



PROTEUS MMX TRAINING MANUAL -
ASSETS

EAGLE TECHNOLOGY, INC.



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ASSETS

1. OVERVIEW

The **Assets** menu is used to record and maintain all equipment/asset data. Assets and Equipment are referred to interchangeably. An asset or piece of equipment is anything which needs periodic maintenance such as fans, chillers, CNC machine forklifts, buildings, grounds or vehicles. A User with appropriate rights can update physical location or operating status of equipment. Assets can have a Bill of Materials which is a list of parts typically used in its maintenance. There is no limit to the number or types of assets that the system can accommodate. Asset records contain details about the asset, and at the bottom of these details, the user will find related details about the asset/equipment.

[Related Information](#) [Work Orders](#) [Cost History](#) [Status Log](#) [Bill Of Materials](#) [Schedule](#) [Work Order Master](#) [Asset Transaction](#)

Every asset is identified by a unique Asset Number or Equipment Number designation; this is the record key.

If there is no asset database that can be converted to a Proteus MMX database, each asset must be manually entered into *Assets*. Enter the Asset information into the data entry fields on the screen (see **Entering Data** section below). The alternative and easier method to enter large amounts of asset information are the use of the Eagle Proteus MMX import utility spreadsheet.

2. ASSET RECORD LIST VIEW

The Asset List View is the first screen that appears when you enter the Assets menu. It displays of all the Assets entered into Proteus MMX. The fields listed in the Record Navigator are:

Asset Number

Asset Tag

Warranty Date

Runtime Units

Manufacturer

Asset name

Serial Number

Asset Tag

Description

Daily Runtime

Capacity Rating

Original Cost

Status

Category

Installation Date

Current Runtime

Weight

Model

There are user fields which when implemented will display as well. All the fields displayed in the list view can be filtered using the filters which have been described in general overview training.

Specific tasks that can be executed from the Record Navigator for Assets include:

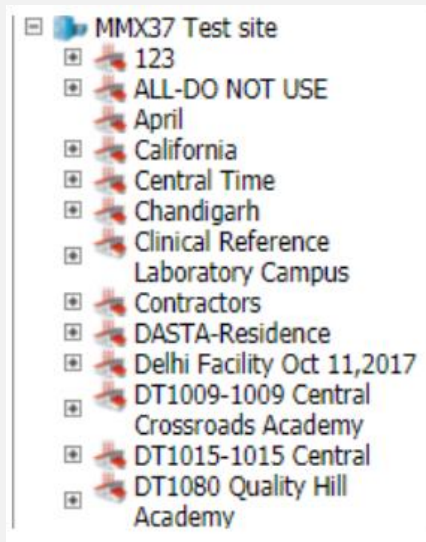
- Change Location
- Change Status
- Issue Work Order
- Update Asset Runtime

Asset Number	Asset Name	Serial Number	Asset Tag	Description	Installation Date
002(Inspection)	Asset - (Inspection)			Asset - (Inspection)	
Inspection-Asset-01	Inspection-Asset-01			Inspection-01	
Inspection-Asset-03	Inspection-Asset-03			Inspection-Asset-03	
UM10101 - 928 Grand Parking Garage Drains	UM10101 - 928 Grand Parking Garage Drains			UM10101 - 928 Grand Parking Garage Drains	
UM10102 - Garage Drains	1010 Grand Parking garage drains			Parking garage drains	
UM10102 - Officers dining room drains	UM10102 - Officers dining room drains			UM10102 - Officers dining room drains	
UM10102 - Roof Drains	Roof Drains			Roof drains on all levels of the roof	
UM10117 - Tech Center Garage Drains	UM10117 - Tech Center Garage Drains			UM10117 - Tech Center Garage Drains	
UM10192-State Line -ENG- Drains (Semi Annually)	UM10192-State Line -ENG- Drains (Semi Annually)			UM10192-State Line -ENG- Drains (Semi Annually)	

3. CHANGE LOCATION

Using the location tree that has been previously set up, users can move assets/equipment to another physical location.

Note: If assets are not assigned to a specific physical location, they will be tied to the **Facility**.



4. CHANGE STATUS

An asset can be taken out of service so that no associate work orders will be automatically activated against it. This is done by selecting a specific asset to be taken out of service and selecting the **Change Status** icon.




The user is then prompted to put in a comment as to why the asset/equipment status is being changed.

If an asset is *“Out of Service,”* future PM work orders will not activate until the asset is put back into service. If an asset is *“Out of Service,”* the user can still manually activate a Work Order Master or create a new Active (Demand) Work Order.

A history of the dates and time the equipment was taken out of and returned to service is found by choosing the **Status Log** tab from the asset details. (See Asset Overview – Above).

5. ISSUE WORK ORDER

A work order can be created in the Asset List menu by highlighting the asset/equipment and selecting the **Issue Work Order** icon. 

A work order can be created against a location as well as a piece of equipment from this view. Highlight the location in the asset tree and right mouse click. This action will bring up an issue work order capability for the location.

6. UPDATE ASSET RUNTIME/COUNT

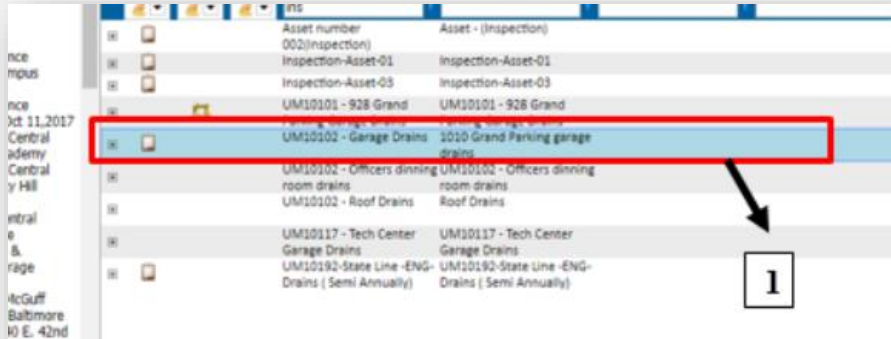
The Runtime can be defined as the meter/counter reading of the asset. Odometers, hours meters, output counters are examples counts types which can be updated. The system allows the triggering of maintenance based on count thresholds. As an example, a vehicle requires specific maintenance when it reaches 3,000 miles. Updating the runtime on a regular basis will allow all Preventative Maintenance work order with runtime schedules to activate automatically.

→ **Update Runtime Instructions on the following page.**

You can update the current runtime of an asset in two (2) ways:

METHOD 1

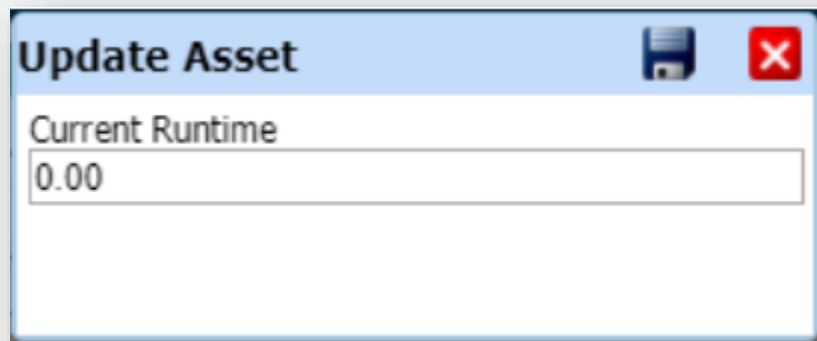
1. Select the asset you want to update from the record list



2. Select the **Update Asset** button on the navigation bar



3. Enter the new **Current Runtime** and **Save**.



METHOD 2

1. Navigate to the **Details** view.
2. Type the new runtime reading into the ***Current Runtime*** field.
3. Type the unit designation (hours, miles, etc.) into the ***Runtime Units*** field.
4. Click ***Save***.

The screenshot shows a software interface with a form. The form has several fields: 'Manufacturer', 'Current Runtime', 'Daily Runtime', 'Runtime Units', 'Serial Number', 'Machine Classification %', 'UserField 1', 'UserField 2', 'UserField 3', and 'UserField 4'. The 'Current Runtime' and 'Runtime Units' fields are highlighted with red boxes. Arrows and numbered callouts indicate the steps: 1 points to the 'Current Runtime' field, 2 points to the 'Runtime Units' field, 3 points to the 'Save' button, and 4 points to the 'Save' button.

Note: Daily Runtime is a daily average figure the user can enter to be used as a reference in record keeping and for calculating projection on reports. This field is not used in any system calculations.

7. ASSET DETAILS

The Details View consists of basic assets fields. These fields are:

Asset Number	Asset Name	Serial Number (if applicable)
Vendor	Description	Category
Asset Tag	Rating	Original Cost
Weight	Capacity	Warranty Date
Installation Date	Model	Current Runtime
Manufacturer	Location	
Daily Runtime	Runtime Units	

There are additional user fields which may be used. These are visible based on user rights and roles if used.

The Asset Details tab is available when you add a **New Asset** record when you **Copy** an existing Asset record when you **Edit** an Asset record or when you **View** an Asset record. These functions are all available on the Record Navigator of the main Asset screen.

Note: The required fields are Asset Number, Asset Name, and Location by default. All other fields are optional (unless they are set by the administrator to be required).

Leaving information fields blank will decrease Proteus MMX's effectiveness in building complete maintenance history records. Make sure all available information has been gathered or is gathered as a piece of equipment is worked on and the system is updated. A CMMS system is never 100% complete and needs to be maintained and updated as information is available or changes.

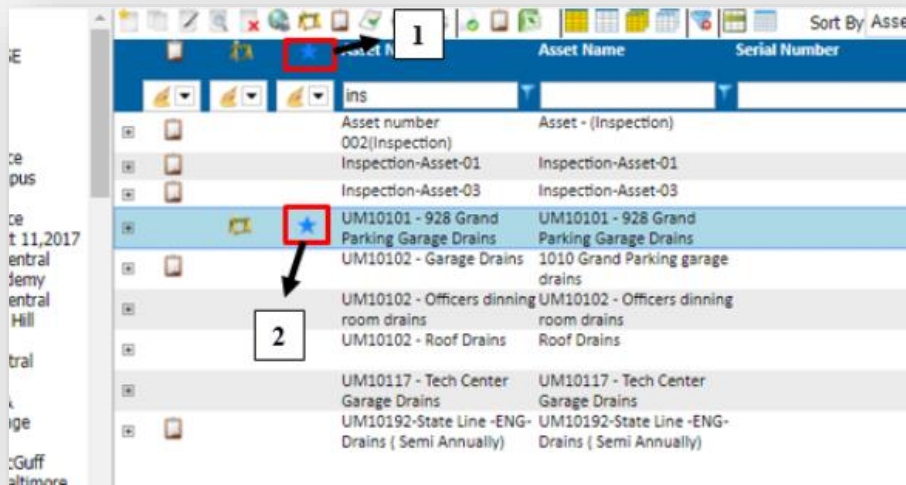
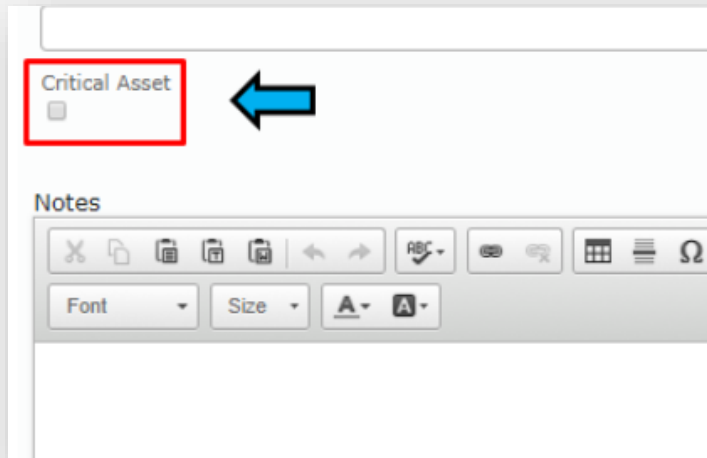
The screenshot shows the 'Assets' form with the 'Details' tab active. The form contains the following fields and their values:

- Asset Number: UM10102 - Garage Drains
- Asset Name: 1010 Grand Parking garage drains
- Description: Parking garage drains
- Asset System: (empty)
- Asset Tag: (empty)
- Category: (dropdown menu)
- Installation Date: (empty)
- Warranty Date: (empty)
- Vendor: (dropdown menu)
- Requester Contact Information: (empty)
- Resolution: (empty)
- Expected life cycle in months: (empty)
- Building And Location: (empty)
- Original Cost: (empty)
- Weight: (empty)
- Rating: (empty)
- Capacity: (empty)
- Model: (empty)
- Detailed Location: (empty)
- REFM # / REFERENCE #: (empty)
- UserField 5: (empty)
- UserField 8: (empty)

8. CRITICAL ASSET

To mark an asset as critical, you must:

1. Go to the **Assets** module.
2. Click on **Assets**, from the drop-down menu.
3. Select an **Asset** record.
4. Click the **Edit** icon.
5. Scroll to the bottom of the **Details** page, to find this feature. (Above the **Notes** field.)
6. Once the checkbox is clicked, select the **Save** icon in the top-right corner of the page.




Once an asset is marked as critical, a blue star icon (1) will appear next to the asset's Unit Number. When searching for a critical asset, make sure to utilize the column filter (2) to find assets with the **Critical Asset** icon associated with it.

9. MACHINE HISTORY

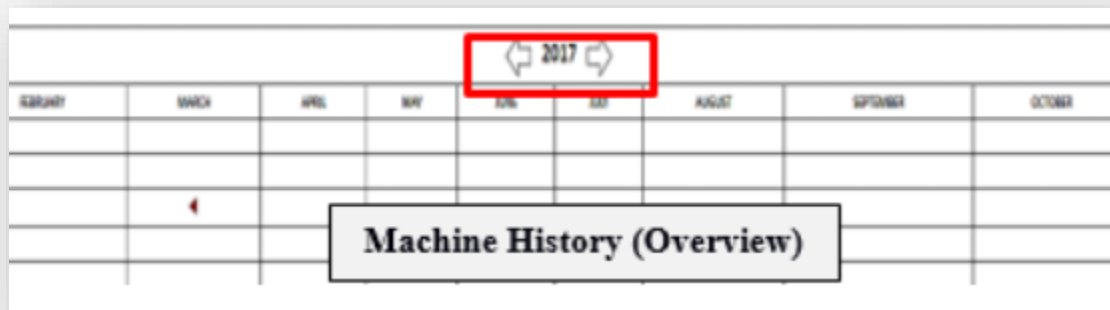
Machine History allows the user to view a year-by-year & month-by-month breakdown of all work orders issued to an asset.

To access the Machine History feature, you must:

1. Go to the **Assets** module.
2. Select an asset in which you wish to use.
3. Click the Machine History icon 

From the Machine History overview page, you see a year-by-year & month-by-month breakdown of all work orders issued to an asset.

Note: To change the outlook year, you simply click the left (to go back) or right (to go forward) arrow at the top of the page.



The screenshot shows the 'Machine History (Overview)' page. At the top, there is a navigation bar with a left arrow, the year '2017', and a right arrow, all enclosed in a red rectangular box. Below this is a table with columns for the months of the year: JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, and OCTOBER. The table has several rows, with a red arrow pointing to the first row under the MARCH column. A label 'Machine History (Overview)' is positioned at the bottom center of the table area.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER

You can view an individual work order by clicking one of the red, left-facing arrows, under the month in which you desire to view. When you click the arrow, you'll be redirected to the Work Order Details page for the selected day.

Work Order Details

Work Order Number	Date	Description	Labor Crafts	Time to Repair	Total Downtime	Total Cost	
20170320027	03/20/2017	UM10101-928 Grand-E...	Labor Crafts Exits...				Go to work order details...

Work Order Details

To view specific, more detailed information on an individual work order, you click the [“Go to work order details”](#) link, located in the right portion of the screen. When you click the link, it will redirect you to that work order’s detail screen.

10. RELATED INFORMATION

When an Asset is saved, several links are provided at the bottom of the Details Tab, showing reference information for the Asset. This Related Information includes the following links:

Work Orders
Cost History
Status Log
Bill of Materials
Schedule
Work Order Master
Asset Transaction

Information will appear in these links as the system is used. As work orders are opened or completed, the PM incurs the data relating to the asset. The data relating to the asset will appear in these links:

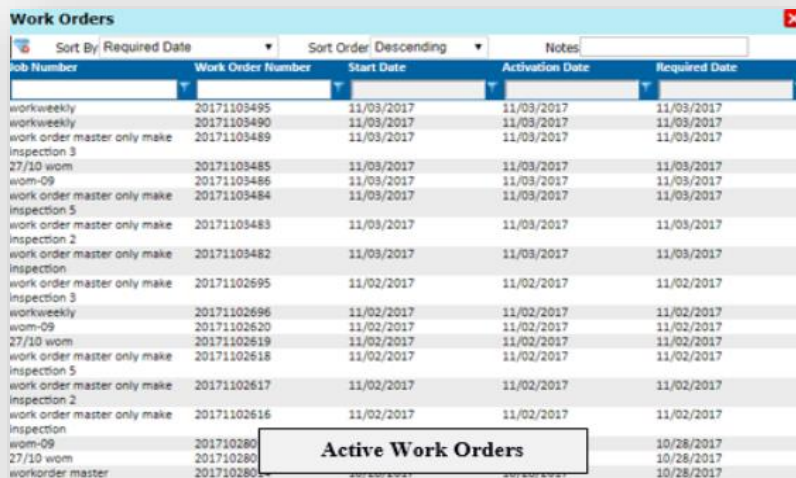
Related Information
[Work Orders](#)
[Cost History](#)
[Status Log](#)
[Bill Of Materials](#)
[Schedule](#)
[Work Order Master](#)
[Asset Transaction](#)

WORK ORDERS

The Work Orders link displays all active work orders to which the current asset is attached. This page shows such fields as:

Job Number
Work Order Number
Start Date
Activation Date
Required Date

Note: This data is read-only and is used for reference purpose only.



The screenshot shows a window titled "Work Orders" with a close button (X) in the top right corner. Below the title bar, there are two dropdown menus: "Sort By: Required Date" and "Sort Order: Descending". To the right of these is a "Notes:" label followed by a text input field. The main content is a table with five columns: "Job Number", "Work Order Number", "Start Date", "Activation Date", and "Required Date". The table contains 20 rows of data. The first 18 rows have a "Required Date" of 11/03/2017 or 11/02/2017. The last two rows have a "Required Date" of 10/28/2017. A black box with the text "Active Work Orders" is overlaid on the bottom right of the table.

Job Number	Work Order Number	Start Date	Activation Date	Required Date
workweekly	20171103495	11/03/2017	11/03/2017	11/03/2017
workweekly	20171103490	11/03/2017	11/03/2017	11/03/2017
work order master only make	20171103489	11/03/2017	11/03/2017	11/03/2017
Inspection 3				
27/10 wom	20171103485	11/03/2017	11/03/2017	11/03/2017
wom-09	20171103486	11/03/2017	11/03/2017	11/03/2017
work order master only make	20171103484	11/03/2017	11/03/2017	11/03/2017
Inspection 5				
work order master only make	20171103483	11/03/2017	11/03/2017	11/03/2017
Inspection 2				
work order master only make	20171103482	11/03/2017	11/03/2017	11/03/2017
Inspection				
work order master only make	20171102695	11/02/2017	11/02/2017	11/02/2017
Inspection 3				
workweekly	20171102696	11/02/2017	11/02/2017	11/02/2017
wom-09	20171102620	11/02/2017	11/02/2017	11/02/2017
27/10 wom	20171102619	11/02/2017	11/02/2017	11/02/2017
work order master only make	20171102618	11/02/2017	11/02/2017	11/02/2017
Inspection 5				
work order master only make	20171102617	11/02/2017	11/02/2017	11/02/2017
Inspection 2				
work order master only make	20171102616	11/02/2017	11/02/2017	11/02/2017
Inspection				
wom-09	201710280			10/28/2017
27/10 wom	201710280			10/28/2017
workorder master	201710280			10/28/2017

COST HISTORY

The Cost History link displays the cost history of selected asset/equipment. The year-to-date and life-to-date costs for Preventative and Demand Maintenance on this asset is displayed based on accumulated labor and material costs from closed Preventative Maintenance and Demand Maintenance work orders.

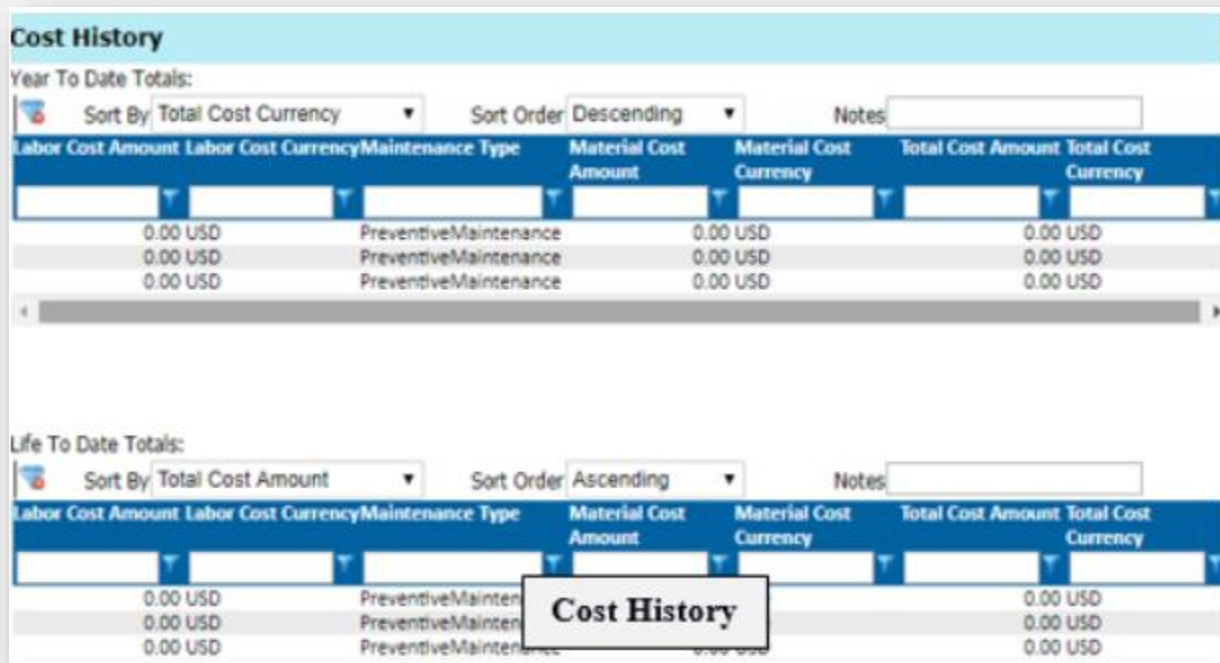
Note: These figures cannot be edited since they are calculated values based on closed work orders.

The calculations for these fields are derived from the following formulas:

Material: Qty. Allocated * Unit Cost (if Unit Cost < > 0)

Calculated when a work order is closed, plus any miscellaneous material costs which were entered on the work order.

Labor: Labor Rate for each employee * Actual hours for that labor rate which was calculated when the work order is closed, plus any miscellaneous labor dollars which were entered on work orders.



The screenshot displays the 'Cost History' report interface. It features two main sections: 'Year To Date Totals' and 'Life To Date Totals'. Each section includes a table with columns for Labor Cost Amount, Labor Cost Currency, Maintenance Type, Material Cost Amount, Material Cost Currency, Total Cost Amount, and Total Cost Currency. The 'Year To Date Totals' section shows three rows of data, all with values of 0.00 USD for Labor and Material costs, and 0.00 USD for Total Cost. The 'Life To Date Totals' section also shows three rows of data, all with values of 0.00 USD for Labor and Material costs, and 0.00 USD for Total Cost. A 'Cost History' label is overlaid on the bottom table.

Year To Date Totals:						
Sort By: Total Cost Currency		Sort Order: Descending		Notes:		
Labor Cost Amount	Labor Cost Currency	Maintenance Type	Material Cost Amount	Material Cost Currency	Total Cost Amount	Total Cost Currency
0.00 USD		PreventiveMaintenance	0.00 USD		0.00 USD	
0.00 USD		PreventiveMaintenance	0.00 USD		0.00 USD	
0.00 USD		PreventiveMaintenance	0.00 USD		0.00 USD	

Life To Date Totals:						
Sort By: Total Cost Amount		Sort Order: Ascending		Notes:		
Labor Cost Amount	Labor Cost Currency	Maintenance Type	Material Cost Amount	Material Cost Currency	Total Cost Amount	Total Cost Currency
0.00 USD		PreventiveMaintenance	0.00 USD		0.00 USD	
0.00 USD		PreventiveMaintenance	0.00 USD		0.00 USD	
0.00 USD		PreventiveMaintenance	0.00 USD		0.00 USD	

STATUS LOG

The Status Log link consists of a history of the dates and times the equipment was taken out of and returned to service. This page shows such fields as:

Out of Service Date
Out of Service By
Comments
In-Service Date
In Service By
Comments

Note: This data is read-only and is used for reference purpose only.

The screenshot shows a web application window titled "Status Log". At the top, there are controls for "Sort By" (set to "Comments"), "Sort Order" (set to "Descending"), and a "Notes" input field. Below these is a table header with columns: "Comments", "In Service Date", "In Service By", "Comments", "Out Of Service Date", and "Out of Service By". Each column has a corresponding input field with a dropdown arrow. The table body is empty, displaying the message "No Data To Display". At the bottom of the table area, there is a pagination bar showing "Records/Page 15", "Goto Page", "Page 0 Of 0", and "0 Item(s) in 0 Pages". Below the table area, there is a button labeled "Status Log".

BILL OF MATERIALS

The Bill of Materials link consists of a selection drop-down and read-only list part that comprise of the Bill of Material.

From this link, the user can add a Bill of Material to the asset.

The Bill of Materials window pane displays a read-only list of all parts that have been used on the current asset. The fields listed are:

Part Number
Part Name
Part Size
Description
Measurement Unit
Manufacturer
Manufacturer Part Number
Shelf Life

Bill of Materials

Bill Of Materials

Sort By: Part Name Sort Order: Descending Notes:

Part Number	Part Name	Part Size	Description	Measurement Unit	Manufacturer	Manufacturer Part Number	Shelf Life
No Data To Display							

Records/Page: 35 Goto Page: Page 0 Of 0 0 Item(s) in 0 Pages

Bill of Materials

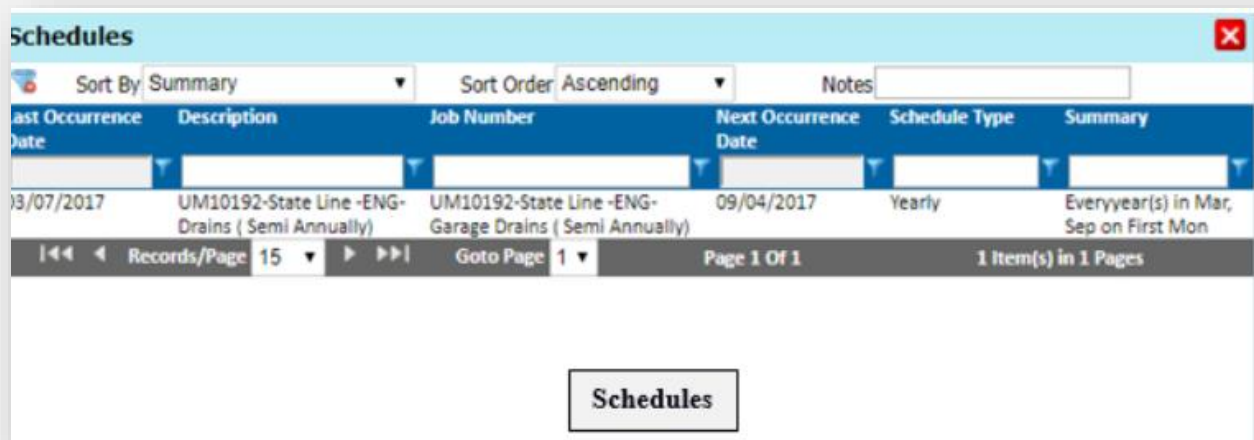
SCHEDULE

The Schedule link displays a listing of all schedules that are currently associated with the asset. A schedule is a description of future work order activations.

The fields listed on the Schedule link are:

Job Number
Schedule Type
Description
Summary
Next Occurrence Date
Last Schedule Date

For more information on scheduling of work order recurrences, please refer to the **Work Order Masters** training section.



The screenshot shows a window titled "Schedules" with a table of schedule data. The table has columns for Last Occurrence Date, Description, Job Number, Next Occurrence Date, Schedule Type, and Summary. A single record is displayed. Below the table is a footer bar with navigation controls and a "Schedules" button.

Last Occurrence Date	Description	Job Number	Next Occurrence Date	Schedule Type	Summary
03/07/2017	UM10192-State Line -ENG- Drains (Semi Annually)	UM10192-State Line -ENG- Garage Drains (Semi Annually)	09/04/2017	Yearly	Everyyear(s) in Mar, Sep on First Mon

Records/Page: 15 | Goto Page: 1 | Page 1 Of 1 | 1 Item(s) in 1 Pages

Schedules

WORK ORDER MASTERS

The Work Order Masters link displays all work order masters to which the current asset is attached. This page shows such fields as:

Job Number
Maintenance Code
Priority
Cost Center

Note: This data is read-only and is used for reference purpose only.

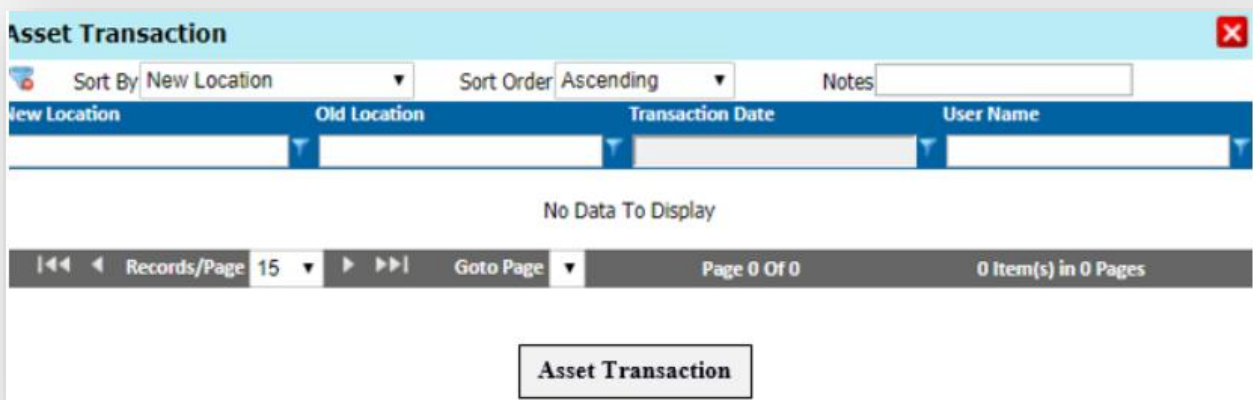
The screenshot shows a web application window titled "Work Order Masters" with a red close button in the top right corner. The interface includes a header bar with a search icon, a "Sort By" dropdown set to "Cost Center", a "Sort Order" dropdown set to "Descending", and a "Notes" text input field. Below the header is a table with four columns: "Cost Center", "Job Number", "Maintenance Code", and "Priority". The first row of data shows "UM10192-State Line -ENG-Garage Drains (Semi Annually)" under Job Number and "PM -Engineering" under Maintenance Code. The table is followed by a pagination bar containing navigation icons, "Records/Page" set to 15, "Goto Page" set to 1, "Page 1 Of 1", and "1 Item(s) in 1 Pages". At the bottom center of the window is a button labeled "Work Order Masters".

ASSET TRANSACTION

The Asset Transaction link shows any movement of the Asset between different locations. These links show fields, such as:

New Location
Old Location
Transaction Date
User Name

Note: This data is read-only and is used for reference purpose only.



Asset Transaction

Sort By: New Location Sort Order: Ascending Notes:

New Location	Old Location	Transaction Date	User Name
No Data To Display			

Records/Page: 15 Goto Page: Page 0 Of 0 0 Item(s) in 0 Pages

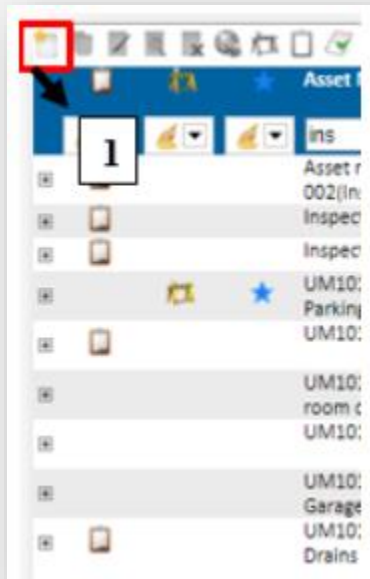
Asset Transaction

11. ENTERING DATA

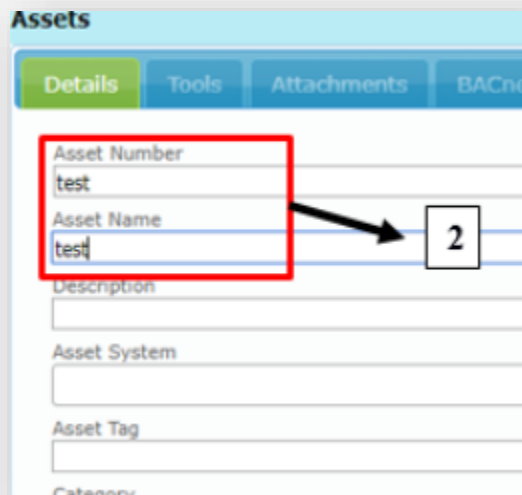
Proteus MMX gives the user the option to enter records manually. Each record entered will populate in the Asset Record Navigator.

To enter a new Asset in the database, follow these steps:

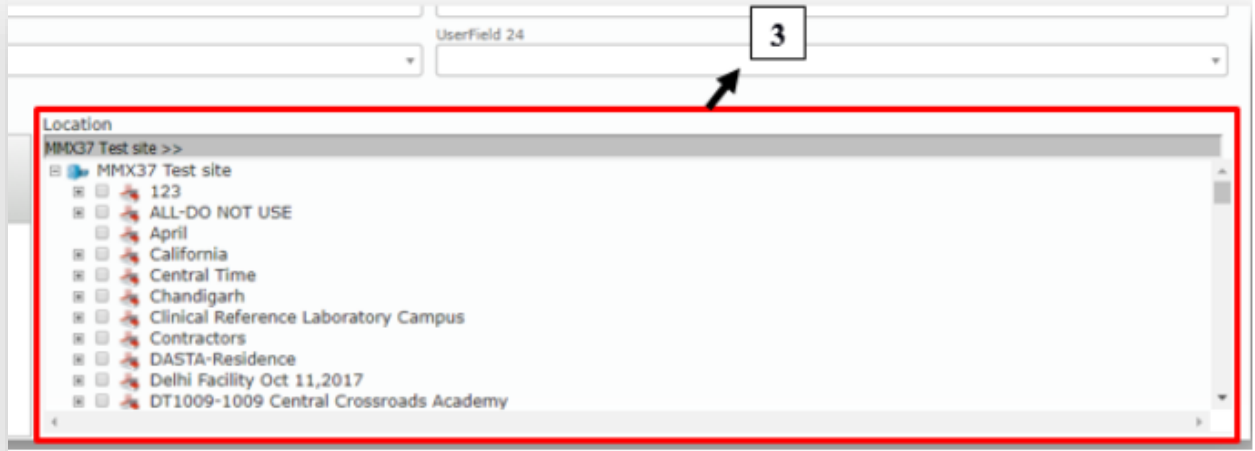
1. From the Asset Record List View, click the **Create New** icon



2. Enter the Asset Number and Asset Name.

A screenshot of the 'Assets' form. The 'Details' tab is selected. A red box highlights the 'Asset Number' and 'Asset Name' input fields, both containing the text 'test'. A black arrow points from the red box to a white box with the number '2'. Other fields like 'Description', 'Asset System', 'Asset Tag', and 'Category' are visible below.

3. Select the Location of the Asset from the Location Tree on the bottom-right of the screen.

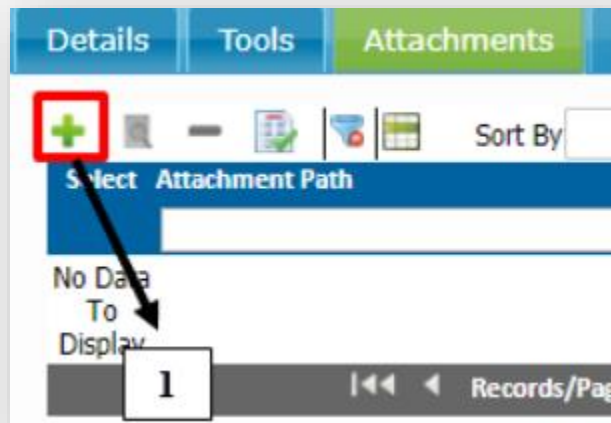


4. Select the **Save and Continue** icon on the top-right of the screen if you wish to add another Asset now. If there are any required fields, you will be prompted to add these fields one-by-one until all required fields are completely entered.

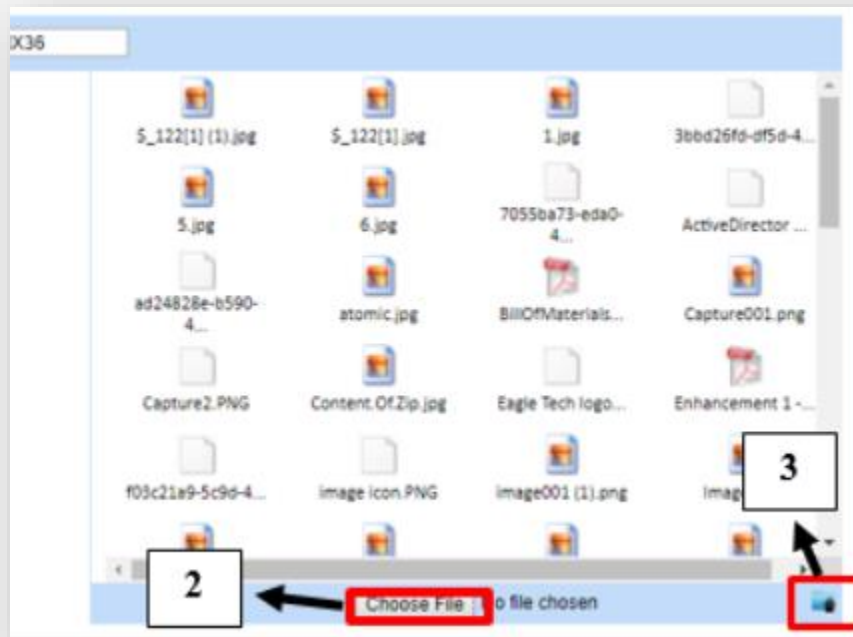


Note: When the Asset is saved, you will be able to view the Related Information links at the bottom of the screen. Since the asset is new, these links will have no data associated with them. Attachments can be added to the Asset record once the asset is created.

5. To add an Attachment, on the Attachments tab, select the **green (+) sign (1)**. Find the file you want to attach (just like adding an attachment to an email. If the attachment is in the current attachments folder, you can click the **Attach (paperclip)** icon in the top-left of the window. If it is not the current folder, you can select **Choose File (2)**, which allows you to search any drive/folder and add a file to the asset attachments



attachments. Selecting the file to be attached, and then select the upload icon (3). The attachment will be uploaded to the asset attachments, and appear in the attachments folder in the future. Any type of file can be attached to the asset. It can be viewed if the person trying to view the attachment has the proper tools to view the file type on their specific device. There is no limit to the number of attachments on an asset. An asset attachment is automatically added to the work order associated with the asset.



ADMINISTRATION

1. USER FEATURES

You can send an email notification to a recipient or group within an established number of days before the warranty end of an asset. You can access this feature by going to:

(1) Settings

(2) General

(3) Global Options

Notify recipient based on warranty end date

☒ Yes ☐ No

Recipient email list (Separate email addresses with semi-colon)

Days Before Warranty end date

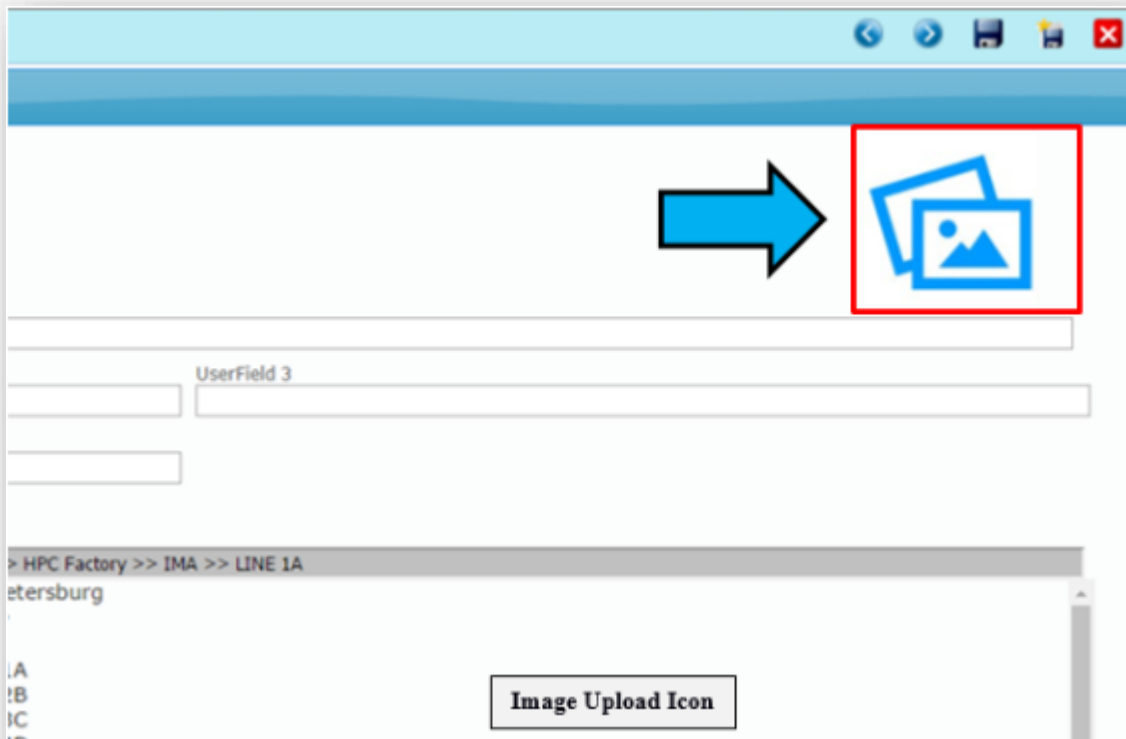
day(s)

2. IMAGE UPLOAD ICON (ASSETS & ASSET SYSTEMS)

This feature gives the user the ability to upload an image of the asset or asset system directly from their device.

To access the **Image Upload** icon on Assets or Asset Systems, you must:

1. Go to the **Assets** module.
 2. Click **Assets** or **Asset Systems**.
 3. Select an asset/asset system record.
 4. Click the **Edit** icon.
 5. Click the **Image** icon on the right-side of the screen, to upload a photo.
- ➔ (Images on next page)



Once you upload an image, a picture will populate in the field:

