TRIRIGA Applications
Version 10.0.0.1

TRIRIGA Application Platform
Version 3.0

Release Notes

IBM

Note
Before using this information and the product it supports, read the information in "Notices" on page 57.

Contents

Release Notes

Welcome to the August 2013 release of TRIRIGA® Applications 10.0.0.1. This release is only available by fix pack. You use a fix pack, or patch, to upgrade your version of TRIRIGA. There is more information about the fix pack for 10.0.0.1 in the "TRIRIGA 10.0.0.1 Changes" section of these Release Notes.

IBM® TRIRIGA delivers application Object Migration packages using two different methodologies:

- Incremental Package – Each application release is a separate file. The latest incremental package is for TRIRIGA 10.0.0.1.

- Cumulative Package – The entire suite of TRIRIGA Applications through the current release is in one file. Cumulative packages offer a substantial time savings for customers upgrading across several releases. The latest cumulative package is for TRIRIGA 9.7.1.

See IBM TRIRIGA Application Object Migration Packages for more information.

These release notes include the following:

- An overview of enhancements and changes

- A list of known limitations

- A list of documentation changes in this release

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

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

What's New in This Release

As of August 8, 2013, IBM TRIRIGA no longer supports TRIRIGA Application Platform version 3.0.x.

With the TRIRIGA 10.0 and TRIRIGA Application Platform 3.0 release, TRIRIGA provides a simple-to-use experience throughout the TRIRIGA suite of applications and continues to add valuable functionality, fix defects, and reduce the effort necessary for new and existing customers to implement our products. Highlights in TRIRIGA 10.0.0.1, TRIRIGA 10.0, and TRIRIGA Application Platform 3.0 include the following:

TRIRIGA 10.0.0.1 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 enhancements to IBM TRIRIGA for this release include the following items:

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

TRIRIGA Applications 10.0 and TRIRIGA Application Platform 3.0 Enhancements

New Portal and Navigation Architecture

Example of Portal and Navigation

Process portals simplify access to role and context sensitive content. Key features include:

- New look-and-feel. The TRIRIGA application is familiar and intuitive.

- New portal pages for Home and menu selections.

- Portal sections from which users take action directly.

- Menu items link directly to portals, queries, reports, graphs, master/detail, forms, performance managers, and more.

- Role-based reminders and performance metrics identify items requiring attention and link to queries or forms to take action.

- Role-based related links navigate directly to process activities.

- Enhanced project selector simplifies access to capital projects. Users toggle between Company and the last selected project.

- Selected items render in the same portal page with pop-up as a user option.

Personalized bookmarks and portals deliver quick access to high priority and frequently used items. Key features include:

- Optional personalization presents portals based on user-selected content and layout preferences. Users select from pre-defined portal content; rearrange portal sections; minimize, hide, and restore portal sections; and restore the default view.

- User bookmarks store frequently used records, forms, and reports for quick access, reducing time and clicks to access.

- Users can personalize their own portals, reducing application administrator time and effort.

Enhanced Charting and Metrics
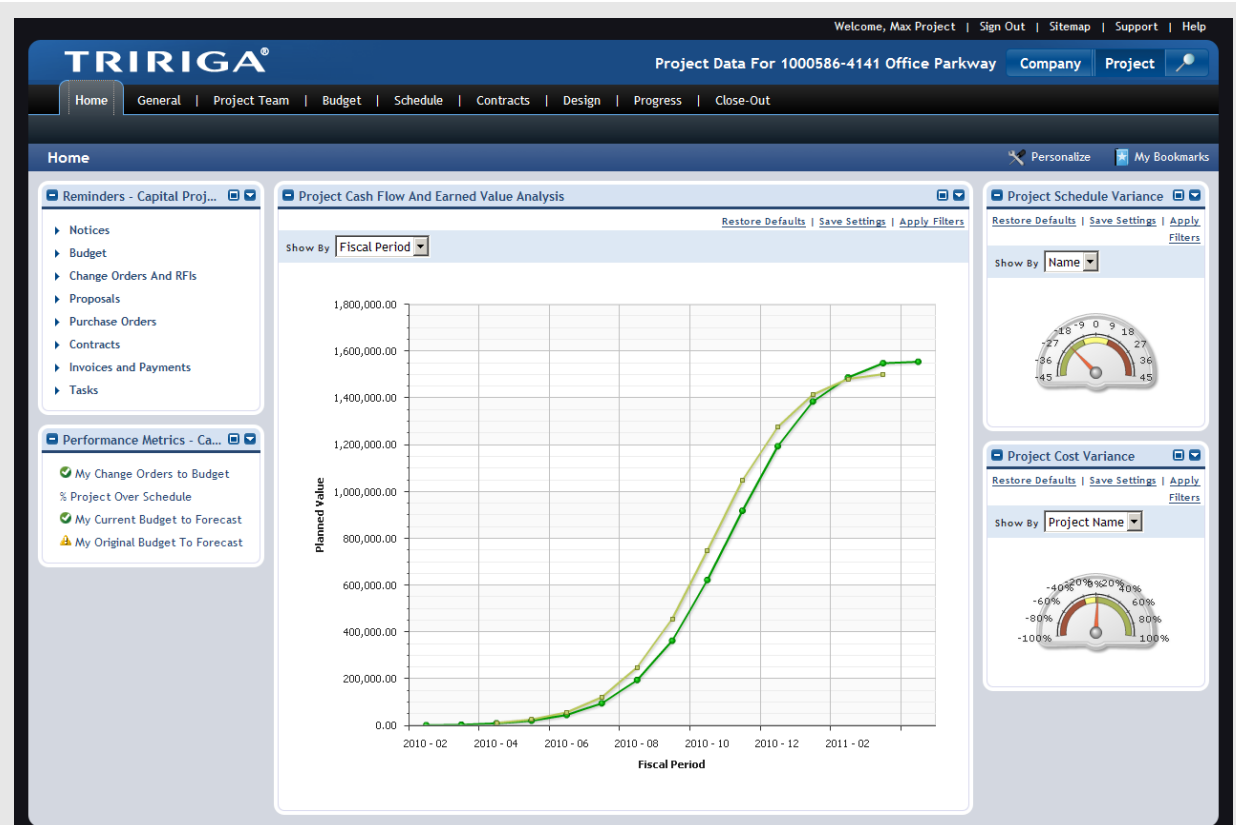
Example of Enhanced Charting and Metrics

Charting enhancements deliver advanced charts and metrics in portals and applications. Key features include:

- New embedded charting engine with enhanced rendering options for labels, color palettes, legends, and more.

- Enhanced support for multi-query graphs driven by two queries.

- Enhanced scaling and resizing in portals and forms.

- Improved support for Print and Save As.

- Enhanced metric query against transactional data.

- Addition of threshold-driven gauges for tactical metric display.

Enhanced Reporting, My Reports

Example of My Reports

Example of Report Interface

My Reports delivers personalized reports and access to shared reports, providing a secured container (sandbox) for users to create personal reports without the risk of altering system reports and a simplified user interface for report creation. With the simplified interface, users can create their own reports, reducing application administrator time and effort.

Enhanced Forms (GUIs)

Example of a Form

Many forms redesigned for ease of use. Key features include:

- User preferences include expand/collapse sections.
- New look-and-feel; updated styles.
- Organized to group related data together.
- Tabs display on a single line with a navigation control for tabs that do not fit.
- Section positioning optimized to minimize the white space between sections.
- Fields utilize commonly recognizable Web controls and maximize the use of autocomplete.
- When selecting data from a single-select query, the user only has to click the radio button to select and return the data to the invoking process, eliminating a secondary action such as OK.

New Portals and Navigation across All Products

Process-based menus accelerate search and access to key activities. Key features include:

- Up to four levels of role-specific menus.
- Role-specific menus present multiple levels in hover-over mode. Levels 1 and 2 of the menus persist.

- Menus contain links appropriate for the selected menu item. Links include portals, queries, reports, graphs, master/detail, forms, performance managers, and more.

- Breadcrumbs give users a view of where they are in the navigation hierarchy and provide quick access to higher levels in the navigation hierarchy from the current location.

The user's role (security group) drives portal content and menus; including multi-role users.

New portals and navigation for 28 roles across all products.

Simplified User Experience for Key Processes across All Products
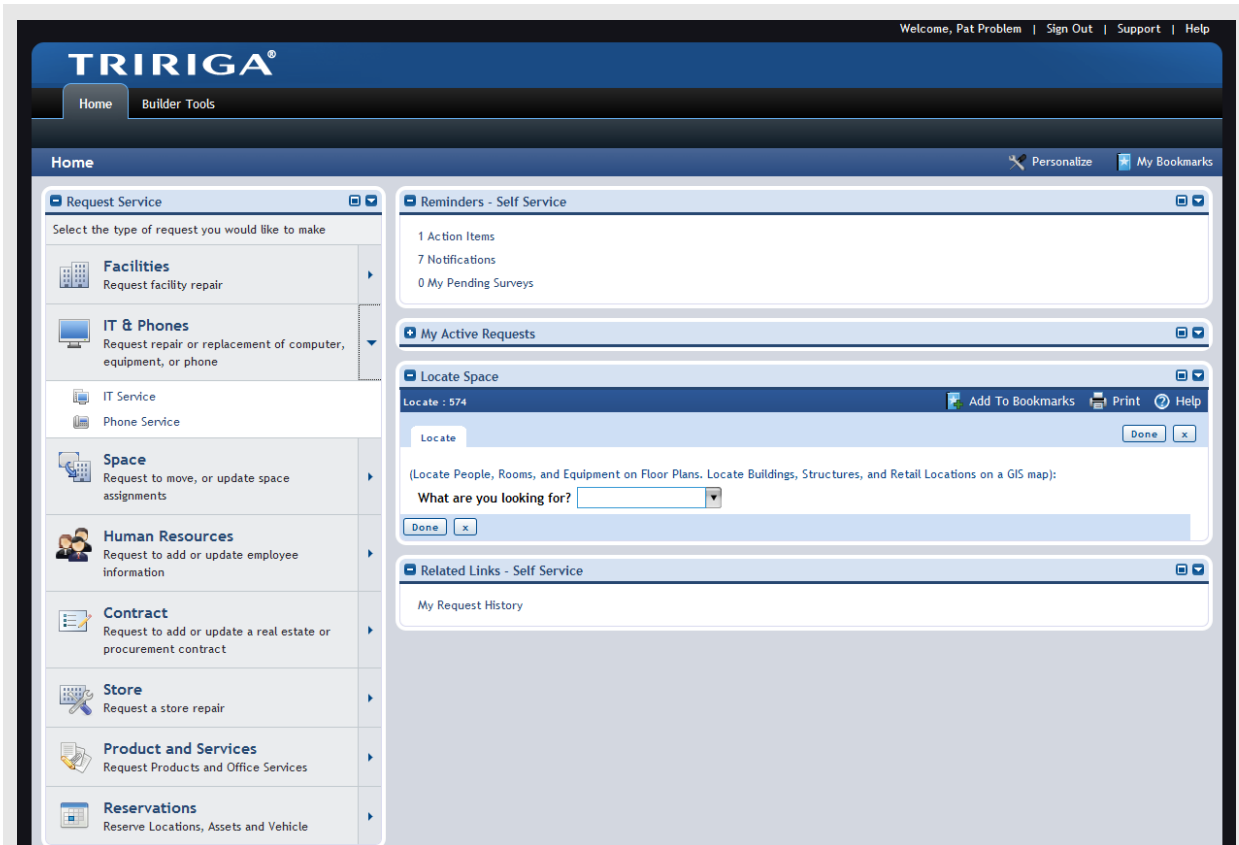
Example of Request Central Portal

TRIRIGA reengineered the user experience so that users perform key processes more easily and with less training. For example, the new accordion-style self-service portal simplifies requests and search. Redesigned request forms open in the portal without pop-ups. The new Locate Space form utilizes progressive disclosure to simplify searches and presents graphic locations based on user input to find a person, a room, or equipment.

Process enhancements for the 10 most used roles across all products. Process enhancements include:

- Request Central: Simplified, intuitive navigation and request forms to submit self-service requests; integrated instructions; progressive disclosure. Graphic find from GIS or floor plans to locate people, locations, and/or equipment.

- Real Estate Contract Manager: Simplified access to lease abstracts and contracts.

- Program Manager: Simplified access to manage projects; integrated metrics.

- Project Manager: Consolidated forms and access to manage projects; streamlined project form; simplified access to project-related forms.

- Move Manager/Planner: Enhanced graphic section for move planning; move calendar.

- Space Manager/Planner: Bulk assignment and allocation of space using browser-based floor plan graphics.

- Facility Assessment Manager: Bulk create of opportunities.

- Service Technician: Simplified access to task information to plan and complete work.

- Service Manager/Planner: Consolidated Assign Task planning form; integrated metrics; bulk task processes.

- Environmental Manager/Planner: Multi-metric views to analyze performance; bulk create of environmental opportunities. Bulk creation of checklists.

Enhanced Browser-Based Web Graphics of CAD Floor Plans
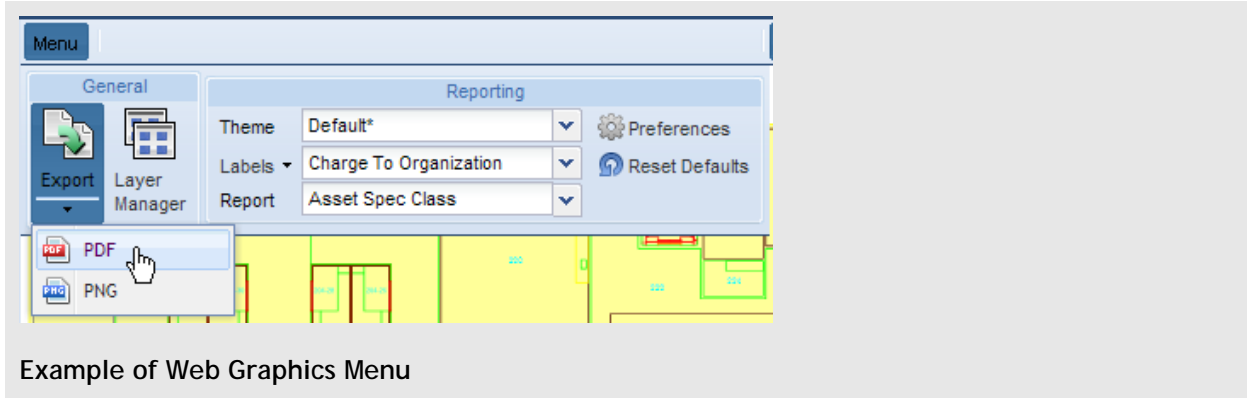
Example of Web Graphics Menu

Enhanced browser-based Web Graphics of CAD Floor Plans drive enhanced applications. Key features include:

- Publish using DXF, an industry-standard drawing file format supported by AutoCAD and MicroStation; removed dependency on SVG and DWF.

- Enhanced and simplified user controls, including zoom/pan with mouse wheel control; themes using combined labels, preferences, and report definitions; configurable, moveable legend; fenced Select Window; and more.

- Enhanced layer and preference management; security restricts confidential layers.

- Enhanced labeling and label filters.

- Export to PDF and PNG.

- Uses graphic reports defined in the TRIRIGA Report Manager, giving access to the breadth of reporting options in the TRIRIGA Report Manager.

Important Installation and Upgrade Information

Please review the *TRIRIGA Application Platform 3 Installation and Implementation Guide* before installing this product. Note the following in particular:

- Stage all upgrades in a test environment and review them thoroughly before you upgrade any production environment.

- Perform a database backup before you upgrade any environment.

- When you perform a platform upgrade, make sure there are no application servers running or other active connections to the database. If there are connections to the database other than the installer, the installer may fail.

- After you perform an upgrade, only start one application server. Do not bring up any other application servers until the upgrade to the first one is complete. Often upgrades are performed during the initial startup of an application server and there may be conflicts if two application servers are started in parallel.

It is critical to complete the upgrade to TRIRIGA Application Platform 3.0 and TRIRIGA 10.0 in the following sequence. In addition to the above, perform the steps appropriate for your company's upgrade scenarios and according to your company's upgrade practices. These steps are not intended to substitute for your company's testing and validation procedures. Follow the steps below to either upgrade applications and platform or upgrade only the platform.

Upgrade Applications and Platform

Follow this sequence when upgrading to TRIRIGA 10.0 and TRIRIGA Application Platform 3.0:

Additional Steps for Installations Upgrading Applications and Platform

Step 1 Upgrade to TRIRIGA 9.7.1

Your target system must be on TRIRIGA 9.7.1 before upgrading to TRIRIGA Application Platform 3.0. If your target system requires an upgrade to 9.7.1, your target system must be on TRIRIGA Application Platform 2.7.2.1 or higher. If you decide to upgrade to TRIRIGA Application Platform 3.0 prior to importing the TRIRIGA 9.7.1 package, you will need to validate that package so that the objects that are not valid in the 3.0 platform will be identified. After these invalid objects are identified, they need to be deleted from the package prior to importing.

Step 2 Upgrade the platform to TRIRIGA Application Platform 3.0

Follow the *TRIRIGA Application Platform 3 Installation and Implementation Guide* to run the installer. Review/follow the suggestions in the "Installation Verification Tips" chapter.

Step 3 Set the `BYPASS_PORTAL_MENU_UPGRADE` property in `TRIRIGAWEB.properties` to `Y`, which will bypass the portal and menu upgrades that typically run with an upgrade to TRIRIGA Application Platform 3.0. Your system receives the portal and menu upgrades when you import the TRIRIGA 10.0 object migration package (which you will do in Step 6). Review/revise the other properties files as appropriate for your implementation. See "TRIRIGA Application Platform 3.0 Properties Files" and the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for more information.

Step 4 Start the server and allow the server startup processes to run.

Additional Steps for Installations Upgrading Applications and Platform

Step 5 Starting with TRIRIGA 10.0, TRIRIGA applications place standard actions, such as Copy, Apply Template, and Delete, under a new More action in the form. This will be done by TRIRIGA on all new forms moving forward; however, upgrading customers can apply this change to previous forms that were not updated or changed by new functionality. To do this you must run an SQL Script against your database. Run this script AFTER the latest platform upgrade but BEFORE importing the TRIRIGA 10.0 object migration package. The SQL files are located in your install folder under `\userfiles\upgrades`. Use either file `STATE_ACTION_updates_oracle.sql` or file `STATE_ACTION_updates_msssqlserver.sql`. (Tri-29957)

Step 6 Apply the TRIRIGA 10.0 incremental package.

Step 7 Follow the recommendations in the *TRIRIGA Application Platform 3 Upgrade Administrator Guide*.

Upgrade Platform Only

Follow this sequence when upgrading to TRIRIGA Application Platform 3.0:

Additional Steps for Installations Upgrading Platform Only

Step 1 In order to upgrade your target system to TRIRIGA Application Platform 3.0, the target system must be on TRIRIGA Application Platform 2.5.0 or later. If it is on 2.1.9.x or earlier, you must first upgrade to 2.7.1.3. After the 2.7.1.3 install is complete, start the application server to finish the upgrade. See the *TRIRIGA Release Notes for 9.7.1 and 2.7.1.3* for more information. Do not start the upgrade to 3.0 until the 2.7.1.3 application has fully started.

Step 2 TRIRIGA 8i implementations using graphics must import an object migration package before performing the upgrade to TRIRIGA Application Platform 3.0. Contact TRIRIGA Support for the object migration package.

Step 3 Follow the *TRIRIGA Application Platform 3 Installation and Implementation Guide* to run the installer. Review/follow the suggestions in the "Installation Verification Tips" chapter.

Step 4 Set the `BYPASS_PORTAL_MENU_UPGRADE` property in `TRIRIGAWEB.properties` to `N`, which allows the portal and menu upgrades that typically run with an upgrade to TRIRIGA Application Platform 3.0. Review/revise the other properties files as appropriate for your implementation. See "TRIRIGA Application Platform 3.0 Properties Files" and the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for more information.

Step 5 Start the server and allow the server startup processes to run.

Additional Steps for Installations Upgrading Platform Only

Step 6   The installer automatically performs most upgrades to TRIRIGA 9 applications. TRIRIGA 9 customers need to import the object migration package that contains the form and workflow changes for the new navigation and portals. This file is located in the install directory under `\userfiles\upgrades\Portal BO Upgrade.zip`.

TRIRIGA 8i implementations must perform manual steps to complete the upgrade. The manual steps include disabling the graphic upgrade, modifying People object forms and workflows, and adjusting the values in the forms for Groups. Contact TRIRIGA Support for detailed instructions.

Step 7   Follow the recommendations in the *TRIRIGA Application Platform 3 Upgrade Administrator Guide*.

TRIRIGA Applications 10.0

This chapter details enhancements and changes to TRIRIGA Applications.

Important Information

Important information concerning TRIRIGA Applications for this release includes the following:

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 www.energystar.gov
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`

Area of Impact	Description

	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`

Externally Generated Lease Abstract Records	The Lease ID of a Lease Abstract record must be unique. The system rejects any imported Lease Abstract record with a Lease ID matching a Lease Abstract record already in the database.

Security	TRIRIGA ships without Geography and Organization access settings (row level security access) on our security groups. Leaving the access settings without Geography and Organization only allows users in that group access to records with no Geography or Organization Access value. Every user needs to belong to at least one security group that gives them access to a specific level within the Geography and Organization hierarchies. All users must be assigned to a group that has row level security set. This can be achieved in one of three ways:
	
	    1. TRIRIGA now includes the Global Data Access Group, which can be used for that purpose. It has row level security set to the root level of /Geography and /Organization.
	
	    2. Modify the form level security group used to set the row level security as desired for your implementation.
	
	    3. Create your own set of row level security groups and assign users accordingly.
	
	If you have followed these guidelines and believe your row level access is not performing as expected, please contact TRIRIGA Support. (Tri-31533)

Security	TRIRIGA uncovered a security defect that exposes passwords in clear text format to people that have access to the TRIRIGA database tables. This issue is not present in TRIRIGA 10. TRIRIGA recommends all TRIRIGA 9 implementations resolve this security defect by following the steps outlined in

Area of Impact	Description
	TRIRIGA User Password Fix, which can be downloaded from http://elite.tririga.com. (Tri-27187)
TRIRIGA Mobile	TRIRIGA expects Syclo to release its 10.0 mobile application in early Q1 2011.

Known Limitations

Known limitations concerning TRIRIGA Applications for this release include the following:

Area of Impact	Description
Checklist Manager	To retire a Checklist Category record or Checklist Item record from a Checklist when the Retire action is not visible, first select Save to reveal the Retire action, then select Retire.

TRIRIGA 10.0.0.1 Changes

You upgrade your version of TRIRIGA for the 10.0.0.1 release by fix pack. The IBM TRIRIGA 10.0.0.1 fix pack updates your 10.0.x system to support the 2013 upgrade to the US EPA ENERGY STAR Portfolio Manager Data Exchange Web Services. You must be on IBM TRIRIGA 10.0.x and on IBM TRIRIGA Application Platform 3.3.x before you apply this fix pack. For more information, see the 10.0.0.1-ENERGYSTAR-README file.

To request access to the 10.0.0.1 fix pack, create a service request for the 10.0.0.1 fix pack at the IBM Software support site at www.ibm.com/support. After you obtain access to the fix pack, follow the directions in the readme file to apply the fix pack.

The changes to IBM TRIRIGA for this release include the following items:

Area of Change	Description
ENERGY STAR	Added fields to multiple objects to support the new ENERGY STAR API as described in the 10.0.0.1 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-

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

TRIRIGA 10.0 Enhancements

In addition to the features described in "What's New in This Release", the enhancements to TRIRIGA Applications for this release include the following:

Area of Change	Description
Budget Manager	In the Capital Project form:
	(1) Added a section to the Budget tab, just below the summary, that displays the following: Original Budget, Budget Changes, Budget Transfers, and Budget Forecasts associated to the project.
	(2) Added a new Procurement tab with four query sections: Proposals (bids, RFQs, RFPs), Purchase Requisitions (product requests), Contracts and Purchase Orders (Purchase Orders, Standard Contracts, Standard Contract Change Orders), and Billing and Payment (Contract Invoices, Invoices, Payment Releases) associated to the record. (Tri-29727)
Bulk Approval	Improved actions in query lists enable bulk approval of contracts, funding requests, lease abstracts, tasks, invoices, contract change orders, programs, projects, budget changes, design reviews, and more.
Bulk Retire	Improved actions in query lists enable bulk retire of drawings, specifications, and surveys.

Area of Change	Description
Bulk Void Payments	Improved actions in query lists enable bulk void of payments.
Locator	The Locator provides a quick and easy way to find people, rooms, and equipment on floor plans or in buildings, and to run reports on graphic images. Users find the Locator in the Locate Space portal section, the Find Space portal section, and the Locate portal section.
Manage Request Services	Available services for which requests can be made can be designated for Buildings, Retail Locations, and Structures.
Move Manager	Changed the behavior of the Move Planner form to be a true process object whereby the record is deleted upon closure of the form. Removed all actions that allowed the record to be persisted (e.g., Save & Close). Relabeled the Save action to Apply as data entered on Project Planning requires saving so that the Gantt sections calculate correctly. However, this action does not persist the record permanently. The published business object record name has been changed from Name and ID to the Control Number. Removed the Contacts and References tabs. Removed the ID, Name, and Status fields from the General tab. (Tri-29757)
OSCRE Lease Abstract	Modified the Lease Abstract OSCRE functionality to comply with the OSCRE 2.0 specifications. Added custom attributes to the lease abstract XML to accommodate customer-specific lease-related data, which allows customers and abstract service providers to accommodate customer-unique data needs without having to add fields and update the XML for each lease or each customer. Added TRIRIGA fields not specified by OSCRE to the lease abstract XML, which allows customers and abstract service providers to accommodate all of the lease fields included in TRIRIGA that are not covered in the OSCRE standard.
Project Manager	The Bulk Create Project functionality within a program now activates the selected projects and creates a project budget and cost code for each project. In prior releases, the projects were created in draft status and the user had to open each project to activate it. (Tri-28583)
Real Estate Contract Manager	The Options and Option Wizard now pull the Effective Date from the parent (Real Estate Lease or Lease Abstract). The Renewal Expiration Date or Must Exercise By fields now are calculated before creating/saving an option so the values can be reviewed. When using the Options Wizard, Exercise Notice now populates from the parent (Real Estate Lease or Lease Abstract) in the Exercise Date Notifications section in the Options form. (Tri-27835)
Task Manager	Users who click the Add action for Offline Tasks can create an Unavailable Time record for themselves in the Create Unavailable Time form. (Tri-31147)
Update Space	This new process form is designed to update space(s) via a floor plan (graphical view). With Update Space, users assign/unassign people, assign/unassign asset(s), assign/unassign chargeback organization(s), assign/unassign occupancy organization(s), and update space details on one or more graphically selected Space records.

TRIRIGA 10.0 Changes

The changes to TRIRIGA Applications for this release include the following:

Area of Change	Description
Application Setup Manager	Adjusted the formatting in the Environmental Water Log offline form to make it consistent with the online form by making Quantity numeric and Rate $(dollar). (Tri-27702)
Application Setup Manager	Corrected the Manual Approvers section label in the Notifications tab of a Notification Requirement. (Tri-28136)
Application Setup Manager	If you need Data Integrator files containing values for Energy, Travel, and Waste Emission Factors, contact TRIRIGA Support. (Tri-28558)
Application Setup Manager	Offline Content related reports now show consistent column labels. (Tri-27709)
Application Setup Manager	On the Travel Emission Factor form, changed the position of the Copy and the Retire actions. Selecting the Retire action now closes the form. (Tri-28234)
Application Setup Manager	Request approvals now are routed correctly when using an approval rule of Use Roles From = Linked Record's Associated Location and the request's Location Requested For field was changed to a different building/location. (Tri-27362)
Application Setup Manager	The Funding Percent Increase field in the Facility Assessment Analysis Defaults section of the TRIRIGA Application Settings record now has text indicating the value is a percent. (Tri-17947)
Application Setup Manager	The Save & Close action on the Approval Rule form now works properly. (Tri-12055)
Application Setup Manager	When the Service Management Setup Wizard opens and the user selects a Request Class Setup radio button, the system displays the Apply button, removes sections that are not appropriate for the selection, and displays sections that are. (Tri-23431)
Asset Manager	Selecting a specification in an asset populates the asset's Environmental Details section from the specification. Clearing the specification also clears the copied data from the Environmental Details section. (Tri-27857)
Budget Manager	The Project Original Budgets - Draft related report now only returns records in draft status. (Tri-12793)
Carbon Footprint Analysis Tool	Corrected the formula for projected energy on the Carbon Footprint Analysis form to account for various Unit of Measure conversions. (Tri-27697)
Carbon Footprint Calculator	The Travel Log query section for a building now has runtime filters for Travel Type and Travel Sub-type fields. (Tri-17565)
Catalog Manager	Renamed the Catalog Manager's root node to Catalog and defined a manager

Area of Change	Description
	query for the root Catalog node. (Tri-27435)
Classification Manager	Corrected the spelling of the Fixture Specification specification class. (Tri-28347)
Classification Manager	Default Fiscal Periods, Fiscal Quarters, and Fiscal Months extend to year 2025. (Tri-23469)
Classification Manager	Removed the Dispatch Method tab from the Maintenance Priority form. (Tri-28415)
Classification Manager	Removed the Response Required check box from Request classification records. (Tri-21640)
Classification Manager	Removed the Status filter under Show More Filters from the Find Using Template pop-up query in the Data Attributes section of the Specification Class. Only records with a status of Template display in the query. (Tri-27587)
Classification Manager	The Catalog column in the Entitlements tab of Roles records now displays data. (Tri-27436)
Climate Log	Made cosmetic and formatting changes to the Climate Log offline form. (Tri-20980)
Contact Center Manager	A Person Centric External Contact now correctly populates the Requested For. (Tri-29465)
Contact Center Manager	After ending a call from the Location Centric view and switching to the Person Centric view, all fields on the Contact Center form are cleared, including end time. Start time is populated with the start time at the next call. (Tri-13078)
Contact Center Manager	Changed the Hire Type to External Contact for the record created when adding an External Contact record using the Pencil icon in the Contact Center Location Centric view. (Tri-13076)
Contact Center Manager	Contact Center, Location Centric, Locations sub-tab query now displays only the Requested Location and any of its children. (Tri-27974)
Contact Center Manager	The creation of an external contact on the Contact Center now only populates the date, requested by, or requested for if it is null. (Tri-27847)
Contract Manager	Fixed the Contract Cost Breakdown Item line number on the Cost tab, Schedule Values section to increment automatically on the Standard Contract form. Also fixed the same issue on other forms like Change Order Cost Breakdown Item, PC Line Item, Contract Invoice Line Item, Bid Line Item and Forecast Change Line Item. (Tri-21803)
Contract Manager	On a Service Agreement, Terms & Conditions tab, Service Locations sub-tab, the query used by the Find action filters out Location Admin and Location Category records. (Tri-13381)
Contract Manager	The Find query for Service Provider on the Blanket Purchase Order form no

Area of Change	Description
	longer uses the Logo field to order by. (Tri-27915)
Contract Manager	The Remove section action is no longer hidden on the Contact section of Standard Contract Change Order and Standard Contract forms. (Tri-12134)
Contract Manager	The system now creates a history record when a user revises an insurance record. Master/detail queries now have a related report to filter history records. (Tri-23675)
Cost Estimate Manager	Changed the formula in the Cost Estimate Unit Line Item form for Total Adjusted to `((Total Unit Price * Geography Index)+(Total Unit Price*(Adjustment Factor/100)))`. (Tri-29347)
Environmental Manager/Planner	For the TRIRIGA Performance Management (US Govt) - Environmental Manager/Planner portal, added the Emission (Carbon) (US Tons CO2) metric. (Tri-23790)
Inventory Manager	When selecting the Primary Inventory Location, the Inventory Location selection now displays children more than three levels deep. (Tri-25235)
Job Manager	Improved the usability of the Job Log. The Job Log form now has runtime filters, a Delete action, related reports, and instructional text. Records display sorted from newest to oldest. (Tri-23415)
Key Manager	Retiring a Key Security now retires the record. (Tri-24933)
Location Manager	After a user takes a Space record Offline and saves it, and then re-opens the Space record and selects the Cancel action, the system no longer hides the Online action. (Tri-30673)
Location Manager	After closing out a Move Line Item, the system now correctly resets the Occupancy and Vacancy information for the Space. (Tri-28229)
Location Manager	Copying a Proposed Site record now appends the copy to the parent record in the hierarchy. (Tri-15670)
Location Manager	Relabeled BOMA Type to Proration Type on the Allocation tab of the Space form and on the General tab of Space Audit form. (Tri-23882)
Location Manager	Removed the manager actions from the Location Manager to make it consistent with other managers. (Tri-13239)
Location Manager	The Copy action for a Space record now copies the Current Use Space Class value from the original Space record. (Tri-15667)
Location Manager	The Currency, Area Units, Length Units, and Carbon Calculation for building records that are children of a property record are not editable. The values populate from the parent property record. (Tri-18001)
Location Manager	The Delete action in Retail Center and Property forms now works correctly. (Tri-28223)

Area of Change	Description
Location Manager	The Space Rollup Summary Report no longer includes retired spaces. (Tri-25385)
Location Manager	The Update action on the Energy Rating section of Building, Retail Location, and Structure forms is disabled until the record is saved with an Energy Rating Type. (Tri-27541)
Location Manager	When the space allocation changes in a Space record, the system no longer changes the history records. (Tri-27826)
Maintenance Manager	Expanded the number of NO-END scheduled events in a created state as follows: Daily – 100, Weekly – 100, Monthly – 50, Yearly – 10. (Tri-23836)
Maintenance Manager	If a building that has Building System Items on the Assessment tab is selected as the location for an Opportunity in the Maintenance Manager, and a user clicks the Find action on the Building System Item section, the Building System Item records of the selected building are listed in the Find query result. (Tri-20843)
Maintenance Manager	In a PM Schedule event, relabeled the text in the Yearly Recurrence section for the Recur Every field to Recur Every Year on _____ (Month). (Tri-27828)
Move Manager	During the Close-out of a Move Request Line Item, a Move Log was being created for both the People record and the My Profile record for the person being moved. Now a Move Log is created for the People record and not the My Profile record. (Tri-28150)
Organization Manager	Added a missing Department Record report to the Reports tab of the Agency form. The report is named `AGENCY 10-09.rpt` and is now in the Document Manager. (Tri-27638)
Organization Manager	Improved performance when Department and Agency (Organization) forms open. (Tri-25260)
Organization Manager	The Reports tab in the Organization Category, Real Estate Lease Template, Permit Record, and Key Request forms now contains a form report. (Tri-27006)
Payment Manager	Added a filter for Summary Type = Rent for Accounting Type = Accounts Payable (AP) to the query used in straight line calculations. (Tri-31097)
Payment Manager	For Utility Invoice functionality, the Waste Log that generates when the invoice is Issued now defaults the Total Cost to `Rate * Total Quantity`. (Tri-30731)
Payment Manager	On RE Invoice Form action, the RE Invoice Record form now opens the RE Invoice Record report. (Tri-21204)
Payment Manager	Relabeled the Contract section of an invoice to Purchase Order to reflect what is listed in the section. (Tri-13204)

Area of Change	Description
Payment Manager	Removed the Accrual option from the Invoice Type's drop-down list on the RE Invoice form. (Tri-23265)
Payment Manager	The Cost Allocations section in the History tab of the Payment Line Item form now is sorted by Organization Name. (Tri-28246)
Payment Manager	The query used in straight line calculations for accounts receivable now includes Payment Line Items in active status and paid and an additional filter on Summary Type as Incentive. (Tri-31098)
Payment Manager	Tidied the appearance of the Payment Voucher. (Tri-28244)
Payment Manager	When the user makes a selection in the Vendor Company Lookup, the system now populates the Last Name field. (Tri-13261)
People Manager	Added instructional text to all tabs of the My Profile form. (Tri-27407)
People Manager	Adding a Move Planner contact role directly to a Geography or Location automatically updates the Move Locations tab on affected Employee and Consultant records. (Tri-26285)
People Manager	Made the actions on Employee and People Template forms consistent with other People forms. (Tri-13251)
Performance	Improved the performance of the Revise, Save, and Activate actions on a Real Estate Lease. (Tri-21313)
Planning Manager	Environmental metrics are calculated using the same units of measure whether a user adds a proposed location on a Space Scenario or with an Add Supply on the Analysis tab, Supply Summary sub-tab. (Tri-27188)
Planning Manager	In a Planning Environment, Forecasts tab, Add Forecast Line Item action, the system now: (1) displays a confirmation message after it creates all Forecast Line Item records; (2) displays an error message and does not create a duplicate record when a user tries to add a Forecast Line Item record with the same geography and demand drivers of an existing Forecast Line Item; and (3) clears selected check boxes after the user clicks the Create Forecast action; however, the system does not clear any selected line that duplicates an existing Forecast Line Item record. (Tri-26471)
Planning Manager	In a Planning Environment, when the user selects multiple geographies and/or drivers in the Add Forecast Line Item form, the system now creates multiple line items. (Tri-28596)
Planning Manager	In a Portfolio Plan, when the user adds Plan Goals to an existing record, they propagate and immediately show on the Space Plan's Scenario Evaluation grid. Previously the user needed to Save to refresh the grid to display the propagated records. (Tri-28357)
Planning Manager	In a Portfolio Plan, when the user adds Plan Goals to the parent Portfolio Plan, they propagate to Sub Portfolio Plans and Space Plans and the default value provided displays on the Space Plan's Scenario Evaluation comparison

Area of Change	Description
	grid. Previously the user needed to Save to refresh the grid to display the propagated records. (Tri-27395)
Planning Manager	Multiple copies of objectives and risks are no longer propagated to child records such as Space Plans and Scenarios. (Tri-28350)
Point of Sale Request	The Revise action now increments the revision number on the record and creates a copy of the original with a status of History. (Tri-12701)
Portfolio Planning Manager	The copy of a Portfolio Highlight record now shows in the Portfolio Highlight section. (Tri-31060)
Project Manager	Corrected the formula for Budget to Forecast Variance on capital project records. The correct formula is: `Budget to Forecast Variance(triBudgetForecastVarNU ) = Budget Current (triBudgetCurrentNU) – Forecast Final (triForecastFinalNU)`. A patch helper is available to correct values in existing records. (Tri-28585)
Project Manager	The copy of a Facilities Project now contains all roles in the Contacts tab of the copied record. (Tri-23320)
Query and Reporting	Can print multiple Work Tasks from the Tasks and Projects tab in the Maintenance Manager. (Tri-28574)
Real Estate Contract Manager	A Real Estate Lease created from a Lease Abstract contains the contacts from the Lease Abstract. (Tri-30592)
Real Estate Contract Manager	A service added in the Services Included sub-tab no longer can be added in the Services Excluded sub-tab, and vice versa, for either (1) a Real Estate Lease; Clauses, Options & Terms tab; Clauses sub-tab; Lease Clause record or (2) a Lease Abstract, OPEX/CAM tab. (Tri-19575)
Real Estate Contract Manager	Ad hoc notifications in the Contract Notifications section of Owned Property records now transition to either Scheduled or Sent. (Tri-28397)
Real Estate Contract Manager	Adding a non-TRIRIGA User (no profile) to a record's approval routing no longer initiates a looping condition during a re-review scenario (approve, revise, approve). Also, blank reviewers are no longer added for re-reviews. (Tri-30819)
Real Estate Contract Manager	Amendment Number is the new name of the Revision label under the Current Amendments Details section on the Owned Property History tab. (Tri-28459)
Real Estate Contract Manager	An Owned Property's payment line items now are set to read-only or editable based on the main record's editable state. (Tri-28453)
Real Estate Contract Manager	Changed the label for the CAM Schedule tab on the Lease Abstract form to CAM Schedules. (Tri-20869)
Real Estate Contract Manager	Changed the labels of listed fields in Lease Abstract and Lease Clause forms. (Tri-20881)

Area of Change	Description
Real Estate Contract Manager	Copying a Real Estate Lease now copies all lease clause data from the original. (Tri-28261)
Real Estate Contract Manager	Corrected a number of issues with the Real Estate Lease query section on a Lease Abstract. (Tri-21127)
Real Estate Contract Manager	Document Type on Lease Abstract now populates correctly to each tab. (Tri-21132)
Real Estate Contract Manager	If the Accounting Cost Center field has a value in the General tab of a Real Estate Lease, the system now populates the lease's Payment Schedules with that value. (Tri-28157)
Real Estate Contract Manager	In the Classification Manager, Date Type, Lease Dates, changed the name of the Construction State lease date to Construction Start. Also made the same change to the Lease Abstract Offline form. (Tri-20944)
Real Estate Contract Manager	On a Real Estate Lease, Locations tab, Contract Locations section, RE Contract Locations record, the unit of measure for the Allocation Percent and Proportionate Share fields now is read only. (Tri-28138)
Real Estate Contract Manager	On a Real Estate Lease, Summary tab, the values in Total Rentable and Total Vacant now are reduced by the value in SUA Rentable Area when an SUA is retired. (Tri-15705)
Real Estate Contract Manager	On an Owned Property, Service Areas tab, Default Service Charge Type section, replaced the query displayed for the Find action to a user-friendly search page. (Tri-28394)
Real Estate Contract Manager	On an Owned Property, Terms tab, Add Revision action, the added record now properly displays in the Deal Terms section. (Tri-28457)
Real Estate Contract Manager	Payment Terms currency fields and unit fields now show unit of measure. (Tri-28147)
Real Estate Contract Manager	Real Estate Lease payment schedules generated using the Include % Growth flag now have correctly rounded values. (Tri-27902)
Real Estate Contract Manager	Remit to Lookup replaces Organization Name as a required field on the Payment Instruction for a Payment Schedule on a Real Estate Lease. (Tri-17908)
Real Estate Contract Manager	Removed duplicate values in the drop-down list (rules 2, 5, and 6) for Payment Reconciliation, Calculation Rule field. (Tri-13951)
Real Estate Contract Manager	Removed the Expected Expense and Expected Accrual columns from the Payment Schedule query display. (Tri-30170)
Real Estate Contract Manager	Removed typos in the Operating Requirement Details section and Opening Co-Tenancy Requirement Lease Clause section of a Real Estate Lease. (Tri-12920)
Real Estate Contract	Reorganized the labels on the Insurance Clause Details section of a Lease

Area of Change	Description
Manager	Abstract and a Real Estate Lease so that the user sees the same labels on both. (Tri-28220)
Real Estate Contract Manager	Resolved rounding issues with Payment Line Items on Real Estate Lease records. (Tri-28433)
Real Estate Contract Manager	Revising and activating a Real Estate Lease does not create double straight line rent liability. (Tri-27890)
Real Estate Contract Manager	Straight Line Rent Deferred Liability queries now include One Time Payments in formulas. (Tri-27841)
Real Estate Contract Manager	Terminating a lease during the processing of a payment schedule now voids the payment line items created after the lease termination date. (Tri-29587)
Real Estate Contract Manager	The Copy action on a RE Data Change Request now copies data values in System Geography and System Location fields on the System tab from the original to the copy. (Tri-12002)
Real Estate Contract Manager	The Copy action on the Contract Notification form in an Owned Property or Real Estate Lease now copies and associates the Owned Property or Real Estate Lease record in the Contract section. (Tri-28396)
Real Estate Contract Manager	The Find action on the Cash Code section, Accrual Cost Code section, and Expense Cost Code section of the Payments Schedules sub-tab of the Payments tab of a Real Estate Lease now only returns service cost codes. (Tri-17777)
Real Estate Contract Manager	The Net Sales Less Tax Exclusion value on the Percentage Rental Detail Summary section now factors in the Tax Exclusions percentage. (Tri-28123)
Real Estate Contract Manager	The Premise Description field now contains the correct value in the RE Contract Locations record linked to Real Estate Lease or Owned Property, Locations tab, Contract Locations section. (Tri-28428)
Real Estate Contract Manager	The Revise action with Amendment option on a Real Estate Lease now copies the entire record to the History record. (Tri-27660)
Real Estate Contract Manager	The Save Clause action in the OPEX/CAM sub-tab for Services Included and Services Excluded on a Real Estate Abstract no longer loses data. (Tri-28116)
Real Estate Contract Manager	TRIRIGA RE Abstractor and TRIRIGA RE Abstractor Manager now have access to the Notifications tab on a Lease Abstract record. The Audit Actions tab has been hidden for these two groups. The Notification tab appears when the system creates the Lease Abstract record. (Tri-21222)
Real Estate Contract Manager	When an Owned Property is activated without a Space Use Agreement, the system will create one. The organization used to create this SUA is the Owner Organization on the Contact Details tab of the Owned Property. (Tri-30887)
Real Estate Project Manager	A RE Project Lease when closed out creates the correct preferred provider evaluation survey and portfolio manager evaluation survey. (Tri-28308)

Area of Change	Description
Real Estate Project Manager	An Attention! message now disappears on Save of a RE Transaction Plan and the window closes on Save & Close. (Tri-28335)
Real Estate Project Manager	CTQ Survey no longer displays a validation message that the user should populate the Evaluation field(s) if all CTQ Item's Evaluation field(s) are populated. (Tri-13118)
Real Estate Project Manager	In Project Lease, Revenue Forecast tab, Demographic Details section, rearranged the "% of the population with associate's degree" and "Median household income ($35,000 to $50,000)" fields so they match the order of the same fields located in the Excel sheet of the Revenue Forecast tab. (Tri-13114)
Real Estate Project Manager	Repositioned Net Rooftop Effect on the RE Project Lease, Summary Metrics tab. (Tri-13122)
Real Estate Project Manager	The market analysis information from a RE Transaction Plan now maps to the Transaction's Summary Metrics tab. (Tri-13125)
Real Estate Project Manager	The sort order of the CTQ Assessment/Evaluation sections now is the same on the CTQ Assessment and CTQ Evaluations sections of the RE Project - CTQ tabs. (Tri-13116)
Real Estate Project Manager	The system no longer creates a Lease Abstract on close-out of an RE Acquisition Project. (Tri-28455)
Record Runtime	If the Reservable check box on a Space record is not checked, the system does not display the record's Reserve tab. The TRIRIGA 10.0 Release Patch Helper corrects existing data. (Tri-29478)
Report Manager	Corrected the filters in the Accounts Payable History Report. (Tri-19777)
Report Manager	Corrected the sort order for the query on the Lease Abstract that searches for the Parent Real Estate Lease. (Tri-21454)
Report Manager	For the Contract Execution Report, the Vendor Company Organization field is now populated from Blanket Purchase Order and Service Agreement and the Commitment Original value now is two decimal places. (Tri-23141)
Report Manager	In the Environmental Summary Report, changed the report's calculation and label from "D.NET CO2e (A+B+C-D)" to "NET CO2e (A-B+C-D)" and relabeled several fields. (Tri-25405)
Report Manager	Relabeled the Pipeline report so that it is consistent with the Pipeline Details report. (Tri-13184)
Report Manager	The Pipeline Details Report now displays Trade Area Identified in the Pipeline Details chart. (Tri-13096)
Report Manager	The Space Class Summary by Space Class report now has complete column headings and displays two-digit decimals where appropriate. (Tri-26937)

Area of Change	Description
Report Manager	The `triProgram - CRYSTAL - Program Financial Summary Report` query no longer results in an exception. (Tri-28476)
Report Manager	Updated the Percentage Rent Report. (Tri-22733)
Reports	The Funding Analysis Summary report now displays values for the FCI column for Option 2 (Maintain FCI). (Tri-17782)
Request for Information	RFQ response totals now include tax values. (Tri-508)
Request Manager	Clicking the Clear icon in the Requested For Lookup prompt in an Equipment Request, Point of Sale Request, and Signage & Fixtures & Furniture Request now clears all values. (Tri-12926)
Request Manager	Corrected the incorrectly populating fields that occurred when a user first opens the form for Add Person, Change Person, Change Space, Remove Person, Need Space, and Return Space. (Tri-28046)
Request Manager	In a Funding Request, Additional Costs form, the UOM field for Cost Percent now is read only. (Tri-23552)
Request Manager	In a Funding Request, made the forms and queries for Objectives and Risk Planning Items consistent. (Tri-23597)
Request Manager	In Request For Information, the Work Location lookup now filters out Location Admin type records from the Locations related report. (Tri-28282)
Request Manager	Increased the field length for Current Organization in the Requested For section to 1000. The field's prior small size prevented the field from being populated on an RE Data Change Request if the Person record was associated to an organization path that exceeded 100 characters. (Tri-13416)
Request Manager	On the Additional Costs form for a Funding Request, the Notes & Documents tab no longer generates an error message. (Tri-23610)
Request Manager	The Objective and Risk Planning Item dependent records now are read only. (Tri-28311)
Request Manager	The Primary Organization and Email fields in the Currently Assigned To and Reassigned To sections of the Reviewer Admin now are populated from the Assigned To Lookup and Reassign To Lookup respectively. (Tri-12857)
Request Manager	The Revise action on a Signage & Fixtures & Furniture record now increments the revision number on the record and creates a copy of the original with a status of History. (Tri-12721)
Request Manager	When an RE Action Request is submitted, the system populates the Transaction Name under the Transaction Plan section for the RE Transaction Plan with "Transaction Plan For - Request: " followed by the ID of the transaction request. (Tri-29968)

Area of Change	Description
Request Manager	When Plumbing Requests - Upload Error is the selected related report, the list of other related reports no longer includes Upload Error. (Tri-28605)
Reservation Manager	A deleted location reservation should no longer appear in the reservation manager. (Tri-28643)
Reservation Manager	Resolved an issue that caused inaccurate asset availability when users reserved the same asset for the same date and time. (Tri-15695)
Risk Manager	The display upon selecting Find on the Items to be Reviewed section of a new Risk Review record no longer includes deleted Project Risk Items. It is no longer possible to select an item multiple times. (Tri-15468)
Submittal Manager	The Task ReIssue popup that appears when reopening a completed Submittal Task or Inspection Task now requires a Task ReIssue Reason before offering the Continue action. That Task ReIssue Reason populates the created record. (Tri-15476)
Survey Manager	The Copy action on a Preferred Provider Evaluation Survey Template question now associates the copy back to the survey. (Tri-28303)
Task Manager	Changed the word Condition to Facility on Condition Assessment Work Task Apply Record and Condition Assessment Work Task Template action forms. (Tri-28416)
Task Manager	Completed tasks no longer display in a user's My Active Tasks portal section. (Tri-28919)
Task Manager	In a Work Task, Work Details tab, Location sub-tab, the type of Location displays in the Type column. Previously only some Location types displayed. (Tri-13345)
Task Manager	In a Work Task, Work Details tab, Locations sub-tab, the Find action now filters out Location Admin, Location Category, External Retail Location, Proposed Site, and Proposed Retail Site records. (Tri-13056)
Task Manager	Resolved an issue causing tasks that had been accepted, started, or stopped to not show the correct Assignment Status after saving. The following rules apply: ▪ If the Task is completed, the Assignment Status will be Completed. ▪ If the Task has 0 (zero) REQUIRED People resources, the Assignment Status will be Unassigned. ▪ If the Task has OPEN Time Entries and the On Site DateTime has been set (via the Start action), the Assignment Status will be On Site. ▪ If the Task has 0 (zero) OPEN Time Entries and the On Site DateTime has been set, the Assignment Status will be Accepted (no longer On Site).

Area of Change	Description
	▪ Otherwise the Assignment Status will be Assigned. (Tri-28736)
Task Manager	The current status of a Work Task record now updates from Completed to Retired when the user retires the record. (Tri-23927)
Task Manager	When a Service Technician enters a value in the Time Entry Date field, the system now saves the value in the Time Log section. (Tri-26335)
Task Manager	Work Task records allow a user to create time entry records only when the Work Task record is out of the null state. (Tri-27480)
Template Manager	Removed the Reports tab on the Critical To Quality (CTQ) template. (Tri-16456)
Template Manager	Removed the Revision column from the Project Original Budget template. (Tri-13237)
Template Manager	Required Amount now copies from the Lease Abstract Template Security Deposit Clause to the Lease Abstract Security Deposit Clause when the user performs an Apply Template action on the Lease Abstract record. (Tri-21087)
Template Manager	The Accounting Cost Center lookup on the Accounting section of a Lease Abstract Template account displays a user-friendly searchable query window. (Tri-28149)
Template Manager	The Apply Record action on the Approval Template form has been removed. Users can manually enter data. They do not need to apply a record to the template. The Apply Record action on Inspection Task Template and Owned Property Template now works properly. (Tri-28386)
Template Manager	Unretiring a retired Approval Template makes the template once again available for use. The Copy action makes a copy. (Tri-11752)
TREES Metrics	Added a new field (`triAccountingTypeTX`) to the RE Contract Fact table, which is used to filter expense vs. income. Incorporated this field as a filter on related cost metrics. (Tri-28265)
TREES Metrics	Corrected the aggregation defined for the Emissions (Carbon) Intensity per Occupant (tons CO2) so that it displays carbon emission per occupant. Previously this metric displayed carbon emission per square foot per occupant. (Tri-28749)

TRIRIGA Application Platform 3.0

This chapter details enhancements, changes, and property file changes for TRIRIGA Application Platform 3.0.

Important Information

Important information concerning the TRIRIGA Application Platform for this release includes the following:

Area of Impact	Description
Branding	Due to significant changes in the portal, TRIRIGA did not map previous branding styles to new style classes in the Style Manager. The upgrade to TRIRIGA Application Platform 3.0 preserves header details, but you will need to rebrand the rest of the page. Find the Style Manager in the Utilities portal section or by selecting Tools > Administration. The Style Manager is described in the *TRIRIGA Application Platform Look and Feel User Guide* until it is replaced by the *TRIRIGA Application Platform 3 User Experience User Guide* (see http://elite.tririga.com for the current schedule for remaining documentation publication).
Brava!	Page 65 of the *Brava! Client/Brava! Server/Net-It Enterprise Installation and User Guide* on TRIRIGA's installation Disk 3 in the `Brava` folder is <u>very</u> important if you wish to use Microsoft Word documents; it shows the nine steps to publish Word documents.
	Attention – TRIRIGA does not recommend using Brava! to view or publish Microsoft Office documents. There are known memory leaks that cause the Brava! Server to become unstable over time. See the *Brava! Client/Brava! Server/Net-It Enterprise Installation and User Guide* on TRIRIGA's installation Disk 3 for steps to restart the server on a periodic basis.
Builder Tools	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)
Duplicate Portal Sections	TRIRIGA Application Platform 3.0 does not allow duplicate portal section names. The upgrade process updates the first portal section found and logs information about subsequent portal sections with the same name in the `portalupgrade.log` located in the install root.
Duplicate Portals	TRIRIGA Application Platform 3.0 does not allow duplicate portal names. The upgrade process renames any portal with a duplicate name by attaching a sequence number to the end of the duplicated name. For example, the second portal named "Employee Portal" becomes "Employee Portal1" and the third becomes "Employee Portal2".

Area of Impact	Description
Excel	According to Microsoft's Web site http://technet.microsoft.com/en-us/library/cc178954.aspx, the OWC library that TRIRIGA uses for Excel sections is not available in Office 2007. That article has a link to where you can download the OWC library and install it as a separate component. If you upgrade Office 2003 or Office 2000 to Office 2007, the OWC library is available. If you have a clean install of Office 2007, the library is missing and will need to be installed for Excel sections to work.
Graphics	Exporting very large graphics could require configuring the Web server with a larger maximum post size. The `maxPostSize` for JBoss is now configured as 10MB. (Tri-28770)
Graphics	Microsoft Silverlight is required to display Web graphics. The first time TRIRIGA attempts to display a Web graphic in an IE environment without Silverlight, IE prompts the user to download Silverlight. The install takes less than 30 seconds, refreshes the page, and displays the graphic.
Graphics	When a user exports a PDF file from a graphics section, Internet Explorer may display a security message in the browser window. To prevent this security message from displaying, add the 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)
Installer	A Sun/Oracle 1.6 JDK or JRE is required to perform a TRIRIGA installation. (Tri-28351)
Internet Explorer	Although Microsoft has improved memory leaks in IE 7 and IE 8, TRIRIGA recommends that users close all browser windows from time to time.
Internet Explorer	TRIRIGA supports Windows Internet Explorer 7 and IE 8 and, between the two, strongly recommends IE 8 for many reasons. Most importantly, TRIRIGA performs best with this version. In addition, as announced in June, 2010, TRIRIGA ends support for IE 7 in June, 2011.
Internet Explorer 8	Internet Explorer 8 includes a "Preserve Favorites website data" option. This property is selected (on) by default in IE8. 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. TRIRIGA recommends clearing this property. If left on and a user's 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.
JBoss	The JBoss default configuration enables compression, except for connections through AJP for Apache. Please see the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for recommendations on JBoss compression.
Microsoft SQL Server	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

Area of Impact	Description
	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.
Number and Currency Validation	In previous releases, TRIRIGA did not validate number fields, including UOM managed fields, correctly. If such a field did not have a default specified, the platform inserted a zero value and the field passed validation. Starting with TRIRIGA Application Platform 3.0, number fields that have no default value and are flagged as required fail validation unless a value is explicitly entered into the field. Review/revise number field definitions to ensure appropriate default values are in place.
Object Migration	Some object types in Object Migration packages from a pre-3.0 environment will not import into a 3.0 environment. The object types that will not import into 3.0 are as follows: managers; pre-3.0 portals; pre-3.0 scorecards; and shortcut list, quick add list, query list, and action items query portal sections.
Portal Menu Upgrade	In 2.7.2, when there was only one menu item in the menu, the system displayed the manager page when a user clicked the menu. In 3.0, this user will not see the page directly; the user will need to hover over the first level menu item and select the item from the second level.
Portal Upgrade Log	The system reports details about which portals were updated and how they were updated during the upgrade process in the `portalupgrade.log` located in the install root.

Record Runtime	Recently created records with a comma in the BO Mapping appear correctly, but older records may contain a comma without a following space in the published name. In order to update these older records, follow this procedure.
	
	1. First insure that the BO Mapping is refreshed
	
	    a. Revise the BO of the affected records and select Tools > BO Mapping
	
	    b. In each location with a comma separator, select a different separator, then select the comma separator again
	
	    c. Save the BO Mapping
	
	2. For each affected record, refresh the published name
	
	    a. Revise the record
	
	    b. Modify one of the fields in the published name and save the record
	
	    c. Change the modified field back to the original value and save the record
	
	    d. Activate the record (Tri-30014)

Record Runtime	TRIRIGA requires Sun/Oracle JRE Version 6 Update 21 (2.6.0_21). Sun/Oracle JRE 1.6.0_22 has a known Sun issue that prevents TRIRIGA Java applets from

Area of Impact	Description
	working. For more information, see http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6995306. (Tri-30996)
	Please refer to the *TRIRIGA Support Matrix* for a complete list of supported operating systems, databases, and related details.
Record Runtime	When a user running Internet Explorer 8 with "Smart Screen Filters" turned ON tries to load more than 1000 records on a page, IE8 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)
System Configuration	TRIRIGA Application Platform 3.0 can consume more resources than previous releases. TRIRIGA recommends monitoring database connections and memory consumption, increasing values if needed.
TRIRIGA Java Applets	For the TRIRIGA Java Applets to load, the Java Virtual Machine on the client side has to be started. The initial loading of the viewer can take time and the Internet Explorer window should not be closed while the JVM is loading. This impacts the following components: SVG Viewer, Brava!, Gantt, stacking, expression editor, document upload, and availability sections. (Tri-22232)
Visual Query	Visual Query is no longer supported. The upgrade that converts visual queries to graphic reports requires either a triSpace business object or a Space business object in order to run. (Tri-28941)
WebSphere	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`. Please refer to the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for step-by-step instructions. (Tri-29060)
Where Used	When searching for items to display in a Where Used tab or section, the system does not include the following references for business object fields: ▪ Workflow Populate File task (binary fields to/from) ▪ Workflow Distill File task (binary field from) ▪ DataConnect Staging Tables / Staging Table Keys ▪ DataConnect Used By / Smart Section Lookup Keys

Known Limitations

Known limitations concerning the TRIRIGA Application Platform for this release include the following:

Area of Impact	Description
Classification Manager	Microsoft SQL Server 2005 only allows a maximum of 256 tables in a query. Because of this restriction, a module can only have a maximum of 256 stand-alone and embedded business objects. This restriction does not apply to MSS

Area of Impact	Description
	2008 or to Oracle. (Tri-27220)
ETL Scripts	After upgrade to 3.0, your ETL scripts may not work. The ETL scripts are written against TRIRIGA's standard database and its database columns, but after an upgrade, 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. The majority of the column names will match, but a small number may not. TRIRIGA recommends reviewing your ETL scripts and changing them as needed to ensure the column names match the generated column names in your database. (Tri-27625, Tri-27705)
Form Builder	When a form is copied and the source business object is different from the target business object, fields that exist in the source business object's form, but not in the target business object, may copy into the target new form. To prevent this, add the fields to the target business object in advance, before the form is copied. If the fields were not added to the target business object prior to the form being copied, the section can be deleted and added again to the form if there are issues with the section after the copy. The impact of these copied fields is limited to the newly copied form; there is no impact on record data. (Tri-28456)
Installation Directory Name	If you use WPM, TREES, TRIRIGA's OSCRE features, or ETL Job Items, the name of your TRIRIGA installation directory cannot contain spaces. These applications use Pentaho to run ETLs. Pentaho is a third-party application that has a startup issue when the installation directory name has a space in it. For more information, see the Pentaho issue database for PDI 2689 at http://jira.pentaho.com/browse/PDI-2689.
Query Section	Having the same select association type on multiple query sections in the same form may result in an undesired select behavior as those sections are sharing the same select associated records. TRIRIGA recommends using a different select association type for each query section to properly maintain each select association. (Tri-23771, Tri-23850)
Scheduling	If an event is scheduled with a Yearly recurrence pattern and the start date of the event is in the last calendar week of the month, the generated scheduled events will be offset by one month. To work around this issue, set the start date of the event to a date that is not in the last calendar week of the month. An example of the problem: If you schedule an event with a start date of December 31, 2010, and the recurrence pattern is to reoccur "Yearly, Every January 15th", all scheduled events will be generated as 02/15/2011, 02/15/2012, and so on. Scheduled events with the following start dates will be scheduled incorrectly. This list only includes dates in the remainder of 2010 and in 2011: 2010 December 26, 27, 28, 29, 30, 31 2011 January 30, 31; February 27, 28; March 27, 28, 29, 30, 31; April 24, 25, 26, 27, 28, 29, 30; May 29, 30, 31; June 26, 27, 28, 28, 29, 30; July 31; August 28, 29, 30, 31; September 25, 26, 27, 28, 29, 30; October 30, 31; November 27, 28, 29, 30; December 25, 26, 27, 28, 29, 30, 31

Area of Impact	Description
Security Manager	In the Access tab of a Group record, the control of a form's Reports tab is incorrectly listed as "Print Preview". To view the security of a form's Reports tab, select Print Preview in the Object panel on the Access tab of the Group. TRIRIGA will address this issue in a future release. (Tri-24466)
TRIRIGA SVG Viewer	The TRIRIGA SVG Viewer is not recommended for design-time work and not supported for working on very large workflows. TRIRIGA recommends using the Adobe SVG Viewer Plug-In for design-time work. (Tri-20731)

TRIRIGA Application Platform 3.0 Enhancements

In addition to the features described in "What's New in This Release", the enhancements to the TRIRIGA Application Platform for this release include the following:

Area of Change	Description
Administrator Console	The TRIRIGA Platform Release number now displays in the Admin Summary managed object. (Tri-20100)
Administrator Console	The WF_INSTANCE_SAVE property in TRIRIGAWEB.properties has a setting that allows global control of workflow instance recording. You can select to 'NEVER' record, 'ALWAYS' record, 'Record based on the workflow configuration in Production Mode and Always in Dev Mode', and 'Record based on the workflow configuration in both Production and Dev modes'. However, changing the configuration required restarting the server for the change to take effect. In response to requests to be able to change the setting without restarting the server, TRIRIGA added the ability to set it on the fly from the Administrator Console. The Workflow Agent Manager managed object now includes a Workflow Instance Recording drop-down box and a Save button. The drop-down box contains the same four options as in TRIRIGAWEB.properties, as well as an option to 'Restore from TRIRIGAWEB.properties'. The setting takes effect as soon as the user presses Save. This only affects the server on which the Administrator Console is being accessed (it does not apply across servers) and stays in effect until changed or until the server is restarted. Restarting the server reverts the setting to the value in TRIRIGAWEB.properties. (Tri-30616)
Administrator Console	TRIRIGA cache statistics now show in the Performance Monitor managed object. (Tri-28544)
Application Server	JBoss is now certified with the 1.6.0_21 JDK and utilizes the 64 bit architecture and performance enhancements contained therein. (Tri-22007)
Application Server	TRIRIGA has updated to JBoss 5.1.0. Please review the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for additional enhancements and changes to the installation and administration process. (Tri-27569)

Area of Change	Description
Charting / GIS	TRIRIGA now supports Adobe Flash Player 10. (Tri-28441)
Metric Reports	Metric reports now support financial rollup and currency fields. (Tri-28661)
Object Migration	Added the following actions when importing a package: Compare & Select Matching Objects, Select New Objects, and Select Existing Objects. Added validation to make sure at least one item is selected when a user clicks Delete, Compare, or Compare & Select Matching Objects. (Tri-29256)
Portal Builder	The TRIRIGA color picker has an Advanced tab that gives the user more colors to choose from, similar to other areas of the platform. (Tri-30009)
Query and Reporting	A query's association filter can be conditional. There is an option to ignore an association filter if the filtering query specified in an association filter returns no records. (Tri-28619)
Query and Reporting	System fields can be selected as filter fields and will work using $$ tokens such as $$RECORDID$$ and $$PROJECTID$$. (Tri-28618)
Query and Reporting	TRIRIGA now supports BusinessObjects Enterprise XI 3.1 on Linux. Please see the T*RIRIGA Application Platform 3 Installation and Implementation Guide* for instructions on setting up the ODBC data sources on Linux. (Tri-29421)
Record Runtime	When a record is in a read-only state, the system does not perform required field and other validation checks when the user triggers a state transition. (Tri-21980)
Stacking Applet	A stacking section now provides an Open Record context menu item on the menus for the supply and demand bars in order to open the backing supply category or demand category record. This is the same as using the Open Record menu item from the supply category or demand category item in the navigation tree. (Tri-29039)
Stacking Applet	In a stacking section, the supply detail label can be used in the same way as the supply detail bar. Hovering over the label displays the detail information and right clicking on the label brings up the supply detail context menu. (Tri-29036)
Style Manager	A user can export all current style configurations to an XML file. The Import action uploads a style XML file and applies the styles to the system. During the import, only the styles in the XML will be applied; all other styles remain unchanged. To restore the styles to the TRIRIGA default, import the style XML supplied in `<install_directory>/userfiles/skins/stylesheet.xml`. (Tri-31206)

TRIRIGA Application Platform 3.0 Changes

The changes to the TRIRIGA Application Platform for this release include the following:

Area of Change	Description
Administrator Console	The Scheduler Cleanup no longer times out when executed from the Administrator Console. Also, added the ability to start all cleanup tasks from one link in the Database Manager. (Tri-30941)
Administrator Console	The Users Manager now shows individual rows for users with user count greater than 1. (Tri-30675)
Administrator Console	When an invalid username/password combination is entered on the Administrator Console login page, the system displays an error message on the login page rather than on a separate page. (Tri-31186)
Application Server	Addressed security cross-site scripting issues. (Tri-25189)
Application Server	For ENERGY STAR, added permanent INFO logging to the `log4j.xml` file and debug logging to the Administrator Console in the Platform Logging managed object. This logging writes to the `energyStar.log` file. (Tri-30305)
Application Server	JBoss now stops correctly when it is installed as a service on Windows. (Tri-27421)
Application Server	JBoss shutdown now works properly with the .bat or .sh scripts and with multiple instances of JBoss servers. (Tri-22632)
Data Modeler	Business object fields used in Locators now are listed as references in Where Used. (Tri-28613)
Data Modeler	In Tools > BO State Transition, the Save action saves the arrangement of states in the State Transitions diagram. The new Autosort action preserves the ordering functionality of prior releases but does not save the state transitions. The functionality of prior releases can be reproduced by clicking Autosort, then Save. (Tri-12459)
Data Modeler	Sections in the Data Modeler now are sorted with the general section(s) first, followed by the smart section(s) in alphabetical order. (Tri-27207)
Data Modeler	The Description tooltip on a field's Properties form now displays correctly. (Tri-23962)
Data Modeler	Updated the alert message that appears when the user tries to create a smart section without selecting a business object. The message now refers to the "Associated Business Object" instead of the "Linked Business Object". (Tri-23691)
Data Modeler	When defining an extended formula for a field, choosing fields from an associated business object no longer causes an exception in some cases. (Tri-28608)
Data Warehouse	TRIRIGA no longer supports data warehouse. Please use TRIRIGA BusinessConnect to integrate with outside systems (Tri-28363)
DataConnect	On update, if a reference field (like a Classification) is empty in the staging table, the field value for the record is set to null just like for any other field

Area of Change	Description
	type. It no longer causes an exception and the staging table row no longer fails. (Tri-28612)
Document Management	Folder names and document names now can contain an apostrophe. (Tri-30158)
Document Management	Uploading a document and providing long text for the Description or the Comments fields no longer causes the text to become unreadable. (Tri-22470)
Form Builder	Improved the validation that prevents deletion of "System" Form Styles. Also added support for importing System Styles through object migration. (Tri-28497)
Form Builder	Removed `Out Line View` as a Form Type. Removed the Form Type drop-down property in the Form Builder because `Wizard` was the only available option. During upgrade, existing forms that were of type `Out Line View` are converted to `Wizard`. (Tri-30741)
Form Builder	When changes to a form's state transitions are saved, the system retains the vertical positioning of the state transition actions. (Tri-26797)
Form Builder	When the Position property of a Form Action Field is changed from `Both` (the default), the value no longer reverts to `Both` after an Apply action. (Tri-28529)
Formula Engine	Improved the internal calculations for NPV and IIR, reducing the time required to perform these calculations. (Tri-28680)
Formula Engine	The workflow formula now displays the correct value, a non-null value, when a Year() expression is added with a static number value and then concatenated to a static string value. For example, the formula: `"FY " + (Year(A) + "/" + (Year(B) + 1) Parameters: A = Oct. 22, 2010 B = Oct. 22, 2011` now yields a result of "FY 2010/2012" as compared to "FY 2010/null" in prior releases. This applies to any number values added first then concatenated with a string. (Tri-28575)
Gantt	Resolved an issue causing the calendar to disappear at times in the Gantt. (Tri-30208)
GIS	If your Geography state shading for the ArcGIS application fails to load properly after a client-side upgrade from Adobe Flash Player 10 to 10.1, upload the `ArcGis.zip` file to the Resource File `ArcGis.zip` under the ClassLoader object `ArcGIS`. (Tri-29598)
Graphics	Replaced the Graphic Find actions with application logic to drive similar behavior with the new graphics section. (Tri-28972)
Graphics Editor	Corrected the issue causing users to see a Permission denied message when saving a pop-up record after navigating away from the parent manager page. (Tri-31120)

Area of Change	Description
Installer	Added a parameter to `tririga-ds.xml` to test connections before handing them over to the TRIRIGA applications. This should prevent a database connectivity issue from causing instability after the connection to the database is restored. (Tri-28881)
Installer	If you use Microsoft SQL Server and WebLogic or WebSphere, you need to update your classpath. The jar file has been renamed from `mssqlserver.jar` to `jtds-1.2.5.jar` to make the versioning of the file clear. (Tri-28471)
Installer	In rare cases, there may be issues creating new modules because the sequence number in the database used for Module IDs has been artificially inflated to a value larger than five digits. During install, a script automatically resets the Module ID sequence (`SEQ_TRI_SYS_OBJECT_ID`) back to what it should reasonably be based on the current maximum actual Module ID in the database. (Tri-30242)
Installer	Installation Disk 3 now includes JDK 1.6 Patch 21 and JRE 6 Patch 21. (Tri-28503)
Installer	TRIRIGA no longer ships with or supports the DWF Server. The DWF settings have been removed from `TRIRIGAWEB.properties`. The new Web graphics replaces the DWF Server functionality. (Tri-28567, Tri-28568)
Installer	TRIRIGA now installs the files to run JBoss as a Windows Service by default. The instructions for completing the configuration of the Windows Service are in the *TRIRIGA Application Platform 3 Installation and Implementation Guide*. (Tri-31353)
Installer	TRIRIGA now uses `ojdbc6.jar` for the Oracle JDBC Driver. (Tri-29351)
Installer	Updated the version of Apache on release Disk 3 to version 2.4. (Tri-29216)
Installer	When installing onto a WebLogic Server, TRIRIGA only supports WebLogic 11gR3 (10.3.3.0) (Tri-28642)
Label Manager	Hierarchical portal sections can be translated. (Tri-26633)
Label Manager	The Help link that shows on every record can be translated. (Tri-25782)
Label Manager	The Label Manager tree now displays forms by module rather than by manager. The tree is similar to the tree found in the Group object's Security Access tab. (Tri-31142)
Label Manager	The text on the Copy action on the Report Manager can be translated. (Tri-25796)
License and Security	A no license selected message now displays in the License Manager page when it is initially loaded or when the user has not selected a license or product from the list. (Tri-30120)

Area of Change	Description
License and Security	Fixed an issue with notifications that prevented users from opening the record. (Tri-29337)
License and Security	Resolved a thread safety issue with the hierarchy tree cache. (Tri-28285)
Metric Reports	In metric queries, the Show By label dynamically displays on the x-axis title. (Tri-27251)
Metric Reports	Resolved an issue causing the y-axis to be mapped to the x-axis in a metric query. (Tri-27250)
Navigation	Non-admin users can access the Object Migration tool if allowed by the security group(s) of which they are member. Prior to this release, only users in the Admin Group were allowed to use the Object Migration tool. (Tri-28954)
Navigation	Users can type multi-digit page numbers in list navigation pages in which it was previously only possible to navigate to single-digit page numbers. (Tri-29019)
Object Migration	Changed the name of "Gui Style" to "Styles" to be consistent with the rest of the application. (Tri-30746)
Object Migration	Resolved an issue that prevented graphics sections from exporting. (Tri-28542)
Object Migration	Security Group header information, including Organization, Geography, and Description, now imports correctly through object migration. (Tri-28688)
Object Migration	The properties in Form Styles in the Style Manager now migrate to the target environment. (Tri-18143)
Object Migration	The system user is upgraded with a User ID of 221931. Some charts may fail if this user is missing or has a different User ID. This can be resolved by running a script in advance to restore this user. Please contact TRIRIGA Support for the script. (Tri-29876)
Platform	Users now see an action labeled Print on record forms where they used to see an action labeled Print Preview. If you have defined translation values for this action, translations have been preserved. If you want the translated equivalent of Print to display instead of the translated equivalent of Print Preview, you will have to redefine the translated values. For example, if you had translated Print Preview to German_Print Preview, the German_Print Preview value still will be shown on record forms. You will have to change the translation from German_Print Preview to German_Print. (Tri-31064)
Portal	A portal name now can contain the character &. (Tri-27742)
Portal	A saved record is added to the Last Visited portal section when either the record or the form is bookmarked. (Tri-30269, Tri-30973)
Portal	If you use an alternate sign in page, you need to edit the alternate `index.html`. The sign in form is `loginMain.jsp` instead of

Area of Change	Description
	`login_fms.jsp`. (Tri-30230)
Portal	In JBoss, fixed the WARN message "Parameters: Invalid chunk ignored.". (Tri-28033)
Portal	It is now possible to open two self-service requests at the same time. Each self-service request opens in a new window. (Tri-21750)
Portal	Manager Help records reflect the new navigation structure. The Form Name field value for manager Help records has been changed to "NavigationItem" from "Manager". Help records for other navigation items can be created by specifying "NavigationItem" as the form name and the navigation item name as the module / application name. (Tri-28814)
Portal	Portal sections no longer show chart legends on the portal. To see a chart's legend, maximize the section to its own window. (Tri-29171)
Portal	Prior to TRIRIGA Application Platform 3.0, the platform concatenated the report header with the portal section header to create the portal section header at runtime. In 3.0, the portal section title comes from the portal section definition, if it exists. If it does not exist, the portal section title comes from the referenced report definition. The upgrade process concatenates these values so there is no change in title for an upgraded portal. (Tri-29306)
Portal	Relabeled the "Login" button on the main login page to "Sign In". (Tri-29208)
Portal	Removed the extra white space visible when a metric query displays in a portal. (Tri-27115)
Portal	The + control on an action item portal section was not appearing. In the new portal, all sections have the ability to show more results. (Tri-12247)
Portal	The dimensions of a portal no longer refresh incorrectly after a record is closed. (Tri-27619)
Portal Builder	White is no longer the default section header color. All headers that were previously white or considered default now use the default color defined in the Style Manager. (Tri-29527)
Query and Reporting	A query with Prompt Before Query checked and with runtime filters is no longer executed in the query section after a section action is applied and the user has not applied runtime filters on it. NOTE: When a query section is linked to a graphic section and the user changes the number of results of this query section, the query with configuration above executes but the linked graphic section is not refreshed with the executed linked query. The user has to do one of following actions in order for the query to be applied to the graphic section: Click the refresh icon, apply runtime filters, clear runtime filters, or switch related reports. (Tri-29763)
Query and Reporting	An exported summary report now shows group by data instead of detail data. (Tri-29146)

Area of Change	Description
Query and Reporting	Resolved an issue causing the column order of a query being rendered in a portal section to be incorrect. (Tri-27901)
Query and Reporting	The Internal Crystal Request server no longer picks up the Microsoft Loopback Adapter's auto-generated IP address. (Tri-27717)
Query and Reporting	The non-hierarchical filter box in a metric query page now closes when the user selects the Clear the Selection option. (Tri-30493)
Query and Reporting	The platform no longer displays an exception message when a user tries to change the number of results displayed without first executing a query that has Prompt Before Query enabled. (Tri-31500)
Query and Reporting	Vertical bar graphs now show the y-axis value for the individual bar as the hover text value. (Tri-28385)
Query and Reporting	When a Crystal report is attached by format file in a workflow, a query set to current project now returns data from the company level. (Tri-28540)
Query and Reporting	When running My Report charts, the system now displays an informative error message and the MID when the memory threshold exceeds the specified percent limit defined in the `TRIRIGAWEB.properties` file. (Tri-31357)
Record Runtime	A record now creates successfully from a form that contains a hidden multi-tab with required fields. (Tri-29218)
Record Runtime	A scrollbar no longer appears on a form after resizing the window unless it is necessary to view elements off the screen. (Tri-30722)
Record Runtime	Actions in the More button on a form are ordered according to the diagram on the State Transition tab of the Form Builder. Top-to-bottom in the form State Transition diagram corresponds to left-to-right for normal actions and becomes top-to-bottom on the record's More button. In previous releases, the ordering was determined by the business object's State Transitions diagram. (Tri-29588)
Record Runtime	An empty List selection or an empty Text or Note field will not pass required validation. If one of these field types is required, a value must be placed into the field to pass validation. (Tri-29230, Tri-29339)
Record Runtime	Binary fields now correctly handle uploading files with names containing an apostrophe. (Tri-28484)
Record Runtime	Clicking the Refresh button, or pressing F5 in the browser, while on the main portal page no longer logs you out. It refreshes the portal to the last known location. (Tri-22768)
Record Runtime	If the user that initiated a workflow has been removed from the system by the time the workflow continues processing after an approval action has been performed, the workflow runs using the user that completed the approval. (Tri-28584)

Area of Change	Description
Record Runtime	Inactive Form Action fields no longer have a hand cursor during hover-over. (Tri-28443)
Record Runtime	Modules (first level) and business objects (second level) that appear in the Association tab of a record now are sorted alphabetically. (Tri-401)
Record Runtime	Query sections displayed in the Print form now reflect the current related report and runtime filters. (Tri-27328)
Record Runtime	Query sections now consistently right align numeric fields in non-editable fields inside an editable query. (Tri-29546)
Record Runtime	Read-only date fields with default column width and column span = 1 are right aligned. (Tri-28501)
Record Runtime	Required checks for Currency and Number fields now work properly. The system no longer sets required Currency and Number fields to 0 (zero) if the Data Modeler does not have a default value. In that scenario, the user must input data. (Tri-28182)
Record Runtime	Resolved an issue preventing the transition of a record containing a required Notes field that had data in it. (Tri-28493)
Record Runtime	The Classification Manager no longer displays the old classification menu before displaying the correct data. (Tri-28338)
Record Runtime	The Open Linked Record icon now is disabled when a user does not have access to a record in an editable query section. (Tri-29051)
Record Runtime	The upgrade process changes custom title bar colors. TRIRIGA suggests the following SQL Script to help identify sections with custom title bar colors that you may wish to change after upgrade. (Tri-29758)

```
SELECT m.module_name,
  bo.name AS bo_name,
  gh.gui_name,
  gtab.gui_tab_name,
  gsec.gui_section_name,
  gsec.title_bar_color
FROM ibs_module m,
  ibs_spec_type bo,
  gui_header_publ gh,
  gui_sections_publ gsec,
  gui_tabs_publ gtab
WHERE m.module_id = bo.spec_class_type
 AND gsec.spec_template_id=bo.spec_template_id
 AND gsec.gui_id=gh.gui_id
 AND gsec.gui_id=gtab.gui_id
 AND gsec.gui_tab_id=gtab.gui_tab_id
 AND LTRIM(RTRIM(gsec.gui_section_label)) NOT IN
('Attention', 'Attention!')
 AND gsec.title_bar_color is not null
```

Area of Change	Description
Record Runtime	Under certain rare circumstances, a user may be logged off and their session invalidated. In the past, if this occurred when the user was in a record, the user would observe JavaScript errors. Now, the user will be redirected either to a page letting them know their session has timed out or to the sign in screen. (Tri-28517)
Record Runtime	When a query section has less than two rows of data, the filters and the Apply Filters, Clear Filters, and Show More Filters actions no longer display. (Tri-28570)
Record Runtime	When a record is opened, while a workflow processes, process indicators appear in both the top and bottom of the form. Previously, a process indicator only appeared on the top of the form. (Tri-31034)
Record Runtime	When a user selects an action that causes a state transition on a tab that contains a custom URL, the workflow that runs now updates the metadata on the custom URL. (Tri-28496)
Record Runtime	When an input field has an onChange workflow, the focus returns to the field after the onChange workflow completes. (Tri-30201)
Record Runtime	When there is only one text field on a tab, pressing the Enter key after entering some text value and without tabbing out does not submit the form to the server. The system ignores the Enter key. (Tri-30194)
Scheduling Engine	Monthly Recurrences with skipped months now honor the months skipped (checked) in the Recurrence page. (Tri-30333)
Scheduling Engine	The Baseline Duration now displays in a human readable form in the Gantt. The format is x year(s), y month(s), z day(s), t hour(s). (Tri-28533)
Security	In Object Migration, when a non-admin user selects an object to which they do not have security access, the system displays a message indicating they are not authorized. (Tri-30253)
Security Manager	Resolved an Object Migration issue causing security groups to export incorrectly if there was an invalid business object and form data on the table storing the security groups. The Object Migration export was treating this scenario as module level security when it should have been ignored because it was invalid. (Tri-30984)
Stacking Applet	A stacking section now correctly repositions the working area dividers to the positions set by the user when the tab is refreshed. (Tri-29037)
Style Manager	Added a link in the Style Manager to the Style Sheet Editor. (Tri-31292)
TRIRIGA BusinessConnect	Improved the performance of the getTargetRecords BusinessConnect method so that it better handles large sets of data without having to increase the timeout. (Tri-30868)
TRIRIGA SOAP API 1	TRIRIGA no longer supports TRIRIGA SOAP API 1. (Tri-18608)

Area of Change	Description
Usability	Selecting a check box or a Boolean field in a form runs the onChange action immediately. (Tri-10260)
Workflow	Workflows with User Action or Approval tasks that contain Create Record and/or Modify Records tasks after the User Action/Approval task that are executed to the point of the User Action task with an earlier platform version and continued (after the user action has been performed) now execute the Create Record and Modify Records tasks correctly. (Tri-29221)
Workflow Builder	The complete Switch Condition title bar now displays. (Tri-30997)
Workflow Manager	Attaching a PDF generated from a Crystal form report in a workflow no longer results in a PDF with labels and no data. (Tri-28504)

TRIRIGA Application Platform 3.0 Properties Files

This section describes changes to the TRIRIGA Application Platform properties files.

Additions to `TRIRIGAWEB.properties`

The `TRIRIGAWEB.properties` file now contains the following properties. See the *TRIRIGA Application 3 Platform Installation and Implementation Guide* for more information:

Area of Change	Description
`BYPASS_PORTAL_MENU_UPGRADE`	Controls whether the TRIRIGA Application Platform 3.0 installer upgrades portals and menus. If set to `Y`, an upgrade to 3.0 bypasses the portal and menu upgrades that typically occur. One scenario where a portal and menu upgrade may not be desirable is when an implementation knows they will be re-implementing portals and menus after the upgrade to 3.0. If set to `N`, an upgrade to 3.0 runs the portal and menu upgrade, converting all pre-3.0 portals and menus to 3.0-equivalent constructs. If an implementation is at TRIRIGA 10.0, this property has no effect. The upgrade does not run since TRIRIGA 10.0 brings a new set of portals and menus. The default value is `N`. (Tri-29552)
`DRAWING_REPROCESSING_AS_NEEDED`	If set to `Y`, at server startup, the system checks drawings to see if any require reprocessing and reprocesses those that need it. If set to `N`, at server startup, the system does not check drawings to see if any require reprocessing. The default value is `Y`.
`ENFORCE_REPORT_ACCESS_SECURITY`	Use this property to control whether report/query links are visible to the user. If set to `Y`, license and security group security control whether a user sees a report link. If set to `N`, security does not control whether a user sees a report link. The default value is `Y`.

Area of Change	Description
	☑ **Tip** - TRIRIGA recommends that TRIRIGA 10 implementations set this value to `Y` and that older implementations set this value to `N`.
`ENFORCE_REQUIRED_VALIDATION`	Establishes when the platform performs required field validations. If set to `Y`, when a user moves from one tab to another, the platform does not check whether all required fields on the tab are filled; however, the platform does perform field validations (for example, `isNumeric`). On state transition, the platform checks required fields. If set to `N`, when a user moves from one tab to another, the platform checks that all required fields on the visible tab are filled and performs field validations. The default value is `Y`. ⓘ **Note** – If set to the default of `Y`, this property ensures that a record cannot be created unless all required fields are populated, regardless of the tab in which the fields appear. This behavior also occurs in TRIRIGA BusinessConnect, where in previous releases only the required fields on the first tab were validated. This change has the potential to cause previously-working integrations to fail. To resume the previous behavior, set this property to `N`.
`GRAPHICS_SECTION_LOGGING_LEVEL`	Sets the client-side logging level for graphics sections. Values are `ERROR`, `INFO`, and `WARN`. The default value is `ERROR`.
`MAX_FORM_ACTION_NUMBER`	Sets the maximum number of action buttons displayed on a form before the platform puts the excess buttons into the overflow action button. The default value is `4`.
`QUERY_CHART_IMAGE_URL`	The location of the server that converts a chart from XML to a PNG image when the user requests "Save as image…". The default value is: `http://localhost:port/AnyChartPNGSaver/PNGSaver`.
`REPORT_MEMORY_USAGE_LIMIT`	The maximum percentage of available server memory that can be used while running a user report. This limit does not apply to System Reports or Community Reports; it only applies to My Reports. If a user sees a "There are not enough resources available to run the report" error for a query, it is likely that the query was the cause of the error; however, it also is possible that other concurrent processes could have consumed memory while the query was assembling its results. Valid values are between `0` and `100`. Values of `0` and `100` essentially disable any limit being enforced. TRIRIGA does not recommend using either value because a single query initiated by a single user could run

Area of Change	Description
	the server out of memory.
	An empty value or an invalid value is treated as a default value.
	The default value is `35`. (Tri-30249)

Changes to `TRIRIGAWEB.properties`

The following properties in `TRIRIGAWEB.properties` changed:

Area of Change	Description
`BRAVA_EXCLUDE_LIST`	TRIRIGA added recommendations to the default list. TRIRIGA recommends the following values: `html,htm,svg,rpt,zip,exe,doc,xls,ppt,pdf,txt,xml`. (Tri-15474)
`CancelLabel`	`x` replaces `Cancel` as the default value.
`SHOW_PREFERENCES_LINK`	When set to `Y`, the "Welcome, <name>" text in each user's welcome bar becomes a link that when pressed opens the user's My Profile.

Deletions from `TRIRIGAWEB.properties`

The `TRIRIGAWEB.properties` file no longer contains the following properties:

Area of Change	Description
`CAD_DRAWING_FILE_TYPE`	All CAD drawings are uploaded in DXF file format.
`CLEANUP_TIME`	The system no longer uses the `CLEANUP_TIME` property. The Cleanup Agent now runs automatically based on the `CLEAN_HOUR` property instead of using the `CLEANUP_TIME` property to wake up periodically to see if it should run. (Tri-29018)
`DW_QUEUE_AGENT_SLEEPTIME`	TRIRIGA does not support data warehouse.
`DW_QUEUE_RETRY_THRESHOLD`	TRIRIGA does not support data warehouse.
`DWF_SERVER_FILE_LOCATION`	TRIRIGA no longer ships with or supports the DWF Server.
`DWF_SERVER_HOST`	TRIRIGA no longer ships with or supports the DWF Server.
`DWF_SERVER_PORT`	TRIRIGA no longer ships with or supports the DWF Server.
`WarehouseAgentLoad`	TRIRIGA does not support data warehouse.
`WarehouseAgentMaxThrea`	TRIRIGA does not support data warehouse.

Area of Change	Description
ds	

Deletions from `TRIRIGAMIDDLEWARE.properties`

The `TRIRIGAMIDDLEWARE.properties` file no longer contains following properties:

| Area of Change	Description
TraceLevelContent	
TraceLevelDefault	
TraceLevelDwarehouse	TRIRIGA does not support data warehouse.

TRIRIGA CAD Integrator/Publisher 2010

This chapter details enhancements and changes to TRIRIGA CAD Integrator/Publisher 2010.

Important Information

Important information concerning the TRIRIGA CAD Integrator/Publisher for this release includes the following:

Area of Change	Description
DWF	TRIRIGA no longer ships with or supports the DWF Server. The DWF settings have been removed from the `TRIRIGAWEB.properties`. The new Web graphics replaces the DWF Server functionality. (Tri-28567)
Graphics Editor	Graphics Editor is no longer supported. The upgrade converts Graphics Editor-type queries to standard queries.
Installation	In order to run CAD Integrator on Windows 7, the user has to be the "owner" and have "full control" of the CI folder after installation.

Note that in order to do this you will need Administrator rights. Typically the following steps are done by an IT department after installing CAD Integrator:

Right click the ci folder. Select Properties. On the Properties window, click the Security tab. Then click Advanced. In the Advanced Security Setting window, select the Owner tab. Choose either yourself or (preferably) a group in which you are a member. Ideally, your IT department would have a "CAD User" group defined, in which case use this group. |
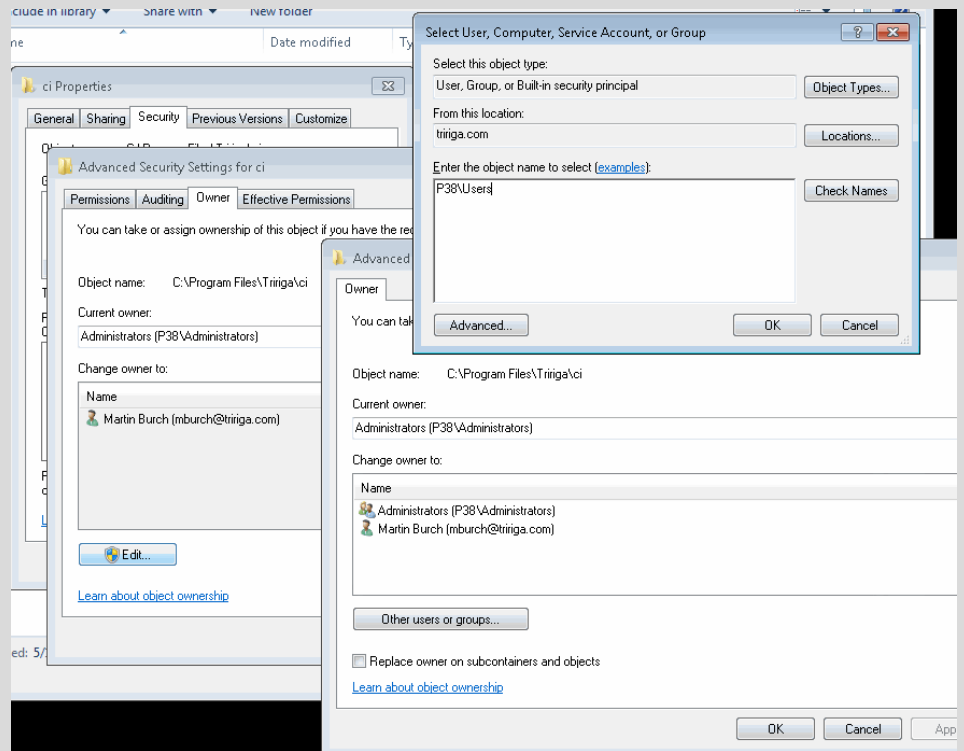
The screenshot above demonstrates how to assign the "Users" group, of which you are a member, as the owner. In this example, this group is not listed in the "Change owner to:" query. Click Edit. In this example, this group is not on the list, so click "Other users or groups". In the pop-up query, find the group you want, enter the name of the group, and click OK.
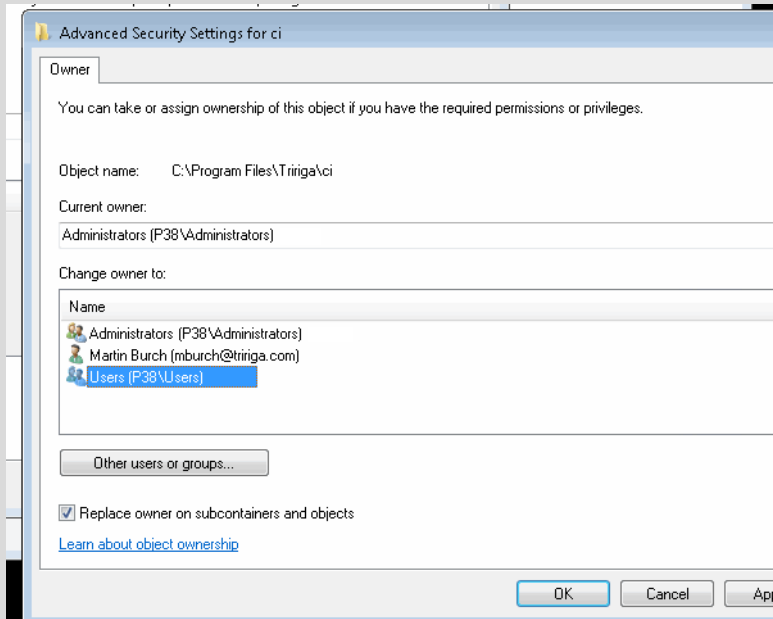
Area of Change	Description
	In the Advanced Security Settings for ci window, select your group, select the "Replace owner on subcontainers and objects" check box, and click OK or Apply. Windows will inform you that you will need to close the Properties windows in order to modify permissions. Close all the windows.
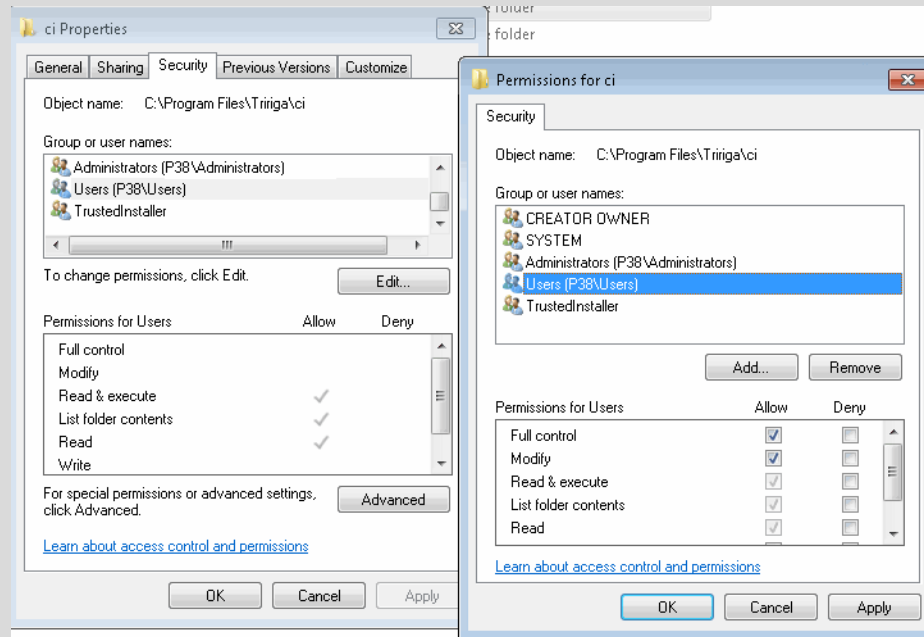
Right click on the ci folder, select Properties. In the Properties window, select the group you set as owner previously. Click Edit. Make sure your group has full control of this folder. Click OK or Apply. Close the windows.

When you open AutoCAD 2010, it should be able to read the .cui file.

Alternatively, you could have set yourself as the owner and given yourself permissions--just follow a similar process.

It does not seem to have an effect if the .cui file is read-only. What is important is that the user of CAD Integrator has "Ownership" AND "has full control" of the ci folder. (Tri-28174)

Area of Change	Description
Installation	On Windows 7, CAD Integrator should be installed in the user's home directory or a directory other than Program Files to ensure sufficient file privileges. (Tri-30503)
Publish	Users with a blank password cannot publish DXF files from CAD Integrator. (Tri-31011)
Republish Drawings	The current version of CAD Integrator no longer publishes SVG or DWF and only works with TRIRIGA Application Platform versions 3.0 or later. As part of your upgrade to a TRIRIGA Application Platform 3.0 version, you must republish all drawings with the latest version of CAD Integrator to DXF format. They do not need to be reattached or uploaded. You can republish each drawing individually or by using the bulk process CAD Integrator utility.

Area of Change	Description
	(Tri-30827)
Single Sign-On	If you are using SSO through IIS, you must have the Basic authentication option selected in order for CAD Integrator 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)
Upload Locations	If set to the default of `Y`, the `ENFORCE_REQUIRED_VALIDATION` property in the `TRIRIGAWEB.properties` file ensures that a record cannot be created unless all required fields are populated, regardless of the tab in which the fields appear. This behavior also occurs in TRIRIGA BusinessConnect, where in previous releases only the required fields on the first tab were validated. This change has the potential to cause previously-working integrations to fail. To resume the previous behavior, set the `ENFORCE_REQUIRED_VALIDATION` property to `N`. (Tri-30614)

Known Limitations

Known limitations concerning the TRIRIGA CAD Integrator/Publisher for this release include the following:

Area of Change	Description
Publish	Layers with double byte character names will not display with Web graphics. (Tri-29488)

TRIRIGA CAD Integrator 2010, Version 3 Changes

The changes to TRIRIGA CAD Integrator for this release include the following:

Area of Change	Description
Assets	Insert Asset previously did not respect the asset mappings set up in Asset Mapper. This has been resolved. (Tri-28462)
CAD Labels	Removed the Exclude Labels with Fills option on the Label Style Manager. (Tri-19792)
General	When attaching a drawing with a default drawing name, the system is supposed to alert the user that the drawing should be renamed. However, the checking mechanism was too aggressive, alerting the user whenever "Drawing" was used anywhere in the name. Now the system only alerts the user for drawings with names like "Drawing1", "Drawing2". (Tri-27836)
Publish	Previously, CAD Integrator placed linked entities on their assigned layer on attachment, but those entities could be moved to other layers. CAD Integrator now moves linked entities to their assigned layer on publish or sync. In order

Area of Change	Description
	to configure the assigned layers, use the Layer Manager in CAD Integrator. (Tri-29035)

TRIRIGA Application Object Migration Packages

TRIRIGA delivers application object migration packages using two different methodologies:

- Incremental Package

  Each application release is a separate file named `TRIRIGA_<version>.zip`. The latest incremental package is for TRIRIGA 10.0.0.1.

- Cumulative Package

  The entire suite of TRIRIGA Applications is in one file named `TRIRIGA_<version>_Cumulative.zip`. Cumulative packages save substantial time for customers upgrading across several releases. The latest cumulative package is for TRIRIGA 9.7.1.

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

After you have the object migration package file downloaded, follow the rest of the steps in this chapter to accomplish your application update.

Applying the Application Object Migration Package

The TRIRIGA 10.0.0.1 fix pack includes three incremental application packages. The fix pack also includes five patch helper records.

The TRIRIGA 10.0 release includes one incremental application package containing enhancements, fixes, and corrections for the TRIRIGA 10 applications, as described earlier. Your target system must be on TRIRIGA 9.7.1 before upgrading to TRIRIGA Application Platform 3.0. If your target system requires an upgrade to 9.7.1, your target system must be on TRIRIGA Application Platform 2.7.2.1 or higher. If you decide to upgrade to TRIRIGA Application Platform 3.0 prior to importing the TRIRIGA 9.7.1 package, you will need to validate that package so that the objects that are not valid in the 3.0 platform will be identified. After these invalid objects are identified, they need to be deleted from the package prior to importing.

Read and follow "Importing Objects" in the *TRIRIGA Application Platform 3 Object Migration User Guide* for a description of how to import application packages.

Import Patch Helper Record

You must run the patch helpers for each application version between your current application version and 10.0.0.1, including 10.0.0.1. Use the steps below to import the patch helper files for each version, in version number sequence. The Patch Helper records update the Application Version record and trigger workflows that update and/or create other essential information within the database.

Wait for one patch helper to complete before you start the next. Some patch helpers can take a long time to complete. After a patch helper completes, either clear all application server caches or restart the application server.

How To Import the Patch Helper Record

Step 1 From the destination system, select the **Tools** first level menu item. In the Utilities portal section, select **Data Integrator**.

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

Module: `triHelper`

Business Object: `triPatchHelper`

GUI: `triPatchHelper`

Import Type: `Add`

Action: `triCalculate`

Step 3 Click **Browse**.

The system displays a file selection window.

Step 4 Select the Import file from a local disk.

Step 5 Click **Upload File**.

The system displays a window indicating the file is processing.

Step 6 Click **OK**.

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

TRIRIGA Support Matrix

The *TRIRIGA Support Matrix* lists supported operating systems, databases, and related details for and about the TRIRIGA Application Platform and relays information about end-of-life plans for such software. The *TRIRIGA Support Matrix* may change over time. To request the *TRIRIGA Support Matrix* for 3.0.x, submit a ticket through the IBM Software Support site at www.ibm.com/support.

Related Documentation

To request access to TRIRIGA documentation for TRIRIGA 10.0 and TRIRIGA Application Platform 3.0, submit a ticket through the IBM Software Support site at www.ibm.com/support.

This release introduces the following new user guides:

- *TRIRIGA 10 Upgrade User Guide*
- *TRIRIGA Application Platform 3 Installation Details for BOE XI 3.1 on Linux*
- *TRIRIGA Application Platform 3 Upgrade Administrator Guide*
- *TRIRIGA Application Platform 3 Upgrade User Guide*

This release includes updates to the following user guides:

- *TRIRIGA 10 Documentation Major Topics*
- *TRIRIGA 10 Getting Started User Guide*
- *TRIRIGA Application Platform 3 Graphics User Guide*
- *TRIRIGA Application Platform 3 Installation and Implementation Guide*
- *TRIRIGA Application Platform 3 Reporting User Guide*
- *TRIRIGA Application Platform 3 Single Sign-On Setup User Guide*
- *TRIRIGA BusinessConnect 3 Technical Specification*

This release includes the following renamed and updated user guides:

- *TRIRIGA 10 Maintenance and Service Management User Guide* replaces *TRIRIGA 9 Maintenance Management User Guide* and *TRIRIGA 9 Service Management User Guide*
- *TRIRIGA 10 Request Central User Guide* replaces *TRIRIGA 9 Employee Self Service User Guide*

This release retires the following user guides:

- *TRIRIGA 9 DWF Server Installation Guide*
- *TRIRIGA SOAP API 1 Technical Specification*

Support

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