

# IBM TRIRIGA Application Platform

Version 5 Release 0.3

*Readme*



# Readme File for IBM TRIRIGA Application Platform Version 5.0.3 Fix Pack

---

This fix pack updates the IBM® TRIRIGA® Application Platform product.

These release notes include the following:

- An overview of changes
- Many of the descriptions include an internal reference number (MREF-nnnnnn, IJnnnnn, IVnnnnn, and/or RFE-nnnnnn)

## What's New in This Release

IBM TRIRIGA Application Platform 5.0.3 continues to add valuable functionality, fix defects, and reduce the effort necessary for new and existing customers to implement the products.

## Prerequisites and Supported Products

To install this fix pack, you must have IBM TRIRIGA Application Platform 5.0 installed.

IBM TRIRIGA Supported Versions and IBM TRIRIGA Application Platform Compatibility Matrix

The IBM TRIRIGA Supported Versions page lists information about IBM TRIRIGA's supported products and platforms and information about end-of-life plans for such software, see

<https://www.ibm.com/support/pages/node/1282306>.

The IBM TRIRIGA Application Platform Compatibility Matrix lists supported operating systems, databases, and related details for the IBM TRIRIGA Application Platform, see

<https://www.ibm.com/support/pages/node/1283650>.

The IBM TRIRIGA Supported Versions and the IBM TRIRIGA Application Platform Compatibility Matrix might change over time.

**IMPORTANT NOTICES:** IBM no longer supports IBM Tivoli Directory Integrator (TDI). Migrate your TDI assemblies to a supported technology, such as Pentaho. As of version 3.6.1.2, the IBM TRIRIGA Application Platform is no longer included with or supports TDI assemblies.

As communicated in the IBM TRIRIGA Application Platform 3.6.1.2 Compatibility Matrix, IBM does not support Oracle WebLogic with IBM TRIRIGA Application Platform version 3.6.1.2 and later. See the Compatibility Matrix for the full listing of compatible products and versions.

# Installing a TRIRIGA Application Platform fix pack

Complete the following steps to install a TRIRIGA Application Platform fix pack.

## Procedure

1. Make sure that no database configuration changes are pending and there are no entries in the WF\_EVENT or EF\_QUEUE tables. You can check the status of these tables by running the following SQL statements: `select count(*)from WF_EVENT` and `select count from EF_QUEUE`.
2. For IBM WebSphere Application Server Liberty Core profile, stop all application servers before you continue the installation.
3. Take a backup of the database and the existing IBM® TRIRIGA® install directory for each server. If necessary, you can use the backups to restore the system.
4. Download the <version>-TIV-TAP-FP00x file. For example, 5.0-TIV-TAP-FP002.
5. Extract the file into any directory.
6. Run one of the following patch executable files:
  - o `fixpack_tririga_v<version_number>_Windows.exe`.  
For example, `fixpack_tririga_v5.0.3_Windows.exe`.
  - o `fixpack_tririga_v<version_number>_Linux.bin`.
7. In the Introduction pane, select **Next** or **Enter**.
8. In the license agreement, accept the terms and select **Next** or **Enter**.
9. Choose the directory where TRIRIGA is installed.  
For example: `c:\ibm\tririga\` or `/opt/ibm/tririga/`.
10. Review the information and select **Next** or **Enter**.
11. The fix pack process patches the WAR file and runs any platform database fix pack scripts.
12. For WebSphere Application Server Liberty Core profile, the WAR file deploys and the cache directories are removed.
13. Restart WebSphere Application Server Liberty.

## Additional Notes

Additional information and recommendations for users installing or upgrading to this version.

**\*\* IMPORTANT:** As part of the Platform fix pack release 5.0.3, we have upgraded the Spring framework to 6.1.x and Spring Framework 6.1.x requires Servlet 6.0, which is part of Jakarta EE 10.

Due to this upgrade, the following changes have been made:

### 1. Updated JAR files

The following JAR files located at `InstallationDirectory/tools/BusinessConnect` have been updated:

- `TririgaCustomTask.jar`
- `TririgaBusinessConnect.jar`

Customers must use the latest versions of these JAR files from the specified location; else the integrations might break. Custom code needs to be recompiled using the above latest jars provided with this release.

### 2. BIRT Viewer UI update

The BIRT Viewer UI has been updated as part of IBM TRIRIGA BIRT upgrade to version 4.16.0. This modernization from version 4.8.0 introduces a cleaner interface, refined styling, and enhanced responsiveness, delivering a more consistent and efficient reporting experience for business users.

# Changes

The following changes to the IBM TRIRIGA Application Platform are in this release:

Area of Change	Description
Accessibility	Accessibility Enhancements. (MASREF-825, 826, 827, 759)
Audit	Audit Tab Actions are now correctly displayed. (MASREF-1772-DT444085)
Exchange	<p>Microsoft has deprecated legacy Exchange Online tokens and is turning them off for Microsoft 365 tenants, starting on February 17th, 2025.</p> <p>This fix is a solution to the deprecated legacy Exchange online token; the fix requires customer to create a Microsoft Azure app registration and a TRIRIGA OAuth profile. In the Azure App Registrations, Click "New Registration",</p> <p>In the new registration, make sure to select "Multitenant" for the supported account type. And under the Redirect URI, please select "Single-page application (SPA)", and for the redirect URI field, put [your TRIRIGA domain]/p/web/outlook/roomSearch.</p> <p>Once registered, in the App registrations page, under the "All applications", select the new registered app. This should navigate to the app, in the page, click on the "Manage &gt; API permissions" to add the "Calendar.Read", "Mail.Read", and "User.Read" permissions.</p> <p>In the "API permissions" page, click "Add a permission". In the Request API permissions panel, click on the "Microsoft Graph". Select "Delegated permissions". Under "Select permissions", look for "Calendars.Read", "Mail.Read", and "User.Read".</p> <p>Once selected the three permissions, click on "Grant admin consent for MSFT", that way it grants consent for the request permission for all accounts in MSFT. Click on the "Overview", copy the Application (client) ID. We will need this client ID later in the TRIRIGA OAuth profile form.</p> <p>In TRIRIGA, visit Tools &gt; System Setup &gt; Integration &gt; OAuth Settings. In the OAuth Settings page, click "add" at the top right corner. A new OAuth profile form will be opened. In the OAuth profile form, you can give any name (i.e Outlook Add-in), select "Microsoft" as the OAuth Provider, and "User delegate" as the Access Type.</p> <p>For the OAuth Application Key field, please paste the copied client ID from the Azure app registration. And for the OAuth Redirect URL field, please put [your TRIRIGA domain]/p/web/outlook/roomSearch. (Tri -102239, 102238-IJ54268)</p>
Form Builder	Label checkbox is now properly aligned. (MASREF-2132-DT444084)
Incoming Email	Issues with Incoming email has been resolved. (MASREF-1771-IJ54954)
Lease Abstract form	Multi-Tabs Block/Div (Header sections) should not disappear now upon the second click or on re-render. (MASREF-1855-DT447140)

Area of Change	Description
Performance	The static resources should now be cached by the browser for performance. (Tri-102400)
Performance	Performance improvements have been made. (Tri-102401-DT443607)
Query & Reporting	The filter options for the "Number" field type are now accurately shown in the report filter modal. (Tri-102417-IJ53514)
Query & Reporting	The currency fields will get displayed properly based on the rounding rule set either in Data Modeler OR UOM_values. (Tri-101906-IJ53083)
Query & Reporting	In Summary Reports, clicking the footer row no longer triggers the "Open Record" functionality or displays the popup message: "The record you are trying to open does not have a layout set." (MASREF-1777-IJ54661)
Query & Reporting	A new property, ENABLE_SQL_WILDCARD, has been added to the TRIRIGAWEB.properties file with a default value of Y. This property controls how SQL wildcard characters % and _ are handled in query filters for Reports and Queries. When set to Y (default), % and _ function as SQL wildcards. When set to N, these characters are treated as literal values rather than wildcards. This setting allows greater flexibility in controlling query behavior based on your requirement. (MASREF-2133)
Query & Reporting	The loading indicator ("One moment please...") now consistently appears when loading a query for the first time and during subsequent refresh operations. (MASREF-2015-IJ54933)
Reporting	An issue with Sum on FR (Financial Rollup) fields not displaying with the enhanced report rendering grids has been resolved. (MASREF-1926-DT447059).
Reporting	Report titles that contain special characters are now accurately preserved during export, ensuring better consistency and formatting in exported files in query report. Some reserved characters are not fully supported in file names across most operating systems. These characters might be removed or replaced during the export process: < (less than) > (greater than): (colon) "" (double quote) / (forward slash) \ (backslash)   (vertical bar or pipe)? (question mark) * (asterisk) To avoid issues, it's best to exclude reserved characters from report titles that are intended for export. (MASREF-1925-IJ52804)
Security	poi-ooxml jar has been upgraded. (Tri-102405)
Security	On applying the java filter now system effectively prevents unauthorized objects from being loaded, reducing the risk of insecure deserialization attacks while maintaining application functionality. (Tri-102194)
Security	Security Enhancements. (Tri-102193, 102181, 102189, 102180, MASREF-1690, 1657, 1647)
Security	commons-beanutils has been upgraded. (MASREF-1655)
Security	commons-lang3 has been upgraded. (MASREF-1654)

Area of Change	Description
Security	esapi has been upgraded. (MASREF-1645)
Security	tinymce has been upgraded. (MASREF-1776)
Security	mpxj jar has been upgraded. (MASREF-2136)
Security	Apache cxf core has been upgraded. (MASREF-2130)
Security	Spring framework has been upgraded. (MASREF-1722)
Site Style Manager	Resolved an issue that prevented changes to the portal title bar background color from being applied correctly. (MASREF-1775-IJ53861)
Form Builder	Fixed form settings for rowspan and colspan when Enhanced Render Mode is on. (MASREF-1778-IJ53425)

## Related Documentation

---

The IBM TRIRIGA Application Suite documentation is at <https://www.ibm.com/docs/en/tas>. The IBM TRIRIGA documentation is at <https://www.ibm.com/docs/en/tririga>. The IBM TRIRIGA Application Platform documentation is at <https://www.ibm.com/docs/en/tap>. The documentation is available online in topics or as downloadable PDF files.

## Support

---

IBM Software Support assists with product defects, answering FAQs, and performing rediscovery. View the IBM Software Support site at [www.ibm.com/support](http://www.ibm.com/support).

# Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive Armonk,  
NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing  
Legal and Intellectual Property Law  
IBM Japan, Ltd.  
19-21, Nihonbashi-Hakozakicho, Chuo-ku  
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
224A/101



11400 Burnet Road  
Austin, TX 78758  
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance; compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

## Privacy Policy Considerations

IBM Software products, including software as service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

This Software Offering does not use cookies or other technologies to collect personally identifiable information.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at [www.ibm.com/privacy](http://www.ibm.com/privacy) and IBM's Online Privacy Statement at <http://www.ibm.com/privacy/details/us/en> in the section entitled "Cookies, Web Beacons and Other Technologies."

## Trademarks

IBM, the IBM logo, ibm.com, and TRIRIGA are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

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

Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at “Copyright and trademark information” at [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).