Facilities Management
IBM TRIRIGA
Training Guide
Version 3.2
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About This Training Guide

TRAINING GUIDE DESCRIPTION

This training guide covers the use of IBM TRIRIGA, a web-based Facilities Management application that supports facility operations and maintenance, project management, space reservation, site planning, and contract management. Users 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, capital improvements, and contracts.

TRAINING GUIDE 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
- Identify and perform the real estate management functions
- Perform equipment and space reservation tasks
- Review the available reports in TRIRIGA

TERMINOLOGY

The terms listed below are used throughout this training guide.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tr>
<td>Acquisition</td>
<td>Defines the real estate details of a property being purchased from another party.</td>
</tr>
<tr>
<td>Approvals</td>
<td>Ensure that created and modified records meet the defined business requirements.</td>
</tr>
<tr>
<td>Assets</td>
<td>Owned or leased items, such as buildings, equipment or vehicles that are tracked in the TRIRIGA system.</td>
</tr>
<tr>
<td>Capital projects</td>
<td>Large-scale goals, such as the construction of a building project that typically requires significant funding to complete.</td>
</tr>
<tr>
<td>Condition Assessment Plan</td>
<td>A plan for ensuring that critical building systems are regularly inspected and the current condition of systems is recorded.</td>
</tr>
<tr>
<td>Current Terms</td>
<td>Defines the current terms and conditions of a lease agreement with another party.</td>
</tr>
<tr>
<td>Dashboard</td>
<td>Default page for each security group or user role that provides a snapshot of current activity.</td>
</tr>
<tr>
<td>Disposition</td>
<td>Defines the real estate details of a property that is being sold to another party.</td>
</tr>
<tr>
<td>Evaluation surveys</td>
<td>Used to follow up requests, maintenance, sustainability measurements, and space reservations with a questionnaire that provides feedback to the service</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Expiration</td>
<td>Defines the real estate details of a lease whose duration is elapsed.</td>
</tr>
<tr>
<td>Facilities projects</td>
<td>Smaller-scale goals, such as painting an office, moving cubicles, and handling plumbing or electrical repairs.</td>
</tr>
<tr>
<td>Funding Request</td>
<td>Used to request the necessary funds to pay for assessed opportunities.</td>
</tr>
<tr>
<td>Funding Sources</td>
<td>Budgetary resources for programs and projects.</td>
</tr>
<tr>
<td>Home Page</td>
<td>Returns the user to the default Dashboard page and includes the available portals for that user based on assigned security.</td>
</tr>
<tr>
<td>Job Plan</td>
<td>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.</td>
</tr>
<tr>
<td>Landing Pages</td>
<td>Contain actions organized into menus and sections of relevant information.</td>
</tr>
<tr>
<td>Lease</td>
<td>Defines the real estate details of a lease agreement with another party.</td>
</tr>
<tr>
<td>Leases Portal</td>
<td>Used to view real estate contracts and asset leases.</td>
</tr>
<tr>
<td>Manage Moves Project</td>
<td>Management of moves includes managing move service requests, planning scheduled moves, and planning strategic moves.</td>
</tr>
<tr>
<td>Notifications tab</td>
<td>A tab in each record that defines users who are notified of any changes or approval requirements.</td>
</tr>
<tr>
<td>Portals</td>
<td>The main application sections within TRIRIGA.</td>
</tr>
<tr>
<td>Portfolio portal</td>
<td>Central store of Locations, Organizations, People, Specifications, and Assets.</td>
</tr>
<tr>
<td>Preventative Maintenance</td>
<td>Work performed on a defined schedule.</td>
</tr>
<tr>
<td>Program record</td>
<td>Provides details about the higher-level business vision, business goals, or business objectives that govern and align the objectives across multiple inter-related projects.</td>
</tr>
<tr>
<td>Project</td>
<td>Defined by its general information, the team members, the scope, a schedule, and a budget.</td>
</tr>
<tr>
<td>Project Record</td>
<td>Used to manage all activity related to the completion of work for a specific project, including the tracking of costs, tasks, milestones, and resources.</td>
</tr>
<tr>
<td>Real Estate Contract Abstract record</td>
<td>The recording of a contract by entering specific summarized data.</td>
</tr>
<tr>
<td>Real Estate Functions</td>
<td>Allow users to plan real estate transactions and manage real estate projects for an organization.</td>
</tr>
<tr>
<td>Real Estate Transaction Plan</td>
<td>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.</td>
</tr>
<tr>
<td>Requests portal</td>
<td>Used to issue, manage, and track various requests.</td>
</tr>
<tr>
<td>Service Level Agreements (SLAs)</td>
<td>Used to define the contractual terms and conditions for maintenance service agreements.</td>
</tr>
<tr>
<td>Service Plans</td>
<td>Used to centralize the rules used to manage service requests and work tasks.</td>
</tr>
<tr>
<td>Space</td>
<td>Used to maintain space plans and track space utilization data in buildings and</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Management</td>
<td>structures. Also possible to manage the people and assets that are in the space and coordinate property transactions in the system.</td>
</tr>
<tr>
<td>Sublease</td>
<td>Defines the real estate details of a lease agreement between a lessee and a sub-lessee.</td>
</tr>
<tr>
<td>Termination</td>
<td>Defines the real estate details of a lease that is closing before its original end date.</td>
</tr>
<tr>
<td>Utility meters</td>
<td>Used to track utility consumption data for locations.</td>
</tr>
<tr>
<td>Work Plan</td>
<td>Used to manage work groups and assign work through scheduling of resources.</td>
</tr>
</tbody>
</table>

**LIST OF ACRONYMS**

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

**Table 2: Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>CAM</td>
<td>Common Area Maintenance</td>
</tr>
<tr>
<td>CTQ</td>
<td>Critical to Quality</td>
</tr>
<tr>
<td>OpEx</td>
<td>Operating Expense</td>
</tr>
<tr>
<td>PM</td>
<td>Preventative Maintenance</td>
</tr>
<tr>
<td>RE</td>
<td>Real Estate</td>
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</tbody>
</table>
1. Foundational Knowledge

Learning Objectives

In this lesson, you will:

- Examine the basic functionality of TRIRIGA
- Examine how projects are defined
- 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. An overview of the integration between TRIRIGA and other State applications, such as Arizona Financial Information System (AFIS) and ProcureAZ is presented in this lesson. This lesson also introduces the workflow process and the use of templates to aid in the creation of new forms.

1.1. 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.
Home Page

The Home Page for a user lists the available portals across the top of the screen. Each portal contains pages, forms, and menus that are used to manage the records and actions stored in the database. Most users will see pending action items and notifications on their Home Page. The Last Visited section displays a list of recently accessed pages.

Landing Pages

Navigating to a portal by clicking its tab at the top of the screen will display the landing page for that portal that contains actions organized into menus and sections of relevant information. The sections can be expanded or collapsed if necessary. Many pages, forms, and sections can be viewed in the current browser window or opened in a new window using the Open in New Window action or icon. A breadcrumb trail allows users to navigate back to any page in the hierarchy of pages for that portal.
**Bookmarks**

Bookmarks allow users to save frequently accessed pages for faster navigation. Bookmarks can be organized into folders by clicking the Bookmark Folders dropdown option menu. Clicking Add to Bookmarks will allow the user to name and save the currently displayed page as a bookmark. Clicking My Bookmarks will display the user’s saved bookmarks and folders. Clicking My Bookmarks again or the Close icon will close the Bookmarks section.

![Bookmarks Interface](image)

**Change View**

Pages that display a list of items in a table provide the user with the ability to view selected items Inline (view in the same window) or as a Popup (view in a new window). Switching between the two options will affect how pages are displayed.

![Change View Interface](image)

Some pages, such as the Locations page in the Portfolio portal, have additional view options. A Location record can be viewed in a bottom pane, or a right pane.

![Location View Interface](image)
Forms

Forms are the documents that create and maintain information in the database. Forms are broken up into tabs and each tab can contain several sections and fields. On forms, required fields are marked with a red star. On completed forms, underlined fields can be clicked on to view the detailed information for the value in that field. A Status field identifies the stage of the record in the lifecycle.

Forms can be completed by users to record tasks, facilities maintenance requests, call center action items, space reservations, and real estate contract actions.

Form Tabs

The tabs at the top of a form represent the different areas of the record, such as contact details, history, locations, and notifications. Access to some tabs is determined by a user’s level of security. Common tabs are shared across many types of forms and include:

- **Associations** – Displays a graphical view of the associations between this record and other records, business objects, and modules
- **Audit** – Displays the label of the action, name of the user, and date for each action that was applied to the record
- **Contacts** – Used to specify the contact information of the people, roles, and organizations that apply to the record
- **Locations** – Used to specify the area units, related addresses, and other location details for the record
- **Notifications** – Used to specify other approvers in addition to required approvers, and the people who receive notifications for each status change that is added
- **Summary** – Used to specify the currency and units of area, and to review the summarized details from other tabs in the record
Printing

On most pages and forms a Print option is available in the top right of the section. Clicking the Print option will display the page in a print preview pop up window with a Print link in the top right corner which will allow the user to select the desired printing options.

System Help

System help is available in the top right corner of the application screen by clicking the Help link. System help contains a link to online documentation and resources as well as a searchable topic database. System help is a buildable resource where the topics are created by users with appropriate security.

1.2. Project Defined

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

Managing projects in TRIRIGA 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.

1.3. Approvals

Approvals ensure that created and modified records meet the defined business requirements. Approvals can be created to automatically escalate records to defined approvers. Users can delegate approvals, 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. Users can opt out of receiving notifications in their profile options and subscribe to notifications from a record that they want to receive notifications about.

1.4. Using Templates

Using templates helps users save time by reducing the amount of data entry required for submission.

**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. Users 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 allow users to create and manage the templates used for creating evaluation surveys. Evaluation surveys are 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. 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.

**Projects**

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 managed in TRIRIGA, such as Critical to Quality contracts. Contract templates are created and managed in a similar manner to Project templates.

Lesson Summary

In this lesson, you:

- Examined the basic functionality of TRIRIGA
- Examined how projects are defined
- Examined the approval and notification processes
- Identify the available template functions

Check Your Progress

1. All users see the same Home Page and portal tabs.
   a. True
   b. False
2. Approvals can be routed ________. 
   a. Manually  
   b. By delegation  
   c. Automatically  
   d. All of the above

3. Templates can be created for __________.  
   a. Forms  
   b. Contracts  
   c. Surveys  
   d. Both b and c
2. 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.

2.1. Organizational Structure

Organizations are used to define the hierarchical structure of the enterprise. Organizations can also represent external companies such as vendors, tenants, landlords and customers.

The organization structure is hierarchical 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.

2.2. 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 using TRIRIGA 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.
2.3. Classifications

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 a user 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.

**Lesson Summary**

In this lesson, you:

- Identify the goals and configuration of the Organizational Structure
- Identify the goals and configuration of the Geographical Structure
- Examine available classifications
3. Operation 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 available in TRIRIGA for the management of assets, maintenance plans, and work tasks. The Portfolio is a central store of asset, location, and other records used throughout the system. Assets and specifications allow users 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.

3.1. Manage Portfolio Locations

The Location structure in TRIRIGA is hierarchical, meaning that records are organized based on their relationship with other locations. This allows the Location structure to mirror the physical location boundaries and relationships or be created independent of physical location structures in any way necessary.
Locations
The Portfolio > Locations portal contains a listing of the locations in the hierarchy. A typical setup of location types in the hierarchy is as follows: Property > Building(s) > Floor(s) > 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, most new location or facility related equipment data will be sent from AFIS to TRIRIGA to establish a shell record. The TRIRIGA user will then complete the record 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, the TRIRIGA user will create the record directly in TRIRIGA for facilities related items.

State Process Overview
The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-001 (Manage Portfolio) and represented below.

1. AFIS is the system of record for all Fixed Asset information. Fixed Asset information is sent from AFIS to TRIRIGA in order to establish location information in the TRIRIGA database. TRIRIGA users will then further define the location information.

2. A TRIRIGA user can 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.

3. A TRIRIGA user can define specific locations, including building or land records. Each location record can be assigned to the location hierarchy, including assignment to a parent Property record. Each location record in TRIRIGA 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.

4. Within each building location, a TRIRIGA user 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.

5. Once the location hierarchy is defined, 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. TRIRIGA exposes the user to CAD views of locations throughout the application. The user can interact with the drawing viewer using pan and zoom controls, measure functions, graphical reports, color-coding, and exporting.

6. Once the location record is fully defined, including the definition of key attributes (e.g. coordinate data for mapping) and floor plan data, then the location can be activated. Once a record is submitted for activation, an optional approval can be used to control which locations are available for reference to other activity in the system (e.g. projects, work orders, etc.). If the approval step is not used, the location record can be activated immediately. If the approval step is enabled, the assigned approver will be notified of an approval action. The location records will require the user to review and approve the location record prior to activation.

7. 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 in Step 6: Revise/Submit Location for Activation. If the approver determines the data is complete and acceptable, then the record is approved and the process ends.
Create 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 lost by accident.
General
In the General section on the General tab of the Location form, complete the following fields:

- 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, users can assign roles to people for a location at any level of the location hierarchy. In TRIRIGA, roles are used to manage contacts. Each associated contact can have a designated role, such as Manager, Primary Contact, or HR Contact. The Approval and Notification functionality in TRIRIGA can be based on the Contact Role for a record. 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.

![Building Area Measurements](image)

![Floors](image)

![Building Area Measurement Details](image)

![Area Summary](image)
**Assessment Tab**

The Assessment tab is used to review condition assessment information and the assessment history for building systems. On the Assessment tab, users 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, users 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

![Valuation Log](image)

**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. Users can add entries to this list by clicking the Add action. 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. In the Maintenance Details section, enter a value in the Maintenance Priority field. 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.
Activation

Once data entry for the location record is complete, the user 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.

Activity 3.1
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.

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

Steps
A. Navigate to the Portfolio > Locations portal landing page.
   1. Click the Portfolio tab.
   2. Click the Locations option in the sub header to view the Locations Hierarchy page.
   3. 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.

B. Create a new Location record.
   1. In the Hierarchy section, click New.
2. In the list of location types, click **Building**.

C. 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.
   4. Select today’s date.
   5. Click the **Create Draft** action.

D. 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**.

E. 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.

F. Save and Activate the record.

1. Click the Save action to save the form.

2. Click the Activate action to submit the form for approval.

3. Observe that the new building has a status of Review In Progress.

4. When you are finished, click the Home tab to return to the Home Page.
3.2. Vehicle/Equipment Specification

In TRIRIGA, 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**

Equipment records play a key role in the processing of maintenance work, condition assessment, energy tracking, and more. Vehicles can be tracked as part of an overall fleet management strategy, including reservations, scheduled maintenance, etc. The specification of an item is a description of the item, but does not represent the actual physical equipment.

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.

**ACTIVITY 3.2**
Create an Equipment Specification Record

**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.

**Setup**
✓ User is logged in to the TRIRIGA Home Page.

**Steps**
A. 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.
B. Create a new Building Equipment specification record.
   1. In the Specifications section click Building Equipment.
   2. Click Open in New Window.
3. Click the **Add** action.

![Building Equipment Spec: Add To Bookmarks Print Help](image)

C. Complete the General tab on the record.

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

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

3. Select **Appliances > Air Conditioners**.

4. In the **Service Class** field, click the **magnifying glass** lookup icon.

5. Select **Facilities > Appliances**.

6. In the **Manufacturer Details** section, in the **Brand** field, click the **magnifying glass** lookup icon.

7. Select **Acme Corporation**.

8. In the **Manufacturer Details** section, in the **Model Name** field, enter **Pressure Flow**.

9. In the **Model Number** field, enter **XX123**.

D. Save and Activate the record.

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

2. Click the **Save** action.

3. Click the **Activate** action.
3.3. Manage 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.

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-008 (Manage Building Systems and Equipment) and represented by the figure below.

1. Prior to the creation of specific building equipment records in TRIRIGA, 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. AFIS is the system of record for all Fixed Asset information. Fixed Asset information will be 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 (FM-TB-012). 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 (FM-TB-015). Once the equipment condition is documented on the equipment record, the system will have the information required to perform process FM-TB-009 (Develop Assessment Plan). In addition, the assessment process will often result in new corrective work (FM-TB-013) to address the identified deficiencies. Finally, the assessment process will often lead to adjustments to existing preventive maintenance (FM-TB-014) schedule frequencies, as decisions are made about how to manage asset lifecycles.
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
Activity 3.3
Create a New Building Equipment Record

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.

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

Steps
A. 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.
B. Create a new Building Equipment asset record.
   1. Click the Add action.
C. Complete the General tab on the record.
   1. In the General section, in the Name field, enter ## Roof AC Unit, where ## is your student number.
   2. Click the checkbox for Reservable.
   3. In the Spec Information section, for the Specification Name field, click the magnifying glass lookup icon.
   4. Select the radio button for ## AC Compressor
5. Click the **OK** action.

![Spec Information](image)

**D.** Enter some optional information about the equipment.

1. Click the **Details** tab.
2. In the **Details** section, in the **BtuH** field, enter **80000**.
3. In the **SEER** field, enter **18**.

![Units](image)

**E.** Complete the Reserve tab on the record.

1. In the **General** section, in the **Reserve Calendar** field, click on the **magnifying glass** lookup icon.
2. Select the radio button for the **Default Reservation Calendar**.
3. Click the **OK** action.
4. In the **Usage Units** field, click the dropdown arrow and select **Hour**.
5. In the **Usage Cost** field, enter **50**.

![General Information](image)

**F.** Save and Activate the record.

1. Click the **Create Draft** action.
2. Click the **Save** action.
3. Click the **Activate** action.
Assign 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. This process will be covered in a later section.

Track 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.

**Manage 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 authorized users have the ability to create Building System records.

![Building Systems](image)

**Manage Asset Lease**
TRIRIGA provides the ability to assign an ownership status (Leased or Owned) 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, Save and Activate the record.
Manage Keys

The Key Security Manager in TRIRIGA 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

3.4. Manage Utility Data

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.

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-002 (Manage Utility Data) and represented by CROSSREF below.
1. In the Utility Meter & Allocations process, users prepare the utility meter records. 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, the user 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, the user can enter utility consumption data into TRIRIGA based on the actual data received from the utility company. Consumption data can be created for any energy type (electrical, water, gas, etc.). The user enters 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 entered into TRIRIGA is historical (already paid) data. The TRIRIGA data is used for energy consumption reporting, but does not drive utility payments.

3. 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 in Step 2. If the approver determines the data is complete and acceptable, then the record is approved and proceeds to the next step. The State can choose to bypass the consumption data approval step, or the approval can be used as a validation of the data entry performed. If approval is not required, then the process proceeds with Step 4: Review Energy Consumption Data. No acceptance actions are assigned.

4. Once consumption data is entered/approved for various energy types at the utility meter level, TRIRIGA will generate energy logs 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. TRIRIGA can automatically perform a unit of measure conversion to allow for reporting across meters and locations in a common unit of measure. Typical metrics generated from TRIRIGA 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 from TRIRIGA. The reports can be exported to standard formats (MS Excel, Adobe PDF), and can be submitted to a regulatory agency as part of a larger document or submission.
Setup 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.

In this case, a Building Equipment specification is created following the steps outlined in Lesson 4.2. 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, Save and Activate the specification.
Setup 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.

In this case, a Building Equipment asset record is created, beginning with the steps outlined in Lesson 2.3. Some additional steps are necessary to complete the Asset meter record.

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.
Enter or select values for the Service Allocation Percent and Service Location fields.

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

**Enter Energy Consumption Data**

The next step in the utility management process is entering the amount and cost of energy consumed per utility meter into TRIRIGA. 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. The user 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.

<table>
<thead>
<tr>
<th>Cost Details (This Invoice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>Rate</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**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.

**ACTIVITY 3.4**
**Manage Utility Meter Data**

**Scenario**
You want to track the consumption of energy for a location record using meter data. You will configure the meter specification, assign the specification to an asset and then enter the energy usage data.

**Setup**
- User is on the Portfolio > Assets > Building Equipment page.

**Steps**
A. 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.

![Image of the Assets page in IBM TRIRIGA](image1.png)

B. Create a new Building Equipment specification record.

1. In the Specifications section, click Building Equipment.

2. Click the Add action.

![Image of creating a new Building Equipment record](image2.png)

C. Complete the General tab on the record.

1. In the General section, in the Name field, enter ## Electric Utility Meter, where ## is your student number.

2. In the Details section, for the Spec Class field, click the magnifying glass lookup icon.


4. For the Service Class field, click the magnifying glass lookup icon.

5. Select Facilities > Electrical.

6. In the Units section, in the Item Units field, click the dropdown and select Energy.

7. Click the Measurement dropdown and select kilowatt-hours.
8. Click the **Activate** action to save and close the record.

   ![Building Equipment details](image)

---

D. 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.

   ![Building Equipment list](image)

---

E. Complete the General tab on the record.

   1. In the **General** section, in the **Name** field, enter **## Meter**, where **##** is your student number.
   2. In the **Details** section, for the **Serial Number** field enter **XX1234**.
   3. In the **Organization** field, click the magnifying glass lookup icon.
   4. Select the radio button for **\Organizations\State of Arizona\ADA**.
   5. Click the **OK** action.
   6. In the **Spec Information** section, for the **Specification Name** field, click the magnifying glass lookup icon.
   7. Select the radio button for the **## Electric Utility Meter** created in the previous step.
   8. Click the **OK** action.
   9. Click the **Create Draft** action.
F. 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 activity 3.1.
   7. Click the OK action.

G. Navigate to the Sustainability > Utility Invoices portal.
   1. Click the Sustainability tab.
   2. Click the Utility Invoices option in the sub header to view the Utility Invoices landing page.
3. In the **Utility Invoice History** section, click the **Add** action.

H. 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.

![Utility Invoice](image)

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

![Utility Invoice](image)

I. Complete the Utility Invoice Line Item record.

1. In the **Details** section, in the **Date** field, enter today’s date.
2. In the **Energy Type** field, click the **magnifying glass** lookup icon.
3. Select **Scope 2 > Electricity**.
4. In the **Billing Period** field, click the **magnifying glass** lookup icon.
5. Select the **current month**.
6. In the **Meter Name** field, click the **magnifying glass** lookup icon.
7. Select the meter asset that was created in the previous step.
8. Click the **OK** action.
9. Select the checkbox for **Include in Energy Use**?
10. In the **Cost Details (This Invoice)** section, in the **Quantity** field, enter **3500**.
11. In the **Rate** field, enter **.05**.
12. Click the **Create** action.

J. 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.

### 3.5. Create Corrective Maintenance Work Task

TRIRIGA supports the creation and tracking of multiple request types. Corrective maintenance work tasks are issued upon request, either by using the self-service functions in TRIRIGA or after being received over the phone. Corrective Maintenance Work Tasks can also be created directly by a user with appropriate access.

#### State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-013 (Create Corrective Maintenance Work Task) and represented by CROSSREF below.

1. 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 the user 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. The process continues with Step 2: Create Work Task for Request.

3. 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 approver may make modifications to the request as necessary prior to approval, or request clarification from the submitter. If, after making updates or receiving additional information, the approver determines that the request is not valid or does not align with the department needs, the record is rejected and the process ends. 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. Approval of the request is optional and can be enabled to prevent creation of a work task without request approval. The process of managing the performance of the work task continues with To Be process FM-TB-015.

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, users are assigned to validate the task scope and priority by reviewing and approving task record information. The approver may make modifications to the request as necessary prior to approval, or request clarification from the submitter. If, after making updates or receiving additional information, the approver determines that the request is not valid or does not align with the department needs, the record is rejected and the process ends. The requestor will be notified that their request has been rejected. If the approver determines the task is valid, the record is approved and the process continues with To Be process FM-TB-015.

**Figure 4: Create Corrective Maintenance Work Task (IM-TB-013)**

Some of the request types that TRIRIGA supports include:

- Electrical and Lighting
- Equipment Service
- Exterior Services
- Fixture and Furniture
- General Repairs
- Housekeeping
- Interior Services
- Key Request
- Plumbing and Leaks
This lesson focuses on General Repair requests with the understanding that all requests are similar in nature but with minor specific differences in the details that pertain to the specific request type.

Submit Online Request

The Requests portal is used to issue, manage, and track the various requests for corrective maintenance in TRIRIGA. Users 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 is for | Me | Someone Else |

*(Instruction): To submit a General Repairs request, complete the form below then click Submit.*
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.

<table>
<thead>
<tr>
<th>Request Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency, immediate service required</td>
</tr>
<tr>
<td>Building</td>
</tr>
<tr>
<td>Floor</td>
</tr>
<tr>
<td>Room</td>
</tr>
<tr>
<td>Organization</td>
</tr>
</tbody>
</table>

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. Users will see the status of their request in the Manage Requests portal. Requests will be listed in the My Request History section.
Receive Request 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 user 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.

Review Request
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.
Create Work Task

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.

**Activity 3.5**

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.

**Setup**

✓ User is logged in to the TRIRIGA Home Page.

**Steps**

A. Navigate to the Requests > Manage Requests portal.
   1. Click the Requests tab.
2. In the Request Central section, expand Facilities and click General Repairs.

![Request Central]

B. 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.

![Request Details]

C. Complete the rest of the request.

1. In the Service Request section, select the radio button for Elevator.
2. In the Describe Your Request section, in the text box, enter "The elevator will not stop at floor 13, where ## is your student number."
3. Click the Submit action.
D. Review the request.

1. On the Manage Requests page, in the My Request History, observe the request has been created.

2. Confirm notification in user Home portal that request has been received.

---

![Image of Manage Requests page]

---

E. Approval of the request generates the Work Task.

F. 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.

---

![Image of Tasks landing page]

---

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

---

![Image of filtered tasks]

---

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

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-014 (Create Preventative Maintenance Work Task) and represented by CROSSREF below.

1. A job plan is the main record that defines the preventive maintenance work to be performed. A job plan defines what building systems, assets, and/or locations will be serviced. The job plan also identifies the organizations (internal or external) responsible for managing and performing the work. After the job plan record is created, the user can associate systems, assets, or locations to the plan. Preventive maintenance schedules can be linked to the job plan to define the planned service dates and frequency. Each schedule is defined by one or more procedures to provide the technician performing the work with a detailed list of steps that are to be performed.

2. Once the setup of the prerequisite preventive maintenance data is complete, the user activates the job plan and its related schedules. Approval of the job plan is optional, but can be enabled to prevent activation of a plan without additional review.

3. 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 process of managing the performance of the work task continues with To Be process FM-TB-015.

4. The tasks generated based on schedule and meter readings are assigned for review. If the approver determines that the task is not valid or does not align with the department needs, then the record is rejected and the process ends. The requestor will be notified that their request has been rejected. If the approver determines the task is valid, then the record is approved and the process continues with To Be process FM-TB-015.
Figure 5: Create Preventative Maintenance Work Task (IM-TB-014)

Setup 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. Users can 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.

**Generate 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 users 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**

Users can 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 bi-weekly on Fridays by selecting weekly and recur every 2 weeks on Friday.

![Image of PM Event: 000025](image)

**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.

![Image of Procedures](image)

**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**

TRIRIGA will automatically generate PM work 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.

ACTIVITY 3.6
Create Preventative Maintenance Work Tasks

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.

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

Steps
A. 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.

B. 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.

![IBM TRIRIGA | Facilities Management](image)

C. 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

<table>
<thead>
<tr>
<th>Monthly Recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day [x] of every [x] month(s)</td>
</tr>
<tr>
<td>The [First] [Monday] of every [x] month(s)</td>
</tr>
<tr>
<td>Day (1-31) [ ] of Every [ ] Month(1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Months to Skip (Seasonal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January [ ] April [ ] July [ ] October [ ]</td>
</tr>
<tr>
<td>February [ ] May [ ] August [ ] November [ ]</td>
</tr>
<tr>
<td>March [ ] June [ ] September [ ] December [ ]</td>
</tr>
</tbody>
</table>

12. Click Next

13. Click Complete

14. Click the Create Draft action.

15. Click the Activate action.

D. Activate the job plan and review the tasks.

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

**Generate Meter-Based Preventative Maintenance Work Task**

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.
3.7. Perform Work Task

TRIRIGA allows users to 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

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-015 (Perform Work Task) and represented by CROSSREF below.

1. Work tasks may be created as the result of multiple processes, including: corrective maintenance (FM-TB-013), preventive maintenance (FM-TB-014), equipment reservation (FM-TB-016), move projects (FM-TB-019), and space reservations (FM-TB-020). 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 continues with Step 2: Assign Work to Vendor or Workgroup. If auto-assignment of the work task is enabled, the process continues with the 'Internal Assignment' check. If work is assigned internally, the process continues with an additional check to determine if the work will be performed by another State agency. If so, the process continues to FM-TB-015-B to establish an internal exchange. If the work is done within the originating agency, the process continues to Step 3: Perform Work (Internal). 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. If the normal procurement process cannot be followed, for example, in the case of an emergency, the process proceeds directly to Step 9:
Perform Work (External) and an alternate payment method may be used. Under most circumstances, however, the mandated procurement process will be followed, with the next step being to create a Purchase Request (FM-TB-015-A) in ProcureAZ.

2. In cases where the work cannot be auto-assigned, a user must manually review the request and determine the appropriate maintenance workgroup or organization to manage and perform the work. Once the manual assignment of work is performed, the process continues with the 'Internal Assignment' check. If work is assigned internally, the process continues with an additional check to determine if the work will be performed by another State agency. If so, the process continues to FM-TB-015-B to establish an internal exchange. If the work is done within the originating agency, the process continues to Step 3: Perform Work (Internal). If the work is assigned to an external vendor, the process continues with another decision point where a determination is made as to whether the mandated procurement processes can be followed. If the normal procurement process cannot be followed, for example, in the case of an emergency, the process proceeds directly to Step 9: Perform Work (External) and an alternate payment method may be used. Under most circumstances, however, the mandated procurement process will be followed, with the next steps being to create a Purchase Request (FM-TB-015-A) in ProcureAZ.

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 (FM-TB-016) or the purchase of new equipment/materials. In the case of the later, the normal procurement processes are expected to be followed. Once the work is performed, it is submitted for completion and the process continues with Step 4: Department Approvers.

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. If the approver determines the work was not performed and documented to satisfaction, then the record is rejected and returned for rework in Step 5: Send Task for Rework. If the approver determines the work was performed and documented completely, then the record is approved and the process continues with Step 6: Complete Work Task.

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, and the process continues with Step 4: Department Approvers.

6. 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 (AP-TB-013). Work related to a maintenance task will provide input into the managing of building systems and equipment (FM-TB-008), otherwise, the process ends.

9. A Purchase Order is required in order to begin work (AP-TB-009) 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 the process continues with Step 4: Department Approvers.

10. TRIRIGA user determines the need for the external service. The process continues with Step 11: Offline Request for Purchase Requisition.

11. TRIRIGA Requests to Order require scheduled integration with ProcureAZ 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 ProcureAZ. The process moves to Step 12: Create Pre-Encumbrance. In addition, if the Purchase Requisition is approved (all lines must be approved) the process proceeds to Step 13: Create Purchase Order. If it is rejected, it is sent back to Step 10: Request for Order Generated.

12. Integration between ProcureAZ and AFIS will create a pre-encumbrance transaction in AFIS to document the accounting postings.

13. Purchase Requisitions that have been approved will create a Purchase Order in ProcureAZ. The process then moves to Step 14: Create Encumbrance. In addition, if the Purchase Order is approved, the process proceeds to performing the work. If it is rejected, it is sent back to Step 4: Request for Order Generated.

14. Integration between ProcureAZ and AFIS will create an encumbrance transaction in AFIS to document the inventory accounting postings.

15. Integration between ProcureAZ and TRIRIGA will create a copy of the Purchase Order on the related Work Task. Any change orders to the Purchase Order in ProcureAZ will be reflected on the Work Task as well.

16. A work task invoice will be created in TRIRIGA for internal work being done for or by another agency.

17. After the work task invoice is issued, the process will integrate with AFIS and create an internal transaction initiator (ITIWO) to initiate the transfer (AP-TB-003).
18. The internal transaction initiator document (ITIWO) will require approval in AFIS. If the approver does not accept the data as entered, the internal transaction document will need to be revised. If the approver accepts the data as entered, then the process will proceed to Step 19: internal transaction agreement.

19. The internal transaction agreement will be copied forward to the receiving agency to complete its side of the transfer and will require an approval in AFIS. If the approver does not accept the data as entered, the internal transaction document will need to be revised. If the approver accepts the data as entered, then the process will proceed to Step 20; ITIWO reconciliation.

20. After the internal transaction process is complete and approved in AFIS, the transfer information is sent to TRIRIGA to reconcile the receipt of transfer.

Figure 6: Perform Work Task (IM-TB-015)
Figure 7: Perform Work Task (IM-TB-015a)
Perform Maintenance Setup

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. Only authorized users have the ability to create service plans.

Setup 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. Only authorized users have the ability to create Service Level Agreements.

**Setup 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. In TRIRIGA, 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). Only authorized users have the ability to create and manage workgroups in the Organization hierarchy.

**Assign 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, more costly 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 the user 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.

**Perform Work Task**
Once a task is dispatched to the appropriate resource, 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 the user 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.

**Perform Work Survey**

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.

**Close Work Task**

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.
**ACTIVITY 3.7**

**Create Work Plan**

**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.

**Setup**

✓ User is logged in to the TRIRIGA Home Page.

**Steps**

A. Update Work Task with Work Group.

1. 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.

B. 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'.

---

**Attention!**

Please Wait. The Work Plan is gathering the necessary data for Planning. You will receive a Notification once the process has finished.
8. Select the **Work Plan** record to open the **Work Planner**.

![Work Planner Screenshot]

C. **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.

### ACTIVITY 2.8

**Perform Work Task**

**Scenario**

Using the work tasks that you previously created, you are the technician responsible for completing the work task and entering in the task completion information into TRIRIGA.

**Setup**

- [ ] User is logged in to the TRIRIGA Home Page.
Steps

A. Navigate to the My Active Tasks portal.
   1. Click the Tasks tab.
   2. Click the My Tasks option in the sub header.

B. 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.
   10. In the Resolution Comment section, enter ### task complete, where ### is your student number.
   11. Click Save.
3.8. Assigning Equipment

Each equipment or vehicle record managed in TRIRIGA can be assigned to locations and people.

When assigning equipment, the user will only be presented with items currently available. Once assigned to a user the selected equipment or vehicle record becomes unavailable in the list.

**State Process Overview**

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-016 (Equipment Reservation) and represented by CROSSREF below.

1. The user adds the required equipment to the 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. The process of managing the performance of the work task continues with process FM-TB-015.

4. Once the work has been performed (FM-TB-015), the equipment can be unassigned by following the same process in step 2. The availability of the equipment record is updated for use by other users.

**Figure 9: Equipment Reservation (FM-TB-016)**
Manage Equipment Assignment

TRIRIGA can be used to manage the assignment of shared equipment.

A service technician updates the work tasks using the My Active Tasks portal section. The portal displays work tasks directly assigned to the technician. Work Tasks are opened by clicking on the task in the list. The technician can view the details of the assigned task, including any resources related to the task, the task location, task description, task planning dates, etc. The technician is allowed to modify some of the values on the work task directly.

**Resources Tab**

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

**Equipment**

On the Resources tab, Equipment section, the user can click the Find action to display a list of available equipment. From the list, the user selects 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.

Activity 3.8
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.

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

Steps
A. 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.
B. Update the Work Task with the equipment used to perform the work.
   1. In the My Active Tasks section, click the Task ID of the task.
   2. Navigate to the Resources tab and select Find in the Equipment section.
      3. Select the checkbox to the left of ## AC Compressor, where ## is your student number, and click OK.
   4. Click Save.
C. 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.

   ![Asset Status](image)

   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.

D. 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**.

   ![Details](image)

E. Save and Close the equipment record.
   1. Click **Save & Close**.

F. 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**.
G. **Activate** the equipment record to restore to a read only status.

---

**Activity 3.8A**

**Complete Work Task**

**Scenario**
Continuing with the work task that you previously updated, you are the technician responsible for completing the task in TRIRIGA.

**Setup**
- User is logged in to the TRIRIGA Home Page.

**Steps**

H. Navigate to the My Active Tasks portal.
   1. Click the Tasks tab.
   2. Click the My Tasks option in the sub header.

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

**Procurement of 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 ProcureAZ creates the PO record on the Work Task
- Any additional orders or changes to a current TRIRIGA PO will be facilitated through ProcureAZ
Track 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.

![Planned Work Details](image)

**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 users to add records that include additional tracking information such as a failure code, problem code, cause, remedy, and description.

![Work Details](image)

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

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
Lesson Summary

In this lesson, you:

- Identified the process of creating Locations
- Examined the specifications for vehicles and equipment
- Examined the management of building systems and equipment
- Reviewed the utility meter creation and management process
- Created corrective maintenance work tasks
- Created preventative maintenance work tasks
- Identified the process involved in performing work tasks

Check Your Progress

1. The Location hierarchy is defined as follows:
   a. Property > Building > Space > Floor
   b. Geography > Floor > Property > Space
   c. Property > Geography > Building > Floor
   d. Property > Building > Floor > Space

2. Which type of maintenance is performed when something breaks?
   a. Corrective Maintenance
   b. Preventative Maintenance

3. Closed tasks should be re-opened if work was not performed satisfactorily.
   a. True
   b. False
4. Project and Planning

Learning Objectives

In this lesson, you will:

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

Lesson Overview

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

4.1. Develop Condition Assessment Plan

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

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

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-009 (Develop Condition Assessment Plan) and represented by CROSSREF below.
1. The development of the condition assessment plan is continued from the management of systems and equipment data in FM-TB-008 (Manage Building System & Equipment). Certain systems and equipment records can be defined as critical or high-priority. Similarly, the current condition of the system/equipment record can be recorded, and can include assignment of the replacement value of the system/equipment. When determining which building systems to analyze, the user can review the documented system/equipment priority and condition as part of the decision making process.

2. Condition assessments can be performed against the defined building systems. The default assessment criteria allows 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, the State planning team 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. The evaluation is performed based on the assessment criteria in Step 2: Develop Assessment Criteria.

4. Record information and any attached documentation are reviewed and approved. If the approver determines there are missing or incorrect data, then the record is rejected and returned for corrections in Step 3: Create/Revise Inspection Request(s). If the approver determines the data is acceptable, then the record is approved and proceeds to the next step.

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. Once the inspection work task is assigned, the process continues with FM-TB-010 (Perform Condition Assessment).

**Figure 10: Develop Condition Assessment Plan (IM-TB-009)**
Issue Inspection Request

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

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

When the request is ready, select the Submit action. The result of submitting the request is the creation of one or more Facility Assessment Work Tasks. The user can view these tasks by returning to the Building record and navigating to the Inspection History sub tab of the Assessment tab.
The tasks that are created by the Inspection Request form are viewable on the Tasks > Manage Tasks > Facility Assessment Work Tasks menu. When the task information is complete, activate the task by selecting the Activate action which changes the task to the Issued status.

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

**ACTIVITY 4.1**

**Issue Inspection Request**

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

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

**Steps**

A. Navigate to the Portfolio > Building record.
   1. Click the Portfolio tab.
   2. Click the Locations dropdown and select Buildings.
   3. Click the ID of the Training Building created in an earlier activity. Remember to only select the ### for your student number.
   4. Click the Revise action.

B. Create an Inspection Request.
   1. Click the Assessment tab.
   2. In the Current Condition Index section, click Create FCI History Record.
   3. Review FCI History record and click Create History Record.
   4. In the Building System Items section, click the Add from Building System Class action.
   5. Check the box for D3050.50 HVAC Air Distribution.
   6. Click the OK action.
   7. In the Building System Items section, check the box next to the Building System Item and click the Inspection Request action.
8. In the **Organization** field, click the **magnifying glass** icon.

9. Select the radio button for **ADA**.

10. Click the **OK** action.

11. In the **Service Request** section, select the radio button for **Condition Inspection – Task**.

12. In the **Describe Your Request** section, in the text box, enter **## Inspect the HVAC, where ## is your student number**.

13. Click the **Submit** action.

14. In the **Building Record**, click the **Activate** action.
C. Review the Facility Assessment Work Task list.
   1. Click the **Tasks** tab.
   2. Click the dropdown for the **Manage Tasks** option.
   3. Click **Facility Assessment Work Task**.
   4. Observe the tasks listed on the page.

### 4.2. Perform Condition Assessment

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

**State Process Overview**

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-010 (Perform Condition Assessment) and represented by CROSSREF below.

1. The inspection work task assignment is generated as a result of FM-TB-009 (Develop Condition Assessment Plan). Technicians are assigned to review the system/equipment condition and to document the results. The assigned work task provides the technician with the required details of the inspection, including the assigned system, location, and description from the request. The technician can score the assessment based on the assessment criteria defined in FM-TB-009, including scoring criteria for observed condition, frequency of maintenance, risk probability, and other categories.

2. 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.

3. 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.

4. When the project request is submitted, a user can be assigned to review the request prior to the creation of the project record. If the project request is approved, the process continues with FM-TB-011 (Perform Capital Project Planning). If the project request is not approved, the requestor returns to Step 2: Identify System/Equipment Deficiencies to re-create and/or re-submit the opportunity record.
Perform Inspection Tasks

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

*General*

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

- General
- Planned
- Actual
- Recorded By

*Resources*

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

- Work Time
- Material List
- Material Orders
**Procedures**

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

- Procedures
- Regulations

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

A funding request is used to request the necessary funds to pay for assessed opportunities. On the Assessment tab of a Building record, the Opportunities section is used to select items to include in a funding request.
Once items have been selected, the user selects the Funding Request action which opens the request in a new window.
**General**
The General tab of the Funding Request form is completed by the user. There are sections for describing the request and estimating the cost.

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

**Evaluation**
The Evaluation tab is used to review the estimated savings and results of the request.
When data entry is complete, the Funding Request can be submitted using the Submit action. When approved, a Facilities Project is created and assigned.

**Perform Condition Assessment Reporting**

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

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

**General**

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

**Location**

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

After reviewing the information in the other sections of the form, the Summary section provides a summary of the analysis report. The full report can be viewed by clicking the Open action.
Activity 4.2
Perform Condition Assessment

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

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

Steps
A. Locate and open the Facility Assessment Work Task.
   1. On the Facility Assessment Work Task page, click the ID of the Assessment task.

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

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

### 4.3. Perform Capital Project Planning

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

**State Process Overview**

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-011 (Perform Capital Project Planning) and represented by CROSSREF below.

1. AFIS is the system of record for Chart of Accounts information and it is used to control capital budgets from a financial perspective. As an element of program management, TRIRIGA may be used as a tool to create capital project planning information. This may be used to justify requests and as input in the process of establishing programs and projects.

2. Once the funding request record is prepared with information on objectives, scope, schedule and cost, the user can submit the request record for review and approval.

3. 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. If the approver determines the request is not valid or does not align with the department needs, then the record will proceed to Step 4: Revise Plan. If the request is approved, a project record is created and the process continues to FM-TB-012.

4. If a plan requires more information and justification, it may be revised and resubmitted for approval in Step 3: Submit for Approval.
Programs

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

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

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

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

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

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

**ACTIVITY 4.3**

Create a Funding Source

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

**Setup**
- User is logged in to the TRIRIGA Home Page.

**Steps**

A. Navigate to the Projects > Funding Sources portal.
   1. Click the Projects tab.
   2. Click the Funding Sources option in the sub header to display the Funding Sources landing page.

B. Create a new Funding Source record.
   1. In the Related Links – Funding Sources section, click Create a Funding Source.
   2. In the General Section, in the Name field, enter Training Funding ##, where ## is your student number.
   3. In the Start Date field, select today’s date.
   4. In the End Date field, select the date 1 year from today’s date.
   5. In the Funding Source Details section, in the Amount Authorized field, enter 1000000.
   6. In the Amount Approved field, enter 1000000.

C. Save and Issue the new record.
   1. Click the Create Draft action.
2. Click the **Issue** action.
3. When you are finished, click the **Home** tab to return to the Home Page.

### 4.4. Manage Capital Project

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

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

**State Process Overview**

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.

1. AFIS is the system of record for capital project information from a financial perspective. AFIS projects can be manually entered in TRIRIGA. The capital project record creation provides a centralized source for document management, schedule task management, RFP management, progress tracking, and project closeout processing. During project creation, project templates are typically used to reduce data entry and enforce standardization of projects across departments. 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. The management of a project typically requires the participation of key project team members. Team members 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. TRIRIGA provides project managers and other authorized project team members the ability to 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. TRIRIGA provides the project team with the ability to upload one or more project documents to the project folder hierarchy. Once uploaded, users can leverage TRIRIGA's document
management functions for version control, including document download, upload, check-in and check-out. Authorized users are able to view documents within the TRIRIGA document viewer. For example, users without CAD viewing software installed locally are still able to view CAD files within TRIRIGA. Users can also upload project notes to the Notes & Documents tab and track date-stamped text comments about the project.

5. Project managers can use the project scheduling tools to create and define the scheduled tasks that need to be completed to successfully accomplish the project requirements. The tasks are used in conjunction with the built-in TRIRIGA 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. Users can create tasks in the schedule list view, in the Gantt chart view, or by importing Microsoft Project schedule files. TRIRIGA also allows export of TRIRIGA project schedules 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, users may receive notifications of each assigned task.

7. Throughout the life of the project, changes may occur that affect the project's schedule and scope. The project manager can use functions in TRIRIGA to manage any of these changes. Issue tracking tools are available which allow the project manager to monitor the project and identify potential changes early. The project manager can use reporting and communication tools to ensure that key project stakeholders are informed of the project's progress.

8. Project closeout checklists provide 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 user's 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. TRIRIGA provides a project level closeout portal that provides project managers with information that aids in the final closeout of a project (i.e. completed contracts/change orders, paid invoices, outstanding invoices, and completed checklists). TRIRIGA also allows for business rule closeout approval routing and progress tracking. Obligations such as payments to vendors may remain open after the project close date.
Create a Project

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

General Tab

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

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

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

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

- Scope Description
- Site Information
- Parking Information
- Building Information
Once data entry for the project record is complete, a draft version can be saved, and the record submitted for approval.

Revise a Project

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

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

### Summary

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<th>Also</th>
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<th>Forecast</th>
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<tr>
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<td>Pending Commitment Changes</td>
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<td>$0.00</td>
</tr>
<tr>
<td></td>
<td>Uncommitted Cost (d-h-l)</td>
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<td>$0.00</td>
</tr>
<tr>
<td></td>
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</table>

*Optional: Summary of the budget and commitments for the project.*
Define Project Schedule

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

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

---

**Activate Project**

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

**Revise Project**

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

**Complete Project**

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

**Close a Project**

The project closeout process can begin when the final tasks for the project are performed and the project reaches the completion stage. The system provides a series of tools to support project managers in the activities related to the closing of open or pending project activities. Prior to project closeout, closeout checklists can be generated to track completion of key project action items. The project manager can review open activities by monitoring the dashboard view or by generating a Closeout Report.
To review and validate project closeout activities, users can navigate to the Closeout tab on the project record. The Closeout tab contains several sections and sub-tabs that cover elements regarding the completion of the overall project process. The Closeout tab also provides a consolidated view of the current status of the records associated with the current project including tasks and checklist items.

### ACTIVITY 4.4

#### Manage a Capital Project

**Scenario**

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

**Setup**

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

**Steps**

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

   ![Projects tab](image)

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

   ![Schedule tab](image)

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

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

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

3. The record will become read only.

### 4.5. Manage Move Project

In TRIRIGA, the management of moves includes managing move service requests, planning scheduled moves, and planning strategic moves. The move manager is responsible for moving people, assets, and equipment within an organization to ensure that move requests and move projects are implemented as required. The move planner is responsible for assembling move projects so that strategic space plans or facility move plans are organized with minimal cost and disruption.
A move request follows the service management process. The request is submitted by the requester, assigned to a move task or move project, and completed when the move is complete.

**State Process Overview**

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-019 (Manage Move Project) and represented by CROSSREF below.

1. 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 the user 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. The process continues with Step 2: Department Approvers.

2. The move request record is reviewed by a designated approver(s). If the move request is not acceptable, or if the approver is in need of additional information, the request will be rejected and returned for resubmission or termination in Step 1: Create/Submit Move Request. If the request is determined to be valid, the record is approved and approval notification is sent to the requestor. Upon approval, the process continues to Step 3: Create Move Project.

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. Upon creation of the project, the process continues with Step 4: Create Move Project Tasks.

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. The process of managing the performance of the work task continues with process FM-TB-015.

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.
Move Request

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

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

Move Project

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

**Lesson Summary**

In this lesson, you:

- Identified the development process of a condition assessment plan
- Performed a condition assessment
- Identified the processes involved in capital project planning
- Managed a capital project
- Reviewed the reports available for viewing space utilization data
- Identified the concepts involved in move requests and move projects

**Check Your Progress**

1. An inspection can be requested to determine the condition of equipment and building systems.
   - a. True
   - b. False

2. Capital projects can be created and based on _________.
   - a. Assessments
   - b. Opportunities
   - c. Templates
   - d. Moves
5. Real Estate Functions

Learning Objectives

In this lesson, you will:

- Examine the process of creating a real estate contract
- Review the management of real estate contracts
- Review the management of real estate payments
- Review the management of real estate transaction plans
- Review the management of real estate transaction projects

Lesson Overview

In TRIRIGA, the Real Estate functions allow users to plan real estate transactions and manage real estate projects for an organization. Portfolio plans, implementation plans, and transaction plans can all be organized into a real estate portfolio. This lesson focuses on the real estate functions for creating and managing contracts, payments, transaction plans, and transaction projects.

5.1. Create Real Estate Contract

Real estate contracts are developed using a facilitated contract abstraction process. Abstracting a lease into an electronic form facilitates easy access to key information, rather than needing to read the entire contents of the contract each time. Users should be able to abstract any information within a lease that is needed to support the requirements, including information to search from, report on, set notifications, include in a workflow, or analyze and compare with other records. All costs spelled out in a lease should also be abstracted for a cost analysis.

The abstraction process can be initiated from the transaction planning process or a contract can be abstracted directly, independent of the transaction plan. While lease contracts require significantly more abstraction, a similar process can be used to define owned property contracts.

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-003 (Create Real Estate Contract) and represented by CROSSREF below.

1. Contracts for the lease or purchase of a building can be generated as a result of a transaction (e.g. building purchase, lease renewal, new lease, etc.) or they can be negotiated by a broker, on behalf of an organization. Once a contract is negotiated and signed, the user can populate the
system with key contract terms, contract documentation, clauses, options, and payment schedules in a single repository. The negotiation of the contract will involve both departmental and ADOA team members. Once the negotiation is complete, a department user will be assigned to perform the creation of the contract record in TRIRIGA.

2. The contract creation process often occurs in concert with the acquisition of a new building (FM-TB-001). If the new contract is assigned to an existing building, the process continues with the Vendor ID check. If the new contract requires assignment to a building that is not in the system, then a new Location record can be created in TRIRIGA. It is assumed that TRIRIGA is the system of record for the Location record. After the Location is created, the process continues with the Vendor ID check. The contract creation process often requires the definition of a new vendor organization for assignment to the contract. If the new contract is with an existing vendor organization, the process continues with Step 3: Abstract Contract. If the contract requires assignment of a vendor organization that is not in the system, a new vendor record must be created in ProcureAZ to allow for vendor assignment to the new contract. It is assumed that ProcureAZ is the system of record for the vendor record. The AP-TB-001 process describes the new vendor request process. TRIRIGA will interface regularly with AFIS to receive the current approved list of vendors for contract assignment.

3. State users can abstract the full real estate contract into TRIRIGA, allowing for easy access to key information, and replacing the need to read through the contents of the full contract each time. The contract abstract record can be created directly, or as a result of the transaction project process. The user accesses TRIRIGA forms to directly enter data related to the contract clauses, options, payment schedules, critical dates, contacts, and documents. Once the contract abstraction is complete, the user can submit the abstract record for approval.

4. State lease contracts typically require review by ADOA. The contract review process allows for ADOA to return the contract to the department for revision or to request clarification. This is an offline process. 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 the process moves to Step 5: Revise Contract. If the approver determines the data is acceptable, then the record is approved and proceeds to Step 6: Execute Contract.

5. As noted, prior to approval, ADOA can request clarifications or revisions to the contract. Changes can include further abstraction of the original contract, additional documentation, clarification of payment terms, etc. This is an offline communication between ADOA and the department.

6. Once the contract is approved, it is considered to be ‘in effect’. Further changes to the contract after activation may require a formal amendment process, depending on the change required. The system will monitor the defined critical dates in the contract options and clauses to automatically notify team members of required action (FM-TB-004). Payment schedules on an active contract will generate and queue payment request records for integration with AFIS (FM-
TB-005) where applicable. Additionally, the encumbrance creation process will be initiated in AFIS (AP-TB-009) to create an order that can be referenced on lease payments.

**Figure 15: Create Real Estate Contract (FM-TB-003)**

Create a Lease Abstract

The Contracts > Leases portal is used to view real estate contracts and asset leases. The Related Links section contains a link to the Lease Abstracts page.
On the Lease Abstracts page, click the Add action to create a new Lease Abstract form. On the Lease Abstract form, enter some basic information and click the Create Draft action. The form status will change to Draft and additional tabs and form actions will become available. The additional tabs represent clause types to be abstracted.

The General Tab

The General tab contains many sections that capture the defining information for the lease abstract. The Details, Critical Dates, Primary Locations, Tenant, and Landlord sections all provide fields and sections where key information is entered.

Details Section

The Details section contains many key fields and is used to define the Location information, Lease Type, Lease Category, Primary Use, and Contract Status.

In the Location Lookup field, enter or use the Search icon to select the location information for the lease abstract. The location address can be manually entered if the lease is not tied to an existing location record in TRIRIGA. When entered, data will be inferred in the following fields if available: Location, Geography Path, Address, City, State/Province, County, Zip/Postal Code and Country.

In the Geography Path field, enter or use the Search icon to select the Geography Path. When entered, data will be inferred in the following fields: City, State/Province, County and Country.

Determine if the Location exists and if the Location is not already set up in the Location Hierarchy, click Create New Location on the Primary Address section bar. Enter Location Details and Setup Details and click Continue. The information populates the Location Lookup field on the Lease Abstract record.
Complete the Details section, including values for the following fields, where appropriate:

- **Lease Type** – Select from:
  - **Expense Lease** – This is the most common. Used when space is leased from a landlord
  - **Expense Lease – Master Sublease** – An expense lease used when subleasing space from another party
  - **Income Lease – Sublease** – An income (AR) based lease used when part of an expense lease is subleased to a third party
  - **Income Lease – Third Party Lease** – An income (AR) based lease used when setting up third-party tenants in an owned building
  - **Inter-Agency Lease** – A lease type used when one internal agency is leasing space from another internal agency

- **Lease Category** – Use the Search icon to select the Lease Category type for the Lease Abstract record. In the search list, the system displays the available types as defined in the Lease Class business object of the Classifications Hierarchy

- **Primary Use** – Use the Search icon to select the Primary Use of the Lease Abstract record. In the search list, the system displays the available types as defined in the Lease Primary Use business object of the Classification Hierarchy

- **Contract Status** – Use the Search icon to select the Contract Status of the Lease Abstract record. In the search list, the system displays the available types as defined in the Lease Contract Status business object of the Classification Hierarchy

Complete other fields as necessary in the Details section.

**Critical Dates Section**

In the Critical Dates section, click the Calendar icon for each field and select the Commencement Date, Construction Start Date, Expiration Date, Construction End Date, Rent Commencement Date, Occupancy Date, and Legal Notice Date, as appropriate.

The system uses these dates to populate other fields in other sections and tabs in the Lease Abstract.

**Premise Location Section**

In the Premise Location section, click Find to identify location(s) in the Location Hierarchy and select from the choices.
Click Add to add a location without an association in the Location Hierarchy as a line item in the Premise Location section.

Continue adding premise locations to this section, as needed.

**Tenant Section**

In the Tenant section, enter values for Tenant Contact Organization Lookup.

If the Tenant Organization is not already set up in the Organization Hierarchy, a new Tenant Organization can be created by clicking Create New Organization on the Tenant section bar.

For the new organization, enter the General information and Setup Details and click Continue. In the Setup Details section, the system creates the new organization under the Parent Organization in the Organization Hierarchy and in the Organization Form Type specified.

The system populates the Tenant Contact Organization Lookup field and related fields in the Tenant section of the Lease Abstract form. Similarly, the system populates the Landlord, Management Company, and Guarantor sections from their respective section bars.

**Landlord Section**

In the Landlord section, enter values for the Landlord Organization Lookup.
If the Landlord Organization is not already set up in the Organization Hierarchy, a new Landlord Organization can be created by clicking Create New Organization on the Landlord section bar.

For the new organization, enter the General information and Setup Details and click Continue. In the Setup Details section, the system creates the new organization under the Parent Organization in the Organization Hierarchy and in the Organization Form Type specified.

The system populates the Landlord Organization Lookup field and related fields in the Landlord section of the Lease Abstract form. Similarly, the system populates the Tenant, Management Company, and Guarantor sections from their respective section bars.

**Accounting Tab**

On the Accounting tab, enter values for the following fields, as appropriate:

- **Accounting Type** – Select the Accounting Type applicable for the Lease Abstract
- **Spend Category** – Use the Search icon to select the Spend Category under which the Lease Abstract record is classified
- **Accounting Start Date** – This field is auto-populated from the Commencement Date in the Critical Dates section, the value can be changed here
- **Accounting Cost Center** – Use the Search icon to select the Accounting Cost Center responsible for incurring the cost of the lease
- **Accounting End Date** – This field is auto-populated from the Expiration Date in the Critical Dates section, the value can be changed here
- **Create Straight Line Adjustments?** – Check this box to add straight line adjustments to the Lease Abstract
- **Operating Portion of Capital Lease** – Enter an amount, as a percentage not to exceed 100%
- **Straight Line Capital Portion of Rent?** – Check this box to add straight line capital portion of rent to the Lease Abstract
Rent Tab
On the Rent tab, complete the creation of scheduled requests for payment. This section establishes basic rent clause information including questions regarding the index adjustment requirements and sales reporting requirements for the contract. Complete the Document Reference and Clause Details field groups. The Rent Schedules section is used to view the payment type, description, frequency, start date, end date, cost per unit, contract rentable, charge amount basis, expected cash pre-tax, total tax, expected cash total, and status of each payment scheduled. Schedules can be added using the Add action.
**Default Tab**

The Default tab contains document reference, clause details, monetary-default clause details, and monetary-default clause specifics. For each Default clause entry, complete the following fields:

- Document Reference
- Clause Details
- Default Clause Type
- Clause Summary
- Default Clause Details

### Default Clause Table

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Granted In Lease</th>
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</thead>
<tbody>
<tr>
<td>Section</td>
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</table>

#### Clause Details:

- Default Clause Type
- Clause Summary

#### Default Clause Details:

- Is Notice Required Before Monetary Grace Period Begins?
- Grace Period For Monetary Default
- Number of Monetary Events
- Cap on events of Monetary Default before Grace Period
- Grace Period for Non-Monetary Default
- Is Notice Required Before Non-Monetary Grace Period Begins?
- Number of Non-Monetary Events
- Cap on events of Non-Monetary Default before Grace Period

### Security Deposit Tab

For each Security Deposit clause on the Security Deposit tab, complete the following fields:

- Document Reference
- Clause Details
- Deposit Details
- Guarantee Type
- Payment Type
- Separate Account Required?
- Interest Bearing Account Required?
- Guarantor
- Deposit Amount
- Expected Returned Amount
- Deposit Date
- Expected Returned Date
- Deposit Returned
- Auto-Generate Deposit Schedules?

**Options Tab**
On the Options tab, populate tenant renewal options and other options clauses.

**Rights Tab**
The Rights tab contains document references, clause details, and additional details regarding alterations, assignment/subletting, holdover, signage, restoration obligations, and other rights.

**Allowances Tab**
Enter Allowance clauses on the Allowances tab.
OpEx/CAM Tab
The OpEx/CAM tab contains operating expense (OpEx) and common area maintenance (CAM) clauses. Use the Add action in the CAM Clauses section to create new CAM-related clauses. Populate the values on the CAM Audit Setup sub tab as required, including base year, base cost, calculate rule, etc.

Use the Find action to create lists of services included and excluded in the OpEx/CAM on the contract.

The CAM Schedules section shows the payment type, description, frequency, start date, end date, cost per unit, contract rentable, charge amount basis, expected cash pre-tax, total tax, expected cash total, and status of each payment scheduled.

Insurance Tab
The Insurance tab contains insurance clause details and insurance payment schedules.

Tax Tab
The Tax tab contains tax clause details and tax payment schedules.

Parking Tab
The Parking tab contains parking clause details and parking payment schedules.

Responsibilities Tab
The Responsibilities tab contains clause details and responsibility services items.

Activate and Complete Real Estate Abstract
A Real Estate Contract Abstract record creates a draft of the real estate contract before formally endorsing it. This can separate security between internal and outsourced resources that are abstracting contracts. Upon mutual agreement of the stipulated terms, the contract abstract serves as a formal Real Estate Contract record.
Selecting the Activate action will route the record for approval and change the status to Review in Progress. If no approvals are required, the status will change to Active and the record is set to a read-only state.

Once a Contract Abstract record is approved and activated, the contract administrator has the option to Complete the abstract record. The Complete action is used to complete the tasks associated with the record. On Completion, TRIRIGA copies the information in the Contract Abstract record and creates a Real Estate Contract record with the same name that appears in the Real Estate Contract page in a Draft status.

Once approved, a Real Estate Contract is considered to be in-effect. Defined request for payment schedules will be generated by the system, potentially including distribution of request for payment record date to AFIS.

**ACTIVITY 5.1**

**Create a Real Estate Contract**

**Scenario**
You have a new lease for your department. You will create a Lease Abstract and submit it in TRIRIGA.

**Setup**
✓ User is logged in to the TRIRIGA Home Page.

**Steps**
A. Navigate to the Contracts > Leases portal.
   1. Click the **Contracts** tab.
   2. Click the **Leases** option on the sub header to display the Leases landing page.
B. Create the Lease record.
   1. In the Related Links – Contract Leases section, click **New Lease Abstract**.
   2. Click **Create Draft** in the upper right corner.
   3. In the **Document Details** section, click the magnifying glass icon for the **Document Type** field.
   4. Select **Lease**.
   5. In the **Effective Date** field, enter *today’s date*. 
6. In the General section, in the Lease Name field, enter **## Training Lease**, where ## is your student number.

C. Complete the rest of the lease.

1. In the Primary Address section, click the magnifying glass icon for the Location Lookup field.
2. Select the radio button for **ST ## Training Building**, where ## is your student number, and click OK.
3. In the Details section, click the magnifying glass icon for the Lease Type field.
4. Select **Expense Lease**.
5. In the Base Lease Rate field, enter **1000**.

6. In the Critical Dates section, in the Commencement Date field, enter **06/01/2015**.
7. In the Base Lease Expiration Date field, enter **05/31/2016**.

8. In the Management Company section, click the magnifying glass icon for the Management Organization Lookup field.
9. Select the radio button for **Lincoln Properties LLC** and click OK.

10. In the Default Remit To section, click the magnifying glass icon for the Remit To Lookup field.
11. Select the radio button for **Lincoln Properties LLC** and click OK.
12. Navigate to the **Tax** tab, located at the top of the screen.
13. Click on the **magnifying glass** icon for the **Tax Type** field.
14. Select **Sales Tax**.
15. In the **Tax Rate** field, enter **3**.

**D. Save and Activate the record.**

1. Click **Save**.
2. Click **Activate**.
3. In **Related Links**, click on **Lease Abstracts**.
4. Reopen the record you just created.
5. Click **Complete**.

### 5.2. Manage Real Estate Contracts

Real estate lease contracts can also be setup and maintained by bypassing the contract abstraction creation functionality. The on-going management of a real estate contract is an important part of the process involved in meeting all contractual obligations.

For example, an option to renew a lease contract with a landlord may contractually require notification to the landlord a number of days in advance of the lease expiration. Failure to comply with the renewal notification clause may result in significant costs to the State.
**State Process Overview**

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-004 (Manage Real Estate Contract) and represented by CROSSREF below.

1. Basic administration of the contract can include monitoring of critical dates associated with contract clauses or options. Through automatic notification and reporting, the contract management team can monitor and report on all contract activity and performance over time.

2. Contract records can be changed during the term of the contract. Depending on the change that is required, a formal change request may be required. If the contract change includes modifications to the contract that will require review and approval of the change, then an amendment should be submitted, and the process should continue with Step 3: Submit Data Change Request. If the updates to the contract include basic data revisions (e.g. adding a lease team member), then an amendment is not required, and the process can continue with Step 6: Update the Contract Record.

3. Data Change Requests are generated when modification to the Real Estate Lease records are required. By populating the Data Change Request form, the user identifies the contract record to which the data change request applies, a description of the change being requested along with other relevant information, such as the person requesting the change. Once the Data Change Request has been completed, the user can submit the request for review and approval. Once submitted, the system will notify and assign approval action items to the assigned approver(s). Approval may be required by external parties as well, though the internal lease team will typically secure the external approval through offline communication.

4. ADOA is required to approve all property purchases and amendments to purchase contracts. For ADOT, separate ADOA approval is not required. If the Contract record requires approval, the system will notify and assign approval action items to the assigned approver(s). This is an offline process.

5. After internal State approval is granted (typically offline by ADOA), approval by the external party on the contract is also required. Typically external approval will be secured using offline communication (e.g. phone, email, etc.). Signed versions of contract amendment documents should be uploaded to the contract document area for tracking purposes. Once all approvals (internal and external) are complete, the process can complete with Step 6: Update Contract Record.

6. Once the Data Change Request has been processed, the modifications to the Real Estate Contract record are made. The Contract Administrator receives the Contract Review Task and reviews the requested changes. The contract record is then revised in order to make the necessary updates. In addition, encumbrance modification information will be sent to and processed in AFIS (AP-TB-010).
Manage Leases

New Leases can be created as a result of the lease abstraction process, in which case the data from the completed lease abstract is copied to the Lease Contract, or independently of the abstraction process by using the Add action in the Leases list. Existing Lease Contract records can be modified, depending on the status, by selecting the record on the Lease list.

Regardless of the method used to create a Lease Contract, the types of modifications that can be performed are the same.

**General**

On the General tab, enter the RE Lease details. The mandatory fields for a lease contract record include the Lease Name and Commencement Date.

The Apply Template option can be used to copy information from an existing lease template to the current lease contract that includes: Base field values, contact lists, clauses and options, rent schedules, etc.
The other sections on the General tab can be used to record any relevant information, but they are not required. The other sections include:

- Primary Location
- Primary Address
- Units
- Details
- Critical Dates
- Accounting
- Cost Summary
- Lease Notifications

When the basic information has been entered, click Create Draft to initiate the document in the system.

**Contact Details**
On the Contact Details tab, click the Add People action to create new role entries on the Contacts list. Click on any existing assigned role to assign a person to that role.

By default, every lease contract is required to have 1 Contract Administrator assigned, in order for the record to be saved.

The Contact Details tab is used to define any tenant, landlord, and management company organization assignments and address/contact information. Use the Default Remit To section to define the default payment address used during request for payment creation.

**Locations**
The Locations tab defines the assigned location details for the contract. Fields on this tab provide default values for Payment Reconciliation calculations. Complete the relevant details in the following sections:

- Units
- Primary Location (pre-filled)
- Location Summary
- Premise Locations
- Other Addresses
**Clauses, Options, and Terms**

The Clauses, Options, and Terms tab is used to associate clauses and options with the real estate lease record. By adding the clause information to the record in the system, users can access the lease clause information easily without having to locate and review the original product. The lease clauses are the user-defined standards that describe articles within a lease document.

Clauses normally specify information about rent, renewals, and other types of options. Additionally, users can correlate the clauses to the actual lease by indicating the appropriate section of the lease. When the user applies a lease clause template to the record, all of the clauses defined in the template populate the appropriate field in the Clauses, Options, and Terms tab. The user can add, edit, or delete clauses from the lease contract.

**Payments**

The Payments tab is used to create scheduled requests for payment. Either review the payment schedule records inherited from the abstraction process or use the Monthly Schedule Wizard action to create new schedules. Complete the schedule information including amount, frequency, escalation rates, and other key information. Click the Create Schedule(s) action to complete the schedule wizard process.
**Accounting**

The Accounting Summary tab displays a summary of the accounting information from the other tabs of the record during the life of the record. The system lists the Accounting Start Date, Accounting End Date, and other relevant accounting values.

Several key reports are displayed on the Accounting tab including:

- Financial Assumption Reviews
- Term Assumptions
- Amortization Summary
- Amortization Schedule
- Impact Reports

**Notes and Documents**

The Notes & Documents tab is used to add informational comments or documents related to the contract. This section displays all notes associated with the contract. Use the Add action in the Comments section to open a new Comment form. Comments can be added to record a log of calls, contacts, conversations, emails, and other communications that are related to the history of the contract. Each comment added to the list is logged with a reference data and author. Use the Create action to complete the creation of a comment.

Use the Find or Upload actions in the Related Document section to attach documents to the contract. Each uploaded document is posted to the document list and can be managed using standard document management functions, including:

- Check in/out
- Version control
- Document viewing
- Document markup

Click the Save action to record any changes made to the Notes & Documents tab.
Activate Real Estate Contract

Once the real estate lease record is complete, click the Activate action. The system will route the record for approval following the defined process. The status of the document will remain Review In Progress until the document is approved. Once approved, the record will appear in the results page with a status of Active and the RE contract is considered to be in-effect. Defined request for payment schedules will be generated by the system, potentially including distribution of request for payment record detail to AFIS.

Monitor Critical Date Notifications

Critical date notifications increase compliance with legal terms, such as expirations, legal notices, and lease options.

<table>
<thead>
<tr>
<th>Critical Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencement Date</td>
</tr>
<tr>
<td>Base Lease Expiration Date</td>
</tr>
<tr>
<td>Rent Commencement Date</td>
</tr>
<tr>
<td>Inception (Execution) Date</td>
</tr>
<tr>
<td>Legal Notice Date</td>
</tr>
<tr>
<td>Original Expiration Date</td>
</tr>
<tr>
<td>Construction End Date</td>
</tr>
</tbody>
</table>

Expiration

Click the Calendar icon and select the Commencement Date, the date from which the lease term starts. Click the Calendar icon and select the Expiration Date, the date on which the lease expires. The system calculates the Lease Term by subtracting the Commencement Date from the Expiration Date. For Expiration Reminder, click the Calendar icon to specify the duration before which advance notice should be given of the expiration of the lease.

Legal Notice

Click the Calendar icon and select the Legal Notice Date, the legal notice serving date. For Legal Notice Reminder, click the Calendar icon and specify the duration before which advance notice should be given for the legal notice date.

ACTIVITY 5.2

Manage a Real Estate Contract

Scenario

You will create a payment schedule for a Lease Contract record.

Setup

✓ User is on the Contracts > Leases page.
**Steps**

A. Locate and open the existing Lease Contract record using the Contracts > Leases portal.
   1. In the related links section, expand **RE Contracts** and click on **Leases**.
   2. Locate **## Training Lease**, where ## is your student number, from the list of available contracts.
   3. Click on the lease record to open.

B. Assign a Contract Administrator to the record.
   1. In the **Contact Details** tab, **Contacts** section, click on **Contract Administrator**.
   2. In the **Contact** section, click **Find**.
   3. Click the radio button for your student number.
   4. Click the OK action.

   ![Contact Details](image)

   5. Click **Save & Close**.

C. Create Payment Schedule for the lease.
   1. In the Contract record, navigate to the **Payments** tab.
   2. In the **Payment Schedule** section, select **Add**.
   3. In the **General** section, in the **Name** field, enter **## Payment Schedule**, where ## is your student number.
   4. In the **Details** section for **Payment Type**, click the magnifying glass icon and select the **Rent** option.
   5. In the **Expected Cash** field, enter **1000**.
   6. In the **Charge Amount Basis** field, verify that it says Per Month.

   ![Payment Schedule](image)

   7. In the **Payment Schedule** section, click the radio button for Pay on [x] day of the Month.
   8. Click the magnifying glass icon in the **Frequency** field and select **Monthly**.
9. Verify that the start and end dates are correct.

![Payment Schedule]

10. In the **Tax Breakdown** section, select the **Add Tax Type** action.
11. Check the box for State and click **OK**.
12. In the **Tax Rate** field, enter 3.
![Payment Schedule]

13. Verify that the vendor is correct in the Payment Instruction section.
14. Select **Create**.

D. **Activate the contract record.**
1. Select the **Activate** action.

E. **Confirm Payment Schedule Creation.**
1. Reopen lease record from Leases landing page.
2. Navigate to **Payments** tab.
3. On the **Payment Schedules** tab, verify the status is **Scheduled**.
4. On the **Payments** tab, verify individual payment lines include total for rent and tax.

![Payments]

F. Click the **[X]** to close the contract record.

**5.3. Manage Real Estate Payments**

Payments related to a real estate contract (owned or leased) can be processed in TRIRIGA. Payment schedules can be defined to include details such as amount, period, frequency, etc.
State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-005 (Manage Real Estate Payments) and represented by CROSSREF below.

1. TRIRIGA provides tools to manage scheduled payments, ad hoc payments, utility payment requests, payment estimate reconciliations, accounts receivable, accounts payable, and more. If the contract is for a State owned location where the tenant is not a State organization, the process can continue to Step 10: Receivables Request – External. If the contract is for a State owned location where the tenant is part of the State, the process will also continue to a receivables step; Step 12: Receivables Request – Internal. If the contract is for a State-leased location with a 3rd party, the process can continue with validation of the payment request type as recurring or one-time. If the payment request for the leased contract is for a one-time payment, the process can continue with Step 3: Payment Request. If the payment request is part of a recurring schedule of contract payments, the process can continue with Step 2: Payment Schedule.

2. Payment schedules are used to show the payment type, description, payment frequency, start date, end date, accounting type, expected cash, and status of each payment scheduled. TRIRIGA provides a payment schedule wizard tool to simplify data entry and auto-create payment requests at the scheduled time. When the payment schedule calls for the creation of a new payment request, the process can continue with Step 3: Payment Request.

3. Whether the payment request was created for a one-time payment or auto-generated based on defined payment request schedules, the payment record in TRIRIGA is needed to facilitate the integration of payment request information to AFIS. Once the payment request is created and issued, the process can continue with Step 4: Department Approvers.

4. Once the payment request is issued, another user will be assigned to review and validate the submitted payment request data. If the approver accepts the data as entered, then the process will proceed with Step 5: Send Payment Request to AFIS. If the approver does not accept the data as entered, the process returns to Step 3: Payment Request and revisions can be made to the request data prior to resubmittal.

5. It is assumed that outbound payment requests will require offline communication with AFIS users for the processing and payment of landlords for lease contract costs. Once the payment schedule information is communicated to AFIS, the process can continue with Step 6: Process Payment Request.

6. Once the payment request data has been sent to AFIS for processing, AFIS will process the actual payments by setting up a document for Future Document Triggering.

7. For payments that have been successfully paid, AFIS will generate a payment receipt record and a warrant.
8. Info Advantage provides receivable/payment details to TRIRIGA users with appropriate level of access, including actual payment paid date, paid amount, check number, etc. This information can then be used to reconcile payments made in AFIS to payments scheduled in TRIRIGA.

9. Certain payment request types in TRIRIGA may require reconciliation. This can be on a monthly or annual basis. If the contract is marked as requiring payment reconciliation, then the system will schedule a notification to the Contract Administrator that payment reconciliation is required. Typically, payment reconciliation functions in TRIRIGA allow the user to compare actual operating expense (OpEx) costs or common area maintenance (CAM) costs. Reconciliation payment requests can be used to adjust the total contract obligation that is remaining. The payment request reconciliation process reduces overpayments, provides critical date alerts, performs automated payment calculations, and adjusts future escrow payment amounts.

10. For owned contracts where an external organization is the tenant, a request for a receivable can be created for payment to the State. The request for receivable payments is an offline communication with AFIS users for the processing of receivables from tenants for owned property income (RETRI).

11. The request for receivable is submitted for approval in TRIRIGA. If the approver determines the record is not valid or does not align with the department needs, then the record is rejected and will be re-evaluated. If the approver determines the record is valid, then the record is approved and the receivable request is communicated to an AFIS user. In AFIS, a receivable document is created without approval (AR-TB-003). A cash receipt document (CRTRI) is then created and approved in AFIS (AR-TB-012). This information can then be used to reconcile payments received in AFIS to receivables created in TRIRIGA.

12. For owned contracts where the State is the tenant, a request for a receivable can be created for a transfer in AFIS (ITITRI). The request for receivable payments is an offline communication with AFIS users for the processing of the ITITRI document.

13. The request for receivable is submitted for approval in TRIRIGA. If the approver determines the record is not valid or does not align with the department needs, then the record is rejected and will be re-evaluated. If the approver determines the record is valid, then the record is approved and the receivable is sent to AFIS. In AFIS, a receivable document is created without approval (RETRI)(AR-TB-003). An internal transfer transaction is then created and approved in AFIS (ITITRI/ITATRI). This information can then be used to reconcile the transfer of monies between departments to the receivables created in TRIRIGA.
Process/Reconcile Payments to AFIS

The Contracts > Payables portal is used to access the Process Payments function. Click the Add action to create a new payment entry on the Process Payments list page.
**General**
Enter a Name and a Planned Date on the General tab.

**Payments Line Items**
In the Payments Line Items section, the Find action can be used to select payment records that were created during the setup of the contract payments, including one-time and/or recurring payments. Select the Payments to be included and select OK.

When complete, select Create Draft. When payments are ready to be processed, select Issue.

---

**ACTIVITY 5.3**
**Process and Reconcile Real Estate Payments**

**Scenario**
You will enter payment line item information for a Lease Contract record.

**Setup**
☑ User is on the Contracts > Payables page.

**Steps**
A. Locate and select **Process Payments** in the **Payments** section on the Contracts > Payables portal.
   1. From the Process Payments landing page, select the **Add** option.
   2. In the **General** section, in the **Name** field, enter **## Rent Payment**, where ## is your student number.

   ![General](image)

   3. In the **Payment Line Items** section, select the **Find** option.
   4. Locate your scheduled payments by entering you student number (##) into the filter field for **Contract Name**.
   5. Select the checkbox next to the **Payment Line Item** that you wish to process.
   6. Click the **OK** action.
   7. Click the **Create Draft** action.
   8. Click the **Issue** action.

B. From the Process Payments landing page, reopen the payment from step A.
   1. Click on the **Payment Line Item**.
2. Navigate to the History tab.
3. Click on the Payment Voucher.
4. Using the AFIS Payment report, enter Check Date, Check Amount and Warrant Number.
5. Click Save action.
6. Verify the Variance field to the actual amount paid.
7. Click Process action.

**ACTIVITY 5.4**

Create and Process Real Estate AR Invoice

**Scenario**

You will create a real estate invoice and process the cash receipt for a Lease Contract record.

**Setup**

- User is on the Contracts > Leases page.

**Steps**

C. Locate and open the existing Lease Contract record using the Contracts > Leases portal.

1. In the related links section, expand RE Contracts and click on Leases.

2. Locate ## Training Lease, where ## is your student number, from the list of available contracts.
3. Click on the lease record to open.
4. Click the Revise action.
5. Enter a revision number and select Continue.
6. Change the Accounting Type to **AR Accounts Receivable** and the Lease Type to **Income Lease – Sublease**.

D. Create Payment Schedule for the lease.

1. In the Contract record, navigate to the **Payments** tab.
2. In the **Payment Schedule** section, select **Add**.
3. In the **General** section, in the **Name** field, enter **## AR Payment Schedule**, where ## is your student number.
4. In the **Details** section, **Payment Type** field, click the **magnifying glass** icon and select the **Rent** option.
5. In the **Accounting Type** field, select **Accounts Receivable (AR)**.
6. In the **Expected Cash** field, enter **500**.
7. In the **Charge Amount Basis** field, verify that it says Per Month.
8. In the **Payment Schedule** section, click the radio button for Pay on [x] day of the Month.
9. Click the magnifying glass icon in the **Frequency** field and select **Monthly**.
10. Verify that the start and end dates are correct.
11. In the **Tax Breakdown** section, select the **Add Tax Type** action.
12. Check the box for State and click **OK**.
13. In the **Tax Rate** field, enter **3**.
14. In the **Payment Instruction** section, select the **Add** option.
15. In the **Remit To** section, click the magnifying glass icon and select **ADA**.
16. Select the **Save and Close** action.
17. Select checkbox for Lincoln Properties; select **Remove** action.
18. Select **Create**.

E. Activate the contract record.

1. Select the **Activate** action.

F. Confirm Payment Schedule Creation.

1. Reopen lease record from Leases landing page.
2. Navigate to **Payments** tab.
3. On the **Payment Schedules** tab, verify the status is **Scheduled**.
4. On the **Payments** tab, verify individual payment lines include total for rent and tax.

G. Close the contract record.

H. Create the Invoice.

1. On the Contracts > Receivables landing page, select **Generate Lease Invoices**.
2. Click the **Add** option.
3. In the **Name** field, enter **## AR Invoice**, where ## is your student number.
4. In the **Process Month** field, set to current month.
5. In the **Due Before** field, enter a date 2 months from today.
6. In the **AR Leases** section, select the **Find** action.
7. Select the checkbox for the AR Lease with your user number.
8. Click **OK**.
9. Click the **Create Draft** action.
10. Click the **Process** action.
11. In the **AR Invoices** section, open the Invoice record.
12. Change the **Remit To** to **ADA**.
13. In the Bill To section, click the magnifying glass and filter on **DTA**.
14. Select the radio button for **DTA** and click **Ok**.
15. Click the **Issue** action.

I. Process the Cash Receipt for the RE Invoice.

1. On the Contracts > Receivables landing page, select **Receive Lease Receipts**.
2. Click the **Add** option.
3. In the **Receipt Date** field, enter today’s date.
4. In the **Payment Method** field, select **Check** from the dropdown menu.
5. In the **Contract** section, select the **Find** action.
6. Select the radio button for the AR Lease with your user number.
7. Click **OK**.
8. In the **Payment Details** section, in the **Check Date** field, enter yesterday’s date.
9. In the **Check #** field, enter **##XXX**, where ## is your student number.
10. In the **Amount Received** field, enter **1000**.
11. In the **Payment Parameters** section, enter a date 2 months from today.
12. In the **AR Payments Due** section, clear the filters and enter the actual amount paid from above.
13. Select the **Calculate** action.
14. Click the **Create Draft** action.
15. Click the **Issue** action.

## 5.4. Manage Real Estate Transaction Plan

A real estate transaction plan can be initiated through the review and approval of a real estate action request. The real estate action request can be submitted to the organization’s transaction manager, who can approve the record, reject the record, or request more information. If the request is approved, the system creates the transaction plan. A transaction plan serves as the container for developing and managing the actual transaction projects.

**State Process Overview**
The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-006 (Manage Real Estate Transaction Plan) and represented by CROSSREF below.

1. A transaction plan can be initiated by a request for action (e.g. a need for more space, a need for departmental relocation or consolidation, etc.). The department user would complete a real estate action request with any required information about transaction requirements, priority, and description. The request is submitted offline to ADOA for review and approval for further evaluation in a transaction plan. Once the request is approved by ADOA, the record can be approved in TRIRIGA.

2. The Real Estate Transaction Plan acts as the central record around which all real estate transaction decisions are made. It enables the user to create possible solutions, called scenarios that describe the options available to solve a real estate transaction issue. Once the Transaction Plan is created, the assigned manager will assemble the team of users who will be involved in the definition of the plan. Templates are typically used to reduce data entry and enforce consistency across transaction plan records. The market analysis of the real estate transaction is added to the plan. The market analysis can be based on input from brokers or other data sources.

3. The Transaction Plan contains a set of critical to quality (CTQ) plan requirements. These are items that are required by the business to successfully accomplish the objectives of the plan. The requirements can vary from project to project, and can describe business needs that are financial, geographic, demographic, regulatory, etc. While the transaction plan defines the requirements, the actual scoring against the requirements is included in the FM-TB-006 process.

4. The business can involve multiple users in the definition of the plan requirements. The final set of requirements can be reviewed and approved offline by ADOA. Once approved, the process continues with Step 7: Manage Transaction Plan Schedule. If the requirements are not approved by the assigned approver, the process returns to Step 4: Develop Transaction Requirements.

5. Key plan tasks and milestones can be defined in the transaction plan schedule. The schedule can be used to assign tasks to team members and to track key deliverable milestones for the success of the plan.

6. Using the Transaction Plan, the transaction planning team can develop scenarios that are possible solutions to the problem for which the real estate transaction is necessary. Once the scenarios are defined and linked to the transaction plan, the process will continue with FM-TB-007 (Manage Transaction Project).
Figure 18: Manage Real Estate Transaction Plan (FM-TB-006)
Real Estate Action Request

The Requests > My Requests portal is used to view Request Central. From the Request Central, users can expand the Contract type and click Real Estate Action Request to create a new Real Estate Action Request form.
General

On the General tab of the request, complete the Requested For section, the first field at the top of the form. The Request is for radio buttons are used to identify for whom the request is being placed. Select either Me or Someone Else. The default assumes the request is for the current user. In the Describe Your Request field, provide a brief description of the RE Action Request.

Lease/Owned Property Contracts Affected

Complete the Lease/Owned Property Contracts Affected section by using the Find action to select the leased/owned property contracts that are affected. A Query window listing all of the associated records from the Real Estate Contract Manager will appear. Select the required lease/owned property contract records and click OK. The system will auto-populate the ID, Name, Lease Type, and Status based on the selected record.

This section can be used to select multiple existing leased or owned properties that may be affected by the RE Action Request. The records displayed in this section are based on the type of action that is selected in the Need Details section. For example, if a new request is created, and the Type of Action selected is New Requirement, then no existing contracts will be displayed in the Lease/Owned Property Contracts Affected section.
Contracts Affected. If the Type of Action selected is Lease Expiration, then the required contracts associated to the lease expiration are added to this section.

**Need Details (Required Parameters)**
The Need Details section is used to describe the required parameters for the proposed real estate transaction. The request is placed based on the parameters selected in this section, such as Required Completion Date, Required Property Use, Contract Term, etc. Additionally, users can define the use of the location, for example, a call center or equipment rental. The Type of Action field in this section determines how associated properties are affected. The possible types include: Closure, Expansion, Lease Expiration, New Requirement, No Change, Other, and Reduction.

![Need Details (Required Parameters)](image)

**Required for Organization**
The Required for Organization section is used to select the Organization Path which acts as one of the key elements in creating the RE Action Request. There are certain requirements for the Organization selected. The Required For Organization must be a My Company or Government record, and within that record, the Contact Details tab must contain an individual. The reason for these requirements is that the person in the Contact Details tab will be selected automatically as the Portfolio Manager when the RE Action Request is created. Without a Portfolio Manager, the RE Action Request will fail when submitted.

![Required For Organization](image)

**Submit the Request**
Click the Submit action to route the record to the members in the distribution list for approval. Submitting the request will change the status to Review In Progress and after all members in the distribution list have approved the record, the record status will change to Issued.

**Transaction Plan**
The Transaction Plan section on the RE Action Request form is automatically populated with the details of the Transaction Plan record that is created when the request is approved.
Develop Real Estate Transaction Plan

The 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.

Create New Transaction Plan

To create a new Transaction Plan, navigate to the Projects > Real Estate portal. In the Related Links – Real Estate section, click View Transaction Plans. On the View Transaction Plans page, click the Add action to create a new RE Transaction Plan record. It is also possible that an RE Transaction Plan was created automatically as a result of the approval of an RE Action Request. In that case, the Transaction Plan can be opened by clicking the Plan Number or Plan Name in the View Transaction Plans list.
**General**

On the General tab, in the General section, the ID field will be auto-generated if not provided. Enter a Name and a Description for the Transaction Plan. In the Target Geography section, use the lookup for the Geography Lookup field to select a value for the field. The other fields in this section will auto-populate based on the Geography Lookup selected. Complete the other sections on the General tab if necessary, they are not required.
**Tasks**
The Tasks tab is used to associate tasks from the Manage Tasks page with the Transaction Plan. The tasks that are associated on this tab relate to the Transaction Plan and may have an effect on the Transaction Plan itself. Some tasks may need to be completed for the transaction; others may just be added for consideration purposes. Project Tasks and Approval Tasks can be associated with the Transaction Plan. The provided features can be used to create task records and create dependencies between tasks to build a set of related Transaction Plan milestones. Users assigned as the Responsible person for a task will receive notifications/alerts about the task assignment.

**Market Analysis**
The Market Analysis tab is used to define an analysis of the market in which the real estate transaction is to take place. The market analysis is based on the market cost/price and total cost/price per square area. This data may help planners make cost and space-related decisions about the pending transaction. This analysis can be based on market data resources, such as a URL. Additionally, market resource documents may be added to the Document Manager, so that they may be viewed by anyone reviewing the RE Transaction Plan. On this tab, enter values for:

- Market Cost/Area
- Market Total Cost
- Market Price/Area
- Market Total Price
- Market Data
Use the Add action in the section bar to add records to the Market Data Resources section. Clicking the Add action will display the URL form which allows users to enter a Name and a URL as the source of Market Data. To add the record to the Transaction Plan, click the Create action.

### Market Data Resources

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>Name</td>
<td>URL</td>
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No data to display

### Market Documents

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Name</td>
<td>Document Number</td>
</tr>
</tbody>
</table>

No data to display

### Notes & Documents

The Notes & Documents tab is used to add informational comments or documents related to the Transaction Plan. This section displays all notes associated with the Transaction Plan. Use the Add action in the Comments section to open a new Comment form. Comments can be added to record a log of calls, contacts, conversations, emails, and other communications that are related to the history of the Transaction Plan. Each comment added to the list is logged with a reference data and author. Use the Create action to complete the creation of a comment.

### Comments

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>Comment Type</td>
<td>Created By</td>
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### Related Documents

<table>
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<tr>
<th>Item</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Document Name</td>
<td>Document Number</td>
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</tbody>
</table>

No data to display

Use the Find or Upload actions in the Related Document section to attach documents to the Transaction Plan. Each uploaded document is posted to the document list and can be managed using standard document management functions, including:

- Check in/out
- Version control
- Document viewing
- Document markup

Click the Save action to record any changes made to the Notes & Documents tab.
**CTQs**
The Critical to Quality items (CTQs) tab is used to provide the details for CTQ Items. Each CTQ Item is listed in line item format on this tab. Click the Add action to add records to the CTQs tab. This will display the CTQ Item form which allows the user to enter the necessary information, such as Name, Importance, Assessment Type, and Desired Value. To add the record to the Transaction Plan, click the Create action. The variables assigned to the Need and Importance Rank columns are used to define the requirement itself. For example, if the CTQ Item record selected is for Completion Date, the Completion Date can be assigned as the desired value.

<table>
<thead>
<tr>
<th>Critical To Quality (CTQ) Items</th>
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<tbody>
<tr>
<td>1</td>
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</table>

**Planning**
The Planning tab contains information that forms the basis of the RE Transaction process. The initial process involves the creation of scenarios which describe all of the possible solutions to close the real estate transaction. Transactions and scenarios are created on the Planning tab.

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
<tr>
<td>Currency</td>
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<tr>
<td>Area Units</td>
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<table>
<thead>
<tr>
<th>Summary</th>
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<tbody>
<tr>
<td>Lowest NPV (Acquisition)</td>
</tr>
<tr>
<td>Highest NPV (Disposition)</td>
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</table>

<table>
<thead>
<tr>
<th>Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>1</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Transactions P&amp;L Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction Projects P&amp;L Impact</td>
</tr>
</tbody>
</table>

Show By: Fiscal Years | Transaction Project

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The Scenarios section is used to add every possible option for completing the real estate transaction. By using the actions in the Action bar, users can create as many new scenarios as necessary.

Click the Add action to display the RE Transaction Scenario form. The form is used to provide all of the necessary information. Clicking the Find action in the Projects section will allow users to associate different kinds of transactions for the scenario. When the Scenario form is complete, click the Create action to add the scenario to the Planning tab on the Transaction Plan.
**Activate**

Once the Transaction Plan record has been completed, click the Activate action. This will route the record for approval based on the defined approval process. The record will remain in Review In Progress status until it is approved. Once approved, the record will appear in the results page with a status of Active and the Transaction Plan is considered to be in-effect.

### 5.5. Manage Real Estate Transaction Project

Real estate projects are developed and managed through a real estate transaction plan. Each project can be evaluated against the scoring criteria (CTQs) from the transaction plan. Multiple scenarios can be developed in conjunction with the transaction plan to address the requirements.

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-007 (Manage Real Estate Transaction Project) and represented by CROSSREF below.

1. **The Transaction Planning (FM-TB-006) process continues with the definition and management of transaction projects. The transaction projects are used to accomplish the approved transaction plan. The scenarios defined in the scenario plan are measured and scored using the defined requirements and scoring criteria. Critical requirements are weighted more heavily. The user can compare multiple scenarios side-by-side to review how each scenario performed against the scoring criteria. These comparison reports allow for better-informed decision making by management.**

2. **Once scenario evaluation is complete and one or more scenarios are selected, transaction project records are created to execute the transaction plan, using cost estimation and scheduling tools. A variety of project types can be managed to accomplish the planned objectives, including projects to dispose of existing real estate (owned property sale, lease termination), acquire new real estate (owned property purchase, new lease contract), or to extend the occupancy of existing real estate (lease contract renewal).**

3. **Once the projects are created based on the approved scenarios, team members can manage the projects using standard project management tools, including project team management, scope definition, scheduling, task assignment, cost estimates, issue tracking, etc. The transaction project record displays detailed information on both the current contract and proposed contract changes, as appropriate depending on the transaction type. Relevant documents can be linked to the transaction project record.**

4. **Record information and any attached documentation are reviewed and approved offline by ADOA. If the approver determines there are missing or incorrect data, then the record is rejected and returned for corrections in Step 3: Develop Project Scope/Cost Estimates/Schedule. If the project is approved, it is activated and the project can then be managed to closeout using available closeout reporting and checklists.**
Create Real Estate Project Transactions

Real Estate Projects are typically created from within the Real Estate Transaction Plan container. To find an existing RE Transaction Plan, navigate to the Projects > Real Estate portal and click the View Transaction Plans link in the Related Link – Real Estate portal section. On the View Transaction Plans page, click the Plan Number for the Transaction Plan that will contain the new RE Project and navigate to the Planning tab.

In the Planning tab, users can provide details that pertain to the new Transaction Project, such as acquisition and disposition details, that is being created for the RE Transaction Plan record.
**Add Transaction Project to Transaction Plan**

Use the Add Transaction Project action in the section bar to add a new Transaction Project record to the Transactions section. The system will display the Add Transaction form, which is used to provide the necessary information such as transaction name and type and assign a Project Template from the list of available templates. When that information has been completed, clicking the Continue action will allow the user to proceed to the next step.

If the Transaction Type of the new Transaction Project is Acquisition or Lease, the system can create a Revenue Forecast.

**Assign Real Estate Projects to Scenarios**

Multiple RE Projects can be assigned to one or more scenarios to define the possible solutions. The various RE Project types provide the ability to effectively track the costs, leases, and occupancy issues associated with a property.

For example, if an organization wants to increase its headcount, it requires more space. The organization can dispose of the current property (using a Termination project) and acquire a new one (through a Lease or Acquisition project). These choices are the possible solutions for each real estate scenario.

Multiple RE Project types can be added to a solution scenario. To assign an RE Project to a Transaction Plan scenario, navigate to the Planning tab on the Transaction Plan and select a record from the Scenarios list or, on the Scenario record, use the Find action in the Projects section to assign candidate projects to the scenario.

**Develop Project Details**

On the RE Project form, complete any additional project details that support the evaluation and comparison of RE Projects, including but not limited to: Financial Terms and Tasks.
**Financial Terms**
The Financial Term details will vary by RE Project type. For example, an Acquisition project will prompt the user for the details of the Purchase Price and Purchase Date, while a Lease project will prompt the user for the Estimated Rent Schedules, Lease Start/End Dates, etc.

**Tasks**
On the Tasks tab, users can create tasks for the RE Project. Typically, the tasks on the RE Project are used to track high-level project milestones. Use the provided features to create task records and create dependencies between tasks to build a set of related Transaction Plan milestones. Users assigned as the Responsible person for a task will receive notifications and/or alerts about the task assignment.

**Request CTQ Evaluation for a Real Estate Project**
A Cost to Quality (CTQ) evaluation is only available for RE Project types of Acquisition or Lease.

On the Transaction Plan record, on the Planning tab, select any of the RE Projects that have been added in the Transactions section. Navigate to the CTQs tab on the selected RE Project record. Complete the Assessment values to define the actual values measured for the Project and Save the project. Click the Request CTQ Evaluation action on the CTQ Assessment section to initiate the survey process. Select which contracts should receive the evaluation assignment and click Continue.

An action item will be assigned to each contact to provide a response, including satisfaction ratings, for each CTQ item. CTQ ratings are used to compare RE Projects across Transaction Plan scenarios, using Six Sigma scoring methods. Various tools are provided to perform a detailed financial analysis and cost comparisons between scenarios.
**Activate the RE Project**

Once the Transaction Plan record is complete, click the Activate action on the Transaction Plan. The system will route the record for approval following the defined approval process. Until the record is approved, the status will be Review In Progress. Once the document is approved, the status is set to Active and the Transaction Plan is considered to be in-effect.

**Lesson Summary**

In this lesson, you:

- Examined the process of creating a real estate contract
- Reviewed the management of real estate contracts
- Reviewed the management of real estate payments
- Reviewed the management of real estate transaction plans
- Reviewed the management of real estate transaction projects

**Check Your Progress**

1. A Lease abstract makes it easier to find information.
   a. True
   b. False

2. Real Estate Lease Contracts must be created through the abstraction process.
   a. True
   b. False

3. A payment schedule is defined by all but which one of the following?
   a. Amount
   b. Period
   c. Frequency
   d. Payment Method

4. Which of the following is a true statement?
   a. Real Estate Transaction Projects can contain many Real Estate Transaction Plans
   b. Real Estate Transaction Plans can contain many Real Estate Transaction Projects
6. Reporting

Learning Objectives

In this lesson, you will:

- Review the reports available in TRIRIGA
- Review the creation of new reports

Lesson Overview

The reporting features in TRIRIGA provide many options for viewing information in new and different ways. There are different types of reports that can be used depending on how a user wants to view the information, whether in a report, chart, query, etc. This lesson will explore the reporting tools available in TRIRIGA.

6.1. 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 in TRIRIGA. On this tab, reports can be added, copied, or deleted
- **Administration** – A list of reports added to the personal My Reports tab for all TRIRIGA users

Filtering

Each tab in the My Reports portal contains filter fields that allow users 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.

### Activity 6.1

**Run an Existing Report**

**Scenario**

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

**Setup**

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

A. Navigate to the My Reports > Community portal.
   1. Click the My Reports tab.
   2. Click the Community tab.

B. Search for a report using the filter fields.
   1. In the Title filter field, enter Task.
   2. Press Enter.

C. 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.

D. 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.
6.2. Creating a New Report

From the System Reports tab, users 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.

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**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.

**Lesson Summary**

In this lesson, you:

- Reviewed the reports available in TRIRIGA

**Check Your Progress**

1. Which tab in My Reports lists all of the available reports in TRIRIGA?
   a. My Reports
   b. Community
   c. Administration
   d. System Reports

2. Which tabs are required when creating a new report?
   a. My Report
   b. Order & Group
   c. Columns
   d. Only a and b
   e. Only a and c
Appendix A

ANSWER KEYS

Below are answer keys to the Check Your Progress quizzes provided at the end of each lesson.

Lesson 1
1. b. False 1.1 Overview of TRIRIGA Functionality
2. d. All of the above 1.3 Approvals
3. d. Both b and c 1.4 Using Templates

Lesson 2
1. d. Property > Building > Floor > Space 2.1 Manage Portfolio Locations
2. a. Corrective Maintenance 2.5 Create Corrective Maintenance Work Task
3. b. False 2.7 Perform Work Task

Lesson 3
1. a. True 3.1 Develop Condition Assessment Plan
2. c. Templates 3.4 Manage Capital Project
3. d. Space and Floor 3.6 Allocate Space and Track Occupancy

Lesson 4
1. a. True 4.1 Create Real Estate Contract
2. b. False 4.2 Manage Real Estate Contracts
3. d. Payment Method 4.3 Manage Real Estate Payments
4. b. Real Estate Transaction Plans can contain many Real Estate Transaction Projects 4.5 Manage Real Estate Transaction Project

Lesson 5
1. a. True 5.2 Managing Space Reservation
2. d. My Active Tasks 5.1 Assigning Equipment
3. b. Space 5.2 Managing Space Reservation

Lesson 6
1. d. System Reports 6.1 My Reports
2. e. Only a and c 6.2 Creating a New Report
Appendix B – Space Management

1. Forecast Space Occupancy

TRIRIGA provides a space management feature that can be used to maintain space plans and track space utilization data in buildings and structures. It is also possible to manage the people and assets that are in the space and coordinate property transactions in the system. Once spaces have been configured and classified, users can manage spaces through space associations, space audits, and space utilization.

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-017 (Forecast Space Occupancy) and represented by CROSSREF below.

1. The forecasting process requires that the Space Planner gathers information from the business managers to determine the space requirements that meet the business needs and objectives. Space Forecast surveys are set up and generated in the Strategic Facilities Planning module. The surveys are tied to a Portfolio plan that defines specifics, such as; the forecast time span, fiscal time periods, contacts, planning objectives and scope. Surveys are generated for each organization and forwarded to the designated Business Managers for their input.

2. Surveys can be sent as either an online form that allows direct input of the information into the system, or as an offline form that is distributed as an Excel spreadsheet. Once the spreadsheet is updated by the department business manager, the survey is sent back to the system where the forecast line items are updated. Survey request responses can be collected and monitored centrally to track which departments did not complete surveys.

3. The Space Planner reviews the long-term space usage forecast information from the surveys, along with the State and departmental goals and objectives to create alternative proposed solutions to the current Space Plan that satisfy the requirements.

4. The Space Planner reviews and evaluates the scenarios with the Scenario Evaluation and Comparison tool. Here the user can compare multiple scenarios side-by-side to review how each scenario performed against specific criteria. These comparison reports allow for better-informed decision making by management. The planner then identifies the recommended scenario plan and submits the recommended plan for review and approval.

5. The system allows the approvers to view all the scenarios in the side-by-side comparison and evaluation grid. If the plan requires further development or clarification, it is routed back to Space Planner for review. If approved, the process continues with Step 6.

6. Upon approval, the system changes the status of the recommended scenario to Approved, and it becomes read-only. All other scenarios are updated to a Retired status, which are also now
read-only. The Space Planner applies the approved changes to the master plan. If the plan requires changes, the record can be revised, but may require re-approval.

**Figure 20: Forecast Space Occupancy (FM-TB-017)**

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**Review Space Utilization Data**

There are several Community Reports available in TRIRIGA designed to help users understand their current space utilization. These reports include the Area Per Employee by Building report and the Floors report.

**Area Per Employee by Building**

Navigate to the My Reports portal and select the Community tab. In the Title filter field, enter Area Per Employee and press Enter. The first report returned is the Area Per Employee by Building report. This report illustrates the area per occupant of each building and the headcount total for each building.

**Floors**

On the Community tab, in the Title filter field, enter Floors and press Enter. The first report returned is the Floors report. This report illustrates the space usage information, broken down by floor class, capacity, headcount, area usage (sq. ft.), vacant area (sq. ft.), for each floor record in the report. This report provides a clear picture of where space may be over-utilized or under-utilized.

All reports provide the user with an option to export the report data to Excel using the Export action on the report window.

**1.1. Allocate Space and Track Occupancy**

TRIRIGA provides the ability to manage many aspects of space management including space allocations and occupancies.
State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-018 (Allocate Space and Track Occupancy) and represented by CROSSREF below.

1. The Space Planner evaluates the space for occupancy and chargeback assignments to departments. This activity is typically performed by doing a physical walkthrough of the facility to document who is occupying each space. Once move management processes are in place and enforced, space planners can rely on the system for tracking of what space each department is occupying, and physical walkthroughs can be performed less frequently. For each space, the assigned departmental allocation can be defined or revised using the Chargeback Allocations section on the Allocation tab of the space record. Area Allocated and Percent Allocated are auto-populated at 100%, but can be overwritten to reflect multiple department assignments.

2. In some cases, a space is assigned to one department for chargeback purposes, even when that organization does not occupy the space. If the assigned chargeback department is the same as the occupying department, the process can continue with Step 3: Activate Space Record. If the assigned chargeback department differs from occupying department the occupying department is assigned to the Occupancy Allocation section of the Allocation tab on the Space record. In addition, depending on State policy, departments may remain accountable for the chargeback of a space even after the space is left vacant.

3. Once the space is allocated to one or more departments, the space record is activated to update the department assignment and to trigger workflows that create the allocation records. The space record status is updated to Active.

4. Chargeback/allocation reports can be generated to display the amount of space and space costs allocated to each department, by site, by building, by floor, etc. The chargeback/allocation reports can be used for reviews with each department about their space usage.

5. Depending on State policies, the chargeback/allocation report may be used to apply proportional chargeback of other costs (e.g. utilities) based on the share of the total building space of each department. If the State will use proportional departmental space usage to determine other internal cost distributions, then the chargeback/allocation report will be shared with AFIS for charging to other areas.
Space Level Allocations

The Portfolio portal is used to locate records in the Location hierarchy. Navigate to the Portfolio > Locations portal and locate the Building > Floor > Space record for which allocations will be defined.

Within the Space record, select the Allocation tab and then the Revise action. Chargeback allocations can be added and removed in the Chargeback Allocations section. Occupancy allocations can be added or removed in the Occupancy Allocations section. Select Save and Close when finished.

Floor Level Allocations

Allocations can also be defined at the Floor level in the Location hierarchy. Navigate to the Portfolio > Locations portal and locate the Building > Floor record for which allocations will be defined.
Within the Floor record, select the Allocation tab and then the Revise action. To add new Floor-level allocations, in the Area Overlay section, select the Add action. A new Area Overlay Allocation window opens. In the Organizations Charged section, select the Organization and enter a name for the allocation. Complete the Overlay record by entering the amount of the area to be allocated in the Details section, click Create.

Within the Floor record, select the Activate action to route the record for approval. Once approved, the status will change to Active.

**Space Allocation and Chargeback Reports**

There are several Community Reports available in TRIRIGA designed to help users understand their current space allocation. These reports include the Space Allocations by Organization report and the Space Chargeback by Organization report.

Both of these reports can be found on the My Reports portal, Community tab. Enter Space in the Title filter field and press Enter to display the available reports.

These reports can be exported to Excel using the Export action.
**ACTIVITY 1.2**

Create a Room Utilization Program *(manual process)*

**Scenario**

Your department has determined that it wants to perform chargeback allocation for the space it occupies. You must create a Room Utilization Program to facilitate this chargeback to the appropriate program.

**Setup**

✓ User is logged in to the TRIRIGA Home Page.

**Steps**

A. Navigate to the Tools > Administration portal landing page.

1. Click the **Classifications** option.
2. In the list of **Classifications** on the left, locate and click on **Room Utilization - Program**.

B. Create a new **Program** record.

1. In the **Hierarchy** section, click **New**.
2. In the list of location types, click **Room Utilization Program**.

C. Complete the General tab.

1. In the **General** section, in the **Name** field, enter **## Training Program**, where ## is your student number.
2. Click the **Create** action.

![Room Utilization Program](image)

**ACTIVITY 1.2 CONTINUED**

**Assign Chargeback and Space Utilization to a Space**

**Scenario**

Your department has determined that it wants to perform chargeback allocation for the space it occupies.

**Setup**

- User is logged in to the TRIRIGA Home Page.

**Steps**

A. Navigate to the Portfolio > Locations portal landing page.
   1. Locate the **Space** record you created earlier by expanding the **Building** and **Floor** records in the hierarchy on the left side of the screen.
2. Click **## Space**, where **##** is your student number, and select the **Open** option in the hierarchy panel.

![General Tab Screenshot](image)

B. Revise the Space record for chargeback allocation.

1. Click the **Revise** action.
2. Navigate to the **Allocation** tab.
3. In the **Chargeback Allocations** section, click the **Find** option.

![Allocation Tab Screenshot](image)

4. Select the checkbox for **\Organizations\State of Arizona\ADA**.
5. Click **Ok**.
6. In the **Space Utilization** section, click the **Add** option.
7. In the **General** section, in the **Name** field, enter **## Space Allocation**, where **##** is your student number.
8. In the **Details** section, in the **Program** field, click the magnifying glass icon.
9. Click on **## Training Program**, where **##** is your student number.
10. In the **Area** field, enter **500**.
11. Click the **Create** action.

![Space Utilization Table](image)

12. Click the **Activate** action.
2. Reservation Functions

Learning Objectives

In this lesson, you will:

- Examine the process of reserving space

Lesson Overview

This lesson identifies the processes involved in the reservation of spaces. TRIRIGA users can manage the distribution of shared locations. Space Reservations can be created in the same way requests are created. The system will generate work tasks as required for events.

2.1. Managing Space Reservation

Location reservations can be created in TRIRIGA to capture and track the details of a scheduled event, including the timing, recurrence, and other event details. Using the Need Space/Event Reservation request form in Request Central, users can enter the details for requested events. The reservation process can trigger the automatic generation of the work tasks required to setup before and breakdown after the event.
State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-020 (Manage Space Reservations) and represented by CROSSREF below.

1. The requestor creates a Space/Event Reservation request. The location, date, time, equipment reference, and any additional available information pertaining to the reservation. The Event Reservation box must be checked for the Event Reservation Information section to be available. The Reservable field on the equipment/asset record must be checked in order for the equipment to be considered reservable by the system. If the box is not checked, the equipment record will not be displayed in reservation search fields. Upon completion of the data entry, the reservation request is submitted and routed for approval. The process continues with Step 2: Department Approvers.

2. The Space/Event Reservation request record is reviewed by a designated approver(s). If the location requested is not reservable, is not available for the date requested, is not entitled to the requestor, or if the approver needs additional information, the reservation request is rejected and returned for resubmission or termination in Step 1: Create and Submit Space/Event Reservation Request. If the request is determined to be valid, the record is approved and the process continues. The process continues with Step 3: Create Reservation Work Tasks.

3. Upon approval of the Space/Event request, reserve work tasks (for services such as equipment setup, room layout changes, room breakdown, etc.) are created and auto-assigned based on the request classification and service plan. The process of managing the performance of the individual work tasks continues with process FM-TB-015.

4. Once the work has been performed, the Space/Event Reservation request record can be completed. The availability of the location is updated for reference on future reservation requests.
**Need Space/Event Reservation**

Space/Event Reservations can be tracked and managed for any location in TRIRIGA. Additionally, each request form provides fields that can be used to define the association of a single request to multiple locations.

The process of reserving a space starts by navigating to the Request Central portal, and from there, to the Space group of request types. Selecting the Need Space/Event Reservation option from the Space group will create a new request.

**General**

On the Need Space form, the Event Details section on the General tab is used to identify the subject, duration, recurrence, and other details for the reservation. The required fields on the request include:

- Building
- Organization
- Service Request
- Event Name
- Event Type
When the reservation request details are complete, clicking the Submit action will submit the event request and approval (if approval rules are defined). Upon completion of the review (if any), the record will be saved with a status of Issued. Issued reservation records are read-only.

**Submission**

Upon submission of the reservation request, the system will automatically send the requestor an email notification to confirm receipt of the request. The notification includes basic information about the received request as well as a link to the record.

**Activation**

Once issued, the system will automatically generate and assign any related Reservation Work Task records (as defined by the related Service Plan).
Complete
The reservation will automatically change to a status of Complete when the resulting event project/tasks are completed. If the associated request class is configured for surveys, then a survey request will be sent for the requestor to complete in TRIRIGA.

ACTIVITY 2.2
Create a Space Reservation

Scenario
You are in charge of reserving a classroom for a training class. You will create the Need Space/Event Reservation process by creating a Need Space/Event Reservation form.

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

Steps
A. Navigate to Request Central.
   1. Click the Requests tab.
   2. In the Related Links – Requests section, click Submit Request.
B. Create a Need Space/Event Reservation request.
   1. In the Request Central section, click the arrow to expand Space.
   2. Click Need Space/Event Reservation.
C. Complete the Need Space form.
   1. At the top of the form, click the checkbox for Event Reservation.
   2. In the Building field, click the magnifying glass lookup icon.
   3. Select the radio button for ST ## Training Building, where ## is your student number.
   4. Click the OK action.
   5. In the Floor field, click the magnifying glass lookup icon.
   6. Select the radio button for the 2nd floor.
   7. Click the OK action.
   8. In the Room field, click the magnifying glass lookup icon.
   9. Select the radio button for the ## Space, where ## is your student number.
10. Click the OK action.
11. In the Organization field, click the magnifying glass lookup icon.
12. Select the radio button for ADA.
13. Click the OK action.

14. In the Describe Your Request section, in the text box, enter Room reserved for EUT Training.
15. In the Service Request section, select the radio button for Need Space/Event Reservation.
16. In the Event Name field, enter EUT Training ##, where ## is your student number.
17. In the Event Type field, enter EUT Training.
18. In the Reservation Start Date/Time field, select today's date from the calendar.
19. In the Reservation End Date/Time field, select today's date from the calendar. Adjust the time by 2 hours.

20. Click the Create Draft action.

D. Submit the reservation request.
   1. Click the Submit action.
   2. When you are finished, click the Home tab to return to the Home Page.

Lesson Summary

In this lesson, you:

- Examined the process of reserving space

Check Your Progress

1. Items marked as Reservable and added to a reservation are flagged as Unavailable.
   a. True
   b. False
2. What portal is used to locate an assigned work task?
   a. My Work Tasks
   b. My Assigned Work
   c. My Assigned Tasks
   d. My Active Tasks

3. What type of request does an Event Reservation use?
   a. Event Request
   b. Space Request
   c. Location Request
   d. Place Request
3. Reservation Functions

Learning Objectives

In this lesson, you will:

- Examine the process of reserving space

Lesson Overview

This lesson identifies the processes involved in the reservation of spaces. TRIRIGA users can manage the distribution of shared locations. Space Reservations can be created in the same way requests are created. The system will generate work tasks as required for events.

3.1. Managing Space Reservation

Location reservations can be created in TRIRIGA to capture and track the details of a scheduled event, including the timing, recurrence, and other event details. Using the Need Space/Event Reservation request form in Request Central, users can enter the details for requested events. The reservation process can trigger the automatic generation of the work tasks required to setup before and breakdown after the event.

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-020 (Manage Space Reservations) and represented by CROSSREF below.

5. The requestor creates a Space/Event Reservation request. The location, date, time, equipment reference, and any additional available information pertaining to the reservation. The Event Reservation box must be checked for the Event Reservation Information section to be available. The Reservable field on the equipment/asset record must be checked in order for the equipment to be considered reservable by the system. If the box is not checked, the equipment record will not be displayed in reservation search fields. Upon completion of the data entry, the reservation request is submitted and routed for approval. The process continues with Step 2: Department Approvers.

6. The Space/Event Reservation request record is reviewed by a designated approver(s). If the location requested is not reservable, is not available for the date requested, is not entitled to the requestor, or if the approver needs additional information, the reservation request is rejected and returned for resubmission or termination in Step 1: Create and Submit Space/Event
Reservation Request. If the request is determined to be valid, the record is approved and the process continues. The process continues with Step 3: Create Reservation Work Tasks.

7. Upon approval of the Space/Event request, reserve work tasks (for services such as equipment setup, room layout changes, room breakdown, etc.) are created and auto-assigned based on the request classification and service plan. The process of managing the performance of the individual work tasks continues with process FM-TB-015.

8. Once the work has been performed, the Space/Event Reservation request record can be completed. The availability of the location is updated for reference on future reservation requests.

Figure 23: Manage Space Reservations (FM-TB-020)

**Need Space/Event Reservation**

Space/Event Reservations can be tracked and managed for any location in TRIRIGA. Additionally, each request form provides fields that can be used to define the association of a single request to multiple locations.

The process of reserving a space starts by navigating to the Request Central portal, and from there, to the Space group of request types. Selecting the Need Space/Event Reservation option from the Space group will create a new request.
General
On the Need Space form, the Event Details section on the General tab is used to identify the subject, duration, recurrence, and other details for the reservation. The required fields on the request include:

- Building
- Organization
- Service Request
- Event Name
- Event Type
- Intended Use
- Start Date
- End Date

When the reservation request details are complete, clicking the Submit action will submit the event request and approval (if approval rules are defined). Upon completion of the review (if any), the record will be saved with a status of Issued. Issued reservation records are read-only.
Submission
Upon submission of the reservation request, the system will automatically send the requestor an email notification to confirm receipt of the request. The notification includes basic information about the received request as well as a link to the record.

Activation
Once issued, the system will automatically generate and assign any related Reservation Work Task records (as defined by the related Service Plan).

Complete
The reservation will automatically change to a status of Complete when the resulting event project/tasks are completed. If the associated request class is configured for surveys, then a survey request will be sent for the requestor to complete in TRIRIGA.
**Activity 3.1**

Create a Space Reservation

**Scenario**
You are in charge of reserving a classroom for a training class. You will create the Need Space/Event Reservation process by creating a Need Space/Event Reservation form.

**Setup**
- User is logged in to the TRIRIGA Home Page.

**Steps**

**E.** Navigate to Request Central.
1. Click the Requests tab.
2. In the Related Links – Requests section, click Submit Request.

**F.** Create a Need Space/Event Reservation request.
1. In the Request Central section, click the arrow to expand Space.
2. Click Need Space/Event Reservation.

**G.** Complete the Need Space form.
1. At the top of the form, click the checkbox for Event Reservation.

2. In the Building field, click the magnifying glass lookup icon.
3. Select the radio button for the ST ## Training Building, where ## is your student number.
4. Click the OK action.
5. In the Floor field, click the magnifying glass lookup icon.
6. Select the radio button for the 2nd floor.
7. Click the OK action.
8. In the Room field, click the magnifying glass lookup icon.
9. Select the radio button for the ## Space, where ## is your student number.
10. Click the OK action.
11. In the Organization field, click the magnifying glass lookup icon.
12. Select the radio button for ADA.
13. Click the OK action.
14. In the **Describe Your Request** section, in the text box, enter *Room reserved for EUT Training*.
15. In the Service Request section, select the **radio button** for *Need Space/Event Reservation*.
16. In the **Event Name** field, enter *EUT Training ##*, where ## is your student number.
17. In the **Event Type** field, enter *EUT Training*.
18. In the **Reservation Start Date/Time** field, select *today’s date* from the calendar.
19. In the **Reservation End Date/Time** field, select *today’s date* from the calendar. Adjust the time by 2 hours.
20. Click the **Create Draft** action.

H. Submit the reservation request.
   1. Click the **Submit** action.
   2. When you are finished, click the **Home** tab to return to the Home Page.

**Lesson Summary**

In this lesson, you:

- Examined the process of reserving space

**Check Your Progress**

4. Items marked as Reservable and added to a reservation are flagged as Unavailable.
   a. True  
   b. False

5. What type of request does an Event Reservation use?
   a. Event Request  
   b. Space Request  
   c. Location Request  
   d. Place Request
3.2. Manage Move Project

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

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

State Process Overview

The steps below describe the statewide process. Your agency may have additional requirements. This process is referenced in To Be ID FM-TB-019 (Manage Move Project) and represented by Figure 24 below.

9. 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 the user for the type of move, the employee(s) being moved, the from location 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. The process continues with Step 2: Department Approvers.

10. The move request record is reviewed by a designated approver(s). If the move request is not acceptable, or if the approver is in need of additional information, the request will be rejected and returned for resubmission or termination in Step 1: Create/Submit Move Request. If the request is determined to be valid, the record is approved and approval notification is sent to the requestor. Upon approval, the process continues to Step 3: Create Move Project.

11. 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. Upon creation of the project, the process continues with Step 4: Create Move Project Tasks.

12. 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. The process of managing the performance of the work task continues with process FM-TB-015.

13. 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.
Move Request

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

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

Move Project

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

**Lesson Summary**

In this lesson, you:

- Reviewed the reports available for viewing space utilization data
- Performed a space allocation
- Reviewed the process and performed a space reservation request
- Identified the concepts involved in move requests and move projects
Appendix

**ANSWER KEYS**

Below are answer keys to the Check Your Progress quizzes provided at the end of each lesson.

*Lesson 3*

1. Items marked as Reservable and added to a reservation are flagged as Unavailable.
   a. True
   b. False

2. What type of request does an Event Reservation use?
   a. Event Request
   b. Space Request
   c. Location Request
   d. Place Request