downloads/connector/j/5.1.html</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ojdbc6.jar (Oracle 11g, 12c R1) or ojdbc7.jar (Oracle 12c R2):</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MS SQL Server</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>An email account is required to send email notifications from the Code Insight server.</td>
</tr>
</tbody>
</table>

---
**Supported Browsers**

Code Insight supports the following browsers:

<table>
<thead>
<tr>
<th>Supported</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Firefox (latest stable version)</td>
<td>• Firefox (latest stable version)</td>
</tr>
<tr>
<td>• Google Chrome (latest stable version)</td>
<td>• Google Chrome (latest stable version)</td>
</tr>
<tr>
<td>• Internet Explorer 10, 11</td>
<td>• Internet Explorer 11</td>
</tr>
</tbody>
</table>

**Ports**

Code Insight typically uses the following ports:

<table>
<thead>
<tr>
<th>Port</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1433/1521/3306</td>
<td>Database Server Access Port (MS SQL Server, Oracle, MySQL)</td>
</tr>
<tr>
<td>8888/443</td>
<td>Tomcat (http/https)</td>
</tr>
<tr>
<td>465</td>
<td>External SMTP (mail) Server</td>
</tr>
<tr>
<td>389</td>
<td>External Authentication Directory Server (Active Directory/LDAP)</td>
</tr>
<tr>
<td>8005 and 8009</td>
<td>Tomcat Connector and Tomcat Shutdown Ports (local access only)</td>
</tr>
</tbody>
</table>

Note the following:

• All ports used by Code Insight are configurable. If any listed port is already in use or is not supported by your company policy, configure an alternative port.

• Ensure that any port that you configure for Code Insight is allowed through your system firewall.

**Source Code Management**

Code Insight supports the following the Source Code Management products in its workflow:

<table>
<thead>
<tr>
<th>SCM</th>
<th>Sample Client Download</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT</td>
<td><a href="http://git-scm.com/downloads">http://git-scm.com/downloads</a></td>
</tr>
<tr>
<td>Subversion (SVN)</td>
<td><a href="http://tortoisesvn.tigris.org/">http://tortoisesvn.tigris.org/</a></td>
</tr>
<tr>
<td>Team Foundation Server (TFS)</td>
<td><a href="https://www.visualstudio.com/downloads/">https://www.visualstudio.com/downloads/</a></td>
</tr>
<tr>
<td>Perforce</td>
<td><a href="https://www.perforce.com/downloads/">https://www.perforce.com/downloads/</a></td>
</tr>
</tbody>
</table>
## Resolved Issues

The following issues have been resolved in this release:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCA-14677</td>
<td>Enhancement: New option to select users outside of the request workflow to receive email notifications when public comments are posted to the request. See <a href="http://www-03.ibm.com/software/products/en/clearcase">Option to Trigger Emails for Public Comments Added</a>.</td>
</tr>
<tr>
<td>SCA-18694</td>
<td>Custom inventory status shown as “Unknown” in reports.</td>
</tr>
<tr>
<td>SCA-20069</td>
<td>The <code>REFERENCED_COUNT</code> of a component (in the PDL_COMPONENT table) not updating properly after a custom-component remap.</td>
</tr>
<tr>
<td>SCA-22557</td>
<td>Security vulnerabilities not being reported for certain components.</td>
</tr>
<tr>
<td>SCA-24193</td>
<td>LDAP users inside subtree directory not synced when <code>ldap.serverPaging</code> in <code>core.ldap.properties</code> is <code>false</code>.</td>
</tr>
<tr>
<td>SCA-24721</td>
<td>JWT not encrypted in <code>ScriptRunner.properties</code>.</td>
</tr>
<tr>
<td>SCA-25369</td>
<td>Error generated when you associate an inventory item to a request from other project and then try to access the associated request details page.</td>
</tr>
<tr>
<td>SCA-25737</td>
<td>Failure by Electronic Update to remap custom versions for components.</td>
</tr>
<tr>
<td>SCA-26833</td>
<td>Documentation not clear on how to use the Source Matches file review option on the Rescan Options tab in workspace settings.</td>
</tr>
<tr>
<td>SCA-26845, SCA-26846</td>
<td>Enhancement: Updates to current component REST APIs to support CPE vendor and product data. See <a href="http://www-03.ibm.com/software/products/en/clearcase">Updates to Existing REST APIs to Support CPE Data</a>.</td>
</tr>
</tbody>
</table>
New Features and Enhancements

The following features and enhancements were introduced in this release:

- **CodeAware Enhancements**
- **Option to Trigger Emails for Public Comments Added**
- **Support for CPE Vendor and Product Names**
- **Support for RHEL 7.8 and 8.2**
- **Enhancements and Updates to Code Insight APIs**
- **Code Insight Rebranding Effort**
CodeAware Enhancements

The following enhancements are available for CodeAware in this release.

**Creation of Inventory Without Versions**

When Code Insight is unable to determine the version of an OSS or third-party dependency, it will gather as much information as possible to create the inventory item without a version. Whether or not the item is published depends on the workflow policy.

**Discovery of First-Level Dependencies in “setup.py” in a PyPI Package**

Previously, direct dependencies for pre-build artifacts were retrieved from only the `requirements.txt` file in a PyPI package. Now, however, in the absence of `requirements.txt`, the dependencies can be reported from `install_requires` section in the `setup.py` file.

**Option to Trigger Emails for Public Comments Added**

In previous releases, when a public comment was posted to a request, an email notification of the comment was automatically sent to users involved in the request workflow—the requester, the currently assigned reviewer, and users who had approved the request. However, the user who posted the request had no option to send the email notification to other users.

Now, when a public comment is posted to a request, the user posting the request can click a **Manage Users List** button to select individual users or user lists to which to send the email notification. (These selections are in addition to those users who automatically receive the notification). This feature is useful, for example, if you want to direct a comment to a specific user to perform some remediation work outside of the normal workflow related to the request.

![Manage Users List Button](image)

**Support for CPE Vendor and Product Names**

Previously, Code Insight did not automatically provide the Common Platform Enumeration (CPE) vendor and product data for a given OSS or third-party component, as defined in the National Vulnerabilities Database (NVD); nor did Code Insight consistently provide the component’s CPE name, which incorporates the vendor and product names. (The vendor and product properties are key in distinguishing between multiple components with the same name.) Users could manually create and manage a custom CPE name for a component, but the use of vendor and product strings in the name’s format was not validated.
Starting in this release, the Code Insight data library (PDL) stores a component’s current CPE name as well as its vendor and product names, as published in the NVD. This information is available in the Code Insight Web UI and public API responses.

Code Insight will continue to support custom CPE names for components. Any previously created custom CPE name is stored in the PDL with null values for the vendor and product strings. For new custom CPE names created from this release on, Code Insight validates the name to ensure that it is in \texttt{cpe://<part>:<vendor>:<product>} format so that the vendor and product information for the component can be extracted and stored in the PDL.

Users can delete NVD-published CPE names and continue to delete custom CPE names as needed for a given component. (The deletion process removes the CPE name from the component entry in the PDL.)

The following is a summary of the CPE support changes in this release:

- Appropriate REST and Java APIs now include component CPE vendor and product names in responses and allow filtering by these names. See for \textit{API Enhancements to Support CPE Data} details.
- Code Insight now validates any new CPE name that a user creates from the Research > Component page in the Code Insight Web UI to ensure that the name uses the proper format.

**Support for RHEL 7.8 and 8.2**

Code Insight has added support for RHEL 7.2 Enterprise and 8.2 Enterprise as options for the Code Insight database.

**Enhancements and Updates to Code Insight APIs**

The following sections provide a quick reference to the Insight API enhancements in this release:

- \textit{API Enhancements to Support CPE Data}
- \textit{Other API Enhancements}

**Sites for Complete Code Insight API Information**

You can find complete information about the Code Insight public REST interface and Java methods by selecting Help in the upper right corner of the Code Insight Web UI and then, from the Documentation tab, selecting the appropriate link:

- For Code Insight REST documentation, select \texttt{Public REST API Swagger Doc}.
- For the Code Insight Java method documentation, select \texttt{Public API Javadoc}.

You can also find this documentation in the /docs directory of your Code Insight installation.

**API Enhancements to Support CPE Data**

Starting in this release, the Code Insight data library (PDL) now stores the following Common Platform Enumeration (CPE) properties for OSS or third-party components. The PDL retrieves this information directly from the National Vulnerability Database via the Electronic Update:

- \texttt{cpeVendor}— The name for the organization that developed the component.
- **cpeProduct**—The product name for the component.

For any *custom* CPE name properly created in this release and later, Code Insight extracts these properties from the CPE name and stores them in the Vendor and Product columns in the appropriate PDL table.

The following describes enhancements made to the public Code Insight APIs to support this CPE information:

- Updates to Existing REST APIs to Support CPE Data
- New Java Methods to Support CPE Data
- Updates to Existing Java Methods to Support CPE Data

### Updates to Existing REST APIs to Support CPE Data

The following REST APIs have been updated to support the new CPE properties.

<table>
<thead>
<tr>
<th>Resource</th>
<th>API Name</th>
<th>Method</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
<td>/component/componentData</td>
<td>GET</td>
<td>In addition to the CPE name, the response now lists the CPE vendor and product names for each retrieved component.</td>
</tr>
</tbody>
</table>

**Note** • The response contains this CPE information whether the summaryOnly parameter is on or off.

<table>
<thead>
<tr>
<th>/component/componentDataFiltered</th>
<th>GET</th>
<th>Updates include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Optional filters available to retrieve only components whose CPE data matches a specific CPE vendor or product string (or matches both strings).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The response now lists the CPE name, the CPE vendor name, and the CPE product name for each retrieved component.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inventory</th>
<th>/project/inventory</th>
<th>GET</th>
<th>Updates include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Optional filters available to retrieve only inventory associated with components whose CPE data matches a specific CPE vendor or product string (or matches both strings).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The response now lists the CPE name, the CPE vendor name, and the CPE product name for the component associated with each retrieved inventory item.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
New Java Methods to Support CPE Data

The following Java methods have been added to support the new CPE properties.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Method Name</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>getComponentsByCPEValue</td>
<td>Retrieves only those components whose CPE data matches a specific CPE vendor or product string (or matches both strings).</td>
</tr>
<tr>
<td>DataService Cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProjectData Cover</td>
<td>getInventoryForProjectByCPE</td>
<td>For a given project, retrieves only inventory associated with components whose CPE data matches a specific CPE vendor or product string (or matches both strings).</td>
</tr>
</tbody>
</table>

Updates to Existing Java Methods to Support CPE Data

The following Java methods have been updated to support the new CPE properties.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Method Name</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>getComponent(long componentid)</td>
<td>The response now lists CPE name, CPE vendor name, and CPE product name for the retrieved component.</td>
</tr>
<tr>
<td>DataService Cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Component Resource</td>
<td>getComponentDataFiltered</td>
<td>Updates include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Optional filters available to retrieve only components whose CPE data matches a specific CPE vendor or product string (or matches both strings).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The response now lists the CPE name, CPE vendor name, and CPE product name for each retrieved component.</td>
</tr>
<tr>
<td>ProjectData Cover</td>
<td>getInventoryForProject</td>
<td>The response now lists the CPE name, CPE vendor, and CPE product name for the component associated with each retrieved inventory item.</td>
</tr>
</tbody>
</table>

Other API Enhancements

The following describes other new APIs and API updates available in this release.
Updates to Existing REST APIs

The following Code Insight REST API has been updated:

<table>
<thead>
<tr>
<th>Resource</th>
<th>API Name</th>
<th>Method</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workflow</td>
<td>workflow/requestData</td>
<td>GET</td>
<td>For each public or private comment associated with the specified request, the response now includes the user who posted the comment and the date and time of the posting.</td>
</tr>
</tbody>
</table>

New Java API

The following new public Java API is now available:

<table>
<thead>
<tr>
<th>Resource</th>
<th>API Name</th>
<th>Method</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>getRequestCommentsByRequestId</td>
<td>GET</td>
<td>Extracts details for each public and private comment associated with the specified Request ID.</td>
</tr>
</tbody>
</table>

Code Insight Rebranding Effort

Code Insight is now a product belonging to Revenera, a division of Flexera Software. The process has begun to rebrand the product, user documentation, and related artifacts to display the new Revenera logo and to redirect links to the Revenera Community and other Revenera-related sites. The rebranding effort also includes removing “FlexNet” from the product name.

Deprecations and Other Notifications

This sections lists deprecations and other important information about Code Insight functionality:

- Analyzer Available Only by Manual Enablement
- End of Support for Java 7
- Point Detector Functionality No Longer Supported
- End of Support for Secunia Community Site

Analyzer Available Only by Manual Enablement

The Analyzer is available for workspace scans and reporting only if it is manually enabled in your Code Insight installation. By default, it is no longer displayed as an option on the Automated Analysis tab nor are its associated reports available for generation from the Schedule Scan/Report dialog.
To re-enable the Analyzer in your Code Insight installation, update the `disableAnalyzer` property, located in the `scanEngine.properties` file, to `false`. For details, see the online help or the Code Insight Installation and System Administration Guide.

**End of Support for Java 7**

Support for Java 7 (JDK 7 and JRE 7) is no longer available as of Code Insight 6.12.0. If you are currently using Code Insight with Java 7, upgrade to Java 8 to ensure that your application runs in a secure environment.

**Point Detector Functionality No Longer Supported**

As of the 6.12.3 release, Point Detector functionality is no longer supported.

**End of Support for Secunia Community Site**

The Secunia Community site will become inaccessible at the end of February. As of the 6.13.1 release, links to Secunia Advisories on the Vulnerabilities dialog and on reports are disabled. Note, however, that a future release of Code Insight will incorporate the following changes to once again provide access to Secunia data:

- Deliver additional Secunia Advisory properties (currently visible on the Secunia Community site) to Code Insight through the Electronic Update service.
- Provide a new Get Vulnerability Details REST API to obtain the additional Secunia Advisory data.
- Develop a new “vulnerability details” interface to display additional Secunia Advisory data.

**Technical Notes & Known Issues**

The following sections provide information you need to be aware of when using the various functional areas of Code Insight:

- Installation and Configuration
- Electronic Updates
- Migration and Backup
- APIs
- Component Research
- Scanning and Analysis
- Reporting
- Code Search
- Project Copy
- SPDX Generator Report
- ScriptRunner and Scripting
Installation and Configuration

Multiple-Server Configuration Limitation (SCA-26837)

Code Insight does not support a configuration in which the Core Server runs on a Windows instance and a Scan Server runs on Linux instance.

Enabling the AJP connector in the Tomcat installation

The Apache Tomcat version installed with Code Insight 6.14.2 (and later) provides the Apache JServ Protocol (AJP) connector, which is disabled by default at installation. Although Code Insight does not require this connector, you might need it to support a Tomcat load-balancing scenario for your Code Insight environment. For instructions on how to manually enable and disable this connector, refer to the following KB article:


Java HotSpot(TM) 64-Bit Server VM warning:ignoring option MaxPermSize=512m; support was removed in 8.0 (SCA-276)

If you encounter this warning while running the Code Insight Installer or scriptRunner, it is likely that you are running Code Insight with Java 7. Upgrade to Java 8 to resolve the issue.

Electronic Updates

Unicode data on SQL Server (PAS-11158)

Some PDL columns in the Code Insight database schema do not currently support UTF-16 characters. As a result, users may see duplicate key errors in core.update.log when running Electronic Update on SQL server. This issue has been partially addressed in the current release of Code Insight, available as part of migration and will be fully resolved in the next release. SQL server users are advised to ignore duplicate key errors when running an electronic update.

Electronic Update buffer pool size

If you experience a failure when running Electronic Update on a MySQL or SQL Server database, ensure that the Buffer Pool Size systems is set to a minimum of 1 GB. Look for an out-of-memory error in the logs. See the Knowledge Base or contact support if you need further instructions.
Migration and Backup

**Backward compatibility of Export/Import scripts**

In Code Insight 6.11.2, changes were introduced to the Export/Import scripts to allow export and import of inventory questions/answers, comments and inventory status. Note that this functionality requires the updated scripts and product APIs that are only available in Code Insight 6.11.2 and later. The scripts will not export these entities on earlier versions of the product.

To export data from an older version of Code Insight and import it into Code Insight 6.14.2, do one of the following:

- Update your Code Insight instance to Code Insight 6.14.2 by following standard migration procedures. Use the export script shipped with Code Insight 6.14.2 to export the data and the import script (also shipped with Code Insight 6.14.2) to import the data.
- Use the export script designed to work with your version of Code Insight to export the data. Use the import script shipped with Code Insight 6.14.2 to import the data.

*Note* • *Neither of these procedures processes inventory questions/answers, comments, or inventory status.*

**APIs**

**REST API Component Search hangs in non-summary mode (SCA-330/PAS-11184)**

The REST API for component search hangs when searching for components that have a large amount of associated data. For example, searching for Apache Tomcat (ID 33045) with `summaryOnly` view disabled results in an error.

**Workaround:** Search with the summary mode turned on, as in the example:

http://localhost:8888/palamida/api/component/componentData?componentIds=33045&summaryOnly=on

**REST API to update requests**

The REST API to update a request may be used to update any request attribute in the request except for the selected component. To update the requested component, use the new `updateRequestedComponent` API included in this release. You may also use `updateRequestedVersion` and `updateRequestedLicense` to update the version and license without affecting other data.

**Component Research**

**Issues with the deletion of multiple CPE names for a component (SCA-28509)**

When you attempt to delete multiple CPE names for a given component, the following issues can occur:

- Only the first name is deleted.
• Deleted names are not being added to the PSE_DELETED_ENTITIES table (used to keep track of the deleted items so that they are not restored during an Electronic Update).

Scanning and Analysis

**Code Insight not applying default port in startup URL (SCA-23973)**

If the URL that starts up the Code Insight Core Server and each Scan Server does not include a port, Code Insight does not automatically apply a default port, causing the startup to fail.

**Workaround:** Before starting a Code Insight server, ensure that the URL used to start up the server explicitly identifies the port (80 for HTTP, 443 for HTTPS).

**Group Builder reports not shown if Scan Servers have different “disableAnalyzer” values (SCA-21054)**

Group Builder reports are not generated if multiple Scan Servers are configured with different values for the disableAnalyzer property in their scanEngine.properties file.

**Workaround:** If possible, configure all Scan Servers with the same value (true or false) for the disableAnalyzer property.

**Multi-archived files not being associated with inventory (SCA-18782)**

CodeAware uses a third-party utility provided by Apache to untar files. This utility does not recognize gz archives as valid and thus is unable to extract their contents for association with inventory during a scan.

**CodeAware groups without associated component/version not being published (SCA-17301)**

CodeAware groups without a selected component/version are not published to inventory. The Analyst should review the groups and associated findings for completeness and accuracy, and manually publish them to inventory based on their assessments.

**Deleted groups reappearing on rescans (SCA-16931)**

System-generated groups that were deleted during the auditing process are reappearing on a rescan.

**Core Server not recognizing other Scan Servers when one becomes unresponsive (SCA-16549)**

The Core Server fails to recognize other Scan Servers (in a multiple scan-server configuration) when one of the servers becomes unresponsive. You can check the Code Insight logs to determine which server is unresponsive so that you take appropriate action such as force-restarting the server.

**Added product catalog entries not showing up in the request form until submitted (SCA-4490)**

When some product catalog items are added while creating a request, the items do not show up on the creation page. However, when the request is submitted, the entries are shown.
Inventory not showing license text on Inventory Page for Cocoapod packages (SCA-4451)

When a Cocoapod package is scanned, the workspace inventory page does not show the license text when you click View As-Found License Text.

License matches in CSS files match entire file content (SCA-289/PAS-11021)

When a CSS file has license text included, scan results match the whole file to a license. No workaround is available. However, this issue will be addressed in the next generation of the product.

Exception during commit on Oracle: ORA-01400: cannot insert NULL into PALAMIDA.PSE_SCANNED_ITEMS.NAME (SCA-278/PAS-10636)

This error occurs when scanning files inside archives that do not have a proper name.

Workaround: Rename the files or scan with archives “off”.

Scan hangs with for file paths containing special characters (PAS-11096)

The issue occurs due to non-UTF8 encoding. We are investigating a fix for the next release.

Analyzer: P1-P3 legends are not showing colors in (PAS-11074)

Priority colors are not showing correctly in the Bill of Materials in IE, Firefox and Edge.

Workaround: Use Chrome.

Group and tag counts for files inside archives (PAS-10134)

When files inside archives are added to/removed from groups, are tagged/untagged, or are marked as reviewed/unreviewed, group and tag file counts are not affected—that is, they do not increase or decrease. This behavior applies to all scan settings including the “scan files inside archives=on” setting.

For example, if a workspace contains 20 files total, one of which is an archive foo.zip with 1000 inner files, marking 1000 inner files as reviewed will not increase the “Reviewed” tag count.

This behavior is in place after considering extensive feedback from customers who reported that including archive files in the count skews the perception of the amount of total work done. Per the example, seeing the number of files reviewed jump to over 1000 would confuse most auditors. For this reason, Code Insight does not include inner files of archives in the file counts. Best practice is to always mark the outer archive as reviewed when dealing with archives.

Tag Archive for Scanning group/tag counts (PAS-10110)

Code Insight offers the option to tag a specific archive for scanning so that files inside archives are processed for indicators in future scans. Note that group and tag file counts will not be updated to include files inside the archives when this tag is turned on. We will continue to work on this feature pending customer feedback about how to process file counts for archives. See the Group and tag counts for files inside archives (PAS-10134) issue for additional information.
Detector file tree count is inconsistent with group/tag counts (PAS-9917)

It is not uncommon to see a Detector file tree count differ from the group/tag counts. The count in the lower left-hand corner of Detector represents the total number of nodes currently available in the Detector file tree. In the presence of inner files of archives (which are not included in group/tag file counts, this number is typically larger than the group/tag count. For additional information regarding this count, see the “Archive File Counts/ Nested Archives” section of the Code Insight User Guide.

Incremental scan affects file counts (PAS-2829)

The workspace file counts incorporate files that have been deleted prior to last scan if incremental scan is disabled. Files that have been deleted prior to the last scan may still be counted toward the total file with and without indicators value.

Workaround: Enable incremental scanning.

Copyrights with multi-byte characters may not be detected by the scanner (PAS-2774)

If a copyright statement contains multi-byte characters, the copyright will be classified as - unparseable- rather than as a valid copyright with a valid copyright holder. No workaround is available.

Ignore workspace matches is not reliable (PAS-2405)

The Ignore Workspace Matches option for components in Detector (whether done one at a time or in bulk) does not always suppress all matches to this component.

Workaround: Mark any groups created for the component you wish to ignore as “Ignored”.

Limitations for custom inventory statuses

Currently custom inventory items are not available for inventory searches and are not supported in the Detector and in APIs.

Procedure to disable the display of RubySec security advisories

For various reasons, when analyzing and reviewing project inventory, a customer might not want to view vulnerabilities available from all security data sources supported by Code Insight. The following property has been added to the core.properties file to disable (or enable) the display of security vulnerability information gathered from RubySec advisory sites. By default, the property is set to false. By setting it to true, vulnerability data from RubySec advisories is not displayed.

    disable.rubysec=true

Additionally, if you make a change to this property, Code Insight must be restarted and an Electronic Update performed to put the change into effect.

The following property has also been added to enable (or disable) the ability to force an Electronic Update. By default, the property is set to false. By setting it to true, the user can manually trigger an Electronic Update as needed (using the Manual Update facility accessed through Administration | Updates):

    enable.forceupdate=true
**Analyzer configuration to parse transitive dependencies in POM files**

As of 6.12.1, the Analyzer executes as an autorun script that no longer needs to process the analyzer.properties file for configuration purposes. In general, the Analyzer parses transitive dependencies of jar files in a pom.xml file, but the autorun script is limited to parsing only those files found within the scan root folder of the workspace. A setting in the formerly used analyzer.properties file, however, parses transitive dependencies in POM files whether those dependencies are within or outside of the scan root folder of the workspace.

To ensure that transient dependencies external to the scan root folder are parsed, enable the “transitive dependencies” functionality available in analyzer.properties:

1. Navigate to Administration | Metadata.
2. Select the Project tab.
3. Click the Add Project Metadata Field, and follow these steps to create a metadata field:
   a. In the Name and Display Name fields, enter Analyzer Resolve Transitive Dependencies.
   b. Select Yes/No for Input Type.
   c. Click Save.
4. Click My Projects, and open a project.
5. Click the View Project Metadata button on the Summary tab.
6. Click Edit, and select Yes for Analyzer Resolve Transitive Dependencies.
7. Click Save.

For each project workspace scanned with the Analyzer enabled, transitive dependencies are parsed, even those external to the scan root folder.

**Reporting**


Workspace Evidence Report shows no “Detected License” value even though Auto-WriteUp has detected groups with licenses.

**Code Search**

**Issues with Code Search highlights in UTF-8 files (PAS-10849)**

UTF-8 files do not display correctly in Detector, and highlighting is either unavailable or shifted by one or more characters. Detector supports only encodings for which each character is a single byte, such as US-ASCII and ISO-8859.

**Workaround:** Switch the file type from “Auto” to “Binary”, and use “CTRL-F” to locate the search result within the file.
**Code Search hanging during index process**

Some customer scans have hung during indexing while in Tika processing. To avoid this problem, set `indexTikaParseLen = 0` in `scan.properties`.

**Project Copy**

**Group data lost in project copies when original project is deleted (SCA-28611)**

Projects that were copied from another project are losing group data when the original project is deleted.

**Workaround:** No workaround is available. To avoid losing data after a project copy, do not delete the original project. If you need further assistance, please contact Revenera Support.

**Project Copy error after switching request forms (SCA-313/PAS-11127)**

Project Copy is not supported for projects that contain requests that reference more than one request form. No workaround is available.

**SPDX Generator Report**

**License matches include more text than just license (SCA-2327)**

The SPDX Generator Report shows too much license text in some cases. This is due to license detection limitations in Code Insight. We hope to resolve this issue in the near future with a new regex implementation for license matching.

**Workaround:** Ensure that you perform a review of all group license data, and make modifications to the "As-Found License Text" group field value to override any automated extracted licenses processed by the report.

**Copyright detection captures non-copyright strings**

The SPDX Generator Report displays non-copyright strings in some cases. This is due to a limitation to automated copyright detection in Code Insight.

**Workaround:** Ensure that you perform a review of all group copyright data, and make modifications to the "Copyright Text" group field value to override any extracted copyrights processed by the report.

**Custom associations of components not being copied during Project Copy**

Custom associations of components to namespaces are not copied over during a project copy.

**Workaround:** Re-apply the custom association for each target workspace once the project copy completes.
ScriptRunner and Scripting

NoSuchMethodError on some scripts/reports (PAS-10740)
This issue occurs due to a potential mismatch in the ant and ant-launcher jars. If you encounter a “NoSuchMethodError” when attempting to run a script or report, replace the ant-launcher jar file in the webapps directory with ant-launcher-1.8.3.jar.

Space in command-line argument to scriptRunner Scripts
Some users are reporting issues in running scriptRunner scripts if the command line argument to the script contains a space. This issue can be addressed by surrounding the line argument with single or double quotes.

For example, to pass the project name “My Project” to the exportWorkspaceData.groovy script, use the following commands:

**Linux**

```bash
./scriptRunner.sh -u myUser -c http://localhost:8888/palamida/ ../scripts/ exportWorkspaceData.groovy -project 'My Project'
```

**Windows**

```bash
./scriptRunner.bat -u myUser -c http://localhost:888/palamida/ ../scripts/ exportWorkspaceData.groovy -project "My Project"
```

Changes to scriptRunner library jars causing issues for older scripts
Scripts that rely on older POI libraries may not work in this version of the product.

**Workaround:** Manually add the libraries to the /scriptRunner/lib directory, and modify scriptRunner.conf file to include the jars. As an alternative, modify the script for compatibility with POI 11.

Workflow

Dynamic constraint definition with non-visible values (PAS-10794)
Dynamic default values and rules support dynamically changing the dropdown list values based on the value of another field. However, this only works if the dropdown list form field is currently visible/editable in the current state. No workaround is available.

Web UI

Research page not sorting properly with “Important Only” Turned Off (SCA-20764)
When you unselect Important Only on the Research page for components, the results are sorted by page, not by the total number of records.
**Review Status column sorting with “Show All” unchecked (PAS-11129)**

Users may see review status out of order when sorting on a subset of available items.

**Workaround:** Use “Show All” when sorting.

**Web session timeout taking user to Login.htm instead of SSO login (PAS-10238)**

This issue applies only to SSO environments. In the case that the user is taken to the Login.htm page instead of back to the last accessed page, users should use the browser’s “back” button to return to the page. As an alternative, the Login.htm page may be modified to instruct the user to start a new session. For example, “Sorry, your session has expired—please close and relaunch your browser to start a new session”.

### Configuring Dynamic Selection of a Request Reviewer

This Code Insight feature (also called the People Picker) allows a user to select an individual (such as a manager) as the designated assignee for a component request at a particular review level. For example, your company’s business logic might dictate that the first review on a request for an OSS component be performed by the requester’s direct manager. Code Insight supports this scenario by allowing the workflow project owner to designate a form field that enables the selection of an appropriate reviewer for a particular review level. At runtime, the requester can then use this field to search a pool of managers in order to choose one assignee to continue the review process.

The following procedure provides an example of how to update the short request form (`request_form_short.sql`) and long request form (`request_form_long.sql`) for your database to add a reviewer selection field. Both scripts are located for your database type in the `dbScripts` directory of your Code Insight installation directory.

**Task** To configure a new field for the dynamic selection of a reviewer:

1. Execute the following appropriate update scripts in your database to display a reviewer selection field for a specific review level on the short or long request form. Note the following about the scripts:
   - The attribute name in the example is `PeoplePickerList`; the displayed field name is `People Picker List`. However, you can provide your own names for the attribute and field.
   - The attribute must have an `INPUT_TYPE` and `TYPE` value of `P`.

### Short Form Scripts

Run both scripts to update the short request form with a reviewer selection field:

```
INSERT INTO PAS_REQ_DEF_ATTR (ID_, REQUEST_DEFINITION_ID_, STAGE_ID_, SEQUENCE_, NAME_, DISPLAY_TEXT_, INPUT_TYPE_, TYPE_, HELP_TEXT_) VALUES (1111,1,1100,13,'PeoplePickerList','People Picker List', 'P', 'P',NULL);
```

```
INSERT INTO PAS_REQ_DEF_ATTR_ACCESS_RULE (ID_, REQ_DEF_ATTR_ID_, ACCESS_TYPE_, WORKFLOW_ROLE_ID_, REVIEW_LEVEL_, REVIEW_LEVEL_STATE_) VALUES (111101,1111,'E',1,0,'E');
```
**Long Form Scripts**

Run both scripts to update the long request form with a viewer selection field:

```sql
INSERT INTO 6110db.PAS_REQ_DEF_ATTR
(ID,REQUEST_DEFINITION_ID_,STAGE_ID_,SEQUENCE_,NAME_,DISPLAY_TEXT_,INPUT_TYPE_,TYPE_,HELP_TEXT_)
VALUES (2112,1,2100,12,'PeoplePickerList','People Picker List','P','P',NULL);
```

```sql
INSERT INTO 6110db.PAS_REQ_DEF_ATTR_ACCESS_RULE
(ID, REQ_DEF_ATTR_ID_, ACCESS_TYPE_, WORKFLOW_ROLE_ID_, REVIEW_LEVEL_, REVIEW_LEVEL_STATE_)
VALUES (211201,2112,'E',1,0,'E');
```

2. As an administrator, create a user list to which to point the new attribute. For instructions on creating a user list, refer to the “Administration Menu: Users Option” topic in the online help or in the Code Insight User Guide. This list must contain the specific users (for example, managers) from which you want the person creating the request to select a reviewer. Be sure that the **User List Type** is set to **Reviewer**.

For purposes of this example, the user list created is called **ReviewList**.

3. In your Code Insight installation directory, open the config/core/core.properties file in a text editor, and add the following line to identify the new property:

```
<REQUEST_ATTRIBUTE_NAME>.filtered.userlist = <USER_LIST_NAME>
```

where:

- `<REQUEST_ATTRIBUTE_NAME>` is the name of the attribute (the `<NAME>` value used in the script in step 1).
- `<USER_LIST_NAME>` is the name of the user list created in step 2.

For this example, you would enter the following:

```
PeoplePickerList.filtered.userlist = ReviewList
```

4. (Optional) Note that, by default, requesters can select their own name from this list of potential reviewers when it is opened in the Code Insight user interface. If you want to disable the ability of requesters to select themselves as reviewers (for security reasons, for example), set the following property to `true` in core.properties:

```
people.picker.disable.self.approve=true
```

With this configuration, when requesters attempt to select their own name, they receive a message stating their inability to do so and forcing them to make another selection.

5. Restart the Code Insight Core Server.

6. In Code Insight user interface, open a project, navigate to the appropriate “review level” tab on the Project Details page, and select the newly created field from the **Select request form field containing reviewers for this review level drop-down list**. In this example, you would select People Picker List.

7. Log in to Code Insight as a requester, navigate to the Requests dashboard, and select **Add New Request** to add a new request for the project. On the Usage tab of the page, you will see the new field containing the user list.
Migrating Your Current Code Insight Version to 6.14.2

The following describes the process for migrating your current version of Code Insight to the latest version:

- **Requirements**
- **Preparing the Environment**
- **Upgrading Code Insight**
- **Verifying the Upgrade**
- **Reverting to a Previous Version**

**Requirements**

The following sections describe the requirements for migrating to Code Insight 6.14.2:

- **Supported Code Insight Versions for Migration to 6.14.2**
- **Additional Requirements**

**Supported Code Insight Versions for Migration to 6.14.2**

You can migrate any of the following Code Insight versions to the 6.14.2 version: 6.14.1, 6.14.0, 6.13.x, 6.12.x, 6.11.x, 6.10.3, 6.10.0, 6.8.1, 6.8.0, 6.6.2, 6.6.1, 6.1.5, 6.1.4
Additional Requirements

You will need the following to perform the upgrade:

- The plain text database password for the user and database defined in core.db.properties.
- You will need to run an Electronic Update as the final step in the upgrade. The Core Server must have outgoing Internet access on port 22; otherwise you must run the Electronic Update manually.
- Enough free disk space to perform backups. Check the size of your workspaces directory, which may be large.
- The Code Insight 6.14.2 distribution zip file. Contact your Flexera representative if you do not have a copy.
- The migrationImport.groovy script, located in the scriptRunner\scripts directory of your 6.14.2 application directory. This script copies the properties and configurations from your existing application directory (OLD_DIR) to the new application directory (NEW_DIR) and notifies you of any additional steps needed.
- The migrate.sh/migrate.bat script, located in the scriptRunner\bin of your 6.14.2 application directory. This script migrates your existing database schema from the existing version of Code Insight to the new version.
- If switching from Oracle JDK 8 to Zulu OpenJDK 8 for your SQL Server database, ensure that you have downloaded the appropriate JDBC driver for Open.JDK 8 to the tomcat\lib directory. You can locate and download the driver from this site:
- If you have custom core reports, you must re-run the custom SQL scripts that you initially used to install them.
- (Optional) The migrateFromAnalyzerToCodeAware.groovy script located in of your 6.14.2 application directory. This script updates workspaces that were previously configured for the Analyzer to now use CodeAware. If you do not run this script, CodeAware is not automatically selected on the Automated Analysis tab for existing workspaces. You will need to manually select it for each workspace you intend to rescan using CodeAware.

Preparing the Environment

These instructions refer to the following variables. You can create a temporary file with this information to use as a reference throughout the migration.

---

Note • The following are examples for a Linux/MySQL installation. Be sure to replace the sample values below with those of your installation.

```bash
# Current installed version.
OLD_VER="6.13.3"

# Current app directory.
OLD_DIR="/opt/CodeInsight/6.13.3"

# New app directory, which will be created.
NEW_DIR="/opt/CodeInsight/6.14.2"

# Base directory for backups (a 6.14.2 subdirectory will be created).
```
BACK_DIR="/opt/CodeInsight/backup"
# Core server only - MySQL Database info.
DB_HOST="localhost"
DB_NAME="CodeInsight"
DB_USER="myUser"
DB_PASS="myDbPassword"
# Scan servers only - Workspaces directory.
WS_DIR="/opt/CodeInsight/workspaces"

You can paste the above into a file on the server (for example /tmp/code_insight_env) and edit the values. Then you can run source /tmp/code_insight_env to set the variables used in this guide. After the upgrade is complete, be sure to run rm /tmp/code_insight_env if the file contains the database password.

Upgrading Code Insight

The following commands are for Linux. Windows users may choose to perform the steps with a mouse.

1. Shut down Code Insight. For multi-server installs, shut down all servers.

   cd $OLD_DIR/tomcat/bin
   ./shutdown.sh

2. Back up the database. This step applies to the Core Server only.

   These commands are for MySQL. If you are using Oracle or SQL Server, obtain a fresh backup from your DBA before proceeding. Make sure your DBA is available to restore the backup promptly in case it is needed.

   mkdir -p $BACK_DIR/$OLD_VER
   cd $BACK_DIR/6.14.2
   mysqldump -h $DB_HOST -u $DB_USER --password=$DB_PASS -r migration_db.sql $DB_NAME

3. Backup the workspaces directory. This step applies to all Scan Servers.

   Note • This backup may take a long time depending on the size of your workspaces directory.

   cd $WS_DIR
   tar cf $BACK_DIR/$OLD_VER/migration_ws.tar

4. Backup the application directory.

   cd $OLD_DIR
   # clear the tomcat temp files
   rm -r tomcat/temp/*
   tar czf $BACK_DIR/$OLD_VER/migration_app.tgz

5. Extract the 6.14.2 distribution zip file (CodeInsight-6.14.2.zip) and move it to the new directory.

   unzip -q CodeInsight-6.14.2.zip -d /tmp
   mv /tmp/CodeInsight_6.14.2 $NEW_DIR

6. Run the migrationImport.groovy script.

   cd $NEW_DIR/scriptRunner/bin
   ./scriptRunner.sh -n ./scripts/migrationImport.groovy $OLD_DIR
7. Check the TODO log for any additional steps needed. Complete any necessary steps before continuing.
   
   cat $NEW_DIR/scriptRunner/log/migration.TODO.log

8. Run the database schema migration. This step applies to the Core Server only.
   
   cd $NEW_DIR/scriptRunner/bin
   ./migrate.sh $OLD_VER

   If database errors are encountered, rerun the database schema migration after resolving the error.

9. Run the new reports.sql to install new reports. Use the appropriate file according to your database vendor (MySQL in this example). This step applies to the Core Server only.

   Note • The reports.sql file will overwrite any modifications to the report tables in the database. If you have custom reports, you will need to re-run the custom SQL to install them after you have run the new reports.sql file. Make sure you have your custom SQL scripts before you run this.

   mysql -h $DB_HOST -u "$DB_USER" --password="$DB_PASS" -D $DB_NAME \
   -e "source $NEW_DIR/dbScripts/mysql/reports.sql"

   Note • Code Insight 6.14.2 has features that require a Data Services Enabled key. You can continue to use the application with your existing key, but there will be errors seen with the features that require this key.

10. Start the new Code Insight application. For multi-server installs, do this after you have completed the previous steps on all servers.

    cd $NEW_DIR/tomcat/bin
    ./startup.sh & & tail -f ../logs/catalina.out

11. Check the log for any errors, and resolve them before continuing.

12. (Optional) Run the migrateFromAnalyzerToCodeAware.groovy script to update workspaces that were previously configured for the Analyzer to now use CodeAware. (The script automatically selects CodeAware on the Automated Analysis tab for each of these workspaces; it ignores workspaces already configured for CodeAware.) The script will prompt you for the scope on which it should run—on all projects, on a specific project, or on a specific workspace.

    Note the following:
    • Before running the script, ensure that the property disableAnalyzer, located in the scanEngine.properties file, is set to true.
    • The script is needed for only those project workspaces that you intend to rescan, so select a scope that makes the most sense.
    • If you do not run this script, CodeAware is not automatically selected on the Automated Analysis tab for workspaces previously configured to use the Analyzer. For each workspace that you intend to rescan using CodeAware, you will need to manually select the CodeAware option.

13. Log into the Web UI and run the Electronic Update. This step applies to the Core Server only.

   Note • Do not skip this step.
In most cases, the Electronic Update will be scheduled automatically. Check the **Scheduler** tab in the Web UI. If the update is not running, trigger it through **Administration > Updates**, and click **Check for Electronic Update**.

If your application does not have outgoing Internet access on port 22, you will need to run the update manually.

---

**Note** • If you run into any issues with detection of Cocoapod packages, re-run the Electronic Update.

### Verifying the Upgrade

User this procedure to verify that the upgrade is successful.

1. Log into Code Insight and go to **Help > About** to verify the version.
2. Create a test project and workspace.
3. Ensure that the Detector client launches for the workspace.
4. Close Detector and schedule a scan.

---

**Note** • If you face certificate errors on startup of the Scan Server or if you are unable to see your Scan Server from the application UI, you must import the certificate being served by Tomcat on the Scan Server into the JDK of the Core Server.

### Reverting to a Previous Version

1. Ensure the Code Insight server is stopped. For multi-server installs, ensure all servers are stopped.
2. Restore the database. This step is performed on the Core Server only.
   
   The following commands restore the MySQL database. If you are using Oracle, have your DBA restore the backup.
   
   ```
   cd $BACK_DIR/6.14.2
   mysql -h "$DB_HOST" -u "$DB_USER" --password="$DB_PASS" -D "$DB_NAME" < db_migration.sql
   ```

3. Restore the workspaces backup. This step is performed on each Scan Server.

   **Note** • If you did not open, create, or scan any workspaces while the new version was running, you can skip this step.

   ```
   cd $WS_DIR
   tar xf $BACK_DIR/6.13.3/ws_migration.tar
   ```

4. Start the previous application. For multi-server installs, do this after you have completed the previous steps.

   ```
   cd $OLD_DIR/tomcat/bin
   ./startup.sh &
   tail -f ../logs/catalina.out
   ```
Product Support Resources

The following resources are available to assist you with using this product:

- Flexera Product Documentation
- Flexera Community
- Flexera Learning Center
- Flexera Support

**Flexera Product Documentation**
You can find documentation for all Flexera products on the Flexera HelpNet site:
https://helpnet.flexerasoftware.com

**Flexera Community**
On the Flexera Community site, you can quickly find answers to your questions by searching content from other customers, product experts, and thought leaders. You can also post questions on discussion forums for experts to answer. For each of Flexera’s product solutions, you can access forums, blog posts, and knowledge base articles.
https://community.flexera.com

**Flexera Learning Center**
The Revenera Learning Center offers free, self-guided, online videos to help you quickly get the most out of your Revenera products. You can find a complete list of these training videos in the Learning Center.
https://learning.revenera.com

**Flexera Support**
For customers who have purchased a maintenance contract for their product(s), you can submit a support case or check the status of an existing case by making selections on the Get Support menu of the Flexera Community.
https://community.flexera.com
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