



South African Weather Service
SAW Technical Assets Management Training Manual
Fiix Implementation

Document Review and Distribution

Document location

Revision history

Version	Author	Date	Revision	Email address
1.0	Sipho Banda	29/07/2019	Final	

Document review

This document is deemed official only if the reviewers have signed below

Reviewer Name	Signature	Role	Date

Document distribution

Version	Name	Date	Email Address

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1 INTRODUCTION

1.1 Document Purpose

The purpose of this training document is to provide steps on how to enter/maintain Assets and process transactions on the NetSuite system.

1.2 Scope

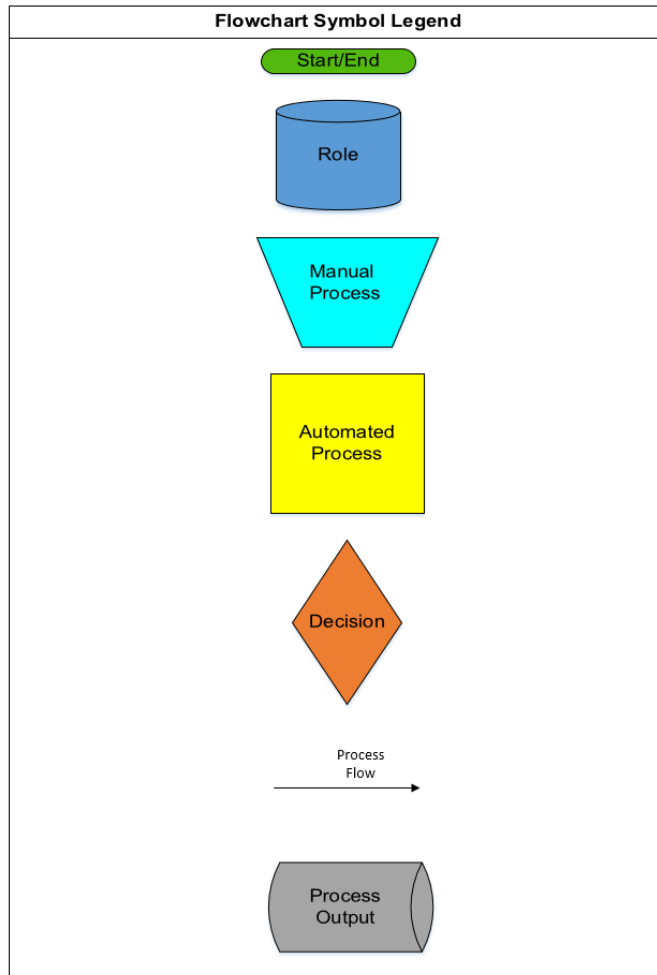
The focus of the training will be on the below functions in NetSuite:

- Asset Records
- Work Requests
- Work Orders
- Parts and Labor Details
- Purchase Orders
- Preventive Maintenance Schedules
- Meter Readings
- Reports

1.3 Process flows

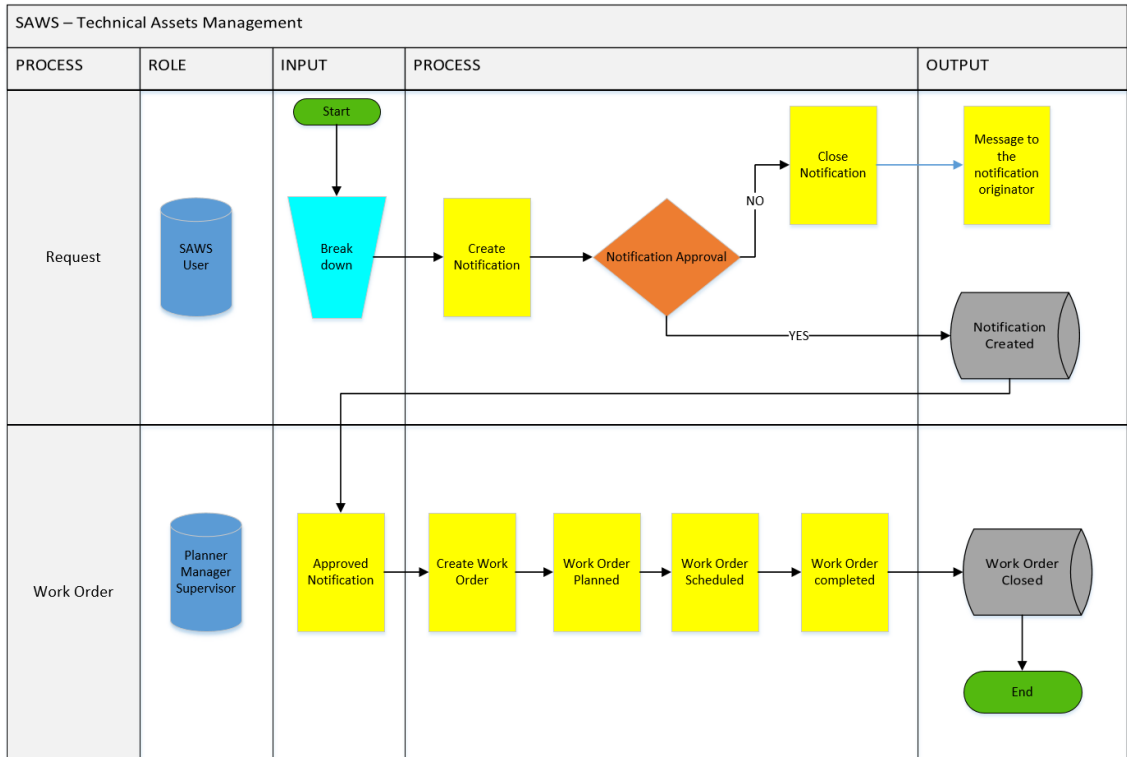
Flowchart Legends

The following are the flowchart symbol legends:



Technical Assets Management Process

The following figure shows the Technical Assets Management Process Flow:



2 Technical Asset Management

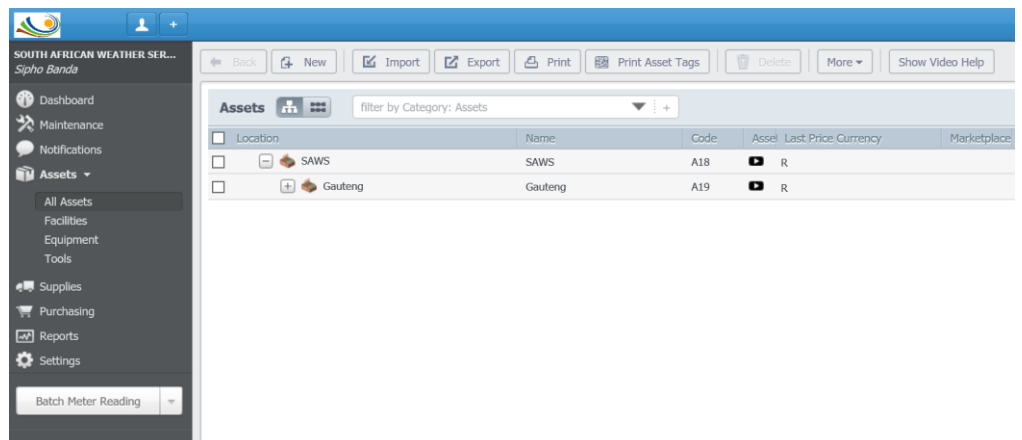
2.1 Asset Master Records

2.1.1 Set Up Buildings and Facilities

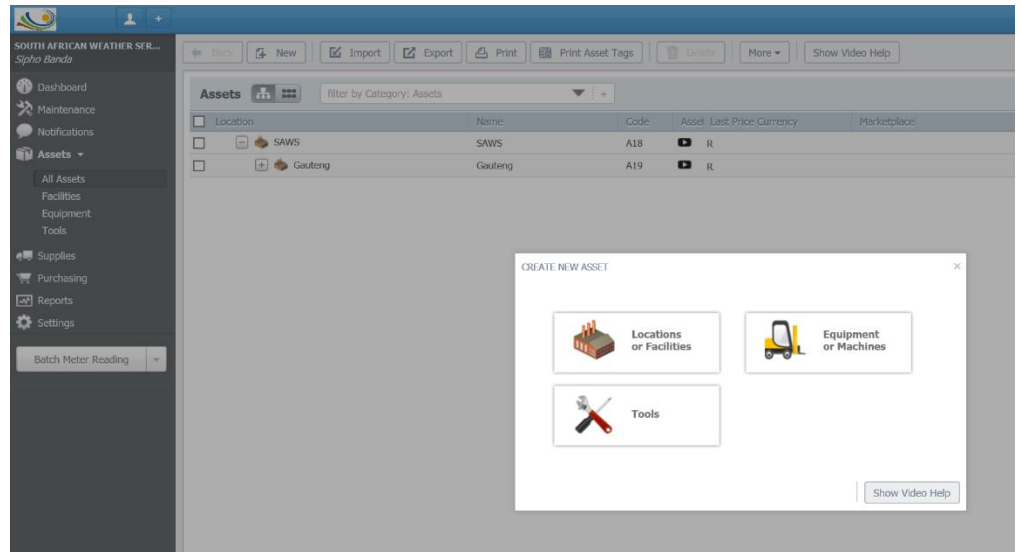
The asset master is a repository of the asset that you own or are responsible for maintaining. You can create and track the current and historical information for each piece of equipment in the asset master.

To set up building and facilities:

- Go to Assets > New.



- Select the type of asset to create. Select Locations or Facilities.

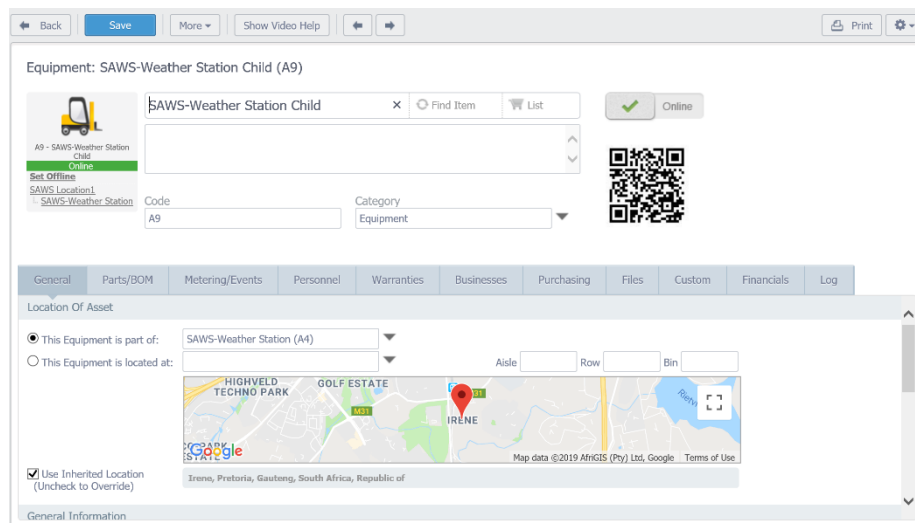


- Select As a new location, and enter the address information below:
 - Asset Name e.g. Durban
 - Asset Description e.g. Durban - South African Weather Service

2.1.2 Creating an Equipment/Component Relationship Record

Equipment/component are defined in the equipment master record and historically tracked when obsolete relationships are ended and new relationships are created. They can be viewed in multiple levels of component relationships for a parent.

- The This Equipment is part of field will be used to link the Equipment to the parent.



Equipment: SAWS-Weather Station Child (A9)

SAWS-Weather Station Child

Code: A9 Category: Equipment

Location Of Asset

This Equipment is part of: SAWS-Weather Station (A4)

This Equipment is located at:

Use Inherited Location (Uncheck to Override)

2.1.3 Mapping Equipment Category Codes

When you define a business unit, you can specify category codes. If these codes, used for the business unit, are also associated with the asset, then you can map the business unit code to the equipment code. Mapped category codes are unavailable for entry. Values must come from the mapping; they cannot be manually entered. The Category field can be used to define the type of an equipment. The business can add more category fields by creating a new custom fields. For example CatCode1

- Category (Asset Class)


Location	Equipment
Facilities	Surface Observation
	Remote Sensing
	GAW
	Marine
	Climate
	Research

- Asset Type

Type
LDN - Remote Sensing
RADAR - Remote Sensing
GAW
Marine

← Back Save More ▾ Show Video Help ← →

Equipment: SAWS-Weather Station (A4)




A4 - SAWS-Weather Station
Online
Set Offline
SAWS Location1

Find Item List

Code

Category



✔ Online

2.2 Corrective Maintenance Work Order

2.2.1 Work Requests

Maintenance notification will be created by submitting a work request. The work request can be assigned to a user or group. A notification will be emailed to the user/group.

A work request will include:

- Asset Number
- Description
- Maintenance Type
- Priority
- Contact information a required field

SUBMIT WORK REQUEST
×

<p>Work Order Code 12</p> <p>Track Ticket For User <input type="text" value="Sipho Banda"/> ▼</p> <p>Assign Ticket to User/Group <input type="text"/></p> <p>Description <input style="height: 100px;" type="text" value="Breakdown"/></p> <p>Asset <input type="text" value="SAWS-Weather Station (A4)"/> ▼</p> <p>Priority <input type="text" value="Medium"/> ▼</p>	<p>Work Order Status Requested</p> <p>Maintenance Type <input type="text" value="Corrective"/> ▼</p> <p>Suggested time (hours) <input type="text"/></p>
---	---

2.2.2 Guest Work Request

- The guest requestor portal is available at the login screen once the feature is been enabled.



Have an issue to report to *South African Weather Service*?
[Submit a Maintenance Service Request](#)

Allow users to easily submit a **Service Request**
from your website: [click to get the HTML widget!](#)

South African Weather Service

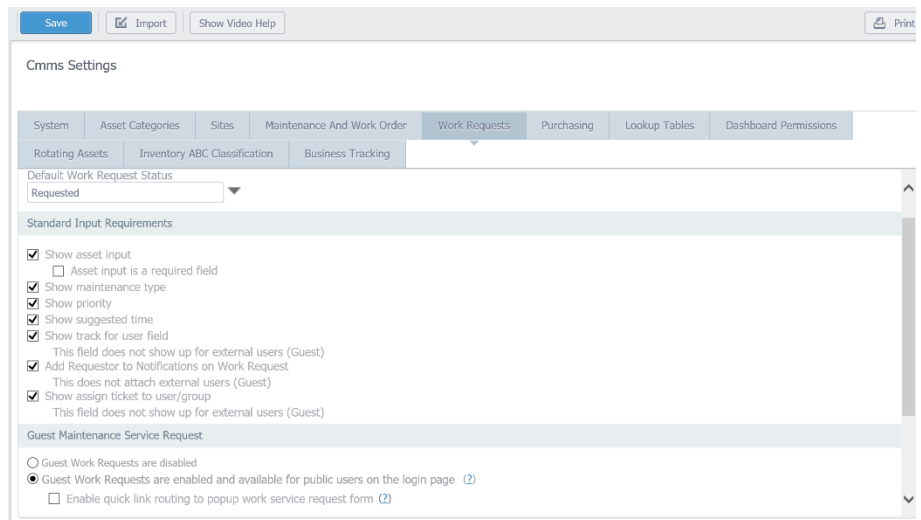
Sign in to your account



Sign In

[Forgot your password?](#)

- To enable the guest requestor feature, start by clicking Settings, CMMS Settings and Work Requests.



Save Import Show Video Help Print

CMMS Settings

System Asset Categories Sites Maintenance And Work Order **Work Requests** Purchasing Lookup Tables Dashboard Permissions

Rotating Assets Inventory ABC Classification Business Tracking

Default Work Request Status
Requested

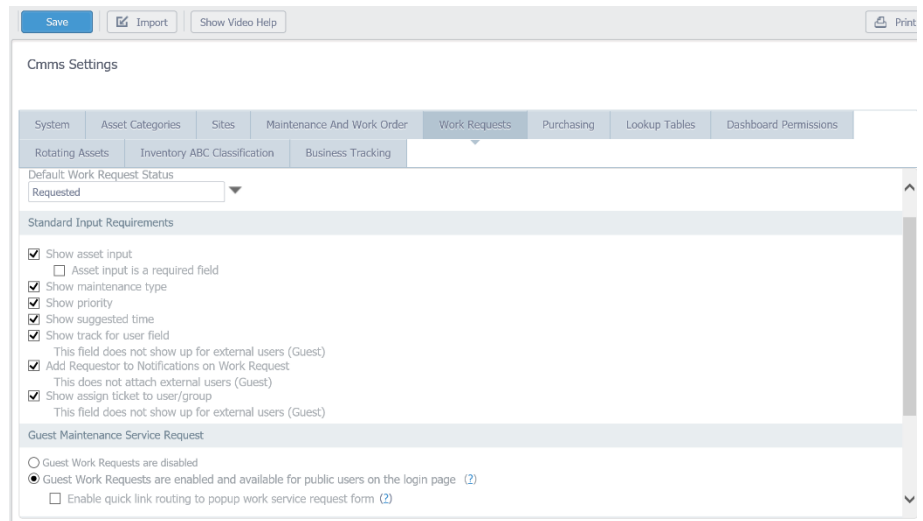
Standard Input Requirements

- Show asset input
 - Asset input is a required field
- Show maintenance type
- Show priority
- Show suggested time
- Show track for user field
 - This field does not show up for external users (Guest)
- Add Requestor to Notifications on Work Request
 - This does not attach external users (Guest)
- Show assign ticket to user/group
 - This field does not show up for external users (Guest)

Guest Maintenance Service Request

- Guest Work Requests are disabled
- Guest Work Requests are enabled and available for public users on the login page (?)
- Enable quick link routing to popup work service request form (?)

- Select Guest Work Requests are enabled and available for public users on the login page, and click Save.



Save Import Show Video Help Print

CMMS Settings

System Asset Categories Sites Maintenance And Work Order **Work Requests** Purchasing Lookup Tables Dashboard Permissions

Rotating Assets Inventory ABC Classification Business Tracking

Default Work Request Status
Requested

Standard Input Requirements

Show asset input
 Asset input is a required field

Show maintenance type

Show priority

Show suggested time

Show track for user field

This field does not show up for external users (Guest)

Add Requestor to Notifications on Work Request
 This does not attach external users (Guest)

Show assign ticket to user/group
 This field does not show up for external users (Guest)

Guest Maintenance Service Request

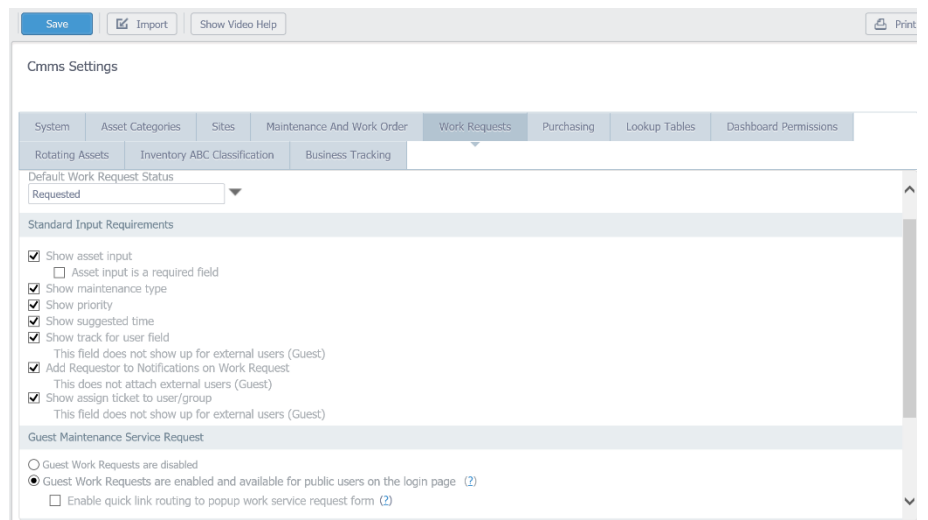
Guest Work Requests are disabled

Guest Work Requests are enabled and available for public users on the login page (?)

Enable quick link routing to popup work service request form (?)

- The default work order status of a work request can be changed by selecting the Default Work Request Status dropdown menu, and selecting a work order status. Click Save to complete.

The default status will be requested.



Save Import Show Video Help Print

CMMS Settings

System Asset Categories Sites Maintenance And Work Order **Work Requests** Purchasing Lookup Tables Dashboard Permissions

Rotating Assets Inventory ABC Classification Business Tracking

Default Work Request Status
Requested

Standard Input Requirements

Show asset input
 Asset input is a required field

Show maintenance type

Show priority

Show suggested time

Show track for user field

This field does not show up for external users (Guest)

Add Requestor to Notifications on Work Request
 This does not attach external users (Guest)

Show assign ticket to user/group
 This field does not show up for external users (Guest)

Guest Maintenance Service Request

Guest Work Requests are disabled

Guest Work Requests are enabled and available for public users on the login page (?)

Enable quick link routing to popup work service request form (?)

- The work requests will be assigned to the Planner. Oliver to provide the planner's detail.

- Use this section to choose which input fields are available on the Guest Request Form. The top four options represent the standard fields that are available for both the guest work request form, and the standard work request form. The following fields can be enabled for guests:

Asset input. This field can be made mandatory.

Maintenance type

Priority

Suggested time

Save
Import
Show Video Help

Cmms Settings

System	Asset Categories	Sites	Maintenance And Work Order	Work Requests	Purchasing
Rotating Assets	Inventory ABC Classification	Business Tracking	▼		

Default Work Request Status

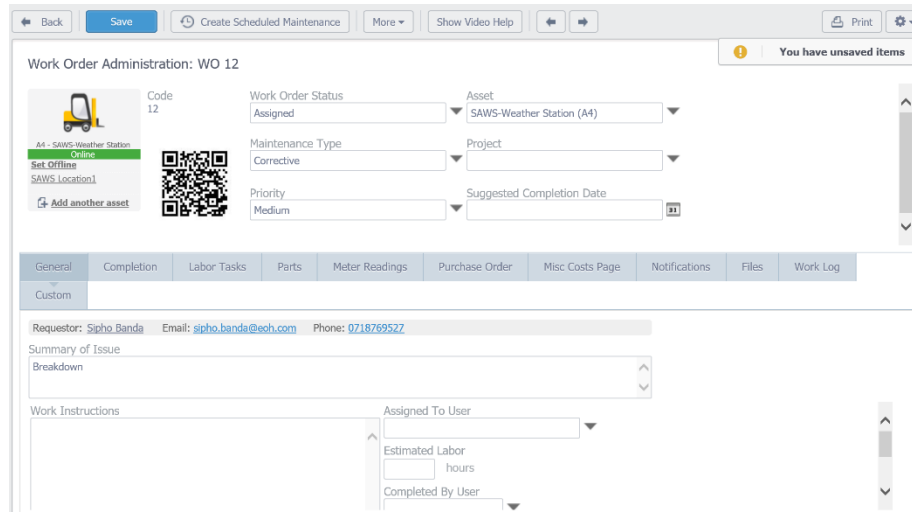
Requested ▼

Standard Input Requirements

- Show asset input
 - Asset input is a required field
- Show maintenance type
- Show priority
- Show suggested time
- Show track for user field
 - This field does not show up for external users (Guest)
- Add Requestor to Notifications on Work Request
 - This does not attach external users (Guest)
- Show assign ticket to user/group
 - This field does not show up for external users (Guest)

Guest Maintenance Service Request

- Guest Work Requests are disabled
- Guest Work Requests are enabled and available for public users on the login page [?](#)
 - Enable quick link routing to popup work service request form [?](#)



Work Order Administration: WO 12

Code: 12

Work Order Status: Assigned

Asset: SAWS-Weather Station (A4)

Maintenance Type: Corrective

Project:

Priority: Medium

Suggested Completion Date:

Requestor: Siphso Banda | Email: siphso.banda@ecg.com | Phone: 0718769527

Summary of Issue: Breakdown

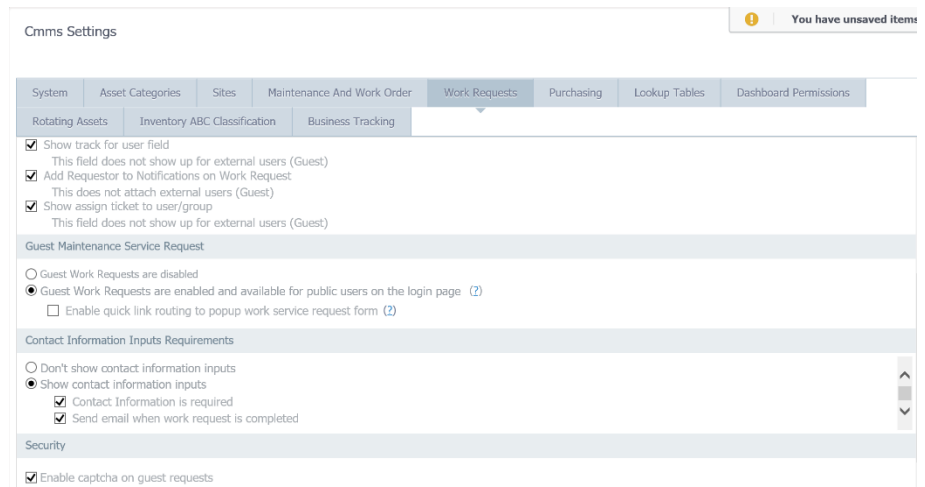
Work Instructions:

Assigned To User:

Estimated Labor: hours

Completed By User:

- To make guest users contact information a required field, select Show contact information inputs, Contact Information is required, and click Save. To send an email to the guest users email inbox when the work order is closed, select Send email when work request is completed and click Save.



Cmms Settings

System | Asset Categories | Sites | Maintenance And Work Order | **Work Requests** | Purchasing | Lookup Tables | Dashboard Permissions

Rotating Assets | Inventory ABC Classification | Business Tracking

Show track for user field
This field does not show up for external users (Guest)

Add Requestor to Notifications on Work Request
This does not attach external users (Guest)

Show assign ticket to user/group
This field does not show up for external users (Guest)

Guest Maintenance Service Request

Guest Work Requests are disabled

Guest Work Requests are enabled and available for public users on the login page (?)

Enable quick link routing to popup work service request form (?)

Contact Information Inputs Requirements

Don't show contact information inputs

Show contact information inputs

Contact Information is required

Send email when work request is completed

Security

Enable captcha on guest requests

- When the Show contact information inputs, Contact Information is required option is selected, then the work request form cannot be submitted without completing the contact information inputs.

SUBMIT MAINTENANCE SERVICE REQUEST ×

Requester Full Name

Requester Phone Number

Requester Email

Work Order Code
27

Work Order Status
Requested

Description

Asset

Maintenance Type

Priority

Suggested time (hours)

Please enter the captcha that you see below into the text field

ffhk2
[Get new captcha](#)

- The CAPTCHA is a security code that will prevent robots and automated machines filling your CMMS with Spam. This can be enabled by selecting Enable captcha on guest requests, and clicking Save. Enabling this setting presents all guest users with the CAPTCHA on the guest request form.

2.2.3 Work Request Approvals

- A work request will be approved by converting the request to a work order. The status will be updated to assigned and a notification will be sent to a requester.
- A work request will be rejected by changing the work request status to close and a notification will be sent to a requester.

2.2.4 Creating Work Orders

Use work orders to manage the work flow of the maintenance tasks and projects. You can manage all of the aspects of a maintenance task or project.

Work orders will be created by




- Adding a new work order in the work orders application.
- Converting a work request to a work order.
- Using preventative maintenance schedules.

A work order will include the following fields,


- Work Order Status - This describes the stage the work order in its workflow.
- Asset - This is where you choose the asset for the work order.
- Maintenance Type - Describes the type of work you are carrying out i.e. electrical, inspection, upgrade etc.
- Priority - This is where you will prioritize the importance of your work, i.e. high, low etc.
- Suggested Completion Date - Set a date at which you expect the work to be completed by.
- Summary of Issue - This field allows you to describe the issue.
- Work Instructions - This field will show any labor tasks associated with the work order.
- Assigned to User - You can use this field to assign the work order to an individual user or a user group.
- Estimated Labor - This allows you to give an estimate of how long you expect the work order to complete.
- Completed by User - This Field will only be filled when the work order is completed. It will record who carried out the work.
- Actual Labor - This field will contain the total amount of time spent on the work order.

- Date Completed - This is where you will enter the date at which the work order was completed.
- Charge Department to be renamed to Cost Center
- Account Number field.

Below is a standard work order print. The business to provide pictures for equipment.

 A4 - SAWS-Weather Station Online SAWS Location1	Code 5	 Work Order Status Open	Asset SAWS-Weather Station (A4)
	Maintenance Type Corrective	Project	
		Priority Medium	Suggested Completion Date Apr 02, 2019 07:42:00 PM

General

 SAWS-Weather Station (A4)	Online
SAWS Location1 (A5)	
Summary of Issue Breakdown	
Work Instructions Breakdown	Assigned To User Spho Banda Estimated Labor 1.00 hours Completed By User

Work Instructions
Breakdown

Assigned To User
Sipho Banda
Estimated Labor
1.00 hours
Completed By User

Actual Labor
hours
Date Completed

Completion

Cost Tracking

Account

Charge Department

Completion Notes

Completion Notes

Problem (briefly outline the problem, if any)

Root cause (short description of the cause of issue, if any)

Solution (short description of the solution, if any)

Labor Tasks

Description	Asset	Assigned To	Hrs Estimate	Hrs Spent	Result
Breakdown	SAWS-Weather Station (A4)	Sipho Banda	1.00		

Parts

Part/supply	For The Asset	Suggested Quantity	Actual Quantity Used
Part1 (A6) at SAWS Location1	SAWS-Weather Station (A4)	1.000	0.000

Meter Readings

Most recent readings, by unit:

For The Asset	Last Reading	Date Submitted	Reading Added On This WO
---------------	--------------	----------------	-----------------------------

Purchase Order

Purchase Order

Requested Item	Description	Req Qty	Purchase Order	Supplier	Status	Need By	Qty Received	Unit Price
----------------	-------------	---------	-------------------	----------	--------	---------	--------------	------------

Misc Costs Page

Type	Description	Est Quantity	Est Unit Cost	Est Total Cost	Quantity	Actual Unit Cost	Actual Total Cost
------	-------------	-----------------	------------------	----------------	----------	---------------------	----------------------

Notifications				
Technician				
Sipho Banda	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Files				
Name	File Type	Size	Preview	
Work Log				
User	Hours Taken	Inventory Cost	Completion Notes	Log Date
Sipho Banda			Work order created.	Apr 02, 2019 07:42:43 PM
Sipho Banda			Work order updated.	Apr 02, 2019 07:45:02 PM
		Total		
		0.00	0.00	
Custom				
Sign Off				
Technician Signoff: _____				
Supervisor Signoff: _____				
Signoff Date: _____				

Change Technician Signoff to Assigned User Signoff

2.2.5 Work Orders Types

The work order types are listed on the table below and can be added in the system using the Maintenance Types.

Planned Maintenance Types	Corrective Maintenance Types	Refurbishment /Improvement Work Order
Preventive Work Order	Breakdown Work Order	Refurbishment Work Order
Predictive Work Order	Emergency Work Order	Project Work Order
	Standby Work Order	General Work Order

Cmms Settings

System	Asset Categories	Sites	Maintenance A
Rotating Assets	Inventory ABC Classification		Busine
<div style="text-align: center;"> < > </div> <div style="text-align: right;">No records</div>			
Maintenance Types			
Other	d36e87		^
Breakdown Work Order	FFFFFF		
Refurbishment Work Order	FFFFFF		
Emergency Work Order	FFFFFF		
Project Work Order	FFFFFF		v
<div style="text-align: right;">14 records.</div>			

2.2.6 Work Orders Statuses

The status of a work order indicates its position in the processing cycle. It can also determine the actions that can be performed on a work order. A work order may progress through several statuses throughout its life cycle. Examples of default work order status types include draft, open, on hold, and closed. The work order statuses are

- Parts requested – Manual update by the planner
- Waiting for parts – Manual update by the planner
- Parts Issued - Manual update by the Storeman
- Resource requested - Manual update by the planner

- Create Requisition - Manual update by the planner
- WO created - Manual update by the planner
- WO Assigned - Manual update by the supervisor
- PO Processed – System update after order approved and sent to supplier
- WO Closed - Manual update by the planner
- WO cancelled - Manual update by the relevant manager
- WO completed – Manual update by relevant manager
- WO in progress - Manual update by the planner
- WO waiting information - Manual update by the planner
- Sub WO created - Manual update by the planner
- PM Rescheduled - Manual update by the Senior Manager.

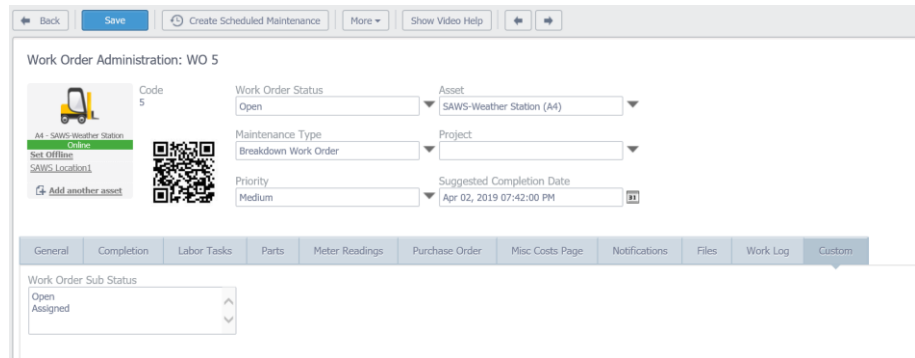
The work order status will be added using the work order statuses.

Cmms Settings

System	Asset Categories	Sites	Maintenance
Rotating Assets	Inventory ABC Classification	Busin	
Corrective		74bc50	
Safety		FF9900	▼
		< [] >	
		14 records.	
Work Order Statuses			
Draft		Draft	
Assigned		Active	▲
Open		Active	
Work In Progress		Active	▼
Closed, Completed		Closed	
		< [] >	
		11 records.	
Reasons To Set Asset Offline			

SAWS requires a Work Order Sub Status field to allow multiple status.

- We will create a Work Order Sub Status custom field. Multiple status will be entered as text as per below.



Work Order Administration: WO 5

Code: 5

Work Order Status: Open

Asset: SAWS-Weather Station (A4)

Maintenance Type: Breakdown Work Order

Project:

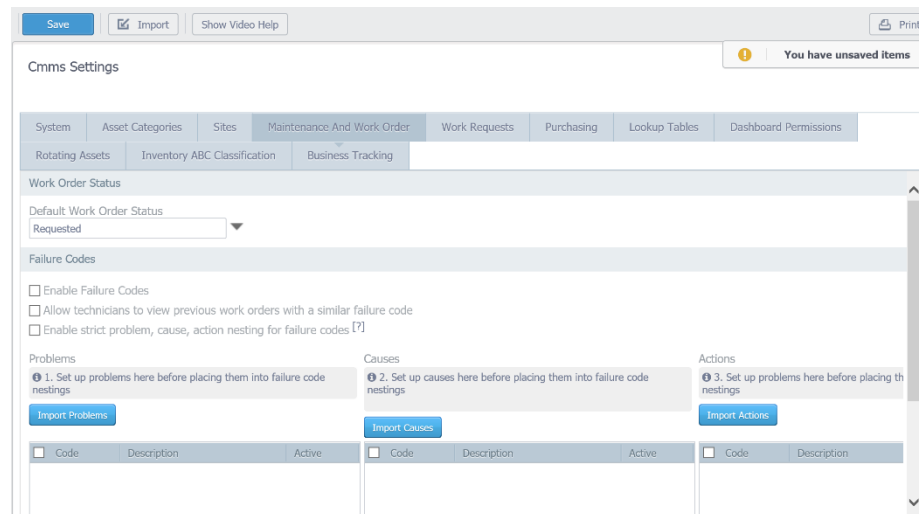
Priority: Medium

Suggested Completion Date: Apr 02, 2019 07:42:00 PM

Work Order Sub Status: Open

Change Work Order Default Status:

To change the default work order status, click Settings, Cmms Settings, Maintenance and Work Order, select a status from the Default Work Order Status dropdown menu, and click Save. The Default Work Order Status is requested.



Cmms Settings

System | Asset Categories | Sites | Maintenance And Work Order | Work Requests | Purchasing | Lookup Tables | Dashboard Permissions

Rotating Assets | Inventory ABC Classification | Business Tracking

Work Order Status

Default Work Order Status: Requested

Failure Codes

Enable Failure Codes

Allow technicians to view previous work orders with a similar failure code

Enable strict problem, cause, action nesting for failure codes [?]

Problems

1. Set up problems here before placing them into failure code nestings

Import Problems

Causes

2. Set up causes here before placing them into failure code nestings

Import Causes

Actions

3. Set up problems here before placing th nestings

Import Actions

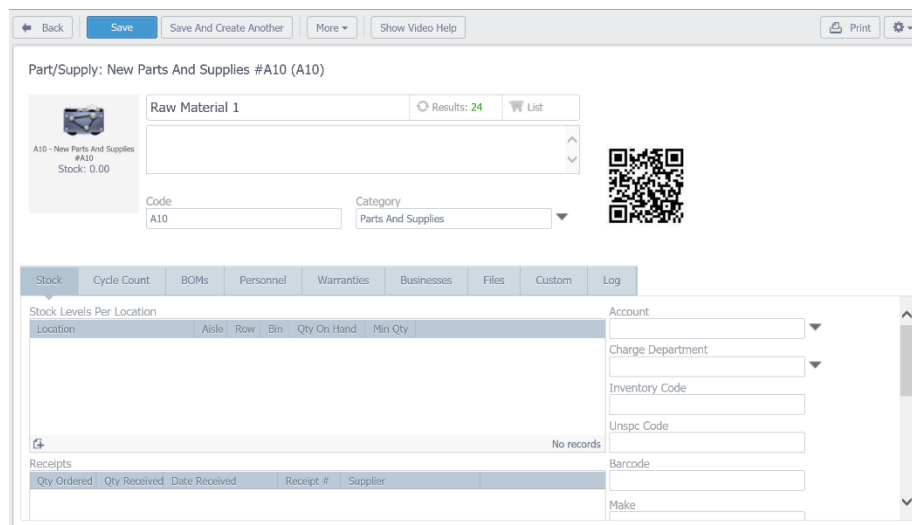
<input type="checkbox"/>	Code	Description	Active
<input type="checkbox"/> <td>Code</td> <td>Description</td> <td>Active</td>	Code	Description	Active
<input type="checkbox"/> <td>Code</td> <td>Description</td> <td>Active</td>	Code	Description	Active

2.3 Work Order Parts List and Labor Details

2.3.1 Setting Up Equipment Parts List

Equipment parts list for an individual Equipment will be enter on the Parts and Supplies application. When you set up a parts list, you specify the:

- Part Name – Item Number/Name
- Description – Description of the part/item
- Code – Link it to inventory
- Category – Link it to inventory
- Account – Linked to inventory
- Charge Department - Linked to inventory
- Inventory Code
- Unspc Code
- Barcode
- Make Model - Linked to inventory
- Last Price - Linked to inventory
- Total Stock - Linked to inventory
- Notes Stock levels will be updated in NetSuite – Inventory.



Part/Supply: New Parts And Supplies #A10 (A10)

Raw Material 1 Results: 24 List

A10 - New Parts And Supplies #A10 Stock: 0.00

Code: A10 Category: Parts And Supplies

QR Code

Stock Levels Per Location

Location	Aisle	Row	Bin	Qty On Hand	Min Qty
No records					

Receipts

Qty Ordered	Qty Received	Date Received	Receipt #	Supplier
No records				

Account

Charge Department

Inventory Code

Unspc Code

Barcode

Make

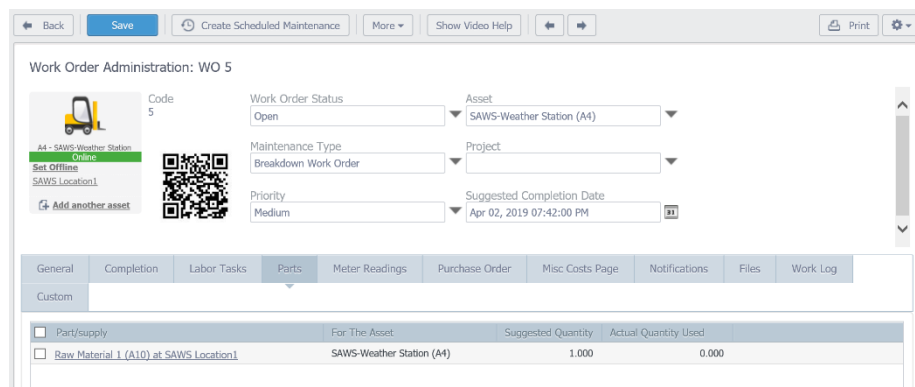
2.3.2 Attaching Part List to Work Orders

Maintaining equipment requires parts and materials. Parts and materials can include:

- Stocked items - These items are in the inventory. Stock items are stored in a branch/plant, are on hand or will be manufactured, and might have reorder points.
- Non-stocked items - These items are in the item master, but they are not kept on hand. In this case, you can associate the part to a work order but cannot issue the part. Instead, you can generate a purchase order for the item with a line type of B, which requires an item number and general ledger account.
- Non-catalogued items - These items are undefined and are not set up in the system. Non-catalogued items are parts that do not need to be defined and managed within the system. Use non-catalogued parts for environments that do not use inventory or manufacturing systems. You can still enter parts and associate them with costs. You can also generate purchase orders and enter the costs on the parts lists. You use non-catalogued items for estimated costs; actual costs come from the purchase order receipt.

Parts list will be added under the Parts tab of a work order by entering the following:

- Part/Supply – this is the part name.
- For the Asset – it will default from the Asset on the work order.
- Suggested Quantity – the required quantity of the parts.



Work Order Administration: WO 5

Code: 5

Work Order Status: Open

Asset: SAWS-Weather Station (A4)

Maintenance Type: Breakdown Work Order

Project: [Empty]

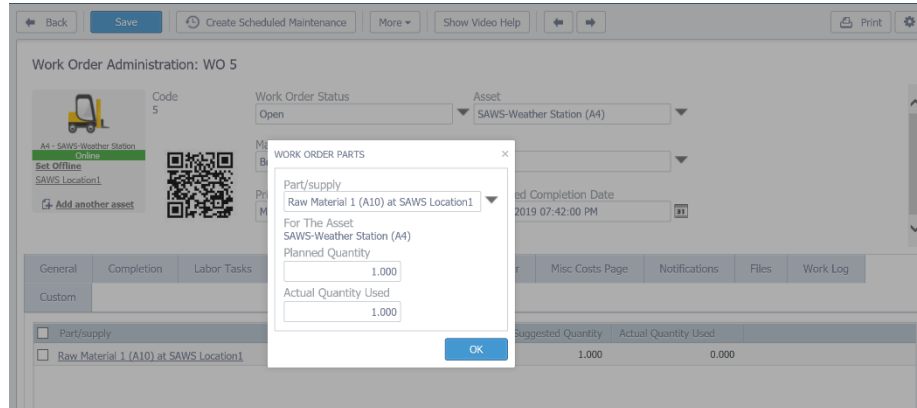
Priority: Medium

Suggested Completion Date: Apr 02, 2019 07:42:00 PM

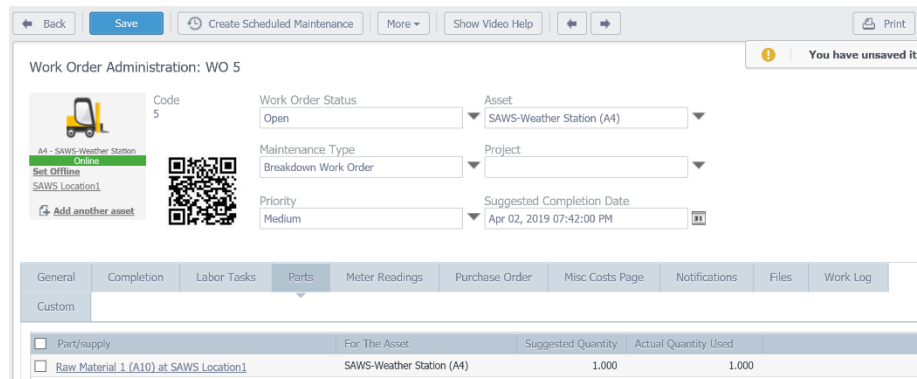
General | Completion | Labor Tasks | **Parts** | Meter Readings | Purchase Order | Misc. Costs Page | Notifications | Files | Work Log

Part/Supply	For The Asset	Suggested Quantity	Actual Quantity Used
<input type="checkbox"/> Raw Material 1 (A10) at SAWS Location1	SAWS-Weather Station (A4)	1.000	0.000

Parts are issued to the work order by updating the actual quantity as per below.

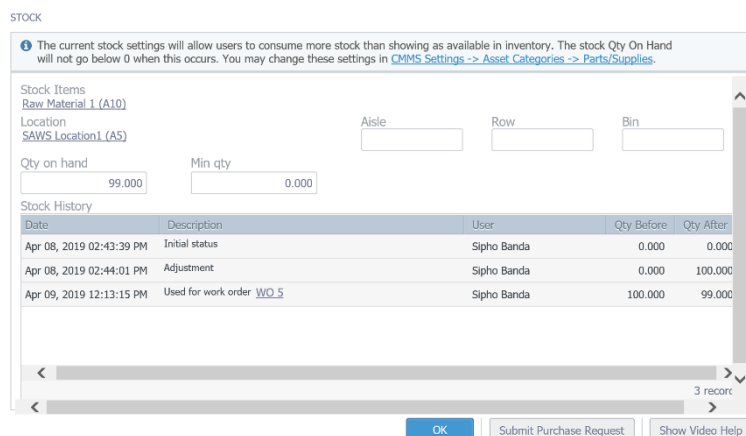


The actual quantity is updated on the part.



Part/supply	For The Asset	Suggested Quantity	Actual Quantity Used
Raw Material 1 (A10) at SAWS Location1	SAWS-Weather Station (A4)	1.000	1.000

Inventory will also be updated.



STOCK

The current stock settings will allow users to consume more stock than showing as available in inventory. The stock Qty On Hand will not go below 0 when this occurs. You may change these settings in [CMMS Settings -> Asset Categories -> Parts/Supplies](#).

Stock Items
Raw Material 1 (A10)
Location
SAWS Location1 (AS)

Qty on hand: 99.000
Min qty: 0.000

Date	Description	User	Qty Before	Qty After
Apr 08, 2019 02:43:39 PM	Initial status	Sipho Banda	0.000	0.000
Apr 08, 2019 02:44:01 PM	Adjustment	Sipho Banda	0.000	100.000
Apr 09, 2019 12:13:15 PM	Used for work order <u>WO 5</u>	Sipho Banda	100.000	99.000

3 records

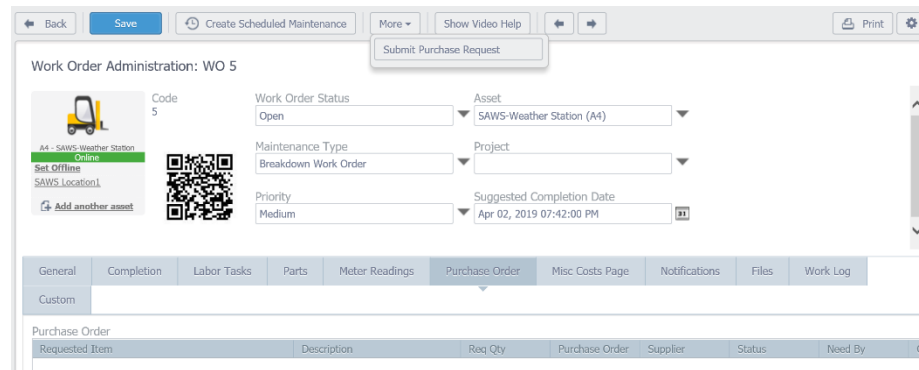
OK Submit Purchase Request Show Video Help

2.3.3 Generating Purchase Request from Parts List

You can purchase parts for a work order by creating purchase orders directly from a work order parts list. This capability is particularly useful if a maintenance task requires parts that you do not usually keep in stock, such as costly parts or parts that have long lead times.

A purchase request can be created in Fiix by submitting a purchase request that will follow an SCM procurement process.

To create a purchase request for an inventory item, Click the Submit Purchase Request

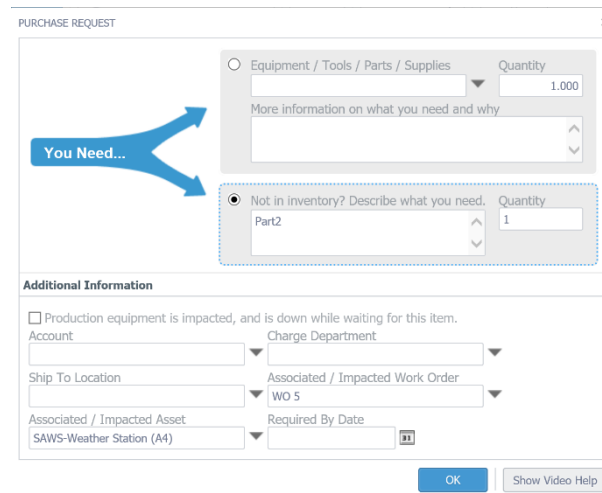


The screenshot shows the 'Work Order Administration: WO 5' interface. At the top, there are navigation buttons: Back, Save, Create Scheduled Maintenance, More, Show Video Help, and Print. A 'Submit Purchase Request' button is highlighted. Below this, the work order details are displayed in a grid format:

- Code:** 5
- Work Order Status:** Open
- Asset:** SAWS-Weather Station (A4)
- Maintenance Type:** Breakdown Work Order
- Project:** (empty)
- Priority:** Medium
- Suggested Completion Date:** Apr 02, 2019 07:42:00 PM

Below the details, there are tabs for: General, Completion, Labor Tasks, Parts, Meter Readings, Purchase Order, Misc Costs Page, Notifications, Files, and Work Log. The 'Purchase Order' tab is currently selected, showing a table with columns: Requested Item, Description, Req Qty, Purchase Order, Supplier, Status, and Need By.

To create a purchase request for an item that does not exist in the CMMS, select the not in inventory? Describe what you need button. Add a detailed description of the part, and a Quantity. Click OK to complete. Note: these items will not be added as records to the CMMS. This option is for consumables.



The screenshot shows the 'PURCHASE REQUEST' dialog box. It has two main sections for item selection:

- Equipment / Tools / Parts / Supplies:** This option is currently unselected. It includes a dropdown menu and a 'Quantity' field set to 1.000. Below it is a text area for 'More information on what you need and why'.
- Not in inventory? Describe what you need.:** This option is selected. It includes a dropdown menu with 'Part2' selected and a 'Quantity' field set to 1.

A blue arrow labeled 'You Need...' points to the 'Not in inventory?' section. Below these options is the 'Additional Information' section, which includes a checkbox for 'Production equipment is impacted, and is down while waiting for this item.' and several dropdown menus for Account, Charge Department, Ship To Location, Associated / Impacted Work Order (WO 5), Associated / Impacted Asset (SAWS-Weather Station (A4)), and Required By Date.

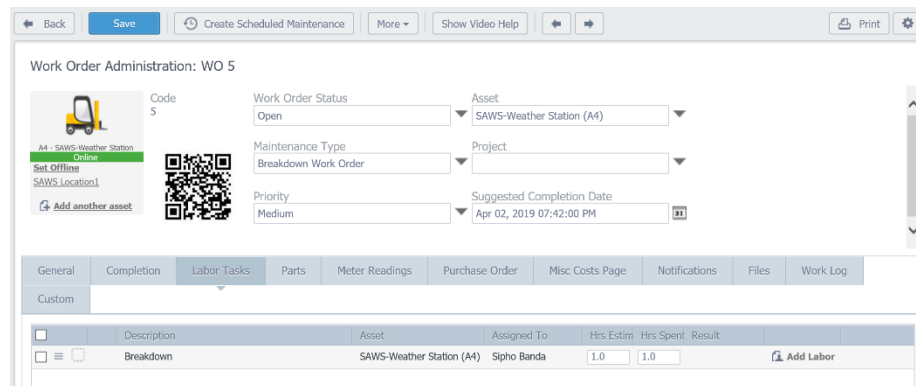
At the bottom right, there are 'OK' and 'Show Video Help' buttons.

2.3.4 Adding Labor Detail to Works

Work centers consist of the people and machines where work is performed. In maintenance management, a work center typically represents labor, such as a labor type, class, or craft. Work centers can also relate to a craft or trade within a maintenance environment, which is used during the planning process to indicate the skills that are required to complete the labor detail steps.

Labor detail is a sequence of steps that include the events that must take place. For maintenance, labor details are the subtasks and steps required to perform the maintenance task. You can create standard labor detail steps for repairs that are typically scheduled, planned, and repetitive. After you have created a work order, you can also manually assign labor details for any task for which you have not set up standard instructions.

Labor details will be captured on the work order.



Work Order Administration: WO 5

Code: 5

Work Order Status: Open

Asset: SAWS-Weather Station (A4)

Maintenance Type: Breakdown Work Order

Project:

Priority: Medium

Suggested Completion Date: Apr 02, 2019 07:42:00 PM

General | Completion | Labor Tasks | Parts | Meter Readings | Purchase Order | Misc Costs Page | Notifications | Files | Work Log

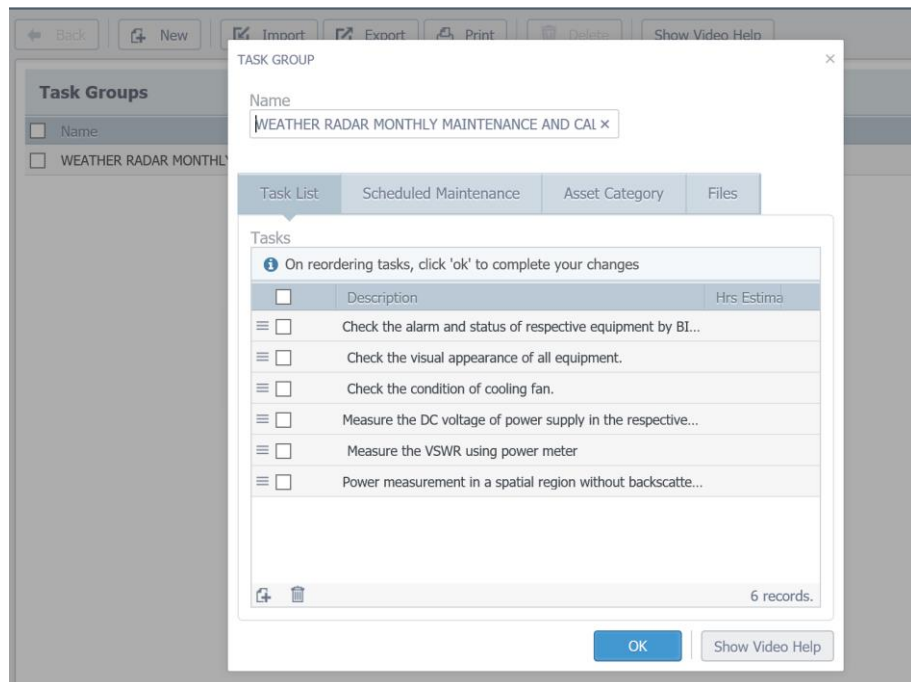
Description	Asset	Assigned To	Hrs Estim	Hrs Spent	Result
Breakdown	SAWS-Weather Station (A4)	Sipho Banda	1.0	1.0	Add Labor

2.4 Preventative Maintenance Schedules

Planning for and scheduling maintenance helps to minimize equipment breakdowns and unscheduled repairs. You can set up a preventive maintenance schedule for each piece of equipment. When you manage equipment maintenance needs, you define the type and frequency of each maintenance task for each piece of equipment in the organization. The PM cycle refers to the sequence of events that make up a maintenance task, from its definition to its completion. Because most PM tasks are commonly performed at scheduled intervals, parts of the PM cycle repeat, based on those intervals.

2.4.1 Adding Standard Procedures

Standard procedures will be entered on the task groups. Task Groups are a great way of quickly populating work orders, scheduled maintenances, projects etc. Task groups are particularly useful if you have similar assets that require the same work to be carried out. Creating task groups and associating them to specific asset categories speeds up the process of creating work orders and scheduled maintenances. It also cuts out the room for human error in terms of creating multi asset work orders, and forgetting to add specific tasks to assets.



2.4.2 Service Types

Below are the service types that will be used to trigger maintenance,

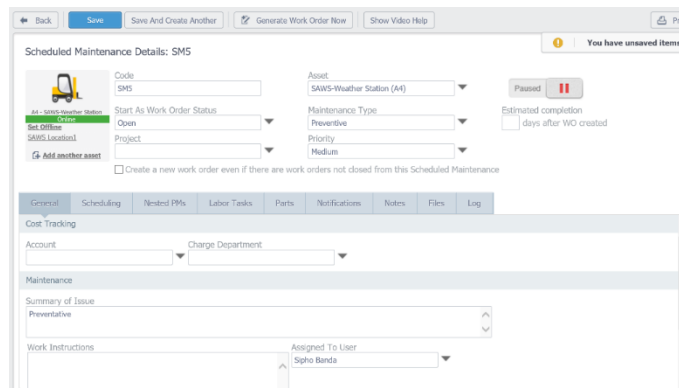
- Bi Weekly
- Monthly
- Quarterly
- Half Yearly
- Annually

2.4.3 Creating Preventive Maintenance Schedules

Preventative maintenance schedule is a template for work orders. When the right conditions are met (a certain amount of time has elapsed, or a meter reading is greater than it should be), the system generates a work order from the scheduled maintenance.

Preventative maintenance schedules will be entered on the Scheduled Maintenance. The PM schedule will include,

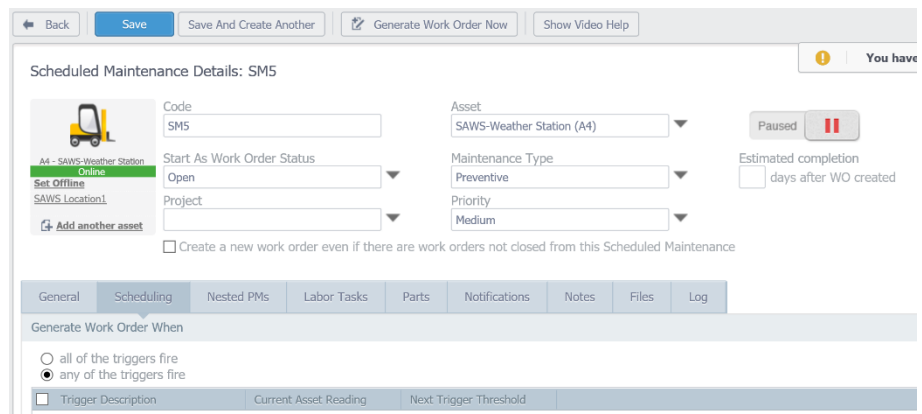
- Asset on which the PM will be performed.
- Maintenance Type to classify type of work to be performed.
- Work Order Status - This is the work order status that will be allocated to the work order when it's created.
- Priority for the work order when generated.
- Summary of the issue.
- Project - If the PM is part of an ongoing project.
- Suggested Completion Date.



Maintenance will be scheduled under the scheduling tab. You can select all of the triggers to fire or any of the triggers to fire. There are three types of triggers:

- Time based
- Meter Reading based
- Event based

South African Weather Services will use the time based trigger for time schedules. When you generate work orders by time schedule, you can select to generate hourly, daily, weekly, monthly and yearly. You can also select to fix the date trigger or keep it floating.



← Back Save Save And Create Another Generate Work Order Now Show Video Help

Scheduled Maintenance Details: SM5 You have

Asset: A4 - SAWS-Weather Station **Code:** SM5 **Asset:** SAWS-Weather Station (A4) **Paused** **Estimated completion:** days after WO created

Start As Work Order Status: Open **Maintenance Type:** Preventive

Project: **Priority:** Medium

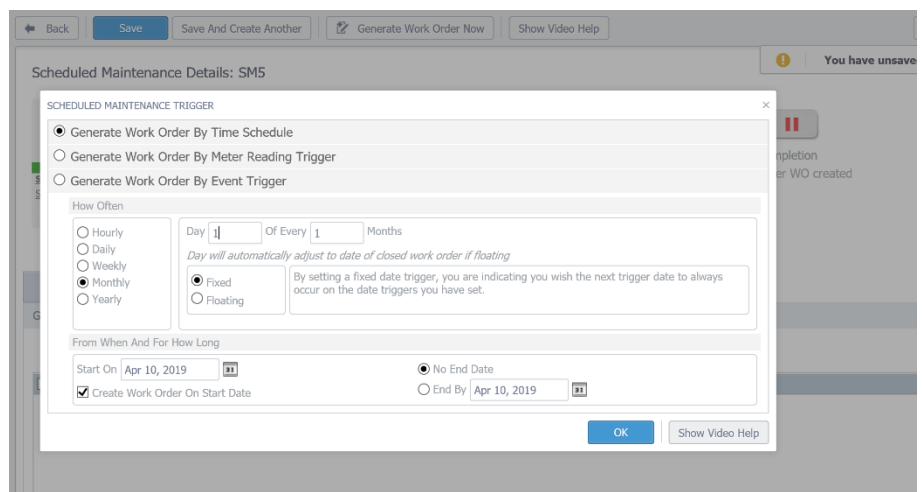
Create a new work order even if there are work orders not closed from this Scheduled Maintenance

General **Scheduling** Nested PMs Labor Tasks Parts Notifications Notes Files Log

Generate Work Order When

all of the triggers fire
 any of the triggers fire

Trigger Description Current Asset Reading Next Trigger Threshold



← Back Save Save And Create Another Generate Work Order Now Show Video Help

Scheduled Maintenance Details: SM5 You have unsaved

SCHEDULED MAINTENANCE TRIGGER

Generate Work Order By Time Schedule
 Generate Work Order By Meter Reading Trigger
 Generate Work Order By Event Trigger

How Often

Hourly Daily Weekly Monthly Yearly

Day 10 Of Every 1 Months

Day will automatically adjust to date of closed work order if floating

Fixed Floating

By setting a fixed date trigger, you are indicating you wish the next trigger date to always occur on the date triggers you have set.

From When And For How Long

Start On Apr 10, 2019 No End Date End By Apr 10, 2019


Create Work Order On Start Date

OK Show Video Help

Task groups will be added on the scheduled maintenance under labor task. A single task can also be added and assigned to the responsible person.

← Back Save Save And Create Another Generate Work Order Now Show Video Help

Scheduled Maintenance Details: SM5



A4 - SAWS-Weather Station
Online
Set Offline
SAWS Location1
Add another asset

Code: SM5

Asset: SAWS-Weather Station (A4)


Start As Work Order Status: Open

Maintenance Type: Preventive

Project: [Empty]

Priority: Medium

Create a new work order even if there are work orders not closed from this Scheduled Maintenance

Paused 

Estimated completion
 days after WO created

General | **Scheduling** | Nested PMs | Labor Tasks | Parts | Notifications | Notes | Files | Log


<input type="checkbox"/>	Description	Asset	Assigned To	Hrs. Estim	Task Control
<input type="checkbox"/>	<enter task description>	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/
<input type="checkbox"/>	Check the alarm and status of respective equip...	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/
<input type="checkbox"/>	Check the visual appearance of all equipment.	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/
<input type="checkbox"/>	Check the condition of cooling fan.	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/
<input type="checkbox"/>	Measure the DC voltage of power supply in the...	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/
<input type="checkbox"/>	Measure the VSWR using power meter	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/
<input type="checkbox"/>	Power measurement in a spatial region without...	SAWS-Weather Station (A4)	Sipho Banda	1.0	Add Labor WEATHER.R/

7 records.

Parts will be added on the scheduled maintenance.

← Back Save Save And Create Another Generate Work Order Now Show Video Help

Scheduled Maintenance Details: SM5



A4 - SAWS-Weather Station
Online
Set Offline
SAWS Location1
Add another asset

Code: SM5

Asset: SAWS-Weather Station (A4)


Start As Work Order Status: Open

Maintenance Type: Preventive

Project: [Empty]

Priority: Medium

Create a new work order even if there are work orders not closed from this Scheduled Maintenance

Paused 

Estimated completion
 days after WO created


General | Scheduling | Nested PMs | Labor Tasks | **Parts** | Notifications | Notes | Files | Log

<input type="checkbox"/>	Part/supply	For The Asset	Suggested Quantity
<input type="checkbox"/>	Raw Material 1 (A10) at SAWS Location1	SAWS-Weather Station (A4)	1.000

Once the scheduled maintenance has been saved, the work order instructions, assigned to and estimates hours will be updated.

← Back Save Save And Create Another Generate Work Order Now Show Video Help

Scheduled Maintenance Details: SM5



A4 - SAWS-Weather Station
Online
Set Offline
SAWS Location 1
Add another asset

Code: SM5

Start As Work Order Status: Open


Project: [Empty]

Asset: SAWS-Weather Station (A4)

Maintenance Type: Preventive

Priority: Medium

Create a new work order even if there are work orders not closed from this Scheduled Maintenance

Paused 

Estimated completion
[] days after WO created

General | **Scheduling** | Nested PMs | Labor Tasks | Parts | Notifications | Notes | Files | Log

Maintenance

Summary of Issue
Preventative

This SM has multiple tasks, [go to the tasks list](#) to sign off on your work procedures

Work Instructions


- 1.
2. Check the alarm and status of respective equipment by BITE system window
3. Check the visual appearance of all equipment.
4. Check the condition of cooling fan.
5. Measure the DC voltage of power supply in the respective equipment.
6. Measure the VSWR using power meter
7. Power measurement in a spatial region without backscattering (high elevation, large

Assigned To Users
Sipho Banda
Estimated Labor
7.00 hours

The scheduled maintenance is running and it shows the next date a work order will be created and dates for the full year.

← Back Save Save And Create Another Generate Work Order Now Show Video Help

Scheduled Maintenance Details: SM5



A4 - SAWS-Weather Station
Online
Set Offline
SAWS Location 1
Add another asset

Code: SM5

Start As Work Order Status: Open


Project: [Empty]

Asset: SAWS-Weather Station (A4)

Maintenance Type: Preventive

Priority: Medium

Create a new work order even if there are work orders not closed from this Scheduled Maintenance

Running 

Estimated completion
[] days after WO created

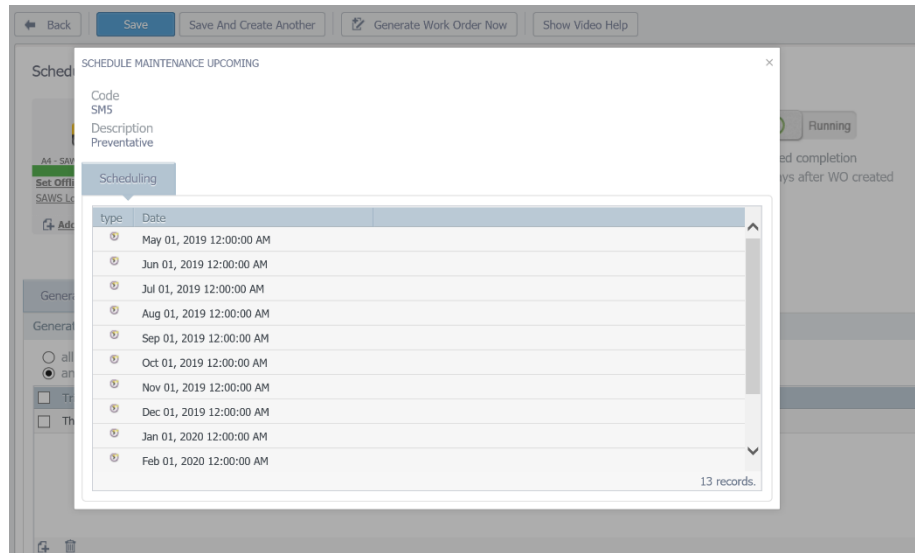
General | **Scheduling** | Nested PMs | Labor Tasks | Parts | Notifications | Notes | Files | Log

Generate Work Order When

all of the triggers fire
 any of the triggers fire

Trigger Description	Current Asset Reading	Next Trigger Threshold
<input type="checkbox"/> The 1st day of every month	Apr 10, 2019 11:38:26 AM	May 01, 2019 12:00:00 AM

🗑️



2.4.4 Cancelling Preventive Maintenance Schedules

There is a requirement from South African Weather Services to cancel outstanding preventative work order when maintenance is due.

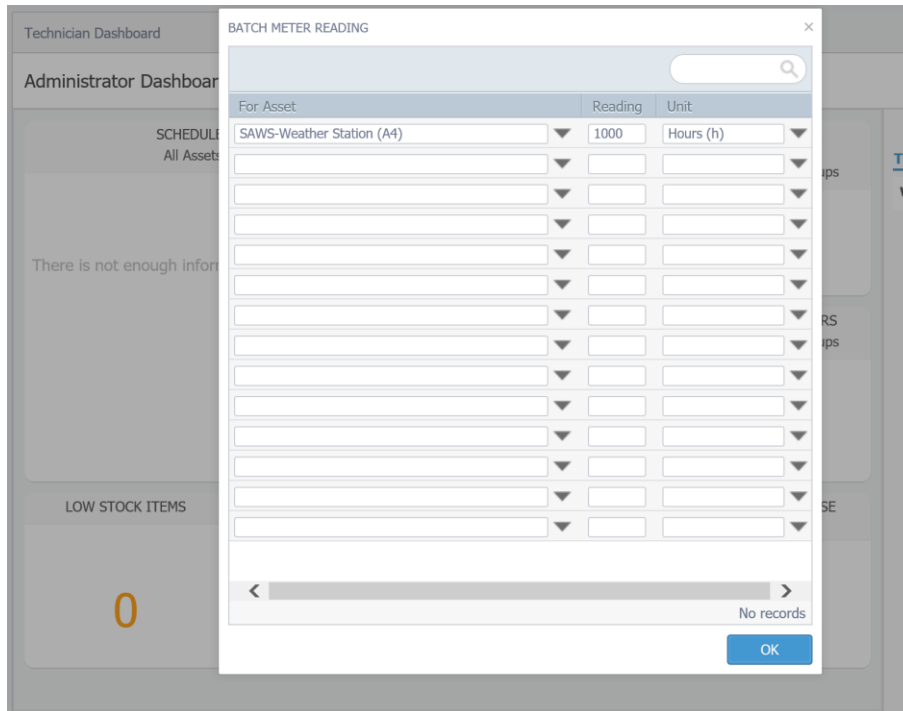
The outstanding PM WO cannot be cancelled, they will rescheduled.

4. Equipment Meter Readings

Meter readings will be used to:

- Trigger maintenance tasks based on accumulated statistical units.
- Enter and update meter readings for individual pieces of equipment or for multiple pieces of similar equipment.
- Update equipment records to indicate that a meter was replaced due to damage or a meter rollover.

Meter reading will be updated manually using the Batch Meter Reading. It allows multiple meter reading updates. The second screen shows that the meter reading has been updated.



Technician Dashboard

Administrator Dashboard

SCHEDULED All Assets

There is not enough information

LOW STOCK ITEMS

0

BATCH METER READING

For Asset	Reading	Unit
SAWS-Weather Station (A4)	1000	Hours (h)

No records

OK

Equipment: SAWS-Weather Station (A4)

SAWS-Weather Station

A4 - SAWS-Weather Station
Online
Set Offline
SAWS Location1

Code Category

General Parts/BOM **Metering/Events** Personnel Warranties Businesses Purchasing Files Custom Financials Log

Most Recent Meter Readings

Last Reading	Unit	Date Submitted
1,000.00	Hours (h)	Apr 10, 2019 11:46:50 AM

5. Roles

Technicians – Edit and View

Technologist - Edit and View

Specialist/Engineers – Add, Edit, View

Manager – Full

Planner – Full

Senior Manager - Full

6. Standard Fiix Reports

The following are standard Fiix reports

Report	Description
Completed Work Order Per Month	This report details graphically the number of closed work orders per month.
[FIIX] All Work Orders Detail Report	This report lists all work orders and user can filter the list based on different parameters
[FIIX] Asset List	This reports details all assets in the CMMS. You can filter the report by location, category
[FIIX] Asset Online and Offline History	This report dumps all Offline / Online Asset events for a given period. You can filter the report
[FIIX] Assets Checked Out Detail Report	This report lists the move history for all assets, filtered by the location that the assets are moved
[FIIX] Closed Work Order Graph Report	This graphical report shows the split of work orders by maintenance type for a particular location
[FIIX] Closed Work Orders Detail Report	This report displays the list of all closed work orders assigned to a maintenance type, asset, category
[FIIX] Closed Work Orders List Report	This report displays the list of all closed work orders assigned to a maintenance type, parent asset.
[FIIX] Closed Work Orders with Completion Notes (all)	Detailed summary of all closed work orders between 2 specified dates with completion notes.
[FIIX] Failure Code Cause Count	This report details the counts for cause failure codes on closed work orders for a particular period.
[FIIX] Failure Code Problem Count	This report details the counts for problem failure codes on closed work orders for a particular period
[FIIX] Labor Logged per Employee	This report list number of hours logged on the work order tasks between two dates.
[FIIX] Labour Hours By Asset - Top 10 Hitters (Improved Version)	This report is looking for time spent on the tasks on work orders.
[FIIX] List of All Projects with Total Costs	This report lists the total costs for each project.
[FIIX] List of asset warranties and expiry dates	List all Assets which have warranties, and the warranties' statuses.
[FIIX] List of low stock inventory, filtered by location	This report lists all the parts in stock that are below minimum levels in a particular stock location

[FIIX] List of meter readings added to an asset	This report lists all meter readings added to an asset filtered by asset, asset category and a meter.
[FIIX] List of offline assets	This report lists all assets which are offline. You can filter the report by location and asset category
[FIIX] List of offline assets (Improved Version)	The report shows the list of offline assets along with the details for the latest date it is put off.
[FIIX] List of Users by Site	This report lists the users assigned to each site, and their associated user groups.
[FIIX] Open PM Work Orders List Report	This report displays the list of all open PM work orders assigned to a maintenance type, parent asset
[FIIX] Open Work Orders Detail Report	This report displays the detailed list of all open work orders assigned to a maintenance type, asset.
[FIIX] Open Work Orders List Report	This report displays the list of all open work orders assigned to a maintenance type, parent asset
[FIIX] Overdue Work Orders Detail Report	List of open work orders that passed expected completion date.
[FIIX] Parts inventory work sheet, filtered by location and parts category	Lists inventory information for all parts and supplies filtered by location, and parts category.
[FIIX] Planned Maintenance List Per Site	This report lists all the SM's with their details associated with the particular site.
[FIIX] Planned Maintenance Two Week Lookout	This report shows the upcoming planned maintenance for a particular parent asset and all their child.
[FIIX] Projects Report with Work Order details	This report lists the WO and total cost related details for each Work Order under the specific Project
[FIIX] Requested Work Orders List Report	This report shows the list of requested work orders.
[FIIX] Shift Report	This lists all the work orders modified on a specific date, filtered by asset category
[FIIX] Site Asset & SM Summary Report	This report lists the assets in the facility and their corresponding SMs.
[FIIX] Skipped PM's Report by Site by Maintenance Type	When scheduled maintenance is due, the new work order is not created if an active work order exists
[FIIX] Upcoming Scheduled Maintenance Detail Report	This report lists all of the upcoming active scheduled maintenances that will be created between two dates
[FIIX] Upcoming Scheduled Maintenance List Report	This report lists all of the upcoming active scheduled maintenances that will be created between two dates

[FIIX] Upcoming scheduled maintenance with stock forecasting	This report lists all of the upcoming active scheduled maintenances, filtered by maintenance type
[FIIX] Work Order Cost Detail Report	This report totals up the labor, and parts costs associated with closed work orders
[FIIX] Work Order Cost List Report	This report lists the labor, parts and misc cost associated with work orders.
[MultiSite Report] Employee Engagement per Site	This report shows employee engagement per site. The report calculates various metrics for every user
[MultiSite Report] Planned Maintenance Percentage per Site per Work Week	This report shows how much of your maintenance is planned per site per work week.
[MultiSite Report] PM Compliance Percentage	This report shows the number of scheduled PM's completed on time per site in a particular calendar
[MultiSite Report] PM Task Completion Percentage	This report shows how many maintenance tasks were completed on time per site per month.
[MultiSite Report] Total Technician Hours Logged Per Site Per Work Week	This report shows total hours logged per site per work week.
[new] List of receipts, received between two dates	This lists all receipts in your system, between two dates, as well as the individual prices of line items
[new] Work order part usage history, created between two dates	Lists all work orders that have consumed a part, between two work order creation dates.
All Assets List Excel Dump	This report details all Assets on the system and exports data into Excel Format.
Asset Custom Field Excel Dump	Dumps asset custom fields info to Excel. This report can be customized
Average Time to Complete Work Orders (days)	This report takes the average time to close for all work orders per work week.
Closed Work Orders (Excel Dump)	Dumps All Closed Work Order info to Excel.
Closed Work Orders by All Maintenance Types	Shows all work orders completed within a specific date period for a given maintenance type (safety, ...)
Closed Work Orders by Associated User (Excel Dump)	Dumps All Closed Work Order info for an assigned user into to Excel.
Closed Work Orders by Parent Asset or Location (Excel Dump)	Dumps All Closed Work Order info to Excel for an parent asset or location and all its child assets.
Closed Work Orders with All Costs	Shows all work orders completed within a specific date period with parts and labour costs.
Cost report by Asset (closed work orders only)	Dumps all cost information from closed work orders for a particular asset to Excel.
Downtime by Repair Type by Asset Category	This report gives a graphical summary of the downtime and reasons for downtime between a specific period

Downtime hits (all)	When an asset is logged offline, a reason is logged. This report shows how many times an asset is logged offline
FIFO Purchases List between 2 dates	This inventory report shows all stock purchases and receipts between 2 dates.
FIFO Value of Stock on Hand Report	This report lists the stock on hand with the corresponding FIFO transactions.
FIIX] Labour Hours By Asset - Top 10 Hitters by Site (Improved Version)	This report is looking for time spent on the tasks on work orders per asset for the Site selected.
Labour Hours By Asset	This report is looking for time spent on the tasks on work orders. The time must be logged.
Labour Hours By Asset - Top 10 Hitters	This report is looking for time spent on the tasks on work orders. The time must be logged.
Mean time between failures (MTBF)	
Mean time between failures by Asset Category (MTBF)	
Mean Time To Repair (MTTR) v2.0	
Mean Time to Repair MTTR (all)	
Mean Time to Repair MTTR (by Asset Category)	
Number Completed Work Order Per Month by Asset Category	This report details graphically the number of closed work orders per month.
Number Completed Work Order Per Month by User	This report details graphically the number of closed work orders per month.
Number Scheduled Maintenance Upcoming per Week	This report shows all upcoming Maintenance in each week.
Number Work Orders Requested V Completed	Shows the number of work orders requested in a month versus the number of work orders completed.
Open Work Order Excel Dump	Dumps All Work Order info to Excel.
Part Usage History	Lists all work orders that have used a part within the time frame given.
Parts Consumed on Work Orders Report	The report shows the list of parts consumed in the work orders.
Parts Received into Inventory	This report lists the inventory received into the CMMS within a particular period
Parts Used in Work Orders (Excel Dump)	Dumps a list of all parts used in Work Orders between 2 dates to Excel.
Planned Maintenance Percentage per month	This report shows how much of your maintenance is planned per month. .
PM Compliance Rate - Monthly	Monthly compliance report shows the number of scheduled PM's completed on time in a particular calendar period

PM Compliance Rate - Weekly	Weekly compliance report shows the number of scheduled PM's completed on time by week.
Project Status	Lists details on all projects that have not yet been closed (current date is not past actual project date)
Purchase Order History (all)	Lists the purchase order history between two dates.
Scheduled Maintenance Critical Percent	This report lists the critical % for work orders generated from scheduled maintenance items.
Scheduled Maintenance Critical Percent by Asset Category	This report lists the critical % for work orders generated from scheduled maintenance items.
Scheduled V Unplanned Maintenance Downtime %	This report shows Scheduled V Unplanned maintenance hours as a % compared the 80/20% target.
Scheduled V Unplanned Maintenance Hours %	This report shows Scheduled V Unplanned maintenance hours as a % compared to the 80/20% target
Spare Parts List Report (Excel)	Lists spare parts information for all parts.
Stock Purchases (all)	This report lists all stock purchases between 2 dates.
Summary Report for a given Asset	This report gives a graphical summary of the maintenance on a particular asset over a specific timeframe
Upcoming Scheduled Hours per Work Week	This report shows how many hours in upcoming Maintenance are due in hours in each week.
Upcoming Scheduled Hours per Work Week by Asset Category	This report shows how many PM maintenance hours upcoming per asset category in each week.
Upcoming Scheduled Hours per Work Week by User	This report shows how many upcoming maintenance hours due per user per work week.
Work Order Completion Rate by Maintenance Type	Work Order Completion Rate shows graphically the percentages of safety work orders completed
Work Order Hours Logged by Technician	Lists Work Order Hours logged for a particular technician in a given time frame.
Work Order Overview by Technician	Lists work order details for each user, including # of work orders assigned, # of closed work orders.

NetSuite Acceptance

Action	Name	Title	Signature	Date
Accepted By		Project Manager		
Accepted By		Consultant		

Customer Acceptance

Action	Name	Title	Signature	Date
Accepted By		Executive Sponsor		
Accepted By		Project Manager		