IPSC Training

MAXIMO BASICS

Intermountain Power Service Corporation

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1   Maximo Basics

1.1   Maximo Project Overview

Maximo implementation represents a step forward in business process management at Intermountain Power Service Corporation (IPSC). The Maximo system is built on the Maximo 7.5 platform. Maximo applications can be utilized to perform asset management and work management tasks. Some of the tasks Maximo applications can perform to improve asset and work management include: creating work orders, routing workflows and scheduling work.

1.2   Maximo Overview

IBM Maximo Asset Management is an integrated productivity tool and database that helps manage all types of assets and workflow on a single software platform. Built on a service-oriented architecture, Maximo Asset Management delivers a comprehensive view of all asset types, their conditions and locations, and the work processes that support them, to provide optimal planning, control, audit, and compliance capability.
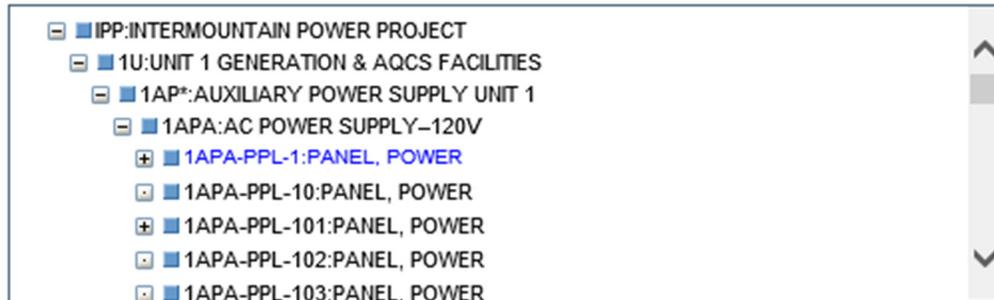
The Maximo database provides critical information about assets and locations, including key attributes, their configuration, and their physical and logical relationships to other resources. Using Maximo, it is possible to manage and track asset related events from acquisition to retirement including creating, assigning, monitoring, notifying, and reporting on key work and work support processes including work orders, purchase orders and work order statuses.

1.3   Maximo Locations and Hierarchies

In Maximo, cost reporting is accomplished at any level using the location hierarchy. All work orders will be associated with a location. All of the plant locations are structured in a parent-child format starting from IPP as the top location down to the specific breaker in a power panel which is a tagging location. Under IPP are children locations of Unit 1, Unit 2, Common, ICS, RCS, Mobile Equipment, and Administrative.


```
☐ ■IPP:INTERMOUNTAIN POWER PROJECT
   ⊞ ■1U:UNIT 1 GENERATION & AQCS FACILITIES
   ⊞ ■2U:UNIT 2 GENERATION & AQCS FACILITIES
   ⊞ ■CA:COMMON ADMINISTRATIVE
   ⊞ ■COMMON:ALL IGS COMMON FACILITIES
   ⊞ ■ICS:INTERMOUNTAIN CONVERTER STATION
   ⊞ ■ME:MOBILE EQUIPMENT & ROLLING STOCK
   ⊞ ■RCSC:RAILCAR SERVICE CENTER
```

Under Unit 1, for example, are primary systems, then subsystems, and then specific components, and so forth. So at any time you can tally up the cost for any level for analysis – meaning you could compare costs between any two pulverizers or all pulverizers in Unit 1 to all pulverizers in Unit 2. **All original TIMS equipment numbers are Locations, but now all the plant components called project IDs are Locations as well.** Miscellaneous things like desks and phones are not locations, but the work orders will be written against the building, which is a location. Maximo provides a drill down option for looking up valid locations starting at the top.

```
☐ ■IPP:INTERMOUNTAIN POWER PROJECT
   ☐ ■1U:UNIT 1 GENERATION & AQCS FACILITIES
      ☐ ■1AP*:AUXILIARY POWER SUPPLY UNIT 1
         ☐ ■1APA:AC POWER SUPPLY–120V
            ⊞ ■1APA-PPL-1:PANEL, POWER
            ⊡ ■1APA-PPL-10:PANEL, POWER
            ⊞ ■1APA-PPL-101:PANEL, POWER
            ⊡ ■1APA-PPL-102:PANEL, POWER
            ⊡ ■1APA-PPL-103:PANEL, POWER
```

1.4 Maximo Locations and Assets

There is a difference between locations and assets in Maximo. Locations are fixed geographical areas or systems. Assets are the tangible items that can be moved into or out of locations and have their life cycle tracked.

We will use locations for all work orders and will be able to see the history of all work order activity. We will use assets for two purposes. The first purpose is for bill of material lists. There are corresponding asset IDs exactly matching all location IDs. All spare parts will be listed under the Asset ID. The other use of Assets will be for what Maximo calls rotating assets. There are 86 stock Items in Maximo that are significant cost or criticality items that we want to track the usage and history on for its entire life cycle. A rotating asset is created which represents these 86 items including those in stock and all of their installed locations. They will be binned in the Warehouse, installed, removed, sent out for rebuild, and returned to the bin for later use. All of the history of the movement of these rotating assets is captured in Maximo for analysis.

1.5 Maximo Basics Training Manual

This training manual focuses on the basics of system use, system navigation, requisitions, service requests and work order tracking (Nuc) applications. This manual will also cover the start center and navigation and querying throughout the system. These functions apply to all User roles in Maximo and provide the foundation for use of the system. Terminology is defined throughout the document and in the glossary.
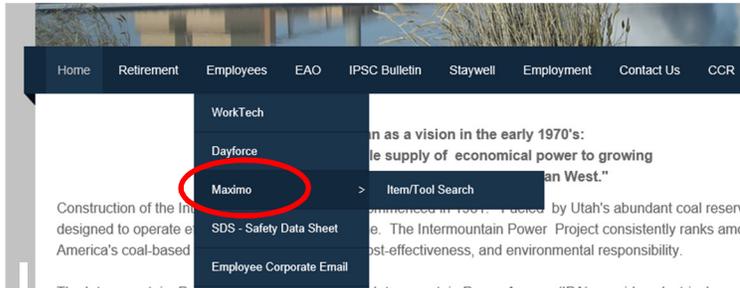
2   Logging In

The Maximo system is a web-based application and is accessed by signing onto the computer and going to the IPSC web page.

2.1   Sign On

1. Select the IPSC web page icon from the desktop or log in using www.ipsc.com.

    Select Maximo under the employees tab.

2. User name and password are your Active Directory credentials. Use the same name and password you use to sign on your computer. If you have problems signing on, contact 6445. (Example John.Doe)

3 Navigation (basic users)

Now that you are signed on, remember:

- Maximo is a web-based program; however, within Maximo, do not use the 'back' and 'forward' arrows or the 'red x' web-enabled browser button.
- Instead, browse back to the **Start Center** by clicking the Start Center link to access another application.
- You will be timed out of Maximo after 30 minutes of inactivity.
- Use the **Sign Out** button to exit Maximo.
- Within Maximo use **Tab** when you would normally use enter. Use **Enter** only when conducting a search.
- Maximo is a single-click application.
- Yellow fields are required data and grey fields are read only.
- The spinning wheel icon doesn't necessarily indicate Maximo is busy, it may be that the mouse point is outside the boundaries of the active dialog box on the screen.
- For information about field requirements, access the field help by clicking on the field and selecting Alt+F1.
- Hovering over an icon will show a tool tip pop-up for the icon.
- **SAVE EARLY AND SAVE OFTEN** 📠
- 🔍 This indicates multiple items were found relating to the search criteria.

3.1 Navigation Bar

The **Navigation Bar**, at the top of the screen, is used to navigate in Maximo. When the Navigation Bar is blue, it is active. When the Navigation Bar is grey, it is inquiring.

Starting at the left:

- **Welcome** shows who is currently logged in.
- **Bulletins** is where you will receive information such as updates, notices, etc.
- **Go To** accesses all Maximo applications that you have access to.
- **Reports** accesses all reports within an application.
- **Start Center** is quick access to your home page and launches other applications.
- **Profile** changes defaults, personal information and password.
- **Sign Out** signs you out of Maximo.
- **Help** is system wide generally, except for applications with (Nuc) in the title. This Help is coming later.
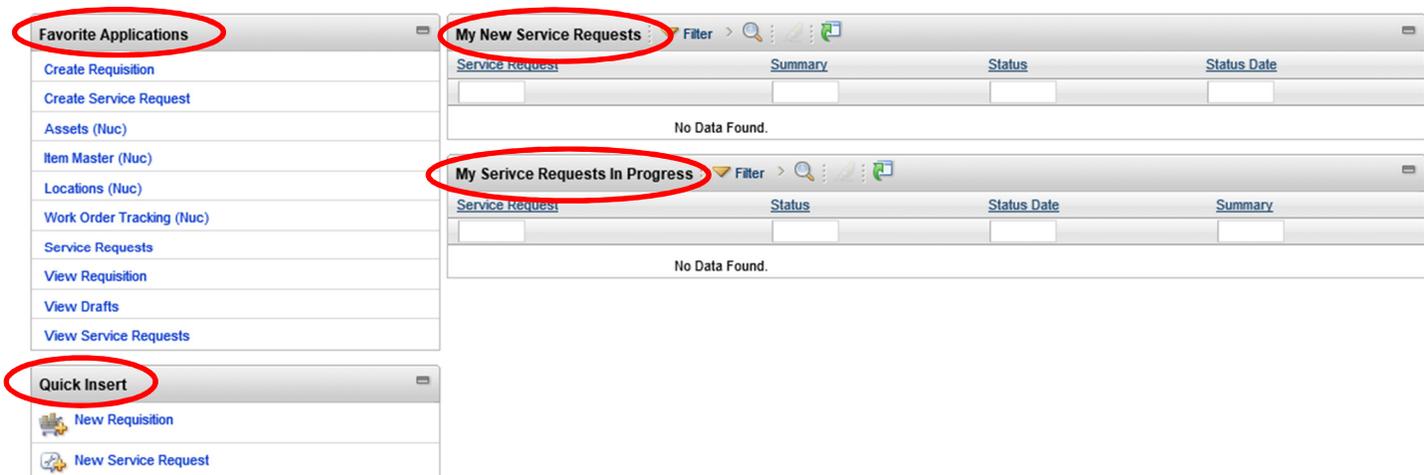
4 Start Centers

The **Start Center** is the starting point for accessing all Maximo features. It can be accessed by clicking the Start Center option in the upper right toolbar. Anytime you experience navigation problems (or just don't know where you are in Maximo), go back to your Start Center.

To update your Start Center, click the update Start Center icon. This option is only for updating your Start Center appearance after configuration changes.

Portlets

Portlets are sub-sections found on the start center that display information from specified applications in Maximo. They are assigned by security group.

The chart below defines some of the portlets that can be added to the start center.

PORTLET	DESCRIPTION
Favorite Applications	Applications most frequently accessed
Quick Insert	Allows quick access to most common used applications
Inbox/Assignments	Shows items you have entered and their status. It also shows items that require action.

5 Requisitions

The **Create Requisitions** application is used to initiate requests for materials (non-stock items), items (stock items), and tools. A valid work order number must be used.

5.1 Creating a New Requisition

In your Favorite Applications Portlet, select Create Requisition. The requisition number will auto-populate. **For searching purposes, tab to and enter a brief description in the field next to the number.**

- **Template** will be taught in advanced classes.
- **Required Date** is the date you would like the item or material. Must be in the future.
- **Sole Vendor and Sole Vendor Explanation** are used for sole sourced items only.
- **Requested By** defaults to the person who is logged in.
- **Requested For** defaults to the person logged in, but can be changed.
  You can change requested for by clicking the » chevrons which will bring up a select value box where you can search for and select a person other than yourself to receive the item or material. Below is an example of a select value box with the filter view open. You can search by person, name, title, department, etc.

  If the filter is closed, no searching options are available, as shown below. Simply click on the blue arrow next to the word filter to open the search bar.

Person	Name	Title	Department	Person's Location	Person's Site	Organization
D22484	Hoggan Nelson	ACCOUNTING SUPERVISOR	SUPPORT SERVICES	IPP	IGS	IPP
D22497	Seth McPherson	ELECTRICAL TECHNICIAN	TECHNICAL SERVICES	IPP	IGS	IPP

Also notice that directional arrows are available for increased mobility.
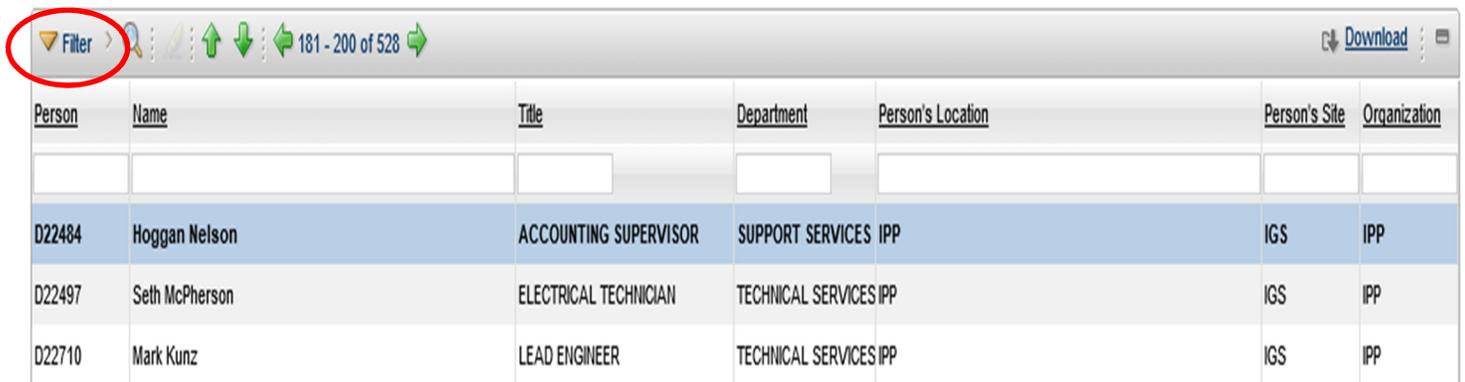
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D22497	Seth McPherson	ELECTRICAL TECHNICIAN	TECHNICAL SERVICES	IPP	IGS	IPP
D22710	Mark Kunz	LEAD ENGINEER	TECHNICAL SERVICES	IPP	IGS	IPP

5.1 Creating a New Requisition (cont)

Priority is a required field that defaults to 4, which is routine. When ordering stock items, use routine priority. The other priorities are used by Purchasing. When ordering non-stock items, the priority can be changed by entering the appropriate priority number if you already know it or by clicking on the magnifying glass 🔍 for a drop-down of the priorities. Select a priority by clicking on the appropriate one.

Shipping Information Section auto-populates to the IPP address and should be left alone**!**

Charge Information Section is where the cost information is entered. A work order number is mandatory. You can click the chevrons to look up a specific work order or just enter the work order number if you know it. The selected work order will populate the GL debit account, the location and asset fields. *Tip: hit the space bar after you enter your work order than the Tab key.*

Click on **Continue**, then **New Row**. This will take you into the order details. All yellow boxes are required fields. The box that is active has an orange border.

5.2 Requesting Items (Things with an Item Number in the Whse)

Start by creating a new requisition using Section 5.1.

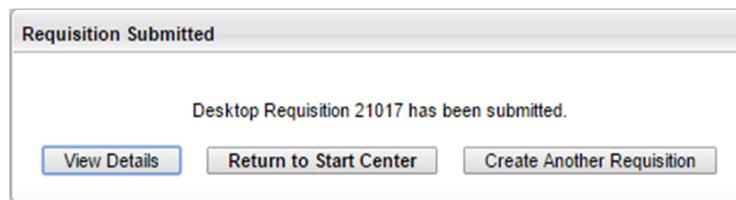**Requisition Line Items Details Section**

- **Line** will auto number.
- **Line Type** defaults to item.
- **Item** is used to order things that have an item number in Maximo. If you know the item number, enter it here. Remember to hit tab! If you don't know the item number, click on the chevrons (>>). You will get a dialog box and select value. This will bring up searching capabilities. You can enter anything you know about the item such as manufacturer, size, etc. Click on the pencil eraser (✏️) to clear the search. You can also click the chevrons and choose "view image" to see a photo of the item. To view the SDS, click "go to" and select "item master (nuc)". Click on attachments once in the item record.
- **Quantity** is where the amount needed is entered. Notice the information in the middle of the screen. It shows current balance, quantity reserved, and quantity available. Enter the quantity needed.
- **Order Unit, Issue Unit, Unit Cost** information is auto-populated from the item number. **Line Cost** is the calculation of quantity and unit cost.
- **Deliver To i**s where you want the item delivered or if you want to pick up the item.
- **Continue then Submit.** You will get an information box with the desktop requisition number. If you requested more than what is in stock, not only will a desktop requisition be generated to issue what we do have in stock, but Maximo will generate a separate purchase request (PR) to buy the deficit amount.

5.3 Requesting Material (Things without an Item Number in the Whse)

Start by creating a new requisition using Section 5.1.

Requisition Line Items Section

- **Line** will auto number.
- **Line Type** must be changed to Material. The line cost field will turn red. This doesn't mean you did anything wrong. Continue to Item field.
- **Description** is used to enter information about the material being ordered. If you are adding an attachment, please state that here. Use the white details box if you need to enter more information.
- **Quantity** is where the amount needed is entered.
- **Order Unit** is entered here. If you aren't sure, click on the magnifying glass for a list of applicable units.
- **Unit Cost** is the cost of a single unit.
- **Line Cost** will calculate from quantity and unit cost.
- **Buyer** identifies the D# number of the Buyer. If not known, use the magnifying glass.
- **Manufacturer** is the manufacturer of the material. IT IS NOT THE VENDOR YOU WOULD LIKE IT PURCHASED FROM. Enter the manufacturer or you can click the chevrons to look up manufacturers.
- **Vendor** is the numeric vendor number. Use the magnifying glass to look up.
- **Model** is the model information if known.
- **Catalog #** is the part number.
- **GL Debit Account** defaults from the work order.
- **Contract Information x 3** is used by Engineering.
- **Reservation Type** defaults to AUTOMATIC.
- **Inspection Required** flags item for inspection before being received.
- **Attachments** is used to add an attachment. Click the paper clip to add or view. There is not a notification that there are attachments.
- **Continue then Submit.** You will be given a desktop requisition number and notified that workflow approval has started.

After the desktop requisition for a material is approved, it is given a Purchase Requisition (PR) number.

To find the PR number, Go To>Purchasing>Purchase Requisition. Then select advanced search and more search fields. In the Line Details section, enter the requisition number and then Find. This will give you the PR number for requisition entered.

The PR will be routed for approval based on the overall dollar amount:

- o Assistant Superintendent: up to $1,000
- o Superintendent: if between $1,001 and $19,999
- o Chief Operating Officer: if $20,000 or more

5.4 For Tools

Start by creating a new requisition using Section 5.1.

Requisition Line Items Section

- **Line** will auto number.
- **Line Type** must be changed to Tool.
- **Item** is where the specific tool number is entered. If you know the tool number, enter it here. Remember to hit tab after the number. *Note all tool numbers start with a T and it must be included when entering or searching.*

  If you don't know the tool number, click on the chevrons and select **Go To, Stocked Tools.** Notice the navigation bar is grey because you are inquiring. You can search by tool number or description by entering anything you know about the tool i.e., manufacturer, size, etc. If your results don't make sense, click on the pencil eraser to clear any search limits that have been entered. When you find the tool you want, click the number. You will now be in the tool tab.

  Go to the Storerooms tab to check the current balance. If you want to check the tool out, click on Return With Value in the upper right corner of the Navigation Bar. If it isn't what you want, you can go back to the List Tab and start a new search.

  Once you have selected the tool, you can click the chevrons and choose "view image" to see a photo of the item, if available.

- **Quantity** is where the amount needed is entered.
- **Order Unit** is auto-populated from the tool number.
- **Unit Cost** is auto-populated from the tool number or will read 0.00.
- **Issue Unit** is auto-populated from the tool number.
- **Line Cost is** auto-populated from the tool number or will read 0.00.
- **Tool Return Date** is where you will enter when you are returning the tool.
- **Deliver To** is where you can put in special instructions i.e. Turbine deck from WHSE 4
- **GL Debit Account** defaults from the work order.
- **Reservation Type** defaults to AUTOMATIC.
- **Required Date** defaults to the current date. You can use the calendar to change.
- **Continue then Submit.** You will be given desktop requisition number and you will be notified that workflow approval has started.

5.5 Viewing Desktop Requisitions

In the Favorites Application Portlet, select View Requisitions

- **Requisition** brings up all Desktop Requisitions (DR) in the lower search box. If you know the number, you can enter here.
- **Requested By** is the D# and name of the requestor. If you know the D# fill it in and hit enter to start the search. You can also search by name by clicking on the chevrons for search options. After selecting your name, hit enter to start the search. The name and D# fields will not match until you have hit enter. You will see the status of your requisitions. If you want to see more detail, choose the requisition. Then click on the history tab to see the PR.
- **Requested For** is same as above.
- **Priority** is not a search option.
- **Status** searches by status of requisitions. Click on the magnifying glass for search options.
- **Date From/Date To** selects a date range.
- **Vendor** searches by vendor number.
- **Item** searches by a specific item number.

Note: Maximo assumes that you only want to see Direct Requisitions (DR) that haven't been completed. To see all DR's that you have entered, use Advanced Search and remove the "N" from the History Box. In the History Box N shows all open DR's, Y shows all closed DR's, and nothing in the field shows all DR's.

6 Service Requests (WR)

The **Service Request (WR)** application is used to identify equipment problems and starts the Work Order process.

6.1 Creating a New Service Request

In the Favorite Applications Portlet, select Create Service Request.

- **Service Request number** will auto-populate.
- **Reported By, Name, Phone, and E-mail** are auto-populated from the person logged in. These fields cannot be changed.
- **Current Status** defaults to NEW and cannot be changed.
- **SR Type** is where you select the type of service request you are entering. The field is searchable using the magnifying glass. You can enter WR or select WR from the search value list.
- **Affected Person, Name, Phone, and E-mail** auto-populates with the credentials of the person logged in. It can be changed using the chevrons and select value.

Work Request Details Section

- **Summary** is where you enter information regarding the problem
- **Details** is used if you need to add more information.
- **Location** field must contain a location within Maximo.
  - Click on the chevrons and then Select Value to search for a specific location number. Select the location number.

    After selecting the number, go back to the chevrons and select view work details. This will bring up a list of open service requests (WRs) and any WO's for the selected location to ensure you are not creating a duplicate WO.
- **Asset** is automatically populated.
- **Reported Priority** is the priority of the work and/or the equipment being worked on. The priority can be entered or you can use the magnifying glass to access the select value list.
- **Planner** can be selected using the chevrons and selecting a planner.
- **GL Account** information is tied to the location selected.
- **Asset Site** is always IGS.
- **Internal Priority** is not being used at this time.
- **Service Group** identifies the craft or the type of work being done. You can enter a number if you know it or you can go to the magnifying glass and select value.
- **Service, Vendor, SLA Applied?, and Create WO Options** are not being used at this time.
- **Clearance Required?** check box is checked when a clearance is required.
- **Staff Approval Required?** check box is checked when Staff approval is required.

6.1   Creating a New Service Request (cont)

Attachment Section

- **Attach File** is used to add an attachment. Click on Attach File to open the Create a File Attachment box. The best way to find an attachment is to **browse.** The browse button will be grey, but is still accessible. Browse your computer for a file to select as an attachment. After clicking the OK button, you will be able to see the document number and description.
- **Attach Web Page** is used when you are attaching a web page. You have to know the URL.
- **Submit** sends the request to the assigned approver. You will receive a brief message in the Navigation Bar showing the process has started.

6.2 View Service Requests

In the Favorite Applications Portlet, select View Service Requests. This will only show requests entered by the person who is logged in.

- **Service Request** number can be entered to view a specific request.
- **Status** can be used to narrow down the results. Click the magnifying glass to get to the select value box. You can select multiple statuses.
- **Asset and Location** can be used to search.
- **Related Work Order** is not being used.
- **Configuration Item** is not being used.
- **Reported Date From and Reported Date To** is used to search a specific date range.
- **Summary** searches the summary field.
- **Affected User** searches affected user field.

7 Work Order Logs

A Work Order specifies a particular task, and the labor, materials, services and tools needed to complete the task.

7.1 Creating a Work Log (notes on a work order)

During the life cycle of a work order, there should be clear communication that can be reviewed about the maintenance activities taken. The log tab allows for specific notes related to a work order to be entered. Any number of these notes can be entered on the work log sub-tab on the log tab within work order tracking.

To create a work log:

In the Favorites Application Portlet, click on Work Order Tracking (Nuc) application.

- This will take you to the list tab, where you can search for a work order or you can enter a known work order.
- After selecting the work order, go to the Log tab. If any notes have been entered into the log, you will be able to see them. Keep in mind, anything you enter cannot be edited by you or anyone else once it has been saved. The notes are also viewable by everyone.
- To enter a new note, click the new row button. Enter a short description of the log entry in the summary field.
- Then either click the long description icon or click in the details field to enter additional information. Note the ribbon above the details. This information can be spell checked, etc.

8 Item Master

Item Master is the complete catalog listing of all items in the system whether they are in inventory or not. This application is used to look at items and is inquiry only. If you want to order an item, go to the New Requisitions application in the Favorites Application Portlet.

- From the Favorites Application Portlet, select Item Master.
- In this application you can search by item, description, commodity group, rotating, etc.
- There are several tricks to searching:
  - % before and after a word, you can enter multiple words, but no spaces, i.e., %bolt%hex%3/4% would bring up all ¾ hex bolts.
  - If you know some of the digits in an item number, you can enter partial item numbers.
  - After selecting an item, go to the Storerooms tab to check for stock quantities.

9 Reporting Problems

If you experience **problems logging into Maximo or have hardware problems,** call 6445.

If you experience **problems with navigation or application access,** contact:

Planning: Kevin Miller 6802/Kelly Cloward 6831/Val Alley 6869
Purchasing: Micah Chase 6540
Accounting: Hogan Nelson 6525
Warehouse: Ross Madsen 6833/Kelly Cloward 6831
Maintenance: Kelly Cloward 6831/Kevin Miller 6802
Operations: Mike Hill 6030/Doyce Olpin 6027
Basic Users: Lorie Cloward 6555/Val Alley 6869

10 Additional Maximo Information

Additional Maximo training and reference materials are available at S:/MAXIMO TRAINING.

Created by Lorie Cloward and Valerie Alley 05/11/15