OUUG WAM PREVENTIVE MAINTENANCE TRAINING

Overview

In this training session, you will define the following:

- Maintenance Specification
- Maintenance Schedule
- Template Work Orders
- Maintenance Triggers
- Assets

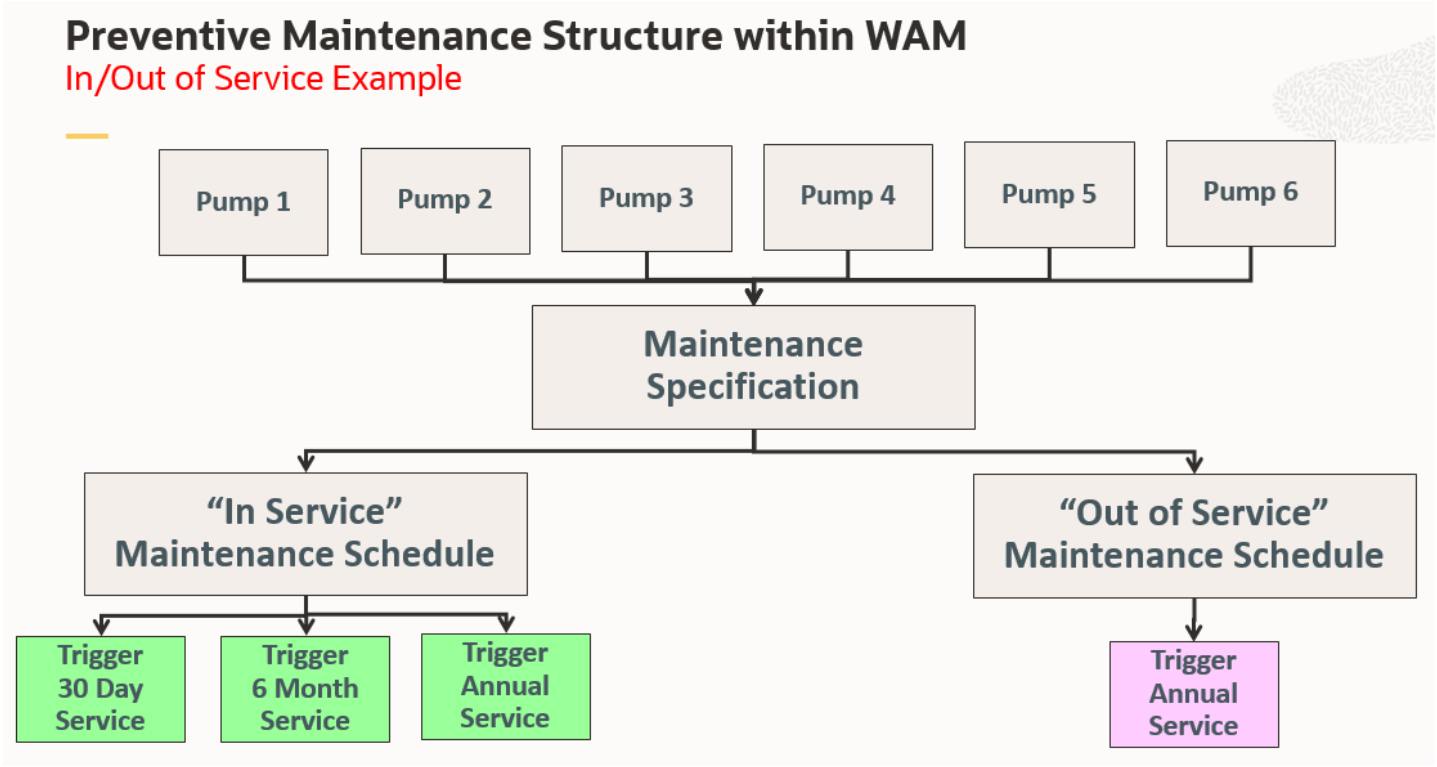
Instance URL: http://v2.examplewam.com/ouaf/cis.jsp

Login credentials: OUUG2020 / austin123

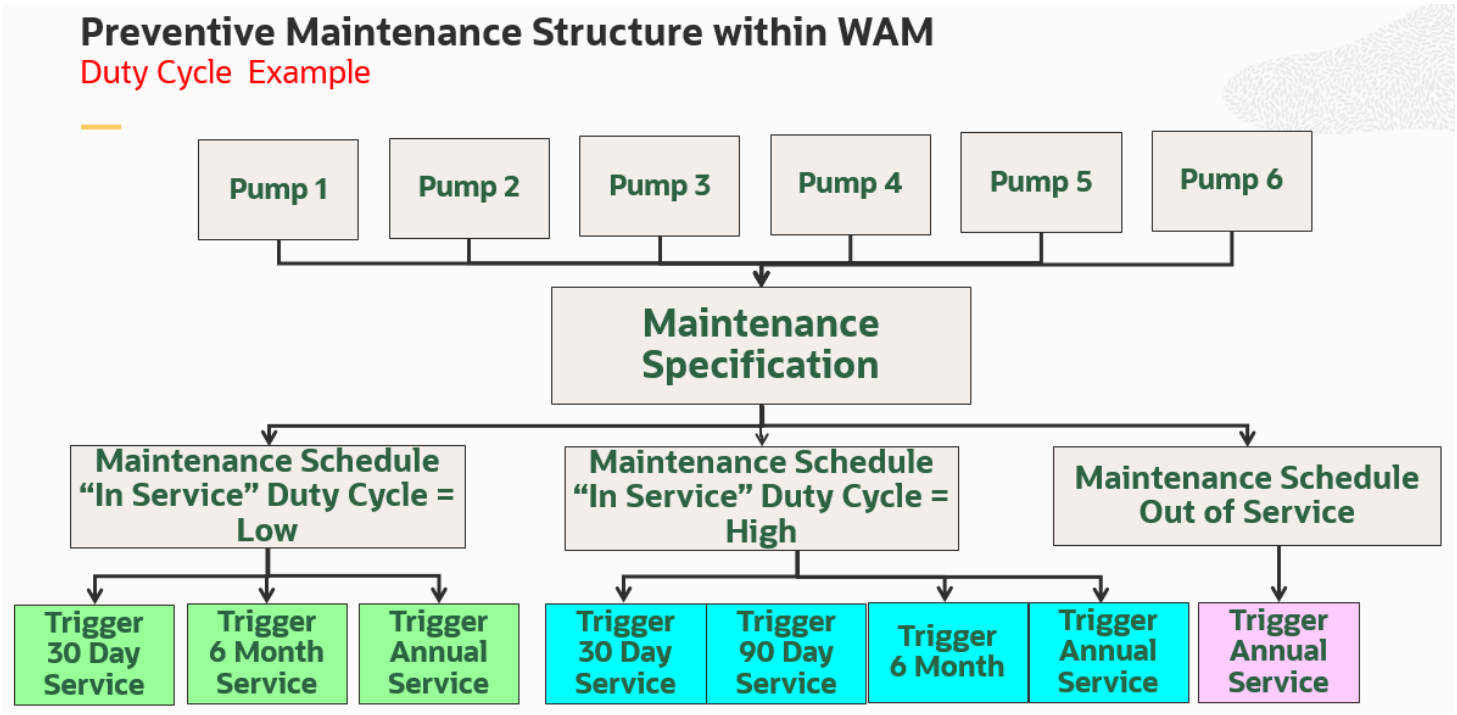
Naming Conventions

The naming convention being used to create new objects for this lesson will be your initials. For example, **Daryl E. Hillen** would use **DEH** and then the object name when creating a new object.

Example: Create XX-Van, where XX represents your initials (DEH-Van).



You would need to create and maintain only 4 Maintenance Triggers for your whole Pump PM Program. In WAM v1, if you could even have had an Out of Service PM Master, you would have had to create and maintain 24 PM Masters for the same scope. (That's 4 PM Masters for each Pump.)



Maintenance Specification

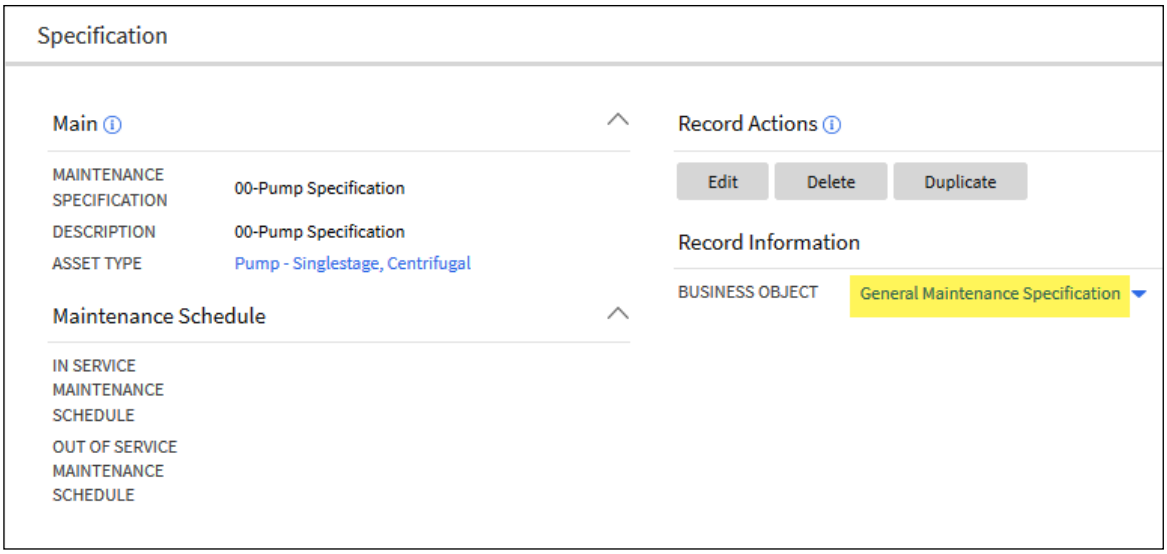
Overview

In this session, you will define:

- A *General* Maintenance Specification
- An *Operational* Maintenance Specification

Create a General Maintenance Specification

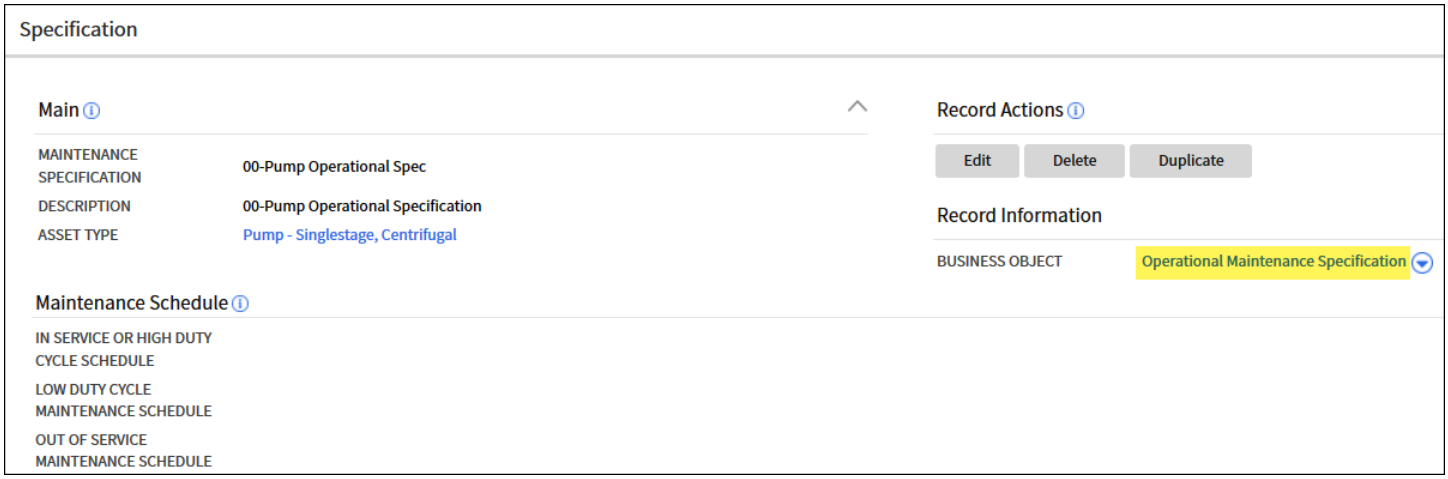
1. Navigate to **Menu**, **Preventive Maintenance**, **Maintenance Specification**, and then click **Add**.
   Select Business Object page displays.
2. Select *General Maintenance Specification* as the **Specification Business Object** and click **OK**.
3. Enter the following details:
   Main Zone
   - **Maintenance Specification**: *XX-Pump Specification*
   - **Description:** *XX-Pump Specification*
   - **Asset Type:** *Pump – Singlestage, Centrifugal*
4. Click **Save**.



Specification record displays.

Create an Operational Maintenance Specification

1. Navigate to **Menu**, **Preventive Maintenance**, **Maintenance Specification**, and then click **Add**.
   Select Business Object page displays.
2. Select *Operational Maintenance Specification* as the **Specification Business Object** and click **OK**.
3. Enter the following details:
   Main Zone
   - **Maintenance Specification**: *XX-Pump Operational Spec*
   - **Description:** *XX-Pump Operational Specification*
   - **Asset Type:** *Pump – Singlestage, Centrifugal*
4. Click **Save**.



Specification record displays.

Maintenance Schedule

Overview

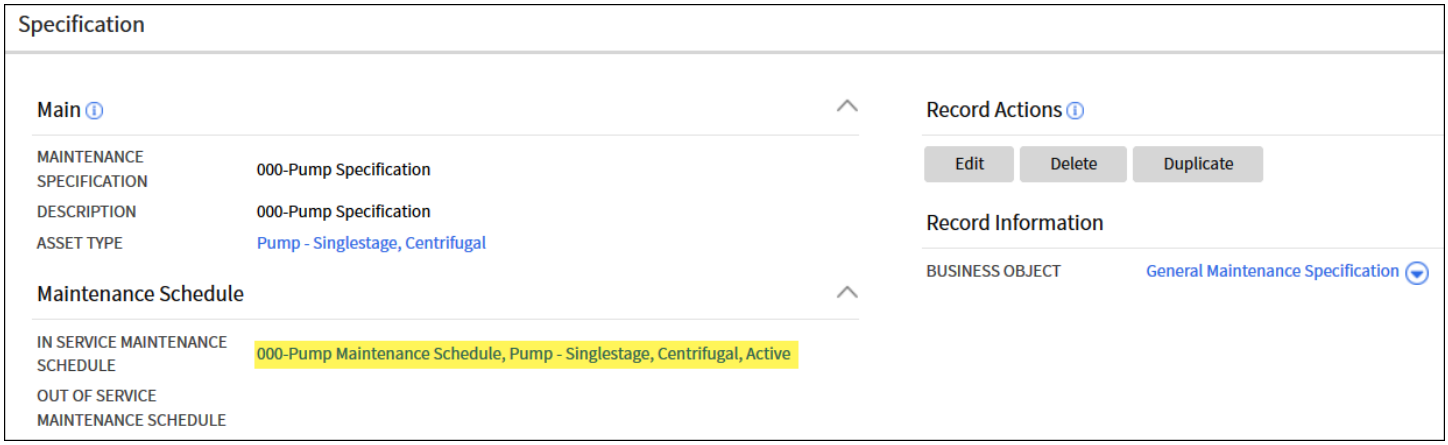
In this session, you will define Preventive Maintenance Schedules.

Create a General Maintenance Schedule

1. Navigate to **Menu**, **Preventive Maintenance**, **Maintenance Schedule**, and then click **Add**.
2. Enter the following details:

   Main Zone

   - **Description**: *XX*-Pump Maintenance Schedule
   - **Detailed Description:** *XX*-Pump Maintenance Schedule
   - **Asset Type:** *Pump – Singlestage, Centrifugal*
3. Click **Save**.
4. Navigate to **Menu**, click **Preventive Maintenance**, click **Maintenance Specification**, and then click **Search** and search for and select your *General Maintenance Specification* (XX-Pump Specification).
5. Click **Edit**.
6. In the **Maintenance Schedule** zone, search for and select your pump maintenance schedule (XX-Pump Maintenance Schedule, Pump – Singlestage, Centrifugal, Active) as the **In Service Maintenance Schedule** and then click **Save**.

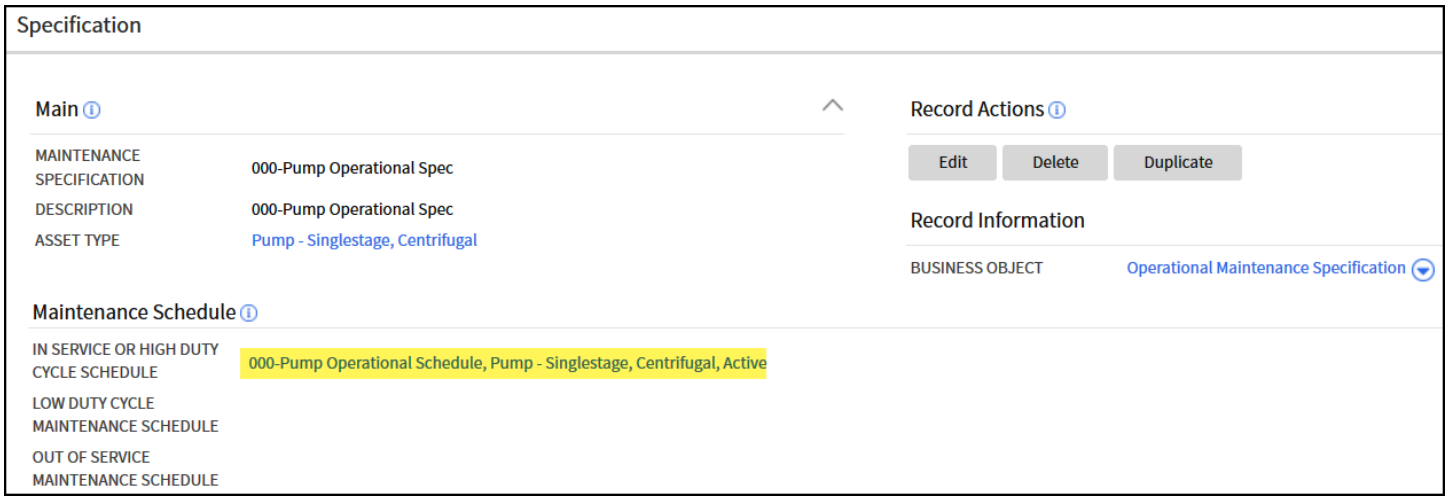


Create an Operational Maintenance Schedule

1. Navigate to **Menu**, **Preventive Maintenance**, **Maintenance Schedule**, and then click **Add**.
2. Enter the following details:

   Main Zone

   - **Description**: *XX-Pump Operational Schedule*
   - **Detailed Description:** *XX-Pump Operational Schedule*
   - **Asset Type:** *Pump - Singlestage, Centrifugal*
3. Click **Save**.
4. Navigate to **Menu**, click **Preventive Maintenance**, click **Maintenance Specification**, and then click **Search** and search for and select your *Operational Maintenance Specification (XX-Pump Operational Specification)*.
5. Click **Edit**.
6. In the **Maintenance Schedule** zone, search for and select your operational maintenance schedule (XX-Station Operation Schedule, Station, Active) as the **In Service or High Duty Cycle Schedule** and then click **Save**.



Template Work Orders

Overview

In this session, you will create the following:

- General Template Work Order and Template Activity

Create a General Template Work Order

1. Navigate to **Menu**, **Work Management**, **Template Work Order**, and then click **Add**.
2. Select *General Template Work Order* as the **Template Work Order Business Object** and click **OK**.
   General Template Work Order page displays.
3. Enter the following details:
   Description: *XX-General Template Pump Maintenance*
   Detailed Description: *XX-General Template Pump Maintenance*
   Work Class: *Planned*
   Work Category: *Periodic*
   Work Priority: *5*
   Work Order Approval Profile: *PM Approval*
   Allow Auto Close: *Yes*
   Required By Lead Days: *0*
   Work Order Business Object: *Work Order*
4. Click **Save**.

Add a Template Activity

1. Click the **Add Template Activity** hyperlink in the **Template Activity** zone.
   Select Activity Type page displays.
2. Select *PM Activity* as the **Activity Type** and then click **OK**.
   General Template Activity page displays.
3. Enter the following PM Activity details:
   Template Activity Number: *01*
   Description: *XX-Pump Inspect & Elec Check*
   Detailed Description: *XX-Pump Inspection & Electric Check*
   - Inspect and check the voltage and amp draw.
   - Insure proper gear is worn while performing this task.
   - Check the Amperage while running.
   - Check for corrosion.
   - Enter the collected data using the motor measurement file.
   - Check for unbalanced greater than 5%.

   Template Work Order: *Use Default* (this should be your WO General Template)
   Service Class: *Use Default* (Preventive Maintenance)

Required By Lead Days: *0*

Cost Center: *536200 – WW North Maintenance*

Percentage: *100*

Planned Service History: *PM – Pump Visual Inspection*

Required: *No*

4. Click **Save**.
5. Click the **Resource** tab and enter resource details:

   Resource Class: *Labor*

   Craft Code: *Maintenance Technician*

   Number Of People: *1*

   Hours Per Person: *2*
6. Click **Save**.
7. Return to the **Main** tab and click the **Template Work Order** hyperlink.
8. Click **Activate**.

Maintenance Triggers

Overview

In this session, you will create a Maintenance Trigger.

Create a Maintenance Trigger

1. Navigate to **Menu**, **Preventive Maintenance**, **Maintenance Trigger**, and then click **Add**.
2. Select *Calendar Anniversary* as the **Maintenance Trigger Business Object** and click **OK**.

   Calendar Anniversary page displays.
3. Enter the following details:

   Main Zone

   - **Maintenance Schedule**: *Search for and select your Maintenance Schedule (XX-Pump Schedule)*
   - **Copy Asset Location Cost Center:** *Leave default (Yes)*
   - **Allow Multiple In Process Activities:** *Leave default (False)*
   - **Sort Sequence:** *Leave default (10)*

   Processing Information Zone

   - **Template Work Order:** *Search for and select your General* Template WO *(XX*- General Template Pump Maintenance*)*
   - **Activity Type:** *PM Activity*
   - **Service History Type:** *PM – Pump Visual Inspection*

   Work Order Defaults Zone

   - **Work Priority:** *6*
   - **Service Class:** *WD-Maint*
   - **Backlog Group:** *Maintenance*
   - **Approval Profile:** *PM Approval*

   Calendar Information Zone

   - **Years:** *0*
   - **Months:** *1*
   - **Days:** *0*
   - **Lead Days:** *7*
4. Click **Save**.

   Maintenance Trigger record displays.
5. Click the **Maintenance Schedule** hyperlink.

   Maintenance Trigger is now associated with the **Maintenance Schedule**.

That's just one Maintenance Trigger. You would define all the appropriate Maintenance Triggers for this Asset Type. For example, Annual; Bi-Annual; Quarterly; Monthly; Bi-Weekly, etc. (Be sure to detail different Service History Types for each Trigger as to ensure they are credited correctly.)

Note that there isn't a different Maintenance Trigger for Operational based maintenance. It's only the Maintenance Schedule and Maintenance Specification associated to the Maintenance Trigger that makes the process utilize the **Duty Cycle** field for Operational based maintenance.

Asset - Maintenance

Overview

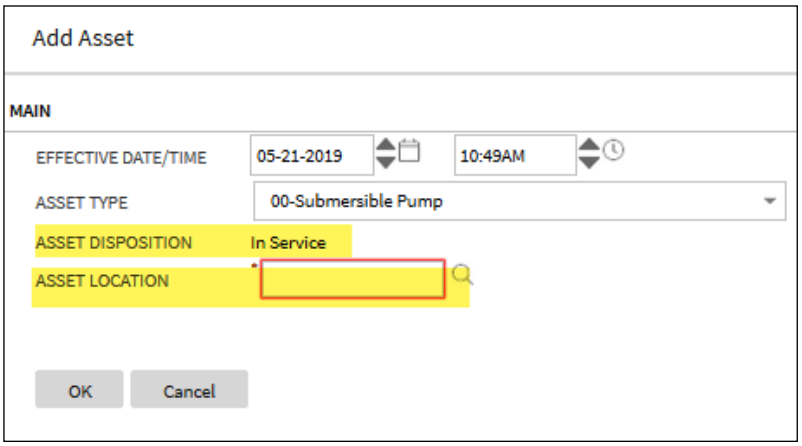
In this session, you will create an Asset and assign the Preventive Maintenance Program you have just defined to that Asset.

Create an Asset

1. Navigate to **Menu**, **Asset Management**, **Asset**, and then click **Add**.
2. Select the **Asset Type** (*Pump – Singlestage, Centrifugal*) from the **Asset Type** drop-down list.

   The **Asset Disposition** is in an *In Service* status by default.

   Also notice that selecting the **Asset Type** displays the **Asset Location** field that was once hidden.



3. Click **Search** (🔍) under the **Asset Location** field.
4. Select *Above Ground / Plant* as the **Location Type** and enter “Pump” in the **Description** field then click **Search**.
5. Select the *Pump “X”* **Asset Location** where “X” is the number assigned to you by the instructor.
6. Click **OK**.

   A new page opens, allowing you to enter more details for the asset that you want to create.
7. In the **Identification** zone, enter the following:

   Badge Number*: B00456-XX*

   Serial Number*: S00456-XX*

   Pallet Number*: P00456-XX*
8. In the **Specification** zone, select the **Maintenance Specification:** *XX-Pump Specification* (Alternatively, you could select your *XX-Pump Operational Specification* **Maintenance Specification**.)
9. Click **Save**.

   The **Asset** page opens displaying details of the newly-created asset.

   Notice that the **Asset Status** is *In Service*.
   By simply selecting that Maintenance Specification, you have now assigned the appropriate PM Program to that Asset. Should you have Assets with the same Asset Type that require different maintenance, you would simply create a different Maintenance Specification with its associated Maintenance Schedule and Maintenance Triggers. When creating Assets, if there is only one Maintenance Specification for that Asset Type, the Maintenance Specification will default to the Asset when you Save the record.

Review the forecasted Maintenance for your new Asset record

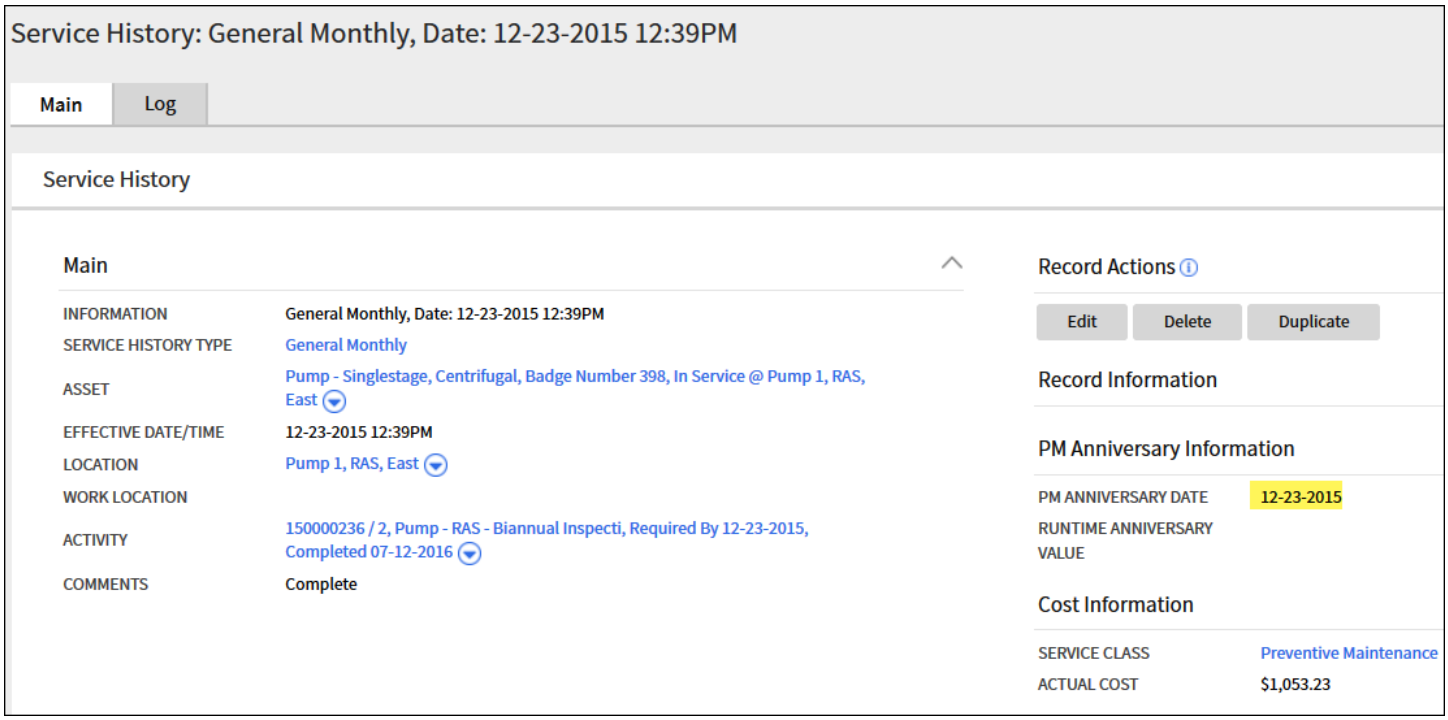
1. Navigate to the **Maintenance** tab of your new Asset
2. Review the **Maintenance Triggers** associated to the Asset (Realizing you currently only have the one, but would normally have: Annual; Bi-Annual; Quarterly; Monthly; Bi-Weekly, etc.)

Create the Maintenance Forecast for your new Asset record

While you truly have defined the maintenance for your asset, you will observe there is nothing displayed in the **Maintenance Schedule Forecast** zone. Those rows are created when the W1-ASSET batch is run, which would typically be scheduled to run nightly.

1. To accomplish this yourself, you would navigate to **Menu**, **Tools**, **Batch Job Submission**, and click **Add.**
2. Enter "*W1-ASSET*" in the **Batch Code** field and click **Save.**
3. Click on **Refresh** intermittently until the **Batch Job Status** shows as *Ended* and the **Run Status** for that **Run** in the **Dashboard** shows as *Complete.*
4. Click on the **Back** icon to navigate back to your Asset and the **Maintenance Schedule Forecast** zone will now be populated.

   It's the PM Anniversary Date for the associated Service History that drives the Forecast, **not** the Completion Date of the PM Activity. (Careful here, that field is in a collapsed zone on the Service History and would be normally populated by the application, but only on a generated PM Activity, not if you just added a Service History to the Asset manually.)



Asset Location Specific Maintenance (PM Route)

Overview

In this session, we will review:

- Asset Location Specific Template Work Orders
- Asset Location Specific Preventive Maintenance Triggers.

Review an Asset Location Specific Template Work Order

The Asset Location Specific Template Work Order provides the capability to perform maintenance on multiple Assets driven by one Asset/Asset Location and its Maintenance Trigger. (This type of Template WO could be for any work, not only maintenance.)

1. Navigate to **Menu**, **Work Management**, **Template Work Order**, and then click **Search**.

2. Select *Asset Location Specific* as the **Template Class** and click **Search**.
3. Select *Template Work Order Number* "*T0000071*".
4. Click on the *Template Activity* hyperlink in the Template Activity zone.
5. Observe that there is an **Asset Location** detailed in the **Main** zone. (But no Asset filed.) This is the Asset Location that will be configured to initiate the maintenance for all the Asset Locations/Assets in the **Asset List** zone. Note that this Asset Location COULD be configured to have a zero "0" percentage of the costs allocated to it.
6. Observe the multiple *Asset Locations* in the **Asset List** zone.
7. Click **Edit**.
8. Observe that you COULD select an Asset Type for each Asset Location. If there were more than one Asset at that Asset Location and they had different Asset Types, you could add another row with the same Asset Location and a different Asset Type. Here are your options:
   a. If you do not populate the associated Asset Type for an Asset Location that has multiple Assets with different Asset Types, you will get a row for every Asset at that Asset Location.
   b. If you populate the associated Asset Type for an Asset Location that has multiple Assets with the same Asset Type, you will get a row for every Asset at that Asset Location.
   c. If you populate the associated Asset Type for an Asset Location that has multiple Assets with different Asset Types, you will get a row for every Asset with the detailed Asset Type at that Asset Location.

   At this time it is not possible to detail the specific Asset at the Asset Location, should there be multiple Assets at the Asset Location with the same Asset Type. (As might happen with Fleet Assets.)
9. Click **Cancel**.

Review an Asset Location Specific Maintenance Trigger

1. Navigate to **Menu**, **Preventive Maintenance**, **Maintenance Trigger**, and then click **Search**.
2. Select *Calendar Anniversary* as the **Maintenance Trigger Business Object** and click **Search**.
3. Select the *10, General Annual, Booster Pump Station Inspection* **Maintenance Trigger**
4. Note that the **Template Work Order** is the same Asset Location Specific Template Work Order we previously reviewed.
5. Note that the **Initial Schedule Date** is populated. (Other than maybe the Description of your Template Work Order or its Activity, this is your only indication you are looking at PM Route type functionality.)

   The **Initial Schedule Date** field is only editable when an Asset Location Specific Template Work Order has been detailed. The reason for this field is that there are supposedly multiple Assets and Asset Locations and we wanted to give you the control of when this maintenance should be initially triggered versus basing that initial date on the In Service Date of the Asset on the Asset at the Asset Location detailed in the **Main** zone of the Asset Location Specific Template Work Order Activity. The PM Anniversary Date for the associated Service History DOES NOT affect the Forecast. Only the Completion Date of the generated PM Activity affects the Forecast when an Asset Location Specific Template Work Order is detailed.

Review an Asset affected by an Asset Location Specific Maintenance Trigger

1. Navigate to **Menu**, **Asset Management**, **Asset**, select and **Asset Type** of "*Station"* and then click **Search**.
2. Select the Booster Pump Station Asset
3. Navigate to the **Maintenance** tab
4. Observe the **Maintenance Trigger** we just reviewed is listed in the **Asset List Maintenance Trigger** zone.

   You are welcome to review it yourself, but if you were to go to the **Asset Location Specific Template Activity** and then navigate to one of the other **Asset Locations** in the **Asset List** zone and then drill down to one of the **Assets** with the **Asset Type** that was selected you would see that the same **Asset List Maintenance Trigger** is listed for that **Asset** as well. The only difference is that the **Cycle Now** button is only available on the "*Station"* **Asset**.