



# Maximo Work Request System Overview

Facilities Management & Logistics (FM&L)

# Maximo Start Center

Maximo is an asset (equipment) management life cycle and workflow process management system. It has integrated modules used to set up planning and control, track inventory, maintain the database and generate work orders to satisfy customer requests for issues or projects. Jefferson Lab (JLab) provides Maximo for use by the Facilities Management department as well as other departments as needed.

You can access Maximo here: <https://misportal.jlab.org/maximo/ui/login>.


After logging in, the screen will display a **Start Center** with separate areas for **Service Requests (SRs)** and **Work Orders (WOs)**.

On the left side of the screen are links to take you directly to the **Service Requests** module and the **Work Order Tracking** module.

On the right is a large section with groups of the Service Requests and Work Orders pertaining to the work group to which you are assigned (see pages 6 & 7 for groups). It has a scroll bar that you can use to scroll down to see the list items in each group. By default, each group only lists 10 items per page, so you can click on the « [Previous Page](#) | and [Next Page](#) » links at the end of each group to see the rest of the group items. It will show which item numbers you are viewing out of the total number of items as you click through the list.

Each user is assigned to a work group or work groups and each work group's Start Center screen will list the **Service Requests (SRs) Pending** – requests that have not yet been accepted by a work group lead, **Service Requests Working** – requests that have been accepted by a work group lead that are still open (being worked), **Corrective Maintenance (CM) Workorders** – open work orders that pertain to unscheduled maintenance issues or projects, and **Preventive Maintenance (PM) Workorders** – open scheduled maintenance work orders generated by the system. Upon completion of the work, the request will disappear off of this screen, but is still searchable from the Service Request or Work Order Tracking modules.

You can search for specific list items in each group by typing in any of the blank boxes above the text. You can sort any column heading by clicking on the headers above each box. You can select any list item by clicking on any of the row elements to review more detailed information. You can accept a request, defer it, cancel it, reassign it, modify and save anything within it, duplicate it, create a report, or print it.

This is one of the few places in Maximo where you may be able to use the browser back arrow to return to the Start Center from a service request or work order that you clicked on from the Start Center. You can also click on the  button in the top right blue bar. If you are in the Start Center already, clicking on this button will refresh the screen.

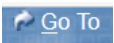
To exit out of Maximo, go to the top right dark blue bar and click on the  button.

# Maximo applications

The following work management processes indicate the activity to be performed in Maximo and the process flow from each module that may be used in creating a work order.

## Work Management processes

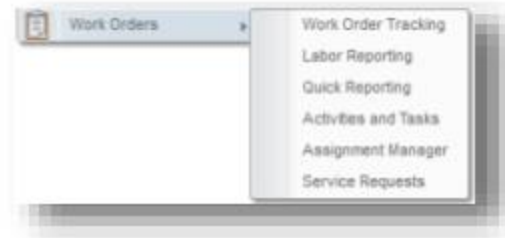


On any Maximo screen, you can go to the top right blue bar and click on the  **Go To** button to scroll down to see the following menu items:

## Work Management modules

- **Work Orders** module allows to track the work that has been performed in the past, and future work that is being planned.

- Work Order Tracking
- Labor Reporting
- Quick Reporting
- Activities and Tasks
- Assignment Manager
- Service Requests




- **Preventive Maintenance** module allows to manage the work performed on a regular schedule to keep assets running efficiently

- Preventive Maintenance
- Master PM



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As each module's application page loads, you will see blank boxes indicating you can type in them to search for particular items or leave them blank and then hit the return key to see the resulting list of items. Some boxes have a  icon beside them which lets you select from a list of values to filter the data. It will show the selection(s) in the box as if you had typed it in and will allow you to edit the selection as well. Each underlined heading above a box can be clicked on to sort the list for that column of data. Click once to sort from top to bottom. Click again to sort from bottom to top.

Above these boxes on the left is an **Advanced Search** box to click on to create a more detailed search. When satisfied with the resulting search items listed, you can click on the **Download** link that appears above the boxes on the right to create an Excel or a PDF file with this data.

Above the search box on the left is a **Query** box which shows saved searches that may be reused. You can save and name your searches to add to the list in each module.

To the right of the Query box is a search box for you to search for items in that application.

To the right of the search box is the **Select Action** box which will allow you to change an item's status and perform other actions depending on your permissions when you click on a list item.

To exit out of a list item and return to the search list, you must click on  **instead** of the browser back arrow.

## Additional applications

- **Planning** module allows to plan how work should be performed, such as creating job plans or safety precautions and procedures
  - Job Plans
  - Routes
  - Safety



- **Resources** module (Administration > Resources) allows to create records about the people in your workforce
  - Labor
  - Qualifications
  - People
  - Person Groups
  - Crafts



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Your permissions are set according to the level of access needed to perform your work and determine which menu items you will be able to view and modify throughout Maximo.

Consistency with file naming is important for ease of searching for existing module file names as well as creation of new files. Module file naming conventions usually include a frequency of use designation, such as:

Name	Frequency	Use Description
W	Weekly	Called (referenced) every week or # of weeks
M	Monthly	Called (referenced) every month or # of months
Q	Quarterly	Called (referenced) every 3 months
SA	Semi Annually	Called (referenced) every 6 months
A	Annually	Called (referenced) each year
#Y	# of Years	Called (referenced) every # of years

Detailed on the following pages are applications various users may be able to access at JLab, along with directions for accessing and managing them.

## People application

The People application stores information about individuals, such as users, laborers, asset owners, and supervisors

A Person can be set as an owner or supervisor of a work order.

Person records are typically created by the Maximo administrator.

A person can receive a record routed by a workflow process.

The screenshot shows the 'Person' form in the Maximo application. The form is divided into several sections for data entry:

- Person:** A dropdown menu showing 'ALLEN'.
- First Name:** Text field containing 'Rebecca'.
- Last Name:** Text field containing 'Allen'.
- Display Name:** Text field containing 'Rebecca Allen'.
- Primary Phone:** Text field containing '781-555-3456'.
- Primary E-mail:** Text field containing 'rebecca.allen@ms.com'.
- Address:** Text field containing '80 Burlington Road'.
- City:** Text field containing 'Bedford'.
- State/Province:** Text field containing 'MA'.
- ZIP/Postal Code:** Text field containing '01730'.
- Country:** Text field.
- Primary SMS:** Text field.
- Attachments:** A section with a plus icon and a list of attachments.
- Status:** A dropdown menu showing 'ACTIVE'.
- VP:** A dropdown menu.
- Calendar Organization:** A dropdown menu showing 'EAGLENA'.
- Primary Calendar:** A dropdown menu showing 'DAY'.
- Primary Shift:** A dropdown menu showing 'DAY'.

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Accessed from the top right menu: [GoTo -> Administration->Resources->People](#). If you do not see these menu options, you do not have permission to access this application. All Maximo users are listed here.

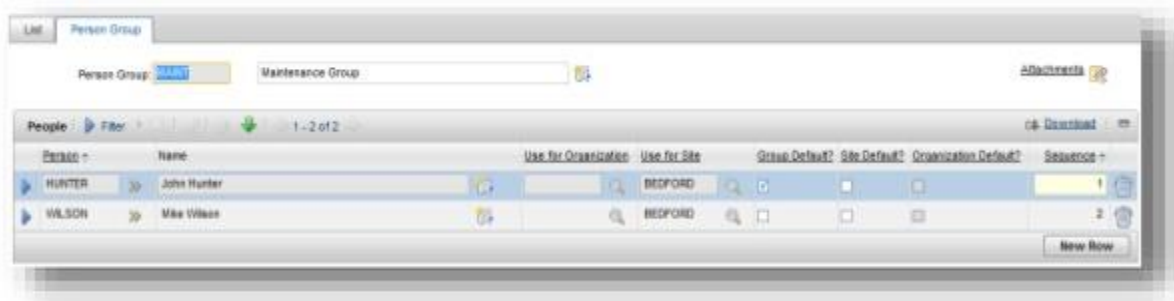
This is where you can search on names or Maximo person id numbers to see who is active or inactive (maintained by the JLab Computer Center (CC) IT department).

## Person Group application

A person group is a list of individuals who may have similar job responsibilities, levels of authority, and security clearances.

After you define person groups, responsibility for records such as work orders, tickets, and purchasing records can be assigned to a group rather than an individual.

A person group can receive a record routed by a workflow process.



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Accessed from the top right menu: **GoTo -> Administration->Resources->Person Groups**. If you do not see these menu options, you do not have permission to access this application. This module allows Maximo users to be set up in work groups based on their department. This will determine which service requests and work orders a user will see in their Start Center. Below are current person groups used in Maximo:

FM = Facilities Maintenance

FME = Facilities Maintenance & Operations Electrical group

FMENG = Facilities Maintenance Engineering

FMFS = Facilities Maintenance Fire Safety group

FMSS = Facilities Maintenance Security & Services group

FMO = Facilities Maintenance & Operations

FMM = Facilities Maintenance & Operations Mechanical group

FMO-MH = Facilities Maintenance & Operations Material Handling

FMO-P = Facilities Maintenance & Operations Plumbing

FMO-S = Facilities Maintenance & Operations Shop group

FMO-VG = Facilities Maintenance & Operations Vehicle and Golf Carts

LOCKS = Locksmiths and Door Hardware Mechanics

OTHER = Unknown Requests

PROP = Property & Logistics group



## **Person Groups associated with the Facilities Management & Logistics (FM&L) Organization:**

Engineering (FMENG)

Facilities Management Review (FM)

Maintenance & Operations (FMO)

Structural (FMO-S) (FMO-P) (FMO-MH) (FMO-VG) (LOCKS)

Mechanical (FMM)

Electrical (FME)

Fire Protection (FMFS)

Security & Services (FMSS)

Property & Logistics (PROP)

### **Group Field Identifier:**

When these person groups are referenced in the Service Request module, they are known as owner groups. When referenced in the Preventive Maintenance and Work Order modules, they are known as work groups.

The above information is helpful for identifying which group should be selected for a service request or work order and associating it with a particular classification denoting which category the work request pertains to. This will be helpful to understand in the Service Request module (detailed on page 17) where classifications are selected or in the Work Request front-end web application where these classifications are known as job types.

Some examples:

Electrical : Lighting : LIGHTN : Modify/New

Electrical : Lighting : LIGHTR : Repair/Maintenance

Mechanical : HVACN : Modify/New

Mechanical : HVACR : Repair/Maintenance

Plumbing : PLUMBN : Modify/New

Plumbing : PLUMBR : Repair/Maintenance





# Assets application


The Assets application creates and stores asset numbers and corresponding information such as parent, location, manufacturer, up/down status, etc.








To create an asset record:

1. On the Maximo toolbar, click New Asset. If the Asset field is empty, enter a value.
2. You can enter a description in the Asset Description field. Click Long Description if you need more space.
3. If the asset is rotating, in the Item field, enter a value or click Detail Menu to select an option and retrieve a value.
4. If this asset has a parent, in the Belongs To field, enter a value or click Detail Menu and select an option.
5. You can enter information in the other fields as needed.
6. Click Save Asset.

Assets can be called (referenced) in these modules: job plans, routes, and PMs. View the following sections for details on each module.

Click on the  icon to create a new asset. Fill in an asset name (ie: building location number + 3-digit asset name (see following pages) + sequential number), a description, location, and as much data as possible about the asset in the **Specifications** tab (ie: Manufacturer, Model #, filter size, etc.). Save the file using the  icon.

Click on the  icon on the top row of the Asset application page to change the status of a particular asset. Change an asset's status to "Operational" to allow it to be used in other modules. When no longer needed, change its status to "Decommissioned" in order to remove it from other modules, yet preserve its history.

There are other icons you can click on to manage an asset, accessible on the main application page as well as within each list item. Use  to clear changes. Use  to go backward and forward through the assets in the search item list. Use  to move/modify assets. Use  to swap assets. Use  to associate users and custodians with the asset. Use  to create a customizable report. Use  to print out the asset. One print icon is high level (less detail), the other shows more detailed information. Other actions are available in the **Select Action** menu, which changes depending on whether you are listing an asset vs. being in an asset.

The following example table lists the asset name, description, and department where they are used. The actual maintained file is located in the facilities management group directory M:facilities/Software/Maximo and is named “Acronyms for Assets”.

Name	Description	Department
AC	Air Compressor   Fan Coil	Mechanical
ACC	Air Cooled Condenser (Refrigerant Coil)	Mechanical
ACU	Air Conditioning Unit	Mechanical
ACWP	Acid Chilled Water Pump	Mechanical
AHU	Air Handling Unit	Mechanical
ASCP	Air Sampling Control Panel	Fire Protection
ASSD	Air Sampling System Detector	Fire Protection
ATS	Automatic Transfer Switch	Electrical
AV	Alarm Valve	Fire Protection
AV/CH	Alarm Valves / Check Valves on Riser	Fire Protection
B	Boiler	Mechanical
BS	Branch Selector	Mechanical
CATF	Clean Agent/Total Flooding System	Fire Protection
CH	Chiller	Mechanical
CHH	ARC Chiller	Mechanical
CMS	Panelboard	Electrical
CP	Control Panel	Mechanical
CRAC	Computer Room Air Conditioning	Mechanical
CRU	Computer Room Unit	Mechanical
CRYO	Panelboard	Electrical
CT	Cooling Tower Cell	Mechanical
CTBS	Cooling Tower Basin Strainer	Mechanical
CTF	Cooling Tower Fan	Mechanical
CTP	Cooling Tower Pump	Mechanical
CTS	Cooling Tower Strainer	Mechanical
CV	Check Valve   Control Valve	Fire Protection
CWP	Chilled Water Pump	Mechanical
DD	Desiccant Air Dryer	Mechanical
DDC	Direct Digital Control	Mechanical
DHU	Dehumidification Unit	Mechanical
DOR	Interior/Exterior Door	Structural
DSD	Duct Smoke Detector	Fire Protection
ECB	Enclosed Circuit Breaker	Electrical
EAC	Exhaust Air Control	Mechanical
EF	Exhaust Fan	Mechanical
ELV	Elevator	Fire Protection
EMLIGHT	Emergency/Exit Light	Electrical
ERU	Energy Recovery Unit	Mechanical
ESEF	End Station Exhaust Fan	Mechanical
EUH	Electric Unit Heater	Mechanical
EWB	Electric Water Heater	Mechanical
EYE	Eyewash/Safety Shower	Mechanical
F	Fan	Mechanical

FACP	Fire Alarm Control Panel	Fire Protection
FC	Fire Connection	Fire Protection
FDC	Fire Department Connection	Fire Protection
FDU	Fiber Distribution Unit	Communications
FL	Incoming Fire Line	Fire Protection
GEN	Generator	Electrical
GHP	Geothermal Heat Pump	Mechanical
GTP	Geothermal Pump	Mechanical
GWP	Groundwater Pump	Mechanical
HD	Heat Detector	Fire Protection
HEX	Heat Exchanger	Mechanical
HP	Heat Pump	Mechanical
HPAF	High Power Amplifier Fan	Mechanical
HPP	High Pressure Pump	Mechanical
HPU	Heat Pump Unit	Mechanical
HS	Hood System	Mechanical
HTAPE	Heat Trace Tape	Electrical
HUM	Humidifier	Mechanical
HVAC	Heating, Ventilation, and Air Conditioning	Mechanical
HWP	Hot Water Pump	Mechanical
HYDRANT	Fire Hydrant	Fire Protection
IDF	Intermediate Distribution Frame	Communications
IPC	Integrated Power Center	Electrical
IU	Independent AC Unit	Mechanical
L	Lighting Panelboard	Electrical
LCWF	Low Conductivity Water Filter	Mechanical
LCWP	Low Conductivity Water Pump	Mechanical
LHD	Linear Heat Detector	Fire Protection
M	Mechanical Panelboard	Electrical
MAU	Make-up Air Unit	Mechanical
MCC	Motor Control Center	Electrical
MDF	Main Distribution Frame	Communications
MDP	Main Distribution Panel	Electrical
MS	Manual Pull Station	Fire Protection
MV	Medium Voltage	Electrical
MVMCC	Medium Voltage Motor Control Center	Electrical
MVSW	Medium Voltage Switch	Electrical
OAU	Outside Air Unit	Mechanical
OHD	Overhead Door	Structural
OME	Oil Mist Eliminator	Mechanical
OWS	Oil Water Separator	Mechanical
P	Power Panelboard	Electrical
PA	Pre-Action Valve	Fire Protection
PACU	Packaged Air Conditioning Unit	Mechanical
PAD3	PAD-3	Fire Protection
PB	Push Button Smoke Removal System	Fire Protection
PDU	Power Distribution Unit	Electrical
PH	Fire Fighter Phone Station	Fire Protection
PIV	Post Indicator Valve	Fire Protection

PNLB	Panelboard	Electrical
PP	Patch Panel	Communications
PRCWP	PR Chilled Water Pump	Mechanical
PTAC	Packaged Terminal Air Conditioner	Mechanical
RCC	Remote Control Center	Fire Protection
RD	Refrigerated Dryer	Mechanical
RDC	Rack Distribution Center	Electrical
RF	Return Air Fan   Rack Fan	Mechanical
RHU	Radiant Heater Unit	Mechanical
RM	Refrigerant Monitor	Mechanical
ROOF	Roof	Structural
RTU	Roof Top Air Unit	Mechanical
RU	Refrigeration Unit	Mechanical
SAF	Supply Air Fan	Mechanical
SD	Smoke Detector	Fire Protection
SHP	Sprinklers & Associated Piping	Fire Protection
SP	Systems Panelboard	Electrical
SUB	Substation	Electrical
SW	Switch	Electrical
SWBD	Switchboard	Electrical
SWGR	Switchgear	Electrical
T	Transformer	Electrical
TA-EF, TB-EF, TC-EF	Truck Access Exhaust Fan	Mechanical
TVSS	Transient Voltage Surge Suppression	Electrical
UH	Unit Heater	Mechanical
UPS	Uninterruptible Power Supply	Electrical
UV	Ultra Violet Filter	Mechanical
VACP	Vacuum Pump	Mechanical
VAV	Variable Air Volume Box	Mechanical
VFD	Variable Frequency Drive	Mechanical
VIU	Variable Refrigerant Flow (VRF) - Indoor Unit	Mechanical
VLV	Distribution Valve	Water Distribution
VOU	Variable Refrigerant Flow (VRF) - Outdoor Unit	Mechanical
VRFC	Variable Refrigerant Fan Coil	Mechanical
WATER METER	Water Meter	Fire Protection
WFS	Water Flow Switch	Fire Protection
WS	Wet Standpipe	Fire Protection
WU	Window Unit	Mechanical
WWHP	Water-Water Heat Pump	Mechanical
XFMR	Transformer	Electrical

Note: as noted on page 9, this list is maintained elsewhere and is subject to change as obsolete names are removed and new names are added. Orange-colored rows denote assets with multiple designations. Yellow refers to an unknown asset description.

## Job Plans application

A job plan is a detailed description of work that is performed for a work order.

Job plans contain tasks and information about the estimated **labor, materials, services, and tools** that are required for the work.

To ensure that work on an asset is performed safely, you can associate **safety plans**.

Job plans can be also applied to **preventive maintenance** records.


Job plans can be created from an existing work order or created manually.

After a job plan becomes a work plan on a work order, you can change the work plan without affecting the job plan.


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



The Job Plan module is the only module using version control. You can create a job plan, save it and change its status to “Active”. Once saved, you select the “Revise” menu option from the **Select Action** box to edit a new version of it. Other actions are available in this menu.

Active job plans can be called (referenced) in a Route or PM. You can also write the job plan instructions in the PM description or reference an attached manual in the job plan, route or PM.

Click on the  icon to create a new job plan. Fill in a job plan name (ie: frequency of use + asset type), description, supervisor, work group, owner group, and add instruction lines in the

**Job Plan Tasks** section. Save the file using the  icon.

Click on the  icon on the top row of the Job Plan application page to change the status of a particular job plan. Change its status to “Active” to be used in other modules. There are other icons you can click on to manage a job plan, accessible on the main application page as well as within each list item.

Use  to clear changes. Use  to go backward and forward through the job plans in the search item list. Use  to create a customizable report. Use  to print out the job plan. One print icon is high level (less detail), the other shows more detailed information.

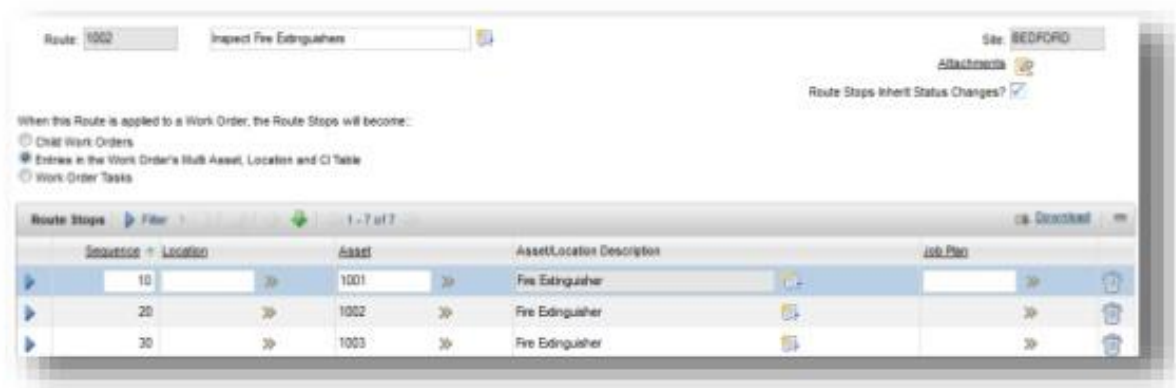
## Routes application

A route is a list of related assets, locations, or both

Routes can be used to:

- generate child work orders for each route stop
- generate a single work order that contains a list of assets and locations for all the route stops
- generate work orders tasks for each route stop



Job plans can be also applied to **preventive maintenance** records.






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This module allows you to add or delete the assets or locations you want to work on for a particular route which may be called by a PM. Routes are not active or inactive and thus do not have a status.

As shown in the figure above, there is also a place to fill in a job plan name to be used for any asset or location listed in the route.

Click on the  icon to create a new route. Fill in a route name (ie: frequency of use + asset type), description, and add rows of assets or locations in the **Route Stops** section. Save the file using the  icon.

There are icons available to manage a route, accessible on the main application page as well as within each list item. Use  to clear changes. Use  to go backward and forward through the routes in the search item list. Use  to create a customizable report. Other actions are available in the **Select Action** menu, which changes depending on whether you are listing a route vs. being in a route.

## Preventive Maintenance application

Preventive maintenance (PM) records are templates for scheduled preventive maintenance work. They are used to generate work orders.

The schedule determines how often work orders are generated from PMs. The schedule can generate work orders based on elapsed time between work orders, on meter units used, or both.


Create a PM hierarchy to schedule a group of work orders for an asset or location hierarchy.

Work orders can be created manually or automatically.

The screenshot shows the 'Preventive Maintenance' application interface. It features several tabs at the top: 'PM', 'Frequency', 'Seasonal Dates', 'Job Plan Sequence', 'PM Hierarchy', and 'Forecast'. The 'PM' tab is active, displaying fields for 'PM Name' (set to 'Breaker maintenance'), 'Master PM', 'Site' (set to 'BEDFORD'), and 'Status' (set to 'DRAFT'). There are checkboxes for 'Override Updates from Master PM?', 'Forecast Dates Locked?', and 'Forecast Costs?'. Below these are sections for 'Details' and 'Work Order Information'. The 'Details' section includes fields for 'Location', 'Asset' (set to 'BREAKER102'), 'Route', 'Lead Time (Days)', 'Lead Time Active?', 'Use Job Plan Sequence?', 'Include this PM in the Forecast?', and 'Has Children?'. The 'Work Order Information' section includes 'Job Plan' (set to 'BREAKINGP'), 'Description' (set to 'Breaker Inspection'), 'Work Type', and 'Last Start Date'. A 'Responsibility' section includes 'Supervisor' and 'Crew' fields. A green checkmark icon is visible in the bottom right corner of the form area.



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This module allows you to specify an asset or location, job plan, and/or route name to be used in the PM to generate a work order(s). Filling in an asset name will generate one work order. Filling in a route will generate as many work orders as there are assets listed within the route (if they are specified to generate as child work orders), along with a parent PM work order.

You can set the PM's work order status to "WAPPR" (waiting approval) or "WSCH" (waiting scheduling) as preferred. As work orders are generated, this will make it easy to tell which work orders are pending or being worked, as they will be changed to "APPR" (approved) upon acceptance by the work group coordinator or lead when they click on the  symbol.




You can set the PM's work type to "PM" for preventive maintenance work (ie: electrical, mechanical, etc.) or "SW" for service work (ie: room setup, security, pest control, janitorial, etc.).

You can set the PM's work group (see next page for list) to the one that the PM will generate work orders for and select the owner who will be the work group owner of those work orders.

Click on the  icon to create a new PM. Fill in a PM name (ie: location + asset type + frequency of use), location or asset, route, job plan, work type, work order status (required field), work group, and owner. Go to the **Frequency** tab and add the frequency and frequency units. Add any other fields as needed. Save the file using the  icon.



Click on the  icon on the top row of the Preventive Maintenance application page to change the status of a particular PM. PM's must be "Active" in order to generate work orders.

There are other icons you can click on to manage a PM, accessible on the main application page as well as within each list item. Use  to clear changes. Use  to go backward and forward through the PMs in the search item list. Use  to create a customizable report. Other actions are available in the **Select Action** menu, which changes depending on whether you are listing a PM vs. being in a PM.

## SR Owner Groups, PM & WO Work Groups

Below is a list of the owner/work groups currently in use:

Name(s)	Description
FME	FMO Electrical Group
FMENG	Facility Maintenance Engineering Group
FMFS	Facility Maintenance Fire Safety Group
FMM	FMO Mechanical Group
FMO	Facility Maintenance Operations Group
FMO-MH	FMO Material Handling Group
FMO-P	FMO Plumbing Group
FMO-S	FMO Structural/Shop Group
FMO-VG	FMO Vehicles/Golf Carts Group
FMSS	Facility Maintenance Security and Services Group
LOCKS	Locks Group
OTHER	Unknown work requests group
PROP	Property Group

Note: this list is subject to change as obsolete groups are removed, new groups are created, and duplicate groups are combined.

## Preventive Maintenance application

The screenshot shows the 'Frequency' tab of the Preventive Maintenance application. A yellow callout box points to the 'Frequency' field, stating: 'Use the **target start date** of the last PM work order to calculate the due date of the next PM work order. If cleared, use the **completion date** of the last PM work order to calculate the next due date.' Another yellow callout box points to the 'Frequency Units' dropdown, stating: 'Insert frequency of the work orders to be generated'. The interface includes tabs for 'List', 'PM', 'Frequency', and 'Seasonal Date'. The 'Frequency' tab is active, showing fields for 'Frequency' (set to 1), 'Frequency Units' (set to MONTHS), 'Alert Lead (Days)' (set to 10), 'Extended Date', and 'Estimated Next Due Date'. There are also checkboxes for 'Use Last Work Order's Start Date to Calculate Next Due Date?', 'Generate Work Order Based on Meter Readings (Do Not Estimate)?', and 'Generate Work Order When Meter Frequency is Reached?'. The status is 'DRAFT' and 'Forecast Exists?' is checked.

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This is where you can fill out the PM frequency number and frequency unit in days, weeks, months, and years to determine how often the active PM will generate work order(s).

PMs usually include the frequency in their name. These groupings are as follows:

Name	Frequency	Description
W	Weekly	Generate work orders every week or # of weeks
M	Monthly	Generate work orders every month or # of months
Q	Quarterly	Generate work orders every 3 months
SA	Semi Annually	Generate work orders every 6 months
A	Annually	Generate work orders each year
#Y	# of Years	Generate work orders every # of years

Set a value in the Lead Time (Days) and Alert Lead (Days) fields for the work order to generate before the due date to appear in the work group's Start Center for planning (usually 28 days).

If you need the PM to generate a work order immediately, go to the **Select Action** menu and click on the **Generate Work Orders** menu option. On the new pop-up that appears, uncheck the "Use Frequency Criteria?" box and then click on "OK". The box will disappear and you will see another box appear listing the work order number(s) that were just generated from the PM.

Now go to the **Work Order Tracking** application and search for work orders. Various columns are displayed. The **Work Order** column shows the work order number, while the Service Request (**SR #**) column will be blank, indicating the work order was generated from a **PM**.

## Service Request application

The Service Request application captures information from a requester about an asset or location to determine further action(s) to take.

PMs are not the only process that generates work orders. Service Requests are unscheduled requests for corrective maintenance work to be done on an asset or at a location. Upon acceptance by the work group default owner, a work order will then be generated.

Service requests can be submitted by anyone at Jefferson Lab with access to Maximo or they can call extension 7400 (Facilities Maintenance call center) and provide information to have a service request submitted.



Service Requests (SRs) are typically entered through the front-end web application **Jefferson Lab Facilities Management Work Request System - Customer Connection** link found here: <https://misportal.jlab.org/work/index.jsf>.



Here you can submit a work request, property request, or key request. Click on **Submit Work Request** to open a detailed work request page. Facilities staff can choose to open a work order only and choose the job type. You can fill in the affected date, requester information, location, description, detailed long description, priority, completion date, check any access training or other training requirements, and then click on the “Submit” button to create the service request.

The service request number will show up on the main screen at the bottom under “Your Open Requests”. The following fields will display the pertinent information: Ticket ID, Date Reported, Status, and Description of Work.

Below this, a **Search Requests** box will allow you to search for service requests with the following fields: a checkbox to include Div. Dept. Group in output, Submitted By multiple selection list, Ticket ID, Submitted between {calendar date} and {calendar date}, and buttons to select either: send output to browser or excel file. Click on the **Search...** button to see the results.

You can go to the **Start Center** to see the service request appear in the relevant work group’s **SRs Pending** group. You can also go to the Service Request application and search for it. If something does not look right, you are still able to click on it and make and save changes.

You can manually create a service request by going to the **Service Request** module and clicking on the  icon to create a new service request. The system will automatically assign a service request number. Fill in a summary, details, classification, internal priority, asset, or location. Save the file using the  icon.

Click on  to create a customizable report. Click on  to print out the service request. Change its status in the **Select Action** menu. Other actions are available in the menu, which changes depending on whether you are listing a service request vs. being in a service request.

## Service Request Statuses

As service requests are created, worked on, and completed, they indicate which stage of the work request process they are in through the status field. Below are the relevant statuses in use:

PENDING = awaiting review/acceptance by FM&L management

WORKING = service request was accepted, work order generated, and work is in progress

DEFERRED = work has been put on hold until further review

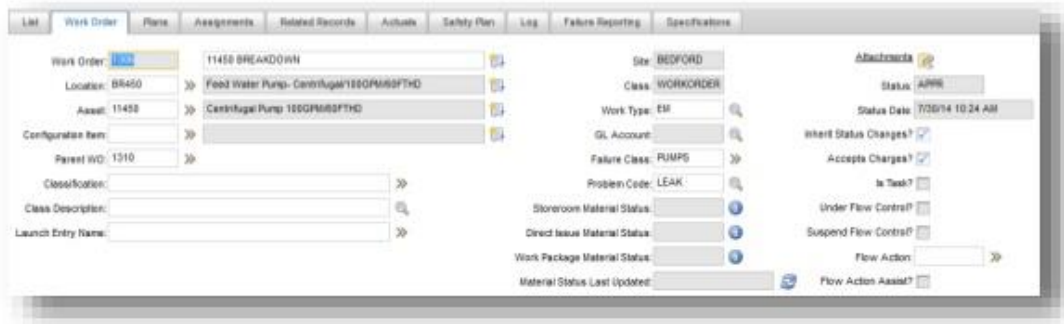
CLOSED = work order has been completed or request was canceled

## Work Order Tracking application

A Work Order (WO) specifies a particular task and the labor, materials, services, and tools required to complete the task

In the Work Order Tracking application, you create and manage work orders for assets and locations.

When you create a work order, you initiate the maintenance management process and create a historical record of the work requested and performed.





The screenshot displays the 'Work Order' form in the Work Order Tracking application. The form is organized into several sections:









- Work Order Details:** Includes fields for Work Order (11450), Location (BR450), Asset (11450), Configuration Item, Parent WO (1310), Classification, Class Description, and Launch Entry Name.
- Task Details:** Includes fields for Site (BEDFORD), Class (WORKORDER), Work Type (EM), GL Account, Failure Class (PUMPS), Problem Code (LEAK), Storeroom Material Status, Direct Issue Material Status, Work Package Material Status, and Material Status Last Updated.
- Attachments:** Includes a Status field (APPR) and a Status Date field (7/26/14 10:24 AM).
- Actions:** Includes checkboxes for 'Inherit Status Changes?', 'Accepts Charges?', 'Is Task?', 'Under Flow Control?', 'Suspend Flow Control?', 'Flow Action', and 'Flow Action Assist?'. There are also buttons for 'Inherit Status Changes?', 'Accepts Charges?', 'Is Task?', 'Under Flow Control?', 'Suspend Flow Control?', and 'Flow Action'.

## Work Order Tracking application – Tabs

- **Work Order (main)** - Create, view, or modify work orders, view identifiers for an applied job plan and safety plan, view PM and scheduling information. If the work order is a follow-up work order, you can view the identifier of its originating work order. You also can identify the failure hierarchy for the work asset.
- **Plans** - Enter, view, or modify information on work orders in a hierarchy, and to enter, view, modify, or delete information about planned job tasks, labor, materials, services, and tools.
- **Related Records** - Add, view, or delete related ticket and work order records.
- **Actuals** - Enter, view, or modify actual work order start and finish times, labor hours and costs, material quantities, service costs, and tool costs.
- **Safety Plan** - Add, view, modify, or delete safety information associated with a work order.
- **Log** - Create, view, edit, and delete Work Log entries, and view Communication Log entries.
- **Failure Reporting** - Enter, view, or modify asset and location failure information to help identify trends.

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Work orders are usually generated by a PM or from a service request, but you can also go to the **Work Order Tracking** module and click on the  icon to create a new work order. The system will automatically assign a work order number. Fill in a location or asset, classification, details, priority, work type, work group, owner, lead, and scroll down to fill in the scheduled start date and any other fields as needed. Save the file using the  icon. You can link a child work order to a parent work order by typing the parent's work order number in the "Parent WO" block. This will perform the same function as selecting the "Plans" tab of a work order and adding a new row in the "Children of Work Order" section.

Click on the  icon on the top row of the Work Order application page to change the status of a particular work order. There are other icons you can click on to manage a work order, accessible on the main application page as well as within each list item. Use  to clear changes. Use  to go backward and forward through the work orders in the search results list. Use  to approve the work order. Use  to complete the work order. Use  to create a customizable report. Use  to route the work order through various stages up to and including "Complete" and "Cancel". Use  to print out the work order. One print icon is high level (less detail), the other shows more detailed information. Other options are available in the **Select Action** menu, which changes depending on whether you are listing a work order vs. being in a work order.

## Work Order Work Types

Work Types are 2-4 character abbreviations used to categorize work orders based on the type of work being performed. Below are the selections:

### FM Work Types:

PM = Preventive Maintenance

CM = Corrective Maintenance

SW = Service Work

CP = Capital Project (Maintenance)

PMF = Preventive Maintenance Find

MOD = Modernization

MATL = Materials

### Child Capital Project Types:

SOW = Scope of Work

STDY = Study

DSGN = Design

CSTN = Construction

CMGT = Construction Management

## Work Order Priorities

Work Order priorities may be set from a service request or work order and are defined as follows:

1 = Low (28 days to complete)

3 = Medium (14 days to complete)

5 = High (7 days to complete)

Blank = generic maintenance (28 days to complete)

## Work Order Logs

Work Order logs must be filled out each time the status changes and work is completed or canceled in order to provide a historical record of the action(s) taken. If there are any issues found with the equipment, a new “PM Find” work order must be created by the technician.

## “PM Find” Work Orders

In the course of working on PM-generated work orders, a problem may be encountered with a piece of equipment. A new work order will then be created to describe the equipment issue, provide the location, set the work group, owner, lead, and set the work type to “PMF”.



## Work Order Statuses

As work orders are being created, worked on, and completed, they indicate which stage of the work request process they are in through the status field. Below are the relevant statuses in use:

WAPPR = Waiting for Approval by supervisor or maintenance lead

WMATL = Waiting for Materials before initiating work

WPCOND = Waiting for Plant Conditions allowance to initiate work

WSCH = Waiting to be Scheduled before initiating work

APPR = Approved for work

CAN = Canceled – work will not be done due to time constraint, scheduling issues, etc.

CLOSE = Closed – all data has been entered

COMP = Complete – all data has been entered and CM QA check is complete

FLDWRKCOMP = Field Work is Complete

### Preventive Maintenance (PM) Work Order Requirements:

- Add entries in the work log as to what was completed
- If spare parts such as belts or filter numbers are not present in the PM – note what they are in the log and send an email to the CMMS Administrator with the work order number and this information to be included in the PM Details field
- Add entries in the actuals section: report labor hours and material dollars
- On completion of work, change status to COMP

### Corrective Maintenance (CM) Work Order Requirements:

- Add entries in the work log each time status changes
- Add entries in the actuals section: report labor hours and material dollars
- On completion of work, change status to FLDWRKCOMP. Coordinator will perform a Quality Assurance (QA) check and then change status to COMP

### Canceling Work Orders:

- For users with non-administrative permissions, work orders may be canceled if they have a status of “APPR” and are connected to a service request. Otherwise, send a list of the work orders to the CMMS administrator with a cancellation description to put in the work log to have them canceled.





## Work Order Queries





Queries in each module are created by performing a search from the **Advanced Search** menu and then saving them from the **Save Query** menu. They will then be available for reuse from the **Query** menu. An important query to keep in mind when you want to view all records in the Work Order Tracking module regardless of their status is to choose the “All Records” query. Normally, you will only get open or completed work orders, but this query will allow you to see cancelled and closed work orders as well. You will be able to tell if you are searching through all of the available records if the record count shows a number higher than 245,000.

Under **Save Query**, you can also **View/Manage Queries**, which will allow you to view the query’s search parameters in the SQL clause statement. You can also view them by selecting a query from the **Query** menu and then clicking on the **Advanced Search** menu and clicking on the **Where Clause** menu.

## Create Custom Reports

Click on the  icon to create a custom report. This will produce a pop-up window with 3 tabs: Style, Content, and Format. The **Style** tab lets you specify the report content layout in a List or Detail report format as indicated by each icon’s picture. The **Content** tab lets you rename, remove, or reorder the selected report fields as well as add new fields to the report content. The **Format** tab lets you select (using a  icon) from the fields specified in the Content tab and filter the data, group the data, and/or sort the data. Click on “Preview Report”. This will open a new window called “BIRT Report Viewer” where you can print or export the report.

## Print using the Printer Icons

Click on a  icon in any module. It will open another window titled: “BIRT Report Viewer” where you can then click on the  icon to print out the report. Change any of the default selections if needed, then click on “OK”. You can also click on either of the   icons to export the report to a PDF file or an Excel spreadsheet and then print it.