Customer-Led Trial

User Guide

Enterprise Asset Management

for

Microsoft Dynamics® 365 for Finance and Operations, Enterprise Edition

Software Release: EAM 1707.0
Document version: 18-04-000

dynaway

Published: April 2018.

Table of Contents

1 Introduction

Enterprise Asset Management is an advanced module for managing assets and maintenance jobs in Microsoft Dynamics® 365 for Finance and Operations. Enterprise Asset Management (EAM) is developed by Dynaway A/S and integrates seamlessly with several modules in Microsoft Dynamics® 365 for Finance and Operations.

The free trial for the Dynaway Enterprise Asset Management (EAM) solution is a presentation of some of the main features in Enterprise Asset Management for Dynamics 365 for Finance and Operations. Below you find an overview and a short explanation of the basic elements of the EAM solution. Chapter 2 describes the current scenario for the free trial and includes procedures for a guided tour in our application, showing you various types of data that can be created and processed in Enterprise Asset Management.

Enterprise Asset Management Overview

Enterprise Asset Management allows you to efficiently manage and carry out all tasks related to managing and servicing many types of equipment in your production department, for example, machinery for production, conveyor belts, packaging equipment, and vehicles. Enterprise Asset Management supports solutions across numerous industries. The figure below shows an overview of the key features covered by Enterprise Asset Management.

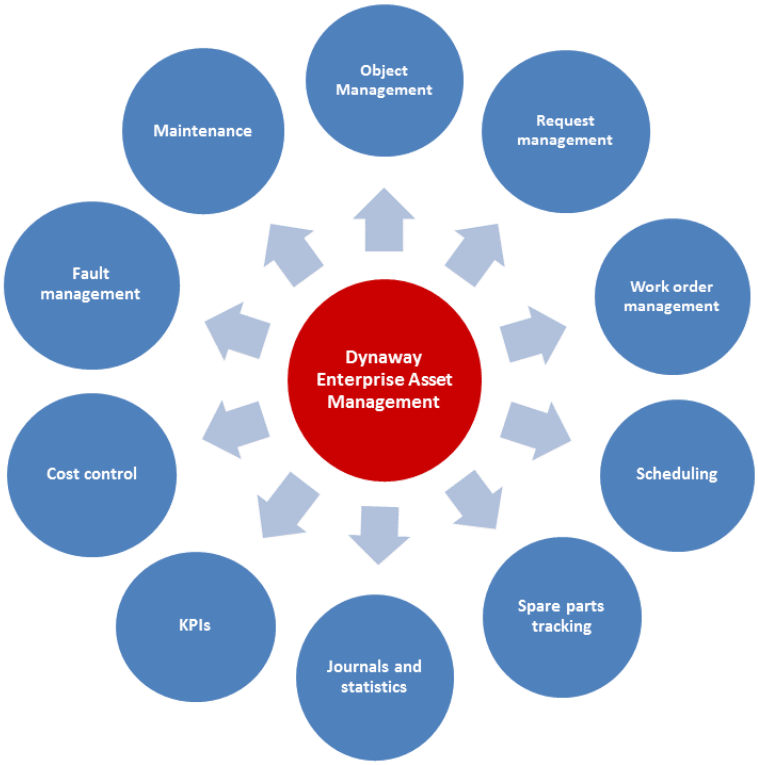

Figure 1

2 Maintenance Supervisor

In this free trial, we provide you with the role of maintenance supervisor. Often, the maintenance supervisor has many years of experience in the production industry, and he or she has previous experience in working as a production worker or a maintenance worker. The main tasks for the maintenance supervisor include keeping an overview of the production equipment in the plant and prioritizing maintenance tasks to ensure stability and reduce downtime on all work stations.

In this trial, we will guide you through some essential parts of the Dynaway Enterprise Asset Management solution in Dynamics 365 for Finance and Operations:

1. Explore object view and get an overview of objects and functional locations
2. Explore object details
3. Explore request details
4. Explore work order details

Note

The starting point of the four guides is the Dynamics 365 for Finance and Operations dashboard. In the screenshots below, the menu button and the link for the EAM menu are shown.

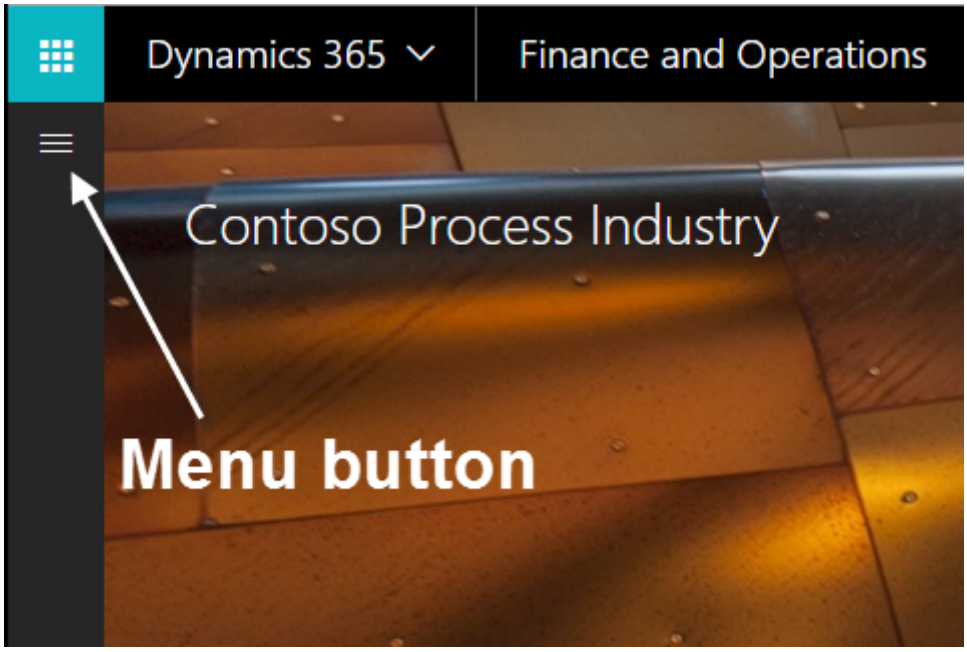

Figure 2

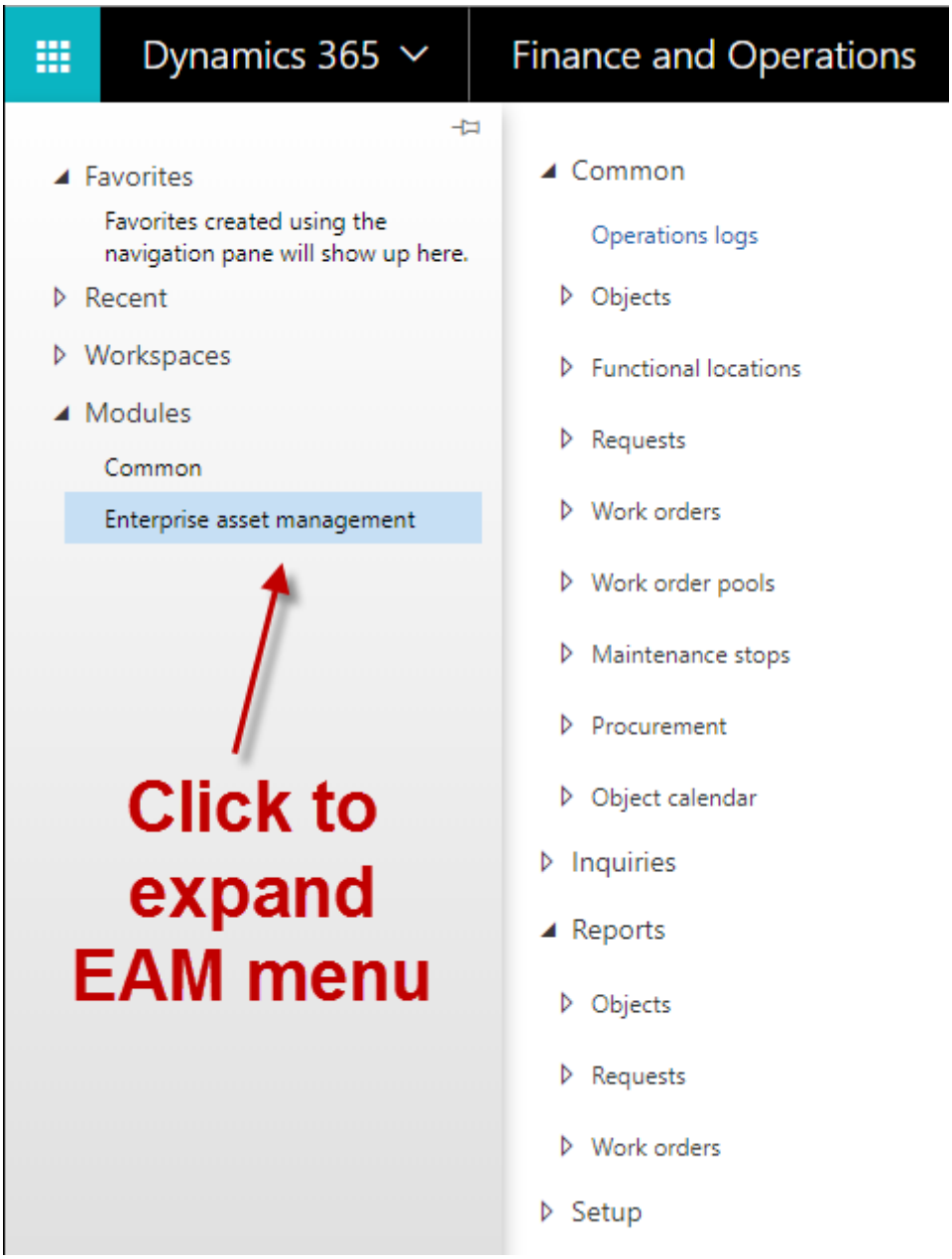

Figure 3

2.1 Explore Object View

Functional locations are used to manage objects on locations, including track object costs on functional locations. Functional locations are structured hierarchically, and locations can have sub locations. The functional location structure is static; locations cannot change place. Objects can be installed on functional locations and, if required, the objects can later be installed on another functional location.

Object costs always follow the location of the object meaning that if you install an object on a new functional location, the object automatically use the financial dimensions related to the functional location. Therefore, object costs are always related to the functional location to which the object was related at any given time. This automatic handling of financial dimensions ensures complete tracking of costs when your company performs project controlling and reporting on functional locations.

In **Object view**, you can see an overview of active objects and functional locations in a tree view. You can easily get an overview of object relations to functional locations as well as see detailed information regarding functional location, object, and related BOM, as well as a quick overview of active requests and work orders related to an object.

1. On the left-hand side of the screen, click the menu button > **Enterprise asset management** > **Common** > **Objects** > **Object view**.

2. Expand the main functional location **DPP: Dynaway Performance Plastics**.

3. Expand **DPP-02: Extrusion Lines** > **DPP-02-02: Extrusion Line 2**.

4. Select object **EX-201: EX-201 Extruder Line 2**.

5. When you have finished exploring the object view, click **Finance and Operations** at the top of the screen to return to the Dynamics 365 for Finance and Operations dashboard.

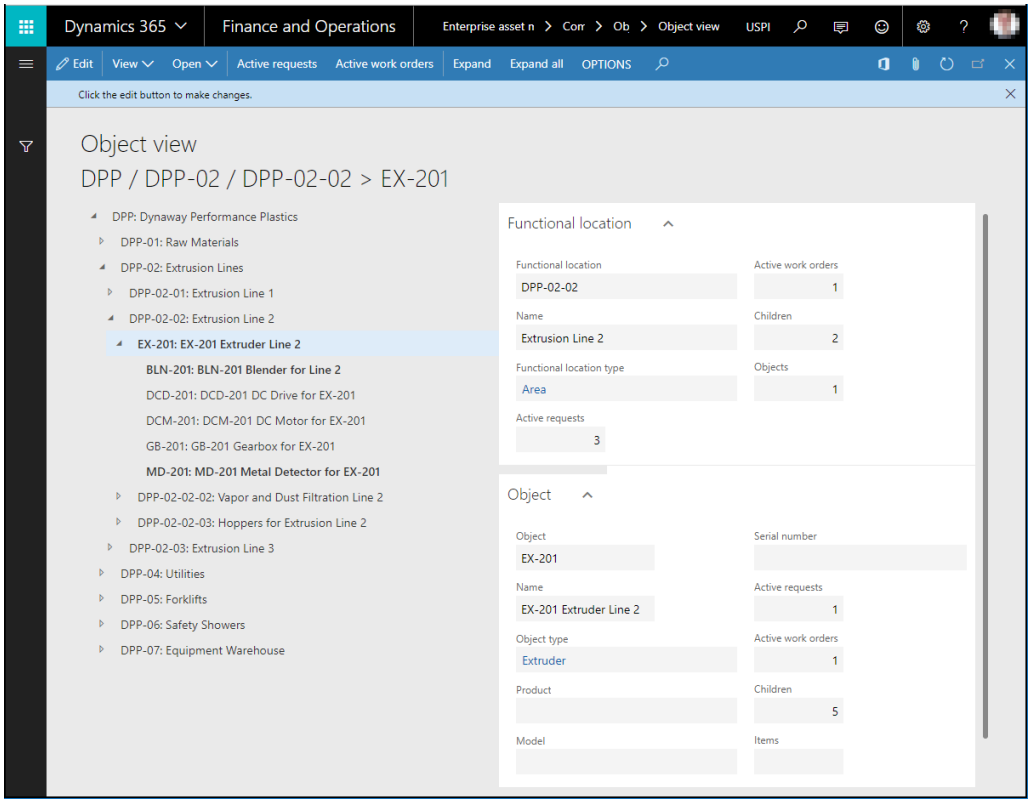

Figure 4

Notes on object view:

- In the figure above, you see additional information related to the selected object. For example, you can see that the object has five child objects, and active requests and work orders are related to the object.

- Three objects (parent object and two child objects are highlighted). This means that active requests and/or active work orders are related to the objects.

- You can select the Active requests button or the Active work orders button to see the requests or work orders related to the selected object.
- Click on the child objects to see related object data for them.
- The default view in the figure above is functional locations. You can change the starting point of the object view by clicking View and making another selection, for example, "Object types" or "Objects".

2.2 Explore Object

An object is any type of equipment, for example a machine or machine part, which requires maintenance, service, or repair. In this section, you will see some of the data related to an object.

1. On the left-hand side of the screen, click the menu button > **Enterprise asset management** > **Common** > **Objects** > **Active Objects**. The **Active Objects** list contains a list of currently active objects.
2. Select the line (not a link) for object "GEN-001 Emergency Generator".
3. Select the icon on the right-hand side of the screen to open FactBoxes related to the object (**Note** that the FactBoxes section may already be visible). Click on the arrow next to a FactBox title to expand or close it.

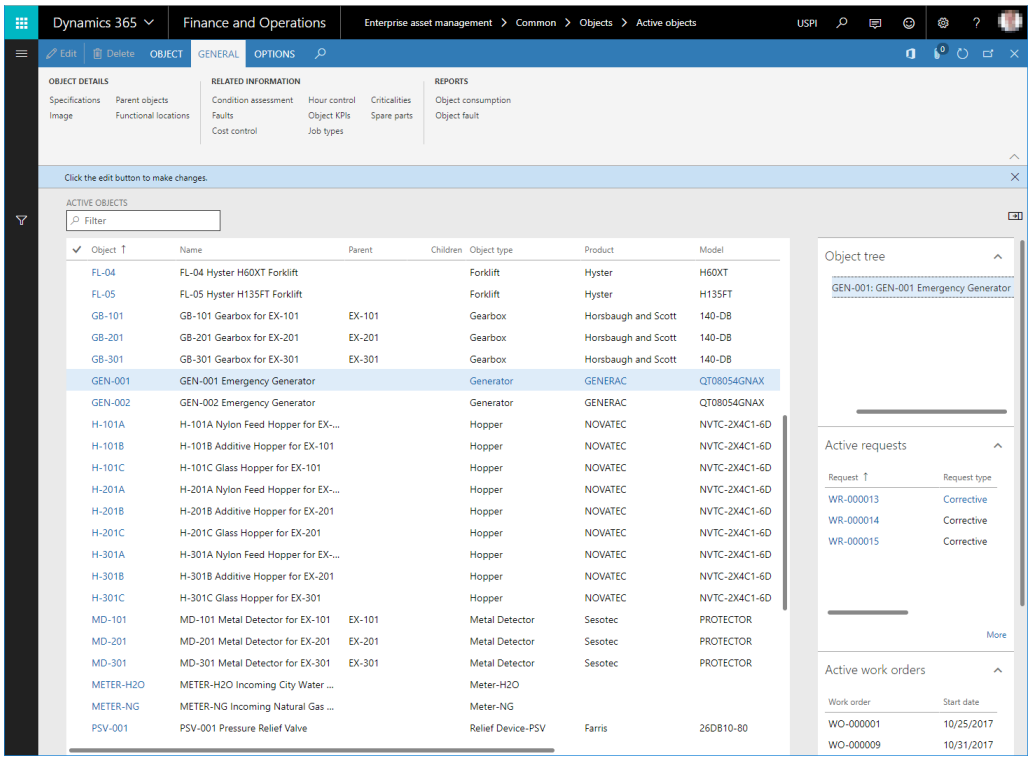

Figure 5

4. Next, click on the link in the **Object** column for object "GEN-001" to open the object details view and see more object details.

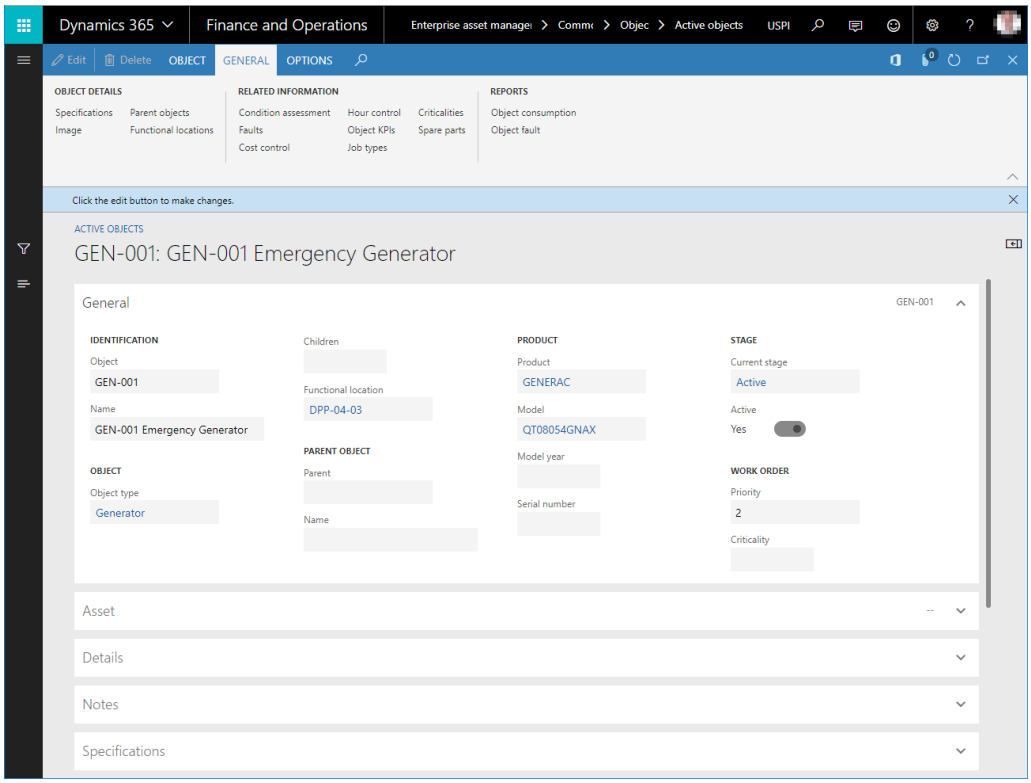

Figure 6

Note

You can create objects and related sub-objects in a hierarchical tree structure to display relations and dependencies of objects. Maintenance jobs can be related to all levels of the tree structure. Also, statistics can be created for the individual level, or as a sum of all sub-object levels.

Object Specifications

Object specifications are used to describe properties related to an object type or object. You can set up all kinds of object-related specifications. For example, for a machine you can create specifications regarding engine volume, power consumption, oil capacity, and maximum load capacity under different conditions.

- In the object details view, click **General** tab, **Specifications** to see the object specifications related to the object. Click the back button (←) at the top of the screen to return to the object details view.

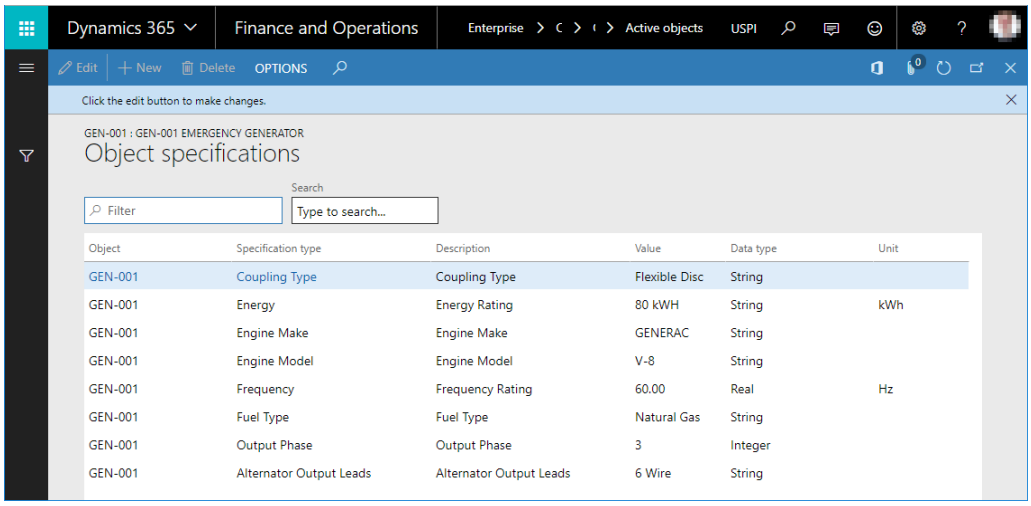

Figure 7

Object Image

- In the object details view, click **General** tab > **Image** to see an image or photo of the object. Click the back button ( ) at the top of the screen to return to the object details view.

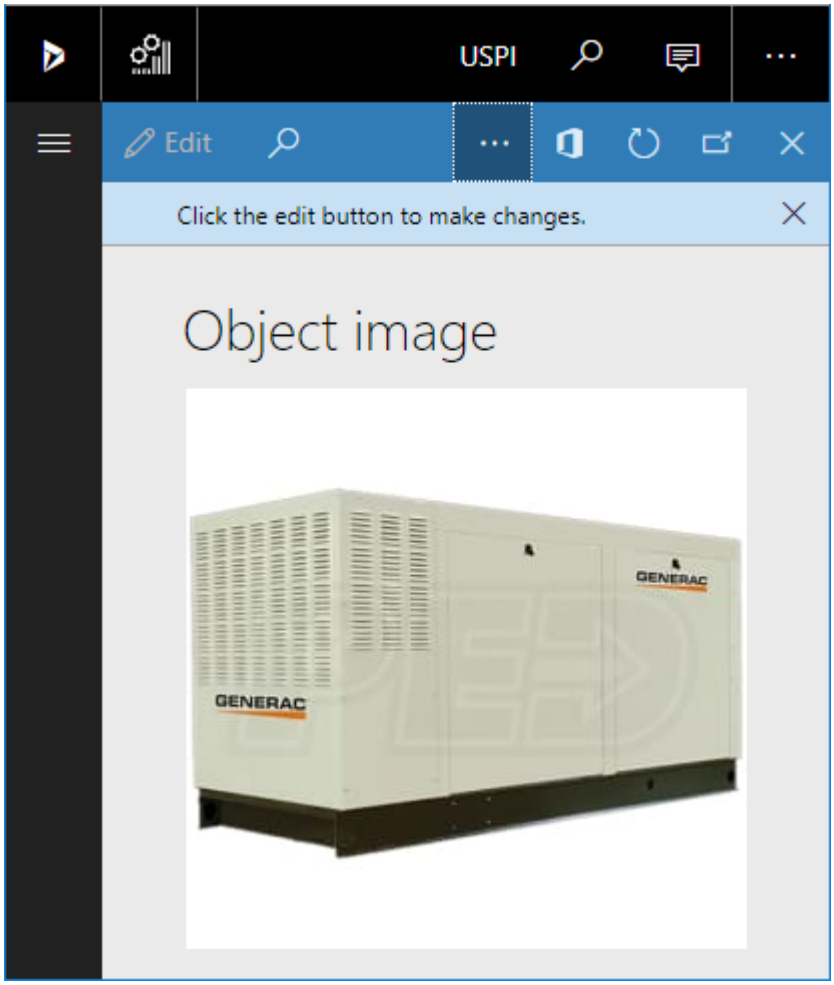

Figure 8

Object Documents

You can set up documents to automatically relate to, for example, job types, products, object types, or objects. This is useful when updated document versions are released. In that case, you only need to place the updated document on the standard location you use for your Dynamics 365 for Finance and Operations documents, attach the document to the object document record you have created, and the updated document can be accessed from the **All objects**, **Active objects**, **My active objects**, **All work orders**, and **Active work order lines** menu items. The process regarding attaching documents to an object document record uses the standard document handling system in Dynamics 365 for Finance and Operations.

Example: A document may relate to an object type - product - model combination (set up in the second record in the **Object documents** screenshot below). The related document could be the standard manual for the selected product model.

- In the object details view, click **Object** tab > **Object documents** to see the files related to the object. Click the back button ( ) at the top of the screen to return to the object details view.

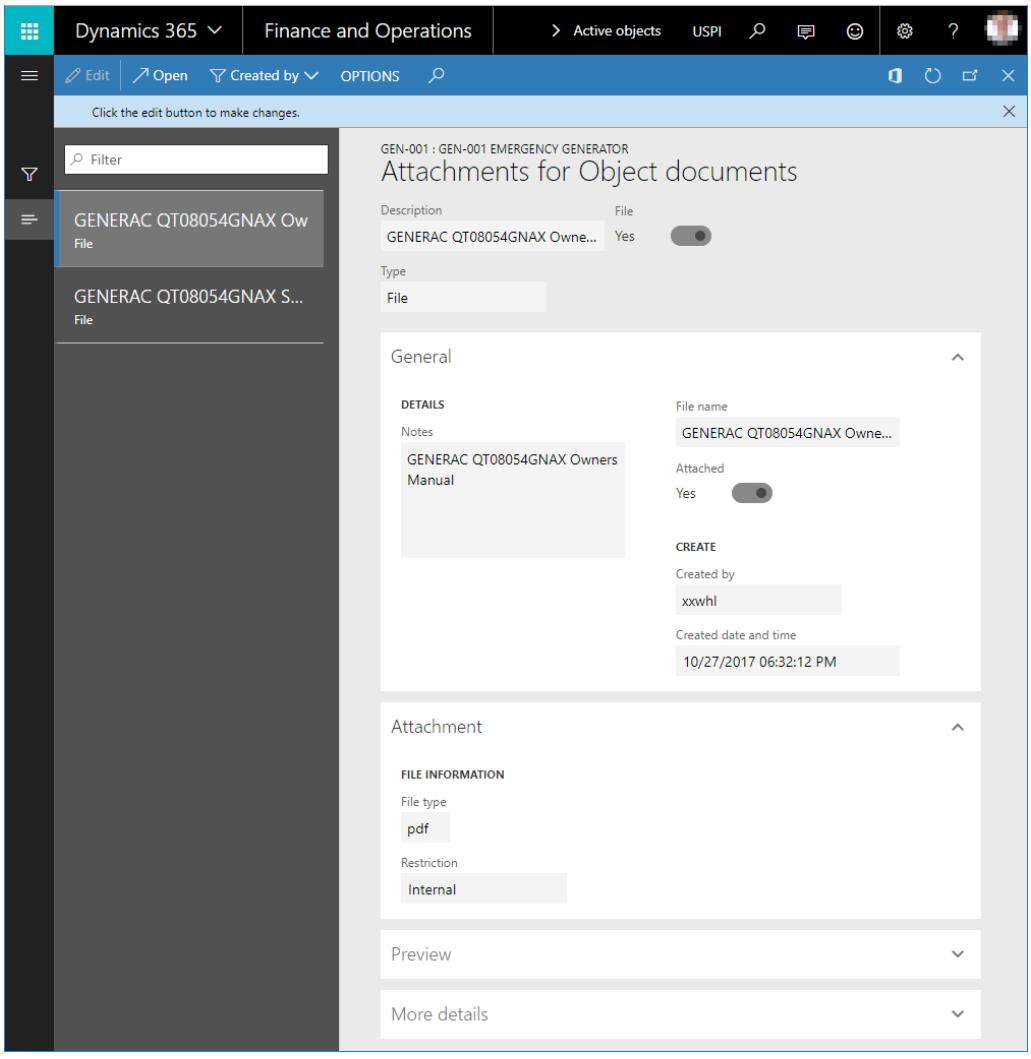

Figure 9

Object Calendar

The object calendar contains a list of all the expected preventive maintenance sequences, requests, and rounds to be carried out. Some calendar entries may have been converted to work orders.

- In the object details view, click **Object** tab > **Object calendar** to see the object calendar entries related to the object. Click the back button () at the top of the screen to return to the object details view.
- When you have finished exploring the object details, click **Finance and Operations** at the top of the screen to return to the Dynamics 365 for Finance and Operations dashboard.

Note

In this example, the object calendar entries are generated from maintenance sequences to which the object is related.

When a calendar entry has been related to a work order, the work order ID will be displayed in the **Work order** field.

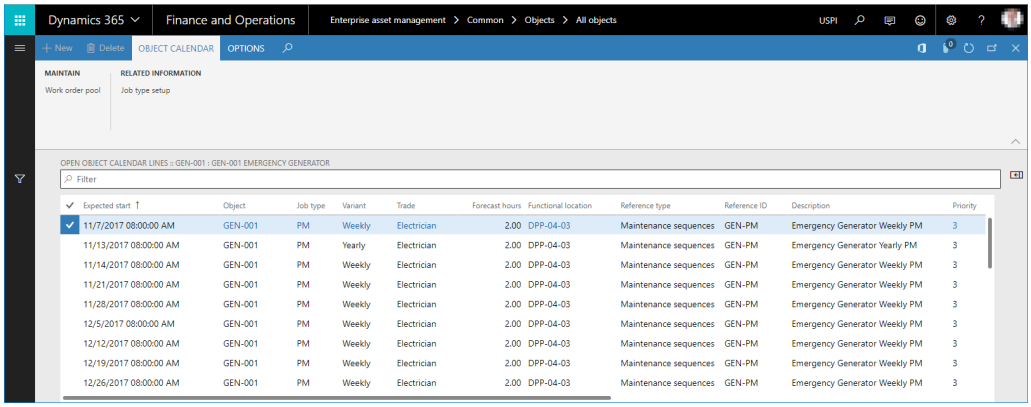

Figure 10

A maintenance sequence defines when a pre-planned preventive maintenance job is to be carried out on an object. Maintenance sequences can be related to objects, object types, functional locations, or functional location types. A maintenance sequence can have multiple maintenance sequence lines. Job type and interval are specified on the maintenance sequence line. There are two types of maintenance sequence lines:

- Time
- Counter

Maintenance sequence lines of type "Time" (shown in the screenshot below) are used for recurring planned maintenance based on a fixed time interval. Maintenance sequence lines of type "Counter" are used for planned maintenance or reactive maintenance based on object counter registrations. A maintenance sequence may include several maintenance sequence lines of both types.

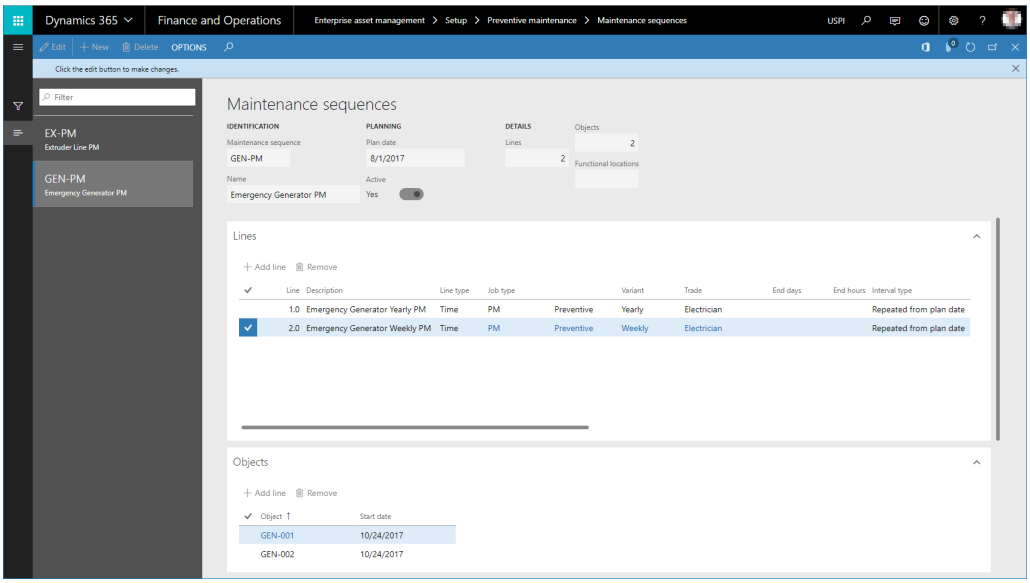

Figure 11

2.3 Explore Request

Requests are notes or declarations that can be created to make a manager or planner aware that an object may require a maintenance or repair job - without actually creating a work order. A work order may subsequently be created based on a request if the contents of the request are considered to be valid for a work order to be created. Requests can be created for any object in Enterprise Asset Management. Various request types can be created, depending on how your company uses requests. Here are some examples:

- Maintenance requests
- Notes
- Corrections / Enhancements
- Investments
- Depot repair - for the purpose of managing repair of objects that you receive from another location to carry out a maintenance or repair job, and then return the object after the job is completed.

1. On the left-hand side of the screen, click the menu button > **Enterprise asset management** > **Common** > **Requests** > **Active Requests**. The **Active Requests** list contains a list of currently active requests.

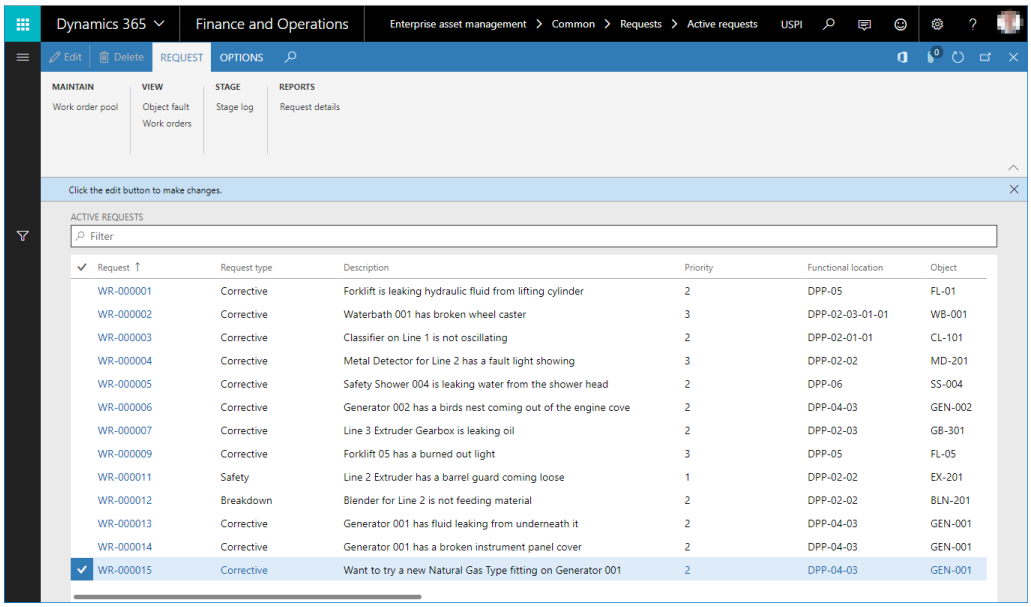

Figure 12

2. In the **Request** column, click on the link for request "WR-000015" to open the request details view.

3. Click on the **Notes** FastTab to see notes added to the request (this FastTab may already be visible).

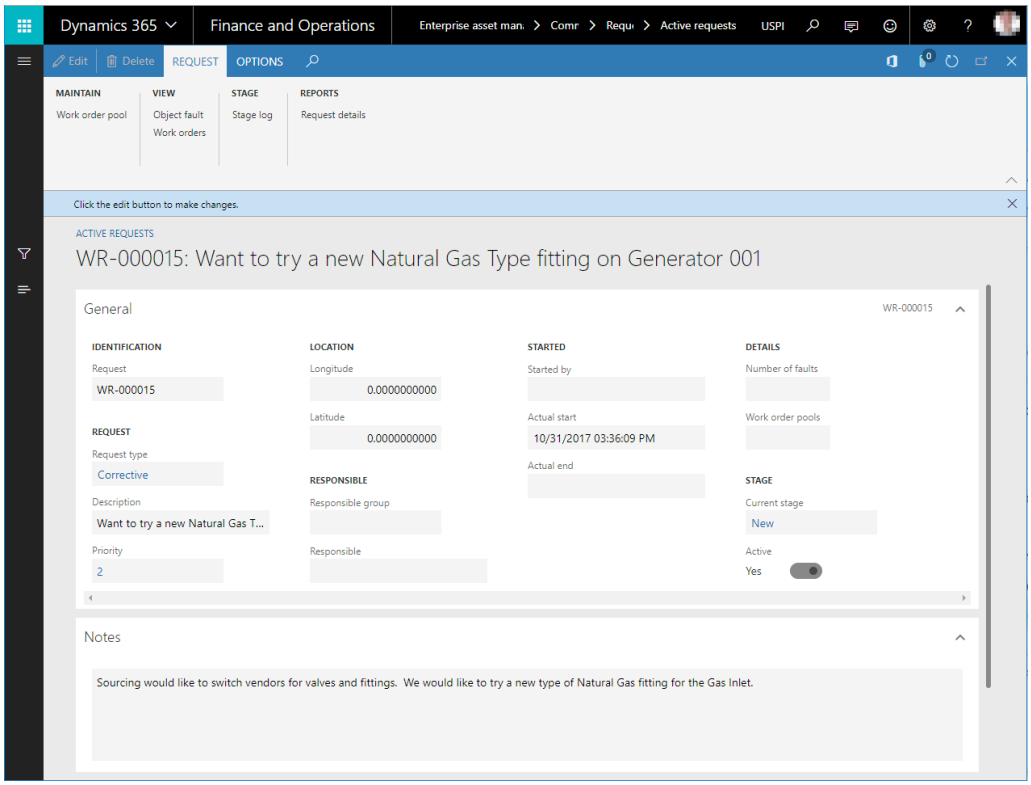

Figure 13

4. On the **Request** tab, click **Object fault** to see related fault registrations. Click the back button () at the top of the screen to return to the request details view.

5. When you have finished exploring the request details, click **Finance and Operations** at the top of the screen to return to the Dynamics 365 for Finance and Operations dashboard.

2.4 Explore Work Order

The central parts of Enterprise Asset Management are objects and work orders. An object is a machine or machine part that requires continuous maintenance and service. Objects can be created in a hierarchical structure, and they can be related to functional locations. Work orders (maintenance jobs) can be planned at all levels in the object hierarchy.

Work orders are used to manage, provide required information for, and register consumption on service jobs. A work order may contain one or more work order lines. One or more objects can be connected to a work order. Each work order line defines a maintenance job scheduled on the object.

Work orders can be created automatically or manually:

- Automatically using the Schedule maintenance sequences functionality
- Automatically using the Schedule rounds functionality

- Create from object calendar, which can be preventive maintenance jobs or requests
- Create a work order manually
- Create a work order from **All requests** or **Active requests** or **My functional location requests** views

A work order contains a work order type, for example, preventive maintenance, corrective maintenance, or inspection. The work order contains one or more work order lines. Each work order line defines a job to be carried out on an object and a related job type, for example, 10,000 km, 50,000 km, 1-year overhaul, or safety inspection. One work order can relate to several objects.

Work orders can be created in various ways relating to corrective, preventive, or reactive maintenance. It is also possible to create work orders manually. In this example, you will look at a work order that has been automatically created from a preventive maintenance setup.

1. On the left-hand side of the screen, click the menu button > **Enterprise asset management** > **Common** > **Work orders** > **Active Work orders**. The **Active Work orders** list contains a list of currently active work orders.
2. Select the line (not a link) for work order "WO-000009 Emergency Generator Weekly PM".
3. Select the  icon on the right-hand side of the screen to open FactBoxes related to the work order (**Note** that the FactBoxes section may already be visible). Click on the arrow next to a FactBox title to expand or close it.

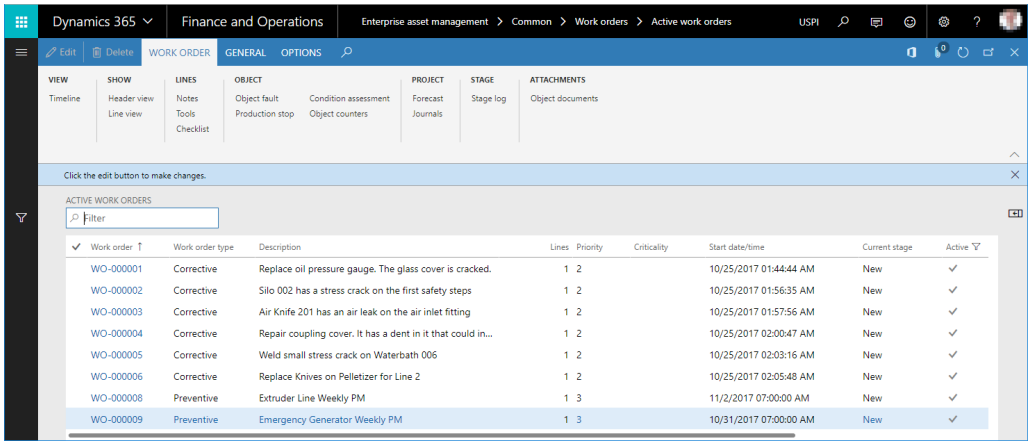

Figure 14

4. Next, click on the link in the **Work order** column for work order "WO-000009" to open the work order details view.

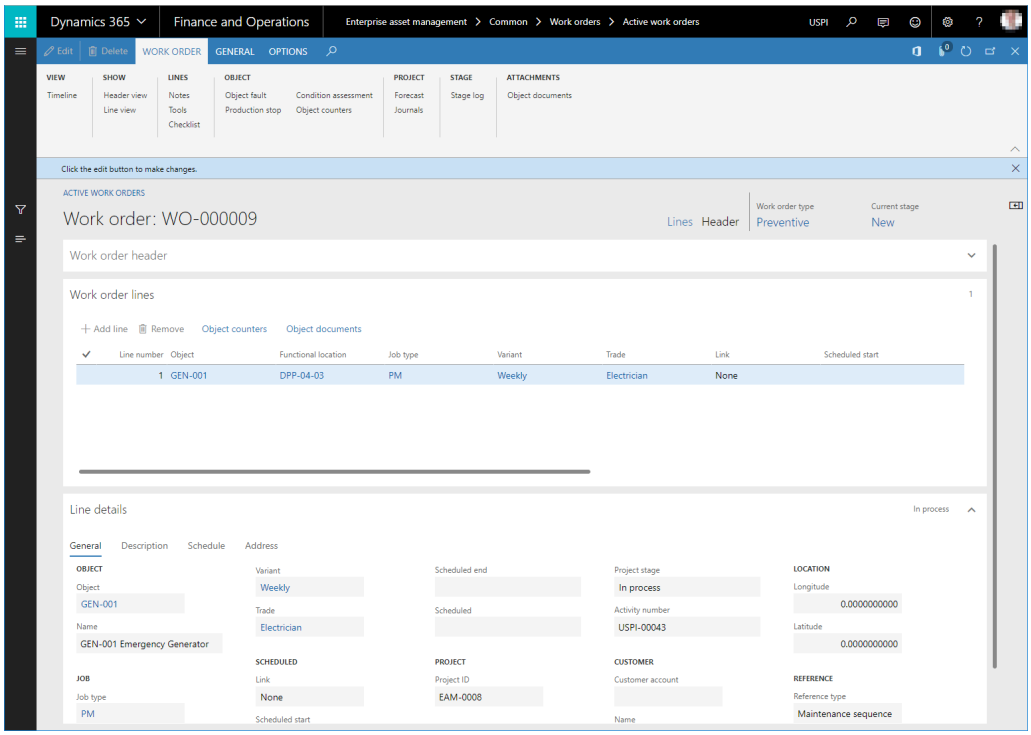

Figure 15

Checklists

Checklists are set up on job types and used when you work on a work order. Filling out checklists and any related measurements is part of completing a work order.

- In the work order details view, click **Work order** tab > **Checklist** to see the checklist and related measurements (if any) for the work order. Click the back button ( ) at the top of the screen to return to the work order details view.

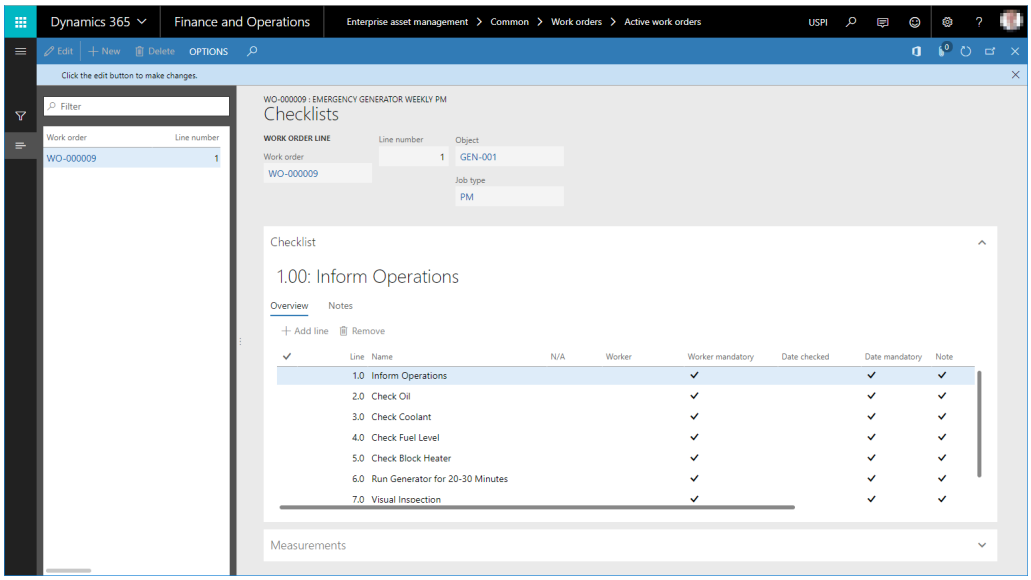

Figure 16

Notes

Work order notes are divided in three categories: Description, worker's remarks, and internal notes.

- In the work order details view, click **Work order** tab > **Notes** to see the notes added to the work order. Click the back button (←) at the top of the screen to return to the work order details view.
- When you have finished exploring the work order details, click **Finance and Operations** at the top of the screen to return to the Dynamics 365 for Finance and Operations dashboard.

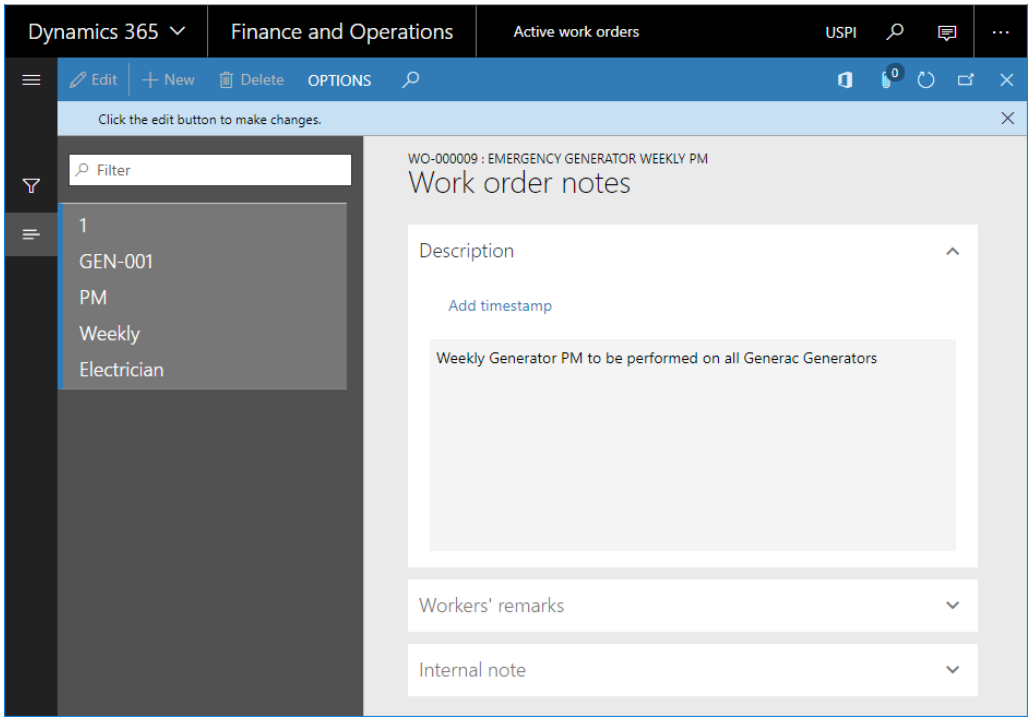

Figure 17

3 What's Next

We hope you've enjoyed the free trial, and that you have gained some insight into our Enterprise Asset Management solution. Want to learn more, or do you have questions for us regarding EAM? Please send us an email: info@dynaway.com.

You are also welcome to learn more on our website: https://www.dynaway.com/eam/.