IBM TRIRIGA
11.2

Application Administration
User Guide

Note

Before using this information and the product it supports, read the information in "Notices" on page 33.

This edition applies to version 11, release 2, of IBM® TRIRIGA® and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Chapter 1. Defining security settings

You must define security to allow users to properly access and use the application. The tasks include creating security groups, adding users to licenses and security groups, and defining password rules.

About this task

Note: For more information on security tools and settings, see Chapter 13 of Application Building for the IBM TRIRIGA Application Platform.

Creating security groups

You can define security access at the module, business object, tab, or section level for all objects in the system. You use the Security Manager application to define the security settings for users and groups. Security settings are based on organization, geography, business object, and reports.

About this task

Note: For more information on security tools and settings, see Chapter 13 of Application Building for the IBM TRIRIGA Application Platform.

Procedure

1. Go to **Tools** > **Administration** > **Security Manager**, and click **Add**.
2. Name the security group and specify any other capabilities for the security group.
3. On the **Members** tab, add users and groups to the security group.

   Alternatively, you can also add users to the members group in the People Manager application.
4. Define the level of access for the security group on the **Access** tab.

   If a user is in more than one group, the user is granted the most permissive level.

   For example, if one security group grants the user no access while another security group grants update access, the user has update access.

   a) Select an object.

   b) In the Data Access section, select the permission level to grant the object.

   c) In the Application Access section, select the permission level to grant the security group.
5. Click **Create**.
6. Click **Cancel** to close the group, or change any settings that you want and save the group.

Related tasks

Defining password rules
Password rules define how passwords behave and are used, such as their expiration requirement and maximum length. Password rules must have an active status, and are applied the next time users attempt to change their passwords. In the Force Password Reset application, you can manually force users to reset passwords.

Deleting security groups

You use the Security Manager application to define the security settings for users and groups. You can also delete security groups and users in the Security Manager application.

Procedure

1. Go to **Tools** > **Administration** > **Security Manager**.

2. Open the security group that needs to be deleted.
3. On the **Members** tab, remove users and groups from the security group. Alternatively, you can also remove users from the members group in the People Manager application.
4. Save and close the security group.
5. Select the check box next to security group that needs to be deleted.
6. Select **Remove action**.

User licenses

You must add users to licenses for purchased products. You add users to licenses in **Tools** > **Administration** > **License Manager**. The License Manager includes a **List View** and a **Matrix View**. This **Matrix View** is also known as the License Matrix.

You save licenses after the application is installed but before the application server is started. You can save the license in the `config` folder of the installation root directory, for example, `C:\Tririga\config\licenses`. Each license is a record and the file name corresponds with the licensed product.

In the License Manager, you select the license that you want to add users to, and then select the users to add to the license. A user can be assigned to more than one license. Each user requires a valid license to access each application.

You can customize the License Manager query for the **Add User** action. To run your customized query instead of the default query, in the Report Manager application you can name your query Security License List. You can see a list of all users in the People Manager application.

The licenses that are shown in the License Manager are synchronized with the licenses shown in user profiles. Any changes that are made in one location are automatically updated in the other location.

Note: For more information, see License management.

Related tasks

Configuring user profiles
You can access user profile records and configure preferences, such as default home page, user language, and time zone. You access user profiles in the **Portfolio** > **People** application. Users can define their own preferences by going to **Portfolio** > **People** > **My Profile**.

Defining password rules

Password rules define how passwords behave and are used, such as their expiration requirement and maximum length. Password rules must have an active status, and are applied the next time users attempt to change their passwords. In the Force Password Reset application, you can manually force users to reset passwords.

Before you begin

Before you deploy IBM TRIRIGA in your organization, plan how the user community should access TRIRIGA applications. IBM TRIRIGA requires a user name and password to gain access to applications. Refer to the *IBM TRIRIGA Application Platform 3 Single Sign-On Setup User Guide* if you want to configure single sign-on (SSO) to manage user access to TRIRIGA applications.

Procedure

1. Go to **Tools** > **System Setup** > **System** > **Password Setup**.
2. Specify the portal and default security group for the password rules and any other restrictions that you want to apply.
3. Save the password rules.

Related tasks

Creating security groups
You can define security access at the module, business object, tab, or section level for all objects in the system. You use the Security Manager application to define the security settings for users and groups. Security settings are based on organization, geography, business object, and reports.

Chapter 2. Configuring system information

You configure IBM TRIRIGA by defining settings in the application so that users are able to use it. You can configure system jobs, user information, contact roles, and offline content forms.

System jobs

You define system jobs in the job scheduler. System jobs are performed by the system on a specified schedule to maintain system performance. You can define system job items and system job schedules in **Tools** > **System Setup** > **Job Scheduling**.

System job items extract data from source logs and business objects. Then they calculate results, create log entries, and update business objects.

System Job Item
Defines the job type and data capture period. You create system job items and then add them to the system job scheduler.

System Job Scheduler
Specifies when system job items run. The data is calculated and business objects and logs are updated. A system job schedule must be in active status to run.

After you create system job items, you create a system job schedule. You specify the relevant details of the schedule, and then you add the job items to it.

After you specify system job items and activate the system job schedule, you can view the list of scheduled jobs. The Logs section shows the time and status for each time this system job schedule ran. The log data is summarized in the Metrics section. The average duration is the calculated by dividing the total duration by the number of runs.

Database tables

As an administrator, you can view, alter, drop, and create database table indexes in the **Database Table Manager** tool. This tool is not found in the IBM TRIRIGA Administrator Console. With the proper permissions, you can find the **Database Table Manager** by signing into IBM TRIRIGA and navigating to **Tools** > **System Setup** > **System** > **Database Table Manager**.

The **Database Table Manager** supports the following actions on IBM TRIRIGA database tables: viewing table indexes, altering table indexes, dropping table indexes, and creating new table indexes. These actions can be performed on any IBM TRIRIGA table. For environments that use a Microsoft SQL Server database, the actions of viewing, creating, and removing Sparse columns are also supported.

Full access to this tool is limited to admin users who have full access to the IBM TRIRIGA Administrator Console. Admin users who have read-only access to the Administrator Console can view the indexes and Sparse columns only. All other users don't have access.

Database table synchronization

When you open the **Database Table Manager** tool for the first time, such as after a new or upgrade installation, you must synchronize the database table indexes or Sparse columns.

The **Synchronize Table Manager** button performs a sync of all database table indexes and Sparse columns into record data that allows tables to be manageable.

When you select this button, a process is started that might take several minutes to run. This sync process is useful if new business objects are created and you want to manage the new T_TABLE that defines the new business objects. The sync process is also useful if at any time you suspect the **Database Table Manager** record data is not in sync with the database table indexes or Sparse columns.

Configuring user information

You must configure some information about users, such as contact roles, email addresses, and offline content.

Configuring user profiles

You can access user profile records and configure preferences, such as default home page, user language, and time zone. You access user profiles in the **Portfolio** > **People** application. Users can define their own preferences by going to **Portfolio** > **People** > **My Profile**.

About this task

You can add, modify, or delete a value in any of the lists in the List Manager application on the preferences page.

Procedure

1. Go to **Portfolio** > **People**, and select the employee type.
2. Select the employee record to open the portfolio preferences.
3. Select the **Portfolio** tab, update the record, and save it.
4. Activate the record.

Related concepts

User licenses
You must add users to licenses for purchased products. You add users to licenses in **Tools** > **Administration** > **License Manager**. The License Manager includes a **List View** and a **Matrix View**. This **Matrix View** is also known as the License Matrix.

Approvals
You use approvals to ensure that records that are created meet particular business requirements. You create approvals to automatically escalate records to defined approvers. You can also delegate approvals, check the resolved actions of an approval, and add manual approvers.

Configuring accessibility requirements

In a user's profile, you can configure accessibility settings if the user requires screen readers. You can enable efficient navigation and change how charts are displayed.

Procedure

1. Go to **Portfolio** > **People** > **Employees** and select the **Profile** tab.
2. In the Accessibility section, define the accessibility settings.

   Enable Accessibility Mode
   Changes how chart data is displayed. When accessibility mode is not selected, data is displayed in metric charts. When you enable accessibility mode, the data is presented in a table format that users with screen readers can access. Users can click the **Show Chart Report** link to change back to the metric chart format.

   Enable Skip Navigation
   Displays a **Skip Navigation** link at the top of a page or form. Skip navigation enables a user who relies on a screen reader to navigate a user interface to go directly to the first content area in the page without having to go through all links and menu items first.
3. Save the profile record.

Contact roles

Contact roles are used in the approval and the notification processes. A person can have more than one contact role. For example, the same person can have two contact roles: Legal and Contract Administrator. A contact role must be in active status to be used.

You use contact roles to define which roles are required when business objects are created. For example, if you create a lease record, you must specify a person and contact role as a contact for the lease record.

You can define contact roles in two ways: in **Tools** > **System Setup** > **General** > **Contact Roles**. Or, after you specify a contact person, you can specify the contact role on the Contact Details tab of the record that you are creating, such as the lease record.

Related concepts

Notifications
You create notifications to send an email to recipients each time the status of a record changes. For example, you can send a notification to management whenever a purchase order is issued. To send notifications, you first create notification content and then create the notification requirements.

Related tasks

Creating approval processes
To set up an approval process, you must define an approval template and then add the template to an approval requirement. You can modify the default approval templates and requirements and add new templates and requirements.

Configuring offline content

Offline content refers to forms that users complete offline and then upload into the system. It is a way of gathering a lot of information from various users without everybody needing to be logged into IBM TRIRIGA. To enable offline content, you must configure email addresses and forms.

Related concepts

Offline content
You use offline content to record data with a form, which you upload into the system when connectivity is available. The data is parsed and the relevant system field is updated. Offline content is sent by users who email offline content to a configured email address.

Related tasks

Configuring email addresses to upload content
You must configure all email addresses of users who are uploading offline content forms into the system.

Configuring forms as offline content
You must define the forms that are used as offline content. You configure the forms so that the data can be collected, parsed, and collated.

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Procedure

1. Go to **Tools** > **System Setup** > **Integration** > **System Configuration** and select **Add**.
2. Enter a name and email address for each user who can upload offline content forms.
3. Save the draft and then activate it.

Related concepts

Offline content

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Related tasks

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Before you begin

If you are using Microsoft Exchange 2007, you must configure the Microsoft Exchange server for client access by defining the IMAP4 authentication properties for basic authentication.

Procedure

1. Go to **Tools** > **System Setup** > **Integration** > **Offline Content** and select **Add**.
2. Specify the details for the offline content form, such has a name and description.
3. Upload the offline content form.
4. Activate the form.

Related concepts

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Related tasks

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Uploading financial data
You can capture financial summary data by downloading and uploading a spreadsheet that is configured as an offline content form.

Offline content

You use offline content to record data with a form, which you upload into the system when connectivity is available. The data is parsed and the relevant system field is updated. Offline content is sent by users who email offline content to a configured email address.

You can use offline content to maintain log data, which is used by the real estate environmental sustainability applications for calculations, reporting, and metric analysis. You can also create offline content to specify bid responses, real estate lease abstracts, real estate transactions, and task invoices from external sources. You open an offline content form, download and complete the form, and email it as an attachment to a configured email address.

Related tasks

Configuring offline content
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Configuring email addresses to upload content
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Chapter 3. Customizing TRIRIGA

You customize records by modifying default records. You customize records to tailor TRIRIGA to your business processes. You can customize lists, the record hierarchy, and create custom help records.

Creating help records

You can customize the system help for users by creating specialized help records.

About this task

Ensure that help text, topic titles, and keywords are all written in the language that is specified in the help record. A separate help record is required for each language that you support.

You can show only the text in the help record or the entire help record. If you show the entire help record, users see the related topics and related documents and can search help topics. In the `FULL_HELP_OBJECT` property of the `TRIRIGAWEB.properties` file, you can specify how the help record is displayed.

Procedure

1. Go to **Tools** > **System Setup** > **System** > **Help** and select **Add**.
2. Specify the module or application name that the help text applies to.

   You can also create a help record for a navigation item, such as the **Employees** page that is displayed when you navigate to **Portfolio** > **People** > **Employees**. To create a help record for a navigation item, specify `Manager` as the form name, and ensure that the module or business object in the **Module/Application Name** field is defined in the master detail query. You define master detail queries in the Report Manager application.
3. Define the language of the help text and any keywords.
4. Specify a topic, which provides a short description of the help text. The topic is what users see when they search for keywords.
5. Write the help text.
6. Specify any related documents or related help topics to link to or from the help topic.
7. Create and save the help record.

Related tasks

Creating user messages
User messages are displayed as errors, warnings, and information for users. You define user messages as a flexible means of communicating with users.

List customization

You can customize the lists that appear on the user interface. You can ensure data integrity by restricting users to selecting values from a list for entry into a field.

You can customize lists by creating a list or modifying an existing one in **Tools** > **Administration** > **Lists**. You can customize the following types of lists:

- Radio button lists
- Drop-down lists of static values
- Dynamic lists derived from values in the database
- Dependent lists, where a selection from one list filters into another list

Lists can be filtered by the module that they are associated with. For example, the Project module has the following lists: project type (called triProject Type), project business object type (called Project BO

Type), project transaction type (called Transaction Project Type), severity (called triSeverity), and work order type (called triWorkOrderType).

Adding classifications to the hierarchy

You can create child records for classification business objects by using the classification hierarchy. The first level in the hierarchy under the classifications hierarchy contains the name of the classification. You can add child classifications under this level to further classify it.

Procedure

1. Go to **Tools** > **Administration** > **Classifications**.
2. In the left navigation panel, select the classification type from the list, and then select **New**.
3. Specify details for the new classification record.
4. Create the classification record.

Related concepts

Classifications
Classifications define how records are related to each other within the classification hierarchy. You use the classification hierarchy to create and manage all classifications.

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Classifications define how records are related to each other within the classification hierarchy. You use the classification hierarchy to create and manage all classifications.

Classifications are a type of record and contain data fields that are used by queries, forms, and workflows.

Root classifications are defined when classification business objects are created. You can create parent and child classifications in the hierarchy. Root classifications for business objects must be created in the Form Builder. Child classifications of root classifications are created in the Classification application.

Related tasks

Adding classifications to the hierarchy
You can create child records for classification business objects by using the classification hierarchy. The first level in the hierarchy under the classifications hierarchy contains the name of the classification. You can add child classifications under this level to further classify it.

Chapter 4. Erasing a user's personal information

You can use the Data Erasure Utility to erase or replace personal information and sensitive personal information in the IBM TRIRIGA system. The tool provides both the ability to find and remove data from TRIRIGA People records and the ability to do a global search and replace throughout the TRIRIGA system.

Removing data from TRIRIGA People records

You can use the Data Erasure Utility to remove personal information (PI) and sensitive personal information (SPI) from an IBM TRIRIGA People record.

About this task

When you use the Data Erasure Utility to remove data from a TRIRIGA People record, the My Profile record for the user is deleted and the user is no longer able to log in to TRIRIGA. The user's TRIRIGA People record status is set to Retired and the personal information in the People record is removed or replaced. Removing a user's data from the People record does not remove his or her personal information from anywhere else in the TRIRIGA system; to find and remove any other occurrences of the user's personal information, use the global search and replace function.

Procedure

1. Go to **Tools** > **System Setup** > **System** > **Data Erasure Utility** to open the tool.
2. Click **Add** to create a new Data Erasure Utility record.
3. On the **General** tab, enter basic information for the record and click **Create Draft**.

   Tip: After you complete the removal of data for this record, you can delete this record. Therefore, you may use PI and SPI in the **ID**, **Name**, and **Description** fields.
4. On the **People** tab, use a name filter to locate and open the records that require removal of PI and SPI.
5. With each record open, click the **Print** action to show the information to be removed. Save the data that is displayed in PDF format to optionally confirm with the person who has requested that their information be removed. Close the records.
6. After you have confirmed that the information to be removed is correct, select the records in the tool and click **Remove People Data**.

   This action removes the data from the database and records.

   Warning: After the data is removed, the My Profile records associated to the People records are deleted and the users can no longer log in to TRIRIGA.

   Tip: People records that were in Active User, Active, or Revision In Progress status before the data is removed are in Retired status after the data is removed and the personal information is removed or replaced. The last name is replaced with the People record ID and the first name is replaced with DEU.
7. Click **Close** to exit the record.
8. Optionally, select the record and click **Delete**. All Data Erasure Utility records remain in the TRIRIGA system until you select the records from the list that appears when you open the tool and then click the **Delete** action. Remember that if you have used any personal information in the **Name** or **Description** fields, this information remains in the TRIRIGA system until the Data Erasure Utility record has also been deleted.

Performing a global search and replace of user personal information

You can use the Data Erasure Utility to do a global search and replace of users' personal information (PI) and sensitive personal information (SPI) throughout the IBM TRIRIGA system.

About this task

Because a user's PI and SPI is not confined to the TRIRIGA People record, in order to remove a user's PI and SPI from the TRIRIGA system, you likely need to do a global search, determine the appropriate search string, and then replace that string with text per your company's standards. For example, you may replace the personal information with a task number or other text to identify that the information has been removed, such as `DELETED`.

This process can be repeated multiple times to remove all of the user's PI and SPI. Each search is a separate Data Erasure Utility record; you cannot edit the search criteria in a Data Erasure Utility record and do a different search or search and replace.

To avoid unintended data loss, you may want to spend some time experimenting with the search options and viewing the results to be sure you are erasing only the correct data. Although there is a **Search & Replace** action that does both in one workflow, a best practice is to always use the **Search** action, check the search results, and then use the **Replace** action. If you click **Search & Replace**, you do not have an opportunity to check the results before the information is replaced and cannot be reversed.

Performing a global search of the TRIRIGA system

You can use the Data Utility Erasure tool to search the entire TRIRIGA system.

Procedure

1. Go to **Tools** > **System Setup** > **System** > **Data Erasure Utility** to open the tool.
2. Click **Add** to create a new Data Utility Record.
3. On the **General** tab, enter basic information for the record.

   Tip: After you complete the removal of data for this record, you can delete this record. Therefore, you may use PI/SPI in the ID, Name, and Description fields.
4. On the **Global** tab, set the criteria for a search.
5. Click **Search** to view the results.

   The Status field displays `Search In Progress` until the search completes. If you refresh the display, partial search results show as they are retrieved. The process is asynchronous, so you can close the record and return later to view the results.

Reviewing search results in TRIRIGA

After using the Data Erasure Utility to search the TRIRIGA system, you can review the search results to confirm that you will replace the desired text.

About this task

The results of the search appear on the **Global** tab of the Data Erasure Utility record when the status of the record is Active. To confirm that the correct information will be replaced, view the record that contains the search string.

Procedure

1. Click to open one of the results records.

The **General** tab of the results record shows the same information that was returned in the query results.

2. Click the **Associations** tab.

   The search result identifies the type of business object that contains your search string, such as My Profile.

3. Navigate to the correct object.
   For example, My Profile records are located in the triPeople module, so you would click the triPeople module icon in the association tree and then click the My Profile business object icon.

   The associated record displays in the Records pane.

4. Click to open the associated record.

   Tip: In some circumstances, the association cannot be displayed and a warning appears in the server.log file. Often, the search results are not affected even though you will not be able to use this method to confirm the results. View the Troubleshooting section for more information about the log results.

Performing a global replace throughout the TRIRIGA system

You can use the Data Utility Erasure tool to replace a string throughout the entire IBM TRIRIGA system.

Procedure

1. Go to **Tools** > **System Setup** > **System** > **Data Erasure Utility** to open the tool.
2. Click to open the Data Erasure Utility record that contains the search you want to replace.
3. On the **Global** tab, you can view the criteria for the search and for the replace, as well as the search results. When you are sure that the criteria are correct, click **Replace** to replace the search string anywhere it is found globally in the TRIRIGA system.

   Tip: When the number of characters in the Replace field is greater than the number of characters in the Search field, the replacement does not occur when doing so would exceed the number of characters defined in the Data Modeler for the target field.

   If this occurs, a warning that contains the text “replace was not able to update” appears in the server.log file.

   Warning: You cannot undo a Replace. Any text throughout the TRIRIGA system that matches the string that you include in the Search field will be replaced.

   To confirm that the information is removed, you can check the server.log file for error or warning messages.

   To locate the server.log file, open the **Administrator Console** and select **Error Logs** from the **Managed Objects** list. Then, in the Error Logs section, click **server-<date>.log**. The list of available server.logs displays. Select the hyperlinked file name. Depending on the browser, the file downloads or you have a choice to view or download.

   Another way to confirm that the information is removed is to create a new Data Erasure Utility record and search again. If you choose to do this, you may want to first roll the server.log file to make it easier to distinguish the log information for the first search versus the second.

   To roll the server.log, use the **Roll** action to the right of the server-<date>.log name in the list.

Chapter 5. Scheduling work

You schedule work by creating calendars and calendar sets, which show the available time for working hours or reservations.

Related concepts

Calendars
You use calendars to define working hours for people, organizations, locations, assets, employees, and spaces. Calendars can be associated with any business object, so that you can coordinate events, activities, repairs, maintenance, temporary usage, and downtime.

Calendar sets
A calendar set is a group of calendars. You create a calendar set by defining a query that groups calendars according to the query result.

Related tasks

Creating calendars
You create calendars so that available time, either for working hours or reservations, can be identified and used. Calendars are used to identify when employees are available to do work. Reservation calendars are used to determine the reservable time for spaces.

Creating calendar sets
You create calendar sets by defining queries that group calendars by specified criteria in a query. You can define queries for available calendars, which are defined by working hours, or for busy calendars, which are defined by meeting events.

External mail server configuration

You can associate an external mail server with a TRIRIGA calendar so that users can make and manage reservations from a calendar that is not in TRIRIGA.

In the External Mail Server Details section on the **Calendar Details** tab of a space record, you can define the external mail server login for a user. Then, in **Tools** > **System Setup** > **General** > **External Mail Server**, you can specify the details of the external mail server.

For example, you can use a Microsoft Exchange server to reserve a space in TRIRIGA, which coordinates the calendar events for the space with a Microsoft Outlook calendar.

When a Microsoft Outlook user makes a reservation for a space, then the reservation is displayed and managed in TRIRIGA. If a Microsoft Exchange server is set up for a user's Microsoft Outlook calendar and in TRIRIGA, then Microsoft Outlook users do not need to have a TRIRIGA account. The Microsoft Outlook calendar user does not need to have a TRIRIGA account to see a Microsoft Outlook calendar reservation that is created by a TRIRIGA user. The Microsoft Exchange server manages the reservations for both applications.

Creating calendars

You create calendars so that available time, either for working hours or reservations, can be identified and used. Calendars are used to identify when employees are available to do work. Reservation calendars are used to determine the reservable time for spaces.

Procedure

1. Go to **Tools** > **System Setup** > **General** > **Calendars**, and select **Add**, and specify whether you are creating a calendar or reservation calendar.
2. Name the calendar and specify the scheduling assumptions and the non-working events.
3. Specify working hours by selecting **Quick Add** and then selecting the record icon to define the working hours in a week.

4. Specify non-working events by selecting **Quick Add** and then selecting the record icon to define when employees are not working.
5. Create the draft and then activate the calendar.

Related concepts

Calendars
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Related tasks

Scheduling work
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Calendars

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Calendars are initially created in the Data Modeler application when a business object is created. You can specify that the business object has a calendar, which gives you the ability to schedule events for the business object. Calendars are also used in the Gantt functionality and the availability functions.

If you have a scheduling exception for a person, you can set up a specific calendar to associate with that person. For example, you can create a calendar for a specific person who has a unique schedule and does not work during typical business hours.

Note: If you create a 24-hour calendar with a **Start Time** of "0:00 AM" (or 12:00 AM) and an **End Time** of "24:00 AM", then the working hours are displayed with no decimal values. But if you want to create a 23.99-hour calendar or calendar with decimal values, then use a **Start Time** of "0:00 AM" (or 12:00 AM) and an **End Time** of "11:59 PM".

Note: To create a 24-hour Availability Calendar, the **Start Time** must say "0:00 AM", the **End Time** must say "24:00 AM", and the **# of Hours** must say "24".

Events

Scheduled events are displayed on the calendar as active links. Any event that is scheduled for the business object record is displayed on the calendar day that corresponds with the start date of the event. You can select the link to open the event record.

Calendar events are displayed with a color. For example, declined reservations can appear in a calendar in red. You can change the color for declined events in **Tools** > **System Setup** > **General** > **Application Settings**, selecting **Reservation Settings**, and changing the declined booking color. You can define the default color for all other event colors in **Tools** > **Administration** > **Style Manager**, selecting **Form Styles**, and selecting **Event**.

Attention: Non-admin users may not have the ability to see the action buttons in the Calendars page of **Tools** > **System Setup**. In order to enable the action button, a Application Administrator must allow access to any security group the non-admin user is in. To do this, go to **Tools** > **Administration** > **Security Manager** and click on a security group to which the non-admin user is a member. Click on the access tab. Expand the triSetup BO and click on triCalendar. In the data access section, choose either **Read, Update and Create** or **Full Access**. Save and close. A server restart is required in order to take effect. Note that only admin users are allowed to edit the Default Calendar no matter the security settings.

Related tasks

Scheduling work

You schedule work by creating calendars and calendar sets, which show the available time for working hours or reservations.

Creating calendars
You create calendars so that available time, either for working hours or reservations, can be identified and used. Calendars are used to identify when employees are available to do work. Reservation calendars are used to determine the reservable time for spaces.

Creating calendar sets

You create calendar sets by defining queries that group calendars by specified criteria in a query. You can define queries for available calendars, which are defined by working hours, or for busy calendars, which are defined by meeting events.

Procedure

1. Go to **Tools** > **System Setup** > **General** > **Calendar Sets** and select **Add**.
2. Specify the name and description of the calendar set.
3. Specify a query for an available or busy calendar. Select the module, business object, and report to include in the query.
4. Add tooltip columns to the query. Specify the column label and select the data source and field.
5. Save the calendar set.

Related concepts

Calendar sets
A calendar set is a group of calendars. You create a calendar set by defining a query that groups calendars according to the query result.

Related tasks

Scheduling work
You schedule work by creating calendars and calendar sets, which show the available time for working hours or reservations.

Calendar sets

A calendar set is a group of calendars. You create a calendar set by defining a query that groups calendars according to the query result.

Each calendar includes an availability type that determines how the events in the calendar are treated. If the status is set to available, then the availability type defines the working-hour events. If the status is set to busy, then the availability type defines the meeting events. The availability of a resource can be defined in a number of different ways, such as working hours, holidays, off-line maintenance events, and so on.

For example, to block out non-working hours, the system derives the non-working hours from a working-hours calendar that has an availability type of “Available”. Next, when the system creates a calendar set containing an “Available” calendar, the system is inverting those periods so that non-working hours are displayed or blocked out on the calendar. For resource-availability checks, an “Available” calendar is treated differently from a “Busy” calendar with meeting events.

By grouping “Available” and “Busy” calendars into calendar sets, a unique set of working-hour and meeting events can be defined for a particular resource.

Related tasks

Scheduling work
You schedule work by creating calendars and calendar sets, which show the available time for working hours or reservations.

Creating calendar sets

You create calendar sets by defining queries that group calendars by specified criteria in a query. You can define queries for available calendars, which are defined by working hours, or for busy calendars, which are defined by meeting events.

Chapter 6. Reporting

You can create reports with chart templates, report financial or sustainability data, and define thresholds for reporting metrics. You can find the report types in My Reports.

Creating chart templates

Chart templates define a layout representation of a chart type. When a user selects a chart, the chart template is used to represent the chart.

Procedure

1. Go to **Tools** > **System Setup** > **General** > **Chart Templates** and select **Add**.
2. Specify a name and description for the chart template.
3. Specify a chart type.
4. Upload a chart template file.
5. Create the chart template.

Defining fiscal periods

You can define fiscal years, fiscal quarters, fiscal months, or custom fiscal periods. Fiscal periods are a type of classification record, which means they exist in a hierarchy and must be defined in relationship to other records. For example, before you create fiscal quarters, you must create the fiscal year.

Procedure

1. Go to **Tools** > **Administration** > **Classifications**.
2. In the hierarchy panel, select **Fiscal periods**.
   - To define a fiscal year, select **New** > **Fiscal year**.
   - To define a fiscal quarter, select ***fiscal year*** > **New** > **Fiscal quarter**.
   - To define a fiscal month, select ***fiscal year*** > ***fiscal quarter*** > **New** > **Fiscal month**.
3. Specify the name and required information for the fiscal period.
   For example, you can name a fiscal year 2014, a fiscal quarter Q1, or a fiscal month 01.
4. Specify the sequence.

   The sequence number can be any decimal number value that sorts the list of years, quarters, and months.

   For example, you can enter 2036.1 for fiscal quarter 1 in fiscal year 2036.
5. Create the fiscal period.

Related tasks

Uploading financial data
You can capture financial summary data by downloading and uploading a spreadsheet that is configured as an offline content form.

Changing CTQ list names

You can change Critical to Quality (CTQ) list names. You can change the name of a list to a label.

About this task

CTQ lists are used in real estate management projects. In a transaction plan, you can define a CTQ survey that requests specific data responses. When the questions in the survey are defined, one of the data types that a person can select is a list. Because the list names are visible, you might want to change the name of the list so that it is easier to understand.

Procedure

1. Go to **Tools** > **Application Setup** > **Real Estate** > **CTQ Lists** and select **Add**.
2. Specify the complete list name. This name must match the list name in the List Manager application.
3. Specify the list label that users see instead of the list name.
4. Create the CTQ list.

Defining emission factors

You can calculate real estate environmental sustainability by evaluating energy emissions, waste emissions, and travel emissions. You define information that is specific to the type of emission to calculate the impact of the emission on the environment. For example, you can define meter types and waste types.

Procedure

1. Go to **Tools** > **Application Setup** > **Sustainability** and select the type of emission factor to define. Select **Add**.
2. Specify the details about the emission factor.
3. When you are done, create the emission factor.

Processing federal XML reports

You use the Location XML Report form to generate a Federal XML report. You use the federal XML reporting to automate the process of retrieving federal data and producing the XML records that are needed for reporting.

About this task

The Federal Real Property Profile (FRPP) is an online system that houses the federal real property inventory data. Agencies are required to report federal data annually by submitting an XML file as stipulated in the most current “Guidance for Real Property Inventory Reporting” document from the GSA Office of Government-wide Policy.

Procedure

1. Go to **Tools** > **System Setup** > **Integration** > **Transformation Content** and select **Add** to define the transformation content.
2. Specify which locations are included in the report.
3. Go to **Tools** > **Data Utilities** > **Location XML Report** and select **Add**.
4. Specify an ID and name and any other required information.
5. Create and then process the report utility.
6. Select the report utility record to access the report results.

Uploading financial data

You can capture financial summary data by downloading and uploading a spreadsheet that is configured as an offline content form.

Before you begin

Define the fiscal periods and cost code structure for your organization. Configure offline content forms.

Procedure

1. Go to **Tools** > **Document Manager** and open the `TRIRIGA\Cost Item` folder.
2. Download the financial summary offline form.
3. Complete the form and save it to your computer.
4. Go to **Tools** > **Data Utilities** > **Financial Summary DTO** and select **Add**.
5. Specify a name for the financial summary. Specify the content by uploading the financial summary offline form.
6. Create the financial summary DTO.

What to do next

Run your company's ETL Job Item to move the data from the Financial Summary record to the database.

When you are ready to process this Financial Summary DTO, find it in the Financial Summary DTO business object in the Job Manager and edit it and then process it.

The import is finished when the total found count is displayed at the top of the Line Items section. Compare this number with the number of records in your spreadsheet.

When the import is finished, the data is ready to be processed by the appropriate Load Financial Summary From Offline Staging Kettle Transformation ETL Job Item. The data is not represented in metrics until the ETL Job Item is complete.

Related concepts

Offline content
You use offline content to record data with a form, which you upload into the system when connectivity is available. The data is parsed and the relevant system field is updated. Offline content is sent by users who email offline content to a configured email address.

Related tasks

Defining fiscal periods
You can define fiscal years, fiscal quarters, fiscal months, or custom fiscal periods. Fiscal periods are a type of classification record, which means they exist in a hierarchy and must be defined in relationship to other records. For example, before you create fiscal quarters, you must create the fiscal year.

Configuring forms as offline content
You must define the forms that are used as offline content. You configure the forms so that the data can be collected, parsed, and collated.

Defining energy star ratings

You must define the file settings for the energy star rating so that an opportunity analysis process can determine the new energy star rating. The energy star rating is calculated from the current energy star rating and the energy consumption reduction.

About this task

You can obtain the energy star information from the US Environmental Protection Agency (EPA) and import the information by using the Data Integrator application. To see the imported data results, go to **Tools** > **Application Setup** > **Sustainability** > **ENERGY STAR Rating**.

Procedure

1. Go to **Tools** > **Administration** > **Data Integrator**.
2. Define the file settings.

File settings	Selection
Module	triEnvironmental
Business Object	triEnvEnergyStarRating
Form	triEnvEnergyStarRating
Import Type	Add
Action	triCreate
File type	Tab Delimited

3. Define the file character set.
4. Browse for the energy star rating file and upload it.

   When the import is complete, a notification appears in the Notifications section of your portal.

Thresholds

Thresholds identify how to score metric values. Metrics are used in performance management, real estate environmental sustainability, and strategic facility planning.

You can use values, ranges, and colors to define thresholds. You can set up a threshold to support three ranges, for example, low, medium, and high, or two ranges, such as low and high. To define thresholds, go to **Tools** > **System Setup** > **General** > **Thresholds**.

For example, you want to define thresholds for budgetary costs per person. You define three thresholds: below budget, on target, and over budget. The below budget threshold is identified in yellow and has a cost range of $0-$1200 as its threshold. The on target threshold is defined by the cost range of $1201-$1800 and is identified in green. The over budget cost range is $1801-$2400 and is identified in red.

Chapter 7. Communicating with users

You can send user messages, approvals, notifications, and news to users. Approvals and notifications create alerts that are automatically sent to people after being triggered, such as a record status changing. User messages alert users with error, warning, or information messages. News can be broadcast to a group of people.

Creating user messages

User messages are displayed as errors, warnings, and information for users. You define user messages as a flexible means of communicating with users.

About this task

Create a user message for each language that you support. User messages are displayed in the language of the user, as defined in the **My Profile** record.

Procedure

1. Go to **Tools** > **System Setup** > **General** > **User Messages** and select **Add**.
2. Specify an ID, name, and language for the user message.
3. Specify the text for the user message.

   You can add up to nine parameters to your message with curly braces and numbers. At run time, the parameters are replaced based on data from the record. The parameters must correspond to data fields that are defined in the workflow that sends the message.
4. Activate the user message.

Related concepts

User messages
You create user messages as an alternative to hardcoding messages. User messages can contain up to nine parameters, which allows the message content to vary.

Related tasks

Creating help records
You can customize the system help for users by creating specialized help records.

User messages

You create user messages as an alternative to hardcoding messages. User messages can contain up to nine parameters, which allows the message content to vary.

The **ID** field is used to indicate which user message to use. User messages employ text substitution to ensure that the message is specific to the triggering action.

If you want to display a message that contains a single quotation mark (for example, `I'm {1}`), you must add another single quotation mark for it to display properly (for example, `I''m {1}`). If you need more than one single quotation mark, add twice the number that you want displayed (for example, to display `''`, you enter `''''`).

Related tasks

Creating user messages

User messages are displayed as errors, warnings, and information for users. You define user messages as a flexible means of communicating with users.

Creating approval processes

To set up an approval process, you must define an approval template and then add the template to an approval requirement. You can modify the default approval templates and requirements and add new templates and requirements.

Related concepts

Contact roles
Contact roles are used in the approval and the notification processes. A person can have more than one contact role. For example, the same person can have two contact roles: Legal and Contract Administrator. A contact role must be in active status to be used.

Approvals
You use approvals to ensure that records that are created meet particular business requirements. You create approvals to automatically escalate records to defined approvers. You can also delegate approvals, check the resolved actions of an approval, and add manual approvers.

Related tasks

Creating approval templates
You must create approval templates before you can define approval requirements. Approval templates can be applied to a type of record, a business object, or multiple business objects.

Creating approval requirements
You use approval requirements to connect an approval template to a business object. Approval requirements must have an active status to be used. If a business object or form has more than one requirement, the requirements are merged.

Creating approval templates

You must create approval templates before you can define approval requirements. Approval templates can be applied to a type of record, a business object, or multiple business objects.

Before you begin

Define contact roles. If you define an approval template that requires a contact role, but no person is defined in that contact role, then the approval is bypassed.

Procedure

1. Go to **Tools** > **Approvals & Notifications** > **Approval Templates**, and select **Add**.
2. Specify the details for the approval template, such as the escalation rule, who the approval is escalated to, and the type of review that occurs if an approval is rejected.
3. Define the approval rules for the approval template. You use approval rules to define the rules for role-based approval routing.
   a) Specify the required information.
   b) Select **Create Template**.
4. Optional: Add specific roles or people who approvals are sent to, and the type of review that is required. Save the record.
5. Click **Create** and then **Save**.

Related tasks

Creating approval processes
To set up an approval process, you must define an approval template and then add the template to an approval requirement. You can modify the default approval templates and requirements and add new templates and requirements.

Creating approval requirements

You use approval requirements to connect an approval template to a business object. Approval requirements must have an active status to be used. If a business object or form has more than one requirement, the requirements are merged.

Creating approval requirements

You use approval requirements to connect an approval template to a business object. Approval requirements must have an active status to be used. If a business object or form has more than one requirement, the requirements are merged.

Before you begin

Create an approval template.

Procedure

1. Go to **Tools** > **Approvals & Notifications** > **Approval Requirements**, and select **Add**.
2. Specify the details for the approval requirement, such as the linked business object and the approval template to be used.

   If you select only a linked business object and do not specify a form, then all records from the business object use this approval requirement.
3. Create the draft and then activate the approval requirement.

Related tasks

Creating approval processes
To set up an approval process, you must define an approval template and then add the template to an approval requirement. You can modify the default approval templates and requirements and add new templates and requirements.

Creating approval templates
You must create approval templates before you can define approval requirements. Approval templates can be applied to a type of record, a business object, or multiple business objects.

Approvals

You use approvals to ensure that records that are created meet particular business requirements. You create approvals to automatically escalate records to defined approvers. You can also delegate approvals, check the resolved actions of an approval, and add manual approvers.

Each time an event occurs that triggers an approval, an action item appears in each reviewer's home page. Optional and required reviewers can approve, return, request clarification, reassign, or escalate.

Users can delegate approvals from their profile page if they are unavailable. They define delegations under **Portfolio** > **People** > **My Profile** > **My Notifications** > **Approval Preferences** > **Delegate To**.

Each time an approval is required, the approval requirements are checked and any conflicts are resolved by using the most restrictive approval requirements. You can see which requirements are used in an approval by opening the approval in the business object. On the **Notifications** tab, you can see the approval reviews, responses, and status changes. You also can add manual approvers.

Tip: When there are multiple users involved in approval process, the approval record is in Assigned state. The user wanting to approve the record must first accept the record from the action items portal. For non-admin users, the approval actions will not be visible until after they have accepted the record.

Related tasks

Creating approval processes
To set up an approval process, you must define an approval template and then add the template to an approval requirement. You can modify the default approval templates and requirements and add new templates and requirements.

Configuring user profiles

You can access user profile records and configure preferences, such as default home page, user language, and time zone. You access user profiles in the **Portfolio** > **People** application. Users can define their own preferences by going to **Portfolio** > **People** > **My Profile**.

Notifications

You create notifications to send an email to recipients each time the status of a record changes. For example, you can send a notification to management whenever a purchase order is issued. To send notifications, you first create notification content and then create the notification requirements.

You can create notifications for most business objects. If a business object is configured to allow status change notifications, then its record has a **Notifications** tab with a Status Change Notification section. You first create the notification content, which specifies which message and attachments are sent out as the notification. Then, you create notification requirements to specify recipients of the notification.

For example, you need a process for purchase orders. You create notification content that states `A purchase order for $340 has been created for a new printer and requires approval`. You attach a standard terms and conditions form with the notification content that must accompany all purchase orders. Then, you create a notification requirement for purchase orders. You define the requirement so that any purchase order with a status change from Draft to Needs Approval must be sent to the manager of the person who created the purchase order.

Users can opt out of receiving notifications in their profile record. Users can also subscribe to notifications from the record that they want to receive notifications about.

Related concepts

Contact roles
Contact roles are used in the approval and the notification processes. A person can have more than one contact role. For example, the same person can have two contact roles: Legal and Contract Administrator. A contact role must be in active status to be used.

Related tasks

Creating notifications
You can create notifications to send an email to users each time the status of a record changes. For example, you can send a notification to a manager whenever a purchase order is issued.

Creating notification requirements
You create notification requirements to specify the business object and recipients of notifications. A linked business object defines the record that causes notification content to be sent to specified recipients.

Adding recipients to notifications
You can add recipients to notifications that are sent when the status of a record changes. After the recipients for notifications are defined in the notification requirements, you can add an ad hoc person or role to receive a notification for a specific record.

Creating notifications

You can create notifications to send an email to users each time the status of a record changes. For example, you can send a notification to a manager whenever a purchase order is issued.

Procedure

1. Go to **Tools** > **Approvals & Notifications** > **Notification Content**, and select **Add**.
2. Specify an ID and name.

   The naming standard that is used is the module, business object, or form name with a sequential identifier.
3. Specify a subject and the content of the notification.
4. Optional: Embed a report in the notification.

5. Optional: To display the notification with a different form, specify the form details as an email form override.

   If the attached form for the notification is too large or contains sections that are not relevant to the notification, you can use an override form.
6. Optional: If you want to send the same attachments every time the notification is sent, in the Notification Attachments section, specify a list of attachments.

   Attached files must be in HTML format.

   For example, you can attach a terms and conditions document to all purchase order notifications.
7. Specify any reports that are sent with the notification.
8. Activate the notification.

Related concepts

Notifications
You create notifications to send an email to recipients each time the status of a record changes. For example, you can send a notification to management whenever a purchase order is issued. To send notifications, you first create notification content and then create the notification requirements.

Related tasks

Creating notification requirements
You create notification requirements to specify the business object and recipients of notifications. A linked business object defines the record that causes notification content to be sent to specified recipients.

Adding recipients to notifications
You can add recipients to notifications that are sent when the status of a record changes. After the recipients for notifications are defined in the notification requirements, you can add an ad hoc person or role to receive a notification for a specific record.

Creating notification requirements

You create notification requirements to specify the business object and recipients of notifications. A linked business object defines the record that causes notification content to be sent to specified recipients.

Before you begin

Create notification content.

About this task

Even if you do not define recipients for status change notifications, the notification requirements define the available statuses for subscription or ad hoc status change notifications.

Procedure

1. Go to **Tools** > **Approvals & Notifications** > **Notification Requirements**, and select **Add**.
2. In the Invoking Record section, specify the business object, form, and status of the business object that trigger the notification.
   - If you select only a linked business object, all records that are created from that business object use the notification requirement.
   - If you select both a linked business object and a linked form, only the records that are created from the business object and the form use the notification requirement.
3. In the Options section, specify the notification content.

   The notifications have six dynamic text fields that can be used in the message. You can use the standard notification content as your message or create your own.
4. Define a specific person or role to receive notification content.
5. Define a specific security group to receive notification content.

6. Activate the notification requirement.

Related concepts

Notifications
You create notifications to send an email to recipients each time the status of a record changes. For example, you can send a notification to management whenever a purchase order is issued. To send notifications, you first create notification content and then create the notification requirements.

Related tasks

Creating notifications
You can create notifications to send an email to users each time the status of a record changes. For example, you can send a notification to a manager whenever a purchase order is issued.

Adding recipients to notifications
You can add recipients to notifications that are sent when the status of a record changes. After the recipients for notifications are defined in the notification requirements, you can add an ad hoc person or role to receive a notification for a specific record.

Adding recipients to notifications

You can add recipients to notifications that are sent when the status of a record changes. After the recipients for notifications are defined in the notification requirements, you can add an ad hoc person or role to receive a notification for a specific record.

About this task

Only the statuses that have defined notification requirements for the business object appear in the list of available statuses. To add a notification requirement for a status that is not in the list, create a notification requirement for the business object.

Procedure

1. Open the record for the business object that you want to create a notification for when the record status changes.
2. On the **Notifications** tab, in the Status Change Notifications section, add a status.
3. Select all of the statuses for which you want a notification to be sent for the record.
4. Select a status in the Status Change Notifications section and specify notification recipients.
5. Save the business object record.

Related concepts

Notifications
You create notifications to send an email to recipients each time the status of a record changes. For example, you can send a notification to management whenever a purchase order is issued. To send notifications, you first create notification content and then create the notification requirements.

Related tasks

Creating notifications
You can create notifications to send an email to users each time the status of a record changes. For example, you can send a notification to a manager whenever a purchase order is issued.

Creating notification requirements

You create notification requirements to specify the business object and recipients of notifications. A linked business object defines the record that causes notification content to be sent to specified recipients.

News

You use news items to broadcast information to the entire company. A news item comprises a headline and text, and can include rich text, an image, and a source URL.

The news item is displayed on every user’s home portal in the Company News portal section and is displayed until the expiration date.

You create news items from **Tools** > **System Setup** > **General** > **News**.

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