TIBCO JasperReports® Server Community Release Notes

Software Release 7.8

TIBCO®

Important Information

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE “LICENSE” FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

ANY SOFTWARE ITEM IDENTIFIED AS THIRD PARTY LIBRARY IS AVAILABLE UNDER SEPARATE SOFTWARE LICENSE TERMS AND IS NOT PART OF A TIBCO PRODUCT. AS SUCH, THESE SOFTWARE ITEMS ARE NOT COVERED BY THE TERMS OF YOUR AGREEMENT WITH TIBCO, INCLUDING ANY TERMS CONCERNING SUPPORT, MAINTENANCE, WARRANTIES, AND INDEMNITIES. DOWNLOAD AND USE OF THESE ITEMS IS SOLELY AT YOUR OWN DISCRETION AND SUBJECT TO THE LICENSE TERMS APPLICABLE TO THEM. BY PROCEEDING TO DOWNLOAD, INSTALL OR USE ANY OF THESE ITEMS, YOU ACKNOWLEDGE THE FOREGOING DISTINCTIONS BETWEEN THESE ITEMS AND TIBCO PRODUCTS.

This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIBCO, the TIBCO logo, the TIBCO O logo, Jaspersoft, JasperReports, and Visualize.js are registered trademarks of TIBCO Software Inc. in the United States and/or other countries.

Java and all Java based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

This and other products of TIBCO Software Inc. may be covered by registered patents. Please refer to TIBCO's Virtual Patent Marking document (https://www.tibco.com/patents) for details.

Copyright © 2005-2020. TIBCO Software Inc. All Rights Reserved.

CONTENTS

Chapter 1 TIBCO Documentation and Support Services **5**
1.1 How to Access TIBCO Documentation 5
1.2 Product-Specific Documentation 5
1.3 How to Contact TIBCO Support 6
1.4 How to Join TIBCO Community 6

Chapter 2 Overview **7**

Chapter 3 New Features **9**
3.1 Version 7.8.0 9

Chapter 4 Changes In Functionality **11**

Chapter 5 Changes In Previous Versions **13**
5.1 Version 7.5.0 13
5.2 Version 7.2 13
5.3 Version 7.1.1 14
5.4 Version 7.1.0 14

Chapter 6 Migration and Compatibility **17**
6.1 Introduction 17
6.1.1 Upgrade Paths 17
6.2 Database Changes 18
6.3 Important Upgrade Information 18

Chapter 7 Known Issues **21**
7.1 Current Known Issues 21
7.2 Known Issues Addressed in this Release 21

CHAPTER 1 TIBCO DOCUMENTATION AND SUPPORT SERVICES

For information about this product, you can read the documentation, contact TIBCO Support, join TIBCO Community, and join Japersoft Community.

1.1 How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website, in the PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product. To access the latest documentation, visit https://docs.tibco.com.

1.2 Product-Specific Documentation

The JasperReports® Server documentation is available at:

- http://community.jaspersoft.com/documentation
- https://docs.tibco.com/products/tibco-jasperreports-server
- <js-install-ce>/docs (after installation)

The following documents for this product can be found on the TIBCO Documentation site:

- TIBCO JasperReports Server Release Notes
- TIBCO JasperReports Server Installation Guide
- TIBCO JasperReports Server Upgrade Guide
- TIBCO JasperReports Server REST API Reference
- TIBCO JasperReports Server User Guide
- TIBCO Jaspersoft Studio User Guide
- TIBCO Jaspersoft OLAP User Guide
- TIBCO JasperReports Server Administrator Guide
- TIBCO Jaspersoft Platform Support Guide
- TIBCO JasperReports Server Visualize.js Guide
- TIBCO JasperReports Server Security Guide
- TIBCO JasperReports Server Ultimate Guide
- TIBCO JasperReports Server Source Build Guide
- TIBCO JasperReports Server Data Management Using Domains

1.3 How to Contact TIBCO Support

You can contact TIBCO Support in the following ways:

- For an overview of TIBCO Support, visit https://www.tibco.com/services/support.
- For accessing the Support Knowledge Base, viewing the latest product updates that were not available at the time of the release, and getting personalized content about products you are interested in, visit the TIBCO Support portal at https://support.tibco.com.
- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to https://support.tibco.com. If you do not have a user name, you can request one by clicking **Register** on the website.

1.4 How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience.

TIBCO Community offers access to Q&A forums, product wikis, and bestpractices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to https://community.tibco.com.

Jaspersoft Community is the official channel for Japersoft products. To join Jaspersoft Community, go to https://community.jaspersoft.com.

CHAPTER 2 OVERVIEW

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 available functionality at a high level; for details, see the documentation.

In particular, see the *TIBCO JasperReports Server Installation Guide* for instructions about running the installer, creating and updating the database, and deploying the WAR file; see the *TIBCO 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 TIB_ js-jrs-ce_ 7.8.0_license.txt. Please read it before you login to JasperReports Server for the first time. If you installed the server using an installer binary (rather than deploying a WAR file), you have already agreed to this license.

These release notes include the following:

- **New Features**
- **Changes In Functionality**
- **Changes In Previous Versions**
- **Changes in Platform Support**
- **Migration and Compatibility**
- **Closed Issues**
- **Known Issues**

CHAPTER 3 NEW FEATURES

This section describes new features introduced in the Jaspersoft BI Suite Version 7.8 release. For information regarding features introduced to Version 7.1.0 to 7.5.0 releases, see the **Changes In Previous Versions** section.

3.1 Version 7.8.0

JasperReports Server 7.8.0 adds these improvements:

- **Updated user interface**. This release includes new visual changes on several pages:
  - The Search Results page has new expand and collapse controls for the filters column on the left.
  - The Repository page, Library page, Schedules page, Schedules editor, and Management pages have new looks.
  - Ad Hoc Editor has usability improvements, including the ability to drag measurements and fields directly to the canvas to start building your visualization.
  - The Visualization Selector now has a new panel describing the selected visualization, including the requirements, and a new Apply and Close button.
  - The Dashboard Designer has usability improvements, including a new toolbar button to switch between editing and viewing a dashboard. The Designer now opens an embedded Ad Hoc Editor when creating and editing charts, crosstabs, and tables.
- **New jasperQL query language**. Jaspersoft Studio supports a new query language for domains called jasperQL. jasperQL provides more options for creating queries than the older domain query language. For example, you can use `Order By`, `Group By`, and `Limit` in your queries. The domain query language is still supported.
- **New Chromium JavaScript engine**. JasperReports Server Version 7.8 uses the Chromium JavaScript engine to generate graphical reports. The binary installer for JasperReports Server will display a message asking if you want to use the engine and then prompt you to enter the path to Chrome or Chromium on your machine. If you want to use Microsoft Edge as your main web browser, you will need to install JasperReports Server using the stand-alone WAR file distribution. For instructions on installing the Chromium JavaScript engine, see the *TIBCO JasperReports Server Installation Guide*.
- **Visualize.js updates**. Dashboard export support has been added to Visualize.js. Supported formats include .PDF, .PNG, .DOCX, .PPTX, and .ODT. Plus, client-server communication has been migrated from using EasyXDM library to cross-origin resource sharing.
- **New *TIBCO JasperReports® Server Data Management Using Domains* Guide**. A new guide on working with domains in JasperReports Server. The guide includes instructions for using the Domain Designer, localizing domains, securing your data, and more.
- **New platforms**. This release adds support for several new third-party platforms:

- Operating systems:
  - Red Hat Enterprise Linux 7.8, 8.0
  - MacOS 10.15
- Application servers:
  - Tomcat 8.5.54, 8.5.57, 9.0.34, 9.0.37
  - Wildfly 18, 19
  - WebSphere 9.0.0.11, 9.0.5.1
- Database servers:
  - DB2 11.5
  - MySQL 8.0
  - SQL Server 2019

CHAPTER 4 CHANGES IN FUNCTIONALITY

This section describes changes in functionality in the Jaspersoft BI Suite Version 7.8 release. For information regarding Version 7.1.0 to 7.5.0 releases, see the **Changes In Previous Versions** section.

- **Chromium replacing PhantomJS**. JasperReports Server Version 7.8 replaces PhantomJS with the Chromium JavaScript engine to generate graphical reports that are run in the background or scheduled. You can use Chrome, Chromium, or any other browser based on Chromium like Microsoft Edge. For information on the compatible versions of browsers, see the *TIBCO Jaspersoft Platform Support Guide*.
- **Input controls client-server pagination** implemented for Report Viewer, Report Options, and Scheduler. This functional change improves performance when running reports with big number of values in single-select and multi-select input controls.

CHAPTER 5 CHANGES IN PREVIOUS VERSIONS

This section describes new features introduced in the Jaspersoft BI Suite Version 7.1.0 to 7.5.0 releases. For information regarding features added to Version 6 releases, see the latest 6.4.x release notes.

5.1 Version 7.5.0

JasperReports Server 7.5.0 adds these improvements:

- **Updated user interface**. This release includes a new look and feel that is crisp and easy to navigate. It keeps the familiar layout and provides updated icons, styling, and colors throughout the application:
  - The home page has a simpler layout with all BI tools in a single column and introduces a color-coding of features that is consistent throughout the application.
  - The pages for creating data sources have been streamlined and color-coded.
  - The Report Viewer is updated with color-coding and matching styles.
- **Three new visualizations**. The new gauge types are the circular gauge, the multi-level gauge, and the arc gauge. These gauges have formatting properties to set minimum and maximum values, colors for value ranges, whether the value is displayed, and if so the number of decimal places and a suffix string such as the % sign.
- **Security**. This release of JasperReports Server updates its use of cryptographic keys, for example to encrypt user passwords internally. All keys are now generated and managed in a single keystore for consistency. Keys used for encrypting export catalogs from older versions of the server have new procedures and user interface for importing into this version of the server. For more details, see the *TIBCO JasperReports Server Security Guide*.
- **Java 11**. JasperReports Server runs with Java 8 and Java 11 for certain platforms, see the Platform Support document for more details.

5.2 Version 7.2

JasperReports Server 7.2 added these features:

- **New platforms**. This release adds several new third-party platforms:
  - Application servers:
    - Tomcat versions 9.0.1 through 9.0.17
    - WildFly 13, 14, 15, and 16
  - Database Servers:

    - PostgreSQL 10.5
- **Accessibility Support**. To help visually impaired users, we improved keyboard and screen-reader support in the report viewer. You can now navigate the main report viewer menu structure using the keyboard and hear interface descriptions using JAWS-enabled screen readers.
- **JasperReports Library**. This new version provides dynamic control of page numbers.
- **Jaspersoft Studio 7.3**. This new version supports Spotfire 7.11 and higher.

The configuration of the `ResourceForwardingServlet` servlet has changed since Release 6. For more information, refer to the **, "New Configuration," on page 15** in **Version 7.1.0**, below.

5.3 Version 7.1.1

Version 7.1.1 was a maintenance release that included improvements requested by customers. For information about the status of specific cases, please visit TIBCO Jaspersoft Technical Support (http://support.tibco.com). In addition, we updated the version of Tomcat: Apache Tomcat 8.5.34.

5.4 Version 7.1.0

JasperReports Server 7.1.0 added these improvements:

- **Jaspersoft Studio**. Several new features are available in our report designer:
    - Support for properties in datasets and query executers. Better support for fields and parameters in the Dataset and Query dialog, including support for field properties on the **Fields** tab and show and hide built-in parameters, and the ability to display, create, and edit parameter properties on the Parameters tab. This lets you configure your fields and parameters directly in the Dataset and Query dialog.
    - Data adapters that connect to a web service. You can now create data adapters that connect to a web service. You configure these data adapters in the data adapter dialog. When you use this type of data adapter in a report, you can access it in the Dataset and Query dialog: you can auto-discover fields from a node you enter in the query dialogs and view and manage HTTP parameters on the Data Adapter tab.
    - Enhanced Properties UI. The advanced properties dialog now displays a searchable list of available properties. You can create expressions, toggle the view to the old Properties dialog, and add properties for your custom classes. Most elements now support expressions in properties.
    - Support for Data Snapshots. Jaspersoft Studio now lets you create a JasperReports data snapshot, which contains a sample dataset that contains all sample data necessary to run the report. Storing the data for a report makes it easier to develop reports while offline or to share a functional report with other developers.

  You can still create reports and connect to the latest JasperReports Server with previous versions of Jaspersoft Studio.
- **New Platforms**. Components included in the installer have been updated to:
    - PostgreSQL 9.3.20
    - Tomcat 8.5.34
    - Oracle JDK 8 version 1.8.0_201 (8u201)
    - Spring Framework 3.2.18
- **New Third-party Software Support**. This release adds support for Oracle 12c as a host for the JasperReports Server repository and WebLogic 12.2.1 as the application server.
- **Security Improvement**. JasperReports Server implements a new mechanism to protect against clickjacking

attacks. To enable this mechanism, edit a configuration file.

1. Using a text editor, open the applicationContext-security-web.xml file (found in <js-install>\apache-tomcat\webapps\jasperserver-pro\WEB-INF).
2. Locate the `antiClickJackingEnabled` property in the `webAppSecurityFilter` bean, and set it to true. Setting this property to true instructs JasperReports Server to include an X-Frame-Options header in every response.
3. You can also set the `antiClickJackingOption` property to control the header value. Valid values are:
   - `DENY` - JasperReports Server doesn't load into any iframe.
   - `SAMEORIGIN` - JasperReports Server only loads into an iframe on a page in the same domain as JasperReports Server.
   - `ALLOW-FROM` - JasperReports Server only loads in a frame on a page specified in `antiClickJackingUri` property.
4. If you set the antiClickJackingOption property to `ALLOW-FROM`, also be sure to set the `antiClickJackingUri` property to a valid URI.
5. Save the file and restart the server.

If you use iframes to embed JasperReports Server (including use of Visualize.js), set the `antiClickJackingOption` to either `SAMEORIGIN` (if the embedding host is on the same domain as JasperReports Server) or `ALLOW-FROM` (if the embedding host is on a different domain than JasperReports Server). If you use `ALLOW-FROM`, also set the `antiClickJackingUri` property.

Clickjack protection doesn't support cases in which multiple domains embed JasperReports Server.

- **Directory Access Control.** A new option controls access to resources in the file system of the JasperReports Server host using the `ResourceForwardingServlet` servlet. The servlet forwards requests to handle browser caching. For example, when it receives calls to `/runtime/<hex-code>/<my-resource>`, it forwards them to `/<my-resource>`.
  The servlet controls access using a whitelist that can include both resource and directory names; for simplicity here, we use the term *directories*.The whitelist defines the directories to which access is granted; access to other directories is denied. By default, it lists all the directories that JasperReports Server requires.

  New Configuration

Note that this approach differs from the previous implementation, and requires intervention in fewer cases. In general, you don't need to change it. We recommend that any additions you make to the whitelist be considered carefully and tested thoroughly.

We advise against removing the default values from the list, as this would impair functionality.

To configure this list, edit the `forwardWhitelist` parameter of the `ResourceForwardingServlet` servlet in the web.xml file.

1. Using a text editor, open the web.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 `forwardWhitelist` parameter, review the comma-separated list of directories that JasperReports Server users should be able to access. This parameter can only list directories under the jasperserver-ce deployment directory.
4. If you make changes, save the file, restart the server, and test the application thoroughly.

In a previous version, access to the application's resources was controlled by a blacklist. The blacklist has been removed in favor of this whitelist.

The previous approach sometimes required additional steps. For example, if you restricted access using the `security-constraint` tag in web.xml, you may have also restricted that access using the `ResourceForwardingServlet` servlet. This step is no longer necessary, since access is now denied by default.

If a high-priority case requires you to customize the `ResourceForwardingServlet` servlet and use JasperReports Server to cache a third-party resource, you might consider editing this list and making further customizations; we advise against such changes due to the security risks they might pose.

CHAPTER 6 MIGRATION AND COMPATIBILITY

This section includes:

- **Introduction**
- **Database Changes**
- **Important Upgrade Information**

6.1 Introduction

6.1.1 Upgrade Paths

Your current version determines your upgrade path:

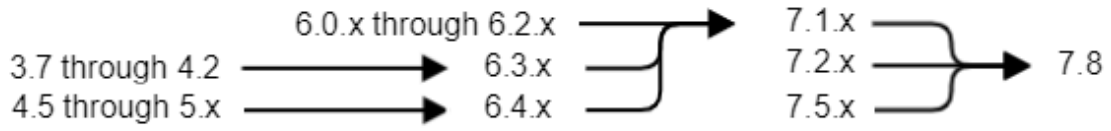

Figure 6-1 Paths for Upgrading to Version 7.8

You can upgrade directly to 7.8.0 if your instance is one of the following:

Version 7	7.1.x	7.2.x	7.5.x

If your instance is one of the versions listed below, you must first upgrade to the latest version of 7.1.x before upgrading to 7.8.0:

Version 6	6.0.x	6.1.x	6.2.x	6.3.x	6.4.x

If your instance is one of the versions listed below, you must first upgrade to the latest version of 6.4.x, then upgrade to 7.1.x, before finally upgrading to 7.8.0:

Version 5	5.0	5.1	5.2	5.5	5.6.x
Version 4	4.5.x	4.7.x			

If your instance is one of the older versions listed below, you must first upgrade to the latest version of 6.3.x, then upgrade to 7.1.x, before finally upgrading to 7.8.0:

Version 4	4.0	4.1	4.2.x
Version 3	3.7.x		

To upgrade, start with the WAR File Distribution ZIP: `TIB_js-jrs-cp_7.8.0_bin.zip`

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

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

If you are upgrading from certain versions of JasperReports Server, such as 7.2.x or earlier, the upgrade involves substantial changes that may require you to plan and prepare beforehand. See the *TIBCO JasperReports Server Upgrade Guide* for advice regarding these important considerations. Also, see **6.3, "Important Upgrade Information," on page 18**.

6.2 Database Changes

Between certain versions of the server, we have changed the repository database in order to add new functionality. There are changes between 6.4.x, 7.1.x, 7.2, and 7.5.

6.3 Important Upgrade Information

This section touches on special considerations for upgrading to this release. These considerations are spelled out more thoroughly in the *TIBCO JasperReports Server Upgrade Guide*.

- **Changes in the 7.8 Release**. s JasperReports Server now uses the Chromium JavaScript engine to export reports and dashboard to PDF and other formats. PhantomJS/Rhino support has been removed. For information, see *Changes in 7.8 that May Affect Your Upgrade* in the *TIBCO JasperReports Server Upgrade Guide*.
- **Changes in the 7.5 Release**. Several changes in this release may affect your upgrade. For example, changes to encryption keys will affect all deployments, changes to the user interface may affect any custom themes you have created, changes to the TIBCO Jaspersoft MongoDB Query Language may affect your MongoDB

queries, and the drivers used for Impala and Simba data sources have been updated and the old drivers no longer work. For information about preparing for such changes, see the latest 7.5.x upgrade guide.

- **Changes in the 7.2 Release** Legacy dashboards are no longer available to view or edit starting in the 7.2 release. For more information, please refer to the latest 7.2.x upgrade guide.
- **Changes in the Version 6 Releases**. JasperReports Server Version 6 releases included many changes that may impact the upgrade steps in unexpected ways. We made such changes in 6.0.x, 6.1.x, 6.2.x, and 6.4.x. For example, changes in 6.2.1 replaced the drivers used by Impala and Simba data sources. For more information about other considerations when upgrading to version 7 from older versions, please refer to the latest 6.4.x upgrade guide.

CHAPTER 7 KNOWN ISSUES

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

- **Current Known Issues**
- **Known Issues Addressed in this Release**

For information about the status of specific cases, please visit TIBCO Jaspersoft Technical Support (http://support.tibco.com). For information regarding known issues found or addressed in Version 6 releases, see the 6.4.x release notes.

7.1 Current Known Issues

We're aware of these issues in this release of JasperReports Server:

- **JS-58997**: If you want to rollback JasperReports Server 7.8.0 to the previous version, make sure that you copy the .jrsks and .jrsksp files from the directory where you saved the backup of your `jasperserver` keystore before running `overlay rollback`. Copy them to the `$HOME` folder after you rollback the application.
- **JS-58935**: Running the command `./overlay install` results in a permission error.
- **JS-58574**: In recent versions of Mac OS, the Stop and Start scripts in the installation directory must be run using Automator.
- **JS-58145**: Trying to use input controls for strings and integers for reports with a very large data size (for example, more than 100,000 rows) could result in the JasperReports Server freezing in the "Loading" stage until the session is terminated.
- **JS-58144**: SQL validation for an input control could result in an error if the input string contains a semicolon (;), dash (–), or number sign (#).
- **JS-57551**: Scalar functions can’t be used as a filter for Ad Hoc views when using an ElasticSearch data source.
- **JS-32077**: Multi-select input controls for reports treat the values as case-sensitive even if the data source is case-insenstive.
- **JRL-242** (was 17824): While Fusion Charts support annotations, JasperReports Server and Jaspersoft Studio don't support them. We may address this issue in a subsequent release.

7.2 Known Issues Addressed in this Release

These defects, which were listed in the release notes of previous versions, were addressed in this release:

- **JS-55770**: Previous versions of JasperReports Server could not be deployed as the root application in Tomcat. This issue has been addressed in this release. Refer to the readme.txt for more information.
- **JS-41184:** The UI Samples page that was available to administrators in previous releases of JasperReports Server has been removed. When testing themes and other cosmetic changes or customizations to the web UI, please navigate to a web page with the UI component you're changing rather than viewing all available components in a single view.
- **JS-38006**: The permissions window in the repository showed the Read + Write + Delete option twice in the drop-down list in earlier versions of JasperReports Server. This issue has been corrected in this release.
- **JS-34763**: In earlier versions of JasperReports Server, exporting scheduled jobs in bulk resulted in an empty ZIP file. This issue has been corrected.
- **JS-33114**: In previous versions, exporting a report with large frame elements as an Excel spreadsheet could result in high memory usage, even when using a virtualizer.