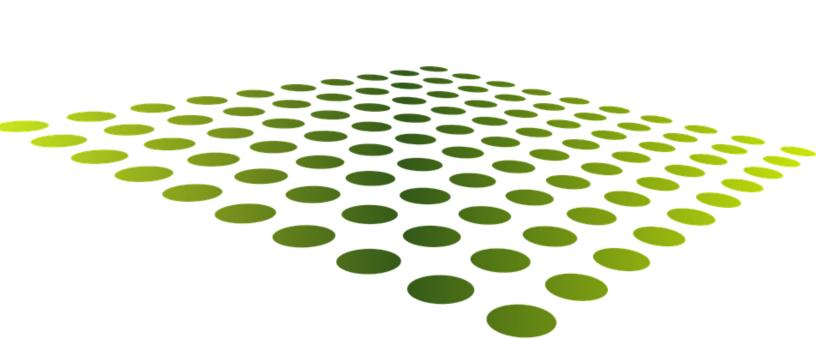


ADOA – General Accounting Office AFIS MANUAL: TRIRIGA-FACILITIES

MANAGEMENT

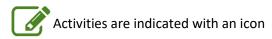




TRIRIGA-Facilities Management

TABLE OF CONTENTS

PURPOSE	
Course Objectives	
FOUNDATIONAL KNOWLEDGE	•
OVERVIEW OF TRIRIGA FUNCTIONALITY	3
Managing Projects	
SETUP AND CONFIGURATION	8
Organizational Structure	
GEOGRAPHICAL STRUCTURE	
CLASSIFICATION	10
OPERATIONAL FUNCTIONS	11
LOCATION PORTFOLIOS	11
VEHICLE/EQUIPMENT SPECIFICATION	21
BUILDING SYSTEMS AND EQUIPMENT	23
UTILITY METERS	31
CREATING CORRECTIVE MAINTENANCE WORK TASK	42
Preventative Maintenance Work Task	49
PERFORMING WORK TASKS	57
SETTING UP WORK TASK	59
PERFORMING WORK TASKS	
ASSIGNING EQUIPMENT	66
PROJECT AND PLANNING	74
DEVELOPING CONDITION ASSESSMENT PLANS	74
Performing Condition Assessments	78
PERFORMING CAPITAL PROJECT PLANNING	85
Managing Capital Projects	87
Managing Moves	95
REPORTING	97
My Reports	97
CREATING A NEW REPORT	99
APPENDIX A	
Terminology	102
APPENDIX B	104
ACRONYMS	104





TRIRIGA-FACILITIES MANAGEMENT

Purpose

This training guide covers the use of IBM TRIRIGA, a web-based Facilities Management application that supports facility operations and maintenance, project management, site planning, and contract management. You will learn how to complete processes for the generation and management of work tasks, building systems and equipment, reports and forecasts of occupancy, condition assessments, and capital improvements.

Course Objectives

In this training guide, you will:

- Review Facilities Management foundational knowledge
- Identify the setup and configuration of projects and portfolio objects
- Perform common operations functions
- Review the planning and assessment processes that are available
- Review the available reports

Foundational Knowledge

Learning Objectives

In this lesson, you will:

- Examine the basic functionality of TRIRIGA
- Examine different types of projects
- Examine the approval and notification processes
- Identify the available template functions

Lesson Overview

This lesson is an introduction to some of the key features and functionality of the TRIRIGA application platform. This lesson also introduces the workflow process and the use of templates to aid in the creation of new forms.

Overview of TRIRIGA Functionality

TRIRIGA is an Integrated Workplace Management System (IWMS) that integrates real estate, capital projects, facilities, operations, portfolio data, and energy management in a single web platform. Each of these components is presented as a portal that contains all of the related tables, forms, and menus for that business function. TRIRIGA also provides the ability to interface with other State applications for accounting and purchasing.



User roles play a key part in the software interface by controlling what portals and pages a user can access. Many aspects of the environment can be customized to a user's personal needs.

Managing Projects

TRIRIGA provides the ability to manage capital, facility, and real estate projects and can be used to identify funding priorities within capital programs, analyze project risk and financial benefits, and automate project management controls and alerts.

Accessing a Project

Managing projects is done by switching to the Project component in the top right of the screen. Existing projects can be searched and selected by clicking the Select Project magnifying glass icon.





A project is defined by its general information, the team members, the scope, a schedule, and a budget. The general information identifies the name, type, and address and client information for the project. A project can also contain subprojects called Child Projects. The team members are defined as project Contacts and must be assigned a project role. The scope defines all of the work being performed by the project. A project schedule can be broken down into tasks that can be tracked from start to finish. The project budget can be defined to enable the tracking of expenses incurred by the project and forecasting of potential changes to the project cost.

Approvals

Approvals ensure that created and modified records meet the defined business requirements. Approvals can be created to automatically escalate records to defined approvers. Approvals can be delegated to check the resolved actions of an approval, and add manual approvers. Any time an event occurs that triggers an approval, an action item appears on each reviewer's Home Page. Approvers can approve, return, request clarification, reassign, or escalate the record.

Approval templates are used to define approval requirements and can be applied to a type of record or business object(s). Approval requirements are used to connect an approval template to a business object and must have an active status to be used. If a business object or form has more than one requirement, the requirements are merged.



Notifications

The Notifications tab is used to create notifications that send an email to recipients each time the status of a record changes. For example, a notification can be sent to management whenever a purchase order is issued. The process involves creating the notification content and then creating the notification requirements. The notification requirement could be defined such that any purchase order with a status change of Draft to Needs Approval must be sent to the manager of the person who created the purchase order. You can opt out of receiving notifications in their profile options and subscribe to notifications from a record that they want to receive notifications about.



Forms

Forms typically do not have templates, but most forms that have been created and saved in the system can be used as a starting point for creating new forms with some information already entered. You can create a copy of an existing form that is open by clicking the More button, and selecting Copy. This creates a new form that can be accessed and completed with the appropriate information. Examples of forms that can have templates include People and Building Systems.



Surveys

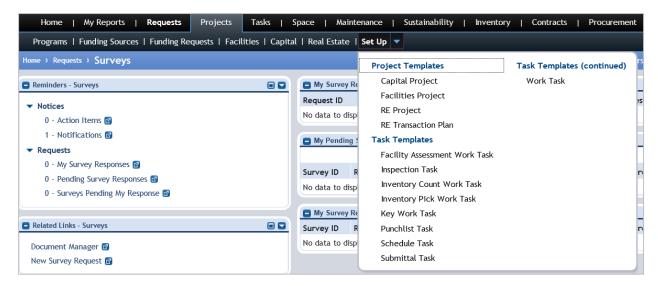
Survey templates are used to create and manage the templates used for creating evaluation surveys. Evaluation surveys are used to follow up requests, maintenance, and sustainability measurements with a questionnaire that provides feedback to the service provider on the quality of work performed. Survey templates are created and managed in their respective portal under the Set Up menu.

Once a survey template has been created, it can be issued as a New Survey Request in the Requests portal.



Project Templates

Project templates can be created for Capital, Facilities, and Real Estate projects. New templates can be created from scratch or existing templates can be copied which will create a duplicate of the template that can then be modified. Templates are managed in the Projects portal Set Up menu by selecting the type of template.



The Add link will create a new template. The More button, Copy command will create a copy of an existing template for use.

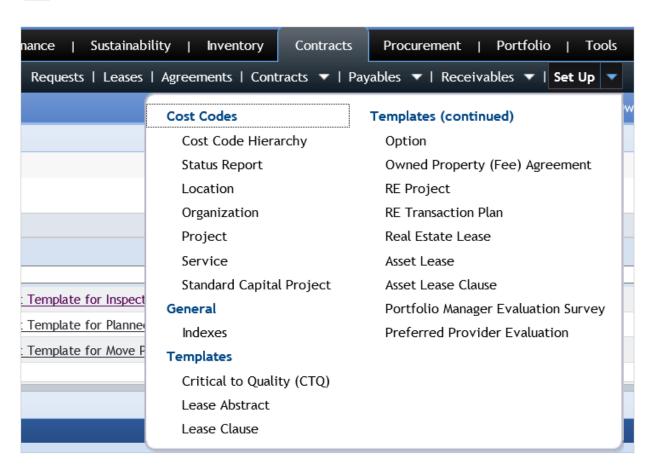




Contracts

Contract templates are available for the various types of contracts, such as Critical to Quality contracts. Contract templates are created and managed in a similar manner to Project templates.







Setup and Configuration

Learning Objectives

In this lesson, you will:

- Identify the goals and configuration of the Organizational Structure
- Identify the goals and configuration of the Geographical Structure
- Examine available classifications

Lesson Overview

Portfolio data is the core information that is used to manage workplaces. The portfolio consists of information about the organizations, locations, people and assets that are associated with the space being managed. To assist in proper categorization of portfolio data, lists, classifications, geographies and specifications are set up as part of the initial configuration of the system.

Organizational Structure

The organization structure is hierarchal and set up based on a parent/child relationship. A parent organization record can have however many departments or divisions as necessary to represent the structure of the organization.

The organizations hierarchy can be included on various templates to define how work or approvals are routed.

Government

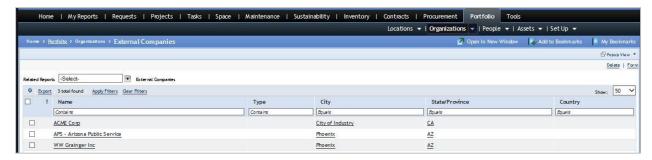
Government organizations represent departments that are part of the State. Each department is defined as an agency at the parent level of the hierarchy. Additional divisions related to those departments are created at the next level down in the hierarchy, also as agencies.



External Companies

External companies can be represented as vendors, customers, tenants, non-State partners or other governments. Any external organization that is related to the functions of facilities management within the system must have a record set up in the organizational hierarchy. Like government organizations, external organizations can have child divisions within their hierarchy.





Any facilities management related external organizations that are defined as vendors or customers will have a matching record in AFIS. AFIS will interface regularly with TRIRIGA to create external organizations. The automated set up of matching vendor records will assist in purchasing functions for work orders and real estate payments for 3rd party leases.

Geographical Structure

The geographical structure is used to define the geographical area of property specific to an organization. Similar to the organization structure, the geographical structure is hierarchal and set up based on a parent/child relationship. A parent geographical record can have however many dependent geographical units as necessary to represent the structure of the organization.

The typical hierarchal structure of geographical areas can include a combination of world region, country, state, region, metropolitan area, county and city. Because each department has a different geographical definition, the names of the organizational hierarchy have been used within the structure to indicate the structure specific to that department. The geographical hierarchy can be included on various templates to define how work or approvals are routed.

Country

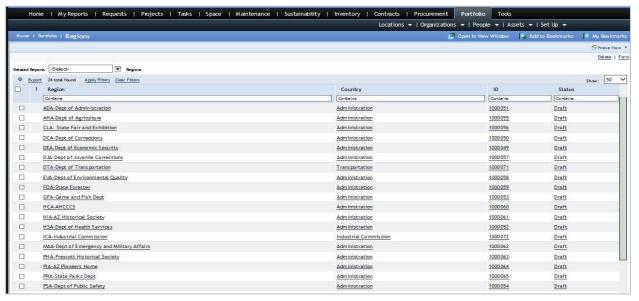
Country is the top of the hierarchy which defines the organization with the highest geographical authority.





Region

Region is defined as the organization that is responsible for any property within its geographical structure.



State/Province

State/Province is defined by the responsible organization to identify geographical areas specific to their business process. Geographical areas include, but may not be limited to region, unit, district or any other name that the organization uses at the lowest level of the geographical hierarchy.

Classification

Classifications define how records are related to each other within the classification hierarchy. A classification is a type of record that defines various data elements contained within the operational records.

Classifications can be used by queries, forms and workflows to determine how a record is managed. Generally, classifications are pre-defined, but new ones can be requested if necessary.

Type, Class, Status, Category, Code, Use, etc.

There are many classification types which allow you to define general attributes about a data element. Classifications typically appear in a query format that is accessible by clicking on the magnifying glass to the right of the field, a list with a drop down menu or through a "find" query.



Operational Functions

Learning Objectives

In this lesson, you will:

- Identify the process of creating Locations
- Examine the specifications for vehicles and equipment
- Examine the management of building systems and equipment
- Review the utility meter creation and management process
- Create corrective maintenance work tasks
- Create preventative maintenance work tasks
- Identify the process involved in performing work tasks

Lesson Overview

This lesson examines many of the operational functions for the management of assets, maintenance plans, and work tasks. Portfolios are a central store of asset, location, and other records used throughout the system. Assets and specifications allows you to track and maintain detailed records for all owned equipment. Those assets can be maintained by performing regularly scheduled and as-needed maintenance work tasks.

Location Portfolios

The Location Portfolio structure is hierarchical, meaning that location activity is organized based on their relationship with other locations.

Locations

The Locations portfolio contains a listing of the locations in the hierarchy. A typical setup of location types in the hierarchy is as follows: Property with Building(s) with Floor(s) with Space(s). The available location type options vary based on the parent location type.



Since AFIS is the system of record for all Fixed Asset information, newest location or facility related equipment data will be sent from AFIS to TRIRIGA. In TRIRIGA the record is updated with additional information not captured in AFIS. It is possible that some locations and/or equipment may not meet the



criteria for Fixed Assets and a department may decide not to create those records in AFIS. In this case, a record can be created directly for facilities related items.

Steps

The steps below describe the statewide process. Your agency may have additional requirements

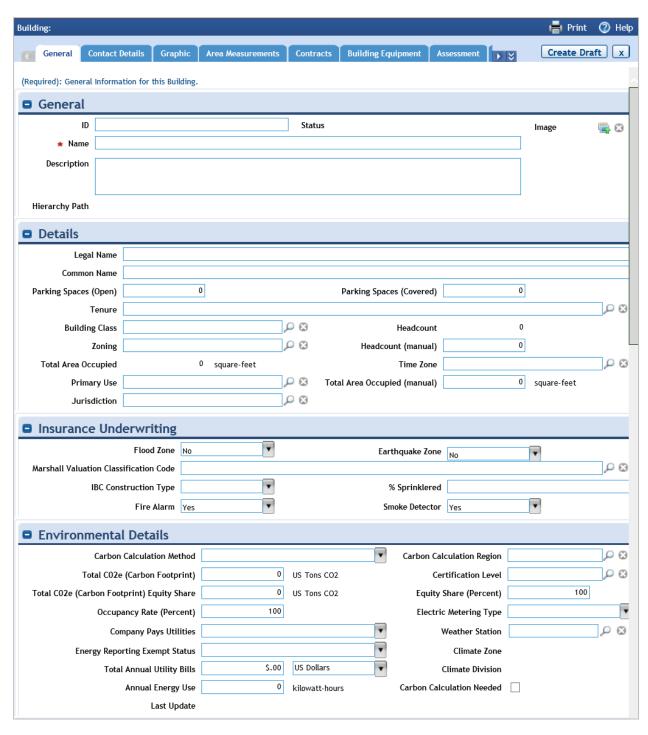
- Create locations that define a group of related buildings, land areas, or other locations. A group
 of locations is referred to as a Property. Each Property record can be assigned to a Geography
 which links the Property to a region as defined with each organization. Basic information about
 the Property can be entered, including any attributes that are common or relevant to each of
 the location records associated with the Property.
- 2. Each location record can be assigned to the location hierarchy, including assignment to a parent Property record. Each location record is used as the data point in which all real estate and facility management activity is associated. Maintenance activity, project activity, lease administration, condition assessment, and space management are all activities that occur at specific locations. The history of this activity can be monitored using the location record. Each location can be assigned geo-code information to allow for spatial display and analysis of facility inventory, condition, and work order history information using GIS-enabled map functions.
- 3. Within each building location, you can define a hierarchy of space, including floors and spaces. By organizing the building record into separate floors, more precise definition of maintenance and project locations is possible. For example, a work task can describe the exact space of a reported problem to a technician, rather than simply a building number or description.
- 4. CAD floor plans can be associated with each floor record in the database. CAD plans typically include a definition of the room/space boundaries (polylines). The integration of CAD data with floor plans allows for automatic calculation of floor and space areas, and the ability to graphically query the floor plan based on the data attributes of the spaces in the plan. Ongoing changes to the base CAD drawing will occur, and will require republishing. CAD views of locations are available throughout the application. You can interact with the drawing viewer using pan and zoom controls, measure functions, graphical reports, color-coding, and exporting.
- 5. Once the location record is fully defined, then the location can be activated.
- 6. Record information and any attached documentation are reviewed and approved by the department.

Creating a Location Record

Some sections of the Location form will only be used when appropriate for the location type being created. For example, defining environmental details may be relevant for a building or land location record but not necessary when defining a space or room location record in the hierarchy.

To create a new location record, navigate to the existing node in the location hierarchy that will be the parent for the new location and select New. Then select what type of location record is to be created. When adding information to a Location record, it is important to save changes regularly so that they are not accidentally lost.





General

In the General section on the General tab of the Location form, complete the following fields:

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- ID
- Description
- Image
- Name



Insurance Underwriting

The Insurance Underwriting section is used when defining a building location. Complete the following fields:

- Flood Zone Indicator
- Earthquake Zone Indicator
- Marshal Valuation Classification Code
- IBC Building Construction
- Number of Stories
- Percent Sprinklered
- Fire Alarm Indicator
- Smoke Detector Indicator

Details

The Details section can be used to designate a location with Parking as the function, usually for a building or structure. In the Primary Use field, select Parking as the value.

Primary Address

The Primary Address section of the form is used to define the physical location of the location record. Complete the following fields:

- Address
- Zip/Postal Code
- Geography Lookup
- City
- State/Province

The Geocode Address action can be used to derive the GIS coordinates, Latitude and Longitude, from the provided address.

Graphics

In the Graphics section, CAD drawings can be associated with a Floor location record.

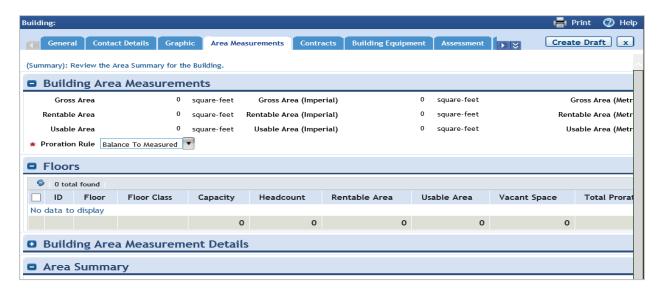
Contact Details

On the Contact Details tab, assign roles to people for a location at any level of the location hierarchy. Each associated contact can have a designated role, such as Manager, Primary Contact, or HR Contact. Contacts can be added in specific roles by selecting the Add People action in the Contacts section.

Area Measurements Tab

The Area Measurements tab is used to review space area measurements for the Location. The measurements displayed vary based on the form. Measurements are rollups from any child locations and typically include Gross Area, Rentable Area, Usable Area, and Property, Building, or Floor Common Area.

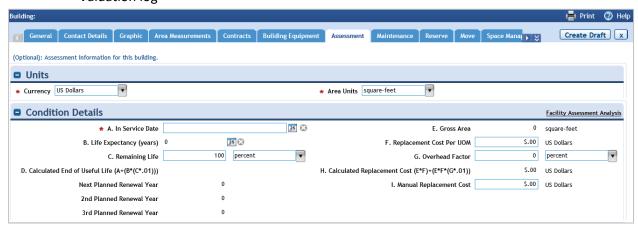




Assessment Tab

The Assessment tab is used to review condition assessment information and the assessment history for building systems. You can find information pertinent to managing assessment data and processes for a location including:

- Life expectancy
- Replacement cost
- Current condition index (with history log)
- List of opportunities and total cost of opportunities
- Repair and replacement funding
- Building systems
- Inspection history
- Regulatory information
- Valuation log

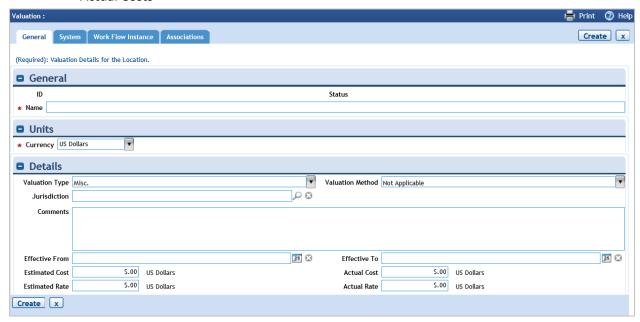




Valuation

When necessary, you can add a record to the Valuation Log on the Valuation tab of the Assessment tab. The following fields are available on the new Valuation Log record:

- Valuation Name
- Valuation Type
- Valuation Method
- Jurisdiction
- Comments
- Effective Dates
- Estimated Costs
- Actual Costs

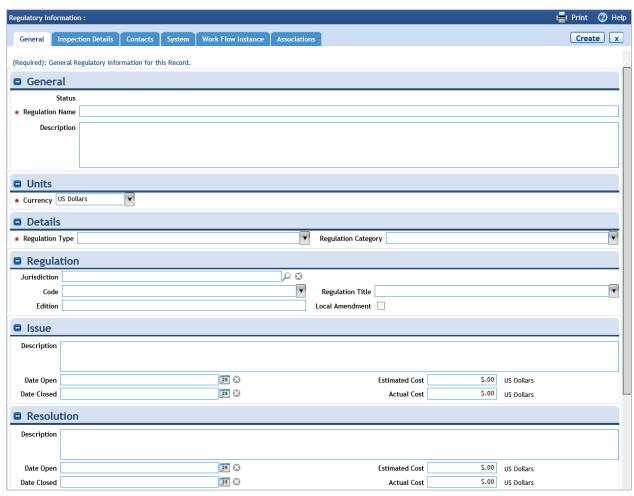


Regulatory Information

From the Assessment tab, the Regulatory Information tab is used to review the list of existing license and permit information for the location. Complete the detailed information for each record in the following fields:

- Regulation Name
- Description
- Regulation Type
- Jurisdiction
- Code
- Issue Resolution
- Inspection Details
- Key Contacts





Maintenance

The Maintenance tab is used to review maintenance work activity information and maintenance history for the location record. The Maintenance tab can also be used to view preventative maintenance schedules and procedures, building systems installed, meter allocations and readings, project activity, and work orders/tasks for the location.

Building Equipment

The Building Equipment tab is used to review the list of equipment associated with the location. The list cannot be modified in this view but the information can be searched, sorted and filtered if needed.

Notes and Documents

The Notes and Documents tab is used to add informational comments or documents related to a location record.

Once data entry for the location record is complete, you can activate the location record using the Activate action at the top of the form. If approval is required to activate a location, the record status will be set to Review in Progress, pending the completion of the approval action.







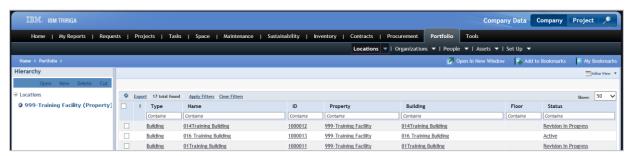
Create a Location Record

Scenario

Your department has acquired a new building and a record must be created in TRIRIGA. You will use the Portfolio > Locations portal to create and update the record.

Login to the TRIRIGA Home Page. Navigate to the Portfolio > Locations portal landing page.

- 1. Click Portfolio tab
- 2. Click **Locations** option in the sub header to view the Locations Hierarchy page
- In the list of Locations on the left, locate and select 999-Training Facility (Property)
- 4. Observe the list of buildings located at the property



Create a new Location record.

- 5. In the Hierarchy section, click New
- 6. In the list of location types, click **Building**



Complete the General section.

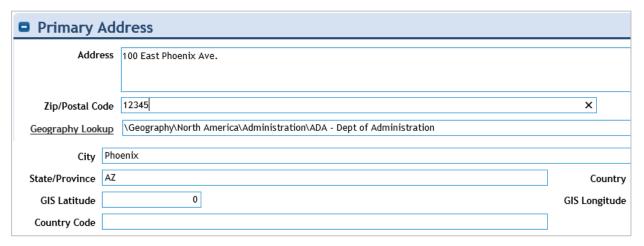
- 1. In the **General** tab, in the **Name** field, enter **General ## Training Building**, where **##** is your student number
- 2. In the **Description** field, enter **Temporary use for training**
- 3. In the **Location Status** section, in the **In Service** field, click the **calendar date lookup Select today's date**
- 4. Click the Create Draft action





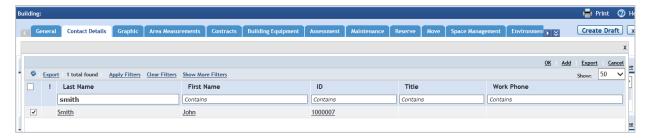
Complete the Primary Address section.

- 1. In the Primary Address section, in the Address field, enter 100 East Phoenix Ave
- 2. In the Zip/Postal Code field, enter 12345
- 3. In the City field, enter Phoenix
- 4. In the State/Province field, enter AZ



Complete the Contact Details tab.

- 1. Click the Contact Details tab
- 2. Click the **Add People** action. The Add People window is displayed.
- 3. In the Last Name filter field, enter Smith
- 4. Press Enter
- 5. Select the **checkbox** for the record that is displayed



- 6. Click the **OK** action. The person is added to the list of Contacts
- 7. Click the **Name** of the Person in the Contacts section
- 8. In the Role section, click the Find action. The Role window is displayed



9. Select the radio button for Building Supervisor



- 10. Click the **OK** action. The role will be added to the contact record
- 11. Click the **Save & Close** action. The Contact Details tab will be updated with the person's role Save and Activate the record.
 - 12. Click the Save action to save the form
 - 13. Click the **Activate** action to submit the form for approval



- 14. Observe that the new building has a status of Review In Progress
- 15. When you are finished, click the **Home** tab to return to the Home Page



Vehicle/Equipment Specification

Assets are owned or leased items, such as equipment or vehicles, which may be associated with a location. An Asset is a unique instance of an item and each item is associated with a specification that categorizes the asset.

Building Equipment/Vehicle Specifications

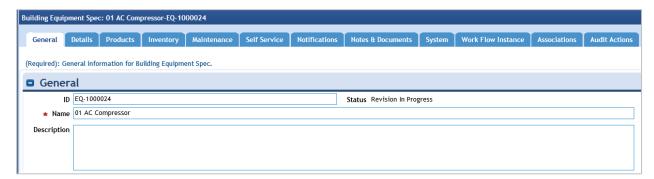
The Portfolio > Assets portal is used to create and manage specifications.

- To add a new Building Equipment specification record, from the list of Specifications, click Building Equipment, and then click Add.
- To add a new Vehicle specification record, click Vehicles from the list of Specifications.
- When data entry is complete, the Activate action is used to submit the form for approval.



General

In the General section of the form, enter a Name and a Description. The ID field will be automatically generated if a value is not specified.

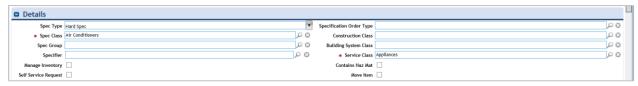


Details

In the Details section, complete the following fields:

- Spec Type
- Spec Class
- Spec Group
- Building System Class
- Service Class





Units

In the Units section, enter values for Currency and Item Units.

Other Sections

The other sections of the form are used when appropriate to store environmental details, manufacturer details, and item cost details.



Scenario

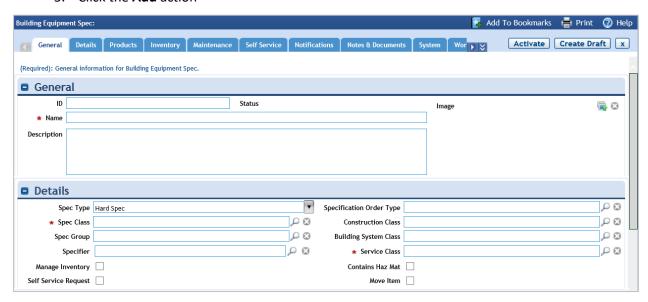
You need to add a specification to the database for a new piece of equipment. You will use the Portfolio > Assets, New Specification form to create the new record.

Login to the TRIRIGA Home Page. Navigate to the Portfolio > Assets portal landing page.

- 1. Click the Portfolio tab
- 2. Click the Assets option in the sub header to view the Assets page

Create a new Building Equipment specification record.

- 3. In the Specifications section click Building Equipment
- 4. Click **Open** in New Window
- 5. Click the Add action



Complete the General tab on the record.

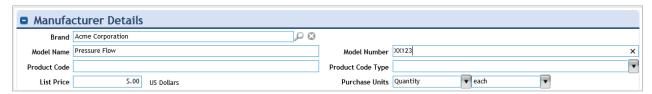
6. In the **General** section, in the **Name** field, enter ## **AC Compressor**, where ## is your student number



7. In the Spec Class field, click the magnifying glass lookup icon



- 8. Select Appliances > Air Conditioners
- 9. In the Service Class field, click the magnifying glass lookup icon
- 10. Select Facilities > Appliances
- 11. In the Manufacturer Details section, in the Brand field, click the magnifying glass lookup icon
- 12. Select Acme Corporation
- 13. In the Manufacturer Details section, in the Model Name field, enter Pressure Flow
- 14. In the Model Number field, enter XX123



Save and Activate the record.

- 15. Click the Create Draft action
- 16. Click the **Save** action
- 17. Click the Activate action

Building Systems and Equipment

The management of building systems and equipment is performed in the Portfolio > Assets portal. Once specifications have been defined, they can be assigned to new asset records.

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Prior to the creation of specific building equipment records, the facility management team must define hierarchies of building systems at each location. The building systems at any location can include mechanical, electrical, plumbing, security, and other systems. Building systems can be defined as hierarchical, allowing for sub-systems to be assigned as child nodes under primary system nodes (e.g. both cold-water and hot-water systems may be defined separately as child nodes under a primary plumbing system).
- 2. Fixed Asset information is sent from AFIS to TRIRIGA in order for equipment information to be established. Equipment records may also require updates to the system as part of a commissioning process during the closeout of a capital project. Communication between project and facility groups will be required to coordinate the information sharing within TRIRIGA.



- 3. Once building system hierarchies are created, specific equipment records can be created and linked to the appropriate system hierarchy nodes. Each building equipment record can include key information about the equipment number, location, maintenance history, cost, valuation, etc. In addition, building equipment can be linked to maintenance job plans to automate the scheduling of recurring preventive work against the listed equipment item.
- 4. The condition of building equipment is monitored throughout the equipment lifecycle. Typically, technicians or external vendors performing work on equipment will be asked to document the condition of the equipment that work is being performed on. The work performed on a piece of equipment can be either corrective or preventive work tasks. Once the equipment condition is documented on the equipment record, the system will have the information required to perform a Develop Assessment Plan. In addition, the assessment process will often result in new corrective work to address the identified deficiencies. Finally, the assessment process will often lead to adjustments to existing preventive maintenance schedule frequencies, as decisions are made about how to manage asset lifecycles.

Managing Building Equipment

The Portfolio > Assets portal is used to create and manage Building Equipment. To add a new Building Equipment record, from the list of Assets, click Building Equipment, and then click Add. When data entry is complete, the Activate action is used to submit the form for approval.



General

In the General section of the form, enter a name for the asset record. The ID field will be automatically generated if a value is not specified.

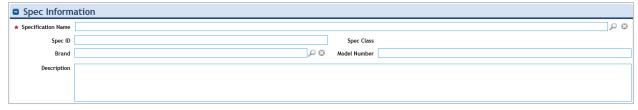


Spec Information

In the Spec Information section, assign a value to the Specification Name field using the lookup icon. Once the specification is assigned, the equipment record automatically infers key information from the specification. These inferred fields include:



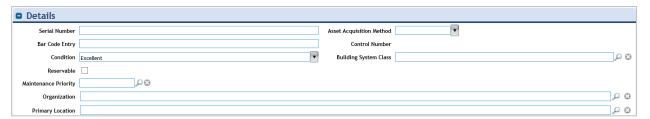
- Building System Class
- Currency
- Spec ID
- Brand
- Spec Class
- Model Number
- Description



Details

In the Details section, enter values in the relevant fields, including:

- Serial Number
- Condition
- Organization
- Primary Location





Scenario

You need to add a building equipment asset to the database for a new piece of equipment. You will use the Portfolio > Assets, New Asset form to create the new record.

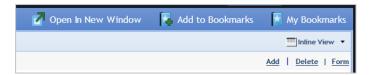
User is on the Portfolio > Assets > Building Equipment (Specifications) page.

Navigate to the Portfolio > Assets portal landing page.

- 1. In the breadcrumb navigation feature, click Assets
- 2. On the Assets page, in the Assets section, click Building Equipment

Create a new Building Equipment asset record.

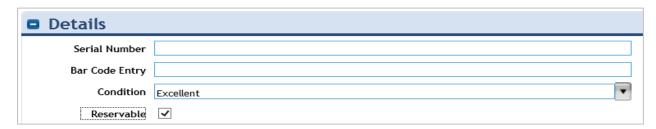
3. Click the Add action



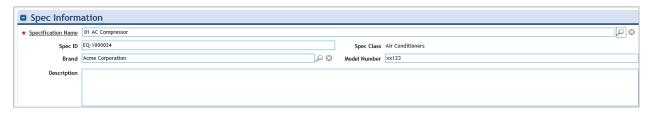


Complete the General tab on the record.

- **4.** In the **General** section, in the **Name** field, enter ## **Roof AC Unit**, where ## is your student number.
- 5. Click the checkbox for Reservable.

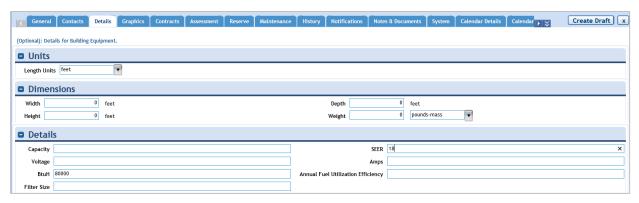


- 6. In the **Spec Information** section, for the **Specification Name** field, click the **magnifying glass** lookup icon.
- 7. Select the radio button for ## AC Compressor
- 8. Click the OK action.



Enter some optional information about the equipment.

- 9. Click the Details tab
- 10. In the Details section, in the BtuH field, enter 80000
- 11. In the SEER field, enter 18.



Complete the Reserve tab on the record.

- 12. In the **General** section, in **the Reserve Calendar** field, click on the **magnifying glass** lookup icon
- 13. Select the radio button for the Default Reservation Calendar



- 14. Click the OK action
- 15. In the **Usage Units** field, click the dropdown arrow and select **Hour**.
- 16. In the Usage Cost field, enter 50.



Save and Activate the record.

- 17. Click the Create Draft action
- 18. Click the Save action
- 19. Click the **Activate** action

Assigning Assets/Equipment to Employee

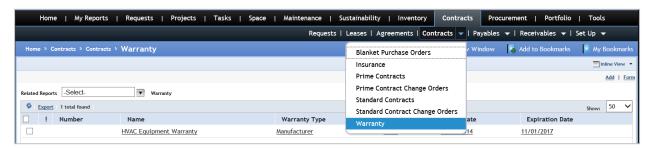
Upon completion of the asset record, individual assets and equipment can be assigned to an employee in the Portfolio > People > Employees list. Once the Employee record is located and opened, the Locations/Assets tab is used to add equipment assigned to the person. Equipment can also be assigned via a work task or on the equipment record.



Tracking Equipment Warranties

During the performance of maintenance activity, it may be necessary for maintenance team members to reference maintenance warranty information, including warranty status, dates, and other information related to the maintenance of the asset record. Warranty records can be assigned to either building records or asset/equipment records.

The Contracts portal, Warranty menu is used to view a list of warranty records. A new warranty record is created by clicking the Add action.



General Tab

The required fields on the warranty record include:



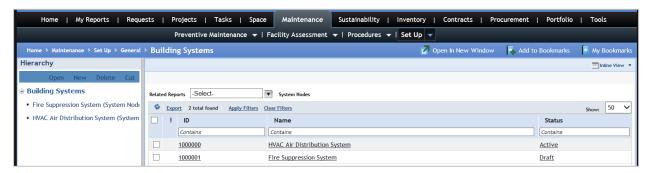
- Name
- Description
- Warranty Type
- Contract Type
- Provider Type
- Start Date
- Expiration Date
- Warranty Service Provider

Assets and Locations Tab

The Assets and Locations tab is used to define the scope of the warranty. Assets and Locations can be added using the Find action and locating the record to associate with the warranty record.

Managing Building Systems

Assets can be defined to track any type of equipment. Each asset record can be assigned to a building system, which provides the context for the relationship between the asset and the building where it is installed. For example, a generator asset may be assigned to the Electrical system of a specific location. Building systems are a key part of the condition assessment process. Only those authorized have the ability to create Building System records.



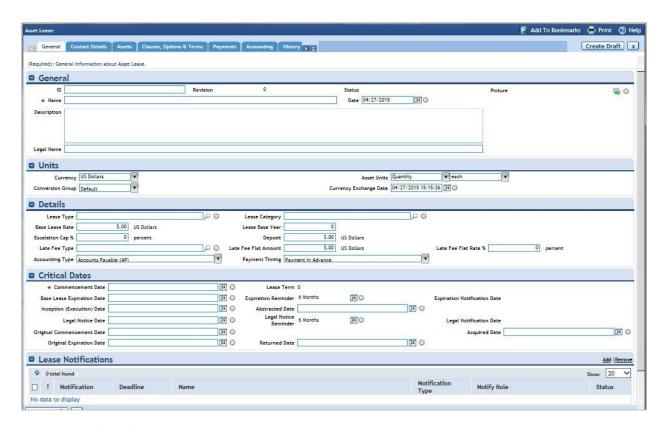
Managing Asset Lease

An ownership status (Leased or Owned) can be assigned to an asset record in the Asset Status section. Leased assets can be assigned to an Asset Lease Contract. Asset Lease records are created using the Contracts > Leases portal and clicking the Add action in the My Asset Leases section.

General Tab

On the General tab, enter a Name, Description, Commencement Date, and Expiration Date.

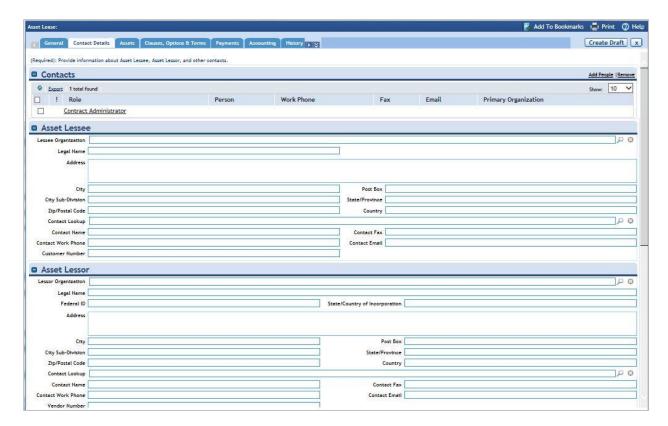




Contact Details Tab

On the Contact Details tab, assign a person to the defined Contract Administrator role by clicking the role name and selecting a person from the list.





Assets Tab

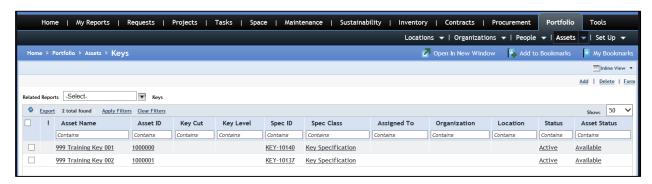
On the Assets tab, assign one or more assets to the lease using the Find action on the Leased Assets section.



Complete any other relevant details for the Asset Lease, including the Lease Terms and Scheduled Payments. When data entry is complete click Save and Activate the record.

Managing Key Security

The Key Security Manager enables an organization to define key security for all the locations in the organization's portfolio. The key management tools are used to create a user-defined hierarchy of key security levels and store the security information required to create new keys.





Keys have a specification record and an asset record. Key specification records are managed in the Assets > Keys portal. New key asset records can be created by clicking the Add action from the Keys page in the Specifications section.

Key asset records are stored in a hierarchy in the Inventory > Manage Keys portal that uses nodes to manage the levels of key security. The following types of keys can be created:

- Great Great Grand Master Key
- Great Grand Master Key
- Grand Master Key
- Master Key
- Change Key
- Sub Master Key
- Specialty Key

Utility Meters

Utility meters are used to track energy consumption data for locations. The process of managing utility data requires the setup of utility meter specifications, setup of asset meters and allocations, and the data entry of energy consumption information.

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Prepare the utility meter records in the Utility Meter & Allocations process. The meter records allow for the registration of energy consumption data against specific locations. Each utility meter asset is classified using the Specification Class value of Utility Meter. As part of the utility meter location assignment, you can define the meter allocations which represent the proportion of the meter that is allocated to each building. This allows for the definition of scenarios where single locations have multiple utility meters, or where a single utility meter is allocated to a group of buildings (e.g. campus meter).
- 2. Once utility meters are defined for each location, you can enter utility consumption based on the actual data received from the utility company. Consumption data can be created for any energy type (electrical, water, gas, etc.). You enter the unit of measurement (e.g. kWh, BTU, gallons, etc.), as well as the total cost of the energy consumed. It is assumed that the consumption data is historical (already paid) data. The utility meter data is used for energy consumption reporting, but does not drive utility payments.
- Record information and any attached documentation are reviewed and approved by the
 department. If the approver determines there are missing or incorrect data, then the record is
 rejected and returned for corrections. If the approver determines the data is complete and
 acceptable, then the record is approved.
- 4. Once consumption data is entered/approved for various energy types at the utility meter level, an energy log is generated at each location. Each location's energy logs reflect the proportional energy usage defined in the utility meter allocations. The allocation allows for generation of reports and energy metric calculations. A unit of measure conversion can be automatically performed to allow for reporting across meters and locations in a common unit of measure.

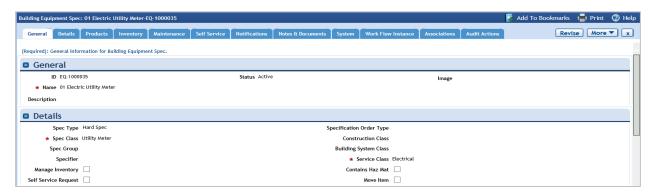


Typical metrics generated are related to energy consumption include energy cost by building per square foot, energy cost by building per energy type and other energy type-specific measures.

5. Reports on energy cost and consumption can be generated, exported to standard formats (MS Excel, Adobe PDF), and can be submitted to a regulatory agency as part of a larger document or submission.

Setting Up Utility Meter Specifications

The first step in the utility management process is to create a utility meter specification. It is recommended to use the Building Equipment specification form to create and track utility meter equipment.

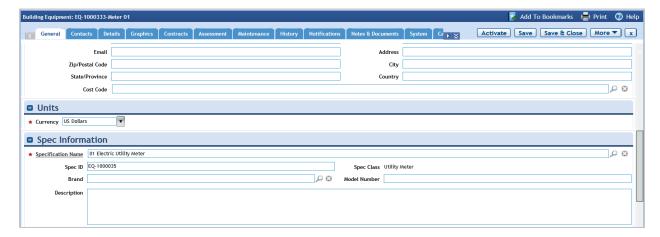


The Spec Class value of Utility Meter can be found under Instrumentation and Controls in the class hierarchy. For a utility meter, the Item Units field should match the units measured by the meter. Once data entry is complete, click Save and Activate the specification.

Creating Asset Meters and Allocations

The next step in the utility management process is to create the asset record to support the tracking and setup of utility meters. Meters can be allocated across and within buildings and other locations.

Once the Specification Name field has been completed using the lookup icon, the equipment record will infer the other key information from the specification.

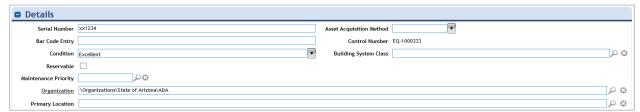




Details

In the Details section enter values for the relevant fields for the meter, including the following:

- Serial Number
- Condition
- Organization
- Primary Location



Meter Service Allocations

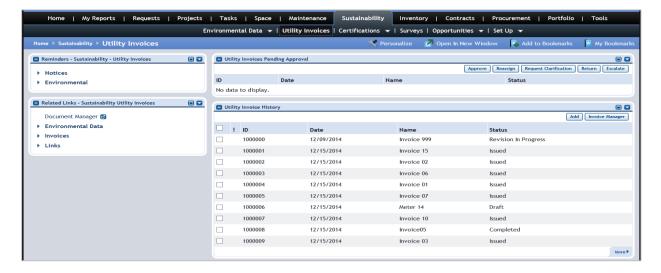
The Meter Service Allocations tab is located on the Building Equipment Record Maintenance tab. This tab is used to allocate a meter across more than one location. For example, a Meter may have two locations assigned at 100% service which means that one meter reports data from both locations. And, multiple meters can service one location, for example, two meters assigned at 50% to a single location.



When data entry is complete, Save and Activate the equipment asset record.

Entering Energy Consumption Data

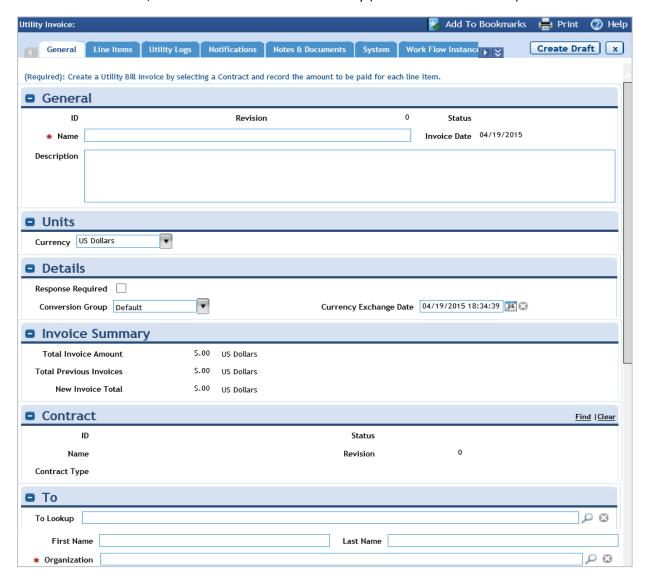
The next step in the utility management process is entering the amount and cost of energy consumed per utility meter. It is assumed that TRIRIGA is only used for historical reporting and analysis of utility invoices and not for processing of utility invoice payments. Utility payments are processed in AFIS. Utility invoice data is entered in the Sustainability > Utility Invoices portal. You can click the Add button to Create a new Invoice record.





General

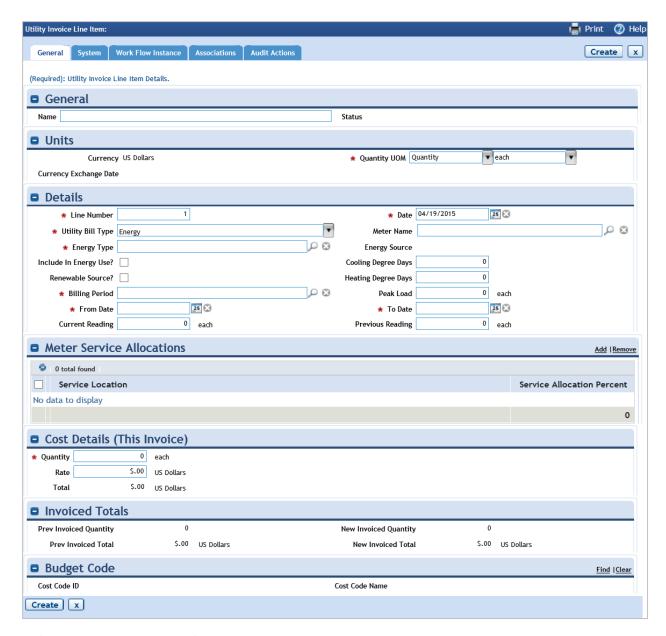
In the General section, enter a Name and select a currency (the default is US Dollars).



Line Items

On the Line Items tab, click the Add action to display the Utility Invoice Line Item form.





Utility Invoice Line Item Details

On the Utility Invoice Line Item form, in the Details section, complete the following fields:

- Name
- Date
- Utility Bill Type
- Meter Name
- Energy Type
- Billing Period
- From Date
- To Date
- Quantity UOM
- Current Reading
- Previous Reading



The Meter Name field provides a lookup icon that can be used to select the meter asset that was created to track usage.

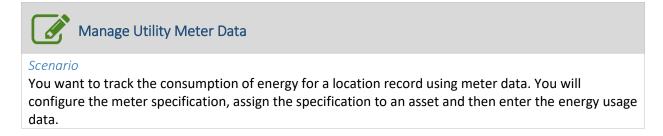
Cost Details

In the Cost Details section, enter values for the Quantity and Rate fields. Also, assign a budget code value if needed. Budget codes must be set up in the Organization Cost Code hierarchy prior to assigning to a utility invoice.



Create and Issue

When data entry is complete for the Utility Invoice record, click Create to save the record, then click Issue. If approved, the record will appear in the results page with a status of Active.



User is on the Portfolio > Assets > Building Equipment page.

Navigate to the Portfolio > Assets portal landing page.

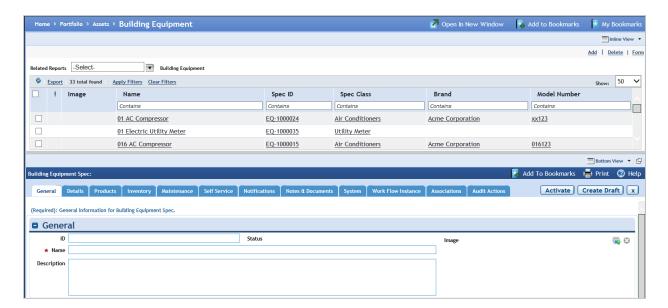
- 1. Click the Portfolio tab
- 2. Click the **Assets** option in the sub header to view the Assets page.



Create a new Building Equipment specification record.

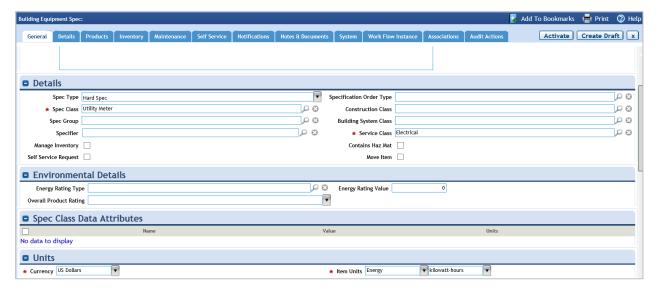
- 3. In the Specifications section, click Building Equipment
- 4. Click the Add action





Complete the General tab on the record.

- **5.** In the **General** section, in the **Name** field, enter ## **Electric Utility Meter**, where ## is your student number
- 6. In the Details section, for the Spec Class field, click the magnifying glass lookup icon
- 7. Select Instrumentation and Controls > Utility Meter
- 8. For the Service Class field, click the magnifying glass lookup icon
- 9. Select Facilities > Electrical
- 10. In the Units section, in the Item Units field, click the dropdown and select Energy
- 11. Click the Measurement dropdown and select kilowatt-hours
- 12. Click the Activate action to save and close the record





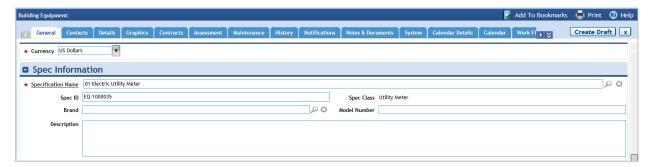
Create a new Building Equipment asset record.

- 1. In the breadcrumb navigation feature, click Assets.
- 2. In the **Assets** section, click **Building Equipment**.
- 3. Click the Add action.



Complete the General tab on the record.

- 4. In the General section, in the Name field, enter ## Meter, where ## is your student number
- 5. In the **Details** section, for the **Serial Number** field enter **XX1234**
- 6. In the Organization field, click the magnifying glass lookup icon
- 7. Select the radio button for \Organizations\State of Arizona\ADA
- 8. Click the OK action
- 9. In the **Spec Information** section, for the **Specification Name** field, click the **magnifying glass** lookup icon
- 10. Select the radio button for the ## Electric Utility Meter created in the previous step
- 11. Click the **OK** action
- 12. Click the Create Draft action



Navigate to the Maintenance tab on the record.

- 1. Click the Maintenance tab
- 2. Click on the Meter Service Allocations tab
- 3. Click the Add action
- 4. In the Service Allocation Percent field, enter 100



- 5. In the **Service Location** field, click the **magnifying glass** lookup icon
- 6. Select the radio button for the building that you created in earlier activity
- 7. Click the **OK** action



- 8. Click the Create action
- 9. Click the Save action
- 10. Click the **Activate** action

Navigate to the Sustainability > Utility Invoices portal.

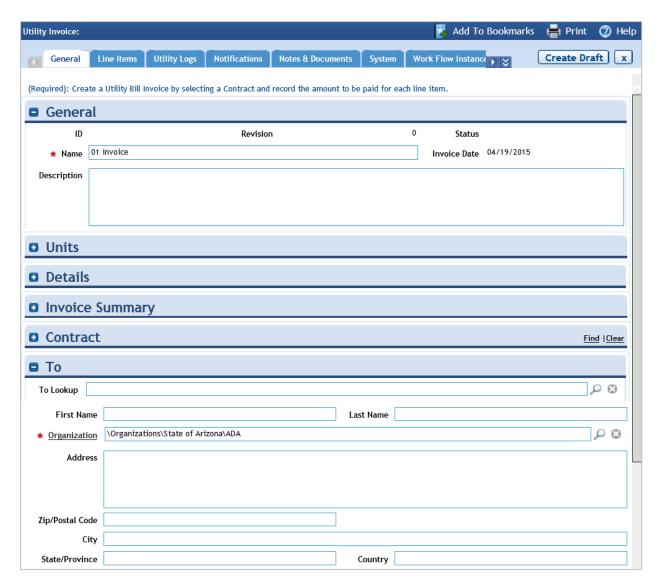
- 11. Click the Sustainability tab
- 12. Click the Utility Invoices option in the sub header to view the Utility Invoices landing page
- 13. In the Utility Invoice History section, click the Add action



Complete the Utility Invoice record.

- 1. On the **General** tab, in the **General** section, in the **Name** field, enter **## Invoice**, where **##** is your student number
- 2. In the Organization field, click the magnifying glass lookup icon to display the lookup page
- 3. Select the radio button for \Organizations\State of Arizona\ADA
- 4. Click the **OK** action





- 5. Click the Line Items tab
- 6. Click the Add action

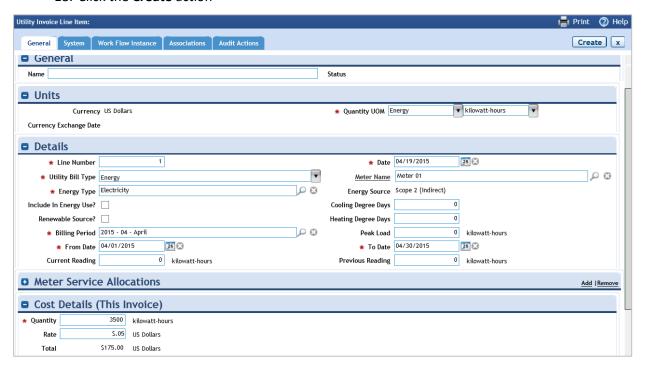


Complete the Utility Invoice Line Item record.

- 7. In the **Details** section, in the **Date** field, enter today's date
- 8. In the **Energy Type** field, click the **magnifying glass** lookup icon
- 9. Select Scope 2 > Electricity
- 10. In the Billing Period field, click the magnifying glass lookup icon



- 11. Select the current month
- 12. In the Meter Name field, click the magnifying glass lookup icon
- 13. Select the meter asset that was created in the previous step
- 14. Click the OK action
- 15. Select the checkbox for Include in Energy Use?
- 16. In the Cost Details (This Invoice) section, in the Quantity field, enter 3500
- 17. In the Rate field, enter .05
- 18. Click the Create action



Issue the Utility Invoice record.

- 1. In the **Utility Invoice** form, click the **Create Draft** action
- 2. Click the Issue action





3. Click the **Home** tab to return to the Home Page

Creating Corrective Maintenance Work Task

Multiple request types can be created and tracked. Corrective maintenance work tasks are issued upon request, either by using the self-service functions or after being received over the phone. You can create Corrective Maintenance Work Tasks based on your access.

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- A work request can be initiated using self-service functions, allowing employees to report
 maintenance-related issues. The requestor can complete an online form to enter the request.
 The request form prompts for the description, location, and type. The system sends a
 notification message to the requestor confirming receipt of the request and provides the
 requestor with a portal view to monitor the status of the submitted request.
- 2. As an alternative to the self-service request entry method, employees may report maintenance-related issues by contacting a centralized call center group. The call center can receive the request by phone or e-mail. While fielding the request, the call center can document the request in the system with information including the requestor name, description, location, and type. The call center option may also be used for emergency requests or in scenarios where the requestor does not have access to the system. Once the request is submitted, the system creates a work task. The system sends a notification message to the requestor confirming receipt of the request.
- Facilities groups may proactively identify maintenance related issues during routine building
 walkthroughs or during the performance of unrelated maintenance work. Maintenance team
 members are authorized to bypass the request process and enter work tasks in the system
 directly.
- 4. If the maintenance process is initiated using a request, then request approval can be utilized to ensure that the work request is aligned with departmental policies, goals, and budgets. Once the request is submitted by the requestor, department users are assigned to validate the



request scope and priority by reviewing and approving request record information. The requestor will be notified that their request has been rejected. If the approver determines the request is valid, the record is approved.

- 5. Once a work request is submitted, the system will automatically generate the work task required to resolve the request.
- 6. If the maintenance process is initiated using a work task directly, then request approval can be utilized to ensure that the new work task is aligned with departmental policies, goals, and budgets. Once the task is submitted by the technician, the task is assigned for validation. The requestor will be notified that their request has been rejected. If the approver determines the task is valid, the record is approved.

Some of the request types include:

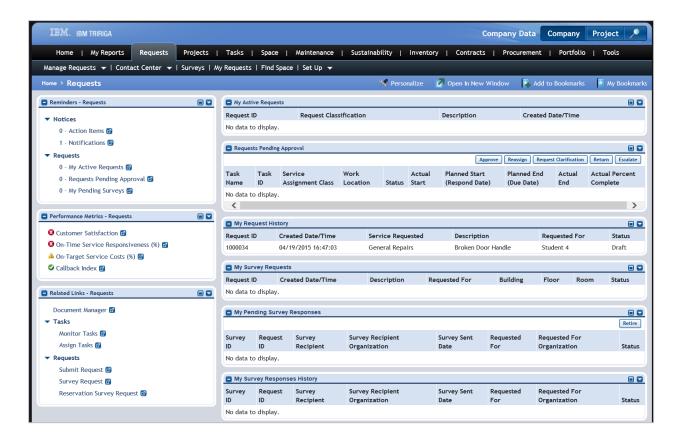
- Electrical and Lighting
- Equipment Service
- Exterior Services
- Fixture and Furniture
- General Repairs
- Housekeeping
- Interior Services
- Key Request
- Plumbing and Leaks
- Security
- Temperature

Submitting Online Request

The Requests portal is used to issue, manage, and track the various requests for corrective maintenance. You can create self-service requests for a variety of repairs and services.

In the Requests Portal, the Submit Request action in the Related Links – Requests section will display the types of requests that can be created. Selecting the type of request from the menu on the left will create the form used to complete the request. In this lesson, the focus is a General Repair request.





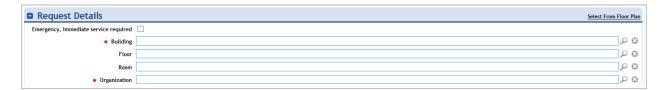
General Repairs

In the General Repairs form, select who the request is for, either Me or Someone Else. For Someone Else enter the contact information for the person the request is for.



Request Details

In the Request Details section, check the Emergency box if immediate service is required. Then enter the Building, Floor, Room, and Organization values as appropriate for the request.



Describe Your Request

Enter a description of the repairs or issue in the Describe Your Request section.

Other Sections

If the request is applicable to more than one Location, add locations by selecting the Find action. Select any Assets that the request is associated with. Enter any additional information in the Comments section and attach any documentation using the Upload action in the Related Documents section.

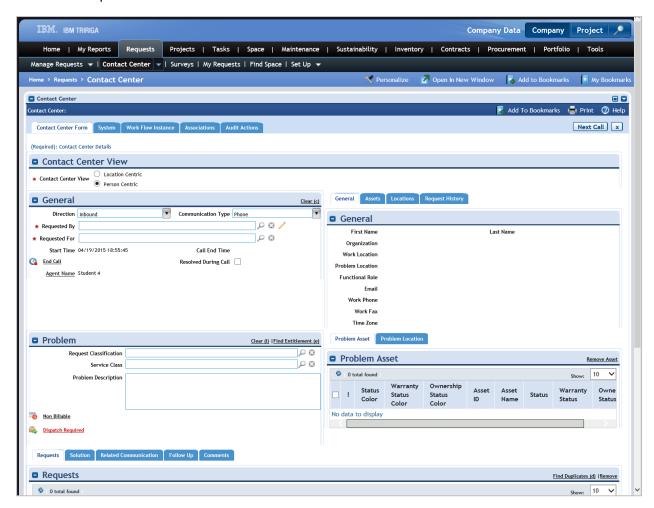


Save and Submit

When data entry is complete, the Create Draft button is used to save the request and the Submit button is used to submit the request. You will see the status of their request in the Manage Requests portal. Requests will be listed in the My Request History section.

Receiving Requests by Phone

The Requests > Contact Center is used to record requests received by phone, email or other offline communication. On the Contact Center form, a call center member completes the necessary information for the request and then clicks Quick Add to create the request then clicks Next Call to submit the request.



Contact Center View

In most cases, the Contact Center View should be left as the default Person Centric which will configure the form to logically record data entry based on a person making the request.

General

In the General section enter values for Requested By and Requested For (if not the same). Both fields are required and the Requested For field will inherit the value from the Requested By field. These fields also populate the content of the General and Primary Location sub-menus. Select a Communication Type from the list, Fax, Mail, or Phone.



Problem

In the Problem section, complete the following fields:

- Request Classification
- Service Class
- Problem Description

The assigned Request Classification will determine the Service Plan used for routing the request.

Locations

In the Locations sub-menu, assign any locations related to the request by selecting from the available items in the list. Click the radio button to add a location to the request record.

Assets

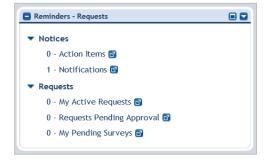
In the Assets sub-menu, assign any assets related to the request by selecting from the available items in the list. Click the radio button to add an asset to the request record.

Submit the Request

Clicking Quick Add action will create the request and clicking Next Call will submit the request. Requests created by the Contact Center form behave the same as requests created in Request Central using the self-service form to generate a work order or a project, as appropriate to solve the request, but there is no approval required in the workflow.

Reviewing Requests

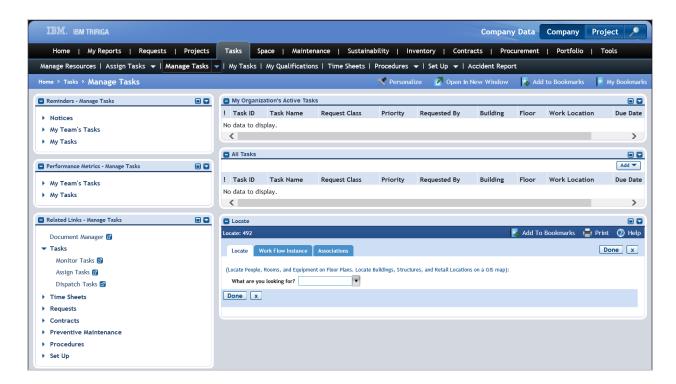
A facilities manager should review requests before creating work tasks. Requests can be reviewed in the Notices > Notifications page in the Reminders section of the Requests page. In the Actions section, managers can approve, escalate, or reassign the request. They can also request clarification for the request. After review, if the request is valid, the manager can approve the request. If necessary, a comment can also be entered for the approval.



Creating Work Tasks

When a Work Request is approved, an associated Work Task is created. Work Tasks are automatically created with the information from the Work Request. Work Tasks can be viewed in the Tasks > Manage Tasks portal using the Work Tasks option. Work Tasks can be filtered and sorted to find desired tasks. Clicking on a task will display the details of the task for review.







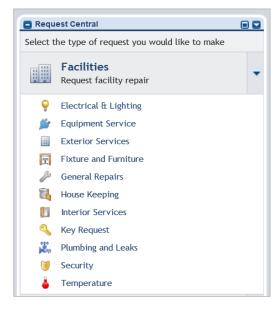
Create Corrective Maintenance Work Task

Scenario

You need to create a work task for a general repair in TRIRIGA. You will create the corrective maintenance request in the Requests portal and then create a work task to perform the repairs.

Login to the TRIRIGA Home Page. Navigate to the Requests > Manage Requests portal.

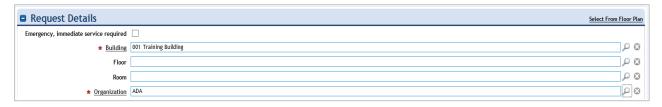
- 1. Click the Requests tab
- 2. In the Request Central section, expand Facilities and click General Repairs





Complete the General Repair request form, Request Details section.

- 1. In the Request Details section, in the Building field, click the magnifying glass lookup icon
- 2. Click in the Name filter field
- 3. Click Enter. All possible values will be displayed in the list
- 4. Select the radio button for the Training Building you created earlier
- 5. Click the **OK** action
- 6. In the **Organization** field, click the **magnifying glass** lookup icon
- 7. Select the radio button for ADA
- 8. Click the **OK** action



Complete the rest of the request.

- 9. In the Service Request section, select the radio button for Elevator
- 10. In the **Describe Your Request** section, in the text box, enter ## **The elevator will not stop at floor 13,** where ## is your student number
- 11. Click the Submit action



Review the request.

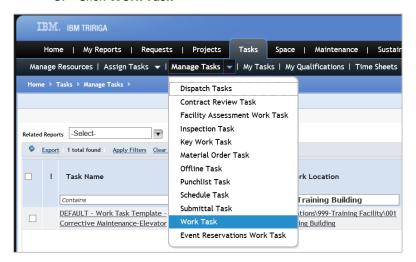
- 12. On the **Manage Requests** page, in the **My Request History**, observe the request has been created.
- 13. Confirm notification in user **Home** portal that request has been received.



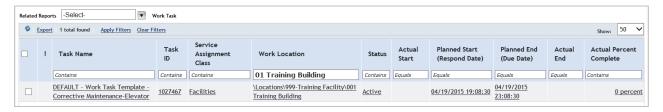


Approval of the request generates the Work Task. Locate and review the Work Task.

- 1. Navigate to the Tasks landing page
- 2. Click the drop down menu for Manage Tasks
- 3. Click Work Task



4. Filter the results by entering **General ## Training Building**, where **##** is your student number, in the **Work Location** field.



5. Click on the task to open it and confirm it created properly

Preventative Maintenance Work Task

Preventative maintenance is work performed on a defined schedule rather than when something breaks. A job plan is 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.

A job plan:

- Is the main record that defines the preventive maintenance work to be performed?
- Defines what building systems, assets, and/or locations will be serviced
- Identifies the organizations (internal or external) responsible for managing and performing the work.

After the job plan record is created, systems, assets, or locations are associated to the plan.



Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Define the job plan.
- 2. Define the prerequisite preventive maintenance data.
- 3. The job plan and its related schedules are activated. Approval of the job plan is optional.
- 4. The system supports both time and meter-based schedules.

For time-based schedules, the system will monitor any defined schedules and will automatically generate work tasks based on the scheduled frequency and scheduled start dates.

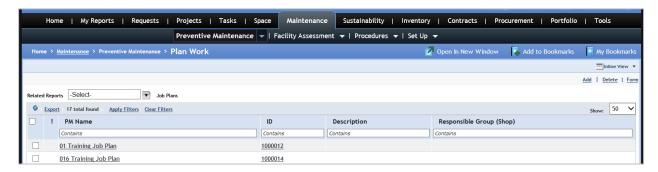
For meter-based schedules, the system will monitor all meter reading log entries and automatically generate work tasks when a meter reading log entry exceeds a defined allowable threshold.

The tasks generated based on schedule and meter readings are assigned for review. The requestor will be notified that their request has been rejected. If the approver determines the task is valid, then the record is approved.

Creating a Preventative Maintenance Job Plan

The Maintenance portal is used to create and manage preventative maintenance job plans. Once a job plan is created it can be used to generate work tasks.

From the Maintenance portal, navigate to Preventative Maintenance and select Plan Work from the menu. Click the Add button on the job plan list to create a new job plan record. Clicking a job plan link in the list will open the existing job plan for review and/or modification.

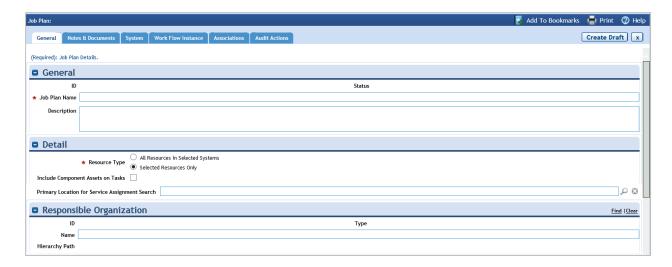


General

On the General tab, enter the necessary information to define the job plan. Enter a Job Plan Name and Description. Select a Resource Type, either All Resources in Selected Systems or Selected Resources Only (default). Enter optional data into the remaining fields, including:

- Primary Location
- Responsible Organization
- Service Provider
- Include Component Assets





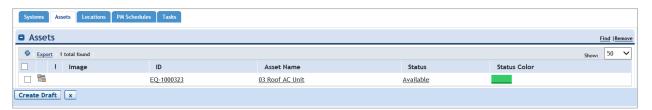
Systems

Selecting the All Resources in Selected Systems option will enable the Systems tab at the bottom of the General tab. Use the Find action to assign one or more building systems to the job plan. Adding systems to the plan will automatically populate the Assets and Locations with the records associated with the selected systems.



Assets

The Assets tab is used to assign one or more asset records to the job plan. The list of available assets is dependent on the equipment records that have already been defined.



Locations

The Locations tab is used to assign one or more location records to the job plan.

When data entry is complete, save and close the job plan to save the record with a status of Draft.

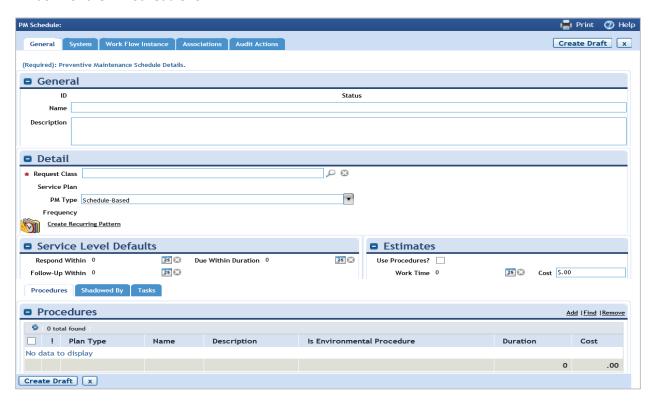
Generating a Schedule-Based Preventative Maintenance Work Task

Preventative maintenance (PM) work can be generated based on a defined recurrence schedule. Once the planned work is generated and activated, the work can be managed using the standard work management processes.

The process starts with locating and opening an existing job plan record in the Maintenance > Preventative Maintenance portal. Once the record is open, the PM Schedules tab at the bottom of the



job plan form allows you to create and review PM schedules. Clicking the Add action will open a new window for the PM Schedule form.



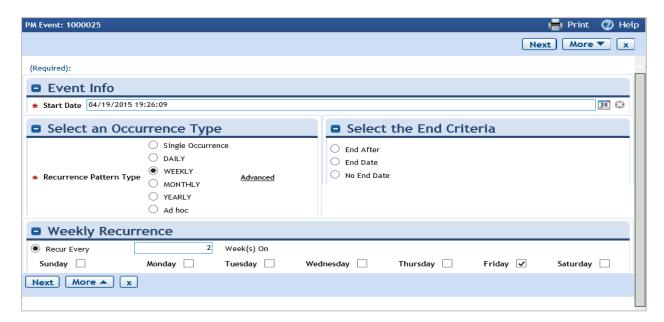
General

On the General tab, enter a name and description for the schedule. Select a Request Classification from the list using the lookup icon. The PM Type should be set to Schedule-Based. Optional information on the General tab includes the Service Level Defaults and Estimates for time and cost.

Recurrence

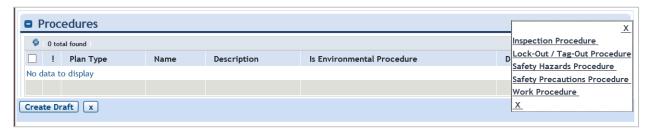
Create a recurrence pattern using the Create Recurring Pattern action. Options include, single occurrence, daily, weekly, monthly, and yearly. For example, a recurrence pattern could be set to biweekly on Fridays by selecting weekly and recur every 2 weeks on Friday.





Procedures

In the Procedures section, add procedures that detail the required steps for the technician to perform in order to complete the assigned schedule of work.



Activate

After a review of the data is complete, the preventative maintenance job plan is activated and the schedule creates with a status of Planned.

Generate PM Work Task

PM work is automatically generated, based on the schedule. Planned work tasks are automatically moved to an Active status on the planned start date of the task.

Activate PM Work Task

Selecting a work task with a status of Planned and clicking the Generate Work action will update the task status to Active.





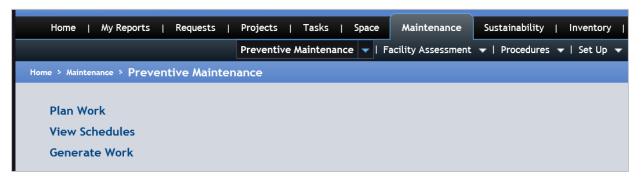
Create Preventative Maintenance Work Task

Scenario

You want to set up a job plan to automatically schedule work tasks for preventative maintenance. You will use the Maintenance portal to create the job plan and add preventative maintenance.

Login to the TRIRIGA Home Page. Navigate to the Maintenance > Preventative Maintenance portal landing page.

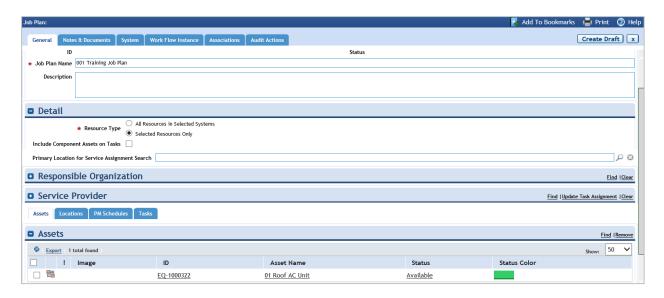
- 1. Click the Maintenance tab
- 2. Click the Preventative Maintenance option in the sub header
- 3. Click Plan Work



Create a PM job plan.

- 1. Click the Add action
- 2. In the Job Plan Name field, enter ## Training Job Plan, where ## is your student number
- 3. In the Service Provider section, click the Find action
- 4. Filter the results by **Type: Work Group** and select the radio button next to your student number work group
- 5. Click the **OK** action
- 6. In the **Assets** section, select the **Assets** tab, click the **Find** action
- 7. Click the **checkbox** for the Air Conditioner created in a previous activity
- 8. Click the **OK** action
- 9. Click the Create Draft Action





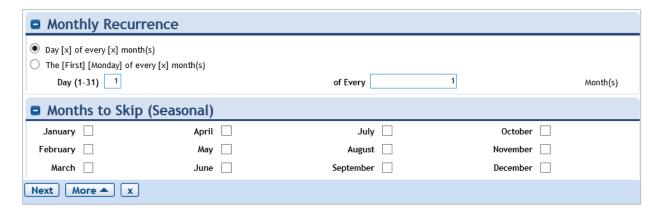
Create a PM schedule to generate the task.

- 1. Click the PM Schedules tab
- 2. Click the Add action
- 3. In the Name field, enter ## Training PM Schedule, where ## is your student number
- 4. In the **Detail** section, for the **Request Class** field, click the **magnifying glass** lookup icon
- 5. Select the radio button for Preventative Maintenance
- 6. Click the OK action



- 7. Click the link for Create Recurring Pattern
- 8. Select the radio button for Monthly
- 9. Select the radio button for End After and enter 2 in the box for Occurrences
- 10. In the Monthly Recurrence section, select the radio button for Day [x] of every [x] month
- 11. Enter **1** in both boxes that appear





- 12. Click **Next**
- 13. Click Complete
- 14. Click the Create Draft action
- 15. Click the **Activate** action

Activate the job plan and review the tasks.

16. In the Job Plan form, click the Activate action

Generating Meter-Based Preventative Maintenance Work Tasks

Preventative maintenance (PM) work can be generated based on a meter reading log entries. Once the monitored meter reading log exceeds a defined threshold, work is generated and activated. The work created by a PM job plan can be managed using the standard work management processes.

The steps involved in generating a meter-based, preventative maintenance work task are very similar to the process of generating schedule-based work tasks. The only difference is that the job plan PM schedule uses a PM Type of Reading-Based. This changes the form and displays sections for Reading Action Rules and Reading Occurrence Details.

The Reading-Based options include:

- Reading Classification
- Reading (Units)
- Action Based On
- Action Occurrence

The action can be based on a value, variance, cumulative total, or reset total. The Action Occurrence can be set based on when a reading occurs. All other options are the same as creating a schedule-based PM schedule.



Performing Work Tasks

You can create, track, and manage work tasks utilizing a variety of tools and resources. Much of the work that is done in the system to manage tasks requires that some setup and configuration be completed first. After work is performed there are several follow-up steps that can be performed prior to closing out a work task and reporting on work performed. This topic will identify the processes involved in the completion of work tasks. The steps outlined in this section include the following:

- Performing Maintenance Setup
- Setup of Service Level Agreements
- Setup of Maintenance Teams
- Assigning Resources to a Task
- Performing a Work Task
- Assigning Equipment to a Task
- Procurement of Goods and/or Services for a Work Task
- Performing a Work Survey
- Tracking Accidents
- Closing Work Tasks
- Performing Work Reporting

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Work tasks may be created as the result of multiple processes, including: corrective maintenance, preventive maintenance, equipment reservation, move projects, and space reservations. In any of these scenarios, work task assignment can be performed automatically by the system, based on the work location and work problem type. If auto-assignment of the work task is not enabled, then the process must be assigned to a vendor or workgroup. If auto-assignment of the work task is enabled, the process continues with the 'Internal Assignment' check.
 - a. If work is assigned internally, an additional check is done to determine if the work will be performed by another State agency. If so, the process continues to establish an internal exchange.
 - b. If the work is done within the originating agency, the process continues to Perform Work (Internal).
 - c. If the work is assigned to a 3rd party maintenance vendor, the process continues with another decision point where a determination is made as to whether the mandated procurement processes can be followed.



- d. If the normal procurement process cannot be followed, for example, in the case of an emergency, the process proceeds directly to Perform Work (External) and an alternate payment method may be used.
- In cases where the work cannot be auto-assigned, you must manually review the request and determine the appropriate maintenance workgroup or organization to manage and perform the work.
- 3. Once work is assigned, the internal workgroup is notified of the work assignment and provided with portal views of all assigned work. The internal workgroup supervisor can leverage work planning tools to balance the workload across workgroup staff. Work is assigned to a technician, and the work is performed. The technician is responsible for tracking and documenting the completion of the work, including time spent, materials used, meter reading information, and other relevant work information. The work performed may require equipment reservation out of inventory or the purchase of new equipment/materials.
- 4. Once work is performed and submitted for review, department users are assigned to validate work completion by reviewing and approving the work task record information.
- 5. Work may be returned to the internal workgroup or external vendor for rework when the submitted work task is considered to be incomplete. The assigned organization would be required to perform additional work and/or supply additional information about the work performed. Once the rework is performed, the work task is submitted again for review.
- Upon approval of the work performed, the work task status is changed to Complete. The record status change triggers automatic notification of work completion to the requestor (for corrective maintenance work).
- 7. For corrective maintenance work, if surveys are enabled for the request classification, a survey request will be sent to the requestor. The survey will ask the requestor to rate the quality of the service received. The survey results are used to help improve the performance of internal and external vendor organizations.
- 8. Once the work is completed, the work supervisor can manage the closeout of the work as required. Closeout of the work may be defined as a necessary step for vendor payment. Work related to a maintenance task will provide input into the managing of building systems and equipment.
- 9. A Purchase Order is required in order to begin work with an external vendor. Once work is assigned, the external vendor is notified of the work assignment. The vendor is responsible for providing documentation of the completion of the work, including time spent, materials used, meter reading information, and other relevant work information. Once the work is performed, it is submitted for completion and department approval.
- 10. If an external service is required, a Request to Order is created and scheduled integration with APP to allow for the approval, processing, and payment of work order costs. The TRIRIGA Request for Order will trigger a request for a Purchase Requisition in APP where a preencumbrance is created. In addition, if the Purchase Requisition is approved (all lines must be approved) a purchase order is created.



- 11. Integration between APP and AFIS will create a pre-encumbrance transaction in AFIS to document the accounting postings.
- 12. Purchase Requisitions that have been approved will create a Purchase Order in APP. The purchase requisition follows the defined process in APP and AFIS.

Setting Up Work Task

Maintenance Service Plan

Maintenance setup involves the creation of a maintenance service plan. Service plans are associated with a request class that determines the business rules that are to be applied by the service management process. Service plans are used to centralize the rules used to manage service requests and work tasks. A request class cannot be associated with more than one service plan. However, it is common for a generic service plan to be associated with more than one request class record.

Service Level Agreements

When more than one group provides the same service, the service assignment matrix records are used to evaluate and assign the work to the appropriate service provider. Service assignment matrix records allow administrators to define Service Level Agreements (SLAs) with external or internal maintenance organizations. SLAs include a start date and an end date for the effective period of the agreement. SLAs are used to define the contractual terms and conditions for maintenance service agreements.

Maintenance Teams

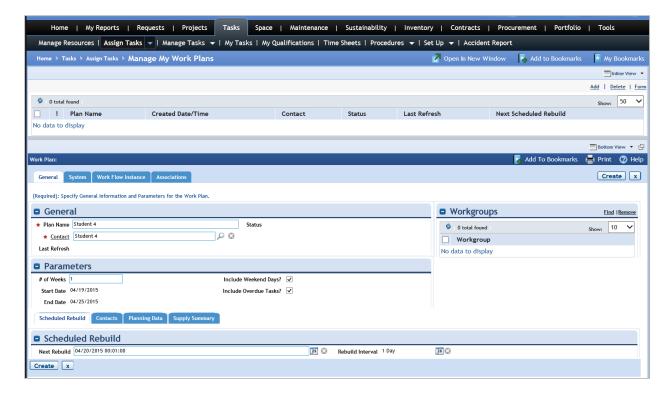
Maintenance teams are used as resources for both internally and externally assigned work tasks. The workgroup supervisor is responsible for assigning specific workgroup team members to individual work assignments. Labor Class records can be managed in the Portfolio > People portal. Workgroups are managed in the Portfolio > Organizations portal. Every resource (person, location, or asset) can be assigned an availability calendar that shows working days/hours that the resource is generally available to be scheduled and non-working event days (holidays).

Assigning Resources to a Task

Task assignment can occur in a number of ways, including automatic assignment to a responsible organization based on service plan settings and manual assignment via the dispatch manager. The goal should always be to do smaller cost (in money, time, and resources) maintenance in an effort to avoid larger, costlier repairs over the long term. The Work Plan allows maintenance managers to allocate resources to tasks efficiently by assigning service technicians based on the desired schedule.

The maintenance supervisor is responsible for managing work plans and teams of resources. A work plan is created by navigating to the Tasks > Assign Tasks portal, clicking Manage My Work Plans, and clicking the Add action.





Work Plan – General

In the General section, enter a Plan Name and a Contact.

Work Plan – Parameters

In the Parameters section, set the basic work plan timeframe which includes the number of weeks and whether to include weekend days or overdue tasks.

Work Plan – Workgroups

The Workgroups section is used to define the organizations that are included in the work plan.

Work Plan – Scheduled Rebuild

The Scheduled Rebuild section is used to define how often the system will regenerate the work plan data. By default, rebuilds happen daily and can be scheduled for non-working hours.

Work Plan - Contacts

In the Contacts section, managers can associate additional contacts with the work plan.

When data entry is complete, click the Create action to generate the record and start the build process. The plan build can take several minutes to process and you will be notified when the plan is ready for use.

From the work plan, select the desired task. Right click on the desired resource and select the Place action. Click OK then click the Assign action to commit the change. Continue assigning or moving work until all warnings have been cleared. Warnings indicate work that is unassigned or resources that are over allocated.



Performing Work Tasks

Once a task is dispatched to a technician, some modifications to the work task can be made, including assignment of failure codes or descriptions of the work performed to resolve the problem. While work is in progress, the task may be put on hold and resumed as necessary, for example if there are missing parts, or by request of the person who initiated the request.

Once work is performed, the work task can be marked as Complete and details of the work performed, such as labor, hours, costs, and actual completion date/time entered.

Tasks assigned to a technician are displayed in the My Active Tasks portal section. Clicking a work task will open the task and allow you to view the details including resources related to the task, task location, task description, and task planning dates. The technician can place the task on hold for parts or for requestor reasons and reactivate the task when necessary.

On the Work/PO Details tab, the technician can verify any procurement information that may be related to the task.

On the Resources tab, the technician enters any materials or equipment used to complete the task.

On the Work Task Info tab, the technician enters their own time, including the following information:

- Time Entry Date
- Time Category
- Hours
- Comment

The technician can then save the changes using the Save or Save and Close action. If the task has been completed, the technician can update the work task status to Complete using the Complete action.

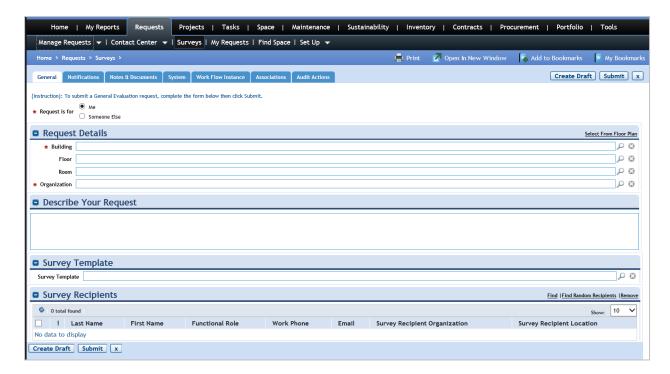
When a work task is marked as complete, related requests are automatically changed to Complete, the requestor is notified of the change to the request status, and the survey process is initiated if a survey template is attached to the request classification of the completed request record.

Using Work Surveys

If a survey template is assigned for the type of work that is requested, then a survey request will automatically be sent to the requestor after the service technician completes the work task associated with the request.

A survey request can also be manually created in the Requests > Surveys portal using the New Survey Request link.

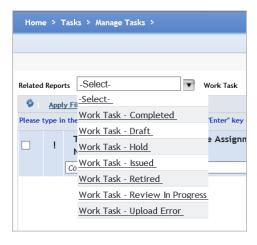




When a survey is sent to a requestor, the requestor will receive an e-mail notification about the survey request. Pending surveys are listed in the My Pending Surveys list accessed via the Request portal in the Reminders section. The user completes the survey questions and submits the record with the survey responses which are used to provide feedback to the service management team.

Closing Work Tasks

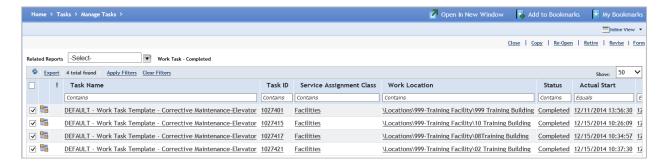
Work tasks that have been marked as complete are considered ready for review and closeout. The closeout of a work task indicates that the work performed was accepted. Closed tasks can no longer be modified. Survey results or other information about the quality and completeness of the work performed should be reviewed prior to closing out the task. All task revisions should be completed prior to moving the work task from Completed to Closed.



If a completed work task is considered acceptable, the service manager can close the task from the work task record. From the work task form, clicking the Close action will change the task status to Closed. The



Work Task – Completed query can be used to close multiple work tasks simultaneously using the checkboxes next to each record.



If a completed work task is considered not acceptable, the service manager can re-open the task from the work task record. From the work task form, clicking the Re-Open action will change the status to Active.

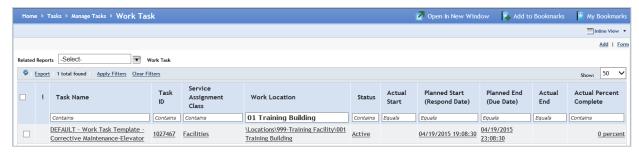


Scenario

Using the work tasks that you previously created, you are the Service Manager responsible for managing schedules and assigning work to your team. You will need to set up your work group and set up a work plan for your team.

Login to the TRIRIGA Home Page. Update Work Task with Work Group.

- Navigate to the Tasks > Manage Tasks > Work Task
- 2. Filter on **Work Location** field, locate and click on the corrective maintenance task containing **General ## Training Building** as the work location, where **##** is your student number



- 3. In the **Responsible Organization** section, select find to open a list of available workgroups
- 4. Select the radio button for **## Work Group**, where **##** is your student number
- 5. Click OK



6. Click the Save action and wait for the record to update



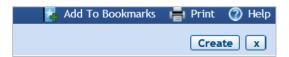
7. Click the Save & Close action

Create Work Plan

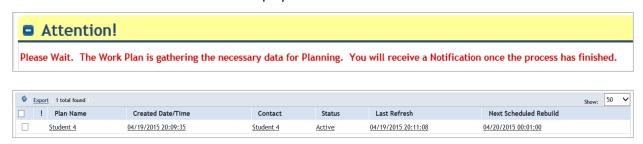
- 1. Navigate to the Tasks>Assign Tasks
- 2. Click on Manage My Work Plans.



- 3. Click **Add** to create a new Work Plan
- 4. In the General section, enter ## Work Plan, where ## is your student number
- 5. In the **Workgroups** section, click the **check box** for **## Workgroup**, where **##** is your student number, click **OK**
- 6. Click the Create action

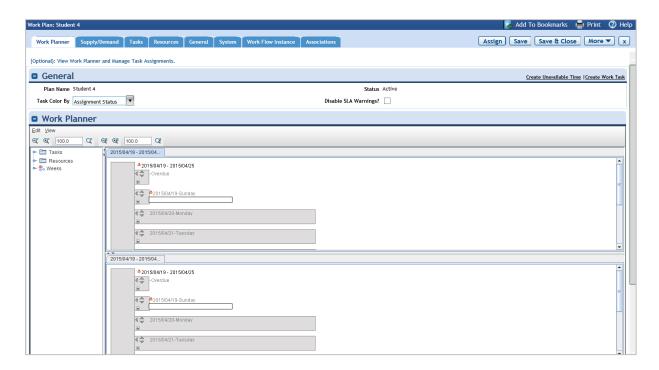


7. Close the **Work Plan** window. It will take the system a few minutes to generate the Work Plan, the **Status** of the Work Plan will display as **Processing**. Click on the **Refresh** icon until the **Status** of the Work Plan displays as **Active**



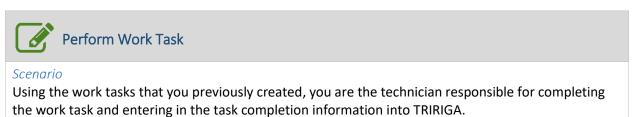
8. Select the Work Plan record to open the Work Planner





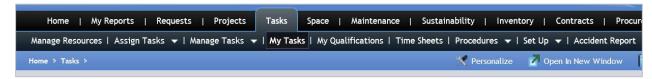
Assign Work

- 1. In the Work Planner, expand the schedule for today's date by clicking on the + icon
- 2. Click on the unassigned task to select
- 3. Expand the first day in the center box to reveal the resources assigned to this Work Plan
- 4. Right click on ##Student and select Place
- 5. Click the **Assign** action
- 6. Click the Save and Close action



Login to the TRIRIGA Home Page. Navigate to the My Active Tasks portal.

- 1. Click the Tasks tab
- Click the My Tasks option in the sub header



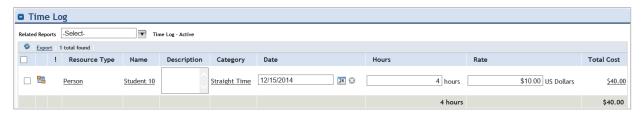


Complete the Work Task Info tab.

- 1. Click on the task and navigate to the Resources tab
- 2. Verify that task is assigned to Student##
- 3. In the Material List section, click Quick Add
- 4. In the **Description** field, enter *Filter XX123*
- 5. In the Quantity field, enter 1
- 6. In the Actual Cost field, enter 5.00



- 7. In the **Resources** section, click the **checkbox** next to **## Student** and then click **Quick Add Time Entry**
- 8. In the **Time Log** section enter **4** in Hours and **10** in Rate



- 9. Navigate to the Work Task Info tab
- In the Resolution Comment section, enter ## task complete, where ## is your student number
- 11. Click Save

Assigning Equipment

Each equipment or vehicle record can be assigned to locations and people. When assigning equipment, only items currently available can be assigned. Once assigned to the selected equipment or vehicle record becomes unavailable in the list.

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Required equipment is assigned to a work task as a resource.
- 2. After adding the equipment to the work task, it must be assigned to the appropriate person. The equipment record is opened, placed in a status of Revision in Progress and then assigned. The record can then be put into a status of Active again to prevent additional changes being made.



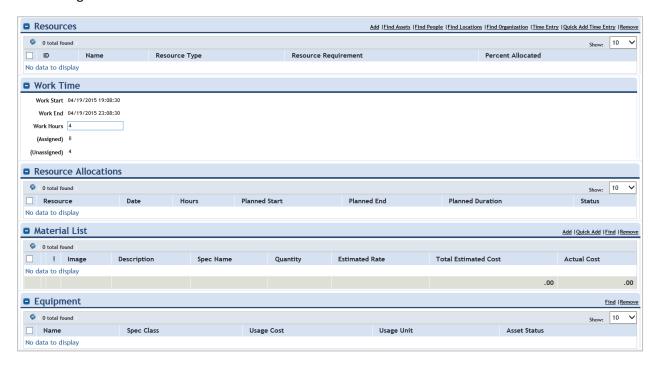
- 3. While the equipment is assigned to a person within a work task, it will not appear on the resource list for any other work tasks and therefore is unavailable for other assignments.
- 4. Once the work has been performed, the equipment can be unassigned to be available for other users.

Managing Equipment Assignment

Update the work tasks using the My Active Tasks portal section. The portal displays work tasks directly assigned to you. Work Tasks are opened by clicking on the task in the list. You can view the details of the assigned task, including any resources related to the task, the task location, task description, task planning dates, etc. Some of the values can be changed on the work task directly.

Resources Tab

On the Resources tab, create a resource entry for all parts and equipment used during the performance of the assigned work.



Equipment

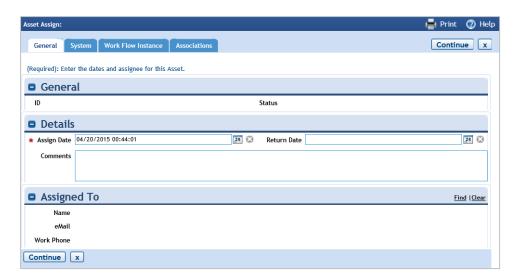
On the Resources tab, Equipment section, you can click the Find action to display a list of available equipment. From the list, select all of the equipment items that were used to perform the work. When finished, click the OK action to save the equipment items to the work task.



Asset Status

After adding equipment to the work task, it will need to be assigned. Clicking on the equipment item in the Equipment section will display the Equipment form.





On the form, in the Asset Status section, click the Assign action and complete the following fields:

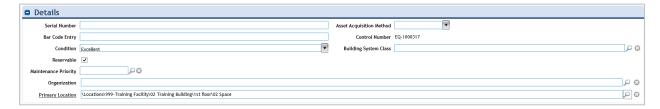
- Assign Date (Required)
- Return Date
- Comments
- Assigned To

When the necessary information has been entered, click the Continue button to assign the asset. The Asset Status will change to Assigned.



Details

After equipment is assigned, the location of the equipment may need to be changed. In the Details section, click the lookup icon for Primary Location. It may be necessary to clear the existing location by clicking the Clear Primary Location action. On the location lookup screen, select a location and click the OK action. The Primary Location of the equipment item will be updated. Click the Save & Close button to save any changes made to the equipment item.



On the Work Task, click the Save & Close button to save the changes to the Work Task.





Manage Equipment Assignment

Scenario

You are a technician responsible for completing work tasks using available equipment. You will add the equipment used to perform work to a work task and then update the Primary Location of the equipment.

Login to the TRIRIGA Home Page. Navigate to My Active Tasks.

- 1. Click the Tasks tab
- 2. Click the My Tasks option in the sub header to display the My Tasks landing page

Update the Work Task with the equipment used to perform the work.

- 3. In the My Active Tasks section, click the **Task ID** of the task
- 4. Navigate to the Resources tab and select **Find** in the Equipment section



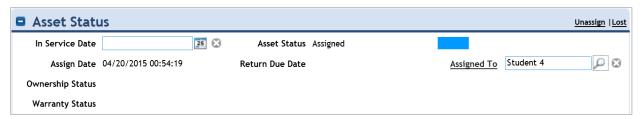
- Select the checkbox to the left of ## AC Compressor, where ## is your student number, and click OK
- 6. Click Save

Assign the equipment to the user.

- 1. Click on the equipment to open the equipment record
- 2. Click on the Revise action
- 3. Click Assign in the Asset Status section of the equipment record



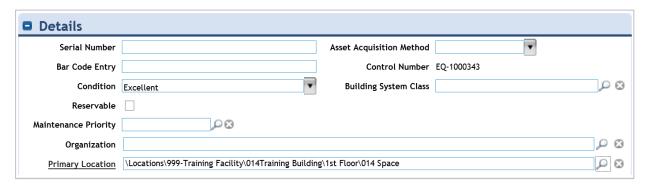
- 4. Populate Assign Date and click Continue
- 5. Click on the Find action in the Assigned To section and locate your username in the list
- 6. Click on the radio button to the left of your username and then OK
- 7. Click the Continue action





Change the Primary Location of the equipment.

- 1. With the equipment record still open, click on the magnifying glass next to the **Primary. Location** field in the Details section
- 2. Click on the radio button to the left of the desired location and then OK

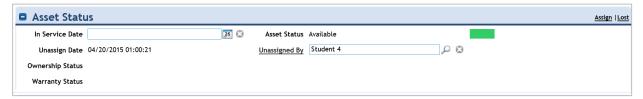


Save and Close the equipment record.

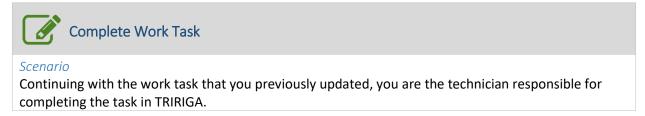
3. Click Save & Close.

To return the equipment back to the system, open the equipment record by clicking on it again.

- 1. Click on the **Equipment** to open the Equipment record.
- 2. Repeat **Step D** to change the **primary location**.
- 3. Click **Unassign** in the Asset Status.
- 4. Add any necessary comments and click **Continue**.



Activate the equipment record to restore to a read only status



Login in to the TRIRIGA Home Page. Navigate to the My Active Tasks portal.

- 1. Click the Tasks tab
- 2. Click the My Tasks option in the sub header



Select the work task and click the **Complete** option.

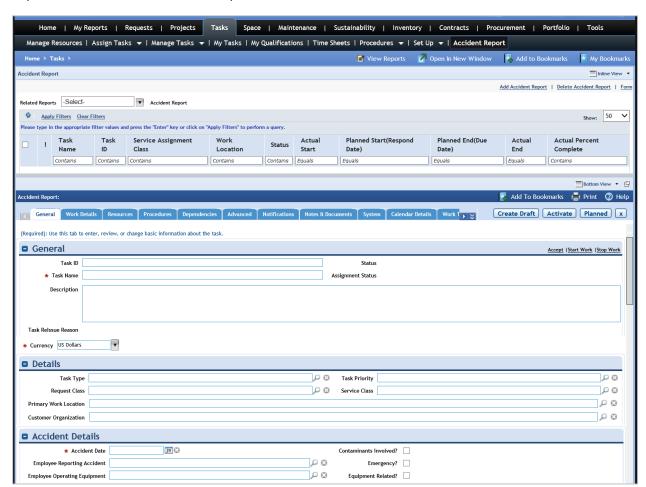
Procuring Goods or Services Necessary to Complete a Task

There are often times when work is not performed directly by an internal work group and the department must procure the services of an external vendor. The task may also require materials or parts that are not kept in inventory and must be ordered before the work can be completed. In this case, the Service Technician would do the following:

- Determine goods or services needed to complete the task
- Place the Work Task on hold by clicking on the hold action and selecting hold for parts
- Communicate the items or services needed to the department Procurement Unit, following the current business process (eg, email, verbal, paper or electronic estimate, etc.)
- Include the Work Task ID number in the communication to the Procurement Unit.
- Confirm that the Purchase Order is correct after integration from APP creates the PO record on the Work Task
- Any additional orders or changes to a current TRIRIGA PO will be facilitated through APP

Tracking Accidents

The Tasks > Accident Report portal is used to track facility-related accidents. Clicking Add Accident Report will create a new Accident Report form.





General

On the General tab, in the General section, enter the Task Name, and a Description.

Details

In the Details section, enter the following relevant information:

- Task Type
- Request Classification
- Task Priority
- Service Class
- Organization

Accident Details

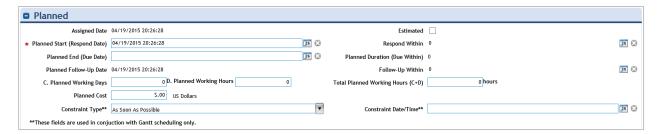
In the Accident Details section, enter the Accident Date and the name of the Employee Reporting Accident. Also if the accident involved equipment, enter the equipment in this section.

Citizen/Visitor Information

Complete the contact information for any involved persons in the Citizen/Visitor Information section.

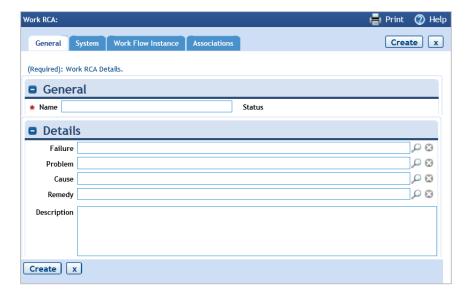
Planned

Complete any accident response date information.



Work Details

The Work Details tab is used to add assets and locations that are related to the accident report. The Work Analysis tab on the Work Details tab allows you to add records that include additional tracking information such as a failure code, problem code, cause, remedy, and description.

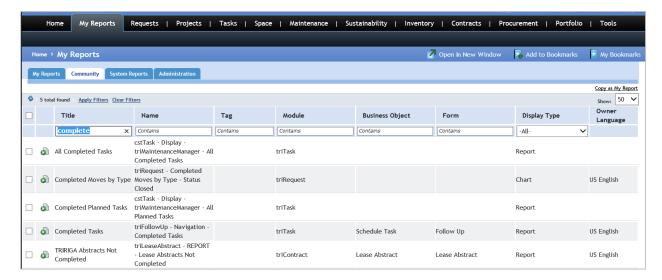




When data entry is complete, click Save and Close to create the Accident Report record.

Reporting Work Tasks

There are many ways for service managers to view reports on work tasks. The Home portal data for a service manager will display several links in the Reminders section for viewing task reports, including the Unassigned Task Report, Overdue Task Report, Tasks Due This Week Report, and Tasks Due Today Report.



There are also community reports available in the My Reports > Community Reports menu. These reports include:

- Crew Labor
- Major Maintenance Activity on Asset
- Material Orders
- Work Task Completed Editable
- Work Task Manager Query
- Exception Reports Performance All Orgs
- All Completed Tasks
- Competed Planned Tasks
- Unscheduled Tasks



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 tasks 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.

Developing Condition Assessment Plans

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.

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Review the documented system/equipment priority and condition.
- Condition assessments can be performed against the defined building systems. The default assessment criteria allow for scoring based on observed condition, frequency of maintenance, risk probability, and other categories.
- 3. By reviewing the condition/priority information defined for each building system/equipment item you can identify and create requests for inspection of relevant systems/equipment. Inspection requests are used to assign an inspection work task to technicians to perform the evaluation.
- 4. Record information and any attached documentation are reviewed and approved.



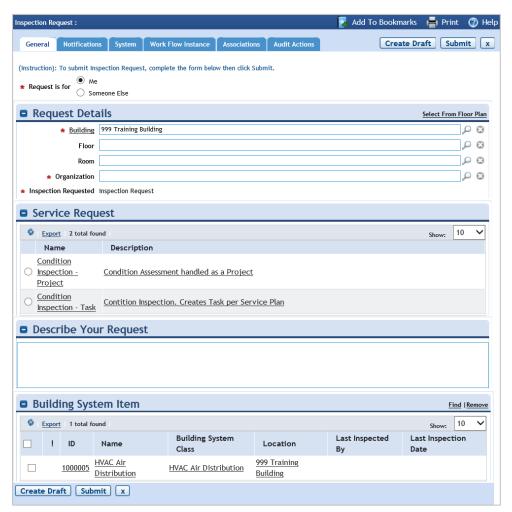
5. When the approver has approved the request, the process continues with the assignment of the inspection work task. Inspection work can be auto-assigned based on inspection task location, system type, priority, etc.

Issuing 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 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.



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.

Login to the TRIRIGA Home Page. 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 created in an earlier activity. Remember to only select the ## for your student number
- 4. Click the **Revise** action

Create an Inspection Request

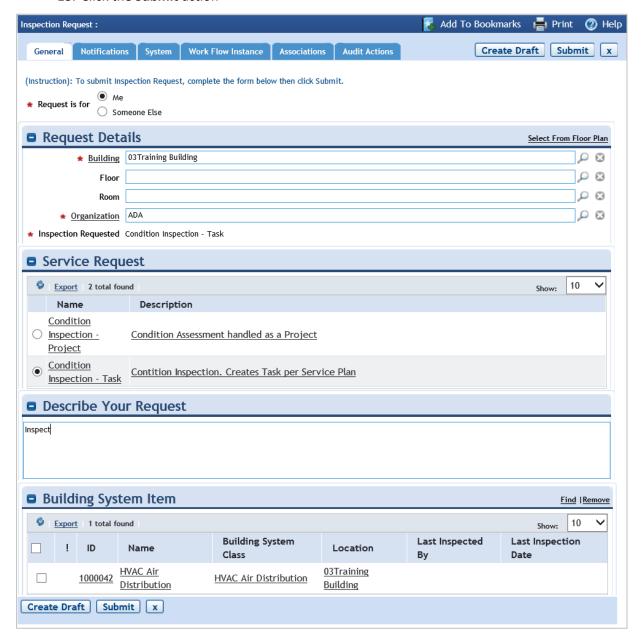
- 1. Click the Assessment tab
- 2. In the Current Condition Index section, click Create FCI History Record
- 3. Review FCI History record and click Create History Record



- 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
- 6. Click the OK action
- 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
- 13. Click the Submit action



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

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



Performing Condition Assessments

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.

Step

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. The technician scores the assessment based on the assessment criteria including scoring criteria for observed condition, frequency of maintenance, risk probability, and other categories.
- After assessment scores are collected through use of the inspection process, decisions can be
 made about which systems and equipment records require maintenance or project work to
 address any identified deficiencies. Deficiencies (opportunities) can be created in the system
 manually, based on the results of the assessment process.
- Once the deficiencies/opportunities are created, detailed cost estimates can be assigned to each record. Cost estimations can be entered manually or external estimation sources can be referenced. Once the cost estimations are complete, the deficiencies/opportunities can be submitted for approval.

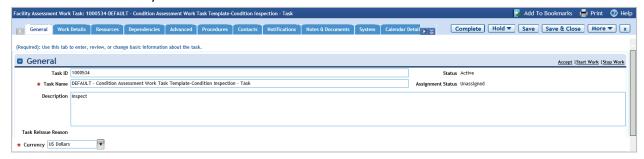
Performing Inspection Tasks

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, complete the fields in the following sections:

- General
- Planned
- Actual
- Recorded By



Resources

On the Resources tab, complete the fields in the following sections:

- Work Time
- Material List
- Material Orders



Procedures

On the Procedures tab, complete the fields in the following sections:

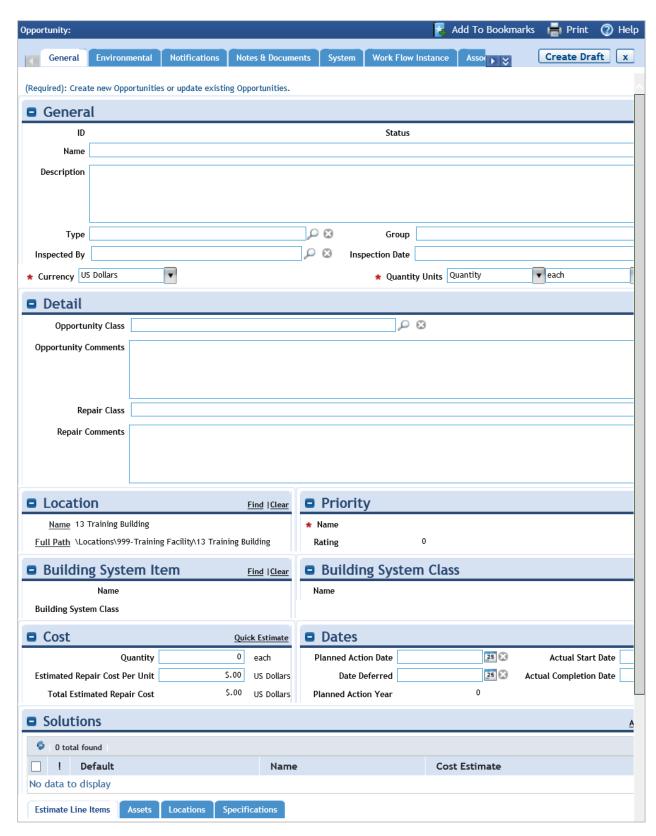
- Procedures
- Regulations

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

Creating Funding Requests

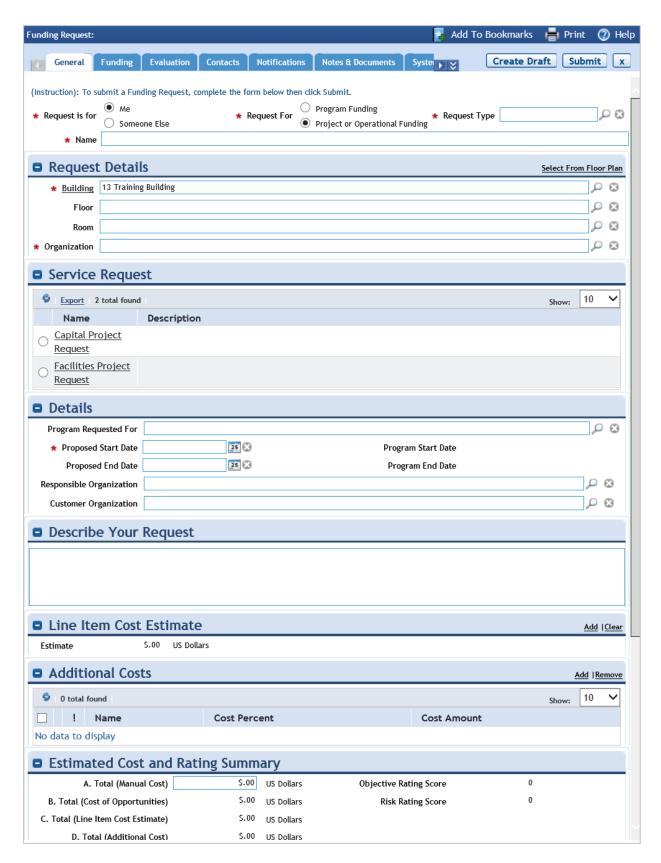
A funding request is used to request the necessary funds to pay for assessed opportunities. On the Assessment tab of a Building record, the Opportunities section is used to select items to include in a funding request.





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







General

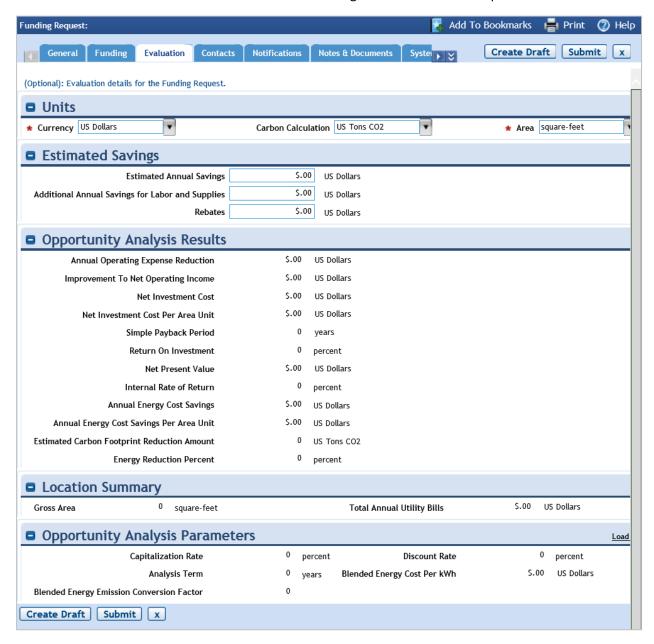
The General tab of the Funding Request form is completed. There are sections for describing the request and estimating the cost.

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.



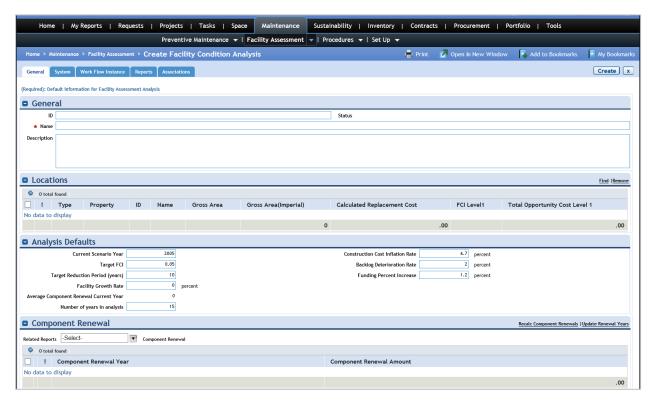
When data entry is complete, the Funding Request can be submitted using the Submit action. When approved, a Facilities Project is created and assigned.



Performing 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.



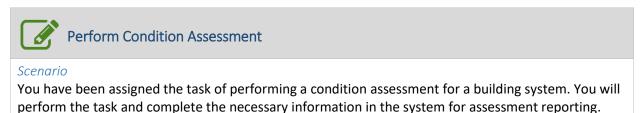
General

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.

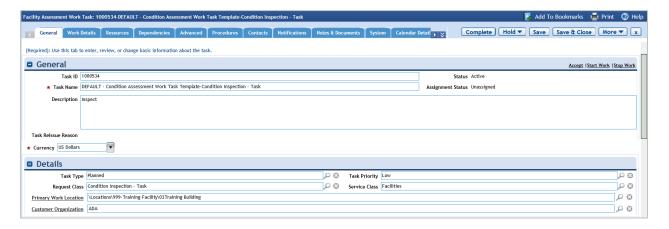


User is on the Tasks > Manage Tasks > Facility Assessment Work Task page.

Locate and open the Facility Assessment Work Task.

1. On the Facility Assessment Work Task page, click the ID of the Assessment task





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
- 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



Performing 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 order to evaluate the costs associated with meeting the objectives of the project.

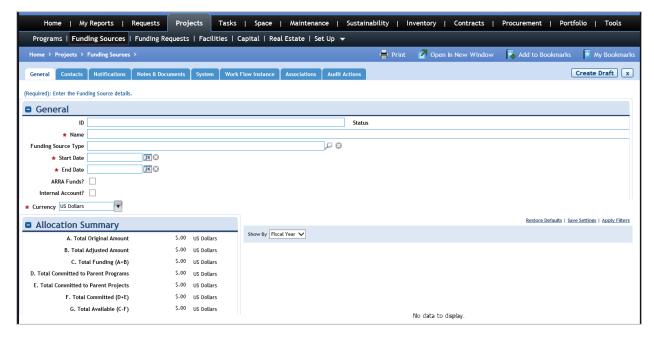
Step

The steps below describe the statewide process. Your agency may have additional requirements.

- 1. Once the funding request record is prepared with information on objectives, scope, schedule and cost, it can be submitted for review and approval.
- 2. When the request is submitted for approval, the system will notify and assign an approval action item to the assigned approver. The approval action will appear on the approver's dashboard view.
- 3. If a plan requires more information and justification, it may be revised and resubmitted for approval.

Creating Funding Sources

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. You enter 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.



Create a Funding Source

Scenario

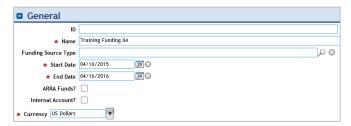
You have received funding through a new source. You will create the new funding source record in TRIRIGA.

Login to the TRIRIGA Home Page. Navigate to the Projects > Funding Sources portal.

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

Create a new Funding Source record.

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



- 7. In the Funding Source Details section, in the Amount Authorized field, enter 1000000
- 8. In the Amount Approved field, enter 1000000





Save and Issue the new record.

- 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

Managing Capital Projects

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.

Steps

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-012 (Manage Capital Project) and represented by CROSSREF below.

- Create the capital project record to provide a centralized source for document management, schedule task management, RFP management, progress tracking, and project closeout processing. The project can be classified with information related to project type, location, estimated cost, key milestone dates, and project scope. Once a project is created, the next step is typically to assign a project manager who continues with the assignment of the project team and the coordination of project activities.
- 2. Project management typically requires the participation of key project team members who can be assigned to specific project roles (e.g. project manager, project administrator, project team member, etc.). Each assigned role can have different levels of authority for performing actions related to the project. In addition, assigned project team members can be assigned to project schedule tasks and can receive automatic notifications on project activity.
- 3. Establish project documentation hierarchies. Each hierarchy folder allows for document level permissions to be established for maintaining document integrity. Once hierarchal folders are created most document types can be pointed to a folder during upload. This level of document management provides an efficient solution for tracking individual key project documentation.
- 4. Upload one or more project documents to the project folder hierarchy. Once uploaded, document management functions for version control, including document download, upload, check-in and check-out. Authorized users are able to view documents within the document



viewer. Project notes to the Notes & Documents tab and track date-stamped text comments about the project can also be uploaded.

- 5. Define project schedule and tasks that need to be completed to successfully accomplish the project requirements. The tasks are used in conjunction with the built-in Gantt chart which provides the ability for project managers and authorized project team members to monitor the project timeline, proactively address potential scheduled task delays, and provide more granular level of project schedule reporting. Project schedules can be exported into Microsoft Project.
- 6. Task assignment provides the team members a source record for tracking activity, storing task specific documentation, and proactive schedule monitoring. Assigning tasks also affords project managers the ability to track project resource availability and team/vendor performance. Once a task is assigned to a team member, the team member can use their portal views to monitor assignments. In addition, you may receive notifications of each assigned task.
- 7. Monitor the project by using issue tracking tools. Use reporting and communication tools to ensure that key project stakeholders are informed of the project's progress.
- 8. Monitor project closeout checklists providing the project team members a comprehensive list of reference to identify critical areas of review to ensure thorough project closeout is performed in accordance with department guidelines. The project manager can track all closeout-related activity on the Closeout tab of the project, including information related to financial project closeout, schedule completion, project punch lists, and more. The Closeout Report is accessed from the portal view, and is used at the end of the project to validate the completion of key activities. Each closeout task is status-based and should be completed prior to the project close event. The project manager can use the Closeout Report and other project notification tools to inform team members of open assignments and overdue items.
- 9. Once the closeout checklists have been reviewed and critical items are considered complete, the project manager can move the project to a status of Closed. Obligations such as payments to vendors may remain open after the project close date.

Creating 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, complete the following fields:

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

Apply Template

The More action allows you 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.

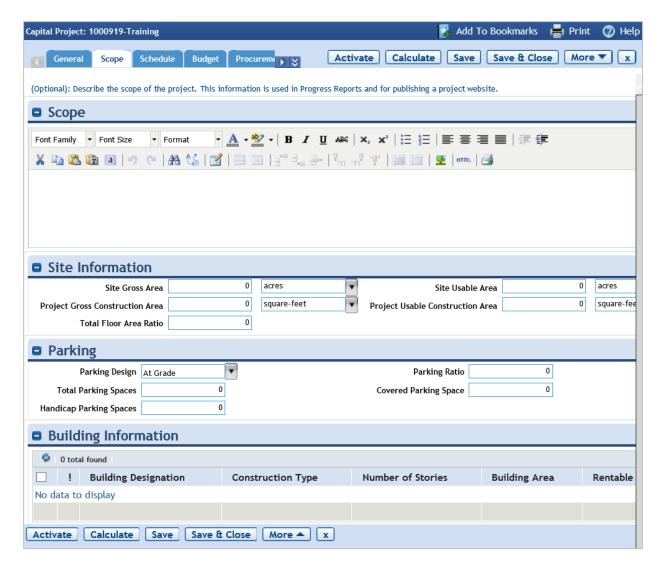
Scope Tab

On the Scope tab, complete 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.





Revising 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.

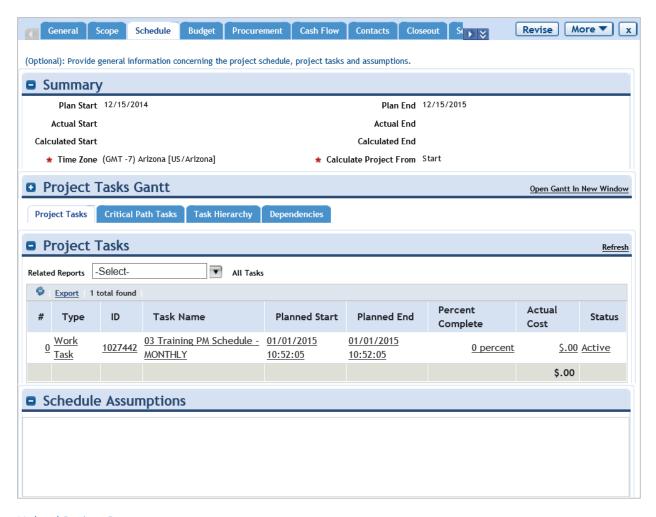




Define Project Schedule

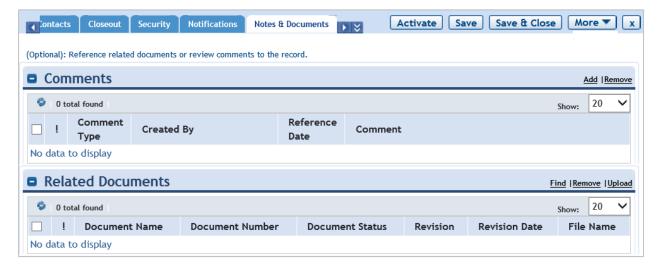
On the project Schedule tab, the Add action is used to create a new task. Enter a Task Name, Currency, and Planned Start Date for the task. Other optional information includes the Responsible Org/Person and the Planned Dates/Duration fields.





Upload Project Document

On the Notes and Documents tab, you 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.

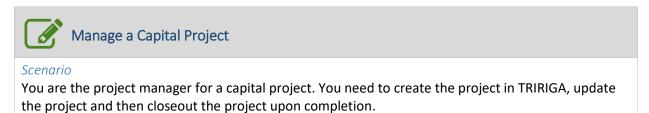
Complete Project

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

Closing a Project

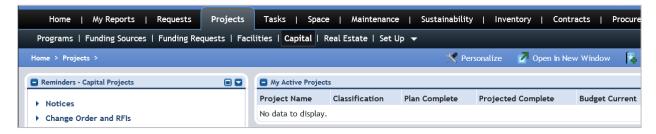
The project closeout process can begin when the final tasks for the project are performed and the project reaches the completion stage. The system provides a series of tools to support project managers in the activities related to the closing of open or pending project activities. Prior to project closeout, 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, 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.



Login to the TRIRIGA Home Page. 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

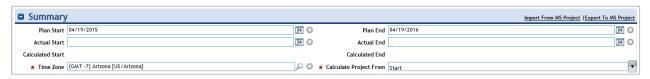


Create a new capital project.

- 3. In the Related Links Capital Projects section, click Create a Capital Project
- 4. In the Name field, enter ## Training Capital Project, where ## is your student number
- 5. In the Currency field, click the dropdown and select US Dollars
- 6. Click the Schedule tab



- 7. In the **Time Zone** field, click the **magnifying glass** lookup icon
- 8. Select GMT -7 Arizona



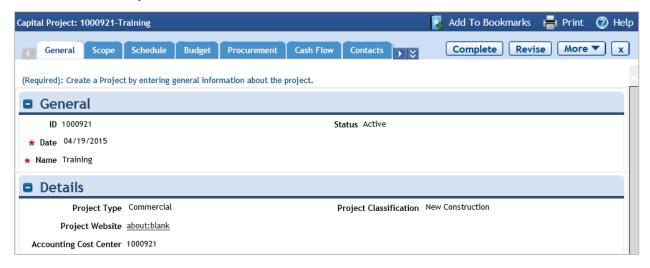
- 9. Click the Create Draft action
- 10. Set the Plan End to one year from today
- 11. In the Project Tasks section, click Find
- 12. In Related Reports, select All Tasks from the dropdown menu
- 13. Select any of the tasks you created earlier in the session, click OK

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

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



Managing Moves

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 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.

Steps

The steps below describe the statewide process. Your agency may have additional requirements.

- A move request can be initiated using self-service or call center functions, allowing employees to
 directly request moves. The requestor can complete an online form to enter the request. The
 request form prompts you to enter the type of move, the employee(s) being moved, the from
 and to location of the move. The system sends a notification message to the requestor
 confirming receipt of the request and provides the requestor with a portal view to monitor the
 status of the submitted request if submitted via self-service.
- 2. The move request record is reviewed by a designated approver(s).
- 3. Move requests are addressed through the execution of move projects. The move project provides the move coordinator with the functions required to manage and execute the move, including management of costs, coordination of tasks, and updates to drawings and documents.
- 4. The move project serves as a container for the tasks that need to be performed. Tasks can be generated for the project based on pre-defined move project templates.
- 5. Once the move project tasks are completed, the move coordinator can manage the closeout of the move project as required. Move project closeout includes management of and revision to related CAD drawings. Upon closeout of the work, the system is automatically updated to display the new employee locations.

Submitting a 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.



Reporting

Learning Objectives

In this lesson, you will:

- Review available reports
- Review the creation of new reports

Lesson Overview

There are different types of reports that can be used depending on how you want to view the information, whether in a report, chart, query, etc.

My Reports

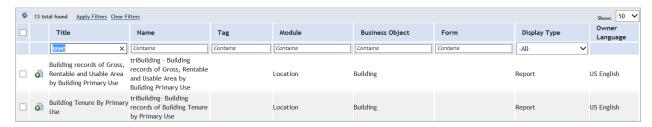
The My Reports portal is the central warehouse of reports. There are four tabs in the My Reports portal.

- My Reports Any report available in the Community or System Reports tabs can be copied to this tab for personal use and quick access
- Community Any report available in the System Reports tab can be shared on this tab for organization use and quick access
- System Reports A complete list of available reports. On this tab, reports can be added, copied, or deleted
- Administration A list of reports added to the personal My Reports tab for all users



Filtering

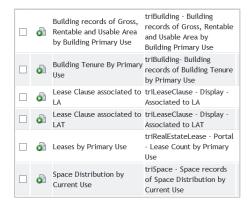
Each tab in the My Reports portal contains filter fields that allow you to narrow down the number or reports displayed in the list. Any known information in the Title, Name, Tag, Module, Business Object, or Form fields can be entered as filter criteria in the corresponding field. The Display Type filter field provides a dropdown menu of all possible Display Types for selection, such as Report, Query, Chart, or Graphic.





Running a Report

Running a report is done by clicking on the Run Report icon for the desired report in the second column from the left. The selected report will be displayed in a new window.



Some reports may display "No data to display" if there are no returned items on the report. From the report window, the report can be exported straight to an Excel file by clicking the Export link in the top right corner of the report.





Scenario

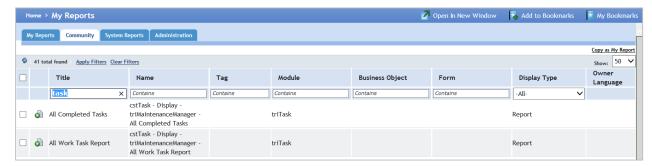
You want to look at a report in TRIRIGA. You will use the My Reports portal to find and run a report.

Login to the TRIRIGA Home Page. Navigate to the My Reports > Community portal.

- 1. Click the My Reports tab
- 2. Click the Community tab

Search for a report using the filter fields.

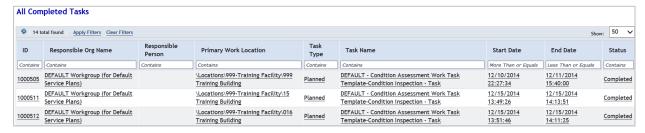
- 3. In the **Title** filter field, enter **Task**
- 4. Press Enter





Run and review the report.

1. Click the Run Report icon for the All Completed Tasks report



- 2. In the Report window, click the Clear Filters action
- 3. Review the information in the report

Copy the report to My Reports > My Reports.

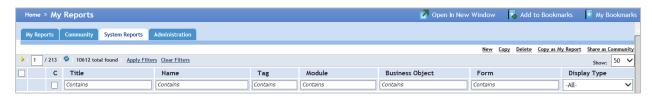
- 1. Click the Cancel action to close the Report window
- 2. Click the checkbox for the All Completed Tasks report
- 3. Click the Copy as My Report action
- 4. Click the My Reports tab



5. Observe that the report has been added to the My Reports list

Creating a New Report

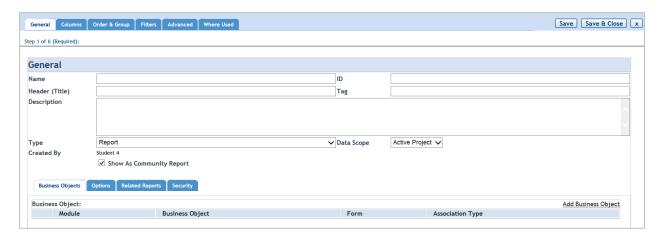
From the System Reports tab, you can create new reports by clicking the New option. This will display the Report Builder page.



General

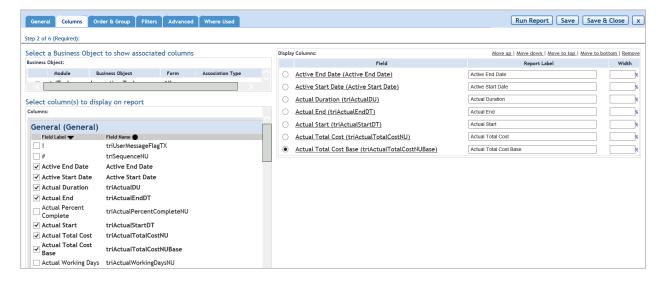
On the General tab of new report, enter a Name, Title, Description, and select a Type from the dropdown menu. The Business Objects tab is used to add reportable objects to the report by clicking the Add Business Object link on the right side of the screen. In the Business Object window that appears, the Module, Business Object, and Form can be selected from the available options. This tab is required in the report creation process.





Columns

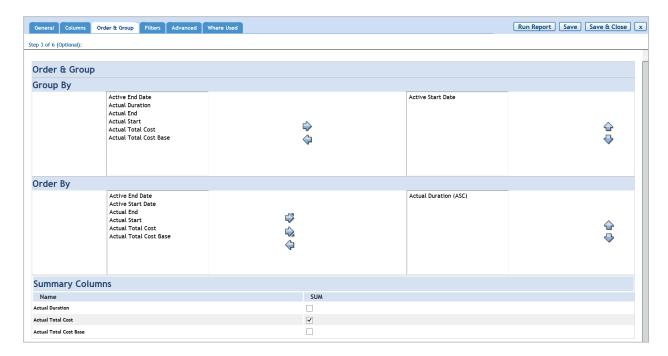
On the Columns tab, all of the available columns in the Business Object selected on the General tab are displayed in the list on the left. Checking the box for a column will add that column to the Display Columns section on the right. Columns can be reordered and removed using the links in that section. This tab is required in the report creation process.



Order & Group

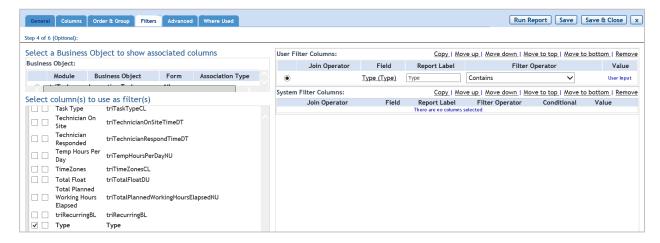
The Order & Group tab is used to specify the grouping and the ordering of the columns selected for the report on the Columns tab. Columns can be added to the groups on the right and reordered once added. This tab is optional in the report creation process.





Filters

The Filters tab is used to add user and/or system-definable filters to the report to be completed by the user when running the report. This tab is optional in the report creation process.



Once the report has been built, clicking the Save button will save the report. Clicking the Run Report button will generate the report with the options selected in the Report Builder.



Appendix A

Terminology

The terms listed below are used throughout this training guide.

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	A plan for ensuring that critical building systems are regularly inspected and the
Assessment Plan	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	Management of moves includes managing move service requests, planning
Project	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	Work performed on a defined schedule.
Maintenance	
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.



Term	Description
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

Acronyms

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

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