



IBM Think 2019 Session 3969

Cloud-Native Master Data Management Collaborative Edition

A Case Study

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Agenda

IBM MDM CE - Snapshot

IBM's Vision of Modern MDM

Need for containerization of MDM CE

The Garage

Accomplishments & Challenges

Demo

Next steps

IBM MDM CE - Snapshot

- Adaptive Data Model**

First Data Model Driven Solution to Market with Integrated Business and Administrative UI

- Full Integrated Workflow**

Parallel Processing, Escalation, Role based Access and Attribute Level Security

- Open Integration**

Batch, Real Time, Near Real time Marketplace Connectors – Amazon, Google, Magento etc.

- Scalability and Experience**

50 million Items, 200+ Customers, Industry and Implementation Knowledge Going Back 15+ years

- Multi-Entity Capability**

Support for Entities Other than Product (Vendor, Locations Bill of Material etc.)

- Out-of-the-Box Components at no Additional Charge**

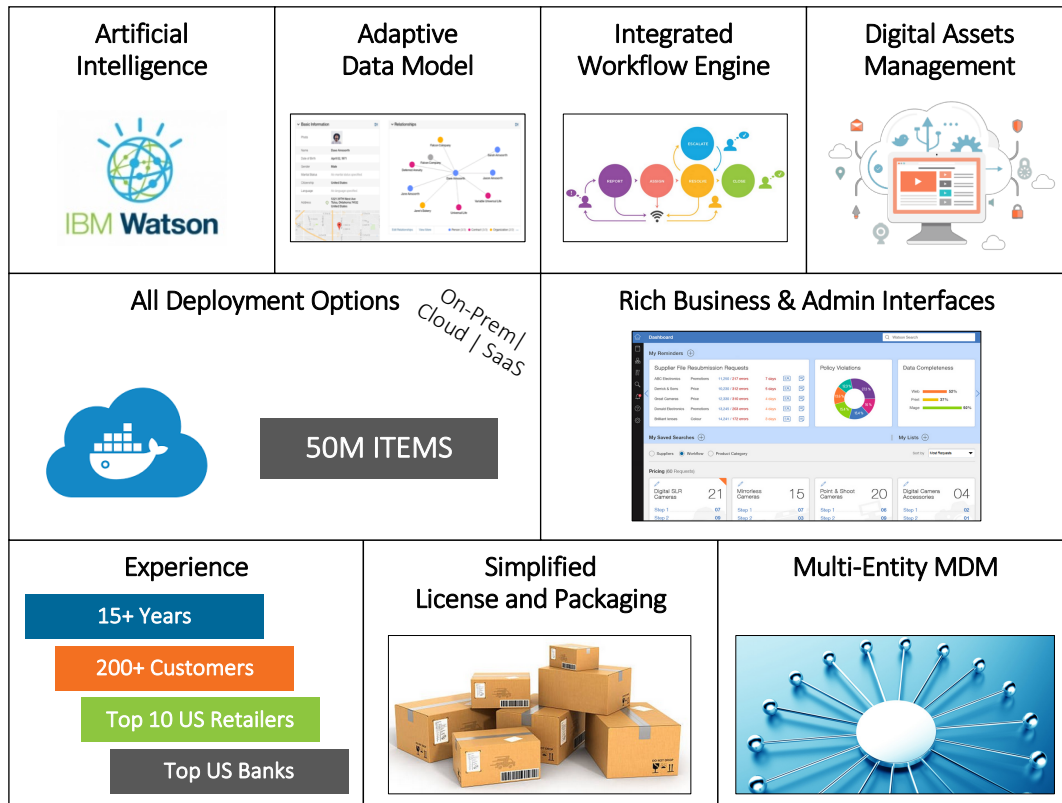
IBM Information Server (Data Quality) Included

IBM Watson Data Explorer Included (Product 360)

IBM DB2 Database

IBM WebSphere Application Server

IBM WebSphere MQ and many more



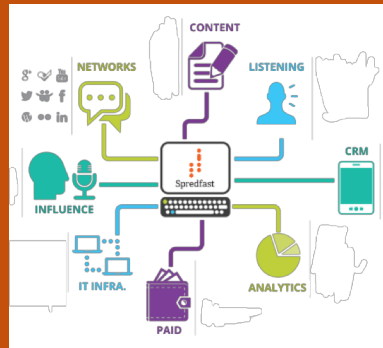
IBM's Vision of Modern MDM

Evolve IBM MDM portfolio to modern MDM solution that is feature rich, addresses use cases enterprise wide, adaptive to ever-changing needs, is easy to implement and operate and can be deployed anywhere.

Persona Based User Interfaces



Product Ecosystem Expansion



User Efficiency Using AI/ML Capabilities



Product Modernization



Need for containerization of MDM CE



Monolithic architecture - makes maintenance hard

Frequent run-ins into setup issues on customers/partners end

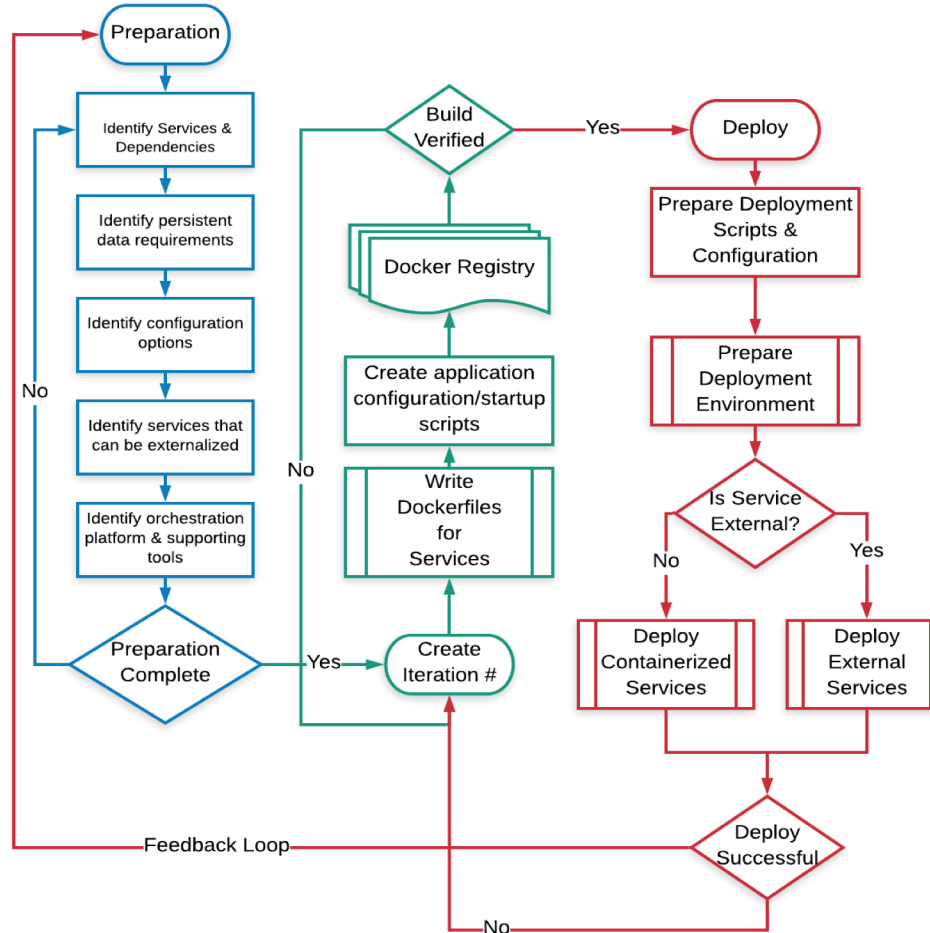
Spike in load - needs manual intervention and application downtime

Time consuming upgrade cycles – reluctance from customers to upgrade

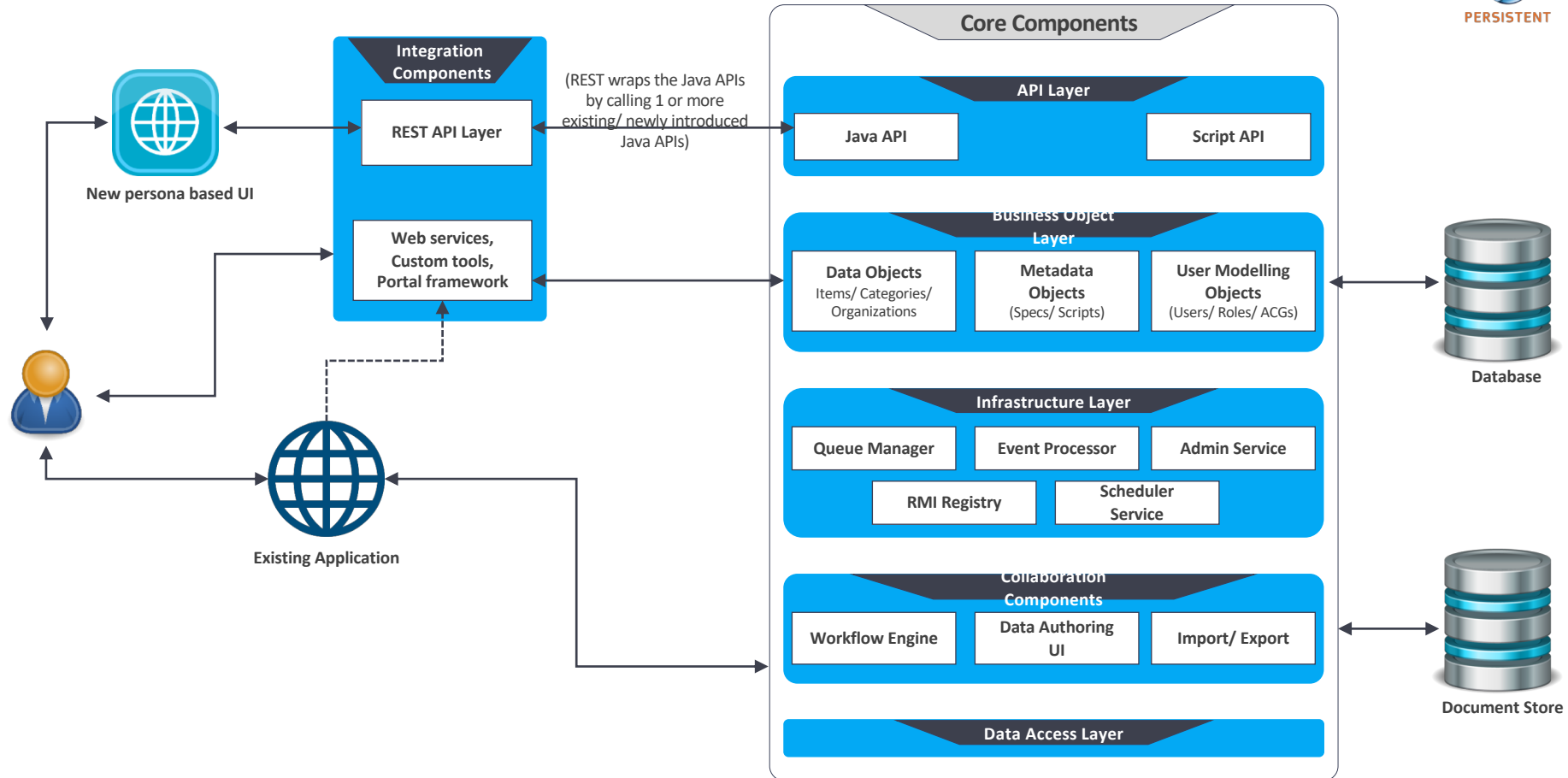
Multi Cloud deployment enablement

Strategic step towards SaaS enablement

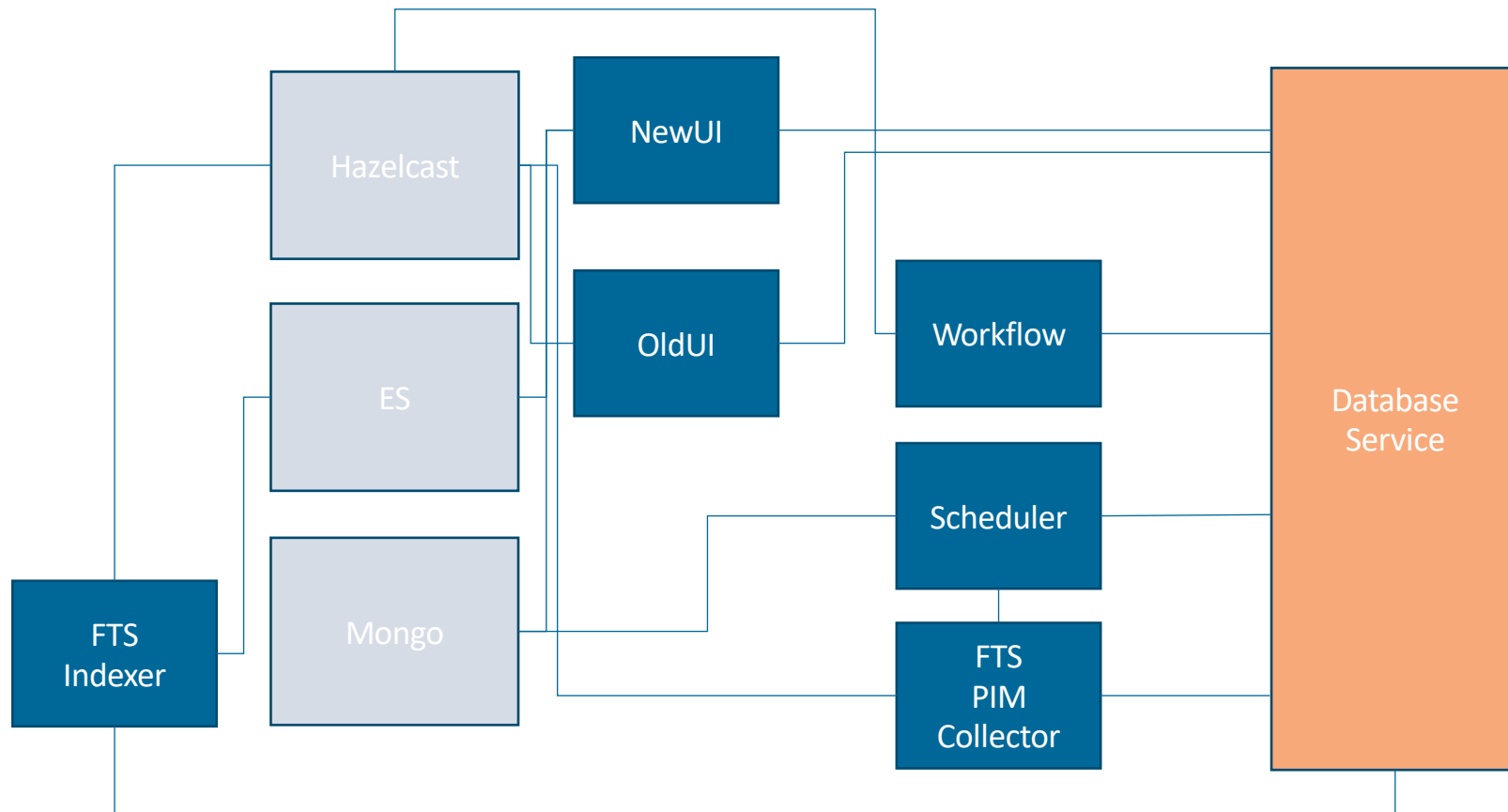
The Garage



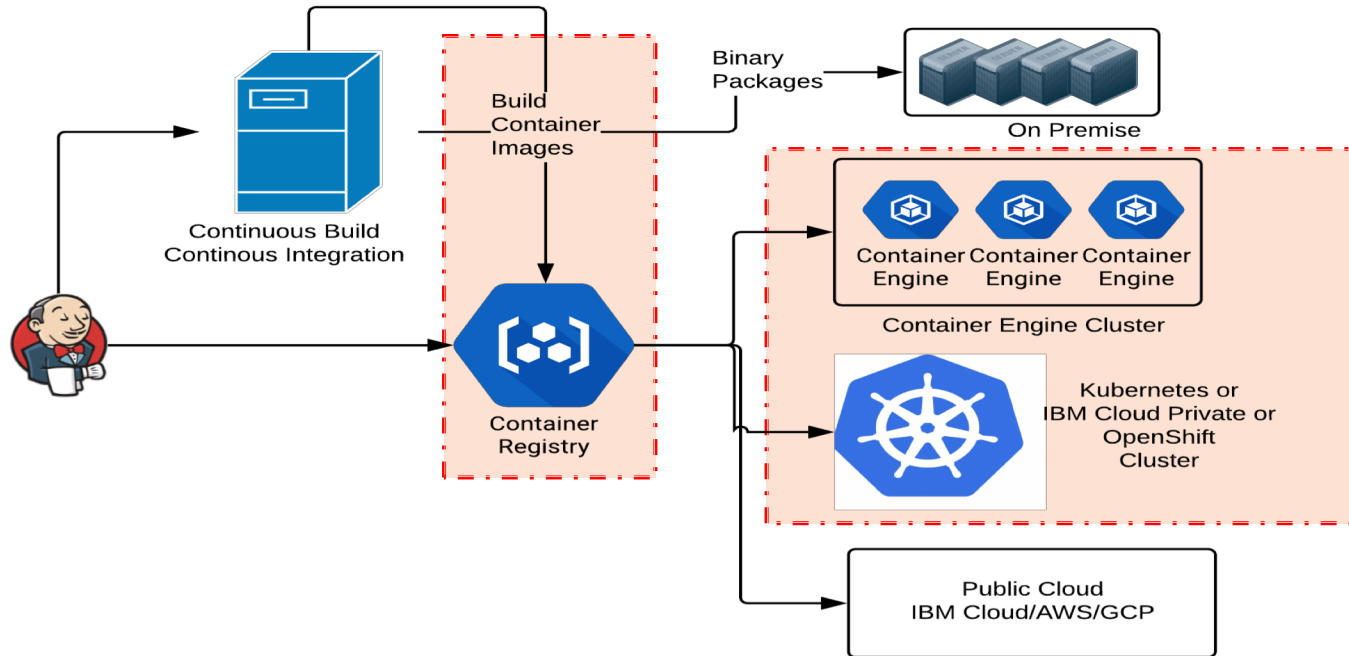
Current Architecture




Current Architecture with Docker Images



Delivery Architecture



Accomplishments



MDM CE docker images are created	
Helm package for deployment and configuration management	
Deployment	<ul style="list-style-type: none">• On Local Kubernetes Cluster• IBM Cloud Private
Versioning with Private Docker Registry	

Challenges



Decoupling application into modular, interconnected services

Decoupling application dependencies

Decoupling application & service configuration

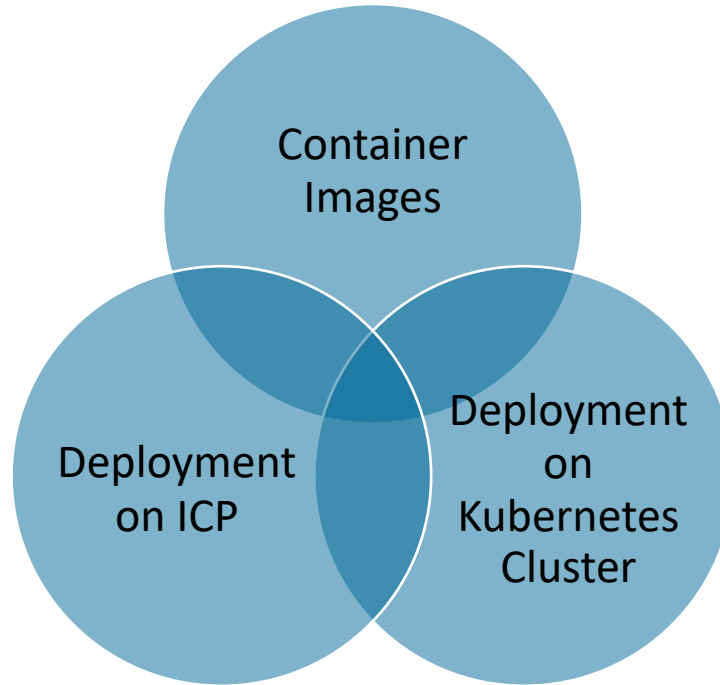
Reducing Image size

- Using alternate middleware

Integration with existing CI/CD pipeline

Product delivery

Demo



Docker images for MDM CE

mdm-appsvr

mdm-wfl

mdm-sch

mdm-ftsindexer

mdm-ftspim

mdm-newui

Helm Package

- Single Helm Package for entire deployment
- Configurable for each service, volumes and env variables

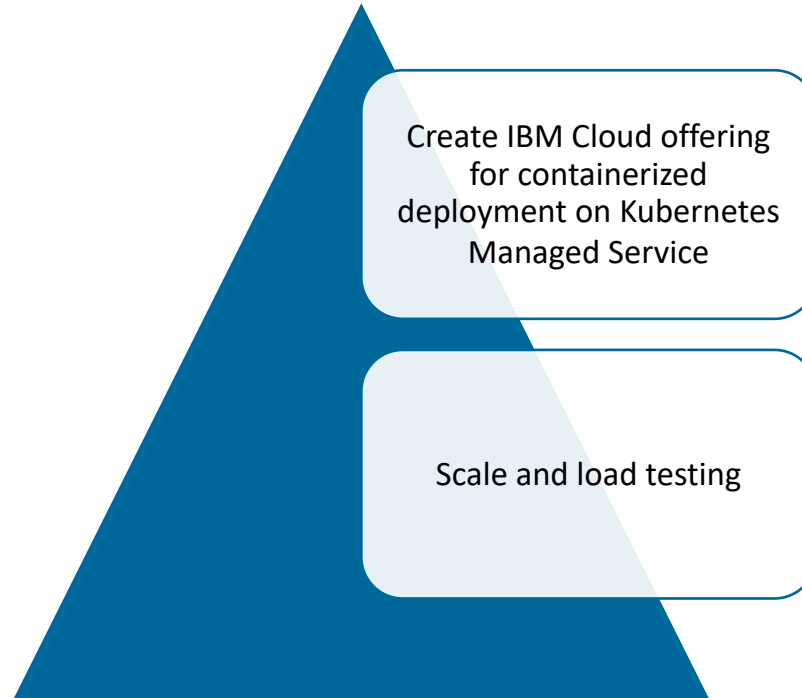
Deployment on Kubernetes

- 5 deployments with configurable replication
- 4 Services
- Volumes for logs of each service

MDM CE running on containers

- Both UI options for MDM CE are available on NodePort service
- Prometheus monitoring for deployment

Next Steps





Thank You!

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