

IBM TRIRIGA

Version 10.4.1

IBM TRIRIGA Application Platform

Version 3.4.1

Release Notes



Note

Before using this information and the product it supports, read the information in "Notices" on page 61.

This edition applies to version 10, release 4, modification 1 of IBM® TRIRIGA® and version 3, release 4, modification 1 of IBM TRIRIGA Application Platform and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright International Business Machines Corporation 2014. All rights reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

RELEASE NOTES	3
What's New in This Release	3
IBM TRIRIGA 10.4.1 Enhancements	3
IBM TRIRIGA Application Platform 3.4.1 Enhancements	3
IBM TRIRIGA CAD Integrator/Publisher 12.1.1 Enhancements	4
Important Installation and Upgrade Information.....	4
IBM TRIRIGA 10.4.1	5
Important Information	5
Known Limitations.....	7
IBM TRIRIGA 10.4.1 Changes.....	9
IBM TRIRIGA 10.4.1 Patch Helper Workflows	9
IBM TRIRIGA 10.4.0 Enhancements.....	10
IBM TRIRIGA 10.4.0 Changes.....	12
IBM TRIRIGA 10.4.0 Patch Helper Workflows	23
IBM TRIRIGA APPLICATION PLATFORM 3.4.1	25
Important Information	25
Known Limitations.....	33
IBM TRIRIGA Application Platform 3.4.1 Changes.....	36

IBM TRIRIGA Application Platform 3.4.1 Properties Files	38
IBM TRIRIGA Application Platform 3.4.0 Enhancements.....	40
IBM TRIRIGA Application Platform 3.4.0 Changes.....	42
IBM TRIRIGA Application Platform 3.4.0 Properties Files	51
IBM TRIRIGA CAD INTEGRATOR/PUBLISHER 12.1.1	52
Important Information	52
Known Limitations.....	52
IBM TRIRIGA CAD Integrator/Publisher 12.1.1 Changes	53
IBM TRIRIGA CAD Integrator/Publisher 12.1.1 Properties Files	54
IBM TRIRIGA CAD Integrator/Publisher 12.1.0 Enhancements	54
IBM TRIRIGA CAD Integrator/Publisher 12.1.0 Changes	55
IBM TRIRIGA CAD Integrator/Publisher 12.1.0 Properties Files	57
IBM TRIRIGA SUPPORTED VERSIONS AND IBM TRIRIGA APPLICATION PLATFORM COMPATIBILITY MATRIX	58
RELATED DOCUMENTATION.....	58
SUPPORT	60
NOTICES	61
Privacy Policy Considerations.....	62
Trademarks	63

Release Notes

Welcome to the September 2014 release of IBM® TRIRIGA® 10.4.1, IBM TRIRIGA Application Platform 3.4.1, and IBM TRIRIGA CAD Integrator/Publisher 12.1.1. This release includes a full installation of the platform and applications and a platform-only upgrade installation from 3.0.x or higher to IBM TRIRIGA Application Platform 3.4.1.

These release notes include the following:

- An overview of enhancements and changes
- A list of known limitations
- A list of documentation changes

Many of the descriptions include an internal reference number (Tri-nnnnnn).



Note - To request access to IBM TRIRIGA application upgrade packages or documentation for releases before IBM TRIRIGA 10.2, submit a ticket through the IBM Software Support site at www.ibm.com/support.

What's New in This Release

With IBM TRIRIGA 10.4.1, IBM TRIRIGA Application Platform 3.4.1, and IBM TRIRIGA CAD Integrator/Publisher 12.1.1, IBM TRIRIGA continues to add valuable functionality, fix defects, and reduce the effort necessary for new and existing customers to implement our products. Highlights in IBM TRIRIGA 10.4.1, IBM TRIRIGA Application Platform 3.4.1, and IBM TRIRIGA CAD Integrator/Publisher 12.1.1 include the following:

IBM TRIRIGA 10.4.1 Enhancements

The following enhancements to IBM TRIRIGA are in this release:

Area of Impact	Description
Mobile Support	Includes enhancements for working with IBM TRIRIGA Anywhere Workplace Operations.

IBM TRIRIGA Application Platform 3.4.1 Enhancements

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

Area of Impact	Description
Compatibility	Compatibility with IBM DB2 is now included. The minimum supported version is IBM DB2 Workgroup Server Edition 10.5.0.4. DB2 is supported on Red Hat Enterprise Linux, SUSE Linux Enterprise Server, and Windows Server. Limited use licenses of IBM DB2 Workgroup Edition and IBM WebSphere Application Server are included for use with IBM TRIRIGA Application Platform.

Area of Impact	Description
Document Management	Documents and folders in the Document Manager can now be searched. The search does not consider what folder you are starting on; it searches the entire document tree from the root. (Tri-143113-IV62761)
Mobile Support	Enhancements are included for working with IBM TRIRIGA Anywhere Workplace Operations.

IBM TRIRIGA CAD Integrator/Publisher 12.1.1 Enhancements

The following enhancements to IBM TRIRIGA CAD Integrator/Publisher are included in this release:

Area of Impact	Description
Installer	TRIRIGA CAD Integrator/Publisher now supports AutoCAD 2015 and AutoCAD Architecture 2015. (Tri-139800)

Important Installation and Upgrade Information

Before installing, go to the IBM TRIRIGA Application Platform 3 Knowledge Center and read *Installing IBM TRIRIGA Application Platform*.

Before upgrading, go to the Upgrading page of the IBM TRIRIGA wiki and read the *IBM TRIRIGA Application Platform 3 Upgrade Installation Guide* and the procedures that outline the upgrade steps for a selection of upgrade scenarios at the following link:

www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Upgrading.

IBM TRIRIGA 10.4.1

This release includes information, known limitations, and changes to IBM TRIRIGA.

Important Information

The following items are important information concerning IBM TRIRIGA for this release:

Area of Impact	Description
Geography	On the Asset Specification form, in the System tab, the System Geography field needs to be cleared in order for buildings to be displayed correctly for location, equipment, and vehicle reservation types in the Room Reservation form for the Contact Center. (Tri-87474)
Globalization	Contact Roles record names can now be translated. If you do not upgrade your application to 10.4.0, you must republish the following business objects manually so that the language tables will be created and import of their data will succeed: <Module name>.<BO name> System.Help System.Licence Details triCiApplicationManager.triCiSpecialField triSetup.triOfflineContent triSetup.triUserMessage (Tri-113883)
Installation	If you are upgrading from a previous version of the Application and have not previously done so, apply the SQL script to update the system fields with sub-attribute type of CreatedDateTime to CreatedDateTime (Number) and ModifiedDateTime to ModifiedDateTime (Number). Scripts for Oracle and Microsoft SQL Server are located on the upgrade disk in the \Scripts folder. Instructions are within the scripts. For Oracle, run SetVarcharColsToNumeric_ORCL.sql. There are two scripts for MSSQL, SetVarcharColsToNumeric_MSSS.sql and SetVarcharColsToNumeric_MSSS_Publish_BO.sql. Run SetVarcharColsToNumeric_MSSS.sql first. When it completes, run SetVarcharColsToNumeric_MSSS_Publish_BO.sql.
Notifications	An issue was resolved where some internal Notification Detail Helper records were not being removed after-use, causing the system to become bogged down with IBS_SPEC and IBS_SPEC_ASSIGNMENT records. Use the following SQL to identify how many of these records exist in your environment: <pre>SELECT COUNT(*) FROM IBS_SPEC WHERE SPEC_TEMPLATE_ID IN (SELECT SPEC_TEMPLATE_ID FROM IBS_SPEC_TYPE WHERE UPPER(NAME) = 'TRINOTIFICATIONDETAILHELPER');</pre>

Area of Impact	Description
	<p>The following SQL can be used to clean up the records when the next Cleanup process is initiated by the system.</p> <pre>UPDATE IBS_SPEC SET OBJECT_STATE = NULL, OBJECT_ID=0-SPEC_ID WHERE SPEC_TEMPLATE_ID IN (SELECT SPEC_TEMPLATE_ID FROM IBS_SPEC_TYPE WHERE UPPER(NAME) = 'TRINOTIFICATIONDETAILHELPER')</pre> <p>(Tri-130778)</p>
Real Estate Abstract	The Lease ID of a Lease Abstract record should be unique.
Real Estate Lease	Users may experience extended processing times when using the Bulk Create Review Assumptions Request across a large number of leases. To process more efficiently, instead of selecting all of the leases at one time for bulk update, select a few at a time. (Tri-80985)
Space - Plan Moves	<p>After you upgrade to 10.4.0 from another version, the Bulk Print Move Items action on the Move Planner's "All Move Line Items" section displays a blank screen.</p> <p>Use the following steps to correct this issue:</p> <ol style="list-style-type: none"> 1. Log in as an admin user. 2. Go to Tools > Document Manager > TRIRIGA > triItem. 3. Point, but do not click, your mouse at the "Move Request Line Item Record (BIRT)" document. At the lower left corner of your browser, you may see "javascript:openDocument(XXXXXX);". The XXXXXX is the document ID. 4. Go to Tools > Builder Tools > Form Builder. 5. Click triPlanning and open triMovePlanner form. 6. Click the "All Move Line Items" query section. 7. In the Properties window, click the "Bulk Print Move Items" action. 8. In the URL of the action property, you will find "/html/en/default/common/RepBuilder.jsp?source=bulk&docId=XXXXXX&showFilters=false&queryName=triItem_triMoveRequestLineItem__triMoveRequestLineItem__MoveDesigner__BulkPrint__For__All__Items". 9. If the document ID is different from the one from step 3, replace the value in the URL bath in step 8 with the document ID from step 3. <p>(Tri-128907)</p>
Upgrade	When upgrading to 10.4.0, update the patch helper workflow "triPatchHelper - triCalculate - 10.3.2 - Retro Contract to Set Payment Timing" by changing the "Update Payment Timing" modify task to have "Map From Records" point to the "Start" task instead of the "Get Existing Contract" query task. This reduces the processing time of upgrading. (Tri-128918)
Workplace Reservation Manager	In the current design for iCal notification attachments, if a room is declined for a specific occurrence, an iCal update is not sent. This is working as designed. The iCal contents are based on the reservation as a whole and are not just for a specific resource or room. For example, if a reservation is made for two rooms, the system sends a single iCal attachment - for the reservation. When a resource or room is declined, the user does receive a notification that indicates the

Area of Impact	Description
	<p>declined status, but the notification does not have an iCal attachment. (Tri-107380)</p> <p>When you use the IBM TRIRIGA Reserve tab in Microsoft Outlook to make a reservation, after you specify the reservation subject, either press Tab or click outside the Subject field. (Tri-77073)</p>

Known Limitations

The following items are known limitations concerning IBM TRIRIGA for this release:

Area of Impact	Description
Analytics	The Create Date of the Asset Event Requests shows the date and time in the local time zone in the work task record. To find this date and time value, go to Sustainability > Set Up > Analytics > Rule Engine. From the rule engine, go to the Tasks tab, and open the task. The Created Date/Time is not in GMT in the Requests section. (Tri-133787)
Gantt	If you create many tasks in the Gantt, then delete the tasks from the Gantt, and then save the project record, some of the tasks may not be deleted. This is because all of the asynchronous workflows that are triggered by these activities did not have sufficient time to complete. If this occurs, delete the tasks in the Gantt that should have been deleted. (Tri-38256)
Globalization	Attention messages for Classification records display in US English because the record language for the delivered instance data (system data) is US English. (Tri-39803)
Installer for the IBM TRIRIGA Workplace Reservation Manager Add-In to Microsoft Outlook	The installer is only available in US English. Installing to a path under Program Files may not work in a non-US English-language version of Windows.
Language Packs	Some list values might not display translated values. If you find a list with values that require translation, use the Language Manager in the Administrator Console to export the list values for translation, then import them back into the system by using the Language Manager.
Lease Accounting	<p>The values in fiscal line items can be incorrect if you issue an index adjustment calculator before a lease with an index adjustment completes the workflow processing that occurs upon lease activation. You must wait until all workflow processing is complete before you issue an index adjustment calculator. (Tri-115634)</p> <p>When payments are paid up to the current period and the lease is also amended in the same period, no catch-up payment is required. However, the first unpaid fiscal line item on the amended lease is calculated incorrectly. (Tri-115637)</p>
Real Estate Environmental Sustainability	IBM TRIRIGA Real Estate Environmental Sustainability Impact Manager supports a new ETL Job Item Type for Tivoli Directory Integrator Transformation. In this ETL job item, the user can add resource files, which will be used during the execution of this job item. If the job item has a resource file associated with it,

Area of Impact	Description
	<p>it can be executed successfully by clicking the "Run Process" button. The job item should also be triggered by the job scheduler according to the defined schedule, but job scheduler currently can not trigger job items that have a resource file defined. (Tri-135438)</p>
Real Estate Lease	<p>No list of cost codes is returned by the Service Cost Codes associated to the Location Cost Code query on the Payment Adjustment form when opened from the Payment Schedule. Service cost codes can still be manually selected by switching to the Service Cost Codes query in the Related Reports list. (Tri-134138)</p> <p>On the Payments tab of the Owned Property record, the Bypass Date Gap Validation check box is not displayed. Only the Attention! message displays. The Bypass Date Gap check box displays in the Accounting Summary section of the Real Estate Lease record, but the Owned Property record does not display this section on the Payments tab.</p> <p>Although the Bypass Date Gap Validation check box is not displayed, the Attention! message states: "One or more date gaps exist in the payment schedules. A missing date might result in incorrectly created or missing payment line items. To proceed, correct the start date and end date of each payment schedule or select the Bypass Date Gap Validation check box." (Tri-133732)</p> <p>The date gap bypass Attention! message does not display on an Asset Lease for date overlaps for semi-annually frequency. You can expect the date gap bypass Attention! message to display for the first two schedules with the date overlap although the payment schedule was activated, the payment schedules scheduled, and the PLIs created. (Tri-133673)</p>
Real Estate Lease Asset Lease	<p>Under the proposed FASB/IASB guidelines for lease accounting (May 2013 Exposure Draft), index leases work only for monthly frequency. Index leases do not work for non-monthly frequencies, for example, quarterly, semi-annually or annually. If an adjustment is made from the Index Adjustment calculator, the adjusted amount is applied to periods that do not have payments, resulting in incorrect calculations. (Tri-115636)</p> <p>Weekly, bi-weekly, or 13-period frequencies are not supported for schedule generation. This is true for current accounting standards and proposed guidelines. (Tri-115639)</p> <p>When the Contract Terminate or Contract Expiration pop-up window displays, you must enter the information correctly before selecting the Continue action. If any errors are not corrected and the transaction is canceled, the record is still processed and could remain in an unusable state. The parent or calling record will transition to the next state regardless of what occurs in the pop-up form. (Tri-123274)</p>
Reservation Survey Request	<p>In a new Reservation Survey Request form, you must select the Create Draft action before selecting either the Find Parameter Recipients action or the Find Random Recipients action when the parameter fields are populated. In an existing Reservation Survey Request form, when the parameter fields are modified or populated, you must select the Save action before selecting either the Find Parameter Recipients action or the Find Random Recipients action. If you do not, neither action works as expected; the action does not pick up the changes in the parameter fields. (Tri-36865)</p>
Workplace Reservation Manager	<p>When looking at a reservation from Microsoft Outlook Web Access (OWA), the text on action buttons (such as check in, early notification) does not show clearly</p>

Area of Impact	Description
	<p>in preview mode. To see the text more clearly, you can open the appointment. (Tri-68953)</p> <p>When you make a one-time reservation for a room that has setup and breakdown requirements, if the setup and breakdown times overlap another reservation, currently the booking is accepted when it should be declined. Instead of using the setup and breakdown feature, reservation coordinators can manually add separate reservations for the setup and breakdown times. (Tri-115568)</p> <p>After you have changed the start time of an existing reservation, queries may still show a record with the old start time in addition to a record with the new start time. (Tri-134201)</p>

IBM TRIRIGA 10.4.1 Changes

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
Workflow	The workflow "triJobRunItem - Synchronous - Run Job Item" is updated so that the "Update TEMP triETLJobItem" task has "Has Resource File" association. Now, job schedules can completely invoke and execute a job item with a resource file. (Tri-136341)

IBM TRIRIGA 10.4.1 Patch Helper Workflows

Patch helper workflows correct the record data in your IBM TRIRIGA application. A patch helper workflow can revise and update, bring new data records for a release, and recalculate records. The patch helper makes necessary changes to your IBM TRIRIGA database. You apply the patch helper workflows for a release after you install or upgrade to that release. Wait for one patch helper workflow to complete before you begin the next. Some patch helper workflows can take a long time to complete.

The following patch helper workflows are in this release:

Name	Description
triPatchHelper - triCalculate - 10.4.1 - Application Data - App Version	This workflow creates an Application Version record for 10.4.1.
triPatchHelper - triCalculate - 10.4.1 - Mobile - Create Or Update TRIRIGAAnywhere Folder And Permission	This workflow gives Admin Group, TRIRIGA Service Technician, and TRIRIGA Service Manager Security Groups permissions to the TRIRIGAAnywhere folder. You can add more Security Groups by modifying the "Group - Workflow - Default Groups for TRIRIGAAnywhere Folder" query.
triPatchHelper - triCalculate - 10.4.1 - Mobile - Retro Work Tasks to Create Bar Code Intermediate	This workflow creates barcode intermediate records for each location and asset associated to a work task. Running this workflow is necessary for the barcode scanning feature on the work list page on the mobile

Name	Description
	app to work.
triPatchHelper - triCalculate - 10.4.1 - Mobile - Update Priority and Status records	This workflow updates the out of the box priority and status records with their respective abbreviations for use and as displayed in the mobile app.

IBM TRIRIGA 10.4.0 Enhancements

The following enhancements to IBM TRIRIGA are in this release:

Area of Impact	Description
Notifications	Sending notification content with different languages has always been based on the language of the linked record. The administrator now has the ability to send notification content based on the recipient's language instead. A field in the Application Settings named Send Notification Based On specifies whether notifications are sent based on the record's language or the user's language. The default setting is the record's language. (Tri-124320)
Real Estate Environmental Sustainability	<p>IBM TRIRIGA Real Estate Environmental Sustainability Impact Manager now provides the option to extend the capabilities of IBM TRIRIGA Real Estate Environmental Sustainability Manager with the following features to help reduce energy use and cost:</p> <p>Analytics added to the current TRIRIGA workflow capability to analyze energy usage and energy sensor data, such as temperatures and pressures, to identify assets that are not performing correctly.</p> <p>Over 40 predefined analytics to improve HVAC and chiller performance, the equipment that is the major energy consumer for many customers</p> <p>Automatic creation of corrective work orders to resolve problems that are identified by the analytics</p> <p>Automatic creation of corrective work orders from SNMP alerts from other systems such as a building management system (BMS)</p> <p>Additional predefined reports on energy usage and sensor data</p> <p>Tools to allow collected energy use and sensor data to be periodically moved into TRIRIGA log files for long-term trend analytics</p> <p>A TRIRIGA Real Estate Environmental Sustainability Impact Manager toolkit is available on the IBM Integrated Service Management Library. The toolkit assists customers and service providers to develop integrations that periodically load energy usage and energy sensor data into TRIRIGA. The data is used by the new analytics and for reporting. The toolkit is at http://www.ibm.com/software/ismlibrary?NavCode=1TW10IB09.</p>
Real Estate Lease	<p>Usability enhancements were made for the adjust payment process.</p> <p>Tenant improvement calculations for the current FASB standard were added.</p>

Area of Impact	Description
	<p>A processing status indicator to avoid data corruption while workflows are running an extended process was added.</p> <p>An alternate use case was added for handling payment line items when a payment schedule is voided.</p> <p>A Pro Rata Basis field was added to the Payment Adjustment log form. The field is always visible. (Tri-127038)</p> <p>An Actual Adjustment column named triAdjustmentAmountNU was added to the Index Adjustment Calcs Processing Details and Fair Market Rate Value Calcs Processing Details related reports on the Payment Processes sub tab of the Payments tab. (Tri-114869)</p>
Workplace Reservation Manager	<p>A new feature was added to handle mutually exclusive rooms that can be combined by using movable partitions into multiple variations and sizes. (Tri-118213)</p> <p>The process for helping users to schedule rooms for recurring meetings was enhanced.</p> <p>The Reservation Policy feature makes it possible to specify how far in advance a reservation may be made and to restrict early reservations to a specific set of users. A typical use of this feature is to allow executive assistants advanced access to room reservations. When the restricted period ends, reservations are available to all users. (Tri-115604-IV52419)</p> <p>You can now specify colors to use in calendars for declined and dependent resource reservations.</p> <p>The Reservation system now supports sending TRIRIGA notifications to Outlook users who do not have a registered user/profile in TRIRIGA. Also, the TRIRIGA calendar view now displays the Outlook email associated with these reservations so that reservation coordinators can view the information. (Tri-123790)</p> <p>You can now limit the number of reservation query results.</p> <p>TRIRIGA now supports silent installation of the reservation plug-in for Microsoft Outlook.</p> <p>The recurring reservation process now supports the ability to resolve conflicts while making the reservation. (Tri-68952)</p>

IBM TRIRIGA 10.4.0 Changes

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
Asset Lease	Accounting Term Months is now updated on the associated payment line item. (Tri-125435)
Asset Lease	The security group TRIRIGA Contract Manager has been updated to not allow the page actions to display on the asset lease contract payment schedules. This change makes an asset lease contract function like the real estate contract with regard to the payment schedules. (Tri-128661)
Asset Lease	The Unit Count column was added to the payment schedule queries on the asset lease and asset lease template. (Tri-125369)
Asset Lease	When applying an asset lease template to an asset lease record, the payment schedule from the asset lease template correctly applies to the asset lease record. (Tri-131982)
Asset Lease	When the user selects the Voided Payment Schedules related report, then selects the Recurring Payment Setup related report on the Payments tab, the Unit Count column displays, not the Contract Rentable. (Tri-125375)
Asset Lease Real Estate Abstract Real Estate Lease	After a lease record is saved, the currency for fields in the IFRS Treatment section on the Accounting tab are now refreshed with the new currency selected on the General tab. (Tri-128937)
Asset Lease Real Estate Abstract Real Estate Lease	The name field on the Payment Line Item and the Subject field on simple event records are marked as localizable. (Tri-129101)
Asset Lease Real Estate Abstract Real Estate Lease	The Payment Instruction Allocation Percentage Attention! Message "percentage" value is now formatted to four decimal places. The Allocation % field on the Payment Instruction form rounds to four decimal places, so that the message is now consistent with the field. (Tri-125617)
Asset Lease Real Estate Lease	Payment line items using partial first payment and partial last payment amounts now correctly display in the Scheduled Cash Payment field on the Payment Line Item form. The amount had been incorrectly populated in the Adjustment Amount field. (Tri-122664)
Asset Lease Real Estate Lease	The ID field is now a read-only field and the link is disabled in the Cash Cost Code, Expense Cost Code, and Accrual Cost Code sections on the Payment Line Item form. You can update Cost Codes in the Adjust Payments functionality. (Tri-124855)
Asset Lease Real Estate Lease	The minimum index adjustment/actual adjustment is now applied correctly to the FLIs for both current standard and exposure draft. (Tri-115634)
Asset Lease Real Estate Lease	The past due payments on the Summary tab of a lease record now include the tax value. (Tri-125842)

Area of Change	Description
Asset Lease Real Estate Lease	<p>The revise amendment process no longer copies payment schedules in Void status to the History record. The Void status records now stay with the active record in Revision In Progress status. Only payment schedules in Scheduled status are copied over into Pending status.</p> <p>The Copy process copies all payment schedules in Void, History, Scheduled, and Pending status into Pending status on the copy record. (Tri-126033)</p>
Asset Lease Real Estate Lease	<p>The TRIRIGA Real Estate Transaction Manager security group no longer allows any form or application actions to display on asset lease and real estate lease contracts. These forms are read only for this security group. (Tri-128706)</p>
Asset Lease Real Estate Lease	<p>The Void Payment Schedules related report query columns and runtime filters are now in sync with the Recurring Payment Setup related report query on the Payment Schedules tab. (Tri-125285)</p>
Asset Lease Real Estate Lease	<p>When the Review Assumptions action is submitted, all actions are removed until the calculations are complete to avoid incorrect data calculations. (Tri-115010)</p>
Asset Lease Real Estate Lease	<p>When you extend a lease expiration date, if the Accounting End Date is greater than the Base Lease Expiration Date, the Likely Term End Date (Accounting tab, Term Assumption section) is now mapped with the new Accounting End Date of the lease. Otherwise, if the Base Lease Expiration Date is greater than or equal to the Accounting End Date, the Likely Term End Date is mapped with the new Base Lease Expiration Date of the lease. (Tri-115638)</p>
Classifications	<p>An issue with the correct association on the Federal Building record when selecting Real Property Use multiple times has been resolved. The association string will be Classified by Real Property Use.</p> <p>You can use either of the following methods to correct the existing records:</p> <p>Method 1: An Admin user can manually remove the association strings.</p> <p>Method 2: The user can run the specific patch helpers to correct the association; however, this method is limited to removing the Classified by triRealPropertyUse association. (Tri-118675-IV54736)</p>
Classifications	<p>Natural gas is now classified under Scope 1 (energy type) rather than Scope 2. The default Base UOM is set to "Energy > Therms" for natural gas and liquefied petroleum gases. (Tri-114593)</p>
Classifications	<p>The Planning Measure Type is now set to blank on all shipping Space Class Current classification records. (Tri-130092)</p>
Classifications	<p>The Record Language on root records for the Weather Stations and Energy Regions hierarchies has been cleared to enable child classifications to be created in the correct language for non-US English-language users. (Tri-129588)</p>
Contact Center Calendar	<p>Equipment and Vehicle reservations now display in the Calendar section of the Contact Center form. (Tri-116710)</p>

Area of Change	Description
Currency	The display mask on the UOM_Value record for the Indian Rupees currency is changed to ##,##,###.00. (Tri-126666)
GIS	Location and Geography forms with a GIS tab now use the new EsriJS URL. Each EsriJS URL maps to a record called GIS Map. Default GIS Map records are delivered in the application. These default GIS Maps are associated to GIS query records. (Tri-117995)
GIS	Portal sections with GIS maps are updated to use the new EsriJS URL. ArcGIS is no longer supported. (Tri-122202)
Globalization	Changed the Display Mask for Norwegian Krone to ###,###.00 and the UOM Delimiter to space. Note: New customers must manually add a space in the Delimiter field for the "Norwegian Krone" and "Russian Ruble" UOM_Value records. (Tri-130355)
Globalization	For non-US English-language users, the subject and content of the Reservation Satisfaction Survey notification now display in the user's language. (Tri-132625)
Globalization	If you are using Arabic or Hebrew, you must set the locale in the Language Manager of Administrator Console. The correct value for Arabic is ar_EG and the correct value for Hebrew is iw_IL. (Tri-126658)
Globalization	In 15 of the specs forms (triBuildingEquipmentSpec, triConsumablesSpec, triCoresSpec, triFurnitureSpec, triKeysSpec, triLocksSpec, triOfficeEquipmentSpec, triServicesSpec, triSoftwareLicenseSpec, triSpaceStandardsSpec, triTechnologyAssetsSpec, triTelephoneSpec, triToolsandTestEquipmentSpec, triVehicleSpec, triWorkAreaOutletsSpec), changes were made to following labels: General tab - "Specifier" to "Created by" and "Manage Inventory" to "Manage as Inventory" Inventory tab -"Quantity Safety Stock" to "Safety Stock Quantity". (Tri-125180)
Globalization	Report axis labels now use translated values. (Tri-128041, Tri-133253)
Globalization	The labels in the system BIRT report "Funding Source Summary Report" now are translated. (Tri-132740)
Globalization	The Space Scenario name, which is visible in the Sub Portfolio Plans section of the Portfolio Plan form, is now translated. (Tri-103655)
Inventory	In the Inventory Item form, the "Estimated Stock Value (On Hand)" field is changed to "Estimated Stock Value On Hand". In the Inventory Count Work Task form, the "Quantity On Hand (From Record)" label is changed to "Quantity On Hand from Record" and "Quantity On Hand (From Count)" is changed to "Quantity On Hand from Count". In the Adjustment Transaction form, the "Quantity to be Posted" label is changed to "Quantity to Be Posted". (Tri-125175)

Area of Change	Description
Inventory	<p>The following changes were made to inventory labels:</p> <p>In the Inventory Item form, the label "Estimated Stock Value (On Hand)" is changed to "Estimated Stock Value On Hand".</p> <p>In the Inventory Count Work Task form, the label "Quantity On Hand (From Record)" is changed to "Quantity On Hand from Record" and the label "Quantity On Hand (From Count)" is changed to "Quantity On Hand from Count".</p> <p>In the Adjustment Transaction form, the label "Quantity to be Posted" is changed to "Quantity to Be Posted". (Tri-122756)</p>
Locations	<p>The Geocode Address function has been upgraded to work with the Esri Geocode Service. (Tri-117994)</p>
Locations	<p>When creating a space, the correct parent floor is now populated via the workflow. (Tri-122571-IV58592)</p>
Notifications	<p>An issue was resolved where some internal Notification Detail Helper records were not being removed after use, causing the system to become bogged-down with IBS_SPEC and IBS_SPEC_ASSIGNMENT records.</p> <p>You can use the following SQL to identify how many of these records exist in your environment:</p> <pre>SELECT COUNT(*) FROM IBS_SPEC WHERE SPEC_TEMPLATE_ID IN (SELECT SPEC_TEMPLATE_ID FROM IBS_SPEC_TYPE WHERE UPPER(NAME) = 'TRINOTIFICATIONDETAILHELPER');</pre> <p>The following SQL can be used to clean up the records when the next Cleanup process is initiated by the system.</p> <pre>UPDATE IBS_SPEC SET OBJECT_STATE = NULL, OBJECT_ID=0-SPEC_ID WHERE SPEC_TEMPLATE_ID IN (SELECT SPEC_TEMPLATE_ID FROM IBS_SPEC_TYPE WHERE UPPER(NAME) = 'TRINOTIFICATIONDETAILHELPER')</pre> <p>(Tri-130887)</p>
Notifications	<p>Approval escalation duration is now correctly calculated based on the duration that is defined in the product request template. (Tri-127601)</p>
Offline	<p>In Spanish, the label for triBidOffline001 now shows the complete content. (Tri-132301)</p>
Offline	<p>The fields in the Guarantor and Default Remit To sections and the Included In Rent and LandLord/Third Party fields in the Parking Details section of the RE Lease Abstract Offline form are no longer protected fields and now allow data entry. (Tri-131864-IV55013)</p>
Password Reset	<p>Password Reset functionality has been added to enable the process to reset a forgotten password. This process assumes that there is only one email per user account. (Tri-127771-IV57725)</p>

Area of Change	Description
Portfolio	When retiring a location, more visual emphasis is placed on the Auto Cleanup fields and an erroneous user message on retired spaces has been corrected. If the user chooses not to enable the Auto Cleanup functionality, then any assigned assets, people, and organizations must be manually removed from retired locations. (Tri-111659-IV52237)
Real Estate Lease	An auto-created Space Use Agreement now remains associated to the current active revision record and the history record when performing a revise/amendment for the real estate lease or owned property (fee) agreement. (Tri-127256-IV56919)
Real Estate Lease	On a real estate lease, exercising a renewal option now updates the contract notifications with the new expiration date reminder and sends out the notification correctly. (Tri-113289-IV52355)
Real Estate Lease	<p>On the payment line item form for Real Estate Lease, Owned Property (Fee) Agreement, and Asset Lease, the actions are hidden when the payment line item is in active status. The following actions are allowed:</p> <p>Real Estate Contract section - Find, Clear</p> <p>Cash Cost Code section - Find, Remove</p> <p>Expense Cost Code section - Find, Remove</p> <p>Accrual Cost Code section - Find, Remove</p> <p>Tax Breakdown section - Add Tax Type, Remove</p> <p>(Tri-122510)</p>
Real Estate Lease	Owned Property (Fee) Agreement is no longer stuck in Processing status if the record is activated, a payment adjustment performed, then activated again. (Tri-133591)
Real Estate Lease	The Accounting Cost Center on the payment line item (PLI) is now populated from the value entered on the payment schedule. (Tri-125494)
Real Estate Lease	The Bypass Date Gap Validation check box is now hidden when all payment schedules are removed and the record is saved. (Tri-115144)
Real Estate Lease	<p>The contract notification on rolling options is no longer missing. The notification name now states, "Rolling Option Window Close for (Option Name) option of (linked contract record name). This Option must be exercised by (Effective To Date). (Role) to review."</p> <p>If you upgrade to 10.4.0, you must run patch helper Application Setup Data. (Tri-113947-IV51849)</p>

Area of Change	Description
Real Estate Lease	<p>The Cost per Unit field on the payment schedule is now read-only. The Cost per Unit amount is calculated on Create or Save actions.</p> <p>For RE Lease / Owned Property / Lease Abstract, the calculation is based on Annual Amount / Contract Rentable</p> <p>For Asset Lease, the calculation is based on Annual Amount / Unit Count.</p> <p>(Tri-94266)</p>
Real Estate Lease	<p>The Create Schedule(s) action generates an Attention! message and displays the Bypass Date Gap Validation check box when the payment schedules have the same End Date on the Generate Payment Schedule form. This is now consistent with the Attention! message on the lease Activate action. (Tri-115145)</p>
Real Estate Lease	<p>The Create Schedule(s) action on the Generate Payment Schedule form now correctly generates an Attention! message when any of the required From Date, To Date, or First Payment Date fields are blank. First Payment only applies to payment schedules using the Other frequency type. (Tri-115149)</p>
Real Estate Lease	<p>The field size for the Name field on the Payment Schedule and Payment Line Item business objects was increased to 700 to correct a mismatch. (Tri-130177)</p>
Real Estate Lease	<p>The Is Notice Required Before Non-Monetary Grace Period Begins field and the Grace Period for Non-Monetary Default field in the Default Clause section under the Default tab of the Lease Abstract form now display correctly in the columns. (Tri-131275)</p>
Real Estate Lease	<p>The real estate lease option dates are no longer recalculated when the Option form is canceled with the form "X". (Tri-129934-IV59287)</p>
Real Estate Lease	<p>The retrieval of the Payment Schedule and PLIs has been changed to be 'More Than or Equals' which allows the Termination Effective Date to be equal to or after the date of the first Payment Schedule and PLIs.</p> <p>The label on the Contract Terminate form was changed to "Void payments on and after termination date".</p> <p>The label on the Contract Expiration form was changed to "Void payments on and after expiration date". (Tri-122953)</p>
Real Estate Lease	<p>The TRIRIGA Lease Accountant security group was updated. Now the Generate Payment Schedules section action displays on the Real Estate Lease contract Payments tab. This change makes the Generate Payment Schedules section action for a Real Estate Lease contract function the same as it does for an Asset Lease contract. (Tri-128704)</p>
Real Estate Lease	<p>When applying a real estate lease template to a real estate lease record, the payment schedule from the real estate lease template is correctly applied to the real estate lease record. (Tri-132070)</p>
Real Estate Lease	<p>When doing a payment adjustment, if there is a partial first and partial last amount for the same month, the system now combines the amount and represents it as one PLI. (Tri-126827)</p>

Area of Change	Description
Real Estate Lease	When terminating a real estate lease after an amendment, the straight-line value of Rent Expense column in the Schedule Straight Line section is now correct. (Tri-115637)
Real Estate Lease Asset Lease	A lease with a Location Specific Quarter schedule now correctly moves out of Processing status. (Tri-124365)
Real Estate Lease Asset Lease	Accounts receivable deposit payment schedules that are auto-generated through the lease clause setup now correctly change from Processing to Scheduled status when the lease is activated. (Tri-131376)
Real Estate Lease Asset Lease	Corrected an issue where the Tenant Improvement Incentive was deducted from the Minimum Lease Payments (MLP), for example the rent, for Current Accounting Standards. (Tri-115633)
Real Estate Lease Asset Lease	The residual value guarantee is now reflected for the schedule type A/type B from the history lease when a lease is extended through the amendment process. The residual value was being reflected only for the last period and not for the original period before extension. (Tri-115635)
Real Estate Lease Asset Lease	The security group TRIRIGA Contract Manager has been updated to not allow any form or application actions to display on the asset lease and real estate lease contracts. These forms are read only for this security group. (Tri-128681)
Real Estate Lease Globalization	The following fields in a real estate lease can be translated: - triRealEstateContract business object - triFasbCapitalorOpLeaseTX field - triAssetLease business object - triFasbCapitalorOpLeaseTX and triFasbLeaseTreatmentTX fields (Tri-109350)
Real Estate Transactions	Payment schedules from an RE Project Lease are now created when creating schedules using the Generate payment schedules form. Issues related to the Create and Create Cash flows schedules action are also corrected. (Tri-130378)
Real Estate Transactions	The BO Mapping for the triReceivingLineItemLog business object in the triInventoryTransaction module now uses the Topic field instead of the Name field. (Tri-107588)
Real Estate Transactions	The Financial Analysis tab and Summary Metrics tab were removed from the following RE Transaction Term forms: - RE Transaction Acquisition Terms - RE Transaction Current Terms - RE Transaction Sublease Terms - RE Transaction Lease Terms - RE Transaction Termination Terms - RE Transaction Disposition Terms - RE Transaction Expiration Terms (Tri-131531)

Area of Change	Description
Real Estate Transactions	The section actions on the Financial Terms tab of all RE Project forms are now visible for a user logged in as TRIRIGA RE Transaction Manager. (Tri-101734)
Reporting	<p>A formula indication has been added to the column heading of "Variance" in the following System Report, another column is added to the report to display variance in \$. In addition, the variance is renamed to "Budget Variance".</p> <p>Title: Project Cost Summary - All Projects Name: triCapitalProject - BIRT - Project Cost Summary AllProjects (Tri-128845)</p>
Reporting	<p>A layout issue was corrected for the following reports:</p> <ul style="list-style-type: none"> Active Transaction Plans (BIRT) Asset Invoice Summary Bulk Print (BIRT) RE Invoice Summary Bulk Print (BIRT) Contract Summary (BIRT) Daily Reservations Report (BIRT) Condition Assessment - Funding Analysis Summary Record (BIRT) LEED Checklist3 (BIRT) Space Rollup Summary Building (BIRT) Space Rollup Summary Floor (BIRT) Space Rollup Summary Property (BIRT) Vendor Performance (BIRT) Vendor Performance Portal (BIRT) Weekly Reservations Report (BIRT) <p>(Tri-129734)</p>
Reporting	Corrected an issue where the last day of the reporting period was not captured by the date-range based ETL job items. (Tri-84732)
Reporting	<p>Sections of the Move Planner which contain the 'Bulk Print Move Items' action might not point to the correct report. To manually point to the correct BIRT report, you must complete the following steps after you upgrade to version 10.4.0:</p> <ol style="list-style-type: none"> 1. Log in as an admin user. 2. Go to Tools > Document Manager > TRIRIGA > triItem. 3. Point, but do not click, your mouse at the "Move Request Line Item Form Report (BIRT)" document. At the lower left corner of your browser, you may see "javascript:openDocument(XXXXXX);". The XXXXXX is the document ID. Make note of this ID. 4. Go to Tools > Builder Tools > Form Builder. 5. Click triPlanning and open triMovePlanner form. 6. Click the "Move Line Items for Selected Request" query section. 7. In the Properties window, click the "Bulk Print Move Items" action.

Area of Change	Description
	<p>8. In the URL of the action property, you will find "/html/en/default/common/RepBuilder.jsp?source=bulk&docId=XXXXXX&showFilters=false&queryName=trilItem_triMoveRequestLineItem_triMoveRequestLineItem__MoveDesigner__BulkPrint__For__Request".</p> <p>9. If the document ID is different from step 3, replace the value in the URL path in step 8 with the document ID from step 3.</p> <p>10. Click the "Move Line Items for Selected Project" query section.</p> <p>11. In the Properties window, click the "Bulk Print Move Items" action.</p> <p>12. In the URL of the action property, you will find "/html/en/default/common/RepBuilder.jsp?source=bulk&docId=XXXXXX&showFilters=false&queryName=trilItem_triMoveRequestLineItem_triMoveRequestLineItem__MoveDesigner__BulkPrint__For__Project".</p> <p>13. If the document ID is different from step 3, replace the value in the URL path in step 12 with the document ID from step 3.</p> <p>14. Click the "Move Line Items for Selected Scenario" query section.</p> <p>15. In the Properties window, click the "Bulk Print Move Items" action.</p> <p>16. In the URL of the action property, you will find "/html/en/default/common/RepBuilder.jsp?source=bulk&docId=XXXXXX&showFilters=false&queryName=trilItem_triMoveRequestLineItem_triMoveRequestLineItem__MoveDesigner__BulkPrint__For__Scenario".</p> <p>17. If the document ID is different from step 3, replace the value in the URL path in step 16 with the document ID from step 3.</p> <p>(Tri-131360)</p>
Reporting	The BIRT report for Bulk Print Move Line Items is converted from form report to a query report. (Tri-129202)
Reporting	<p>The following queries were removed:</p> <p>triEnvCarbonLog - REPORT - Grainger Emissions Report triEnvCarbonLog - REPORT - Grainger Environment Impact Report</p> <p>These two queries can be manually removed if not used anywhere in the system. (Tri-113187)</p>
Reporting	The system BIRT report named triCapitalProject - BIRT - Project Cost Summary - Portal now displays the data correctly in languages other than US English. (Tri-131289)
Reporting	The variance in the "Project Cost Summary - All Projects" BIRT report now shows the same display format as the format used in the Budget Variance (%) field in the Summary section in the Budget tab of Capital Project records. (Tri-128740)

Area of Change	Description
Requests	Inventory items from the On Hold transaction form now work correctly for consumable and assignable items. (Tri-127974-IV58938)
Requests	Move Services for small move/group move now shows the correct spaces for the To Location based on the functional role of the person being moved. (Tri-126987-IV56863)
Requests	Resources are now copied from the task template if a work task is created from a request or a planned maintenance schedule. (Tri-124701)
Specifications	Labels in the specification forms were changed to improve clarity. (Tri-122761)
System Setup	A list value for Design Change Request has been added to triLinkedForm list. The linked form value on the Contact Role Setup record for RE Project Sublease is reselected to display the correct value from the list. (Tri-129468)
System Setup	The default value for a Planning Measure Type list in a new Space Class Current Classification record is changed to Occupancy. (Tri-129376)
Workplace Operations	The Procedure Step was removed from the Add list of Safety Plans (Procedures) in the Floor record in an object migration environment. (Tri-114836)
Workplace Reservation Manager	An update iCAL attachment for each exception is now sent with the notification after a reservation is submitted. (Tri-128554)
Workplace Reservation Manager	Corrected typographical errors in the Workflow Builder field labels 'Original Commencement Date' and 'Commitment Original for the original Commitment'. (Tri-121823)
Workplace Reservation Manager	Resolved an issue that caused series reservations to not be declined when the reservation occurred outside the room's calendar. For example, a series occurrence showed as accepted on a weekend for a room having a Monday-Friday calendar. (Tri-118868)
Workplace Reservation Manager	Resolved an issue where Reservations could only be opened by the delegate who created the reservation. (Tri-124208-IV56284)
Workplace Reservation Manager	Resolved an issue where Vehicle and Equipment inventory items that were removed from a Primary Location were still displayed in the Location Reservation form as available to be reserved. (Tri-122028)
Workplace Reservation Manager	Spaces that have the check box for "Do Not Allow Series Reservations" selected as part of a Reservation Space Group no longer show in the queries when the reservation is a recurring reservation. (Tri-124324)
Workplace Reservation Manager	The Account Detail action is now available as appropriate for the state of the record. (Tri-113286)
Workplace Reservation Manager	The detail information in the email notification that is sent from non-US English-language user now contains all information. (Tri-129936)
Workplace Reservation Manager	The triCancellationChargesNU formula field is no longer recursive. This resolves an issue when running a year service window. (Tri-129094-IV59103)

Area of Change	Description
Workplace Reservation Manager	The update/exception iCAL now updates the correct date and time. (Tri-130482)
Workplace Reservation Manager	Users that are not the Reservation Coordinator to any space record can no longer see private rooms. (Tri-120116-IV54302)
Workplace Reservation Manager	When a recurring reservation with no end date or in which the end date is beyond the cut-off date time (reservation start date time + cut-off duration), the reservation is declined. The user must change the end date and re-book the room. (Tri-68981)
Workplace Reservation Manager	When a reservation is changed, the food orders and equipment orders are now retired correctly. (Tri-126245)
Workplace Reservation Manager	When creating a reservation, the logged in user must have time zone set. If the user's time zone is not set in the user's profile, a user message displays and the reservation is in read-only mode. (Tri-69376)
Workplace Reservation Manager	When deleting a reservation space group with a space associated to it (using "Delete" in Location hierarchy), the Do Not Allow Series Reservations field on the associated spaces is now unchecked. (Tri-126159)
Workplace Reservation Manager	When the Reserve Cut-Off Duration = 0 on a space, a user can now create a no end recurring reservation. The space shows up in the available spaces for the user to select. (Tri-125277)

IBM TRIRIGA 10.4.0 Patch Helper Workflows

Patch helper workflows correct the record data in your IBM TRIRIGA application. A patch helper workflow can revise and update, bring new data records for a release, and recalculate records. The patch helper makes necessary changes to your IBM TRIRIGA database. You apply the patch helper workflows for a release after you install or upgrade to that release. Wait for one patch helper workflow to complete before you begin the next. Some patch helper workflows can take a long time to complete.

The following patch helper workflows are in this release:

Name	Description
triPatchHelper - triCalculate - 10.4 - Application Setup Data	This workflow adds classifications, user messages, notifications, and the like for 10.4.
triPatchHelper - triCalculate - 10.4 - Application Data - App Version	This workflow creates an Application Version record for 10.4
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Reset Rule Definition Form Meta-Data	This workflow updates Rule Definition Form meta-data based on Event Type. This workflow is created for INTERNAL USE only.
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Retro Main Meter & Utility Rate Plans Section on Utility Meter Assets	This workflow updates assets having a Spec Class of "Utility Meter" to display the new "Main Meter?" field on the General tab and the new "Utility Rate Plans" section on the Environmental tab.
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Retro DEFAULT Asset Analytic Process	This workflow updates "DEFAULT" Analytic Process with their appropriate Rule Definitions & Rule Parameters associations
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Retro Utility Rates Tab on External Company	This workflow updates "external company" organization records having an organization type of "Utility Supplier" to display the new Utility Rates tab.
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Fix Rule Parameter Published Name	This workflow updates All Rule Parameters with new Published Name to include Control Number. This workflow is created for INTERNAL USE only.
triPatchHelper - triCalculate - 10.4 - Application Settings Defaults	This workflow sets the default values on "Application Settings" record
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Retro DEFAULT Asset Job Schedulers	This workflow updates DEFAULT Asset Job Schedulers to show associated ETL Job Item
triPatchHelper - triCalculate - 10.4 - Energy Optimization - Retro Resource File Section on ETL Job Items	This workflow updates existing ETL Job Items that are ETL Transformations to display the new Resource File Query Section
triPatchHelper - triCalculate - 10.4 - Bidi - Retro DEFAULT Base Text Direction	This workflow sets the default value of the Direction of user-generated text field to Default in the Employee records

Name	Description
triPatchHelper - triCalculate - 10.4 - Update UOM_Value Records	This workflow is to update the Name on CAM classification record and Name on CAM Type Cash Flow Line Item records to "Common Area Maintenance"
triPatchHelper - triCalculate - 10.4 - Reserve - Remove Specs From Spaces	This workflow removes existing association from space to specification if association between the primary location of the space and specification does not exist.
triPatchHelper - triCalculate - 10.4 - Retro Federal Building with Real Property Use	This workflow corrects all Federal Building records with incorrect association selected for Real Property Use.
triPatchHelper - triCalculate - 10.4 - Retro Federal Land with Real Property Use	This workflow corrects all Federal Land records with incorrect association selected for Real Property Use.

IBM TRIRIGA Application Platform 3.4.1

This release includes important information, known limitations, changes, and property file changes to the IBM TRIRIGA Application Platform.

Important Information

The following items are important information concerning the IBM TRIRIGA Application Platform for this release:

Area of Impact	Description
Accessibility	<p>Some of the links in a calendar, such as today, previous month, choose month, and next month, are not accessible. If the screen reader does not announce the month and year, type the date directly in the text field. (Tri-92422)</p> <p>The scroll left and scroll right buttons in a row of tabs are not accessible by using the Tab key. The user can access those buttons by using the mouse to scroll to them. The drop-down menu can be accessed by using the keyboard and pressing Ctrl+down arrow key. (Tri-92435)</p> <p>If the autocomplete feature is enabled for a locator field, users must specify the exact string in the input field so that a unique record can be automatically assigned after the user moves out of the input field.</p> <p>If a search returns multiple records, the user must move out of the input field and use the selector icon to select the record.</p> <p>If there is no matching record to a specified string, users cannot use the Tab key to move out of the input field. If the screen reader keeps saying the Tab key, users must press the Esc key to tab to the next element. (Tri-96117, Tri-92431)</p> <p>The Attention section is not accessible. If an application message is displayed, the message is not read by the screen reader. However, the application messages are accessible through section navigation and landmark navigation.</p> <p>For example, if a visually impaired user is typing a value in the Password field that does not follow the company's password rules, the attention section displays a warning, but the screen reader does not read it. So, the user does not receive the warning that the entered value is not valid. (Tri-100541, Tri-92816)</p> <p>In Internet Explorer, if a portal page display extends beyond the bottom of the window, and a user presses Ctrl+space to open a portal section button, the portal page display scrolls to the bottom of the window.</p> <p>The portal section button retains the focus. (Tri-92252)</p> <p>The focus box and the dashed lines are not visible in the portal for quick links of the type Large View.</p> <p>Workaround: The status bar at the bottom of the browser shows the target URL</p>

Area of Impact	Description	
	<p>of the currently focused quick link. The name property in the URL is the label of the quick link, for example, name=Builder+--+Portal+Builder. (Tri-103893, Tri-109460)</p> <p>The focus box or dashed line is not visible when the current focus is on the column header of a hierarchical report.</p> <p>Look at the status bar where the column header label is displayed. (Tri-109452, Tri-107966)</p>	
Browsers	Browser	Important Information
	Apple Safari	<p>The following builder tools are not supported: Classifications, Lists, Data Modeler, Form Builder, Association Manager, Workflow Builder, Portal Builder, Navigation Builder, State Family Manager, Scorecard Manager, License Manager, Security Manager, Data Integrator, Object Migration, Currency Conversions, Label Manager, and Style Manager.</p> <p>Excel sections are not supported.</p> <p>Safari does not support dragging and dropping files from the finder into the multi-file uploader in the Document Manager. (Tri-80867)</p> <p>There is limited support for HTML5 charts.</p>
	Google Chrome	<p>The following builder tools are not supported: Classifications, Lists, Data Modeler, Form Builder, Association Manager, Workflow Builder, Portal Builder, Navigation Builder, State Family Manager, Scorecard Manager, License Manager, Security Manager, Data Integrator, Object Migration, Currency Conversions, Label Manager, and Style Manager.</p> <p>Excel sections are not supported.</p> <p>Java applets are not supported for Chrome on Mac OS X.</p> <p>There is limited support for HTML5 charts.</p> <p>For BIRT printing to PDF, use the Chrome PDF viewer instead of the Adobe PDF plugin. For more information, use your browser to search for <i>How To Enable the Built-in PDF Viewer in Google Chrome</i>. (Tri-67281)</p> <p>If your locator field drop-downs and navigation menu drop-downs are hidden behind applets like stacking, availability, and Gantt sections, minimize the applet section and reopen it when you need it again. (Tri-66901, Tri-71492)</p>
	Internet Explorer	Due to a known limitation in IE 10, the background color on fields may show when the record is printed from the


Area of Impact	Description
	<p>print preview page. (Tri-75848)</p> <p>The following builder tools are not supported in IE 10 or IE 11: Classifications, Lists, Data Modeler, Form Builder, Association Manager, Workflow Builder, Portal Builder, Navigation Builder, State Family Manager, Scorecard Manager, License Manager, Security Manager, Data Integrator, Object Migration, Currency Conversions, Label Manager, and Style Manager are not supported.</p> <p>In IE 10 and IE 11, Excel sections are not supported.</p> <p>Query sections do not display correctly if the browser zoom is set to a custom value that is less than 100%. The default browser zoom is 100%. (Tri-33883)</p> <p>Some builder tools do not load or work correctly if the browser zoom is set to a custom value that is less than 100%. The default browser zoom is 100%. (Tri-28866)</p> <p>When a user exports a PDF file from a graphics section, IE may display a security message in the browser window. To prevent this security message from displaying, add the IBM TRIRIGA application URL to IE's Internet Security list of Trusted Sites zone. In the Security Settings for Trusted Sites Zone, set the Download permission to not display the warning message. (Tri-31024)</p>
Mozilla Firefox	<p>The following builder tools are not supported: Classifications, Lists, Data Modeler, Form Builder, Association Manager, Workflow Builder, Portal Builder, Navigation Builder, State Family Manager, Scorecard Manager, License Manager, Security Manager, Data Integrator, Object Migration, Currency Conversions, Label Manager, and Style Manager.</p> <p>Excel sections are not supported.</p> <p>Fixed-column queries do not remain fixed in place due to a Firefox limitation.</p> <p>Opening a new record in the popup view opens the new window behind the window that originated it. This is a known issue with Firefox / Adobe Flash. Disabling the plug-in corrects the issue. You can find more information in the following article: http://support.mozilla.org/en-US/questions/938033 (Tri-78853)</p> <p>There is limited support for HTML5 charts.</p> <p>Firefox may not close all windows automatically when signing out of a single sign-on session. (Tri-84899)</p> <p>Firefox has a feature that blocks ALL Java plug-ins. Users</p>

Area of Impact	Description
	<p>see the following message: "Activate Java Deployment Toolkit. This plug-in has security violations." For more information on how to activate the plug-in for use with TRIRIGA applications, see https://support.mozilla.org/en-US/kb/how-allow-java-trusted-sites. (Tri-130970)</p>
Business Objects	<p>If you upgrade the platform to 3.4 but do not also upgrade the application to 10.4, many business objects must be republished to support localization changes.</p> <p>Option 1: To republish all of the business objects, you can follow the instructions given in the <code>Publish_all_BOs_For_localization_MSSS.sql</code> or <code>Publish_all_BOs_For_localization_ORCL.sql</code> scripts, which are found in the scripts directory of the Application Upgrade disk.</p> <p>Option 2: You may choose to manually republish the business objects. The following business objects, listed with business object name first and module name in parentheses, need to be republished:</p> <ul style="list-style-type: none"> Classification (Classification) Cost Code Container (triCostCode) Data Utilities (Data Utilities) Document Container (Document) Geography (Geography) Group (Group) Group Member (Group) Holidays (System) Location (Location) Organization (Organization) Permission Line Item (triPeople) Polylining Standard (Polylining Standard) Project Group Container (Group) ROOT (Document) triAnalyticEvent (triAnalyticEvent) triAnalyticItem (triAnalyticItem) triAnalyticProcess (triAnalyticProcess) triAnalyticRule (triAnalyticRule) triApplicationSettings (triSetup) triApproval (triRouting) triApprovalRule (triSetup) triAssetEvent (triAnalyticEvent) triAssetLink (triAsset) triBidResponse (triProposal) triBuildingSystem (triBuildingSystem) triBuildingSystemLink (triBuildingSystem) triCatalog (triCatalog) triCatalogLink (triCatalog) triCiApplicationDefinition (triCiApplicationManager) triCiAssociatedObject (triCiApplicationManager) triCiHierarchyNode (triCiHierarchyNode) triContactRole (triIntermediate) triContract (triContract) triContractLink (triContract) triCostCode (triCostCode) triCostItemLink (triCostItem)

Area of Impact	Description
	triCTQAssessment (triIntermediate) triDataAttributeItemIntermediate (triIntermediate) triDesignLink (triDesign) triEnergyRatingErrorLog (triLog) triEnergyStarValidationItem (triIntermediate) triExternalMailServer (System) triGeographyLink (Geography) triInspectionLink (triInspection) triInventoryLocation (triInventoryLocation) triInventoryLocationLink (triInventoryLocation) triItemLink (triItem) triKeySecurity (triKeySecurity) triLeaseAbstract (triContract) triLeaseAbstractAction (triActionForm) triLocationEnergySpace (triIntermediate) triLocationLink (Location) triNotificationDetails (triRouting) triOSCREUtil (Data Utilities) triPeopleLink (triPeople) triPermitLink (triPermit) triPlan (triPlanning) triPlannedSpace (Location) triPlanning (triPlanning) triPlanningConflictItem (triPlanningItem) triPlanningEnvironment (triPlanning) triPlanningPeriodItem (triPlanningItem) triPlanningScopeItem (triPlanningItem) triProductsAndServicesLink (triProductsAndServices) triProjectCalcItem (triCalculationItem) triProjectLink (triProject) triProjectReport (triProgressReport) triProjectUpdater (triActionForm) triREContractLocations (triIntermediate) triRequest (triRequest) triRequestLink (triRequest) triReservationGroup (triSetup) triResource (triIntermediate) triRetailCompany (triIntermediate) triReview (triActionForm) triReviewer (triIntermediate) triScheduleTask (triTask) triSpaceForecastItem (triPlanningItem) triSpaceForecastSurvey (triPlanning) triSpacePlan (triPlanning) triSpaceScenario (triPlanning) triSpecificationLink (triSpecification) triSurveyQuestionResponse (triIntermediate) triTaskLink (triTask) triTaskResourceAllocation (triTaskAllocation) Working Hours (System) (Tri-128841, Tri-128369)

Area of Impact	Description
Graphics	<p>Exporting very large graphics could require configuring your web server with a larger maximum post size. (Tri-28770)</p> <p>Exporting from a graphics section does not work properly on WebSphere with SSL. By default, WebSphere adds additional caching headers to responses that already contain cache control, which causes issues in IE when trying to stream application data like PDF files back to the client. This can be disabled via a custom property for your application server in the WebSphere Integrated Solutions Console. Note that this change merely prevents WebSphere from automatically adding headers; you are then left with the cache control headers that IBM TRIRIGA intends to be there. Please reference the following guide: http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=%2Fcom.ibm.websphere.express.doc%2Finfo%2Fexp%2Fae%2Frrun_chain_httpcustom.html</p> <p>Following the steps in that guide, add a custom property named <code>CookiesConfigureNoCache</code> with a value of <code>False</code> to your secure HTTP transport channels.</p> <p>After completion, restart the server, and the Export works properly. (Tri-34664)</p>
Installation	<p>IBM TRIRIGA does not currently support container databases in Oracle 12c. When installing and configuring your Oracle 12c database with 'dbca', do not choose the "Create As Container Database" option. (Tri-105909)</p> <p>It is no longer possible to upgrade from IBM TRIRIGA Application Platform version 2.7.x or earlier. To upgrade from 2.7.x or earlier, you must first upgrade to version 3.3.1.0, and then upgrade to this platform version. (Tri-95335)</p>
Microsoft Excel	<p>The Office Web Components (OWC) library that IBM TRIRIGA uses for Excel sections is not available in a clean install of Office 2007 or Office 2010. For information about downloading the OWC library and installing it as a separate component, search for <i>office web components roadmap</i> on the Microsoft website http://blogs.office.com. You do not need to download and install the OWC library if you upgrade Office 2000 or Office 2003 to Office 2007 or Office 2010, because the OWC library is available.</p>
Microsoft SQL Server	<p>If the upgrade of an MSSQL database with MBCS enabled fails and you see in the <code>ant.log</code> that there were invalid views during the NVarchar Conversion process, use the following recovery steps:</p> <p>Review the <code>ant.log</code> to identify the invalid views.</p> <p>Run the upgrade with MBCS Support turned off.</p> <p>Log into IBM TRIRIGA and republish the business objects identified in the <code>ant.log</code> as having invalid views.</p> <p>Run upgrade with MBCS Support turned on. (Tri-32284)</p> <p>If you are upgrading an MSSQL database with MBCS enabled, before the upgrade to 3.4.x, you must (1) back up your database, and (2) republish the <code>triRealEstateContract</code> business object in the <code>triContract</code> module, the <code>triBuilding</code> business object in the <code>Location</code> module, the</p>

Area of Impact	Description
	<p>triLeaseAbstract business object in the triContract module, and the triREProject business object in the triProject module. This is to avoid a possible MSSQL error on the backing table of one of these business objects during the upgrade. The error that might occur if a business object is not republished is as follows: "Cannot create a row of size xxxx which is greater than the allowable maximum row size of 8060". If this error occurs, a table is not configured correctly for MBCS. In this case, restore the database. If you republished those four objects before upgrade, contact the IBM TRIRIGA team at IBM Software Support for instructions. If you did not, republish those objects and try the upgrade again. (Tri-31926, Tri-94270)</p> <p>If you have custom tables in the IBM TRIRIGA table space and you are upgrading to MBCS on Microsoft SQL Server, these tables may not convert correctly depending on the table definition (for example, if IDENTITY_INSERT is set). These tables need to be either deleted or converted manually before running the 3.4.x MBCS upgrade.</p> <p>To convert these tables manually, alter all varchar fields to be nvarchar and alter their collation to the collation used during the conversion during install. For example, for field xxx in table yyy when your desired collation is Japanese_CS_AS and the SIZE of the varchar field is 100, the script is as follows: alter table YYY alter column XXX nvarchar(100) collate Japanese_CS_AS (Tri-32702)</p> <p>Microsoft SQL Server has a row size limit of 8060 bytes. On MSS2008, there is an overflow mechanism that transparently enables a row to logically exceed 8060 bytes while physically overflowing some of the extra data into a separate part of the database. More information about the 8060 byte limit can be found at the following link: http://msdn2.microsoft.com/en-us/library/ms186981.aspx.</p>
Navigation	<p>Pressing a key or key chord and the Access Key character navigates the user directly to the tab or triggers the action defined in the Form Builder. Different browsers use different keys or key chords, as follows:</p> <p>For Microsoft Internet Explorer -> Alt+AccessKey+Enter</p> <p>For Mozilla Firefox -> Alt+Shift+AccessKey</p> <p>For Google Chrome -> Alt+AccessKey</p> <p>For Apple Safari -> Alt+Control+AccessKey (Tri-71056)</p>
Object Migration	<p>When upgrading the application or importing any large Object Migration package, the system should not be in Production mode. Also, the System Cache Processing Mode should be set to Data Load Mode. The System Cache Processing setting can be found in the TRIRIGA Administration Console's Cache Manager page. After the import is complete, the system cache can be reset and the system placed back into Production mode.</p>
Oracle	<p>If you are installing a new Oracle database and wish to support multi-byte characters, make sure your instance character set is UTF-8 or UTF-16 and your NLS_LENGTH_SEMANTICS is set to CHAR, not BYTE. Follow the instructions in the IBM TRIRIGA Application Platform 3 Information Center in <i>Installing IBM TRIRIGA Application Platform</i> to ensure your platform supports multi-byte</p>

Area of Impact	Description
	<p>characters properly. (Tri-32998)</p> <p>If you are upgrading an Oracle database and are considering changing the instance character set to UTF-8 or UTF-16 to support multi-byte characters, it is imperative that you carefully follow the instructions in the IBM TRIRIGA Application Platform 3 Information Center in <i>Installing IBM TRIRIGA Application Platform</i>. Failure to do so could compromise your data.</p>
Report Manager	<p>Reports with blank titles show up first in the list if the database is Microsoft SQL Server and show up last in the list if the database is Oracle.</p>
Security	<p>You can find instructions for managing issues with applets such as the Gantt in which the applet console reports a security exception under CVE-2010-3560 at http://www.oracle.com/technetwork/java/javase/6u22releasenotes-176121.html.</p> <p>Security is not applied when a PDF generated from an external report type (BIRT and Crystal) is emailed. (Tri-88536)</p>
Software Licenses	<p>Starting with IBM TRIRIGA Application Platform 3.2, IBM TRIRIGA distributes software licenses in a separate license file for each product. The license file names are in the format <code>LICENSE_IBM_TRIRIGA_{productname}.properties</code> (for example, <code>LICENSE_IBM_TRIRIGA_Application_Platform.properties</code>).</p> <p>You may continue to use your existing <code>TRIRIGALICENSE.properties</code> file if you have one. You do not need to replace your <code>TRIRIGALICENSE.properties</code> file until it expires or your software requirements change.</p> <p>At the end of an install, your <code>config\licenses</code> directory should contain either your <code>LICENSE_IBM_TRIRIGA_{productname}.properties</code> files or your <code>TRIRIGALICENSE.properties</code> file, but not both.</p> <p>After you start using the <code>LICENSE_IBM_TRIRIGA_{productname}.properties</code> files, do not revert to the <code>TRIRIGALICENSE.properties</code> file. (Tri-33449)</p> <div style="background-color: #ffe6e6; padding: 10px; border: 1px solid #ff0000;">  <p style="color: #ff0000; font-weight: bold;">Attention - All application servers accessing a database must have the same license set. The only exception is the license for IBM TRIRIGA Connector for Business Applications since it may be licensed only on a limited number of servers and should only be placed on that number of servers to stay in compliance.</p> </div>
Syclo	<p>Syclo has been removed from the <i>IBM TRIRIGA Application Platform Compatibility Matrix</i>. Customers should contact the vendor with any issues or concerns regarding Syclo and the IBM TRIRIGA Application Platform.</p>
WebSphere	<p>The automated installation of TRIRIGA with WebSphere may fail if the <code>com.ibm.SOAP.requestTimeout</code> parameter value is not increased. The parameter can be found in the <code>soap.client.props</code> file within the Application Server properties directory of WebSphere. Setting this value to 0 makes it unlimited.</p> <p>When using WebSphere, an additional MIME Type is required for certain pages in</p>

Area of Impact	Description
	<p>the application to display properly. You must add a new extension, <code>html</code>, as <code>text/html</code>. For more information, go to the IBM TRIRIGA Application Platform 3 Information Center and select <i>Installing IBM TRIRIGA Application Platform</i>. (Tri-29060)</p> <p>Use the correct JDK for your WebSphere installation.</p> <p>If you have two WebSphere installations, one at</p> <p><code>/[pathToWebSphere]/IBM/WebSphere/AppServer</code> for WebSphere 8.0</p> <p>and one at</p> <p><code>/[pathToWebSphere]/IBM/WebSphere/AppServer85</code> for WebSphere 8.5, using <code>java</code> in the 8.0 installation causes the installation to fail. (Tri-89328)</p>

Known Limitations

The following items are known limitations concerning the IBM TRIRIGA Application Platform for this release:

Area of Impact	Description
Accessibility	<p>Internet Explorer is the supported browser for accessibility.</p> <p>In Internet Explorer, section action links do not retain focus after a link's action page is opened and closed. (Tri-93030)</p> <p>On the Personalize page, only the Save and Cancel buttons are accessible. If a user tabs past the Save and Cancel buttons, the only way to close the Personalize page is to press Shift+Tab to return to the Save and Cancel buttons. (Tri-93069)</p> <p>The focus may be lost when users add, rename, delete, or move a bookmark or bookmark folder.</p> <p>With keyboard navigation, users can press Shift+Tab until they get to the actions at the bottom of the bookmark window. For JAWS users, a landmark region can be used if the focus goes out of the bookmark window. (Tri-92461)</p>
Agents	<p>The Incoming Mail Agent is unable to monitor and process incoming mail when using Microsoft Office 365 Exchange Online.</p>
Document Management	<p>Double-byte characters do not display when you preview Unicode or UTF-8 .txt files. You must download the file to see the content. (Tri-36352)</p>
Extract, Transform, and Load (ETL)	<p>The as-shipped ETL scripts are written against the standard IBM TRIRIGA database and its database columns, but after an upgrade, a small number of your implementation's database column names that were auto-generated during the upgrade may be slightly different and not match the names in the released ETL scripts. Review your ETL scripts and change them as needed to ensure the column names match the generated column names in your database. (Tri-27625,</p>

Area of Impact	Description
	<p>Tri-27705)</p> <p>If you use any of the IBM TRIRIGA Workplace Performance Management products, any of the IBM TRIRIGA Real Estate Environmental Sustainability products, the OSCRE features, or ETL Job Items, the name of your IBM TRIRIGA installation directory and the location of the application server cannot contain spaces. These applications use Pentaho to run ETLs. Pentaho is a third-party application that has a startup issue when the name of the directory where the application resides has a space in it. For more information, see the Pentaho issue database for PDI 2689 at http://jira.pentaho.com/browse/PDI-2689.</p>
Gantt	Gantt will not calculate dates after 2037 due to a 3rd-party library limitation with Netronic. (Tri-129919-IV59123)
Gantt	When you use the Gantt with SSO, you must respond to some login prompts to use the Gantt chart. When you open Gantt in a new window, you must respond to login prompts as the local Java Web Start downloads the resources from the SSO protected server, and to another login prompt as the Gantt application connects to the SSO protected server.
GIS	The as-delivered sample editor widget and overview widget sometimes do not display when the user clears the browser cache and opens the map. Refresh the map and the widgets show properly. (Tri-81522)
Globalization	An issue causing a warning in the LabelManager.log during a label language pack import of System_triApplicationVersion.xliff does not impact the labels in your import and will be resolved in the next release. The warning includes the following text: "Skipping language data import for [GroupInfo[id=15006695,resname=10.3.2]] because the target record no longer exists." (Tri-126541)
Globalization	<p>Formulas involving a localized field may only calculate the language values (L_ table) of the current user in session. For example, a localized text field is used in a formula to concatenate with another field value. The calculation of the language value of the localized text field is based on the language of the current user in session. The other language values available for the localized text field, if any, are not included in the calculation of the formula. For example, an Italian user triggers a calculation of this concatenation formula. The Italian language value is concatenated and the Italian user can see that the calculated value has the concatenated Italian language value. However, other users only see the default internal values (T_ table) calculated in the formula even if there are, for instance, German or Chinese language values available for the localized text field.</p> <p>Similarly, formulas that are processed by the extended formula queue do not use the language values in the calculation. The extended formula process only uses the internal values of the localized field in the calculation.</p>
Globalization	<p>The following areas are not fully globalized and translated:</p> <p>Application builder pages are only available in US English, including Form Builder, Data Modeler, Workflow Builder, and Label Manager. Application builder pages may show mixed translations if the user's preference is set to a language other than US English and the language packs are applied.</p>

Area of Impact	Description
	<p>The installer is only available in US English. Installing to a path under <code>Program Files</code> may not work on a non-US English-language version of Windows.</p> <p>Some pages to which only an administrative user has access are only available in US English. This includes Application Setup pages, the Administrator Console, data utilities, and the System, Associations, and Work Flow Instance tabs.</p> <p>Brava! Viewer labels are available in US English only.</p> <p>Document paths in BIRT reports are available in US English only.</p>
Globalization	<p>You will find information about your label export from the Language Manager in the <code>LabelManager.log</code> file. Information about your data export from the Language Manager is in the <code>TranslationData.log</code> file. Only the <code>TranslationData.log</code> is mentioned in the user message in the Language Manager. (Tri-130875)</p>
Graphics	<p>In a Graphics section, the labels for Export and Layer Manager do not render in Internet Explorer 9 for bidirectional languages. (Tri-133280)</p>
IBM TRIRIGA SVG Viewer	<p>The IBM TRIRIGA SVG Viewer is not well suited for design-time work and not supported for working on very large workflows. Use the Adobe SVG Viewer Plug-In for design-time work. (Tri-20731)</p>
Language Packs	<p>When you import a language pack for the first time, you may see exception messages in the <code>LabelManager.log</code> file. To eliminate the exception messages, repeat the import of the language pack.</p> <p>You may see persistence errors in the <code>Translation.log</code> file when a language pack is imported into an environment that is upgraded to 3.3 or later with the 10.3 or later object migration package applied. These errors are displayed because the field that is referenced has been removed from the application. You do not need to repeat the import of the language pack to correct this issue.</p>
Microsoft Exchange	<p>Microsoft Exchange (SMTP) does not support yearly recurrences when day, weekday, and weekend day are specified for the weekly option. (Tri-39663)</p>
Multi-byte Resource Names	<p>When a resource name contains multi-byte characters, the file format of the powershell file is not in UTF-8 and does not run in the Exchange Management Shell. Instead, you see a parser error.</p> <p>The following describes how to convert the powershell to UTF-8.</p> <ol style="list-style-type: none"> 1) Open the file in a text editor. 2) Go to File > Save As. On the bottom of the save dialog, make sure that the encoding is set to UTF-8. Save, overwriting the original powershell file. 3) Run the powershell script again. It shows the multi-byte characters as question marks in the shell, but the multi-byte characters show properly in the console.
Object Migration	<p>Importing records with many associations might take a long time to import. (Tri-144723)</p>

Area of Impact	Description
Offline	Microsoft Exchange converts a sent Microsoft Outlook message (.msg file) and any attached messages (.msg files) into Multipurpose Internet Mail Extensions (MIME) format. However, the IBM TRIRIGA Incoming Mail Agent is not designed to recognize attachments in MIME format. Instead of attaching Microsoft Outlook .msg messages to another .msg message, you have two options. To attach the file, either (1) From Microsoft Outlook, save the .msg attachment as a Microsoft Outlook file template (.oft file). Then, attach the .oft file to the main .msg message that you are delivering in Microsoft Outlook, or (2) From Microsoft Outlook Web App (OWA), attach the .msg file to the main email that you are delivering, in the OWA. After attaching the file, send the message or email. (Tri-67117)
Reporting	Data changes cannot be made via editable query fields if the editable query contains Group By clauses and if the query is either Query or Report report type. (Tri-123757-IV55557)
Reporting	In metric tabular queries, the Business Object field's source UOM currency symbol is not taken into consideration, and instead the field's default UOM currency symbol will display. Metric chart queries do not display currency symbols. (Tri-38270)
Single Sign-On	When you use SiteMinder as a single sign-on solution, you must configure the BadUrlChars to only "/*,*.,,-". The default strings restrict too many URLs to the application, causing issues such as not loading the calendar picker. (Tri-133748)

IBM TRIRIGA Application Platform 3.4.1 Changes

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

Area of Change	Description
Administrator Console	Resolved an issue where a user with read-only access did not see the Platform Maintenance Scheduler managed object and the Scheduler Manager managed object. (Tri-144149)
Brava	Brava 7.2 viewer now works in Internet Explorer 11 browser with compatibility mode turned on. (Tri-140905)
CAD Integrator/Publisher	Resolved issues with the TRIRIGA CAD Integrator/Publisher Application Definition cache not working correctly. (Tri-136280)
Document Management	Added the triSystemIDSY field to the DM_History business object. The published name now refers to the new field, and the records now refer to the new published name. (Tri-143123-IV63233)
Gantt	Dependency now considers the Working Hours Per Day value in decimals. (Tri-143121-IV62881)
Gantt	Importing from Microsoft Project no longer calculates actual end date if percent complete is less than 100. (Tri-143101-IV61367)

Area of Change	Description
Gantt	Resolved an issue within Gantt sections where a task could lose its dependencies to tasks when the task is minimized and the Gantt applet is saved. (Tri-140716-IV62519)
GIS	Resolved an EsriJS issue where non-Admin users were not able to access widgets on the GIS Map, regardless of whether the "Add Security" check box for a particular widget was selected. (Tri-144718-IV63741)
Globalization	Resolved a currency formatting issue for a non-US English-language user who enters values in a currency field in a different format than the user's locale. (Tri-140169)
Graphics	Resolved an issue where if an unattached block shares the same layer as an attached layer (for example triGrossAreaLayer in the default application definition), the graphic loading now loads correctly. (Tri-143114-IV62287)
Graphics	Small drawings, such as drawings scaled in meters, now correctly render line widths. The line width minimum was required to render lines in certain small drawings that were extremely far from the origin. Now the system detects this case, logs a warning about it (since moving the drawing closer to the original and republishing fixes this), and only applies a minimum line thickness for this corner case. The minimum thickness workaround works for Internet Explorer and Chrome but does not work reliably in Firefox. (Tri-143118-IV61446)
Licensing	A legacy IBM TRIRIGA Facility Management Enterprise license was added back into the license table. (Tri-143104-IV62946)
Licensing	Updated the license table for IBM TRIRIGA Workplace Performance Management licenses. (Tri-144458)
OSCRE	Corrected an issue where an OSCRE XML Import failed with the error "No field named 'triJobItemtypeLI' exists". (Tri-142821)
Performance	Re-factored some internal SQL calls for Oracle to improve efficiency. (Tri-143116-IV62170)
Reporting	Resolved a Crystal 2011 issue in which Crystal Report PDF attachments on Workflow Notification emails were corrupt if the report attached to the Workflow Notification was Crystal Query Report. (Tri-144614)
Reporting	Resolved a Metric Chart issue where errors occurred when the primary Group By value was null. (Tri-143119-IV62245)
Reporting	Resolved an issue where the export of query results did not export all of the data. (Tri-143106-IV61539)
Reporting	The "Export" link now shows only when a report is tabular. (Tri-143120-IV62314)
Reporting	The "shared groups" column in My Reports now shows for all rows that have a group specified within its security access. An error was fixed where removing group security access from at most the second to last row would remove the view of shared groups from all rows below it. (Tri-145817-IV63756)

Area of Change	Description
Security	Resolved an issue where even though a security group had full access to the Report Manager, users in that security group were not able to create query actions. (Tri-143105-IV62532)
Security	Resolved an issue where the "Special View" link was not displayed for users that were not in the Admin group. (Tri-143109-IV63061)
WebLogic	Resolved a WebLogic TRIRIGA Installation issue where Axis.jar was showing up as a file to add to the classpath in setDomainEnv.sh and setDomainEnv.cmd. Also resolved an issue where a JSTL library reference in weblogic.xml was unnecessarily causing WebLogic administrators to manually deploy a WebLogic JSTL library. (Tri-142511-IV62882)
Workplace Reservation Manager	An issue has been resolved where the Reserve Outlook Add-in would give the user connection errors when there was no network connectivity. (Tri-143110-IV62880)
Workplace Reservation Manager	Resolved an issue where the "sent by" information of a reservation was not processed in the reservation agent. (Tri-143108-IV63051)
Workplace Reservation Manager	The Outlook Add-in is now properly signed. Users no longer see an unverified publisher message. (Tri-126727)
Workplace Reservation Manager	When the Reserve Outlook Add-in encounters a communication error with TRIRIGA, it now displays the credentials pop-up in which you can review and possibly change your current Add-in connection properties without having to navigate into the Add-in settings. (Tri-143102-IV63215)

IBM TRIRIGA Application Platform 3.4.1 Properties Files

The following changes to the `TRIRIGAWEB.properties` file are in this release. For more information, go to the IBM TRIRIGA Application Platform 3 Knowledge Center and select *Installing IBM TRIRIGA Application Platform > Configuring the platform > Properties files*.

Area of Change	Description
OSLC_MYPROFILE_RESOURCE	The default value of the property <code>OSLC_MYPROFILE_RESOURCE</code> in the <code>TRIRIGAWEB.properties</code> file is now <code>triMyProfileRS</code> . (Tri-134474)
SHOW_ZEROS_IN_NUMBER_FIELDS	<p>The new <code>SHOW_ZEROS_IN_NUMBER_FIELDS</code> property in <code>TRIRIGAWEB.properties</code> is used at record runtime to determine whether number fields render 0 for null value or show empty field.</p> <p>When the value is Y, a number field renders zero in a form when the value in the database is null.</p> <p>When the value is N, a number field renders empty in a form when the value in the database is null.</p> <p>The default value of this property is Y. (Tri-140284)</p>

Area of Change	Description
TRIRIGAMIDDLEWARE DATABASE_TYPE	The value for TRIRIGAMIDDLEWARE DATABASE_TYPE can now be db2.

IBM TRIRIGA Application Platform 3.4.0 Enhancements

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

Area of Impact	Description
Admin Console	The hierarchy tree cache can be configured to include additional hierarchies in the TRIRIGAWEB.properties. (Tri-132226)
Application Server	Linux and Unix application servers no longer require X-windows to run the IBM TRIRIGA Application Platform.
Document Manager	An HTML5 upload feature is included in this release for Document Manager to remove the Applet dependency.
Getting Started	The getting started information is updated with default user roles, typical user role tasks, home page, group details, and license details.
GIS	An upgrade to the 3.4 platform will switch any As Delivered GIS portal sections and tabs from using the old ArcGIS classloader technology to using the new EsriJS classloader technology. It will also import and use the As Delivered EsriJS maps which are configured similar to the ArcGIS As Delivered configuration, and update the geocode actions (e.g. Buildings) to use EsriJS. (Tri-125321)
Globalization	<p>Arabic and Hebrew now have support and mirroring capabilities as bidirectional languages.</p> <p>In Label Manager import, you now can choose whether or not to update existing labels. (Tri-93062)</p> <p>Label export was moved to the Language Manager in the Administrator Console from the Label Manager in the application. You can now choose whether to remove blank tooltips by running a label export for GUI Tooltips or All. (Tri-101829)</p> <p>Query results now display internal_value data when translated data does not exist. Previously, blank values displayed. (Tri-115530)</p> <p>You now use the Language Manager in the Administrator Console to export changes to labels. A best practice is to clear Object Metadata Cache in the Cache Manager of the Administrator Console before exporting labels or data.</p> <p>When you choose to do a delta export and compare the values with the US English language pack from installer, the comparison is made with the first file in the userfiles/LanguagePacks folder. (Tri-92978 and Tri-124098)</p>
Graphics	<p>Added a new Auto Zoom feature that allows a graphics view to automatically zoom in to a target record after the graphic loads. Three properties have been added to the graphics section of forms to control how the zoom behaves:</p> <p>Auto Zoom - When checked, and there is exactly one associated record in the graphics section (for example, the space graphic), the view zooms to that record when the graphic is first rendered. (Tri-119060)</p> <p>Zoom % - Defaults to 100 percent, but can be used to change the scale factor of the zoom. For example, 50% is twice as far, and 200% is twice as close. The</p>

Area of Impact	Description
	<p>value must be 1 - 400. (Tri-119060)</p> <p>Zoom Delay - Specifies the amount of time in seconds to wait before Auto Zoom happens. This allows you to configure the time to see the full context of the graphic before the zoom occurs. This must be between 0 and 99. Note that the Zoom Delay will recognize how long a graphic has taken to load and count that time as part of the delay. For example, if Zoom Delay = 3 and graphic takes 10 seconds to load, the Auto Zoom will happen immediately after load completes. (Tri-123872)</p>
Notifications	<p>Email notifications can now be configured to send a single email to all recipients by adding a boolean field named triSendSingleEmailBL to the mail notification object. If this boolean is set to 'TRUE' when the notification is sent, it will include all recipients in a single email to allow the user to use a 'Reply To All' functionality. (Tri-121918-IV55127)</p>
OSLC Enablement	<p>This release includes an Open Source for Lifecycle Collaboration (OSLC)-compliant implementation that will be used for future mobile releases.</p>
Portal	<p>The row limits on the Notifications and Action Items portal sections are increased from 50 to 500. (Tri-128520-IV59864)</p>
Query	<p>Text wrapping for editable queries provides better wrapping and usability for text fields.</p> <p>Opening records in the Master Detail navigation target has changed. The records can be viewed either in a popup window or inline in the current window. Previously this property would default to inline. A change has been made to make this default configurable in TRIRIGAWEB.properties and the default value for MASTER_DETAIL_RECORD_VIEW_TYPE is Popup. (Tri-133256)</p> <p>Reserve query performance includes the following improvements:</p> <p>Curtailed search - A field can be added to a Reserve Query that allows you to configure the number of records to be returned from a greater result set.</p> <p>Reserve thread modeling - This release added new capabilities to enable a total Reserve Query Thread Pool and another property to specify how many threads each reserve query request can use. This feature is scalable with hardware and can be tuned to meet specific use cases and scenarios. (Tri-120227)</p>
Real Estate Environmental Sustainability	<p>The platform includes the following enhancements related to TRIRIGA Real Estate Environmental Sustainability Impact Manager:</p> <p>Integration with IBM Tivoli Directory Integrator</p> <p>Improved metric reports</p> <p>Generic staging tables were created as a new type of staging table</p>
Reporting	<p>BIRT libraries are updated in this release to support the latest version of BIRT.</p>
Upgrade	<p>This release includes the following improvements to Object Migration (OM) and platform builders to ease application upgrades:</p> <p>Date-based OM package creation</p>

Area of Impact	Description
	<p>Improved updated_date management on all OM supported metadata types</p> <p>Accurate updated_date searches for all OM supported metadata types</p> <p>Associated data migration</p> <p>Ability to export and import associated record data by using OM</p> <p>Support for migration of association metadata</p> <p>Workflow export text format</p> <p>Ability to export a workflow to a formatted text file that includes all task types, task properties, flow control structures, and conditions</p> <p>Export available for all versions of a workflow</p> <p>Workflow export available from OM packages in addition to Workflow Builder</p>

IBM TRIRIGA Application Platform 3.4.0 Changes

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

Area of Change	Description
Administrator Console	Added an index on wf_event_history to improve performance on lookups of completed events. (Tri-132315-IV59981)
Administrator Console	In the Workflow Agent Manager, the per user workflow count can now be updated dynamically. The dynamically updating thread configuration can be changed, and the number of total threads on the server can be updated. (Tri-114875)
Administrator Console	Resolved an issue with the Workflow Events tab in the Admin Console in Firefox. (Tri-111749)
Application Server	Resolved an issue where a large number of events in the queue caused an error with an SQL statement. (Tri-125572-IV56228)
Application Server	The HTTP header Cache-Control can now be configured in the TRIRIGAWEB.properties file. By default, there is no property in the file; however, you can override the default values of 15 minutes (900 seconds) for non-production mode, or 1 week (604800 seconds) for production mode, by adding CACHE_CONTROL_SECONDS=XXXX where XXXX is a value greater than 900. (Tri-132531)
Application Server	The unused TRIRIGACONVERSION properties file has been removed from the config directory. (Tri-110499)
Application Server	The X Window System is no longer necessary to provide graphical services to the IBM TRIRIGA Application Platform. (Tri-115136)

Area of Change	Description
Connector for Business Applications	Text values that are entered for the saveRecord operation are now localized for non-US English-language users. (Tri-90830)
Connector for Business Applications	You no longer can request the Connector for Business Applications wsdl and send a SOAP request in the same HTTP request without authenticating. (Tri-133622)
Data Modeler	Details of financial tokens can now be viewed even when the business object is published. (Tri-123483)
Database	<p>The Oracle driver has been updated to the latest to resolve some issues with connectivity to 11r2.</p> <p>Please see the following URL for a list of corrections to the driver:</p> <p>http://download.oracle.com/otn/utilities_drivers/jdbc/121010/JDBC-Readme.txt?AuthParam=1378853111_da0bd109a8cc47b9ab0a7423515977b7</p> <p>(Tri-105914)</p>
Document Manager	Resolved an issue in Document Manager that caused a unique constraint error if you double-clicked the Check-In action. (Tri-113176-IV51696)
Document Manager	Uploading a document into the Related Documents section on the Notes & Documents tab is now possible if the project name includes a single quote. (Tri-120424-IV55020)
Form Builder	Resolved an issue where Form Builder was not able to switch to a different tab in a multi-tab section. (Tri-118832)
Formula Engine	<p>A new expression function, <code>replaceCRLF</code>, can be used to replace existing CRLF (carriage return, line feed, or line break) characters with another tag. For example, to replace a non-functioning line break with the <code>
</code> syntax, which is used by the text editor in 10.4, use the following new expression:</p> <pre>replaceCRLF(A, "
")</pre> <p>Where <code>A</code> is the variable to specify where the input string comes from. (Tri-117359-IV53545)</p>
Gantt	Resolved an issue that caused only the top of the last task that was listed in a Gantt chart to display. (Tri-90820)
Gantt	Resolved an issue where tasks from the selected project were not rendering in the Projects Gantt section. (Tri-113581)
Gantt	Resolved an issue with launching the Gantt scheduler applet when running with an Apache and LDAP SSO configured environment. The login prompt will no longer be shown for the inline schedule applet. Launching for the first time will bring up a login prompt through the Java Web Start system, as it connects to retrieve the code from the server. (Tri-111293-IV52377)

Area of Change	Description
Gantt	The FRONT_END_SERVER no longer needs to be set for Gantt, as Gantt Web Start was replaced by opening the traditional Gantt Applet in a new window. (Tri-129103)
Gantt	The Gantt Schedule section in a new window is refactored to use a standard browser window and to remove the web start download/popup. This resolves an issue where the section would fail because of XSS protections. (Tri-122320)
GIS	An upgrade to the 3.4 platform switches any As Delivered GIS portal sections and tabs from using the old ArcGIS classloader technology to using the new EsriJS classloader technology. It also imports and uses the As Delivered EsriJS maps which are configured similar to the ArcGIS As Delivered configuration, and update the geocode actions (e.g. Buildings) to use EsriJS. (Tri-125321)
GIS	GIS now displays the translated report title that is defined in the GIS query object in the query list. Previously it displayed the GIS query object name, which was not translatable. (Tri-122702)
GIS	GIS will now translate report headers in the "Show Table" view and "View Record" when selecting a pin on the map. (Tri-122813)
GIS	Removed the extents from the default gray basemap to improve its appearance when the user switches back to it from another basemap. (Tri-130295)
GIS	Resolved an EsriJS editor widget issue that caused a drawing offset when either the Details tab, or the Table tab, or both, were open. You no longer must close the tabs before editing. (Tri-116252)
GIS	Resolved an EsriJS issue where locator pins were not displaying for non-US English-language users when the latitude and longitude coordinates were comma delimited. (Tri-122816)
GIS	Resolved an issue where the new EsriJS was not honoring the \$\$RECORDID\$\$ or \$\$PARENTRECORDID\$\$ filters in run reports as ArcGIS did. (Tri-113795-IV53755)
GIS	Resolved issues with loading labels from the language pack which happens on environments using SSO and/or SSL (HTTPS). This is corrected by implementing and using a direct API instead of relying on a self-post for resources. (Tri-114381)
GIS	The geocode search no longer zooms too much into locations, which caused the map display to be blurry. (Tri-114497)
GIS	Two new fields, "Proxy Host" and "Proxy Port", are added to the Integration Object form that can be used to configure a proxy when using the HttpPost function. If the Proxy Host is blank, it will not be used. (Tri-109576-IV53465)
Globalization	Autocomplete now shows localized values in the drop-down lists. (Tri-129130)
Globalization	L_ tables are now deleted when the business object is deleted. (Tri-132814)
Globalization	Language values can now be mapped to localized smart section fields of embedded records. (Tri-131963)

Area of Change	Description
Globalization	Localized values from the updated smart section row are now calculated properly in the parent record formulas. Formulas involving list field values now calculate the label translation of the field into the localized calculated value of the formula if the target field or formula field is localized. (Tri-112821)
Globalization	Locator fields can now be localized when the source is a localized system read-only record name. (Tri-89545)
Globalization	Mapping a Classification field to a text field is now fully localizable (short and full path). (Tri-103771)
Globalization	Record name values that include a List, System BO Label, System Form Label, or Classification field (given the record name of the root classification is localized) can now be exported for translation and show translation in the form. (Tri-113883)
Globalization	Resolved an issue that caused localized values to not be displayed for Summary reports. (Tri-122467)
Globalization	Resolved an issue with currency formatting when the default language is set to anything other than US English. (Tri-116260-IV53470)
Globalization	The Subject column of the Notifications portal section now renders translated values. (Tri-125499)
Globalization	The translation of a static string is now mapped in the workflow even if the workflow template id is not the same as the one in the as-delivered language pack. This occurs when the workflow was created in the environment through an object migration import rather than from clean installation. In order for this mapping to work, you must either import the label language pack again or import only the WFSTATICMAPPINGLABEL.xliff file again. (Tri-127286)
Globalization	Tooltips can now be translated for the Report Manager. (Tri-87558)
Globalization	When the display of the full tab list cannot fit on the page, the tab list is partially rendered. To scroll the tabs, click either the upper or lower empty cells. (Tri-129389)
Globalization	When you run an Excel export, system read-only fields (of GUILABEL subtype) are now translated. (Tri-119934)
Globalization	You can now add a space before a colon in a language pack for linguistic reasons so that your users can see a space before a colon at run time. For example, if French users are to see a space before a colon. (Tri-111938)
Globalization	You now export labels from the Language Manager in the Administrator Console instead of from the Label Manager. (Tri-127032)

Area of Change	Description
Graphics	A graphics section was overriding all of the layers in a block to the inserted layer, which is inconsistent with AutoCAD and MicroStation. Updated the dxf processing to preserve all of the entity's original layers. The user can turn individual block entities on or off by layer, similar to how AutoCAD and MicroStation work. Also resolved an issue with layer filters by count, which appeared to not work correctly because all entities within a block were counted as one entity for the block. (Tri-115013)
Graphics	The Label Styles in the Graphic Section are updated to handle bad data in association label elements more robustly. (Tri-118836-IV57432)
Graphics	The Zoom window button now functions in IE 10 and Windows 8. (Tri-113165)
Help	An issue has been resolved where the FULL_HELP_OBJECT=N caused just the note data in the help records not to be displayed. (Tri-134286-IV60607)
Installation	Due to a locator field localization dependency between the triCiHierarchyNode and triCiMapping business objects, a SQL Persistence Error may be written to server.log during the automatic import of the CIAppManagerMetaUpgrade upgrade package. This happens the first time an application server is brought up with IBM TRIRIGA Application Platform 3.4. This log message is normal for the CIAppManagerMetaUpgrade upgrade package, and the issue is resolved automatically. The triCiHierarchyNode and triCiMapping business objects are published correctly. (Tri-133406)
Installation	It is now possible to do a platform upgrade from JBoss 5.1.0 GA (Community) to WebSphere directly by choosing the old TRIRIGA directory in the installer. (Tri-124086)
Installation	WebSphere now updates the JDBC driver class, pointing to the new TRIRIGA Install directory. WebSphere now installs into a secondary WebSphere profile. When the WebSphere connection fails, the installer no longer allows you to continue installation. The installation can continue when the WebSphere information is correct. (Tri-12322)
Installation	When the installer attempts to connect to determine whether WebSphere is running, the full command is shown if the connection fails. The command can be copied and pasted into a command line to help troubleshoot the reason for the failure to connect. (Tri-125924)
Integration Object	Resolved an Integration Object file data import issue where the following error would occur if the file contained a mixture of new and existing data: "A valid record id must be specified when using a blank value for actionName". (Tri-124231-IV55986)
Integration Object	Resolved an Integration Object HTTP Post issue, where if the request method type was PUT, null request errors occurred. (Tri-133213)
Integration Object	Resolved an Integration Object issue where, if the user triggering the Integration Workflow does not have the appropriate access, under certain circumstances an inaccurate error would be displayed in the log indicating "...The context you are attempting to finalize is not the current context...". Now it displays a no access error instead. (Tri-114251-IV51854)

Area of Change	Description
Integration Object	Resolved an issue where Integration Object error instance records that were generated for failures were displaying the same resubmit data rather than data related to the actual record that failed. The issue made it difficult to resubmit failed requests. (Tri-116191-IV52941)
Integration Object	Reversible encrypted passwords that are used in the IBM TRIRIGA Connector for Business Applications now unencrypt for the applications to work correctly. (Tri-103817)
License	Updated the license table to give WPME access to run the ETLs through the Job Scheduler. (Tri-117465)
License and Security	Resolved an issue where ETL job items ran without the required license installed. (Tri-119565)
Localization	An onChange workflow in a field that concatenates a localized locator field with a localized text field to display in a non-localized field now works appropriately in a non-US English-language environment. (Tri-115069-IV52581)
Navigation Builder	An issue has been resolved in the Navigation Builder. Now a navigation collection cannot be configured for a collection type where the number of levels is not valid. (Tri-130524-IV59394)
Navigation Builder	Resolved an issue where multiple spaces would appear when typing a space while filtering columns in the Navigation or Portal builders. (Tri-118830-IV53743)
Notifications	Approval Escalation is now working correctly, as based on the duration defined in the Product Request Template. (Tri-128892-IV57384)
Object Migration	In a record data export, if the record data path name exceeds the 255 character Linux file name limit, the record data XML no longer fails to create in the package. Packaged record data XML files no longer contain the entire name as the file name, but instead use a hash value for part of the file name. (Tri-122301)
Object Migration	Newly created budget tokens, lists, hierarchy structures, and styles are now added to an object migration export package when you use the By Date create mode. (Tri-122881)
Object Migration	On import, duplicate queries are no longer created in the same module in the target environment when the primary business object for the query changed in the source environment. (Tri-114596)
Object Migration	The Create Package By Date option no longer automatically adds dependencies. To automatically add first-level dependencies, select the check box. (Tri-125821)
Object Migration	The export process no longer exports invalid Group module level security access when an invalid form ID is found on the source environment. (Tri-128990)
Object Migration	The Search Results section and the Find Dependents section now have a Reset Search action that clears the section. (Tri-126546)

Area of Change	Description
Performance	A performance improvement has been made when activating users. In the previous version, if multiple workflows executing to activate users, the workflows would bottleneck at the processUserAccess state transition. This bottleneck has been removed to improve performance. (Tri-118431-IV53583)
Performance	Because of known performance issues when not running in production mode, the Sign-In screen now prominently displays if a system is not in production mode and that performance will be negatively impacted. (Tri-131279)
Real Estate Lease	The currency formatting for Indian Rupees now groups correctly. (Tri-124392-IV56245)
Record Runtime	An issue has been resolved when printing forms where some tabs that are visible did not render. (Tri-133079-IV60233)
Record Runtime	Availability sections are not available for printing, as is the case with other special sections types like Availability Legacy and Gantt. (Tri-103988)
Record Runtime	Corrected an issue where text area locator field with maximum length set to 0 will not allow user to enter any value and do the auto-search. (Tri-117344-IV53915)
Record Runtime	Query sections in forms now can display a loading indicator when a user action is taken. (Tri-117208)
Record Runtime	Resolved an issue where, in some cases, image fields were rendering with a "-1" in a query output. (Tri-132246)
Record Runtime	There is no longer extra white space on the bottom of the tab in a record view of a Navigation target. (Tri-81359-IV54141)
Record Runtime	Users can now create Capital Project records even when JRE is not installed on the client. (Tri-87994)
Reporting	An issue has been resolved with off-loaded BIRT reports with multi-select parameter values. (Tri-130313-IV59397)
Reporting	Corrected an issue where the Summary Report header name display escaped characters such as x20. (Tri-126196-IV56543)
Reporting	Corrected an issue where using the System Readonly Created DateTime (Number) field or the System Readonly Modified DateTime (Number) field as static filters in report would throw a stack trace. (Tri-120226-IV54273)
Reporting	Form names are now translated when they appear in query results. (Tri-112998)
Reporting	Number fields in an Excel file that was exported from a TRIRIGA report are now correctly formatted when the user has a European region and language setting. (Tri-119231-IV54050)

Area of Change	Description
Reporting	Ordering now works correctly when a field in the Summary Report is part of both Group By and Order By. (Tri-126518-IV56549)
Reporting	Resolved an issue where exported values were not exported with translated values when users with a default language other than US English exported a report containing a classification field. (Tri-116869-IV53481)
Reporting	Resolved an issue with the display of incorrect results in groupings when exporting to Excel from reports when the grouping was not configured in the report. (Tri-122298-IV54944)
Reporting	Results now display when a non-US English language user enters key words in the Excel Template search. (Tri-110333)
Reporting	The BIRT report engine version has been upgraded to 4.3.1. (Tri-119284)
Reporting	The JSTL 1.2 library is now automatically deployed. This corrects an issue where metric reports would not run on Weblogic 11. (Tri-117761)
Reporting	The Order & Group tab now displays correctly when rendered in the Chrome browser. (Tri-124219)
Reporting	The save action on an editable query with an associated BO now works correctly. (Tri-117461-IV53544)
Reporting	The thousand separator is now displayed in number fields that are exported to Excel, based on the regional settings set in the operating system. (Tri-122228)
Security	A security issue was resolved in data integrator so that it is no longer possible to upload a data integrator file with two dots in the name, such as MyFile..Upload.txt. (Tri-131778)
Security	Document Manager now enforces read-only licensing. If your license grants you read-only access to the Document module, you can no longer make changes in the Document Manager. (Tri-115605)
Security	Resolved an issue when attempting to send an error report to IBM's PMR system with non alpha-numeric values in the PMR or Customer fields. (Tri-133737)
Security	The IBM TRIRIGA Workplace Reservation Manager license now has access to run ETLs and the job logs. The IBM TRIRIGA Real Estate Environmental Sustainability Impact Manager license no longer has access to either. (Tri-123746)
Security	The Reserve Location Request functionality requires a Self-Service, Facilities, or Operations license. The functions for triMaintenance > triJobPlansPMs and triMetricFact > triStandardHoursDetails are now licensed correctly. (Tri-133517)
Security	The 'system' user now has access to all the licensed functionality on the server. (Tri-115343)

Area of Change	Description
Security	Two new licenses are now available for IBM TRIRIGA: - IBM TRIRIGA Workplace Reservation Manager for Small Installations (3044) - IBM TRIRIGA Workplace Reservation Coordinator (3045) (Tri-129220)
Security	Updated the license table to remove the invalid settings that gave the WPME access to some Builders/Managers. (Tri-115346)
System Setup	Updated the installation and upgrade documentation for Weblogic. (Tri-116421-IV53472)
Workflow	Resolved an issue for Schedule tasks where values for a recurrence were not saved. (Tri-127779)
Workflow	Resolved an issue in Schedule tasks that caused the End By date for a recurrence to increment by one day each time the task was opened. (Tri-127781)
Workflow	Resolved an issue that prevented formula field mapping from being cleared when the Clear All action was clicked during workflow mapping. (Tri-80268)
Workflow	Resolved an issue where forms with a multi-tab section that is marked as visible but has no visible sub tabs would become unresponsive after an onchange workflow. (Tri-115710)
Workflow	When a record with a dependent association is created, the System Record ID now updates properly. (Tri-106501)
Workplace Reservation Manager	Exchange integration now works with Jboss EAP. (Tri-115231)
Workplace Reservation Manager	Resolved an issue that caused a canceled occurrence in Outlook to cancel the wrong event. (Tri-114055)
Workplace Reservation Manager	Resolved an issue where an internal library within the IBM TRIRIGA Platform could not find new Time Zone IDs. The library has been updated and contains the new time zones. (Tri-115990-IV52424)
Workplace Reservation Manager	The IBM TRIRIGA Workplace Reservation Manager Outlook no longer communicates with IBM TRIRIGA when Outlook is offline. (Tri-128965-IV59312)
Workplace Reservation Manager	The Reserve Outlook add-in now supports Siteminder SSO. (Tri-124583)
Workplace Reservation Manager	The Workplace Reservation Manager Outlook add-in installer can now be run in silent operation. Create a silent install.properties file with the responses for the graphical installer's prompts. Run the add-in installer as follows: install.exe -i silent -f install.properties. Be sure that all prerequisites are met before installation. (Tri-118073)

IBM TRIRIGA Application Platform 3.4.0 Properties Files

The following changes to the `TRIRIGAWEB.properties` file are in this release. For more information, go to the IBM TRIRIGA Application Platform 3 Knowledge Center and select *Installing IBM TRIRIGA Application Platform > Configuring the platform > Properties files*.

Area of Change	Description
Brava	Brava 5.5j support has been replaced with Brava Enterprise 7.2 Server support. Please see Developer Works for additional information on how to obtain Brava 7.2 Enterprise and license. (Tri-115581)
Brava	Properties in the <code>TRIRIGAWEB.properties</code> file that were related to Brava 5.5j have been removed. (Tri-129612)
ENFORCE_REQUIRED_VALIDATION	OSLC ignores the value of the <code>ENFORCE_REQUIRED_VALIDATION</code> property in the <code>TRIRIGAWEB.properties</code> file. (Tri-106622)
UNSUCCESSFUL_LOGIN_ATTEMPT	<p>A new property is added to <code>TRIRIGAWEB.properties</code> file named "UNSUCCESSFUL_LOGIN_ATTEMPT". Default value is -1.</p> <p>#</p> <p># This property is to determine how many number of unsuccessful login attempts are allowed before the account gets locked. Default is -1 which means functionality is turned off.</p> <p># Any positive value will mean only that many unsuccessful login attempts are allowed.</p> <p># Once reached that account will be locked and can only be unlocked by a system administrator</p> <p># from the Admin Console -> User Manager page.</p> <p>#</p> <p><code>UNSUCCESSFUL_LOGIN_ATTEMPT=-1</code></p> <p>(Tri-119066)</p>

IBM TRIRIGA CAD Integrator/Publisher 12.1.1

This release includes important information, known limitations, changes, and property file changes to IBM TRIRIGA CAD Integrator/Publisher.

Important Information

The following items are important information concerning IBM TRIRIGA CAD Integrator/Publisher for this release:

Area of Impact	Description
AutoCAD	If you are using AutoCAD 2012 64-bit, you must be on SP1 or later. (Tri-37066)
Hover Help	If the hover help you are reading closes before you can finish, move your mouse away and then back to redisplay the hover help.
IBM TRIRIGA Application Platform	To use IBM TRIRIGA CAD Integrator/Publisher 12.1, you must be on IBM TRIRIGA Application Platform 3.4. To use IBM TRIRIGA CAD Integrator/Publisher 12.1.1, you must be on IBM TRIRIGA Application Platform 3.4.1.
Single Sign-On	If you are using SSO through IIS, you must have the Basic authentication option selected in order for IBM TRIRIGA CAD Integrator/Publisher to sign in properly. You can use any other combination of authentication options (Basic, Digest, and Windows Integrated), provided that both Digest and Windows Integrated are not selected at the same time. (Tri-21349)

Known Limitations

The following items are known limitations concerning IBM TRIRIGA CAD Integrator/Publisher for this release:

Area of Impact	Description
Data	IBM TRIRIGA CAD Integrator/Publisher for AutoCAD supports multi-byte characters in drawings, windows, and records. IBM TRIRIGA CAD Integrator/Publisher for MicroStation supports multi-byte characters in IBM TRIRIGA CAD Integrator/Publisher windows and in IBM TRIRIGA records.
Globalization	IBM TRIRIGA CAD Integrator/Publisher is only translated to languages to which AutoCAD is translated.
Installer	The installer is only available in US English. By default Install Anywhere installs to a folder with the literal value <code>Program Files</code> . On non-US English-language versions of Microsoft Windows, this folder has a translated name and an install to a folder named <code>Program Files</code> may not work. If you are installing IBM TRIRIGA CAD Integrator/Publisher on a non-US English-language version of Windows, install to a folder with a different name. For example, <code>C:\CI</code> .

Area of Impact	Description
MicroStation	<p>For MicroStation users of IBM TRIRIGA CAD Integrator/Publisher, the areapat.cel file is required in order for fills to work properly. TRIRIGA CAD Integrator/Publisher expects the areapat.cel file to be in the C:\ProgramData\Bentley\MicroStation V8i (SELECTseries)\WorkSpace\System\Cell folder. If you do not have a C:\ProgramData\Bentley\MicroStation V8i (SELECTseries)\WorkSpace\System\Cell folder installed, you can resolve the problem by taking the following steps:</p> <ol style="list-style-type: none"> 1. Create the C:\ProgramData\Bentley\MicroStation V8i (SELECTseries)\WorkSpace\System\Cell folder. 2. Copy the areapat.cel file in the C:\ProgramData\Bentley\MicroStation V8i\WorkSpace\System\Cell folder to the C:\ProgramData\Bentley\MicroStation V8i (SELECTseries)\WorkSpace\System\Cell folder. <p>As a result, the areapat.cel file is in both of the folders:</p> <p>C:\ProgramData\Bentley\MicroStation V8i\WorkSpace\System\Cell</p> <p>C:\ProgramData\Bentley\MicroStation V8i (SELECTseries)\WorkSpace\System\Cell (Tri-143115)</p>
Publish	A graphics section does not render entities output to the DXF paper-space. (Tri-32950)

IBM TRIRIGA CAD Integrator/Publisher 12.1.1 Changes

The following changes to IBM TRIRIGA CAD Integrator/Publisher are in this release:

Area of Change	Description
Detach Object	MicroStation now removes blocks that were inserted originally when detaching them. (Tri-143107-IV62526)
Drawings	Resolved an issue that caused an error when opening a version 10 upgraded drawing in version 12.1.x. (Tri-145538)
Reporting	Resolved an issue where applying hatches did not work correctly when there were any open attached polylines or complex regions, i.e., more than one boundary loop or includes "holes" involved. Updated to support hatching complex regions, which, due to limitations in AutoCAD, includes full support for normal polylines and circles, but only partial support for complex regions with arcs or ellipses. TRIRIGA CAD Integrator/Publisher does not support hatching open polylines, but the presence of these entities no longer causes normal boundaries to fail to hatch. (Tri-143117-IV61530)
Smart Attach	Resolved an issue where a MicroStation drawing with large Element IDs (for example, greater than 4,000,000,000) failed to attach gross, attach measured gross, attach object, or upload areas. (Tri-143111-IV63152)

Area of Change	Description
Smart Attach	Resolved an issue in which running the Smart Attach or Batch Process on a drawing with a large number of spaces did not link all of the spaces on the first upload. (Tri-136599)
Upgrade	TRIRIGA now updates the attachment state for legacy TRIRIGA CAD Integrator/Publisher version 10 drawings that have been upgraded. These drawings now appear with the correct state in the "Open Drawing from Record" and the various attachment dialogs. TRIRIGA CAD Integrator/Publisher now upgrades the Measured Gross area correctly on version 10 drawings. Also the drawing upgrade process now automatically runs Sync Full to complete the upgrade. Improved the messages for upgrade. (Tri-143122-IV63235)

IBM TRIRIGA CAD Integrator/Publisher 12.1.1 Properties Files

The `ci.properties` file did not change in this release.

IBM TRIRIGA CAD Integrator/Publisher 12.1.0 Enhancements

The following enhancements to IBM TRIRIGA CAD Integrator/Publisher are included in this release:

Area of Impact	Description
Authentication	The authentication type can be basic, preemptive basic, or NTLMv2.
Certifications	IBM TRIRIGA CAD Integrator/Publisher is now certified for MicroStation V8i Select Series 3 with Microsoft Windows 8.
Graphics	Inserted blocks with multiple layers now retain the individual layers in IBM TRIRIGA Graphics sections.
Java	The IBM TRIRIGA CAD Integrator/Publisher 12.1.0 installation supports Java 7. Support for Java 6 is deprecated.
Mappings	<p>Added a field to the Mapping form to specify a detach action to run a specified state transition when detaching a drawing or object. This includes detaching from the context menu. If the detach action transition is blank, or is not a valid transition for the state a record is in, no transition will occur.</p> <p>Situations that detach children entities along with the parent entity, like detach drawing (detach all entities) and detaching a space with child items, will call the detach transition, if applicable, on all children. (Tri-92976)</p> <p>The display of the full hierarchy path for mappable smart section fields can be</p>

Area of Impact	Description
	<p>configured in CAD mappings and enabled in the Smart Attach, Batch Process, and Batch Edit forms.</p> <p>In the Space Mapping, Current Use Space Class Mappable Special Field, set the new Associated Mapping locator to point to the Space Class Mapping. In the Space Class Mapping, add a "Path" Special field and configure it on the triPathTX field on the Space Class business object. You can choose any field to represent the "path".</p> <p>This can be similarly applied to any Smart Section-based mappable special field.</p> <p>When this is done, the full path is available as tooltips in the list selector. In addition, there is a check box to allow the user to show the full path. A search field has also been added. (Tri-114048-IV51850)</p>

IBM TRIRIGA CAD Integrator/Publisher 12.1.0 Changes

The following changes to IBM TRIRIGA CAD Integrator/Publisher are in this release:

Area of Change	Description
Attach Gross Area	Updated Attach Gross and Attach Measured Gross to display a message when cancelling out of the command, rather than logging an error. (Tri-110947)
Batch Edit	Added a Show By Path check box to Batch Edit to allow the user to see the full path of a smart section text field record. This check box will only be enabled if the field is configured in the application definition by a mappable special field that is associated mapping and path field. (Tri-126870)
Detach	Detaching a drawing and all drawing data now remove the legend. (Tri-88286)
Detach	Resolved an issue where detaching a space in MicroStation did not unlink child block elements, such as inserted/attached people or assets, as AutoCAD does. (Tri-109211)
Detach	Resolved an issue where you could not detach an object from the context menu in MicroStation. Also resolved an issue in both AutoCAD and MicroStation where using context menu detach object on a boundary detached child items on the plug-in but did not detach them on the server. (Tri-109322)
Detach	Resolved performance issues when detaching a space in drawings with a large number of spaces and a large number of attached items. (Tri-125549-IV56620)
Globalization	Resolved an issue where the CAD Integrator/Publisher installer did not set the correct language settings for Polish. (Tri-130106)
Labels	CAD Integrator/Publisher labels now maintain the correct justification

Area of Change	Description
	when the user syncs, publishes, or changes the label style in AutoCAD. (Tri-114880-IV52348)
Login	CAD Integrator/Publisher works with Siteminder using basic authentication when you enable "Support non-browser clients" in the Siteminder configuration. (Tri-125600)
Menu	Resolved an issue where the Drawing Properties menu item was incorrectly set to active for an unattached design file. (Tri-89367)
Preferences	Server environments no longer save the "/" at the end of URL string so that functions that open the TRIRIGA application or a record in a browser window open correctly. (Tri-112358)
Publish	In the Graphics section, the polyline to arc transformation now correctly displays a non-positive unit Z normal. This corrects an issue on certain MicroStation drawings where doors appeared to be flipped on publish. (Tri-113522-IV51712)
Publish	Resolved an issue that could cause a crash when publishing design files using MicroStation SS3 on Windows 8. (Tri-115744)
Reporting	Resolved issues with the alignment of the color in the legend of AutoCAD when there are multiple results and updated the color graphic to have a border. (Tri-109773)
Single Sign-On	CAD Integrator/Publisher log-in now supports NTLMv2 authentication through IIS. Fields were added for configuring a proxy host and port for an environment. The SSO type selector was renamed Authentication, and the options were renamed to Basic, Preemptive Basic, and NTLMv2. (Tri-67173)
Smart Attach	In AutoCAD, the upload candidates now correctly process children of existing linked spaces as subspaces. (Tri-90230)
Smart Attach	Resolved an issue where spaces were not created in CAD Integrator/Publisher if the parent floor had a reference to a renamed or deleted organization in the system organization field. Now, CAD Integrator/Publisher logs an error for a misconfigured sys org field but still creates a space. Some users do not use the system organization field for security, and, if they frequently change their organization structure, then CAD Integrator/Publisher will no longer be affected by this issue. (Tri-121667-IV56564)
Smart Attach	<p>Updated the CAD Integrator/Publisher application metadata to be able to configure a query to control the results for Space Class Current:</p> <p>In the Space Mapping, Current Use Space Class Mappable Special Field, set the new Associated Mapping locator to point to the Space Class Mapping. Now you can change or update the query on the Space Class Mapping in order to control the results that show up in the selector in CAD Integrator/Publisher.</p> <p>This can be similarly applied to any Smart Section based Mappable Special Field. (Tri-113848)</p>

IBM TRIRIGA CAD Integrator/Publisher 12.1.0

Properties Files

The following changes to the `ci.properties` file are in this release:

Area of Change	Description
AUTO_UPGRADE	The <code>AUTO_UPGRADE</code> property applies to AutoCAD only. It controls the automatic upgrade of IBM TRIRIGA CAD Integrator/Publisher (CI) version 10 drawings. When set to <code>Y</code> , the default, CI version 12 upgrades any drawing from version 10 when it is opened. When set to <code>N</code> , version 10 drawings appear as unattached in version 12. You can use the <code>TRGA_UpgradeXData</code> command or set the <code>AUTO_UPGRADE</code> property to <code>Y</code> to upgrade drawings. If you run <code>TRGA_UpgradeXData</code> , you must first save the drawing and then reopen the drawing to refresh the CI menu state. (Tri-114329)
FLATTEN_Z_ON_TEXT_ENTITIES_WHEN_UPLOADING ACCEPT_UNCLOSED_BOUNDARIES_WHEN_UPLOADING	<p>In AutoCAD, drawing entities are usually represented in three dimensions and the geometry of the vertices typically has (x,y,z) coordinates. However, CAD Integrator expects that the floor plans are in only two dimensions, with (x,y) vertices and z=0.</p> <p>Two new properties in the <code>ci.properties</code> file control how CAD Integrator behaves in AutoCAD when you upload floor plans. The <code>FLATTEN_Z_ON_TEXT_ENTITIES_WHEN_UPLOADING</code> property assumes Z=0 for uploading, which is the default behavior. The <code>ACCEPT_UNCLOSED_BOUNDARIES_WHEN_UPLOADING</code> property, which defaults to <code>N</code>, can be set to <code>Y</code> to treat unclosed boundaries as valid for uploading candidates. When set to <code>N</code>, CI ignores unclosed boundaries, which was the behavior in previous CI releases. (Tri-92362)</p>

IBM TRIRIGA Supported Versions and IBM TRIRIGA Application Platform Compatibility Matrix

The *IBM TRIRIGA Supported Versions* lists information related to IBM TRIRIGA's supported products and platform and relays information about end-of-life plans for such software. The *IBM TRIRIGA Application Platform Compatibility Matrix* lists supported operating systems, databases, and related details for and about the IBM TRIRIGA Application Platform and relays information about end-of-life plans for such software. The *IBM TRIRIGA Supported Versions* and the *IBM TRIRIGA Application Platform Compatibility Matrix* may change over time. The *IBM TRIRIGA Supported Versions* and the *IBM TRIRIGA Application Platform Compatibility Matrix* can be found on the IBM TRIRIGA wiki at <https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Support+Matrix>.

Related Documentation

You will find the documentation for this release in the IBM TRIRIGA 10 Knowledge Center at http://www.ibm.com/support/knowledgecenter/SSFZ3_10.4.1/com.ibm.tri.doc_10.4.1/product_landing.html and in the IBM TRIRIGA Application Platform 3 Knowledge Center at http://www.ibm.com/support/knowledgecenter/SSHEB3_3.4.1/com.ibm.tap.doc_3.4.1/product_landing.html. The documentation can be found in online IBM Knowledge Center topics, or in PDF files, or both.

This release introduces the following new documentation.

An IBM *TRIRIGA Real Estate Environmental Sustainability Impact Manager* toolkit is available on the IBM Integrated Service Management Library. The toolkit assists customers and service providers in developing integrations that periodically load energy usage and energy sensor data into IBM TRIRIGA. The data is used by analytics and for reporting. This toolkit can be found at <http://www.ibm.com/software/ismlibrary?NavCode=1TW10IB09>.

The following videos that demonstrate how IBM TRIRIGA self-service users can request services and reserve company resources for themselves or for others are available:

IBM TRIRIGA Self-Service Users - Requesting Services - Includes information about how to use Request Central to make online requests for services, repairs, or products and to manage and track each request

IBM TRIRIGA Self-Service Users - Reserving Company Resources - Includes information about how to use Request Central to reserve resources like meeting rooms, workspaces, food services, vehicles, and equipment

IBM TRIRIGA Self-Service Users - Reserving Company Resources from Outlook - Includes information about how to use the IBM TRIRIGA reservation add-in for Outlook® messaging software to create appointments in Outlook and connect to IBM TRIRIGA to reserve company resources

The videos are located in the Media Library at <https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Media+Library>.

The *IBM TRIRIGA Inventory Management User Guide* is now available as part of the IBM Knowledge Center, rather than only as PDF. (Tri-109355-IV50672)

This release updates the following documentation.

"Administering IBM TRIRIGA" (online topics) or *IBM TRIRIGA 10 Application Administration User Guide* (PDF)

"Assessing and improving the physical condition of facilities" (online topics) or *IBM TRIRIGA 10 Facility Assessment User Guide* (PDF)

"Getting started" (online topics) or *IBM TRIRIGA 10 Getting Started User Guide* (PDF)

"Installing IBM TRIRIGA Application Platform" (online topics) or *IBM TRIRIGA Application Platform 3 Installation and Implementation Guide* (PDF)

"Integrating data by using OSLC" (online topics) or *IBM TRIRIGA Application Platform 3 OSLC Integration Guide* (PDF)

"Integrating data with the TRIRIGA integration object," "Integrating data with the TRIRIGA connector for Esri Geographic Information Systems (GIS)," and "Extending connector functions" (online topics) or *IBM TRIRIGA Application Platform 3 Connector User Guide* (PDF)

"Integrating, publishing, and reporting on CAD drawing information" (online topics) or *IBM TRIRIGA CAD Integrator/Publisher User Guide* (PDF)

"Localizing applications" (online topics) or *IBM TRIRIGA Application Platform 3 Localization User Guide* (PDF)

"Managing graphics" (online topics) or *IBM TRIRIGA Application Platform 3 Graphics User Guide* (PDF)

"Managing inventory" (online topics) or *IBM TRIRIGA 10 Inventory Management User Guide* (PDF)

"Managing leased and owned property contracts" (online topics) or *IBM TRIRIGA 10 Lease and Owned Property Contract Management User Guide* (PDF)

"Managing portfolio data" (online topics) or *IBM TRIRIGA 10 Portfolio Management User Guide* (PDF)

"Managing procurement" (online topics) or *IBM TRIRIGA 10 Procurement Management User Guide* (PDF)

"Managing real estate environmental sustainability" (online topics) or *IBM TRIRIGA 10 Real Estate Environmental Sustainability User Guide* (PDF)

"Managing reservations and reservable resources" (online topics) or *IBM TRIRIGA 10 Reservation Management User Guide* (PDF)

"Managing services" (online topics) or *IBM TRIRIGA 10 Maintenance and Service Management User Guide* (PDF)

"Managing spaces and moves" (online topics) or *IBM TRIRIGA 10 Space and Move Management User Guide* (PDF)

"Performance Framework" (online topics) or *Application Building for the IBM TRIRIGA Application Platform 3: Performance Framework* (PDF)

"Planning real estate transactions and projects" (online topics) or *IBM TRIRIGA 10 Real Estate Transaction Management User Guide* (PDF)

"Strategic facility planning" (online topics) or *IBM TRIRIGA 10 Strategic Facility Planning User Guide* (PDF)

Application Building for the IBM TRIRIGA Application Platform 3 (PDF)

Application Building for the IBM TRIRIGA Application Platform 3: Calculations (PDF)

Application Building for the IBM TRIRIGA Application Platform 3: Data Management (PDF)

IBM TRIRIGA Application Platform 3 Administrator Console User Guide (PDF)

IBM TRIRIGA Application Platform 3 Connector for SAP BusinessObjects User Guide (PDF)

IBM TRIRIGA Application Platform 3 Object Migration User Guide (PDF)

IBM TRIRIGA Application Platform 3 Reporting User Guide (PDF)

IBM TRIRIGA Application Platform 3 Single Sign-On Setup User Guide (PDF)

IBM TRIRIGA Application Platform 3 Upgrade Installation Guide (PDF), which can be found at <https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Upgrading>

IBM TRIRIGA Application Platform 3 User Experience User Guide (PDF)

IBM TRIRIGA Connector for Business Applications 3 Technical Specification (PDF)

IBM TRIRIGA 10 Request Central User Guide (PDF)

IBM TRIRIGA 10 Reservation Management User Guide (PDF)

Support

IBM Software Support provides assistance with product defects, answering FAQs, and performing rediscovery. View the IBM Software Support site at 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 of 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 and IBM's Online Privacy Statement at www.ibm.com/privacy/details in the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at www.ibm.com/software/info/product-privacy/.

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.

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](http://www.ibm.com/legal/copytrade.shtml)" at www.ibm.com/legal/copytrade.shtml