Maximo to MAS Upgrade

- Key Roles and Responsibilities





Saurabh Gupta

Sustainability Senior Solution Architect saurabh.gupta@ibm.com

June, 2024

Please note

- 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.

- 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.

Agenda

- ✓ Maximo Application Suite Introduction Why Modernize?
- ✓ Path and benefits to application Modernization
- √ Key skills, roles and activities for MAS modernization
- ✓ MAS Modernization DOI Bureaus
- ✓ IBM Expert Labs ecosystem and offerings for MAS modernization

slido

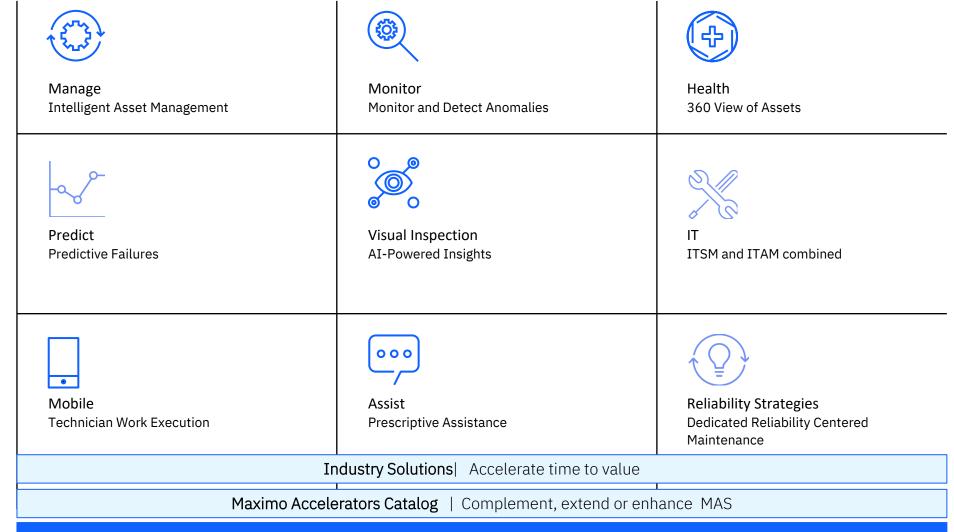


What level of experience and skills do you have with running Red Hat OpenShift

Maximo Application Suite

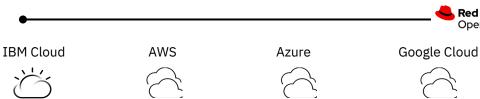
Best-of-class capabilities to provide complete view of your assets addressing the needs of key personas in your organization.

- **Technicians**
- Technician Supervisor
- Asset Maintenance Manager
- Plant Manager
- Fleet Manager
- **Operations Manager**
- Reliability Engineer
- **Quality Manager**
- Planners / Schedulers
- Dispatchers
- Purchasing Managers



IBM Cloud Pak for Data | Watson Studio | Watson ML | Watson Discovery | Watson Assistant | App Connect | Cognos Analytics

Red Hat OpenShift





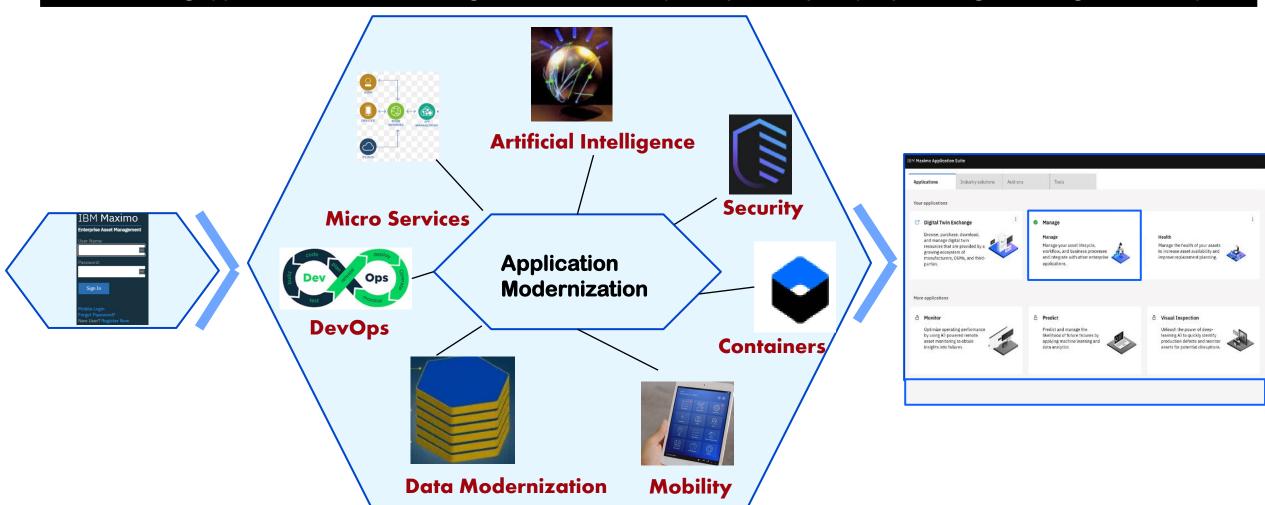
Infrastructure Independent

Common Operating Environment



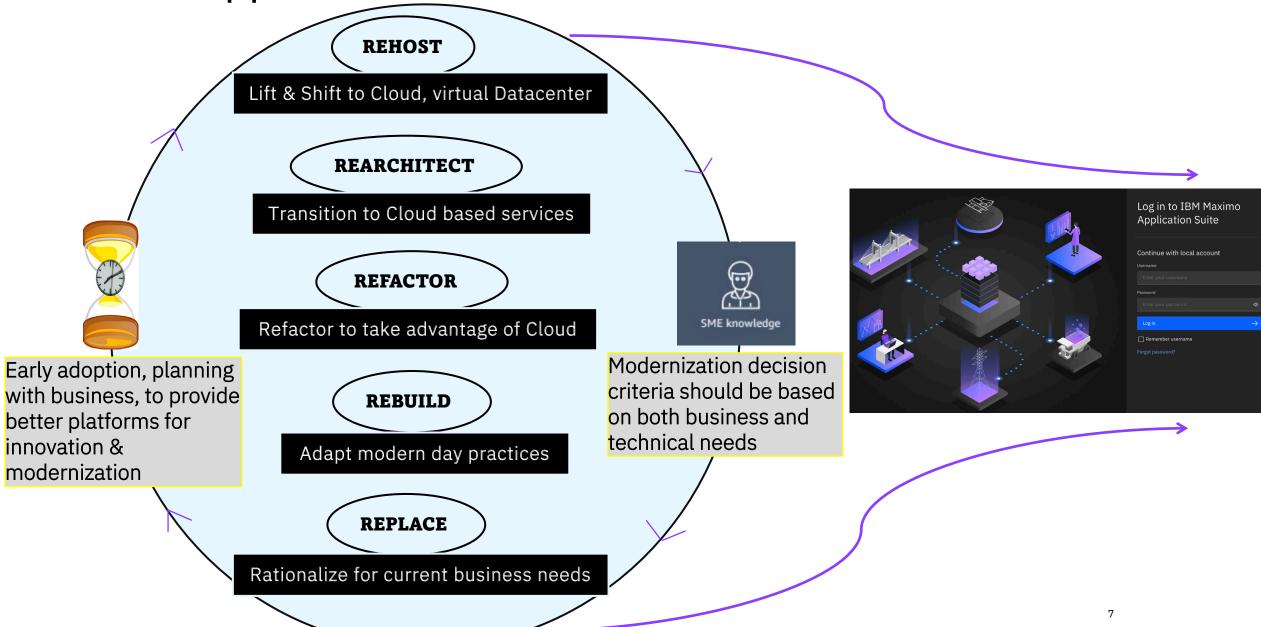
Benefits of application Modernization

Modernizing applications offers several significant benefits, especially in today's rapidly evolving technological landscape



In summary, application modernization can bring numerous benefits across performance, security, cost efficiency, user experience, and overall business agility, making it a strategic investment for many organizations.

5-R's of Application Modernization



slido

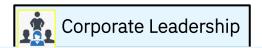


Have you considered SaaS hosting option?

MAS Deployment Options

Deployment	Availability	Procure	Provision & Operate	Client Benefits
On Premise Customer Managed	Now	Client purchases MAS from IBM Client provides infrastructure	Client provisions, manages, and operates full stack	Maximum operational flexibility
Hyperscalers Customer Managed	Now AWS Azure Now AWS Azure	BYOL Client purchases software from IBM and infrastructure from Hyperscalers Paid (Marketplace listing) Client purchases software and infrastructure from Hyperscalers	Client runs IBM-provided automation scripts to deploy MAS on Hyperscalers' cloud Client manages and operates both software and infrastructure	 Simplifies procurement and deployment Allows client to select their Hyperscalers Flexibility for clients to manage and operate their environment
SaaS Editions IBM Managed	Now	Client purchase single part (includes software, infrastructure, and operations) from either std IBM sales/channels or AWS Marketplace Essentials Standard Premium	IBM provisions, manages, and operates Client's MAS environment on AWS Cloud using IBM's AWS cloud account Provides a base implementation of Manage or MVI. Limited configuration. Provides full MAS Capability, with limited options and operational options Full MAS with more flexibility.	Reduced time-to-value Reduced operational costs Allows clients to focus on business priorities Entry Level for small implementations. Targeted at most clients requiring MAS and wanting to focus on standard capabilities. For clients wanting more operational features and flexibility.

Key Roles / Skills for MAS Modernization

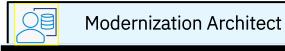


Executive Sponsor, as well as other leaders such as CIO





Project Success leader, goal setter, tracks budget and timelines

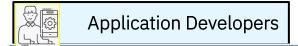


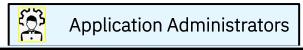


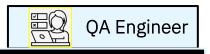
Functional (asset & process), Technical, Integration, Cloud Architects

Q: How do you find the talent you need???

A: Access the skillset available in-house, upskill through training, hire consultants







slido

Please download and install the Slido app on all computers you use





Have you indentified resources (financial, technical, human) required for successful application modernization?

(i) Start presenting to display the poll results on this slide.

MAS Modernization - IBM and DOI



- DOI is a long time Maximo customer. 6 Bureaus and hundreds of users leverage Maximo today
- DOI upgraded their Active Maximo tokens to MAS App Points in 2022
- DOI is "Dual Entitled" to use MAS 8 and Max 7.6.1.x.
- DOI also secured IBM Expert Labs to assist them with the upgrade from 761X to MAS
- The IBM Maximo sales team and various Bureaus at DOI meet weekly to
 - Help plan and support MAS pilot activities
 - Answer Maximo/MAS questions
 - Resolve issues and escalate cases
 - Demo new MAS capabilities

IBM Expert Labs is supporting an initial pilot around the MAS 8/9 install and upgrade process.

- Develop a 'runbook' that creates a streamlined path for success based on individual Bureau needs, architecture and lessons learn from the pilot
- Different Maximo user groups across DOI Bureaus are shadowing to learn and gain experience with MAS
- The focus is on the upgrade to MAS Manage, also help Bureaus across DOI to evaluate Maximo Mobile, MAS
 Monitor and Health during their initial testing

Bureau of Land Management (BLM)
Bureau of Reclamation (BoR)
Bureau of Indian Affairs (BIA)
U.S. Fish and Wildlife Service (FWS)
National Park Service (NPS)
U.S. Geological Survey (USGS)

Expert Labs ecosystem / customers for MAS modernization

MAS transforming industries

Automotive – Maximo Visual Inspection, Manage

Energy & Utilities – Manage with Industry Solutions, Monitor, Health and Predict.

Government – Manage with Mobility solution

Life Sciences – Manage with Industry Solution and Mobility Solution, Maximo Visual Inspection

Travel and Transportation – Manage with Industry Solutions, Maximo Visual Inspection

Oil and Gas – Maximo Visual Inspection, Manage with Industry Solution and Mobility Solution

Aviation – Monitor, Predict, Manage & Health



EAM Technical Assessment: Overview IBM Expert Labs

Technical Assessment for MAXIMO /SaaS Flex upgrade and migration to MAS Managed Services

Key Activities:

- Focus on application layout and technical configurations using the IBM Maximo Sizing questionnaire as a starting point
- Identify areas of impact for upgrade and migration to MAS Managed Services
- Assess data structure
- Identify customizations and assess the gap from leveraging the out of the box adapters

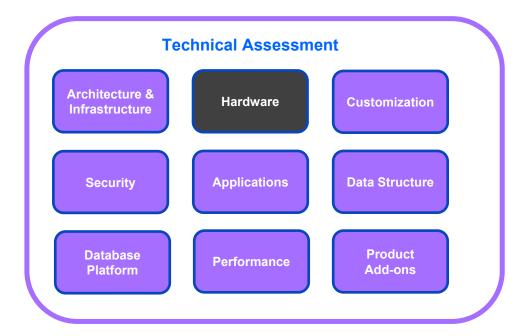
Expected Outcome:

 Maximo Technical Upgrade Assessment document containing tailored recommendations and a journey map for the upgrade

Duration:

■ 5-7 weeks

Maximo Assessment Components



IBM Sustainability Software / © 2024 IBM Corporation

Assessment & Planning results

Assessment results are shared with the customer as a journey map to prepare them for their migration. Key elements of the assessment result report are:

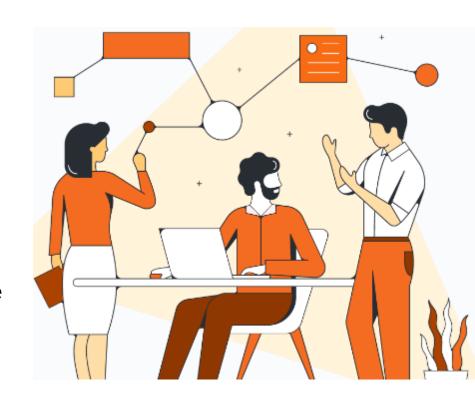
- Area of Maximo functions that classified as **major**, **minor or no changes** required for migration and complexity is assessed based on used techniques, large workloads and number of users.
 - <u>Application-level changes</u> -: Java classes and UI changes for Custom and Cloned application. Any new java classes extensions and UI changes in OOB applications.
 - <u>Integrations</u> It includes End points, Exit classes, data manipulation techniques and methods used while integrate with External applications like XSL mapping, batch scripts, style sheet, data control and schedule tasks etc.
 - <u>Message bus system and Doclinks</u> In MAS JMS and Kafka are available to leverage. Doclinks migration strategy depends on existing implementation.



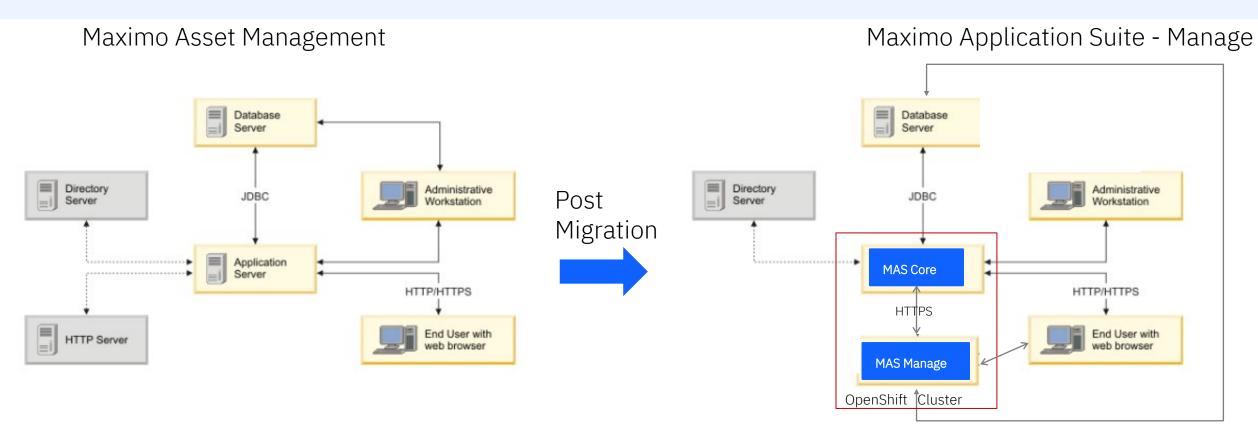
Assessment & Planning results...contd.

Assessment results are shared with the customer as a journey map to prepare them for their migration. Key elements of the assessment result report are:

- Area of Maximo functions that classified as **major**, **minor** or **no** changes required for migration and complexity is assessed based on used techniques, large workloads and number of users.
 - <u>System Arch, Security, Users</u> Number of VMs and JVM heap size to size the DEV,TEST,PROD MAS env. Number of users and how they are authenticated and authorized/
- Area of Maximo functions that require post migration enhancement.
 - Call out the functions that would and won't be migrated even after the post migration exercise
 - Recommendation, alternatives for functions that are too complex or not possible to migrate
- Guidelines and product documentation links to refer during migration for awareness and future troubleshooting



System architecture and components – Maximo and MAS Manage



- Administration Workstation Installs OpenShift Cluster , MAS using ansible scripts
- MAS Core has pods that connects to Directory Server and Database Server. MAS core has configurations to store the user and database info
- MAS Manage has pods that connects to Database Server for migration and data access
- End User connects via OpenShift load balancer to MAS Core and MAS Manage

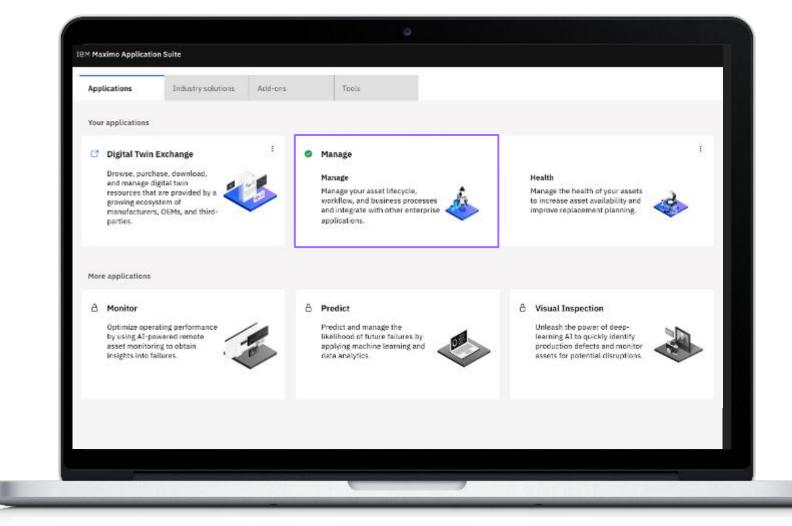
Questions?



Upgrade to Manage in the Suite

Manage in the Suite

- New installation process at the MAS level
- Deployed on Red Hat OpenShift Container Platform (OCP)
- Authentication and User Management moved to the MAS level
- Modernized user experience to align with rest of the Suite
- Improved serviceability for monitor and logging options



Documentation for Maximo EAM Upgrade to Maximo Application Suite:

https://www.ibm.com/docs/en/maximo-manage/continuous-delivery?topic=upgrading-from-maximo-enterprise-asset-management-maximo-manage