

Configuration & Tailoring – Supported through Upgrades to MAS and beyond



WE ARE
Naviam

The asset management journey.
Streamlined.



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[IBM Champion 2024/2025](#)

[Maximo 7.6.1.x End of Support – 9/30/2025 ;<3 months to go; Are you ready?](#)



Agenda

- Introduction / Background
- Organization Options
- Domains
- The importance of Relationships for Application Designer Changes
- Roles & Communication Templates
- Conditional Expressions / Conditional UI
- Reporting Library / Query Based Reporting Parameters
- Integration – Object Structures
- Honorable Mentions

Introduction

- Maximo is delivered with tools to make it fit your use cases
 - Enhancements over the years have expanded both core application and add-on's
 - This session will focus on no code to low code options that will work in Maximo 7.6.x as well as Application Suite Manage 8.x+

Why is Maximo So Big?

Watson IoT

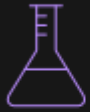
IBM

Maximo manages the world's most asset-intensive organizations



Who in the world depends on IBM Maximo?

Top organizations throughout the planet!¹



10 of the 13
largest pharmaceutical companies¹

Calibration & Life



Sci. **10 of the 20**
largest oil and gas companies²

Oil & Gas



5 of the 15
busiest shipping ports in the world¹



16 of the 24
largest automotive companies¹



9 of the 18
largest diversified utility companies¹

Utilities



7 of the 10
major aerospace and defense companies³



14 of the 20
largest power generation utilities¹

Nuclear



12 of the 20
largest power distribution utilities¹

Linear



44.2
million rail travelers daily

Transportation



9 of the 18
busiest airports in the world⁴

Who has the power of Maximo?

The most successful American electric generators and distributors!



Who's going places with Maximo?

Trains, planes and people on the move throughout the world!



Here's why asset-intensive organizations choose Maximo:



5–20%
reduction in downtime and material costs



Up to
10–20%
improvement in labor utilization


Organization Options – there may be too many

| | | | |
|-------------------------------|-------------------------|-------------------------------|------------------------------|
| Work Order Options ^ | Crew Assignment Options | Labor Options | System Settings |
| Work Type | Asset Options | Service Desk Options | Delete Organization |
| Edit Rules | Drilldown Options | Global Ticket Solution Option | Add to Bookmarks |
| Other Organization Options | PM Options | SLA Options | Calibration Options |
| Site Options | Safety Plan Options | Ownership Assignment Options | Work Order - Other Organiza. |
| Everyplace Work Query Opti... | Purchasing Options ^ | Workflow Options | Work Order - Edit Rules |
| Inventory Options ^ | PO Options | Autonumber Setup | Associate Time Zone |
| Item Options | Contract Options | System Level | |
| Inventory Defaults | Tax Options | Set Level | |
| Reorder | PO Labor Options | Organization Level | |
| Inventory Costs | Invoice Options | Site Level | |
| Transfer Options | | | |
| Count Books Options | | | |

Org setting – W.O. Options

? Allow fields to be updated in Work Tracking

⚡ BOOST FOR: ▾

Follow 

Administration ×

+ Add a tag



Keith Henderson posted 08-04-2023 14:29

Good Afternoon

I know this is not best practice.

Is there a way to allow the asset and GL Acct fields to be updated after the work order has been set to in progress ?

Currently they are read-only.

Thanks

I have this question too • 0

ANSWER



Invading Moss posted 08-04-2023 17:07

Navigate to Organizations -> Select Action -> Work Order - Edit Rules, a dialog will open which allows you to configure the edibility of Asset, Location, GL account etc at various Work Order statues

Helpful • 0



Keith Henderson posted 08-07-2023 09:01

Good Morning,

Thank you very.... much. Worked perfectly.

Helpful • 0

Maximo Edit Rules for consideration

- Need to insert / update the asset number when work is at INPRG? Change the default settings

The screenshot displays the IBM Maximo Application Suite interface. The main window is titled "Organizations" and shows the "Edit Rules" dialog for "Work Order Edit Settings (1 - 6 of 6)". The dialog lists various work order statuses and their corresponding edit settings for GL Account, Asset, Location, WP Labor, WP Materials, and WP Service.

| Status | GL Account? | Asset? | Location? | WP Labor? | WP Materials? | WP Service? |
|--------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| APPR | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| COMP | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| INPRG | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| WAPPR | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| WMATL | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| WSCH | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The "INPRG" status row is highlighted with a blue box, and a mouse cursor is pointing at the "Asset?" toggle switch. Below the table, there are "Cancel" and "OK" buttons.

Overlaid on the right is a "Work Plan Edit Options" window, which contains a table with the following data:

| Status | GL Account | Equipment | Location | WP Labor | WP Materials | WP Tools | Safety Tab |
|--------|------------|-----------|----------|----------|--------------|----------|------------|
| APPR | N | N | N | N | N | N | N |
| COMP | N | N | N | N | N | N | N |
| INPRG | N | N | N | N | N | N | N |
| WAPPR | Y | Y | Y | Y | Y | Y | Y |
| WMATL | N | N | N | N | N | N | N |
| WSCH | N | N | N | N | N | N | N |

Org setting – Labor options



Amy Tellier-Briggs posted 05-31-2023 08:04

Folks,

We are running Maximo 7.6.1.2. I have a technician that entered a **-112.5 hour actual transaction** that we need to get rid of. Problem is, he can't enter a +112.5 hour transaction to cancel it out because Maximo won't allow him to enter any more than 8 hours on a given day. Any ideas?

Thanks,
Amy Briggs
Jackson Laboratory



Christopher Winston posted 05-31-2023 08:50 **Best Answer**

Query Based Reporting – Runti...

Technically this is ruled by the organization labor option setting for future labor transaction tolerance

Organizations

Find Organization

Find Navigation Item

Go To Applications

Available Queries

All Records

All Bookmarks

Common Actions

+ New Organization

+ Save Organization

+ Clear Changes

+ Create Report

More Actions

Service Address Options

Labor Options

Automatically Approve Inside Labor Transactions? ☒

Automatically Approve Outside Labor Transactions? ☐

Allow Mismatched Craft and Labor When Reporting Actual Labor? ☐

Automatically Approve Invoices Created from Labor Transactions? ☒

+ Future Labor Transaction Tolerance in Hours 115:00

OK Cancel

+ Default Item Status PENDING

+ Default Stock Category STK

Change it to allow this transaction only, and then change it back after save. You should probably note this in your change control documentation as well in case it comes up on an audit, as you may not remember it was done.

Domains – Many are delivered; and you can add more

- Over 400 in v7.6.x; Over 550 in v 8/9
- Example of a synonym domain to edit
 - MCOMP (FCOMP) synonym of INPRG
- Priority Fields have no delivered domains
 - Admin can add them
 - Populate with locally approved values
 - Attached to fields via db config
 - They stay attached through upgrade

SYNONYM Domain

Domain: WOSTATUS WO Status

Domain Type: SYNONYM

Length: 16

SYNONYM Domain Filter 1 - 10 of 11

| <input type="checkbox"/> | Internal Value | Value | Description | Default |
|--------------------------|----------------|--------|-------------------------|-------------------------------------|
| <input type="checkbox"/> | ▶ APPR | APPR | Approved | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ CAN | CAN | Canceled | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ CLOSE | CLOSE | Closed | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ COMP | COMP | Completed | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ INPRG | INPRG | In Progress | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ INPRG | MCOMP | Maintenance Complete | <input type="checkbox"/> |
| <input type="checkbox"/> | ▶ WAPPR | WAPPR | Waiting on Approval | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ WMATL | WMATL | Waiting on Material | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | ▶ APPR | WPCOND | Waiting on Plant Cond | <input type="checkbox"/> |
| <input type="checkbox"/> | ▶ WSCH | WSCH | Waiting to be Scheduled | <input checked="" type="checkbox"/> |

☐ Select Records

Leverage Relationships to properly add attributes

IBM Maximo Application Suite | Manage

Application Designer

Workspace

Application: PO

Table Column Properties

General | Advanced

Control ID: 1679428776795

Default Label: Description

Label:

Attribute: PO_VENDOR.NAME

Type:

Sortable?:

Relationships (1 - 4 of 4)

| Relationship | Child Object |
|--------------|--------------|
| PO_BILLTO | COMPANIES |
| PO_SHIPTO | COMPANIES |
| PO_VENDOR | COMPANIES |
| VENDOR | COMPANIES |

COMPANIES

| 1000 | 0 | Store Replenishment | APPR | ATI | Atlantic Trading, Inc |
|------|---|---------------------------|------|--------|-----------------------|
| 1004 | 0 | 1 Inch ID Copper Tubing | APPR | ATI | Atlantic Trading, Inc |
| 1010 | 0 | General Plumbing Supplies | APPR | HELWIG | Helwig Company |
| 1011 | 0 | Plumbing Supplies | APPR | HELWIG | Helwig Company |

Roles & Communication Templates

- A role can extract emails from vendor / company contacts

Comr Create Communication

To create communication, select a template or directly enter the message and details.

> C Template

PONOTIFICATIC >

Tem

To

George.Defrost@CMC.com, Gerald.Denning@CMC.com

cc

bcc

Subject

Purchase Order Report 1114 / Changeover Managem

Message

Please see the attached purchase order 1114. Reference this PO number on invoices related to this order; submit invoices to ap@mycompany.comn. **Please review the attached PO and Acknowledge Receipt.**

If there are any questions or concerns, please contact My Company's Procurement Team at buyer@mycompany.comn.

Role

POVNDCTCT

Purchase Order Vendor Contacts

*Type

A set of data rel.

Object

PO

*Value

:PO_VENDOR.CONTACT.email

Parameter

:PO_VENDOR.CONTACT.email

E-mail?

☒

Conditional Expressions and Usage

- Conditional User Interface (UI)
- Conditional Signature Options
- Global Data Restrictions for all users
- Global Data Restrictions for select security groups

Decreases the need for cloning / duplicating applications to impose different requirements

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Conditional Expression Manager

> All Conditions (1 - 6 of 6)

| | Condition | Description | Type | |
|---|--------------|------------------------------------|------------|---|
| | asset | | | Q |
| ▼ | ASSETMETER | Are there any asset meter records? | EXPRESSION | Q |
| ▲ | ASSETTYPE_FL | Fleet Type Asset | EXPRESSION | Q |

Details

❗ Give the condition a name that will help you identify the condition when you apply it in the Security Groups application evaluated.

Condition

ASSETTYPE_FL Fleet Type Asset

*Type

EXPRESSION Q

*Expression

:assettype = 'FLEET'

Class

Condition Expression Builder

Always Evaluate?

Reference Count

3

Conditional User Interface (UI)

- Allows you flexibility in requiring, hiding or making something read only depending on the 'condition'

Global Data Restrictions

Object Restrictions | **Attribute Restrictions** ▾

Attributes (1 - 6 of 6)

| | Object | Attribute | Application | Type |
|---|--------|-----------|-------------|----------|
| ▾ | ASSET | ASSETTAG | ASSET | REQUIRED |
| ▾ | ASSET | PRIORITY | | REQUIRED |
| ▾ | ASSET | SERIALNUM | | REQUIRED |

Condition

ASSETTYPE_FL

***Type**

EXPRESSION

***Expression**

:assettype = 'FLEET'

***Asset Tag**

12559

Asset Template

Calendar

COMPANY1

Shift

***Priority**

2

***Serial #**

JA12337

Naviam 18

Add Calculations to the Report Library

- Query Based Reporting can be enhanced with additional calculation expressions by adding them to the library
- Confirm the syntax is correct and be sure to test and re-test before adding to production

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Report Administration

Find Navigation Item <

Available Queries ▾

Common Actions

- + New Report
- Create Report

More Actions

- View Report Processing
- View Scheduled Reports
- View Group Security
- Set Security Group Limits
- Set Application Security
- Set All Application Security
- Set Report Object Structure Se...
- Remove All Application Security
- Define Ad Hoc Reporting Library**
- Set Report File Export Options

Ad Hoc Report Expression Library

Define the expression keywords that users can use when they create SQL expressions in ad hoc reports.

Keywords (1 - 6 of 6)

| Expression Id | Expression | Description | |
|---------------|-------------------------------------|---|----|
| CASEWHEN | case when (<EXPR>) then <TRUE> else | Used for Conditional Expressions | 🗑️ |
| Date | &DATE& | Maximo Date variable | 🗑️ |
| DateTime | &DATETIME& | Date-time variable | 🗑️ |
| DayDateDiff | datediff(day,&DATETIME&,<FIELD>) | Calculate the amount of days between tr | 🗑️ |

Details

Expression Id

DayDateDiff

Description

Calculate the amount of days between today and the field specified (this could be negative if the field is in the past)

***Expression**

datediff(day,&DATETIME&,<FIELD>)

Query Based Reporting – Add Runtime Parameters

How is this done?

- Create and Save QBR
- In Report Administration, add Parameters
- Set Attributes as needed
 - For Dates, remember to enter Earliest and Latest parameters to allow for date range
 - Enter a display name so that the user can tell the difference between fields
 - Set operator as needed (\geq for Earliest / \leq for Latest/ etc.)
 - Add the lookup as needed (datelookup, site, etc) to simplify usage
 - Save and then click on 'Generate Request Page' (if required)
- Resulting QBR may also be run from Start Center

QBR – Add Runtime Parameters – Report Administration App

IBM Maximo Application Suite

Manage

Take a tour

Report Administration

Report

Security

Performance

Report File Name

WOTRACK_MAXADMIN_1680630513.rptdesign

Work History - Hours & Costs per Actual Finish Date Range

Last Import Date

4/4/23 5:55 PM

Report Type

BIRT

Imported by

MAXADMIN

Application

WOTRACK

Report Folder

WOTRACK

Ad Hoc Report Settings

Settings

Parameters (1 - 3 of 3)

| Parameter Name | Attribute Name | | Sequence | Display Name | Multi-Lookup Enabled? | Operator | Required? |
|-----------------------------|----------------|--|----------|-----------------------------|-------------------------------------|----------|-------------------------------------|
| Site ID | siteid | | | Site ID('s) | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> |
| Earliest Actual Finish Date | actfinish | | 1 | Earliest Actual Finish Date | <input type="checkbox"/> | >= | <input checked="" type="checkbox"/> |
| Latest Actual Finish Date | actfinish | | 2 | Latest Actual Finish Date | <input type="checkbox"/> | <= | <input checked="" type="checkbox"/> |

1 - 3 of 3

Integration Module – Object Structures

- Should be used for:
 - Start Center Results Sets
 - Query Based Reporting
 - Work Centers (7.6.x) / Role Based Applications (MAS)
- Be careful with changes to object structures
- Prepare to use Object Structure Security (Templates)

IBM Maximo Application Suite | Manage

Take a tour



Object Structures



> Object Structure

Source Objects for REP_INVENTOR_ITEM (1 - 4 of 4)



| Object | Parent Object | Object Location Path | Relationship | Object Order | User Defined? | Exclude Attributes | Mode? |
|-------------|---------------|-----------------------|--------------|--------------|-------------------------------------|--------------------------|-------|
| INVENTORY | | INVENTORY | | 1 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| INVCOST | INVENTORY | INVENTORY/INVCOST | INVCOST | 1 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| INVBALANCES | INVENTORY | INVENTORY/INVBALANCES | INVBALANCES | 2 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| ITEM | INVENTORY | INVENTORY/ITEM | ITEM | 3 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Honorable mentions

Cron Tasks

- KPICronTask – generates data point

System Properties

- *mail.* – configure email for send / receive

PM Help to Bookmark

<https://tinyurl.com/MaximoPMHelp> (7.6.x)

<https://tinyurl.com/PMManage> (8.x)

- Maximo 8 Navigation for the 7.6 user:

<https://youtu.be/CfF8C69IA0Y>

Useful Reference Links

- ORG Setting Level: <https://www.ibm.com/docs/en/mam/7.6.0?topic=pms-limitations-when-setting-up-options-in-organizations-application-1>
- Conditional UI: <https://www.ibm.com/support/pages/four-ways-using-conditional-expressions-maximo>
- SQL Reference: https://www.techonthenet.com/sql_server/index.php
- System Properties: <https://www.ibm.com/docs/en/mam/7.6.0?topic=reference-system-properties>
- Domain Types: <https://www.ibm.com/docs/en/mam/7.6.1.1?topic=overview-types-domains>
- Ad-Hoc reporting library file (xls): <https://tinyurl.com/AHRptLib>
- Runtime Parameters for QBR: <https://youtu.be/RF9Udi3qyd0>
- Generate your ERD: <https://tinyurl.com/GenerateERD>

Useful Reference Links

- Application Configuration Best Practices: <https://tinyurl.com/AppConfigBPs>
- Relationships for use in Application Designer: <https://tinyurl.com/UseRelationshipsInAD>
- Understanding Search Methodologies: <https://tinyurl.com/SearchMethodologies>
- Configuring Search Methodologies: <https://tinyurl.com/ConfigSearchMethods>
- Object Structures for Work Centers: <https://tinyurl.com/WCObjStruct>
 - Object Structure Data Restrictions: <https://tinyurl.com/OSDRMas> or <https://tinyurl.com/OSDR7p6x>
- Org setting blogs:
 - Work Orders: <https://www.naviam.io/resources/blog/organization-options-work-orders>
 - Inventory: <https://www.naviam.io/resources/blog/organization-options-inventory>
 - Purchasing: <https://www.naviam.io/resources/blog/organization-options-purchasing>
 - Others: <https://www.naviam.io/resources/blog/organization-options-others>

QUESTIONS?