IBM **Maximo**

Maintenance Manager Project
Introduction

Russell Bee
Brian Downey
Kim Woodbury

Maximo Product Management

IBM

Contents

- Background
- Design basis
- Mas 8.9 scope under consideration
- Phased release plan

Please note

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.

Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.

The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract.

The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Background

A new generation of desk-top applications is being introduced into Maximo Manage. This will include a multi-role Operational Dashboard, Work Orders application for the Maintenance Manager/Supervisor and other new applications for desk top roles such as HSE, Asset Managers, Operations and Supply Chain managers and supervisors. These new capabilities will be delivered in phases over multiple releases.

A parallel project is introducing new desk-top applications for Scheduler, Planner and Dispatcher. Industry Solution teams will also deliver applications that support industry specific roles.

Design basis

New applications will be built using Graphite and follow IBM's Carbon design patterns.

Navigation to Classic Maximo will be incorporated for detailed views and actions. An IFrame approach will be adopted using combined Graphite and Classic breadcrumbs to assist user navigation.

Design must be quickly adaptable for multiple roles and extensible for Industry Solutions.

A customer should be able to configure the layout and content of the screens. The scope of this configurability will extend over multiple release.

Mobile applications are not part of the scope. It is anticipated that desk top users will be able to use Maximo Mobile applications when away from the desk top.

Under consideration for MAS 8.9

- Operational Dashboard

  - Workflow Assignments

  - Quick Actions (inserts only)

  - KPI Graphs

  - My Recent Actions on side nav used to replace Favorities

- Work Orders

  - Summary capability integrated with classic Work Order Tracking.

- Workflow Assignment application

Phased Release Plan

Release	Vision	Component Summary
1	Initial release of a configurable Operational Dashboard and a work order role based application.	Operational Dashboard – Workflow Dashboard component, Quick Actions and KPI Graphs components. Workflow Assignment application. Work Orders – Table List, Work Order Summary, key actions, navigation to Work Order Tracking
2	Continue to develop the Operational Dashboard and work order applications. Add a new HSE/Sustainability focused application for Incidents.	Operational Dashboard - Add Result Set/Work Queues, Map/Indoor Map navigation, KPI List Work Order - Add initial AI capability, more actions and summary capability. Incidents – Table List, Work Order Summary, key actions, navigation to Incidents
3	Continue to add components to existing applications and add a new Operational focused application based on Operator Log and Permit to Work.	Operation Dashboard – Add Charts, enhance schematic/indoor map navigation Work Orders – Add more action, summary and AI capability. HSE – Add additional components. Operator Log and Permit to Work – Table List, Summary, Key Actions and Navigation to Classic.
Future	Continue to develop existing components in line with customer feedback and add asset and supply chain management capability.	Order and scope to be confirmed based on customer feedback.

Operational Dashboard components

Classic component	RBA component	Release	Notes
Inbox/Assignments	Workflow	8.9	
Favorite Applications	Favorites	8.9	Replace with Left Hand Nav, My Recent Applications
Quick Inserts	Quick Actions	8.9	Can we extend beyond insert actions?
Result Set	Work Queues	8.10	Work Queues enhancements under discussion to meet 8.10 timeframe.
Bulletin Board	Bulletin Board	8.11	Could rename and associated more closely with Notification capability
KPI Graph	KPI	8.9	
KPI List	KPI	8.10	
Report List	Report List	8.11	
Not available	Trend	8.10?	New component
Not available	Map	8.10	Assuming this is a card, that can be expanded although could be a widget.
Not available	Indoor Map	8.10?	Assuming this is a card, that can be expanded although could be a widget.

Operational Dashboard Screen layout

Note: Historical trends not in scope for 8.9 currently

Operational dashboard

Button

Workflow assignments due

Work order (12)

Assignment	Due Date
Approval needed for work order Site BEDFORD, Work order 1234	01/10/2022 8:30 AM ⚠ 2 days overdue
Financial approval level 1 Site MANCHESTER, Work order 1242	01/11/2022 8:30 AM
Message Jill to update assignment Site BEDFORD, Work order 1243	01/11/2022 8:30 AM
Message Jill to update assignment Site BEDFORD, Work order 1244	01/11/2022 8:30 AM

1 – 4 of 12 items

PM work orders overdue
🖥 2 more to caution

6 work orders

▼ 15% from last week

Overdue emergency work
🖥 2 more to alert

4 work orders

▲ 5% from last week

SLA compliance
🖥 1 more to alert

87.5 incidents

▲ 20% from last week

% Rework
🖥 1 to until target

10 %

▼ 3% from last week

Incidents this month
⚠ 3 more to caution

59 incidents

▲ 5% from last week

Quick actions

🔍 Search

Create new MoC ⎘
MoC

Create new incident ⎘
Incidents

Create new service request ⎘
Service Requests

Create inspection results →
Inspection Results

Create new asset ⎘
Assets

SLA compliance

Placeholder

Target	1000
Mean	756
Peak	1045

PM work orders overdue

Placeholder

Target	1000
Mean	756
Peak	1045

Automated Maximo Workorder Failure Code Assignment

Objective
Automatically assign failure codes to workorders based on only a few training examples

Challenges
Unreliable labeled data, limited data to train a model, limited domain specific documents

Approach
Augment and generate representative data based on the few input examples using domain information, and create a model which improves over time

Input

Domain information, e.g., failure code description from ISO

Sample description, e.g., 1-2 sentences per failure code by SME

A few samples, e.g., 5 workorder descriptions per failure code

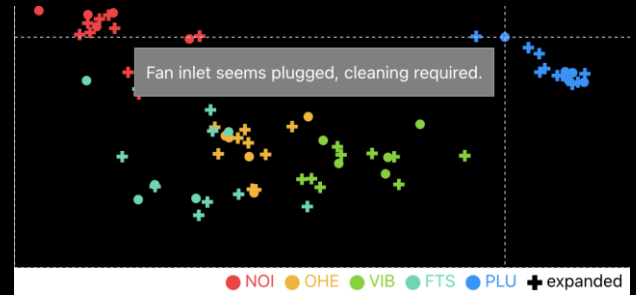Validation dataset, e.g., 30 workorders per failure code

Usage

IBM Maximo Asset Management

Create Work Order

Specify the Issue

fuel leaking on the ground   [Identify]

Watson Problem Code

External Leakage fuel   (88.31%)

Automated Failure Code fill

Results

Augmented samples like the input

Fan inlet seems plugged, cleaning required.

● NOI   ● OHE   ● VIB   ● FTS   ● PLU   ✚ expanded

Data Used for Training	Accuracy*
One-sentence/word description for each failure code	47%
Above + Sample inputs (5 sentences) for each failure code	66%
Above + 7 workorders samples for each failure code	92%

* Validation set has 70 samples per failure code

IBM **Maximo**