



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:

<b>Asset Number</b>	<b>Daily Runtime</b>
<b>Asset Tag</b>	<b>Capacity Rating</b>
<b>Warranty Date</b>	<b>Original Cost</b>
<b>Runtime Units</b>	<b>Status</b>
<b>Manufacturer</b>	<b>Category</b>
<b>Asset name</b>	<b>Installation Date</b>
<b>Serial Number</b>	<b>Current Runtime</b>
<b>Asset Tag</b>	<b>Weight</b>
<b>Description</b>	<b>Model</b>

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:**

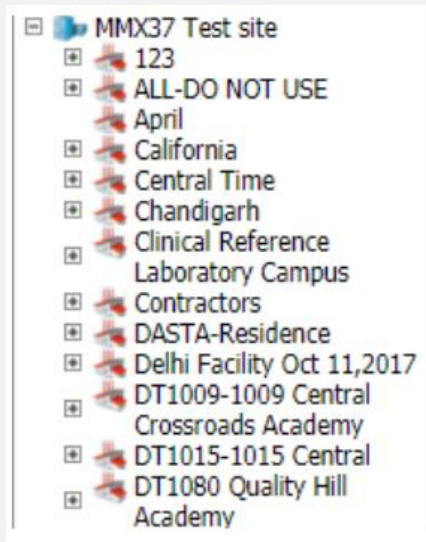
- Change Location
- Change Status
- Issue Work Order
- Update Asset Runtime

Asset Number	Asset Name	Serial Number	Asset Tag	Description	Installat
Asset number 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

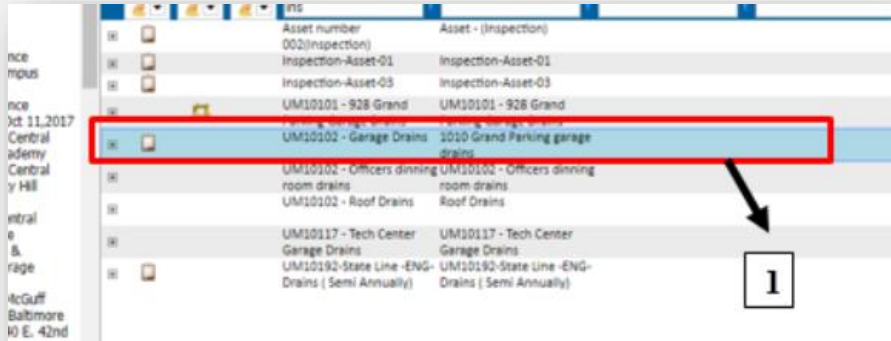
The Runtime can be defined as the meter/counter reading of the asset. Odometers, hours meters, output counters are examples counts types which can be updated. The system allows the triggering of maintenance based on count thresholds. As an example, a vehicle requires specific maintenance when it reaches 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***

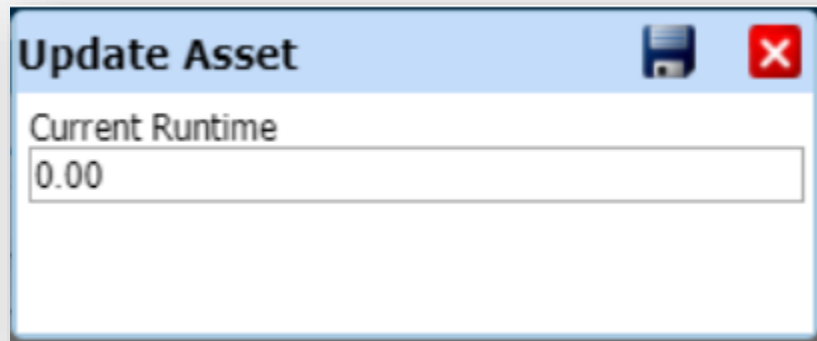
1. Select the asset you want to update from the record list



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 (with a value of 0.00), Daily Runtime (with a value of 0.00), Runtime Units (with a dropdown arrow), Serial Number, Machine Classification %, UserField 3, UserField 4, and UserField 5. Three numbered callouts are present: '2' points to the Current Runtime field, '3' points to the Runtime Units field, and '4' points to a Save button in the top right corner. Red boxes highlight the Current Runtime and Runtime Units fields.

**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:

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

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** and 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 a software interface for managing assets. The main window is titled 'Assets' and has a sub-header 'UM10102 - C'. Below the header are several tabs: 'Details' (selected), 'Tools', 'Attachments', 'BACnet', and 'Default Employees'. The 'Details' tab contains a form with the following fields and values:

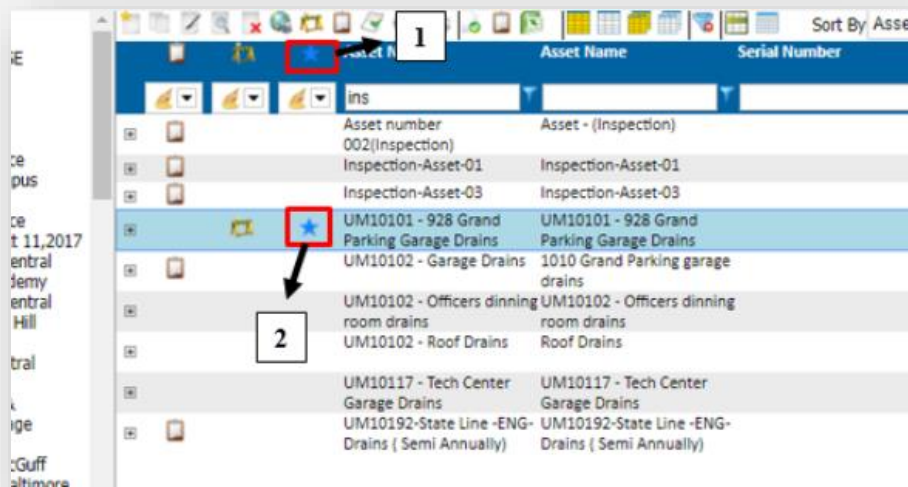
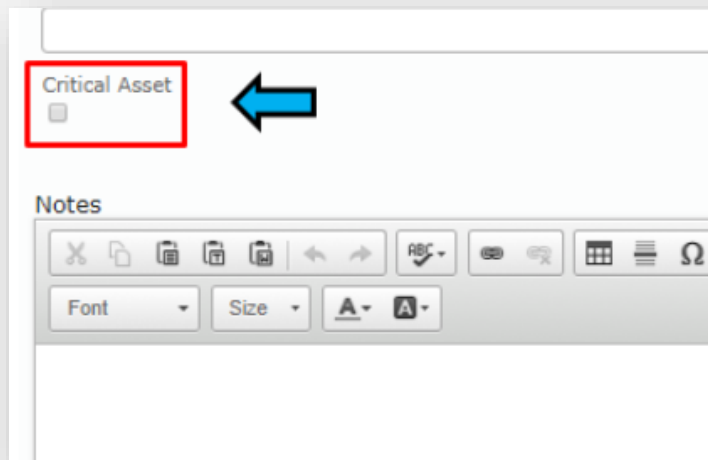
- Asset Number: UM10102 - Garage Drains
- Asset Name: 1010 Grand Parking garage drains
- Description: Parking garage drains
- Asset System: (empty)
- Asset Tag: (empty)
- Category: (dropdown menu)
- Installation Date: (empty)
- Warranty Date: (empty)
- Vendor: (dropdown menu)
- Requester Contact Information: (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)

At the bottom of the form, there are two small fields: 'Work Order Time of Day Completed' and 'Dispatcher Name'.

## 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.



Work Order Number	Date	Description	Labor Crafts	Time to Repair	Total Downtime	Total Cost	
20170320027	03/20/2017	UM10101-928 Grand-E..	Labor Crafts Exists..				<a href="#">Go to work order details...</a>

**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](#)

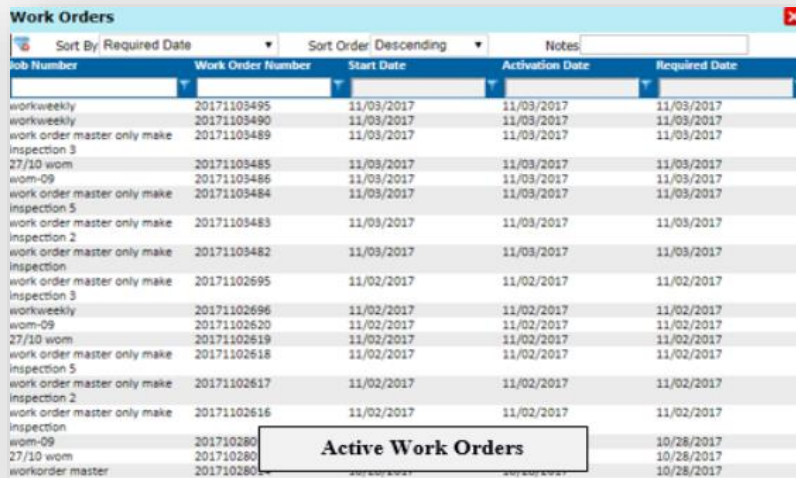
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## WORK ORDERS

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.



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 two sections of a 'Cost History' report. The top section, 'Year To Date Totals', has a 'Sort By' dropdown set to 'Total Cost Currency' and a 'Sort Order' dropdown set to 'Descending'. It contains a table with three rows of data, all showing 0.00 USD for Labor Cost Amount, Material Cost Amount, and Total Cost Amount, with the Maintenance Type listed as 'PreventiveMaintenance'. The bottom section, 'Life To Date Totals', has a 'Sort By' dropdown set to 'Total Cost Amount' and a 'Sort Order' dropdown set to 'Ascending'. It also contains a table with three rows of data, all showing 0.00 USD for Labor Cost Amount, Material Cost Amount, and Total Cost Amount, with the Maintenance Type listed as 'PreventiveMaintenance'. A 'Notes' field is present in both sections. A 'Cost History' label is overlaid on the bottom section.

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		

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## 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 sorting controls: "Sort By" set to "Comments" and "Sort Order" set to "Descending". Below this is a table header with columns: "Comments", "In Service Date", "In Service By", "Comments", "Out Of Service Date", and "Out of Service By". The table body is empty, displaying the message "No Data To Display". At the bottom of the table area, there are pagination controls: "Records/Page" set to "15", "Page 0 Of 0", and "0 Item(s) in 0 Pages". A "Status Log" button is located at the bottom center of the window.

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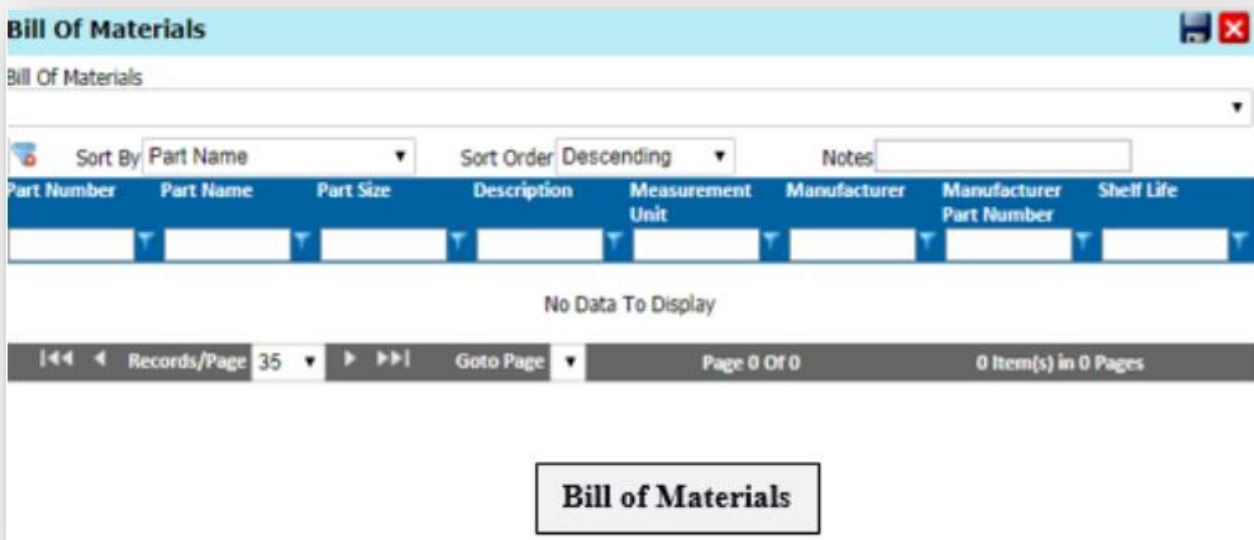
## **BILL OF MATERIALS**

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**





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## 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.

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

Sort By: Summary   Sort Order: Ascending   Notes:

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

**Schedules**

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## 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 search bar with a magnifying glass icon, a "Sort By" dropdown menu set to "Cost Center", a "Sort Order" dropdown menu set to "Descending", and a "Notes" text input field. Below these is a table with four columns: "Cost Center", "Job Number", "Maintenance Code", and "Priority". The first row of data contains the text "UM10192-State Line -ENG-Garage Drains ( Semi Annually)" under "Job Number" and "PM -Engineering" under "Maintenance Code". At the bottom of the table area, there is a pagination bar with "Records/Page" set to 15, "Goto Page" set to 1, "Page 1 Of 1", and "1 Item(s) in 1 Pages". A button labeled "Work Order Masters" is centered below the table.

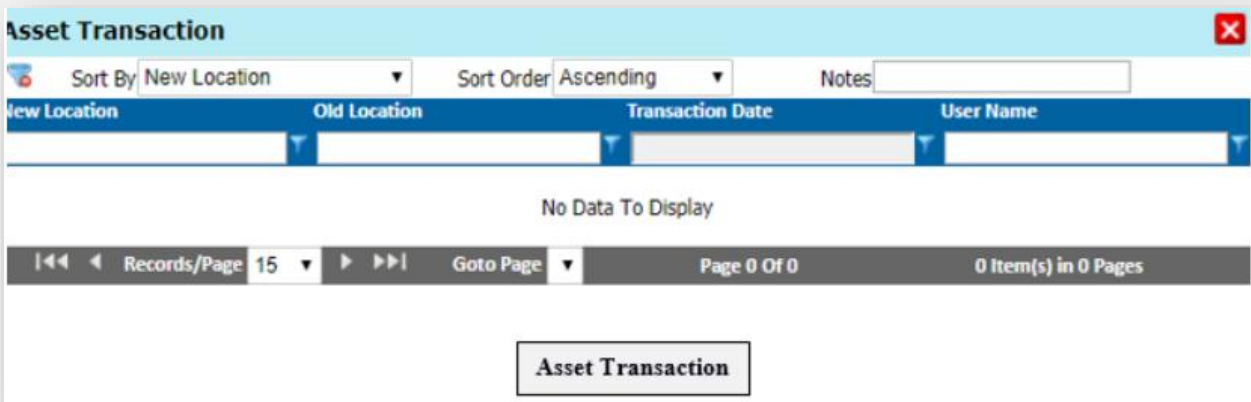
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## ASSET TRANSACTION

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.

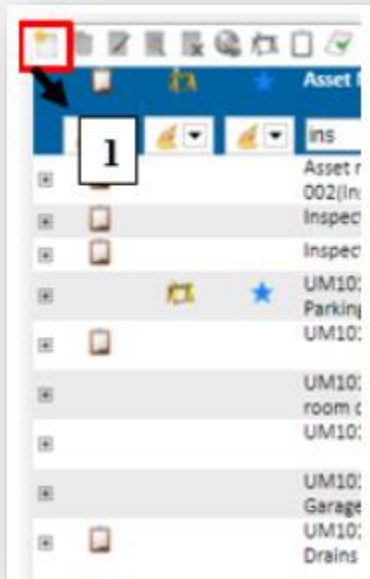


## 11. ENTERING DATA

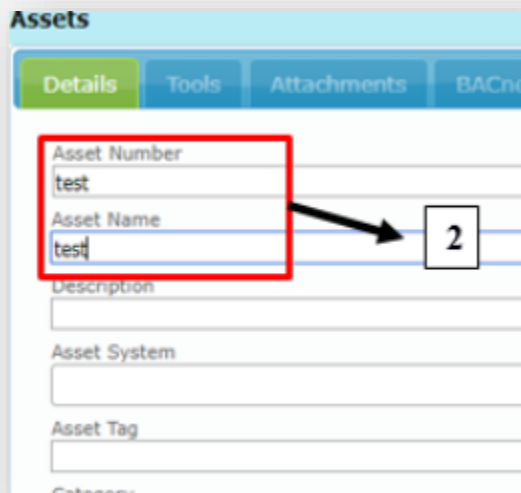
Proteus MMX gives the user the option to enter records manually. Each record entered will populate in the Asset Record Navigator.

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

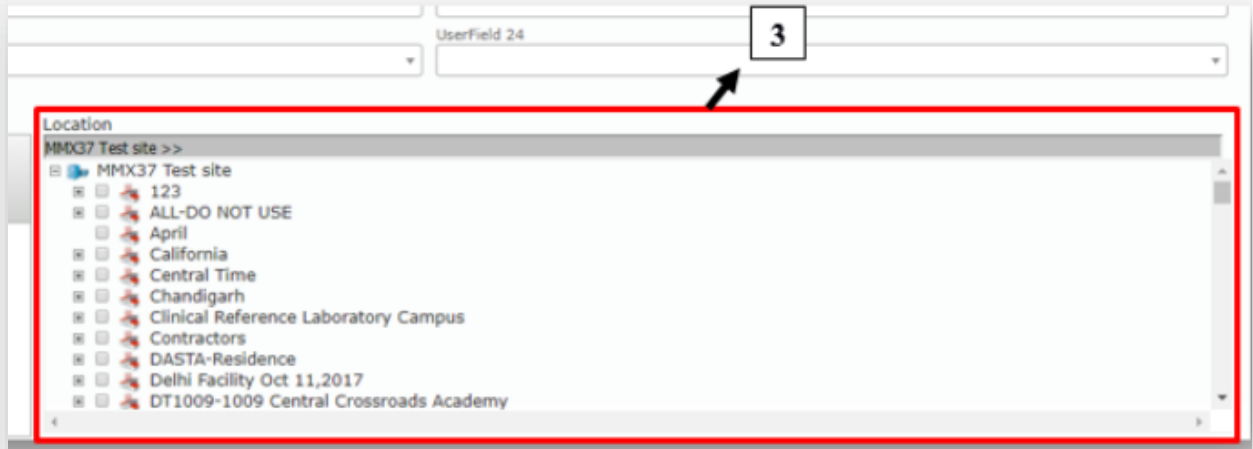
1. From the Asset Record List View, click the **Create New** icon



2. Enter the Asset Number and Asset Name.

A screenshot of the 'Assets' form. The 'Asset Number' and 'Asset Name' fields are highlighted with a red box. An arrow points from the red box to a box with the number '2'. The form includes fields for 'Asset Number', 'Asset Name', 'Description', 'Asset System', 'Asset Tag', and 'Category'. The 'Asset Number' field contains 'test' and the 'Asset Name' field contains 'test'.

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

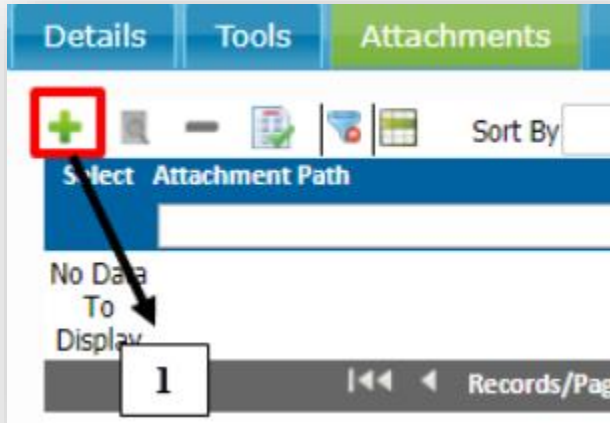


4. Select the **Save and Continue** icon on the top-right of the screen if you wish to add another Asset now. If there are any required fields, you will be prompted to add these fields one-by-one until all required fields are completely entered.



**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)

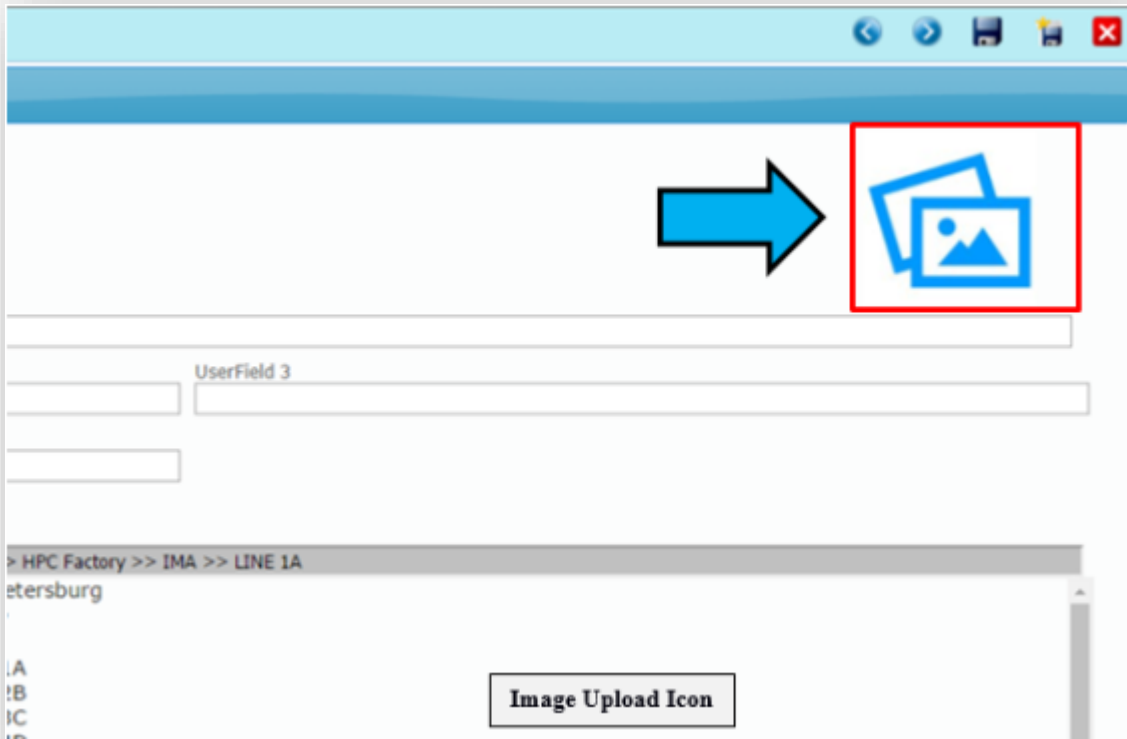
Days Before Warranty end date  
 day(s)

## 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:

