

IBM TRIRIGA
Version 10 Release 5

*Strategic Facility Planning
User Guide*

IBM

Note

Before using this information and the product it supports, read the information in "Notices" on page 55.

This edition applies to version 10, release 5, modification 1 of IBM TRIRIGA and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Strategic facility planning overview

TRIRIGA® Strategic Facility Planning delivers advanced planning capabilities to understand core business demands, simplify complex planning analysis, and streamline the implementation of facilities plans.

TRIRIGA Strategic Facility Planning helps facility planners increase the effectiveness of all types of facilities planning through advanced performance analytics, visual scenario modeling, and an automated workflow engine. To help organizations deliver effective strategies, TRIRIGA Strategic Facility Planning reveals gaps between business demands and space availability; analyzes, ranks, and suggests scenarios; and automates manual and time-consuming processes.

Implementation of strategic facility planning starts with the collection and compilation of critical business and facility asset information, including objectives, goals, and future space requirements. TRIRIGA Strategic Facility Planning provides a portfolio planning framework, business unit forecasts, and predefined performance metrics to streamline the understanding of business demands and impacts on facility performance over time.

Strategic facility planning process flows

The business process flow in your organization might not perfectly match the business process flow or application process flow that is delivered with the IBM® TRIRIGA application. In the IBM TRIRIGA Application Platform building tools, you can modify the process flows to meet your company standards and policies.

Overview

The strategic facility planning overview flowchart describes the high-level overview of the strategic facility planning process as delivered by the TRIRIGA application. The first phase identifies the strategic facility planning portfolio setup. The second phase identifies the strategic facility planning application setup. The third phase identifies the planning setup and forecasts. Finally, after all of the setup is done, the fourth phase identifies the planning hierarchy of portfolio plans, space plans, and scenarios.

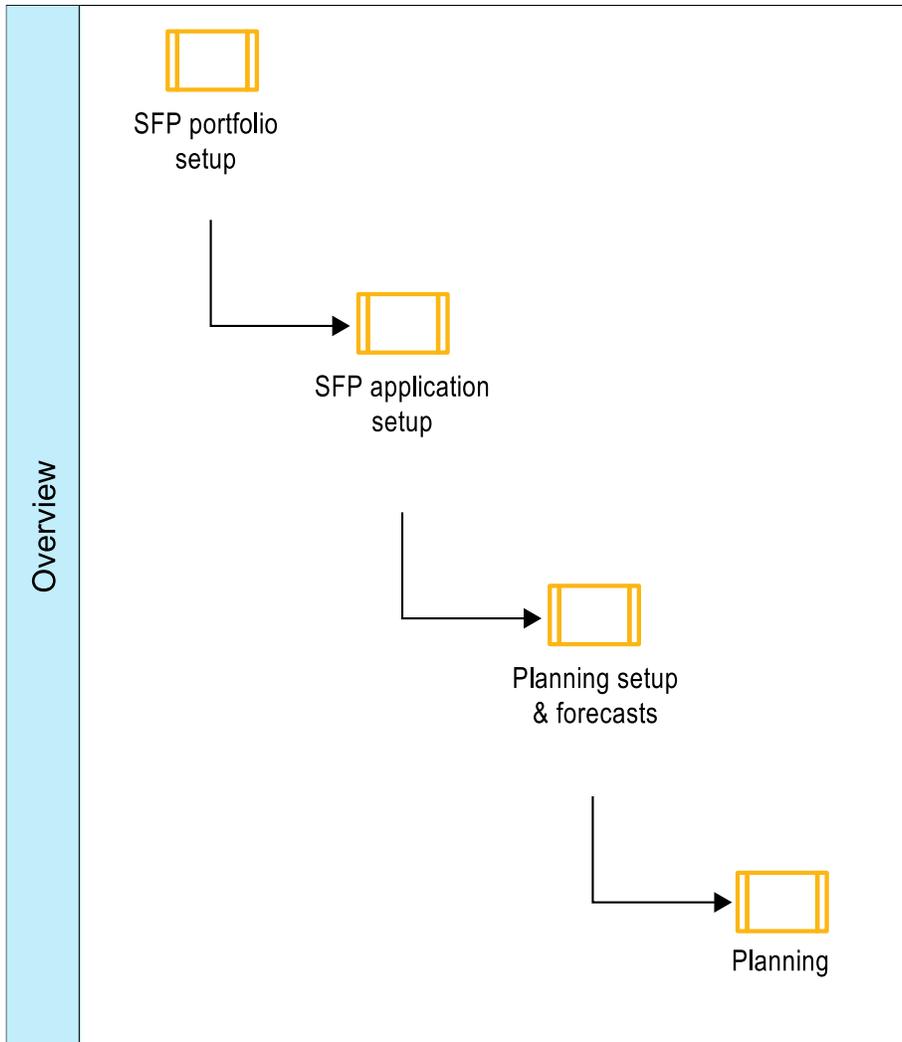


Figure 1. Overview

Portfolio setup

This flowchart describes the process of setting up your portfolio associations in TRIRIGA. This process includes making sure that buildings are associated with cities, organizations are allocated to each space, and people are associated with spaces, organizations, and functional roles.

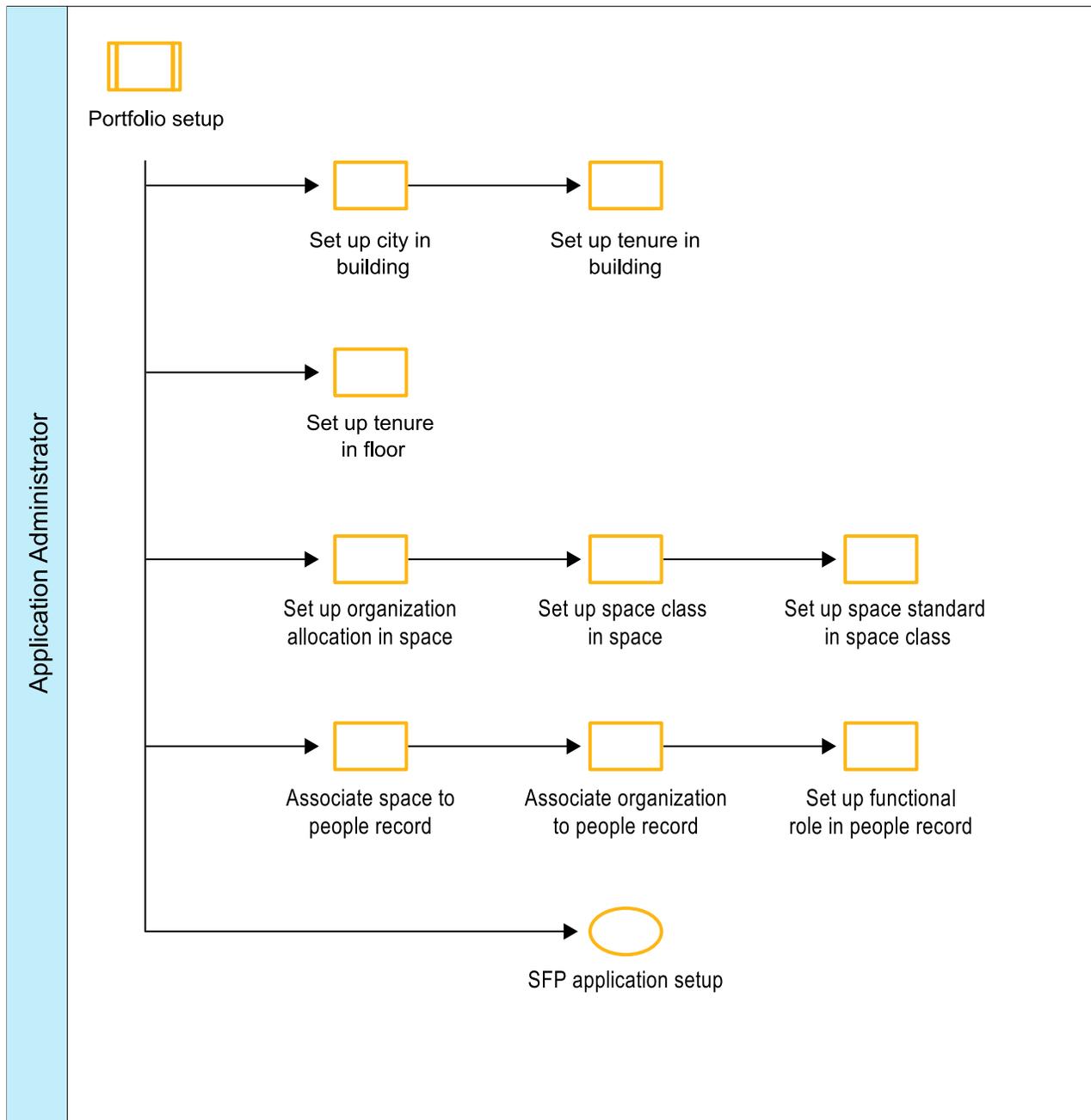


Figure 2. Portfolio setup

Related concepts:

“Prerequisite portfolio setup” on page 13

To use TRIRIGA Strategic Facility Planning, information about the portfolio must first be set up by an application administrator.

Application setup

This flowchart describes the process of defining your Strategic Facility Planning application settings and values in TRIRIGA. This process includes modifying any building classifications and estimated values, and preparing any space specifications, demand drivers, forecast standards, and planning-period templates.

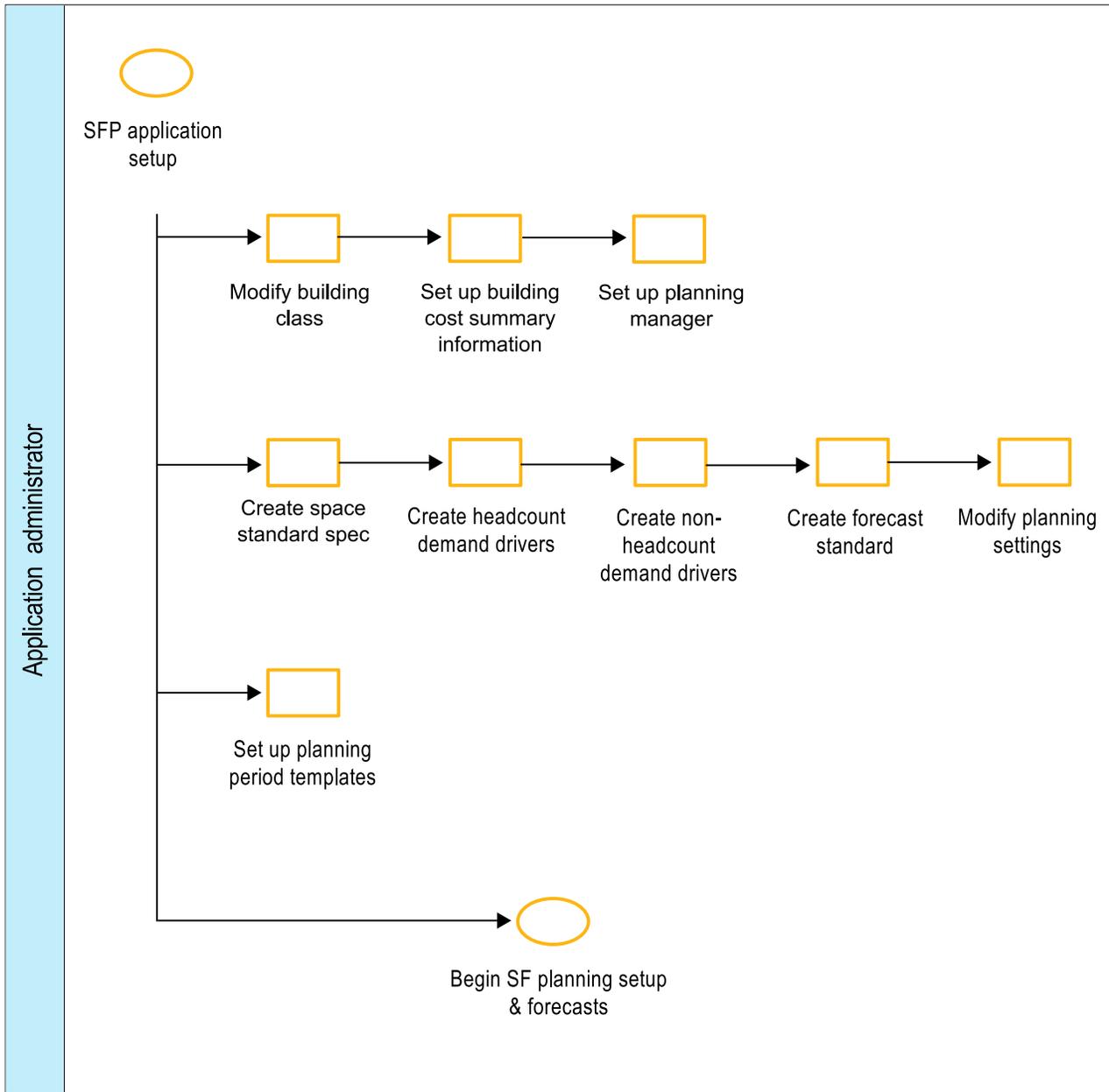


Figure 3. Application setup

Related tasks:

“Setting up the application” on page 18

To use TRIRIGA Strategic Facility Planning, the application must first be set up by an application administrator.

Planning setup and forecasts

This flowchart describes the process of defining your planning environments to generate planning data, as well as gathering and updating your forecast data in TRIRIGA. This process includes sending out forecast surveys to business unit managers who might adjust any future demand.

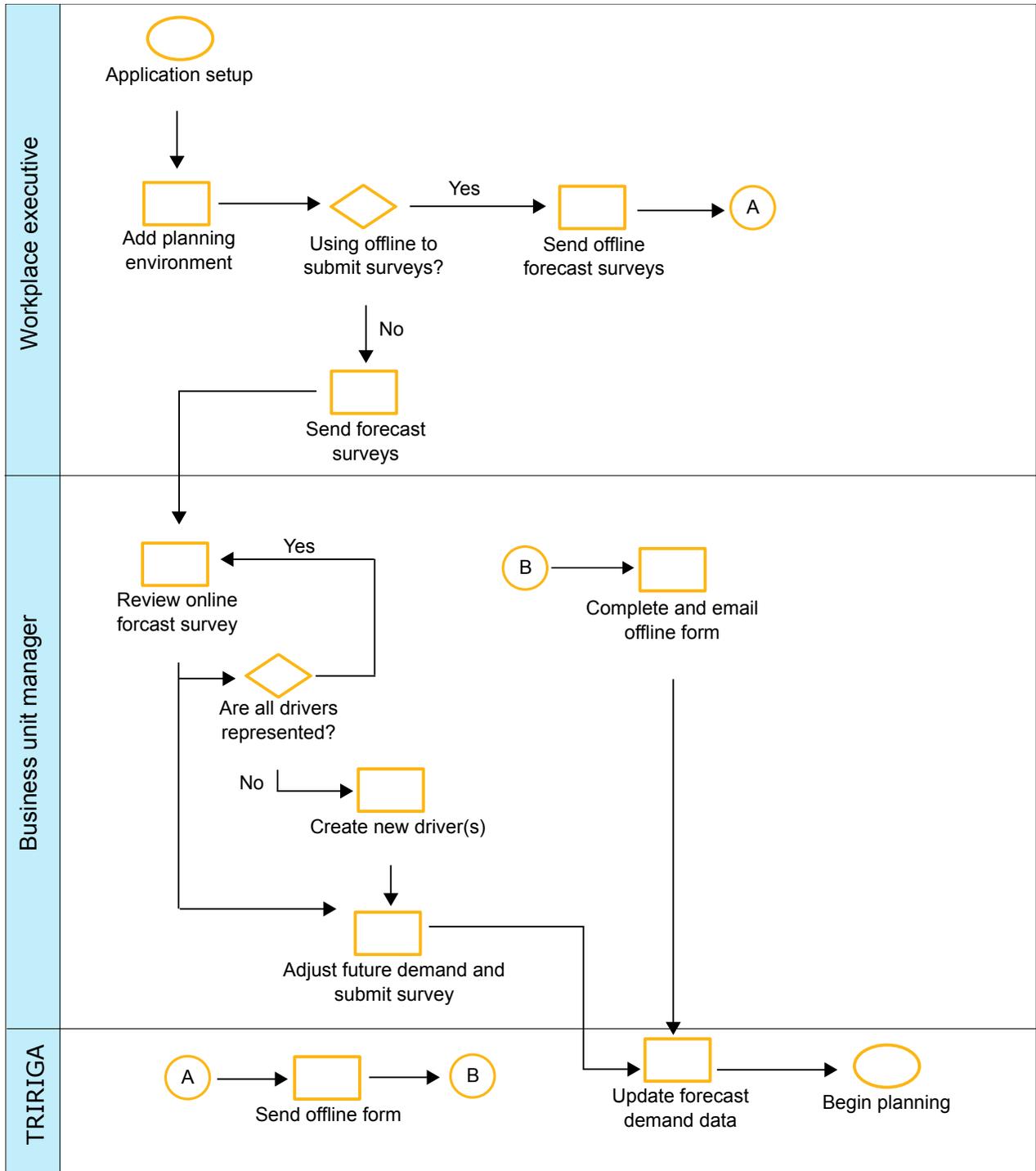


Figure 4. Planning setup and forecasts

Related tasks:

“Defining planning environments” on page 25
 Set up a planning environment that includes the planning elements and configurations to be used as the primary source of planning data for TRIRIGA Strategic Facility Planning.

Chapter 3, "Forecasting," on page 31

Forecasting is the process of analyzing current and historical data to determine future trends.

Planning

This flowchart describes the process of building your SFP planning hierarchy in TRIRIGA. This process includes defining the corporate-level and child-level portfolio plans, the space plans for each portfolio plan, and the scenarios for each space plan. In turn, you can compare scenario metrics before you recommend a scenario for approval.

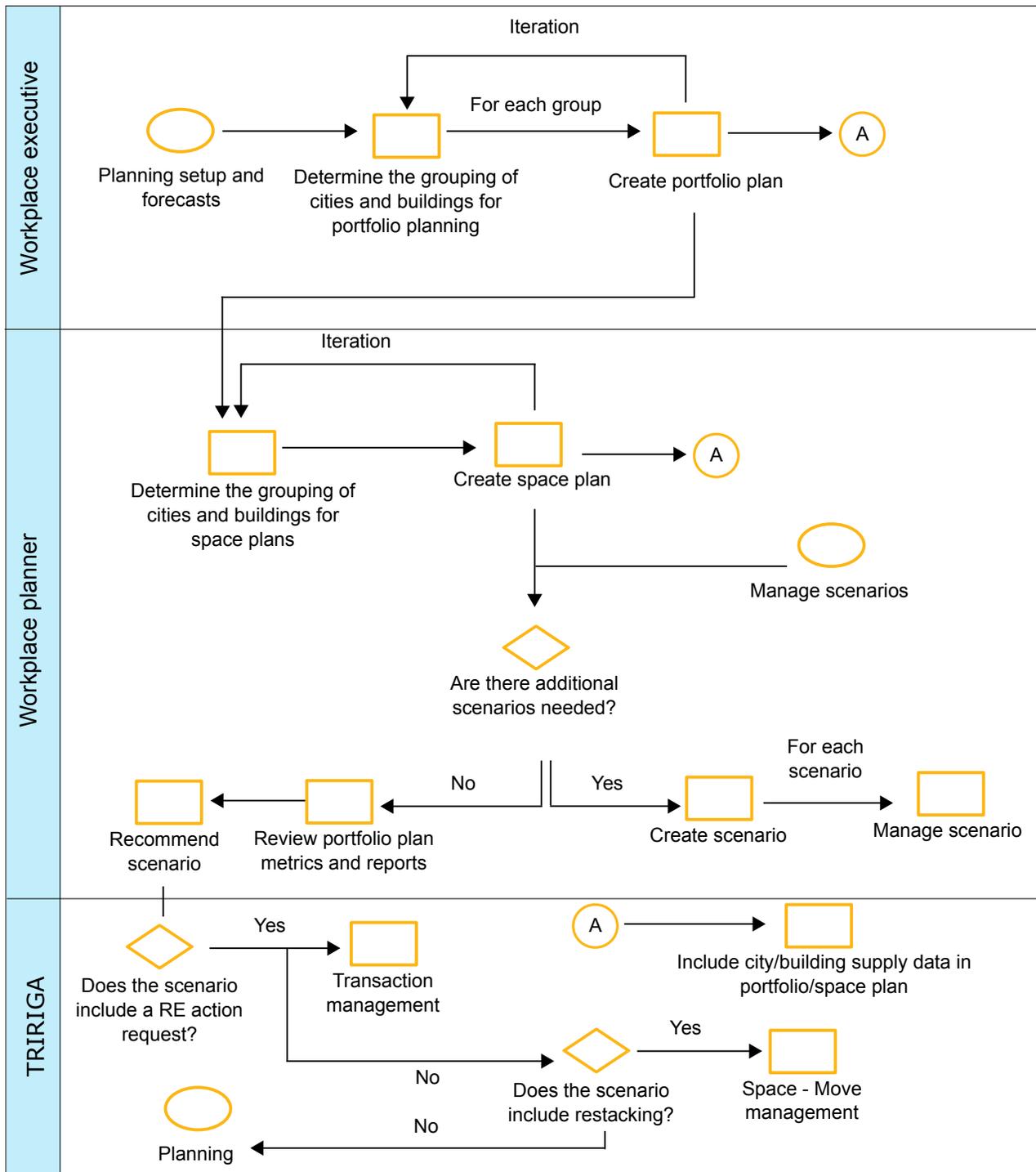


Figure 5. Planning

Related concepts:

Chapter 5, "Space planning," on page 39

A space plan provides an environment for a planner to work with a set of planning data, including supply and demand, for a set of locations. A portfolio plan or subplan can have many space plans.

Related tasks:

Chapter 4, "Portfolio planning," on page 33

Portfolio planning involves setting up the corporate portfolio plan, lower-level portfolio plans that are child plans of the corporate plan, space plans for a portfolio plan or subplan, and scenarios for a space plan.

Chapter 6, "Scenario planning," on page 41

In the space planning process, scenarios satisfy the requirement to establish a space plan of record or to evaluate options that are related to unplanned events. The process can be initiated by routine planning cycles, strategic initiatives, an emergency response, or a business change event. The space planning process also can be used to develop feasibility studies or contingency plans that do not go into an execution phase.

Planning for each scenario:

This flowchart describes the deeper process of analyzing the space supply and demand for a specific scenario of a space plan in TRIRIGA. This process includes determining whether there are any planning conflicts with other scenarios, and whether a supply must be added, terminated, or sold. If needed, you can use the stacking tool to graphically track the supply and demand data.

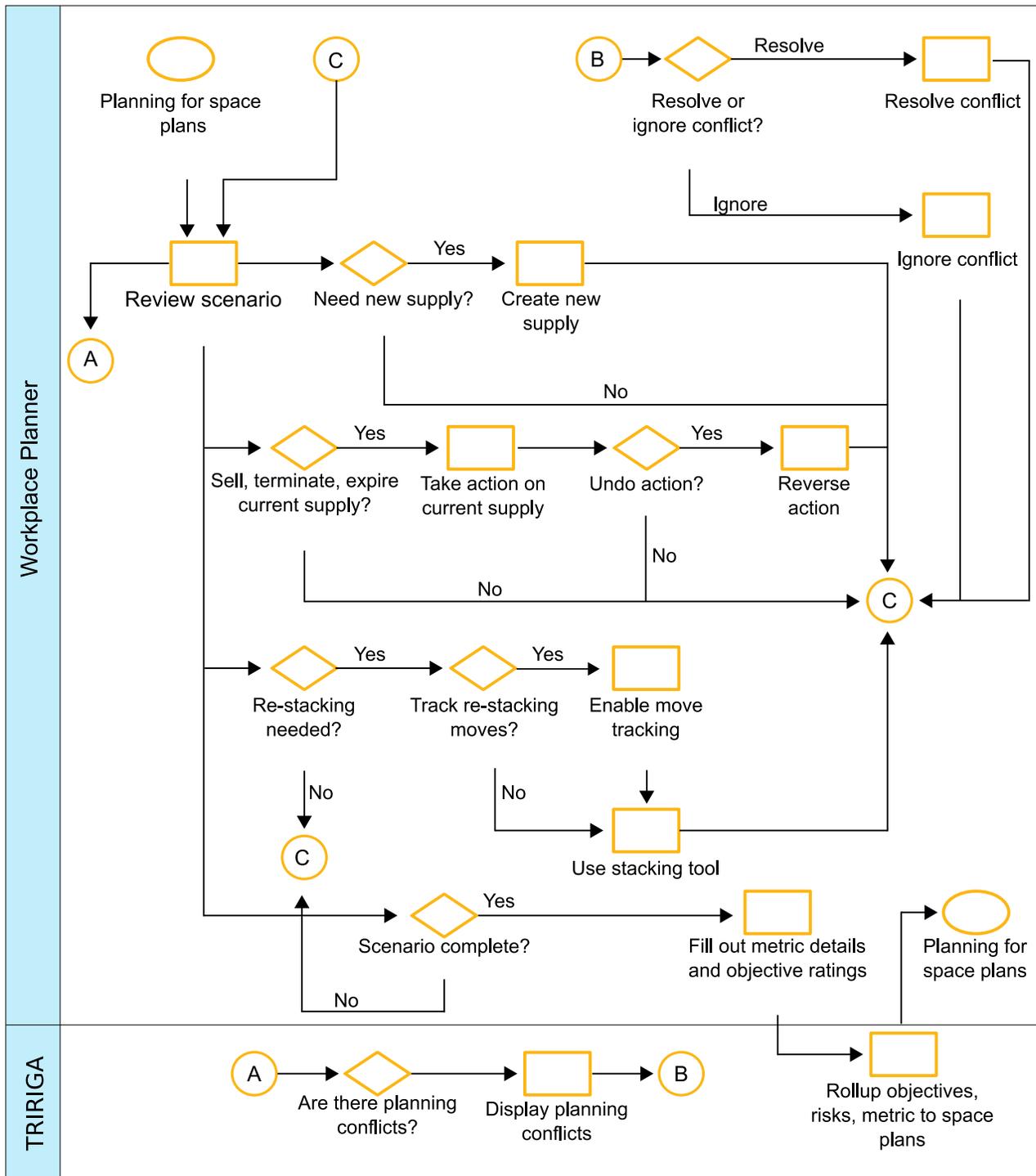


Figure 6. Planning for each scenario

Related concepts:

“Supply and demand analysis” on page 42

In space planning, supply and demand analysis is a fit or gap analysis across time of the demand for business space and the supply of buildings or space in the current or planned portfolio.

“Stack scenario planning” on page 44

Stack scenario planning uses a graphical display of space supply and demand that is overlaid to determine space fit and gaps for a group of locations. Stack scenario planning is most commonly done at a floor level.

Strategic facility planning process

The TRIRIGA Strategic Facility Planning process is both a linear end-to-end process and a cyclical process for continuous improvement and strategy adaptation for space management.

Step one: Setting up your planning environment

To begin the strategic facility planning process, configure TRIRIGA Strategic Facility Planning for your organization and define the planning environment.

Planning environments are used to establish a baseline for the primary source of planning data that is used within the strategic facility planning process. Planning environments contain planning elements and configurations. Each planning environment can be configured to manage the following data groupings: planning year and planning periods, key contacts and contact roles, planning scope, planning data, and forecast data.

Step two: Forecasting

Forecast surveys facilitate the process of gathering space forecast data about each organization. Organizations are used to define the hierarchical structure of your company. These forecast survey records are automatically created for each planning organization when you select the **Generate Data** action in a planning environment. Information about the future of each organization is collected from the business unit manager for that organization. When you complete and submit forecast surveys, the data can be used to gain insight into changes for an organization relating to its demand for space over time.

Step three: Evaluating space plans and scenarios

A space plan provides an environment for a planner to work with a set of planning data, which include supply and demand, for a set of locations. Space plans are created within a portfolio plan. A portfolio plan or subplan can have many space plans.

Space scenarios are the alternative proposed solutions, what-if options, or feasibility studies under consideration for a space plan. The parent space plan contains the overall plan summary data, scope of planning, data aggregations, common setup data, comparison goals, and targets. The parent space plan acts as a means to compare and evaluate scenarios. Space scenario records are created and maintained within a space plan.

Space scenarios are used to satisfy the requirement to establish a space plan of record or to evaluate options that are related to unplanned events. The entire process can be initiated by routine planning cycles, strategic initiatives, an emergency response, or a business change event. The space planning process also can be used to develop feasibility studies or contingency plans that do not go into an execution phase.

The evaluation phase includes the review of the scenarios within a space plan against the planning goals or objectives and against each other. The evaluation and comparison can be used for in-process iterative reviews or final evaluation to identify and approve the best scenario for implementation. The evaluation and comparison step is a key decision point that finalizes the facility planning process.

Step four: Implementation and follow-up

After the evaluation phase is complete, a scenario is chosen, reviewed for approval, and then the space plan itself is submitted for approval. Any additional follow-up activity to implement an approved space plan is handled by other resources and groups in IBM TRIRIGA.

Strategic facility planning roles and portals

When you sign in to TRIRIGA Strategic Facility Planning, you see your home page. Your home page is your entrance into the application. From your home page, you can review your home portal or use the menus to open the process portals available to your role. Use your menu bar to open other available portals. Based on your role, your application might consist of one or many portals.

The setting of the TRIRIGA Strategic Facility Planning home page is set in the Default Portal section of your profile record. Your home portal or process portals might vary, based on your role in the company and your security and license access. However, your portals contain a combination of the components and section types that are described in this discussion.

In turn, each portal consists of portal sections. Each portal section serves a specific function and shows the information that applies to your business role. The portal sections in your portal are configured by your application administrator for your role in IBM TRIRIGA.

Business unit manager

The business unit manager is a point of contact for a planning organization or business unit in the strategic facility planning process.

The business unit manager is the source for forecast information in the strategic facility planning process. Similar roles or alternative titles include division vice president, director, or manager.

When you sign in as a Business Unit Manager role, the home portal is the Business Unit Manager portal. An example of the Business Unit Manager portal includes the following portal sections:

- Reminders
- Performance Metrics
- Requests

Facilities executive

The facilities executive is a decision maker and information consumer in the strategic facility planning process.

The facilities executive is interested in information from the strategic facility planning process and is involved in approvals. Similar roles or alternative titles

include workplace executive, workplace resources vice president, corporate real estate or facility management vice president, and director.

When you sign in as a Facilities Executive role, the home portal is the Facilities Executive portal. An example of the Facilities Executive portal includes the following portal sections:

- Reminders
- Performance Metrics
- Related Links
- Facilities Locations

Space planner

The space planner has the primary workplace planning role in the strategic facility planning process.

The space planner is involved in all aspects of the strategic facility planning process. Similar roles or alternative titles include space manager, strategic space planner, workplace consultant or strategist, customer relationship representative or manager.

When you sign in as a Space Planner role, the home portal is the Space Planner portal. An example of the Space Planner portal includes the following portal sections:

- Reminders
- Performance Metrics
- Related Links
- Customer Satisfaction
- Occupancy Rate

Chapter 2. Setting up the planning environment

To begin the strategic facility planning process, configure TRIRIGA Strategic Facility Planning for your organization and define the planning environment.

Strategic facility planning preparation

To prepare for strategic facility planning, check that the portfolio is set up correctly for planning.

Prerequisite portfolio setup

To use TRIRIGA Strategic Facility Planning, information about the portfolio must first be set up by an application administrator.

In addition to basic information about the portfolio, the following setup activities are important for strategic facility planning:

- Buildings are associated with cities
- Buildings and floors are associated to a tenure (either leased or owned)
- Organizations are allocated to each space
- Current space classes are associated with each space
- Space standards are associated with each space class
- People are associated with spaces, organizations, and functional roles
- The location hierarchy is set up

Level of detail

The TRIRIGA Strategic Facility Planning setup gives users a flexible range of data detail or simplification to suit the needs of an organization. There are trade-offs to consider when you consider a simpler approach versus collecting detailed data.

Although day to day space management is often at a detailed level, planning data typically must be aggregated at a higher level to simplify the planning process or to match up with the needs of organizational planning. Detailed data comes at the expense of more data entry and complexity. High-level data is simpler to manage and to use for planning, but generalized data can result in oversimplification and cause inaccuracies or result in overlooking important considerations.

Forecasting accuracy and uncertainty can be a good predictor of the accuracy and detail that is needed in planning data. Forecasting has some level of inaccuracy. For example, if forecasts can have a +/- 5% accuracy, there is not much value in using more detail to get an overall precision of 1%.

To help determine the level of detail you require, consider the following factors:

Locations

Identify and exclude buildings that are not in the scope of planning. For example, some companies exclude parking buildings, guard shacks, and recreational facilities during strategic facility planning setup to simplify analysis.

Organizations

Determine which planners and business unit contacts are responsible for

business forecasts and business unit decisions and identify the processes these planners and business unit contacts use to determine appropriate organization level planning. Strategic facility planning for an organization can occur at any rolled up level in the organization hierarchy and is not required to be planned at the lowest level that is used in space allocations or the organization of the assigned person. For example, a 10 level deep organization hierarchy can be planned at level three, four, or five to get the granularity needed for planning and avoid what can be too much detail at lower levels.

Space Classes

Establish the planning granularity that is needed for space classes. For example, planning lab space at a consolidated level (level one) might be sufficient for planning detail when planning at lower levels that identify lab subclasses (level two) might have marginal value. Office space can be planned at level one with an overall density goal and estimating standard; however, the result would lack the ability to estimate space that is based on office standards, functional roles, or mobility factors. For some companies level one might be ideal, and for other companies level one can cause data inaccuracies and result in poor decisions.

Naming

Use names for locations, space classes, organizations, and geographies that describe the element clearly and concisely and that have the key differentiators at the beginning of the name.

In TRIRIGA Strategic Facility Planning, often more than one name is combined to describe an element, for example a demand driver that is created by IBM TRIRIGA.

Geography

Before you start the strategic facility planning process, you must be sure that the geographies are configured correctly for planning.

TRIRIGA Strategic Facility Planning focuses on cities. Be sure that the Geography Hierarchy includes all cities that are included in any planning process and the geography above them and that a planner contact role is established for each planning geography.

Geographies must exist in the Geography Hierarchy before a user sets the Geography or Scope on portfolio plans or subplans.

The Geography Hierarchy is on the Portfolio portal.

Tip: If you are planning for areas that include more than one city in more than one state, define a Metropolitan Area at the country level. For example, if you are planning for the Philadelphia metro area, define \Geography\North America\United States\Philadelphia Metropolitan Area in the Geography Hierarchy. Then set the value of the **Metropolitan Area** field on the **General** tab of the City records for Philadelphia, PA, Camden, NJ, and Wilmington, DE, to the Philadelphia Metropolitan Area.

Location

TRIRIGA Strategic Facility Planning focuses on buildings and floors for planning. Space within floors is an essential part of the planning data capture process.

If there are no spaces, no supply or demand is captured.

Locations must exist in the Location Hierarchy before a user sets the planning locations on portfolio plans or subplans.

The Location Hierarchy is under the Portfolio portal menu item.

Note: Use names that describe the building, floor, and space concisely and with the key differentiators at the beginning of the name.

Buildings

TRIRIGA Strategic Facility Planning uses information from building records that must be set during portfolio setup.

General

Information from the General tab of the building record that is important for strategic facility planning includes the content from the following fields:

- The name is used to identify the building
- The image displays in the Stack Planning tool
- The tenure (lease or owned)
- Environmental details are used for scenario metrics
- Cost summary information is used for scenario metrics
- The units of measure
- The location status is used to establish the dates when the building is available during strategic facility planning focus periods
- The primary address section is used to identify the city; each building must be assigned to a city for strategic facility planning

Contact details

The Contacts section of the **Contact Details** tab lists parties in strategic facility planning and move management roles, such as workplace executives, business executives, workplace planners, business unit managers, planning administrators, and space planners.

Area measurements

The Building Measurements section of the **Area Measurements** tab contains values for gross area, rentable area, and usable area that are used in strategic facility planning.

Contracts

TRIRIGA Strategic Facility Planning must know the term of lease or ownership for each building. When IBM TRIRIGA Real Estate Manager is implemented, this information is found in a link from the Contracts tab for the building to the real estate lease record. With a TRIRIGA Real Estate Manager license, TRIRIGA Strategic Facility Planning can break out multiple leases and handle subleases.

If you have a TRIRIGA Real Estate Manager license, the Locations tab on a real estate lease contains the Contract Locations section, which links the lease to one or many spaces (typically a suite but also might be individual offices or

workstations), floors (assumes that all spaces are within the floor), buildings (assumes that all floors or spaces are within the building), and properties (assumes all buildings, floors, or spaces are within the property).

If different leases occupy space on the same floor, each lease must explicitly link to the individual space records (in the Contract Locations section) for TRIRIGA Strategic Facility Planning to work correctly. If different leases occupy space in the same building on different floors, each lease must explicitly link to the respective floors.

When TRIRIGA Real Estate Manager is implemented, IBM TRIRIGA uses fields in the real estate lease for scenario metrics, including fields from the Cost Summary section, Environmental Details section, and Units section.

Space management

The fields in the Space Occupancy Settings section on the **Space Management** tab of a building provide the opportunity to override the global space occupancy settings in the **Space Management Settings** tab of the Application Settings record.

When you select **Use Building Level Occupancy Policies**, IBM TRIRIGA uses the value of this building for **Use People's Primary Organization for Occupancy Allocations** instead of the system-wide setting of the same name in the Application Settings record.

Select **Use People's Primary Organization for Occupancy Allocations** to indicate that IBM TRIRIGA is to create or manage occupancy allocations for spaces in the building that are based on the organization of the people that are assigned to the spaces in this building. Leave **Use People's Primary Organization for Occupancy Allocations** cleared to indicate that the user must create or manage occupancy allocations for spaces in the building manually.

Space

TRIRIGA Strategic Facility Planning uses information from space records that must be set as part of the portfolio setup.

Access the space records from **Portfolio > Locations > Spaces**.

General

Information from the **General** tab of the space record that is important for strategic facility planning includes the following content:

- The name is used to identify the space
- The area and unit of measure
- The prorated area and unit of measure
- The current use space class
- The capacity, which is the total designed capacity of the space before changes that are made during planning. Capacity is used in strategic facility planning only for occupancy capacity. When the space class planning measure type is set to either area or count, instead of occupancy, capacity is not used.
- The organization occupancy status, which is determined by the data in IBM TRIRIGA
- The headcount of people who are assigned to the space as their primary location

- The headcount of people who are assigned to the space as their secondary location
- The seats that are allocated. This number is the total capacity as seats. This value is from the Occupancy Allocations section on the **Allocation** tab when no people are assigned to the space. When people are assigned, IBM TRIRIGA automatically allocates seats as based on the percent of capacity (seats) that are occupied.
- The percent that is occupied, which is the seats allocated divided by the capacity
- The remaining vacant seats, which is the capacity in seats minus the seats that are allocated
- The in service date
- The actual retirement date

The association of people to spaces triggers the workflows that implement the occupancy status rules.

Details

The **Details** tab on a Space record shows the people with this space as their Primary Location or Secondary Location (Other Assigned Locations).

The association of people to space is required to establish demand where the **Planning Measure Type** of the space class is set to Occupancy. Primary and secondary people are treated the same with respect to occupancy (that is, a person uses one capacity regardless of whether they are primary or secondary).

Allocation

The **Allocation** tab on a Space record shows the organizations that are occupying the space in the Occupancy Allocations section. These allocations are essential for establishing demand.

Occupancy space groups

You can use occupancy space groups to physically group together spaces for the purpose of occupancy during the strategic facility planning process. View and define space groups at **Portfolio > Locations > Space Groups**.

Organization

Organization is used in strategic facility planning primarily when you generate planning data. Organization information allows IBM TRIRIGA to aggregate demand data that relates to people and allocations for a planning level organization and its child plans.

The level of detail that is represented in the Organization Hierarchy must match or roll up to the level of organizational detail you that you use for planning processes.

The Organization Hierarchy is under the Portfolio portal first-level menu item.

People

For TRIRIGA Strategic Facility Planning to be able to relate spaces to organizations and geography, people records must identify the spaces that each person occupies.

The People page is under the Portfolio portal first-level menu item.

General

Information from the **General** tab of the People record that is important for strategic facility planning, includes the content from the following fields:

- The name
- The functional role
- The assignment type
- The organization path of the primary organization
- The location path provides the association to spaces
- The geography

Functional Role and **Assignment Type** are essential for headcount demand drivers and forecasting. If this information is not used, all people are treated equally in terms of space standard (area). For example, without functional role, adding one executive would add the same area requirement as adding one worker.

Note: Be consistent in your use of **Functional Role** and **Assignment Type**. If some People records have these values and some do not, the forecasting process becomes awkward and confusing.

Locations and assets

In the **Locations & Assets** tab, assign the primary location and as many other assigned locations (secondary locations) as appropriate. To plan moves that include equipment and assets like desks and computers that are assigned to a person, those moves must be defined in the Asset page and identified in the **Locations & Assets** tab of the person.

Tip: You also can assign people to a space, or remove them from a space, by using IBM TRIRIGA CAD Integrator/Publisher.

Setting up the application

To use TRIRIGA Strategic Facility Planning, the application must first be set up by an application administrator.

Application setup overview

Before you use TRIRIGA Strategic Facility Planning, check that the application is set up according to your planning needs.

The following setup activities are important for strategic facility planning:

- Check or modify the classification settings that affect strategic facility planning. For example, enter the correct values into the estimate and factor fields of the Details section of building class records
- Set up values in the planning manager to be used in strategic facility planning
- Modify the planning and move planning settings to be used in strategic facility planning
- Enter the correct values into the estimate and factor fields of the Details section of building class records
- Enter values into the Cost Summary section of building records that are included in strategic facility planning

- Create space standard specifications
- Create headcount and non-headcount demand drivers
- Create forecast standards
- Set up planning period templates
- Define goal types

Classifications

Classifications contain data fields that are used in TRIRIGA Strategic Facility Planning calculations.

Building Class classification

Building Class is a classification structure or hierarchy that is used to assist with classifying a building based on its function. The Building Class classification is an important element that is used in the planning functions of TRIRIGA Strategic Facility Planning.

Certain scenario metrics calculations are supported by values that are set up on building classes. The values that are retrieved from building class are used as factors to calculate estimates for proposed locations when you request more supply. For example, estimates are taken from the building class for CO2 Emissions/GSF, Energy Use/GSF, Annual Cost of Operation/RSF, Annual Lease Costs/RSF, and Annual Fixed Assets Costs/RSF and used with the proposed area of the new location to calculate an estimate.

You can modify the Building Class classification at **Tools > Classifications > Building Class**.

Demand Driver Category classification

The Demand Driver Category classification groups space demand drivers, such as office workers, dorm students, warehousing, and server racks.

Space Class Current classification

The Space Class Current classification identifies how the space is intended to be used. The space class of a space is an important element within the planning functions.

It is important to strategic facility planning that the planning measure type and the default space standard are correct in the Space Class Current classification. The planning measure type can be set to area, count, or occupancy. The default space standard is a specification for the space that includes the capacity and average area. The default space standard identifies what roles can be assigned to the space. The default space standard must be set for each space class current for strategic facility planning to be accurate.

Space standard specification

The space standard is a specification that defines the attributes of a space, including capacity, average area, and which roles can be assigned. There must be a space standard specification for every space class.

Specifications in IBM TRIRIGA represent a description of an item, but not an actual item. Specifications can represent a wide variety of items, such as equipment, consumable items, services, software licenses, vehicles, and space standards.

The Specification page is at **Portfolio > Set Up > Specification**.

In the **General** tab, Details section, the important fields that are used by TRIRIGA Strategic Facility Planning are **Capacity** and **Average Area**. **Capacity** is used as standard capacity units per space. **Average Area** is used as a standard area per space.

First, you must create space standard specifications and then you can assign them to space classes.

Planning settings

IBM TRIRIGA prepopulates new portfolio plans with values from the planning settings that are set in the application settings.

The planning settings within the application settings are the global defaults and apply to IBM TRIRIGA as a whole. The values can be changed at the portfolio plan level as needed. If you change the values in the **Planning Settings** tab, authorized users can select portfolio plans and copy the updated values into them.

Set the default planning settings for IBM TRIRIGA on the **Planning Settings** tab that at **Tools > System Setup > General > Application Settings**.

If you have IBM TRIRIGA Real Estate Manager and use real estate lease contracts for supply planning, you can select the **Use Real Estate Lease Contracts for Supply Planning** check box.

If the **Use Real Estate Lease Contracts for Supply Planning** check box is selected, TRIRIGA Strategic Facility Planning finds the leases for each building and uses the start and end dates from those leases. In this scenario, IBM TRIRIGA tracks as many leases as there are for a building, for example, when a company has separate leases for each floor of a building.

If the **Use Real Estate Lease Contracts for Supply Planning** check box is cleared, TRIRIGA Strategic Facility Planning uses the **Tenure** field in the **Details** section of the **General** tab of the building to identify leased versus owned property. IBM TRIRIGA then uses the **In Service** and **Actual Retirement** fields on the Location Status section of the **General** tab of the building as the start and end dates for availability of the building for planning supply. In this scenario, TRIRIGA Strategic Facility Planning has only one set of start and end dates that it can use for a building.

In the **Space Class Used for New Supply** field, identify the space class that is to be assumed when you request more supply during the supply or demand analysis or during stack planning.

In the Details section, establish system-wide default values for the **Move Downtime Estimated Cost (per Day)**, **Move Downtime Estimate (Days)**, **Analysis Term in years**, and **Discount Rate (percent)** fields. The values for **Move Downtime Estimated Cost (per Day)**, **Move Downtime Estimate (Days)**, and **Move Downtime Estimated Cost** are per person and are used as factors for calculating scenario churn metrics. IBM TRIRIGA uses the **Analysis Term** and **Discount Rate (percent)** fields as factors for calculating scenario financial metrics.

Planning manager

The Planning Manager is the primary interface for managing the space classes, organizations, cities, and buildings that are included in the planning process.

The settings from the Planning Manager are global and set strategic facility planning values for the entire IBM TRIRIGA system.

The Planning Manager is only available when you are signed in as a system administrator or space planner. Click **Space > Set Up > Strategic Planning > Planning Manager** to access the Planning Manager functions.

The data in the Planning Manager that define values for strategic facility planning include the information contained in the following tabs:

- **Manage Space Classes**
- **Manage Organizations**
- **Manage Cities**
- **Manage Buildings**

Defining planning periods

Define the planning period configurations that match your organization's best practices and reuse them during strategic facility planning events.

Planning periods

Planning periods are defined time intervals that are used for all planning data.

An important aspect of planning is the notion of time. IBM TRIRIGA uses planning periods to define a set of named time intervals. These periods are aligned with fiscal periods to establish a time-based dimension for all planning data.

Tip: The more planning periods there are, the more data must be created to support the planning functions.

Planning periods and notifications

The planning year and planning period that is defined in the **Planning Period Config** field in the General section populates the **Planning Periods** tab. You can choose whether to send notifications to assist with cyclical planning.

Planning period line items

If planning data is not saved in the planning environment, you can change the value in the **Planning Period Config** field and click **Save**. Changing the value in the **Planning Period Config** field updates the values in the **Planning Periods** tab.

Notifications

To assist with cyclical planning, TRIRIGA Strategic Facility Planning can be set to send notifications for any of the planning period line items. Selecting the **Notify** check box specifies that IBM TRIRIGA is to send a notification to all workplace planner roles that are contained within the planning environment. This reminder of the pending period change is sent on the date that is displayed in the Notify Date column. To change the value of the Notify Within column or the Notify Date column, click the **Linked Record** icon.

Defining a planning period configuration

Planning period configurations simplify the implementation of planning periods by establishing standard increments of time that are covered in a plan.

Before you begin

Sign in with the appropriate system administrator role.

About this task

Tip: Define the planning period configurations that match the needs of your organization once and reuse them during strategic facility planning events.

Procedure

1. Click **Space > Set Up > Planning Period Templates**.
2. Click **Add**.
3. Review the Planning Period Config form.
4. In the General section, enter the name of the planning period configuration. Use a name that describes the planning period. For example, for a planning period that is for two years, with the first year in quarters, use 2 Year (QQQQY), or for a three-year planning period with the first year in quarters, use 3 Year (QQQQYY).
5. To define the structure of the planning period, click **Add** on the Period Configuration section bar. IBM TRIRIGA adds a line in the Period Configuration section. The **Period #** identifies the sequence in the planning period. Select the **Period Type (duration)** of the period from the list. Use **Quarter** or **Year** for **Period Type** and avoiding the many dimensions that a value of **Month** would create.
6. Continue adding periods until the configuration is complete. Each time that you click **Add**, IBM TRIRIGA adds a line, increments the period number, and prepopulates the period type with the value from the prior line. To remove a period, select the check box to the left of the line and click **Remove**.
7. Click **Create Draft**.
8. Select the appropriate action. Click **Activate** to make the planning period configuration available to use in IBM TRIRIGA.

Defining forecast standards

Define forecast standards to be used in the forecasting process to establish the space standards to use for a set of demand drivers.

Forecast standards

Forecasting uses forecast standards to establish the space standards to use for a set of demand drivers. The data that is contained within the forecast standards are treated as overrides to the global demand driver configurations for values that include space standard.

These forecast standards are applied to space forecast surveys and their respective line items and are typically configured by organization.

A typical use of forecast standards is by companies that have different space class standards for different locales. Such a company would establish forecast standards for each locale, for example, for the United States, for Europe, and for Asia Pacific.

Modifying forecast standards

You can choose to modify the forecast standards to override the global demand driver configurations for specific locations.

Before you begin

You must be signed in with the appropriate space planner or system administrator role.

Procedure

1. Click **Space > Set Up > Forecast Surveys > Standards**. IBM TRIRIGA displays the Standards results page.
2. Review the list of forecast standards. To add a forecast standard, click **Add**. To edit an existing forecast standard, click the **Name**.
3. Review the Forecast Standard form..
4. To add a demand driver to the Headcount Demand Driver section or the Non-Headcount Demand Driver section, click the **Add Demand Driver** action on the respective section bar. IBM TRIRIGA displays a list of demand drivers.
5. Make your selections and click **OK**. If the list that displays does not contain the demand driver that you want, click **Add**. IBM TRIRIGA opens a Headcount Demand Driver form or a Non-Headcount Demand Driver form. The fields in a demand driver can be changed from the standard values to ones appropriate for this particular forecast standard.
6. Click **Create**. The forecast standard acts as an override in the space forecast.

Thresholds

Thresholds identify how metrics are scored.

IBM TRIRIGA provides one threshold for each scenario metric calculation. In TRIRIGA Strategic Facility Planning, the values and ranges determine the display of the threshold indicator on the comparison grid of the **Scenario Evaluation** tab for a space plan. Thresholds also are part of the display of scorecards and metric charts in TRIRIGA Strategic Facility Planning portals.

You might want to change the values in the standard thresholds to the standards of your organization or to establish additional thresholds. For example, it is likely that your company has different standards for some thresholds for different countries.

You change the details at **Tools > System Setup > General > Thresholds**. Each threshold identifies the planning category and contains values, ranges, and colors. A threshold can support three ranges (for example, low, medium, and high) or two ranges (for example, low and high). The thresholds that you need depend on the data to be represented.

Defining the move cost estimates

The move cost estimates provide values for calculating the costs in the Move List of the stacking tool when the building that you are moving from is new supply or a forecast addition or when the move cost is not supplied by the building

About this task

The move planning settings are global settings. The values on the **Move Planning Settings** tab apply to the entire IBM TRIRIGA system. They can be overridden for a specific building in the **Move** tab of the record of that building.

Procedure

1. Select **Tools > System Setup > General > Application Settings**.
2. In the Move Cost Estimates section of the **Move Planning Settings** tab, click **Add** to create a new Move Cost Estimate record.
3. Enter the move cost estimate settings in the Details section and click **Create** and then **Save & Close** to save the record.
4. Click **Save & Close** to save the changes in the application settings.

Defining demand drivers

Define demand drivers to group how data and calculations are aggregated during forecasting.

Demand drivers

A demand driver captures the space class, space standard, functional role, worker type, and demand category into one record that provides insight into how spaces are classified.

Demand drivers are used in forecasting for capacity and size. When you generate data in a planning environment, IBM TRIRIGA creates demand drivers that are not yet defined. Define the demand drivers that you expect to use during the planning process.

Demand drivers are used as groupings for the forecast processes in collecting data and calculations. Demand drivers are categorized as either headcount or non-headcount. Examples of demand drivers include office workers, manufacturing product volume, warehouse pallet storage, dorm students, and meeting volume.

Defining headcount demand drivers

Headcount demand drivers are used as groupings for the forecast processes in collecting data and calculations about headcount. Access the headcount demand driver functions and define new headcount demand drivers that you expect to use during the planning process.

Before you begin

Sign in with the appropriate space planner or system administrator role.

Procedure

1. Click **Space > Set Up > Forecast Surveys > Demand by Headcount** to open the Demand by Headcount results page.
2. Click **Add**.
3. Use the Headcount Demand Driver form to define the new headcount demand driver.
4. Click **Create**.

Defining non-headcount demand drivers

Demand drivers are used in forecasting for capacity and size. Access the non-headcount demand driver functions and define new non-headcount demand drivers that you expect to use during the planning process.

Before you begin

Sign in with the appropriate space planner or system administrator role.

Procedure

1. Click **Space > Set Up > Forecast Surveys > Demand by Type** to open the Demand by Type results page.
2. Review the list of non-headcount demand drivers. Click **Add**.
3. Use the Non-Headcount Demand Driver form to define the new non-headcount demand driver.
4. Click **Create**.

Adding goal types

Portfolio plans contain goals that are appropriate for the level of plan. A goal defines the targets and the appropriate thresholds for your organization.

Before you begin

Sign in with an administrator role.

About this task

Note: Most users will not need to add to the default goal types. It is more likely that you choose to change the thresholds for goal types that are already included in TRIRIGA Strategic Facility Planning.

Procedure

1. Click **Tools > Application Setup > Strategic Planning > Goal Types**.
2. Click **Add** to open the Goal Type form.
3. Complete the Goal Type form and click **Create Draft**.
4. Click **Activate** to make the goal type available.

Defining planning environments

Set up a planning environment that includes the planning elements and configurations to be used as the primary source of planning data for TRIRIGA Strategic Facility Planning.

Planning environments

Planning environments contain planning elements and configurations that are the primary source of planning data that is used by TRIRIGA Strategic Facility Planning.

A planning environment is a time-based approved portfolio or space plan that is the planning data for implementations or forward-looking metrics. An approved scenario updates the planning environment to reflect the new or updated plan. The planning environment is sometimes referred to as the plan of record, the master plan, the master space plan, or the space plan of record.

Planning environments can be configured to manage the following data groups:

- Planning year and planning periods
- Key contacts and contact roles
- Planning scope
- Planning data
- Forecast data

Typically a planning environment is set up once a year for cyclical planning as part of an annual budgeting cycle or business planning cycle.

Planning data

When you generate planning data for a planning environment, TRIRIGA Strategic Facility Planning collects information about supply and demand to be used in space plans.

Time

Time within planning data is based on planning periods. This dimension of the data is based on whether the building or lease is active for the periods that are defined in the planning environment.

As TRIRIGA Strategic Facility Planning discovers supply data, it creates planning data records only for periods that overlap the active dates of the building or lease. For example, if a building has a retirement date at the end of 2013, and the planning environment is configured for 2012, 2013, 2014, 2015, and 2016, TRIRIGA Strategic Facility Planning generates supply planning data records for that building only for the 2012 and 2013 periods.

TRIRIGA Strategic Facility Planning identifies whether a space is owned or leased based on the value of the **Tenure** field on the building. Often, real estate leases do not reflect space-level data. Because this data is not present explicitly, IBM TRIRIGA starts with information on the **Locations** tab on the real estate lease to make assumptions. The items in the Contract Locations section are intermediate links to any type of location. A single lease can be linked to one or more of the following location types:

- Spaces
- Floors, including all spaces within the floor
- Buildings, including all floors and spaces within the building
- Properties, including all buildings, floors, and spaces within the property

Planning measure types

As TRIRIGA Strategic Facility Planning gathers the space data by space class, it establishes different types of data according to the planning measure type on the space class. The three planning measure types are occupancy, count, and area.

The occupancy planning measure type manages space according to the total capacity. For supply data, this value is the sum of the space capacity by floor and by space class. For demand data, this value is the sum of occupants by floor, space class, and organization.

To reflect occupancy-based demand, TRIRIGA Strategic Facility Planning captures the count of people that belong to an organization, or its suborganizations, that are associated to spaces for a given space class, or its subspace classes, on a floor. This value is displayed in the **Quantity** field.

The count planning measure type manages space according to the total count. For supply data, this value is the number of spaces by floor and by space class. For demand data, this value is the number of spaces by floor, space class, and organization.

To reflect count-based demand, TRIRIGA Strategic Facility Planning captures the count of spaces that are allocated by an organization, or its suborganizations, for a space class, or its subspace classes, on a floor. This value is displayed in the **Quantity** field.

The area planning measure type manages space according to the total area. For supply data, this value is the sum of space area by floor and space class. For demand data, this value is the sum of space area by floor, space class, and organization.

To reflect area-based demand, TRIRIGA Strategic Facility Planning captures the sum of space area that is allocated to a organization, or its suborganizations, for a space class, or its subspace classes, on a floor. This value is displayed in the **Quantity** field.

Creating a planning environment

The planning environment identifies the planning period for space forecasting, the scope of the locations to be included in forecasting, and whether the planning environment provides the master planning data for the IBM TRIRIGA Workplace Performance Management metrics.

Before you begin

You must sign in as a space planner role.

About this task

Set up a planning environment once per year for cyclical planning that coincides with an annual budget or a business planning cycle.

Procedure

1. Select **Space > Plan Space > Planning Environments**.
2. Click **Add** to create the planning environment.
3. In the **General** tab, define the characteristics of the new environment.
 - a. If the new planning environment is linked to a prior planning environment, click the **Search** icon  after the **Previous Planning Environment** field. The selected prior planning environment is used for historical data. TRIRIGA Strategic Facility Planning supports two history periods.
 - b. In the **Planning Year** field, identify the year that is represented by the new planning environment. For example, if you are starting to plan for fiscal year 2013, enter 2013. If there is a previous planning environment, the planning year is set to the next year.
 - c. In the **Planning Period Config** field, click the **Search** icon  and select the appropriate configuration for the planning period.
 - d. To set the planning environment as the master plan to be reflected in the enterprise metric charts on the portal and in the portfolio plan, select the **Master** check box. Only one plan can be the master plan. If you select the new plan to be the master plan, this setting on the previous master plan is automatically cleared.
 - e. Select the currency and area units for the new planning environment.
4. Click **Create Draft**.

Setting the planning environment scope

The default scope of the planning environment is set in the Planning Manager. However, you can restrict the planning environment to a specific set of buildings.

Procedure

Click **Add Buildings** on the Scope section bar to select buildings to add to the scope or click **Remove** to remove a building that is already listed.

Configuring contacts

Identify the people to be notified about events in this planning environment by configuring the key contacts and contact roles.

Procedure

1. To add a person, on the **Contacts** tab of the Planning Environment form, click **Add Person**.
 - a. Optional: Click **Apply Filters** or **Clear Filters** to broaden or narrow the list of people.
 - b. Select from the list, and click **OK**. The person is added to the contacts list for the planning environment.
2. To specify the contact role for the person, click the person's name.
 - a. In the Role section of the Contact Role form, select the role that the person has for this plan. You can also select **All Roles** from the Related Reports.
 - b. Click **OK** and then **Save & Close**.

Prerequisites for generating data

Before you generate data for a new planning environment, the configuration of the data must meet the requirements to generate the correct data.

Type of record	Requirements
Building	The city in the Geography Lookup field in the Primary Address section on each Building record must be in the Manage Cities tab of the Planning Manager. If a city is not in the Manage Cities tab, the buildings in that city are not captured.

Type of record	Requirements
Space	<p>The Current Use Space Class field on each Space record, or a space class higher in the Space Class Current classification hierarchy, must be in the Manage Space Classes tab of the Planning Manager. Space records with space classes that are higher in the Space Class Current classification hierarchy than the space classes listed in the Manage Space Classes tab are not captured.</p> <p>Each organization that is listed in the Occupancy Allocation section of the Allocation tab of each Space record, or an organization higher in the Organizations hierarchy, must be in the Manage Organizations tab of the Planning Manager. Space records with Occupancy Allocations organizations that are higher in the Organizations hierarchy than the organizations that are listed in the Manage Organizations tab are not captured.</p>
People	<p>The Location Path field, which is in the Primary Location section of the General tab of the People record, and all locations that are listed in the Other Assigned Locations section of the Locations & Assets tab contain a Building record in the Manage Building tab of the Planning Manager. People records with buildings that are not in the Manage Buildings tab are not captured.</p> <p>The Organization Path field, which is in the Primary Organization section of the General tab of the People record, contains an Organization in the Manage Organizations tab of the Planning Manager. People records with organizations that are higher in the Organizations hierarchy than the organizations that are listed in the Manage Organizations tab are not captured.</p> <p>The Location Path field, which is in the Primary Location section of the General tab of the People record, and all locations that are listed in the Other Assigned Locations section of the Locations & Assets tab of each People record is a Space record with the Space Class Planning Measure Type of Occupancy.</p>
Space class current	<p>The Default Space Standard field is configured in each Space Class Current record in the Manage Space Classes tab of the Planning Manager and in each space class that is lower in the Space Class Current classification hierarchy than the space classes listed in the Manage Space Classes tab.</p>

Generating planning data

The master planning data is a time-based snapshot of the current state of the supply and demand data that is used by the space management application.

Before you begin

Before you generate data for a planning environment, check that the configuration of the data meets the requirements to generate the correct data.

About this task

When you generate data for a planning environment, you can change the current period for the data. By changing the current period for the data, you can move the planning environment data from one planning period to the next.

Restriction: If you change the current period, you cannot return to a previously selected period. You can change the current period only to a period within the planning year.

Procedure

1. Select the **Generate Data** action on the planning environment action bar.
2. Optional: Change the current period.
3. Click **Continue**. While the data is generating, the planning environment is locked in read-only state with a status of Processing. Depending on the level of detail in the data to be gathered, this process can take several hours.

Results

After data is generated, the planning environment is editable and returns to its prior status. The **Forecast** tab and the Summary section, Planning Data section, Supply Summary section, and Data Capture Log section are now populated. Select the **Show Processes** action to view the list of processes that completed. Click **Save & Close** to save the changes to the Planning Environment record.

Show Processes and Hide Processes

The **Show Processes** and **Hide Processes** actions are used to troubleshoot data issues.

You might not be able to see the **Show Processes** and **Hide Processes** actions on the Summary section bar. The **Show Processes** and **Hide Processes** actions are visible only to users with appropriate security permissions.

Clicking **Show Processes** adds three tabs to the Planning Data section. The tabs are **Running Processes**, **Finished Processes**, and **Exception Processes**.

TRIRIGA Strategic Facility Planning generates the data for the planning environment and displays information about what is running, finished, and any exceptions that are encountered.

Use the **Show Processes** action as a tool during data generation.

Clicking **Hide Processes** removes the **Running Processes**, **Finished Processes**, and **Exception Processes** tabs from view.

Chapter 3. Forecasting

Forecasting is the process of analyzing current and historical data to determine future trends.

Forecast data

Forecast data is predicted data based on previous data and forecast survey data.

Planning data is the information that IBM TRIRIGA contains in terms of demand and supply. Supply is an aggregation of the same data as demand, but without the organization included. When you generate data for a planning environment, IBM TRIRIGA finds any deltas in demand. It then creates forecast records in addition to the demand records. IBM TRIRIGA uses the forecast data to give you a supply and demand chart that shows the future.

Space forecast surveys

Space forecast surveys gather space forecast data for planning organizations. When data is generated for a planning environment, forecast surveys are created automatically for each planning organization.

Each planning organization has a forecast survey. TRIRIGA Strategic Facility Planning populates each forecast survey's primary contact with the person that is designated as the business unit manager contact role in each organization. Forecast surveys can be sent multiple times to the planning contact for the organization. The planner can also choose to complete the surveys with information that is gathered from the business unit manager.

Completing forecast surveys

The workplace executive fills out or sends the forecast surveys to collect the data that is needed to forecast future space needs. Forecast surveys are created when you generate the data for a planning environment.

Procedure

1. Click **Space > Plan Space > Forecast Surveys** to view the forecast surveys that were generated by TRIRIGA Strategic Facility Planning.
2. Optional: You might choose to communicate directly with the business unit managers and then complete the survey.
3. Optional: If you choose to send the forecast surveys to be completed by the business unit managers, you can select the check boxes for the forecast surveys to send and click **Send** or click one forecast survey to open, edit, and click **Send**. Then, either send the survey in an offline form by email or send a notification for the business unit manager to complete the survey online.
4. Click **Save** to save changes to the survey.
5. Click **Submit** when the survey is complete.

Chapter 4. Portfolio planning

Portfolio planning involves setting up the corporate portfolio plan, lower-level portfolio plans that are child plans of the corporate plan, space plans for a portfolio plan or subplan, and scenarios for a space plan.

Portfolio plans

A portfolio plan contains the overall plan summary data. A corporate-level portfolio plan defines the high-level goals, objectives, risks, and resources for all lower-level portfolio plans.

After a corporate-level portfolio plan exists, the next step is to create child-level portfolio plans. Portfolio plans are hierarchical and you can develop as many levels as needed to support your corporate objectives. Build plans and subplans to define your planning structure. A child-level portfolio plan can contain the goals, objectives, risks, and resources of the corporate-level plan. You also can add goals, objectives, and risks that are specific to a child-level plan.

The roles that contribute to the corporate-level portfolio plan are the executive team, which might include the CEO, CXO, Workplace Executive, Real Estate Portfolio Manager, Facility Manager, Environmental Manager, and Business Unit Executives. The roles that contribute to child-level portfolio plans are the Facility Manager or Real Estate Portfolio Manager.

Defining a corporate-level portfolio plan

A portfolio plan contains the overall plan summary data. A corporate-level portfolio plan defines the high-level goals, objectives, risks, and resources for all lower-level portfolio plans.

Before you begin

Sign in as a space planner role.

Procedure

1. Click **Space > Plan Space > All Portfolio Plans**.
2. To create a portfolio plan, click **Add**.
3. Complete the Portfolio Plan form.
 - a. In the **General** tab, General section, enter a unique ID to identify the portfolio plan according to your organization's standards. If you do not assign an ID, IBM TRIRIGA generates an ID.
 - b. Use a name that summarizes the scope of the plan, such as Corporate 2013 Plan.
 - c. The **Geography** field identifies the cities that are incorporated in the portfolio plan. Since this portfolio plan is the upper-most portfolio plan, select the highest level for which you are planning. For example, you might select World.
 - d. In the Units section, select the currency, area units, carbon units, and energy units for this plan. This information is propagated to child plans and set the units of measure on the scenario metrics.

4. Click **Create Draft**. IBM TRIRIGA creates the plan in Draft status and displays more sections and tabs.

Defining a child-level portfolio plan

After a corporate-level portfolio plan exists, the next step is to create child-level portfolio plans.

About this task

Portfolio plans are hierarchical and you can develop as many levels as needed to support your corporate objectives. A child-level portfolio plan might contain the goals, objectives, risks, and resources of the corporate-level plan. You also can add more goals, objectives, and risks specific to a child-level plan.

Procedure

1. Click **Space > Set Up > Strategic Planning > Planning Manager > Portfolio Plans** to open the Planning Manager and select the parent portfolio plan.
2. On the **General** tab, scroll to the **Portfolio Plans** tab. Click **Add**.
3. Review the Portfolio Plan form.
 - a. In the **General** tab, General section, enter a unique ID to identify the portfolio plan according to your organization's standards. If you do not assign an ID, IBM TRIRIGA generates an ID.
 - b. Use a name that summarizes the scope of the plan, such as North America 2013 Plan.
 - c. IBM TRIRIGA sets the Parent Portfolio Plan to be the corporate-level plan. If this plan is a child of a child plan, IBM TRIRIGA lists its immediate parent.
 - d. The Geography field identifies the cities that are incorporated in the portfolio plan. It must be a lower level than the geography on the parent plan.
 - e. The values in the Units section are pre-populated from the parent portfolio plan. Optionally, change the currency, area units, carbon units, and energy units for this plan. These settings determine the units of measure on the scenario metrics.
4. Click **Create Draft**. IBM TRIRIGA creates the plan in Draft status and displays more sections and tabs.

Entering goals, objectives, and risks for a portfolio plan

By entering goals, objectives, and risks for a portfolio plan, you link your business objectives and workplace performance goals to the planning and analysis process.

Goals, objectives, and risks

Goals, objectives, and risks drive performance indicators throughout the planning process and are the basis of scenario evaluation and decision making.

The information that is defined in a portfolio plan for the goals, objectives, and risks is what ultimately is compared. Thresholds are assigned to goals, objectives, and risk for evaluation.

In a corporate-level plan, define corporate-wide goals, objectives, and risks. TRIRIGA Strategic Facility Planning delegates this information down to child plan levels.

In a child-level plan, the **Goals & Objectives** tab initially contains the goals, objectives, and risks indicated to be propagated from the parent plan. Add goals, objectives, and risks appropriate for this child-level plan. TRIRIGA Strategic Facility Planning delegates this information down to child plan levels. Add local goals, objectives, and risks in the lower-level child plans.

The Plan Goals section, Objectives section, and Risks section have **Add** and **Remove** actions. Click **Add** to create values that can be cascaded to subplans. To delete an item from a section, select the check box beside its name and click **Remove**. For objectives and risks, TRIRIGA Strategic Facility Planning also removes the item from lower level plans when you click the **Save** action. However, an objective or risk that is propagated from a parent cannot be removed in a child-level plan. The objective or risk must be removed at the level it was added.

Adding goals to portfolio plans

Add goals to link your workplace performance goals to the planning and analysis process.

About this task

The goals in the Plan Goals section of the portfolio plan propagate to portfolio plans that are listed in the Sub Portfolio Plans section on the **General** tab (child-level plans of this plan) when you click the **Save** action. Removing a plan goal does not remove it from lower levels. In a child-level plan, IBM TRIRIGA copies the plan goals from the parent portfolio plan. You can change the target values for the plan.

Procedure

1. From the Plan Goals section of the portfolio plan, click **Add**. The list of plan goals that displays includes the goal types that you configured in the application setup settings.
2. Select the goals to add and click **OK**.
3. Optional: To add a goal that is not listed, click **Add**, complete the Goal Type form, click **Create Draft**, and select **Activate** to make the goal available.
4. Adjust the target values for this portfolio plan to tailor the standard goals to this particular planning exercise. If the threshold value in a planning goal item is blank, the Scenario Evaluation section for the space plan does not include a threshold indicator.

Adding objectives to portfolio plans

Portfolio plan strategic objectives set performance goals that are measured by using metrics for program or project evaluation and for scenario evaluation.

About this task

Strategic objectives can be propagated to child portfolio plans that are listed in the Sub Portfolio Plans section on the **General** tab. In a child-level plan, IBM TRIRIGA copies from the parent plan objectives indicated to be propagated. You can add objectives to the Objectives section.

Procedure

1. From the Objectives section of the portfolio plan, click **Add**.

2. Complete the Planning Objective form. In the Objective Details section, the fields have the following meanings:
 - **Objective Category** establishes a grouping of objectives. It is used for top-level aggregation during evaluation and performance metric analysis. The result is the sum of the rating scores for the direct child plans. By default, it is set to Strategic. Portfolio plan strategic objectives can be used for setting performance goals (measured by using metrics), for program/project evaluation and for scenario evaluation.
 - **Objective Type** establishes a subgrouping of objectives within a category. The result is the sum of the rating scores for the direct child plans. The standard choices are Customer, Environmental, Financial, Operational, Portfolio, and Regulatory.
 - **Propagation Rule** establishes whether this planning objective is propagated to child plans. The values are All and No Propagation.
 - **Default Threshold** defines the appropriate minimum and maximum range of acceptable performance for this objective.
 - **Importance Ranking** is similar to a priority or a weighting factor. The importance sets the relative ranking of this objective as compared with other objectives. The values are 1 – Low, 3 – Medium, and 5 – High. The ranking is used for scoring.
 - **Importance** is the importance ranking.
3. Click **Create** to add the planning objective to the Objectives section.
4. Click **Save** to propagate the objective to subplans as indicated by the value of the Propagation Rule.

Adding risks to portfolio plans

IBM TRIRIGA manages risk items and risk reviews in the context of a portfolio plan. This method adds risk planning and evaluation at the beginning of the evaluation processes. With this addition, risk is identified and evaluated as part of the recommendation and approval process.

About this task

The items in the Risks section can cascade to subplans that are child plans of this plan. In a child-level plan, IBM TRIRIGA copies from the parent plan risks that are indicated to be propagated. You can add risks to the Risks section.

Procedure

1. From the Risks section of the portfolio plan, click **Add**.
2. Complete the Planning Risk form. In the Risk Details section, the fields have the following meanings:
 - **Risk Category** establishes a grouping of risk planning objectives. By default, it is set to Strategic.
 - **Risk Type** establishes a subgrouping of risk planning items within a risk category. The aggregation of the risk type is the sum of the rating scores for the direct child plans of the risk type. The standard choices are Customer, Environmental, Financial, Operational, Portfolio, and Regulatory.
 - **Propagation Rule** establishes whether this risk is propagated to child portfolio plans. The values are All and No Propagation.
 - **Default Threshold** defines the appropriate minimum and maximum range of acceptable performance for this objective.

- **Importance Ranking** is similar to a priority or a weighting factor, the Importance sets the relative ranking of this objective as compared with other objectives. The values are 1 – Low, 3 – Medium, and 5 – High. The ranking is used for scoring.
 - **Importance** is the importance ranking.
3. Click **Create** to add the risk to the Risks section.
 4. Click **Save** to propagate the risk to subplans as indicated by the value of the Propagation Rule.

Chapter 5. Space planning

A space plan provides an environment for a planner to work with a set of planning data, including supply and demand, for a set of locations. A portfolio plan or subplan can have many space plans.

After you define your portfolio plans through the hierarchy of plans and subplans, the next step is to build space plans.

Although space plans can be built on any level of the portfolio plans, normally space plans are only associated with the lowest level portfolio plan. This lowest level portfolio plan is where the geography is set and where space planning typically occurs.

The space plan is the container for scenarios. Each space plan is the data source for all scenarios that are created within it, enabling planners to compare scenarios.

A space plan uses the data that is generated from a planning environment as its data source.

Defining a space plan

Space plans provide an environment for a planner to work with a set of planning data, including supply and demand, for a set of locations.

Before you begin

Portfolio plans and an active planning environment must exist before space plans can be created.

Procedure

1. From the **General** tab of the portfolio plan or subplan, navigate to the **Space Plans** tab. Click **Add**.
2. Review the Portfolio Plan form.
 - a. In the **General** tab, General section, enter a unique ID to identify the space plan according to your organization's standards. If you do not assign an ID, IBM TRIRIGA generates an ID.
 - b. Use a name that summarizes the scope of the plan, such as Nevada Optimization Space Plan 2013.
 - c. Click the **Search** icon  and select the planning environment that contains the planning data to be used for this space plan.
 - d. IBM TRIRIGA pre-populates the primary contact with the person who is creating the form. To change the primary contact, click the **Search** icon  and select the person to be used as the primary contact for this space plan.
 - e. In the Units section, select the currency, area units, carbon units, and energy units for this plan.
3. Click **Create Draft**. IBM TRIRIGA creates the space plan in Draft status and displays more sections and tabs.
4. Click **Save & Close**.

Adding data to a space plan

Data that is added to a space plan defines which cities, buildings, and leases are incorporated from the planning environment. This task provides the actual data on which the space plan focuses. The data in the space plan is used for all scenarios in the space plan.

About this task

Remember: IBM TRIRIGA does not automatically move the data from the planning environment to the space plan. You must define what data goes in the space plan in the Supply Summary section.

Procedure

1. From the **General** tab of the space plan, click **Add** on the Supply Summary section bar.
2. Optional: If you are doing forecasting, in the Generate Planning Data form, select the **Include Forecast Data** check box. Because all forecast data is defined at the city level, you cannot choose buildings or leases after you select this option. IBM TRIRIGA removes the Supply Summary section from the Generate Planning Data display. The cities are identified in the Cities section. IBM TRIRIGA adds forecast data for all cities in the Cities section from the portfolio plan identified on the **General** tab of the space plan and also includes all of the previously shown buildings and leases. After you decide to do forecasting, all supply for those cities is incorporated into the space plan and its scenarios, so that the planner has all of the representative supply for resolving the forecast.
3. Optional: If you are not doing forecasting, you might want to add or remove buildings or leases to the planning data for the space plan by clicking **Add** or **Remove**. By default, the Supply Summary section displays the buildings and leases in the planning environment for the cities that are identified in the Cities section.

Restriction: In the following scenarios, you might not be able to remove the Supply Summary records:

- If forecasting has been enabled (city records exist) and you are attempting to remove buildings or leases without also removing the city record. IBM TRIRIGA displays the following message: Some of the selected Supply Summary items could not be removed because Forecast Data has been included for the City. You must remove the Forecast City items before these items can be removed or select only items that do not have Forecast Data included for the City.
- If changes have been made (using Stack) to the Supply Summary in any of the scenarios. IBM TRIRIGA displays the following message: Some of the selected Supply Summary items could not be removed because changes have been made within the Scenarios for these items. You must reset changes in those Scenarios before these items can be removed or select only items that have not changed.

Chapter 6. Scenario planning

In the space planning process, scenarios satisfy the requirement to establish a space plan of record or to evaluate options that are related to unplanned events. The process can be initiated by routine planning cycles, strategic initiatives, an emergency response, or a business change event. The space planning process also can be used to develop feasibility studies or contingency plans that do not go into an execution phase.

Space planning scenarios

Scenarios are the alternative proposed solutions, what-if options, or feasibility studies that are under consideration for a space plan.

The space plan to which a scenario is associated, called the parent space plan, contains the overall plan summary data, scope of planning, data aggregations, common setup data, comparison goals, and targets. The parent space plan is used to compare and evaluate the scenarios that it contains.

IBM TRIRIGA creates two possible scenarios for all space plans, the Plan Goals scenario and the Status Quo scenario.

The Plan Goals scenario includes all of the plan goals that are established on the space plan. Objectives and risks from the space plan are propagated to the Plan Goals scenario, where you can rank them. No planning data is directly associated with this scenario. It is used to provide a set of ideal results to which other scenarios can be compared with in the scenario comparison tool.

The Status Quo scenario represents the state of the data when the space plan was created, which is the baseline data for the space plan. This scenario is never modified. As scenarios are created and changes are made, the Status Quo scenario is used to view the changes made from when the planning process was started for that space plan.

When you are comparing scenarios, the Plan Goals scenario has a sequence of -1 and the Status Quo scenario has a sequence of 0. The sequence specifies the location of the scenario in the scenario comparison grid. The Plan Goals scenario shows as the first item in the scenario comparison grid and the Status Quo scenario shows as the second item.

IBM TRIRIGA automatically copies the planning data from the space plan to a new scenario to establish an isolated version of the data that is ready for analysis and manipulation. Copying the data from the space plan ensures that all scenarios have the same starting point, which is an essential part of being able to compare scenarios.

The planning data for a scenario is at the center of all planning functions in the scenario. This planning data reflects all changes in supply and demand. All tools in the space plan use this planning data.

Supply and demand analysis

In space planning, supply and demand analysis is a fit or gap analysis across time of the demand for business space and the supply of buildings or space in the current or planned portfolio.

Real estate decisions include whether to lease a building, buy a building, end a lease, or sell a building. Too much space or too little space results in increased costs, both capital and operating, and a productivity impact on the core business. Real estate decisions and the ensuing transactions typically require long lead times. Understanding the business unit needs and objectives (the demand) and comparing that demand to the available facilities (the supply) provides a future look at portfolio needs.

During supply and demand analysis, you use the organizational space requirements forecast data to determine whether the planned space inventory fits the business requirements of quantity, quality, type, and timing.

The input to the process includes the following information:

- Location area and capacity forecast
- Organization required area and capacity forecast
- Facilities management standards
- Scope of analysis (planning period range, geographies, organizations, space class types, locations)
- Historical organization capacity requirements
- Historical location capacity data

Outputs include the proposed location area and capacity changes, which might be to retire a location, to extend a lease, or to acquire or construct a location.

Supply/Demand Analysis tool

The Supply/Demand Analysis tool is accessed from the **Analysis** tab of the Scenario. The Supply/Demand Analysis function is a chart that is embedded directly within the scenario. The chart provides a combined view of the supply and demand planning data across time.

The supply data is represented as a stacked bar graph where area is stacked vertically based on the building or lease. The demand data is represented as a line graph that overlays the bars. This graph shows how the supply of space or area matches up against the demands of an organization.

With this tool, you can interactively analyze scenario options to match forecasted business demand to portfolio space supply across planning periods. The graphical analysis tool helps with the following tasks:

- Visually detect supply-demand gaps that require planning actions to meet demand or to improve portfolio utilization.
- Analyze what-if supply-side actions for lease contract options, new building expansions, or portfolio consolidations.
- Investigate the implications of demand-side changes to match supply or close gaps.

Adding and removing supply

You can add new supply by clicking the **Add Supply** action on the Supply Summary section of the **Analysis** tab on the scenario.

When you select the building class in the supply definition, IBM TRIRIGA populates the other fields in the Details section with values from the Building Class standard. These values are used in scenario evaluation metrics. You can adjust any of the numbers to better reflect any known information relative to a city area or building type. IBM TRIRIGA uses step-up rules to convert the total area in the Supply Breakdown section to Usable, then up to Rentable, and then to Gross. For example, if the total Area is 10,000, the Usable Factor is 0.25, the Rentable Factor is 0.35, and the Gross Factor is 0.20:

$$\begin{aligned} \text{Assignable Area} * (1 + \text{Usable Factor}) &= \text{Usable Area} \\ 10,000 * 1.25 &= 12,500 \end{aligned}$$
$$\begin{aligned} \text{Usable Area} * (1 + \text{Rentable Factor}) &= \text{Rentable Area} \\ 12,500 * 1.35 &= 16,875 \end{aligned}$$
$$\begin{aligned} \text{Rentable Area} * (1 + \text{Gross Factor}) &= \text{Gross Area} \\ 16,875 * 1.20 &= 20,250 \end{aligned}$$

In the Units section, IBM TRIRIGA populates the Area Units, Currency, Carbon Reporting UOM, and Energy Reporting UOM values from the Units section on the scenario.

If you choose to remove an added supply after any organizations are included in the added supply, IBM TRIRIGA does not remove the added supply. You must reset changes in the stack plan before you can remove an added supply.

Take action

The purpose of the **Take Action** function is to provide a mechanism for studying the implications of altering an existing supply. The available actions depend on whether you are working with a lease or owned building.

For a leased building, the choices are **Extend** and **Terminate**. For an owned building, IBM TRIRIGA populates **Action** with **Sell**. The **Extend** function also extends the lease supply block in the stack plan for the focus periods included in the extension. The **Terminate** or **Sell** actions also remove the supply block from the stack plan in the focus period after the termination or sell date. Any demand blocks that were on the supply block are flagged with the over-allocation icon.

As a result of an action, TRIRIGA Strategic Facility Planning updates the supply summary and appends the supply change to the supply and demand graph. TRIRIGA Strategic Facility Planning also adds a line item in the RE Action Requests section.

You can also cancel an action to have the line item removed from the RE Action Requests section.

Stack scenario planning

Stack scenario planning uses a graphical display of space supply and demand that is overlaid to determine space fit and gaps for a group of locations. Stack scenario planning is most commonly done at a floor level.

Stack planning overview

Stack scenario planning is primarily done by the space planner, and its graphical information views are beneficial in visually presenting alternatives or interactively creating what-if scenario plans with business management and workplace management teams.

Space supply is the existing and planned space inventory. Space demand is the projected space needs of the business units that are based on business goals and space drivers from the space forecasting process. By overlaying supply and demand, space fit and gaps are graphically identifiable. Then, fit can be improved and gaps that are minimized by dragging for graphical rearrangement of organizations between locations as a first step in macro level space planning.

Stacking is typically done at the department level and space classification level. The information that is aggregated might include area sums, space capacity by type counts, or people by type counts. The information that is aggregated does not include individual space, asset, or person details.

Stack planning is an interactive graphical user interface that is similar to a horizontal bar chart with the following capabilities:

- Expand or collapse viewing panels and tabs for flexible viewing and easier navigation
- Zoom and resize building stacks to easily view varying building sizes in one view
- Analyze based on capacity and area
- Store move sequencing data for implementation move planning

Workplace planners create and analyze scenario stack plans for a focus period that is selected from the planning periods that are established in the planning environment. During scenario creation, you select the locations and the focus period. The stack plan tool depicts both the supply (selected locations) and the demand (either the as is condition or the forecast data for the focus period).

Workplace planners deal with a huge amount of information. The graphical stack planning tool places that information into a format that is easy to understand and manipulate.

The inputs to the process include the following information:

- The proposed location area/capacity forecast
- The organization required area/capacity forecast
- The scope of analysis (planning period, geographies, organizations, space class types, locations)
- The available move type definitions (with estimated cost per headcount, area, and more)

Outputs include the following information:

- The proposed moves

- The proposed changes to location space class type
- The total estimated move costs for the scenario
- The proposed move sequences

Demand is the required area or capacity. Supply is assignable area or capacity. Capacity is headcount per location.

The stack planning tool is accessed from the Stack tab of the Scenario. The goal of stack planning is to ensure that the demand is allocated across available locations within the capacity of each location for the selected planning period.

Attention: The stack planning tool saves changes temporarily in memory. When you select the **Save** action from the scenario action bar, IBM TRIRIGA permanently saves the changes from the stack planning tool. At any time before you click the **Save** action, you can undo your changes. After you save, IBM TRIRIGA permanently commits the changes to the database.

Stacking tool

The stacking tool graphically represents the supply and demand data. The objective of the planner is to move quantities of demand, including headcount, space counts, and area, from place to place by rearranging the organizational blocks within the buildings or floors and parking lot to best satisfy the scenario goals and objectives.

Focus period

Set the focus period for the stack planning tool in the Parameters section. It can be changed unless there are saved stack moves. If there are saved moves, click the **Reset Changes** action to revert the moves first before you change the focus period. As blocks are moved from floor to floor, IBM TRIRIGA tracks the moves as changes. The **Reset Changes** action restores the blocks to where they were before any changes were made.

Sequencing

The stack planning tool provides the capability to track the sequence of moves as the planner rearranges organizational blocks in the stack plan. IBM TRIRIGA records each move in the **Move List** tab with sequential group and sequence numbers, providing valuable information for the move planner when you plan phased moves.

To enable the stack plan sequencing function, select the **Track Moves** check box in the Parameters section on the **Stack** tab.

If you want to group a series of block moves into a single group to simulate a larger move project, select the **Enable Sequence Grouping** check box. IBM TRIRIGA provides a **Sequence Group #** field to identify a group. Each subsequent save transfers moves to the Move List with the current Sequence Group #.

The purpose of recording move steps during a scenario planning session is to capture data that can be used to evaluate scenario implementation costs, compile metrics, and set up move project plans. Budgetary move cost estimates, project duration estimates, and move churn can all be captured. Since scenario moves simulate a move, data is available on area and people moved, space classes moved, and space classes changed (remodel space). From this data, IBM TRIRIGA

calculates rough order of magnitude (budgetary) costs, timelines, move sequence or phasing, and other statistics at a level commensurate with the level of planning.

In complex space plans, first do manual trial and error stacking plan scenarios to determine the best future state solution that is based on fit and adjacency. Then, do a recorded sequenced move in the stacking plan with the end goal in mind.

An oversimplification of a large sequenced move process is when vacant space is being created and backfilled, creating the vacant space for the next backfill. This is mimicked in the steps that are taken by the space planner in a scenario planning exercise. A vacant space is created by adding a building or downsizing organizations to free up space. Then, the vacant space is remodeled and moved into, which creates another vacant space to be backfilled. This process repeats until the space planner fills all of the spaces, satisfying the organizational or strategic planning needs. At the end, the space planner ideally has vacant space that is left over which can be disposed (such as a lease termination) or subleased.

Add supply

If you find you must add supply, select the **Add Supply** action on the Parameters section bar. The purpose of the **Add Supply** action is to provide a mechanism for increasing the supply. With **Add Supply**, you can simulate acquiring a new leased or owned building (supply). After supply is added, it shows in the stack as empty buildings or floors available to drop blocks into when the start or end dates overlap the focus period. The supply is displayed in the stack planning tool as a new tab and is formatted and treated like a building.

Select and place

To move organizational blocks, select the organization to be relocated by clicking the colored block from either the floor or the space class level. IBM TRIRIGA highlights the selected organization.

To select more than one organization, hold down the control key on the keyboard and select more organizations, or use the right-click pop-up menu.

To move the selected organization blocks to another floor, right-click the **Move To** floor and select the **Place** action in the pop-up menu. IBM TRIRIGA moves the blocks to the new floor.

When you select organization blocks to place into a different floor or into forecast removals of the same organization and same space class planning measure type. The result is one of the following possibilities:

- When the organization exists in the new floor, IBM TRIRIGA updates the quantity and area.
- When the organization does not exist in the new floor, IBM TRIRIGA creates one based on planning measure type.
- When the floor does not exist, IBM TRIRIGA creates a floor that is based on the planning measure type.
- If the organization block is a forecast additions block, place it into a floor in the same city.

You can undo a move by using the **Undo** or **Undo All** actions on the **Edit** menu. You can undo moves until you do a permanent save.

Select partial

Part of an organizational block can be moved by using the **Select Partial** action. To activate the control, right-click an organizational block on the space class level and select the **Select Partial** action from the pop-up menu.

The scale on the control shows the available capacity of the selected block. Slide the scale to the number of capacity units you want to move. Click **Select** to identify the current selection set. Click **Select (add)** to add the selected count to the current selection set.

Permanent save

To permanently save your stack plan manipulations, select the **Save** action at the top of the Space Scenario form.

Permanent save completes the following actions:

Data IBM TRIRIGA writes to the database data manipulations done on the stack plan tool from the previous permanent save to the current save.

Visuals

IBM TRIRIGA refreshes the stack plan and removes the data in the bottom information panel tabs when the save completes.

Metrics

IBM TRIRIGA recalculates impacted scenario metrics and refreshes all items in the Demand Summary section on the **Analysis** tab for the scenario.

Move List

If **Track Moves** is turned on, IBM TRIRIGA creates move lists by using the order that you did the moves in the stack tool. If the feature is enabled, it also shows the sequence groupings. The results display in the **Move List** tab on the **Stack** tab.

Change List

IBM TRIRIGA creates change lists for all moves that are performed in the stack tool and displays the results in the **Changes** tab on the **Stack** tab. The change lists contain valuable information that is required for the scenario evaluation metrics.

Move list

The move lists contain valuable information, including the area and estimated cost for each move step. Move designers and planners use the data to act on the approved scenario of the completed space plan. The Move List items in stack planning are available to the move planner in the Move Designer when the scenario is recommended, approved, and its space plan is completed. The move types have move items for person and room function move types. The move planner can create person and room function move line items from this information. The data also provides information for scenario evaluation metrics, for example financial metrics such as implementation costs, NPV, ROI, and IRR and operational metrics such as area moved, churn, people moved, and churn rate.

Stack planning performance metrics

Stack planning provides feedback on the performance and efficiency of the scenario by providing views to the Occupancy Rate and Utilization Density key metrics. IBM TRIRIGA displays these metrics in tabs on the **Stack** tab. The red, yellow, or green colors display based on predefined threshold values.

Stack plan work area

The stack plan tool contains two identical work area panels. The work panels facilitate simultaneous viewing of the source demand block and the destination supply block.

Each building or leased area in the scenario is represented by a tab at the top of each work area panel. Select a tab to view the stack for that building or lease. You can have the same building that is selected in the top and bottom panel or different buildings.

Within each stack plan work area:

- Buildings are represented as a vertical gray bar on the left. If the building has an image, the image displays within this bar.
- Floors are represented as horizontal gray bars. The length of the bar is proportional to the area of the floor. Floors display top down, for example, floor three above floor two above floor one.
- Organizations are represented as colored bars within a floor with their areas proportional to the size of the floor. You can visually see whether there is excess or over-allocated space on each floor.
- Space classes are represented as bars below a floor bar. Organizations are represented in space class bars as colored bars.

To select a floor, organization, or space, click the colored bar that represents the block. Hold down the Control key while clicking to select multiple blocks. To place the selected blocks, right-click on the bar that represents the new floor, organization, or space and select **Place**.

Parking lot

The parking lot tabs hold the deltas that were generated from the forecast data to be used in stack planning.

When the scenario includes forecast data, the system generates additions and removals in a focus period when that period has a positive (forecast additions) or negative (forecast removals) delta from the first period. The deltas are set in the forecast survey items for the planning environment for the organization by focus period. In the scenario, TRIRIGA Strategic Facility Planning places the deltas in parking lot tabs by city. There is a tab in the stack plan work area for each city with forecast deltas. The deltas display in the stack planning tool similar to buildings (or leases) and users interact with them as they would buildings.

Forecast additions represent new requirements that the workplace planner is to move from the parking lot to the buildings or floors. Each space class in the tray has zero quantity and the organization blocks reflect the delta quantities from the forecast data. The tray has an over-allocation icon. When all blocks are moved from a tray and allocated into the stack, IBM TRIRIGA removes the over-allocation icon.

Forecast removals represent items that the workplace planner is to remove from the buildings or floors. Each space class in the tray has a quantity that reflects the negative delta quantities from the forecast data. The tray has an over-allocation icon. When all blocks are moved from the stack into the tray, the system removes the over-allocation icon.

Space Class used for New Supply setting

The Space Class used for New Supply setting identifies the space class that is used by IBM TRIRIGA when you create new supply within a space plan scenario. Though this field is configurable, it is not intended that users change the value.

How the Space Class used for New Supply setting functions

TRIRIGA Strategic Facility Planning includes a configurable setting that is called Space Class used for New Supply. The field is located within the Application Settings under the **Planning Settings** tab. The default value for the classification record is Expansion.

This option is used to identify the space class that is used by IBM TRIRIGA when you create new supply within a space plan scenario. By default, the option is pre-configured to \Classifications\Space Class Current\Expansion. The classification is configurable to any space class, but this space class is used to represent space that is not configured.

This setting is intended to be used while you work on a scenario or a plan to move demand to a new building that is proposed, but for which specific configurations are not yet determined. For example, the new building might be proposed to be 10,000 square feet. The building is created as new supply and the floors are given square footage. IBM TRIRIGA then works with the new building as simple square footage of open space. The exercise for the strategic facility planner is to drag blocks into the space by using the stacking tool until it is full. The Expansion space class is used to help the system work with this new space, which is imagined but undefined.

The structure of the planning data that is used by the scenario to represent the stack consists of four main types:

Supply Buildings

A set of buildings within the scenario that overlap the scenario's focus period.

Supply Floors

A set of floors within a supply building.

Supply Categories

A set of space classes that represent the available space, along with their respective area and capacity within a floor.

Demand Blocks

A set of space classes that represent occupied space, along with their respective area and capacity within a floor.

When new supply is added to the scenario, IBM TRIRIGA creates a new supply building and floors that is based on the information that was entered in the new supply dialog. IBM TRIRIGA also creates a single supply record for each floor by using the area that is identified within the dialog and the space class that is based on the Space Class used for New Supply application setting.

Assuming the new supply overlaps the scenario's focus period, the stack displays the new supply building and floors next to the other buildings. The objective is for the user to drag demand blocks from other buildings and floors directly onto the new floors, which creates new supply categories for space classes that do not exist in the new floor and the corresponding demand blocks to fill up the floors.

Evaluating and approving scenarios

After you define scenarios, you can do a side-by-side comparison before you recommend a scenario for approval.

Scenario evaluation

During the evaluation phase of the strategic facility planning process, planners review scenarios against planning goals and objectives and compare scenarios against each other.

Scenario evaluation and comparison can be used for in-process iterative reviews or for final evaluation to recommend and approve the best scenario for implementation. This key decision point finalizes the facility planning process.

Use the scenario evaluation tool to decide on the best scenario to implement. Base comparisons on balanced scorecard objectives and evaluation criteria.

Evaluation features include the following options:

- Expand or collapse criteria and details in side-by-side comparison matrix
- Compare scenario differences to business objectives, status quo, or against other scenarios
- Drill into further scenario details or reports
- Route and notify approvals to complete the decision

After one or more scenarios are considered ready for evaluation, the scenarios can be analyzed and reviewed, and the recommended scenario can be submitted for approval.

Scenario evaluation tool

With the scenario evaluation tool, you can compare scenarios against previously defined or categorized plan goals, objectives, and risks and against other scenarios.

To access the evaluation tool, open the space plan and select the **Scenario Evaluation** tab. TRIRIGA Strategic Facility Planning displays scenarios side by side in an evaluation grid.

Tip: The scenario evaluation tool displays only scenario metrics for plan goals that are defined on the space plan. If you want to change the items that are displayed in the Environmental, Financial, Operational, and Portfolio sections, adjust the space plan.

Scenario Evaluation section

The Scenario Evaluation section contains the evaluation grid. The scenarios that are displayed are listed in the Scenarios section and have the **Include in Comparison** flag set.

The left panel displays evaluation categories (objectives, risks, environmental, financial, operational, and portfolio).

The right panel displays scenarios; each scenario is presented vertically with the evaluation categories aligned.

Threshold/Value/Delta

The green, yellow, and red icons serve as a quick indicator of how the value compares with the threshold settings for the item. The number in the Value column is the data that is used by the threshold calculation. The value in the Delta column is the difference between the value in this scenario and the value in the scenario that is selected as the comparison base.

IBM TRIRIGA provides one threshold for each standard scenario metric in the Scenario Evaluation section.

When an evaluation category is collapsed, IBM TRIRIGA displays the values from the first row for that category.

For objectives, IBM TRIRIGA multiplies the **Importance Ranking** for each line item times its **Evaluation Ranking** to get a score. The scores are added together and divided by the sum of the **Importance Ranking** values. For example:

Objective Item A: Evaluation Ranking A *
Importance Ranking A = score A

Objective Item B: Evaluation Ranking B *
Importance Ranking B = score B

Objective Item C: Evaluation Ranking C *
Importance Ranking C = score C

Value = (score A + score B + score C) /
(Importance Ranking A + Importance Ranking B + Importance Ranking C)

For Risks, IBM TRIRIGA multiplies the **Risk Probability** for each line item by its **Evaluation Ranking** times its **Importance Ranking** to get a score. The scores are added together and divided by the sum of the Importance Ranking values. For example:

Risk Item A: Risk Probability A * Evaluation Ranking A *
Importance Ranking A = score A

Risk Item B: Risk Probability B *
Evaluation Ranking B * Importance Ranking B = score B

Risk Item C: Risk Probability C *
Evaluation Ranking C * Importance Ranking C = score C

Value = (score A + score B + score C) /
(Importance Ranking A + Importance Ranking B + Importance Ranking C)

Tip: The threshold indicator displays when there is a threshold that is defined in the item.

Select the 'compare to' scenario

The radio buttons below the scenario names identify the scenario to which all other scenarios are being compared. To change the 'compare to' scenario, click the radio button. TRIRIGA Strategic Facility Planning calculates deltas relative to the scenario selected.

Scenarios section

The Scenarios section lists the scenarios in the space plan.

The **Sequence** field sets the order that IBM TRIRIGA displays the scenarios in the Scenario Evaluation section. If you change the values, click **Save** on the Space Plan action bar and TRIRIGA Strategic Facility Planning redisplay the evaluation grid.

Select the **Include in Comparison** check box to include a scenario in the Scenario Evaluation section. If you change a setting, click **Save** on the Space Plan action bar and TRIRIGA Strategic Facility Planning updates the evaluation grid.

Evaluating scenarios

You can compare scenarios to the status quo scenario, the plan goals metrics that are set for the space plan, and to the other space scenarios. Based on the comparison, you can make the best decision possible to recommend one scenario.

About this task

In the review process, you can include all or only some scenarios in the comparison by selecting the check box for each one in the Scenarios form section. You can also set the order in which the scenarios display. You can click a radio button in each column in the Scenario Evaluation form section to see how the numbers compare and differ for each scenario, including the delta for each option as based on the column in focus.

Procedure

1. On the **Scenario Evaluation** tab in the Space Plan record, expand the Financial and Operational sections to view the results of the space plan goals against the corresponding values in each space scenario. The scoring for the objectives is not reflected in the scenario evaluation in the Space Plan record. Click each record in the Scenarios section to review the objectives scoring totals for each one.
2. Compare how each scenario matches the goals and objectives of the space plan and how each scenario compares to the others.
3. When you identify a scenario that meets your goals, select the radio button and click **Recommend Scenario**.
4. Click **Submit** on the Space Plan form. Submitting the space plan continues the TRIRIGA Strategic Facility Planning evaluation process. The space plan goes to business unit manager, executives, or anyone else who reviews this data for necessary approvals.

Scenario approval and implementation

The strategic facility planning process is complete for the space planner after the recommendation of a space scenario and the submission of the Space Plan record. The space plan is now subject to an approval and review process by management.

After the scenario is approved, the next step in the process is with the real estate and facilities manager roles. The role responsible depends on the actions that are included in the scenario that is recommended in the approved space plan. These actions might include lease extensions or terminations, real estate purchases or sales, space or asset movement, and staff termination or additions.

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