Maximo 7.6.1 Key User Training Guide, ANU
Unit 1: Navigation, Reporting, and Start Centres
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Change record

<table>
<thead>
<tr>
<th>Date</th>
<th>Author</th>
<th>Version</th>
<th>Change Reference</th>
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</thead>
<tbody>
<tr>
<td>10 October 2019</td>
<td>Velibor Djukic</td>
<td>V1.0</td>
<td>Training Documentation for ANU, Unit1: Navigation, Start Centers, and BIRT Reporting</td>
</tr>
</tbody>
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Typographical conventions

In this course, the following typographical conventions are used.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bold</strong></td>
<td>Commands, keywords, file names, authorization roles, URLs, or other information that you must use literally appear in <strong>bold</strong>.</td>
</tr>
<tr>
<td><em>Italics</em></td>
<td>Variables and values that you must provide appear in <em>italics</em>. Words and phrases that are emphasized also appear in <em>italics</em>.</td>
</tr>
<tr>
<td><strong>Bold Italics</strong></td>
<td>New terms appear in <strong>bold italics</strong> when they are defined in the text.</td>
</tr>
<tr>
<td>Monospace</td>
<td>Code examples, output, and system messages appear in a monospace font.</td>
</tr>
<tr>
<td>→</td>
<td>In this manual, the arrow character is used as a path arrow. The arrow indicates the path to the named window.</td>
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</tbody>
</table>
Course introduction

This course is a scenario-based course designed for individuals who need to manage Maximo 7.6.1. Through lecture, instructor demonstration, and exercises, students will discuss work Maximo Asset Management features, such as Navigation, Start Centers and BIRT Reporting.

Objective

Upon completion of this course, you will be able to:

- Navigate successfully through Maximo
- Utilize advanced search functions
- Create and manage queries
- Manage Start Centers
- Perform reporting functions

Outline

The following outline is a high-level description of the contents of this course. Each unit has an overview presentation, and most have a series of student exercises designed to reinforce the concepts presented. The course contains the following units:

Unit 1: Maximo Navigation, Start Centres, and Reporting
In this unit, you will learn about creating and managing queries and KPI’s and how these can be used in the Start Centre. You will also learn how to schedule reports.

Unit 2: Maximo Works Management Applications
In this unit, you will learn about the various Work Management applications which allow for efficient management of maintenance and repairs required for your assets.

Unit 3: Service Request
In this unit, you will learn about the Service Request application and process.

Unit 4: Work Order
In this unit, you will learn about the Work Order Tracking application and process.

Unit 5: Datasplice
In this unit, you will learn about the Datasplice mobile application and process.
Lesson 1: Basic Navigation

Screen Layout

Navigation is consistent within most Maximo applications especially those used in day to day operations such as Locations, Assets, Preventive Maintenance, Job Plans, Purchasing and Work Order Tracking.

In these applications when a user first opens a Maximo application, they are presented with a list screen. This screen can be used to search for records that require viewing or editing, the user can select specific records or scroll (browse) through the result set using the application screen navigation buttons.

Users enter search criteria into fields specific to the application, the result is a list of records that match the search criteria.

Each list has a standard set of search fields which are also the fields displayed for the list of results. Additional search fields are available for more detailed or complex searches. For advanced users, the "Where Clause" of the SQL statement for the application can be edited and saved.

Maximo can also be displayed in two modes with a side Navigation frame or the traditional horizontal "Select Action" menu at the top of the application frame.

All screen shots throughout this unit use the newer display mode with Side Navigation frame.

Warning

When applying an Action to Records within a List Screen the action is applied to all records shown in the result set.

While a valuable feature to modify many records at the same time it can also have unintended results.

KEY ASSUMPTIONS

- User understands the concept of "records" and the general purpose of the application
- User has logged on and has security privilege to view, insert and update records

USER ACTIVITIES
### List Screen Menus

From the Start Centre, go to the following application: Go To → Assets → Assets

To review the items in each popup menu, click icon () beside the menu item. The Available Queries, Common Actions and More Actions lists can be minimized using icon () or maximized using icon ()

1. **Find Asset** – the menu combines the menus for "Advanced Search" and "Save Query" into a single menu. This menu exposes:
   a. More Search Fields for entering search criteria
   b. The SQL "Where clause" which results from the data entered into the search fields,
   c. Attribute Search – which provides ability to search by the asset’s specification attributes
   d. Search Tips – which launches Maximo help page on searching
   e. Save Current Query – saves the SQL Where clause generated by the criteria entered into the search fields. The saved query is shown in the Query Menu
   f. View / Manage Queries – the user can edit the SQL Where clause or delete the saved query.

2. **Key word search on list navigation items** – result can be selected as navigation item

3. **Available Queries** – list predefined "Public" queries and the users saved queries for the application.

4. **Common Actions** – commonly used actions that can be applied to records, the menu changes according to the application.

5. **More Actions** – all other actions that can be applied to records, the list changes according to the application.

6. **Advanced Search** – see items 1a, 1b, 1c, 1d above.

7. **Save Query** – see items 1e, 1f above.

![Figure 1 – Asset List Screen Menus (Side Navigation Version)](image-url)
Most Maximo applications will have a list comprising a set of search fields and a toolbar.

1. Filter Off button (𝄌) closes the search fields
2. The Filter On button (𝄍) opens the search fields so criteria may be entered
3. Search Fields – search criteria are entered in these fields. In some cases the criteria are free text, in others it may be selected from a list or another application. Operators may be used with the search criteria to expand or constrain the result.
4. The Query Find button (⏀) applies the entered selection criteria and result set is returned. Pressing enter achieves the same result
5. The Query Filter Clear button (⟇) clears the entered selection criteria this may / may not include default search criteria depending on the application
6. The table refresh button (⟳) reapplies the entered selection criteria and a fresh result set is returned. This is useful when records have been modified.
7. Scroll through individual records in the list screen using next up and next down buttons ( שנים)
8. Scroll through pages of records in the list screen using table previous and next buttons (← →)
9. Click the menu button (י) to open selection methods, text can be entered into the search field and multiple selection can be entered with separating commas
10. Indexed whole word text can be entered directly into the field, the wild card operator (* or %) must be used for partial text
11. Click the menu button (י) to open selection methods, also text can be entered into the search fields and the "Select Value" option provides a list of values with multiple selections available
12. Click the Lookup button (📋) to display a list of values with multiple selections available
13. The download button (📥) is used to export the result set to Web version of MS Excel (XLS).
14. The minimize / maximize buttons (—in) are used to collapse or restore the result set list (table)

Figure 2 - Asset List Screen – Common Search Features
Activity Name | Application Navigation (Side Navigation Version)

To view and edit records we use the Application Screens. The application screens are opened by selecting a record from the result set in the list screen. This example uses the Assets Application.

From the Start Centre, go to the following application: Go To → Assets → Assets

1. Enter search criteria
2. Click the Query Find button (🔍) to apply the search criteria
3. Click the desired record to open the Asset Application Screen.

Note: Only the underlined values can be clicked to open the application screen.

![Figure 3 - Asset List Search - Record Selection](image-url)
The selected record is displayed in the Asset Application on the "Asset Tab"

Within the Asset Application screens, we can:

4. Click the Insert Record button ( ) to create a new record
5. Click the Save button ( ) to save changes to the record
6. Click the Clear button ( ) to exit without saving and return to the list screen
7. Click the Previous button ( ) to scroll to the previous record. When at the first record, the button will be greyed out and cannot be selected
8. Click the Next button ( ) to scroll to the next record. When at the last record, the button will be greyed out and cannot be selected
9. Click each tab to display and edit additional data for the selected record
10. Click the menu button ( ) to open menu. Many menus may be available within an application screen for the selection of related data from other Maximo applications.
    Most menu will contain as a minimum a "Select Value" option ( ) and "Go To" application ( ) option.
11. Select Value provides a list of values that can be filtered so the correct value selected and entered into the field.
12. Go To application – opens the selected application screen so it can be used to find and select the correct value. The selected value can be returned to field in the originating application

Note: Actions applied within the application screen only apply to the record displayed and child records when applicable. Other records within the list screen result set are not affected by actions within the application screen.

Figure 4 - Asset Screen - Main Record Tab
## Simple List Screen Filter

From the Start Centre, go to the following application: Go To → Assets → Assets

1. Enter search criteria
2. Click the Query Find button (قلق) to apply the search criteria
3. Click the desired record to open the Asset Application Screen.
   
   Note: Only the underlined values can be clicked to open the application screen.

![Figure 5 – Simple Asset List Search](image)

4. Click the Clear Query Filter button (🗑️) to clear the entered selection criteria and remove the result set from the list screen

![Figure 6 - Clear Search Criteria](image)

Note: If the user has set a default query for the application then it may be removed by clicking the Clear Query Filter button. If this occurs simply reopen the application using the Go To Menu.
Activity Name | Navigating Records in List Screen

From the Start Centre, go to the following application: Go To → Assets → Assets → Query Find button (🔍)

1. Scroll through pages of records in the list screen using table previous and next buttons (←→)
2. Scroll through individual records in the list screen using next up and next down buttons (↑↓)
3. Click the underlined heading to change the sort order to ascending for the selected heading
4. Icon (▲) appears and shows current sort order is ascending
5. Click the underlined heading again to change the sort order to descending for the selected heading
6. Icon (▼) appears and shows current sort order is descending
7. Click the underlined heading to change the sort order to default (icon disappears).

Figure 7 - Record Navigation in List Screen
Advanced Search

The "Advanced Search" feature provides access to fields not shown in the list screen result set but can be used to create complex search criteria to filter the result set to records we require.

**KEY ASSUMPTIONS**

- User understands the concept of "records" and the general purpose of the application
- User has basic concept of Boolean operators AND / OR.
- User has logged on and has security privilege to view, insert and update records

**USER ACTIVITIES**
From the Start Centre, go to the following application: Go To → Assets → Assets

1. The icon ( ) opens the "Advanced Search" menu comprising:
   a. More Search Fields for entering search criteria
   b. The SQL "Where clause" which is created from the data entered in the search fields,
   c. Attribute Search – which provides ability to search by the asset’s specification attributes
   d. Search Tips – which launches Maximo help page on searching

2. The "Advanced Search" ( ) button will open "More Search Field" screen

![Figure 8 - Open Advanced Search](image)

When a field has search criteria the Standard Query Language (SQL) "Where Clause" is modified to reflect the search requirement. More detail on the Where Clause will be discussed below.

Each field with search criteria is treated as an "AND" join (connection) with other search fields, so all fields with criteria must be true for a result set to be returned.

When multiple values are selected for a single field they are treated as an "OR" join (connection) within the fields. So that any one of the values can be true for a result set to be returned.
Referring to Figure 9.

3. The fields shown in Green are included on the List Screen. Values entered on the List Screen search filter will also appear in the "More Search Fields" screen.

4. The Lookup button (🔍) on the Status Field will display a list of status values. Multiple selections will be given an "OR" join (connection).

5. The Lookup button (🔍) on the Type Field will display a list of asset type values. Multiple selections will be given an "OR" join (connection).

To this point the Where clause would include:

\[
((\text{upper(status) = 'ACTIVE' or upper(status) = 'OPERATING'}) \text{ and siteid = 'ACTON' and assettype = 'FACILITIES'})
\]

6. When a "FROM" date is entered, records inclusive of the "FROM" date forward to now are selected.

7. When a "TO" date is entered, records inclusive of the "TO" date backwards is selected.

8. When both "FROM" and "TO" dates are entered, records between and inclusive of the "FROM" and "TO" dates are selected.

9. Click the "Find" button to apply the search.

10. Click the "Restore Application Defaults" to restore any defaults for the application e.g. if default insert site is used as a filter but has been removed, it would be restored.

11. The Revise icon (🔄) to open menu comprising:

   a. Clear Query and Fields – Resets all fields and any active query
   b. Clear All Fields – Resets all fields but will leave the current query
   c. Change Query – opens a Select List of saved queries that can be selected and applied without leaving the More Search Fields screen
   d. Restore Default Query – resets to the default query
Figure 9 - More Search Fields
Saved Queries allow you to save the “current query” in the application. The current query may have been built by using the List Screen, Advanced Search or even manually editing the where clause (next chapter).

From the Start Centre, go to the following application: Go To → Assets → Assets

1. Enter search criteria and press enter to search – result set is listed on the screen
2. The "Save Query" (Save Query) button will open "Save Current Query" dialog box (screen)
3. Enter a Query Name (no spaces)
4. Enter a Query Description
5. Public checkbox
   a. Checked the query is available to other users
   b. Un Checked the query is available to only the current user
6. Default checkbox
   a. Checked the query is applied each time the application list screen is opened for the current user
   b. Un Checked the applications default query is applied when the application list screen is opened
7. Click the "OK" button to save the query

![Figure 10 - Save Query](image)
Activity Name | Apply Saved Query List Screen

Saved queries can be applied to the application list screen. In each case the result set shows only current records meeting the query criteria which may be different from when the query was saved. Two methods of applying the query are shown below (1) – Available Queries, (2 & 3) – View/Manage Queries

From the Start Centre, go to the following application: Go To → Assets → Assets

1. In the "Available Queries" frame on the side navigation menu – select the saved query. The result set is automatically displayed in the list screen

2. Alternatively, the Save Query icon (✓) opens the menu comprising:
   a. Save Current Query
   b. View/Manage Queries

3. Click the View/Manage Queries menu item

4. In the View/Manage Queries – enter criteria to filter the list and press enter

5. Select the underlined value of the required query to apply automatically and show the result set in the list screen

*Figure 11 - Applying a Saved Query*
The Where Clause

As explained earlier when a field has search criteria the Standard Query Language (SQL) "Where Clause" is modified to reflect the query. This occurs when users enter criteria in the list screen filters or the More Search Fields. The resultant "Where Clause" can be manually edited, saved and reused.

KEY ASSUMPTIONS

- User understands the concept of "records" and the general purpose of the application
- User has a basic understanding of Standard Query Language (SQL) Where Clause and the appropriate syntax for a "Where Clause"
- User has logged on and has security privilege to view, insert and update records

USER ACTIVITIES
Activity Name | Viewing and Editing the Where Clause

To view and edit the where clause for the current query.

From the Start Centre, go to the following application: Go To → Assets → Assets

1. Enter search criteria using a multiple selection – this will create an OR join between each value.

2. Click the Advanced Search icon (▼) to open the menu comprising:
   a. More Search Fields
   b. Where Clause
   c. Attribute Search
   d. View Search Tips

3. Click on the "Where Clause" menu item – this opens the where clause for viewing and editing

4. The automatically created where clause appears as
   
   (siteid = 'DUST' and (location = 'DL1001' or location = 'DL1002' or location = 'DL1003' or location = 'DL1004' or location = 'DL1005' or location = 'DL1006'))

5. The multiple "OR" joins can be replaced by "IN" and a list of locations as
   
   (siteid = 'DUST' and location in ('DL1001','DL1002','DL1003','DL1004','DL1005','DL1006'))

6. Click the "Find" button to apply the revised where clause – if records are found matching the Where Clause the result set will be displayed in the list screen. In this case the results are the same.

Figure 12 - Editing the Where Clause
7. Click the "Save Query" button to save the modified where clause
8. Enter a query name (no spaces)
9. Enter a query description
10. Click the "OK" button to save the query

Note: Users can only modify queries they have saved. They cannot modify queries for other users. Revised queries are applied as per normal saved query.

Why Edit the Where Clause

The Where Clause is edited when a specific search result cannot be achieved via the list screen or more search fields options. Often the ability to edit the Where Clause is restricted to Power Users and Administrators as the users must be familiar with SQL syntax of a Where Clause.

The Where Clause can include Maximo special functions like ":USER" (current user) and date functions which are cover further in the next section.

Many of the standard BIRT reports use the Where Clause from the list screen to generate their result set, this also applies to Query Based Reports.

The ability to edit the Where Clause gives users access to the SQL queries that display data in Maximo. When combined with BIRT Reports, Query Based Reports, Result Sets and KPI's it is a powerful end user reporting function.
Where Clause Editing Tips

The following are some examples/tips of common where clause edits.

Current User

If you want a query to always filter according to the currently logged in user, the value of ":USER" can be added to the Where Clause for fields that would use "personid" as its value, such as the Work Order:

- Owner
- Supervisor
- Lead

Add the following to your query:

```
owner=:USER
```

Note: This can only be done in the saved query view/manage area. If you apply this in the main where clause edit screen, it gets changed to the current logged in username instead of ":USER".

When edited in view/manage queries window ":USER" gets saved.

Dates and Date Ranges

Dates and Date Ranges are common for queries especially if the data is being selected is for the current day, week, month or year.

The SQL syntax for date functions varies depending on the database provider. Maximo can use Microsoft SQL Server, Oracle Database or IBM db2 as its database.

Date arithmetic can be quite complex for some systems especially when dealing with multiple time zones and difference in date formats.

Some useful MS SQL Server date functions are:

- `dateadd(datepart, number, date)` – returns a date
- `datediff(datepart, startdate, enddate)` – returns integer
- `datefromparts(year, month, day)` – returns a date value
- `datetimefromparts(year, month, day, hour, minute, seconds, milliseconds)` – returns a datetime value
- `getdate()` – returns datetime value for current database system timestamp
- `getutcdatetime()` – returns datetime value for current database system timestamp in UTC format
- `year(date)` – returns integer
- `month(date)` – returns integer
- `day(date)` – returns integer

With the above functions, it is possible to create a query (result set) that return records within a specific date range such as all work orders for the current month from the start of the month to today.

The Where Clause for a work order query would include something like:

```
"((woclass = 'WORKORDER' or woclass = 'ACTIVITY') and historyflag = 0 and istask = 0 and siteid = 'ACTON') and
(targstartdate => DATEFROMPARTS(year(getdate()), month(getdate()),1) and targstartdate <=
DATEFROMPARTS(year(getdate()), month(getdate()),day(getdate())))"
```

Note: The above is an untested demonstration of using functions to create flexibility in a Where Clause so that it may be applied without manually entering the actual date for the start of the month and the current date.
Accessing linked or child tables (sub queries)

Record selection can often be based on data in a different table (or application) to one we are querying. For example, generating a list of work orders for a specific asset type. While "assetnum" value is stored in the Work Order table the "assettype" field is only available from the asset table.

Similarly records for PO's can be selected based on criteria from the PO Lines table.

The following example selects work order for assets that have a type of "FLEET" for the period from the start of the current month inclusive of today.

"((woclass = 'WORKORDER' or woclass = 'ACTIVITY') and historyflag = 0 and istask = 0 and siteid = 'ACTON') and assetnum in (select assetnum from asset where assettype = 'FACILITIES')"

Note: The fields displayed are only from the list screen, but the selection criteria can be based on data in another table via a relationship to the main table.

Operators and Wildcards in searches

The following information applies to both List Screen filters and Advances Search

Wildcard Characters

You can use a "wildcard" character or characters with letters or numbers to indicate you want to find records that begin with, end with, or contain those letters/numbers.

There are four characters you can use as a wildcard: the asterisk (*), the percent sign (%), the underscore (_), and the question mark (?).

Use * or % to stand for any number of characters (zero, one, or multiple) in the specified position.

There should be no space between the wildcard and the other characters.

Example 1: Enter 123* or 123% to find records that start with 123, such as 123, 12345, 123ABC, etc.
Example 2: Enter *123 or %123 to find records that end in 123, such as 123, 5123, or PUMP123.
Example 3: Enter *123* or %123% to find records that contain 123, such as 123, 1234, PUMP123, or XX12300Valve.

Use _ or ? to stand for a single character in the specified position.

Example 4: Enter 123? or 123_ to find any four-character records that start with 123, such as 1234, 1230, 123g, etc.
Example 5: Enter _18 or ?18 to find any three-character records that end with 18, such as 418 or J18.

Equal (=) and Not Equal (!=) Operators

You can place an equal sign (=) before a word or number to find only records that match that word or number exactly. There should be no space between the = and the word or characters that follow it.

= means "match exactly"
!= means "does not equal "

Example 1: Enter =123 to find any records with the exact characters 123 in the field. (Search results would not include numbers such as 0123 or 1234AB. If you enter just 123, without the =, search results would include 0123 and 1234AB.)
Example 2: Enter != 123 to find records which to not match exactly the string 123

Searching for Null and Not Null Values

You can enter the following values into a search field on the List tab:

When searching for a null value enter: "~null~
When searching for not null values enter: != ~null~
Lesson 2: Start Centers

Start Centers are the default home screen for Maximo users providing them with quick access to frequently used tools and key performance indicators.

Start Centers are based on templates linked to Security Groups, users that are members of multiple security groups may have multiple start centres.

A user with administrative rights can create and change templates, update portlets, and change the appearance of the Start Center. A user with administrative rights can also control which portlets you see and can configure.

**KEY ASSUMPTIONS**

- User understands the concept of "records" and the general purpose of the application
- User has completed lessons on advanced search, saved queries and modifying the Where Clause
- User has logged on and has security privilege to view, insert and update records

**USER ACTIVITIES**
Blank portlets are placed on the Start Center before selecting the content in each portlet. Start Centers may comprise the following portlets:

- Bulletin Board – messages that can be set for people or people groups
- Favorite Applications – shortcuts to quickly open applications
- Inbox / Assignment – workflow assignments to the current user
- KPI Graph – Key Performance Indicator Graph typically field count or sum using a Where Clause
- KPI List – Key Performance Indicator List typically field count or sum using a Where Clause
- Quick Insert – Opens application as "Insert" mode ready to enter a new record
- Report List – quick access to listed reports – opens the parameter / run report window
- Result Set – a saved query that can be displayed in list or chart formats

Overview of Start Center Screen

1. Home or Start Center button – returns user to their Start Center
2. Users may have multiple Start Centers they are shown as Tabs
3. Change Content / Layout ( ) button – users may alter their own start center but changes will be lost if update start center is selected
4. Display Settings ( ) button – used to modify display for start centers
5. Update Start Center ( ) button – reset the current Start Center to deployed template, contact the System Administrator to retain modifications.
6. Display
   a. Checked – the start center will be displayed
   b. Un-Checked – the start center will be hidden
7. Default
   a. Checked – the start center will be the first displayed
   b. Un-Checked – not the default, only one start center can be set as default
8. Click the "OK" button to accept the display settings
Example add a Result Set Portlet, KPI Graph and KPI List to the Start Center.

1. Click the Home ( ) button to return to the Start Center
2. Select "Change Content/Layout" ( ) button
3. Click the "Select Content" button for the Right Column to open dialog box listing available portlets.
   The Right Column is best used for Wide Format portlets.

Figure 15 - Start Center - Change Content/Layout
4. Click the checkbox of "KPI Graph"
5. Click the checkbox of "KPI List"
6. Click the checkbox of "Result Set"
7. Click the "OK" button to add the portlets to the Right Column of the Start Center
8. The selected portlets are added to the Right Column and are given a display order. The order may be manually changed to suit user requirement
9. Click the "Finished" button to return to the Start Center

10. The Start Center now contains blank KPI Graph, KPI List and Result Set portlets
Add Content to Result Set Portlet

Result Set Portlets can be placed on your Start Center for reporting information every time a user logs into Maximo. Key points are:

- Linked to Saved Queries
- Displays results of a saved query for columns from the main table and child tables that have one to one relationship with the main object (single cardinality)
- Run on demand every time you load or return to the Start Center which may impact performance
- Changes to the linked Saved Query will affect the Result Set Portlet
- Can be viewed as a List of Data or as a graph
- The list can be color coded according to the field values
- The saved query can be opened directly from the Result Set

Configuring a Result Set Portlet

Click the Edit Portlet ( ) button – open the Result Set Setup Screen

Figure 18 - Start Center - Result Set Portlet
1. Portlet is in Setup mode
2. Select the Application for the Result Set – this determines the available queries and object structures
3. Select the Saved Query for the Result Set
4. Select the Object Structure for the Result Set – only child tables with one to one (single cardinality) will be displayed for selection
5. Click the drill select (a) button for the main table the of "Available Fields" for this table are displayed
6. Click the drill select (a) button for a child table the list of "Available Fields" for this table are displayed
7. Using the filter for "Available Fields" the desired columns for the result set are added by selecting the checkbox and then:
8. Click the "Add Selected" button
9. The "Selected Fields" are shown below. When the fields is for a child table the "dot" notation is used in the "Name" column to differentiate to the main table
10. Click the "Save" button

![Figure 19 - Result Set Setup – Field Configuration](image-url)
11. Click the "Chart Options" tab
12. Select the Chart Type (BAR)
13. Select the Field to Display By – this is the grouping for the graph
14. Enter a title for the Display By – heading for the group
15. Enter a title for the values being group – for example the value will be a count of assets or work orders
16. Click the "Save" button

Figure 20 - Result Set Setup - Chart Options
17. Click the "Color Options" tab
18. Enter Condition Attribute
19. Click the "Add Color Alert" button
20. Select an Expression (=, >, >=, <, <=) for the Alert
21. Enter a value for the expression this may be numeric or text
22. Select a Color
23. Click the "Save" button
24. Click the "Finished" button

Figure 21 - Result Set Setup - Colour Options
25. The Result Set is displayed in the Start Center with rows matching the color options. In this case when the Asset Num value matches the alert setting.

26. Click the "Chart View" link

![Figure 22 - Start Center - Result Set List](image)

27. Click the "Chart Type" link to open the "Chart Options" dialog

28. Change the "Chart Type" from BAR to PIE

29. Click the "OK" button

![Figure 23 – Start Center – Result Set Chart View (BAR)](image)
30. Hover over a chart segment – the value will be displayed and the segment will animate, slightly separating from the PIE

![Chart Diagram](image)

*Figure 24 – Start Center – Result Set Chart View (PIE)*
Lesson 3: BIRT Reporting Functions

Most Maximo modules include a set of standard BIRT reports. Access to reports is setup by your Maximo Administrator in the Report Administration module.

Reports can be run immediately in browser mode and exported to PDF, CSV, RTF and other formats. Reports can also be emailed as attachment in PDF, XLS and other formats. To email reports they must be scheduled to run in a future period and the schedule can be set for single report run or as a recurring schedule.

Record Selection

Record selection for reports is based on
1. User Input Parameters
2. The Current / Selected / All Record Set (Where Clause)
3. Combination of User Input Parameters and the Where Clause

Report Parameters

When a report is selected a "Request Page" is generated as shown in Figure 25. If the report has parameters, they are shown on the "Request Page" so the user can select records for the report.

![Figure 25 - Report Request Page](image)

The report request page shown in Figure 25 has been generated from the "Asset Availability" report. The Input parameters are:

- Supervisor – comma separated list of WO Supervisors
- Report Date From, Report Date To: - reporting period

The red asterisk (⊕) indicates the parameter is mandatory for running the report.
Module Where Clause

Reports can be run on the current open record or the records displayed in the application list view.

When reporting on the list view records, restrictions may be applied to prevent overloading of the report server and users may be required to reduce the number of records before running the report. Limitations on records contained in a report are set in the Report Administration Application by the Maximo Administrator.

The following examples use the Work Order Module but apply equally to most Maximo modules where standard reports have been enabled.

Example 1 – As shown in Figure 26 the result list shows six (6) records when a report such as "Work Details" is run the resulting report will contain each of the 6 records - formatted appropriately.

![Figure 26 - Run Report against Selected Records](image-url)
Example 2 – As shown in Figure 27 a result set has not been generated. When a report such as "Work Details" is run, the resulting report would be for all records. Restrictions may be applied by the Maximo Administrator to prevent this occurring by limiting the number of records for the report.

Example 3 – As shown in Figure 28 a single WO "Current" has been selected. When a report such as "Work Details" is run, the resulting report would be containing only the "Current" WO being viewed.
User Input Parameters and Where Clause

Some report may use both User Defined Parameters and the Where Clause

The report would have parameters defined by a Maximo Administrator using the Report Administration Application, and the "Use Where Clause" checkbox would be set to true for the report.

When this occurs, only records meeting both requirements of the Where Clause and User Input Parameters are selected for the report.

**KEY ASSUMPTIONS**

- User understands the concept of parameters / where clause in report record selection
- User understands the concept of "records" and the general purpose of the application
- User has completed lessons on advanced search, saved queries and modifying the Where Clause
- User has logged on and has security privilege to run reports

**USER ACTIVITIES**
1. Open the Application
2. Open the records for the report (list View for multiple records)
3. From the More Actions menu select "Run Reports"
4. The “Reports and Schedules” dialog box will open
5. Select the report to run
6. The report “Request Page” will open
7. Immediate is selected by default. Click the "Submit" button to run the report

Figure 29 - Run Reports - Immediate Report
Depending on the browser setting the report will open either as a new window or a new tab in the browser. Ensure that the Maximo URL has been added as a pop-up blocker exception.

Figure 30 - Immediate Report - Browser view
1. With report open in the browser – select the "Export data" ( ) button
2. In the Export Data dialog box select the data columns to export
3. Select the Export format
4. Select the Export Options
5. Click "OK" this opens a file save dialog box
6. Select the folder
7. Select the file name
8. Click the "Save" button
9. ... or Find exported files in download folder.
1. With report open in the browser — select the "Export Report" button
2. In the Export Report dialog box Select the Export format
3. Select the Export Options
4. Click "OK" this opens a file save dialog box
5. Select the folder
6. Select the file name
7. Click the "Save" button
8. ... or Find exported files in download folder.

Figure 32 - Immediate Report - Export Report (Formatted)
Activity Name | Emailing a Scheduled Report

1. Open the Application
2. Open the records for the report (list View for multiple records)
3. From the More Actions menu select "Run Reports"
4. The “Reports and Schedules” dialog box will open
5. Select the report to run
6. The report “Request Page” will open
7. In the "At This Time" enter a date and time
8. Enter an email address
9. Enter a subject
10. Select a File Type for the report as an attachment
11. Click the "Submit" button to create scheduled report, the “Schedule Confirmation” message will open.
12. In the Schedule Confirmation box:
   a. View button will display the schedule for the report,
   b. Delete button will delete the scheduled report
   c. Cancel button will close the dialog box with affecting the schedule.

Figure 33 - Email Scheduled Report (as PDF)
Creating a recurring schedule is the same as “At This Time” except for steps below:

13. For a Recurring Schedule – select the "Recurring" on the Request Page
14. The “Select Schedule or Time Value” dialog opens. Enter a schedule
15. Click "OK" to return to the Request Page
16. Click the "Submit" button

Figure 34 - Recurring Schedule Reports