IBM TRIRIGA
Version 10.3.2

IBM TRIRIGA Application Platform
Version 3.3.2

Release Notes

IBM®

Note
Before using this information and the product it supports, read the information in "Notices" on page 130.

Contents

Release Notes

Welcome to the December 2013 release of IBM® TRIRIGA® 10.3.2, IBM TRIRIGA Application Platform 3.3.2, and IBM TRIRIGA CAD Integrator/Publisher 12.0.2. 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 3.3.2.

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 10.3.2, IBM TRIRIGA Application Platform 3.3.2, and IBM TRIRIGA CAD Integrator/Publisher 12.0.2, 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 10.3.2, IBM TRIRIGA Application Platform 3.3.2, and IBM TRIRIGA CAD Integrator/Publisher 12.0.2 include the following:

IBM TRIRIGA 10.3.2 Enhancements

The following enhancements to IBM TRIRIGA are included in this release:

Area of Impact	Description
Accessibility	This release supports accessibility in the following areas. For more information, go to the IBM TRIRIGA 10 Information Center and select *Product overview > Accessibility*. ▪ Added compliance for Section 508 of the United States Workforce Rehabilitation Act for users of the IBM TRIRIGA Capital Projects Manager in Microsoft Internet Explorer. ▪ Added various keyboard navigation shortcuts to the platform for use in IBM TRIRIGA applications. ▪ Added screen reader capability.
Contact Role Management	Contact roles are used to define roles that have role requirements. To manage contact role information, you can create contact roles or reassign them to multiple records in a single transaction. You can use the Contact

Area of Impact	Description
	Role Manager application to manage contact role information for the following modules:

Geography	People
Organization	Contracts
Location	Projects
Asset	

Area of Impact	Description
Lease Accounting	▪ Straight-line Schedule

Before IBM TRIRIGA 10.3.2, the straight-line calculations for both real estate and asset leases were based on payment line items (PLIs) in the Payments section of the Payments tab. To better align with current FASB standards and to cover the latest developments from the May 2013 FASB/IASB exposure draft on lease accounting, the new 10.3.2 straight-line calculations are based on fiscal line items (FLIs) in the Schedule Straight Line section of the Accounting tab of the lease form (for both real estate and asset leases). As a result, certain fields in the Payments tab and Accounting tab that were included in versions before 10.3.2 are no longer needed for the new straight-line calculations.

For more information about the straight-line schedule upgrade, see the Lease Accounting page in the IBM TRIRIGA wiki at https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM+TRIRIGA1/page/Lease+Accounting.

▪ Bulk Create Review Assumptions

IBM TRIRIGA 10.3.2 introduces enhancements to the Bulk Create Review Assumption Request form. These enhancements include the ability to set the lease classification as Type A or Type B. Type A refers to the financing approach of most leases of assets such as equipment, aircraft, cars, or trucks. Type B refers to the straight-line approach of most leases of real estate such as land, a building, or part of a building.

▪ Asset Lease and Real Estate Lease

IBM TRIRIGA 10.3.2 introduces enhancements to the Accounting tab of the Asset and Real Estate Lease forms. These enhancements include the ability to set the lease classification as Type A or Type B, the ability to set the Accounting Standard to GAAP (FASB) or IFRS (IASB), the IFRS Treatment section, and the inclusion of the straight-line schedule sections mentioned above.

▪ Lease Termination

IBM TRIRIGA 10.3.2 introduces enhancements to the lease termination process. If the termination has a penalty fee, then a one-time payment is created with the payment type of Termination Fees. Any payment line items (PLIs) are voided after the termination effective date. If a payment schedule extends after the termination effective date, then the payment schedule is also voided. If any PLIs are paid, the fiscal line items (FLIs) are recalculated from the last paid period onwards and the straight-line value is recalculated for the remaining periods. The FLIs from paid periods are not changed. For lease options, if a termination option has a penalty fee,

Area of Impact	Description
	then the fee amount is spread evenly across the non-paid PLIs.
Real Estate Transaction Management	IBM TRIRIGA 10.3.2 incorporates various fixes and enhancements to the Site Information tab, Offer Information tab, Financial Terms tab, Financial Summary tab, and Executive Summary tab of many Real Estate Project forms, such as the Acquisition, Disposition, Expiration, Lease, Sublease, and Termination forms. These fixes and enhancements include the removal of unneeded sections and fields, the addition of new sections, fields, and tooltips, and the revision of formulas for calculated fields.
Space Management Implementation	▪ Implementation of Space Management user guide A new user guide supports the implementation of space management. You can use space management to maintain space plans and track space usage data in buildings and structures. Space management involves installing the required software, applying user roles and classifications, and importing portfolio data. The guide can be found at https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Space+management+implementation. ▪ Data migration package You can use configured integration objects and associated template files to import geography, organization, location, and people portfolio data into IBM TRIRIGA DataConnect staging tables. The integration objects and template files are provided in a data migration package. The package can be found at https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Portfolio+data+migration.

IBM TRIRIGA Application Platform 3.3.2 Enhancements

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

Area of Impact	Description
Accessibility	This release supports accessibility in the following areas: ▪ Added compliance for Section 508 of the United States Workforce Rehabilitation Act for users of the IBM TRIRIGA Capital Projects Manager in Microsoft Internet Explorer. ▪ Added various keyboard navigation shortcuts to the platform for use in IBM TRIRIGA applications. ▪ Added screen reader capability.
GIS	A geocoding service can now be specified. Such a service used to process transformation of geocoding point projections for the Esri JavaScript viewer. Previously, geocoding point projections were done using an external Esri service. This service can be referenced in widgets and used for point projections.

Area of Impact	Description
Graphics	This release introduces an enhancement to the management of graphics layers. On the Layer Configuration page, you can define layer filters to show layers, hide layers, exclude layers, or override the color of entity strokes in layers. These filters can be triggered by the layer name or on the entity count.
License Metrics	The new LICENSE_METRIC table tracks the concurrent user count for each product license. A snapshot is taken every 10 minutes. You can view the data from the Administrator Console by querying the LICENSE_METRIC table from the Database Query Tool.
Localization	The Administrator Console has a new section in the Language Manager named Export Data for Translation. The Export link that used to be in the Swap Base Language section is now in the Export Data for Translation section so that users can more easily specify the target language of the export.
Reporting	This release introduces an enhancement to Chart type reports. With this enhancement, when a user selects an element of the chart (such as a single bar in a bar chart or a pie slice in a pie chart), information is shown only for the selected element.
SAP Crystal Reports	IBM TRIRIGA now supports SAP Crystal Reports version 2011.

IBM TRIRIGA CAD Integrator/Publisher 12.0.2 Enhancements

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

Area of Impact	Description
Installation	CAD Integrator is now certified for AutoCAD 2014 and MicroStation V8i (SELECTseries 3).
Installation	The installer can force the deployment of files even if no CAD installs are found on the client.

Important Installation and Upgrade Information

Before installing, go to the IBM TRIRIGA Application Platform 3 Information 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. The link is https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Upgrading.

IBM TRIRIGA 10.3.2

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
ENERGY STAR	ENERGY STAR only made the following energy spaces eligible for 1-100 score: Bank Branch Courthouse Data Center Distribution Center Financial Office Hospital (General Medical & Surgical) Hotel K-12 School Medical Office Non-Refrigerated Warehouse Office Refrigerated Warehouse Residence Hall/Dormitory Retail Store Senior Care Community Supermarket/Grocery Store Wastewater Treatment Plant Wholesale Club/Supercenter Worship Facility For more information, see http://www.energystar.gov/ia/business/evaluate_performance/List_of_86_Functions.pdf?95ef-4a93
ENERGY STAR	Follow these steps if you receive the following certificate error when you attempt to communicate with ENERGY STAR: `ERROR: javax.net.ssl.SSLPeerUnverifiedException: peer not authenticated` 1. Download the ENERGY STAR certificate from a web browser or from the ENERGY STAR site and name it `energyStar.cer`. 2. Find the Java home directory on Linux: `run echo $JAVA_HOME` on Windows: `run echo %JAVA_HOME%` 3. Either copy the `energyStar.cer` file to the `JAVA_HOME/jre/lib/security` directory or reference the `cacerts` file in that directory when you run the following command: From `sudo` on Linux: `sudo keytool -import -keystore cacerts -file energyStar.cer`

Area of Impact	Description

	From IBM TRIRIGA Administrator Console on Windows:
	`keytool -import -keystore cacerts -file energyStar.cer`
	
	4. You can verify with the following command:
	`keytool -list -keystore cacerts`
	
	(Tri-113218)

ENERGY STAR	Follow these steps if you receive the following certificate error when you attempt to communicate with ENERGY STAR: `ERROR: sun.security.validator.ValidatorException: PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderException : unable to find valid certification path to requested target`
	
	1. Download the ENERGY STAR certificate from a web browser or from the ENERGY STAR site and name it `energyStar.cer`.
	
	2. Find the Java home directory
	
	on Linux: `run echo $JAVA_HOME$`
	
	on Windows: `run echo %JAVA_HOME%`
	
	3. Either copy the `energyStar.cer` file to the `JAVA_HOME/jre/lib/security` directory or reference the `cacerts` file in that directory when you run the following command:
	
	From `sudo` on Linux:
	`sudo keytool -import -keystore cacerts -file energyStar.cer`
	
	From IBM TRIRIGA Administrator Console on Windows:
	`keytool -import -keystore cacerts -file energyStar.cer`
	
	4. You can verify with the following command:
	`keytool -list -keystore cacerts`

Geography	In 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)
Installation	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`

Area of Impact	Description
	and `SetVarcharColsToNumeric_MSSS_Publish_BO.sql`. Run `SetVarcharColsToNumeric_MSSS.sql` first. When it completes, run `SetVarcharColsToNumeric_MSSS_Publish_BO.sql`.
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)
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 declined status, but the notification does not have an iCal attachment. (Tri-107380) ▪ 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)

Known Limitations

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

Area of Impact	Description
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)
GIS	▪ The GIS sections and portals in IBM TRIRIGA 10.3.2 use ArcGIS to connect to Esri. To use EsriJS instead of ArcGIS, you can run scripts that are in the application upgrade disk, in the GIS folder. If your GIS sections and portals use EsriJS, you can find them with scripts in the GIS folder of the application upgrade disk, and change them to use ArcGIS. The GIS folder has scripts for Oracle and Microsoft SQL Server databases. ▪ When you use EsriJS for GIS sections, the Find In Map functionality in shipping applications does not zoom in to the location found. ▪ On December 31, 2013, Esri removes the default geocode service that is used by the Geocode Address action in the Primary Address section of building records. To geocode new building records, consider taking one of the following options:

Area of Impact	Description
	o Preferred: Configure the TRIRIGA Integration Object to populate the GIS Longitude and GIS Latitude fields for all building records, as described in the Geocode Example in the *IBM TRIRIGA Application Platform 3 Connector User Guide*. When you follow this example, set the `outSR` property to `4326`, which uses the same spatial reference as was previously used by the Geocode Address action. The *IBM TRIRIGA Application Platform 3 Connector User Guide* is at the following link: http://pic.dhe.ibm.com/infocenter/tivihelp/v49r1/topic/com.ibm.tap.doc_3.3.2/pdfs/pdf_tap_connector.pdf. o Alternative: Specify a different geocode service in the Geocode Service field of the ArcGIS record in Tools > System Setup > GIS > Configuration. With this method, you can continue to use the Geocode Address action. For example, you can specify an Esri sample server such as the following server: http://sampleserver1.arcgisonline.com/ArcGIS/services/Locators/ESRI_Geocode_USA/GeocodeServer.
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-English 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 Label Manager to export the list values for translation, then import back into the system.
Lease Accounting	▪ 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) ▪ 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)
Real Estate Lease	In real estate lease payment schedules: ▪ When the total is not evenly divisible by the frequency, rounding causes the sum of the payment line items (PLI) to be greater than the total. For example, if the frequency is semi-annual and the annual amount is $1,000.47, two PLIs are created in the amount of $500.24. This value is rounded up from $500.235. When you add up the PLIs, the total is $1,000.48, which is one cent greater than the annual amount.

Area of Impact	Description
	▪ When the frequency is weekly or bi-weekly, the number of PLIs created is based on the number of weeks in the calendar for that year. For example, 2012 has 52 weeks and 2 days, which results in 53 PLIs, each with a weekly payment based on 52 weeks. When you add up the PLIs for that year, the amount is too large by one payment because of the 53rd PLI representing the extra two days. The same result occurs when the frequency is bi-weekly and there are more than 52 weeks in the calendar for that year, because the calculation is based on 26 payments. ▪ The values displayed in the Cost / Unit (Year) column and in the Cost per Unit field have two decimal places; however, the values stored in the database have six decimal places. The database value with six decimal places is used to calculate the value of the Period Amount field and the Annual Amount field. For example, the formula is Annual Amount = Cost / Unit (Year) * Contract Rentable. A manual calculation using the two-decimal precision displayed is $137.81 Cost / Unit (Year) * 20000 Contract Rentable = $2,756,200.00 Annual Amount. However, when the six-decimal precision stored in the database is used, the calculated Annual Amount displayed is $2,756,250.00. This is a difference of $50.00. ▪ The Charge Amount Basis values of per Area (Annually) and of per Area (Monthly) do not apply to an asset lease. Because the Generate Payment Schedule wizard is a standard form, it is possible for a user to select these values; however, the value of the Expected Cash Amount field on the generated Payment Schedule form will be zero.
Real Estate Lease and Asset Lease	▪ Tenant improvements payments (TI) for current accounting standards are calculated incorrectly. Currently, the TI amount is deducted from the liability; however, it should appear on a separate TI schedule. (Tri-115633) ▪ Under the proposed guidelines, the Residual Value Guarantee (RVG) must be included whenever asset and liability values are calculated. The asset and liability are reassessed when the lease term is extended, or when the amounts expected to be payable under the RVG change. Currently, the RVG is only added to the last period of the amended lease; however, it should also be applied to the period from which the amendment begins. (Tri-115635) ▪ Under the proposed guidelines (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) ▪ 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) ▪ When a review assumption form is submitted, it takes a few seconds for the lease record to go into read-only state to perform the calculations. If

Area of Impact	Description
	you click the Review Assumption action again and submit, you can cause the calculations to be incorrect. To avoid incorrect calculations, submit review assumptions only one time and wait for the record to go into the read-only state. (Tri-115010) ▪ When a lease is amended with an extension, the likely term end date is not mapped as the expiration date of the lease. As a result, the lease does not have an end date. To work around this issue, select the Review Assumption action before the lease is activated. (Tri-115638)
Reservation Survey Request	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)
Workplace Reservation Manager	▪ To add links from a building or a space to the reservation notification that is created from IBM TRIRIGA, attach a document that contains the links. (Tri-68968) ▪ 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 in preview mode. To see the text more clearly, you can open the appointment. (Tri-68953) ▪ 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)

IBM TRIRIGA 10.3.2 Changes

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
Accessibility	The following objects were updated or added to support accessibility. Business Object (4) My Profile (triPeople) triCapitalProject (triProject) triManageTaskHierarchy (triProcessForm) triPeople (triPeople)

Area of Change	Description
	Form (4)
	My Profile (triPeople)
	triCapitalProject (triProject)
	triEmployee (triPeople)
	triManageTaskHierarchy (triProcessForm)
	Query (24)
	triConditionAssessmentWorkTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triContractReviewTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triDependency – Display – Dependency Records Associated To Project (triIntermediate)
	triFollowUpTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triInspectionTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triInventoryCountWorkTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triInventoryPickWorkTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triKeyWorkTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triMaterialOrderTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triOfflineTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triPunchlistTask – triDraft – Editable - Project Associated to current Record by Has Task (triTask)
	triReserveAssetTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triReserveMeetingSpace – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triReserveVehicle – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triReserveWorkTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triScheduleTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triSubmittalTask – triDraft – Editable – Project Associated to current Record by Has Task (triTask)
	triTask – Display – Associated to Manage Task Hierarchy

Area of Change	Description
	(triTask)
	triTask - Display - Critical Path Tasks Associated to Current Project Record (triTask)
	triTask - Display - triProject Associated to current Record by Has Task (triTask)
	triTask - Find - Tasks Associated to Current Project (triTask)
	triTask - HGRID - Child Projects Tasks Hierarchy (triTask)
	triTask - HGRID - Projects Tasks Hierarchy (triTask)
	triWorkTask - triDraft - Editable - Project Associated to current Record by Has Task (triTask)
	Record Data (1)
	\triManageTaskHierarchy001 - US English (triSetup)
	Workflow (8)
	My Profile - Synchronous - Update triPeople (triPeople)
	triCapitalProject - Synchronous - Pre-Load - Set Accessibility (triProject)
	triManageTaskHierarchy - Synchronous - OnChange - Add Child Task Association (triProcessForm)
	triManageTaskHierarchy - Synchronous - Permanent Save Validation (triProcessForm)
	triManageTaskHierarchy - Synchronous - Remove Child Task Association (triProcessForm)
	triPeople - Synchronous - Create TRIRIGA User (triPeople)
	triProcessForm - Synchronous - PreCreate (triProcessForm)
	triProcessForm - WF WIZARD CANCEL (triProcessForm)
Application Settings	In the General tab, in the Environmental Settings section, added the Energy Rating Currency field. This field sets the default value for energy rating currency when energy logs are created. A patch helper workflow (triPatchHelper - Synchronous - ENERGY STAR - Fix Energy Log Energy Rating Data) can be run to set this value to US Dollars. In the Integration Settings tab, the Energy Star Settings section is no longer used with the current Portfolio Manager and is now hidden. (Tri-113566)
Application Settings	The Application Settings record is no longer included in release object migration packages. This change avoids overwriting customizations in the existing Application Settings record in the target environment. When there are changes to the Application Settings record in the future, the record will be updated through a patch helper workflow to be run on the target environment. (Tri-108262)

Area of Change	Description
Approvals	After a user reassigns an approval, the approval no longer remains in the user's queue. (Tri-101511)
Asset Lease	In the Asset Lease form, in the Accounting tab, there is now only one Fair Market Value field. (Tri-110283)
Assets	In the Security Equipment, Point of Sale Equipment, and Technology Asset forms, in the Details tab, the label "CPU Speed" was corrected. In all asset forms, in the Assessment tab, the label "D. Calculated End of Useful Life (A+(B*(C/100)))" was corrected. (Tri-97638)
Assets	In the Technology Assets form, error messages do not persist after closing the form. In the Technical tab, error messages now appear. (Tri-97640)
Assets	In the Technology Assets form, instructions for the Contacts, Details, and Technical tabs were corrected. (Tri-99020)
Building Equipment Asset	Resolved an issue where a validation intended for integration with ENERGY STAR prevented the record from being saved. This validation now occurs only when the fields for Base UOM Type and Energy Rating UOM Type are both populated. If either field is blank, the validation is bypassed. (Tri-105852)
Capital Projects	When Enable Accessibility Mode is selected in a user's profile, schedule assumptions in a capital project form are shown in a separate Schedule Assumptions tab instead of in the Schedule tab. (Tri-108466)
Classifications	The name "CAM Cost Type" is now "Common Area Maintenance". This fix is applied through execution of a patch helper workflow. The following new Payment Type classifications were created. Now the Payment Type classifications are in sync with the Cost Type classifications used in real estate projects. Architectural Fees — Other Professional Fees Broker Commissions — Other Project Costs Commissions — Property Taxes Customer Specific Relocation — Rental Income Expense — Repair and Maintenance Demolition — Reserved Design Fees — Satellite Dish Removal FF&E Liquidation — Service Charges FF&E Purchases — Signage Installation Free Rent — Signage Removal Leasehold Improvements — Site Cleanup LL Cash Payment — Site Demolition Moving Allowance — Technology Purchases – Capitalized Moving Expense — Technology Purchases – Expensed Office Space Construction — Wiring Installation Optional — Wiring Removal (Tri-92881) Other Exit Costs

Area of Change	Description
CTQ Item Templates	Corrected the UOM value for the "Amenities - Gym" Critical To Quality (CTQ) Template record. Additionally, the UOM value for the following CTQ Template records was corrected: Demographics - Population Site - Private Office Site - Parking Site - Rentable Area Site - Private Conference Rooms Site – Workstations The workflow that runs when the value of the Field Type field changes now clears related values on the Critical To Quality (CTQ) Template, which corrects the situation that introduced invalid data. (Tri-93386-IV43916)
Facilities Projects	In a request, the service plan that creates a facility project with automatic assignment to a service provider now correctly follows the service assignment matrix of organization and location to find the correct service provider for the facility project. (Tri-89442)
Inventory	In the Equipment Availability form, the Calendar Filters section is now placed below the Equipment Availability section to prevent the Inventory Manager list from blocking the calendar section. (Tri-104874)
Inventory	In the On Order Transaction and the Adjustment Transaction forms, the Transaction By field is now populated with assignee person upon creation of the transaction record. (Tri-106221)
Job Plans	In the `triPMSchedule – triCreateDraft – Populate ID` workflow, the Job Plan to PM Schedule association was corrected. (Tri-99756-IV46486)
Lease	If the Extend Rent Payments for Likely Term flag is set, the extended period rents are now based on the frequency of the payments. (Tri-109704)
Locations	In the Location Property form, in the Area Measurements tab, the Rentable Area (Imperial and Metric) and Usable Area (Imperial and Metric) fields now contain correct values that are based on their unit of measure. Previously the values for Imperial and Metric were identical. (Tri-105471-IV48011)
Notifications	Email notifications with record information can now be sent to multiple recipients. (Tri-98212-IV45548)
Notifications	Resolved an issue that caused the date and time values in email notifications to be displayed in millisecond format. (Tri-102421-IV47177)
Offline	The description of the environmental offline forms has changed. (Tri-107590)
Payment Schedules	In the RE Lease, Asset Lease, and Owned Property Agreement forms, in payment schedules, when Advanced Schedule is selected: (1) The correct monthly recurrence is selected. (2)The correct due dates are generated on the payment line items. (Tri-113568-IV51757)
Payment Schedules	Resolved an issue that caused the Due Date field to be blank for a partial last payment that was generated with the Advanced Schedule Option. (Tri-111200)

Area of Change	Description
PM Schedules	PM Event records now validate the start date and the selected month to be skipped. If the Start Date Month is the same as the selected month to be skipped, an attention message displays. (Tri-76980-IV44231)
Portals	In the Home - Lease Accounting Manager portal, in the Reminders - Lease Accounting Manager section, the navigation item is now "Lease Assumptions Change Requests Pending Approval". Also, the Bulk Approval actions, Approve, Reassign, Request Clarification, Return, and Escalate, were added to this query. (Tri-72401)
Portfolio	In the Floor form, in the Maintenance tab, a Procedure Step record can no longer be created with the query section Add action on the Safety Plans (Procedures) tab. For 10.3.2 application upgrades, you must manually change the query `triSafetyPlan - Display - Associated Procedures` to select Business Object `Procedure` and Form `All` in the Business Object tab. For 10.3.2 clean installs, you do not need to change the as-delivered query. (Tri-110933-IV51162)
Portfolio	The ability to create spaces directly under Space Group in the location hierarchy is removed. Space and space group records should be at the same level in the location hierarchy. You add existing spaces to a space group by adding them using the Find action in the Spaces query section in the Space Group form. (Tri-101542)
Portfolio Manager	Removed an incorrect association in the `triCounty` business object. The incorrect association was `Geography - Is Parent Of - triCounty`. For existing implementations, you must manually delete this association with the Data Modeler. (Tri-110977-IV51342)
Procedures	In the Inspection Procedure, Lock-Out / Tag-Out Procedure, Safety Hazards Procedure, Safety Precautions Procedure, and Work Procedure forms, in the Procedure Steps section, the Remove action is now a Delete action. This action deletes the Procedure Step records instead of just de-associating them from the Procedure record. (Tri-102557-IV46997)
Programs	Allocations are now correctly calculated when adding funds from a parent program to a subprogram. (Tri-111840-IV51408)
RE Transaction Management	The values entered for the Business Unit Discount Rate and the Corporate Tax Rate fields in the General tab of the RE Transaction Plan are mapped to the Accounting Information section of the Financial Terms tab of the RE Project Acquisition record that is created from the Planning tab of the RE Transaction Plan. The same change was made to the RE Project Disposition, RE Project Expiration, RE Project Lease, RE Project Sublease, and RE Project Termination forms. NOTE: The values entered for Business Unit Discount Rate and Corporate Tax Rate in the RE Transaction Plan are only copied upon the original creation of the record. No updates are processed if the Business Unit Discount Rate and

Area of Change	Description
	Corporate Tax Rate values are updated in the RE Transaction Plan after initial record creation. (Tri-97570-IV45116)
Real Estate	In Index Adjustment Calculator records and in Fair Market Rate Value Calculator records, if the Maximum % value is set to zero, the system considers this as an infinite maximum percentage and uses the % Change value compared to the Minimum % value to determine the % Used value for the adjustment. (Tri-110810)
Real Estate	In the Payment Instruction form, removed the Copy action. (Tri-102875)
Real Estate Abstract	In the Lease Abstract form, in the Payment Schedule Notes & Documents tab, the Related Documents now map to the Real Estate Lease. (Tri-94494)
Real Estate Abstract	In the Lease Abstract form, the Payment Schedule Copy action now displays the copy record in the following sections: Percent Rent Schedules, Commission Schedules, CAM Schedules, Insurance Schedules, and Tax Schedules. (Tri-102244)
Real Estate Abstract	In the Lease Abstract form, when the user selects the Complete action, the value of the Rolling Option check box and the value of the Effective to Date on the Option Renewal record are now mapped from the Lease Abstract to the Real Estate Lease. (Tri-94491)
Real Estate Abstract	On the Lease Abstract form, the Copy action in the embedded option of a lease clause now appends the copy record to the parent lease clause. The copied option record shows in the Other Options section of the Options tab and in the Options section of the lease clause. The lease clause must be saved first with the option before you use the Copy action. (Tri-102135)
Real Estate Abstract	Payment Schedule and Payment Schedule embedded Simple Event, Tax Rate, and Payment Instruction forms associated to the Option are now read only when the Lease Abstract is read only. (Tri-94501)
Real Estate Abstract	Purchase Details on the Purchase Option record are now mapped from Lease Abstract to Real Estate Lease. (Tri-95054)
Real Estate Abstract	Related documents are visible on the following payment schedules after the lease abstract template has been applied on the lease abstract. Rent Schedules / Insurance Schedules Percentage Rent Schedules / Tax Schedules Commission Schedules / Other Payment Schedules CAM Schedules / (Tri-94655)
Real Estate Abstract	Start Date, End Date, Recurrence Pattern, and informational text fields that are related to the Advanced Schedule option on the following payment schedules are now visible after the template is applied on a lease abstract. Rent Schedules / Insurance Schedules Percentage Rent Schedules / Tax Schedules Commission Schedules / Other Payment Schedules CAM Schedules / (Tri-94653)

Area of Change	Description
Real Estate Abstract	Termination details in a Termination Option record are now mapped from the lease abstract to the real estate lease. (Tri-95053)
Real Estate Abstract	The "Copy of" record that is created as a result of the lease abstract Copy action no longer includes Lease Clause forms that show Terminate, Apply Template and Copy actions. (Tri-103172)
Real Estate Abstract	The Has Payment Schedule association between lease abstract and payment schedule has been removed. (Tri-71612)
Real Estate Abstract	When a lease is created from a completed lease abstract, the amortization process is no longer triggered automatically. (Tri-101126)
Real Estate Environmental Sustainability	Resolved an issue in the Carbon Processing Log in which the Missing Travel Emission Factor check box was incorrectly selected when the waste emission factor was missing. (Tri-103234-IV47367)
Real Estate Environmental Sustainability	The following changes only impact new installations: (1) Added conversion factors for eleven UOM Values related to energy. Also removed two UOM Values: gigajoules-per-kilogram and terajoules-per-gram. (2) Added Default Base UOM values for three Environmental Meter Type classifications: Coal (kilograms), Petroleum (us-gallon of automotive gasoline), and Renewable Energy (kilowatt-hours). (Tri-70708)
Real Estate Lease	Comment record now appears in the query section for Payment Instruction record associated to the payment schedule. (Tri-94656)
Real Estate Lease	For asset leases and real estate leases, only payment schedules after the termination effective date are voided. Payment line items before the termination effective date are not voided. (Tri-107412)
Real Estate Lease	Improved performance of the generation and recalculation of an amortization schedule. (Tri-87897-IV43796)
Real Estate Lease	Improved performance of the generation of payment line items on leases. (Tri-91797-IV44691)
Real Estate Lease	In an active RE Contract Lease form, you can now select the RE Contract Notification to add a transaction. (Tri-96626)
Real Estate Lease	In an Assumption Audit Log form, the Index Growth % field is now read-only. The Index Growth % field shows the minimum floor percent when there are multiple rent clauses with Index Adjustment % specified. (Tri-101107)
Real Estate Lease	In the Asset Lease form and in the RE Lease form, in the Payments tab, the `triRentStraightLineNU` field shows only when the lease is an Operating lease. The field is mapped with the straight-line value of the current term. In the Index Adjustment Calculator, the field is mapped with the straight-line value over the longer term, not the period in which the Index Adjustment Calculator is applied. (Tri-84643)

Area of Change	Description
Real Estate Lease	In the Bulk Create Review Assumptions Request form, a message now warns the user if the user clicked the Create Review Assumption action and did not enter a non-zero value in either the Incremental Borrowing Rate or the Rent Component Assumptions fields. (Tri-107904)
Real Estate Lease	In the Bulk Create Review Assumptions Request form, when using the Financial Percentage Assumptions and Likely Term Option option, the option that was previously selected is now cleared when a new lease record selected. (Tri-108190)
Real Estate Lease	In the Bulk Create Review Assumptions Request form: 1) The Display Leases section now shows leases that are in statuses in addition to Active. 2) In the Leases section, the Find action only displays leases in Active status. 3) Added instructional text to advise the user to select only Active leases to create review assumptions. 4) Now the Assumption Audit Log is only created for the selected Active leases. (Tri-107905)
Real Estate Lease	In the Lease Abstract and RE Project Lease forms, the Option record and the Payment Schedule record that are associated to the Option record are now different records. (Tri-93057)
Real Estate Lease	In the Lease Abstract form, CAM Schedules are set to Pending status when mapped from the RE Project Lease. (Tri-92897)
Real Estate Lease	In the Lease Abstract form, in the Other Payment Schedules tab, the Include In Amortization Schedule flag is selected by default for a new Payment Schedule. (Tri-94503)
Real Estate Lease	In the Lease Abstract form, in the Payment Schedule tab, Related Documents that are associated to the Option record are now mapped from the RE Project Lease form. (Tri-94292)
Real Estate Lease	In the Lease Abstract, Lease Abstract Template, and Real Estate Lease forms, in the Guarantor section, the label "Place of Registration" is now "Place Of Registration". The label is now consistent with the same label used in the Tenant, Landlord, Management Company sections. (Tri-86855)
Real Estate Lease	In the Lease Clause and Lease Clause Template forms, the Assignment/Subletting section is now between the Clause Text section and the Payment Schedule section. (Tri-103774)
Real Estate Lease	In the Lease Clause and Lease Clause Template forms, the Holdover section is now between the Clause Text section and the Payment Schedule section. (Tri-103775)
Real Estate Lease	In the Lease Clause and Lease Clause Template forms, the Restoration Obligations section is now between the Clause Text section and the Payment Schedule section. (Tri-103776)

Area of Change	Description
Real Estate Lease	In the Lease Clause form, Fair Market Rate Value Calculator records and Action Items are now generated based on the Adjustment Reminder that is defined in the Fair Market Rate Value section. (Tri-110309)
Real Estate Lease	In the Lease Clause form, Index Adjustment Calculator records and Action Items are now generated based on the Adjustment Reminder that is defined in the Index Adjustments section. (Tri-110309)
Real Estate Lease	In the Payment Line Item form, the Include In Amortization Schedule field is now read-only. The field is set on the Payment Schedule and mapped to the Payment Line Item record generated when the Real Estate Lease or Asset Lease is activated. (Tri-104827)
Real Estate Lease	In the Real Estate Lease form, in the Accounting tab, a Lease Fiscal Line Item record is in the language of the parent lease record. (Tri-106516)
Real Estate Lease	In the Real Estate Lease form, the Copy action no longer copies the FASB 13 Treatment section information from the original Real Estate Lease record to the created copy record. Field values are set to the default values in the copy record. (Tri-100531)
Real Estate Lease	In the Real Estate Lease form, the payment schedule that is associated to the option is now read only when the real estate lease is read only. The Payment Instruction, Simple Event, and Tax Rate dependent records of the payment schedule are also read only. (Tri-94502)
Real Estate Lease	In the Real Estate Lease, Asset Lease, and RE Project Lease forms, in the Accounting tab, the Lease Treatment field now defaults to blank when a real estate lease, asset lease, or re project lease is created. The label "PV of Rent" is now "NPV of Rent". (Tri-87996)
Real Estate Lease	Lease accounting calculations are now triggered when the lease has a manual approver. (Tri-103888)
Real Estate Lease	Purchase Details in a Purchase Option record are now mapped from the RE Project Lease to the Lease Abstract. (Tri-94997)
Real Estate Lease	Real Estate Index Adjustment Calculator Actual Adjustment Amount value now matches the Adjustment Amount value on the payment line item when a different currency is used that has currency conversion set up. (Tri-102487-IV50286)
Real Estate Lease	Real Estate Lease payment schedules that are created with the Add action on the Lease Abstract form are now generating the correct number of payment line items. (Tri-107223)
Real Estate Lease	Resolved an issue that caused payments that were generated for a real estate lease to incorrectly display in the Asset Lease section in the payment line items. (Tri-112486-IV51527)
Real Estate Lease	Resolved an issue that caused the history record of an amended real estate lease to not link correctly to attached documents. The history record now

Area of Change	Description
	contains a link to the original document. (Tri-107652-IV49883)
Real Estate Lease	Rolling Option, Effective to Date, and Notify Roles in an option record are now mapped from the RE project lease to the lease abstract. In the Lease Abstract form, in the option record that is created in the lease abstract, the ID field displays the record ID instead of the ID for the option on the RE project lease. (Tri-94291)
Real Estate Lease	The Annual Amount and Expected Cash Amount on the payment schedule of a lease abstract are now correctly populated from the cash flow line item of the RE project lease. (Tri-93089)
Real Estate Lease	▪ The date gap between payment schedules is now validated if you use the Generate Payment Schedule wizard. The date gap is also validated when you activate an RE Lease. In the Generate Payment Schedule form, if the validation fails, an attention message is displayed to the user and the Bypass Date Gap Validation check box becomes available in the Payment Parameters section. In the RE Lease form, if the validation fails, an attention message is displayed to the user and the Bypass Date Gap Validation check box becomes available in the Accounting Summary section of the Payments tab. When a lease is revised or amended, the validation is only done on payment schedules that were added. Payment schedules already in the RE Lease are ignored. ▪ In the RE Lease form, a payment schedule now can be created only with the Generate Payment Schedule action on the Payments tab. The manual Add action was removed. (Tri-76958-IV50811)
Real Estate Lease	The Expire action on the Real Estate Lease form now maps the Contract Status from the real estate lease to the Contract Expiration form. Any value updated on the Contract Expiration form is mapped back to the real estate lease. (Tri-96299)
Real Estate Lease	The payment instruction attention message now also appears on the payment schedule Notes & Documents and System tabs. (Tri-93994)
Real Estate Lease	The Terminate action on the Real Estate Lease form now maps the Contract Status from the real estate lease to the Contract Terminate form. Any value updated on the Contract Terminate form is mapped back to the real estate lease. (Tri-96303)
Real Estate Lease	When you copy a real estate lease, the fields in the FASB section are no longer copied to the new lease. When you revise or amend a real estate lease, the fiscal line items and other lease accounting information are copied to the history record. (Tri-85255)
Real Estate Lease and Asset Lease	A Real Estate Lease form or an Asset Lease form is now read-only (in Processing status) when the Index Adjustment Calculator is issued and processing. After processing completes, the record's status returns to the

Area of Change	Description
	status before the adjustment. (Tri-110295)
Real Estate Lease and Asset Lease	Fiscal Line Item (FLI) values in the Schedule Straight Line section now calculate correctly when the same ID of a real estate lease or asset lease is used in multiple records. (Tri-104740)
Real Estate Lease and Asset Lease	Real estate lease and asset lease records with leap year dates entered are used to calculate and set the Short Term Lease check box to Yes on the Accounting tab. Review Assumptions actions trigger the calculation. The Activate action triggers the calculation if a payment schedule and accounting standard are defined on the lease. (Tri-107695)
Real Estate Transaction Management	In the RE Project Lease form, in the Cash Flow Line Item, the Index Adjustments section was removed. The Details section is now read only. You update the Includes Index Adjustment? check box from the Rent Expense query section. (Tri-73672)
Real Estate Transaction Management	In the RE Project Lease form, in the Financial Terms tab, in the Deal Terms section, the value of the Total Building Rentable field is now mapped to the Total Area for Proportionate Share field in the Location Summary section in the General tab in the Lease Abstract form. (Tri-103099-IV47358)
Real Estate Transactions	A payment schedule has the Include In Amortization Schedule check box selected (TRUE) when it is created from the cash flow line item on the RE project lease through the RE Project Lease Close Out to Lease Abstract process. (Tri-103811-IV47362)
Real Estate Transactions	Contract status is set to Pending on a lease abstract when it is created from an RE project lease. (Tri-93044)
Real Estate Transactions	In all RE Project forms, the formula for total commitments now uses the value in the Term Total field from each cash flow line item in the Financial Term tab. The value for Total Commitments is now calculated correctly. (Tri-101714)
Real Estate Transactions	In Document Setup, the document requirement for RE Project Lease Letter Agreement is now Available But Not Required. Also, the RE Project Sublease form is now the linked form on the RE Current Terms Document Setup record.
	Customers with previous versions of IBM TRIRIGA: The RE Current Terms record is no longer supported. You can delete this record if you are not using it. (Tri-104373)
Real Estate Transactions	In RE Project forms, in the Cash Flow Line Item form, the Accounting Type field was removed. (Tri-98038)
Real Estate Transactions	In real estate lease, asset lease, and owned property (fee) agreement forms, in the Payment Schedule section, the Void action sets unpaid future payment line items to Void status. (Tri-112369)
Real Estate	In the Application Settings form, in the Real Estate Management Settings tab,

Area of Change	Description
Transactions	when the Include Evaluation / Scoring in CTQs? field is set to `Yes`, the CTQs mapped from the Translation Plan are mapped to the CTQ Assessment section and to the Executive Summary tab of the RE Project Lease. (Tri-96611-IV45558)
Real Estate Transactions	In the Lease Abstract form created from an RE Project Lease form, resolved issues that prevented Attention messages from displaying in CAM Payment Schedules. (Tri-92882)
Real Estate Transactions	In the Lease, Acquisition, Sub Lease, Termination, Disposition, Expiration, and Current Terms forms, you can now update the Net Rooftop value. Now when a Transaction scenario is created, the Net Rooftop value is updated from the form type. When you add different transaction types, the Net Rooftop value is calculated appropriately. (Tri-96625)
Real Estate Transactions	In the Owned Property (Fee) Agreement form, in the Summary tab, the Financial Summary totals calculate correctly. You must run the following workflow to update or fix the expiration date on your existing Owned Property (Fee) Agreement records to achieve the correct result from the Financial Summary totals: `triPatchHelper - triCalculate - 10.3.2 - Retro Owned Property Agreement`. (Tri-111829)
Real Estate Transactions	In the Projects > Real Estate landing page, in the Reminders – Real Estate portal section, in the Active RE Projects list, the Proposed Space Commitment column is now populated from the Usable Area field in the Financial Terms tab in the RE Acquisition form. (Tri-101726)
Real Estate Transactions	In the RE Project Acquisition form, in the Financial Terms tab, added the Operating Expense tab. (Tri-101334-IV46996)
Real Estate Transactions	In the RE Project Acquisition form, in the Financial Terms tab, the Dilapidation / Restoration tab and the Dilapidation / Restoration Costs section are now hidden. (Tri-101724)
Real Estate Transactions	In the RE Project Current Terms form, in the Executive Summary tab, the CTQs tab and CTQs section are no longer visible. (Tri-101312)
Real Estate Transactions	In the RE Project Current Terms, RE Project Expiration, RE Project Sublease, and RE Project Termination forms, in the Site Information tab, the Proposed Site section is hidden. In the RE Project Disposition form, in the Offer Information tab, the Proposed Site section is hidden. (Tri-95519-IV45112)
Real Estate Transactions	In the RE Project Disposition form, in the Offer Information tab, the Buyer section is no longer populated with the Owner section data from the Owned Property (Fee) Agreement record selected in the Existing Contract section. (Tri-103277-IV47360)
Real Estate Transactions	In the RE Project form, in the Executive Summary tab, in the Comments section, when you create a Comment record and then reopen the form, the Comment Type field is editable. (Tri-97992-IV45810)
Real Estate	In the RE Project form, in the Security Deposits, Leasehold Improvements,

Area of Change	Description
Transactions	Allowances, Commission Schedules, Moving Costs, and Restoration / Dilapidation tabs, in the Cash Flow Line Item record, the value of the End Date is set to End of the Month from Start Date. And the End Date is blank when the Start Date is blank. The change does not apply to the Rent Expense, Operating Expenses, and Parking Expenses tabs. (Tri-106387)
Real Estate Transactions	In the RE Project forms, in the Executive Summary tab, in the associated RE Cash Flow form, the Year One Total, Year Two Total, Year Three Total, and Term Total dollar amount fields are now right-aligned. (Tri-102215)
Real Estate Transactions	In the RE Project forms, in the Financial Terms tab, in the Detail section, the Cost Items are now read only when you drill into them. You can edit the values with the editable queries in the subtabs. (Tri-97791)
Real Estate Transactions	In the RE Project Lease form, after the user adds a quarterly cash flow line item with the Generate Payment Schedules action, the cash flow line item does not recalculate until the user saves the RE Project Lease. (Tri-80652)
Real Estate Transactions	In the RE Project Lease form, Document Type is now mapped from the Notes & Documents Required Documents section to the Lease Abstract Related Documents section. (Tri-92921)
Real Estate Transactions	In the RE Project Lease form, in the Financial Terms tab, in the Premise Locations section, the Included In Rent check box now defaults to selected. (Tri-94267)
Real Estate Transactions	In the RE Project Lease form, in the Financial Terms tab, in the Operating Expenses and Parking Expenses subtabs, the Monthly Amount and Annual Amount fields are now read only. (Tri-93382)
Real Estate Transactions	In the RE Project Lease form, in the Financial Terms tab, the Contract Rentable field on the payment schedule that is created in the Option record now populates from the Proposed Rentable Area field value. (Tri-94285)
Real Estate Transactions	In the RE Project Lease form, in the Financial Terms tab, the Leasehold Improvements, Commission Schedules, Moving Costs, and Restoration / Dilapidation tabs are now considered as one time payments. On the RE project lease Close Out action, the cash flow line item records in these tabs are created as One Time Payment type payment schedules on the Other Payment Schedules tab in the Lease Abstract. (Tri-94145)
Real Estate Transactions	In the RE Project Lease form, in the Financial Terms tab, the value of the Premise Locations Effective From field now defaults to the Commencement Date (Tri-92899)
Real Estate Transactions	In the RE Project Lease form, in the General tab, the Description field is now mapped to the Description field in the Lease Abstract form. (Tri-92896)
Real Estate Transactions	In the RE Project Lease form, in the Option record, the Copy action makes a copy of the Option record and displays it in the Options query section. (Tri-94287)
Real Estate	In the RE Project Lease form, in the Option record, the Payment Schedule

Area of Change	Description
Transactions	Copy action now copies the Payment Schedule record and associates the copy to the Option record. (Tri-94288)
Real Estate Transactions	In the RE Project Lease form, in the RE Project Financial Terms tab, the Rent Commencement Date and Occupancy Date are now mapped to the corresponding fields in the Lease Abstract form, in the General tab. (Tri-92893)
Real Estate Transactions	In the RE Project Lease form, in the RE Project Lease Site Information tab, in the Landlord section, the field Legal Name is now mapped into the Lease Abstract form, in the General tab, in the Landlord section, and is not mapped into the Lease Abstract form, in the General tab, in the General section. (Tri-92890)
Real Estate Transactions	In the RE Project Lease form, Subject and Recurrence values are now populated on the Simple Event record for the Advanced Schedule Payment Schedule. (Tri-93920)
Real Estate Transactions	In the RE Project Lease form, the Copy action on the Payment Schedule that is associated to the Option record now copies the Charge Amount Basis. (Tri-94886)
Real Estate Transactions	In the RE Project Lease form, the Description field is now mapped from the Cash Flow Line Item for Operating Expenses to the payment schedule on the CAM Schedules of the lease abstract. (Tri-92864)
Real Estate Transactions	In the RE Project Lease form, the End Date value from the cash flow line item is not populated for payment schedules with Frequency set to Other on the Other Payment Schedules tab of the lease abstract. The following are considered as One Time Payment type payment schedules: Leasehold Improvements, Allowances, Commission Schedules, Moving Costs, and Restoration / Dilapidation. (Tri-106358)
Real Estate Transactions	In the RE Project Lease form, the Rent Component Assumptions section is no longer missing and the FAS Treatment section displays as expected after opening and closing or canceling the form. (Tri-92901)
Real Estate Transactions	In the RE Project Lease form, the value of the Proposed Rentable Area field is now calculated based on the values in the Premise Locations Rentable (lease) field for rows that have the "Included In Rent" check box selected. (Tri-92892)
Real Estate Transactions	In the RE Project Lease, RE Project Sublease, and RE Project Current Terms forms, in the Financial Terms tab, in the Deal Terms section, the Accounting Type field was removed. (Tri-102696)
Real Estate Transactions	In the RE Project Lease, RE Project Sublease, RE Project Current Terms, and RE Project base forms, in the Financial Terms tab, in the Real Estate Cost Summary section, the label "Annual Leasehold Improvements" is now "Total Leasehold Improvements". The calculated value for the field is not a per-annual calculation. (Tri-95642-IV45118)
Real Estate	In the RE Project Sublease form, the Assignment check box is no longer

Area of Change	Description
Transactions	visible when Transaction Type = Sublease is selected. (Tri-101360-IV46759)
Real Estate Transactions	In the RE Project Termination form, in the Financial Terms tab, the Commission Schedule tab was added. On the One-time Cost tab, Asset Liquidation, Professional Fees, and Re-Stacking (Existing/Current Space) cost types were added to the tab. (Tri-96622)
Real Estate Transactions	In the RE Projects forms, in the Financial Terms tab, in the cost items, the term is now set to one month when the start date is the same as the end date, and the end date is set to the end of the month when the start date is after the end date. (Tri-96628)
Real Estate Transactions	In the Terminate form, the Units section displays by default. Before, the Units section only displayed when Charge Termination Policy was selected. (Tri-107970)
Real Estate Transactions	In the Transaction Plan form, in the Planning tab, a scenario is created when you use the Find action to find an RE Project. (Tri-96623)
Real Estate Transactions	In the Transaction Plan form, in the Planning tab, when you use the Find action to find and select an RE project, the CTQs are copied from the transaction Plan, and, on the Find, this process creates a scenario. (Tri-101719).
Real Estate Transactions	In the Transaction Plan form, the Add Transaction Project action no longer creates a Current Term record. You must manually remove the Current Terms List value from the List Manager `triTransactionProjectType`. (Tri-101747)
Real Estate Transactions	On Close Out action for the RE project lease, the Allowance Cash Flow Line Item is mapped as a One Time Payment type payment schedule in the lease abstract. (Tri-95150)
Real Estate Transactions	On complete of a new RE Project Lease, (1) the RE Project Payment Schedule is now in the Lease Abstract in the new Other Payment Schedules tab, (2) the RE Project Options are now in the Lease Abstract, and (3) the RE Project Documents are now in the Lease Abstract. (Tri-82107-IV42241)
Real Estate Transactions	RE Project Current Terms is no longer available as an option to add in Projects > Real Estate > Related Links > RE Project links. (Tri-101316)
Real Estate Transactions	RE Project Sublease Related Report named Sublease Projects - History now only shows records in History status. (Tri-103456)
Real Estate Transactions	RE Transaction Scenario now finds RE Project records in History status. (Tri-94765-IV45039)
Real Estate Transactions	The Abstracted By field in the lease abstract that is created by the RE project lease Close Out action is now populated with the abstract contact entered on the Transaction Closeout form from the originating RE project lease. (Tri-103083-IV47357)
Real Estate	The Allowances, Commission Schedules, Moving Costs, and

Area of Change	Description
Transactions	Restoration/Dilapidation Cash Flow Line Item records from the RE Project Lease Close Out action are created as One Time Payment "Other" payment schedules on the lease abstract. The End Date on a One Time Payment payment schedule record is hidden and the value is not mapped from the Cash Flow Line Item. (Tri-92898)
Real Estate Transactions	The payment schedule that is associated to the option is now read only when the parent RE project lease is read only. (Tri-94290)
Real Estate Transactions	When a lease abstract is created from an RE project lease, the RE Contract Locations record in the lease abstract is no longer the same as in the RE project lease. (Tri-93066)
Real Estate Transactions	When an RE project lease is closed, in the Financial Terms tab, the termination details from the termination option record is now mapped to the lease abstract. (Tri-94990)
Real Property Information Model	In the Land, Building, Structure, and Space forms, in the RPIM tab, labels that contained "CAT Code" now contain "CATCODE Code". (Tri-100007)
Real Property Information Model	In the query `triCategoryCode - Find - All Category Codes`, the label "CAT Code" is now "CATCODE Code". (Tri-101237)
Reporting	Added two new reports, the Daily Reservations Report and the Weekly Reservations Report. (Tri-102241, Tri-102695)
Reporting	In the Asset Leases Expiring Within 6 Months report and the Leases Expiring Within 6 Months report, corrected a typographical error in the title. Also, the Leases Expiring within a Year system report was deleted. (Tri-104741)
Reporting	The Maintenance Priority system report now displays the correct Respond Within Duration and Due Within Duration times for High, Medium, Low priorities. Also fixed column labels, column order, and misspelled report title. (Tri-88991-IV42186)
Requests	In the Bulk Create Review Assumptions Request and Lease Assumption Change Request forms, the section label "Borrow Rate & % Growth Assumptions" is now "Borrow Rate". (Tri-108657)
Requests	In the RE Action Request form, in the Desired Geographic Location section, the County field and the Metropolitan Area field now populate for a new City record that has County and Metropolitan Area associated. (Tri-92595-IV43802)
Requests	In the Real Estate Action Request form, the Required For Organization section now reflects the primary organization of the selected requested for person. (Tri-92507-IV43803)
Requests	Review Type is now mapped from the selected lease assumption change request to the bulk create review assumptions request. (Tri-107936)
Requests	The approval return notification message content now shows the date and time the approval is returned by the reviewer and not the date and time the

Area of Change	Description
	approval was originally sent out for review. (Tri-95971-IV44786)
Strategic Facility Planning	The messages in the following workflows now use a user message record. This change aids the translation of the messages to other languages. The new user message records are included in the Application Setup patch helper workflow.

- `triSPAddSupply - Synchronous - User Message - Invalid Supply Breakdown` (Tri-101801)
- `triSPAddSupply - Synchronous - User Message - New Supply Data Added` (Tri-101802)
- `triSPSupplySummaryAction - Synchronous - User Message - No Item Selected on Scenario` (Tri-101803)
- `triSPSupplySummaryAction - Synchronous - User Message - No Action Available` (Tri-101800)
- `triSPSupplySummaryAction - Synchronous - User Message - Invalid Supply Type` (Tri-102411)
- `triSPAddSupply - Synchronous - User Message - Same Name Exists` (Tri-102411)

| System Reports | Changed the indicated query filters in the following queries. |

- `triSpaceDemandDriverItem - Display - Demand Drivers Associated:` Added filter to Type and Space Standard.
- `triBuilding - Find - Building for Visual Query:` Changed Form to Type.
- `Location - Display - Planning Building Locations (All):` Added filter to ID.
- `Location - Display - Planning Building Locations (Filters):` Added filter to ID.

Changed the `triFormLabelTX` field to the `triFormLabelSY` field in the following queries for correct translation.

- `triBuilding - Find`
- `Location - Find - triBuilding, triProperty, triRetailLocation, triStructure`
- `triProperty - Find`
- `triBuilding - Find - with sub reports`
- `Location - Find - Buildings and Retail Location with Sub-reports`
- `triBuilding - Find - triGraphicFind`
- `triBuilding - Find - Building, Structure and Retail Location`
- `Location - Find - Buildings, Structure and Retail`

Area of Change	Description
	Location
	▪ triLocation – Find – Parent Location for Add Location
	▪ Location – Display – Planning Building Locations (All)
	▪ triSpacePlanningDataItem – Display – triSpaceScenario – CHANGES – Associated as Has
	▪ Locations – Display – Move Planner Responsible Locations
	▪ triSpacePlanningDataItem – HGRID – Supply/Demand – Associated as Has
	▪ triPlanningMoveItem – Display – triCreateSFPMoveLineItem – Associated as Has Planning Item
	▪ Location – Display – Planning Building Locations (Filters)
	▪ Locations – Move Planning – Move Planners Responsible Locations
	▪ triBuilding – Find – Location Cost Index
	▪ triProperty – Find – Location Cost Index
	▪ triProposedSite – Find – Location Cost Index
	▪ Locations – Display – Move Designer – Buildings, Structures, and Retail Locations Assigned to Current User
	▪ triBuilding – Find – Move Locations (employee and consultant)
	▪ triBuilding – Locator Query
	▪ triChecklist – Navigation – All In-Progress Checklist
	▪ triBuilding – Find – Managed Services for Building, Structure and Retail Location
	▪ triWorkSupplySummaryItem – HGRID – Stack Containers – Associated as Has
	▪ triWorkSupplySummaryItem – HGRID – Stack Trays – Associated as Stack Tray
	▪ triBuilding – Find – Building for Visual Query
	▪ triBuilding – Find – Update Space – Active
	▪ triBuilding – Find – Buildings for Contact Center
	▪ triBuilding – Display – Building, Structure and Retail Location Associated to Property
	▪ triProperty – Find – Associated triReservationSurveyRequest
	(Tri-101799)

Area of Change	Description
System Setup	In the Incoming Mail Config form, added `imaps` to the values in the Mail Server Type list. (Tri-94854-IV44214)
Task Manager	Removed the Service Manager group overrides from the My Team Tasks and the My Tasks navigation items. You must be a manager of the organization associated to the task in order to see it in the list. (Tri-90828-IV44212)
Templates	In Real Estate Lease Template and Lease Abstract Template forms, the FASB 13 Treatment section is no longer displayed. (Tri-81427)
Time Entry	In the Time Entry form, the Time Entry Detail section is now populated the same way regardless of how the user arrived at the form. If the associated resource has only one labor rate, that rate is used to populate the section. (Tri-96732-IV45110)
Unit of Measure	You must remove an incorrect Unit of Measure record in your environment. The record is for UOM ABBREVIATION = CAD, and the record has blank values in the UOM Type and UOM fields. To remove this record from your server, complete the following steps: 1. Use a SQL tool to run this SQL script to unprotect the record. Open the record to find the spec id of the record in the URL before you run the SQL. `update ibs_spec set system_flag = 0  where spec_id = <Spec id of the record to unprotect>` 2. Delete this record. (Tri-73671)
Workplace Reservation Manager	A meeting booked in Outlook now has the correct time zone associated to the TRIRIGA event. (Tri-110729)
Workplace Reservation Manager	A rejected or declined reservation for a requestable room can be moved to a new time and rebooked. (Tri-102500)
Workplace Reservation Manager	A room removed from Exchange is no longer available in OWA/Outlook. (Tri-108304)
Workplace Reservation Manager	Canceling an occurrence for the same day that a draft record exists now sets the draft record to cancelled status. The next reservation instance in the series remains in draft status. (Tri-101793)
Workplace Reservation Manager	Cancelled reservations no longer show on Reservation (Calendar View). (Tri-102642)
Workplace Reservation Manager	If a recurring reservation overlaps another reservation, the confirmation of the room's availability is now correct. (Tri-100500-IV46415)
Workplace Reservation Manager	In a calendar, the date in Day View now shows the correct date regardless of the time zone of the server and of the user. (Tri-110288)
Workplace	In Reservation (Calendar View), the results are filtered based on all the

Area of Change	Description
Reservation Manager	filters that you enter, even when some filters are skipped. (Tri-68975)
Workplace Reservation Manager	In the Manage Reservation landing page and in the Reservation Coordinator portal, the food order queries now return the food order for one location and not an itemized list. Use the Manage Reservation Food Order queries to see all food orders. The Reservation Coordinator portal queries show the food orders for the logged in reservation coordinator. (Tri-110944)
Workplace Reservation Manager	In the My Calendar form, the word "DECLINED" now displays before the name of the reservation when any room for that reservation was declined. (Tri-100713)
Workplace Reservation Manager	In the Room Reservation form and the Concierge form, in the Cost Summary section, the UOM is now displayed for all the fields. (Tri-69002)
Workplace Reservation Manager	My Calendar shows declined reservations in red. You can change the color in the Reservation Settings tab of the Application Settings record. (Tri-103851)
Workplace Reservation Manager	Opening an all day occurrence of a series from the calendar no longer changes the end date. (Tri-101960)
Workplace Reservation Manager	Recurring reservations are honoring resource downtime records. If a resource is on a downtime record, the resource cannot be reserved by a one-time reservation or a recurring reservation. (Tri-113707)
Workplace Reservation Manager	Resolved an issue that caused a Calendar section with reservations in the month view to load slowly for Internet Explorer users. (Tri-101732)
Workplace Reservation Manager	Resolved an issue that prevented a reservation from being created when a daily recurrence pattern was used. (Tri-96141)
Workplace Reservation Manager	Resolved an issue with recurring reservations that caused reservation instances to not be created when an event outside the service window encountered a conflict during its wake-up process. A patch helper workflow restarts the generation process for reservations that were affected by this issue. (Tri-100367)
Workplace Reservation Manager	The correct occurrence is declined in Outlook for an All Day conflict when a user is in a different time zone from the server. (Tri-113811)
Workplace Reservation Manager	To avoid possible double-bookings when rescheduling/moving a series, a change was made to how the system defines the booking time for a resource. Before this change, the booking time was established when the user clicks Book Selected. It is now established when the user clicks Submits. The booking time is used to understand the ownership of a time slot. (Tri-109448)
Workplace Reservation Manager	Users can now print the following reports: ▪ Requests > Manage Reservations > Related Links - Manage Reservations > Location Reservations > Reservations (Calendar View) ▪ Requests > My Requests > Related Links - Request Central > Location Reservations > My Reservations (Tri-96473)

Area of Change	Description
Workplace Reservation Manager	When a recurring reservation is created in Outlook/OWA and an occurrence is declined by the application, the free/busy status of that occurrence for the resources in question is now updated within Exchange. (Tri-68979)
Workplace Reservation Manager	When communication from the reservation system to Exchange fails, the system now retries the communication until it is successful. (Tri-104204-IV47567)

IBM TRIRIGA 10.3.2 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.

Note – The patch helper workflows for ENERGY STAR must be run in the following sequence. Wait for each patch helper workflow to complete processing before you start the next one. The third and fourth patch helper workflows migrate existing ENERGY STAR buildings, energy spaces, meters, and consumption data. You do not need to run the third and fourth patch helper workflows if you do not have any data in your current ENERGY STAR portfolio.

1. `PatchHelper_10_3_2_ES_REST_SETUP.txt`

2. `PatchHelper_10_3_2_ES_REST_ENERGYLOG.txt`

3. `PatchHelper_10_3_2_ES_REST_MIGRATION.txt`

4. `PatchHelper_10_3_2_ES_REST_MIGR_CONSUMPTION.txt`

5. `PatchHelper_10_3_2.txt`

You must run the following steps to import the file that associates Location Primary Use with Energy Space.

1. From the destination system, select Tools > Administration > Data Integrator.

2. Select the following values in the Upload File section:

   - Module: `Classification`

   - Business Object: `triEnergyRatingLocation`

   - Form: `triEnergyRatingLocation`

   - Import Type: `Add`

   - Action: `triCreate`

3. Browse to `PatchData_10_3_2_triEnergyRatingLocation.txt`

4. Click Upload File and click OK.

You receive a notification in your Reminders portal section when the import process

The following patch helper workflows are in this release:

Name	Description
`triPatchHelper - triCalculate - ENERGYSTAR_REST_ENERGYLOG - ENERGY STAR - Fix Energy Log Energy Rating Data`	This workflow populates values for Energy Rating UOM from meter (if data available) or meter type classification and populates values for Energy Rating Currency from application settings for all existing energy logs.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_MIGRATION - ENERGY STAR - Get ENERGY STAR Ids`	This workflow populates the Energy Star Lookup table (Building Id) from Energy star portfolio buildings. This is for existing ENERGY STAR customers.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_MIGRATION_CONSUMPT ION - ENERGY STAR - Get Consumption Ids`	This workflow populates the Energy Star Lookup table (Consumption ID) from Energy star portfolio. This is for existing ENERGY STAR customers.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_SETUP - ENERGY STAR - Associate Energy Rating Attributes To Energy Space Type`	This workflow associates Energy Space types to the Energy Space classification.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_SETUP - ENERGY STAR - Associate Migration Item To ENERGY STAR Migration`	This workflow associates Energy Star Migration Items into the Energy Star Migration Record.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_SETUP - ENERGY STAR - De-Associated Location Primary Use from Energy Space`	This workflow removes existing associations from the Location Primary Use classification to Energy Space.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_SETUP - ENERGY STAR - Setup Classloader`	This workflow sets the class loader with integration and sets the Integration Object response maps.
`triPatchHelper - triCalculate - ENERGYSTAR_REST_SETUP - ENERGY STAR - Set Application Settings`	This workflow sets the default value of the Energy Rating Currency field to `US Dollars` in the Application Settings record.
`triPatchHelper - triCalculate - 10.3.2 - Application Settings Defaults`	This workflow sets a default color for the Declined Booking Color field in the Reservation Settings tab of the Application Settings record.
`triPatchHelper - triCalculate - 10.3.2 - Application Setup Data`	This workflow adds classifications, user messages, notifications, and the like for 10.3.2.
`triPatchHelper - triCalculate - 10.3.2 - Cashflow Line Item Hide Index Adjustment`	When Cashflow Line Items have the CPI check box selected, this workflow hides the Index Adjustment section. The Index Adjustment section is no longer

Name	Description
	needed.
`triPatchHelper - triCalculate - 10.3.2 - Contact Role Manager - Retro Contact Role Intermediate`	This workflow resolves an issue where the Linked Record ID on the Contact Role record does not match the Record ID of the business object record that it references. You must run this workflow before you use the Time To Value - Contact Role Manager functionality in 10.3.2. This workflow updates all contracts, projects, geographies, locations, organizations, and assets and runs for a significant amount of time. If you do not run this workflow, contact roles might not create, reassign, or delete correctly with the Contact Role Manager functionality.
`triPatchHelper - triCalculate - 10.3.2 - Rename CAM Cost Type`	This workflow updates the name on CAM classification records and on CAM Type Cash Flow Line Item records to "Common Area Maintenance".
`triPatchHelper - triCalculate - 10.3.2 - Retro Asset Leases to Set Fair Market Value`	This workflow updates asset leases. When the FASB 13 section was created, the Fair Market Value field in the Details section was hidden. This workflow maps the value of the Fair Market Value field from the Details section to the FASB section.
`triPatchHelper - triCalculate - 10.3.2 - Retro Contract to Map Periods per Year`	This workflow updates asset leases and RE leases to set Periods per Year from Application Settings record. This affects the calculation of the NPV of Rent.
`triPatchHelper - triCalculate - 10.3.2 - Retro Contract to Set Payment Timing`	This workflow updates asset leases, RE leases, and lease abstracts. It sets the value of the Payment Timing field to Payment in Advance. It also set the Payment Timing field on other objects, such as associated payment schedule, IFRS lease treatment, and amortization summary records.
`triPatchHelper - triCalculate - 10.3.2 - Retro FASB Leases to Set Accounting Standard`	This workflow affects FASB leases. It sets the value of the Accounting Standard field to `GAAP (FASB)` in the Accounting tab and shows the FASB 13 Treatment section.
`triPatchHelper - triCalculate - 10.3.2 - Retro Owned Property Agreement`	The workflow is updates the expiration date on Owned Property Agreement records.
`triPatchHelper - triCalculate - 10.3.2 - Retro Property`	This workflow recalculates all Property records in which the Area Measurement field has metric and imperial values. The recalculation updates the values and UOM.
`triPatchHelper - triCalculate - 10.3.2 - Retro RE Project Net`	This workflow corrects values in RE Project records

Name	Description
`Rooftop Effect`	for the Net Rooftop Effect field.
`triPatchHelper - triCalculate - 10.3.2 - Retro Reservation Booking Status`	This workflow sets the booking status that is used to highlight any declined reservations in the Calendar view. This is a non-critical update for any Reserve implementation.
`triPatchHelper - triCalculate - 10.3.2 - Setup Financial Category Rollups For Financial Category`	This workflow sets up the Financial Category Total Income Recovery Rollups. It resolves an issue in the rollup operator for Sublease Rental Income.
`triPatchHelper - triCalculate - 10.3.2 - Application Data - App Version`	This workflow creates an Application Version record for 10.3.2.

IBM TRIRIGA 10.3.1.1 Enhancements

This fix pack enhances the IBM TRIRIGA Connector for ENERGY STAR Benchmarking to support the 2013 upgrade to the US EPA ENERGY STAR Portfolio Manager Data Exchange Web Services.

The following enhancements to IBM TRIRIGA are included in this release:

Area of Impact	Description
ENERGY STAR	Added an option to exclude zero-cost energy logs for ENERGY STAR submissions.
ENERGY STAR	Added energy type unit of measure conversion to normalize the units of measure that are used for ENERGY STAR submissions.
ENERGY STAR	Added the ability to submit energy costs to ENERGY STAR.
ENERGY STAR	This release adds the following fields for metrics now calculated by ENERGY STAR: ▪ Current Site Energy Intensity ▪ Current Site Total Energy Use ▪ Current Source Energy Intensity ▪ Current Source Total Energy Use ▪ Current Weather Normalized Site EUI ▪ Current Weather Normalized Source EUI ▪ Current Direct GHG Emissions ▪ Current Indirect GHG Emissions ▪ Current Total GHG Emissions

IBM TRIRIGA 10.3.1.1 Changes

You upgrade your version of IBM TRIRIGA for the 10.3.1.1 release by fix pack. The IBM TRIRIGA 10.3.1.1 fix pack updates your 10.3.1 system to support the 2013 upgrade to the US EPA ENERGY STAR Portfolio Manager Data Exchange Web Services. You must be on IBM TRIRIGA 10.3.1 and on IBM TRIRIGA Application Platform 3.3.1 before you apply this fix pack. For more information, see the 10.3.1-TIV-PDM-FP0001-README.

To download the 10.3.1.1 fix pack, go to Fix Central at the following link: http://www.ibm.com/support/fixcentral. In the Find product tab, select **IBM TRIRIGA Portfolio Data Manager**, **10.3.1**, and your platform. Download the `10.3.1-TIV-PDM-FP0001-README` and the `10.3.1-TIV-PDM-FP0001` package. Follow the directions in the readme file.

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
ENERGY STAR	Added fields to multiple objects to support the new ENERGY STAR API as described in the 10.3.1.1 readme.
ENERGY STAR	Added new Energy Space Type classification records to match the building types now supported by ENERGY STAR.
ENERGY STAR Migration	You use this form to migrate existing Energy Space types that are no longer supported by ENERGY STAR to new Energy Space types. The tool also copies the attribute values from an old Energy Space to a new Energy Space when the attribute names are identical. The object migration package includes a default migration record. Before using the default migration record, you must update it to match your portfolio. For more information about the changes that ENERGY STAR made to Energy Space types, see the following ENERGY STAR site: http://portfoliomanager.supportportal.com/link/portal/23002/23010/Article/34128/How-will-space-types-for-buildings-currently-in-Portfolio-Manager-migrate-to-the-new-property-uses-in-the-upgraded-Portfolio-Manager The object migration package also includes new navigation items named `Master Detail - Energy Star Migration` and `Master Detail - Energy Star Migration - Sustainability`. You must manually add them into your navigation collection.
ENERGY STAR Settings	The Energy Star classification record is no longer used to store account credentials. The Energy Star Settings form is used to store account credentials for the Portfolio Manager Live Environment and the Portfolio Manager Test Environment. You can create new test accounts for the ENERGY STAR Test Environment with the Create Account action.
ENERGY STAR Validation Tool	Updated the validation tool to work with the new ENERGY STAR schema. If navigation is not available in your environment, manually add the navigation items from the object migration package to your navigation collection. The new navigation items are named `Master Detail - Energy Star`

Area of Change	Description
	`Migration` and `Master Detail - Energy Star Migration - Sustainability.`
Integration Object	Updated the TRIRIGA Integration Object to communicate with the ENERGY STAR REST API.

IBM TRIRIGA 10.3.1 Enhancements

The following enhancements to IBM TRIRIGA are in this release:

Area of Impact	Description
Asset Lease	The FASB 13 Treatment section is now available for asset leases. You use this section to identify whether an asset lease is treated as an operating lease or as a capital lease. (Tri-80665)
Real Property Information Model	IBM TRIRIGA has been enhanced to support the requirements of the US Department of Defense Real Property Information Model (RPIM) initiative. Additions include changes to the data model, classifications, and business rules to support the data elements and reporting required by RPIM.
Workplace Reservation Manager	▪ You can perform workspace searches based on the functional role entitlements that are configured on the workspace for the user that is identified as the requested for. This feature is enabled and disabled in the Application Settings. (Tri-70097)
	▪ A notification now informs the requester of a reservation when the room was set up for auto-cancellation and the system canceled the room. (Tri-75224)
	▪ New reports for equipment reservations and vehicle reservations show the reservation along with the assets that were reserved. Additional reports show reservations for the next 30 days and reservations in the past. (Tri-68882, Tri-68893, Tri-68971)
	▪ New usability features include creating reservations in the past and closing an ongoing meeting early. (Tri-68980, Tri-70252)

IBM TRIRIGA 10.3.1 Changes

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
Application Settings	On a clean install, in Application Settings, the Lease Abstract Defaults fields (Default Parent for Internal Organization, Default Parent for Location, Default Parent for External Organization) and Date Generation field (Start

Area of Change	Description
	Date) are now blank. (Tri-88848)
Asset Lease	Multiple copies of the same Asset Lease are created on Activate when an Includes Index Adjustment clause and a Payment Schedule are added. To resolve this issue requires a change in the Index Adjust Calculator (`triIndexAdjustmentCalculator`) business object. This change is not included in the 10.3.1 release object migration package.

To resolve this issue, run the following SQL to update the smart section attribute on the Index Adjust Calculator business object. You can run the SQL either before or after importing the 10.3.1 release object migration package into your environment. (Tri-73713)

```
SELECT *
FROM module_association
WHERE source_module = 16
AND source_bo_id = 10010440
AND association_verb='Has Contract'
AND ass_module = 21
AND ass_bo_id = 10008550

/* update Association Manager */
UPDATE module_association
SET dependent_flag =0, cascade_read_only=0
WHERE source_module =16
AND source_bo_id = 10010440
AND association_verb='Has Contract'

SELECT *
FROM dd_sobjtype_sections
WHERE spec_template_id = 10010440
AND category_id = 1
AND sub_category_name = 'triAssetLease'

/* updates Data Dictionary Smart Section table
dd_sobjtype_sections */
update dd_sobjtype_sections
set override_flag=0,
input_option=2,
live_link=1
WHERE spec_template_id = 10010440
AND category_id = 1
AND sub_category_name = 'triAssetLease'

SELECT *
FROM sobjtype_sections
WHERE spec_template_id = 10010440
AND category_id = 1
AND sub_category_name = 'triAssetLease'
AND ref_spec_template_id = 10008550

/* Update One more Smart Section table */
update sobjtype_sections
set override_flag=0,
``` |

Area of Change	Description
| | ```
live_link=1,
input_option=2
WHERE spec_template_id = 10010440
AND category_id = 1
AND sub_category_name = 'triAssetLease'
AND ref_spec_template_id = 10008550
``` |
| Asset Lease | When an asset lease is revised, the history lease retains the information for the FASB 13 section of the original lease. The history asset lease record does not calculate a present value (PV) as only a payment schedule was created and no payment line items (PLI) were generated. The PLIs are used for calculating the straight line, which is used for PV of Rent/PV of rent building only (discounted) values. (Tri-83342) |
| Asset Lease | When straight line adjustments are used in conjunction with a partial payment schedule, the last payment line item now has the correct Expected Accrual value. When the Payment = Straight Line/Month, accrual values on PLIs when the expected accrual value should be 0 are now calculated correctly. When the Lease Treatment is Operating, the value of the Operating Portion of Capital Lease field is not used in the Straight Line Rent Liability calculation. When the sum of the Straight Line Rent Capital Portion PLIs does not add up to the necessary total due to rounding, the additional PLI that is created is now created with the correct value. (Tri-72452) |
| Assets | In all Asset forms, in the Spec Information Section, the Spec Class field has been made read only.

In the Core and Key Specification forms, the Spec Class field now displays its own Specification Class hierarchy list instead of the ROOT Specification Class hierarchy list. (Tri-88855- IV42741) |
CAD Integrator	In the CAD Mapping form, removed the Copy action. (Tri-73164-IV36348)
Capital Projects	Resolved an issue that caused security groups for Capital Project Template forms to not work correctly when the `USE_PROJECT_SECURITY` property in the `TRIRIGAWEB.properties` file was set to `Y`. You now can create a task within a Capital Project Template. (Tri-74011-IV30868)
Capital Projects	The behavior of the All Capital Project query Delete action has changed. The Delete now deletes the selected record in the query. (Tri-89423)
Classifications	Updated the business object label for `triResponsibilityCategory` to Responsibility Category. Existing customers should run the following SQL scripts in order to update the Business Object field in the System tab of Responsibility Category Classification records.

```
Update ibs_spec set updated_date=sysdate where spec_id in
(select spec_id from t_triResponsibilityCategory where
triBusinessObjectLabel = 'Area Type');
Update t_triResponsibilityCategory set
triBusinessObjectLabel='Responsibility Category',
triBusinessObjectLabel2='Responsibility Category' where
triBusinessObjectLabel = 'Area Type';
``` |

Area of Change	Description
	(Tri-70674)
Contact Center	In the Contact Center form, the Agent Name is now correctly populated with the User that is logged in. Agent Name is populated through workflow instead of using the Platform Auto Populate functionality. (Tri-78699)
Contact Center	The Requested For field on the Contact Center form is now populating the correct Active User. The Organization is now mapped correctly from the Requested For person to the Service Request that is created from the Contact Center Request. (Tri-76653-IV37280)
Contact Roles	Test data has been removed from the list of system data for Contact Roles. (Tri-88850)
Contracts	When selecting the service organization contact lookup and the bill to contact lookup for an external contact, consultant, or employee with an address greater than 50 characters, the blanket purchase order record no longer hangs. The address field now accepts 200 characters. (Tri-75859-IV36887)
Contracts > Leases	When a user clicks the Issue action in the Payment Reconciliation Action item, the routing now proceeds to completion. (Tri-80223-IV38558)
Data Modeler	Increased the size of the `FUNCTION_DESC` field in the Formula business object in the System module from 100 to 150. (Tri-91539)
Integration Object	When you import instance records for the TRIRIGA Integration Object, run the patch helper named `IntegrationObject_DataMaps`. This patch helper triggers a utility that scans the current datamaps and correctly reassigns the object IDs that are needed to save records. (Tri-74041)
Inventory	The Services form now opens when the user navigates to Inventory > Setup > Contracts > Services. Previously, the Services Specification form was rendered. (Tri-71228-IV36022)
Lists	A new list named `triBillingTypes` replaces lists named GE Billing Types and `triGEBillingTypes`. The values in the `triBillingTypes` list are First and Second. The `triLeaseAllocations`, `triSpaceAssignments`, and `triSpaceUseAgreement` business objects now reference the new `triBillingTypeLI` list. (Tri-81642-IV38448)
Owned Property	On an Owned Property, the Include in Amortization Schedule check box is hidden for all Payment Schedules created using the Generate Payment Schedule process. (Tri-72830)
Real Estate Abstract	In the Lease Abstract form and the Lease Abstract Template form, the fields in the Default Remit To section are not cleared when a different Remit To Look Up value is selected. The Update Payment Instructions action updates the Payment Schedules with the selected Default Remit To data. The Remit To Look Up clear icon clears the data in all fields in the section. (Tri-78826-IV37433)

Area of Change	Description
Real Estate Abstract	In the Lease Abstract form and the Lease Abstract Template form: Tenant Rights (and child nodes), Landlord Rights (and child nodes), LL Provision of Services to Premises, and Must Take Space have been removed from Classification Hierarchy - Clause Type > Real Estate Lease Clause Type > Other. They are no longer available for selection from the Other Clauses tab of the Lease Abstract form. Instead they are available/added to Classification Hierarchy - Clause Type > Real Estate Lease Clause Type > Rights > Other Rights. And they are now available to add from the Rights tab of the Lease Abstract form. These same changes are also applied to Lease Abstract Template. Note: These items on the Other Clauses Classification hierarchy have been removed from the shipping product. But existing customers using above listed items from the Other Clauses tab of Lease Abstract should update their environments to use the items on the Rights tab instead and to remove the records from the Other Clauses classification hierarchy manually. (Tri-81725-IV38447)
Real Estate Abstract	In the Lease Abstract form, the Responsibilities Services Clause Summary field now accepts 1000 characters. (Tri-75110-IV36816)
Real Estate Lease	In the Generate Payment Schedule form and the Payment Schedule form: 1. When Frequency is 'Monthly' and Charge Basis Amount is 'per Area (Monthly)' or 'per Area (Annually)', the Cost per Unit field on a Payment Schedule is now calculated correctly. 2. When Frequency is something other than 'Monthly' and the value of Charge Amount Basis field is not 'per Month', the calculations of Monthly Amount, Annual Amount, and Cost / Unit (Year) in the Payment Schedule section of the Generate Payment Schedule wizard are now correct. (Tri-70442-IV34303)
Real Estate Lease	In the Generate Payment Schedule form, in the Payment Parameters section, the label "First Payment Amount" is now "Amount Per Basis". (Tri-70800)
Real Estate Lease	In the Generate Payment Schedule form, in the Payment Schedule section, the label "Monthly Amount" is now "Period Amount". (Tri-70795)
Real Estate Lease	In the Lease Clause and the Lease Clause Template forms, the fields in the Alterations section have been rearranged to match the layout of the Alterations section on the Rights tab of the Lease Abstract form. (Tri-72751)
Real Estate Lease	In the Payment Schedule section, resolved rounding inconsistencies between the calculation of the Annual Amount and the Cost/Unit (Year) * Contract Rentable calculation. The value displayed in the form has two decimal places; however, the value stored in the database has six decimal places. The database value with six decimal places is used for calculations. (Tri-86721)

Area of Change	Description
Real Estate Lease	In the Payment Terms form, in the Payment Amount Calculations section, the label "Monthly Amount" is now "Period Amount". (Tri-84432)
Real Estate Lease	In the RE Invoice form, the Asset Invoice form, and the Process Payment form, Straight Line Rent Liability payments no longer display. (Tri-73702)
Real Estate Lease	When a lease is amended, the value for Charge Amount Basis is now correctly mapped to the History record of the payment schedule. (Tri-86734)
Real Estate Transactions	In all RE Project forms, in the Financial Terms tab, the Commencement Date field was changed from required to optional. The affected forms include RE Project Acquisition, RE Project Current Terms, RE Project Disposition, RE Project Expiration, RE Project Lease, RE Project Sublease, and RE Project Termination. (Tri-73008)
Real Estate Transactions	In the RE Project Acquisition form , the Purchase Terms section has been moved from the Offer Information tab to the Financial Terms tab. (Tri-91200)
Real Estate Transactions	▪ In the RE Project Acquisition form, the Purchase Terms section was moved from the Offer Information tab to the Financial Terms tab. ▪ In the RE Project Disposition form, the Details of Sale section was moved from the Offer Information tab to the Financial Terms tab. ▪ In the RE Project Expiration form, in the Financial Terms tab, the Deal Terms section was changed to better represent the data in the section. ▪ In the RE Project Termination form, some fields in the Details of Termination or Buyout section of the Site Information tab were moved to the Deal Terms section of the Financial Terms tab. The remaining fields and the Details of Termination or Buyout section were removed from the Site Information tab. (Tri-83345)
Real Estate Transactions	In the RE Project Disposition form, the Details of Sale section has been moved from the Offer Information tab to the Financial Terms tab. (Tri-91201)
Real Estate Transactions	In the Transaction Plan form, when you create an RE Project within that plan, it creates a transaction scenario. On the Summary Metrics tab of the transaction scenario, the financial information rolls up to this form. These calculations have been updated to perform the calculations correctly. The summary metrics on all RE Project forms now are calculated correctly. The reports and NPV values on the Transaction Plan now are calculated correctly. (Tri-73656-IV37460)
Real Estate Transactions	In the Transaction Plan form, when you create an RE Project within that plan, it creates a transaction scenario. On the Summary Metrics tab of the transaction scenario, the financial information rolls up to this form in the P&L Impacts section. The profit and loss (P&L) values have been updated to perform the calculations correctly. (Tri-70456-IV36355)

Area of Change	Description
Real Estate Transactions	In the Transaction Plans, RE Projects portal section, the hierarchical query now displays the child project records. Previously, only the parent record displayed. (Tri-71112-IV36161)
Reporting	In the metric reports for Green Condition Index, corrected an issue where Building System Item Replacement Value was incorrectly added with Calculated Replacement Cost of the building to calculate the Green Condition Index Ratio. Also corrected an issue where the Green Condition Index Ratio was incorrectly summed, instead of averaged, when viewed through the Geography or Capture Period drill path. (Tri-70303-IV33565)
Reporting	Resolved an issue that caused errors in the following reports in Microsoft SQL Server environments: Asset Lease Assumption Audit Log Report, Lease Assumption Audit Log Report, `triAssetLease - BIRT - Asset Lease Assumption Audit Log`, and `triRealEstateContract - BIRT - Lease Assumption Audit Log`. (Tri-89936)
Requests	In the Disposition Request form, the queries for Related Reports now return records in the appropriate statuses. (Tri-90374)
Requests	In the Move Services form, the section actions on the Move Items section now are disabled when the Move Services record is in a null state. Users cannot add a Move Request Line Item until the Move Services record is created. This method prevents the creation of orphan Move Request Line Item records. (Tri-73705-IV33142)
Requests	On a request, when the Someone Else option and a different Requested For person are selected, the Location and Organization under the Request Details section now map correctly into the Primary Work Location and Customer Organization fields respectively on the work task that is created when the request is submitted. (Tri-83540-IV39026)
Requests	On an Individual Move Request, the To Location is now copied to the Move Request Line Item if it is populated after the request is in draft mode and the user clicks the Submit action. (Tri-73385)
Requests	On the Request record, when the Requested For is changed to another person, that person's organization is now correctly updated in the Request Details section. (Tri-73707)
Requests	On the Request record, when you change the Request is for option from Someone Else to Me, the Requested For and Request Details sections are populated with the Work Phone, Email, Primary Location, and Primary Organization data corresponding to the Requested For person. When you change the Request is for option back from Someone Else to Me, by design the Location data is not updated with the Me person data. (Tri-79623-IV38409)
Requests	The value for Request Class on the work task is now correctly mapped from the work task template, rather than the request itself, when a service request creates work tasks. If the Request Class is not defined on the

Area of Change	Description
	template, then the work task maps the value from the service request. (Tri-74008-IV33506)
Requests	Under the Service Request section on the Request form, the selected option remains selected or another option can be selected when the Request is for option is changed to Someone Else and the Requested For person is changed. (Tri-79610-IV38020)
Requests	Update Personnel Information (Change Person Request) now maps all the data under the Updated Personnel Details section on the Change Person Request to the Person record. My Profile data is kept in sync if the Person record is in Active User status. (Tri-82079-IV39415)
Service Plan	When creating a Facility Project Template that has Task templates and the record is being created through request with a Service Plan, a new rule has been added in the Service Plan. When Task Assignment Rule equals "Auto-assign to Service Provider", the Task Assignment Date Rule now has "Use Task Template". This allows the Task within a Facility Project to use its Task Template to map the dates rather than the Service Agreement. (Tri-70487-IV36001)
Space	In a Space record, the value of the Area (Imperial) field of the Space Measurements section is now calculated correctly. The conversion value in the Area - square-meters UOM_Value record is now 10.76391042. (Tri-74003-IV34565)
Space	In the Find Space form, the Personnel Directory tab now displays data from the People record instead of from the My Profile record. (Tri-77005-IV37979)
Space	In the Find Space form, the Personnel Directory tab now displays People records that have the associated primary location set to the Space that is created under a Space Group. (Tri-77004-IV37978)
Space	In the Space form and the Space Group form, in the General and the Allocation tabs, the label "Percent Occupied (c/d)" is now "Ratio Occupied (c/d)". This field shows a decimal value, not a percentage. (Tri-78704-IV37437)
Space	Spaces added to the Space Group hierarchy are now displayed in the Spaces query section of the Space group record. The association on space query was changed from Has to Is Parent Of. (Tri-70313-IV33982)
Space	The extended formula for the `triHeadcountNU` field on the `triFloor`, `triBuilding`, and `triProperty` business objects now uses a query instead of an associated business object field. (Tri-70761)
Space	When creating new Space records from IBM TRIRIGA CAD Integrator/Publisher, the update process (Permanent Save validation workflow) is no longer executed twice. The update process now runs asynchronously. (Tri-70759)
Workplace	A reservation now respects the minimum order time for food orders as defined in the blanket purchase order. If a reservation is within the minimum

Area of Change	Description
Reservation Manager	order time, the user cannot see or select food items. (Tri-68933)
Workplace Reservation Manager	Added reports for equipment reservations and vehicle reservations to view the reservation along with the assets that were reserved. The new reports are as follows: Reservations (Today), Reservations (Today and Future), Reservations (This Week), Equipment Reservations (Past), and Location Reservations (Past). (Tri-68882)
Workplace Reservation Manager	Credit card account code, charges, and encrypted details can be viewed by users in TRIRIGA Reservation Coordinator, TRIRIGA Request Central – Reserve, and TRIRIGA External Service Provider security groups. (Tri-68939)
Workplace Reservation Manager	In the Reservation Coordinator portal, a new report can be used to query for reservations in the past. (Tri-68893)
Workplace Reservation Manager	In the Reservation Coordinator portal, a new report shows a graphical representation of reservations for the next 30 days. (Tri-68971)
Workplace Reservation Manager	In the Reservation form, in the Location Reservation section, the Concierge section, and the Preferred section, the new Default Layout column shows the layout of the room or space. (Tri-89176)
Workplace Reservation Manager	Now users can modify the Date/Time and Subject while on the TRIRIGA tab within Outlook. Previously these fields were read-only. (Tri-68949)
Workplace Reservation Manager	The Select Equipment form now shows the same Available Equipment when accessed from different locations. (Tri-84254)
Workplace Reservation Manager	The start and end date and time in a reservation-related notification is now converted to the user's preferred format and time zone. (Tri-68999, Tri-75229)
Workplace Reservation Manager	The TRIRIGA Workplace Reservation Manager now can be used to create reservations in the past. This change accommodates the use case where an end user or a concierge uses a reservable location, but the data needs to be back-dated for utilization metrics. (Tri-71558, Tri-73571)
Workplace Reservation Manager	Users can now check in from the reservation user interface. Before this change, the check in process was only accessible from the email notification. (Tri-70249)
Workplace Reservation Manager	When a recurring reservation created in IBM TRIRIGA is imported into Outlook, all occurrences of the appointment appear in Outlook instead of only the first occurrence. (Tri-70128)
Workplace Reservation Manager	When a reservation with equipment orders is deleted, the equipment orders are now removed from the Equipment Orders pages. (Tri-86450)

IBM TRIRIGA 10.3.0.1 Changes

You upgrade your version of IBM TRIRIGA for the 10.3.0.1 release by fix pack. The 10.3.0.1 fix pack includes an object migration package. Do not apply the 10.3.0.1 object migration package on versions of IBM TRIRIGA before version 10.3. To upgrade to IBM TRIRIGA version 10.3, follow the instructions at the following link: http://www.ibm.com/support/docview.wss?uid=swg24033724.

To download the 10.3.0.1 fix pack, go to Fix Central at the following link: http://www.ibm.com/support/fixcentral. In the Find Product tab, select **IBM TRIRIGA Portfolio Data Manager**, **10.3.0.1**, and your operating system. Download the readme file and the object migration package. Follow the directions in the readme file.

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
Real Estate Lease	In the Generate Payment Schedule form, in the Payment Parameters section, the label "First Payment Amount" is now "Amount Per Basis". (Tri-72942)
Real Estate Lease	In the Generate Payment Schedule form, in the Payment Schedule section, the label "Monthly Amount" is now "Period Amount". (Tri-72932)
Real Estate Lease	In the Payment Schedule form, when the Frequency is Monthly and the Charge Amount Basis is per Area (Monthly) or per Area (Annually), the Cost per Unit field is now calculated correctly. In the Generate Payment Schedule wizard, in the Payment Schedule section, when the Frequency is other than Monthly and the Charge Amount Basis field is other than per Month, the calculations of Period Amount, Annual Amount, and Cost / Unit (Year) are now calculated correctly. (Tri-72930-IV34303)
Real Estate Lease	In the Payment Terms form, in the Payment Amount Calculations section, the label "Monthly Amount" is now "Period Amount". (Tri-84433)
Real Estate Lease	Resolved rounding inconsistencies between the calculation of the Annual Amount in the Payment Schedule query section and the Cost/Unit (Year) * Contract Rentable calculation. The value displayed in the form has two decimal places; however, the value stored in the database has six decimal places. The database value with six decimal places is used for calculations. (Tri-86720)
Real Estate Lease	The following applies to real estate payment schedules: ▪ Frequency payment calculations now include the option to calculate with a frequency of 13 periods per year. ▪ The Charge Amount Basis values of per Area (Annually) and of per Area (Monthly) do not apply to an asset lease. Because the Generate Payment Schedule wizard is a standard form, it is possible for a user to select these values; however, the value of the Expected Cash Amount field on the generated Payment Schedule form will be zero. (Tri-72939)
Real Estate Lease	When a lease is amended, the value for Charge Amount Basis is now correctly

	mapped to the History record of the payment schedule. (Tri-86731)

IBM TRIRIGA 10.3 Enhancements

The following enhancements to IBM TRIRIGA are in this release:

Area of Impact	Description
Workplace Reservation Manager	The enhanced IBM TRIRIGA Workplace Reservation Manager product manages all schedulable resources in a single product; integrates with other IBM TRIRIGA products for portfolio, web graphics, task, inventory and contract management, and strategic facility planning; analyzes capacity; and increases facilities utilization. The bi-directional integration with Microsoft Exchange/Outlook delivers end-user scheduling directly through Microsoft Outlook, including requests for related services and equipment. The software supports flexible workspace programs. The interactive graphic (web graphic) locator presents available locations. Utilization metrics analyze capacity and increase utilization.
Environmental and Energy Management	IBM TRIRIGA Real Estate Environmental Sustainability Manager enhancements support global greenhouse gas reporting standards and compliance. Also, with the addition of processing logs that contain failure point information for both carbon calculations and ENERGY STAR ratings, you can more easily locate errors so that you can fix them. You can then successfully receive accurate carbon calculations and ENERGY STAR ratings.
Capital Project Management	IBM TRIRIGA Capital Projects Manager now manages and displays project costs in the local currency of the project. The currency unit of measure (UOM) for the project is set by the person initiating the project. All of the project objects then have the same currency UOM. Project-related financial information is displayed in the project currency UOM, without being translated to the base UOM and back to the project UOM.
Payment Schedule Wizard	The payment schedule wizard now supports the definition of calendar quarters that are different from the quarters used traditionally in US accounting periods. A user creates one payment schedule record in the payment schedule wizard with the specific quarter days selected. When a user activates a lease, payment line items for the defined quarter days are created with quarter days as due dates for each payment line item.
Globalization	IBM TRIRIGA application instance data is available in 16 languages supported by IBM TRIRIGA: Brazilian Portuguese, Chinese (Simplified and Traditional), Czech, Dutch, French, German, Hungarian, Italian, Japanese, Norwegian, Polish, Russian, Spanish, Swedish, and US English.
Carbon Calculations	The new carbon processing log stores failure point information related to carbon calculations. A carbon processing log record is created every time the job scheduler runs on the building record that was flagged to have carbon calculation (Carbon Calculation Needed check box). The carbon processing

Area of Impact	Description
	log is associated to the building (building, structure, and retail location) and organization (My Company) record. (Tri-36502)
Energy Benchmarking with ENERGY STAR	The new ENERGY STAR processing log stores failure point information related to the ENERGY STAR rating process. An ENERGY STAR processing log record is created for each error returned by the US Environmental Protection Agency's ENERGY STAR Automated Benchmarking Service (ABS) system in response to a request for an ENERGY STAR rating. ENERGY STAR processing log records are associated to the building (building, structure, and retail location) for which the ENERGY STAR rating was being processed. (Tri-36504)
System Setup	Selecting the Help link on the Home page now redirects the user to the IBM TRIRIGA Support site. There is a patch helper workflow to update existing Help records. (Tri-39322)

IBM TRIRIGA 10.3 Changes

The following changes to IBM TRIRIGA are in this release:

Area of Change	Description
Application Setup Manager	When multiple Headcount Demand Driver records are pulled into the Forecast Standard form, each corresponding Forecast Demand Driver now is created and the Standard Space Area column in the query section reflects the correct value. (Tri-27829)
Asset Lease	In the Asset Lease form, in the Accounting tab, corrected the spelling of the label of the Balance Sheet Affect section. (Tri-37034)
Asset Lease	In the Asset Lease form, when using the Payment Schedule Copy action, the Copy of… Payment Schedule now shows the Unit Count and Units fields with the correct UOM. (Tri-37574)
Asset Lease	Now after clicking the Apply Template action, the Attention section shows on the Asset Lease form. (Tri-36733)
Asset Lease	The FASB 13 Treatment section is now available for asset leases. You use this section to identify whether an asset lease is treated as an operating lease or as a capital lease. (Tri-80665)
Asset Lease	When creating a One Time Payment from an Asset Invoice using the Quick Add method, the Asset Lease name on the One Time Payment record is no longer marked as required. Both the RE Contract and Asset Lease smart sections were visible on the One Time Payment form. Now, if displayed from an Asset Invoice, the RE Contract section is hidden, and if displayed from an RE Invoice, the Asset Lease section is hidden. The applicable contract from the Invoice is now prepopulated on the One Time Payment form. (Tri-37241)
Asset Lease	When making a copy of an Asset Lease that has a payment schedule, the copy of the associated payment schedule that is in the Copy of… Asset Lease

Area of Change	Description
	record now shows the Unit Count and Units fields with correct UOMs. (Tri-37575)
Assets	Attached appropriate queries to a few query sections that were missing queries. (Tri-26554)
Assets	In Asset forms, in the Graphics tab, resolved the issue that prevented displaying the applicable graphic (for example, a floor plan). (Tri-31897)
Assets	In the Building Equipment Asset form, in the History tab, in the MTBF Log tab and the Downtime Log tab, removed the Add action. (Tri-36652)
Assets	In the Specification (Parts List) section of an asset, when the user selects specs from the query, the system creates corresponding line items in the section. (Tri-12100)
Assets	The Select Organization Lookup icon now displays the locator query in the following forms: Core, Key, Key Ring, Locks, Office Equipment, Software License, Technology Assets, Telephones, Tools & Test Equipment, Vehicles, and Work Area Outlets. (Tri-36037)
Assets	The status of a copied Telephones record is Draft and shows as Draft in the System tab. (Tri-36154)
Capital Projects	After funds are transferred via the Fund Allocation section of the Budget tab of the Capital Project form, the values are now correct in the Funds Available column in the Requested Project Fund Transfers from Funding Source section. (Tri-37060)
Capital Projects	Currency on the budget (Original Budget, Budget Change, Forecast and Transfer) defaults to the same currency as its parent capital project. The currency field in budget forms now is read-only. (Tri-19577)
Capital Projects	In the Capital Project Template form, the Copy action now copies the template correctly. (Tri-17559)
Capital Projects	Standard Capital Project Cost Codes are no longer available for selection on the Cost Code section of the Space Use Agreement form. (Tri-13168)
Capital Projects	When a draft capital project is activated, it is routed through the approval process defined for the project record. In the past, when an active project was revised and then reactivated, the approval process was bypassed. This is no longer the case. An active project that is revised and then reactivated now follows the approval process defined for the project record. Also, an issue causing improper sequencing of the remaining reviewers whenever an approval was returned has been resolved. Upon reactivating a project after it has been previously returned, the approvals are now routed to the reviewers in the sequence defined for the project. (Tri-37493)
Capital Projects	When the new field Enable in Draft Mode in the Project Security section of Application Settings is selected, a user with the appropriate security can select the Apply Template action on a Capital Project. (Tri-39468)

Area of Change	Description
Checklists	History records are no longer included in the results of the contract Find query on the Contract Award Checklist form. (Tri-12138)
Classifications	Active, Review Cancelled, and Template status classification records that were in retired status have been changed to active status. (Tri-37099)
Classifications	Added OSCRE ID = 999 to Frequency Type "Specific Quarterly (Location Specific)" Classification records. (Tri-37143)
Classifications	Added time zones for (GMT +8) Taipei Standard Time [Asia/Taipei] and (GMT +9) Korea Standard Time [Asia/Seoul]. Corrected the time zone value for (GMT +4) Moscow, St. Petersburg, Kazan, Volgograd [Europe/Moscow] and (GMT -2) Mid-Atlantic Standard Time [Atlantic/South_Georgia]. (Tri-40330, Tri-40463)
Classifications	An entry removed from the Repair Cost Estimate Items section no longer reappears when the user saves the Building System Class record. (Tri-27356)
Classifications	Carbon Calculation Region Classification (NERC Region) files are no longer delivered with the application. (Tri-37762)
Classifications	Now when you clear the Real Property Type field in the Real Property Use Classification record, the Real Property Type ID field is also cleared. (Tri-37003)
Classifications	Resolved several issues that caused Copy actions to not work properly. (Tri-37008, Tri-37009, Tri-37018, Tri-37019, Tri-37020, Tri-37089, Tri-37092, Tri-37093)
Classifications	Some classification records do not have the correct status record association. You use the patch helper workflow `triPatchHelper - triCalculate - 10.3 - Fix All Classification Status Field` to resolve. (Tri-20417)
Classifications	The copy created as a result of the Copy action on the RE Savings Type classification record now is created under the parent record instead of under the root hierarchy. (Tri-37088)
Classifications	The OSCRE ID field is no longer copied from the original Unit Type Classification record to the copy record. (Tri-39129)
Contact Center	The Clear action in the General section now clears the values in the Problem Asset and Problem Location fields. (Tri-29619)
Contracts	A warranty in draft status no longer processes a new request or creates a task; this does not occur until the warranty is in an Issued state. Tasks now are activated when a task is created from a warranty (any type). A location now is attached to the warranty whether the warranty is draft or issued. (Tri-35873)
Contracts	Added an association from `triBlanketPurchaseOrder`, `triServiceAgreement` form, to the `triProperty` business object. Now a

Area of Change	Description
	property is reverse associated to the service agreement. (Tri-19141)
Contracts	After a contact role is added to a service agreement and the service agreement has been issued and then revised, the contact role can now be removed or changed. (Tri-31909)
Contracts	In the Asset Lease Template and RE Lease Template forms, the Unretire action now returns the record to Template status. (Tri-39970)
Contracts	In the Blanket Purchase Order form, in the Products & Services tab, after you retire a product or service, the status of the product or service changes to retired and the product or service displays in the Retired Products and Services section. (Tri-15699)
Contracts	In the Owned Property (Fee) Agreement Template form, the Calendar tab is no longer visible. (Tri-38302)
Contracts	In the Payment Schedule form and the Generate Payment Schedule form, the Amortization Schedule check box no longer shows if those forms are from Owned Property (Fee) Agreement. (Tri-38258)
Contracts	In the Prime Contract form and the Prime Contract Change Order form, in the Contracts section, added the Remove action to make it possible to remove contact records. (Tri-39725)
Contracts	In the Process AR Receipts form, in the AR Payments Due section, resolved an issue that caused the Find action to not display applicable payment line item records from the associated contract. (Tri-37965)
Contracts	Line Items now are removed when the Standard Contract reference is cleared from a Standard Contract Change Order. (Tri-18789)
Contracts	Revising a Service Agreement now creates a Service Agreement History record and is visible in the `Service Agreements - History` subquery. (Tri-15693)
Contracts	State/Province, County and Country fields are now mapped when the user clicks the Create New City action. (Tri-20775)
Contracts	When a warranty contract is retired, associated SAM records are deleted. (Tri-34114)
Cost Codes	Adding a new Cost Code no longer defaults the Name field to `Cost Code`. (Tri-40468)
Cost Estimates	When you Retire a Geography Cost Index record that is in Revision in Progress status, the Status Value now displays as Retired. (Tri-16531)
Document Management	The Publication form now has Revise and Retire actions when it is in the Published state. (Tri-17142)
Energy Rating	When creating a subsequent energy rating record for a building, the Other

Area of Change	Description
	Subtype field is now mapped correctly. (Tri-36841)
Environmental Manager	A Carbon Log is now created for a building that has Waste Log data but no Energy Log data or Travel Log data. (Tri-36609)
Facility Assessment	Added the BST Approval Template record. It links to the Building System Template Approval Requirement record. If you have created an approval template record with a similar name, you need to make sure your users understand which record to select in the Approval Requirement records. (Tri-33347)
Facility Assessment	In the Maintenance Manager form, Bulk Print actions for all task types now print all selected task records whether or not they are created under a project level. (Tri-36480)
Facility Assessment	Now the results in the Opportunity Analysis section are the same for Opportunity and Funding Request records. (Tri-36114)
Forms	Updated the query sections for the following forms: `triAsset`, `triAssetOffline`, `triCatalog`, `triContractNotificationAssetLease`, `triCore`, `triDuplicateRequests`, `triInventory`, `triIssue`, `triKey`, `triKeyRing`, `triLocks`, `triOfficeEquipment`, `triPWServiceManagerEditServiceAgreement`, `triPermitApplication`, `triProductContractServicesRequest`, `triResolutionOption`, `triServiceExcluded`, `triSoftwareLicense`, `triSolution`, `triTechnologyAsset`, `triTelephones`, `triTimeCategory`, `triToolsandTestEquipment`, and `triWorkAreaOutlets`. (Tri-36932)
Funding Sources	Performing a Program fund transfer for a given funding source and year no longer results in the transfer amount being applied to each Program funding source having that same year. (Tri-36151)
Gantt	In a Calendar record, in the Working Hours Per Day Used For Scheduling field, the value now must be greater than 0 and less than 24. (Tri-21097)
Geography	Adding a city to a building now creates the correct association between `triBuilding` and `triCity`. (Tri-33227)
GIS	GIS maps have been updated with changes from Esri. (Tri-40505)
Globalization	British English, Korean, and Thai are no longer included as delivered values in the Language Manager. However, if you are doing an upgrade to 10.3 using the object migration package, you need to remove these entries manually from `triLanguage` and Language lists under the `triCommon` module. (Tri-39155)
Globalization	In 10.3, the currency in the Application Settings defaults to `SYSTEM_BASE`, which is the base currency defined in the `TRIRIGAWEB.properties` file. The functionality that references this field now can pull in a currency/number field in currency other than US Dollars; however, existing

Area of Change	Description
	data remains as is. You can use the following Patch Helper workflows to reset the currency/number fields for an existing Application Settings record: (1) `triPatchHelper - Synchronous - Retro Application Settings Currency UOM`, (2) `triPatchHelper - triCalculate - 10.3 - Retro Application Settings Currency UOM` (Tri-37061)
Globalization	Removed all labels from the as-delivered products that were not in US English. (Tri-35827)
Globalization	Resolved an issue in the translation into some languages with the way navigation items that show in a Reminders section are labeled. Now the labels are reordered using the format `# - Label`. This change applies to all navigation items in Reminders sections that can be found on landing pages or home portals. (Tri-36721)
Globalization	The value of the Language field on a building record is populated from the originator's My Profile record. However, in a hierarchy, a child record inherits the language value from its immediate parent. (Tri-38614)
Help	In the Help record, in the Related Documents tab, in the Related Topics section, documents selected using the Find action now display. (Tri-13013)
Inventory	In Manage Inventory, the Inventory Quick Fill units are now correct. The Quantity UOM and Currency UOM are populated from the Inventory Item. (Tri-38095)
Inventory	In Manage Inventory, the `triInventoryBillofMaterials - Synchronous - Calculate Actual Cost` workflow now calculates Quantity Issued and Quantity Returned from the `triInventoryTransactionItem` records, similar to Cost Issued and Cost Returned. With this change, the task's Inventory Bill of Materials record now more accurately reflects actual quantities. Also, new fields added to the task's section queries (`triInventoryBillofMaterials - Display - triTask Consumable` and `triInventoryBillofMaterials - Display - triTask Assignable`) improve the data available to the user about each line item was processed. (Tri-37100)
Inventory	In the Inventory Manager form, when doing inventory items adjustments, the quantity unit of measure is now pulling from the inventory item. (Tri-37967)
Inventory	In the Items form, the Order/Receipt, Hold, Issue, and Adjustment/Transfer section actions are inactive until the record is created. (Tri-37715)
Lease	In Application Settings, in the Lease Accounting Settings tab, in the Rent Component Assumption Defaults section, if the values total more than 100%, the System tab now shows an appropriate Attention message. (Tri-35801)
Lease Abstract	Frequency now displays on Payment Schedule records of a Real Estate Contract record when completing a Lease Abstract record. (Tri-39628)
Lists	Added `yyyy/MM/dd HH:mm zzz`, `dd.MM.yyyy HH:mm:ss`, and `yyyy-MM-`

Area of Change	Description
	dd HH.mm to the Date Time Format List. (Tri-36707, Tri-36830)
Lists	Removed DateTime formats containing both HH and a, such as yyyy/MM/dd HH:mm a zz, because the a indicates an AM/PM designator for an HH 24-hour clock. (Tri-37281)
Locations	In the Building form, cancelling an opportunity record when Type = Environmental no longer causes the Environmental Opportunity Type field to disappear. (Tri-37371)
Locations	In the Land form, in the Environmental tab, in the Scope 1 (Direct) Summary section, added formulas for the CO2, N2O, and CH4 Equity Share and Equity Share Reporting fields. (Tri-37380)
Locations	The carbon calculation UOM is now applied from the building into the carbon log record. (Tri-36912)
Locations	When a floor record is retired, the system updates the Rentable Area field and Usable Area field on the Area Measurements tab of the building record. (Tri-36251)
Maintenance	For records in Active status, a Checklist Item that is manually added has a retire action as does a Checklist Item created from a Checklist Item Template. (Tri-17643)
Maintenance	In the PM Event form, replaced the sentence for Yearly Recurrence with Sequence, Day and Month labels for each list field. (Tri-36863)
Maintenance	In the Safety Precautions Procedure, Inspection Procedure, Lock-Out/Tag-Out, and Safety Hazards Procedure forms, in the Details section, currency fields are now right aligned. (Tri-36634)
Maintenance	Resolved the issue causing opportunities from a funding analysis to not be copied to the new funding request. (Tri-37482)
Notifications	For Real Estate Transaction Management users who do acquisitions (only), the shipping Notification Requirement record on RE Project Acquisition has been removed. This record will not be installed with future releases (new install). If an upgrading customer would like to remove this, you can do it manually. (Tri-36915)
Notifications	Notification of a completed work task is sent once instead of twice. (Tri-36637)
Notifications	Resolved issues causing notifications to be sent twice instead of once. (Tri-37087)
Object Migration	If the Threshold type selected does not match the Detail section, run the triPatchHelper - triCalculate - 10.3 - Fix Thresholds workflow. (Tri-31397)
Organizations	The reverse association of Organization - Parent Level 3 - Organization on

Area of Change	Description
	the Organization business object now is set correctly and matches other Parent level (0, 1, 2, 4, and 5) associations. (Tri-20255)
Payables	In PO Invoice, the Organization field now populates correctly when the user clears the Organization field and selects a new organization. The Organization field now populates correctly when the user changes the user after selecting the To Lookup link. (Tri-13388)
Payables	In the Payment Release form, the Vendor Company Lookup now defaults to External Contact instead of Employee. (Tri-28155)
Payments	When the user completes a prime contract change order, if the prime contract change order has prime contract change order line items with cost codes, the system appends the cost code from the prime contract change order line item to the Cost Transaction Codes section of the Financial Transaction form. (Tri-19691)
People	Each security group and license can be added only one time. Even if a user attempts to add a group or license more than once, the system does not add it more than once. (Tri-13266)
People	In the Employee form, in the Profile tab, updated the list of languages. (Tri-36610)
People	Resolved an issue that caused the user who created or modified the record to be displayed in the System tab as `System, System` instead of the actual user. (Tri-37782)
Percentage Rent Reporting	Percentage Rent Reporting action items now are removed from the user's Home page Action Items list after the records have been issued. (Tri-36914)
Plan > Space Allocation Manager	In the Area Level Allocation form, in the Portfolio Summary section, the label "Seat Occ Pct" is now "Seat Occ Pct (e*100/f)". (Tri-8702)
Plan Moves	In the Move Planner form, in the Move Line Items for Selected Request section, the Add Room action now correctly maps a Location record. (Tri-27814)
Portals	Updated the Contracts menu and portal section to include links to Prime Contract Change Orders. (Tri-36979)
Portfolio > Planning Manager	Space Plans are added from Portfolio Plans. Removed the Add action from the following reports: ▪ All Space Plans/Scenarios ▪ My Space Plans/Scenarios (Tri-27729)
Portfolio > Planning Manager	User messages are no longer hardcoded through workflow. (Tri-27573)
Portfolio > Project Manager	The editable query for the Project Original Budget Template Items in Project Original Budget Template records now includes fields to input budget

Area of Change	Description
	amounts. (Tri-22823)
Portfolio > Project Manager	The values of the Importance Ranking field and the Importance field are now cleared when the user changes the Use In Evaluation check box from selected to cleared. (Tri-23237)
Procedures	When creating a procedure, clicking the Add action on the Materials sub-tab from the General tab opens a new Specification Bill of Materials. The Status field in the Bill of Materials record no longer contains the current user's status. (Tri-31604)
Process AR Receipts	When there is an AR Receipt Credit on the associated RE Contract, the system now pulls this amount into the Credit Balance field in the Payment Details Section on the Process AR Receipt form. (Tri-36116)
Procurement	In the Purchase Order form, in the Blanket Purchase Order section, the Clear action now clears the associated blanket purchase order. (Tri-27669)
Procurement	Removed the `triPurchaseOrder - Synchronous - triCompleteFinalHidden` workflow in the Complete Final Hidden subaction of the state transition of the `triPurchaseOrder` business object. (Tri-18532)
Procurement	The selection of a contact in the Purchased From section of a Procurement Card Line Item no longer changes the Organization in the Purchased By section to the value in the Purchased From section. (Tri-23439)
Projects	Added an In Service date field to a Retail Location record created from a Proposed Retail Site record when the project is closed out. The In Service date is the Commencement Date from the RE Lease Project form, Financial Terms tab. (Tri-13051)
Projects	Contract Invoice Line Item Amounts are no longer doubled when multiple change orders are present. (Tri-39821)
Projects	If the Potential Change Order form, in the To section, the Organization field now displays the organization name instead of the whole path. (Tri-32567)
Projects	Improved the Cash Flow Graph report. It now includes the series name and the point data value in the hover tooltip. (Tri-36607)
Projects	In the Budget form, corrected inconsistencies in the display of currency UOM. (Tri-36396)
Projects	In the Budget form, in the Spend Plan tab, in the Details section, a user message now displays when an invalid value is entered. (Tri-25777)
Projects	In the Facility Project form, Planned End Date no longer always has the same value as Planned Start Date. (Tri-39503)
Projects	In the Funding Request form, in the Evaluation tab, the value of the Net Investment Cost field now includes rebates when performing the funding

Area of Change	Description
	analysis calculations. (Tri-36040)
Projects	In the Funding Request form, when the Use In Evaluation field is selected, objectives and risks now populate from the program to the funding request even if the required request type is not populated before the user creates a draft record. (Tri-36672)
Projects	In the Prime Contract form, in the General tab, in the Bill To section, the First Name and Last Name fields are no longer required fields. (Tri-37618)
Projects	In the Project Original Budget form, in the Spend Plan tab, improved the user messages. Instead of one combined message, now there are separate validation attention messages, one for percent of duration when half the budget will be spent and the other for Growth Value. (Tri-25964)
Projects	In the Purchase Order form, the Total Invoice field now displays the total invoiced value from the associated purchase invoice. (Tri-36650)
Projects	In the Standard Contract form, in the Summary section, all fields display the currency UOM from the user's My Profile. (Tri-37388)
Projects	In the System Job Scheduler, System Job Item, and Job Scheduler forms, hid the Run Process action. (Tri-36977)
Projects	Resolved incorrect mapping into a locator field in Apply Template workflows on original project budget. (Tri-28469)
Projects	The BO Mapping for the `triLineItemSummary` business object in the `triCostItem` module no longer points to a field that does not exist. (Tri-29586)
Proposals	In the RFP form, all fields in the Vendor Company section and the Bill To section are now populated from the Standard Contract record, as well as the Cost Form section in RFP record. (Tri-22481)
Proposals	In the RFP form, the Vendor Company Lookup query now defaults to External Contact instead of Employee. (Tri-28236)
Proposals	Users now can add licenses to an External Contact record in a project context. (Tri-10007)
Real Estate	In the Payment Adjustment form, the Accrual Adjustment Amount field and the Credited Amount field are now marked as required fields. (Tri-11751)
Real Estate Abstract	In a Lease Abstract form, the Area Units field now is pre-populated with the value of the Area Units field in the logged in user's My Profile record. (Tri-36622)
Real Estate Abstract	In a Lease Abstract form, the Copy action now also copies the premise location record. Changes that are made to premise location details in the original record no longer affect both records. (Tri-36400)

Area of Change	Description
Real Estate Abstract	In a Lease Abstract form, when selecting a Responsibility Services record from a query section, fields in the Clause Details and Responsibility Service sections are changed accordingly. If a user selects a Responsibility Services record and clicks Cancel instead of Save on the Lease Abstract, the next time the user opens this record, the default radio button is where it was last saved. (Tri-38521)
Real Estate Abstract	In the Lease Abstract form, Payment Schedules (Rent, Percent Rent, Commissions, CAM/OPEX, Insurance, and Tax) associated to a Lease Abstract are now copied when the user clicks the Copy action. (Tri-38619)
Real Estate Abstract	In the Lease Abstract form, the Reports tab is hidden on all clause records. (Tri-34348)
Real Estate Abstract	Save and Save & Close actions are no longer available when the Lease Abstract Issue record is in Status = Pending Abstractor and read only. (Tri-35904)
Real Estate Abstract	The value selected for Insurance Carrier in the embedded section of a lease abstract now maps to the Insurance Carrier field on the added clause. (Tri-36055)
Real Estate Lease	% Change on Index Adjustment Calculator form now calculates the percentage change between the Base Index and the New Index. (Tri-36003)
Real Estate Lease	A Payment Schedule Term record is not created if the value of Number of Schedules is 0. You must enter a number in this field to cause the Payment Schedule Terms to be created. (Tri-38034)
Real Estate Lease	Automatic calculation of the partial first and/or last payment (monthly) in the Payment Schedule wizard is now correct for Asset Lease records. (Tri-36478)
Real Estate Lease	Changed the query columns of the Payment Schedules section of the Real Estate Lease and Owned Property (Fee) Agreement to be consistent with the Rent Schedules section of the Lease Abstract. Also, changed columns of the Rent and Expenses section of the Real Estate Lease Template and Scheduled Payments section of Owned Property (Fee) Agreement Template. (Tri-20906)
Real Estate Lease	Corrected a timing issue between asynchronous and synchronous workflows in the calculation of partial payments for payment schedules. (Tri-37112)
Real Estate Lease	Corrected an issue that caused a duplicate payment line item to be generated for the first month of a lease. (Tri-36193)
Real Estate Lease	During the RE Project Expiration process, the Contract Status status field on the Contract Terminate form now correctly maps the Contract Status defaulted or changed on the form to the amended real estate lease record. (Tri-36966)
Real Estate Lease	Fair Market Rate Value Calculator record is no longer created past the Payment Schedule End Date. (Tri-39883)

Area of Change	Description
Real Estate Lease	Field labels have been changed on the Green Lease Provisions tab of Lease Abstract and Lease Abstract Template forms. The same changes were made on the Lease Clause, Lease Clause Template, Asset Lease Clause, and Asset Lease Clause Template forms. (Tri-36399)
Real Estate Lease	For Percentage Rent Reporting, the Tax Rate form pop up from the Tax Exclusions tab is now read-only if the parent Percentage Rent Reporting record is read-only (for example, Issue and Completed statuses). (Tri-36875)
Real Estate Lease	If a lease has one time payment schedules defined, the values in the amortization schedule and in the amortization summary section are now correct. Before, the one time payment schedules were spread across the term of the lease, which was incorrect. The rent paid is now in the correct fiscal period. (Tri-40154)
Real Estate Lease	Improved the performance the Save action and the Revise action on an RE Lease record. (Tri-38723)
Real Estate Lease	In a Lease Clause Service record, the Attention section is no longer visible when there is no data in this section after the user cancels out of the page and then reopens it. Retired the workflow `triLeaseClauseService - Cancel -Reset Meta Date`. (Tri-23707)
Real Estate Lease	In a Payment Schedule, the Add Payment Schedule action now maps contract rentable from the Real Estate Contract Premise Locations on the Locations tab to the payment schedule. Cost per Unit and Annual Amount are now calculated. (Tri-34515)
Real Estate Lease	In the Critical Dates section, the Legal Notification Date field is now calculated when the Legal Notice Date and Legal Notice Reminder duration are populated. (Tri-38260)
Real Estate Lease	In the Generate Payment Schedule form and the Payment Schedule form: The calculation of '13-period' frequency is now added to frequency payment calculations. The Charge Amount Basis values per Area (Annually) and per Area (Monthly) do not apply to the Asset Lease. These values can be selected since Generate Payment Schedule is a common form, but the Expected Cash Amount on the generated Payment Schedule form will display zero. (Tri-70797)
Real Estate Lease	In the Generate Payment Schedule form, added the Include In Amortization Schedule field. The field is mapped from the Generate Payment Schedule form to the Payment Schedule form when the user clicks the Create Schedule(s) action on the Generate Payment Schedule form. (Tri-36484)
Real Estate Lease	In the Generate Payment Schedule form, resolved an issue that caused a partial year schedule created by modifying the end date of the last scheduled year to stay in processing status. (Tri-37184)

Area of Change	Description
Real Estate Lease	In the Lease Clause record, fields on Payment Schedule and Option are mapped with the fields on Payment Schedule and Option of the Lease Clause Template record when the Lease Clause record is created from a Lease Clause Template record. The affected fields are: For Payment Schedule - Document Type, Section, Page, Abstract Notes, Option Term Payment, and Covenant Frequency Type For Option - Document Type, Granted In Lease, Section, Page, Abstract Notes, Rolling Option, and Effective to Date (Tri-35924)
Real Estate Lease	In the Lease Clause Template form, the layout of the fields for the Default clause type now matches the layout in the Lease Abstract Default tab. (Tri-36045)
Real Estate Lease	In the Options Wizard, the Effective Date on the Renewal Option created is being set correctly by taking the Renewal Expiration Date of the most recent Renewal option plus one day. (Tri-37132)
Real Estate Lease	In the Payment Line Item record, the Post Type is now the same as the Post Type selected in the Payment Schedule. (Tri-36012)
Real Estate Lease	In the Proposed Real Estate Lease form, in the Terms section, the Add Revision action now populates the Name, Lease Commencement Date, Lease Expiration Date, and Current Fiscal Year fields with the values from the last revision record. (Tri-12146)
Real Estate Lease	In the RE Lease form, corrected the calculation of the Straight Line/Month field by dividing by the accounting period instead of by the number of PLIs. (Tri-37161)
Real Estate Lease	In the RE Lease form, in the Services tab, in the Default Matrix SLA Values section, removed the Update Matrix action. (Tri-36951)
Real Estate Lease	In the RE Lease form, the Reports tab contains one BIRT report, the Lease Assumption Audit Log Report. (Tri-20744)
Real Estate Lease	In the Real Estate Lease Template form, in the Service Locations tab, the Graphic Find action on is now hidden. (Tri-36034)
Real Estate Lease	In the Software License form, the label "triBuildingSystem" is now "Building System". (Tri-36807)
Real Estate Lease	Index Adjustment Value Calculator records are no longer created past the Payment Schedule End Date. (Tri-39884)
Real Estate Lease	Lease Clause Template Copy action now copies all data from the original to the Copy of... record. (Tri-38278)
Real Estate Lease	Only payment amounts greater than zero are applied when processing Receive Lease Receipts. (Tri-39420)
Real Estate Lease	Resolved an issue that caused an extra payment line item to be created. (Tri-36188)

Area of Change	Description
Real Estate Lease	Resolved an issue that caused the browser window to remain processing when a Payment Instruction was created with an organization that had a very long name or a very long address. (Tri-39587)
Real Estate Lease	Resolved several issues that caused missing payment line items when the payment schedules started or ended in the middle of the month. (Tri-36366)
Real Estate Lease	Revising and reactivating a lease no longer blanks out the value in the Notification column in the Lease Notifications section. (Tri-35979)
Real Estate Lease	The Amortization values and summary are now calculated correctly when a quarterly payment schedule is defined along with regular payment schedules. Earlier, advanced schedules were not handled properly, which caused amortization values to be incorrect. Note that only monthly and yearly advanced schedules are supported. (Tri-40116)
Real Estate Lease	The Notification Date (calculated) field is now recalculated if the value of Notify me how long prior? is changed. (Tri-32597)
Real Estate Lease	The Premise Location section no longer includes retail center records. Also, the Owned Property Locations tab, Primary Location section, Find action query is now the same as the Primary Location Find query on the General tab. (Tri-36326)
Real Estate Lease	The radio button for the clause is automatically selected if there is only one clause in the query section when using the Find Template action. When there is more than one clause selected from the Find Template action, the radio option of the first record in the Lease clause query section is automatically selected. If one clause is selected in the query section already, the selection will be the same after selecting another Lease Clause from the Find Template action. (Tri-35841)
Real Estate Lease	The RE Lease is no longer automatically approved if it has been revised and resubmitted when the Contract Administrator Manual Approver is different from the person who created the RE Lease. (Tri-38417)
Real Estate Lease	The status of a Payment Schedule that is added from the Generate Payment Schedule form changes to Scheduled when the RE Lease is activated. (Tri-37307)
Real Estate Lease	Updated two workflows to remove switches that did not have conditions: `triRealEstateContract – Synchronous – Make Dependant Records Editable` and `triRealEstateContract – Synchronous Read Only Dependant Records`. (Tri-35687)
Real Estate Lease	When a lease is revised and the proportionate share is modified in the clause, this change is now carried into the Schedule OPEX/CAM reconciliation. Added Refresh OPEX/CAM Details actions on the Premise Location section of the RE Lease and on the Services Included section of the Lease Clause to update the proportionate share value on Lease Clause and Reconciliations. (Tri-39184)

Area of Change	Description
Real Estate Lease	When a user selects One-time payment ("Other" in Frequency), only Frequency, First Payment Date and First Payment Amount are shown in the Payment Parameters section, with the Frequency field as the first field in the section. Also, hid the Payment Schedule query section. Relabeled "Covenant Frequency" to "Frequency" on the Generate Payment Schedule and Payment Schedule forms. (Tri-36476)
Real Estate Lease	When a user selects One-time payment (Frequency = Other) and selects the Generate Payment Schedule action in the Payments tab, Payment Schedules sub-tab, the system creates the correct schedule. (Tri-36529)
Real Estate Lease	When an Advanced Payment Schedule record is saved, if the Start Date is greater than the End Date, now a validation Attention message displays. (Tri-35879)
Real Estate Lease	When an RE Invoice is revised, it creates a history RE Invoice, which inadvertently created two payment vouchers. Now the RE Invoice only creates one payment voucher. (Tri-39643)
Real Estate Lease	When straight line adjustments are used in conjunction with a partial payment schedule, the last payment line item now has the correct Expected Accrual value. (Tri-38463)
Real Estate Lease	When the Lease Treatment is Operating, the value of the Operating Portion of Capital Lease field is not used in the Straight Line Rent Liability calculation. (Tri-37935)
Real Estate Lease	When the Payment = Straight Line/Month, accrual values on PLIs when the expected accrual value should be 0 are now calculated correctly. (Tri-39834)
Real Estate Lease	When the sum of the Straight Line Rent Capital Portion PLIs does not add up to the necessary total due to rounding, the additional PLI that is created is now created with the correct value. (Tri-37962)
Real Estate Lease	When you remove an option from an RE Lease, it is now deleted. (Tri-37244)
Real Estate Lease	Within the same month and year, regardless of payment types, the PLIs are split proportionally. (Tri-37389)
Real Estate Lease	You use the field named *Time Zone used to calculate contract payment schedule* that is now in Application Settings > Lease Accounting Settings > Payment Schedule Settings to establish whether the system's or the user's time zone is used to calculate payment schedules. The Event object now includes a field named `triTimeZoneId`, which contains the value from the *Time Zone used to calculate contract payment schedule* field in Application Settings. The `triTimeZoneId` field is used to calculate payment schedules that create Event records. (Tri-36970)
Real Estate Lease	You use the Units section to change the Currency UOM on the Asset Invoice form or the RE Invoice form to be different from the associated contract.

Area of Change	Description
	(Tri-36375)
Real Estate Projects	Added as child classifications to RE Moving Costs in the Cost Type Classification: Purchase Cost, Financial Category = Purchase Cost and Purchase Price, Financial Category = Purchase Price. (Tri-37564)
Real Estate Projects	An empty Premise Location record is no longer created when an RE Project (new Lease) creates a Lease Abstract. (Tri-36812)
Real Estate Projects	An RE Project Lease when closed out creates the correct preferred provider evaluation survey and portfolio manager evaluation survey. (Tri-40011, Tri-40013)
Real Estate Projects	During the RE Project Termination process, a Contract Status field was added to the Contract Terminate popup. Workflow now properly maps the Contract Status defaulted or changed on the pop up to the amended real estate lease record. (Tri-36967)
Real Estate Projects	In the RE Project Acquisition Offer Information tab, in the Purchase Terms section, percent is now read-only for the Acquisition Costs, Commissions, and Closing Costs fields. (Tri-36941)
Real Estate Projects	In the RE Project form, the RE Project Template list displayed by the Apply Template action no longer includes retired records. (Tri-32169)
Real Estate Projects	In the RE Project Termination form, in the RE Project Termination Site Information tab, in the Details of Termination Or Buyout section, percent is now read-only for the Lease Termination Cost (% of Remaining Obligation) field and the Lease Buyout (% of Remaining Obligation) field. (Tri-36940)
Real Estate Projects	On all RE project forms, the label "Annual Rent Expense" is now "Average Annual Rent". Also, the formulas used to calculate the Average Annual Rent and the Total Commitment were updated and improved. Both now subtract sub-lease rental income. (Tri-36916)
Real Estate Projects	On each RE Project form, in the tabs in the Financial Term tab, the Remove actions now properly deassociate the Cash Flow Line Items that are selected/removed by the user. (Tri-36818)
Real Estate Projects	Purchase Price has been added to Financial Category Classification under 3 Yr Cash Flow. Also Purchase Price has been selected in Financial Categories section of Acquisition record under Project Type Classification. (Tri-37568)
Real Estate Projects	Save and Save & Close actions are now available when RE Project Lease or Acquisition records are in Planning status. (Tri-36538)
Real Estate Projects	The Lease Option is now editable on a contract amendment action item. (Tri-36357)
Real Estate Transaction	Removed the Add action from the OPEX/CAM Reconciliation navigation queries. (Tri-32805)

Area of Change	Description
Reporting	A number of queries had reverse association set to `yes` even though it was not required. These queries now have reverse association set to `no`. (Tri-39388)
Reporting	Added runtime filters for Payment Type, Accounting Type, Due Date (Before) and Due Date (After). (Tri-21010)
Reporting	Changed the Reset Capture Period flag to be cleared in the following Reserve Job Schedules. Checking this flag causes other metrics to not render correctly. ▪ DEFAULT Reservation Resource (Asset) Day Fact Load Table ▪ DEFAULT Reservation Resource (Location) Day Load Fact Table (Tri-38324)
Reporting	Changed the reverse association to No for the following queries: `triJobPlan - Display - triMaintenanceManager - Responsible Org` and `triJobPlan - Display - triMaintenanceManager - Service Provider Org`. Also corrected the association types in the Association filter. (Tri-30297)
Reporting	Changed the reverse association to No for the following query: `triMoveRequestLineItem - Display - Associated Task Query`. (Tri-22458)
Reporting	Now the Currency indicator in the Portfolio Summary Report is displayed and changed according to the user's selection. (Tri-36643)
Reporting	Queries to be removed from the shipping product in the future have `TO_BE_DEPRECATED` in the query tag. (Tri-40031)
Reporting	Related Reports queries for Transformation Content - Upload Error and Transformation Content - Review In Progress now return records in the correct status. (Tri-32711)
Reporting	Removed developer notes from the report description of the Financial and Activity Report, Funding Notification Report, Program Specific Recovery Act Report, Move From/To Details Report, and the Move From/To Summary Report. (Tri-28518, Tri-28521)
Reporting	Removed the contact role filter from the AR Aging report and for the AR Aging report for asset lease. (Tri-36392)
Reporting	Resolved issues in the following BIRT reports that prevented the report from rendering or that entered random values in the fields in the parameter box: Potential Change Order Summary, Space Class Summary by Geography, and Funding Source Summary Report. (Tri-36653)
Reporting	Run the 10.3 patch helper workflow to fix an issue causing time zone classification records to not be associated to the status classification. (Tri-35766)

Area of Change	Description
Reporting	The Active status filter has been renamed to Issued for the `triContract – REPORT – Contract Execution Report for Bin3` report. (Tri-24694)
Reporting	The My Active Request report performs a descending sort correctly. Apply the SQL script to update the system fields with sub-attribute type of `CreatedDateTime` to `CreatedDateTime (Number)` and `ModifiedDateTime` to `ModifiedDateTime (Number)`. Oracle and Microsoft SQL Server scripts are located on the upgrade disk in the `\Scripts` folder. Instructions are within the scripts. (Tri-32473)
Reporting	The parameters are now correct in the Bulk Print RE Invoice and Bulk Print Asset Invoice BIRT reports. (Tri-36635)
Reporting	The symbol is changed throughout when Currency parameter = Currency Conversion and To Currency parameter is any currency. The changes are made to the BIRT reports listed below. ▪ `triRealEstateContract – BIRT – Accounts Payable History` ▪ `triRealEstateContract – BIRT – All Future Lease Obligations` ▪ `triRealEstateContract – BIRT – AR Aging` ▪ `triAssetLease – BIRT – AR Aging for Asset Lease` ▪ `triRealEstateContract – BIRT – AR RE Contract Payment Details` ▪ `triAssetLease – BIRT – AR RE Contract Payment Details for Asset Lease` ▪ `triRealEstateContract – BIRT – Contract Payment Details` ▪ `triRealEstateContract – BIRT – Contract Summary Report` ▪ `triRealEstateContract – BIRT – Future AR Payments` ▪ `triAssetLease – BIRT – Future AR Payments for Asset Lease` ▪ `triRealEstateContract – BIRT – Future Rent Obligations Detail` ▪ `triRealEstateContract – BIRT – Future Rent Obligations Detail for Asset Lease` ▪ `triRealEstateContract – BIRT – Portfolio Summary Report` ▪ `triRealEstateContract – BIRT – Tenant Aging Report` (Tri-36566)
Reporting	Updated the extended formula on the `triContractPaymentsNU` field. (Tri-36938)
Reporting	Updated the subqueries in Key Request and Product Request so they are consistent. (Tri-17581)
Reporting	Updated the Survey Fact Table to get the correct location on the general evaluation. Also corrected Responsible organization and Responding organization data in Survey metric queries. You must recapture the survey fact in order show the results correctly. (Tri-39157)

Area of Change	Description
Requests	By design, the Service Request section is hidden when the service request record is in Issued status. However, the selected Service Request is populated to the field (Service Requested) in the Request Details section, and this field is visible when the service request record is in Issued status. (Tri-35930)
Requests	Corrected the workflow that fires when the user selects an Add Space request or a Return Space request and switches from Me to Someone Else. (Tri-34015)
Requests	Funding Analysis now displays names instead of numbers when comparing funding requests. (Tri-23339)
Requests	Improved the columns displayed in the My Call Records portal section when a user signs in as a Call Center Agent. (Tri-32044)
Requests	In a Move Request Line Item form, the Copy action now copies the Move Planner from the From Location section to the copied record. (Tri-36899)
Requests	In a New Hire request, when the user selects the Someone Else check box and the Requested For is a person with a building that has manage service, only Add Person is prepopulated. (Tri-39683)
Requests	In the Add Person Request, in the New Hire Details section, added a Location field. (Tri-39105)
Requests	In the General Evaluation Request form, in the Survey Recipients section, the Find action now only refers to Employees and Consultants. (Tri-19749)
Requests	In the Human Resources, New Hire form, in the Service Request section, the Add Person radio button now works properly. (Tri-36536)
Requests	In the Product Request form, in the Products Requested section, retired records no longer display when the user selects the Search Catalog link. (Tri-23759)
Requests	Survey questions from the selected template on a General Evaluation Request are now displayed on the General Evaluation Survey record. (Tri-39419)
Requests	The as-shipped Vehicle Specification Class no longer includes the following specification classes: LMV and HMV. (Tri-38023)
Requests	The Follow Up task notification is now only sent to the "Associated To" person if the agent has multiple My Profile associations. (Tri-36847)
Requests	When a move request is completed, the Primary Location field is now updated on the My Profile forms of affected users. (Tri-35612)
Requests	When the user navigates down the solution tree and selects the solution instruction, the correct solution is created and appended to the Solution section of Contract Center. (Tri-22851)

Area of Change	Description
Security	If a user password fails because it is longer than the maximum password length set in Tools -> System Setup -> System -> Password Setup, the message displayed to the user now includes the maximum length. (Tri-34597)
Security	The Bulk Security Utility now supports bulk updating of License and Security Group details for multiple users. (Tri-36073)
Security	TRIRIGA Application Administrator and TRIRIGA Environmental Manager/Planner now have access to the Environmental Meter Log. (Tri-38272)
Space	In the Audit Space form, when a user selects the Close Audit Period action, the status of the Master Audit record changes to History and the statuses of all Audit and Space Audit - Allocation History records associated to the Master Audit change to History. (Tri-27200)
Space	In the Floor form, in the Area Measurements tab, the values for Imperial and Metric now display the correct data. (Tri-37172)
Space	In the Planning Goal Item form, entering a Target Value for the SFP - OPS - Time to Complete (Months) no longer causes an error. (Tri-39940)
Space	In the Space form and in the Space Group form, in the Allocation tab, the Floor Cost per Sq Unit field is now mapped with the value in the Cost per Sq Unit field on the Floor record when the Space record is first created. (Tri-33224)
Space	Move Service Request now shows the To Location once the individual move is set. (Tri-34556)
Space	On the Space Audit form, the Find action in Space Allocation section opens a query section. (Tri-10651)
Space	The Find Space feature for People, Space, and Asset now prompts users to enter search criteria before the search is processed. This targeted search returns results to the user more quickly. (Tri-38510)
Space	When the user clicks Move Facilities Project - Upload Error in the Related Reports, they now see the Related Reports for Move Facilities Projects. (Tri-36285)
Space Use Agreements	Cost Code subqueries on the Find action of the Cost Code section in a Space Use Agreement record now appear as subreports of each other so that selecting one will display the others in the subqueries list. (Tri-13049)
Specifications	Revised the workflow that tests for a null value in the user message. The affected workflow is `triConsumablesSpec - triUploadHidden – Validate Data`. (Tri-32132)
Specifications	Specification forms now display the Attention section on the System tab. (Tri-32409)

Area of Change	Description
State Family Manager	RFP Response state family for create, save, save and close now map the correct workflows. (Tri-32333)
Sustainability > Certifications	Added a Revise action on the Energy Rating Schedule. This action removes scheduled events, which will stop polling on the Energy Rating Schedule. (Tri-36608)
Sustainability > Certifications	Resolved an issue slowing performance of the Rating Schedule. (Tri-36599)
Sustainability > Environmental Data	In Sustainability > Emission Factor > Energy, moved the Energy Source field to the Details section, made the Energy Source field read only, and populate the Energy Source field based on the Meter Type. (Tri-37123)
Sustainability > Environmental Data	The value the Projected Energy field now defaults to be the same as the value of the Current Energy field in the Carbon Footprint Analysis Summary section of the Carbon Footprint Analysis form. (Tri-32573)
Sustainability > Environmental Data	Travel Emission Data now only shows the scope section that is based on the scope in the travel log. Energy Emission Data now only shows the scope section that is based on the energy source selected in the travel log. (Tri-37723)
Sustainability > Environmental Data	You must retire existing emission factor records for travel, energy, global warming, and waste before creating new records. (Tri-37514)
Sustainability > Set Up	The units of measure for CO_2, CH_4, and N_2O emissions are now correctly displayed in the field label. Previously these were displayed in drop-down lists even though selecting different units did not change the calculations. (Tri-37766)
System Setup	Corrected an issue that caused the System Job Scheduler to only process the first carbon log when Capture Historic Runs was checked. Now the Carbon Calculation Needed flag on buildings is not reset immediately after the historic capture runs. The processing determination and reset of the check box now takes place on the subsequent capture that is set for a future date. (Tri-36186)
System Setup	In the System Configuration form, the Delete and Copy actions have been removed. (Tri-32713)
System Setup	Resolved the issue causing the Building Cost ETL to work incorrectly. (Tri-37375)
Tasks	In the Schedule Task form, when a user inputs a number into the Lead(-)/Lag(+)Working Days field and the Lead(-)/Lag(+)Working Hours field and then saves the record, the Lead(-)/Lag(+)Total Working Hours field is now calculated correctly. The same update has been applied to the following tasks: contract review, facility assessment work task, inspection task, key work task, material order task, punchlist task, reserve work task, schedule task, submittal task, work task, inventory count work task, and inventory pick work task. (Tri-36689)

Area of Change	Description
Tasks	In the Work Task form, in the Responsible Organization section, when the user clicks the Find action, the Assign and Auto-Assign actions are hidden and the Unassign action shows. When the user clicks the Clear action, the Unassign action is hidden and the Assign and Auto-Assign actions show. This change was made to the following task types: Work Task, Schedule Task, Inventory Count Work Task, Inventory Pick Work Task, Key Work Task, Material Order Task, Punchlist Task, Submittal Task, Inspection Task, Reservation Work Task, and Facility Assessment Work Task. (Tri-32340)
Tasks	In the Work Task Template form, materials put under Resources are now copied to the Work Task. (Tri-14122)
Tasks	The Find action on the Dependencies section of the task templates listed below now points to the correct query. The affected task templates are as follows: Schedule Task Template, Facility Assessment Work Task Template, Contract Review Template, Inspection Task Template, Inventory Count Work Task Template. Inventory Pick Work Task Template, Key Work Task Template, Punchlist Task Template, Reserve Work Task Template, Schedule Task Template, Submittal Task Template, and Work Task Template. (Tri-27784)
Tasks	The section label for assigned service provider is now "Responsible Organization" for the Contract Review, Contract Review Template, Inspection Task, Inspection Task Template, Punchlist Task, Punchlist Task Template, Submittal Task, and Submittal Task Template forms. (Tri-13156)
Tasks	The `triNameTX` field in all task business objects now has a length of 150 characters. (Tri-36975)
Tasks	When a work task is completed, if the Actual End Date field is empty, the field is now populated with the user's current date and time. If the Actual End Date field contains a value when a work task is completed, no change is made to the value. (Tri-27567)
Transaction Plans	CTQs are mapped from the Transaction Plan and the user can request a CTQ Evaluation. (Tri-36152)
User Profile	The Created Date and Modified Date Time fields on the System tab of a record now display in the user's date format preference. (Tri-33263)
Workflow	Corrected field values in 11 workflows. (Tri-23065)
Workflow	Corrected mapping for the Message Content Note in the Add Subject tasks for the `triIntegrationNotification - SEND - Create Email Integration Notification` workflow. (Tri-28564)
Workflow	Removed an unused workflow, `triOption - triExercise - Create notifications for Renewal type Options`. Retiring or deleting this workflow manually in your environment is optional. (Tri-39183)
Workflow	Removed the End Task from the middle of the `triSpace - Synchronous - Set Availability Dates - Refresh Planned Occupancy and`

Area of Change	Description
	`Planned Vacancy` workflow. (Tri-33897)
Workplace Reservation Manager	A notification has been added to inform the requester on a reservation when the room was set up for auto-cancellation and the system cancelled the room. (Tri-75224)
Workplace Reservation Manager	The Reservation system now supports the ability for a user to end a meeting early from the reservation user interface so that the room can be freed up for others to book. (Tri-68980)
Workplace Reservation Manager	Users can now check out from the reservation user interface, so that the room can be freed up for others to book. If the user does not check out, the room automatically becomes available at the planned end time of the reservation. (Tri-70252)
Workplace Reservation Manager	You can perform workspace searches based on the functional role entitlements that are configured on the workspace for the user that is identified as the requested for. This feature is enabled and disabled in the Application Settings. (Tri-70097)

IBM TRIRIGA Application Platform 3.3.2

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	▪ 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) ▪ 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) ▪ 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. If a search returns multiple records, the user must move out of the input field and use the selector icon to select the record. 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) ▪ 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. 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) ▪ 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.

Area of Impact	Description
	The portal section button retains the focus. (Tri-92252)
	▪ The focus box and the dashed lines are not visible in the portal for quick links of the type Large View.
	Workaround: The status bar at the bottom of the browser shows the target URL 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)
	▪ The focus box or dashed line is not visible when the current focus is on the column header of a hierarchical report.
	Look at the status bar where the column header label is displayed. (Tri-109452, Tri-107966)

Browsers	Browser	Important Information
	Apple Safari	▪ 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.
		▪ Brava viewer is not supported in the Document Manager. (Tri-81601)
		▪ Excel sections are not supported.
		▪ Safari does not support dragging and dropping files from the finder into the multi-file uploader in the Document Manager. (Tri-80867)
		▪ There is limited support for HTML5 charts.
	Google Chrome	▪ 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.
		▪ Excel sections are not supported.
		▪ Java applets are not supported for Chrome on Mac OS X.

Area of Impact	Description

- There is limited support for HTML5 charts.

- 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 *How To Enable the Built-in PDF Viewer in Google Chrome.* (Tri-67281)

- 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)

Internet Explorer

- Microsoft Internet Explorer (IE) 8 includes a "Preserve Favorites website data" option. This property is selected (on) by default in IE 8. This property retains temporary Internet files from sites that are in your Favorites even if you have set the flag to delete all temporary files. Clear this property. If left on and a user's IBM TRIRIGA server is in their Favorites, the cache is not cleared, which can cause js, jsp, and style sheet issues after an upgrade. If you want to clear your cache, uncheck the "Preserve Favorites website data" option.

- Due to a known limitation in IE 10, the background color on fields may show when the record is printed from the print preview page. (Tri-75848)

- In IE 10, 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.

- In IE 10, Excel sections are not supported.

- 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)

- 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)

- When a user exports a PDF file from a graphics

Area of Impact	Description	
		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)
		▪ When a user running IE 8 with "Smart Screen Filters" turned ON tries to load more than 1000 records on a page, IE 8 verifies the response it is getting back and crashes, since the response is too large. To avoid this circumstance, turn off the "Smart Screen Filters". For more information refer to http://www.microsoft.com/security/filters/smartscreen.aspx (Tri-27698)
		▪ Your browser must not use a compatibility view. To confirm that your browser is not in a compatibility view, press the F12 key, click the Browser Mode tab, and then select the setting for your browser.
	Mozilla Firefox	▪ 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.
		▪ Excel sections are not supported.
		▪ Fixed column queries do not remain fixed due to a Firefox limitation.
		▪ 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 fixes the issue. You can find more information in the following article: http://support.mozilla.org/en-US/questions/938033 (Tri-78853)
		▪ There is limited support for HTML5 charts.
		▪ Firefox may not close all windows automatically when signing out of a single sign-on session. (Tri-84899)
Graphics	▪ Exporting very large graphics could require configuring your web server	

Area of Impact	Description
	with a larger maximum post size. (Tri-28770)
	▪ 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 Following the steps in that guide, add a custom property named `CookiesConfigureNoCache` with a value of `False` to your secure HTTP transport channels. After completion, restart the server, and the Export works properly. (Tri-34664)
Installation	▪ 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) ▪ The IBM TRIRIGA Application Platform now has two license agreements that must be accepted before installation. (Tri-106150)
Microsoft Excel	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 *office web components roadmap* 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.
Microsoft SQL Server	▪ For a Microsoft SQL Server (MSSQL) database, running the Multi-Byte Character Support (MBCS) conversion process during upgrade to 3.3 can take several hours. The duration depends on many factors, such as hardware, database size, and disk speed. (Tri-32051) ▪ If the upgrade of an MSSQL database with MBCS enabled fails and you see in the `ant.log` that there were invalid views during the NVarchar Conversion process, use the following recovery steps: 1. Review the `ant.log` to identify the invalid views. 2. Run the upgrade with MBCS Support turned off. 3. Log into IBM TRIRIGA and republish the business objects identified in the `ant.log` as having invalid views.

Area of Impact	Description
	4. Run upgrade with MBCS Support turned on. (Tri-32284)
	▪ If you are upgrading an MSSQL database with MBCS enabled, before the upgrade to 3.3.x you must (1) back up your database, and (2) republish the `triRealEstateContract` business object in the `triContract` module, the `triBuilding` business object in the `Location` module, the `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)
	▪ 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 3.3 MBCS upgrade. 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)
	▪ Microsoft SQL Server has a row size limit of 8060 bytes. On MSS2005 and 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.
Navigation	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: ▪ For Microsoft Internet Explorer -> Alt+AccessKey+Enter ▪ For Mozilla Firefox -> Alt+Shift+AccessKey ▪ For Google Chrome -> Alt+AccessKey ▪ For Apple Safari -> Alt+Control+AccessKey (Tri-71056)
Object Migration	▪ Some object types in object migration packages from a pre-3.0 environment do not import into a 3.x environment. The object types that do not import into 3.x are as follows: managers; pre-3.0 portals; pre-3.0

Area of Impact	Description
	scorecards; and shortcut list, quick add list, query list, and action items query portal sections.
	▪ When an object migration package created before IBM TRIRIGA Application Platform 3.3 is imported into an environment that has been upgraded to IBM TRIRIGA Application Platform 3.3 and IBM TRIRIGA 10.3, the language table is deleted. This is because the localizable property does not exist in an object migration package created before IBM TRIRIGA Application Platform 3.3. As a result the localizable property value that is already in the target system is reset. By design, the business object publish deletes the column for a field that is no longer marked as localizable. Since an old object migration package does not have this property, all the columns are dropped, which eventually drops the entire language table.
Oracle	▪ 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 *Installing IBM TRIRIGA Application Platform* to ensure your platform supports multi-byte characters properly. (Tri-32998) ▪ 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 *Installing IBM TRIRIGA Application Platform*. Failure to do so could compromise your data.
Report Manager	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.
Security	▪ 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. ▪ Security is not applied when a PDF generated from an external report type (BIRT and Crystal) is emailed. (Tri-88536)
Software Licenses	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 `LICENSE_IBM_TRIRIGA_{productname}.properties` (for example, `LICENSE_IBM_TRIRIGA_Application_Platform.properties`). You may continue to use your existing `TRIRIGALICENSE.properties` file if you have one. You do not need to replace your `TRIRIGALICENSE.properties` file until it expires or your software requirements change. At the end of an install, your `config\licenses` directory should contain

Area of Impact	Description
	either your `LICENSE_IBM_TRIRIGA_{productname}.properties` files or your `TRIRIGALICENSE.properties` file, but not both. After you start using the `LICENSE_IBM_TRIRIGA_{productname}.properties` files, do not revert to the `TRIRIGALICENSE.properties` file. (Tri-33449) **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.
Syclo	Syclo has been removed from the *IBM TRIRIGA Application Platform Compatibility Matrix*. Customers should contact the vendor with any issues or concerns regarding Syclo and the IBM TRIRIGA Application Platform.

WebSphere	▪ The automated installation of TRIRIGA with WebSphere may fail if the `com.ibm.SOAP.requestTimeout` parameter value is not increased. The parameter can be found in the `soap.client.props` file within the Application Server properties directory of WebSphere. Setting this value to `0` makes it unlimited.
	
	▪ When using WebSphere, an additional MIME Type is required for certain pages in the application to display properly. You must add a new extension, `phtml`, as `text/html`. For more information, go to the IBM TRIRIGA Application Platform 3 Information Center and select *Installing IBM TRIRIGA Application Platform*. (Tri-29060)
	
	▪ Use the correct JDK for your WebSphere installation.
	
	If you have two WebSphere installations,
	one at
	    `/[pathToWebsphere]/IBM/WebSphere/AppServer for`
	    `WebSphere 8.0`
	and one at
	    `/[pathToWebsphere]/IBM/WebSphere/AppServer85 for`
	    `WebSphere 8.5`
	using java in the 8.0 installation causes the installation to fail. (Tri-89328)

Known Limitations

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

Area of Impact	Description
Accessibility	▪ Internet Explorer is the supported browser for accessibility. ▪ In Internet Explorer, section action links do not retain focus after a link's

Area of Impact	Description
	action page is opened and closed. (Tri-93030)
	▪ 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)
	▪ The focus may be lost when users add, rename, delete, or move a bookmark or bookmark folder. 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)
Document Management	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)
Extract, Transform, and Load (ETL)	▪ 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, Tri-27705) ▪ 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.
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) ▪ On December 31, 2013, Esri removes the default geocode service that is used by the Geocode Address action in the Primary Address section of building records. To geocode new building records, consider taking one of the following options: ○ Preferred: Configure the TRIRIGA Integration Object to populate the GIS Longitude and GIS Latitude fields for all building records, as

Area of Impact	Description
	described in the Geocode Example in the *IBM TRIRIGA Application Platform 3 Connector User Guide*. When you follow this example, set the `outSR` property to `4326`, which uses the same spatial reference as was previously used by the Geocode Address action. The *IBM TRIRIGA Application Platform 3 Connector User Guide* is at the following link: http://pic.dhe.ibm.com/infocenter/tivihelp/v49r1/topic/com.ibm.tap.doc_3.3.2/pdfs/pdf_tap_connector.pdf. o Alternative: Specify a different geocode service in the Geocode Service field of the ArcGIS record in Tools > System Setup > GIS > Configuration. With this method, you can continue to use the Geocode Address action. For example, you can specify an Esri sample server such as the following server: http://sampleserver1.arcgisonline.com/ArcGIS/services/Locators/ESRI_Geocode_USA/GeocodeServer.
Globalization	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 of 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. 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.
Globalization	The following areas are not fully globalized and translated: ▪ Application builder pages are only available in US English, including Form Builder, Data Modeler, and Workflow Builder. 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. ▪ The installer is only available in US English. Installing to a path under `Program Files` may not work on a non-English version of Windows. ▪ Some pages to which only an administrative user has access are only available in US English. This includes Application Setup pages, the Administrator Console, and data utilities. ▪ Brava! Viewer labels are available in US English only. ▪ Document paths in BIRT reports are available in US English only.
IBM TRIRIGA SVG Viewer	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)
Language Packs	▪ When you import a language pack for the first time, you may see exception messages in the `LabelManager.log` file. To eliminate the

Area of Impact	Description
	exception messages, repeat the import of the language pack. ▪ You may see persistence errors in the `Translation.log` file when a language pack is imported into a 3.2 to 3.3 upgrade file with the 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 fix this issue.
Microsoft Exchange	Microsoft Exchange (SMTP) does not support yearly recurrences when day, weekday, and weekend day are specified for the weekly option. (Tri-39663)

Microsoft SQL Server	Improved performance in Microsoft SQL Server environments by ensuring the correct data type is passed to the database to avoid implicit conversions.
	
	 To alleviate contention and possible deadlocks in the `GUI_INSTANCE` table, Microsoft SQL Server users can add the following index. The index name can be changed to follow your database naming conventions.
	 `CREATE INDEX "IDX01_GUI_INSTANCE" ON "GUI_INSTANCE"`
	 `("SPEC_ID", "PROPERTY_TYPE")`
	 (Tri-91207-IV44233)

Multi-byte Resource Names	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. The following describes how to convert the powershell to UTF-8. 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.
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	In metric queries, only the US Dollar symbol is displayed for currency data, regardless of the user's UOM preference or of the currency UOM set for a project. (Tri-38270)

Area of Impact	Description
Single Sign-On	IBM TRIRIGA CAD Integrator/Publisher requires basic authentication to be enabled.

IBM TRIRIGA Application Platform 3.3.2 Changes

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

Area of Change	Description
Administrator Console	If `tririga-ds.xml` is encrypted, you cannot edit connection information from the Administrator Console. (Tri-98888-IV45537)
Administrator Console	Resolved an error when resetting all Instrumentation metrics in the Administrator Console Performance Monitor. (Tri-97991)
Administrator Console	Resolved an issue where unselected Future Actions with the same Instance ID were deleted. (Tri-108671-IV50485)
Administrator Console	Sessions are now disposed of completely when a session is stopped by the IBM TRIRIGA Administrator Console. (Tri-91885)
Agents	Resolved a problem where the scheduler and the cleanup agent would loop forever when a no-end-date monthly event series excluded the months when the event was to occur. For example, if the monthly event series was set up to run every six months, starting on January 1 (so it would run in January and July), and the months excluded were January and July, the scheduler would loop forever looking for the next sixth month that was January or July, all of which were excluded. (Tri-100279)
Data Modeler	Date fields hold both date and time in millisecond format. Before you perform duration calculations with date fields, you must strip out the time portion with the DateFromDateTime function. The DateFromDateTime function always returns "0:00" in the time portion (GMT midnight). (Tri-102590)
Data Modeler	If the base business object is not published, you cannot publish a non-base business object. An error message is displayed. (Tri-94222)
Data Modeler and Report Manager	The characters ` ` no longer display in field labels in the Report Manager and in the Data Modeler. (Tri-67113)
DataConnect	Resolved a DataConnect issue that caused all records to fail to import when the import included one invalid record and the workflow task used temporary data. (Tri-105340)
DataConnect	Resolved a DataConnect issue where an error would occur if not all staging keys contained values. Now null staging key values can be included in record lookups; however, at least one non-null staging key value is required. (Tri-106424)

Area of Change	Description
DataConnect	Resolved a DataConnect issue where record lookups in both Update mode and Upsert mode did not take localized data into consideration. Also resolved a similar issue where Section record lookups did not take localized data into consideration. (Tri-107160)
DataConnect	Resolved an issue where the `USER_ID` column in the `DC_JOB` table was not populated upon the Execute action in an integration object. (Tri-104412-IV47434)
Document Manager	The check in action now works correctly for non-US English-language users. (Tri-107100)
Document Manager	The Document Manager no longer prompts for secure and insecure content. (Tri-99333-IV46760)
Drag and Drop	Resizable windows now have a symbol in the lower-right corner to use to adjust the size of the window. You can no longer use keyboard keys such as Shift or Ctrl to resize windows. This affects builder tools such as the Data Modeler, the Form Builder, and object migration. (Tri-100932)
Form Builder	If the contents of the Tab Information field exceed 200 characters when the form is saved, a warning message is displayed to the user. (Tri-93985)
Form Builder	User can now switch tabs in a multi-tab section when editing a form in the Form Builder. (Tri-88623-IV41867)
Gantt	Resolved an issue that prevented the Gantt section applet from loading in SSO environments that use NTLM version 2 for authentication. (Tri-84737)
GIS	Added a translated label to inform the user if the ErsiJS API file was not found in the ClassLoader to display in a GIS section. (Tri-110544)
GIS	GIS map renders properly on all supported browsers even when the user does not clear the cache. (Tri-108432)
GIS	If there are errors loading the labels for EsriJS, for example caused by SSL or SSO configuration problems, a warning is logged and US English labels are returned. (Tri-113854)
GIS	Resolved issues that caused errors in Microsoft Internet Explorer 8 and that prevented the display of table results from the selected query when you use the JavaScript version of the Esri viewer. (Tri-102528)
GIS	When the EsriJS Connector initially loads, if there is exactly one result, the item is centered and zoomed. (Tri-102568-IV47907)
GIS	▪ When the word "Image" is in the results column and there is an image field with the value, the image renders. ▪ When calling to get the language pack files, the connector now uses `hostname` as the host. Also added logging to the `server.log`, that shows "fetching resource for url[…]", where the url is the hostname.

Area of Change	Description
	(Tri-101928)
Globalization	Classification field values in metric charts are now translated into the user's language. (Tri-106490)
Globalization	In the Administrator Console, in the Language Manager, the new Export Data for Translation section contains the Export link that was previously in the Swap Base Language section. You can now specify the target language for the export. By default, US English is the default target language and the Internal Value check box is selected. When the base language is not US English and the user selects US English as the target language, the Internal Value check box is cleared by default. The assumption in this case is that the user wants to retrieve the target US English values from the language table. This feature is available for full exports only. (Tri-92980)
Globalization	In the Label Manager, an export of GUI Tab Information now populates values in the target for .xml and .xliff files. (Tri-96143-IV44928)
Globalization	Label Style/Filter and theme list values are now translated in web graphics sections. (Tri-111505)
Globalization	Resolved a metric query chart issue where classification field values and the unassigned text were not being translated for the user's language in the chart filters. (Tri-106495)
Globalization	Resolved an issue in query runtime where localized data was not displayed when the field was from associated module level join. (Tri-106182)
Globalization	Resolved an issue that prevented a user from using dependent lists in an editable query. (Tri-89613)
Globalization	Resolved an issue where importing a language pack did not import the dependent list values in the target environment. (Tri-108306)
Globalization	The field columns that are displayed in the Columns and Filters tabs in a report definition now account for the user's language in the sort ordering for field labels. (Tri-111510)
Globalization	The locator field picker now shows translated values when the locator is pointing to a localizable field. (Tri-90983)
Globalization	The query sorting indicator is shown for a non-US English-language user when the user clicks the column label to sort. In a form, when a user sorts query results, the data is sorted based on Unicode sorting for all languages. The result might not match the expected behavior for non-US English-language users. (Tri-108297-IV50822)
Globalization	Upload Path, Size, Status, Remove, Select Files, Upload Files, Name, and Check In Document in the Document Manager can now be translated. (Tri-110508)
Globalization	When a language pack file is imported, the previous `LabelManager.log` file is renamed with a time stamp and a new `LabelManager.log` is

Area of Change	Description
	created. Additionally, the `TranslationData.log` now only logs WARN and higher messages. (Tri-93053)
Graphics	Resolved an issue that caused graphics sections to not render graphics when more than one association existed with the same association string that the graphics section was configured to look for. (Tri-110088-IV50567)
Graphics	With the new Graphics Layer Configuration feature, you can override the stroke color of entities in a layer when rendered in the graphics section and clear the server cache after you add or update the layer configuration record. TRIRIGA layers, by design, are not affected by this change. The stroke color of the text elements in the layer is not affected by this change. (Tri-92547)
Graphics	You no longer must clear the object metadata cache to see newly created data in dynamic system lists, such as those found in the Graphics Label Style, Label Filter, and CI Mapping forms. This change addresses all of these list types, which include module, business object, form, section, field, and report data selection. (Tri-103529-IV47205)
IBM TRIRIGA Connector for Business Applications	When you terminate the session from IBM TRIRIGA Connector for Business Applications, the HTTP session is terminated immediately, not just the IBM TRIRIGA session. (Tri-91934)
Installation	IBM TRIRIGA no longer provides an installer for the HPUX operating system because HPUX is no longer supported. (Tri-95866)
Installation	Only 64-bit application server installations are supported. The installer no longer launches in 32-bit environments. Use only 64-bit JVMs in 64-bit operating systems. (Tri-66656)
Installation	The installer no longer prompts for the System user and password to create the data schema if you choose option 3 only (Load Database). (Tri-106939)
Installation	The installer now requires JTDS driver version 1.2.8 for SQL Server installations and upgrades. You can download the driver from http://sourceforge.net/projects/jtds/files/jtds/1.2.8/jtds-1.2.8-dist.zip/download. (Tri-75072, Tri-95183)
Installation	Windows 2012 server is now supported. (Tri-66697)
Installer for the IBM TRIRIGA Workplace Reservation Manager Add-In to Microsoft Outlook	The name of the installer now includes the platform and version to be installed. (Tri-106626)
Java Applets	Beginning with Java update 45, loading an applet within IBM TRIRIGA triggered a warning message. Now, the first time that any applet is loaded, an informational dialog allows the user to suppress the warning for future loading of applets. (Tri-113113)

Area of Change	Description
Label Manger	The Label Manager now logs results to the `LabelManager.log` file when you import a single .xml file or .xliff file. (Tri-92018-IV43907)
License Metrics	The new `LICENSE_METRIC` table tracks the concurrent user count for each product license. A snapshot is taken every 10 minutes. You can view the data from the Administrator Console by querying the `LICENSE_METRIC` table from the Database Query Tool. (Tri-93065)
Object Migration	Resolved an issue when you migrate a business object with a smart section field name that also exists as a field name in the business object. (Tri-106019)
Object Migration	Resolved an issue with full package object migration export. (Tri-102077-IV46737)
Offline	Resolved an issue that caused the distill process to fail to evaluate formula/reference cells. (Tri-106184-IV49884)
Offline	Resolved an issue with using a secure IMAPS mail server in a WebSphere application server environment. (Tri-91680-IV46518)
Performance	Improved performance and reduced locks when using Microsoft SQL Server by resolving implicit conversions in the following areas: ▪ Logging out of a user session. (Tri-100764) ▪ Publishing a business object. Publishing now creates indexes for `SYS_GUIID` and `SYS_OBJECTID` fields against the `T_BusinessObject` table. (Tri-109561) ▪ Running `ScheduledEvent` cleanup queries. Also resolved a long-running SQL. (Tri-101052) ▪ Running TRIRIGA queries with a duration field. (Tri-102249) ▪ Using `$$USERID$$`, `$$PROJECTID$$`, and `$$RECORDID$$` in system filters. (Tri-102246) ▪ Updating the security groups in a user profile. (Tri-102243) ▪ Clearing the `EF_EVENT` queue. (Tri-102248) ▪ Passing the correct data type to the database. To alleviate contention and possible deadlocks in the `GUI_INSTANCE` table, you can add the following index. Change the index name to follow your database naming conventions. `CREATE INDEX "IDX01_GUI_INSTANCE" ON "GUI_INSTANCE" ("SPEC_ID", "PROPERTY_TYPE")` (Tri-91207-IV44233) ▪ Hierarchical queries. (Tri-92819) ▪ Query handler. (Tri-92821)

Area of Change	Description
	- Record runtime hidden forms. (Tri-92823) - Show more filters within queries and reports. (Tri-114878) - Workflow processing of user approval tasks. (Tri-103212)
Portals	Resolved an issue that caused a gray box to open when a user went to a landing page on Microsoft Internet Explorer browser versions before 9. (Tri-67100)
Record Runtime	An event color and event label prefix can now be configured in a calendar set. (Tri-99350)
Record Runtime	Required fields and read-only required fields in smart sections are now validated on a state transition. (Tri-89950-IV51378)
Record Runtime	Resolved an issue that caused the value of a date field to move back a day when the date field was saved. (Tri-107584)
Record Runtime	Resolved an issue that prevented the localized value of a smart section field from displaying. (Tri-106997-IV49881)
Record Runtime	Resolved an issue with Date and Time fields in queries. The time no longer shows an hour off when the server is in the British Summer Time zone, or GMT, and a user has no time zone set in their My Profile. Date fields have a new property named Relative. When selected, a date is a date no matter what time zone the user views it in. This is similar to how Date and Time fields now show the same time no matter what time zone your users are set to. (Tri-92678-IV47356)
Record Runtime	System Organization and Geography fields now autopopulate when you create a new record in the People module from the user's profile record. This gives the user access to newly created records when their security group limits Geography and Organization scope. (Tri-99583-IV46118)
Record Runtime	Temporary data in an editable query in a multi-tab section is retained when the user switches tabs. (Tri-92487)
Record Runtime	The audit action functionality now displays the date with a time stamp. (Tri-94654-IV44213)
Record Runtime	When the Enable Skip Navigation check box is selected in a user's My Profile, the Skip Navigation link is available at the top of portals and forms. After the user tabs to the Skip Navigation link and presses Enter, the user is taken directly to the main content of the portal or form. (Tri-109672)
Reporting	Chart type reports now use the decimal precision that is specified for the report in the Report Manager. (Tri-100739)
Reporting	Queued reports now use the URL defined in the `FRONT_END_SERVER` property in the `TRIRIGAWEB.properties` file. (Tri-100429-IV45931)

Area of Change	Description
Reporting	Resolved a reporting issue where Export to Excel was producing an Excel spreadsheet with data columns that did not align with column headers when UOM fields were in the report. (Tri-109145-IV50332)
Reporting	Resolved an issue that prevented temporary association data from being used when a query was exported to Excel. (Tri-111630-IV51403)
Reporting	Resolved an issue where drill through of Chart type reports showed the complete report instead of just the data for the place the user clicked. (Tri-100738)
Reporting	Resolved an issue where Graphic reports that were to return results based on a unique value for the Color By field did not list hatch and color field options. (Tri-103440)
Reporting	The Data tab of the Scorecard at runtime now shows the same percent values that are shown in the chart. For example, when the chart shows 25.25%, the Data tab now also shows 25.25, instead of .25, which was shown before this change. All chart types with expected percentage values are affected with this change. The affected chart types are Bar Percent, Circular Gauge Percent, and Linear Gauge Percent. (Tri-105658)
Reporting	The query engine now filters the result correctly when a user specifies the data value for a System Read Only date and time number field in the user's date format instead of in milliseconds. (Tri-100289)
Reporting	When a query includes a color field and a group by on a different field, when the report is run and the data is exported to Excel, the values in the color field are now exported. (Tri-89420)
SAP Crystal Reports	IBM TRIRIGA now supports the use SAP Crystal Reports version 2011. For information about installing Crystal 2011, see the *IBM TRIRIGA Application Platform 3 Connector for SAP BusinessObjects User Guide*. (Tri-96126)
Security	All hierarchy trees that use TririgaWidget now use session cookies instead of persistent cookies. When a user selects or expands certain tree nodes, the state of those nodes now is only kept within the session of the browser. When the browser exits and reopens, the state of those nodes is reset. (Tri-96742-IV45084)
Security	IBM TRIRIGA Workplace Performance Management Operations and IBM TRIRIGA Workplace Operations Manager licenses were updated to add access to the Mail > Recurrence and triLog > triReserveCheckInLog business objects. (Tri-113435)
Security	The IBM TRIRIGA Integrated Workplace Manager license now has module level access to `triProcessForm`. (Tri-115132)
Server Startup	Production Mode setting now displays at startup time in the system's `server.log` file. If a system is running with Production Mode = N, the system displays a message that warns about the performance impact. If the system is configured with Production Mode = Y, the system displays a

Area of Change	Description
	message that the setting is set correctly. (Tri-95863)
UOM	Number fields now allowing the entry of three or more leading zeros directly after the decimal point when the digit that precedes the decimal point is a zero. For example, 0.0001. (Tri-108131-IV50116)
WebLogic Application Server	Resolved a WebLogic issue where setting session timeout with the WebLogic administration console had no effect. For more information, see the `TRIRIGAWEB.properties` file. (Tri-87556)
WebSphere	Aspects of Java applets might be blocked by WebSphere security. The workaround is to decrease the security level in the Java control panel. (Tri-11667)
Workflow	An Iterator task now correctly refetches data in an existing iterator from a Break task. (Tri-87554)
Workflow	Resolved a spelling issue when deleting a task in Workflow Builder. (Tri-96232-IV44798)
Workflow	Resolved an issue that prevented the Assign Variable task from clearing the variable data when the clear data property was set. (Tri-112558-IV51423)
Workflow	Workflow mappings are now easier to differentiate with alternating white and gray backgrounds. (Tri-93426)

IBM TRIRIGA Application Platform 3.3.2 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 Information Center and select *Installing IBM TRIRIGA Application Platform > Configuring the platform > Properties files*.

Area of Change	Description
ALLOW_PASSWORD_AUTO_COMPLETE	Enabling auto completion of login passwords can be set with the `ALLOW_PASSWORD_AUTO_COMPLETE` property. (Tri-101528)
ALLOWED_URL_FOR_REDIRECT	To redirect a user to an external URL after login, specify the URL in the `ALLOWED_URL_FOR_REDIRECT` property. If you do not specify the URL in this property and attempt to redirect to that URL, your users see an unauthorized page. (Tri-101524)
SSO_BACKING_SERVER_PORT	When SSO is enabled and the SSO server port number is not the same as the back end server port number, you now must specify the back end server port number in the `SSO_BACKING_SERVER_PORT` property. For example, `SSO_BACKING_SERVER_PORT=8001`. The default value of `SSO_BACKING_SERVER_PORT` is −1. When the value is −1 or any other negative number, the port number of the front end server is used as the port

Area of Change	Description
	number for the back end server. If the port number is not configured correctly, an error message is logged and US English labels are returned. (Tri-112922)
`SYSTEM_DEFAULT_TIMEZONE`	You must use a complete time zone name in the `SYSTEM_DEFAULT_TIMEZONE` property instead of a three-letter time zone abbreviation. For example, replace `PST` with `America/Los_Angeles`. For a list of valid time zone names, see the Time zone ID column at https://publib.boulder.ibm.com/infocenter/iseries/v5r4/index.jsp?topic=%2Frzamy%2F50%2Fadmin%2Freftzval.htm. (Tri-92729)

IBM TRIRIGA Application Platform 3.3.1.1 Changes

You upgrade your version of IBM TRIRIGA Application Platform for the 3.3.1.1 release by fix pack. You must be on IBM TRIRIGA Application Platform 3.3.1 before you apply this fix pack.

To download the 3.3.1.1 fix pack, go to Fix Central at the following link: http://www.ibm.com/support/fixcentral. In the Find product tab, select **IBM TRIRIGA Application Platform**, **3.3.1**, and your platform. Download the `3.3.1.1-TIV-TAP-FP0001-RDME` readme and the `3.3.1.1-TIV-TAP-FP0001` package. Follow the directions in the readme file.

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

Area of Change	Description
Database	Improved performance in Microsoft SQL Server environments by ensuring the correct data type is passed to the database to avoid implicit conversions. (Tri-95179)
Globalization	Exporting GUI Tab Information now populates target values in xml and xliff files. (Tri-98642)
IBM TRIRIGA Connector for ESRI Geographic Information System	Resolved issues that caused errors in Microsoft Internet Explorer 8 and that prevented the display of table results from the selected query in the EsriJS Connector. (Tri-102531)
IBM TRIRIGA Connector for Offline Forms	Resolved an issue that caused the UOM defined in the offline form to not match the record in IBM TRIRIGA. (Tri-96781)
IBM TRIRIGA Connector for Offline Forms	Resolved an issue with using a secure IMAPS mail server in a WebSphere application server environment. (Tri-101918)
Installation	The code signing certificate for applets was updated. The new certificate expires in June 2015. (Tri-95196)
Portals	Resolved an issue that caused a gray box to display intermittently when a user accessed a landing page when using Microsoft Internet Explorer 8.

Area of Change	Description
	(Tri-96021)
Record Runtime	The Audit Actions tab now displays the date and time based on the user's profile setting. (Tri-95194)
Security	Resolved several cross-site scripting vulnerabilities, removed a persistent cookie in the TririgaWidget tree, removed an unsafe flash embedded setting, and resolved a parameter-based redirection issue on login. (Tri-94760, Tri-94761, Tri-94762, Tri-101564, Tri-101565, Tri-101566)
Security	The Gantt section applet now loads in SSO environments that use NTLM version 2 for authentication. (Tri-94913)
Workplace Reservation Manager	Resolved an issue that prevented a reservation from being created when a daily recurrence pattern was used. (Tri-98022)

IBM TRIRIGA Application Platform 3.3.1.1 Properties Files

The following change to the `TRIRIGAWEB.properties` file is in this release:

Area of Change	Description
`ALLOW_PASSWORD_AUTO_COMPLETE`	Used to enable or disable autocompletion of a user's password for login to IBM TRIRIGA and to the Administrator Console. The default value is `Y`. (Tri-101567)

IBM TRIRIGA Application Platform 3.3.1 Enhancements

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

Area of Impact	Description
Accessibility	Users accessing IBM TRIRIGA with an accessibility tool like a screen reader can now read field labels and attributes and the alternate text for images.
Browser Support	Users can now use IBM TRIRIGA from the following browsers: ▪ Apple Safari ▪ Google Chrome ▪ Microsoft Internet Explorer ▪ Mozilla Firefox For detailed information about support for each browser, see the Important

Area of Impact	Description
	Information and Known Limitations for IBM TRIRIGA Application Platform. For detailed information about supported browser versions and supported operating systems for each browser, see the *IBM TRIRIGA Application Platform Compatibility Matrix*.
Globalization	In addition to Brazilian Portuguese, Czech, Dutch, French, German, Hungarian, Italian, Japanese, Norwegian, Polish, Russian, Simplified Chinese, Spanish, Swedish, US English, and Traditional Chinese, IBM TRIRIGA applications now have language packs available in British English, Danish, Finnish, and Korean.
Help	Help now opens the help record for a business object when invoked from a manager query context. (Tri-88917)
IBM TRIRIGA Connector for Business Applications	The IBM TRIRIGA Connector for Business Applications now supports methods for metric queries.
IBM TRIRIGA Connector for ESRI Geographic Information System (GIS)	The enhanced Esri viewer offers redesigned configuration forms, flexibility in creating customized interfaces with Esri, and an upgrade path from the previous version.
Red Hat JBoss	Red Hat JBoss 5.1 Enterprise Application Platform (EAP) application server is now supported.
TRIRIGA Integration Object	Expanded support for REST API with the following new features: ▪ Tokens to use dynamic data from queries to send data ▪ Request types for delete, get, post, and put operations ▪ Headers ▪ Validation of data before it is sent
User's Session	A user with a session that is about to time out can receive an alert message that gives them notice of when the session is to expire. A system administrator configures this feature from the `TRIRIGAWEB.properties`. The `SESSION_WARNING_ENABLED` property can be configured to trigger the alert. The `SESSION_WARNING_THRESHOLD` property defines how many minutes before the session expires that the alert displays. (Tri-71462, Tri-81074-IV38021)

IBM TRIRIGA Application Platform 3.3.1 Changes

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

Area of Change	Description
Accessibility	As-delivered portal images now include an alt attribute to conform to the Deque screen reader standard. (Tri-71578, Tri-71584)
Administrator Console	A history of the patches applied to your system can be viewed in the Build Number page of the Administrator Console. (Tri-70308)
Application Server	The automated WebSphere install now includes the following Java option to support environments where BIRT reporting is on a separate server: `-Xjit:exclude={org/mozilla/javascript/UintMap.rehashTable*}` To add this Java option manually: 1. Open the WebSphere Console on the server. 2. Navigate to Servers > Server Types > WebSphere Application servers > serverX > Java and Process Management > Process definition > Java Virtual Machine 3. In the Generic JVM arguments section, add `-Xjit:exclude={org/mozilla/javascript/UintMap.rehashTable*}` 4. Bounce the application server. (Tri-70391)
CAD Integrator	Resolved an issue where moving elements in AutoCAD caused AutoCAD to crash. (Tri-80872)
Cleanup Agent	The Cleanup Agent no longer puts messages in the server log when Crystal is not installed. (Tri-77293-IV37383)
Currency Conversion	Currency conversion pages now show the value of the currency conversion rate field in standard decimal format instead of in exponential number format. (Tri-66913)
Data Integrator	A user that is not a member of the Admin Group no longer receives a security error message after uploading a file to Data Integrator. (Tri-66639-IV31704)
Data Modeler	A state transition action now honors the value of the Audit Actions property of a business object. For a state action to be audited, the Audit Actions flag must be selected. (Tri-67115-IV29894)
Data Modeler	If the business object is in a published state, you can now highlight the field name of a field label in the business object field list. (Tri-76826)
Data Modeler	Searching for a field in the Data Modeler when the field label includes a character specified in TRIRIGAWEB.properties to be invalid no longer causes a system error. (Tri-81064)
Data Modeler	Text fields now support a field size of up to 1000 in Microsoft SQL Server implementations. (Tri-81012)
Data Modeler	The default layout is now business object/field properties first, field list second, and associations third. All are full height by default. (Tri-66640)
Data Modeler	The Sub Action property label "Log" is now "Audit Action". (Tri-66914)

Area of Change	Description
Data Modeler	Where Used for fields now includes when the field is used in a workflow variable from an expression. (Tri-70305)
DataConnect	A DataConnect upsert on a business object that has no DataConnect keys defined now performs an insert of the data in the staging table record. (Tri-87523)
Document Management	The referenced files of a document in publication are also published when the "Include Referenced Documents" option of the publication is checked. (Tri-67065)
Documentation	The *IBM TRIRIGA 10 Document Management User Guide* now correctly reflects the actions available after selecting the Publish action. (Tri-68789-IV34260)
Formula Engine	A server no longer fails on startup if an extended formula has a bad UOM_TYPE on one of its fields. (Tri-66659)
Gantt	Gantt form sections can now be set to read only from a Modify Metadata workflow task. (Tri-88361-IV40957)
GIS	If you load a GIS tab or portal section and see the following phrase: "No EsriJS_arcgis.js file found.", go to esri.com, copy the `http://serverapi.arcgisonline.com/jsapi/arcgis/3.3/` file, name it `EsriJS_arcgis.js`, and upload it to the EsriJS Classloader object under System > ClassLoader > EsriJS > Resource File. (Tri-89664)
GIS	In the Address section of a building record, it is only necessary for a user to add either the city and state or the zip code for the geocode address to find the building. (Tri-66462)
GIS	Removed the Move Location feature. (Tri-79574-IV37847)
Globalization	"Processing Excel Sections." is now translated when a user clicks the Calculate Data action on an Excel section. (Tri-67121)
Globalization	A note has been added for IBM translators when a particular label should be partially translated. (Tri-88152-IV40891)
Globalization	Changed the sequence of the words in the tooltip for Portfolio > Key Rings > Inline View > Add so that it can be translated into German and Korean. (Tri-78492)
Globalization	Label Manager now supports import and export in US English. (Tri-83917)
Globalization	Offline content labels with line breaks are now translated. (Tri-66902)
Globalization	Opening a record when there is no UOM for a particular language no longer causes an error for a non-US English-language user. (Tri-78496)
Globalization	Resolved an issue that caused an error when a non-US English-language user viewed the Reports tab in a record. (Tri-87881, Tri-87939-IV40668)

Area of Change	Description
Globalization	Resolved an issue that prevented the XLIFF export format from retaining existing translations when a language is selected. (Tri-71052)
Globalization	The welcome string is now exported as `Welcome, {0}` so that the welcome string can be set with the user's name before or after the welcome. (Tri-80876)
Globalization	When a form is copied, the existing translations are also copied to the new form. (Tri-80443)
Installer	JBoss EAP 5.1.0 is now supported in the installer. For more information, go to the IBM TRIRIGA Application Platform 3 Information Center and select *Installing IBM TRIRIGA Application Platform*. (Tri-66488)
Installer	WebLogic 11 Rel 1 (Version 10.3.6) is now supported. (Tri-86782)
Instance Data Globalization	Classification query now filters data correctly when a non-US English value is entered as the filter value. (Tri-88257-IV40876)
Instance Data Globalization	Setting a value to a locator field from an editable query is now properly setting the translated values. (Tri-87878-IV40666)
Instance Data Globalization	The instance data language pack can be imported successfully when the host name or IP of the application server is listed in the trusted websites of the IE browser. (Tri-79570-IV38476)
Instance Data Globalization	When there are no fields with the localizable flag set in all of the business objects in a module, now the localized views (`ML_` and `VL_` view) are dropped along with the language table. (Tri-69712)
Integration Object	When you import instance records for the TRIRIGA Integration Object, run the patch helper named `IntegrationObject_DataMaps`. This patch helper triggers a utility that scans the current data maps and correctly reassigns the object IDs that are needed to save records. (Tri-74041)
Integration Object	You can now export more than 1000 records from the TRIRIGA Integration Object. (Tri-81320)
Label Manager	An entry is made to the `environment_properties` table when a language pack is imported using the Label Manager. (Tri-66694)
Label Manager	Custom tooltips configured in the Label Manager now display the appropriate custom values when viewed in records. (Tri-66393)
Label Manager	Double-byte characters now display correctly in label tooltips. (Tri-84117)
Label Manager	The correct tooltip translation is now provided on a form with fields with the same name but that are from different business objects. (Tri-84735)
Object Migration	Object migration validation warnings for form data fields that are Organization, Location, or Geography are no longer shown. These warnings

Area of Change	Description
	were invalid as these fields are known to the system. (Tri-75211)
Object Migration	Resolved an issue for business object prefix and suffix mapping with constants so they import correctly using object migration. (Tri-74668-IV36650)
Object Migration	Resolved an issue where dependent list values were not being imported in object migration when they had the same child values but different parent values. (Tri-90360)
Object Migration	Starts With query filters are no longer changed to Contains query filters in an object migration import. (Tri-66705-IV31575)
Object Migration	The form property flag "Allow bookmark to specific record" is now migrated correctly. (Tri-80210)
Portals	All portal sections that display buttons are now 508 compliant, for example, collapse/expand, maximize/resize, drop downs, and more. (Tri-71591)
Portals	Items within Quick Links portal sections can now be opened in a new window by clicking the square blue icon next to the item name. (Tri-75639)
Portals	Resolved the issue causing the date shown in the Notifications portal section to not match the date in the Notification record and other places in the application. (Tri-83548-IV39025)
Portals	The Actions Items dialog from the portal now matches the hours in the Actions Items dialog. (Tri-67142)
Portals	The new Auto Resize property in a portal section of type External adjusts the height of the portal section to match the height of its contents. (Tri-67105)
Record Runtime	Modify Metadata now updates the Read Only property for a Form Action properly. (Tri-87999-IV40877)
Record Runtime	Number fields with a percent sign in the display mask now accept numbers and persist values. (Tri-70966)
Record Runtime	Resolved an issue caused when the time zone on the user's computer was earlier than the time zone on the server; for example, when the user was in GMT -8 and the server was in GMT -3. (Tri-84640)
Record Runtime	Resolved an issue for validating number fields that contain letters followed by numbers. (Tri-84729)
Record Runtime	Resolved an issue where hierarchical records opened in a new window would not close when Save and Close was clicked when the main TRIRIGA window was changed. (Tri-71639-IV36324)
Record Runtime	Section or record read-only property now updates the Read Only property for a form action. (Tri-88531)
Record Runtime	The border color and width properties of a section are now properly rendered

Area of Change	Description
	in the form. (Tri-72864)
Record Runtime	There were changes to the styling to make the look and feel consistent among the supported browsers. If you want to make the label text font look like the way it was in prior releases, you need to increase the labelStyleClass1 font size from 10 to 12. (Tri-76300)
Record Runtime	When a user clicks Help and a help message does not exist for the record, the user now sees the default help message instead of a warning message. (Tri-75323)
Reporting	Filters on fields of type Date and Time now filter correctly when the user inputs a date. (Tri-66918-IV33185)
Reporting	Metric query tabular reports no longer fail when the user clicks to see the next set of results at runtime when no order column and related reports are specified in the report design. (Tri-76800)
Reporting	Metric reports now show the date in tooltips instead of milliseconds or spec id. (Tri-66907)
Reporting	Metric reports shown by Calendar Week now display data for all weeks within the given scope. (Tri-66908)
Reporting	Now there are date filters for the Created DateTime system read-only field query filters. (Tri-85977)
Reporting	PDFs are now created for Form reports attached to a notification email. (Tri-66917-IV33312)
Reporting	Resolved a metric query tabular report issue where clicking Next to see the next set of results caused an error when the primary grouping field was a locator. (Tri-66904)
Reporting	Resolved an issue in which a non-US English-language user was not able to export a query result. (Tri-67104-IV32866)
Reporting	Resolved an issue that caused tabular metric reports used for drill through to show data and records for all forms in the selected business object even though a filter in the record form field filtered out some forms. (Tri-67299)
Reporting	Resolved an issue where sum columns in a query of type Hierarchy were not lined up correctly when a group by was set. (Tri-70693-IV36327)
Reporting	Resolved an issue with exporting a report to Excel where the data in the Excel columns was not lining up correctly with the Excel headers. (Tri-90285-IV42716)
Reporting	Rounded number values now display the same at record runtime and query runtime. (Tri-74988)
Reporting	Tabular metric reports used for drill through and metric reports now only return data and records for the forms in the selected business object in the

Area of Change	Description
	report. (Tri-67205)
Reporting	When viewing the tabular information backing a chart, if an Associated Field is selected on the tabular report, the headers of the columns now align properly. (Tri-72945)
Security	A user belonging to security group that is a copy of another security group now has access to appropriate forms when creating a report in My Reports. (Tri-76251-IV37073)
Security	Security groups and licenses are now checked on scorecard queries and sub-queries. The query is not shown on the scorecard if the user does not have access to the module and business object of the query. (Tri-66696)
Security	The system non-reversible encryption type is now configurable. It can be set in the IBM TRIRIGA Administrator Console, under System Manager in the System Encryption type field. If you wish to update to SHA-2 for your non-reversible password fields, set the value to a valid SHA-2 type such as SHA-256 or SHA-512. (Tri-75849)
Security	To resolve an issue that allowed a user with read-only project security to update a form, added logic to project security to validate the user's project level access before rendering a form. Both of the following properties in `TRIRIGAWEB.properties` must be set to `Y` for project security: `USE_PROJECT_SECURITY` and `RECORD_PROJECT_CONTAINMENT`. (Tri-76952-IV37811)
Security	Users who do not have access to a portal page now see a no-access message. (Tri-83714)
Security	When a project's security is modified, all application server security caches in a multi-application server environment are cleared. (Tri-82240)
Security	When a system includes a license for IBM TRIRIGA Workplace Reservation Manager, a user that does not have any assigned licenses can access notifications and action items. (Tri-76307)
Style Manager	Padding-Left property can now be set in the Style Sheet Editor. (Tri-76692)
Style Manager	SectionStyle should only be used to style section elements such as background color, border color, and width. Labels contained inside the section should be styled using a dedicated style class named 'labelStyle', where attributes related to fonts, such as font weight, size, and style, can be specified. (Tri-67199-IV33785)
Style Manager	The border color of a manager can be changed with the Master Detail Frame Border Color property of the Style Manager. (Tri-66897-IV30720)
Style Manager	The Style Manager now displays RGB hex values for portal and other components. (Tri-66683)
Style Manager	There were two sets of data and label styles in the system, in the Style Sheet

Area of Change	Description
	Editor and in the Style Manager. The Style Sheet Editor used the same field styles as the Form Builder. The Style Manager now also uses these field styles. (Tri-66643)
Web Graphics	Lines are now scaled properly in CAD drawings in meters in TRIRIGA web graphics. (Tri-83546-IV39495)
Web Graphics	The Layer column of the Layer manager on the Web Graphics section can now be expanded to show the full layer name. (Tri-66178-IV33536)
Web Graphics	The leading zeros in text field values are no longer truncated when displayed in a graphic report legend. (Tri-75844-IV36881)
Workflow	Resolved an issue where the label of a task name can be highlighted when a workflow is in published state in Workflow Builder. (Tri-77001)
Workflow	Resolved an issue with Date fields with decimal values in a Microsoft SQL Server environment. (Tri-70302-IV36356)
Workplace Reservation Manager	Resolved an issue that caused incorrect availability for a resource in the following circumstances: The resource had 24-hour availability and the event fell in a specific time range after the change to daylight saving time. (Tri-68259)
Workplace Reservation Manager	The Options form in the Outlook Add-In is now fully translated. (Tri-67124)
Workplace Reservation Manager	When a Reserve notification emails with an iCal attachment, the body of the iCal now contains the content of the body of the notification. (Tri-68962)

IBM TRIRIGA Application Platform 3.3.1 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 Information Center and select *Installing IBM TRIRIGA Application Platform* > *Configuring the platform* > *Properties files*.

Area of Change	Description
`AUTO_PROJECT_ASS OCIATION_RESTRIC TION`	In a new installation, the default value of the `AUTO_PROJECT_ASSOCIATION_RESTRICTION` property is now Contains. (Tri-78601)
`CHART_RENDERING_ TYPE`	Determines how charts are rendered in the web browser.
`COMPANY_FILE_UPL OAD_EXCLUDE_EXTE NSIONS`	Restricts file uploads of image files according to their file extensions.

Area of Change	Description
COMPANY_FILE_UPLOAD_INCLUDE_EXTENSIONS	Restricts file uploads of image files according to their file extensions.
IMPORT_CONTENT_EXCLUDE_EXTENSIONS	Restricts file uploads of binary files according to their file extensions
IMPORT_CONTENT_INCLUDE_EXTENSIONS	Restricts file uploads of binary files according to their file extensions
OOTB_G11N_EXPORT_APP_VERSION	Inserts a value or description of the IBM TRIRIGA application version in the file header of the instance data export. For example, `10.3.1`.
SESSION_WARNING_ENABLED	Allows an alert message to be displayed to a user whose session is about to expire.
SESSION_WARNING_THRESHOLD	If the value of the `SESSION_WARNING_ENABLED` property is set to `Y`, then sets the number of minutes the alert message is displayed before the session is set to expire.
WS_RELIABLE_MESSAGING	Enables (Y) or disables (N) the Web Services Reliable Messaging Protocol (http://schemas.xmlsoap.org/ws/2005/02/rm/).
WS_RM_ACKNOWLEDGMENT_INTERVAL	The number of milliseconds at which the Reliable Message destination sends asynchronous acknowledgements. This property applies only when the `WS_RELIABLE_MESSAGING` property is enabled.
WS_RM_BASE_RETRANSMISSION_INTERVAL	The number of milliseconds at which an acknowledgement is received by the Reliable Message source for a given message. This property applies only when the `WS_RELIABLE_MESSAGING` property is enabled.
WS_RM_DELIVERY_ASSURANCE_IN_ORDER	Enables (Y) or disables (N) the delivery assurance "in order" type of the Reliable Message. This "in order" assurance type can be combined with the delivery assurance type that is specified by the `WS_RM_DELIVERY_ASSURANCE_TYPE` property.
WS_RM_DELIVERY_ASSURANCE_TYPE	The delivery assurance type of the Reliable Message. This property applies only when the `WS_RELIABLE_MESSAGING` property is enabled.
WS_RM_INACTIVITY_TIMEOUT	The number of milliseconds that must pass without receiving a message for the Reliable Message sequence to be considered terminated due to inactivity. This property applies only when the `WS_RELIABLE_MESSAGING` property is enabled.

IBM TRIRIGA Application Platform 3.3.0.1 Changes

This release introduces a new way for you to upgrade your version of the IBM TRIRIGA Application Platform. The fix pack installer, which is also known as the patch installer, is now available for you to upgrade in-place.

With this release, the patch installer delivers the targeted fixes to update the IBM TRIRIGA Application Platform from version 3.3 to version 3.3.0.1. Do not use the 3.3.0.1 fix pack installer on versions of the IBM TRIRIGA Application Platform before version 3.3. To upgrade to IBM TRIRIGA Application Platform version 3.3, follow the instructions at the following link: http://www.ibm.com/support/docview.wss?uid=swg24033723.

The version 3.3.0.1 fix pack installer patches the platform EAR (Enterprise ARchive) file and updates any database tables that are used by IBM TRIRIGA Application Platform and that require modification. If your application server is running JBoss or WebSphere, the EAR file is updated and redeployed. If your application server is running WebLogic, the EAR file is patched and a manual redeployment is required.

To download the 3.3.0.1 fix pack, go to Fix Central at the following link: http://www.ibm.com/support/fixcentral. In the Find Product tab, type `TRIRIGA 3.3.0.1`. Download the `readme.txt` file and the patch installer appropriate for your operating system. Follow the directions in the `readme.txt` file.

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

Area of Change	Description
Application Server Setup	The TRIRIGA Integration Object no longer imports every time you start the application server against an Oracle database. (Tri-69516)
CAD Integrator	Resolved an issue that caused a login to IBM TRIRIGA CAD Integrator/Publisher version 12.0 to fail after an upgrade to IBM TRIRIGA Application Platform version 3.3. (Tri-70140)
Portals	Resolved an issue that caused parameters in a custom portal query string to become invalid due to the addition of extra parameters. (Tri-71733)
Reporting	Resolved an issue in which fields of type Date and Time did not filter correctly at query run time if a time value was not included as part of the filter value. Now, if a user does not input a time value, a time value of 00:00:00 is used. (Tri-70130-IV33185)
Web Graphics	Running associative graphic reports with hatch patterns in Graphics sections or in IBM TRIRIGA CAD Integrator/Publisher now works properly when the data does not include associated records for some groups. (Tri-69997)
Workplace Reservation Manager	Resolved an issue that caused incorrect availability for a resource in the following circumstances: The resource had 24-hour availability and the event fell in a specific time range after the change to daylight saving time. (Tri-69525)

IBM TRIRIGA Application Platform 3.3.0.1 Properties Files

The properties files did not change in this release.

IBM TRIRIGA Application Platform 3.3 Enhancements

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

Area of Impact	Description
Platform-wide	Major enhancements to the platform include the following. - *Alternate form* - *Alternate print form* - *Availability widget* - *Calendar server* - *Calendar set builder* - *Calendar widget* - *Conditional pop-up form on form state transition* - *Conditional query* - *Contact role-based security* - *Customizable pop-up form size* - *Date/date time/duration widget enhancements* - *ETL enhancement to support utilization calculations* - *Future trigger action in workflow* - *Graphics section hover over, lock theme, and new color to theme* - *Graphics section links to Availability section* - *iCal notifications* - *In memory smart object* - *In session option for Modify Metadata workflow task* - *Integration Object* - *Intelligent form action refresh* - *Microsoft Exchange power shell script support to create Exchange resources* - *Microsoft Exchange Web Service (EWS) workflows* - *Microsoft Outlook add-in* - *Relative date and time fields* - *Reserve query* - *SMTP agent* - *Workflow formula functions* - *Workflow variable assignment from expression*
Globalization	Instance data can now be translated.

Area of Impact	Description
Administrator Console	The system status now loads asynchronously. You can click the OK or warning message to retest the status. (Tri-30859)
Currency	Enhanced the financial transaction posting process to use the most recent currency conversion rate if one does not exist for the posting date and time of the transaction. (Tri-37084)
Data Modeler	The base currency for a currency conversion can be set at run time to replace the value of the `BaseCurrency` property in the `TRIRIGAWEB.properties` file. If a Number field or a UOM field is defined as having a UOM of Currency, and the Default UOM is `SYSTEM_BASE`, when a user enters a value in that field, that value becomes the base currency for the TRIRIGA system. Additionally, when `SYSTEM_BASE` is specified as the UOM for a business object field, at run time, for that field, the current user's profile record is not used to initially default the UOM value. (Tri-37001)
Graphics	A graphics section now can be linked to an availability section in the same form. The graphic highlights all spaces that are available for reservation at a given time based on the backing query of the availability section. The spaces are highlighted in a different color than is used when a query section is linked to a graphics section; this color is identified in the Selectable field of the theme. A user can select the spaces either in the availability section or in the graphics section. This feature applies to the availability section but not to the availability legacy section. (Tri-36971)
Graphics	In a graphics section, the theme and its associated labels and report can be locked to a default specified in either the section properties in the Form Builder or in the theme list. When a user opens a form with the graphics section, the values of Theme, Labels, Report, and the label type cannot be changed. (Tri-36661)
Graphics	Now you can show additional information for spaces in a graphics section in a tooltip box while the user moves the mouse over the spaces. The content of the tooltip is dynamic and relative to the space being hovered. The appearance of the tooltip is based on a label style that is tied to a theme. Additionally, when the theme has a hover label style defined, a button on the graphics section allows the user to disable the tooltips. (Tri-36156)
License and Security	The IBM TRIRIGA Workplace Reservation Manager license now gives all users the access granted by the license. You can limit what a user can do with group security. (Tri-37064)
Metric Reports	Metric queries now use the database functionality for year and month for values for group by Calendar Period Year and Calendar Period Month instead of relying on the Calendar Period classifications. The display of year and month is based on the user's My Profile and is formatted as `yyyy` and `yyyy – MM – MMMMM` respectively. (Tri-37185)
Query and Reporting	Added support for `$$PARENT::[Section Name]$$` functionality in a query

Area of Impact	Description
	field filter. Before this release, $$PARENT::[Section Name]$$ was only supported in an association filter. (Tri-37072)
Query and Reporting	The new $$PERSONID$$ query field filter resolves to the record ID of the triPeople record that is associated to the user that invoked the query. If the current user is not associated to a person, an error is displayed. Similar to $$USERID$$, it also supports section or field access. One example of valid notation to resolve the first name of the current person is: $$PERSONID::Detail::triFirstNameTX$$. (Tri-36949)
Workflow Builder	The Variable Definition task and the Variable Assignment task now allow the variable value to be set from the result of an expression. The result of the expression returns record IDs. For example, this can be used to find a set of dates that match a recurrence pattern and that are within a date range. After the record IDs for the dates are returned, the workflow can iterate through them and perform other actions. (Tri-33133)

IBM TRIRIGA Application Platform 3.3 Changes

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

Area of Change	Description
Administrator Console	A double-click when starting or stopping an agent does not leave it in an invalid state. The second action is ignored. (Tri-37040)
Administrator Console	In the Workflow Events manager, the field label for Oldest WF Event in Queue has been changed from Event Type to User Account. (Tri-38292)
Administrator Console	Resolved an issue that caused the Administrator Console to time out on WebSphere regardless of user activity. (Tri-40494)
Administrator Console	The Database Manager now shows the names of the objects and the types of objects invalid in an Oracle schema. (Tri-35438)
Administrator Console	The link to the WebLogic console from the Administrator Console now works properly when the installation has a context path. (Tri-39639)
Agents	If the time on a server in a database cluster is off by more than a few seconds, unpredictable results occur when operating the system. The IBM TRIRIGA Administrator Console attempts to determine if a server in the cluster is off by a few seconds. If so, the status message displays a warning that a server's time may be off. After the times on the database servers have been synchronized, you can select the status again to re-run the test. (Tri-35482)
Agents	Resolved a Cleanup Agent issue that caused record data cleanup to fail if a document parsing exception was encountered during the cleanup of images.

Area of Change	Description
	(Tri-38032)
Agents	The Extended Formula agent now continues to process entries after encountering an entry with a `spec_id` less than 0 in the queue. (Tri-38513)
Applets	If applet-related properties in `TRIRIGAWEB.properties` are left blank, then the applet attempts to find the latest version of Java on your system and use that to run the applet. This affects applets related to Availability Legacy sections, SVG Viewer, Document Manager, object uploads, Workflow Builder (expression editor), and Stacking sections. (Tri-37219)
Application Server	In WebSphere, if you are using Java 1.7, set the following Java property on application server startup to ensure the proper sorting behavior: `-Djava.util.Arrays.useLegacyMergeSort=true` See http://www.oracle.com/technetwork/java/javase/compatibility-417013.html#source for more information. (Tri-40165) If using IBM Java 1.7, the release version needs to be 7.0.0 SR1 at a minimum. (Tri-39084)
Application Server	The deployment into WebSphere has been automated in the installer. New and upgraded installations are now set up automatically. (Tri-30497)
Application Server	The user that installs TRIRIGA must have write or create access to the installation root directory. (Tri-37250)
Application Server	When a session expires, the user is now taken to the unauthorized page (`$context_path$/unauthorized.jsp`). That page includes the correct HTTP error code for 508 compliance, plain text telling the user that they are no longer authorized, and a link to the sign in page. (Tri-38425)
Charting	Resolved a charting issue that caused certain grouped by day metric query charts to show the same date multiple times along the date axis. (Tri-38481)
Charting	Resolved an issue involving charts in form sections where the title of a chart displayed even when the Show Query Header property was not checked. (Tri-37044)
Crystal Reports	Resolved an issue where Crystal reports created with ADO XML Version 1 were not correctly rendering data in report columns for business object field names that contained spaces and were included in a smart section. (Tri-36200)
Currency	A user is warned if they enter a conversion rate that has more than six digits to the right of the decimal point. (Tri-39153)
Data Modeler	An empty module can now be deleted from the Data Modeler. (Tri-498)
Data Modeler	Improved the size of the Tools menu that a user sees after selecting a business object in the Object Browser. (Tri-31744)

Area of Change	Description
Data Modeler	Resolved an issue that caused business object field where used to not display correct results for extended formula usage. (Tri-39449)
Data Modeler	Revising a business object enables the links on the State Transition tab. (Tri-4964)
Data Modeler	The Association List in the Data Modeler now is sorted in alphabetical order. (Tri-22035)
Data Modeler	The process of publishing business objects now creates indexes on certain sys columns used in queries. For the indexes to be created, you need to republish existing business objects. (Tri-35768)
Document Management	Document permissions can now be optionally controlled by a Custom task and workflow to apply permissions on a record by record basis. (Tri-39086)
Document Management	Folder names are now sorted based on the user's locale. (Tri-40107)
Document Management	Resolved an issue where not all files selected using the download icon were listed in the MultiFile Download Files tab. (Tri-37021)
Financial Tokens	At workflow runtime, a workflow field map no longer maps a value from the source record to the destination record when the target field has a formula defined in its Business Object Field definition. The target field value is now calculated and derived from its Data Modeler formula mapping. If a formula field is grayed out on the Object Mapping form, it means that the formula map defined in the Data Modeler is used as the source value for this field. Note that a total field that adds up a sum field in a smart section is also considered a formula field for the purposes of this behavior. To return to the prior functionality in which workflow mapping is executed instead of mapping defined in the Data Modeler, you must remove the formula mapping defined for this field from the Data Modeler; then workflow mapping is applied to the field. (Tri-36356, Tri-39564)
Form Builder	The default value for duration fields displays correctly when the user clicks the Source Details link. (Tri-6487)
Form Builder	Two new properties in the root of a form can be used to indicate the size of the form if it opens in a popup window. The properties are Popup Height and Popup Width. These properties apply to forms that load from a query, the add action on a query, a custom action on a query section, the Add action on a query section, a chart, a portal section, an action on a portal section, section actions, and field actions. (Tri-37245)
Form Builder	When a user tries to create a new default form with the same name as an existing form, the Default Form check box is no longer selected and read only. (Tri-4819)
Form Builder	When the user deletes a style sheet in the Style Manager, the deleted properties no longer show in the properties panel. (Tri-21665)

Area of Change	Description
Gantt	A form validation triggered when a user saved a record, when the form had a smart section with a name different from the data section name and had an unfilled required field, now finds the correct source record to validate. (Tri-39467)
Gantt	Gantt calculations now consider daylight saving status on the task's destination time zone. (Tri-37182)
Globalization	Resolved a metric query charting issue where Gauge chart types were not correctly formatting numbers for the user's locale. (Tri-39200)
Globalization	Resolved a metric query charting issue where Pie and Pyramid chart types were not correctly formatting numbers for the user's locale. (Tri-39799)
Globalization	The installer now creates a translations folder in the `userfiles` directory to contain imported label translation files. (Tri-38627)
Globalization	To display multi-byte characters with the Adobe SVG Viewer, a user must install the appropriate character-specific Adobe SVG viewer. (Tri-36402)
Globalization	Users now can translate name salutations such as Mr. and Mrs. (Tri-36796)
Globalization	Users now see a spinning wheel instead of "loading…". (Tri-36869)
Graphics	A Drawing Not Found error no longer occurs if a drawing that uses XRef drawings is being viewed in a graphics section and a drawing that uses one or more of the same XRef drawings is published. (Tri-37243)
IBM TRIRIGA Connector for Business Applications	Multiple users firing Query Continuation Token requests no longer cause ConcurrentModificationExceptions. (Tri-37081)
Installer	The installer now collects values for the `BRAVA_INTERNAL_DOWNLOAD_HOST` and `BRAVA_EXTERNAL_DOWNLOAD_HOST` properties in the `TRIRIGAWEB.properties` file during the install. You no longer need to manually edit the `TRIRIGAWEB.properties` file to set these values. (Tri-39158)
Label Manager	Resolved issues causing page messages, tab messages, and label tooltips to be deleted when a value was entered for US English. (Tri-36709)
Lists	Clicking the Cancel action in the Label List window now only prompts the user about losing unsaved changes if the user actually changed any of the list values. (Tri-21920)
Object Migration	Classifications with special characters can now be imported and exported through object migration. (Tri-36035)
Object Migration	One or more spaces at the end of a classification name no longer prevent successful object migration of the classification and its children. (Tri-36091)

Area of Change	Description
Object Migration	Resolved an issue when importing or publishing with an object migration package that includes the `triDispositionMethod` or `triDispositionType` classifications. (Tri-34650)
Object Migration	Time field values on a record now import correctly into the target system. (Tri-36589)
Object Migration	When performing an object migration, Tag fields in queries now move over. (Tri-38263)
Portals	Added a new feature to report portal sections. Now if the value of Max Records Displayed is set to 100 or more, at runtime that report section renders a view that allows the user to do functions that could be done in a full report view such as filter and export. (Tri-36913)
Portals	Resolved an issue where links were disabled on summary reports in portal sections. (Tri-37075)
Portals	The Group Override flag now remains intact between edit sessions of a navigation collection in the Navigation Builder. (Tri-37598)
Portals	The links for Help and for Support open a new window and do not reset the current portal. (Tri-37930)
Portals	The weekly view on the Calendar tab is now shown in the format from the user's profile. (Tri-36838)
Projects	Project names now can contain special characters. Budget records in projects with names containing special characters post properly. (Tri-33788)
Record Runtime	A record calendar now displays in the user's preferred format. (Tri-36797)
Record Runtime	Functionality has changed when updating a UOM field value using a workflow Modify Records task. Now the UOM value can be set using a name if that UOM exists under the field's default UOM type or under the current field value's UOM type. (Tri-37097)
Record Runtime	Multi-line text fields mapped into notifications no longer cause email clients to display the raw HTML in the email message. (Tri-36680)
Record Runtime	Resolved an issue where certain locator fields that did not have the Locate Using field name correctly set up on the business object were causing the blue processing spinner to spin endlessly after the user entered text and tabbed out of the field. (Tri-39491)
Record Runtime	White space is no longer added to new lines when saving records on multi-line text areas. (Tri-37011)
Reporting	A value with an E surrounded by numbers, for example, `1E15`, exports from a query into Excel in the correct format. (Tri-36330)

Area of Change	Description
Reporting	Additional error handling that detects and manages "no module with id 0 can be found" exceptions has been implemented for system reports. (Tri-35414)
Reporting	Cancel links no longer display on related reports within the portal. (Tri-36054)
Reporting	Group By reports now show a Refresh icon for the user to refresh the query results. (Tri-34564)
Reporting	Grouping of records remains intact after every 5000 records in a report exported to Excel. (Tri-36984)
Reporting	If a business object is deleted from a module that has a query to find all business objects in that module, the query now runs correctly. (Tri-37890)
Reporting	Improved logging to help users identify issues with a report or query that contains a problem with the metadata. The log entry contains the ReportId, ReportName, UserId, and Referrer URL. (Tri-28579)
Reporting	Resolved a charting issue causing years to be displayed as decimal values. (Tri-37916)
Reporting	Resolved a charting issue that caused broken lines and missing bars to sometimes occur after chart columns were sorted in alphabetical order. (Tri-37257)
Reporting	Resolved a metric query chart issue where month names were not being translated to the language specified in the user's My Profile. (Tri-39310)
Reporting	Resolved a Metric Query issue that caused Group By Date charts to not render if the user's Date or DateTime format began with a stand-alone date token. For example: `d MMMM yyyy`. (Tri-39073)
Reporting	Resolved a query issue that caused more rows than expected to display when multiple Group By columns were used in a report that had Sum columns. (Tri-35619)
Reporting	Resolved a query issue where system field filters that used the `$$TODAY$$` special value caused corrupt SQL generation when used in conjunction with filter grouping parentheses. (Tri-37033)
Reporting	When the user selects a new value for a parent list in an editable query, the children values in the query are cleared. (Tri-32842)
Scheduling Engine	Monthly scheduled events with no end dates and using the first, second, third, and fourth options no longer skip future months when regenerating new events. (Tri-37749)
Security	An IBM TRIRIGA Capital Projects Manager license now includes `triProductsAndServices`. With this change, users with Capital Projects Manager licenses can create purchase orders containing products and

Area of Change	Description
	services. (Tri-37038)
Security	The IBM TRIRIGA Connector for ESRI Geographic Information System license has been incorporated into each of the following applications and is no longer available separately: IBM TRIRIGA Real Estate Manager, IBM TRIRIGA Capital Projects Manager, IBM TRIRIGA Facilities Manager, IBM TRIRIGA Workplace Operations Manager, IBM TRIRIGA Portfolio Data Manager, and IBM TRIRIGA Facility Assessment. Users must have one of these licenses for ESRI GIS to work as expected. The IBM TRIRIGA Connector for ESRI Geographic Information System requires a license for the IBM TRIRIGA Connector for Business Applications. The IBM TRIRIGA Connector for Energy Star Benchmarking license has been incorporated into the IBM TRIRIGA Real Estate Environmental Sustainability Manager license and is no longer available separately. The IBM TRIRIGA Connector for Energy Star Benchmarking requires a license for the IBM TRIRIGA Connector for Business Applications. (Tri-40397, Tri-40398)
Security	User licenses and security settings are now checked before displaying subreports in a query. (Tri-35319)
Style Manager	The Style Manager now displays RGB hex values for portal and other components. (Tri-33132)
Style Manager	There were two sets of data and label styles in the system, in the Style Sheet Editor and in the Style Manager. The Style Sheet Editor used the same field styles as the Form Builder. The Style Manager now also uses these field styles. (Tri-28391)
Workflow	A record with multiple User/Approval tasks in separate workflows no longer auto-completes the second task. The system now waits for the user to perform the action. (Tri-36945)
Workflow	Adding a variable task and clicking the task to load its property no longer causes a JavaScript error. (Tri-37074)
Workflow	In Workflow Builder mapping, removed the option to map values to a formula field. (Tri-37304)
Workflow	Resolved an issue that prevented the Switch task from loading when a previous task had an '&' in the task label. (Tri-37629)
Workflow	There is a new function available in workflow that gets the UOM type of a field, `getUomType(recordId, fieldName)`. The first parameter can use a system business object record ID field and the second parameter is a string value. (Tri-37267)
Workflow	When a module or business object changes in a Variable Definition task, workflow parameters tied to that Variable Definition task are now updated with the new module or business object. (Tri-38354)

IBM TRIRIGA Application Platform 3.3 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 Information Center and select *Installing IBM TRIRIGA Application Platform > Configuring the platform > Properties files*.

Area of Change	Description
`ALLOW_ETL_DETERMINE_DB_CONNECTIONS`	Allows the Extract, Transform, and Load (ETL) processes to determine whether or not to use multiple database connections. If set to `Y`, then the value of Use Unique Connections on the ETL determines whether to use one connection (On) or multiple connections (Off). Setting Use Unique Connections to Off in the ETL can improve performance for long-running ETLs, but can cause the Application Server to run out of database connections for large ETLs with lots of steps accessing the database. In this case, it might be necessary to increase the Application Server maximum database connections. If set to `N` (legacy behavior), then the platform automatically sets Use Unique Connections to On when running the ETL. Therefore only one database connection is used by the ETL. The default value is `N`. (Tri-37042)
`ALLOWED_URL_FOR_REDIRECT`	The list of URLs or external sites to allow for redirect. The URLS are separated by spaces. IBM TRIRIGA blocks redirections to URLs that are not internal to IBM TRIRIGA. To allow a redirection to an external URL, enter that URL in the list. For example: `http://google.com` (Tri-36883, Tri-36884)
Applets	If applet-related properties in `TRIRIGAWEB.properties` are left blank, then the applet attempts to find the latest version of Java on your system and use that to run the applet. This affects applets related to Availability Legacy sections, SVG Viewer (Association tab works fine), Document Manager, object uploads, Workflow Builder (expression editor), and Stacking sections. (Tri-37219)
`AVAILABILITY_CACHE_LOAD_FACTOR`	The decimal value used by the availability section applet to determine how much data to cache. This value is multiplied by the visible time range unit and indicates how much time in the past and future is cached. For example, with a value of `1.5`, if the visible time range is 1 week, then the applet loads one and a half weeks in the past and in the future, and caches the data.
`AVAILABILITY_CACHE_LOAD_THRESHOLD`	The decimal value used by the availability section applet to determine how much data that the user still has in cache before loading more data to cache. This value is multiplied by the visible time range unit. For example, with a value of `0.25`, if the visible time range is 1 week and the user is scrolling the applet in the future, then when user has a quarter of a week left in the cache, the applet loads more data and caches the data.
`EXCHANGE_DOMAIN`	The IBM TRIRIGA domain for the Microsoft Exchange server. For example: `tririga.com`

Area of Change	Description
FRONT_END_SERVER	You access IBM TRIRIGA with the URL in the FRONT_END_SERVER property to use BIRT and the Gantt. (Tri-37276)
PDF_EXPORT_GRAPHIC_STROKE_WIDTH_OVERRIDE	Overrides all stroke (line) widths when a graphics section is exported to PDF. On some larger-scale drawings, the width of lines can appear to be very thick when zoomed into the PDF at a high magnification. This property can be used to resolve that issue by setting the stroke width to a very small constant value such as 0.0000001. When the value is left blank, the exported PDF uses the stroke width defined per line in the graphic, which is derived from the line widths as published from CAD. The default value is blank, no value specified. (Tri-35267)
ServerRoot	The path to the parent directory of the userfiles directory.
SMTP_CLIENT_TIMEOUT	The SMTP timeout in minutes. For example: 10
SMTP_KEEP_EMAIL	Determines whether to keep the email after SMTP processing by iCalendar. If set to Y, then the system keeps the email after processing. Use Y only when SMTP processing is being debugged. If set to N, then the system deletes the email after processing. In a production system, the value should be N.
SMTP_PORT	The port that is used by the Reserve SMTP Agent for incoming SMTP traffic. If the value is anything other than 25, then the administrator might need to route the SMTP traffic to this port. This value is the port on which IBM TRIRIGA listens for SMTP traffic. For example: 25
SVG_PLUGIN_DOWNLOAD_URL	This property has been removed. The Adobe SVG Viewer plug-in is no longer available from Adobe for download. (Tri-40547)
TRIRIGA_RESERVE_OUTLOOK_TAB_LABEL	The label that is displayed when a user connects the Microsoft Outlook client to the IBM TRIRIGA application server. For multi-byte support, you must Unicode-escape your values according to the Java specification. Example: TRIRIGA Reserve
TRIRIGA_RESERVE_SMTP_ROOT	The simple mail transfer protocol (SMTP) root directory that is created when the Reserve SMTP Agent is started. If the directory already exists, the IBM TRIRIGA process must have write access to the directory. Example for Microsoft Windows: c:\tririga\install\userfiles\smtp\in\ Example for UNIX: /tririga/install/userfiles/smtp/in/
TRIRIGA_RESERVE_SUB_DOMAIN	The IBM TRIRIGA subdomain for the Microsoft Exchange server. This value determines which emails are forwarded to IBM TRIRIGA. The resources that are managed in IBM TRIRIGA must have a contact to forward to in this subdomain. For example: reserve.tririga
USE_WF_BINARY_LOAD	If set to Y, the system uses the binary load process. The Workflow Templates are loaded from the stored binary version, if they cannot be found in the

Area of Change	Description
	Workflow Template cache. If set to N or no value, the Workflow Templates are loaded by processing the workflow definition into the binary format. The default value is Y.
WF_FUTURE_AGENT_ SLEEPTIME	The number of seconds the Workflow Future Agent waits before checking if more items need to be processed. The default value is 5.
WF_INSTANCE_SAVE	Renamed the default value from NEVER to ERRORS_ONLY to better represent that errors are saved. (Tri-39747)

IBM TRIRIGA CAD Integrator/Publisher 12.0.2

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	When your environment is on IBM TRIRIGA Application Platform 3.3 or later, to use IBM TRIRIGA CAD Integrator/Publisher, all CAD Integrator client workstations must be on IBM TRIRIGA CAD Integrator/Publisher version 12.0 or later. To use IBM TRIRIGA CAD Integrator/Publisher 12.0, you must be on IBM TRIRIGA Application Platform 3.3. To use IBM TRIRIGA CAD Integrator/Publisher 12.0.1, you must be on IBM TRIRIGA Application Platform 3.3.1. To use IBM TRIRIGA CAD Integrator/Publisher 12.0.2, you must be on IBM TRIRIGA Application Platform 3.3.2 or 3.3.1.
MicroStation	For MicroStation users of IBM TRIRIGA CAD Integrator/Publisher, the file `areapat.cel` is required in order for fills to work properly. The installer does not provide this file, and it is the responsibility of the user to provide it. The `areapat.cel` is installed by default with MicroStation V8i (SELECTseries 2), and IBM TRIRIGA CAD Integrator/Publisher attempts to load it. However, if IBM TRIRIGA CAD Integrator/Publisher cannot locate the file or if you are running a different version of MicroStation V8i, you need to copy the `areapat.cel` file into the CAD Integrator installation directory. (Tri-35695)
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)
Upgrade to version	The steps to upgrade from CAD Integrator 10.0 to IBM TRIRIGA CAD Integrator/Publisher version 12.0 are described in the IBM TRIRIGA 10

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Area of Impact	Description
12.0	information center. From the information center, select *Integrating, publishing, and reporting on CAD drawing information > Installing and upgrading TRIRIGA CAD Integrator/Publisher*. After the upgrade, you must redefine reporting information and application definitions on the server side. For reporting (labels/fills/graphic reports), each user of IBM TRIRIGA CAD Integrator/Publisher must recreate the reporting that was defined on their client, on the server. Alternatively, users can use the standard graphics for labels and reports. If you have heavily customized your applications, you must adjust the standard application definitions.

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.
Installer	The installer is only available in US English. By default Install Anywhere installs to a folder with the literal value `Program Files`. On non-English versions of Microsoft Windows, this folder has a translated name and an install to a folder named `Program Files` may not work. If you are installing IBM TRIRIGA CAD Integrator/Publisher on a non-English version of Windows, install to a folder with a different name. For example, `C:\CI`.
Publish	A graphics section does not render entities output to the DXF paper-space. (Tri-32950)

IBM TRIRIGA CAD Integrator/Publisher 12.0.2 Changes

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

Area of Change	Description
Child Records	In AutoCAD, the Child Records dialog now uses the initial mapping to load child records. Also in AutoCAD, an issue was resolved that prevented orphans from displaying. In AutoCAD and MicroStation, a new status label, Orphaned, identifies records that are orphaned. (Tri-96365-IV44789)

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Area of Change	Description
Drawing Properties	Resolved an issue where only the attached record label was being set after a drawing was attached. Now the full CI path of the attached record is set. (Tri-88776)
Find Object	Resolved an issue where Find Object sometimes failed due to an issue with locking the AutoCAD drawing properly. (Tri-104060-IV48022)
General	The message that displays when a value is missing in the TRIRIGA database was changed from "The translated value is not available" to "The value is not available". This is now correct for US English and foreign language users. (Tri-91142)
Installer	Added support for installing CI for AutoCAD 2014 and AutoCAD Architecture 2014. Note that due to new security features in 2014, the CI files have a warning that forces the user to explicitly load it. This happens every time the user loads AutoCAD. To allow CAD Integrator to load without the security warning, the user must add the user install directory path plus `...` to the `TRUSTEDPATHS` environment variables. For example, assuming the default install path, in AutoCAD, type `TRUSTEDPATHS` and set or append the following path: `C:\Program Files\IBM\TRIRIGA\CI-12\...` Alternatively you can specify the specific path to the `ac`-specific CI files: `C:\Program Files\IBM\TRIRIGA\CI-12\bin\ac` (Tri-92039)
Installer	Added support for installing on MicroStation V8i (SELECTseries 3) (version 08.11.09.x). (Tri-92038)
Installer	If the installer cannot recognize a previous installation, the installer warns the user about it, and it allows the user to deploy the files for the installation. (Tri-94149)
Installer	The CI Installer now determines whether the target computer has the required Microsoft Visual C++ 2005 Redistributable (x86) version 8.0.61001. If this software is not detected, CI prompts the user to install the required package. (Tri-107732)
Installer	To resolve various issues with uninstall, the installer was reconfigured to use Install Anywhere's native uninstall support. This results in the following changes: ▪ There is no longer an option to uninstall using the installer. Instead there are three ways to uninstall: 1) Use the Add/Remove programs in the Control Panel (this was previously

Area of Change	Description
	registered there, but did not work in earlier versions).
	2) Click the Uninstall shortcut that is now created by the installer in the program group for IBM TRIRIGA Cad Integrator - Publisher.
	3) Run the `Uninstall IBM TRIRIGA Cad Integrator - Publisher.exe` file that is deployed by the installer in a subfolder.
	▪ The installer recommends restarting Windows to complete the uninstall process. (Tri-98722-IV45692)
Installer	Updated the CI installer to support installing on a Windows 8 operating system. (Tri-92040)
Label Style	Before this change, labels that were applied in CI lost their attachment data when you synced or reapplied a new label. This caused the Edit Record command to fail to open the record when the label was selected. This issue was resolved for new labels.
	For existing labels that lost attachment data, the only way to correct the data is to erase the labels directly and reapply the labels or sync. The fastest way to do this is to select all labels on the label layer and erase them (`triLabelLayer` in the default application definition). Then reapply the labels. (Tri-113807)
Label Style	In MicroStation, when labels are refreshed, for example, during a Publish, instead of setting justification to lower left, existing justification is now retained on existing labels. And on new labels, standard text-style justification settings are used.
	In MicroStation, legend text is no longer out of alignment when a report is applied and the standard text-style justification is anything other than top left. (Tri-107159-IV50014)
Label Style	▪ Instead of using `triLabelLayer`, the application definition mapping name field attached layer name now can use user-configured label layer names when applying labels.
	▪ The default layer was updated from `Tri_Default` to `triDefault` in AutoCAD, and from `tri_label` to `triDefault` in MicroStation, to be consistent with naming conventions for the application definition layer.
	(Tri-93759-IV44112)
Login	Now, when you log in to CAD Integrator, if an application definition has a major error, the login proceeds, an error message is logged, and the application definition with the error is skipped. If there are no valid application definitions, the login fails and errors are in the log. (Tri-92971)
Menu	The Edit, Find, Child Records, and Drawing Properties menus are now disabled when you open an orphaned drawing. (Tri-70790)

Area of Change	Description
Open Drawing	Resolved an issue where open drawing from record did not have the correct images or tooltips when using search. (Tri-89118-IV42156)
Preferences	Renamed the first SSO type in the Edit Environments form from "None" to "Automatic" because if the server is configured for SSO, CI automatically attempts to connect by using single sign-on. The other options force SSO to use a particular method. (Tri-109760)
Publish	If the user is not an admin and has read-only access or no access to the top-level record form (e.g., the floor in the default application definition), publish does not change the record. If the user tries to publish, the publish fails, and an exception message is logged that the user does not have the required rights to update the record. (Tri-101363-IV46677)
Smart Attach	If the application definition child hierarchy definitions do not contain sub children of the same type, for example if you delete the `triSubSpace` node in the default application definition, then the subspaces are not processed in Smart Attach upload. Note that this is the only way to disable this behavior. CI follows the application definition, not the TRIRIGA subspace configuration. (Tri-101835-IV46554)
Smart Attach	Resolved issues that prevented attaching and uploading a drawing when the drawing was too far away from the origin. (Tri-99392-IV46122)
Smart Attach	Space area conversions are processed correctly when a new space is created in CI upload and the CI user's user profile has different default UOMs than the parent floor record. (Tri-109999-IV50652)
Smart Attach	The Smart Attach upload now always updates the area fields for existing spaces, even when the CI Client Attach > Upload > Update Existing Spaces preference is not checked. This setting still applies to non-area fields. (Tri-110531)
Sync	CAD Integrator now deselects the active selection before syncing. CI cannot process entities that the user selected, which causes incorrect sync results. (Tri-66617- IV47605)

IBM TRIRIGA CAD Integrator/Publisher 12.0.2 Properties Files

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

Area of Change	Description
AUTO_UPGRADE	The `AUTO_UPGRADE` property applies to AutoCAD only. It controls the automatic upgrade of IBM TRIRIGA CAD Integrator/Publisher (CI) version 10 drawings. When set to `Y`, the default, CI version 12 upgrades any drawing

Area of Change	Description
	from version 10 when it is opened. When set to `N`, version 10 drawings appear as unattached in version 12. You can use the `TRGA_UpgradeXData` command or set the `AUTO_UPGRADE` property to `Y` to upgrade drawings. If you run `TRGA_UpgradeXData`, 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`
	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.
	
	Two new properties in the `ci.properties` file control how CAD Integrator behaves in AutoCAD when you upload floor plans. The `FLATTEN_Z_ON_TEXT_ENTITIES_WHEN_UPLOADING` property assumes Z=0 for uploading, which is the default behavior. The `ACCEPT_UNCLOSED_BOUNDARIES_WHEN_UPLOADING` property, which defaults to `N`, can be set to `Y` to treat unclosed boundaries as valid for uploading candidates. When set to `N`, CI ignores unclosed boundaries, which was the behavior in previous CI releases. (Tri-92362)

IBM TRIRIGA CAD Integrator/Publisher 12.0.1 Enhancements

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

Area of Impact	Description
Attach	Attach now updates only the fills and labels for the record that is being attached.
Batch Associate	Batch Associate dialog has an improved layout.
Batch Process	Batch Process form allows the user to add or remove multiple drawings at once.
Bentley MicroStation	▪ Edit Record command stays active so the user can open multiple records in a single command. ▪ Insert Object and Attach Object commands stay active so the user can insert or attach multiple records in a single command. ▪ Apply Theme, Apply Label, and Apply Report forms stay open so the user can apply different reports in succession. ▪ Smart Attach Design File supports selecting a level.

Area of Impact	Description
	• Batch Associate and Batch Edit support preselecting entities.
Detach Object	Detach Object command now stays active so the user can detach multiple records in a single command.
Insert Object	Insert Object now updates only the fills and labels for the record that is being attached.
Reporting	Report list now shows the Graphic reports that are defined as My Reports.
Smart Attach	Smart Attach now displays messages that indicate the progress of the records that are being uploaded, for example, "Uploaded 40 of 194 records…"
Smart Attach	Smart Attach now provides the ability to "Select from Drawing" from a button on the Smart Attach dialog instead of from a drop-down list for each layer.
Smart Attach	Smart Attach now remembers the last layer that the user selected for each layer option.

IBM TRIRIGA CAD Integrator/Publisher 12.0.1 Changes

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

Area of Change	Description
Attach	You can now attach and upload Circles, Ellipses, and Regions. Note that publishing Regions to Web Graphics remains unsupported. (Tri-86286-IV39579)
Attach Drawing	Attaching a drawing when the default CI theme has a report set, and display legend is on, displays a legend for the query run on the entire system (e.g., the Space Class query shows every space in the system). Now the query is not run if there are no attached entities on the drawing. (Tri-78863)
Batch Associate	In AutoCAD, if the user selects an unattached entity when running Batch Associate, the dialog stays open and informs the user no attached entities were selected. (Tri-69007)
Batch Associate	In Batch Associate, if a mapping that has no valid associated objects is selected, an error message is displayed. Switching to a valid mapping now clears the error message. (Tri-69258)
Batch Associate	In MicroStation, pre-selection can be used to filter the records listed in Batch Associate form. (Tri-67178)

Area of Change	Description
Batch Associate	Updated the error message that displays when no results are returned when the user clicks the Find by Association action in the De-associate tab. (Tri-88290)
Batch Edit	If the user selected an unattached entity when running Batch Edit, the dialog stays open and informs the user no attached entities were selected. (Tri-69006)
Batch Process	Batch Process function now attaches, uploads, and publishes design files from MicroStation. (Tri-66128)
Batch Process	Batch Process was timing out when a Report was set in the default theme in some environments. Now reports are not applied for Batch Process. Users can still run sync at a later time to apply the report set on the default theme. (Tri-76067)
Batch Process	Resolved an issue that caused batch process to time out when processing large drawing. The timeout duration is now configurable in `ci.properties`. (Tri-81581-IV39576)
Batch Process	The new `OPEN_DRAWING_INTERNAL_TIMEOUT_SECONDS` property in the `ci.properties` file is the maximum amount of time in seconds to wait for a drawing that is opened by internal IBM TRIRIGA processing, such as when the Open Drawing From Record command is selected, or opened due to a batch processing action. The default is 600 seconds (10 minutes). (Tri-89701, Tri-90246)
Batch Process	You can now select more than one file at a time from the Add File window. (Tri-76727)
Create Planning Drawing	Added a message to indicate that the Create Plan drawing process is complete. Also updated the log to indicate the specific cause when an unexpected error occurs. (Tri-84268)
Create Planning Drawing	Closing the original drawing after creating a new planned drawing no longer results in an invalid menu configuration. This happened when the server was on a Linux environment and was caused by drawing file path discrepancies. (Tri-90228)
Create Planning Drawing	Resolved an issue that caused sync failures at creation time for planning drawings created from other drawings. This happened if the user's drawing preference was set to Sync Drawing when Opened. Sync processing tied to this preference is now disabled for planning drawings. With this change, a user must start the sync manually after opening or creating planning drawings. (Tri-87834)
Create Planning Drawing	Resolved an issue that caused the Gross and Measured Gross boundaries on a planning drawing to not be attached in MicroStation. (Tri-90361)

Area of Change	Description
Create Planning Drawing	Updated the create plan process to correct an issue that occurred on some drawings with hatches applied that were upgraded from a previous version of CI. The issue in create planning drawing resulted in the spaces in the create plan drawing linking to the original space instead of to the planned space. (Tri-85259)
Detach Drawing	Detach drawing now restores the layer colors of the Gross and Measured Gross boundary on drawings attached using Smart Attach. (Tri-84243)
Detach Object	The Detach Object command no longer ends after detaching a single object. It continues to be active until the user cancels it. (Tri-70760)
Find Object	In MicroStation, resolved the issue preventing the Find Object function from finding employees or assets. (Tri-89724)
General	In version 12.0, CAD Integrator enabled the Attach Gross action and the Attach Measured Gross action whenever a drawing was attached, regardless of whether the gross or measured gross areas were actually attached. Now the actions are enabled or disabled depending on whether gross or measured gross areas are attached. In addition, using the Detach Object action on the gross or measured gross areas correctly updates the menu. (Tri-77003-IV37090)
General	Updated the location hierarchy tree to display a message that the translation is not found instead of "null" if the record names returned are null. This can happen if an environment is missing instance data translations for a user's language. (Tri-90243)
General	Updated the message for "Sync Starting" to "Sync in progress…" in order to reflect that the sync operation may take some time to complete. Similar update for Smart Attach. (Tri-84260)
IBM TRIRIGA Application Platform	Resolved an issue that caused a login to IBM TRIRIGA CAD Integrator/Publisher version 12.0 to fail after an upgrade to IBM TRIRIGA Application Platform version 3.3. (Tri-70702)
Insert Object	Moving an object block from one space to another in AutoCAD now de-associates the object from the first space and associates the object to the second space. (Tri-67175)
Insert Object	Resolved an issue that caused block labels to not render after inserting objects. (Tri-89217)
Installer	If version 12.0 is not present in the client computer before installing version 12.0.1, inches is selected as the value for drawing unit when the user has not made any selection to the following dialogs: Smart Attach, Attach Drawing, and Batch Process. (Tri-67170)
Installer	The shortcut icons are now created when the client computer has Java 7

Area of Change	Description
	update 21 or later installed. (Tri-89432)
Label Style	In AutoCAD, clearing a label style and applying a different label style now renders the new label. (Tri-81784)
Login	If the portal project search system query does not contain `triNameTX`, the user can sign in if the user has security to access the Company Level project. If this occurs, a server error is logged. (Tri-88979-IV42155)
Login	Resolved a customer-specific data issue related to invalid UOM data. The CI login process now logs an error on the server for this field if an invalid value is encountered. (Tri-70153)
Menu	If no drawing is attached, the Sync Areas and Sync Full menu items are disabled. (Tri-89426)
Menu	The Planning Drawing menu now includes Smart Attach and Attach Object in order to support attaching and uploading Planned Spaces. (Tri-90221)
MicroStation	A select from design file option is now supported to select the Gross, Measured Gross, Boundary, Name, and other layers directly from the design file. You now can use the Smart Attach tool to upload spaces on a design file after you select layers. (Tri-67177)
MicroStation	Batch Edit and Batch Associate now open the form if a legend is present in the design file. (Tri-69005)
Publish	A publish now succeeds even if one of the XRef drawings is not found or has an unresolved path. The unresolved XRef drawing is skipped during the publish. (Tri-86846)
Publish	Resolved an issue that caused polylines to not show up in graphics sections after publishing. The detach all objects command was not successful because an attached entity had an empty original layer name before the drawing was reattached and published. If you are experiencing this issue, you must run the detach all objects command again before you republish. (Tri-81924-IV38997)
Reporting	Applying a report now renders all spaces for a large (~1000+) drawing. (Tri-90244)
Reporting	Attach Object was running the entire report/labels on all spaces every time a single object was attached, which increased the run time. Now the fill and label are only applied to the single object being attached to. Note that the legend is not updated when attaching a single space; the user needs to apply the report or sync first. (Tri-66833)
Reporting	Clearing report and clearing label style now displays a message. (Tri-85587)

Area of Change	Description
Reporting	Graphic reports created by a user from the My Reports manager are now available in the Report list of CAD Integrator. (Tri-69619)
Reporting	In MicroStation, resolved an issue that caused the fill color on a server record graphic report result to be rendered white whenever the color did not exactly match the internal color table. Now the color rendered is the closest RGB value in the MicroStation color table. Also, the internal color table now uses the MicroStation color table, which makes it possible for users to render custom colors by updating the MicroStation color table to match the RGB value of the server record color. (Tri- 67179, Tri-85730)
Reporting	In MicroStation, the last row is now aligned correctly in a graphic report that does not contain a row that aggregates fields, such as count or area. (Tri-79394)
Reporting	Resolved an issue that caused an exception when a user applied fills via attach/reporting when the number of entities in a drawing was an exact multiple of 100. (Tri-70734)
Smart Attach	A text entity without a boundary no longer causes the processing of the upload candidate to stop. Now, the error is logged and processing continues for the other text entities. (Tri-84994)
Smart Attach	During upload candidate processing, the update count is no longer out of sync with the actual records being updated. (Tri-80498)
Smart Attach	MicroStation now correctly detects subspaces when using Smart Attach or Batch Process. (Tri-66123)
Smart Attach	The layer name selector fields on the Smart Attach dialog are now persisted after a user exits the dialog. (Tri-87383)
Smart Attach	The OK button is now disabled on the Smart Attach form after the user clicks it until the smart attach process is complete. (Tri-88099)
Smart Attach	The required field mapping default picker in the Smart Attach dialog shows values even if one of the records does not contain a translated value. When a translation is not available, the user sees the corresponding translation to "The translated value is not available." message. (Tri-87386)
Smart Attach	The Select from drawing option in the Layer drop-down selectors on the Smart Attach form has been replaced by a Select from drawing button that displays to the right of the Layer drop-down selectors. (Tri-87384)
Smart Attach	The View Errors button on the upload candidate dialog is disabled if there are no errors. If there are errors, the button is enabled and the number of errors is displayed on the button next to the label. (Tri-87385)

Area of Change	Description
Smart Attach	Upload candidates no longer present additional invalid errors in the View Errors dialog when a user selects a layer from a drawing for the mappable field values. (Tri-87732)
Sync	Resolved a Full Sync issue that prevented all associated attached records from being correctly synced in scenarios where a record had multiple associated attachments. (Tri-89219)
Sync	The Sync Complete status message no longer displays before all processing related to the Full Sync is complete. (Tri-81794)
Themes	The label of the theme is now displayed when the theme is applied. (Tri-87555)
Tooltips	Resolved an issue where Smart Attach displayed tool tips designed for Batch Process. (Tri-73153)
Upgrade	Resolved an issue with upgrade that caused the publish to fail on some old drawings that contained non-multi-lined text labels. The command `TRGA_PurgeXData` resolves this issue in drawings that have already been upgraded. (Tri-81907-IV38981)
Upgrade	Updated the `TRGA_PurgeXData` command to remove bad drawing attachment data caused by a missing application definition in an old drawing. Updated the Upgrade processing of old drawings to automatically call the `TRGA_PurgeXData` command if the upgrade process fails for any reason. Added a `ci.property`, `AUTO_PURGE_WHEN_UPGRADE_FAILS`, to enable users to turn off this automatic purge on failure behavior. (Tri-88997)
Upload Location	Smart Attach and Batch Process now display progress indicator messages on the command line when uploading spaces (e.g., "Uploaded 50 of 134 records…") as the upload runs. (Tri-84142)
Web Graphics	Applying a graphic report to a drawing in web graphics that has an attached region entity now renders the report correctly. (Tri-89213). Note that published Regions in Web Graphics remains unsupported.
Web Graphics	Attached asset entities are now visible from the web graphics section. (Tri-91833-IV43132)
Web Graphics	Resolved an issue that caused the as-delivered Charged To Organization report to fail to run in either web graphics or IBM TRIRIGA CAD Integrator/Publisher (Apply Report). The issue occurred because the Hatch Field that was specified on the report definition did not have at least one space with an associated Organization. In general, if a graphic report has an associated object result that may not exist, for example no Organization associated to a space, then this issue occurs. An alternate method is to

Area of Change	Description
	remove the Hatch Field from the report. (Tri-69901)

IBM TRIRIGA CAD Integrator/Publisher 12.0 Enhancements

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

Area of Impact	Description
Globalization	IBM TRIRIGA CAD Integrator/Publisher is available in the following languages supported by IBM TRIRIGA: Brazilian Portuguese, Chinese (Simplified and Traditional), Czech, Dutch, French, German, Hungarian, Italian, Japanese, Norwegian, Polish, Russian, Spanish, Swedish, and US English. 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.
Architecture	IBM TRIRIGA CAD Integrator/Publisher now uses a common Java framework.
Process Improvements	The process flow has been improved to be more intuitive and streamlined.
Usability	The navigation in the menus and user interfaces has been improved. The user interfaces include tooltips and intuitive labels that expose more information at the level where the user is most likely to see it and where it is most helpful. If necessary, users can click links to view more detailed information. Improved and expanded system and program messages make it easier for users to resolve problems on their own.
Application Definitions	The application definitions are managed by an IBM TRIRIGA administrator and are centralized in the IBM TRIRIGA environment. A user can pull data from a CAD drawing to populate any IBM TRIRIGA field that is specified in the application definition mappings.
Reporting	Label styles, label filters, and graphic reports are centralized in the TRIRIGA environment. IBM TRIRIGA CAD Integrator/Publisher users can reuse existing web graphic reports, label styles, and label filters, or create their own unique label styles, label filters, and CAD themes. A field in a graphic report can be identified as a hatch pattern locator field. This field can then be used to specify the hatch pattern, scale, and angle to be used when the report is rendered in IBM TRIRIGA CAD Integrator/Publisher.
Smart Attach	CAD drawing information can be attached and published at one time, from one interface with the Smart Attach feature.

Area of Impact	Description
Administration Tools	An IBM TRIRIGA administrator manages the product-wide configurations by using the new CAD Integrator tools in the IBM TRIRIGA administration tools. These configurations are available to all users that have appropriate security group privileges.

IBM TRIRIGA CAD Integrator/Publisher 12.0 Changes

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

Area of Change	Description
Administrator Console	The new CadIntegrator thread setting in the Threads Manager controls the number of threads the platform allocates to IBM TRIRIGA CAD Integrator/Publisher when attaching a drawing. (Tri-37460)
Architecture	The architectural changes in IBM TRIRIGA CAD Integrator/Publisher 12.0 resolved or invalidated a large number of outstanding IBM TRIRIGA CAD Integrator/Publisher issues from prior releases.

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 Information Center http://pic.dhe.ibm.com/infocenter/tivihelp/v49r1/topic/com.ibm.tri.doc_10.3.2/product_landing.html and in the IBM TRIRIGA Application Platform 3 Information Center http://pic.dhe.ibm.com/infocenter/tivihelp/v49r1/topic/com.ibm.tap.doc_3.3.2/product_landing.html. The documentation in the information centers can be found in online information center topics, or in PDF files, or both.

This release introduces new documentation.

- "Installation Details for SAP BusinessObjects Enterprise", which contains excerpts from material in the *IBM TRIRIGA Application Platform 3 Connector for SAP BusinessObjects User Guide*. You can copy from this page, which can be found at https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM+TRIRIGA1/page/Installation+Details+for+SAP+BusinessObjects+Enterprise

- "Portfolio data migration", which contains integration objects for portfolio data, worksheet templates for portfolio data, and people template records for space planner and space manager user roles. This migration package can be found at https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Portfolio+data+migration

- *Implementation of Space Management User Guide* (PDF), which can be found at https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM+TRIRIGA1/page/Space+management+implementation

- *Lease Accounting: Straight-line Schedule Upgrade* (PDF), which can be found at https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM+TRIRIGA1/page/Lease+Accounting

- Videos that demonstrate the concepts that help you get started with IBM TRIRIGA. The videos are *IBM TRIRIGA - Components*, *IBM TRIRIGA - Business objects and forms*, and *IBM TRIRIGA - Customizing*. 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

This release updates documentation.

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

- "Default user roles" (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, 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 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 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)

- "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)

- "Web graphics in IBM TRIRIGA Application Platform graphics sections" (online topics) or *IBM TRIRIGA Application Platform 3 Graphics User Guide* (PDF)

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

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

- *Application Building for the IBM TRIRIGA Application Platform 3: Performance Framework* (PDF)

- *IBM TRIRIGA 10 Document Management User Guide* (PDF)

- *IBM TRIRIGA 10 Procurement Management User Guide* (PDF)

- *IBM TRIRIGA 10 Program and Project Management User Guide* (PDF)

- *IBM TRIRIGA 10 Workplace Performance Management User Guide* (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 Reporting User Guide* (PDF)

- *IBM TRIRIGA Application Platform 3 Securing Passwords in* `trirga-ds.xml` (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)

This release renames and updates documentation.

- *IBM TRIRIGA Application Platform 3 Connector User Guide* (PDF) replaces *IBM TRIRIGA 10 Connector User Guide*

This release retires documentation.

- *IBM TRIRIGA Application Platform 3 Installation Details for BOE XI 3.1 on Linux*

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.

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