SouthWest Maximo Users Group (SWMUG) 2025 Workshop

Redefining App Modernization and User Experience

Saurabh Gupta Senior Solutions Architect, Technology Expert Labs IBM

Hybrid Cloud Revolution:

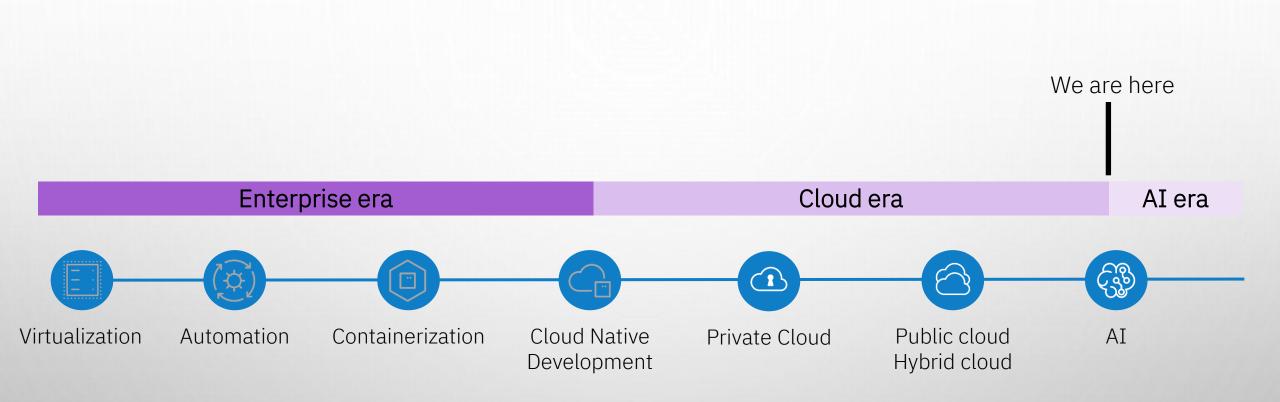






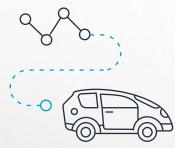
- AI AND DIGITAL REINVENTION
- CHALLENGES TO OVERCOME
- OPENSHIFT AND AUTOMATION BENEFITS
- TRANSFORMING MAXIMO WITH HYBRID CLOUD: IMPACTS ON DEVELOPER WORKFLOWS
- MAS MANAGE ON OCP

Al is the next evolution of what came before

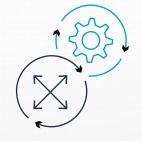


A digital re-invention is disrupting the operating model of asset intensive industries





Equipment is connected and can predict its own failures Artificial Intelligence (AI) is changing the driving experience



Airports are becoming automated







Assets are more complex driving engineering complexity

The underlying solutions supporting these assets must change

Business outcomes are coupled to technical challenges

APPLICATION MODERNIZATION

- IMPROVE CUSTOMER EXPERIENCE (PERFORMANCE/SCALABILITY)
- DEPLOY NEW FUNCTIONALITY (FASTER)
- TAKE ADVANTAGE OF NEW TECHNOLOGIES

APPLICATION RESILIENCE

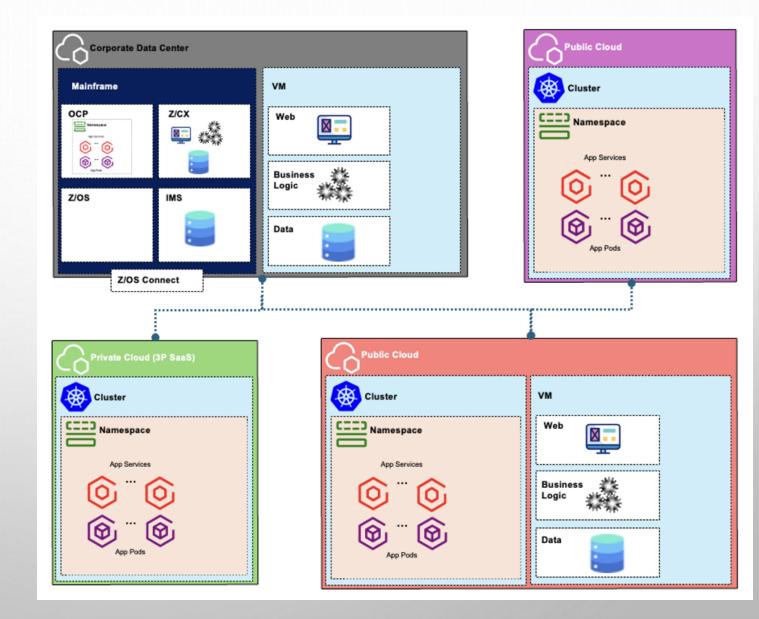
- IMPROVE UPTIME
- LOWERING COST, COMPLEXITY, AND OVERHEAD

APPLICATION MOBILITY

- AVOID VENDOR LOCK-IN
- TAKE ADVANTAGE OF UNIQUE VENDOR FEATURES

APPLICATION MIGRATION

- RETIRE LEGACY SYSTEMS
- UPGRADES
- REVERSE CLOUD MIGRATION



Open Hybrid Cloud, with Red Hat OpenShift and Ansible, enabling Business Value Anywhere, with AI and Automation

Any Cloud

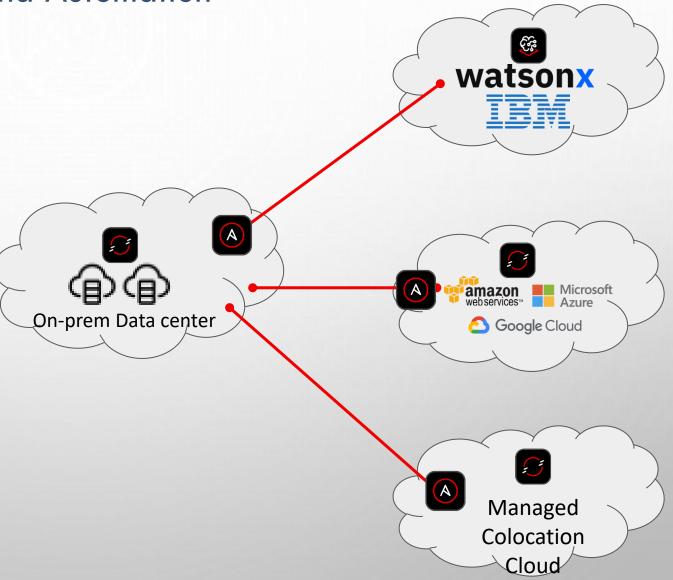
Enable consistent application, operations and security experience across any cloud and any IBM hardware platforms with OpenShift and Ansible.

Al

Enable AI for applications with WatsonX using natural language for insights and actions. Scale with multi-modal foundation models: Language, Vision, Time-series

Automation

Enable automation for cost savings, improved security and improved availability across infrastructure and applications with Ansible.



Hybrid Cloud Solution - Maximo application Suite

Modernize & migrate applications with AI

Modernize and containerize legacy applications and accelerate the time-tovalue of hybrid cloud environments.



Leverage an AI-ready infrastructure

Servers, storage and software designed to run mission-critical apps with resiliency, security and performance.



Enable an open hybrid cloud to run AI anywhere

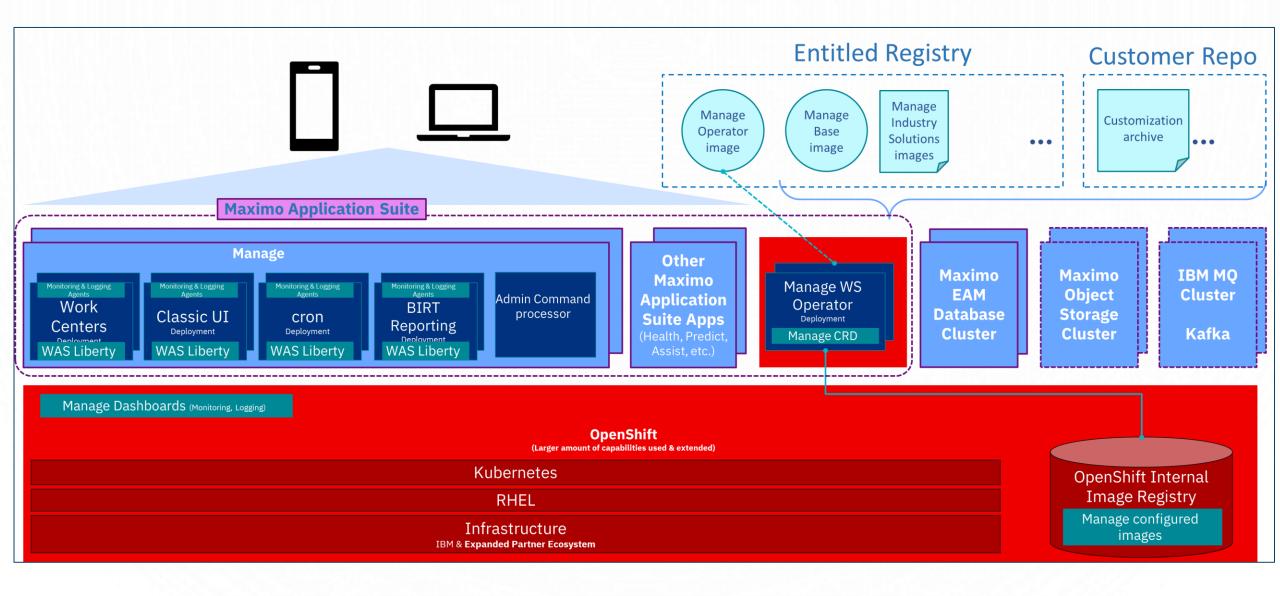
Adopt platform-centric approach for your AI investments to scale with security and consistency.



Harness the full power of Linux®

Run Linux on IBM servers to bring a new level of reliability, security and scalability to your business-critical workloads.

MAS Manage on OCP



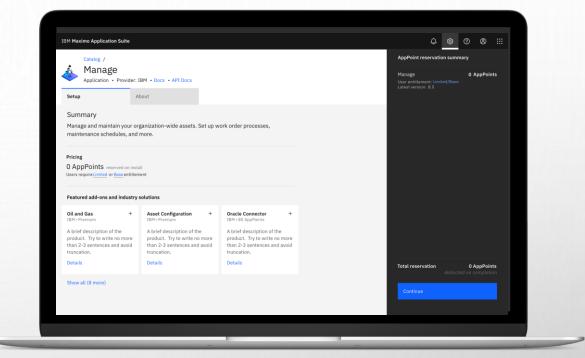
OVERVIEW: EAM to MANAGE

OVERALL CHANGE TO EAM

DATA – No data model changes
APPLICATIONS – Changes to authentication & user management
INFRASTRUCTURE – Red Hat OpenShift Deployment

MAJOR TECHNOLOGY MIGRATIONS NEEDED

OPENSHIFT OPERATORS – Install, deploy, config environment, customize deployment, upgrade
SECURITY & USER MGMT – SAML (single sign-on) support
APP SERVER – WAS Liberty instead of WAS ND & WebLogic
INTEGRATION – Rest API replaces Remote Method Invocation
MESSAGE QUEUE – Kafka; JMS (MQ) BYOL



Design is not final

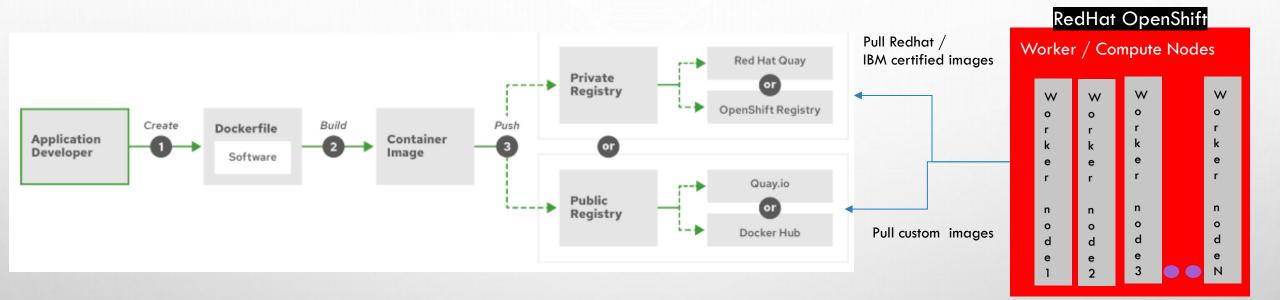
NEW OPTIONS AVAILABLE TO CLIENTS

MODERNIZED USER EXPERIENCE – Skin & Navigation MOBILE – new Mobile experience SERVICEABILITY – Improved logging options (Elasticsearch, Fluentd & Kibana) & monitoring options (Prometheus & Grafana)

TOP DEVELOPMENT CHANGES

OPERATOR CREATION – Rewriting Install & Configuration USER MGMT – SCIM integration to support enterprise user schema CONFIGURATION – Rebuilding delivery & deploy for MAS

Understanding OpenShift Container Platform development



- Developing containerized applications
- ✓ Building a simple container
- ✓ Create Kubernetes manifest for OCP
- ✓ Develop Operators

