TIBCO®

JASPERREPORTS® SERVER COMMUNITY

RELEASE NOTES

6.4.2

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CHAPTER 1 INTRODUCTION

JasperReports® Server Community Project is a high-performance standalone or embeddable Business Intelligence (BI) platform that provides rich reporting and integrated in-memory analysis capabilities. In addition, Jaspersoft® OLAP provides data analysis running on the same shared BI platform.

These release notes describe the installation and available functionality at a high level; for details, see the documentation, which is available at:
- http://community.jaspersoft.com/documentation
- https://docs.tibco.com
- <js-install-ce>/docs (after installation)

In particular, see the *JasperReports Server Installation Guide* for instructions about running the installer, creating and updating the database, and deploying the WAR file; see the *JasperReports Server Upgrade Guide* for instructions on upgrading from previous versions.

> JasperReports Server is governed by a License Agreement, the text of which is found at <js-install>/Jaspersoft-Subscription-Services-Agreement.txt. Please read it before you login to JasperReports Server for the first time. If you installed the server using the installer binary (rather than deploying a WAR file), you have already agreed to this license.

These release notes include the following:
- **What's New**
- **Installation and Basic Usage**
- **Upgrade Notes**
- **Known Issues**
- **Release Distributions**
- **End of Support Notices**

CHAPTER 2   WHAT'S NEW

This section describes new features introduced in the Jaspersoft BI Suite Version 6 releases. For information regarding features added to Version 5 releases, see the 5.6.1 release notes.

2.1   Version 6.4.2

JasperReports Server 6.4.2 is a maintenance release that includes improvements requested by customers. For information about the status of specific cases, please visit TIBCO Jaspersoft Technical Support (http://support.tibco.com). Highlights of this release include:

- **New Supported Platforms**. Some components included in the installer have been updated:
    - Apache Tomcat 8.5.20
    - Oracle JDK 8 version 1.8.0_144 (8u144)
    - PostgreSQL 9.3.18
    - Spring Framework 3.2.18
- **Directory Access Control.** The improvements include a new option to deny access to directories in the file system of the JasperReports Server host using the `ResourceForwardingServlet` servlet. The servlet forwards requests from, for example, `/runtime/<hex-code>/<my-resource>` to the `/<my-resource>` URL to handle browser caching.

    Access to the WEB-INF and META-INF directories is always denied. In some circumstances, you may want to deny access to other directories. For example, if you restrict access to certain directories using the security-constraint tag in web.xml, you should also restrict access to those directories using the `forwardForbiddenDirectories` parameter of the `ResourceForwardingServlet` servlet. To do so, edit a configuration file.

    1. Using a text editor, open the aweb.xml file (found in <js-install>\apache-tomcat\webapps\jasperserver-ce\WEB-INF).
    2. Locate the `init-param` section of the `ResourceForwardingServlet` servlet.
    3. In the `param-value` section of the `forwardForbiddenDirectories` parameter, enter a comma-seperated list of directories that JasperReports Server users shouldn't be able to access. This parameter can only list directories under the jasperserver-ce web application.

For example:

```
<servlet>
    <servlet-name>ResourceForwardingServlet</servlet-name>
    <servlet-class>com.jaspersoft.jasperserver.war.ResourceForwardingServlet</servlet-class>
        <init-param>
            <param-name>forwardForbiddenDirectories</param-name>
            <param-value>jpivot,fusion,wcf</param-value>
                <!-- Comma separated list of any additional directories
                (besides WEB-INF, META-INF) that the access is forbidden to-->
        </init-param>
```

4. Save the file and restart the server.

In some cases, the documentation may refer to this release as 6.4.0. In such cases, the information applies to 6.4.0 and 6.4.2.

2.2   Version 6.4.0

JasperReports Server 6.4.0 included these improvements:

- **Installation Improvement**. PhantomJS can now be installed with the server.
- **PDF Release Notes**. These release notes, which were previously delivered as a text file, are now delivered as PDF.
- **Jaspersoft Studio**. Our advanced report designer now supports improved customizers for JFreeCharts in JasperReports Library:
    - New chart customizers classes for working with specific chart types.
    - Support for configurable chart customizers, which let the user enter values at report runtime.
    - Support for multiple chart customizers applied to a single chart.
    - User interface support for chart customizers in Jaspersoft Studio using a JSON file that can be uploaded.

2.3   Version 6.3.0

JasperReports Server 6.3.0 added these improvements:

- **Scheduler**. New enhancements include:
    - Support for SFTP with SSH key authentication as a transfer protocol.
    - Automatic validation of the path to the repository output folder when clicking **Save**.
    - Support for changing the default output folder; it's specified by editing a configuration file. For more information on themes, see the *JasperReports Server Administrator Guide*
- **Jaspersoft Studio**. New enhancements include:
    - Support for font sets, which let you group font extensions in supersets that can include several languages or character sets and control which languages are used with each font in the set.

- Import and export for configuration resources, which lets you migrate global configurations, such as global data adapters, composite elements, and Jaspersoft Studio preferences, between different instances of Jaspersoft Studio.
    - Improved interface for editing properties in HTML5 charts.
- **Security Improvements**. In our on-going effort to improve the security of your data, JasperReports Server implements a new Cross-Site Request Forgery (CSRF) protection mechanism that is more effective and less intrusive. To fully enable CSRF protection, please configure it as described in the *JasperReports Server Security Guide*.

2.4   Version 6.2.1

JasperReports Server 6.2.1 added these improvements:

- **New Supported Platforms**. This release adds support for:
    - Operating Systems: Microsoft Windows 10; note that Microsoft Edge is also supported with this release.
    - Application Servers: WildFly 8.2.0.
- **Jaspersoft Studio**. Our advanced report designer includes several improvements:
    - Usability and interface improvements, including improvements to crosstabs, particularly when working with row and column groups; improvements to the community-supported Custom Visualization Component.
    - If you are using your reports with an application you built using JasperReports Library, you can use the **Window > Preferences > Compatibility Setting** to choose the version of JasperReports Library to use for compiling reports. This doesn't affect reports uploaded to JasperReports Server, which are still set by configuring each server.
- **Documentation Improvements**. To improve the API documentation of JasperReports Server, the *Web Services Guide* has been redesigned and renamed as the *JasperReports Server REST API Reference*. This book covers the current and complete REST API; the deprecated REST and SOAP APIs have been removed from the guide.

2.5   Version 6.2.0

JasperReports Server 6.2.0 added these improvements:

- **Jaspersoft Studio**. Our advanced report designer has several improvements, including:
    - The RCP version of Jaspersoft Studio has been updated to Eclipse 4.5.
    - Enhancements to the custom visualization component let you create your own component UI using a JSON file.
    - A new grid layout makes it easier to place elements in containers, such as bands, tables, crosstabs, and frames.
    - Two ready to use custom visualization components:
        - Figures: This example component lets you add a visualization of stick figures representing a set of values. Such visualizations are often used in infographics to depict complex information in a format that's easy to read.
        - Radial Progress: This example component lets you add a circular visualization that represents a percentage. Values up to 100% are drawn as a single ring or portion thereof. For values above 100%, additional rings are drawn.
    - For more information on these community-supported features visit http://community.jaspersoft.com.

- Due to incompatibilities between Eclipse 4.5 and earlier versions of the Jaspersoft Studio workspace, the workspace format has been updated. Upgrading users are prompted to pick a new workspace location. Once Jaspersoft Studio launches, import your previous projects to the new location. You can also import data adapters, server connections, and preferences.

2.6   Version 6.1.1

JasperReports Server 6.1.1 added these improvements:

- **Keyboard Navigation and Improved Accessibility**. Keyboard navigation has been improved in the web UI. Accessibility has been improved, including the Easy Access theme, which increases color contrast and highlighting in the web UI. It can improve the user experience of those with visual impairment.
  For more information on themes, see the *JasperReports Server Administrator Guide*. For information on keyboard navigation, see the *JasperReports Server User Guide*.
- **Performance Improvements**. JasperReports Server's performance has been improved, particularly when adding organizations in an instance with a very large number of organizations.
- **New Supported Platforms**. This release added support for:
  - Operating Systems: Red Hat Enterprise Linux 7.1
  - Databases: PostgreSQL 9.4
  - Application Servers:
    - tcServer 2.5.1, 2.6.5, and 2.9.10 (not supported in JasperReports Server 6.4 or later)
  - Java Development Kits:
    - Open JDK 1.8
    - IBM JDK 1.7

2.7   Version 6.1.0

JasperReports Server 6.1.0 added these improvements:

- **Documentation Improvements**. In our continuing efforts to improve the security of JasperReports Server, we have reorganized some of our documentation for ease of use. In previous releases, information about securing the application was spread across several documents. In this release, the new *JasperReports Server Security Guide* describes security concerns and steps you can take to protect your application. Details of data-level security in Jaspersoft OLAP remain in that product's user guide.
- **Updated Default Theme**. An updated theme for the web UI improves the server's look and feel.
- **Updated Components**. We have updated versions of some of the third-party components that are provided in the JasperReports Server installer:
  - Apache Tomcat 7.0.59
  - Postgres 9.1.15 (32 or 64 bit)
  - Oracle JDK 1.7.0_75 (32 or 64 bit)
- **New Platform Support.** JasperReports Server now supports:
  - Oracle Java 8 as a JDK

2.8   Version 6.0.1

JasperReports Server 6.0.1 added these improvements:

- **Custom Visualization Component**. This new Jaspersoft Studio Community-supported component lets you leverage third-party JavaScript libraries, such as D3, in Jaspersoft Studio and JasperReports Server. For details, please see the article on our Community wiki.

  Please note that this component is only supported by the Jaspersoft Community. TIBCO Jaspersoft Technical Support and Engineering do not currently support this feature.

  The custom visualization component is a powerful and flexible feature, suitable for advanced users of JasperReports. Using the component requires advanced coding skills in the following technologies:

  - JavaScript
  - CSS
  - HTML/DHTML
  - The third-party library you want to expose in Jaspersoft Studio and JasperReports Server.

- **Updated Spring Security**. Starting in this release, the server now incorporates a more recent version of the underlying Spring Security framework. We now use Spring Security 3. The new version offers improved application security.

  If you are upgrading from a previous version of JasperReports Server, you may need to take additional steps to accommodate the file structure of the new version of Spring. This is particularly the case if you have custom LDAP or SSO configured for the server. For more information, see the *JasperReports Server External Authentication Cookbook*.

- **Interactive Reports**. The web UI's report viewer now includes:

  - Workbooks and Tables of Contents let report designers create a JRXML report that contains workbook sections and a Table of Contents that is displayed as a tabbed report in the server's report viewer. The table of contents is also created when the workbook is exported; for example, a PDF would include a table of contents hyperlinked to specific report pages. This eliminates the need for code that was previously required to consolidate multiple reports and generate a table of contents in earlier releases.
  - Variable page format support lets report designers combine reports that have varying page layout formats within a single workbook. This lets the designer create highly customized content within a single report.
  - Floating crosstab headings are displayed and move with your view as you scroll through long crosstab reports.

- **Server Level Attributes**. New profile attributes support hierarchical and categorical attributes at the user and server levels. You can refer to these attributes while developing reports in Jaspersoft Studio and while defining data sources in JasperReports Server. The new profile attributes make management much more flexible and robust. You can create parameter-based data sources using attributes defined at user and server levels to control the data users see in reports and OLAP views.

CHAPTER 3 INSTALLATION AND BASIC USAGE

This section includes:
- **Installation**
- **Login**
- **Starting and Stopping**

3.1 Installation

You can install JasperReports Server either by running an executable installer or deploying a WAR file. For evaluations, we recommend you use the installer; for most production instances, we recommend you use the WAR file. Both the executable and the WAR file are available from the Jaspersoft community site (http://community.jaspersoft.com); download:

- `TIB_js-jrs_cp_6.4.2_installer-<osType>-<arch>.<ext>`
- `TIB_js-jrs_cp_6.4.2_bin.zip`

For more information, see the installation guide found at <js-install-ce>/docs/JasperReports-Server-CP-Install-Guide.pdf.

3.1.1 Binary Installer

To install JasperReports Server, you can use the binary installer, which is available for Windows, Linux, and Mac: `TIB_js-jrs_cp_6.4.2_installer-<osType>-<arch>.<ext>`

Double-click the installer and accept the default installation type to create a standard installation. Select the custom installation type to configure your instance to specify the application server and RDBMS to use, among other options. The installer can also be run from the command line.

3.1.2 War File Distribution ZIP js-install Script Installation

You can use the js-install command-line shell scripts if you are installing to the following databases:
- PostgreSQL
- MySQL

And the following application servers:

- Apache Tomcat
- JBoss
- Glassfish
- WildFly

For information on the js-install scripts, see the installation guide. The js-install scripts are found in the WAR File Distribution ZIP file: `TIB_js-jrs_cp_6.4.2_bin.zip`.

To install:

1. Go to the buildomatic folder, create and edit a default_master.properties file, and run js-install-ce.sh/bat:

```
cd <js-install>/buildomatic
cp sample_conf/<dbType>_master.properties default_master.properties
```

2. Using a text editor, edit default_master.properties to add your application server and database server properties.

```
./js-install.sh (or js-install.bat)
```

3. Then change the JAVA_OPT memory options for your application server following instructions from the installation guide. For example, under Linux with Tomcat running on JDK 1.7, add the following to the top of the <tomcat>/bin/setclasspath.sh file:

```
export JAVA_OPTS="$JAVA_OPTS -Xms1024m -Xmx2048m -XX:PermSize=32m -XX:MaxPermSize=512m"
export JAVA_OPTS="$JAVA_OPTS -Xss2m -XX:+UseConcMarkSweepGC -XX:+CMSClassUnloadingEnabled"
```

For Linux with Tomcat running on JDK 1.8, use:

```
export JAVA_OPTS="$JAVA_OPTS -Xms1024m -Xmx2048m -XX:MetaspaceSize=128m"
export JAVA_OPTS="$JAVA_OPTS -Xss2m -XX:+UseConcMarkSweepGC -XX:+CMSClassUnloadingEnabled"
```

4. Next, copy your jasperserver.license to your application server user's home folder:

```
cp <js-install>/jasperserver.license <path-to-home-folder>
```

For information on JAVA_OPTS configuration, see the *JasperReports Server Installation Guide*.

3.2 Login

To login after installation, use the following URL:

```
http://<hostname>:8080/jasperserver
```

The following default users are created during installation:

User	Password
Always created	
jasperadmin	jasperadmin
Only created if you install the sample data	
joeuser	joeuser

> For security reasons, always change the default passwords immediately after installing JasperReports Server.

3.3   Starting and Stopping

This section describes how to start and stop the server if you installed using the binary installer. If you used another installation method, see the *JasperReports Server Installation Guide*.

3.3.1   Windows

You can start and stop from the Windows menu: click **Programs > JasperReports Server 6.4.2 CP > Start and Stop > Start Service or Stop Service**.

3.3.2   Linux

You can start and stop from the command line:

```
./<js-install>/ctlscript.sh (start|stop)
```

3.3.3   Mac OS X

From Finder, double-click the start, stop, or login apps:

```
/Applications/jasperreports-server-cp-6.4.2/jasperServerStart.app
/Applications/jasperreports-server-cp-6.4.2/jasperServerStop.app
/Applications/jasperreports-server-cp-6.4.2/jasperServerLogin.app
```

Alternatively, you can start/stop from the OS X command line:

```
./<js-install>/ctlscript.sh (start|stop)
```

CHAPTER 4   UPGRADE NOTES

This section includes:

- **Introduction**
- **Database Changes**
- **Upgrade from 6.x to 6.4.2**
- **Upgrade from Older Versions**
- **Important Upgrade Information**

4.1   Introduction

You can upgrade directly to 6.4.2 if your instance is one of the following:

Version 4	4.0	4.1	4.2.x	4.5.x	4.7.x
Version 5	5.0	5.1	5.2	5.5	5.6.x
Version 6	6.0.x	6.1.x	6.2.x	6.3.x	6.4.0

To upgrade, start with the WAR File Distribution ZIP: `TIB_js-jrs_cp_6.4.2_bin.zip`

Downloaded it from the Jaspersoft community site (http://community.jaspersoft.com).

The recommended upgrade procedures are fully described in the *JasperReports Server Upgrade Guide*.

> If you are upgrading from certain versions of JasperReports Server, such as 4.5 or earlier, 5.6, 6.0.1, 6.1, or 6.2.0, the upgrade involves substantial changes that may require you to plan and prepare beforehand. See the *JasperReports Server Upgrade Guide* for advice regarding these important considerations. Also, see **4.5, "Important Upgrade Information," on page 18**.

4.2   Database Changes

Between certain versions of the server, we have changed the repository database in order to add new functionality:

- There are jasperserver repository database changes between 6.0.x and 6.1.x as well as between 6.1.x and 6.2.0.
- There are no database changes between 6.2.0 and 6.2.1.
- There are database changes between 6.2.x and 6.3.0.
- There are database changes between 6.3.x and 6.4.0.
- There are no database changes between 6.4.0 and 6.4.2.

4.3   Upgrade from 6.x to 6.4.2

The recommended procedure for upgrading from 6.x is described in the *JasperReports Server Upgrade Guide*. Run this procedure from the command line. In summary:

1. Copy the properties file:

```
cd <unpacked-dir>/buildomatic

cp sample_conf/<dbType>_master.properties default_master.properties
```

2. Using a text editor, edit default_master.properties to add your application server and database server properties.
3. Run the install .sh or .bat file:

```
./js-upgrade-samedb-ce.sh
```

4.4   Upgrade from Older Versions

This upgrade procedure lets you upgrade from any of the JasperReports Server versions listed in this section's introduction (versions 4.x through 6.3.x).

The recommended procedure is described in the *JasperReports Server Upgrade Guide*. This procedure is run from the command line. In summary:

1. Export your existing JasperReports Server repository data, either using the buildomatic/js-export.sh/bat command (for example, `./js-export-ce.sh --everything --output-zip my-export.zip`), or by exporting directly from the web UI).
2. Change directories to the buildomatic directory (for example, `cd <unpacked-dir>/buildomatic`).
3. Copy the master properties file (for example, `cp sample_conf/<dbType>_master.properties default_master.properties`).
4. Edit the default_master.properties file to add your application server and database properties (for example, `./js-upgrade-newdb-ce.sh <path>/my-export.zip`, or `/.js-upgrade-newdb-ce.bat <path>/my-export.zip`).

4.5   Important Upgrade Information

This section describes special upgrade requirements for certain versions of the server:

- **Changes in the 6.1.0 Release**
- **Changes in the 6.0.x Releases**
- **Changes in the 5.6.0 Release**

For additional information on planning for your upgrade, see *Planning Your Upgrade* in the *JasperReports Server Upgrade Guide*.

4.5.1   Changes in the 6.1.0 Release

The new look-and-feel of JasperReports Server introduced in the 6.1.0 release required several changes to the structure of themes. If you have customized your theme, you must apply those customizations to a new theme.

For more information, see the *JasperReports Server Upgrade Guide*.

4.5.2   Changes in the 6.0.x Releases

Starting in the 6.0.x releases, the server now incorporates a more recent version of the underlying Spring Security framework. We now use Spring Security 3. If you are upgrading from a previous version of JasperReports Server, you may need to take additional steps to accommodate the file structure of the new version of Spring. This is particularly the case if you have custom LDAP or SSO configured for the server. For more information, see the *JasperReports Server External Authentication Cookbook*.

4.5.3   Changes in the 5.6.0 Release

The 5.6.0 version included changes to OLAP engine that may require you to take additional steps during upgrade. Due to a change between versions of the OLAP engine, if you use Jaspersoft OLAP's XML/A functionality to connect to a remote JasperReports Server's XML/A sources in versions previous to 5.6.x, you must take additional steps to complete your upgrade to 5.6.x and later versions. For information, see JA-926 in **5.1, "Current Known Issues," on page 21**.

CHAPTER 5   KNOWN ISSUES

This section describes issues you may need to be aware of, including:

- **Current Known Issues**
- **Known Issues Addressed in Previous Releases**

For information regarding known issues found or addressed in Version 5 releases, see the 5.6.1 release notes.

5.1   Current Known Issues

Note that we have adopted new tracking numbers for our known issues. Issues listed in previous releases' notes include both the old and new numbers; new known issues list only the new numbers.

- **JA-926** (was 35986): If you use Jaspersoft OLAP's XML/A functionality to connect to a remote JasperReports Server's XML/A sources, you must take additional steps to complete your upgrade if your previous version was 5.2 or earlier. You must redefine your XML/A connections to specify the connection string in a new way. For example, in previous versions, the Foodmart XML/A connection specified:

```
Provider=Mondrian;DataSource=Foodmart
```

In more recent versions, the DataSource portion of the connection string is always `JRS` when the remote provider is JasperReports Server. For example:

```
Provider=Mondrian;DataSource=JRS
```

- **JRL-30**: When JasperReports Server is hosted under certain combinations of Windows and application servers (such as WildFly 9 on Windows 8.1 or Tomcat 8 on Windows 10), the server becomes unresponsive when a user exports a report; the server responds again once the export completes. To work around this issue, edit the jasperreports.properties file. Comment out the `net.sf.jasperreports.phantomjs.executable.path=path/to/phantomjs` property, and increase the PhantomJS timeout by changing those settings to:

```
com.jaspersoft.jasperreports.fusion.phantomjs.executable.path=path/to/phantomjs
com.jaspersoft.jasperreports.fusion.phantomjs.executable.timeout=600000
```

- **JRS-12507**: The documentation for this release may refer to the release as 6.4.0. In such cases, the information applies to 6.4.0 and 6.4.2.

- **JRS-11883**: When the server is hosted by Tomcat 7.0.73 or Tomcat 8.0.39 and higher, and a user's name and organization are passed as a URL to the server, Tomcat returns an error reporting an illegal character. The problem is caused by the use of the pipe character (|) to specify the user name and organization ID. For example, Tomcat throws an error when the URL passed to the server includes:

```
homeFlow&j_username=jasperadmin|organization_1
```

This is because these versions don't allow the pipe character. Instead, you must use `%7C` as an escaped character; for example, you would instead use:

```
homeFlow&j_username=jasperadmin%7Corganization_1
```

- **JS-20916** (was 32168): Though we don't strictly support the practice, in previous versions of JasperReports Server, it was possible to create a clone install in JBoss by copying an existing JasperReports Server WAR file and deploying it to a new JBoss instance. With 5.1, Jaspersoft supports JBoss AS7/EAP6, but has uncovered issues with clone installs. For more information, see this article on our Community website.
- **JS-30155** (was 33003): Export catalogs created through the web UI in JasperReports Server version 5.1.x contain incorrect metadata. When these catalogs re imported into JasperReports Server version 5.2, the objects they contain are created in the wrong location in the repository. To work around the problem, you must edit the catalog manually to edit a single line in a text file before importing it:

1. Navigate the export catalog and locate the index.xml file.
2. Open the index.xml file in a text editor and locate this text near the top of the file:

```
<?xml version="1.0" encoding="UTF-8"?>
<export><property name="pathProcessorId" value="zip"/>
<property name="jsVersion" value="5.1.0 CE"/>
<module id="repositoryResources"><folder>/public</folder>
</module><module id="reportJobs"/></export>
```

3. Update the `jsVersion` property to correctly identify the version of JasperReports Server that created the catalog. For example, change:

```
<property name="jsVersion" value="5.1.0 CE"/>
```

To:

```
<property name="jsVersion" value="5.1.0 PRO"/>
```

4. Save the file.
5. Import the file into JasperReports Server.

- **JS-30583** (was 43387): We are aware of a significant performance issues when the server is run in certain versions of. We recommend 8.5.20 or later.

5.2   Known Issues Addressed in Previous Releases

This defect, which was listed in the release notes of previous versions, was resolved in a previous release:

- **JS-28160** (was 40543): We uncovered a number of issues while testing this release when deployed in Glassfish 3.1 that prevented us from supporting that specific version of Glassfish with previous releases. We have addressed this issue, though it requires additional configuration for non-clustered Glassfish 3.1.2.

To change the configuration:

1. Using a text editor, open the web.xml (found in `<js-install>\apache-tomcat\webapps\jasperserver\WEB-INF`.

2. Locate and uncomment (that is, remove `<!--` from the beginning of) this line:
   ```
   <!--<listener-
   class>com.jaspersoft.jasperserver.core.util.GlassFishRequestContextListener</list
   ener-class-->
   ```

3. Locate and comment out (that is, add `<!--` at the beginning of) this line:
   ```
   <listener-
   class>org.springframework.web.context.request.RequestContextListener</listener-
   class>
   ```

4. Locate and uncomment these lines:
   ```
   <!--filtzer>
   <filter-name>GlassFishFilter</filter-name>
   <filter-class>com.jaspersoft.jasperserver.war.GlassFishSessionFilter</filter-
   class>
   </filter-->
   ```

5. Locate and comment out these lines:
   ```
   <!--filter-mapping>
   <filter-name>GlassFishFilter</filter-name>
   <url-pattern>/*</url-pattern>
   </filter-mapping-->
   ```

6. Save the file and restart the server.

- **JS-31528** (was 44541): When the JasperReports Server installation executable ran in Windows against an existing Tomcat instance, it didn't remove the contents of the WEB-INF/lib directory, which resulted in duplicate JAR files that caused Tomcat to return errors and fail to initialize. This issue is resolved.

These defects, which were listed in the release notes of previous versions, are considered obsolete:

- **21798**: When JasperReports Server is accessed through Microsoft Internet Explorer 8, performance may be impaired. Because this version of IE reached its end of life, we consider this defect obsolete.
- **25258**: When exporting your repository as part of the upgrade process from version 4.0.x, 4.1, or 4.2.x, an organization's theme is reset to the server's default theme. The workaround is to reset each organization's active theme. Custom themes may need to be upgraded, as described in the *JasperReports Server Upgrade Guide*. Because we have ended support for these versions, we consider this defect obsolete.
- **32159**: When the 64-bit JasperReports Server binary installer is run in some versions of Mac OSX (including Mac OSX 0.8.3), and you select the option to install the bundled PostgreSQL, an error appears if PostgreSQL 9.1 is already installed. Since we no longer certify this version of Mac OSX, we consider this defect obsolete. Note that this version of OSX is considered compatible with this version of the server.

- **44576**: Previous release notes suggested that JasperReports Server failed to export repository resources when the server was hosted by Glassfish 3 and higher and the web UI was viewed in Internet Explorer 9. We have determined that this issue was caused by incorrect configuration, and doesn't occur normally.

CHAPTER 6   RELEASE DISTRIBUTIONS

This section describes:

- **Installer General Notes**
- **Operating Systems Supported by the Installer**
- **Application Server and Database Configurations Supported by the Installer**
- **WAR File Binary Distribution**

For more information, see the *Jaspersoft Platform Support* document, which is available from the Jaspersoft community site (http://community.jaspersoft.com).

6.1   Installer General Notes

The installers contain all components needed to run the JasperReports Server web application, including:

- Apache Tomcat 8.5.20
- PostgreSQL 9.3.18
- Oracle JDK 8 version 1.8.0_144 (8u144)
- JasperReports Server Web Application (WAR) file
- PhantomJS 2.1.1 (Linux and Windows) or 1.9.8 (Mac)

6.2   Operating Systems Supported by the Installer

The installers are available for both 32-bit and 64-bit versions of these operating systems:

Linux Installer	Windows Installer	Mac OS X Installer
- Red Hat Enterprise Linux 5.4, 5.5, 5.6, 6.1, 6.4, and 7.1 - Novell SUSE Linux Enterprise 11.1 - Ubuntu 10, 11, 12, and 14 - Debian 5.0 and 6.0 - Fedora 19 and 20 - CentOS 5.6, 6.1, and 7	- Windows 7 (SP1) - Windows 8.1 - Windows 10 - Windows Server 2008 and 2012	- Mountain Lion (10.8) - Maverick (10.9) - Yosemite (10.10.1) OSX 32 bit is no longer supported as of JasperReports Server version 5.5.

6.3   Application Server and Database Configurations Supported by the Installer

During installation, you can choose whether to use an existing instance of Tomcat or create a new one. Similarly, you can choose whether to use an existing instance of PostgeSQL or create a new one. These choices are entirely independent; you can use either an existing instance or create a new instance of either application.

6.4   WAR File Binary Distribution

The WAR File Binary Distribution (file name: `TIB_js-jrs_cp_6.4.2_bin.zip`) contains sample configurations and repository database setup scripts for the applications listed in this section.

6.4.1   Application Servers

- Apache Tomcat 7.0 (we recommend 7.0.19 and higher) and Tomcat 8.5 (we recommend 8.5.20)
- GlassFish 4.1
- JBoss EAP 6.1.1, 6.2, 6.3, 6.4, and 7.0

6.4.2   Database Servers

- PostgreSQL 9.2, 9.3, 9.4, and 9.5
- MySQL 5.5, 5.6, and 5.7

6.4.3   Java Virtual Machines

- Oracle JDK 1.7 and 1.8
- OpenJDK 1.7 and 1.8
- IBM JDK 1.7

Only 64-bit JDKs are supported.

CHAPTER 7   END OF SUPPORT NOTICES

TIBCO Jaspersoft is in the process of ending support for these technologies:

- We are in the process of deprecating Jaspersoft OLAP views. In this release, OLAP views and the objects that underlie them (such as Mondrian connections, XML/A connections, cube schemas, and access grant definitions) remain intact.
- With the 6.4 release, we no longer support WebLogic 10.3.6 or Tomcat 6.
- JasperReports Server no longer supports JDK 1.5 or JDK 1.6. JasperReports Library, which underlies the server, is now compiled with source and target compatibility set to 1.7. Note that we plan to drop support for JDK 1.7 in an upcoming release.
- We have deprecated our Open Flash functionality in favor of HTML5 solutions. In particular, the Flash samples that shipped with previous versions of the server are no longer provided. Also note that the Flash export option has been removed from the report viewer. If you want to re-enable this option, you can uncomment the exporter in a configuration file.

  To do so, open the `WEB-INF/flows/viewReportBeans.xml` file and uncomment this line:

  ```
  <entry key="swf" value-ref="swfExporterConfiguration"/>
  ```

- With the completion of the v2 REST API, we announced the deprecation of the original REST API and the end-of-life of the SOAP services. While these services remain available in the server for this release, we plan to remove them in our next release. We recommend that you migrate your integration to the latest API available: Jaspersoft v2 REST API.
- In previous releases, information about our SOAP and REST APIs was found in the *JasperReports Server Web Services Guide*. In this release, SOAP and v1 REST API are considered deprecated, so that information is no longer part of the current documentation. The older guide is replaced by a new *JasperReports Server REST API Reference*. If you still use the older APIs, see the 6.2.0 version of the *JasperReports Server Web Services Guide*.
- With the general availability of the commercial edition of Jaspersoft Studio, we announced that iReport is now in maintenance mode. We recommend that you migrate to Jaspersoft Studio, which offers improvements beyond what is available in iReport.
- With the addition of more advanced interactive behavior in the report viewer, JasperReports Server no longer supports interactivity in the xhtml report exporter. If you want your reports to be interactive when viewed in the server, use the default report exporter (html2). For more information, see the *JasperReports Server Administrator Guide*.
- For Mac OSX, we no longer support:
  - The 32-bit version of Mac OSX
  - Mac OSX 10.5

In addition, Mac OSX 10.8.3 is no longer certified, but is considered compatible with this version of JasperReports Server.

• We no longer support tc Server.

• Microsoft has ended support for some of its products:

 • In April 2014, Microsoft ended support for its Windows XP operating system. For more information, see Microsoft's End of Support page.

 • In January 12, 2016, Microsoft ended support for Internet Explorer version 8. Also note that JasperReports Server no longer supports Internet Explorer 7. For more information, see Microsoft's IE End of Support page.

• Version 5.6.1 was the last version that supported Spring Security 2.x. All releases after Version 6.0 support Spring 3.x and may require updates to authentication integration code written to work with prior JasperReports Server releases.