

TRIRIGA Applications
Version 10.1.0.1

TRIRIGA Application Platform
Version 3.1.7

Release Notes



Note

Before using this information and the product it supports, read the information in "Notices" on page 50.

This edition applies to version 10, release 1, modification 0.1 of TRIRIGA® Applications and version 3, release 1, modification 7 of TRIRIGA Application Platform and to all subsequent releases and modifications until otherwise indicated in new editions.

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Release Notes

Welcome to the August 2013 release of TRIRIGA® Applications 10.1.0.1. 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 10.1.0.1 in the "[TRIRIGA 10.1.0.1 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 10.1.
- 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 10.1.

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

With TRIRIGA 10.1 and TRIRIGA Application Platform 3.1, IBM TRIRIGA continues to add valuable functionality, fix defects, and reduce the effort necessary for new and existing customers to implement our products. Highlights in TRIRIGA 10.1.0.1, TRIRIGA 10.1, and TRIRIGA Application Platform 3.1 include the following:

TRIRIGA 10.1.0.1 Enhancements

As of August 8, 2013, IBM TRIRIGA no longer supports TRIRIGA Application Platform version 3.1.x.

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.

Area of Impact	Description
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	<p>This release adds the following fields for metrics now calculated by ENERGY STAR:</p> <ul style="list-style-type: none"> ▪ 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 10.1 Enhancements



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

Area of Impact	Description
Contracts	Lease abstract and real estate lease enhancements now support capturing more detailed historical data when abstracting leases where the rentable area has changed over the life of the contract. (Tri-31422)
Cumulative Object Migration Package	The entire suite of TRIRIGA Applications through TRIRIGA 10.1 is in one file named <code>TRIRIGA_10.1_Cumulative.zip</code> .
Portals	Reorganized the shipping portals, moving the less critical sections to the related portal section list so that they are available for personalization of the portals.
Portals	The Self Service product has been rebranded to Request Central. In support of this change, the shipping security groups have been updated to use the Request Central name. The 10.1 application release includes a patch helper workflow so that the update can be propagated to records created before this change. (Tri-31773)
Security	Application-level security enhancements to enable strong passwords.
Work (Wrench) Time	Provides Service Organizations with a way to establish Work Time estimates that fit into the task auto-creation and assignment process. (Tri-30466)

TRIRIGA Application Platform 3.1 Enhancements

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

Area of Impact	Description
Administrator Console	<p>Administrators can lock the TRIRIGA system so object migrations and/or object publishing can be performed without other users in the system. The new locking option is located in the Administrator Console in the System Manager.</p> <p>Note: You must have administrators already logged into the system before locking the system. (Tri-19907)</p>
Administrator Console	<p>Administrators can roll log files from within the Administrator Console. The new Roll action renames the current log file with the current date and time. New messages are entered into a fresh file. (Tri-31748)</p>
Administrator Console	<p>The Performance Monitor now includes Key Performance Metrics for a server. These Key Metrics can be recorded to a log file for future analysis. Also, the Performance Monitor's EHCACHE display has been moved into its own sub-page named Cache Monitor. (Tri-28281, Tri-31656)</p>
Administrator Console	<p>The Performance Monitor now includes performance logging for TRIRIGA BusinessConnect, extended formulas, extended formula calculations, extended formula queues, queries, asynchronous workflows, and synchronous workflows. Each is placed into a separate tab-delimited performance log, not into the <code>server.log</code>.</p> <p>Enable logging for short periods of time, not more than a day, because of the large volume of logging data generated. (Tri-28548, Tri-31652)</p>
Application Server	<p>Addressed cross-site scripting security issues. (Tri-25189, Tri-31810, Tri-32529, Tri-32820)</p>
Application Server	<p>Reduced the number of INFO messages appearing in the <code>server.log</code> at startup by more than half on JBoss and by 30% on WebLogic and WebSphere. (Tri-9519)</p>
Charting	<p>The new <code>ENABLE_CHART_ANIMATION</code> property in <code>TRIRIGAWEB.properties</code> controls whether charts are animated. It defaults to disabled on upgrade. (Tri-31822)</p>
External E-Mail	<p>TRIRIGA contains configurable HTML buttons in the e-mails it sends. The buttons correspond to the actions that the user could take on a particular record. In this way, the user is initiating the action directly from the e-mail, greatly reducing the click-count to accomplish the equivalent task.</p>

Area of Impact	Description
Passwords Containing Double-Byte Characters	<p>Added support for passwords containing double-byte characters (e.g., Arabic, Chinese, and Japanese). Existing passwords containing characters outside of the English alphanumeric set may need to be reset and re-entered.</p> <div data-bbox="509 386 1440 569" style="background-color: #e0ffe0; padding: 10px;">  <p>Note - Because the size of the database fields used to hold passwords increased to support the added length of an encrypted multi-byte character password, you need to republish the <code>triPeople:MyProfile</code> business object to update the password field size.</p> </div> <p>(Tri-32088)</p>
Performance	<p>Made a number of performance improvements across the platform.</p>
Portal	<p>Added the Home Portal Section Filter to the portal personalization interface. This filter only shows when the user is personalizing a home portal. The filter default enables home portal sections, which means the Available Sections list only shows sections that were configured as related sections in the Portal Builder. When the filter is set to All Portal Sections, the Available Sections list shows all sections available to the user, including related sections and all other sections the user has access to throughout their menu. (Tri-31911)</p>
Portal	<p>The Portal Section Builder has a new option for Report types. When the Hide Metric Filters property is checked, metric chart portal sections do not show filters at runtime. However, the filters show when such a metric chart portal section is maximized. The property is unchecked by default. (Tri-31912)</p>
Portal Builder	<p>An application builder can configure a portal section to be collapsed by default in a portal. This new property is called Collapsed By Default. This configuration only applies to the portal section as it is configured in the selected portal, allowing a portal section configuration to be different for sections that appear in multiple portals.</p> <p>At runtime when a section is configured to be collapsed by default, the first time the user views the portal that section will be collapsed. If the user chooses to expand the section at runtime, that personalization will be persisted so the next time the user views the portal that section will be expanded. (Tri-31811)</p> <div data-bbox="509 1472 1440 1619" style="background-color: #e0ffe0; padding: 10px;">  <p>Note - If a user collapsed a portal section before the application builder configures that portal section to be collapsed by default, the next time the user views this portal, the portal section will be expanded.</p> </div>
Record Runtime	<p>The new Lookup Query feature in the Form Builder adds a configuration option for classification fields. At runtime, the system runs the specified query to select a value. For the tab out functionality to continue to work, the query must contain the field <code>triNameTX</code> in TRIRIGA 9 or TRIRIGA 10 or <code>className</code> in TRIRIGA 8i. (Tri-31910)</p>

Area of Impact	Description
Security	<p>The new Access All Profiles field on Group records controls whether members of the Group can access another user's profile record.</p> <p>Use the new <code>ENABLE_PROFILE_ROW_LEVEL_SECURITY</code> property in <code>TRIRIGAWEB.properties</code> to turn off this feature. To do so, set <code>ENABLE_PROFILE_ROW_LEVEL_SECURITY</code> to N. (Tri-30256)</p>
Style Manager	<p>TRIRIGA now offers a new green color scheme. The files are located in the <code><install directory>/userfiles/skin</code> folder and can be imported in the Style Manager, as described in the <i>TRIRIGA Application Platform 3 User Experience User Guide</i>. The <code>skin</code> folder includes a green company logo and links background image. (Tri-32570)</p>
Translation	<p>Improved translation capability across the platform.</p>

Important Installation and Upgrade Information

Please review the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for this release before installing. 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 a platform 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 completed during the initial startup of an application server and there may be conflicts if two application servers are started in parallel.



Note - Starting with TRIRIGA Application Platform 3.1, TRIRIGA provides scripts to accomplish a performance upgrade that removes unused columns from the `IBS_SPEC` and `IBS_SPEC_ASSIGNMENTS` tables in the TRIRIGA database. These tables are the two largest and most used tables in the TRIRIGA system. Removing unused columns from these tables will improve performance and reduce storage space required. The TRIRIGA system will still function properly without applying this upgrade. The *TRIRIGA Application Platform 3.1 Performance Upgrade Specification* outlines the steps to be performed and contains scripts to be copied and used to remove the unused columns.

The following sections outline the upgrade steps for a selection of upgrade scenarios. 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.

- [Upgrade](#) from TRIRIGA 9/prior to TRIRIGA Application Platform 3.0 → 10.1/3.1
- [Upgrade](#) from prior to TRIRIGA 10.0/TRIRIGA Application Platform 3.0 → 3.1 (platform only)

Upgrade from TRIRIGA 9/Prior to TRIRIGA Application Platform 3.0 → 10.1/3.1

If you are upgrading from TRIRIGA 9 and a platform release prior to TRIRIGA Application Platform 3.0, it is critical to complete the upgrade to TRIRIGA 10.1 and TRIRIGA Application Platform 3.1 in the following sequence. Perform the following steps in addition to the above and to your company upgrade practices. These steps are not intended to substitute for your company testing and validation procedures.

Only follow this sequence when upgrading to TRIRIGA 10.1 and TRIRIGA Application Platform 3.1 from TRIRIGA 9 and a platform release prior to TRIRIGA Application Platform 3.0:

Additional Steps for Installations Upgrading from TRIRIGA 9 and a Platform Release Prior to TRIRIGA Application Platform 3.0 → 10.1 and 3.1

- Step 1** In order to upgrade your target system to TRIRIGA Application Platform 3.1, 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 3.1 until the 2.7.1.3 application has fully started.
- Step 2** Shut down the application server.
- Step 3** Upgrade the platform to TRIRIGA Application Platform 3.1. Follow the *TRIRIGA Application Platform 3 Installation and Implementation Guide* to run the installer. Review/follow the suggestions in the “Installation Verification Tips” chapter. Do not start the application server.
- Step 4** 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 3.1. Your system receives the portal and menu upgrades when you import the TRIRIGA 10.1 object migration package (which you will do in Step 7). Review/revise the other properties files as appropriate for your implementation. See 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.
- Step 6** 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 10.1 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_mssqlserver.sql`. (Tri-29957)
- Step 7** Apply the TRIRIGA 10.1 cumulative package.

Additional Steps for Installations Upgrading from TRIRIGA 9 and a Platform Release Prior to TRIRIGA Application Platform 3.0 → 10.1 and 3.1

Step 8 Follow the recommendations in the *TRIRIGA Application Platform 3 Upgrade Administrator Guide*.

Upgrade from Prior to TRIRIGA 10.0/TRIRIGA Application Platform 3.0 → 3.1 (Platform Only)

If you are upgrading from releases prior to TRIRIGA 10.0 and TRIRIGA Application Platform 3.0, it is critical to complete the platform upgrade to TRIRIGA Application Platform 3.1 in the following sequence. Perform the following steps in addition to the above and to your company upgrade practices. These steps are not intended to substitute for your company testing and validation procedures.

Only follow this sequence when upgrading a pre-TRIRIGA 10.0 environment to TRIRIGA Application Platform 3.1 from platform releases prior to TRIRIGA Application Platform 3.0:

Additional Steps for Installations Upgrading Platform Only from Releases Prior to TRIRIGA Application Platform 3.0 → 3.1

Step 1 In order to upgrade your target system to TRIRIGA Application Platform 3.1, 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 3.1 until the 2.7.1.3 application has fully started.

Step 2 Shut down the application server.

Step 3 TRIRIGA 8i implementations using graphics must import an object migration package before performing the upgrade to TRIRIGA Application Platform 3.1. Contact the IBM TRIRIGA team at IBM Software Support for the object migration package.

Step 4 Upgrade the platform to TRIRIGA Application Platform 3.1. Follow the *TRIRIGA Application Platform 3 Installation and Implementation Guide* to run the installer. Do not start the application server.

Step 5 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 3.1. Review/revise the other properties files as appropriate for your implementation. See the *TRIRIGA Application Platform 3 Installation and Implementation Guide* for more information.

Step 6 Start the server and allow the server startup processes to run.

Additional Steps for Installations Upgrading Platform Only from Releases Prior to TRIRIGA Application Platform 3.0 → 3.1

Step 7 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 the IBM TRIRIGA team at IBM Software Support for detailed instructions.

Step 8 Follow the recommendations in the *TRIRIGA Application Platform 3 Upgrade Administrator Guide*.

TRIRIGA Applications 10.1

This chapter details important information, known limitations, and changes to TRIRIGA Applications.

Important Information

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

Area of Impact	Description
ENERGY STAR	<p>ENERGY STAR only made the following energy spaces eligible for 1-100 score:</p> <ul style="list-style-type: none">▪ 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 <p>For more information, see www.energystar.gov</p>
ENERGY STAR	<p>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</p>

Area of Impact	Description
	<ol style="list-style-type: none"> 1. Download the ENERGY STAR certificate from a web browser or from the ENERGY STAR site and name it <code>energyStar.cer</code>. 2. Find the Java home directory <ul style="list-style-type: none"> on Linux: <code>run echo \$JAVA_HOME\$</code> on Windows: <code>run echo %JAVA_HOME%</code> 3. Either copy the <code>energyStar.cer</code> file to the <code>JAVA_HOME/jre/lib/security</code> directory or reference the <code>cacerts</code> file in that directory when you run the following command: <ul style="list-style-type: none"> From <code>sudo</code> on Linux: <pre>sudo keytool -import -keystore cacerts -file energyStar.cer</pre> From IBM TRIRIGA Administrator Console on Windows: <pre>keytool -import -keystore cacerts -file energyStar.cer</pre> 4. You can verify with the following command: <pre>keytool -list -keystore cacerts</pre>

Externally Generated Lease Abstract Records	The Lease ID of a Lease Abstract record should be unique. The system rejects any imported Lease Abstract record with a Lease ID matching a Lease Abstract record already in the database.
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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. (Tri-17643, Tri-17645)

TRIRIGA 10.1.0.1 Changes

You upgrade your version of TRIRIGA for the 10.1.0.1 release by fix pack. The IBM TRIRIGA 10.1.0.1 fix pack updates your 10.1.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 10.1.x and on IBM TRIRIGA Application Platform 3.3.x before you apply this fix pack. For more information, see the 10.1.0.1-ENERGYSTAR-README file.

To request access to the 10.1.0.1 fix pack, create a service request for the 10.1.0.1 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 10.1.0.1 readme.
ENERGY STAR	Added new Energy Space Type classification records to match the building types now supported by ENERGY STAR.
ENERGY STAR Migration	<p>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.</p> <p>The object migration package includes a default migration record. Before using the default migration record, you must update it to match your portfolio. For more information about the changes that ENERGY STAR made to Energy Space types, see the following ENERGY STAR site: http://portfoliomanager.supportportal.com/link/portal/23002/23010/Article/34128/How-will-space-types-for-buildings-currently-in-Portfolio-Manager-migrate-to-the-new-property-uses-in-the-upgraded-Portfolio-Manager</p> <p>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.</p>
ENERGY STAR Settings	<p>The Energy Star classification record is no longer used to store account credentials.</p> <p>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.</p>
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 Applications 10.1 Changes

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

Area of Change	Description
Application Setup	Resolved an issue with the scheduling of notifications for asset warranties that had an expiration reminder. (Tri-31405)
Application Setup	User Messages referencing "Cancel" have been updated to say "Close" or "close". (Tri-29479)
Building	In Bulk Create Checklists, improved the Attention! messages when no Location or Checklist Template is selected. (Tri-30156)
Carbon Footprint Analysis Tool	On Carbon Footprint Analysis form, the 'Name' field is now a Required field. This eliminates an error message on the metric that was possible if the record was created without a Name. (Tri-31628)
Classifications	The Payment Type field in the Option Type classification record is no longer a required field. (Tri-31567)
Contracts	Added Accounting Type to the fields in the Income per Area (AR Leases) metric query. This metric query now filters on Accounting Type = Accounts Receivable (AR). (Tri-28510)
Contracts	Added runtime filters to the Update Role look up query on the General tab Lease Contacts section of the Lease Abstract. (Tri-31467)
Contracts	Financial Transactions created from Payment Release now use the Payment Release Date as the posting date for the Financial Transaction. In the past the system used the Invoice Line Item creation date. (Tri-31131)
Contracts	In a Payment Schedule, the accounting type now always defaults to Accounts Payable (AP) instead of picking the default value from the Parent Real Estate record. (Tri-31512)
Contracts	On the Capital Project Budget tab, the Pending Commitment Changes field now populates with the totals from issued Standard Contract Change Orders. (Tri-32449)
Contracts	Payment Line Items generated from a Payment Schedule now exclude Real Estate Contract records with a status of History. (Tri-27292)
Contracts	Removed the Re-Activate action for Voided Payment Schedules. (Tri-32264)
Contracts	The Add Payment Schedule Wizard now copies the contract rentable value to the created payment schedule. (Tri-27427)
Contracts	The Add Revision action on the Terms tab of Owned Property record now increments the Revision Number on the Current Active record for RE Transaction Acquisition Terms. The current active RE Transaction Acquisition Terms record now pre-populates fields from last revision record (which is the history record). (Tri-31399)
Contracts	The Contract Notification Copy action now copies the 'Notify Role' value on the RE Lease and Owned Property forms. (Tri-31614)

Area of Change	Description
Contracts	The Copy action for Lease Abstract no longer closes the form. (Tri-30806)
Contracts	The OPEX/CAM Expense query now retrieves records in Draft status. (Tri-30610)
Contracts	The order of Cost Code sections on the Payment Schedule, Payment Line Item, and Payment Adjustment forms now is consistent. (Tri-31623)
Contracts	The Update Roles list from the Lease Contacts section of the Lease Abstract now matches the list from the Contacts tab of the Real Estate Lease. (Tri-31508)
Contracts	When a Lease Abstract is read only, the payment schedules associated to lease clauses also are read only. (Tri-31620)
Contracts	When a user copies a RE Lease, the system now populates Premise Location data on the Locations tab and Payment Schedule data associated to the Lease clause. (Tri-32263)
Cost Estimates	Corrected typos in the following reports: "Geography Cost Index - Revision In Progress" and "Geography Cost Index - Upload Error". Updated related report queries for Geography Cost Index. (Tri-31447)
ENERGY STAR Connector	ENERGY STAR integration can update ENERGY STAR energy records in the Portfolio Manager that were originally created directly in the Portfolio Manager. (Tri-28348)
Facility Assessment	Improved the Bulk Create Opportunities form. (Tri-30162)
Facility Assessment	The Find action on the Reference Building System Item section of the Building System Inspection Item page now correctly retrieves Building System Item records for selection when the locations are the same for both records. (Tri-12226)
Inventory	Quick Fill now has Add and Delete actions. (Tri-31758)
Inventory	Removed duplicate Purchase Requisitions and Purchase Orders items from the Inventory > Set Up > Contracts menu. (Tri-31496)
Key Security	When a user copies a Great Great Grand Master Key, the copy now contains all fields. (Tri-12545)
Leases	Changed the Percent UOM from a drop-down to read only on the % Growth field of the Payment Parameters section of a Generate Payment Schedule form. (Tri-32737)
Leases	Contract Notifications no longer generate an additional record in the Lease Notifications query section on the General tab each time a user creates a Real Estate Lease and Options with a Revise or Amendment action. (Tri-32629)
Leases	Removed invalid actions that were selectable on the Contract Notification

Area of Change	Description
	dependent records of Real Estate Lease records in History status. (Tri-32074)
Leases	Resolved the duplicate Add action on the Rent Schedules sub-tab of the Lease Abstract Template form. There is now only one Add action on this form. (Tri-32312)
Leases	The Contract Locations form now is read-only when the parent Lease is read-only. (Tri-32265)
Leases	The Delete action is no longer available on a Lease Abstract form in draft status. The action still is available in the master/detail query. (Tri-32133)
Leases	The message informing a user that a Lease Clause does not have a Payment Schedule no longer persists after the user adds a Payment Schedule. (Tri-22986)
Leases	The Options Document section now maps correctly from Lease Abstract to Real Estate Lease. (Tri-32488)
Leases	The Partial First Payment and Partial Last Payment sections display side by side in the Monthly Schedule Wizard and the Payment Schedule form from the Add action. (Tri-32190)
Leases	The Summary Type field on the Generate Payment Schedule form now populates when the user selects Payment Type. (Tri-32627)
Leases	The system now maps the Address field in the Guarantor section of a Real Estate Lease record from the Lease Abstract. (Tri-32620)
Leases	The system now populates the Contract section on existing Contract Notification records when a Real Estate Lease or Owned Property record is created. (Tri-32660)
Locations	The attention message to select the contact role now displays on activating/creating the building record. (Tri-31574)
Locations	The name of the copy of a Label Filter now begins with "Copy of ". (Tri-31594)
Locations	<p>The triPatchHelper - triCalculate - 10.1 - Recalculate Floor Extended Formulas corrects area measurement calculations on the floor. This patch helper makes the following changes:</p> <ul style="list-style-type: none"> ▪ Rentable = Gross (Do Not Include in Rentable = TRUE) ▪ Usable = Rentable (Do Not Include in Usable = TRUE) <p>See "IBM TRIRIGA Application Object Migration Packages" for directions for running the 10.1 patch helper workflows. (Tri-32495)</p>
Locations	The TRIRIGA Space Manager and TRIRIGA Facilities Manager roles now have access to the triSpace form actions and the triSpaceLevelOccupancyAllocation form so that they can add or

Area of Change	Description
	remove an Organization in the space record for purposes of calculating organization occupancy. The TRIRIGA RE Contract Manager and TRIRIGA RE Transaction Manager roles now have read-only access to the <code>triSpaceLevelOccupancyAllocation</code> form since they both have read-only access to <code>triSpace</code> . (Tri-31759)
Locations	When you change the name of a space record, the system now updates the Active Occupancy and Chargeback Allocations with the new name. (Tri-30228)
Maintenance	A PM Schedule no longer generates duplicate tasks when an asset is added to a job plan. (Tri-31413)
Maintenance	The Task Template query on the Service Plan form now restricts the user to viewing Task Templates across the current (Active) Project in scope. (Tri-23536)
Manage Requests	During the creation/submittal of a Move Services Request, the Move Request Line Items (MLI) were being created twice (duplicated). MLI were being created once when the Create Draft process was executed, and again when the Submit process was executed. Now the Submit process ignores the creation of MLI if they had already been previously created during the Create Draft process. This affected all move types: Individual Move, Small Move, and Group Move. (Tri-32054)
Manage Requests	Some query sections were missing queries. This has been resolved. (Tri-32143)
Manage Tasks	During the initial creation of a task via the Service Plan process, the "A. Baseline Working Days" and "B. Baseline Working Hours" fields were not being set. This has been corrected. (Tri-32501)
Move Planner	Revamped the Move Line Item displays so Item ID and Item Name appear first and do not scroll horizontally. (Tri-28935)
Moves	When loading a project into the Project Gantt, the planned start and planned end dates now align between the actual project and the Gantt. (Tri-31441)
My Reports	All decimal fields in the Space Rollup Summary Crystal report now have two decimal places. (Tri-32675)
My Reports	Corrected the filter on the <code>triRatingSchedule - triActive - Editable</code> query so that it only displays active records. (Tri-32201)
My Reports	Corrected the typo on the "Net Investment Cost" label in the Funding Analysis metric query. (Tri-31423)
My Reports	Funding Analysis Summary Crystal report graphs now match the values in the tables. (Tri-32605)
My Reports	Opportunities by Type and Opportunities by Location bar charts on the Sustainability home page now display labels for x-axis and y-axis. (Tri-31603)
My Reports	The Active Capital and Facilities Projects query and all Related Reports now

Area of Change	Description
	display Active, Review In Progress, and Revision In Progress projects. (Tri-30539)
My Tasks	My Active Tasks and My Overdue Tasks queries no longer include Offline tasks or tasks in Planned status. (Tri-31888)
Order/Receive	In a Purchase Order Line Item, the line number of the PO Line Item now increments the Line Item for Inventory Item action. (Tri-32073)
Organizations	The Control Number no longer overwrites the ID field (ttriIDTX) if there is a Contact Role validation error. (Tri-31667)
Payables	A One Time Payment can be created against an active RE Lease. (Tri-32342)
Payables	Removed the Pay Partial action from the Complete button drop-down list when the RE Invoice was in Issued status. This option was intended for a future capability which is not yet available. Users should select Pay instead. (Tri-31857)
Payments	Resolved an issue that, in some cases, caused a circular association (i.e., a looping condition) when a payment was associated to an invoice line item. (Tri-27788)
Payments	The Tenant and Contact Person data in the Tenant section of Bulk Print Invoices now appear in the Crystal report. (Tri-29891)
Plan Moves	The default query for the Projects sub-tab in the Move Designer now includes move projects in Draft status. (Tri-31886)
Planning	Removed Quantity and renamed Capacity to Hours on the Planning Data query on the Work Plan. (Tri-30320)
Portals	Standardized the labels for On-time Service Responsiveness and On-target Service Costs in as-delivered portals and queries. (Tri-30289)
Projects	A Critical To Quality (CTQ) Item Response record's Reports tab now displays properly from within a RE Transaction Plan. (Tri-31906)
Projects	Corrected an issue where Facilities Project Tasks created from a Facilities Project Template (via the Request/Service Plan process) were not being created in same chronological order as they were defined on the template. (Tri-31995)
Projects	If the calculated end date of a capital project is before the plan end date of the project, the system no longer generates items for every fiscal period in the database. (Tri-32382)
Projects	Improved the form report rendered from the Reports tab on the Program form. (Tri-23537)
Requests	Changed Funding Analysis to Analyze Funding Requests on the Sustainability landing page and on the Projects - Funding Requests landing page. Removed


Area of Change	Description
	the Opportunities tab when analyzing funding requests. (Tri-31454)
Requests	Improved the Service Request Record form report rendered from the Reports tab on the Signage & Fixtures & Furniture Request form. (Tri-28262)
Requests	The Estimated Cost per Area currency value is correctly converted from the RE Action Request form to the Business - Cost per Area field on the CTQ tab of the RE Transaction Plan. (Tri-31215)
Security Manager	Groups with access to the Bulk Create Opportunity form now have access to the section actions on the Locations section of that form. (Tri-31680)
Security Manager	The Facility Assessment Manager Group now has access to the Add actions in the Estimate Manager. (Tri-31415)
Tasks	The visible attributes of the "Assign, Auto-Assign & Unassign" actions on the Responsible Organization section of several Task forms were not being properly set when an Organization was assigned/associated or unassigned/deassociated to the task. This has been resolved on the following Task forms: Work Task, Inspection Task, Schedule Task, Inventory Count Work Task, Inventory Pick Work Task, Key Work Task, Material Order Task, Punchlist Task, Submittal Task, Reservation Work Task, and Facility Assessment Work Task. (Tri-25754)
Templates	Added the Unretire action to the RE Project Template form and the Related Report List view. (Tri-31756)
Templates	Resolved several layout issues with the Closeout Checklist Template form. Also corrected an issue with the Copy action where the questions for the Checklist were not properly associated to the checklist record. (Tri-28365)
TREES®	On the Funding Request form, Additional Cost Records now are created correctly when the user chooses the Request Type. (Tri-17980)

TRIRIGA Application Platform 3.1

This chapter details changes important information, known limitations, and properties file changes for the TRIRIGA Application Platform.

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 does not map previous branding styles to the new style classes in the Style Manager. The upgrade to TRIRIGA Application Platform 3.x preserves header details, but you 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 <i>IBM TRIRIGA Application Platform 3 User Experience User Guide</i> .
Brava!	Page 65 of the <i>Brava! Client/Brava! Server/Net-It Enterprise Installation and User Guide</i> on the TRIRIGA 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. Please refer to section 3.4.5 in the <i>Brava! Client/Brava! Server/Net-It Enterprise Installation and User Guide</i> on TRIRIGA's installation Disk 3 for steps to restart the server on a periodic basis.
Duplicate Portal Sections	TRIRIGA Application Platform 3.x does not allow duplicate portal section names. The upgrade process from TRIRIGA Application Platform versions prior to 3.0 updates the first portal section found and logs information about subsequent portal sections with the same name in the <code>portalupgrade.log</code> located in the install root.
Duplicate Portals	TRIRIGA Application Platform 3.x does not allow duplicate portal names. The upgrade process from TRIRIGA Application Platform versions prior to 3.0 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".
Excel	According to the following Microsoft website 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

Area of Impact	Description
	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 <code>maxPostSize</code> for JBoss is now configured as 10MB. (Tri-28770)
Installer	A Sun/Oracle 1.6 JDK or JRE is required to perform a TRIRIGA installation. (Tri-28351)
Internet Explorer	<ul style="list-style-type: none"> ▪ Although Microsoft has improved memory leaks in Internet Explorer (IE) 7 and IE 8, users should close all browser windows from time to time. ▪ TRIRIGA supports Windows IE 7 and IE 8. You should use IE 8 for many reasons. Most importantly, TRIRIGA performs best with this version. In addition, as announced in June, 2010, TRIRIGA ended support for IE 7 in June, 2011. ▪ IE 8 includes a "Preserve Favorites website data" option. This property is selected (on) by default in IE 8. This property retains temporary Internet files from sites that are in your Favorites even if you have set the flag to delete all temporary files. Clear this property. If left on and a user's 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. ▪ Some builder tools do not load or work correctly if the browser zoom is set to a custom value that is less than 100%. The default browser zoom is 100%. (Tri-28866) ▪ When a user exports a PDF file from a graphics 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) ▪ 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. ▪ When a user running Internet Explorer 8 with "Smart Screen Filters" turned ON tries to load more than 1000 records on a page, IE 8 verifies the response it is getting back and crashes, since the response is too large. To avoid this circumstance, turn off the "Smart Screen Filters". For more information refer to http://www.microsoft.com/security/filters/smartscreen.aspx (Tri-27698)
JBoss	<ul style="list-style-type: none"> ▪ The JBoss default configuration enables compression, except for connections through AJP for Apache. Please see the <i>TRIRIGA Application Platform 3 Installation and Implementation Guide</i> for recommendations on

Area of Impact	Description
	<p>JBoss compression.</p> <ul style="list-style-type: none"> ▪ You will find JBoss Native Accelerators on Disk 3, under the <code>jboss-native-accelerator</code> directory. Please see the <code>readme.txt</code> for installation instructions for your operating system. (Tri-31865)
Microsoft SQL Server	<ul style="list-style-type: none"> ▪ Microsoft SQL Server (MSSQL) has a row size limit of 8060 bytes. On MSS2005 and MSS2008, there is an overflow mechanism that transparently enables a row to logically exceed 8060 bytes while physically overflowing some of the extra data into a separate part of the database. More information about the 8060 byte limit can be found at the following link: http://msdn2.microsoft.com/en-us/library/ms186981.aspx. ▪ If the upgrade of an MSSQL database with Multi-Byte Character Support (MBCS) enabled fails and you see in the <code>ant.log</code> that there were invalid views during the NVarchar Conversion process, use the following recovery steps: <ol style="list-style-type: none"> 1. Review the <code>ant.log</code> to identify the invalid views. 2. Run the upgrade with MBCS Support turned off. 3. Log into TRIRIGA and republish the business objects identified in the <code>ant.log</code> as having invalid views. 4. Run upgrade with MBCS Support turned on. (Tri-32284) ▪ For an MSSQL database, running the MBCS conversion process during upgrade to 3.1 can take several hours. The duration depends on many factors, such as hardware, database size, and disk speed. (Tri-32051) ▪ If you are upgrading an MSSQL database with MBCS enabled, prior to the upgrade to 3.1 you must (1) back up your database, and (2) republish the <code>triRealEstateContract</code> business object in the <code>triContract</code> module (10.x, 9.x) or Real Estate Contract (8.x). This is to avoid a possible MSSQL error on the backing table of that business object during the upgrade. The error that might occur if the business object is not republished is as follows: "Cannot create a row of size xxxx which is greater than the allowable maximum row size of 8060". If this error occurs, the table will not be configured correctly for MBCS. In this case, restore the database and contact the IBM TRIRIGA team at IBM Software Support for additional instructions. (Tri-31926) ▪ If you have custom tables in the TRIRIGA table space and you are upgrading to MBCS on Microsoft SQL Server, these tables may not convert correctly depending on the table definition (for example, if <code>IDENTITY_INSERT</code> is set). These tables need to be either deleted or converted manually prior to running the 3.1 / MBCS upgrade. <p>To convert these tables manually, alter all <code>varchar</code> fields to be <code>nvarchar</code> and alter their collation to the collation used during the conversion during install. For example, for field <code>xxx</code> in table <code>YYY</code> when your desired collation is <code>Japanese_CS_AS</code> and the <code>SIZE</code> of the <code>varchar</code> field is <code>100</code>, the script is as follows: <code>alter table YYY alter column</code></p>

Area of Impact	Description
	XXX nvarchar(100) collate Japanese_CS_AS (Tri-32702)
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.x environment. The object types that will not import into 3.x 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.
Oracle	<ul style="list-style-type: none"> ▪ If you are installing a new Oracle database and wish to support multi-byte characters, make sure your instance character set is UTF-8 or UTF-16 and your NLS_LENGTH_SEMANTICS is set to CHAR, not BYTE. Follow the instructions in the <i>TRIRIGA Application Platform 3 Installation and Implementation User Guide</i> to ensure your platform will support multi-byte characters properly. (Tri-32998) ▪ If you are upgrading an Oracle database and are considering changing the instance character set to UTF-8 or UTF-16 so multi-byte characters can be supported, it is imperative that you carefully follow the instructions in the <i>TRIRIGA Application Platform 3 Installation and Implementation User Guide</i>. Failure to do so could compromise your data.
Portal	Portal section headers do not translate correctly when the portal section name or header fields have a leading or trailing space. Contact the IBM TRIRIGA team at IBM Software Support for a SQL script to identify these sections. (Tri-31987)
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.x, 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 <code>portalupgrade.log</code> located in the install root.
Record Runtime	<p>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.</p> <ol style="list-style-type: none"> 1. First insure that the BO Mapping is refreshed <ol style="list-style-type: none"> 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

Area of Impact	Description
	<ul style="list-style-type: none"> c. Save the BO Mapping <p>2. For each affected record, refresh the published name</p> <ul style="list-style-type: none"> 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)
System Configuration	TRIRIGA Application Platform 3.1 can consume more resources than previous releases. Monitor 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 <code>triSpace</code> business object or a <code>Space</code> business object in order to run. (Tri-28941)
WebLogic	When running an upgrade to 3.1 for WebLogic, the previously saved settings from the old directory will be set in the installer. (Tri-28939)
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, <code>phtml</code> , as <code>text/html</code> . Please refer to the <i>TRIRIGA Application Platform 3 Installation and Implementation Guide</i> for step-by-step instructions. (Tri-29060)
Where Used	<p>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:</p> <ul style="list-style-type: none"> ▪ 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
Classifications	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 2008 or to Oracle. (Tri-27220)

Area of Impact	Description
ETL	<ul style="list-style-type: none"> After upgrade from a version of the TRIRIGA Application Platform prior to 3.0, your ETL scripts may have issues. The ETL scripts are written against the standard TRIRIGA 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. Review your ETL scripts and change them as needed to ensure the column names match the generated column names in your database. (Tri-27625, Tri-27705) If you use WPM, TREES, the 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.
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)
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. Use a different select association type for each query section to properly maintain each select association. (Tri-23771, Tri-23850)
TRIRIGA SVG Viewer	The TRIRIGA SVG Viewer is not recommended for design-time work and not supported for working on very large workflows. Use the Adobe SVG Viewer Plug-In for design-time work. (Tri-20731)

TRIRIGA Application Platform 3.1.7 Changes

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

Area of Change	Description
Formula Engine	Resolved an Extended Formula performance issue that caused the Extended Formula Agent to look at an association from one record (left-hand side) to another (right-hand side) and potentially recalculate formulas on many of the records associated to the right-hand record. With this fix, the Extended Formula Agent only calculates the single record that is affected by the change, the one on the left-hand side of the association. (Tri-36815)

Area of Change	Description
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Scheduling Engine

When you map a Date type field into an Event start field, the platform scheduler by default reads that field as being in the user's time zone. If you want the platform to use the system's time zone instead of the user's time zone, you need to specify that as outlined below.

The TRIRIGA Application Platform has been enhanced to allow a time zone to be set in the Event object so it can be used in the processing of date values. When a user inputs a date value, the platform stores it in the server's time zone. However, when the scheduler processes the date value, it assumes the date value is in the user's time zone. To resolve this issue for scenarios that require the scheduler to use the server's time zone, the scheduler now processes a date value in the time zone that is specified in the `triTimeZoneId` field of the Event object.

To take advantage of this platform change, you need to update the application to include the new `triTimeZoneId` field so the scheduler will know from which time zone to process a date field. Note that if the field is not included and a value is set, the scheduler will continue to assume the value is in the user's time zone.

The following example shows how an issue identified in the TRIRIGA 9.7 Real Estate application could be addressed by implementing this new date processing. To resolve an issue when date processing may cause incorrect due dates in payment line items created when a payment schedule for a RE lease is activated requires one change to a business object in the Data Modeler and one change to a workflow in the Workflow Builder. After you make these changes, the updated scheduler will have the correct values to calculate and generate the correct start date and end date of the scheduled events.



Attention - Do not attempt the following unless you are a TRIRIGA Certified Application Developer and thoroughly understand the instructions and the effect on your implementation. If you are not comfortable making these changes in your implementation, please contact the IBM TRIRIGA team at IBM Software Support.

Step 1: In the Data Modeler, edit the Event system object found in the Mail module. Add a new text field named `triTimeZoneId`, as illustrated below:

Field List			
<input type="checkbox"/>	<u>u</u> <u>ivdayBL</u>	ivday	boolean
<input type="checkbox"/>	<u>triNovemberBL</u>	November	Boolean
<input type="checkbox"/>	<u>triOctoberBL</u>	October	Boolean
<input type="checkbox"/>	<u>triOffsetDateDurationDU</u>	OffsetDate Duration (for Shadowing)	Duration
<input type="checkbox"/>	<u>triRecordStateSY</u>	Record State	System Read Only
<input type="checkbox"/>	<u>triRecurrenceDailyOptionsLI</u>	Daily Recurrence Options	List
<input type="checkbox"/>	<u>triRecurrenceEndOptionsLI</u>	End Recurrence Options	List
<input type="checkbox"/>	<u>triRecurrenceMonthlyOptionsLI</u>	Monthly Recurrence Options	List
<input type="checkbox"/>	<u>triRecurrenceYearlyOptionsLI</u>	Yearly Recurrence Options	List
<input type="checkbox"/>	<u>triSeptemberBL</u>	September	Boolean
<input type="checkbox"/>	<u>triTimeZoneId</u>	TimeZone Id	Text
<input type="checkbox"/>	<u>triUserMessageFlagTX</u>	!	Text
<input type="checkbox"/>	<u>triUserMessageTX</u>	Attention!	Text
<input type="checkbox"/>	WeeklvFridav	Fridav	Boolean

Business Object - Event (Published)	
Module	Mail
Name	Event
Display Name	Event
Description	Scheduled Events
Stand Alone	<input type="radio"/>
Embedded	<input type="radio"/>
Link	<input type="radio"/>
Externally Managed	<input type="radio"/>
Has Staging Table	<input type="checkbox"/>
Has Calendar	<input checked="" type="checkbox"/>
Audit Actions	<input type="checkbox"/>

The runtime values of the `triTimeZoneId` field can be the following:

- blank or null - the scheduler assumes the input is in the user's time zone.
- USER - the values are in the user's time zone.
- SYSTEM - the values are in the server's time zone.
- any valid time zone ID from the Java `TimeZone` class. Note: The values stored in the Time Zones classification are valid Java time zone ids.

Step 2: In the Workflow Editor, modify the following workflow to set the `triTimeZoneId` field to SYSTEM.

Module: triPayment

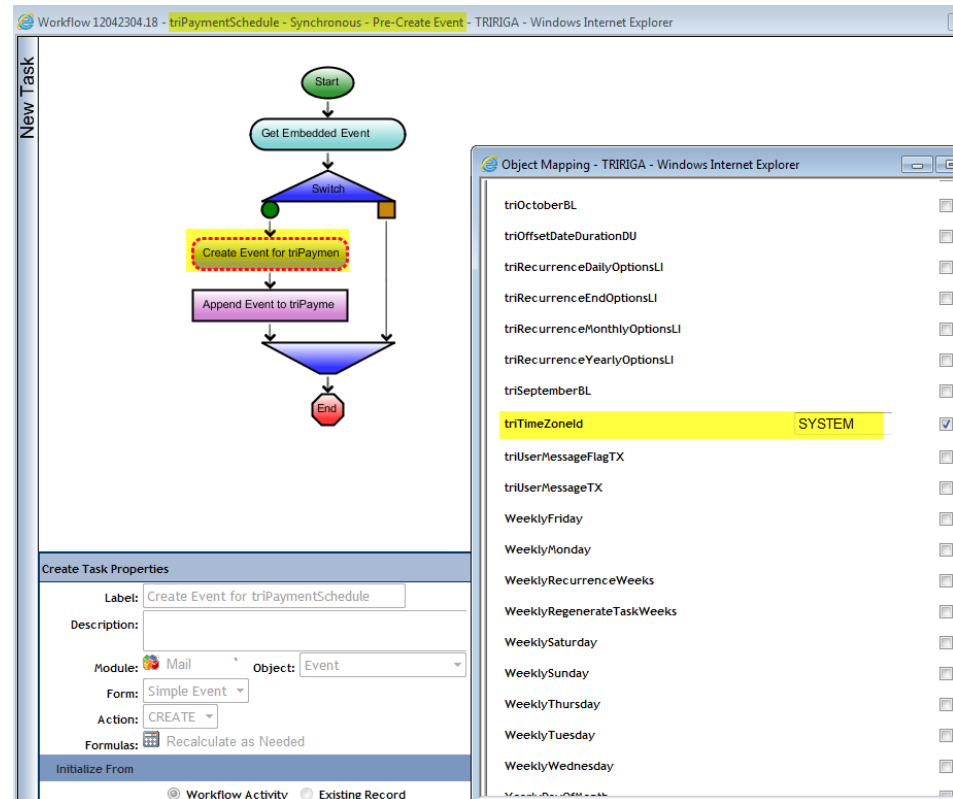
Business Object: triPaymentSchedule

Area of Change

Description

Workflow: triPaymentSchedule - Synchronous - Pre-Create Event

The illustration below shows the Workflow Editor after the change has been made:



(Tri-36814)

Security

Resolved a cross-site scripting vulnerability that allowed HTML execution within a text field displayed in a portal section report. (Tri-36959)

Workflow Builder

A record with multiple User/Approval tasks in separate workflows no longer auto-completes the second task. The system now waits for the user to perform the action. (Tri-36957)

TRIRIGA Application Platform 3.1.7 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1.6 Changes

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

Area of Change	Description
Query and Reporting	If you have a report using the Group By functionality and set to Prompt Before Query, the query filters now show. (Tri-36383)
Query and Reporting	Text values exported to Excel that could be interpreted as exponential numbers are no longer converted to Excel formulas. For example, a query result of 1E15 is no longer converted to a formula of concatenated string of values, as in ="1"&"E"&"15". The values, instead, are tagged as text values within the exported file so that Excel treats them as such. (Tri-36056)
Query and Reporting	The Cancel link has been removed from Related Reports when viewed inside a portal. When present, the Cancel link closes the entire window, forcing the user to sign in again. (Tri-36115, Tri-36244)

TRIRIGA Application Platform 3.1.6 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1.5 Changes

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

Area of Change	Description
Application Server	SSO authentication information now is shared with the Gantt section. When a user selects Open Gantt In New Window, the user must enter login credentials one time to save. (Tri-35878)
Object Migration	Resolved an Export issue where queries referenced in form action URLs were not showing up as dependencies to the form. (Tri-33773)
Object Migration	Resolved an issue preventing objects from publishing when imported on MSSQL into a multi-byte enabled environment. (Tri-35241)
Project	A newly created project is now available on the Company Project selector when the user sets security to allow access to the project for single application server configuration. (Tri-36028)
Query and Reporting	Resolved a print preview issue that caused a record's Print action to truncate data in a text field that spanned multiple rows. (Tri-35974)
Security	Resolved a cross-site scripting vulnerability within commonObjectMainNA.jsp. (Tri-35966)

TRIRIGA Application Platform 3.1.5 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1.4 Changes

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

Area of Change	Description
Graphics	Resolved an issue with graphic drawings/layers accumulating in memory beyond the specified cache limits causing the system to become unresponsive or run out of memory. Changed the limits of the Drawing, Layer, and GFX-Layer caches to 40 Drawings, 100 Layers, and 250 GFX-Layers. Added indexes on the DRAWING_DATA and DRAWING_LAYER tables. (Tri-34673)

TRIRIGA Application Platform 3.1.4 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1.3 Changes

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

Area of Change	Description
Administrator Console	Updated the error report e-mail address in the Administrator Console to <code>tsupport@us.ibm.com</code> . (Tri-33547)
Application Server	Changed the end of session cleanup to avoid a deadlock condition in WebSphere. (Tri-33477)
Financial Tokens	Resolved an issue that prevented insertion or modification of financial tokens. (Tri-33232)

TRIRIGA Application Platform 3.1.3 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1.2 Changes

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

Area of Change	Description
External E-Mail	The system no longer strips style tags from e-mail notifications. (Tri-33086)
External E-Mail	Users should no longer receive duplicate notifications through e-mail when they are listed in the To, CC, and BCC sections. (Tri-33004)

Area of Change	Description
Installer	A new database/new install with Oracle using UTF-8/UTF-16 and CHAR for the NLS_LENGTH_SEMANTICS should now install cleanly with no indexing errors. (Tri-32998)
Lists	Resolved an issue that prevented users from selecting a list value that contained special characters such as # or \. (Tri-33079)
Lists	Values now load from a dependent list containing special characters. (Tri-33087)
My Reports	A metric report with secondary group by now displays correctly when the user changes the Show By option. (Tri-32999)
My Reports	Temporary query data that used a \$\$PARENT::SECTION::FIELD\$\$ filter now can be exported to Excel. (Tri-33030)
My Reports	The Data tab in a Scorecard displays the records when the report contains a hierarchical group by column. (Tri-32997)
Portals	The "Available Sections" panel in the Portal Personalization interface now shows results when viewed in Internet Explorer 7. (Tri-33051)
Record Runtime	Resolved an issue preventing a user from publishing a drawing with a large hex handle, for example, FBEBD5F9537F6D61. (Tri-33083)

TRIRIGA Application Platform 3.1.2 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1.1 Changes

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

Area of Change	Description
Graphics	Drawings published from MicroStation now correctly display as attached and allow the record details to be displayed from the graphic. (Tri-32917)
Graphics	Text labels resembling scientific notation, such as 5E30, no longer cause an error when exporting a graphic to PDF. (Tri-32918)
List Manager	Resolved an issue that prevented creating list values three-levels deep. (Tri-32941)

TRIRIGA Application Platform 3.1.1 Properties Files

The properties files did not change with this release.

TRIRIGA Application Platform 3.1 Changes

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

Area of Change	Description
Administrator Console	An exception is no longer thrown in the <code>server.log</code> when the Application Server is accessed directly while SSO is configured. (Tri-19241)
Administrator Console	It is now possible to sign into the main application and then the TRIRIGA Administrator Console at the same time when using a browser with tabs. An administrator must first sign in to the main application, then access the Administrator Console URL, at which time the administrator automatically is allowed into the Administrator Console if they have permissions. If they do not, they are prompted for a login. When an administrator signs out of either the Administrator Console or the main application, they will be signed out of both. (Tri-27500)
Administrator Console	Removed the log4j manager. Please use Platform Logging to perform targeted debugging on platform features. (Tri-13440)
Administrator Console	The Cleanup Agent now removes orphaned sessions in <code>ACTIVE_USER_SESSION</code> . (Tri-30329)
Administrator Console	The Log4j configuration now appends the <code>.log</code> extension to log files that have been rolled over. (Tri-19755)
Administrator Console	The Users Manager now shows multiple concurrent logins of users and their IP addresses. This helps identify users before performing an administrative log off. (Tri-17931)
Administrator Console	Users logged into the system can be logged out from the Users Manager. (Tri-12672)
Application Server	Changed the level of the message about using connection pooling when starting the platform on WebLogic to an info level. (Tri-28115)
Application Server	If the application server cannot communicate to the database, a user attempting to sign in will be presented with the following message: "Application Server does not have a connection to the Database! Please contact your System Administrator." Previously, the user saw an "Invalid username or password" message. (Tri-10081)
Application Server	If you do a platform upgrade but the database is not updated, the system will not allow users to sign in. The Administrator Console will display an error stating the build numbers of the database and application server do not match. To correct this, re-do the upgrade and make sure both the application server and database are completely upgraded before allowing users to sign in.

Area of Change	Description
	(Tri-1145)
Application Server	If you receive an SQL exception from <code>IBS_SPEC.SPEC_NAME</code> that a value is too large for a column, contact TRIRIGA Support for a script to increase the column length from 100 bytes to 1000 bytes. (Tri-23781)
Application Server	The JBoss startup scripts include new JVM parameters that tune the garbage collection process. (Tri-31864)
Audit	Corrected an issue with open cursors for <code>SESSION_HISTORY</code> . The database cursor now closes properly. (Tri-32731)
Brava!	Brava! can open documents with names containing single quotes. (Tri-32352)
Brava!	Brava! now supports AutoCAD 2010 files. To update your system, replace the <code>Dwg2DL.dll</code> file in the <code>C:\Program Files\IGC\Brava!\Brava! Enterprise\JobProcessor\</code> directory (or the directory that contains the old <code>Dwg2DL.dll</code> file) with the new <code>Dwf2DL.dll</code> zip file copied from the Brava directory on Disk 3. (Tri-31867)
CAD Integrator	Attaching the Gross or Measured Gross Area in CAD Integrator now triggers extended formulas to recalculate for each field. (Tri-31976)
Data Integrator	Before implementing batch uploading, run the scripts in the <code><TRIRIGA installation>\userfiles</code> directory to create the default directories to do the processing. Please refer to the "Data Integrator" chapter of <i>Application Building for the TRIRIGA Application Platform 3: Data Management</i> user guide for details. (Tri-9102)
Data Integrator	The Data Upload business object adds a new attribute (<code>CharSet</code>) if it is not present. Data Integrator uses this to specify the character set of the uploaded file. (Tri-32414)
Data Modeler	Business object field form references in Where Used no longer return incorrect references. (Tri-31672, Tri-31675)
Data Modeler	Resolved an issue causing the Form Wizard to open with the incorrect module, resulting in the incorrect business objects displaying in the business object list. (Tri-13328)
Data Modeler	Resolved an issue preventing the Field List view from loading when selected in the View menu. (Tri-10042)
Data Modeler	Sub-attribute types for System Read Only fields that included the term "GUI" have been changed to "Form". (Tri-31580)
Data Modeler	The Field Properties page now loads in the Data Modeler when the field has a regular formula set and the formula has an error. (Tri-32337)
Data Modeler	The View link next to the workflow on the State Transition sub-action in the Data Modeler did not do anything when the business object was in publish mode. The link now is active regardless of the state of the business object.

Area of Change	Description
	(Tri-28467)
Data Modeler	When the Formula flag is unchecked on a field with an existing formula map, the platform now removes formula mapping from the database. (Tri-31687)
Data Modeler	Where Used now returns results for business object fields used in Populate File or Distill File workflow tasks. (Tri-27927)
Document Management	In a project context, the Delete action now deletes a folder when all of the documents in the folder are unpublished. (Tri-32472)
Document Management	Resolved a Document Manager issue when using JRE 1.6.0_23 that prevented the links to upload a document from appearing. (Tri-31818)
Document Management	Resolved an issue where opening a document upload window while using an MS SQL database could potentially create a lock that caused the window to delay the display and not create the necessary folder hierarchy. (Tri-32618)
Document Management	The default value of the root node of a Discussion Thread is now translatable. (Tri-32372)
Document Management	The MultiFile upload now properly uploads or downloads files that have multi-byte characters in the filename. (Tri-31942)
Form Builder	Copying a dynamic text field correctly copies the required property of the field into the form of a different business object (for example, via Copy Form or Copy Section). (Tri-32579)
Form Builder	Form Builder no longer closes when the user selects Cancel in the form layout. Preview mode no longer includes a Cancel action. (Tri-30396)
Form Builder	In some cases the Comparison Association property for sections was showing when it should not have. This has been resolved. (Tri-32537)
Form Builder	Now when adding a new form, the default name in the Navigation panel is Form instead of GUI. (Tri-31572)
Form Builder	Read only sections now honor the row span property. (Tri-32080)
Form Builder	Renamed "Gui Name" and "Gui Label" on the Includes page to "Form Name" and "Form Label" respectively. (Tri-31757)
	Renamed "Gui" in State Transition Properties to "Form". (Tri-31719)
Gantt	Calculated Start and End dates on a program now update the program instead of only the project. (Tri-30082)
Gantt	Changing the Add label on a Query section (for example, translating the label) no longer causes a JavaScript error. (Tri-32012)
Gantt	Date and Time fields mapped into Date fields now are truncated to midnight. (Tri-30089)

Area of Change	Description
Gantt	Tasks in the drop-down on a Gantt section now display translated values if applicable. (Tri-32107)
Graphics	Drawings with layer names that contain characters that use a UTF-8 multi-byte representation now are correctly handled and the layer names display correctly in the Layer Manager. (Tri-31968)
Graphics	If the user does not have access to a query section, the report is not run against the linked graphic section. The dependent graphic section displays a "No Graphic Available" message. (Tri-30029)
Graphics	In the Preferences window, users can select the same color consecutively for different Preference colors. (Tri-31565)
Graphics	Resolved an issue where the Export processing indicator ("Exporting...") goes away prematurely, prior to the file download dialog displaying. (Tri-31522)
Graphics	The "Loading" and "Exporting" messages in a Graphic section now are translatable. (Tri-31111)
Graphics	To display an East Asian language in a Graphic section, the SimSun font must be installed on the client machine in order for the characters to render properly. The SimSun font is included with the majority of Windows software. (Tri-31981)
Installation	Added following settings in <code>span.ini</code> that need to be filled for appropriate authentication to work <code>PROXYURL= PROXYUID= PROXYPWD= URLUID= URLPWD= CACHE= LOG= TIMEOUT=0</code> (Tri-10071)
Installation	New installations on Microsoft SQL Server no longer fail if the database password used is not in the current policy. (Tri-12509)
Installer	Depending on your database size, if you are upgrading to MBCS on Microsoft SQL Server, you may need to set your Log file to autogrow during the conversion process. (Tri-32702)
Installer	If you are updating your SQL Server Database to use multi-byte support and use WebLogic or WebSphere, please also update your JDBC URL by setting <code>SendStringParametersAsUnicode=true</code> . (Tri-32124)
Installer	If you start a new install on a database where application servers are already running, the installer will warn you about the possibility of the installation failing before actually doing the install. (Tri-32117)
Installer	Increased the initial Oracle database table and index sizes to 2500 MB from 2000 MB. (Tri-32644)
Installer	Resolved an issue caused by Java 1.6 updates 22-24 where certain applets would no longer display some of their labels, such the Document Manager "Upload" and "Browse" labels. Refer to http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6993073 for more

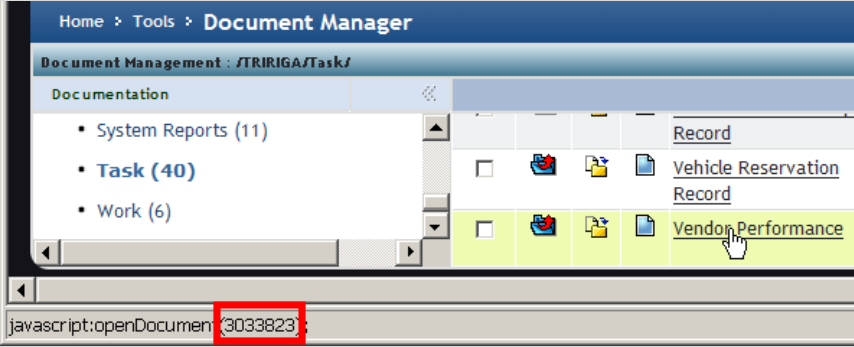
Area of Change	Description
	information on this issue. (Tri-32724)
Installer	<p>The installer now asks for the location of the <code>TRIRIGALICENSE.properties</code> file and copies it into the correct location in the <code>config</code> directory during the install process.</p> <p>A license file is not required for an install. If you do not provide a file during the install, you can copy it into the <code>config</code> directory after the install. Just be sure to do so before the application starts. (Tri-19925)</p>
Installer	<p>The installer now has a check box to set the application server to run in production mode. This sets the value of the <code>ProductionMode</code> property in <code>TRIRIGAWEB.properties</code>. If you need to change the setting after the install is complete, change the value in <code>TRIRIGAWEB.properties</code> and restart the application server process. (Tri-30854)</p>
Installer	<p>The installer upgrade scripts and platform upgrade classes now update the <code>updated_date</code> in <code>environment_properties</code>. (Tri-21479)</p>
Installer	<p>The SQL Server table space for a new install will be created with <code>SQL_Latin1_General_CP1_CI_AS</code> collation. This ensures proper collation for the TRIRIGA table space. Individual tables within the table space will be given appropriate collation based upon whether or not the database is enabled for MBCS. (Tri-21189)</p>
Installer	<p>When running a Microsoft SQL Server upgrade with Multi-Byte Support, make sure that no TRIRIGA application instances are connected to the database and that the database user being used for the upgrade is uniquely associated to the database. (Tri-32725)</p>
Installer	<p>When running an upgrade install for WebLogic, the previously saved settings from the old directory will be set in the installer. (Tri-28939)</p>
Installer	<p>You will find JBoss Native Accelerators on Disk 3, under the <code>jboss-native-accelerator</code> directory. Please see the <code>readme.txt</code> for installation instructions for your operating system. (Tri-31865)</p>
Label Manager	<p>Fields exported for translation from the Label Manager now are saved as UTF-8. (Tri-31191)</p>
Label Manager	<p>Resolved an issue causing duplicate key errors during Form Label, System Label, and Classification Label Manager imports. (Tri-31469)</p>
Label Manager	<p>Special characters can be imported by the Label Manager if the Allow Special Characters check box is selected. (Tri-25744)</p>
Label Manager	<p>The Label Manager user interface and Export functionality now use the base value of a label. (Tri-26646, Tri-26647)</p>
Language Utility	<p>Multi-byte character sets now are supported in SQL Server. (Tri-15885, Tri-28780)</p>

Area of Change	Description
License and Security	A user will not be subjected to license checks when accessing their own My Profile record. (Tri-32048)
License and Security	Due to a license change, you need to update your ArcGIS Connector with the object migration package named <code>TRIRIGA-ArcGIS.zip</code> that can be found in Disk 2. (Tri-32049)
License and Security	Resolved an issue where a user could be prevented from logging in if they were assigned to an old license that was no longer valid. Now the platform ignores old licenses and only evaluates currently valid license to which the user is assigned. (Tri-31938)
License and Security	The TRIRIGA Employee Self Service product license has been renamed to TRIRIGA Request Central. (Tri-31849)
List Manager	A list definition can be viewed and edited through the View/Edit List action in the List Manager. All fields are readable but not all are editable. The following fields are not editable: Name, Language, System List (if already checked as system list, otherwise editable so that non-system list can be set as one), Dependent List, and Source Type. (Tri-31503)
List Manager	Dependent lists now load properly when the parent list value contains an <code>&</code> . (Tri-32690)
Object Migration	Compare now compares the Target Type field of a navigation item. (Tri-29431)
Object Migration	Expanded the workflow task column type for formula recalc in upgraded MSSQL databases from <code>tinyint</code> to <code>numeric</code> . This was done to be consistent with Oracle and clean MSSQL databases, as well as to prevent possible object migration failures with invalid data. (Tri-32097)
Object Migration	HTML data now imports correctly on a Note field that contains an image. (Tri-31708)
Object Migration	Security Group import now works properly in a TRIRIGA 8i environment. (Tri-32112)
Object Migration	The Delete action now outputs an appropriate message if the user has not selected at least one package. (Tri-23053)
Object Migration	The Group form changes for 3.1 are in the <code>triGroup_Form_3.1.zip</code> object migration package located in <code>userfiles/upgrades/triGroup_Form_3.1.zip</code> . TRIRIGA recommends that implementations import this into their environments taking proper steps to not override any custom changes that may have been made to the Group form. (Tri-32314)
Object Migration	Updated the validation message when a field already exists in the destination system but has a different type. (Tri-32102)

Area of Change	Description
Performance	Improved performance by caching static resources in the hierarchical drop-down widget of metric reports. (Tri-31735)
Portal	Classification Rollup fields now display correctly in portal sections. (Tri-31568)
Query and Reporting	A report now sorts correctly when the column label contains non-alphanumeric characters or spaces. (Tri-31853)
Query and Reporting	A report with special characters in its name, tag, title, or owner name now displays correctly in the Report Manager entry page. (Tri-32160)
Query and Reporting	Added a new System Read Only field sub-type of "Created DateTime (Number)" that follows the Modified DateTime (Number) behavior of storing the value in precise milliseconds. If a field of this type is added to a business object/form, it will show the created date/time, and, once persisted, it can be sorted properly in queries. This behavior contrasts with <code>triCreatedSY</code> , which stores values as the explicit string in the database. (Tri-31752)
Query and Reporting	Adding new associations and/or adding new actions in the Report Template Advanced tab no longer results in tooltips and user messages that cannot be translated. (Tri-32093)
Query and Reporting	Crystal Query reports can be bookmarked. (Tri-31354)
Query and Reporting	In the Actions window of the Advanced tab of a report: <ul style="list-style-type: none"> The label Gui has been changed to Form. (Tri-31715) Removed an extra space at the end of the Query link (visible when the action type is Query). (Tri-31714)
Query and Reporting	Increased the maxLength attributes in ADO XML v2. (Tri-30198)
Query and Reporting	Removed the Add to Bookmarks action from queries started from actions. (Tri-28934)
Query and Reporting	Resolved an issue causing the display format of currency UOMs in some cases to be incorrect when shown in reports. (Tri-32388)
Query and Reporting	Running a Crystal report that does not have a title no longer results in an error. Now the system uses the report name when the title is blank. (Tri-31979)
Query and Reporting	Some Metric Reports may not have translated labels available until the report is opened and saved. (Tri-31936)
Query and Reporting	The "Copy Of" text that is placed in front of copied report names is now translatable. (Tri-32006)
Query and Reporting	The form ADO XML v2 generation no longer fails when the form contains a query section with no query or a query with an invalid definition. (Tri-31632)

Area of Change	Description
Query and Reporting	The Reports tab on the Employee form now loads when the name contains a single quote ('). (Tri-32191)
Query and Reporting	To improve performance, disable the Java Data Source feature when a Query report is used in bulk report mode. To configure a single query report to NOT to use Java Data Source (Streaming) option, put the following tag in the Report comments ::DISABLE_JAVA_DATA_SOURCE::. When using a command table as the data source for a dynamic parameter field in a Crystal report in conjunction with TririgaQueryXML, you must disable the Java data source for the report. To configure a single query report to NOT to use Java Data Source (Streaming) option, put the following tag in the Report comments ::DISABLE_JAVA_DATA_SOURCE::.. (Tri-25941)
Query and Reporting	Users in the Report Builder can access the tabs on a report with very long tab names in a translated environment. (Tri-32025)
Query and Reporting	When exporting a query with a Boolean field into Excel format, the system now displays the value FALSE when a Boolean field is null instead of an empty string. (Tri-32539)
Record Runtime	A Note field value in a record that was created prior to release 2.6.0 can be updated successfully. (Tri-29823)
Record Runtime	A query section Remove action now de-associates line items if the query has group by column(s) but not a hierarchical query. Single-select is now supported in this type of query. (Tri-31017)
Record Runtime	A query with the Fixed Column Count parameter set in the Report Manager now displays with fixed columns at runtime. (Tri-15703)
Record Runtime	A text file used as embedded content in a notification e-mail no longer results in a null value instead of template text. (Tri-28485)
Record Runtime	An action that is secondary and has multiple sub-actions marked for close will now close the record. (Tri-31637)
Record Runtime	Autocomplete now works the same on a translated classification as on a US English one. (Tri-32043)
Record Runtime	Classification fields set to display the full path now correctly display the translated values for each Classification in the path. (Tri-32649)
Record Runtime	Clicking rapidly on a section expand/collapse icon no longer creates a double bar effect. (Tri-31489)
Record Runtime	Dialog windows no longer display a message that the window cannot close before closing. (Tri-32241)
Record Runtime	Form tabs with multiple Multi Tab sections expand with the window. (Tri-31601)

Area of Change	Description
Record Runtime	Locator search windows now are positioned properly near the field when no query is set for the Locator (default data search). (Tri-31797)
Record Runtime	Navigation item names and dynamic labels that are the same except for leading or trailing blanks now translate correctly. (Tri-31988)
Record Runtime	Note fields now save modified data when a different field triggers an on change workflow. (Tri-31862)
Record Runtime	Opening a document Print Preview tab no longer causes an error. (Tri-31706)
Record Runtime	Opening a record from a Business Object field search window no longer causes an error. (Tri-11422)
Record Runtime	Records should no longer hang indefinitely with a JavaScript error when connecting from a client workstation on a very slow network connection. (Tri-31372)
Record Runtime	Resolved an issue preventing calendar-related fields in a metric report from accepting or displaying a date or date/time in the field. (Tri-32366)
Record Runtime	Resolved an issue preventing on change workflows on list fields from firing properly. In this case, both a parent list field and a dependent list field had on change workflows. When the parent list field was changed, the dependent list on change workflow was fired instead of the parent list. (Tri-31885)
Record Runtime	Resolved an issue where Date and Time field format settings were not being honored if the user changed the formatting in their profile without signing out and back in. (Tri-31832)
Record Runtime	Resolved issues with Multi Tab section read only / required validations. (Tri-31540)
Record Runtime	Resolved the issue that caused an error when a user switched from one tab to another on the Forecast Survey form. (Tri-32662)
Record Runtime	Running a workflow task with the Recalculate All option set no longer causes an exception when an associated record is added. (Tri-32783)
Record Runtime	The Add to Bookmarks action in a query is available for translation. (Tri-31935)
Record Runtime	The columns in an Availability Gantt now use the translated values, if applicable, of the display columns for the query to which the Gantt section is linked. (Tri-32411)
Record Runtime	The default TRIRIGA Data Search for Classification fields now sorts properly when a column header is clicked. (Tri-31059)
Record Runtime	The document upload page is translatable. (Tri-31927)

Area of Change	Description
Record Runtime	The GIS tab is no longer visible in the Print Preview of a record. (Tri-32341)
Record Runtime	The label of the cancel action now displays when it contains double-byte characters. (Tri-31975)
Record Runtime	The system now performs required validation on read-only Date and Time fields. (Tri-31490)
Record Runtime	The tooltips for the text fields and buttons on the sign in page now display title text. (Tri-31903)
Record Runtime	To resolve a number of browser issues around formatting of rich text in Note fields, upgraded the TinyMCE Library to version 3.3 from version 3.2.7. (Tri-28193)
Record Runtime	When selecting a value for a classification field in a translated environment, the root node of the tree now displays the translated value. (Tri-32373)
Record Runtime	When the Audit Data Changes property is set for a business object and a record contains a smart section that contains a reference to itself, the system no longer throws an exception on save. (Tri-32551)
Record Runtime	When using zzz (time zone) formatting for a Date and Time field, the time zone format now displays correctly and re-selecting the picker no longer results in an error. (Tri-31833)
Report Manager	ADO XML v1 can be generated from the Advanced tab. (Tri-32195)
Report Manager	Can translate messages, actions, and column headers that were not previously translatable. (Tri-31930)
Report Manager	<p>If your users encounter an error when drilling into a graph on a Crystal report, use the following steps to eliminate the error:</p> <ol style="list-style-type: none"> Find the report in the Document Manager. Hover your mouse over the hyperlinked Name. Write down the number that appears in the lower left corner of the display after <code>javascript:openDocument</code>.  <ol style="list-style-type: none"> Open the Crystal report. Right-click on the graph and select Format Chart. The system opens the

Area of Change	Description
	<p>Format Editor.</p> <ol style="list-style-type: none"> Select the Hyperlink tab. In the Hyperlink information section, change the displayed website address from <pre data-bbox="532 436 1430 520">/html/en/default/crystalreports/CrystalProcessServlet.srv?docId=<Number>&specId=-1&source=ManagerPreview&cacheId=0&showFilters=true</pre> to <pre data-bbox="532 590 1430 674">/html/en/default/crystalreports/CrystalProcessServlet.srv?docId=<NumberFromLowerLeftCorner>&specId=-1&source=ManagerPreview&cacheId=0&showFilters=true</pre> The number following docId= must be the document id you wrote down in step 1. Click OK and Save the report. Upload the report into the Document Manager. (Tri-27673)
Report Manager	My Reports is now sorted by title by default. (Tri-31830)
Report Manager	Report filters now are fully translatable. (Tri-32026)
Report Manager	Resolved an issue that allowed a report with security set to be displayed to a user outside that security group. (Tri-32777)
Scheduling Engine	<p>When scheduling a yearly event, the system correctly generates the following:</p> <ul style="list-style-type: none"> The first event if the start date and first event date fall on the same day. Events when the start date is in the last week of the month. <p>(Tri-31688, Tri-31645)</p>
Security Manager	In the Access tab, the Reports tab was incorrectly labeled Print Preview. The label has been updated in this release. (Tri-31626)
Style Manager	An item in TRIRIGA Objects linked to menu text no longer displays as "null". (Tri-31739)
Style Manager	The display of some portal properties (e.g., title bar action text) was extremely small because the properties did not have default font size values in the database and the platform default was in units of em. The Style Manager did not support font size units other than px. For example, 0.8 em was rendered as 0 px. Resolved by adding support for the following font size units: em, pt, cm, px, and %. The preview now displays what users will see. (Tri-32556)
Style Manager	When creating a style in the Style Sheet Editor, if the name contains any spaces, changes made in the Font Properties of the Style Sheet Editor are not applied. Web browsers do not support class names with spaces, so TRIRIGA now validates that the names of newly created styles do not contain spaces or special characters. TRIRIGA recommends deleting and replacing any older

Area of Change	Description
	styles that have spaces and/or special characters in their names. (Tri-31907)
Template Manager	<p>The upgrade to 3.1 includes the Add action to the Chart Templates System Setup tool, giving users the ability to add new Chart Templates. Users who previously upgraded to 3.0 will need to add the Add action manually by following these steps:</p> <ol style="list-style-type: none"> 1.) In the Report Manager, open the System Report <code>triChartTemplate - System - Manager Default</code> 2.) In the Advanced tab, click the Add action on the Actions section bar. 3.) Choose Action Type = <code>System Add</code>. Enter Add for the Name and for the Label. 4.) Click Ok, then Save. (Tri-31743)
TRIRIGA Offline	E-mail supports the UTF-8 character set. (Tri-32325)
TRIRIGA Offline	When exporting a record with a Note field that contains non-ANSI characters into an Excel spreadsheet, the platform now converts the non-ANSI characters into a readable format. (Tri-32650)
Usability	Null pointer exceptions no longer appear in the log when single sign-on is configured and a user connects directly to the application server. Instead, the log contains a warn message. (Tri-15653)
Workflow Builder	For new workflows, changed the default of the Save Workflow Instances check box from checked (on) to unchecked (off). (Tri-31780)
Workflow Builder	To improve performance, changed the default value of the Modify Records workflow task's Formulas field from Recalculate as Needed to Disable Auto Recalculation. (Tri-31776)
Workflow Builder	When a record is deleted from a portal section, the system triggers <code>DELETE_FROM_MGR</code> workflows against the record. (Tri-32633)
Workflow Manager	<p>A Retrieve task that gets either minimum or maximum values now behaves consistently on Microsoft SQL Server and Oracle.</p> <ul style="list-style-type: none"> ▪ When getting MINIMUM values, there is a slight change of behavior on Oracle. Any null value records will be returned first. This is consistent with existing Microsoft SQL Server behavior. ▪ When getting MAXIMUM values, there is a slight change of behavior on Oracle. Any null value records will be returned last. This is consistent with existing Microsoft SQL Server behavior. (Tri-32594)
Workflow Manager	Resolved an intermittent JavaScript error that displayed when a user attempted to open a workflow instance from a record. (Tri-19876)
Workflow Manager	Resolved an issue that caused an exception when a user tried to execute a PM Schedule that ended on a non-working day (weekend or holiday). (Tri-32483)

TRIRIGA Application Platform 3.1 Properties Files

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

Area of Change	Description
ACTIVE_CHECK_INTERVAL	This property is no longer used and has been removed from TRIRIGAWEB.properties. (Tri-31643)
ENABLE_CHART_ANIMATION	Controls whether charts are animated. It defaults to disabled on upgrade. (Tri-31822)
ENABLE_PROFILE_ROW_LEVEL_SECURITY	<p>Controls user security access to My Profile records.</p> <p>If set to Y, the platform uses the Access All Profiles field in the user's Group to determine whether or not the user can access another user's My Profile record. Additionally, the user's Group controls the user's access to the My Profile form and access to tabs, sections, actions, and other Form Builder features within the form. TRIRIGA recommends this setting. The default value is Y.</p> <p>If set to N, a user has administrator access to his/her own My Profile record. If a user tries to access another user's My Profile record, the platform applies standard Group access controls.</p> <p>If an implementation is not ready to take the new functionality, it can be disabled in TRIRIGAWEB.properties by changing the value of ENABLE_PROFILE_ROW_LEVEL_SECURITY to N. (Tri-30256)</p>
SESSION_HISTORY_TRACKING	Indicates which user sessions are logged to the SESSION_HISTORY table. The default value is ALL. If set to WEB_USER, user sessions from TRIRIGA BusinessConnect are not logged to the SESSION_HISTORY table.
SSO_REMOTE_USER	If SSO_USER_PRINCIPAL is Y, set SSO_REMOTE_USER to N.
SSO_USER_PRINCIPAL	If set to Y, the system uses the UserPrincipal HTTP header parameter. The default value is N. When the value of SSO_USER_PRINCIPAL is Y, set SSO_REMOTE_USER to N.
WF_INSTANCE_SAVE	Changed the default value from PER_WORKFLOW_PRODUCTION to NEVER. (Tri-31779)

TRIRIGA CAD Integrator/Publisher 2011

This chapter details important information, known limitations, and changes to TRIRIGA CAD Integrator/Publisher 2011.

Important Information

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

Area of Impact	Description
Installation	<p>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.</p> <p>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:</p> <p>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.</p> <p>In the Advanced Security Settings for ci window, select your group, select the check box for <i>Replace owner on subcontainers and objects</i>, 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.</p> <p>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.</p> <p>When you open AutoCAD 2010, it should be able to read the .cui file.</p> <p>Alternatively, you could have set yourself as the owner and given yourself permissions--just follow a similar process.</p> <p>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)</p>
Installation	<p>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)</p>
Label Style Manager	<p>Usage guidelines for CAD Integrator:</p> <ul style="list-style-type: none">Do not manipulate CAD Integrator entities or attached entities while not logged in to TRIRIGA.Since changes may occur on the server, undo is not supported in CAD

Area of Impact	Description
	<p>Integrator.</p> <ul style="list-style-type: none"> Do not copy and paste CAD Integrator entities or attached entities. Since copying maintains the same attachment data, CAD Integrator will not be able to distinguish the two items, and intermittent issues can occur. <p>(Tri-24050)</p>
Publish	Users with a blank password cannot publish DXF files from CAD Integrator. (Tri-31011)
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 TRIRIGA CAD Integrator for this release include the following:

Area of Impact	Description
Data	The data used by TRIRIGA CAD Integrator cannot contain multi-byte characters.

TRIRIGA CAD Integrator 2011, Version 1.2 Changes

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

Area of Change	Description
Label Filter Manager	<p>CAD Integrator now properly filters out retired Organization allocation business objects when using the Fill Style Manager.</p> <div style="background-color: #e0ffe0; padding: 5px; border: 1px solid #008000;">  <p>Note - If allocation records were retired in IBM TRIRIGA after login to CAD Integrator, a Sync command must be run from CAD Integrator to filter out retired space allocation records.</p> </div> <p>(Tri-36365)</p>

TRIRIGA CAD Integrator 2011, Version 1.1 Changes

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

Area of Change	Description
Fill Style Manager	CAD Integrator now displays the data in text and hierarchy fields regardless of business object. (Tri-35031)
Fill Style Manager	Hierarchy fields displayed in the CAD Integrator legend now display a number of hierarchy levels dependent on the hierarchy level setting instead of the single level previously displayed. (Tri-35188)
Fill Style Manager	The Fill Manager now uses the entire hierarchy path for fill display, rather than the path trimmed to the hierarchy set in options. Only the space hierarchy path fill settings are impacted, since support for the correct display of other hierarchy paths also is added in this release. Existing fills based on the trimmed setting will be used if found and the fills will be updated as they are saved. If the hierarchy level is adjusted in the options before the space hierarchy path settings are saved, the fill settings for the space hierarchy path may be lost. (Tri-35189)
Graphics	Resolved an issue in MicroStation environments that prevented reference files from publishing correctly from CAD Integrator to the platform. (Tri-35030, Tri-35032)
Options	The number of hierarchy levels displayed in CAD Integrator now can be configured from the Options dialog. (Tri-35108)

TRIRIGA CAD Integrator 2011, Version 1 Changes

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

Area of Change	Description
Assets	Insert Asset now correctly inserts the mapped asset symbol in cases where it did not before. (Tri-32056)
Attach Asset	The search dialog in the Attach Space dialog now only displays spaces that are valid for attaching. Additionally, the dialog now properly repopulates after searching or selecting Restore Defaults. (Tri-29553)
Create Planning Drawing	The Create Planning Drawing command now works correctly when the Allow Multiple Floor Boundaries option is set to Append on Assignment. (Tri-31044)
Layer Manager	Running the Level Manager command no longer causes MicroStation V8i to fail. (Tri-31742)
Login	The API login command no longer resets the platform and applications in the login dialog on custom script migrations. (Tri-20048)

Area of Change	Description
Login	The Server field in the CAD Integrator login dialog now is selectable with the tab key. (Tri-31784)
Login	Where absent, added the HTTP port to Web Services requests from CAD Integrator. (Tri-32368)
Publish	Added support for CAD file names that contain an ampersand. (Tri-32715)
Publish	Added support for rendering text with underlines in Graphic sections. (Tri-29868)
Publish	UTF-8 encoded characters on request URLs now are properly decoded with UTF-8 on the server. (Tri-31112)
Sync	In MicroStation V8i, spaces and people now correctly update with server-side changes. AutoCAD did not experience this issue. (Tri-30004)

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 10.1.0.1.
- 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 10.1.



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.

Use the method that best suits your needs. Incremental package files might be best to upgrade across one or two releases. The cumulative file may be better when you need to update from an earlier version of the application. Be aware, however, that the cumulative file is large and will take a long time to download, load, and import. After you have the object migration package files downloaded, follow the rest of the steps in this chapter to accomplish your application updates.

Applying the Application Object Migration Package

The TRIRIGA 10.1.0.1 fix pack includes three incremental application packages. The fix pack also includes five patch helper records.

The TRIRIGA 10.1 release includes one incremental application package and one cumulative package containing enhancements, fixes, and corrections for the TRIRIGA 10 applications, as described earlier.

If you are upgrading from TRIRIGA 10.0, use the 10.1 and 10.1.0.1 incremental application packages.

Use the 10.1 cumulative package if you are upgrading from TRIRIGA 9, as described in "[Important Installation and Upgrade Information](#)".

Optionally, you can use incremental packages instead of the 10.1 cumulative package and the 10.1.0.1 incremental package. You must proceed in this sequence:

1. Upgrade to TRIRIGA Application Platform 2.7.2.3.
2. Load each incremental object migration package that is later than your current application version, in order, up to and including 9.7.1. Depending on your current application version, you may need to apply the 9.0.1, 9.0.2, 9.0.3, 9.0.4, 9.0.5, 9.0.6, 9.1, 9.1.1, 9.1.2, 9.1.3, 9.5.0, 9.5.1, 9.5.1Supp, 9.6.0, 9.6.0_Gantt, 9.6.1, 9.6.2, 9.7.0, and 9.7.1 packages. See the *TRIRIGA 9.1 Release Notes* for information about applying the 9.1 package. Perform each package sequentially, in the order listed above. Wait for one to complete all of the steps below before beginning the next.

3. Upgrade to IBM TRIRIGA Application Platform 3.1.
4. Load each incremental object migration package for 10.0, 10.1, and 10.1.0.1. Perform each package sequentially, in the order listed above. Wait until all of the steps are complete for an incremental object migration package before you begin the next.

If you use the 10.1 cumulative package, you must also apply the 10.1.0.1 incremental package. Perform each package sequentially, in the order listed. Wait until all of the steps are complete for an incremental object migration package before you begin the next.

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

Whether you use the cumulative Object Migration package and the 10.1.0.1 incremental package or a set of version-specific incremental Object Migration packages, you must run the Patch Helpers for each application version between your current application version and 10.1.0.1, including 10.1.0.1. 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

Form: triPatchHelper

Import Type: Add

Action: triCalculate

Step 3 Browse to identify the *Name* of the package to be imported.

Step 4 Click **Upload File** and 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 3.1.x, submit a ticket through the IBM Software Support site at www.ibm.com/support.

Related Documentation

To request access to TRIRIGA documentation for releases prior to IBM TRIRIGA 10.2 and IBM TRIRIGA Application Platform 3.2, submit a ticket through the IBM Software Support site at www.ibm.com/support.

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