# Contents

ABOUT THIS GUIDE ........................................................................................................... 1  
Conventions................................................................................................................................. 1  
Intended Audience..................................................................................................................... 1  
Prerequisites............................................................................................................................. 1  
Support........................................................................................................................................ 1  

1. OPERATIONS AND MAINTENANCE MANAGEMENT ............................................. 2  
   Operations and Maintenance Process Overview ................................................................. 2  
   Service Management Process Overview ........................................................................... 2  

2. SERVICE MANAGEMENT SETUP ............................................................................ 4  
   Service Management Questionnaire .................................................................................. 4  
   Service Management Questionnaire Question Table ....................................................... 4  
   Service Management and Operations Administrative Items ........................................... 6  
   Request Classification ........................................................................................................ 7  
      To Create a Request Class Record.................................................................................... 8  
   Service Plan........................................................................................................................ 10  
      To Create a Service Plan Record................................................................................... 10  
   Assignment Rules Options ................................................................................................. 12  
      Assignment Rules.......................................................................................................... 13  
   Service Management Wizard ............................................................................................ 14  

3. ADDITIONAL SERVICE MANAGEMENT SETUP ................................................. 16  
   Priority Classifications....................................................................................................... 16  
   Procedures............................................................................................................................ 16  
      To Create a Procedure Record.................................................................................... 16  
   Reading Groups and Logs ................................................................................................. 19  
   Service Matrix Records..................................................................................................... 21  
   Knowledge Base and Solutions Records .......................................................................... 26
4. CORRECTIVE MAINTENANCE ................................................................. 34
   Request Central Portal ........................................................................... 34
   Contact Center Records ......................................................................... 34

5. PREVENTIVE MAINTENANCE ............................................................ 38
   Job Plans .................................................................................................. 38
   To Create a Job Plan Record .................................................................... 38
   PM Schedules – Schedule-Based ............................................................ 40
   To Create a Time-Based PM Schedule Record ....................................... 40
   Recurrence Pattern Types ....................................................................... 43
   PM Schedules – Reading-Based ............................................................. 43
   To Create a Reading-Based PM Schedule Record ................................... 44

6. TASK ASSIGNMENT ........................................................................... 46
   Resource Manager .................................................................................. 46
   Work Planner ........................................................................................ 46
   To Assign Work with the Work Planner ................................................. 47
   Unavailable Time ................................................................................... 49

7. WORK TASKS .................................................................................... 50
   Task Types ............................................................................................ 50

GLOSSARY .................................................................................................. 52

NOTICES .................................................................................................... 54
About This Guide

This guide describes the procedures for operating, modifying, and maintaining the maintenance application. The guide contains descriptions of the various tabs and their functions.

Conventions

This document uses the following conventions to ensure that it is as easy to read and understand as possible:

- **Note** - A note provides important information in addition to the standard details. Often, notes are used to make you aware of the results of actions.

- **Tip** - A tip adds insightful information that can help you use the system better.

- **Attention** - An attention notice indicates the possibility of damage to a program, device, system, or data.

Intended Audience

This guide supports operations and maintenance managers, technicians, contact center managers, contact center agents, and system personnel responsible for setting up, tracking, and maintaining information around corrective or preventive maintenance.

Prerequisites

The reader must have a basic understanding of the IBM® TRIRIGA® Application Platform and the fundamental concepts required to operate the Web-based TRIRIGA system.

Support

IBM Software Support provides assistance with product defects, answering FAQs, and performing rediscovery. View the IBM Software Support site at [www.ibm.com/support](http://www.ibm.com/support).
1. Operations and Maintenance Management

Organizations run best when their people can effectively use assets and locations for their designed functions and services. Operations and maintenance enable organizations to maintain or increase the efficiency, reliability, and safety of its assets and locations. A solid operations and maintenance program helps a multifaceted approach to achieve an optimum level of readiness. The first approach is the proactive maintenance of assets and locations. Maintenance is achieved through both time-based and reading-based scheduling. The second approach allows for input from every level of the organization to identify discrepancies and maintenance needs. The final approach incorporates formally scheduled inspections on various building systems to evaluate their state of readiness and life expectancies. This guide addresses the first two approaches to operations and maintenance. The IBM TRIRIGA 10 Facility Assessment User Guide covers the final approach.

Operations and Maintenance Process Overview

The overall process generally boils down to two main events:

- creation of work, generally in the form of a work task
- subsequent completion of the work, such as a technician responding to a call and fixing a discrepancy

The creation of work is managed by the service management process.

Service Management Process Overview

The first three steps in the operations and maintenance process overview can be thought of as the service management process. A thorough understanding of the basic service management process can help you understand a number of TRIRIGA capabilities including corrective maintenance, preventive maintenance, move management, and facility assessment.
The service management process can be represented by the following process diagram.

The Request Class record and its corresponding Service Plan record contain the settings that drive how the business logic is enforced in the creation of the work. The method by which the service management process is invoked determines which Request Class and Service Plan records will be used.
2. Service Management Setup

The TRIRIGA system will implement the organizations business rules in accordance with the setup that has been done before rolling out operations and maintenance.

Before moving exploring the setup items that a maintenance manager or system admin would take care of, you must perform some initial setup. As part of the TRIRIGA installation the system admin completes the Application Settings record. The Service Management Questionnaire, a component of the application setting, simplifies many of the records by displaying only relevant information.

Service Management Questionnaire

The following steps show how to access and update the Service Management Questionnaire.

To update the Service Management Questionnaire

Step 1
Select the Tools menu item. Then select the System Setup second-level menu item.

Note - TRIRIGA security may limit access for maintenance supervisors to the System Setup menu or some of its components. If necessary contact your system admin for assistance.

Step 2
Next select the Application Settings link in the General section.

Step 3
Go to the Service Management Settings tab to access the Service Management Questionnaire. Answer the questions according to your organizations processes around service management.

Service Management Questionnaire Question Table

The questions and possible system responses for the Service Management Questionnaire represent the way your organization handles its service management process and are not right or wrong, but merely representative of your business rules.

<table>
<thead>
<tr>
<th>Question</th>
<th>System Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you using the Contact Center?</td>
<td>If not selected, the system hides the Contact Center Request Type field on the General tab in Request Class, and removes it as an option in the Service Management wizard.</td>
</tr>
<tr>
<td>2. Are you using the Knowledge Base?</td>
<td>If not selected, the system hides the Has Solution Record field on the General tab and the Solution tab in Request Class, and removes it as an option in the Service Management wizard.</td>
</tr>
<tr>
<td>Question</td>
<td>System Response</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3. Do you want to perform a Duplicate Search for Requests?</td>
<td>If not selected, the system hides the Duplicate Search tab on the Request Class, and removes it as an option in the Service Management wizard.</td>
</tr>
<tr>
<td>4. Do you manage Priorities based on the type of Request or do you assign SLA response times individually by Service Provider?</td>
<td>If you choose By Request, the system shows the Priority tab on the Request class, and as an option in the Service Management wizard. The system also hides the option to manually assign SLA and Priority individually on Service Matrix records.</td>
</tr>
<tr>
<td></td>
<td>If you choose By Service Provider, the system hides the Priority tab on the Request Class and as an option in the Service Management wizard. The system also shows the option to manually assign SLA and Priority individually on Service Matrix records.</td>
</tr>
<tr>
<td>5. Do you want the system to Auto-Assign Service Providers based on the Service Matrix or do you assign Service Providers manually?</td>
<td>If you choose Auto-Assign, the system shows the Service Matrix Setup wizard action.</td>
</tr>
<tr>
<td></td>
<td>If you choose Combination, the system hides the Service Matrix Setup wizard action.</td>
</tr>
<tr>
<td></td>
<td>If you choose Manual, the system shows the Service Matrix Setup wizard action.</td>
</tr>
<tr>
<td>6. Do you use a single Service Provider for all Requests of a similar type for all Locations?</td>
<td>If not checked, the system shows the Service Matrix Setup wizard action.</td>
</tr>
<tr>
<td></td>
<td>If checked, the system hides the Service Matrix Setup wizard action. You can still use the Service Plan instead.</td>
</tr>
<tr>
<td>7. Will you be sending auto-generated Surveys to Requesters?</td>
<td>If not selected, the system hides the Survey Template tab on the Request Class record, and removes it as an option in the Service Management wizard.</td>
</tr>
<tr>
<td>Questions 8 through 13 are not displayed if either of the following statements is true:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The answer to Question 5 is Manual, or</td>
</tr>
<tr>
<td></td>
<td>The check box next to Question 6 is selected.</td>
</tr>
<tr>
<td>8. Do you have different Service Providers based on Customer Organizations (occupants)?</td>
<td>If not selected, the system hides the Customer Organization option in the Service Matrix Setup wizard, and sets the Customer Organization to the root Organization node.</td>
</tr>
<tr>
<td>9. Do you manage external Service Providers based on Contracts (Service Agreements or Blanket Purchase Orders)?</td>
<td>If not selected, the system hides the Manage By Contract option in the Service Matrix Setup wizard.</td>
</tr>
<tr>
<td>Question</td>
<td>System Response</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10. Do you manage internal Service Providers based on Service Agreements?</td>
<td>If not selected, the system hides the Manage by Contract option in the Service Matrix Setup wizard.</td>
</tr>
<tr>
<td>11. Do you manage services based on ‘included’ vs. ‘additional cost’ options?</td>
<td>If not selected, the system hides the Service Charge Type option in the Service Matrix Setup wizard. The system also sets the value to default to Included.</td>
</tr>
<tr>
<td>12. Do you manage Service Providers by Location, Geography, or Both?</td>
<td>If you choose Both, the system shows both Service Geography and Service Location options.</td>
</tr>
<tr>
<td></td>
<td>If you choose Geography, the system hides the Service Location option.</td>
</tr>
<tr>
<td></td>
<td>If you choose Location, the system hides the Service Geography option.</td>
</tr>
<tr>
<td>13. Do you want the system to auto-assign the Responsible Person based on their Role?</td>
<td>If not selected, the system hides the fields for auto-assign of Contact Role on the Service Matrix wizard.</td>
</tr>
</tbody>
</table>

**Service Management and Operations Administrative Items**

Regardless of the method initiating the service management process, the two keys for executing the wanted business logic are the request classification and its associated service plan. For this reason request classification and service plan are listed next in this chapter. These are followed by the Service Management Setup wizard, a tool for making bulk changes to other setup items.

- Request Class Classification
- Service Plan
- Service Management Setup wizard

Remaining topics are listed in alphabetic order.

- Calendar Templates and Calendar Details
- Knowledge Base and Solution Instruction Records
- Procedures
- Reading groups
  - Asset based
  - Location based
- Service Assignment Matrix records
- Survey Templates
In addition to the direct creation or upkeep of the setup items, you can use the Service Management wizard to assist maintenance managers in maintaining the system. The wizard allows for bulk changes to things such as the request class classification and service assignment matrix records.

Request Classification

Identification of a request classification determines the business rules that the service management process will follow.

The request classification can be identified in a number of ways.

- A requester logs on to TRIRIGA and uses Request Central to manually select a request classification
- A Contact Center agent selects a request classification on behalf of caller
- A maintenance supervisor selects a request classification in the process of setting up a PM schedule while administering preventive maintenance

Note - Management of the request classification records is typically done by an application administrator or service management process manager. Although users can select from a list of request classifications, viewing and editing of these records is typically restricted by security.

One way that request classifications can be accessed is by selecting the Tools menu item to get to the Tools landing page. From the Tools landing page, selecting a Classification link in the Application Administration section opens the classification hierarchy panel. In the resulting classification hierarchy panel, navigate to the appropriate request class record. In this case the Room Too Cold record is selected. You can then use the Open button at the top of the hierarchy panel to view or edit, depending upon your security group settings.

If the user security group allows for editing then modifications can be made that will dictate the type of business rules applied by the service management process. Generic details are listed at the top of the General tab and subsequent specifics are broke out across a multi-tab section based on category.
To Create a Request Class Record

The TRIRIGA system ships with an extensive collection of preconfigured request class records. Alteration of this structure (editing, additions, or deletions) can be done in the classification hierarchy. The following steps illustrate one method for creating a request classification.

To create a request class record

Step 1 Select the Tools menu item. From the Tools landing page, select the Classifications link under the Application Administration section.

Step 2 In the hierarchy panel, navigate to the request class records and then drill down until you have located the parent of the record about to be created.

Step 3 Once the parent record is selected. Click New at the top of the hierarchy panel.

Step 4 The system then prompts for the selection of record type. In this case the only option should be Request Class and should be selected.

Step 5 The fields at the top of the General tab in the General section provide basic information about the request class. The Name field is required. Enter the other fields if you want to. When completed, the fields in this section include:

- **ID**: optional field for setting a request class ID. If not manually set, the system will auto generate an ID when you select Create.
- **Status**: system generated field describes the records status
- **Image**: this field allows an image to be uploaded and associated with the request class type
- **Name**: required field for identifying the request class name
- **Hierarchy Path**: system generate field describes the complete request class path
To create a request class record

**Step 6** The Details tab contains additional fields:

- **Service Class**: this field contains the service class record that can be used for categorizing the use of this request class
- **Response Required**: this box allows for the defaulting of response required on requests generated from this request

**Note** – *Response Required* is rarely used since the use of surveys has replaced the need of the field and added additional flexibility in the information that will be returned.

- **Selectable**: this check box is used to enable editing of this request class from within the Service Management Setup wizard
- **Has Solution Record**: this check box should be set manually to indicate that a solution record is available for the request class
- **Request Note**: this field is used to convey a message to the contact center agent when this request class is selected within the contact center form
- **Estimated Service Cost**: this field is used to give an initial estimate based on a typical request of this request class type
- **per Unit**: this field sets the unit of measure that the estimated service cost is based upon
- **Display Color**: this field can be populated to set the color that this request class would be represented by within a visual query
- **Show Move Details**: this field determines if move information should be shown when displaying the request

**Step 7** On the **Priority** tab, select the Name of the priority you want. The Rating, Due Within Duration, Respond Within Duration, and Follow-Up Within Duration will automatically be populated based on the priority record selected.

**Step 8** On the **Service Plan** tab, select the service plan you want to execute the required business rules.

**Step 9** On the **Survey Template** tab, a survey can be associated with the request class. If selected then the survey will, by default, automatically be sent to the requestor after the service technician completes the work task associated to the request.

**Step 10** On the **Solution Record** tab the root solution is identified, if used. Solution records map out a series of questions for a contact center agent to ask a caller to either solve a problem on the phone or narrow down the troubleshooting required by the responding technician to be assigned the related work. For more information about solution records, see [Solutions Records](#).
To create a request class record

**Step 11** On the *Duplicate Search* tab, optional duplicate search logic can be activated. If set, duplicate requests will be identified based on the checked criteria on this tab. If a duplicate is located then the logic will either automatically associate the generated request with the task or project that the original request resulted in if the *Auto-Assign to Duplicate* option is set or place the duplicate request in the dispatch queue flagged as a possible duplicate if the *Route Duplicates to Dispatch* option is selected. If the *No Duplicate Search* option is selected then it will process the request without regard to any existing requests.

**Step 12** The final tab, *Classification Notes*, provides a customizable note field for further describing of the request class.

**Step 13** When finished with all field entries, select *Create* to save and generate the request class record.

**Service Plan**

The service plan associated to the request class is the second significant piece in determining how the business rules for processing will be enforced. A request class may not have more than one service plan record associated to it. However, it is common for a generic service plan to be associated to more than one request class record.

**To Create a Service Plan Record**

Even though generic service plans can be created, TRIRIGA allows for every request class to have its own service plan record. The following steps illustrate one method for creating a service plan record.

To create a service plan record

**Step 1** Select the Maintenance menu item. From the Maintenance landing page, expand the *Set Up* link in the Related Links - Maintenance section. From within Set Up select *Service Plan*.

**Step 2** Click *Add* to open a new service plan.

**Step 3** On the *General* tab in the General section, enter the *Name* (required) and *Description* (optional) fields. The *ID* field can be populated or can be left to the system for population. The *Status* field will be system populated.

*Note* - TRIRIGA naming conventions typically describe the use of the service plan, however any naming convention may be used.
To create a service plan record

**Step 4**  The Details section contains default information about the service plan. The *Request Type* (required) describes how the service plan will be used. In the example pictured the user has selected “Corrective Maintenance”. The *Currency* field contains the default currency that will be propagated throughout the record. The selection here will determine what assignment rules are available in the Assignment Rules section. For example if “Condition Assessment” is selected then the *Inspection Task Grouping Rule* becomes visible. For more information about these settings, see the *IBM TRIRIGA 10 Facilities Assessment User Guide*.

**Step 5**  The Service Level Defaults section provides the system with defaults for the generated work if the Assignment Rules section dictates pointing back to a service plan for values. Specify the appropriate fields. *Work Type* is used to categorize the work that will be associated with the service plan. *Service Class* is a classification field that can be used to further classify the area that the work will be done on. It can be used for filtering or even in the application of business logic, for example in the determination of a duplicate request. *Service Provider* sets the organization that will be responsible of accomplishing the work if the Assignment Rules specify to “Use Service Plan”. The following fields, *Respond Within*, *Due Within*, *Follow-Up Within*, *Priority Classification* and *Priority Rating* establish priority and response times if the Assignment Rules specify “Use Service Plan”.

**Step 6**  The Assignment Rules section is where most of the business logic is determined. This example will show a common example of assignment rule setup. For a complete set of options, see *Assignment Rule Options*.

The first selection has the greatest impact on future selections. It is the *Create Project or Tasks*. This field has three choices, “Create Project”, “Create Task”, and “Do Nothing”. This example will use the “Create Task” selection. After selecting this option the project-related fields will disappear. Additionally it will expose the Tasks tab which is where the task template will be identified.

**Step 7**  Next complete the *Task Assignment Rule* field. The choice here determines how the created tasks will have their responsible organization identified. For this example “Use Service Plan” is selected. For a complete set of options and the business logic they represent, see *Assignment Rule Options*.

**Step 8**  The *Task Assignment Dates Rule* field establishes how to determine the *Respond Within*, *Due Within*, and *Follow-Up Within* fields, as well as the *Priority Classification and Priority Rating* values for the created tasks. Because “Use Service Plan” was selected for the *Task Assignment Rule* field in Step 7, it becomes the only choice for this field. However, if one of the other options is selected for *Task Assignment Rule*, then additional options may be available here. The complete set of options is listed in the *Assignment Rule Options* section.

**Step 9**  The final selection option is the *Task Grouping Rule* field which dictates if each Asset or Location will have its own task created or if they will be group under one created task. Here the user has elected to leave the default “Create Task For Each Asset/Location” value. The remaining options are reviewed in the *Assignment Rules Options* section.
To create a service plan record

**Step 10** The Labor and Materials tab has two sections. The first section, Units, contains only one field. This field is the same currency field that is displayed on the General tab and again identifies the default unit for currency throughout the record. Changing the value in either location will update both. The second section is the Estimates section, allows the user to designate default values for a “normal” use of this service plan. This enables initial estimates on calls that used a request class with this associated service plan.

**Step 11** The Tasks tab provides one or more task templates to be used in the creation of tasks. This tab is only visible if the Create Task field is set to the “Create Task” value. Click Find to choose from available task templates.

**Step 12** The Notes & Documents tab associates comments records, and other related documents to the service plan. Comments can be added using the Add action. Documents can be associated in one of two ways. If the document is already in the IBM TRIRIGA Document Manager then you can use the Find action. If not, then use the Upload action to associate the document with the service plan and upload it to the IBM TRIRIGA Document Manager.

**Step 13** Click Create if it is a new record, or Save & Close if the record exists.

### Assignment Rules Options

The assignment rules section of the service plan identifies most of the record business logic. The following items are the possible fields, their possible values, and an explanation of the associated business logic.

**Note** - The available fields and available options in the fields of the Assignment Rules section are dependent upon which values have already been selected. For example the **Project Type** field is only visible if the Create Project or Tasks field is set to ‘Create Project’.

**Create Project or Tasks** field can have the following values:

- Create Project - This setting states that when processed the service plan will result in the creation of a project. Selection of this option also results in the displaying of three project-related fields:
  - **Project Type** - This field determines what project will be created. The drop down list choices are ‘Capital Project’, ‘Facility Project’, and ‘Transaction Plan’
  - **Project Template** - Allows the user to set up the template to be used for the project creation.
  - **Project Assignment Rule** - This option designates the responsible organization for completing the project. All assignment rule settings are listed at the end of this section.

- Create Task - This setting states that when processed the service plan will result in the creation of a task or tasks. Selection of this option also results in the display of the Task tab for selection of one or more task templates as well as three task-related fields:
o **Task Assignment Rule** - This option determines the responsible organization for completing the tasks. All assignment rule settings are listed at the end of this section.

o **Task Assignment Dates Rule** - This option determines where the Priority Classification and Priority Rating, as well as the Respond Within, Due Within, and Follow-Up Within fields get their values from. All assignment rule settings are listed at the end of this section.

o **Task Grouping** - This determines if the service plan will make one task for each asset or location or if it will make one task for all of the assets or locations total. The available settings are ‘Create Task For Each Asset/Location’, ‘Create Single Task For All Asset/Location’, and ‘Not Applicable’.

- **Do Nothing** - This setting is used when the outcome of the service plan processing is not a project or a task. For example, if a maintenance manager wanted to evaluate the volume or need for a particular service this could be used to capture request volume to determine staffing requirements around a specific call type.

### Assignment Rules

The following options are available for the *Project Assignment Rule*, *Task Assignment Rule*, and *Task Assignment Dates Rule* fields:

- **Auto-Assign to Provider** - This rule causes a system search for any valid service assignment matrix (SAM) record to identify the responsible organization. The SAM record may be from a service level agreement, blanket purchase order, or even a real estate lease contract.

- **Do not Assign** - This option does not assign the project or task to an organization instead leaving it up to manual methods such as the dispatch manager.

- **Not Applicable** - This option is only seen on the *Project Assignment Rule* and may be used in situations where there is not a defined responsible party.

- **Use PM Schedule Organization** - This option is only seen on the *Task Assignment Rule* and uses the PM schedule associated job plan organization for assignment.

- **Use Service Plan** - This option, regardless of which field it is describing states that the values in question (whether it is the service provider or the times info) will be determined by looking at the Service Level Defaults section of the service plan. This is primarily used when there is only one provider handling the related request classification of the service plan.

- **Use Assignment from Task Template** - This option is only seen on the *Task Assignment Rule* and directs the system to pull the appropriate organizations from the templates on the Task tab which are used to generate the tasks.

- **Use Service Agreement** - This option can be seen as an option for the *Task Assignment Dates Rule*, but only if the *Task Assignment Rule* was set to ‘Auto-Assign to Provider’. In this scenario the Priority Classification, Priority Rating, Respond Within, Due Within, and Follow-up Within values are pulled directly from the matching service matrix record found during the assignment search.

- **Use Task Template** - This setting is only seen as an option for the *Task Assignment Dates Rule*, but only I the *Task Assignment Rule* was set to ‘Use Assignment from Task Template’. In this scenario the Priority Classification, Priority Rating, Respond Within, Due Within, and Follow-up Within values are pulled directly from the same task template on the Task tab where the organization assignment was found.
Service Management Wizard

Service Management setup and maintenance are divided into two distinct activities:

- Request Class and Service Plan Setup and Maintenance
- Contract and Service Matrix Setup and Maintenance

These two distinct activities are illustrated in the following diagram:

---

Service Management wizard

Service Management Setup and Maintenance Activities

The approach of the Service Management Setup wizard, also known as the Service Assignment wizard is first to ask key basic setup questions, then to provide you with the appropriate forms within the wizard based on your answers. The forms are tabs in the wizard: Request Class Setup, Service Plan Setup, Create Service Matrix, and Modify Service Matrix.

Access to the wizard is controlled by security. The wizard is a process object that is used for creating and updating the various service management setup records. When you finish a session with the wizard the system deletes the process object.

To use the Service Maintenance Setup wizard

**Step 1** Select the Tools menu item. Next select the Application Setup second-level menu item.
To use the Service Maintenance Setup wizard

Step 2  Click the Service Assignment wizard link in the Maintenance section.

Note - The Service Management Questionnaire has a link to the Service Management Setup wizard in the upper right corner of the Service Management Settings tab discussed in the beginning of this chapter. For information about how to access via the questionnaire click this Service Management Questionnaire link.

The Service Assignment wizard provides tabs for the managing request class records, service plan records, and service matrix records (also known as service assignment matrix records).

Step 3  The Request Class Setup tab allows for bulk updates to request class records. In the Select Request Class Section to Update, choose the appropriate section that requires updating. The system updates the form to display the relevant details to the right of the Select Request Class Section to Update.

After making the changes, select the request class records in the Select Request Class Records to Update section at the bottom of the form.

Click the Apply to Request Class link to push the changes to all selected request class records.

Note - In the Request Class Setup tab, you can also create a request class records by clicking Add in the Select Request Class Records to Update section.

Step 4  The Service Plan Setup tab permits the user to push task or project templates to multiple service plans.

Select the task or project template to apply to the service plans from the appropriate query section.

Select all of the service plan records to be updated.

Click the Apply to Service Plan link to associate the selected template to the selected service plan records.

Note - Similar to the Request Class Setup tab, the Service Plan Setup tab also provides an alternate mechanism for creating records. To create a service plan, select Add in the Service Plan section.
3. Additional Service Management Setup

The following items are also part of the setup process. These items are not necessary for every scenario and are listed here alphabetically:

- Priority classifications
- Procedures
- Reading groups and logs
- Service matrix records
- Knowledge Base and Solutions records
- Work Time setup

Priority Classifications

Priority Classifications set the importance of how quickly tasks are to be accomplished. TRIRIGA ships with four priority classification records (Low, Medium, High, and Emergency).

If you need to add classification records, see the IBM TRIRIGA 10 Application Administration User Guide.

Procedures

Procedures contain steps and information that is associated to records that explain how certain types of maintenance is accomplished. These records dictate how a maintenance technician will perform the work and are therefore associated to assets, locations, and even PM schedules.

To Create a Procedure Record

Procedures can be vague or detailed. Procedure steps will sometimes reference external sources such as equipment service manuals or may be entirely self contained. Organizations decide which approach makes the most sense for them and even have the flexibility of deciding on an equipment-by-equipment basis. The following illustrates one method for creating a procedure record.

To create a procedure record

Step 1  Select the Maintenance menu item. From the Maintenance landing page, expand the Set Up link in the Related Links - Maintenance section. From within Procedures, select Work.

Note - The different procedure types can be used together to describe a complete maintenance process. For example, a Work procedure may require the completion of a Lock-Out/Tag-Out procedure to safely secure the equipment before the work being accomplished.
To create a procedure record

**Step 2**  Click Add to open a new procedure.

**Step 3**  Give the procedure a name in the Name field (required) and describe the procedure in the Description field (optional). The ID and Status fields are populated and maintained by the system. The Procedure Active From and the Procedure Active To fields bracket the dates that the procedure will be considered valid.

The Is Environmental Procedure check box identifies the procedure as part of the organizations environmental program.

**Note** - The system validates the completion of the Procedure Active To field with a date after the Procedure Active From field value only if the later is populated. If the Procedure Active From field is cleared, then this validation is bypassed.

**Tip** - Take advantage of the Procedure Active From and Procedure Active To fields to ensure that technicians are using current procedures. Having a specified expiration ensures that period validation of procedure accuracy and continued validity.

**Step 4**  The Details section is a read only section maintained by the system and updated whenever the record is saved. Click Create Draft or Save at any time to update this section.

**Step 5**  The Procedure Steps tab contains the steps required to complete the work. Click Add to create a procedure step record.

**Step 6**  In the General section, complete the Name field (required). The ID and Status fields are system populated and maintained. The Currency field will default to the default system currency, in this example ‘US Dollars’.

**Step 7**  In the Details section, set the Step # field.

**Tip** - The system will sort the step by the alphanumeric field Step #, therefore using a numbering sequence such as 01, 02 or 001, 002 will prevent the order from being distorted. If the number is left as single digits then the step 10 will be placed after step 1 and before step 2, since the system is using an alphanumeric sort and not a pure numeric one. This process also allows for step numbers such as 12a and 12b with valid sorting.

Complete the Procedure Text with the expected technician procedures. The Labor Class and Qualification/Skill sets requirements for the technician that is completing the work.

Complete the Estimated Duration field with the amount of time expected to complete the work.
To create a procedure record

Step 8 In the Cost Estimate section, complete the estimated billing amount in the Hours field and the billing rate in the Rate/Hour field. The Total will be calculated/updated by the system after clicking Create or Save.

Note - The Hours value is the amount of billing against the step and should not be confused with the Estimated Duration field from the previous section. Minimum billing periods may cause these two fields to differ. For example, a car repair shop may charge a one hour minimum labor charge even though the actual labor takes only 38 minutes.

Step 9 The Readings section dictates if the step will require the technician to take a reading. If a reading is required, then check the Reading Required check box and specify a reading class in the Reading Class field. Specifying this value will default the values for the Reading Units field.

Step 10 Click Create to commit the data and create the step record.

Step 11 Create additional steps as needed. Editing of existing steps can be done to many of the fields directly in the Procedure Steps section, or the steps can be opened by clicking the open linked record icon to the left of each step.

Step 12 From the Materials tab, click Add to open a new specification bill of materials record. On this record, click Find to select a specification. This will also populate other areas, such as the Rate (price) field and the Description field from the specification information. Then update the Quantity field with the number needed and click Create.

Step 13 The Related Documents tab allows the user associate additional documents to the work procedure. Select Find if the document already resides in the TRIRIGA Document Manager. Select Upload if the document exists only on the user local computer environment.

Step 14 Select the Qualifications tab and select Find to identify technician qualification requirements for completion of the maintenance (for example, Asbestos specialist).

Step 15 On the Equipment tab, click Find to add required equipment to the procedure. Equipment represents things needed to complete the work but that are not expendable (for example, hammers, oscilloscopes, or cranes).

Step 16 The final section at the bottom of the record contains a multi-tab section with information regarding the use of the procedure throughout the system. For the ‘Specifications’, ‘Assets’, ‘Locations’, ‘PM Schedules’, ‘Building Systems’, and ‘Tasks’ tabs it shows the records of each tab type that are associated to the procedure. For the ‘Building System Class’ and ‘Building Systems’ tabs, the user actively creates associations for these types of records by clicking Find on the appropriate tab and selecting from the available records.

Step 17 The Notifications tab contains standard Notifications information pertaining to approval routing and record status change notifications.
To create a procedure record

Step 18 The Notes & Documents tab associates comment records and related documents to the procedure record. This is TRIRIGA standard Notes & Documents tab layout.

Note - The Related Documents section on the Notes & Documents tab is a replica of the Related Documents section located on the General tab. The data from ones of these will always match the other.

Reading Groups and Logs

Reading groups at the asset and location level contain reading logs and are associated to the respective assets and locations. The reading log acts as a storage location/history for the readings against the asset or location. Technicians enter the readings on work tasks or directly on the asset/location. In some situations, integration to a building monitoring system can be configured to update the reading logs directly.

The process for setting up a reading group is the same for a specification, asset, or location. Assets created after a reading group has been established at the specification level automatically inherit the reading group upon creation.

The following steps show how to create a reading group at the asset level. The same basic process creates reading groups for specifications and locations.

To create a reading group

Step 1 Select the Portfolio menu item. Then select the Assets sub menu item.

Step 2 In this example click Building Equipment in the Assets section.

Attention - Selecting Building Equipment from the Specification section sets up the reading group in the specification and all assets created after. It does NOT retroactively apply assets of that specification type that exist.

Step 3 From the resulting query, select the asset that the reading group will be added to. This opens the asset record.

Step 4 Select Revise if the record is in an ‘Active’ state, such as the one in this example.

Step 5 Navigate to the Maintenance tab. Select the Readings tab on the multi-tab section displayed.

The Add and Remove actions display in the Readings section now that the record is in the Revision In Progress state.
To create a reading group

**Step 6**  Click **Add** to create a reading group for the asset.

The resulting form serves as a definition of the types of readings, link to the monitoring job plan record, and finally a container for reading logs of this type.

**Step 7**  In the General section, type in a name and description in the corresponding **Name** and **Description** fields if wanted. The system populates and maintains the **ID** and **Status** fields automatically.

**Step 8**  Select a PM reading class for the **Reading Class** field. The system defaults the **Reading Units** values based on the PM reading class selected. For example, the user here selected ‘Temperature’ so the system defaulted the **Reading Units** to ‘Temperature’, ‘degrees-fahrenheit’. Change these as necessary to alter the reading units or to measure deltas (changes) in value rather than absolute readings.

When applicable, edit the **Auto Reset Value** to the appropriate setting. One example where this might be useful is on a meter that counts down hours of equipment use before next maintenance. Once the meter reads zero, maintenance would be scheduled, conducted and the meter reset to resume its countdown.

**Step 9**  The Job Plan section links the reading group to the monitoring job plan. This process ensures that reading-based maintenance within a job plan knows which readings to monitor. For more information about setting up job plans or reading-based maintenance, click these links: **Job Plans** or **reading-based maintenance**.

Find the corresponding job plan for the asset.

**Step 10**  The PM Readings Log section contains all of the readings that have been posted against the asset. These readings post directly to the asset, through work tasks associated to the asset, or even automatically via integration to a building monitoring system.

When setting up this section it will not contain any readings.

**Step 11**  The bottom multi-tab section displays additional associated locations and assets to the reading group.

Click **Create**.

**Step 12**  Now back at the asset level click **Activate**.
Service Matrix Records

Using only the service plan works great if only one group is supplying a service organization wide. This is frequently the case for small organizations that are centrally located. This works in some cases for large organizations that centralize certain aspects of their service (for example, a global company might centralize all travel through a single travel agency to take advantage of their volume). However, in some instances this is not sufficient. When more than one group supplies the same service the system uses service assignment matrix (SAM) records, sometimes referred to as service matrix records, to evaluate and assign the work to appropriate service provider.

Various contract types generate and contain the service assignment matrix records that are examined when looking for a match. Among the records that generate service assignment matrix records include but are not limited to: blanket purchase orders, real estate lease contracts, service agreements, and warranty records.

To demonstrate the creation of service matrix records the following example goes through the process of creating a service agreement.

**Note** – Blanket purchase orders (BPO) and service agreements are identical in function. The difference is in their use. Typically, organizations track external vendors through blanket purchase orders and track internal service providers, such as workshops through the service use agreements. This is not a systematic requirement but merely a common convention.

---

**To create a Service Agreement**

**Step 1** After logging in, select Home>Contracts>Agreements. This landing page contains various information concerning both service agreements and space use agreements.

**Step 2** Click the **Service Agreement** link located in The Related Links - Contract Agreements section.

This displays the system service agreements.

**Step 3** Click **Add** to launch a new service agreement.

**Step 4** For purposes of service assignment matrix record generation and maintenance, this example focuses on two main tabs, the General tab and the Terms & Conditions tab.

On the General tab, in the General section type in a name in the **Name** field (required) and a brief description in the **Description** field (optional). The system will generate an ID for the **ID** field and likewise maintain the **Status** field. The **Revision** field operates as it does in all contract records, starting at zero and automatically incrementing when the record is activated and later revised.

**Note** - The automatic incrementing of the revision number indicates that the system has created a copy of the original, which can be accessed via the History tab. This allows a user to view changes made to the contract over time.
To create a Service Agreement

Step 5  In the Service Provider section, click Find and choose the organization that will be performing the work that the service agreement covers.

Step 6  The Details section starts to define the business rules. Select a contract type for the **Contract Type** field; this field does not perform business logic, but merely provides a reporting parameter. The **Provider Type** and **Provider Rating** fields work together in the assignment process. If the system is using the auto-assign process and finds more than one service assignment matrix record that matches the search criteria, it uses these fields to “break the tie”. For example, at a specific location both the HVAC workgroup and the Electrical workgroup can respond to a temperature request. If the system finds that both workgroups have agreements covering this type of request for this location it looks to see if one of the respective agreements is set with the **Provider Type** set to ‘Primary’. The **Provider Type** becomes the first criteria for the tie breaker. If none of the corresponding contracts are set with ‘Primary’ the system looks for ‘Backup’. The ‘Emergency’ value is not used for auto-assignment. The **Provider Rating** field serves as a second level of differentiation if more than one service matrix record qualifies after the **Provider Type** criteria has been evaluated.

**Note** - In summary, when using auto-assign the system searches all service matrix records looking for those that match the request in:

1. Request Class (or Service Class for procurement)
2. Organization for the request
3. Location (or Geography if Location match not found)
4. Highest Provider Type if more than one match still exists
5. Highest Provider Rating if more than one match still exists

Items 1-3 all are always used, items 4 and 5 are only used if multiple records meet the 1-3 criteria.

Select ‘Primary’ for the **Provider Type** field and ‘Preferred’ for the **Provider Rating** field.

Step 7  Check the boxes for both **Responsible Organization** and **Resource Organization**. The difference is that the responsible organization tracks and verifies completion of work, while the resource organization actually performs the work. In many cases, especially for internal service agreements, the responsible organization, and the resource organization will be one and the same.

Step 8  The remaining three boxes (**Services**, **Materials**, and **Manages Purchase Requisition Orders**) dictate the type of things to be provided by the terms of the service agreement. Click the box for **Services**.
To create a Service Agreement

Step 9  The Dates section captures critical dates in terms of the contract. Complete the Start Date and Expiration Date fields with the dates that the service agreement is valid. In the Expiration Reminder field, designate how longer before the expiration date you should receive a reminder to review or extend the service agreement. The system will populate and maintain the remaining fields in the section starting with the Create Draft action.

Step 10  The Cost Summary section provides a snapshot of the original and budgeted amounts for the contract. It also contains a Notify Limit field that works much like the Expiration Reminder but using a dollars remaining threshold instead of a time remaining threshold. This enables contract administrators to act proactively if the contract is burning through funds faster than originally anticipated. If the contract was for a fixed dollar amount then the budgeted amount would be put in the Current Approved Amount field. In this instance, check the box next to Do Not Specify Approved Amount.

Note  - Service agreements, which by design are normally internal agreements, will frequently use the Do Not Specify Approved Amount because the internal services are not treated as incremental maintenance costs.

This is contrasted with Blanket Purchase Orders, typically used with external vendors. In those instances, contract administrators tend to monitor the expenses more critically.

Step 11  Click Create Draft to create the record.

Step 12  Navigate to the Terms & Conditions tab. The Terms & Conditions tab displays the service assignment matrix records once they are generated, and it is here that the user defines the service assignment matrix criteria.

The Terms & Conditions section contains an open text field for describing the language for payment terms associated to the contract.

The Payment Terms section contains discounts applied for payment within certain time periods.

The service agreement generates the corresponding service assignment matrix records once it is issued. When creating these matrix records the system starts with the values identified in the Default Matrix SLA Values section. The user has the option of later modifying these records to reach the wanted service agreement values.

Check the box next to Use Request Class Defaults. This selection grabs the Priority, Respond Within, Due Within, and Follow Up Within values of the request class and plugs it in for the associated service matrix assignment records. This simple step guarantees that the service assignment matrix records start with reasonable values since each set of values comes from the request class that it covers.

Selections made for the check boxes on the General tab for the Responsible Organization, Resource Organization, Services, Materials, and Manages Purchase
To create a Service Agreement

Requisition Orders correspond directly to the same items on the Terms & Conditions tab.

The Default Assignee allows the user setting up the service agreement to establish a specific person to be designated as the responsible person for the tasks that the service assignment process ultimately generates.

**Note** - The responsible person on a task is the person tracking the work, not necessarily the individual doing the work. Resources associated to the task designate the technician actually completing the work.

**Note** - Use the Role Resolution field to identify the responsible person. Using role resolution ensures that changes to the role will automatically keep the service agreement current. The system allows resolution for roles associated to the contract (service agreement in this example) or the request being processed. The system can also look at the geography, location, organization, or project associated to the contract or request for contact role resolution. Final options for the role resolution setup evaluate the associated location or organization of the request submitter.

The three fields, Default Assign To Role, Use Roles From, and Role Resolution work together to assign the task responsible person based on contact roles. The Default Assign To Role designates the contact role that the system is looking for. The Role Resolution field determines if the contact role will be associated to the contract or to the request being process through the contract, thus establishing the ‘linked record’. And finally, the Use Role From field describes the relationship to the ‘linked record’.

**Step 13** The Default Service Charge Type determines what all of the service assignment matrix records have as their initial charge type, either ‘Billable’ or ‘Included’. As with the other default values, the user can edit individual service assignment matrix records after creation. ‘Included’ means that the service is covered under the agreement and is paid for as part of the contract terms. ‘Billable’ means that although the service provider will do the work as part of the contract agreement it will incur billing on a pay per use basis.

**Step 14** The next section, a multi-tab section, contains the search criteria that the service assignment matrix records will contain. For valid service assignment matrix records to be created, a minimum of three criteria must be supplied in the contract.

The contract must contain at least one associated Request Class or Service Class. The Request Class is used for the service request process. Similarly the Service Class record is used in the procurement process.

For this example, select ‘Room Too Cold’ and ‘Room Too Warm’ under the Request Class tab.

The contract must also contain at least one associated Location or Geography record.
To create a Service Agreement

Note - When the auto assignment process begins evaluating locations and geographies, it will look first at the specific location identified in the request. If found, a matching service assignment matrix record with the other criteria also correct will be used. If a match for the specified location is not found, the search continues at the next level higher level in the location hierarchy (for example, if a space is specified and no match is found the system searches again, this time at the floor level, and then the building level, and so on.)

The system requires only one of the two, locations or geographies, because the system will look for locations first and then geographies only if a match is still not found.

Here the user selected Las Vegas - Building One and Two. Select the appropriate locations or geographies for the service agreement.

The final required criterion for generating service assignment matrix records is one or more valid Customer Organizations. These organizations, like the other criteria are pulled from the request when searching for a suitable match.

Select the organizations, whose requests would be addressed under the terms of the service agreement.

Step 15 Select Issue. This step commits the record, makes the transition to a read-only state, and routes it for any required approvals. The system changes the record to an issued state, and generates the necessary service assignment matrix records once any required approvals have been processed.

Once the record is issued select it from the list of service agreements. Navigate back to the Terms & Conditions tab where we were last working. Click Service Matrix from the bottom multi-tab section to view the generated service assignment matrix records.

The service agreement in the exercise generated eight service assignment matrix records. That represents each unique combination of criteria (in this example 2 request classes times two locations times two organizations equals eight service assignment matrix records).

Tip - When creating contracts for service assignment, users should select the highest level in the hierarchy that accurately describes the work covered. (for example - select the building level for locations if every floor uses the agreement). Why? Two reasons:

1. It will require the fewest number of service assignment matrix records to be generated, speeding up the generation and search processes.

2. It supports management through exception. This means that if the electrical group covers all electrical calls for a building except the IT server room which is covered by IT, then two service agreements would both technically cover the server room. Since the system looks at the lowest level first it would find the IT group service matrix record if the call was specifically for the server room, and process it without looking further up the hierarchy.
Knowledge Base and Solutions Records

The Knowledge Base consists of a series of branching solution records. These solution records come in three forms, questions, answers, and solutions. When a contact center agent receives a phone call, and identifies the appropriate request class corresponding to the problem of the caller, a link to the knowledge base for that request class is displayed if it is available.

The following steps illustrate the steps for creating a solution tree for use with the contact center knowledge base.

<table>
<thead>
<tr>
<th>To create Solution records for the Knowledge Base</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
</tr>
</tbody>
</table>

**Note** - The solution instruction records serve as the question tree that the contact center agent follows when helping a caller with the knowledge base. This should not be confused with the solution records generated during the actual knowledge base use. These solution records act as a historical record of the solution instructions that were used, thus capturing the questions, answers, and ultimately solutions talked through during the call.

| **Step 4** | The General section of the **General** tab contains the **Name** field. Specify an appropriate name on the **Name** field. The system populates the **ID** field automatically upon creation if left blank. The system also manages the **Status** field. |

**Tip** - Users may find it useful to name the top level of the solution instruction tree with the same name as the request class that it is going to support. In the example, the solution instructions will be associated to the ‘Room Too Cold’ request class and therefore the top level, or root record, is also named ‘Room Too Cold’. This record houses the first question in the question tree. The request class points directly to this top-level record.

| **Step 5** | The Details section contains summary information that describes when the solution instruction will be called on. Select the request class that the knowledge base will be called on for the **Request Classification** field. Select the best category describing the type of service for the **Service Class** field. Next identify the type of solution instruction in the **Instruction Class** field. Choices for this field include ‘Question’, ‘Answer’, and ‘Solution’. The **Problem Type** field determines if the problem type is a location, asset, or other type problem. Choose the appropriate problem type. |

| **Step 6** | The Instruction section contains the actual information that displays when this solution instruction is accessed via the knowledge base. Complete the question, answer, or solution as appropriate for the solution instruction being created. |
To create Solution records for the Knowledge Base

Step 7 The Instruction Options lists the choices that the contact center agent has available for the next level of the question tree. Click Find to locate the appropriate choice or choices for the next level.

Tip - If the next level of solution instruction does not exist, click Add on the Find pop up query to add the required record right from there.

Step 8 The Related topics section captures other solution instructions that are somehow related to the current one. This allows the contact center agent to “jump” to a related area when the questions uncover that the original assumptions about the problem may not have been valid. Click Find to show available related records.

Step 9 The Related Documents section stores documents that may be useful to the contact center agent or the caller when the knowledge base is accessed. The contact center agent sends the documents via email directly to the callers default email address when using the knowledge base. Select Upload to upload the document from your local computer or network. The document is added to the section and maintained in the Document Manager to manage necessary updates.

Tip - To access to any document already in the Document Manager, select Find instead of the Upload.

Step 10 Click Create to commit the record.

Step 11 After completing the solution instruction build out, attach the top level of the solution instruction tree to the appropriate request class. The solution instruction record attaches on the General tab in the Solution Record tab. For more information about accessing the request classification record, see the section on request class records at this request class link.

Work Time Setup

To enable Work Time and Cost estimates, the following application areas must be set up or configured.

- **Service Plans**
- **Service Agreements & Blanket Purchase Orders**
  - Request Class records
  - Service Matrix records
- **Service Management Setup Wizard**
- **PM Schedule**

Service Plans

Service Plans are used to centralize the application business logic and rules for managing Service Requests and Work Tasks. For example, the Request “engine” takes an association between a Request
(via a Request Class) and a Service Plan to instruct the system on how to react when a Request is submitted.

The system uses the Service Plan configuration to drive the following actions:

- Task creation (based on the Task Template on the Service Plan),
- Automatic assignment of Service Provider (for example, Responsible Organization and Person),
- Service Level Agreement (SLA) details (for example, Respond Within, Due Within and Follow-up Within).

Assignment Rules

The primary Service Plan elements involved in the assignment of Tasks are:

- **Task Assignment Rule** - Used to establish the method for assigning the Service Provider (for example, Responsible Organization and Person).
- **Task Assignment Dates Rule** - Used to establish the method for assigning the SLA details (for example, Respond Within, Due Within and Follow-up Within).
- **Task Assignment Estimates Rule** - Used to drive how and from where the Work Time and Planned Costs (for the created Tasks) originate.

Dates Rules

The “Task Assignment Dates Rule” option is dependent upon the “Task Assignment Rule”. In other words, if you change the “Task Assignment Rule”, you must reselect the “Task Assignment Dates Rule”. The following discussion lists the specific dependencies.

Estimates Rules

For the Service Plan, the **Task Assignment Estimates Rule** field drives how and from where the Work Time and Planned Costs (for the created Tasks) originate. This field behaves like the **Task Assignment Dates Rule** in that its options are dependent upon the “Task Assignment Rule” selection. The following dependency values are supported.

<table>
<thead>
<tr>
<th>Task Assignment Rule</th>
<th>Dates Rule Options</th>
<th>Estimates Rule Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto-assign to Service Provider</strong> - The system triggers</td>
<td>Use Service Agreement</td>
<td>Use Service Agreement</td>
</tr>
<tr>
<td>a complex workflow process.</td>
<td>Use Service Plan</td>
<td>Use Service Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use Task Template</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use PM Schedule</td>
</tr>
<tr>
<td><strong>Use Service Plan</strong> - The system uses data on the Service</td>
<td>Use Service Plan</td>
<td>Use Service Plan</td>
</tr>
<tr>
<td>Plan (that is associated to the Task).</td>
<td></td>
<td>Use Task Template</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use PM Schedule</td>
</tr>
<tr>
<td><strong>Use PM Schedule Organization</strong> - The system uses data</td>
<td>Use Service Plan</td>
<td>Use Service Plan</td>
</tr>
<tr>
<td>on the Job Plan associated to the PM Schedule (that is</td>
<td></td>
<td>Use Task Template</td>
</tr>
<tr>
<td>associated to the Task).</td>
<td></td>
<td>Use PM Schedule</td>
</tr>
</tbody>
</table>

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Use Assignment from Task Template - The system uses data on the Task Template associated to the Service Plan (that is associated to the Task).

- Use Service Plan
- Use Task Template
- Use Service Plan
- Use Task Template
- Use PM Schedule

Do not Assign - The Service Provider assignment is ignored.

- N/A
- N/A

With these options, you are given considerable flexibility in automating your Service Management process. For example, you can use the Service Level Agreement to assign the Service Provider (for example, Organization/Person), but use the Service Plan to assign the SLA details.

**Dates/Estimates Rule Options**

<table>
<thead>
<tr>
<th>Dates/Estimates Rule Options</th>
<th>Description</th>
</tr>
</thead>
</table>
| Use Service Agreement        | The system uses the data on the final SAM record that was found in the SAM (Service Assignment Matrix) search process.  
  |  
  | See the [Service Agreements & Blanket Purchase Orders](#) section. |
| Use Service Plan             | The system uses data on the Service Plan that is associated to the created Tasks. |
| Use Task Template            | The system uses data on the Task Template associated to the Service Plan that is associated to the created Tasks. |
| Use PM Schedule              | The system uses data on the PM Schedule that is associated to the Task.  
  |  
  | See the [PM Schedule](#) section. |
| N/A                          | The SLA assignment is ignored.  
  | The Estimates assignment is ignored. |

**Service Agreements & Blanket Purchase Orders**

To populate Work Time and Cost estimates, the Service Agreements and Blanket Purchase Orders (different forms for the same BO) must be set up or configured.

The estimates are populated only if the **Use Request Class Defaults** box is checked (on the Service Agreement or Blanket Purchase Order).
Note - Existing Service Matrix records are not updated during the Issue process. Therefore, if any global data has been changed on the Service Agreement (like the Service Provider or the Assignee parameters), the SAM records must be regenerated.

Use the following steps to populate the Work Time and Cost estimates.

### To Populate the Work Time and Cost Estimates

**Step 1** Sign in with the proper Application Administrator role.

**Step 2** From the menu bar, click Tools > Administration > Classifications to open the Classifications hierarchy.

**Step 3** The system displays a navigation tree structure of all of the existing classification records in the Hierarchy panel, as well as a list of records for the selected node in the main panel.

- In the Hierarchy panel, select the Request Class node.
- If necessary, expand the tree to navigate to an existing Request Class.

**Step 4** In the main panel, select an existing Request Class.

**Step 5** In the Request Class record, review the data in the Estimated Service Cost and Estimated Service Time fields on the Request Class record.

Note - The Estimated Service Time and Estimated Service Cost fields on the Request Class record are used to populate the Work Time and Cost estimates on the Service Agreement.

For more details on the Request Class record, see the IBM TRIRIGA 10 Request Central User Guide.

**Step 6** Sign in with the proper Project Manager or Contract/Purchasing Manager role.

**Step 7** From the menu bar, click Contracts > Agreements to open the Agreements page. In the Related Links - Contract Agreements portal section, click Service Agreements to open the Service Agreements results page.

Note - To open the Blanket Purchase Orders results page, go to the menu bar and click Contracts > Contracts > Blanket Purchase Orders.

**Step 8** Review the page that appears. The page displays a list of Service Agreement records. Click from the list to open an existing Service Agreement record.

**Step 9** Review the form that appears. Click the Terms & Conditions tab.
To Populate the Work Time and Cost Estimates

**Step 10** Scroll down to the Default Matrix SLA Values section. Verify that the Use Request Class Defaults box is checked.

*Note* - If this option is checked, data populates from the Estimated Service Time and Estimated Service Cost fields on the Request Class record.

**Step 11** Specify any other details regarding the Service Agreement record. Then click Issue.

**Step 12** Once the SAM records are created (on Issue of the Service Agreement), review the Service Matrix Records section.

*Note* - The Estimated Cost and Estimated Time fields are displayed in the Service Matrix Records section.

*Note* - Existing Service Matrix records are not updated during the Issue process. Therefore, if any global data has been changed on the Service Agreement (like the Service Provider or the Assignee parameters), the SAM records must be regenerated.

**Step 13** If necessary, use the Service Matrix Records editable query section to modify the Service Matrix records. If you need to regenerate Service Matrix records, use the following section actions:

- The Remove action allows you to filter, select, and remove specific Service Matrix records in the query.
- The Remove All action removes all Service Matrix records from the Service Agreement.

**Service Management Setup Wizard**

To populate Work Time and Cost estimates via the Service Management Setup wizard, the following options must be set up or configured.

- Estimated Service Time field for updating Request Classes.
- Estimated Service Cost and Estimated Service Time fields for updating the Service Matrix.

The estimates are populated only if the Use Request Class Defaults box is checked (on the Service Agreement or Blanket Purchase Order).

*Note* - Existing Service Matrix records are not updated during the Issue process. Therefore, if any global data has been changed on the Service Agreement (like the Service Provider or the Assignee parameters), the SAM records must be regenerated.
Use the following steps to populate the Work Time and Cost estimates.

To Populate the Work Time and Cost Estimates

**Step 1** Sign in with the proper Application Administrator role.

**Step 2** From the menu bar, click Tools > System Setup > Application Settings to open the Application Settings page.

**Step 3** In the Application Settings page, click the Service Management Settings tab. Then click Service Management Setup wizard.

**Step 4** In the Service Management Setup wizard, review the Request Class Setup tab.

- Select the Details option.
- Update the Estimated Service Cost and Estimated Service Time fields.
- Select the Request Class records to update.
- Then click Apply to Request Class.

**Note** - The Estimated Service Time and Estimated Service Cost fields on the Request Class record are used to populate the Work Time and Cost estimates on the Service Agreement.

For more details on the Request Class record, see the IBM TRIRIGA 10 Request Central User Guide.

**Step 5** Click the Modify Service Matrix tab.

- Check the Change SLA Values box.
- Update the Estimated Service Cost and Estimated Service Time fields.
- Select the Service Matrix records to update.
- Then click Update Service Matrix Records.

**PM Schedule**

To populate Work Time and Cost estimates via the PM Schedule, the Service Level Defaults section of the PM Schedule must be set up to define the Respond Within, Due Within and Follow-up Within durations for the PM Schedule created Tasks.

In addition, the Estimates section of the PM Schedule must be set up to define the Work Time and Cost estimates for the PM Schedule created Tasks.

There are two different ways to establish the Estimates:

- If you want to manually enter the Work Time and Cost, leave the Use Procedures box cleared.
- If you want to use the rolled-up values for the Duration and Cost values from the Procedures section, select the Use Procedures box.
Use the following steps to populate the Work Time and Cost estimates.

<table>
<thead>
<tr>
<th><strong>To Populate the Work Time and Cost Estimates</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> Sign in with the proper Service Manager (or Maintenance Manager) role.</td>
</tr>
<tr>
<td><strong>Step 2</strong> From the menu bar, click <strong>Maintenance &gt; Preventive Maintenance &gt; View Schedules</strong> to open the <strong>View Schedules</strong> results page.</td>
</tr>
<tr>
<td><strong>Step 3</strong> Review the page that appears. The page displays a list of <strong>PM Schedule</strong> records. Click an existing <strong>PM Schedule</strong> record.</td>
</tr>
<tr>
<td><strong>Note</strong> - You can also access an existing <strong>PM Schedule</strong> record via an existing <strong>Job Plan</strong> record.</td>
</tr>
<tr>
<td><strong>Step 4</strong> Review the <strong>PM Schedule</strong> record that appears.</td>
</tr>
<tr>
<td><strong>Step 5</strong> Review the Estimates section.</td>
</tr>
<tr>
<td>▪ Leave the <strong>Use Procedures</strong> box cleared if you want to manually entry of the <strong>Work Time</strong> and <strong>Cost</strong> in the Estimates section.</td>
</tr>
<tr>
<td>▪ Select the <strong>Use Procedures</strong> box if you want to use the rolled-up <strong>Duration</strong> and <strong>Cost</strong> values from the Procedures section.</td>
</tr>
<tr>
<td><strong>Step 6</strong> Click <strong>Save &amp; Close</strong>.</td>
</tr>
</tbody>
</table>
4. Corrective Maintenance

Corrective Maintenance, also known as demand maintenance, is reactive maintenance in response to an identified problem. The problem may have been identified and logged through Request Central or may have come in via the Contact Center as a call from an employee.

Regardless of how the problem is identified it is the information about the generated request that determines how the service management process is going to handle it.

Request Central Portal

When a self service user logs in they see the request central home portal. Request Central provides a simple, intuitive method of problem entry for the all employees.

Here is an example of the Request Central portal for the Self Service User role.

For additional information regarding Request Central, see the IBM TRIRIGA 10 Request Central User Guide.

Contact Center Records

Contact Center provides a tool for organizations to run call centers. A call center operator answers calls and records pertinent information about the Contact Center form. When processed, the form generates a request that is processed under the same rules as if the caller had used Request Central to enter the information themselves.

Contact Center operators home portal contains the Contact Center form. The Contact Center form stays open from one call to the next. This persistent nature allows the agent to leave it open indefinitely as they receive calls.

To use the Contact Center form

Step 1 When logged in with the Contact Center Agent - Graphic as the home portal selected, the Contact Center form is displayed for easy access. Click the Maximize icon to launch the form into its own window.

Note - Contact Center may also be accessed through the menu navigation if the home portal is not specifically for the contact center agent. As long as security access permits, the contact center form can be reached using Home>Requests> Contact Center.
To use the Contact Center form

Step 2 The Contact Center View determines the default view for the form. Select ‘Person Centric’. This step will configure the form for a logical data entry based on a person making a request.

Note - Many retail organizations will usually process calls from a location centric perspective (for example, call from store #287). If your organization will be processing only one type of view, the form may be customized to default to the wanted view and the Contact Center View section hidden to further simplify the form.

Step 3 The General section and the multi-tab section immediately to its right define the caller and information related to the caller.

The Direction and Communication Type will default to ‘Inbound’ and ‘Phone’, however may be edited to track return calls or non-standard request input.

Populate the Requested By field with the name of the caller.

Note - If the caller information cannot be found when populating the Requested By field, click the pencil icon to the right of the field to open a new external contact record for capturing the caller information.

The Requested By information is copied into the Requested For field. If the caller is calling on behalf of another individual then the agent can update. Additionally, all of the information in the multi-tab section to the right of the General section is updated to reflect information relevant to the requested-for individual.

When you first open a window, or when a new call is taken, the Start Time is populated. Likewise, the Call End Time field is populated when the agent selects End Call or Next Call.

The system populates the Agent Name based on the user logged in when the form is first accessed.

The Resolved During Call check box provides a tracking mechanism for those calls that the agent is able to solve without generating an actual request. This supplements reporting with service calls averted through use of the knowledge base solution records.

Step 4 Review any pertinent information in the multi-tab section to the right of the general section. In this example the person centric view was selected so the information is all related to the requested-for individual. This information includes general contact information, associated locations, associated assets, as well as a history of all requests.

The “problem” location defaults to the requester default location. If this not the correct location, find the “problem” location or asset on the appropriate tab. Select on the asset or location to populate the problem asset or location section below it.
To use the Contact Center form

**Step 5** In the Problem section, select the appropriate *Request Classification* value that describes the issue. The value can be typed in directly or chosen after clicking the search icon. The possible values can be limited to only those request class values that correspond to service matrix values for the identified location and requester organization by clicking *Find Entitlement*.

The system then updates much of the remaining information in the Problem section. The *Search KB* action displays showing that knowledge base solution records are available for this request type. The system populates the associated *Service Class*.

- **Note** – If *Find Entitlement* action is used to limit request classes before selection then the *Priority*, *SLA Respond By* and *SLA Due By* values auto-complete as well. This information is pulled from contract with the service provider where the matching service matrix record is found.

Request class notes from the request class display with highlights to convey important information to the agent that may be relevant to the call.

Type a short description in the *Problem Description* field to capture the problem. This description further describes the problem to a technician if ultimately assigned as a work task.

The *Dispatch Required* action provides a direct link to the Dispatch Manager form.
To use the Contact Center form

**Step 6** The bottom multi-tab section conveys problem resolution information. Click Quick Add to generate a default request based on the information about the contact center form. This is quickest and easiest way to get a request into the system.

*Note* - The next choice (Service in this case) will be either Move, Product, or Service. This choice also generates a request (of the appropriate kind), but opens the request for the agent to allow for additional editing before processing.

The Find Duplicates action searches the system for matching requests and allows the form resulting communication record to be associated to an existing request rather than generating another request.

*Note* - This find duplicate logic is similar to the logic at the request class level. The main difference being that here on the contact center form it is looking for existing requests to associate the communication record to and the logic at the request class level looks for existing tasks/projects to associate a request to. In essence, this allows a contact center agent to identify the duplicate earlier in the process than if the request comes in via request central from a self service user.

The remaining tabs in this section provide additional information about the call or resulting request.

<table>
<thead>
<tr>
<th>Tab</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution tab</strong></td>
<td>Stores a history of the step by step solution if the knowledge base solution process is used.</td>
</tr>
<tr>
<td><strong>Comments tab</strong></td>
<td>Captures additional information that the agent finds relevant to the call.</td>
</tr>
<tr>
<td><strong>Follow Up tab</strong></td>
<td>Provides the agent a mechanism to set a reminder with to show up their action items at a designated future time.</td>
</tr>
<tr>
<td><strong>Related Communications tab</strong></td>
<td>Displays related communications.</td>
</tr>
</tbody>
</table>

**Step 7** Click Next Call. This action stops the call clock, stores the form as a communication record, and clears the values so the agent can begin processing the next call.
5. Preventive Maintenance

Preventive Maintenance (PM), also known as preventive or planned maintenance, is a proactive approach to maintaining and improving the operating condition of assets, locations, and building systems.

The goal is to do smaller cost (in money, time and resources) maintenance to avoid larger more costly repairs over time.

Job Plans

The job plan record acts as the container for work to be done. It answers two of the biggest questions around maintenance:

- What? - It identifies what building systems, assets and/or locations will be serviced.
- Who? - It also identifies both the responsible organization as well as the service organization for the maintenance to be performed.

To Create a Job Plan Record

Creating a job plan gives a maintenance manager access to all of the maintenance associated to assets, locations, or even building systems. The following steps illustrate one way to create a job plan record.

<table>
<thead>
<tr>
<th>To create a job plan record</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong>  Select the Maintenance menu item. From the Maintenance landing page, expand the Preventive Maintenance link in the Related Links - Maintenance section. Select Job Plans.</td>
</tr>
<tr>
<td><strong>Step 2</strong>  Click Add to create a blank Job Plan.</td>
</tr>
<tr>
<td><strong>Step 3</strong>  Complete the information in the General section of the General tab. Job Plan Name is a required field. Description is an optional field. Both the ID and Status fields are populated and maintained by the system after record creation.</td>
</tr>
</tbody>
</table>
To create a job plan record

**Step 4**  The Detail section contains additional information that starts to define the business logic of the job plan. The first field to be completed is the **Resource Type**. If ‘All Resources in Selected Systems’ is selected then the form will display the **Systems** tab in the multi-tab section at the bottom of the **General** tab. When this option is used, the assets and locations associated to the job plan will be auto-populated as well as auto-updated based on the assets and locations that are associated with the selected systems. If you select ‘Selected Resources Only’ option, the job plan applies only to those assets and locations explicitly associated to the job plan, and the **Systems** tab is not displayed.

The **Include Component Assets on Tasks** check box flags the job plan to not only include the assets identified on the tasks, but any component assets of those assets as defined within building systems.

**Attention** - It is important to understand that the system uses the component relationships from the building system and not the parent/component relationship on the asset record itself when determining which assets to include on the task.

The **Primary Location for Service Assignment Search** is for determining the location to use if the auto-assign is used in the corresponding service plan as discussed earlier in setup. This field is also responsible for determining what the primary location will be for tasks generated from associated PM schedules.

**Step 5**  Click **Find** to select a responsible organization in the Responsible Organization section. The Responsible Organization section designates the organization that is responsible for the job plan and tracking the maintenance. This is typically a workshop responsibility.

**Step 6**  Click **Find** to select the service provider in the Service Provider Section. The Service Provider section designates the organization that will actually perform the work on the job plan.

**Note** - The **Update Task Assignment** action allows the system to reassign the service provider with a new organization if the maintenance completion is given to another group. It will “push” these changes to any tasks selected in the **Tasks** tab below it.

**Step 7**  Complete the next tabs based on the systems, assets, and locations that the maintenance will be performed against. In this example, only an asset will be selected. However, building systems may be identified as discussed in Step 4, or locations can be added on the **Locations** tab. Click **Find** on the **Assets** tab and select the assets to be associated with the job plan.

**Step 8**  Click **Create Draft** in the upper right corner of the record to commit the data.

**Note** - The remaining two tabs pertain to the creation of PM schedules and the schedules automatic creation of the appropriate tasks. These tabs are discussed in the next sections.
PM Schedules – Schedule-Based

Schedule-based Preventive Maintenance (PM) Schedules provide maintenance managers with a method of scheduling maintenance, usually recurring, against building systems, assets and/or locations. PM schedules are contained within job plans. The PM schedule also is associated with a request classification. This means that the PM schedule pulls business rules and information from the job plan, the request classification and the associated service plan, and applies it to the generated schedule.

To Create a Time-Based PM Schedule Record

Creating a schedule-based PM schedule record is done from within the job plan. The following steps assume that the job plan exists. If the job plan does not exist, see ‘To create a Job Plan record’ for the steps to create a preventive maintenance job plan. The following steps will illustrate one way to create a schedule-based PM schedule record.

To create a schedule-based PM schedule record

Step 1  Select the Maintenance menu item. From the Maintenance landing page, expand the Preventive Maintenance link under the Related Links - Maintenance section. From within Set Up Select Job Plan.

The resulting query will display the job plans that the user has access to. Click the name of the job plan that assets, locations, or building system that needs the maintenance scheduled against it.

Step 2  At the bottom of the General tab, select the PM Schedules tab from the multi-tab section.

Step 3  Click Add to create a PM schedule.

Step 4  The General section contains four fields. These fields should look familiar since they tend to show up over and over again in various record types (for example, request class, service plan, and job plan).

Complete both the Name and Description fields. The ID and Status fields will be populated and maintained by the system.

Tip - Although there is no mandated naming conventions for PM schedules, most managers find it helpful to incorporate information into the Name. For example, a ‘Q-1 Pump filter replacement’ PM schedule record indicates that it is the first quarterly check on the equipment in the job plan and the maintenance consists of replacing a pump filter.

Step 5  In the Detail section, select the appropriate request class for the Request Class field. Here the user selected ‘Preventive Maintenance’ and the system automatically populates the corresponding service plan for the Service Plan field. Leave the ‘Schedule-Based’ value for the PM Type field as is.
To create a schedule-based PM schedule record

Step 6  Click the ‘Create Recurring Pattern’ link to begin defining the schedule’s timing on the PM Event form.

The Start Date field defaults to the current date. After selecting on the appropriate Recurrence Pattern Type, the form will update with additional choices and settings depending on the type selected. For a complete listing of options, see Recurrence Pattern Types. In this example the user is creating a quarterly check.

Tip - The system does not have a quarterly option, so the user can select a monthly but occurring only once every three months to get the same effect. This type of modification makes the scheduler much more flexible.

Select the ‘MONTHLY’ option. For the Monthly Recurrence section, select ‘Day [x] of every [x] months’ and then pick a day and make it every three months.

The Select the End Criteria section allows the user to set a specific number of occurrences (using ‘End After’), set a limited time frame (using ‘End Date’), or a system auto-extend process that will generate new tasks as planned ones become active (‘No End Date’). Select ‘No End Date’. The ‘The [First] [Monday] of every [x] months’ can be handy for avoiding holidays and weekend when setting of the scheduling.

The Months to Skip (Seasonal) section controls skipping for maintenance that does not occur year round.

Step 7  (Optional) Clicking the ‘Advanced’ link uncovers to additional sections.

These sections permit the user to add additional dates or omit certain periods from the scheduling process. This helps out for things such as planned facility shut downs and subsequent reopenings.
To create a schedule-based PM schedule record

**Step 8** Click Next in the upper right corner to continue.

The screen updates to allow for entry of shadowing information.

- **Note** - Shadowing allows higher level maintenance to supersede lower-level maintenance when scheduling. For example a quarterly that replaces a filter may not be need if an annual overhaul check was performed a few days early that included the replacement of the filter.

- **Tip** - When using shadowing, always schedule the higher level maintenance schedules first. This ensures that unneeded maintenance tasks will be properly skipped.

The **Offset Duration** field determines how far from the shadowing tasks the system should look when determining if a lower-level task should be scheduled or not. In this example the A-1 Pump Overhaul check was selected and the system will look plus or minus five days from any existing A-1 task to determine if the Q-1 tasks should be scheduled or skipped.

**Step 9** Click the ‘Complete’ action button in the upper right corner.

**Step 10** Click **Find** under the **Procedure** tab to select any procedures that should be added to every task generated by the schedule. If the procedure does not exist, use the **Add** action to generate a procedure from scratch.

**Step 11** Click the **Shadowed By** tab to display any PM schedules that were selected to shadow this one.

The **Tasks** tab will display the generated tasks once the PM schedule is activated.

**Step 12** Click the **Activate** action button in the upper right corner to activate the schedule, which will generate the tasks.

**Step 13** When the schedule has finished activating, the generated tasks will be added associated to job plan, the schedule as well as the appropriate assets and locations.

Notice how the Q-1 skips the December scheduling since the shadowing A-1 check is already there.
Recurrence Pattern Types

<table>
<thead>
<tr>
<th>Pattern Type</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Occurrence</td>
<td>Use this option for a one-time event worthy of documenting within your preventive maintenance program.</td>
</tr>
<tr>
<td>Daily</td>
<td>This option provides recurrence every [x] number of days, or every weekday, or every weekend day. This option is set to ‘End After’ for a finite number of events, to ‘End Date’ to schedule through a termination date, or ‘No End Date’ to automatically schedule additional events as current ones go active.</td>
</tr>
<tr>
<td>Weekly</td>
<td>This option sets the schedule to recur every {x} number of weeks and can be set to one or more specific days of the week. This option is set to ‘End After’ for a finite number of events, to ‘End Date’ to schedule through a termination date, or ‘No End Date’ to automatically schedule additional events as current ones go active.</td>
</tr>
<tr>
<td>Monthly</td>
<td>This option sets the schedule to recur every [x] number of months and can be set to a specific monthly date or day (for example first Monday or last Tuesday) of each month. This option is set to ‘End After’ for a finite number of events, to ‘End Date’ to schedule through a termination date, or ‘No End Date’ to automatically schedule additional events as current ones go active. This option provides the additional option to skip specified months for seasonal reasons.</td>
</tr>
<tr>
<td>Yearly</td>
<td>This option sets the schedule to recur once a year and can be set to an annual date or to a type of annual day (for example, second Tuesday of January). This option is set to ‘End After’ for a finite number of events, to ‘End Date’ to schedule through a termination date, or ‘No End Date’ to automatically schedule additional events as current ones go active.</td>
</tr>
<tr>
<td>Ad hoc</td>
<td>This option allows for multiple scheduled occurrences that do not necessary conform to a standard pattern.</td>
</tr>
</tbody>
</table>

PM Schedules – Reading-Based

Reading-based PM Schedules work differently than the schedule-based. Instead of using time to determine when a task needs to be performed, a reading-based schedule “listens” for readings taken on assets or locations and generates a task when specific reading requirements are met. For example, the system may generate a task to change a copier toner cartridge if the copy count exceeds 5000.

The following diagram illustrates how the different components work together to allow reading-based preventive maintenance.
Process for Reading-Based Preventive Maintenance

The PM Reading Log is created manually through task completion, manually directly against a location or asset, or via integration to another system, such as a building monitoring system. The system monitors the location or asset reading group that the reading log is added to. When the system, via the appropriate job plan and reading-based PM schedule detects a new reading, it evaluates it against the define criteria. When appropriate the system invokes the associated service plan, and generates the appropriate task or project. The system associates necessary procedures to the generated tasks, if they are associated to the PM schedule.

To Create a Reading-Based PM Schedule Record

Creating a reading-based PM schedule record is also done from within the job plan. The following steps assume that the job plan exists. If the job plan does not exist, see ‘To create a Job Plan record’ for the steps to create a preventive maintenance job plan. The following steps will illustrate one way to create a reading-based PM schedule record.

To create a reading-based PM schedule record

Step 1  Select the Maintenance menu item. From the Maintenance landing page, expand the Preventive Maintenance link under the Related Links - Maintenance section. From within Set Up Select Job Plan.

The resulting query will display the job plans that the user has access to. Click the name of the job plan that assets, locations, or building system that needs the maintenance planned against it.

Step 2  Open the PM Schedules tab and click Add. A new PM schedule record opens.

Step 3  The General section contains four fields. The ID and Status fields are populated and maintained. Enter a Name and Description as needed.

Step 4  Select a Request Class. As with the schedule-based PM schedule, a generic request class can be used, or a custom request class with a service plan for the business case can be set up. The Service Plan is populated based on the associated request class selected. For PM Type, select ‘Reading-Based’. The system updates the form to provide reading-based options.
To create a reading-based PM schedule record

**Step 5**  For the **Reading Classification** field, select the classification that the maintenance will trigger off. The **Reading** field populates with the logical reading type and default unit of measurement, but can be edited if necessary. Select the appropriate choice for the **Action Based On** field. ‘Value’ looks at only the entry being evaluated. ‘Variance’ processes based on the difference between two consecutive readings. ‘Cumulative Total’ adds the latest reading to the total of all logged readings and processes against that value. Similarly the ‘Reset Total’ adds the latest reading to the all logged readings, but only those readings since the last readings log reset.

The **Reset On Action** check box sets the rule for the generated maintenance task to reset the reading log reset total values.

**Step 6**  The Reading Occurrence section establishes the parameters which result in a work task generation.

The **Action Occurrence** field sets the monitoring method. There are three options:

‘Occurs Every’ allows for a single value to trigger the PM, ‘One Time Only’ will allow for a threshold value (the **One Time Only** field) as well as the test method of =, <, >, or <> (the **One Time Only** field).

For this example the ‘One Time Only’ value is selected and with a greater than 170 parameter set. This means that any reading, whether manual, via work task, or through building system integration where the associated reading log value is greater than 170 will result in the generation of a maintenance work task against this PM schedule.

**Step 7**  Click **Create Draft**, creating the record and saving it to the database.

**Step 8**  Click **Activate**. When working with the schedule-based PM schedule in the previous example, this step generated the work tasks. In this example, the activation of the record does not generate the work tasks directly but has the system start monitoring the associated reading logs for the locations and/or assets covered. Any new reading posted to the associated reading log is evaluated. If the reading meets the criteria established in the PM schedule, then a work task is generated in accordance with the rules established by the service plan.
6. Task Assignment

Task assignment may occur in a number of ways, ranging from automatic assignment to a responsible organization based on service plan settings to manual assignment via the dispatch manager.

The goal is to do smaller cost (in money, time and resources) maintenance to avoid larger more costly repairs over time.

Resource Manager

Resource Manager functionality is now handled by the improved Work Planner.

Work Planner

Work Planner improves the maintenance manager ability to allocate the resources to tasks.

The following steps show how to create a work plan record.

To create a Work Plan record

Step 1 When logged on as a maintenance supervisor, select the Tasks menu item. Select the arrow to the right of the Assign Tasks second-level menu item. Manage My Work Plans drops down as an option. Select Manage My Work Plans.
To create a Work Plan record

**Step 2** Select Add to create a work plan.

*Note* - Once a work plan has been created the Assign Tasks second-level menu item takes you directly to it. If the user is associated to more than one work plan, then the Assign Tasks menu item directs the system to the first one created.

The General section populates the user information into the **Plan Name** and **Contact** fields. The system populates and maintains the **Status** and **Last Refresh** fields as well.

The Workgroups section populates with the user workgroups by default.

The Parameters section lets the user determine how far out the work plan should project.

*Note* - Because the system works in Sunday to Saturday weeks, projecting one week may actually display two weeks when viewing the work plan midweek.

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

The Contacts section allows the user to associate additional contacts to the work plan.

**Step 3** Click the **Create** action to generate the record and start the build process.

The build process populates the **Planning Data** tab on the **General** tab with all of the Supply (resources) and Demand (tasks) to be populated in the work plan.

The build process also populates the **Supply Summary** tab with the records for time periods to plan against.

**Step 4** After receiving the notification that the work plan is ready for use. Click the Tasks menu item and select the Assign Tasks second-level menu item to access your work plan.

To Assign Work with the Work Planner

The following steps show how to assign and unassign a task to a resource.

**To assign work with the Work Planner**

**Step 1** When logged on as a maintenance supervisor, select the Tasks menu item. Select the Assign Tasks second-level menu item. The user default work plan opens.
To assign work with the Work Planner

**Step 2**  The Task Color By field determines the criteria to use for displaying task colors. In step 1, the view applied the colors based on the tasks priority.

The system automatically alerts the user if they try to schedule a task outside of the service level agreement timelines. To turn off this feature, check the box next to **Disable SLA Warnings**.

Clicking the toggle to the left of the word Tasks, Resources, and Weeks in the left panel expands and collapses breakdown information of the information being rendered in the stack.

**Step 3**  The stack contains the task and resource information broke down by week and expandable to view by day.

The system displays any overdue tasks in addition to looking ahead based on the parameters defined on the work plan general tab.

Hovering over a task provides a tooltip with the name of the task. For more information, right click and select **Open Record** to access the record.

**Step 4**  To assign work, select the task.

Right click the resource, and select **Place**.

> **Note** - Selecting the ‘Unassigned’ resource provides the user a mechanism to unassign work. The unassign process commits upon the Assign action, just like the normal assign process.

The stack now displays the moved work.

> **Note** - After selecting a task, right clicking and choosing ‘Select Partial’ allows the user to break up a task into components. This allows the task to be split across multiple resources and/or multiple days.

**Step 5**  Click the **Assign** action to commit the change.

**Step 6**  Continue assigning or moving work until all of the warnings have been cleared.

The warnings indicate things like unassigned work and over allocations. Hovering the mouse over the warning gives details.

**Step 7**  To view a summary of the assignment status, view the **Supply/Demand** tab.
Unavailable Time

The work planner allows supervisors to block out time when a resource is unavailable. This feature locks out the unavailable time without changing the resources calendar (which may be shared among multiple resources).

The following steps demonstrate how to create unavailable time for a resource.

<table>
<thead>
<tr>
<th>To create unavailable time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
</tr>
</tbody>
</table>
| **Step 2** | Select the resource for the **Resource** field. Specify the reason the resource is not available in the **Purpose** field. In the **Start Date/Time** and **End Date/Time** fields, set the duration of the off limits time.  

  The **Unassign Resource(s) from Overlapping Tasks** check box automatically unassigns tasks with conflicts. |
| **Step 3** | Click the **Continue** action to commit the record.  

  The system alerts you when finished, and you can create additional unavailable time if necessary. |
| **Step 4** | See the **Resources** tab for a listing of all resources as well as unavailable time. |
7. Work Tasks

Generally, a Task record will be created and managed through the associated Job Plan and PM Schedule records discussed above. However, the Template Manager and Task Manager also will enable you to create, edit, view, delete, and manage the Task Template records and Task records.

**Note** - This section does not include the procedures for managing Inventory Count Work Tasks or Inventory Pick Work Tasks. These business objects are discussed in the *IBM TRIRIGA 10 Inventory Management User Guide*.

**Note** - Your System Administrator can rename, modify, remove, or create new business objects within a manager. Therefore, the business objects in your installation can differ from those delivered with the IBM TRIRIGA application and the business objects discussed in this guide.

## Task Types

Here are the following Task Type definitions and their intended use. Depending upon your established business practices, your specific Task Type list may vary:

- **Contract Review Task** - Created from a RE data change request. Captures the contract and the description of the contract change. Assigned to the contract appropriate contact role.

- **Facility Assessment Work Task** - The facility assessment process involves inspecting building systems, assets, and locations for maintenance and environmental opportunities. This task is generated as part of the process to coordinate the inspector evaluation of submitted building systems, assets, and locations for inspection.

- **Inspection Task** - Represents an inspection time frame. Intended to be used in capital or facility projects where the inclusive tasks include internal/external inspection activities.

- **Inventory Count Work Task** - Initiated by the Inventory Manager to verify actual amounts of inventory for specific locations. Can provide justification for adjusting inventory amounts.

- **Inventory Pick Work Task** - Initiated by the Inventory Manager. Indicates the type of inventory, specific location, and staging location for pickup by customer.

- **Key Work Task** - User submits a key request to create this key task indicating the requested key ring and appropriate key cut.

- **Material Order Task** - Created to satisfy a request for a specific type and quantity of material. Can be an integration point to inventory or procurement management where the satisfaction of the requested material can be an asset or product obtained through inventory or procurement processes. Initiated from tasks (for example, maintenance technician needs to request air filter or belt) or from product requests.

- **Punchlist Task** - Part of the Capital Project close-out. Completing a punchlist with included punchlist tasks indicates the item description, responsibility, and duration. When completed, these items (punchlist tasks) indicate that the project is nearing completion.

- **Schedule Task** - Used as part of a project to assign responsible roles (from the project) for task activities. Not intended to be work or data intensive (for example, no time entry, material resources, and so on). Created manually in the project or from a project template.
- **Submittal Task** - Created within the project container to represent submittals of drawings, materials, and other content, for approval by the architect/owner.

- **Work Task** - Work and data intensive tasks coordinating all resources, including people, time entry, materials, and costs to complete a request. Intended to be used with move, facility assessment inspection, preventive/corrective maintenance, and many other request types. Work tasks can be the genesis for facility assessment, inventory, procurement, TREES, time management, and preventive maintenance processes.
### 8. Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blanket Purchase Order</td>
<td>Contract agreement for services and/or materials. Usually with an outside vendor.</td>
</tr>
<tr>
<td>Corrective Maintenance</td>
<td>Reactive maintenance performed after equipment has failed, been degraded or underperformed. (Also called Corrective Maintenance).</td>
</tr>
<tr>
<td>Demand Maintenance</td>
<td>See Corrective Maintenance.</td>
</tr>
<tr>
<td>Job Plan</td>
<td>Record that contains information regarding the maintenance against assets, locations, or building systems. Information includes PM schedules, procedures, and tasks.</td>
</tr>
<tr>
<td>Planned Maintenance</td>
<td>See Preventive Maintenance.</td>
</tr>
<tr>
<td>Preventive Maintenance</td>
<td>See Preventive Maintenance.</td>
</tr>
<tr>
<td>Preventive Maintenance (PM)</td>
<td>Proactive maintenance performed on a regular basis (either time based or in response to a reading), designed to maintain assets, locations, or building systems in a higher functioning manner and thus avoid larger more costly (in time, money and resources) maintenance.</td>
</tr>
<tr>
<td>PM Schedule</td>
<td>PM Schedule (Preventive Maintenance Schedule) provides the criteria for when preventive maintenance will occur. It may be time-based, such as a monthly inspection or reading based such as investigative maintenance in response to a high temperature reading.</td>
</tr>
<tr>
<td>Reading-based</td>
<td>Refers to PM schedule that has its task creation based on a reading against the asset or location.</td>
</tr>
<tr>
<td>Reading Group</td>
<td>Record associated to an asset or location that contains reading logs and links them to an associated job plan for processing.</td>
</tr>
<tr>
<td>Reading Log</td>
<td>Record that contains readings taken against an asset or location.</td>
</tr>
<tr>
<td>Request Class</td>
<td>Classification record that determines many of the business rules to be applied by the service management process.</td>
</tr>
<tr>
<td>Schedule-based</td>
<td>Refers to PM schedule where the task creation is date driven. This is done with a common recurring frequency, but could also involve on demand processing dates as well.</td>
</tr>
<tr>
<td>Service Agreement</td>
<td>Contract agreement for services and/or materials. Usually with internal organization. Also known as service level agreement or SLA.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Service Assignment Matrix Record (SAM)</td>
<td>Record associated with a contract that is used in the determination of responsible organization when multiple service providers are available.</td>
</tr>
<tr>
<td>Service Level Agreement</td>
<td>See Service Agreement.</td>
</tr>
<tr>
<td>Service Management Process</td>
<td>System automated process that uses a request class and service plan to determine business rules for creation of task/project and assignment to the responsible organization.</td>
</tr>
<tr>
<td>Service Plan</td>
<td>Record that works with the request class record to determine the business rules for the service management process.</td>
</tr>
<tr>
<td>Service Provider</td>
<td>Organization that is doing the work on the task in question.</td>
</tr>
<tr>
<td>Shadowing</td>
<td>Process of having a high-level maintenance such as a yearly preventive maintenance check supersede lower-level maintenance and therefore eliminate the need for that instance of the lower-level scheduling.</td>
</tr>
</tbody>
</table>
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