Facilities Management
IBM TRIRIGA

Training Guide

Version 4.0

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About This Training Guide

Training Guide Description

This training guide covers the use of IBM TRIRIGA, a web-based Facilities Management application that supports project management.

Training Guide Objectives

In this training guide, you will:

- Review the planning and assessment processes that are available

1. Project and Planning

Learning Objectives

In this lesson, you will:

- Identify the development process of a condition assessment plan
- Perform a condition assessment
- Identify the processes involved in capital project planning
- Manage a capital project
- Review the reports available for viewing space utilization data
- Perform a space allocation
- Identify the concepts involved in move requests and move projects

Lesson Overview

Many of the tasks performed in TRIRIGA revolve around the planning and analyzing of projects. This lesson focuses on the tasks involved in the planning and management of equipment condition assessments and capital projects.

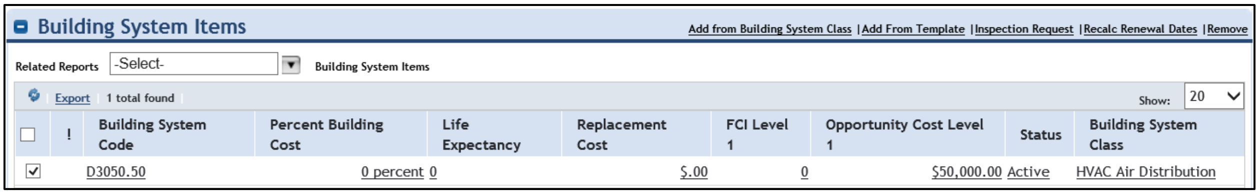
1.1. Develop Condition Assessment Plan

A condition assessment plan can be put in place to ensure that critical building systems are regularly inspected and the current condition of systems is recorded. This process analyzes the existing and projected future conditions of facilities, and the building systems and assets within those facilities. An inspection may reveal opportunities for improvement to current systems and those opportunities can be recorded along with the estimated costs associated with addressing them.

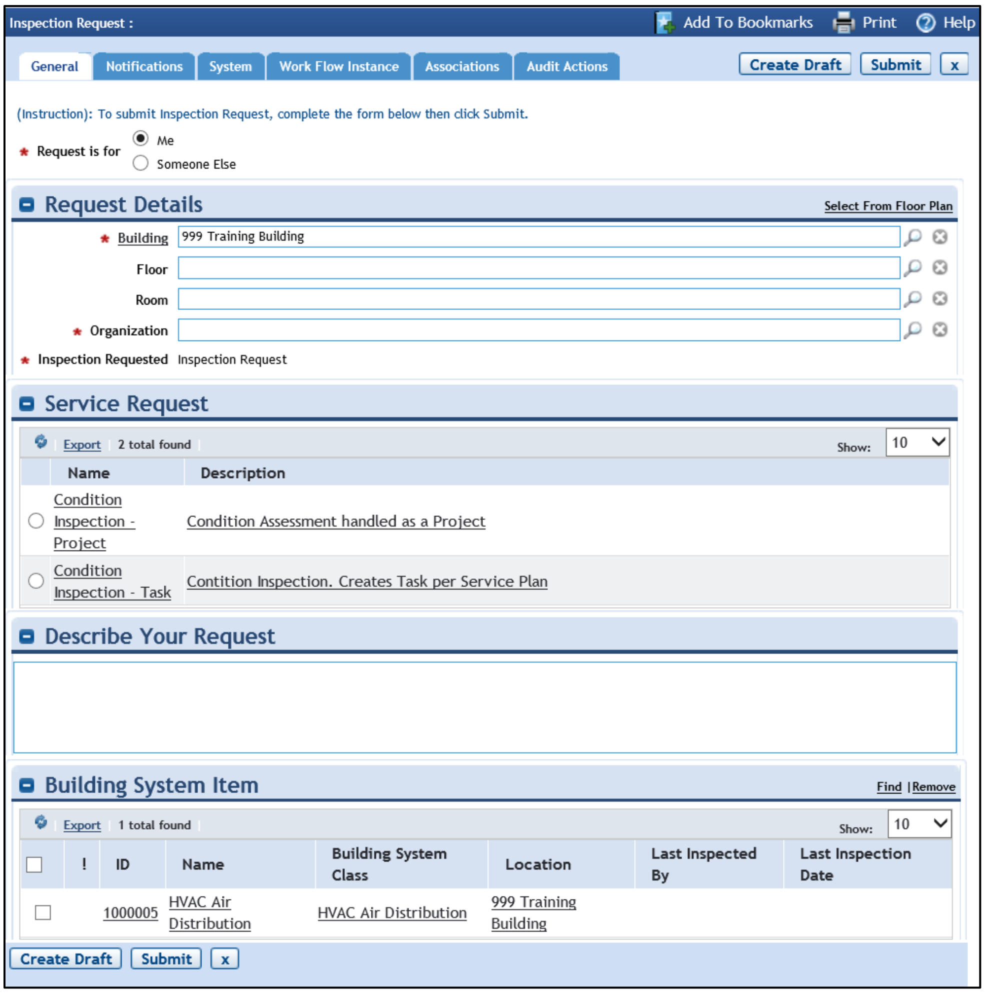
When developing a condition assessment plan, certain systems may take priority over others. For example, an air-handling unit for a critical data center location may be considered a higher priority system than a similar unit installed at a warehouse location.

Issue Inspection Request

Inspection requests are created by navigating to the Building record and then to the Assessment tab. To initiate an Inspection Request, select the Building System Items that should be included on the Inspection Request and then select the Inspection Request action.



The Inspection Request form will open in a new window, with certain fields pre-populated. Review the request form and select the type of service required.



When the request is ready, select the Submit action. The result of submitting the request is the creation of one or more Facility Assessment Work Tasks. The user can view these tasks by returning to the Building record and navigating to the Inspection History sub tab of the Assessment tab.

The tasks that are created by the Inspection Request form are viewable on the Tasks > Manage Tasks > Facility Assessment Work Tasks menu. When the task information is complete, activate the task by selecting the Activate action which changes the task to the Issued status.

Once the work associated with the task is complete the task status is changed to Complete and the system updates the Building System Items with the changes recorded by the inspector. The status of any Deficiencies (Opportunities) is changed from Draft to Active and notifications are sent out regarding the changes.

ACTIVITY 1.1

Issue Inspection Request

Scenario

You need to issue an inspection request for a system located in your building. You will locate the Building record and complete the Inspection Request form.

Setup

- ✓ User is logged in to the TRIRIGA Home Page.

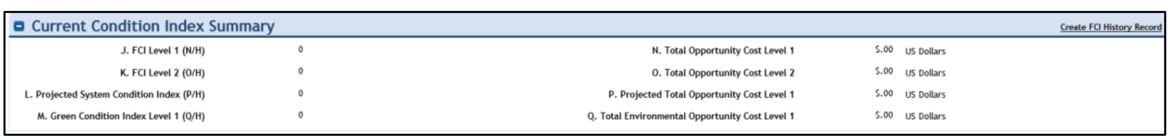
Steps

A. Navigate to the Portfolio > Building record.

1. Click the **Portfolio** tab.
2. Click the **Locations** dropdown and select **Buildings**.
3. Click the **ID** of the Training Building assigned by the instructor. Remember to only select the **##** for your student number.
4. Click the **Revise** action.

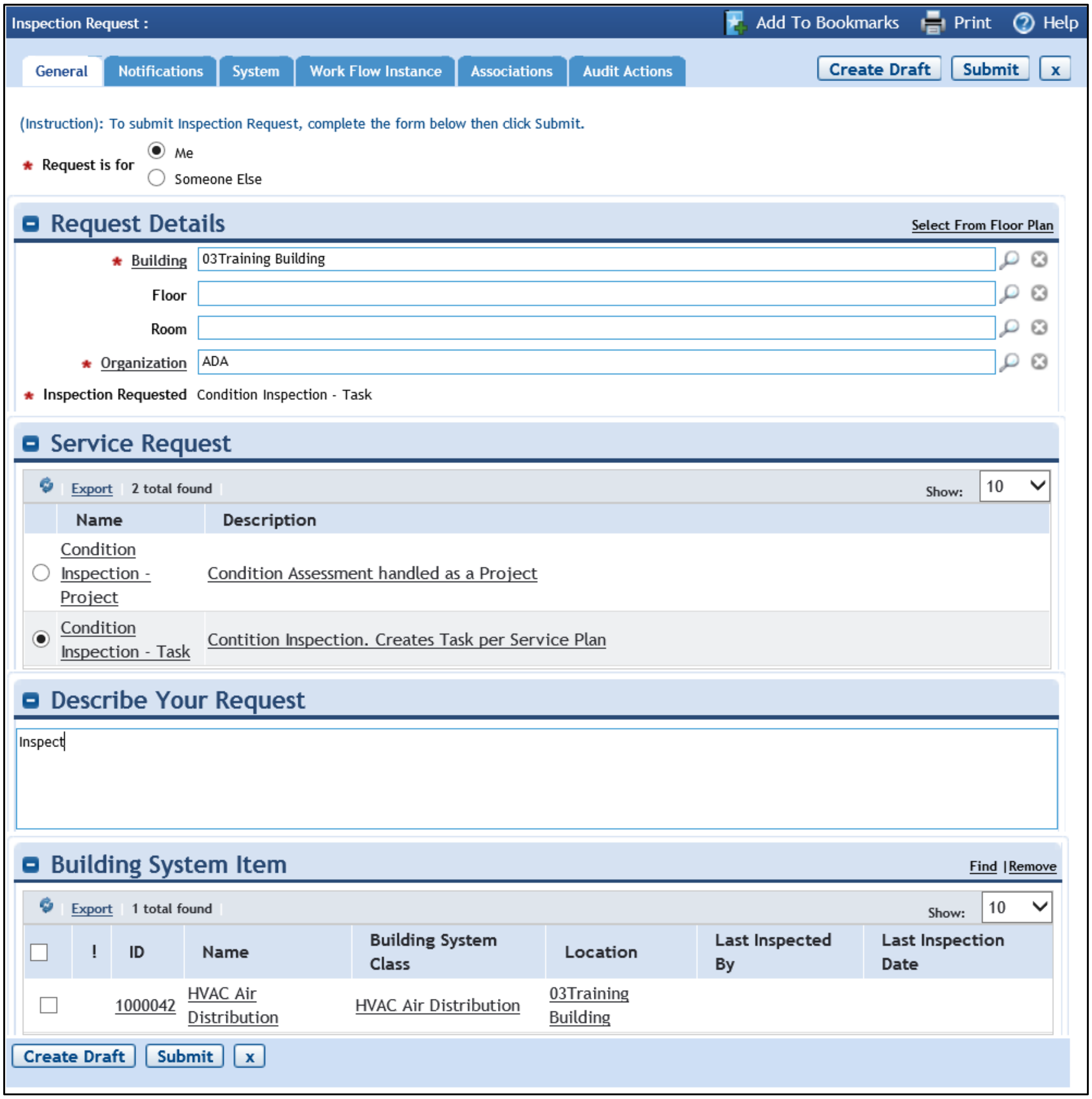
B. Create an Inspection Request.

1. Click the **Assessment** tab.
2. In the **Current Condition Index** section, click **Create FCI History Record.**
3. Review FCI History record and click **Create History Record**.



4. In the **Building System Items** section, click the **Add** from Building System Class action.
5. Check the box for **D3050.50 HVAC Air Distribution**. (May have to choose another option if not available)
6. Click the **OK** action.
7. In the **Building System Items** section, check the box next to the Building System Item and click the **Inspection Request** action.
8. In the **Organization** field, click the **magnifying glass** icon.
9. Select the radio button for **ADA**.

10. Click the **OK** action.
11. In the **Service Request** section, select the radio button **for Condition Inspection – Task**.
12. In the **Describe Your Request** section, in the text box, enter ***## Inspect the HVAC***, *where ## is your student number*. Click **Create Draft.**
13. Click the **Submit** action.



14. In the Building Record, click the **Activate** action.

C. Review the Facility Assessment Work Task list.

1. Click the **Tasks** tab.
2. Click the dropdown for the **Manage Tasks** option.
3. Click **Facility Assessment Work Task**.
4. Observe the tasks listed on the page.

1.2. Perform Condition Assessment

Once a Facility Assessment Work Task has been created and assigned to an inspector, the condition assessment task can be performed and the results of the task can be recorded in the system.

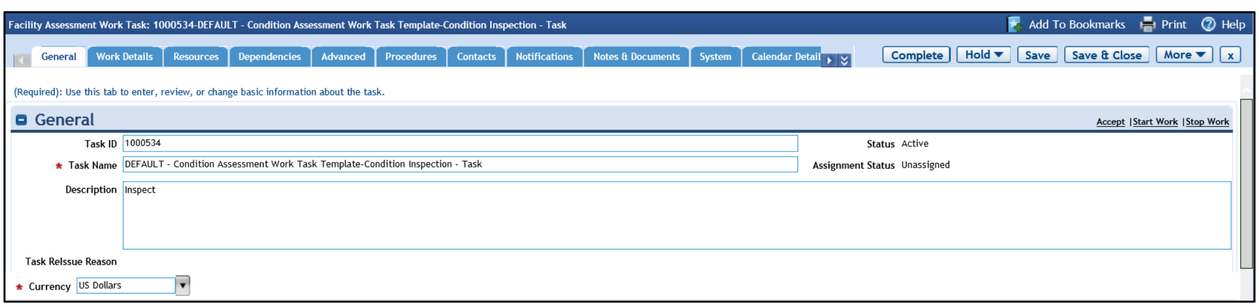
Perform Inspection Tasks

The Facility Assessment Work Task is assigned to a user to perform the task. The user would navigate to the task and review the details of the task before beginning the inspection. After the inspection is complete, the task is updated with the results of the inspection.

General

On the General tab, the user completes the fields in the following sections:

- General
- Planned
- Actual
- Recorded By



Resources

On the Resources tab, the user completes the fields in the following sections:

- Work Time
- Material List

- Material Orders

Procedures

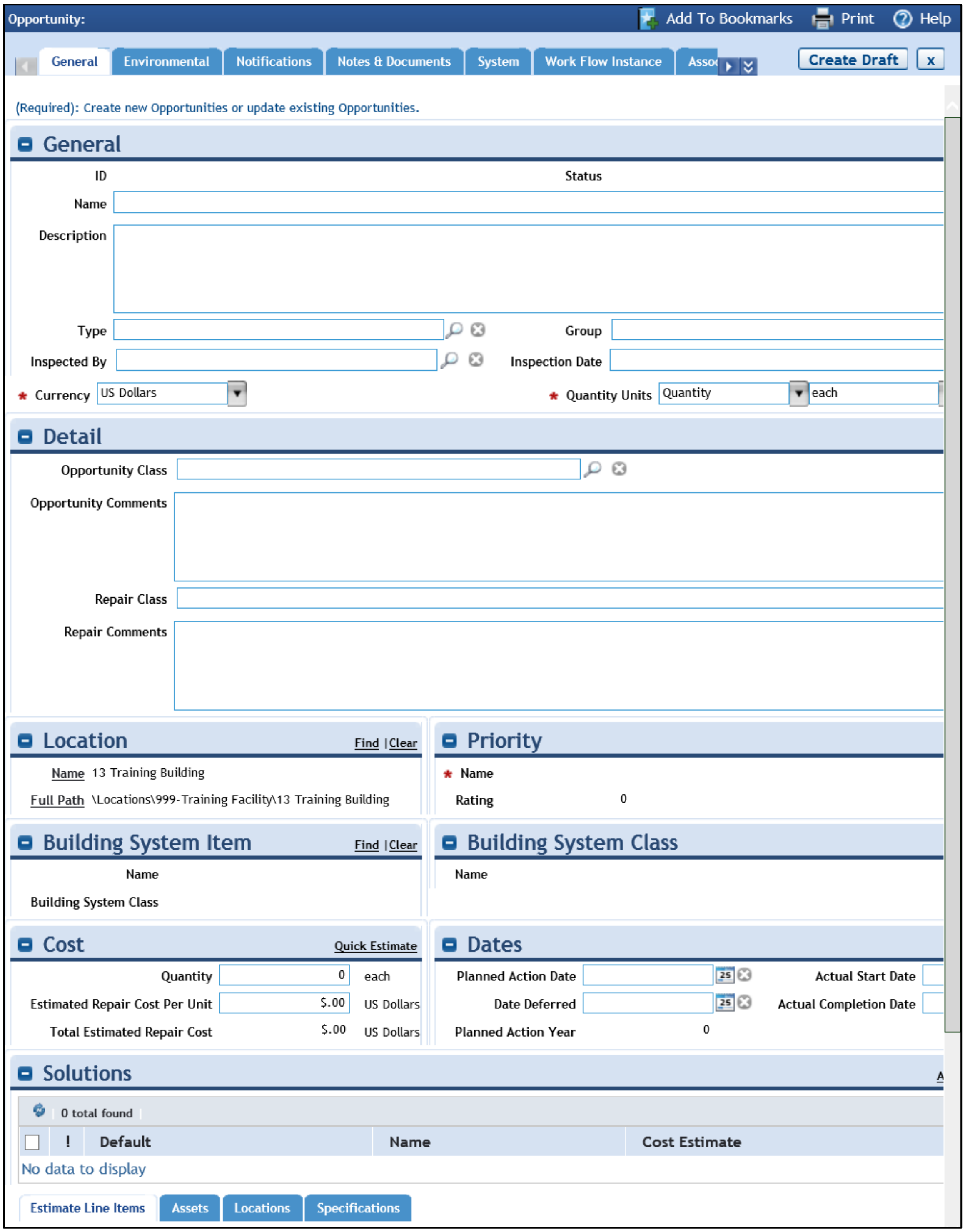
On the Procedures tab, the user completes the fields in the following sections:

- Procedures
- Regulations

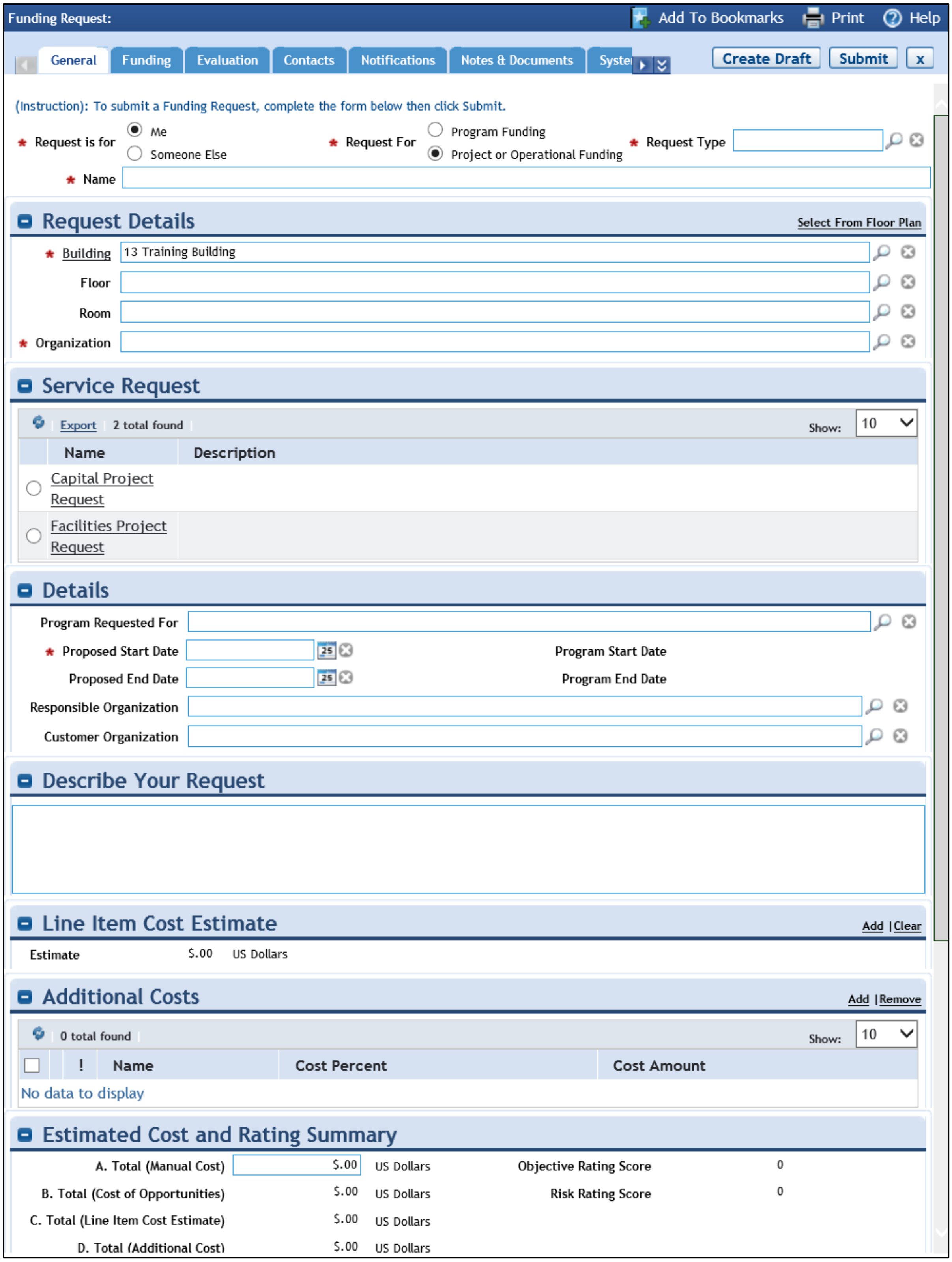
When the work has been performed, the user selects the Complete action which changes the Assessment work task to read-only.

Create Funding Request

A funding request is used to request the necessary funds to pay for assessed opportunities. On the Assessment tab of a Building record, the Opportunities section is used to select items to include in a funding request.



Once items have been selected, the user selects the Funding Request action which opens the request in a new window.


Funding Request: Add To Bookmarks Print Help

General | Funding | Evaluation | Contacts | Notifications | Notes & Documents | Syste… Create Draft Submit x

(Instruction): To submit a Funding Request, complete the form below then click Submit.

* Request is for: Me / Someone Else — * Request For: Program Funding / Project or Operational Funding — * Request Type

* Name

Request Details — Select From Floor Plan

* Building: 13 Training Building

Floor

Room

* Organization

Service Request

Export | 2 total found — Show: 10

Name	Description
Capital Project Request	
Facilities Project Request	

Details

Program Requested For

* Proposed Start Date — Program Start Date

Proposed End Date — Program End Date

Responsible Organization

Customer Organization

Describe Your Request

Line Item Cost Estimate — Add | Clear

Estimate $.00 US Dollars

Additional Costs — Add | Remove

0 total found — Show: 10

!	Name	Cost Percent	Cost Amount

No data to display

Estimated Cost and Rating Summary

A. Total (Manual Cost)	$.00	US Dollars	Objective Rating Score	0
B. Total (Cost of Opportunities)	$.00	US Dollars	Risk Rating Score	0
C. Total (Line Item Cost Estimate)	$.00	US Dollars		
D. Total (Additional Cost)	$.00	US Dollars		

General

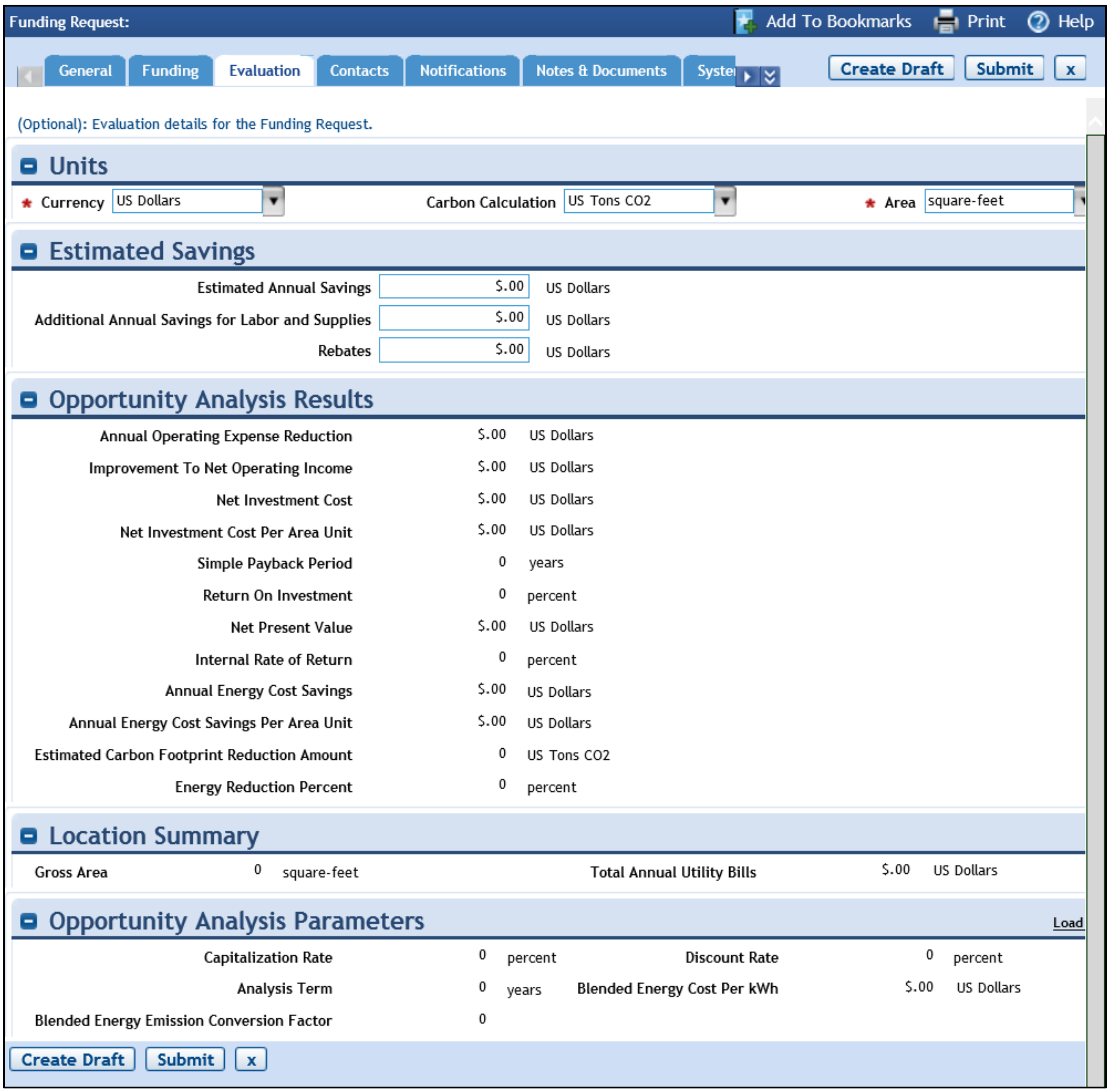
The General tab of the Funding Request form is completed by the user. There are sections for describing the request and estimating the cost.

Funding

The Funding tab is used to review the funding allocations of each available Funding Source for each fiscal year. Funding sources can be added to the request from the list.

Evaluation

The Evaluation tab is used to review the estimated savings and results of the request.

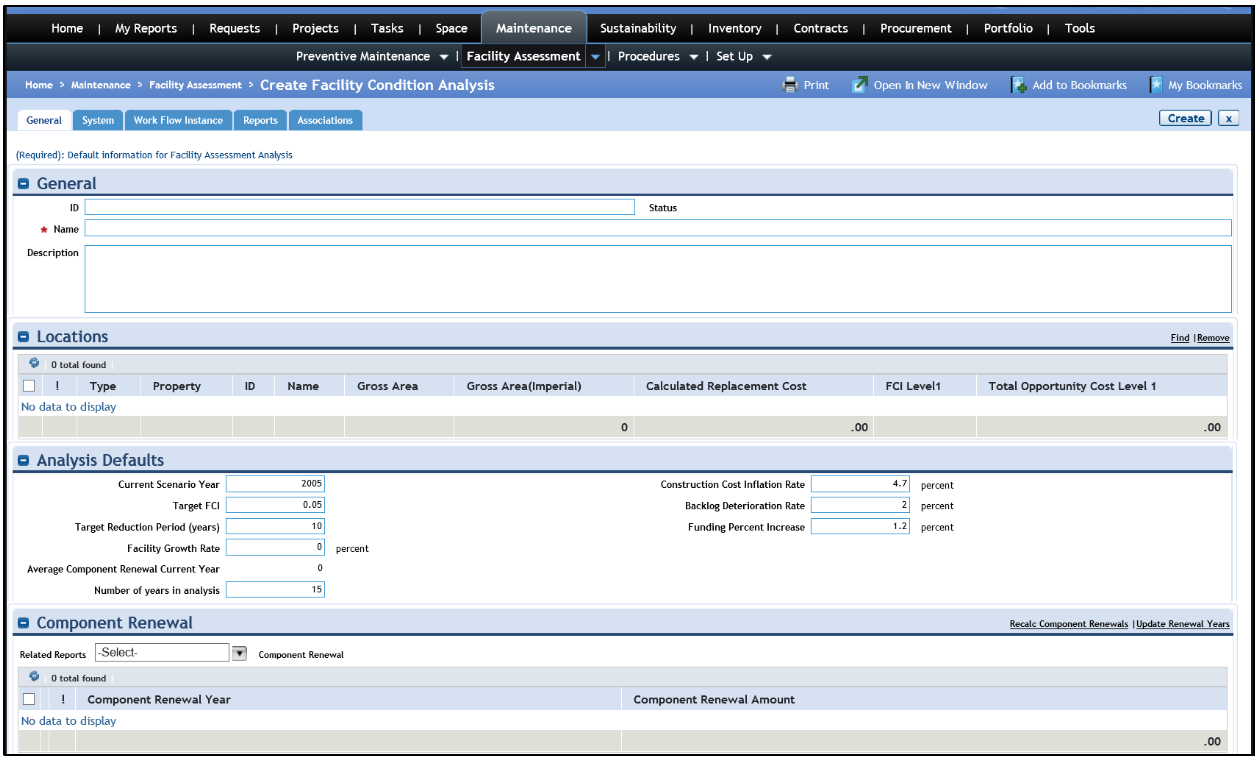


When data entry is complete, the Funding Request can be submitted using the Submit action. When approved, a Facilities Project is created and assigned.

Perform Condition Assessment Reporting

Once an inspection has been performed and the results entered into the system, the Environmental or Facility Assessment data can be compared across multiple Buildings and Structures.

The Maintenance portal, Facility Assessment menu is used to select Create Facility Condition Analysis.



General

In the General section, the user provides an ID, Name, and Description.

Location

The Location section is used to specify which Buildings and Structures to include in the analysis.

After reviewing the information in the other sections of the form, the Summary section provides a summary of the analysis report. The full report can be viewed by clicking the Open action.

ACTIVITY 1.2

Perform Condition Assessment

Scenario

You have been assigned the task of performing a condition assessment for a building system. You will perform the task and complete the necessary information in the system for assessment reporting.

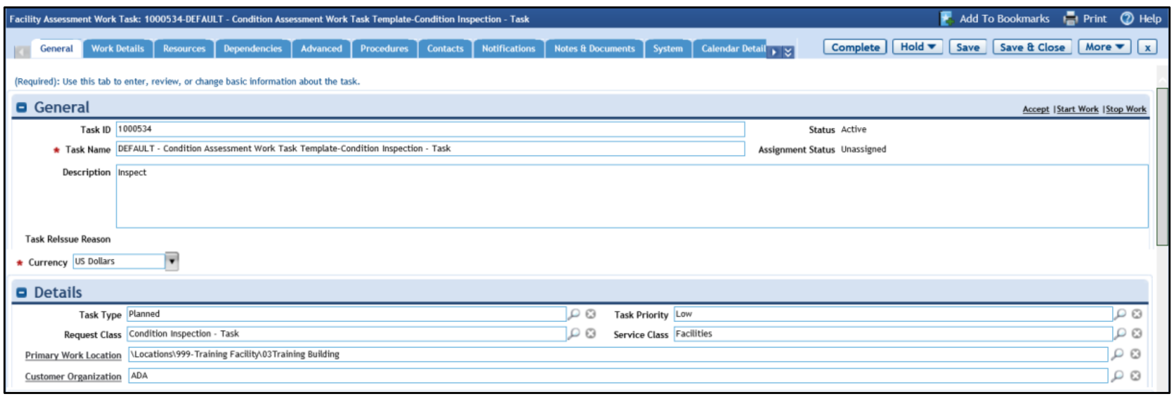
Setup

✓ User is on the Tasks > Manage Tasks > Facility Assessment Work Task page.

Steps

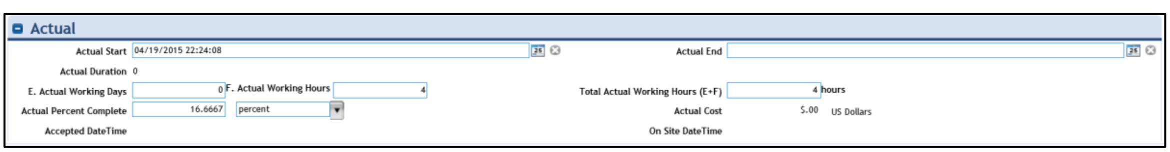
A. Locate and open the Facility Assessment Work Task.

1. On the Facility Assessment Work Task page, click the **ID** of the Assessment task. (Click on the actual link)



B. Complete the work task.

1. On the General tab, in the Actual section, in the **Actual Working Hours** field, enter ***4***.
2. Click **Save.**
3. Observe that the Actual Start date has been populated, along with the Actual Percent Complete and the Total Actual Working Hours fields.



4. On the **Work Details** tab, click on the **Inspection Item** to open the building system record.
5. In the **Details** section, use the magnifying glass icon to select find your student number, click **OK**.
6. In the **Inspected By** field, click the **Magnifying glass** icon and select your **Student ##** from the list. Select the **Radio Button** and click **OK**

7. In the **Inspection Date** field, enter ***today's date***.
8. In the **Condition** section, enter **values for several of the items in the condition list.**
9. Click the **Save** action.
10. Click the **Completed** action.
11. Close the building system record.
12. Click the **Complete** action on the Facility Assessment Task.

1.3. Perform Capital Project Planning

Capital projects are large-scale projects that typically require significant funding to complete. Capital project funding sources and requests can be tracked in TRIRIGA in order to evaluate the costs associated with meeting the objectives of the project.

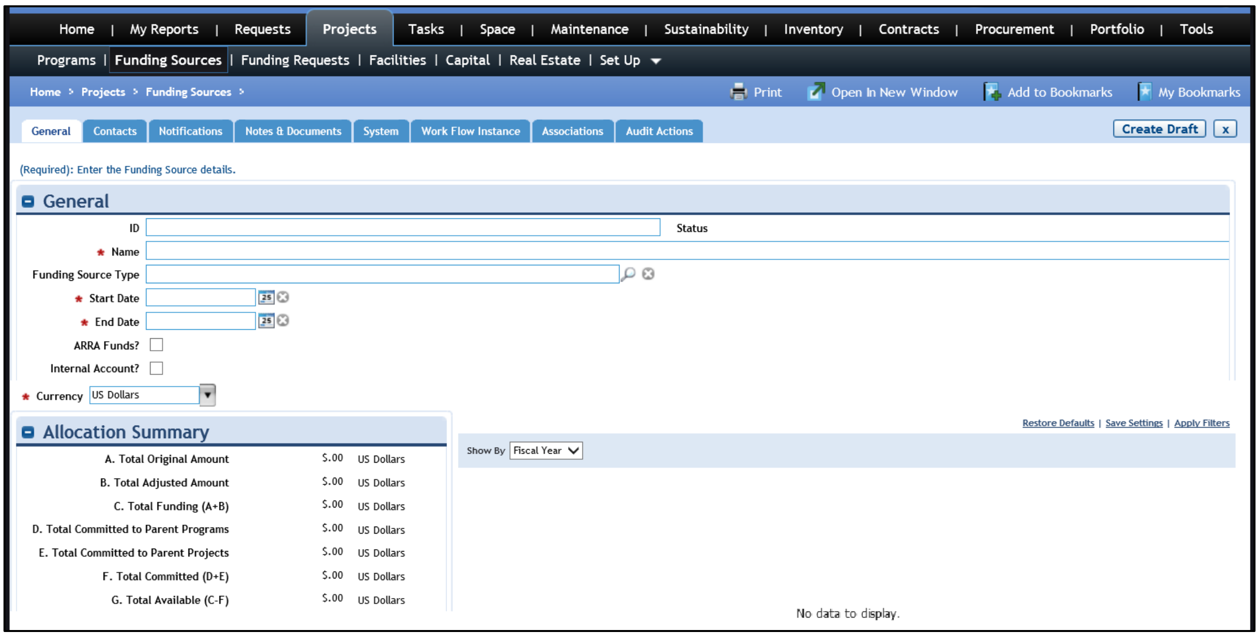
Programs

A Program record provides details about the higher-level business vision, business goals, or business objectives that govern and align the objectives across multiple inter-related projects.

Programs are managed in the Projects > Programs portal. Only authorized users can access the Programs page. In the Related Links section, clicking View Programs will display the list of existing Programs in the system. A Program record can be opened by clicking on the ID or the Name of the record. Any necessary modifications can be performed on the record. When changes are complete, clicking the Issue button will route the record for approval.

Create Funding Source

Funding Sources are budgetary resources for programs and projects. A Funding Source record provides details about the funding organization, start and end dates, as well as the fund totals and allocations. Funding Sources are identified and accounted to ensure that they are committed for the purpose for which they were made available and that the project is adequately funded.



The Projects > Funding Sources portal contains a link in the Related Links section to Create a Funding Source. The Funding Source form includes the following fields:

- Name
- Funding Source Type
- Start Date
- End Date
- Currency
- Amount Authorized
- Amount Approved
- Funding Entity
- Authorizing Organization
- Responsible Organization
- Description

Once the Funding Source record is created, the Funding Pending Approval section displays the funding allocations, one line item per fiscal year. The user enters the Original Fund amount allocated for each fiscal year. After the record has been approved by all required parties, the Issue action is used to approve the Funding Source and make it ready for use.

Activity 1.3

Create a Funding Source

Scenario

You have received funding through a new source. You will create the new funding source record in TRIRIGA.

Setup

✓ User is logged in to the TRIRIGA Home Page.

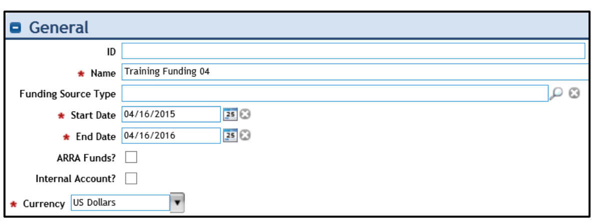
Steps

A. Navigate to the Projects > Funding Sources portal.

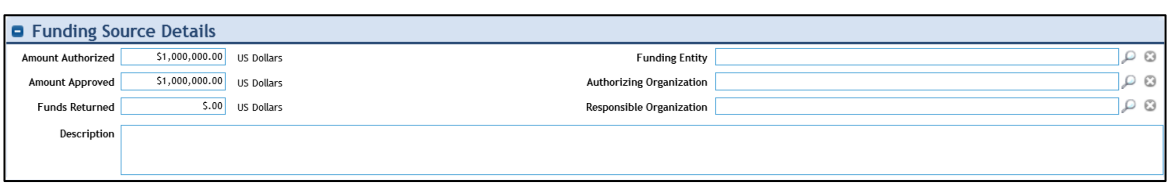
1. Click the **Projects** tab.
2. Click the **Funding Sources** option in the sub header to display the Funding Sources landing page.

B. Create a new Funding Source record.

1. In the Related Links – Funding Sources section, click **Create a Funding Source**.
2. In the General Section, in the **Name** field, enter ***Training Funding ##***, where ## is your student number.
3. In the **Start Date** field, select **today's date**.
4. In the **End Date** field, select **the date 1 year from today's date**.



5. In the Funding Source Details section, in the **Amount Authorized** field, enter ***1000000***.
6. In the **Amount Approved** field, enter ***1000000***.



C. Save and Issue the new record.

1. Click the **Create Draft** action.

2. Click the **Issue** action.
3. When you are finished, click the **Home** tab to return to the Home Page.

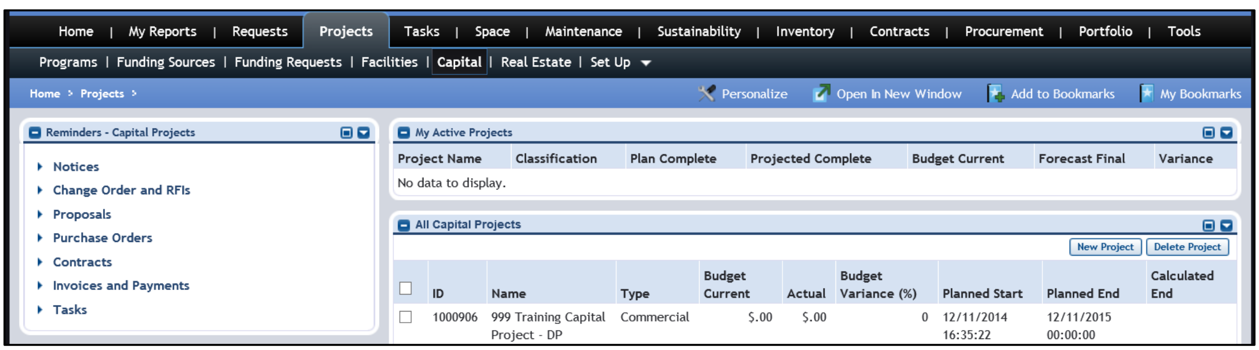
1.4. Manage Capital Project

A project record is used to manage all activity related to the completion of work for a specific purpose, including the tracking of costs required to perform the activity, tasks, and milestones related to the activity, and resources performing the activity.

Project managers update the project through manual review as well as the application of existing project templates. Since many projects are similar in their requirements and execution, the template functionality provides a fast way to apply standardized data to many projects.

Create a Project

Projects are created and maintained in the Projects portal. To create a new capital project, navigate to the Projects > Capital portal and in the All Capital Project section click New Project.



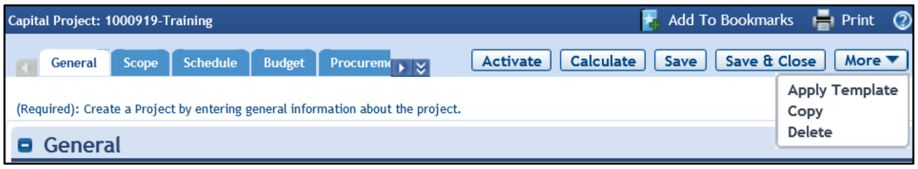
General Tab

On the General tab, the user completes the following fields:

- Project ID
- Project Date
- Project Name
- Project Type
- Accounting Cost Center
- Project Location

Apply Template

The More action allows users to select the Apply Template action. The list of available templates can be filtered and the template record that contains the appropriate task information can be selected. Once a template is selected, click OK. The schedule tasks and contacts list are copied to the new project record.



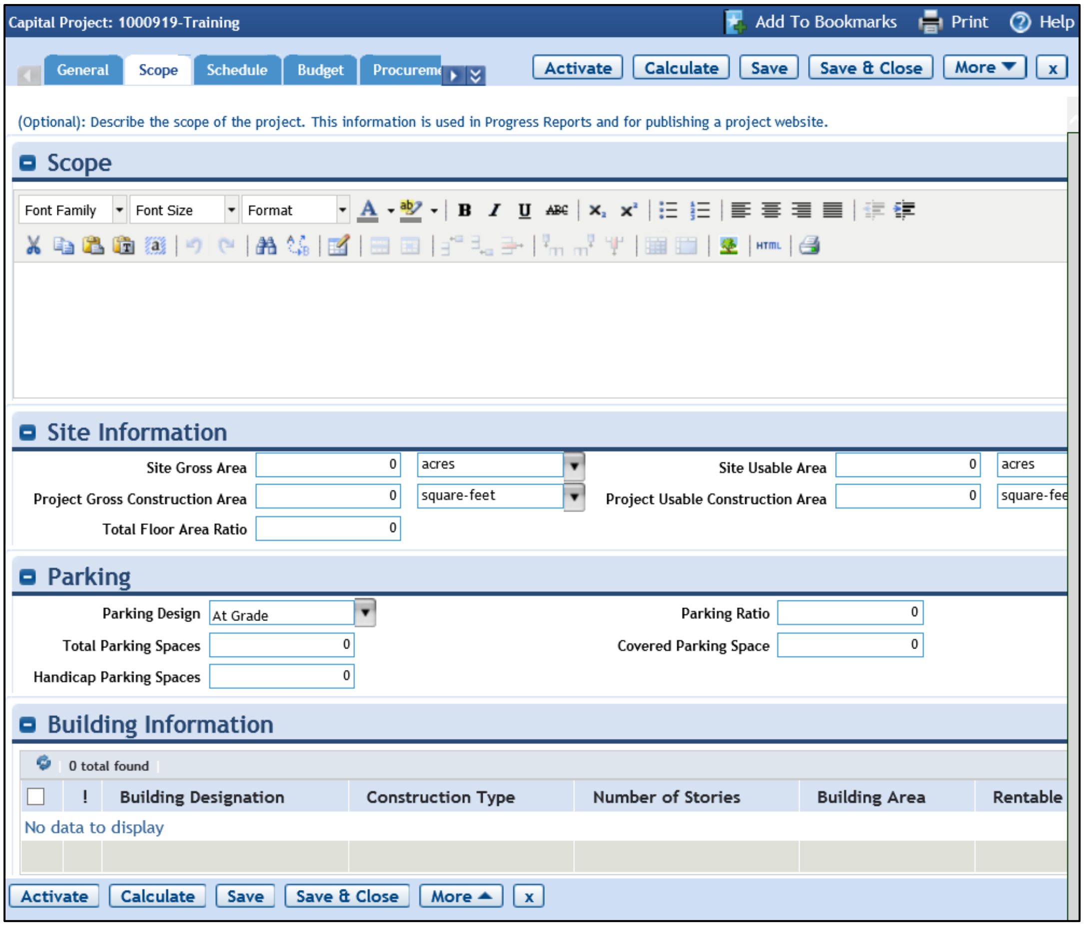
Any template-assigned project tasks can be added to or removed on the Schedule tab. Any template-assigned contacts can be modified on the Contacts tab.

Scope Tab

On the Scope tab, the user completes the following fields:

- Scope Description
- Site Information
- Parking Information
- Building Information

Once data entry for the project record is complete, a draft version can be saved, and the record submitted for approval.

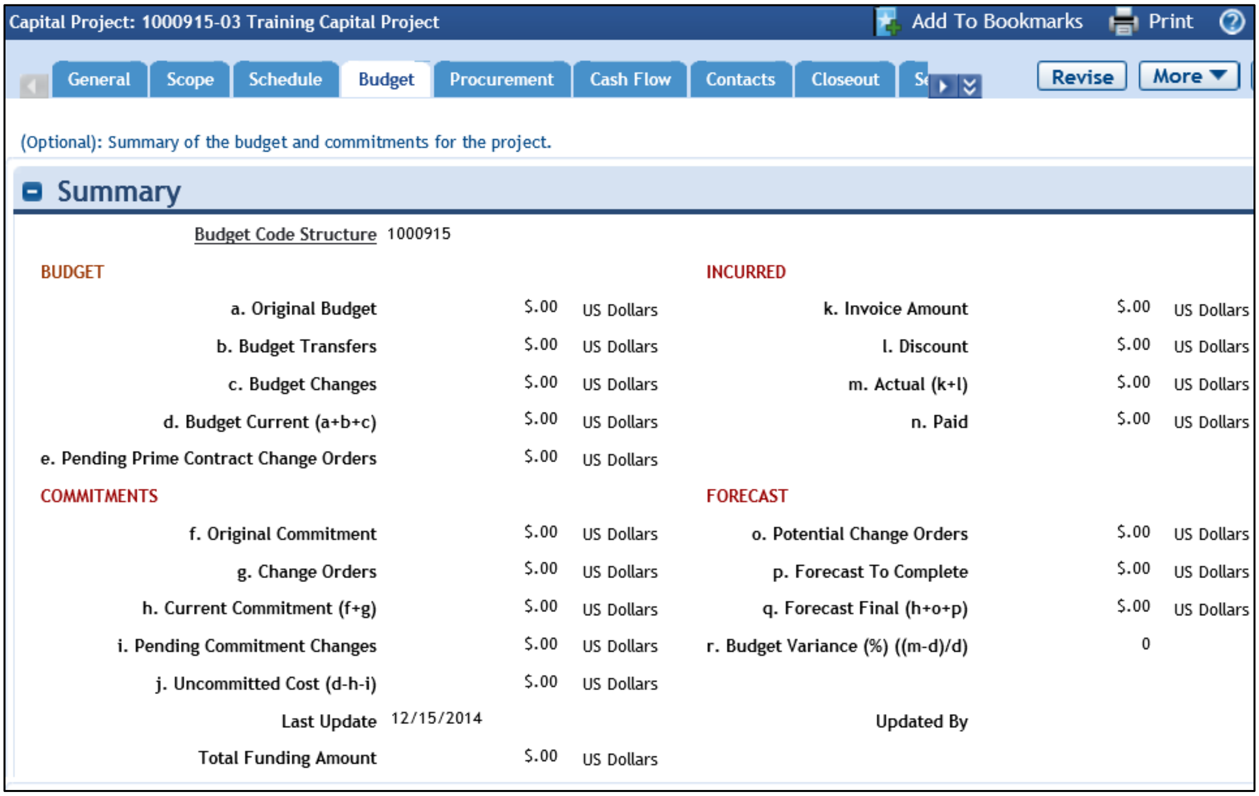


Revise a Project

An active project is constantly updated with the latest project progress information by the project manager. Projects can be selected from the available project lists such as My Active Projects or All Capital Projects.

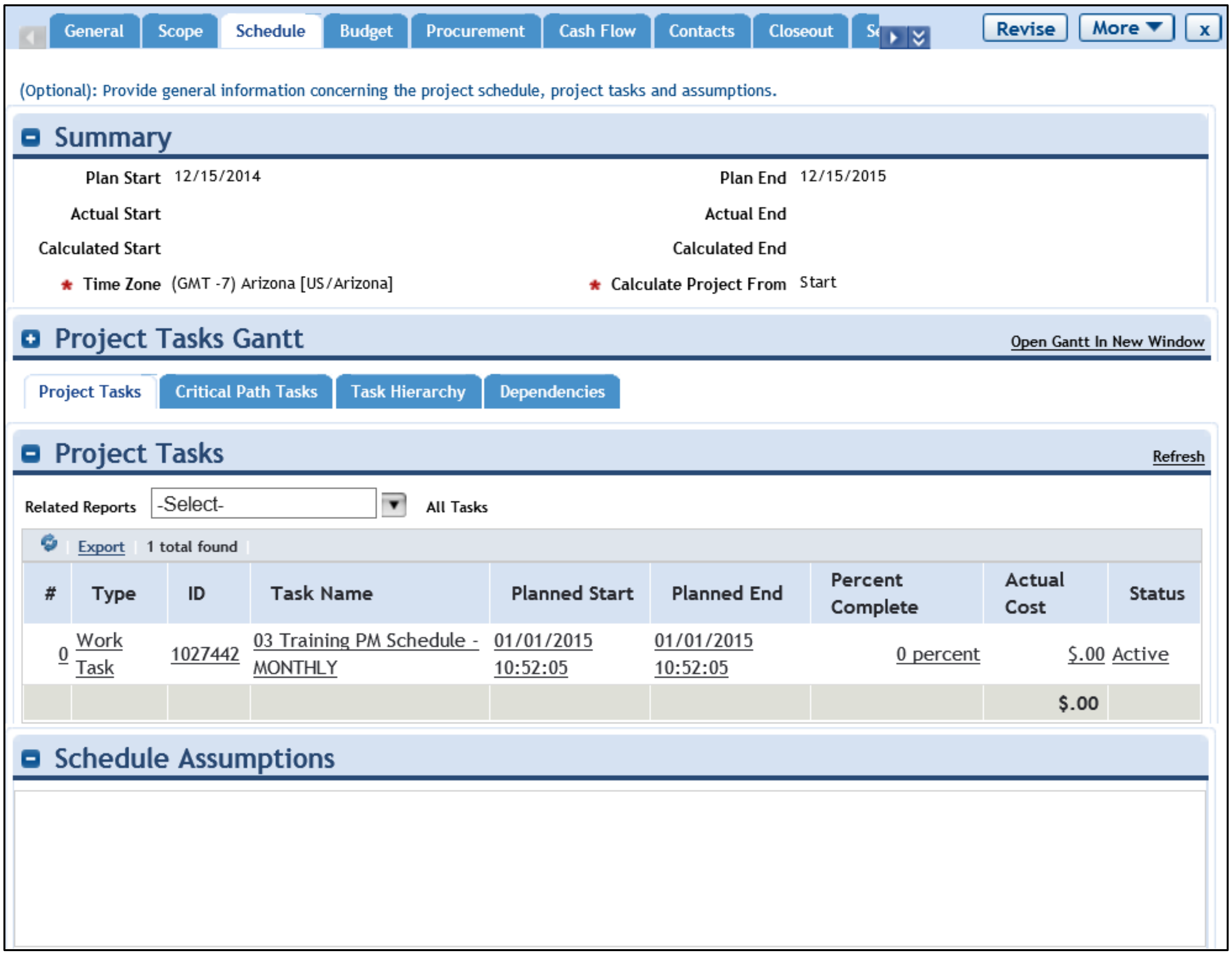
Define Project Budget

On the project Budgets tab, budget items can be added to populate the budget. The required fields on the Budgets tab include the Date, Name, and Currency fields.



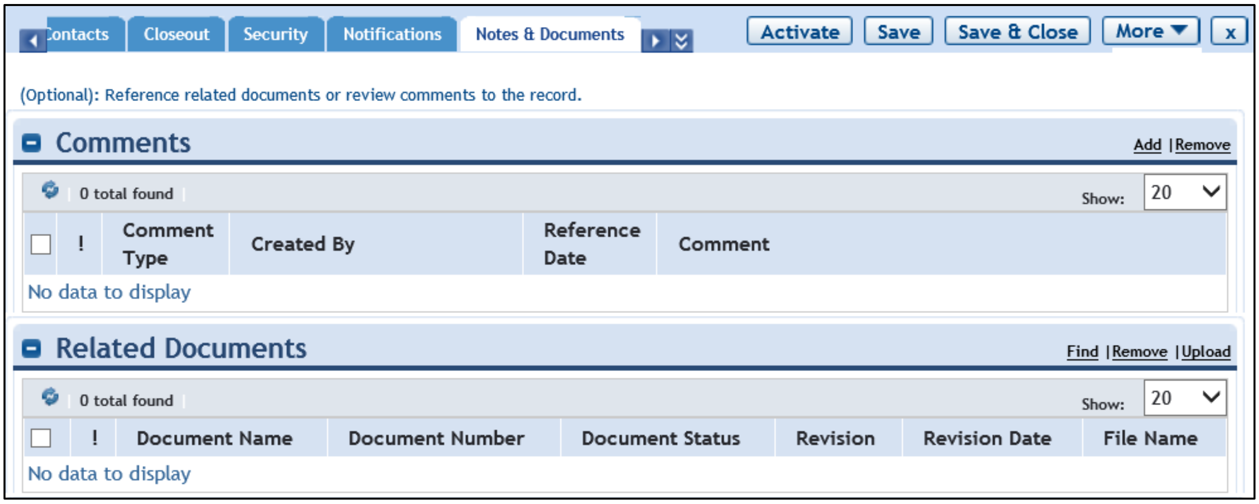
Define Project Schedule

On the project Schedule tab, the Add action is used to create a new task. Enter a Task Name, Currency, and Planned Start Date for the task. Other optional information includes the Responsible Org/Person and the Planned Dates/Duration fields.



Upload Project Document

On the Notes and Documents tab, users can upload documents and attach them to the project record.



Activate Project

On a project record, selecting the Activate action will change the project status to Active.

Revise Project

On a project record, selecting the Revise action will change the project status to Revision in Progress.

Complete Project

On a project record, selecting the Complete action will change the project status to Complete.

Close a Project

The project closeout process can begin when the final tasks for the project are performed and the project reaches the completion stage. The system provides a series of tools to support project managers in the activities related to the closing of open or pending project activities. Prior to project closeout, closeout check lists can be generated to track completion of key project action items. The project manager can review open activities by monitoring the dashboard view or by generating a Closeout Report.

To review and validate project closeout activities, users can navigate to the Closeout tab on the project record. The Closeout tab contains several sections and sub tabs that cover elements regarding the completion of the overall project process. The Closeout tab also provides a consolidated view of the current status of the records associated with the current project including tasks and checklist items.

ACTIVITY 1.4

Create a Capital Project

Scenario

You are the project manager for a capital project. You need to create the project in TRIRIGA, update the project and then closeout the project upon completion.

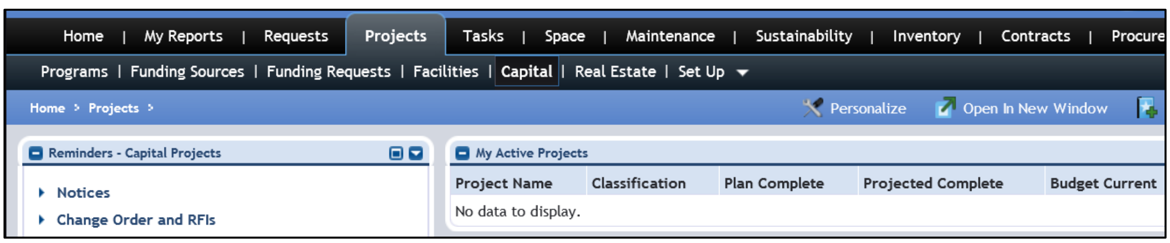
Setup

- ✓ User is logged in to the TRIRIGA Home Page.

Steps

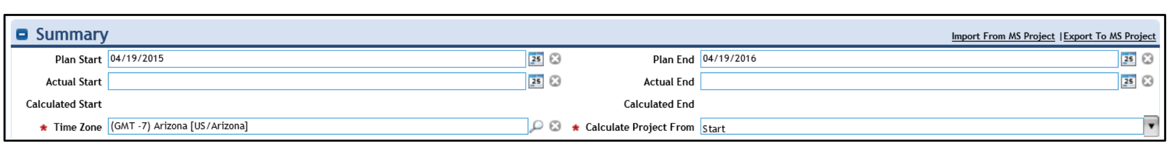
A. Navigate to the Projects > Capital portal.

1. Click the **Projects** tab.
2. Click the **Capital** option in the sub header to display the Capital Projects landing page.



B. Create a new capital project.

1. In the Related Links – Capital Projects section, click **Create a Capital Project**.
2. In the **Name** field, enter ***## Training Capital Project***, where ## is your student number.
3. In the **Currency** field, click the **dropdown** and select **US Dollars**.
4. Click the **Schedule** tab.
5. In the **Time Zone** field, click the **magnifying glass** lookup icon.
6. Select **GMT -7 Arizona**.



7. Click the **Create Draft** action.
8. Set the Plan End to one year from today.

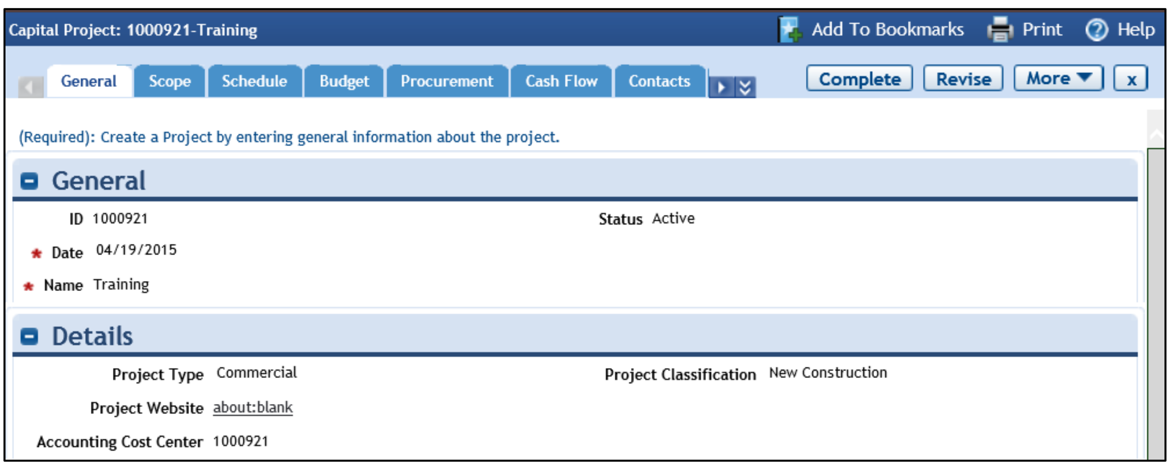
9. In the **Project Tasks** section, click **Find**.
10. In **Related Reports**, select **All Tasks** from the dropdown menu.
11. Select any of the tasks you created earlier in the session, click **OK**.

C. Update the capital project.

1. Click the **Scope** tab.
2. In the **Scope** text field, enter ***Build 1 new training facility for new employees***.
3. In the Building Information section, click the **Add** action.
4. In the **Building Designation** field, enter **## *Training Building***, where ## is your student number.
5. In the Values section, in the **Number of Stories** field, enter ***2***.
6. Click the **Create** action.
7. In the Capital Project form, click the **Activate** action.

D. Closeout the capital project.

1. From the **Capital Projects** landing page, reopen the project you just created.
2. Click **Complete**.



3. The record will become read only.

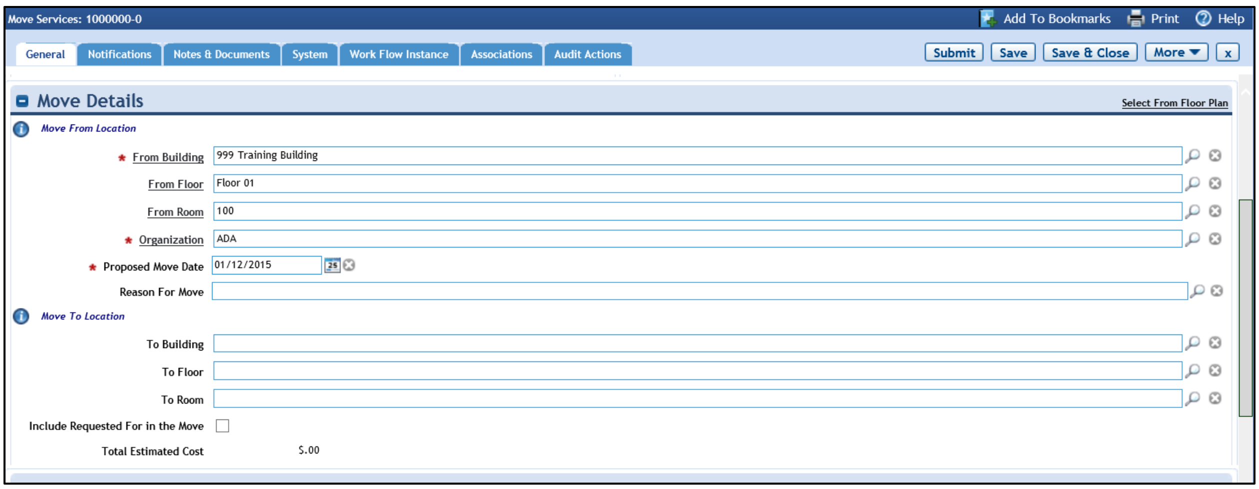
1.5. Manage Move Project

In TRIRIGA, the management of moves includes managing move service requests, planning scheduled moves, and planning strategic moves. The move manager is responsible for moving people, assets, and equipment within an organization to ensure that move requests and move projects are implemented as required. The move planner is responsible for assembling move projects so that strategic space plans or facility move plans are organized with minimal cost and disruption.

A move request follows the service management process. The request is submitted by the requester, assigned to a move task or move project, and completed when the move is complete.

Move Request

A move request can be submitted by employees or space planners to initiate the process of moving employees and their related assets (PC, phone, etc.). A move request can be managed in the system from the initial submission through delivery or fulfillment of the move transaction.



The move request must include information about the location from which the person is moving and the organization that is responsible for the location. When a move request is submitted, a series of automatic and manual activities are initiated that are managed by the move manager.

Move Project

Move projects are often generated automatically, as a result of the Move Request process. A move project is associated with one or more move line item records that contain the details of the move. Move projects can be based on an applied project template which may include more information, such as the planned start date and estimated costs.

Appendix A

TERMINOLOGY

The terms listed below are used throughout this training guide.

Table 1: Terminology

Term	Description
Acquisition	Defines the real estate details of a property being purchased from another party.
Approvals	Ensure that created and modified records meet the defined business requirements.
Assets	Owned or leased items, such as buildings, equipment or vehicles that are tracked in the TRIRIGA system.
Capital projects	Large-scale goals, such as the construction of a building project that typically requires significant funding to complete.
Condition Assessment Plan	A plan for ensuring that critical building systems are regularly inspected and the current condition of systems is recorded.
Current Terms	Defines the current terms and conditions of a lease agreement with another party.
Dashboard	Default page for each security group or user role that provides a snapshot of current activity.
Disposition	Defines the real estate details of a property that is being sold to another party.
Evaluation surveys	Used to follow up requests, maintenance, sustainability measurements, and space reservations with a questionnaire that provides feedback to the service provider on the quality of work performed.
Expiration	Defines the real estate details of a lease whose duration is elapsed.
Facilities projects	Smaller-scale goals, such as painting an office, moving cubicles, and handling plumbing or electrical repairs.
Funding Request	Used to request the necessary funds to pay for assessed opportunities.
Funding Sources	Budgetary resources for programs and projects.
Home Page	Returns the user to the default Dashboard page and includes the available portals for that user based on assigned security.
Job Plan	The primary record in the preventative maintenance process that defines who is responsible for the work to be performed and identifies the building systems, assets, and locations that will be serviced, also referred to as the scope.
Landing Pages	Contain actions organized into menus and sections of relevant information.
Lease	Defines the real estate details of a lease agreement with another party.
Leases Portal	Used to view real estate contracts and asset leases.
Manage Moves Project	Management of moves includes managing move service requests, planning scheduled moves, and planning strategic moves.
Notifications tab	A tab in each record that defines users who are notified of any changes or approval requirements.
Portals	The main application sections within TRIRIGA.
Portfolio portal	Central store of Locations, Organizations, People, Specifications, and Assets.
Preventative Maintenance	Work performed on a defined schedule.

Term	**Description**
Program record	Provides details about the higher-level business vision, business goals, or business objectives that govern and align the objectives across multiple inter-related projects.
Project	Defined by its general information, the team members, the scope, a schedule, and a budget.
Project Record	Used to manage all activity related to the completion of work for a specific project, including the tracking of costs, tasks, milestones, and resources.
Real Estate Contract Abstract record	The recording of a contract by entering specific summarized data.
Real Estate Functions	Allow users to plan real estate transactions and manage real estate projects for an organization.
Real Estate Transaction Plan	Acts as the central component around which all real estate transaction decisions are made. A Real Estate Transaction Plan can be developed that includes scenarios that use Real Estate Transactions as solutions to problems. A Real Estate Transaction Plan can also be a container for Real Estate Transaction Projects which use a Six Sigma rating system to compare the possible scenarios and help in the real estate decision-making process.
Requests portal	Used to issue, manage, and track various requests.
Service Level Agreements (SLAs)	Used to define the contractual terms and conditions for maintenance service agreements.
Service Plans	Used to centralize the rules used to manage service requests and work tasks.
Space Management	Used to maintain space plans and track space utilization data in buildings and structures. Also possible to manage the people and assets that are in the space and coordinate property transactions in the system.
Sublease	Defines the real estate details of a lease agreement between a lessee and a sub-lessee.
Termination	Defines the real estate details of a lease that is closing before its original end date.
Utility meters	Used to track utility consumption data for locations.
Work Plan	Used to manage work groups and assign work through scheduling of resources.

Appendix B

LIST OF ACRONYMS

The table below lists the acronyms that are used in this training guide.

Table 2: Acronyms

Acronym	Definition
CAM	Common Area Maintenance
CTQ	Critical to Quality
OpEx	Operating Expense
PM	Preventative Maintenance
RE	Real Estate

a. Place Request