

The Road Ahead with Maximo Application Suite

Kim Woodbury
Senior Product Manager
[*kwoodbur@us.ibm.com*](mailto:kwoodbur@us.ibm.com)

May 2021

Please note

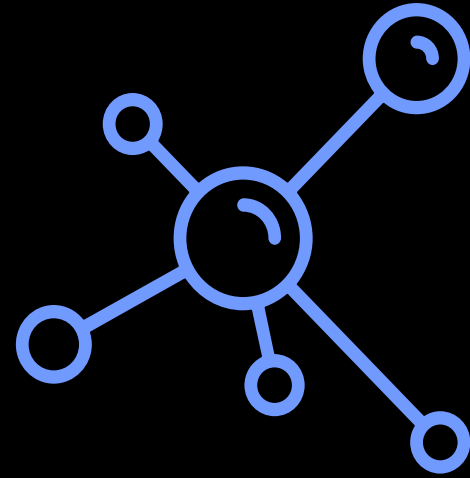
IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.

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.

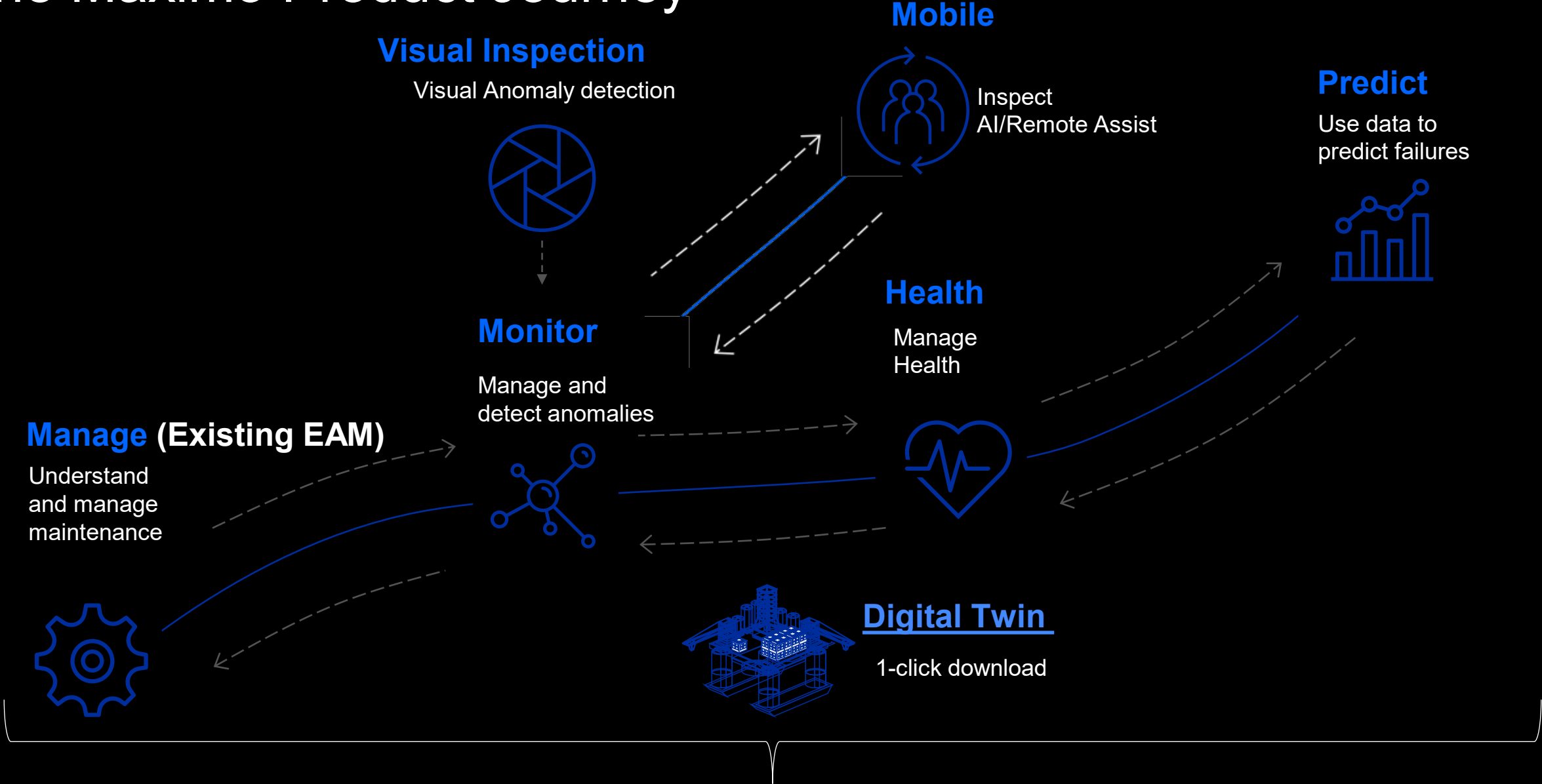
The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract.

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

Maximo Application Suite



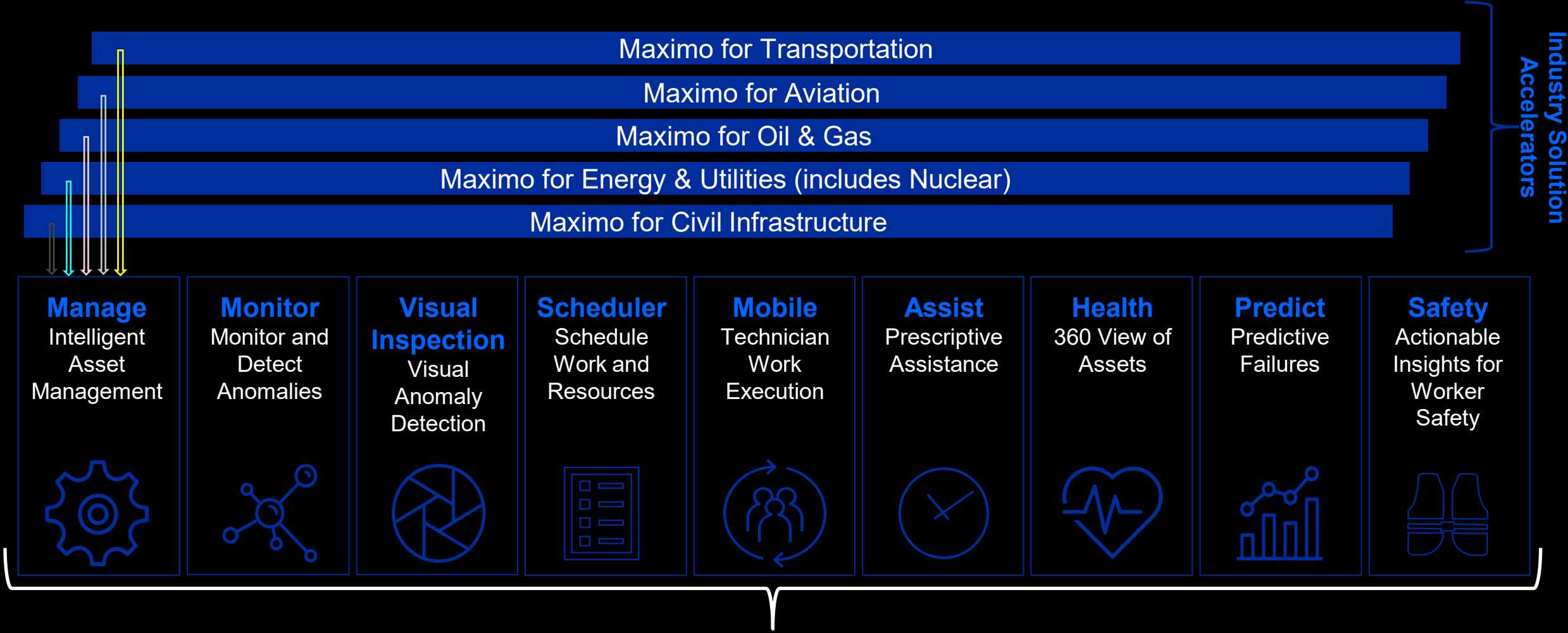
The Maximo Product Journey



Maximo Application Suite 8.x

Maximo 8.0 Application Suite

designed for the new operating model



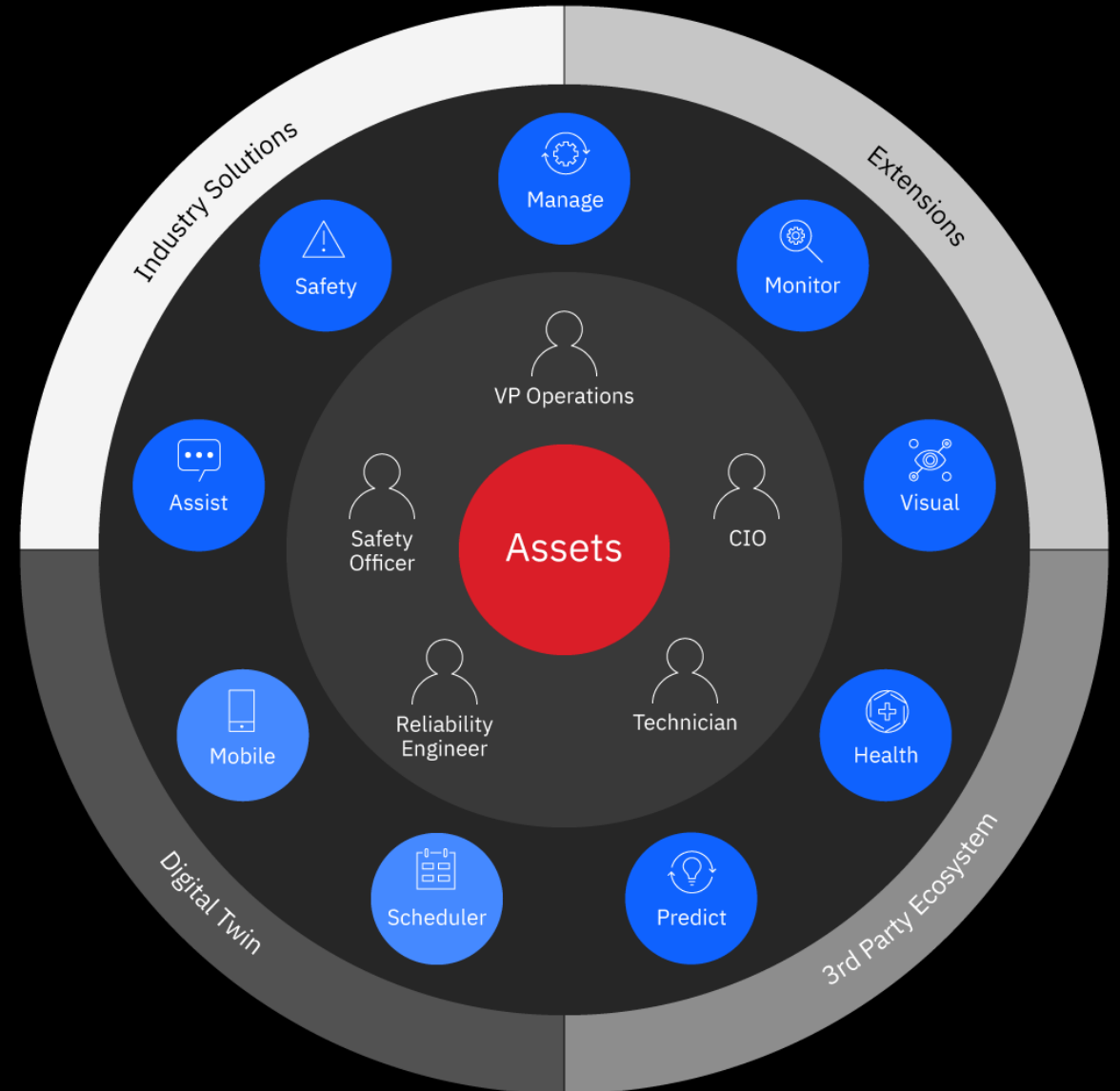
Application Suite

ibm.com/maximo

IBM Maximo Application Suite

Remote asset monitoring, maintenance and reliability applications in a single platform

- **Integrated** solution
- Usage **Flexibility**
- **Multi-cloud** deployment



Simplified Licensing and Usage

MAS AppPoints will be used across suite

Entitlement covers the whole suite. AppPoints are expended based primarily upon different active User types

Available as Subscription or Perpetual Licenses

1. Single license

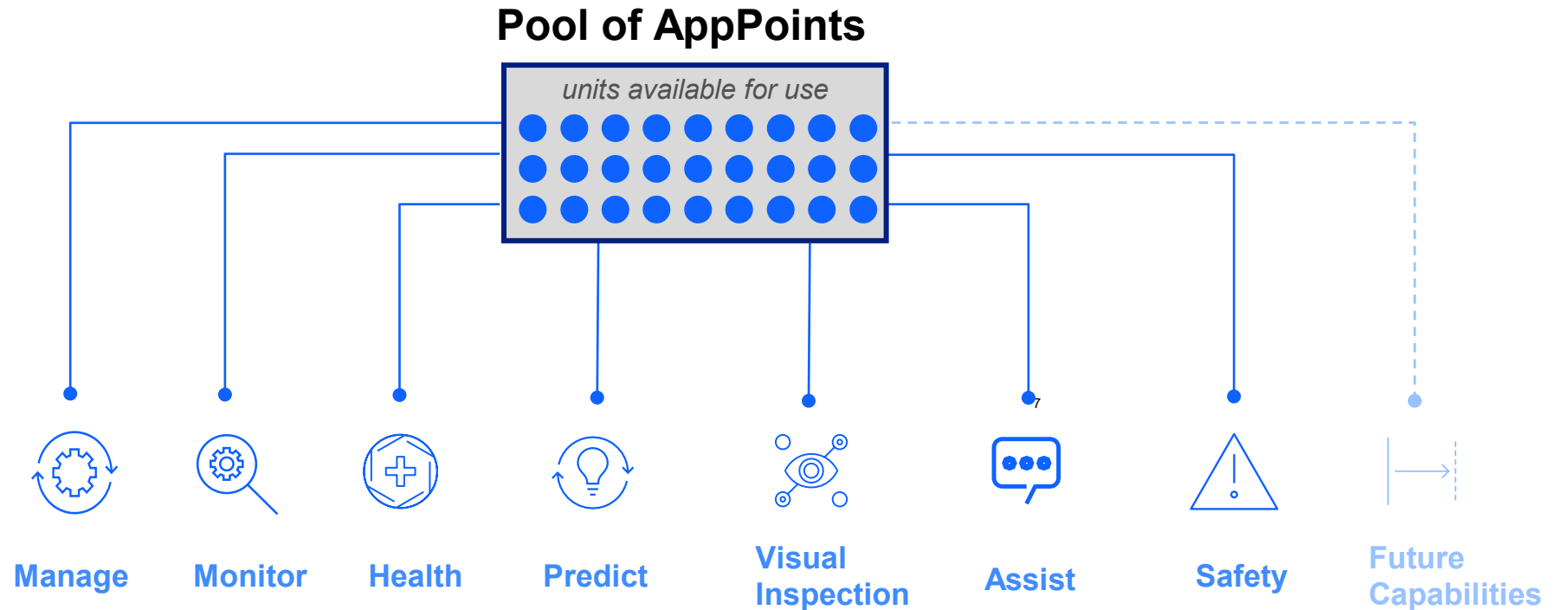
One entitlement to entire Suite

2. Flexible consumption

Sharing of license through concurrent users

3. Simplified usage

Access applications without additional provisioning



MAS Application License Model

Premium Concurrent User
15 AppPoints



Manage

Industry Solutions

- Oil & Gas, Aviation, Transportation, Utilities, Nuclear, Civil Infrastructure

Add-ons

- Asset Configuration Mgr, Service Provider, Health, Safety Env.

Predict

Health and Predict - Utilities
 Visual Inspection

Base Concurrent User
10 AppPoints



Manage


Includes:

- Linear
- Calibration
- Spatial (requires install)
- Scheduler

Health

Safety

Limited Concurrent User
5 AppPoints



3 Modules:

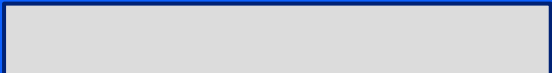
- Manage
- Manage Industry Solutions
- Manage Add-ons

Mobile

- Maximo Mobile
- Assist
- Anywhere
- 3rd Party

Monitor

Self Service Concurrent User
0 AppPoints



Self Service Applications

- Service Requests
- Desktop Requisitions
- Requests (Oil & Gas)
- Create/Review Incidents (HSE)
- Vehicle Requests (Transportation)
- Graphical Appt Book (Scheduler)
- Bill review (Service Provider)
- Data Transfer via devices and sensors (Safety)

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)
-----------------------------------------------	--------------------------------------	-------------------------	--------------------------------------	--------------------------------------------------	-------------------------	--------------------------------------------------

Application Suite: A New Model for Software

Included with MAS

License:

IBM Cloud Pak for Data

- *Watson Studio*
- *Watson Machine Learning*
- *Watson Discovery*
- *DB2 Warehouse*
- *WAS Liberty*
- ...and more

RedHat OpenShift Container Platform



Faster Hybrid Installation



All Applications in one Suite



Simplified Licensing

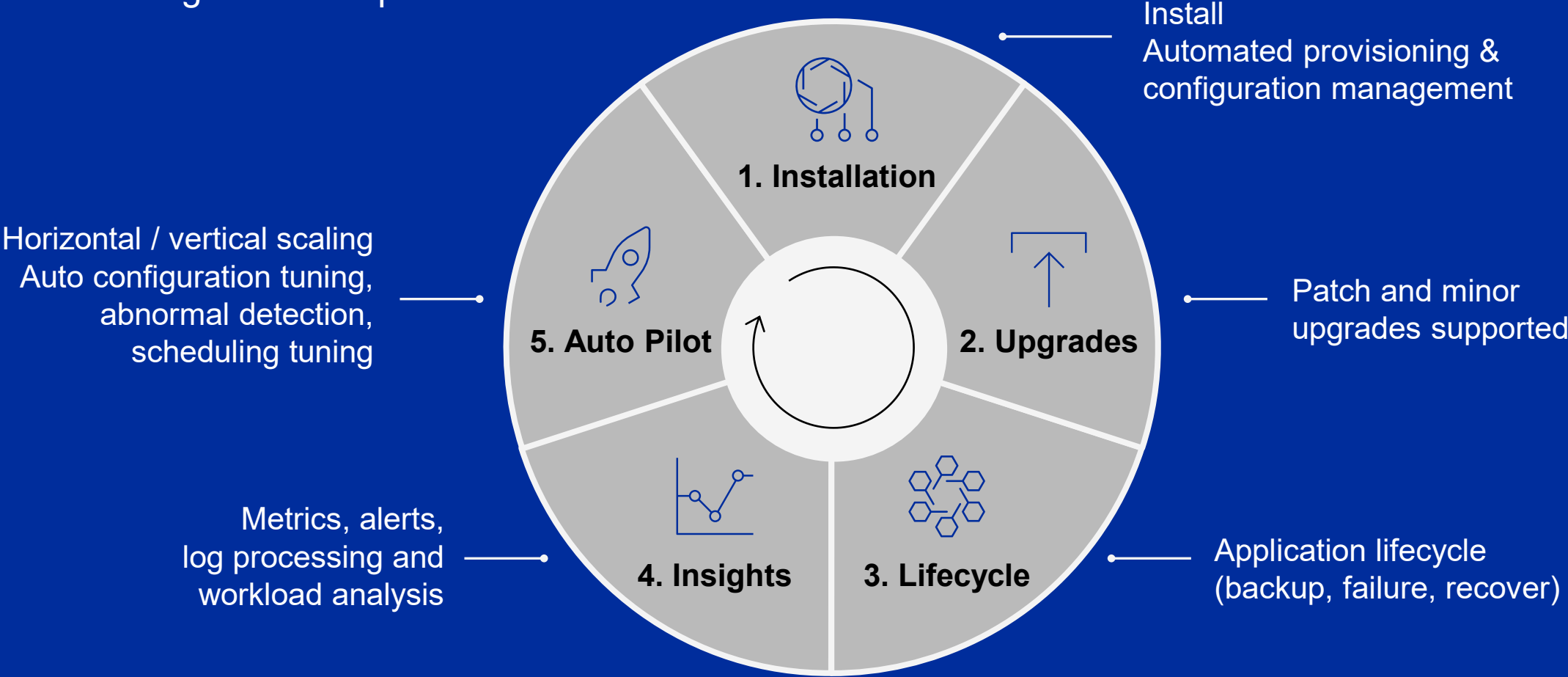
The Application Suite effort is driving the journey for hybrid software built on **RedHat OpenShift**

Drives a fundamental improvement in how IBM packages, provisions, licenses application software



Software that is Easier to Manage with OpenShift

We are entering a new chapter

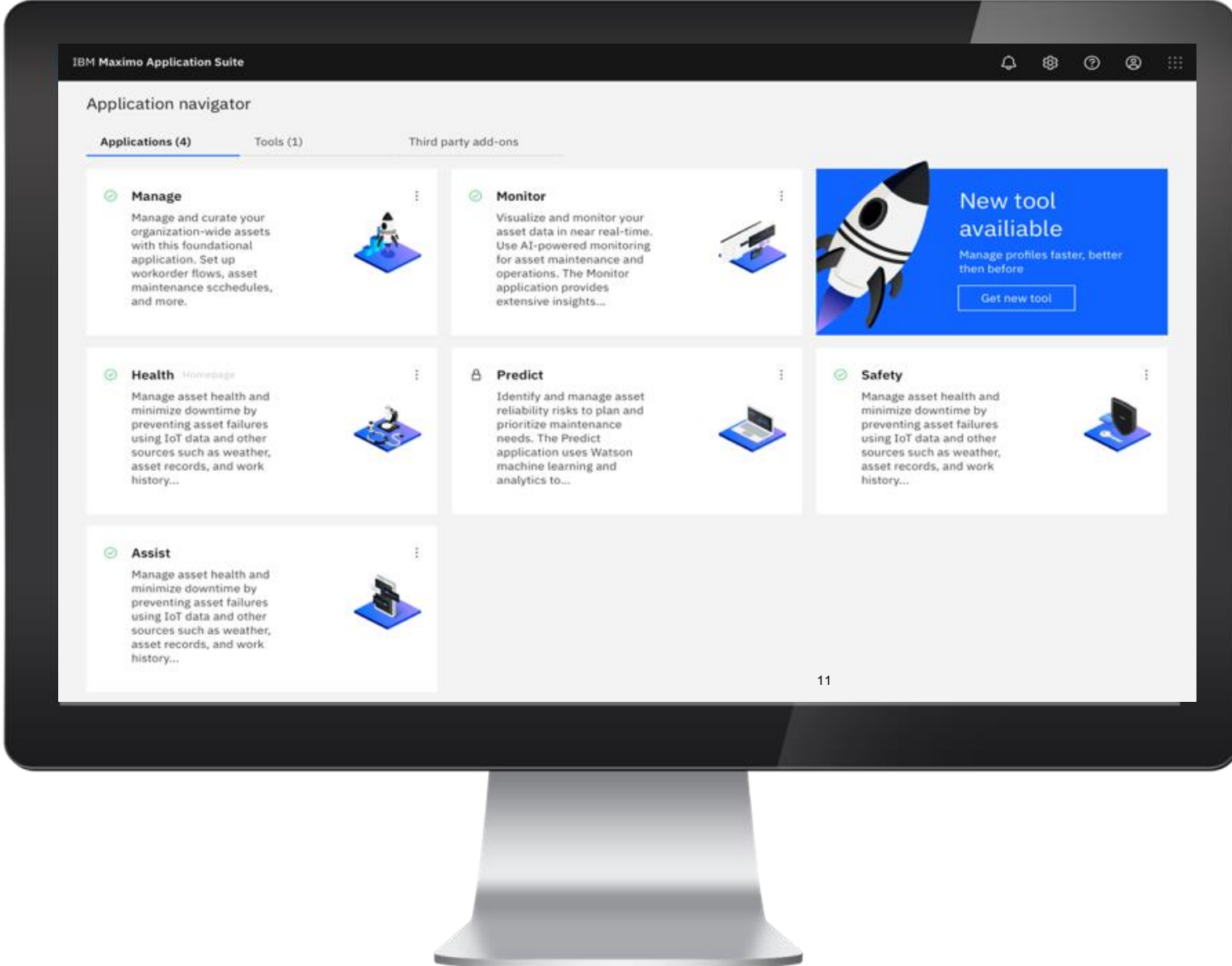


Manage Deployment Lifecycle through a single pane of glass

Start anywhere and scale your digital transformation journey

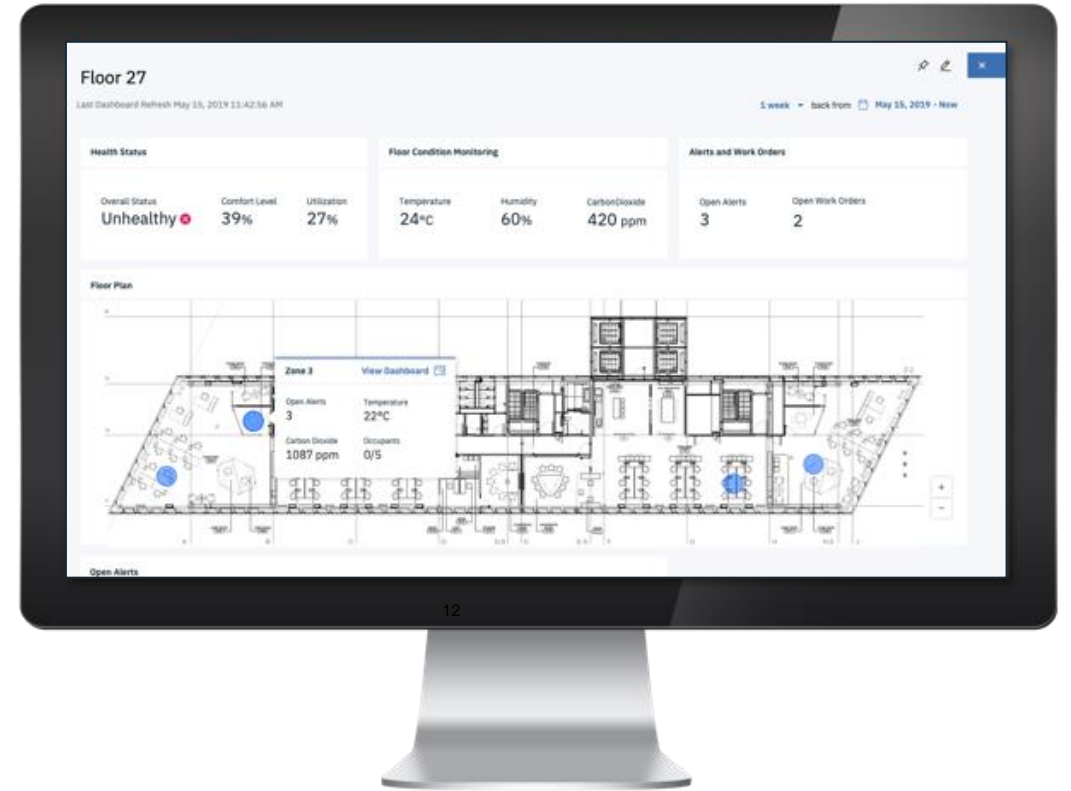
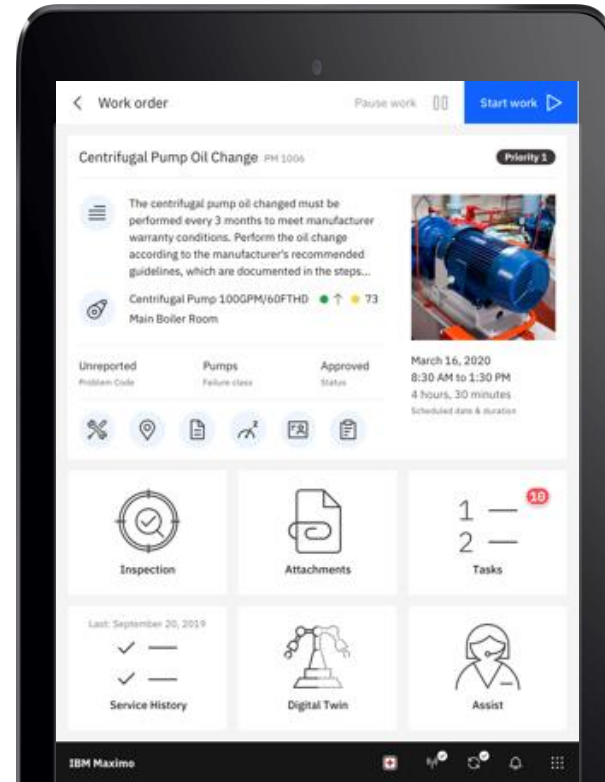


Integrated Suite of Applications



Modernized User Interface

Easy navigation, common controls and visualization



Updated Look and Feel

Manage 8.0

Updated Search Navigation

Collapsed Left side Navigation allows more screen real estate

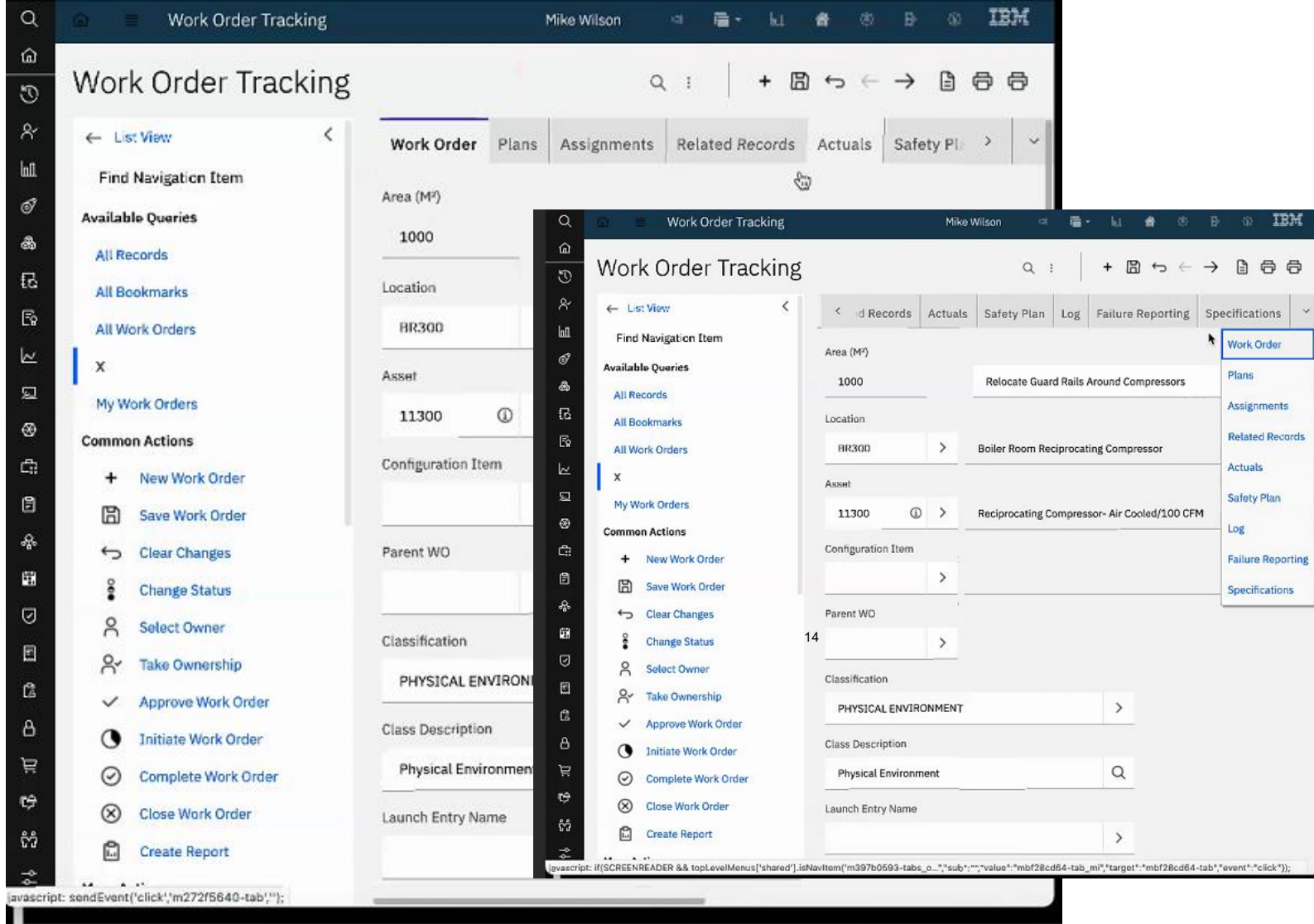
The screenshot displays the 'Work Order Tracking' application interface. On the left, a dark navigation menu is collapsed, showing a search bar and a list of categories including Start Center, Financial, IT Infrastructure, Integration, Inventory, Planning, Planning and Scheduling, Preventive Maintenance, Purchasing, Release, Security, Self Service, Service Desk, Service Level, System Configuration, Task Management, Work Orders, Work Order Tracking, Labor Reporting, Quick Reporting, Activities and Tasks, Assignment Manager, Service Requests, Conduct an Inspection, and Work Supervision. The 'Work Order Tracking' item is highlighted. The main content area shows a table of work orders with columns for Work Order ID, Description, Is Task?, Location, Asset, and Scheduled Start. A search bar at the top right contains the text 'Find Work Order'. A dropdown menu is open from the search bar, listing options: More Search Fields, Where Clause, Attribute Search, View Search Tips, Save Current Query, View/Manage Queries, and Bookmarks. The table lists 13 work orders, with the first few being: 1000 (Relocate Guard Rails Around Compressor), 1001 (12 Month Service on Shipping Dept #1 Conveyor), 1002 (Rebuild Feedwater Pump), 1003 (Check for Plumbing Problem), 1004 (Generator Overhaul), 1005 (Electric Cart Tune-Up), 1006 (Feedwater Pump Service), 1007 (Packaging Mach. Elevator & Drainpan Inspection), 1008 (Repair Damaged Conduit Feeding Generator), 1009 (12 Month Service on Shipping Dept #2 Conveyor), and 1013 (Inspect and Repair Pump as Required).

javascript: if(!SCREENREADER && topLevelM

Updated Look and Feel

Manage 8.0

Tabs 'anchored' at top of page



Updated Look and Feel

Manage 8.0

Continues to support previous features

- Application Designer
- Conditional UI

New Capabilities:

Table Window details embedded

Removed properties file options

- Skin
- Dynamicfontsize
- Vericallabels
- showOnToolbar

The screenshot displays the 'Work Order Tracking' application interface. The main view shows a work order for '1000' titled 'Relocate Guard Rails Around Compressor' at the 'BEDFORD' site. The location is 'Boiler Room Reciprocating Compressor' and the asset is '11300 Reciprocating Compressor- Air Cooled/100 CFM'. The work type is 'CM'. The status is 'NOT READY'. The interface includes a navigation menu on the left with options like 'New Work Order', 'Save Work Order', 'Clear Changes', 'Change Status', 'Select Owner', 'Take Ownership', 'Approve Work Order', 'Initiate Work Order', 'Complete Work Order', 'Close Work Order', and 'Create Report'. A table window is embedded in the center, showing asset details for '11300'.

Asset Details	
Asset	Status
11300	NOT READY
Reciprocating Compressor- Air	Primary User/Custodian
Manufacturer	--
Ingersoll-Rand Company	Type
Item	--
--	Classification
Serial Number	--
43960	Location
Asset Tag	Boiler Room Reciprocating Compressor
4286	

On the right side, there are several toggle switches for 'Inherit Status Changes?' (checked), 'Accepts Charges?' (checked), 'Under Flow Control?' (unchecked), and 'Suspend Flow Control?' (unchecked). Below these are input fields for 'Flow Action'.

Toggles instead of checkboxes

Maximo Mobile

Next Generation User Experience



1 application, 1 role-based interface



Intelligent workflows = blue button



Intelligent forms = configurability



Connected and disconnected



Trustworthiness: data quality is higher, and real-time updates



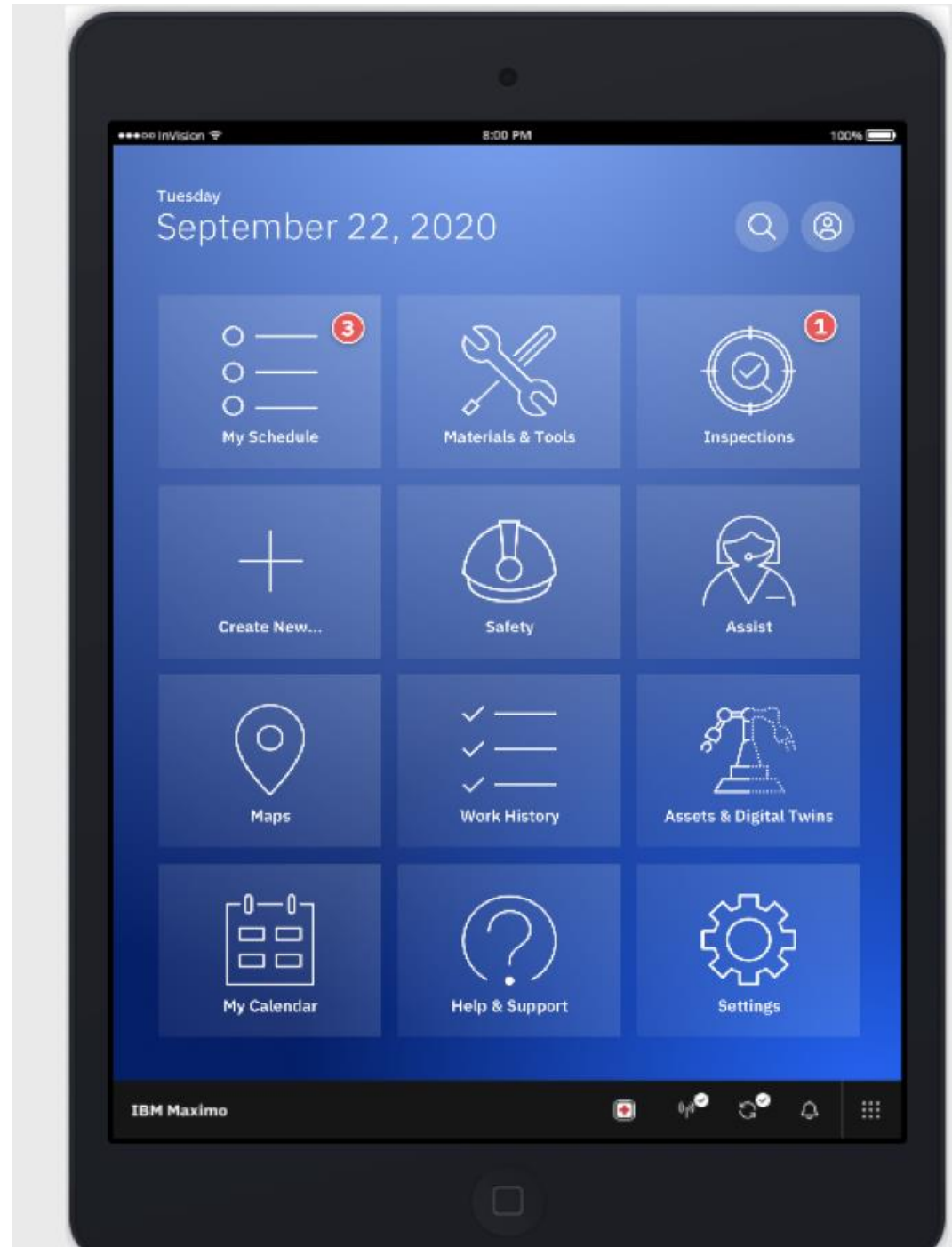
Downloadable from:



Apple
App Store



Google Play
Store



Maximo Mobile Configuration

Initial Configuration Capabilities:

- XML Editing Page
- Upgrade Tooling (XML Diff)
- Customization enablement
- Preview changes

The screenshot displays the IBM Maximo Application Configuration interface. The top navigation bar includes 'Open menu', 'IBM Maximo', and 'Application Configuration'. The main content area is titled 'Application list' and shows a table with 4 results. The table columns are 'App Name', 'Description', 'Status', 'Last update', 'Last updated by', and 'Disconnected'. The rows are:

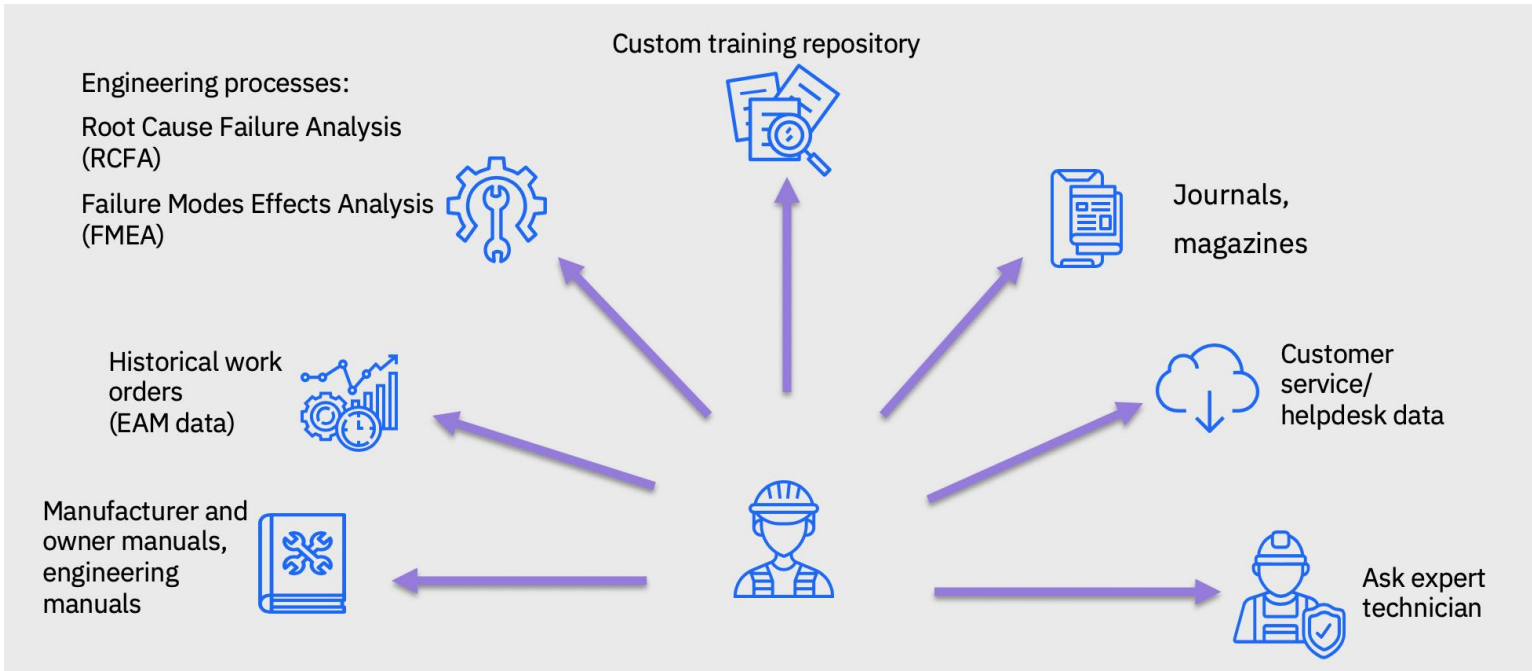
App Name	Description	Status	Last update	Last updated by	Disconnected
INSPECTION	Inspections				
MANAGE-SHELL	Manage Shell Applic...				
MAXDEMO-APP	Graphite De				
TECHMOBILE	Technician				

Below the table, there are controls for 'Items per page: 10' and '1-4 of'. An 'app.xml' file is selected in the file list on the left. The right pane shows the XML content for 'TECHMOBILE' with line numbers 4 through 23. The XML includes properties, menu items, a data source, and a schema with various attributes.`4 <property name="mxe.mobile.travel.travels" id="m424" />
5 <property name="mxe.mobile.travel.navigation" id="rrbw3"/>
6 </properties>
7 <menu slot="navigation-items" id="k9p4v">
8 <menu-item label="My Schedule Test Update" icon="maximo:schedule" page="schedule" id="w6_yq"/>
9 <menu-item label="Materials & Tools" icon="maximo:materialsandtools" page="materials" id="r9zjz"/>
10 <menu-item label="Map" icon="maximo:map" page="map" id="xb5jv"/>
11 </menu>
12 <maximo-datasource id="synonymdomainData" lookup-data="true" object-structure="mxapisynonymdomain"
13 where="domainid in ["W0STATUS","LTYPE","TIMERSTATUS"]">
14 <schema id="bn686">
15 <attribute name="value" id="xp2e9"/>
16 <attribute name="maxvalue" unique-id="true" searchable="true" id="g58pj"/>
17 <attribute name="description" id="wwzq"/>
18 <attribute name="domainid" searchable="true" id="m2ebr"/>
19 <attribute name="valueid" searchable="true" id="aakrv"/>
20 <attribute name="siteid" searchable="true" id="r27qk"/>
21 <attribute name="orgid" searchable="true" id="wz5gx"/>
22 <attribute name="defaults" id="avz96"/>
23 </schema>
</maximo-datasource>`

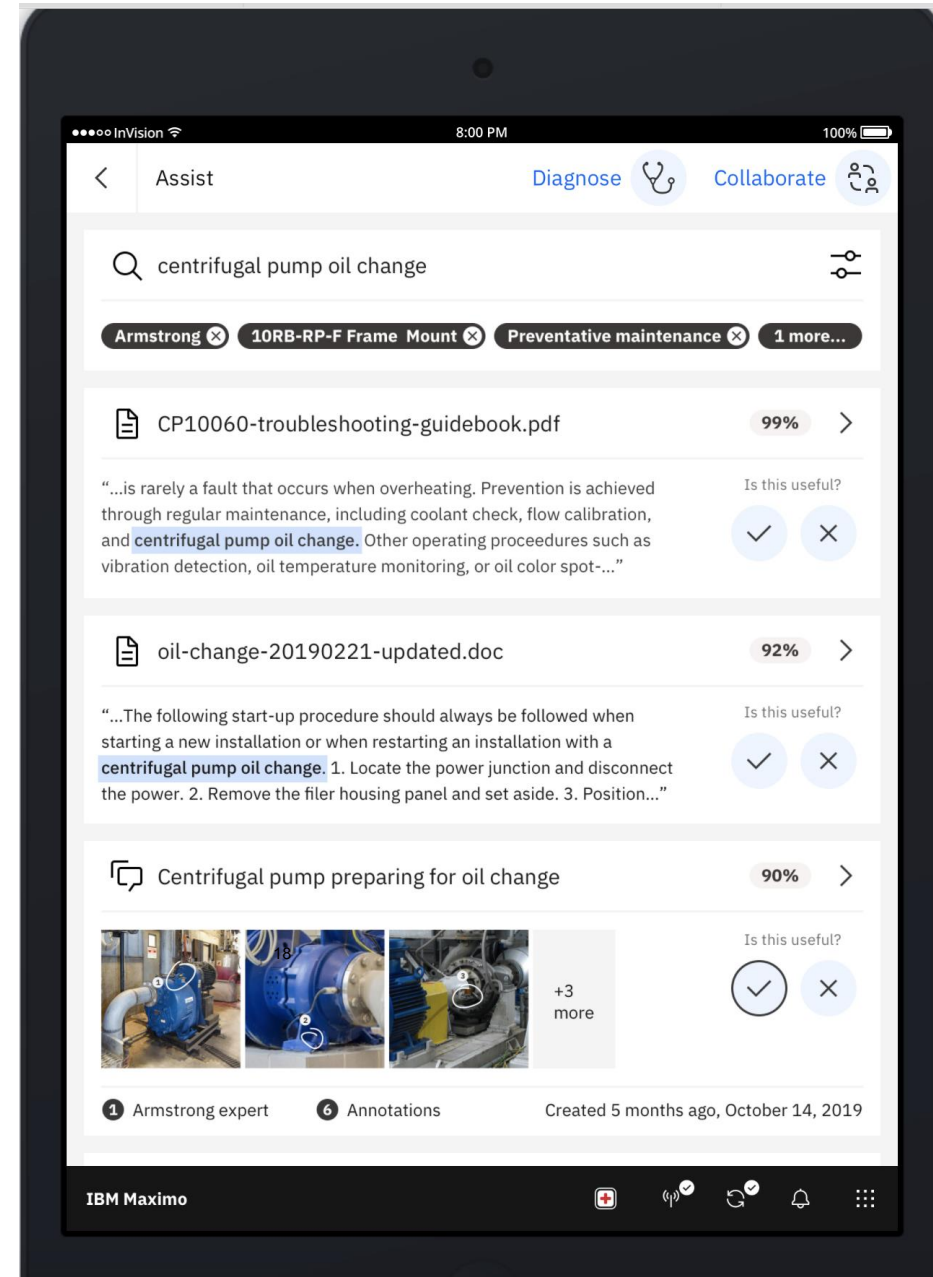
At the bottom, there are buttons for 'Save', 'Preview', 'Add customization', 'Publish', and 'Cancel'. The 'Published' status is indicated by a green checkmark.

Maximo Assist

Empower technicians to work autonomously by enabling them to obtain AI guidance whenever they need it



Benefits: Reduce mean time to repair, boost first time fix rates, improve technician productivity



Assist Remote Guidance

*for additional assistance,
whenever you need it,
wherever you need it*



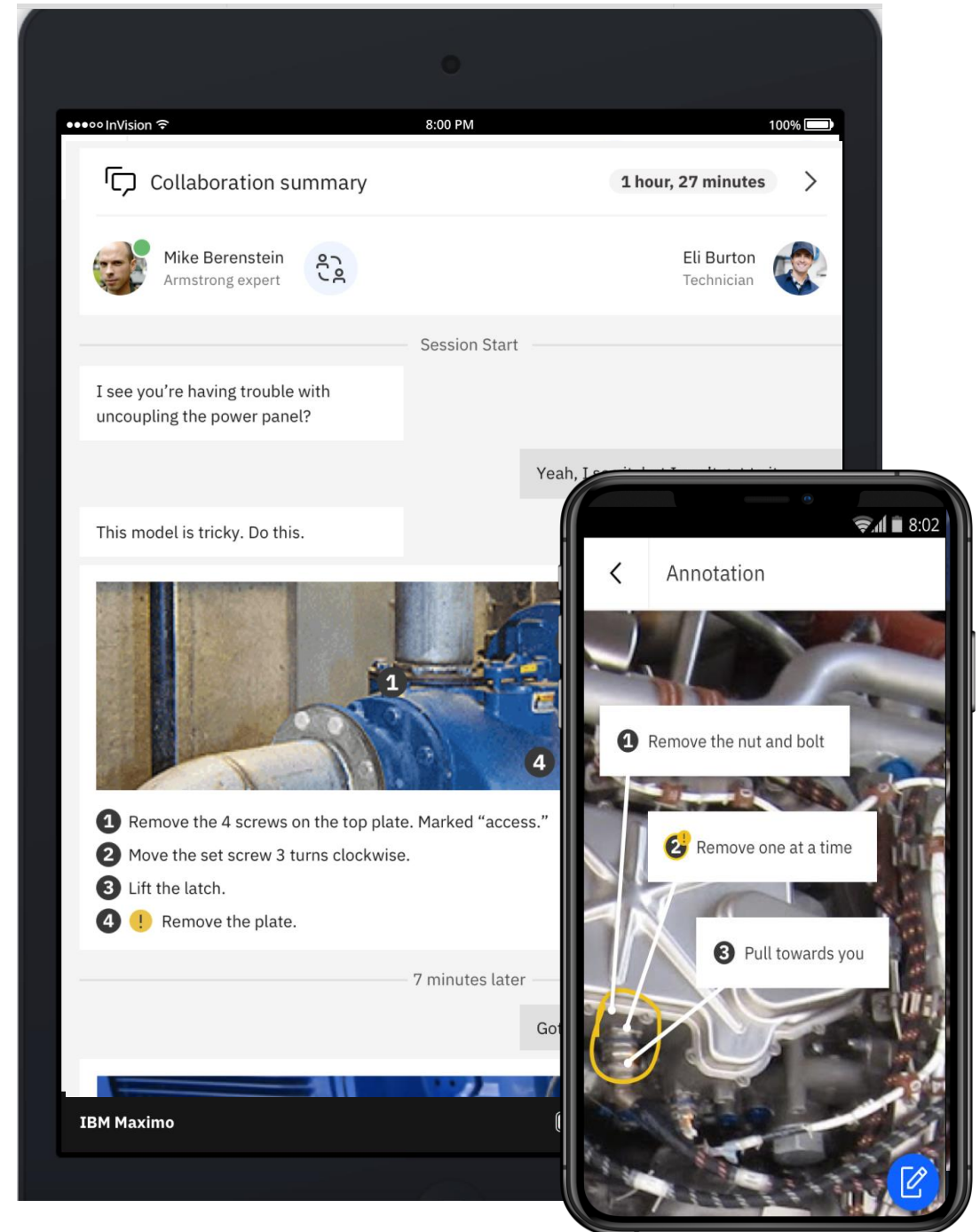
Remote Guidance session history
attached to the **Maximo work order** for
future reference and added to AI
knowledge base



Capture your expert knowledge and make
it searchable next time a similar incident
occurs



Enhance experience for new technicians
and help **every technician perform like
your best technician**



Upgrade - *What to expect from EAM MANAGE in the Suite*

OVERALL CHANGE TO EAM

DATA – No database changes & no data model changes

APPLICATIONS – Changes to authentication & user repository

INFRASTRUCTURE – Red Hat OpenShift Deployment

TECHNOLOGY MIGRATIONS

OPENSIFT OPERATORS – Install, deploy, config environment, customize deployment, upgrade

SECURITY & USER MGMT – Migrate to MAS Authentication

APP SERVER – WAS Liberty

INTEGRATION – Rest API replaces Remote Method Invocation

MESSAGE QUEUE – Kafka; JMS (MQ) BYOL

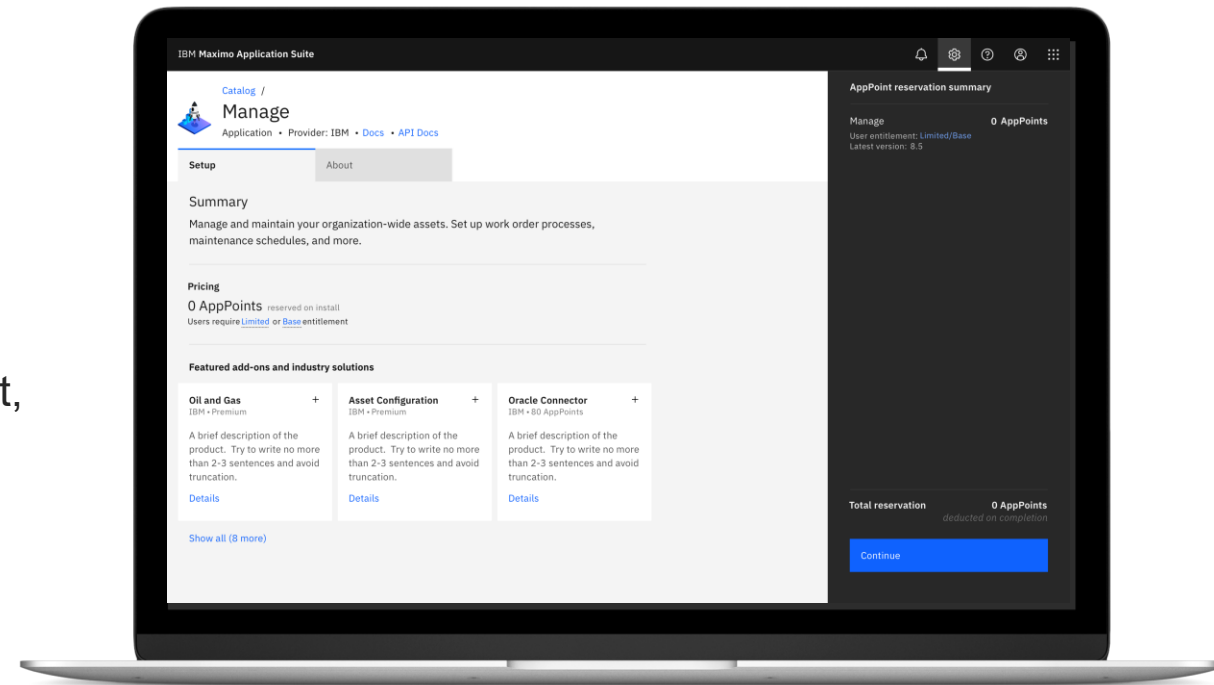
NEW OPTIONS AVAILABLE TO CLIENTS

MODERNIZED USER EXPERIENCE – Skin & Navigation

MOBILE – new Mobile experience

SERVICEABILITY – Improved logging options (Fluentd & Kibana) & monitoring options (Prometheus & Grafana)

Playbook for Maximo EAM Upgrade to Maximo Application Suite: <https://ibm-mas-manage.github.io/playbook/upgrade/overview>



Design is not final

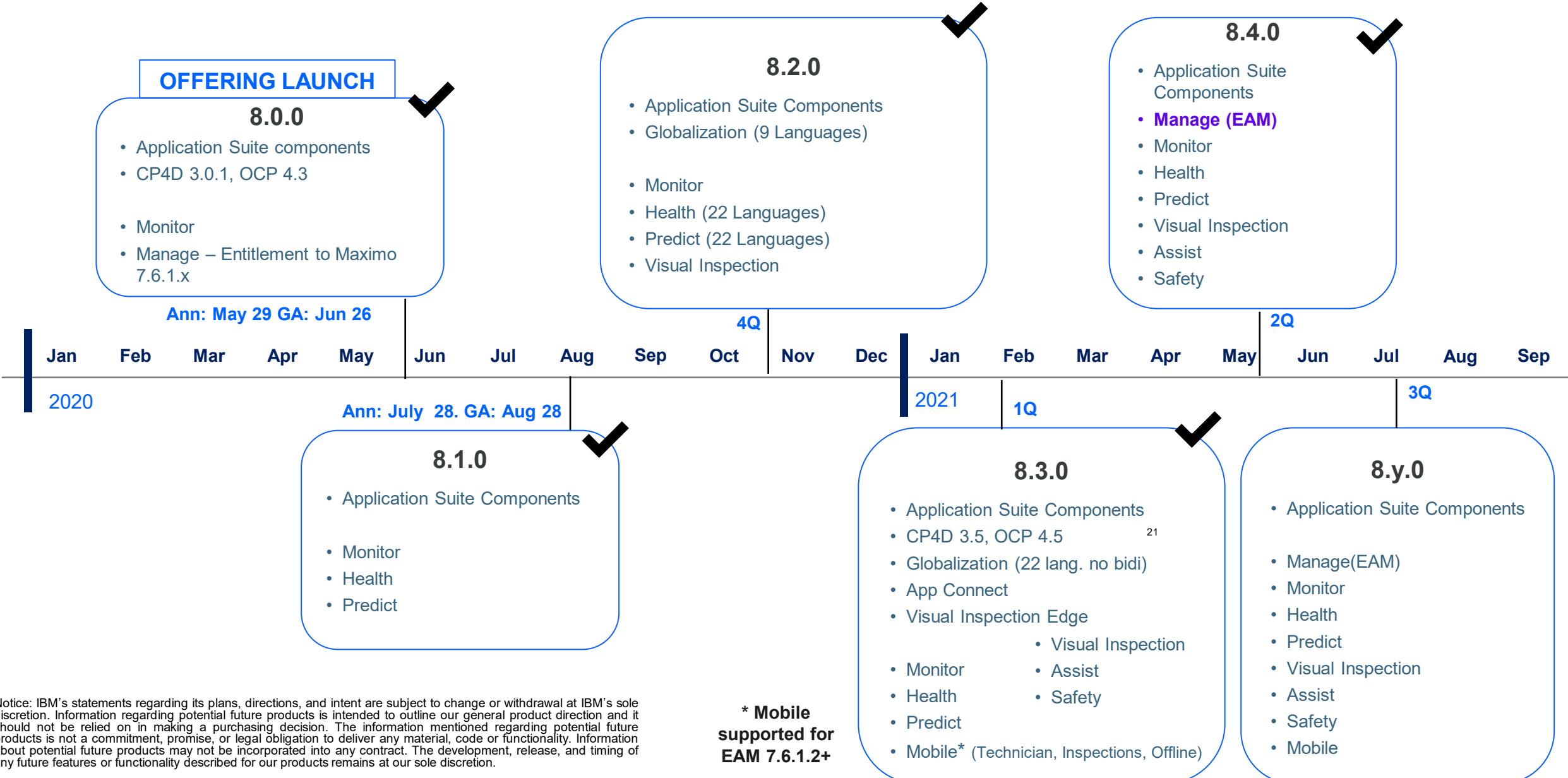
TOP DEVELOPMENT CHANGES

OPERATOR CREATION – Rewriting Install & Configuration

USER MGMT – Moving users & LDAP control to MAS

CONFIGURATION – Rebuilding delivery & deploy for MAS

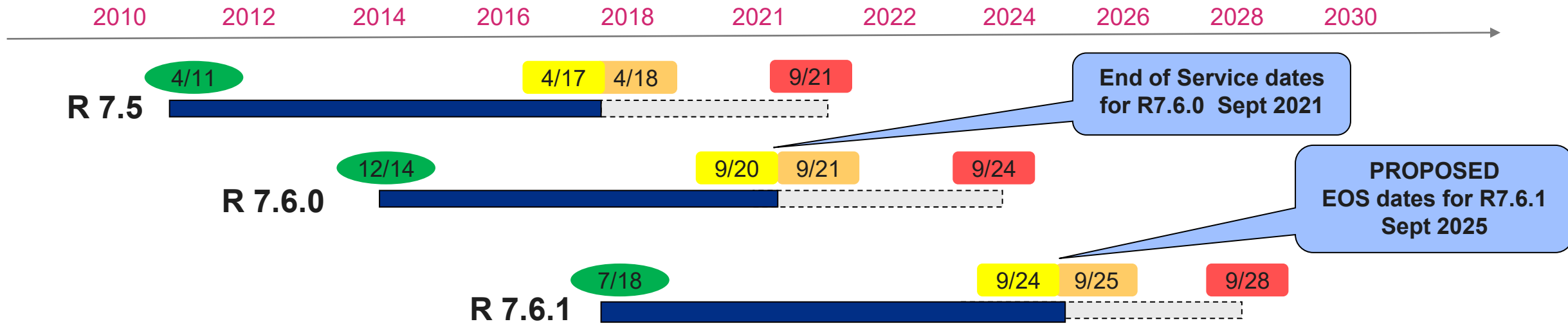
Maximo Application Suite Roadmap



Notice: IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal 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.

* Mobile supported for EAM 7.6.1.2+

7.6.0 GA Announced December 2014 – EOS effective date September 2021



End of Service dates for R7.6.0 Sept 2021

PROPOSED EOS dates for R7.6.1 Sept 2025

- Initial Release
- EOS Announce
- EOS Effective
- Extended Support Ends

On September 8, 2020, 7.6.0 end of support was announced via [IBM Announcement Letter # 920-136](#).

Notice: IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal 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.

Questions



Dave Gasdia, Program Director, Maximo
drgasdia@ibm.com

Kim Woodbury, Product Manager, Maximo
kwoodbur@us.ibm.com

Lisa Stuckless, Product Manager, Maximo
lss@ca.ibm.com

New IBM Documentation site

formerly Knowledge Center

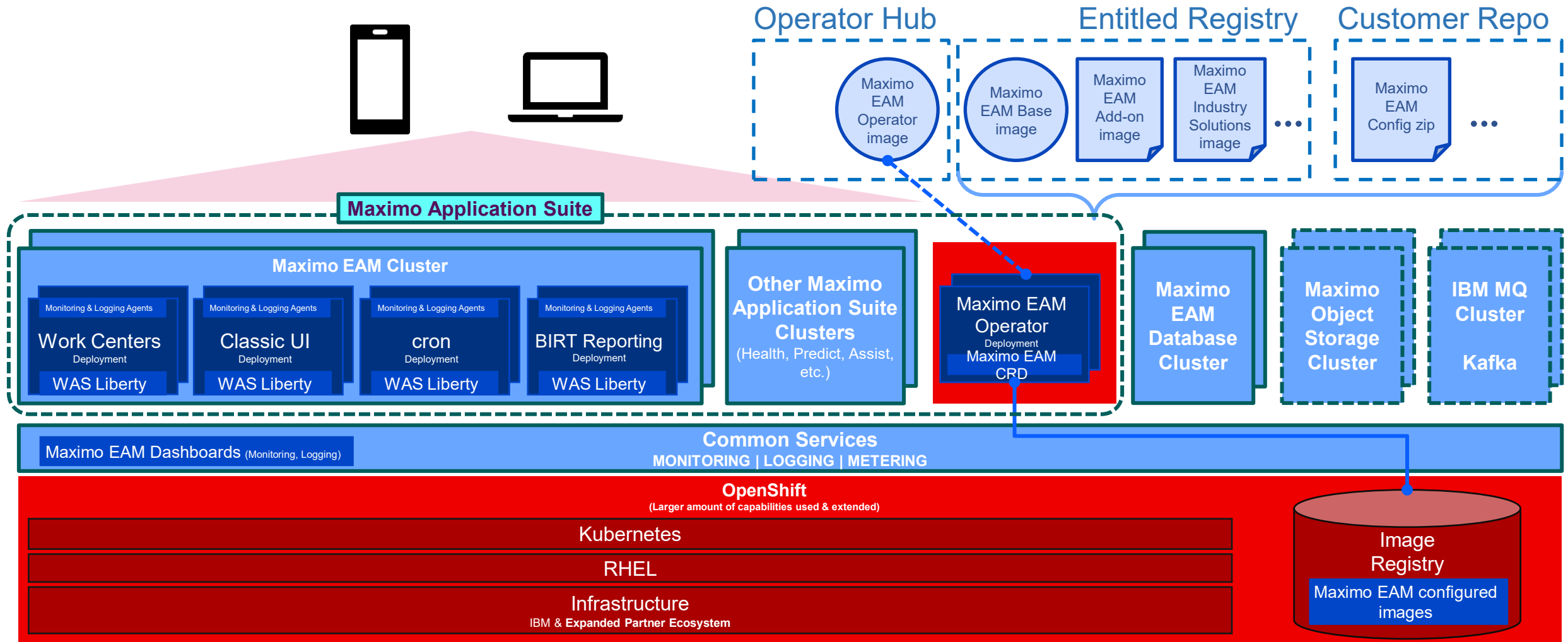
The screenshot displays the IBM Documentation website interface. At the top, the IBM logo and 'Documentation' text are visible. The main header area features the text 'IBM Maximo Application Suite / IBM Maximo Application Suite documentation' and a 'Change product' link. Below this, a large blue banner contains an isometric illustration of a server stack and network components. A horizontal navigation bar below the banner lists 'IBM Maximo Application Suite 8.2', 'IBM Maximo Application Suite 8.1', and 'IBM Maximo Application Suite 8.0'. The main content area is titled 'Maximo Asset Management 7.6.1.2' and includes a 'Trending documentation' section with three blue tiles: 'Getting started with Maximo Asset Management', 'Installing Maximo Asset Management 7.6.1.2', and a third tile with a bug icon. A left sidebar provides navigation options for 'Maximo Asset Management', including a version selector (7.6.1.2) and a table of contents.

<https://www.ibm.com/docs/en>

New name: IBM Knowledge Center is now IBM Documentation

Close

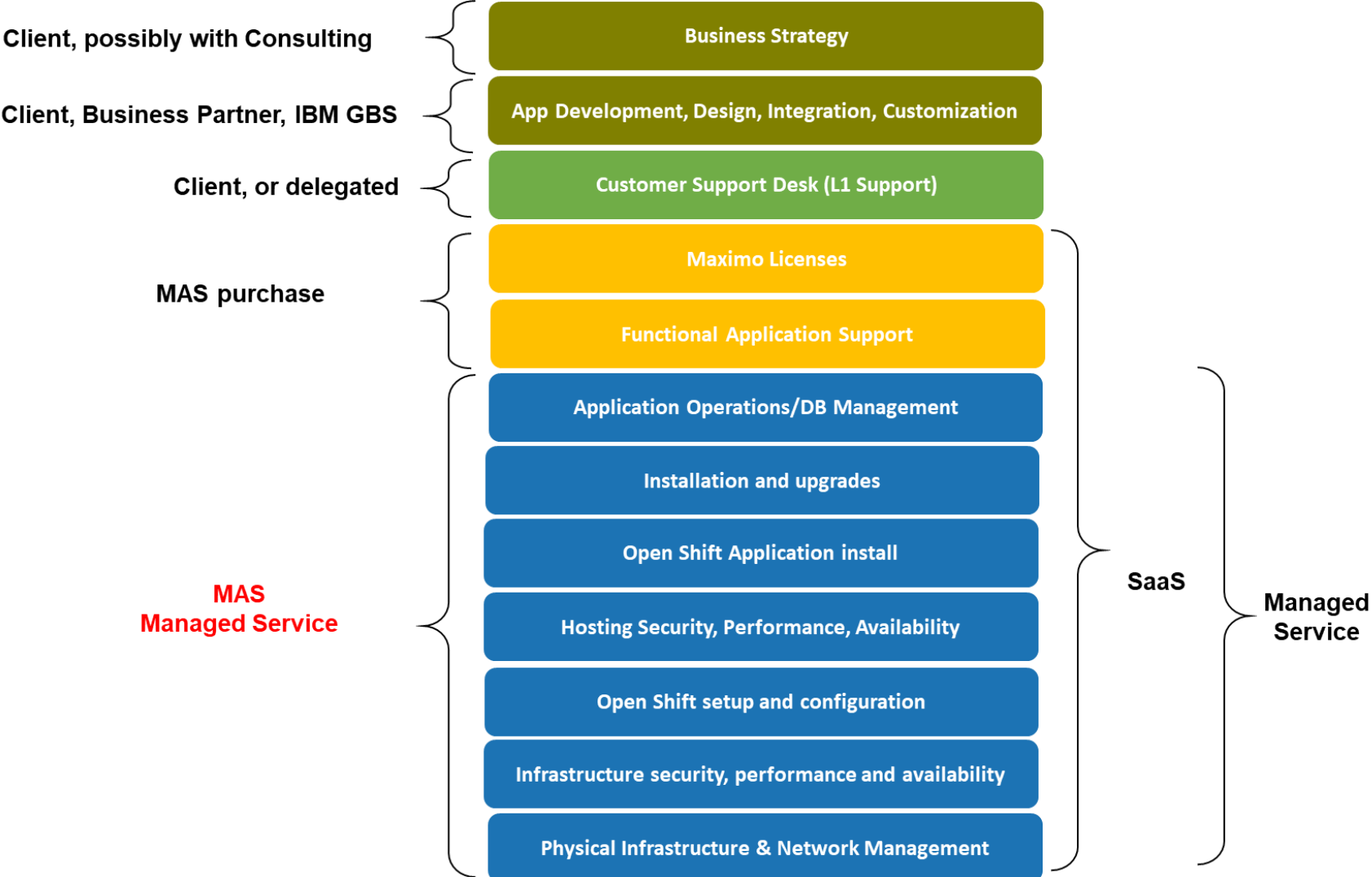
Maximo EAM (Manage) in Maximo Application Suite on OCP



IBM MAS Managed Service



- **Provision:** Create instances in IBM Cloud with OpenShift Cluster
- **Installation:** Install MAS
- **Security/privacy/compliance**
- **Configuration:** Configure system, services & applications
- **Monitor:** Continuous monitoring of performance and security
- **Upgrade:** Patch fixes and upgrades
- **Backup & recovery:** Daily backup & DR support
- **Availability:** 99.9% Availability SLA



Monitor

Monitoring with AI-based Anomaly Detection at Enterprise-Scale



Solution

- Enterprise scale Monitoring
- AI-based anomaly detection
- KPI/rules and custom models



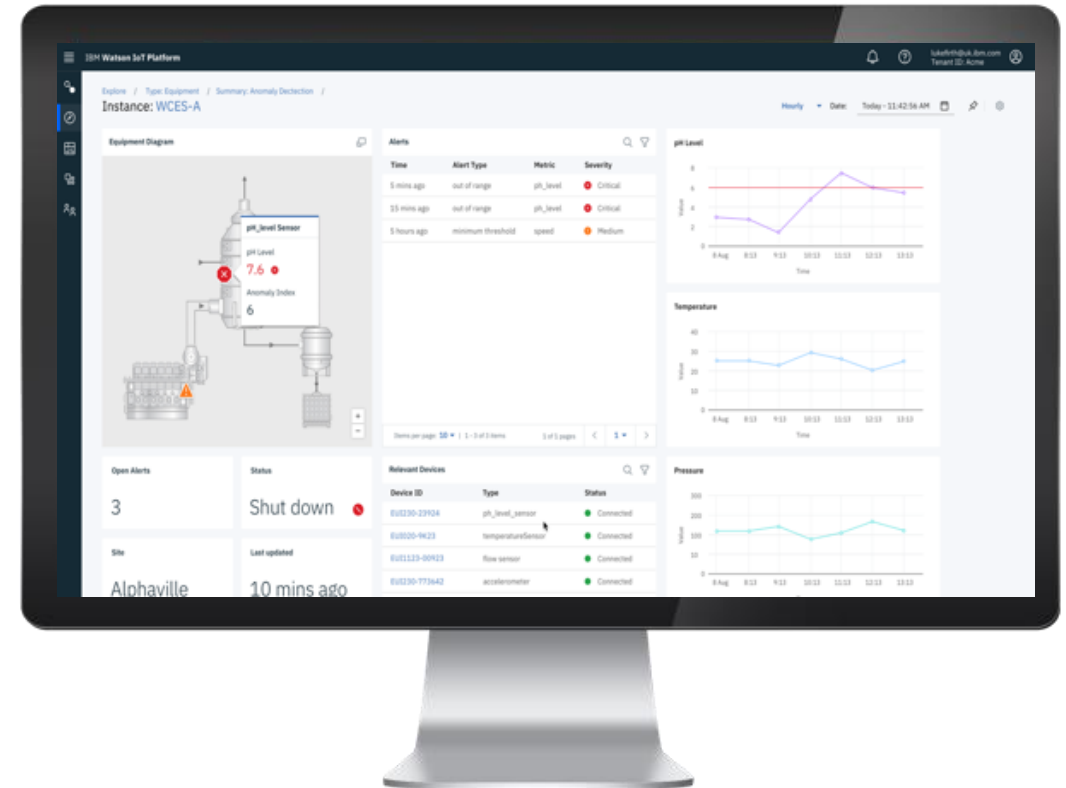
Capabilities

- Easily Configurable dashboard: No-code widgets
- Enterprise wide view of operation
- Workflow to drive ownership of issues
- Auto-generation of work orders
- Rapid data integration
- Scalable dashboard filtering and management



Business Value

- Reduce unplanned downtime
- Shorten duration of outages
- Increase production output
- Decrease wasted time investigating false-positive alerts



Health

IBM Maximo APM - Asset Health Insights



Solution

- Consolidated global view of assets
- Health Visibility and Analysis
- Condition based actions
- Replacement Planning



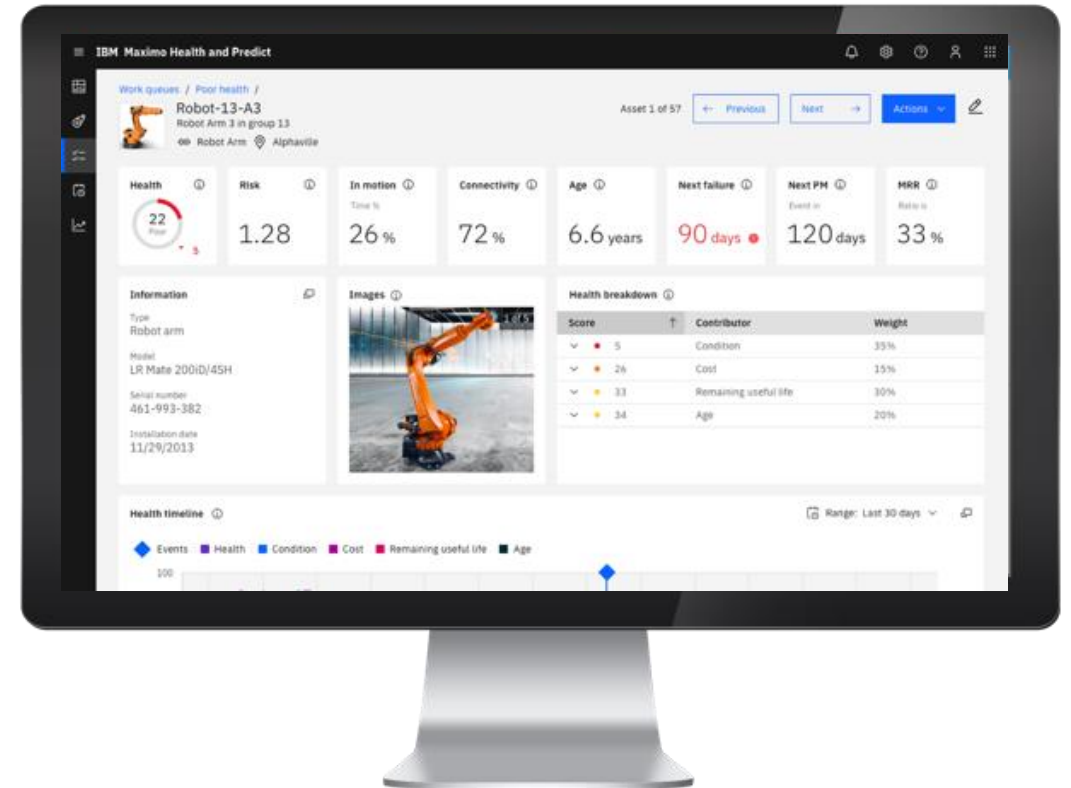
Capabilities

- Dashboard with cards, map view, spreadsheet view
- Fleet-wide view and health drilldown
- Health based notifications and actions
- Flexible health scoring by asset type or groups
- Sensor data integration
- Job plan efficacy analysis
- Refurbish / replace prioritization



Benefits

- Reduce fleetwide operational risk by focusing on the right assets
- Increase asset availability
- Reduce unnecessary preventive maintenance
- Reduce time to make capital replacement planning decisions



Predict

IBM Maximo APM - Predictive Maintenance Insights



Solution

- Build asset failure models
- Predict failures
- Determine factors that contribute to failure
- Incorporate sensor data into models



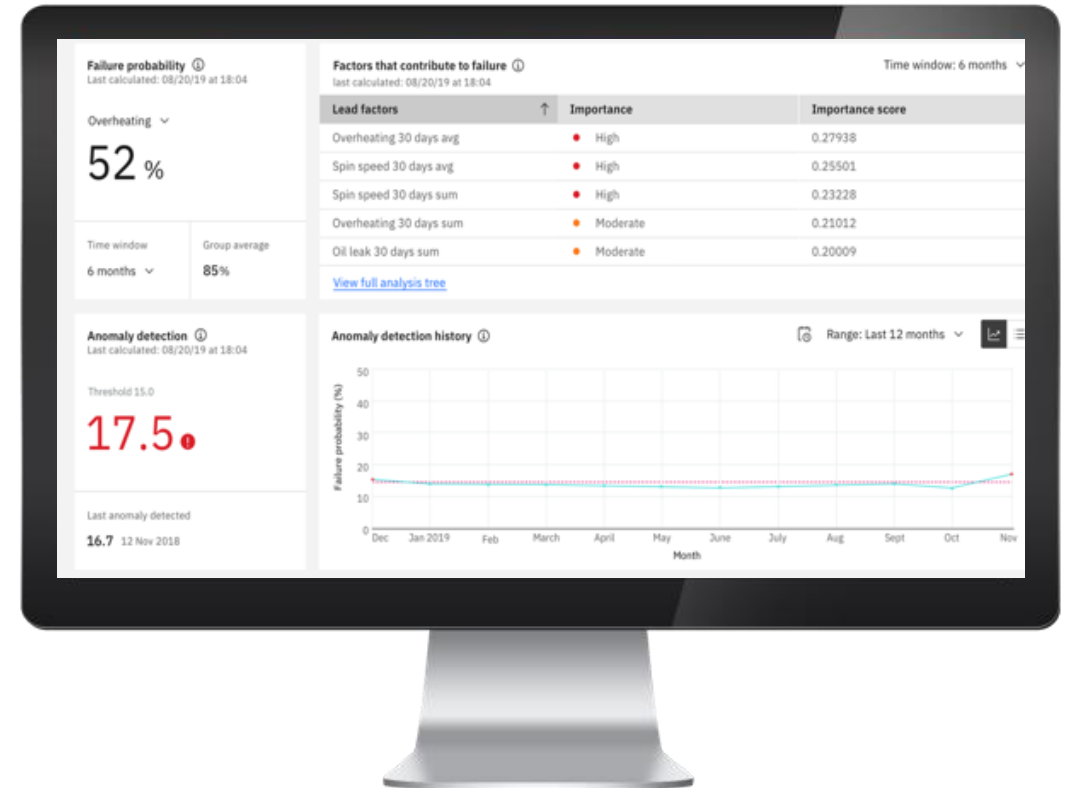
Capabilities

- Templates provided to build common predictive models
- Score predictive models using Watson ML
- View pre-built visualizations
- Workflow for managing assets
- Work queues for managing and tracking actions



Benefits

- Reduced failures
- Reduced maintenance costs
- Improved asset utilization
- Extended life of asset
- Increased production output



Visual Inspection

Point and Click AI Solution

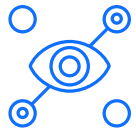
Key Benefit



Time to Value
– Fast, Easy, Accurate



Detect and Correct
– At The Point of Installation



Asset Maintenance
– AI Powered Insights



Empower Subject Matter Experts
– AI Technology

IBM Maximo Application Suite | Visual Inspection | Data sets | Models | Custom assets | Deployed models | Projects | adminuser

Welcome to IBM Maximo Visual Inspection

- Create data set**
Start by adding images and video files to a data set.
- Prepare data**
Label objects in images and video frames, then use auto labeling to finish adding labels to the whole data set; assign categories to images or videos, or label actions in videos.
- Train model**
Select a few custom options to create your model.
- Deploy model**
Deploy the trained model and receive an API link for an inference device.

[Get started](#)

Now Available on Maximo Application Suite

Safety



Business Value

- Avoidance of injury claims
- Reduced Workforce disruption
- Compliance of worksite safety plan
- Increased employee availability



Application

- Analytics solution for workplace safety utilizing IoT devices
- Contextual incident detection (event and measurement data captured and processed in near real-time)
- Safety abnormalities leveraging Edge enabled Event Action Engine



Capabilities

- Mobile App and Dashboards for Worker, Supervisor, Safety Officer
- Pre-integrated devices for key use cases
- Pre-build analytics (KPIs) to determine safety events
- Pre-integration with Maximo HSE, Incident Management
- Flexible integration with 3rd party systems of engagement

