# AssetOptics Quick Start Learning Series

## Asset Management



## Learning Objectives

Learn how to set up and use:

- 1. Equipment/Assets
- 2. Locations
- 3. Building, Floors, Spaces
- 4. Meters & Meter Readings
- 5. Asset Groups
- 6. Bills of Materials



## **Definitions – Asset Management**

**Equipment/Asset** – Equipment, Components, and Vehicles. A physical or logical entity upon which preventive and corrective maintenance work orders are tracked (a.k.a., an "asset tag")

**Location** – Physical and/or logical areas where Equipment/Assets are located. Locations can be organized into hierarchies

**Buildings, Floors, Spaces** – A three-tiered hierarchical facility data model. Equipment/Assets and Work Orders have a lookup relationship to Spaces.



## **Definitions – Asset Management**

**Meter** – An instrument for measuring runtime (e.g., hours, cycles, miles) or fuel consumption (e.g., gallons)

Meter Readings – Individual date/time stamped readings for a specific meter. Can be used to schedule preventive maintenance work orders.

Asset Group – A collection of Equipment/Assets of the same type. An Asset Group is used to organize Bills of Materials, Model Work Orders, and Work Order Standard Tasks to promote efficiency of work planning and minimize duplication of effort.

**Bills of Materials** – (BOM) List of Service/Repair Parts for an Equipment/Asset.



### Equipment/Assets Equipment, Components, Vehicles

Equipment/Asset Mash Mixer Pu	mp				+ Follow Edit Delete New Note New Task New Event New Work Or
Description Mash Mixer Pump	Model Number Serial Number M245 AIM4569920	Manufacturer Acme Industrial Machin	Asset Locat nes, Inc. Processing		
Details Related					Quick Links Chatter Activity
Information					Related List Quick Links 💿
Asset ID	Mash Mixer Pump	1	Owner	😸 Admin User	🖸 Work Orders (6) 🔤 PM Schedules (3) 💋 PM Group Schedules (1)
Description ()	Mash Mixer Pump	/	Status	In Service	Route Stops (0) O Meters (1) Equipment/Assets (Parent Asset ID) (0)
Asset Location	Processing	/	Туре 🕚	Machinery	Show All (11)
Account 🕔		1	Asset Group 🕕	APV Lobe Pump	
Space		/			Notes Files Audit Trail
Nameplate Informatio	on				
Manufacturer 🚯	Acme Industrial Machines, Inc.		PO Number		8 Notes (0)
Model Number	M245	/	Purchase Date	5/1/2016	1
Serial Number	AIM45699201	/	Mfg Date 🚯		QR Code
Noun 🕕		1	In Service Date	5/4/2016	
Modifier 🕕		/	Warranty Expiration Date	5/1/2018	
Nameplate Data					
Nameplate Data 🛛 🜒		M245 MMP Voltage 230/460 Phase 3 20 HP RPM 4200			
		RPM 4200			Asset Attributes
Serialized Inventory D	etails				Asset Attributes
Item Master		1	Purchase Order		
Bin Location		/	PO Stock Item 🕚		There are no Asset Attribute - Value records
Service Planning					Asset Hierarchy Map
Default Planner 🚯		1	Service Region		Asset Name V Description V Location
Asset Hierarchy					✓ Mash Line Mash Line Processing
Parent Asset ID	Mash Mixer		Hierarchy Sort Order 🏾 🕚	0	> Mash Hopper Mash Hopper Processing
Parent Description	Mash Mixer		· · · · · · · · · · · · · · · · · · ·	-	Mash Conveyor Mash Conveyor Processing
				~~~~~	Rolls-Mill Rolls-Mill Processing

Record Asset Nameplate Information, Purchase & Service Data, Define where an Asset resides within a system (hierarchy), record images.



### Locations

ceceiving Boy 2 Receiving Dock     Details Related     Lecation D Receiving Bay 2     Owner     Description     Receiving Bay 2     Owner     Created 9     Solution Hierarchy     V Location Hierarchy     Parent Location ©     Receiving Dock     Name     V Brewing Facility     Brewing Facility     Brewing Facility     Brewing Facility     Brewing Bay 1     Receiving Dock     Receiving Box 2     Receiving Box 3     Parent Location ©        Parent Location ©	escription	Parent Location	Parent Description						
Location ID 1 Receiving Bay 2 / Created By 2 / Created By 5/14/2020, 8:43 AM Lest Modified By 5/14/2020, 8:43 AM Lest Modified By 5/14/2020, 8:43 AM Software Created By 5/14/2020, 8:43 AM Lest Modified By 5/14/2020, 8:43 AM Not Created By 5/14/2020, 8:43 AM Lest Modified By 5/14/2020, 8:43 AM Not Created By 7/2 Receiving Dock Not Created By 7/2 Receiving Dock Not Created By 7/2 Receiving Dock Receiving Doc 2 Dock Lock, Receiving Doc 2 Dock Lock Re	eceiving Bay 2								
Location ID 1 Receiving Bay 2 / Owner C C C C C C C C C C C C C C C C C C C	<u> </u>	(Contraction)	1: ( E=:/// )		$(1) (\mathcal{S} (\mathcal{S} (\mathcal{S}))) (\mathcal{S} (\mathcal{S})) (\mathcal{S} (\mathcal{S})) (\mathcal{S}) ($		<u> </u>		1.15%
Description Receiving Bay 2   Created By 5/14/2020, 8:43 AM   Last Modified By 5,5/14/2020, 8:43 AM   Location Hierarchy   Parent Location   Parent Location   Receiving Dock   Hierarchy Sort Order   Obscription   Receiving Dock   Brewing Facility   Receiving Dock   Receiving Bay 1   Receiving Bay 2   Receiving Bay 2   Receiving Bay 2   Receiving Bay 2   Port Storage   Dort Storage   Serial Number:   Sated Group:   Serial Number:   Sated Group:<	Details Relate	ed						Quick Links Chatter	
Created By 5/14/2020, 8:43 AM   Location Hierarchy   Parent Location @   Parent Location @   Receiving Dock   Name   V   Description   Receiving Dock   Brewing Facility   Brewing Facility   Receiving Dock   Receiving Dock   Receiving Dock   Receiving Dock   Receiving Dock   Receiving Box I   Receiving Bay 1   Receiving Bay 2   Receiving Bay 2   Prost Storage   Dry Storage   Dry Storage   Dry Storage   Dry Storage   Dry Storage   Naterial Storage   View All   Lust Modified By   (and Material Storage View All View All	Location ID	1 Receiving Bay 2		1	Owner	8	£	Related List Quick Links 👔	
<ul> <li>✓ Location Hierarchy</li> <li>Parent Location          <ul> <li></li></ul></li></ul>	Description 🚯	Receiving Bay 2		1				Child Locations (0)     Equipment/Assets (4)	
Parent Location     Parent Location     Parent Description Receiving Dock     Imme       Description           Brewing Facility   Brewing Facility Brewing Facility   Receiving Bock Receiving Dock   Receiving Bay 1 Receiving Bay 1   Receiving Bay 2 Receiving Bay 2   Proget Dry Storage   Dry Storage Dry Storage   Proget Receiving Docy 2   Receiving Bay 2 Receiving Bay 2   Proget Dry Storage   Dry Storage Dry Storage   Proget Rew Material Storage     View All	Created By	8	5/14/2020, 8:43 AM		Last Modified By	o 14/2020, 8:43 AM		Work Orders (0) Notes (0)	
Parent Description Receiving Dock     Iame Description     Iame Receiving Bay 1        Iame Receiving Bay 2 <td><ul> <li>Location Hierarc</li> </ul></td> <td>hy</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Files (0)</td> <td></td>	<ul> <li>Location Hierarc</li> </ul>	hy						Files (0)	
Jame       Description         > Brewing Facility       Brewing Facility         > Receiving Dock       Receiving Dock         > Receiving Bay 1       Receiving Bay 2         > Receiving Bay 2       Receiving Bay 2         > Dry Storage       Dry Storage         > Dry Storage       Dry Storage         > Raw Material Storage       Raw Material Storage	Parent Location 🕕	2 Receiving Dock		1	Hierarchy Sort Order	20	1		
Name       Description       Description:       Descript	Parent Description	Receiving Dock						Equipment/Assets (3+)	
Name       Description       Description:       Descript								Dask Lovalar Despiring Depr 2	•
> Brewing Facility       Brewing Facility       Serial Number:       998530         > Receiving Dock       Receiving Dock       Dock Lock, Receiving Door 2         > Receiving Bay 1       Receiving Bay 2       Receiving Bay 2         > Dry Storage       Dry Storage       Dry Storage         > Nexerial Storage       Rew Material Storage       Naterial Storage	lame			$\sim$	Description		~	Description: Dock Leveler, Receiving Door 2	
Receiving Dock     Receiving Dock       Receiving Bay 1     Receiving Bay 1       Receiving Bay 2     Receiving Bay 2       Dry Storage     Dry Storage       Receiving Storage     Rew Material Storage	✓ Brewing Facility				Brewing Facility		•		
> Receiving Bay 1     Receiving Bay 1     Asset Group:       > Receiving Bay 2     Receiving Bay 2       > Dry Storage     Dry Storage       > Raw Material Storage     Raw Material Storage	✓ Receiving Do	ck			Receiving Dock				
Dry Storage     Dry Storage     Dry Storage       Rew Material Storage     Raw Material Storage         Dry Storage     Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage         Dry Storage </td <td>&gt; Receiving</td> <td>Bay 1</td> <td></td> <td></td> <td>Receiving Bay 1</td> <td></td> <td></td> <td>Asset Group:</td> <td></td>	> Receiving	Bay 1			Receiving Bay 1			Asset Group:	
> Dry Storage     Dry Storage     Asset Group:       > Raw Material Storage     Raw Material Storage     Serial Number:	> Receiving	Bay 2			Receiving Bay 2			Door System, Receiving Door 2	
Naw Material Storage     Raw Material Storage       View All	> Dry Storage				Dry Storage			Asset Group:	
	> Raw Material	Storage			Raw Material Storage				
> Processing Processing	> Processing				Processing			View All	

- 1 Locations are used to specify areas where Equipment/Assets are located
- 2 Locations can be organized into hierarchies by specifying a Parent Location
- 3 The Hierarchy Order is determined by a user-specified numerical value

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### Facilities Hierarchy Buildings, Floors, & Spaces

RM-101		+ Follow Edit Delete Clone
Description Space Type Floor ID Building Room #101 Room FL-01 101 Main St		
Details     Related       Space ID     RM-101       Description     Room #101       Space Type     Room       Created By     11/10/2018 10:55 AM	Building     101 Main St       Floor ID     FLO1       Hierarchy Sort Order     101       Last Modified By     7/1/2019 2:54 PM	Quick Links     Chatter     Activity       Related List Quick Links     •       Equipment/Assets (2)     •     Work Orders (10+)       PM Schedules (1)     2     PM Group Schedules (0)       Route Stops (0)     •     Notes (0)       Files (0)     •     •
Building Hierarchy Name	✓ Description	Notes Files
<ul> <li>✓ 101 Main St</li> <li>✓ FL-01</li> <li>&gt; RM-101</li> </ul>	101 Main St Ground Floor - Level 1 Room #101	Notes (0)
> RM-102 > RM-103	Room #102 Room #103	Recent Items (1) IO1 Main St Description 101 Main St
> RM-104 > RM-105 > FL02	Room #104 Room #105 Floor - Level 2	
> FL03	Floor - Level 3	

1- Work Orders may be created directly on Spaces or the Space can be inherited from the Equipment/Asset.

2 - Preventive Maintenance Schedules, PM Group Schedules, PM Routes, and Work Orders can be created directly on a Space.

3 - If an Asset is moved to a new Space, subsequent Work Orders get created with the new Space reference while existing Work Orders retain references to the prior Space.



#### Meters & Meter Readings Track Runtime Hours/Miles/Consumption

i Meter M-000002	73					
Description Hot Water Tank Flow Meter	Last Reading Value 9,250.00	Last Reading Date 9/1/2020, 2:14 PM	Average U 36.36	se (Units/Day)	UOM Gallons	
Related <b>Details</b>						
Meter ID	M-00002			Owner		😸 Admin User
Description (1)	Hot Water Tank Flow Meter	•	1	Туре 🚯		Continuous
UOM 🚯	Gallons		all a second sec			
Last Reading Value 🕕	9,250.00		_1	Asset ID 🚯		Hot Water Tank
Last Reading Date 🚯	9/1/2020, 2:14 PM		1. Alternation of the second s	Asset Description	0	Hot Water Tank
✓ Meter Usage Details						
Avg Use Calculated (Units/Day)	36.36			Auto Calculate Avg	Use 🚺	✓
Avg Use Override (Units/Day)			1	Average Use Readin	gs 🚺	2
Average Use (Units/Day)  🕚	36.36			Last Avg Use Update	e 🚯	12/14/2020, 2:39 PM
Estimated Annual Use 🕚	0.00		1			
✓ Additional Details						
Revision 🕕	1		2	External ID 🚯		
Install Date 🚯			1	Search 🚺		Meter
Created By	😸 Admin User, 12/14/20	20, 2:12 PM		Last Modified By		8 12/15/2020, 11:34 AM
Record Type	Continuous					

1 – Meters are linked to Assets

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2 – Meter Readings can be imported referencing External IDs

#### Meters & Meter Readings (cont'd) Track Runtime Hours/Miles/Consumption

escription	Last Reading Value	Last Reading Date	Average Use (Units/Day)	UOM		
elivery Truck Odometer	19,110.00	12/14/2020, 11:15 AM	26.25	Miles		
Related Details		$\mathcal{L}^{2} \longrightarrow (V_{0}^{*} M) i \longrightarrow$				
Meter Readings (4)	5					New
Meter Reading ID	لم Readin	g Date	Reading Value		UOM	
MR-00000007	12/14	2020, 11:15 AM	19,110.00		Miles	
MR-00000006	9/17/2	2020, 12:13 PM	16,800.00		Miles	
MR-00000005	7/29/2	2020, 10:11 AM	14,525.00		Miles	
VR-00000004	4/10/2	2020, 7:12 PM	12,253.00		Miles	
			View All			
PM Schedules (1)	3					
PM Schedule #	Asset I	D	Asset Description		PM Due Date	
PM-000003	Deliver	y Truck	Class V Delivery Truck			
			View All			
<b>O</b> Meter History (2)						
Date	Field	User	Ori	ginal Value	New Value	
12/14/2020, 12:19 PM	Slope				3,291,461.905	

3 - Meter Readings can be used to schedule Preventive Maintenance



#### Asset Groups

Asset Group APV Lobe Pump					
Details Related					
Standard Work Tasks (1)				\$t -	C New Change Owner
1 item • Sorted by Std Task ID • Updated a few seconds ago				÷.	C Herr onunge office
Std Task ID ↑	✓ Description		✓ Est Hrs	✓ Status	~
1 Monthly Maintenance APV Lobe Pump	Monthly Maintenance	APV Lobe Pump	0.50	New	
	13	View All			
Bills of Materials (1)					
				ŵ -	C <sup>I</sup> New Change Owner
1 item • Sorted by BOM ID • Updated a few seconds ago BOM ID ↑	✓ Description		Revision	✓ Status	
		~			~
1 BM-000000	APV Lobe Pump Parts List	View All	1	Approved	•
		View All			
Model Work Orders (4)				\$t = (	C <sup>I</sup> New Change Owner
4 items • Sorted by Work Order • Updated a few seconds ago					
Work Order 1	✓ Description		∨ Туре	✓ Status	~
1 WO-0000000	Monthly Maintenance		Preventive	Approved	
2 WO-0000001	Weekly Inspection on APV Lobe Pump		Preventive	Approved	•
3 WO-000002	Quarterly Maintenance		Preventive	Approved	•
4 WO-0000003	Annual Maintenance		Preventive	Approved	
		View All			
Equipment/Assets (1)				æ - 1	C <sup>4</sup> New Change Owner
1 item • Sorted by Asset ID • Updated a few seconds ago					
Asset ID 🕇 🗸 🗸	Description	✓ Status	✓ Location	✓ Record Type	~
1 Mash Mixer Pump	Mash Mixer Pump	In Service		Equipment	
		View All			
_					
2 Notes (0)					New

Asset Groups are used to help organize: (1) Standard Work Tasks, (2) Bills of Materials, (3) Model Work Orders, and (4) Equipment/Assets



### **Bills of Materials**

#### Predefined Parts Lists Accessed via Work Orders

ription Lobe Pump Parts List	Status Approved	Asset Group APV Lobe Pump				
tails <b>Related</b>						
BOM Items (10+) items • Sorted by Item Master II	) • Updated a minute	ago				total and the second se
BOM Item: BOM Item I	D v I	tem Master ID ↑	$\sim$	Item Description	V BOM Qty	~
BI-000019	J	820149		SCREW - Set	2	
BI-000023	Ν	M03AP331034		SHAFT and GEAR ASSEMBY - Long	1	
BI-000024	Ν	M03AP331036		SHAFT and GEAR ASSEMBY - Short	1	
BI-000020	Ν	M03HP331030		NUT - Bearing Adjustment	1	
BI-000017	Ν	M03HP331031		NUT - Bearing Adjustment and Seal Retainer	1	
BI-00007	Ν	M03HP331037		BACKPLATE	1	
BI-00008	Ν	M03HP331051		BEARING - Seal (Stainless Steel)	2	
BI-000010	Ν	M03HP331077		STUD - Hex	4	
BI-000001	Ν	M03HP331499		COVER	1	
		M521V007222		SCREW - Hex Head Cap	4	

- 1 Organized by Asset Group
- 2 List of Parts presented to user on a Work Order
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