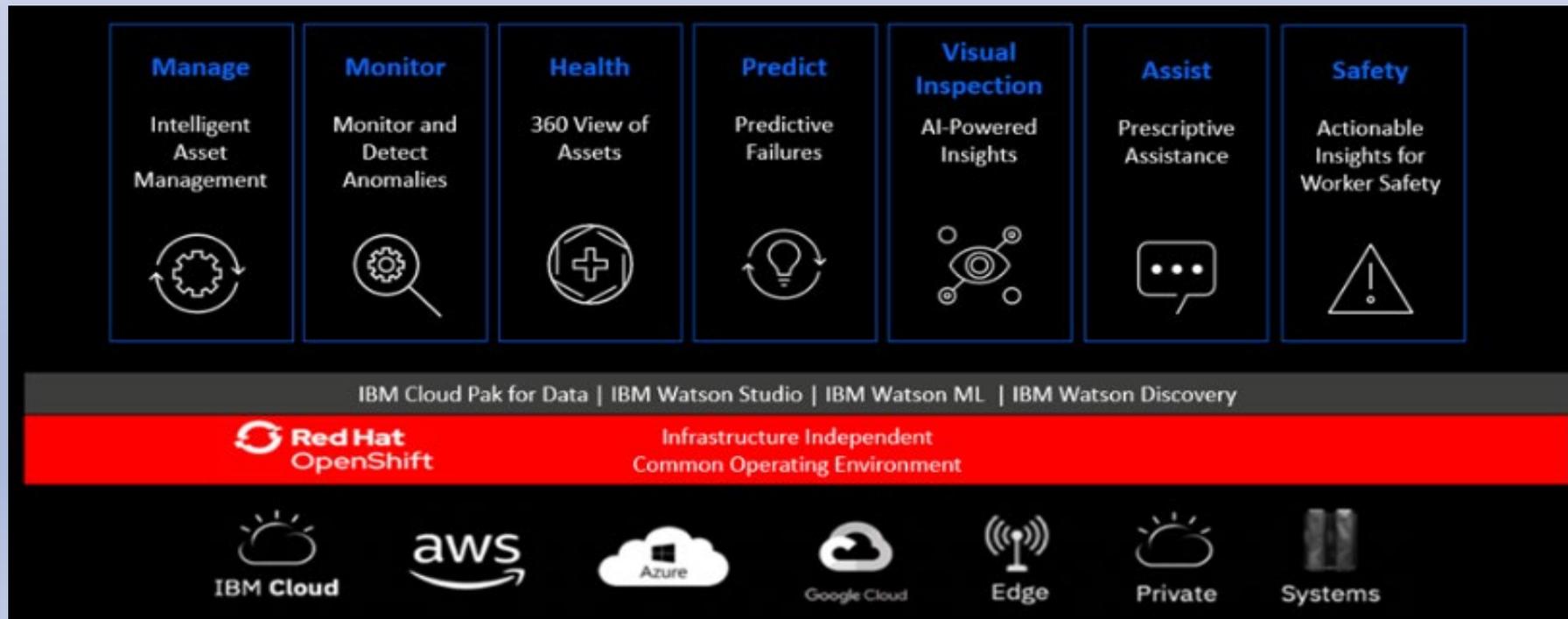


# Implementing MAS 8

## A Panel Discussion

What have we learned so far?



# Panelists

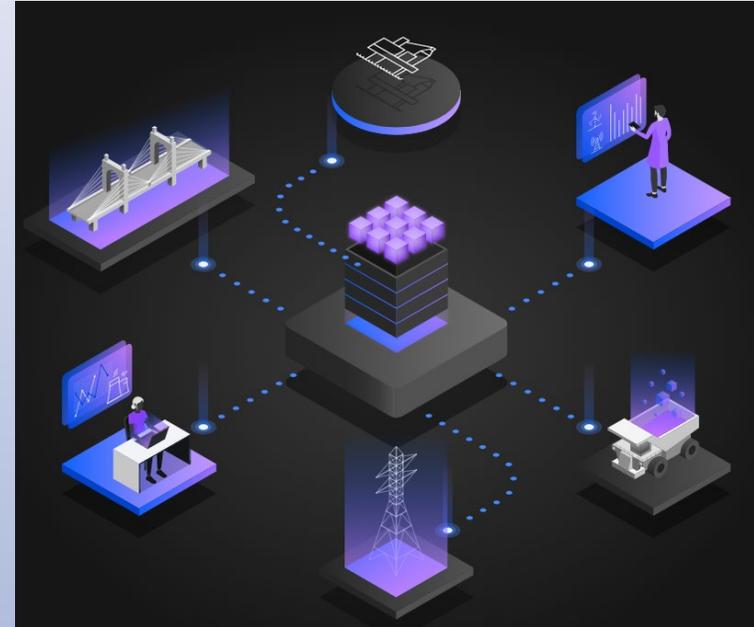
- Bob Fyke
- Rachita Bhatia
- Bennet Tan
- Terry Saunders
- You – The Audience



# Agenda:

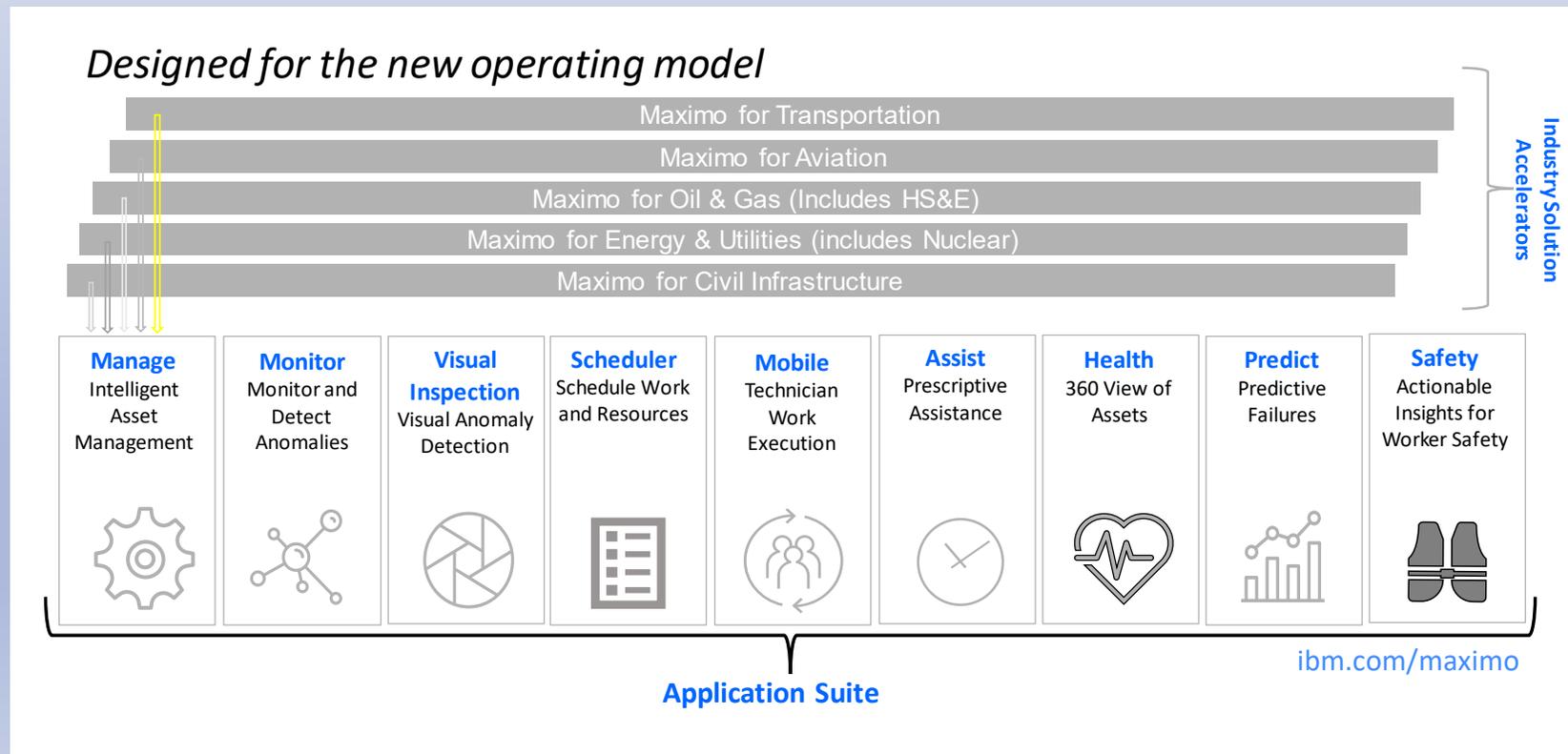
## Moving to MAS 8

- What's New?
  - Suite/Manage vs. Traditional Maximo
  - Versatile "Toolbox"
  - Opportunities
- Why Move?
- Infrastructure
  - Hardware & Software
  - Administration/IT Support Skills
- Look & Feel
- When?
- MAS Licensing Model
- What's the Impact?
- Questions / Discussion



# What's New?

- Suite vs. Maximo
- Maximo is “Manage”
- What's in the toolbox?



# Why Move?



- Single point of access to the entire suite of applications
- Major improvements will only occur in MAS 8 moving forward
- Leverage concurrent App Points for same user logged into multiple environments
- Take advantage of containerization technology for easy scalability

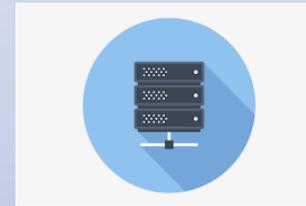


# Deployment

Where can Maximo Application Suite / Manage be deployed:

- On-premise (or private cloud) data centers:

- Bare-metal, vSphere



- Public cloud Providers

- Azure, AWS, IBM Cloud, GCP

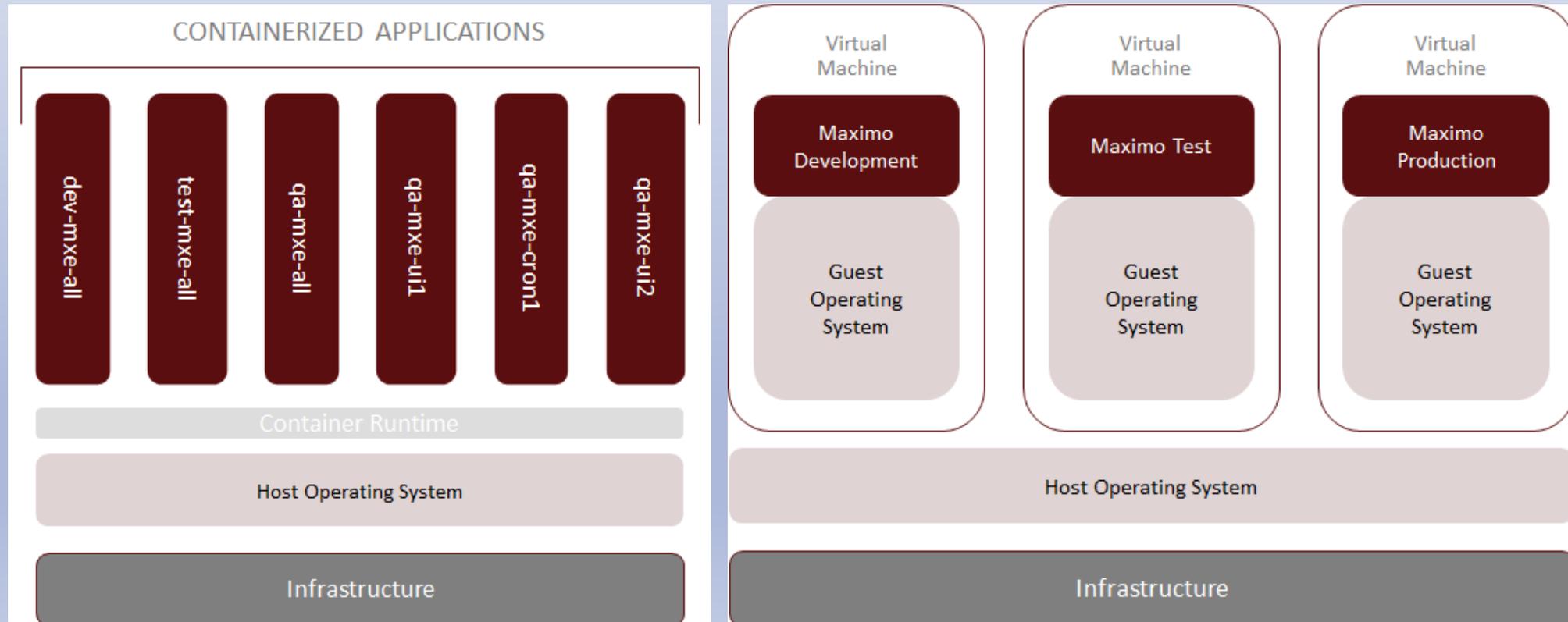


- Maximo SaaS providers



# Infrastructure

## Containerization vs. Virtualization



# Infrastructure

## Master Nodes:

- 3 node minimum
- Runs core components required for OCP and Kubernetes



## Worker Nodes:

- 3 node minimum
- Run applications (Maximo JVM) and several OCP components (ex. Ingress)



**Each Node is a server.**

**For example: AWS t3a.xlarge instance: 4 CPU + 16 GB Ram**



# Openshift Container Platform

## Red Hat OpenShift

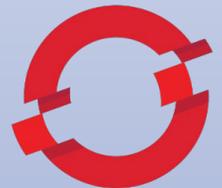
hybrid cloud open-source Kubernetes container platform. Distributed enterprise solution for running and managing applications

- Developed by Red Hat – RHEL CoreOS
- Built on Enterprise-grade Kubernetes with additional features
  - Client tools and API, Build tools , Image Registry, Networking, Monitoring, Logging, Storage, User/group Management

## Kubernetes

open-source container orchestration system used for software deployment, scaling and management

- Core component of OpenShift
- Open-source project started by Google in 2014
- IBM, Red Hat, CoreOS joined Kubernetes community in 2014
- Initial version: Kubernetes v1.0 and OpenShift 3.0 released in 2015
- Now: Maintained by Cloud Native Computing Foundation - Over 450 members



OPENSIFT

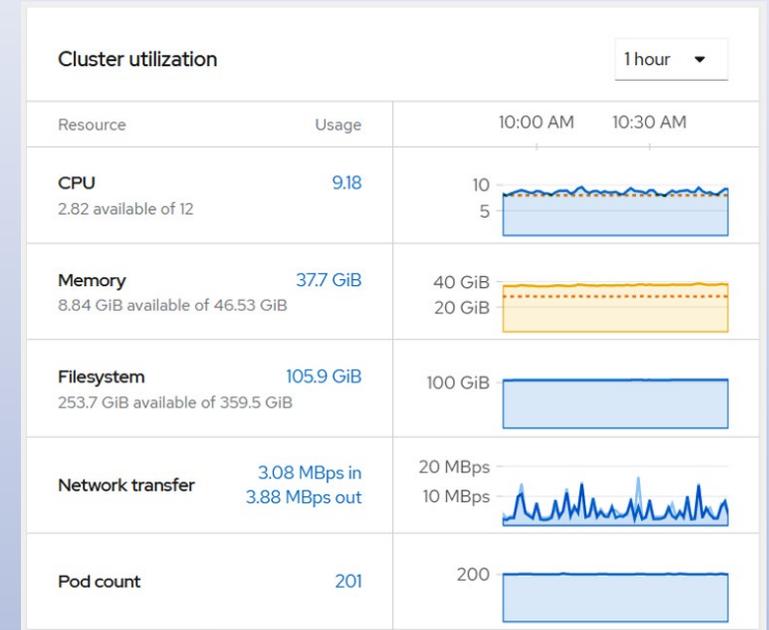


# Openshift Container Platform

## Redhat OpenShift Web Console

The screenshot shows the Red Hat OpenShift Web Console interface. The left sidebar contains navigation options: Administrator, Home, Operators, Workloads, Networking, Storage, Builds, Monitoring, Compute, User Management, and Administration. The main content area is titled "Overview" and "Cluster". It is divided into three columns: Details, Status, and Activity.

- Details:** Cluster API address (https://servername:6443), Cluster ID (bf8f2e25-7c77-40b6-9b6b-91697a57e02f), Provider (None), OpenShift version (4.8.10), and Update channel (stable-4.8).
- Status:** Cluster (green checkmark), Control Plane (green checkmark), Operators (1 updating). An Insights section shows 1 issue found, with a warning icon and a message about a deprecated API.
- Activity:** Ongoing activities (none), Recent events (10:52 AM Readiness..., 10:52 AM Unable to a..., 10:52 AM (combined...), 10:52 AM Back-off re..., 10:52 AM Unable to a..., 10:52 AM Back-off re..., 10:51 AM Startup pr..., 10:50 AM Liveness pr...).



Cluster inventory dashboard showing the following metrics:

- 3 Nodes
- 311 Pods (2 red warning icons, 6 refresh icons)
- 1 StorageClass
- 8 PersistentVolumeClaims



# Administration

## Maximo Application Suite administrative dashboard

- Each Maximo instance contains an administrative dashboard
- User management, catalog, configuration, deployment, License consumption / analysis

IBM Maximo Application Suite

Take a tour

Suite administration

Overview

Catalog

Configurations

License consumption

Users

### Suite administration

Configure and manage the suite-level features. Applications, add-ons, tools and industry solutions administration interfaces. Learn more about suite [administration](#).

**Add an administrator user account**

You are logged in as the suite super user that is intended for suite installation and setup. Create administrator user accounts for day-to-day suite administration tasks.

Create personal account

[Configure LDAP](#) [Configure SAMI](#)

### Catalog

Deploy and then activate key Maximo applications for your enterprise users.

My applications

- Digital Twin Exchange**  
IBM  
Browse, purchase, download, and manage digital twin resources that are provided by a growing ecosystem of manufacturers, OEMs, and third-parties.  
External
- Manage**  
IBM - Manage - 8.0.0  
Manage your asset lifecycle, workflow, and business processes and integrate with other enterprise applications.  
Deployed
- Visual Inspection**  
IBM - Visual Inspection  
Unleash the power of deep-learning AI to quickly identify production defects and monitor assets for potential disruptions.

More applications

- Monitor**  
IBM - Monitor  
Optimize operating performance by using AI-powered remote asset monitoring to obtain insights into failures.
- Predict**  
IBM - Predict  
Predict and manage the likelihood of future failures by applying machine learning and data analytics.
- Visual Inspection**  
IBM - Visual Inspection  
Unleash the power of deep-learning AI to quickly identify production defects and monitor assets for potential disruptions.
- Assist**  
IBM - Assist  
Use artificial intelligence and augmented reality to enable technicians to troubleshoot and repair equipment problems more efficiently.

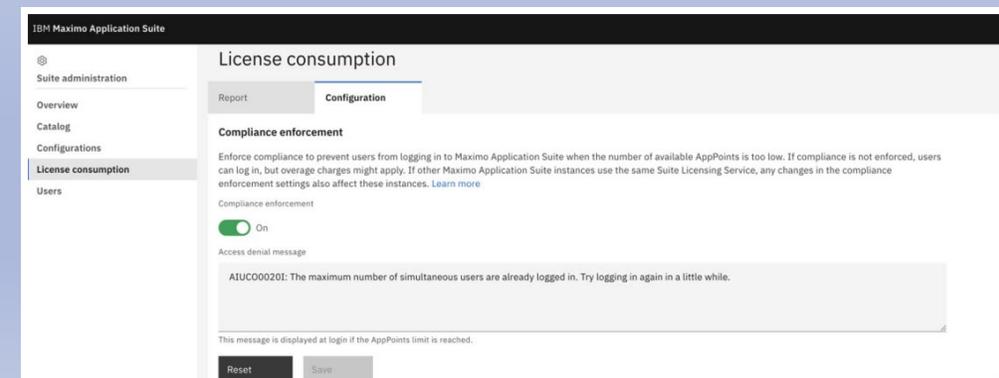
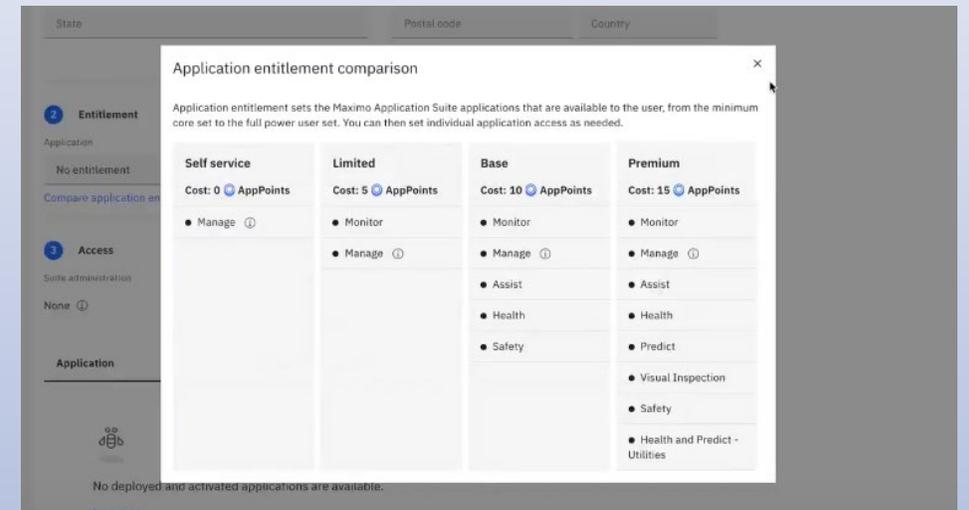
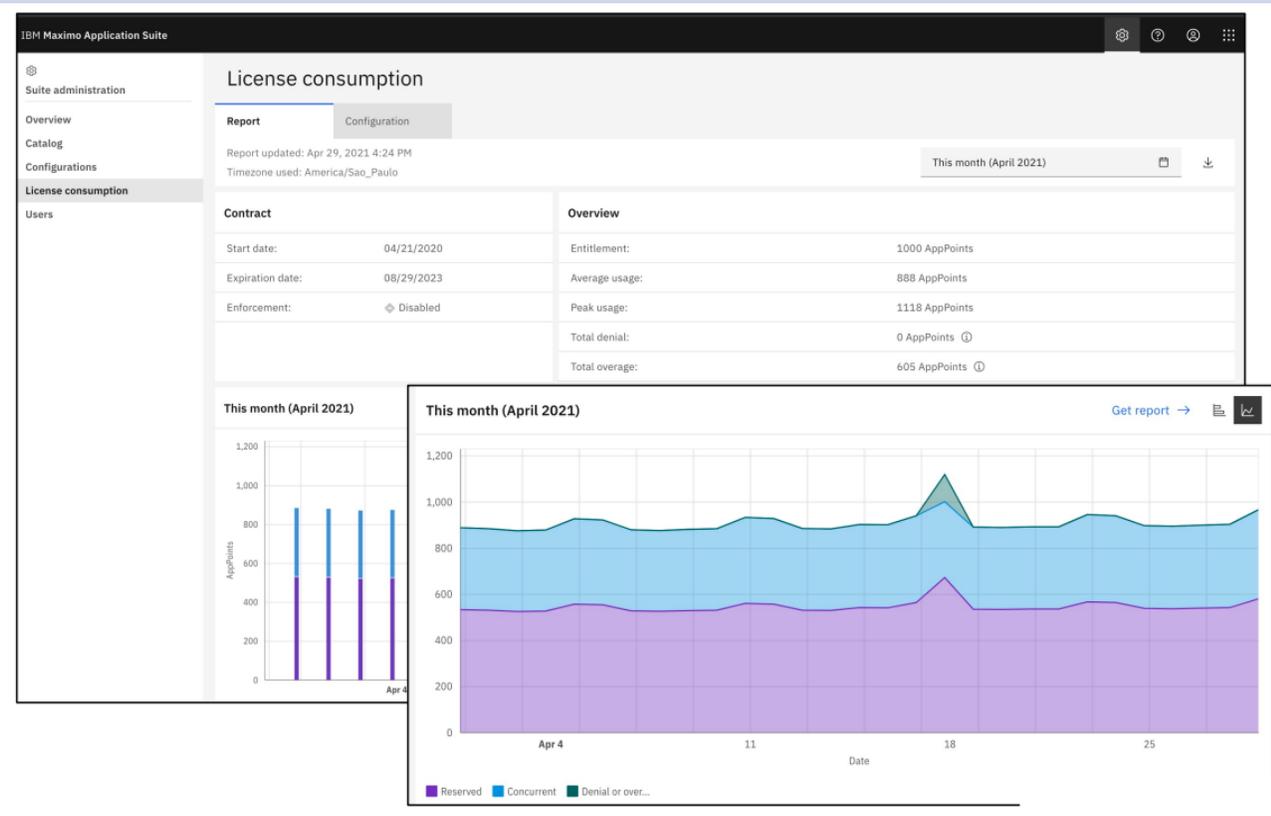
### Configurations

View and manage system configuration settings and application dependencies.

# Administration

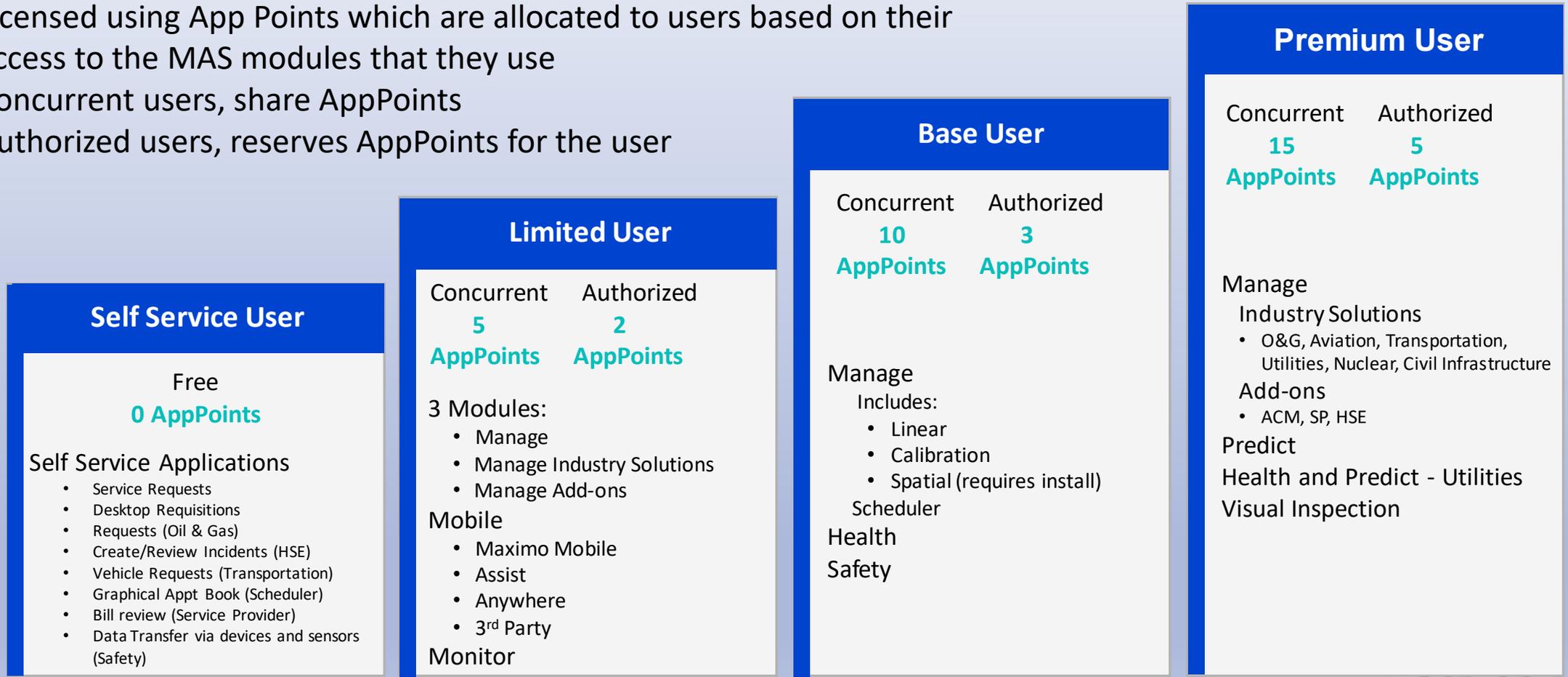
## Security & User Management

- Authentication and user management
- User creation, assignment and analysis of App Points



# MAS License Model

- Licensed using App Points which are allocated to users based on their access to the MAS modules that they use
- Concurrent users, share AppPoints
- Authorized users, reserves AppPoints for the user



**Install – 1 AppPoint**  
(x multiplier)

**SAP/Oracle Connector**  
(x80)

**Spatial**  
(x20)

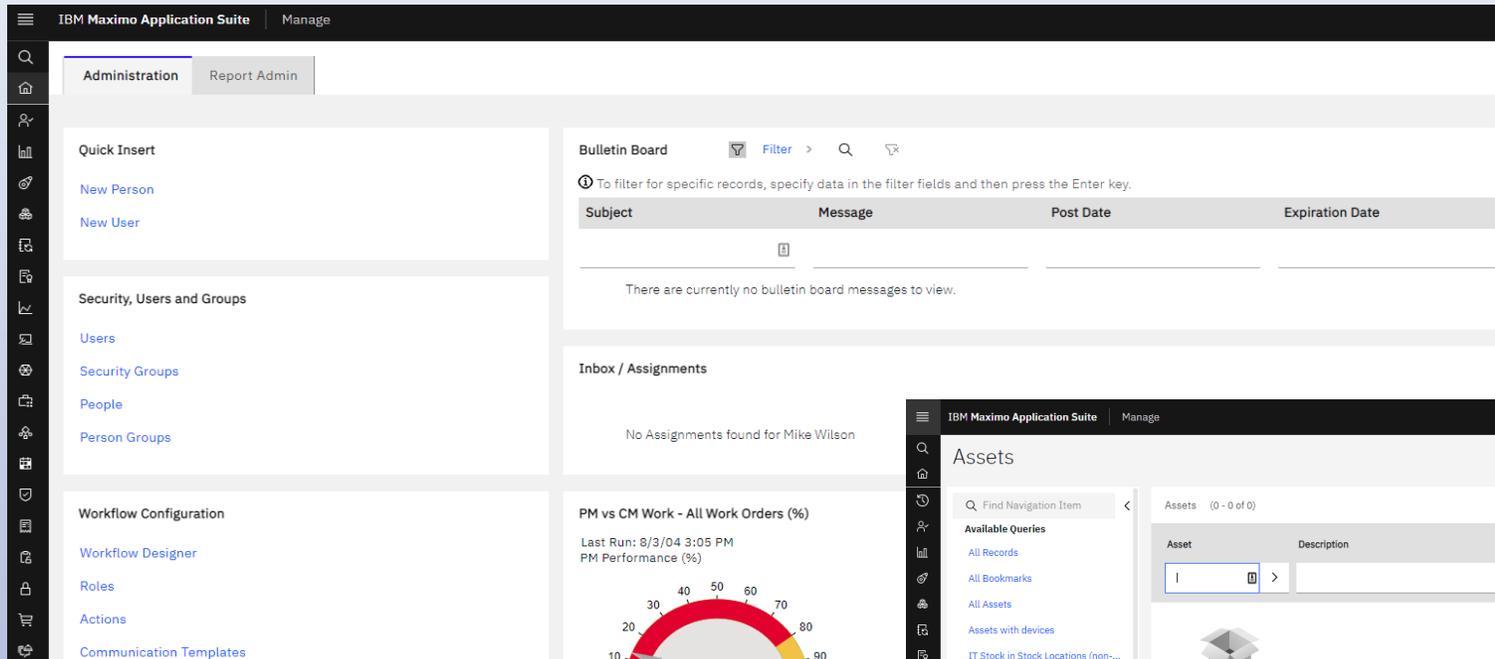
**Civil Infrastructure**  
(x50)

**Visual Inspection**  
(x45) Edge (1 pkg 5)

**Assist**  
(x150)

**Health & Predict - Utilities**  
(x60)

# Look and Feel



IBM Maximo Application Suite | Manage

Administration | Report Admin

Quick Insert

- New Person
- New User

Security, Users and Groups

- Users
- Security Groups
- People
- Person Groups

Workflow Configuration

- Workflow Designer
- Roles
- Actions
- Communication Templates

Bulletin Board

Filter > [Search Icon]

To filter for specific records, specify data in the filter fields and then press the Enter key.

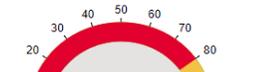
Subject	Message	Post Date	Expiration Date
There are currently no bulletin board messages to view.			

Inbox / Assignments

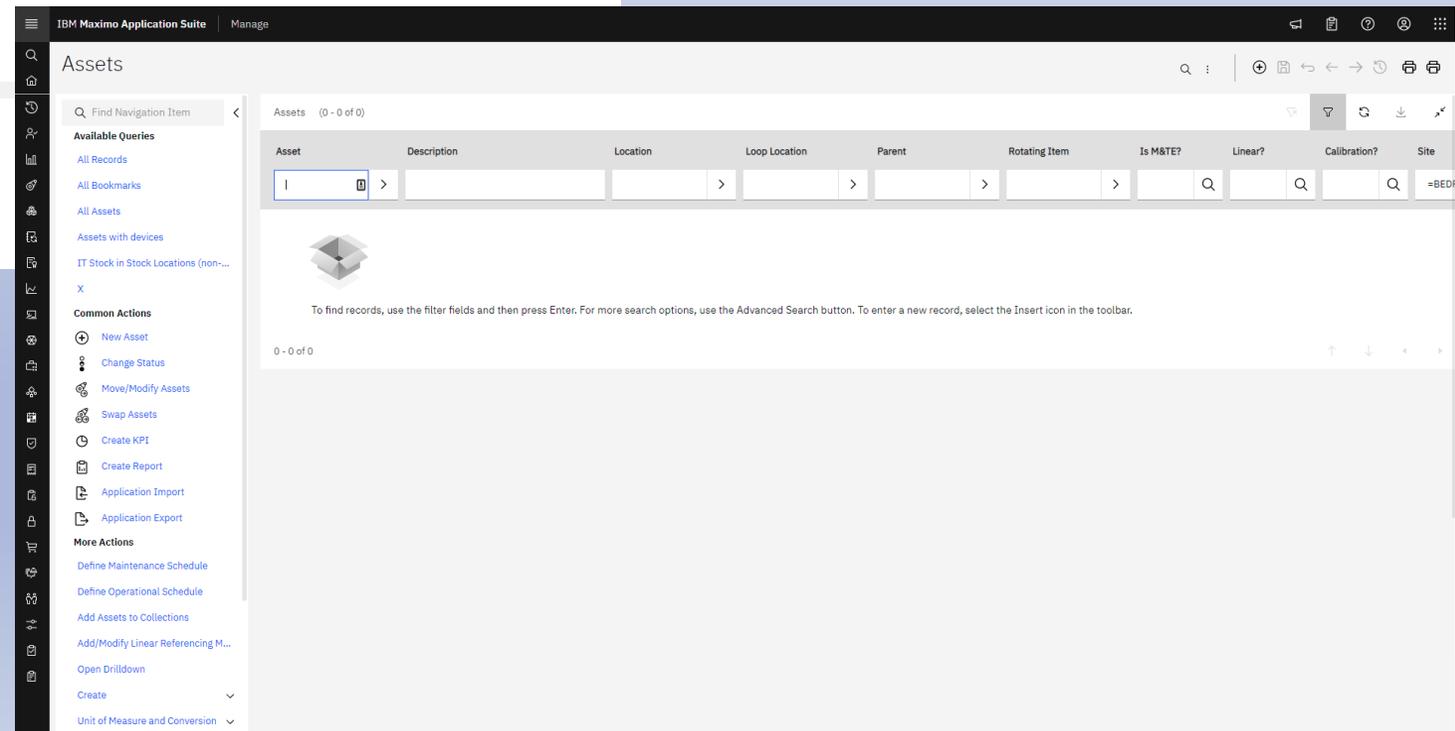
No Assignments found for Mike Wilson

PM vs CM Work - All Work Orders (%)

Last Run: 8/3/04 3:05 PM  
PM Performance (%)



The gauge chart shows a performance level of approximately 45% on a scale from 0 to 90. The needle is positioned between the 40 and 50 marks.



IBM Maximo Application Suite | Manage

### Assets

Assets (0 - 0 of 0)

Find Navigation Item <

Available Queries

- All Records
- All Bookmarks
- All Assets
- Assets with devices
- IT Stock in Stock Locations (non-...
- X

Common Actions

- New Asset
- Change Status
- Move/Modify Assets
- Swap Assets
- Create KPI
- Create Report
- Application Import
- Application Export

More Actions

- Define Maintenance Schedule
- Define Operational Schedule
- Add Assets to Collections
- Add/Modify Linear Referencing M...
- Open Drilldown
- Create
- Unit of Measure and Conversion

Asset	Description	Location	Loop Location	Parent	Rotating Item	Is M&TE?	Linear?	Calibration?	Site
I									

To find records, use the filter fields and then press Enter. For more search options, use the Advanced Search button. To enter a new record, select the Insert icon in the toolbar.

0 - 0 of 0

Updated Styling, Dashboard Look and  
Feed Fonts, Colors, Icons

# Look and Feel – Star Center

The screenshot displays the IBM Maximo Application Suite interface. At the top, the header shows "IBM Maximo Application Suite" and "Manage". The left sidebar contains a navigation menu with the following items: Home, Search, Refresh, User, Dashboard, Home, Incident (HSE) / COSRS, Preventive Maintenance(HSE), Master PM, Assets (HSE), Locations (HSE), Failure Codes, Condition Monitoring, Job Plans (HSE), and Routes (HSE). The main content area is divided into three panels:

- Left Panel:** "Con Edison Company of New York" with a list of links: Work Order Tracking (HSE), Quick Reporting(HSE), Labor Reporting, Incident (HSE) / COSRS, Preventive Maintenance(HSE), Master PM, Assets (HSE), Locations (HSE), Failure Codes, Condition Monitoring, Job Plans (HSE), and Routes (HSE).
- Middle Panel:** "Time not submitted in PeopleSoft" with a table header: Labor, Name, End of Pay Week (Saturday). The table content is "No Data Found."
- Right Panel:** "Bulletin Board" with a table header: Subject, Message, Post Date, Expiration Date. The table content is "There are currently no bulletin board messages to view."

At the bottom right, there is a list of links: ~Blank~, Users, Change Password, Companies, Company Master, Tools, Labor, Crafts, and Person Groups.

# Look and Feel – Work Order

The screenshot displays the IBM Maximo Application Suite interface for Work Order Tracking (HSE). The main header shows 'Work Order Tracking (HSE)' with search and navigation icons. Below the header is a tabbed menu with 'Work Order' selected. The left sidebar contains navigation options like 'List View', 'Find Navigation Item', and 'Available Queries', along with 'Common Actions' (Save Work Order, Change Status, New Work Order, etc.) and 'More Actions' (Change Work Order Options, Create, View, etc.).

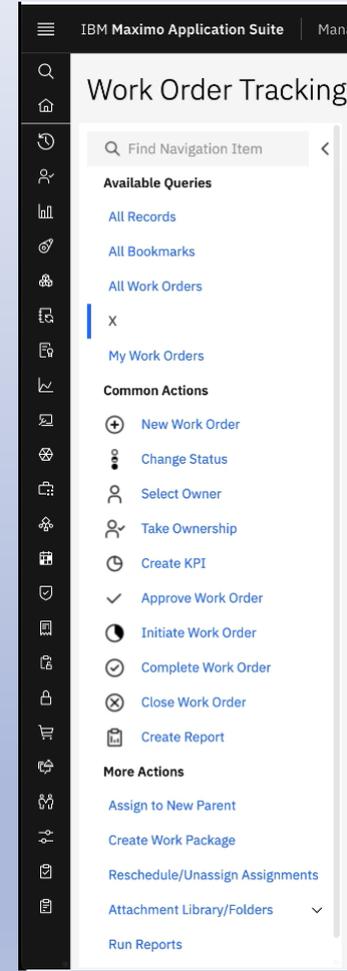
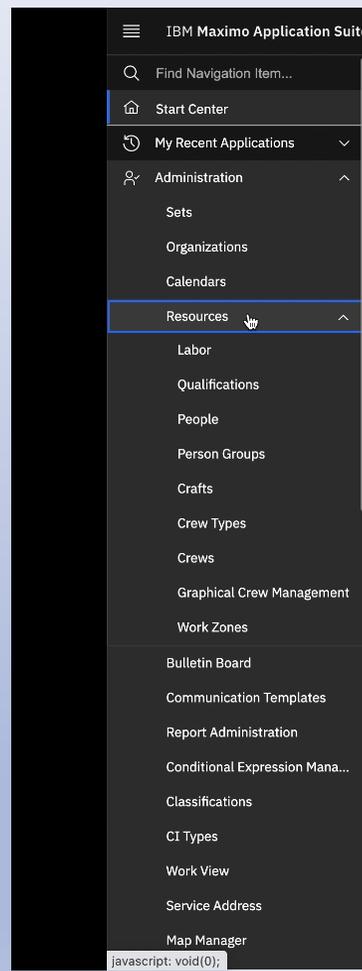
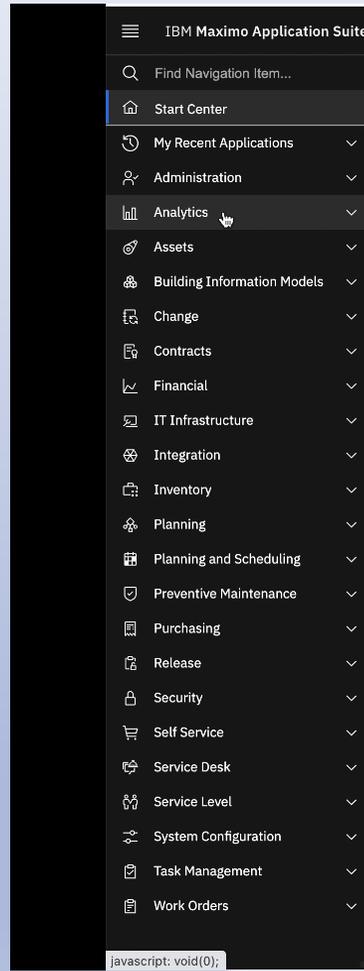
The main form area contains the following fields:

- Work Order:** 18018072
- Location ID:** 04-64-54
- Location Description:** DISTRICT 04 - 64 ST TO 54 ST
- Asset:** (Empty)
- Location Remarks:** (Empty)
- P and ID/One-Line:** (Empty)
- Isolation Point:** (Empty)
- Briefed By:** (Empty)
- Customer Name:** (Empty)
- Contact Name:** (Empty)

The right sidebar contains the following fields:

- Department:** SD
- WO Priority:** 9
- Priority Justification:** (Empty)
- Work Type:** CM
- Job Code/Task Type:** J
- Loc/Asset Criticality:** (Empty)
- Status:** WAPPR
- Status Date:** 9/19/22 10:40 AM
- Reason for Ticket:** (Empty)
- Site:** SD
- Manufacturer:** (Empty)
- Model:** (Empty)
- Installation Date:** (Empty)
- Aux ID:** (Empty)
- GL Account:** (Empty)
- Work Unit:** SA
- Project / Task:** 101007840014
- Units Completed:** (Empty)

# Look and Feel - Navigation



Expand and collapse Module Navigation  
Click to drill into sub-applications

Module Navigation collapses as soon as  
you hover off of it



# Look and Feel - Assets

The screenshot displays the IBM Maximo Application Suite interface for managing assets. The main view shows a list of assets with columns for Asset ID, Description, Location, Loop Location, Parent, Rotating Item, Is M&TE?, Linear?, and Calibration?. The asset 13150, 'Top Breaker System', is highlighted.

Asset	Description	Location	Loop Location	Parent	Rotating Item	Is M&TE?	Linear?	Calibration?
13150	Top Breaker System	BPM3100						
13160	Filler And Lifter System	BPM3100						
13170	Top Sealer System	BPM3100						
11300	Reciprocating Compressor- Air Cooled/100 CFM	BR300						
12210	Brake System- Overhead Crane #1	SHIPPING		12200				
12300	Electric Cart	SHIPPING						
12200	Overhead Crane #1	SHIPPING						
11430	Centrifugal Pump 100GPM/60FT HD	BR430		11400				
12700	Conveyor System #2	SHIPPING						
7500	Standard Laptop Computer	HWSTOCK						
7400	Standard Laptop Computer	HWSTOCK						
7300	Standard Laptop Computer	HWSTOCK						
7200	Standard Laptop Computer	HARDWARE						
7100	Standard Laptop Computer	ADDR2001						
11200	HVAC System- 50 Ton Cool Cap/ 450000 Btu Heat Cap BR200							
13130	Stripper System	BPM3100						

The detailed view for asset 13150 shows the following information:

- Asset:** 13150, **Description:** Top Breaker System
- Status:** NOT READY
- Linear?:**
- Site:** BEDFORD
- Type:** [Field]
- Asset Template:** [Field]
- Calendar:** COMPANY1
- Shift:** [Field]
- Priority:** 3
- Serial #:** 32R5G
- Failure Class:** PKG
- Parent:** [Field]
- Maintain Hierarchy?:**
- Location:** BPM3100, #1 Liquid Packaging Line
- Bin:** [Field]
- Rotating Item:** [Field]

# When?



## Maximo 7.6.0.x

End of Support: September 30 / 2021

## Maximo 7.6.1.x

End of Service: September 30 / 2025  
Announced April / 2022



### What does all this mean?

- 7.6.0.x - No more IBM development.
- 7.6.1.x – Development moving forward will be limited to fixes and prerequisite updates (eg., db2, Windows Server)
- Expect new features / functionality will be rolled into

## Maximo Application Suite 8.x.y

 <b>IBM Maximo Application Suite</b> 8.7.2 provided by IBM
 <b>IBM Maximo Manage</b> 8.3.1 provided by IBM

Maximo Application Suite 8.6  
Manage 8.2

October 26 / 2021

Maximo Application Suite 8.7  
Manage 8.3

Feb 22 / 2022

Maximo Application Suite 8.8  
Manage 8.4

July 25<sup>th</sup> / 2022

Maximo Application Suite 8.9  
Manage 8.5

Dec 1<sup>st</sup> / 2022



# What's the Impact?

## Making the Decision



### Emphasis - solution architecture upfront

- Planning for the Upgrade
  - What does this look like?
    - Project Plan
    - Technical architectural design
    - Integrations
    - Customizations
- Architecture – Networking, Database, Storage, Security

### Requirements

- IBM requirements spreadsheet
  - Ability to scale that back as part of architectural design

### Licensing – “who is working today”

- App Point Calculations must account for MAS Administrator. 15 Points are reserved immediately
- Non-production environments require app points (users in multiple MAS instances are not double charged)
- Ability to add on industry solutions
  - (e.g., scheduler / mobility in limited / base)

### IBM partnership

- Engaged with product managers and development
- Working with IBM on few install issues
- Working with IBM on several design changes



# Questions/Discussion



- "Disconnected" install options?
- Impact on Websphere? Moving away?
- Server patching – Cloud vs. On-Prem
- Disaster Recovery strategies?
- Are there changes for developers to know, e.g. Automation Scripts
- Best Programming Language? Ones to Avoid?

