ORACLE

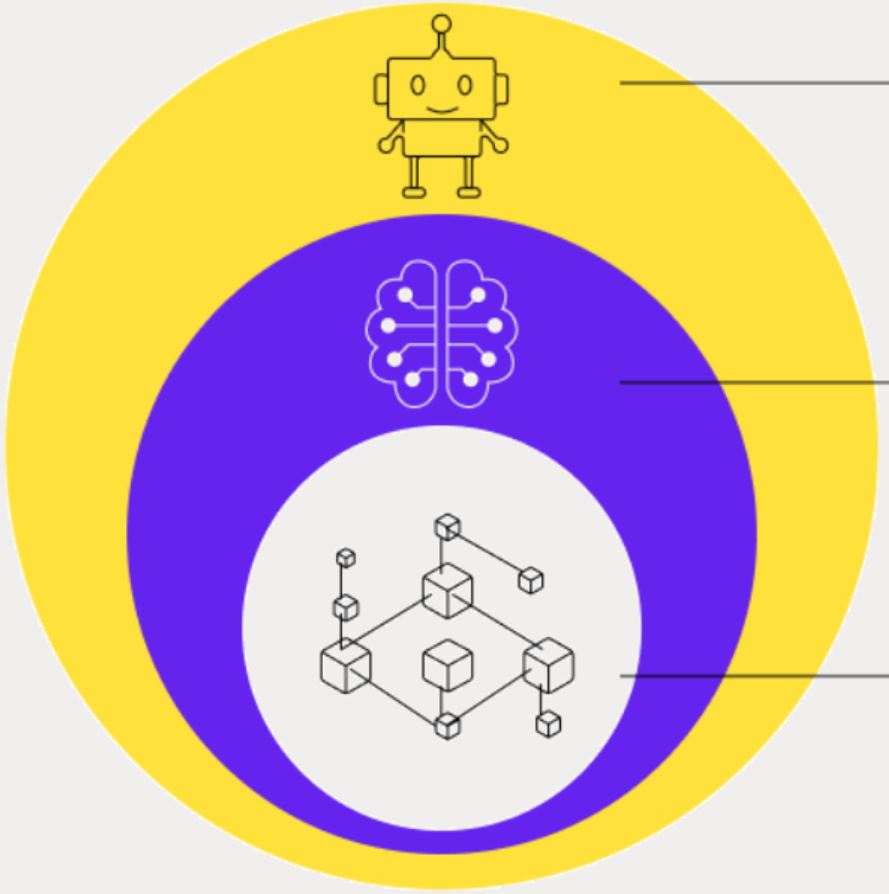
Getting more from your JD Edwards with AI and Machine Learning

JD Edwards Nordic Conference

May 14, 2024

Mark Herwege
Master Principal Solution Engineer JDE
Oracle Applications Unlimited Western Europe

Glossary



Artificial Intelligence

Computers that can imitate human intellect and behavior.

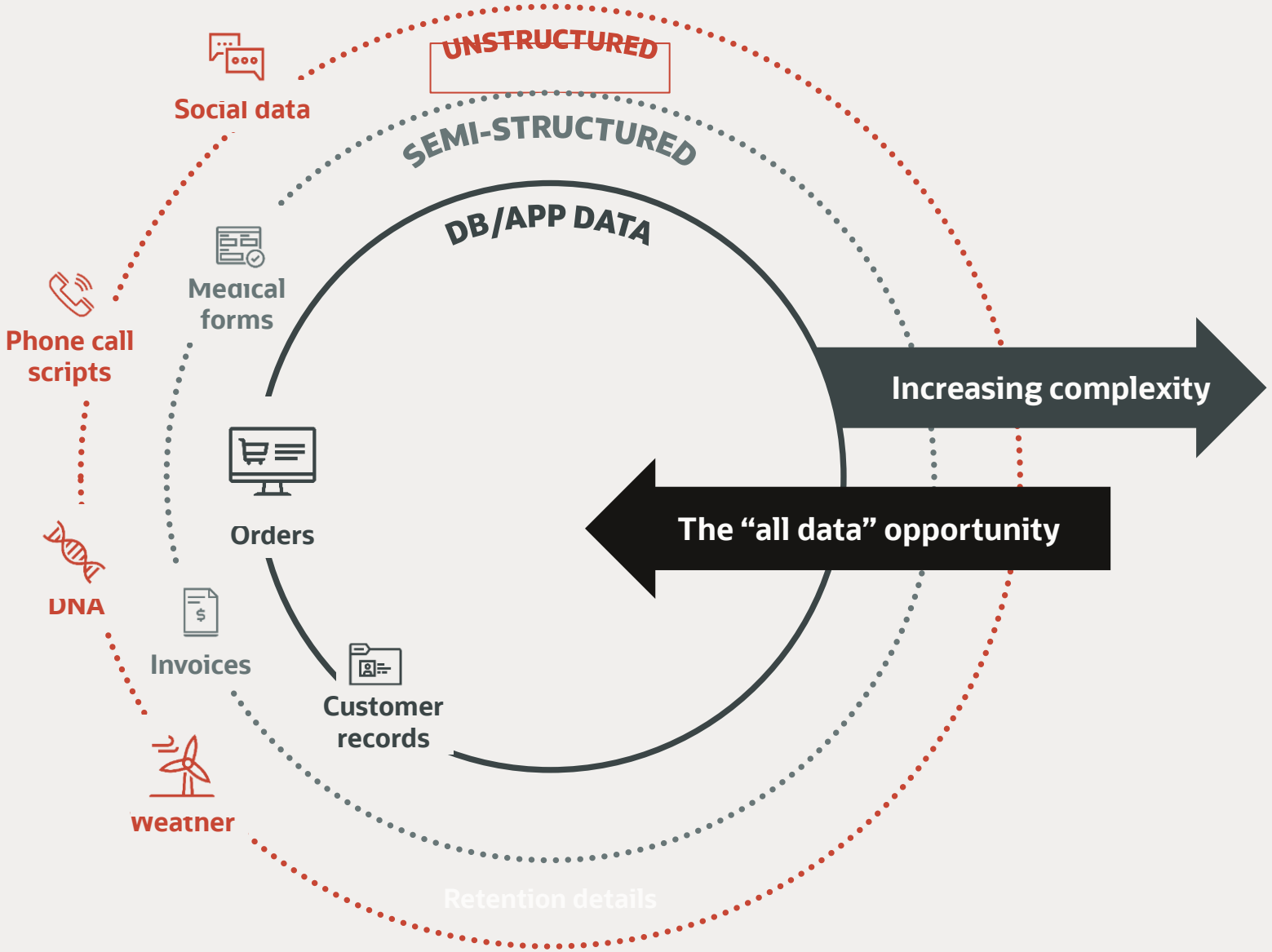
Machine Learning

Statistical algorithms that enable AI implementation through data.

Deep Learning

Subset of machine learning which follows neural networking.

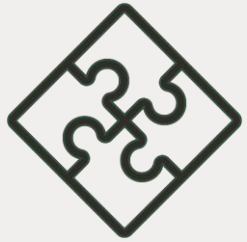
It all starts with **data**



What customers want for their production AI

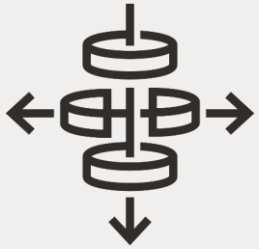
AI that works for your enterprise scenarios

- Pretrained, customizable models for your industry



Collaborate with a single, consistent experience

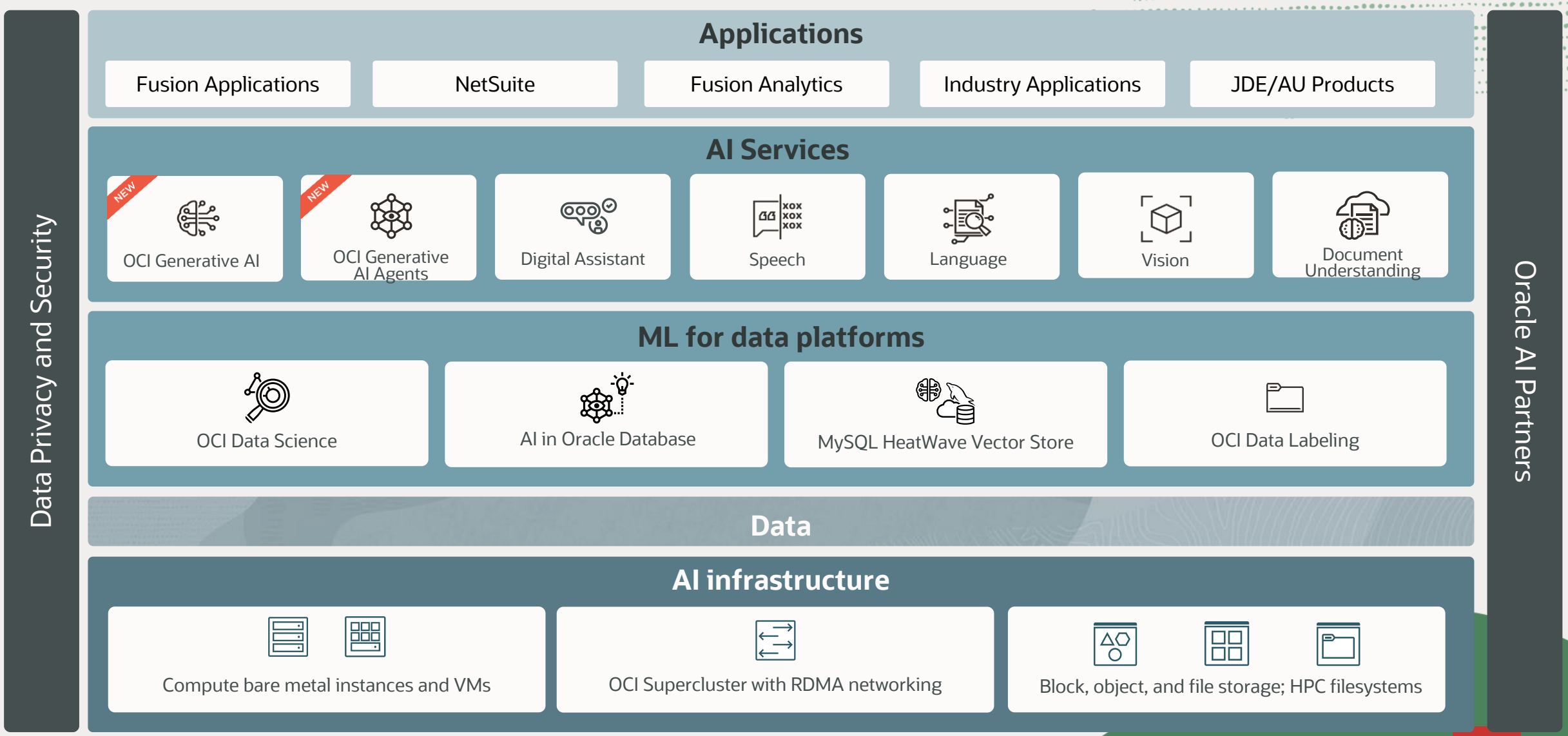
- Single discovery and publishing experience for models, features, datasets and labels
- Consistent APIs



Open and extensible platform

- Use favorite open-source tools and frameworks
- Run your AI models anywhere
- Portability- no lock-in

AI across the Oracle Cloud ecosystem



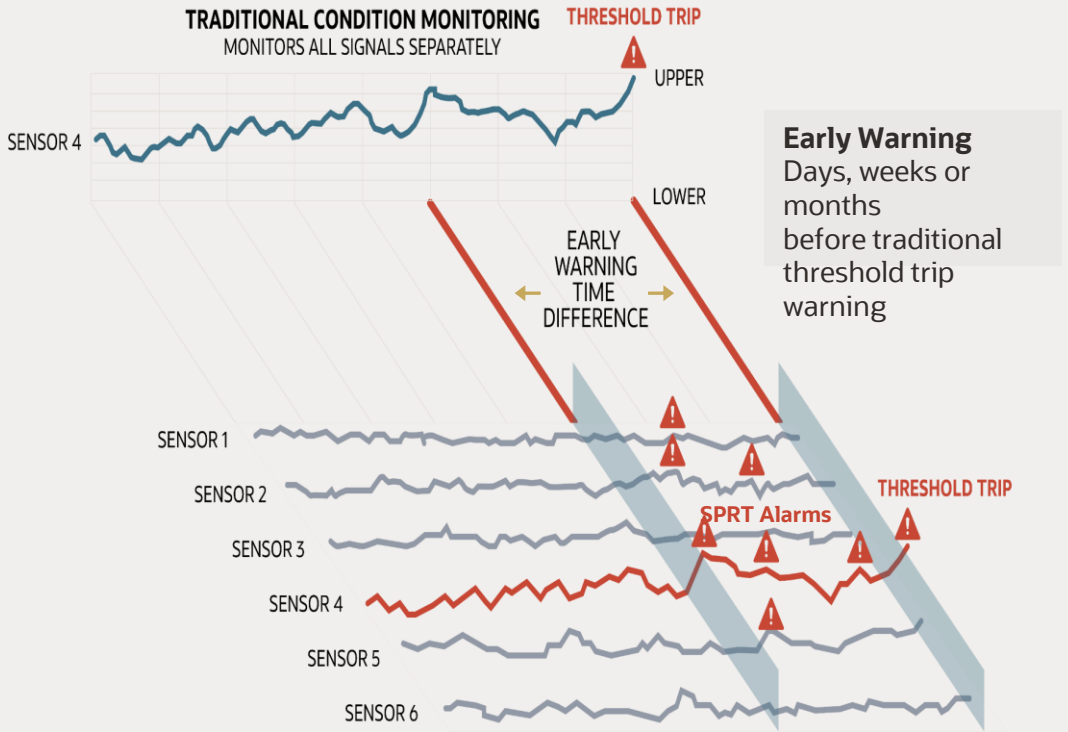
JD Edwards AI strategy

Enable customers and partners to enhance their JD Edwards processes with Oracle's investments in AI in the areas of **OCI AI/ML services including Generative AI** to **accelerate** business processes, **improve** user productivity and **aid** in decision making

OCI Document Understanding

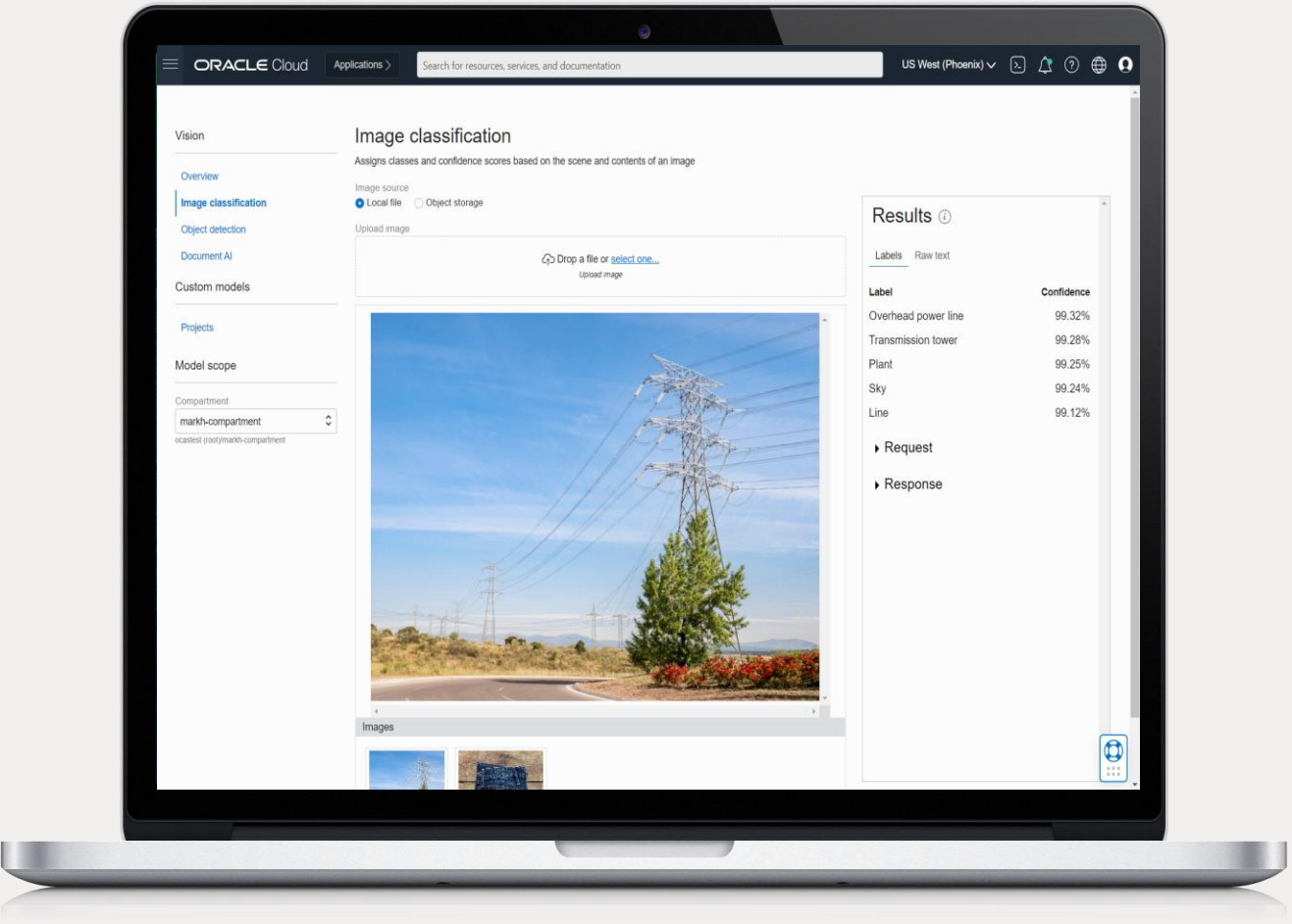
- Gain pretrained and customizable models to analyze document content
- Deploy text recognition, table detection, document classification, and key-value detection capabilities as needed
- Benefit from fully managed model infrastructure
- Expect complete integration with OCI Data Labeling for simplified data labeling
- Use cases
  - Processing of Invoices/Receipts in Procure to Pay

OCI Anomaly Detection



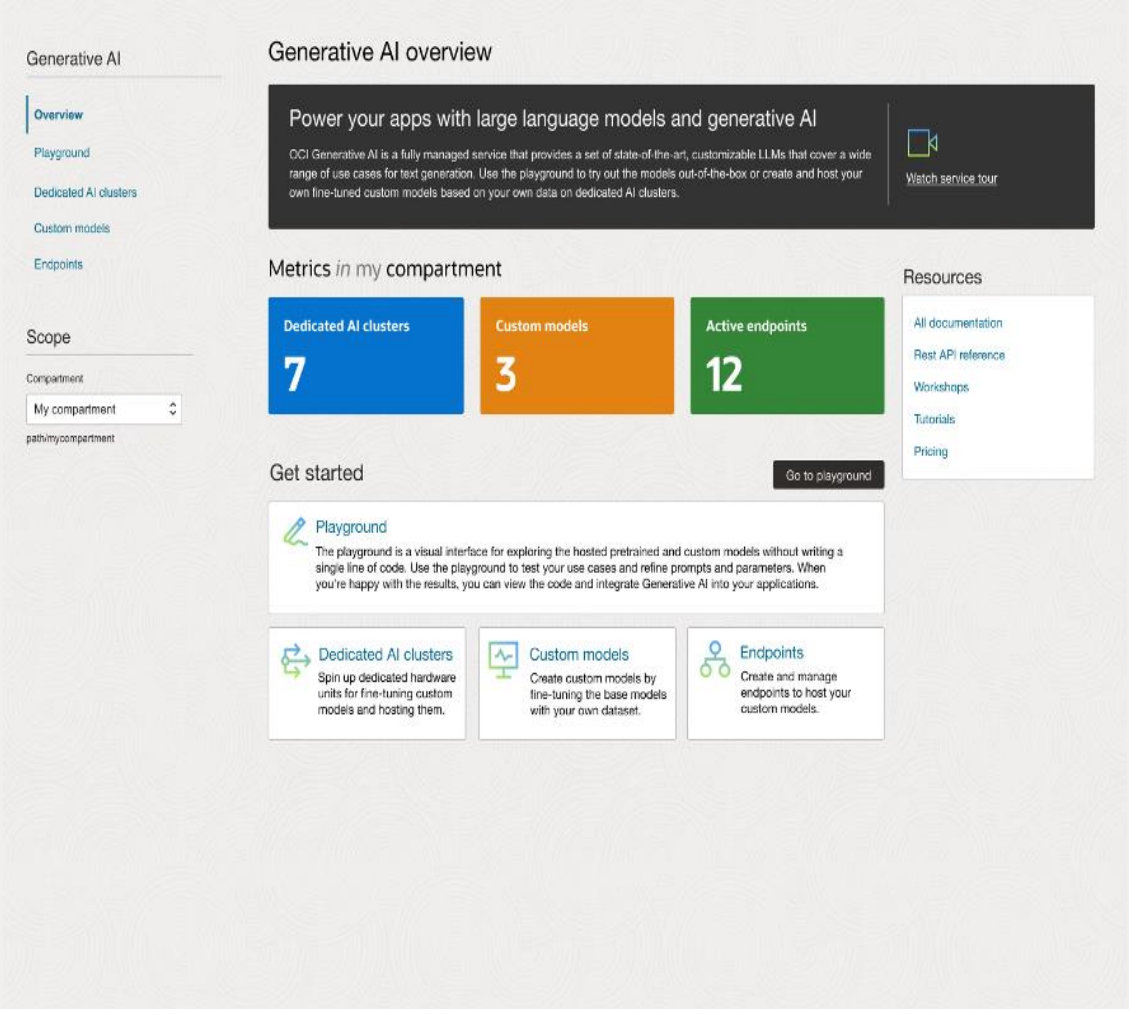
- Builds multiple anomaly detection models and automatically selects the most accurate to flag critical incidents earlier
- Automatically identifies and fixes data quality issues
- Based on industry-leading, proven anomaly detection techniques (MSET-2)
- Detects anomalies that span across multiple sensors to increase accuracy
- Use cases:
  - Asset Monitoring
  - Cost Overruns and changes
  - Shipment delays and Procurement changes
  - Productivity Loss
  - Abnormal consumption or demand

OCI Vision



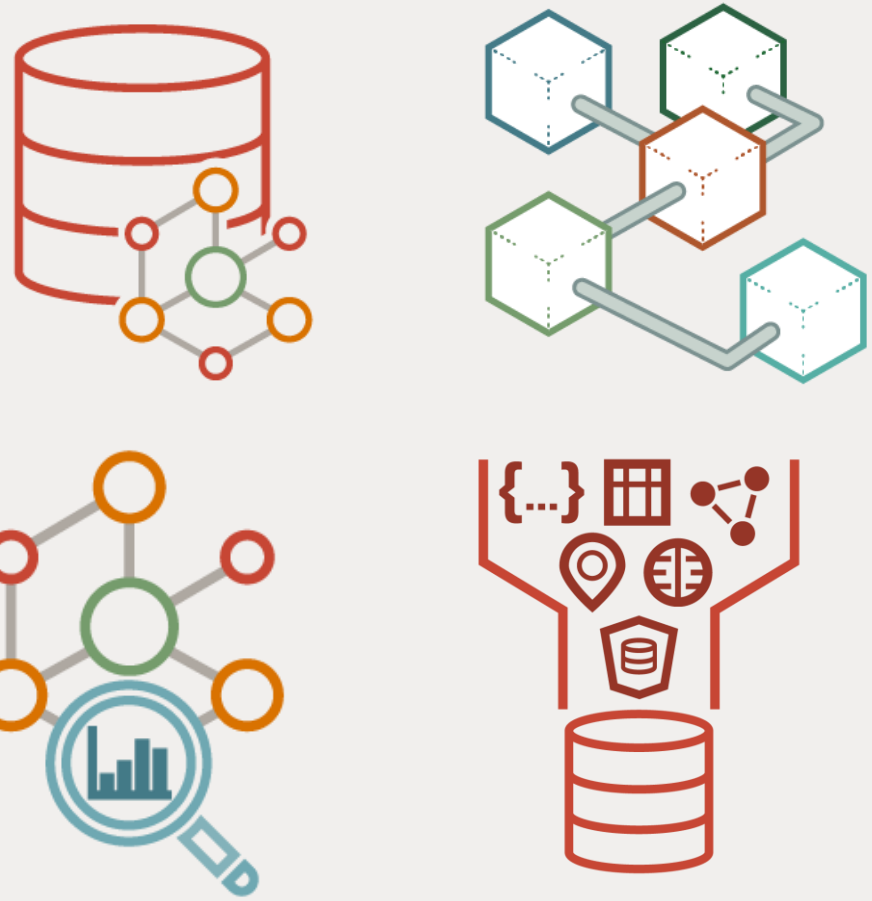
- Provides pretrained and customizable computer vision models to analyze image-based content
- Fully managed model infrastructure
- Complete integration with OCI Data Labeling simplifies data labeling
- Use cases
  - Identifying parts
  - Product defect identification
  - Inventory management
  - Warehouse location for items
  - Read product blueprints and create BOM
  - Crop Monitoring
  - Waste Management and Pest Control

OCI Generative AI



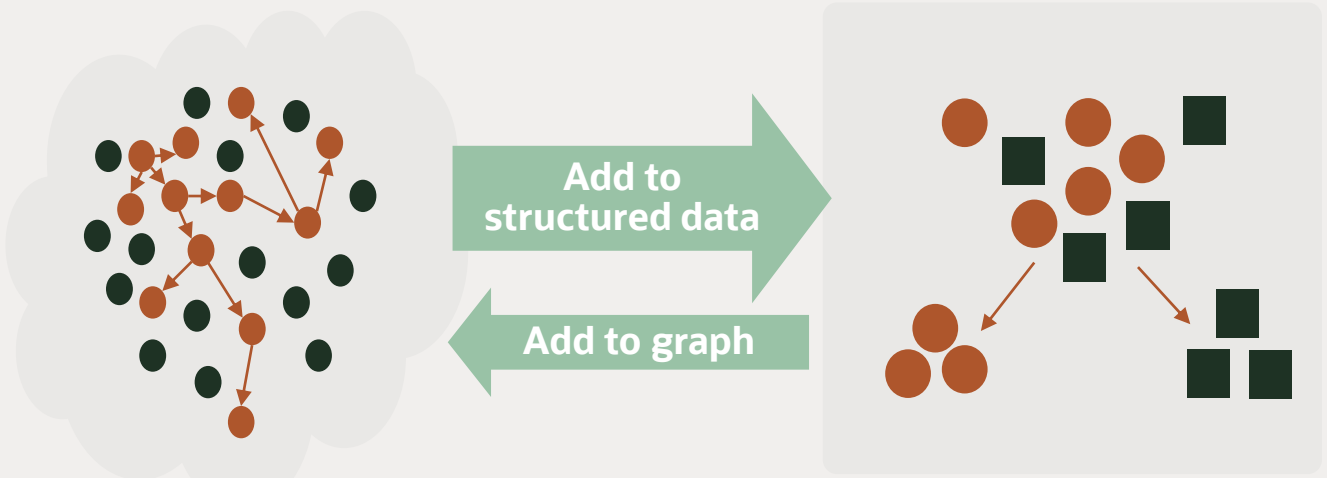
- High quality pre-built models from Meta and Cohere to meet your business needs with minimal effort
- Customize models to meet your need
- Fully hosted inside OCI. No cross-region or cross-cloud communication
- Private and secure. Oracle does not send customer data to Cohere or Meta.
- Use Cases:
  - Document summarization
  - Information retrieval using Retrieval Augmented Generation (RAG) agents

Oracle Property Graph



- Useful for discovering and understanding relationships
- Discover entity relationships and influences
- Work with any information to discover entity relationships and influences
- Perform graph analytics & visualization
- Use data from applications and workflows based on converged Oracle Database
- Use Cases:
  - Achieve higher yields, reduce costs and improve efficiency of production lines
  - Trace process workflows
  - Track delivery times for shipments
  - Identify production bottlenecks

Oracle Graph ML



Compute graph metric(s)
Explore graph or compute new metrics using ML result

Build predictive model using graph metric
Build model(s) and score or classify data

- Built-in algorithms to provide recommendations and predictions
- Use Cases:
  - Recommendations on production improvements

Release 24
Tools 9.2.8.2

Authentication for Oracle Cloud Infrastructure Services

Use Orchestrator to authenticate to and invoke a wide range of OCI services

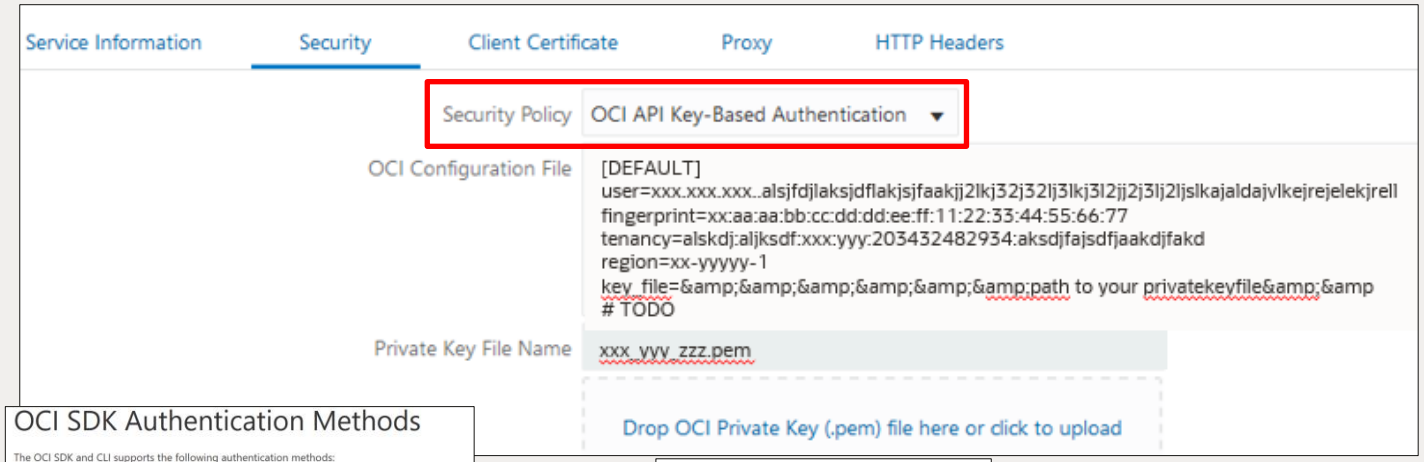
Business Problem:

The EnterpriseOne digital platform, and specifically EnterpriseOne Orchestrator, enable the EnterpriseOne system to participate in process automation, integration, and data exchange with external systems and Cloud services, notably Cloud services offered by Oracle Cloud Infrastructure. Of course those integrations must happen securely.

Solution:

This feature extends the supported authentication mechanisms that EnterpriseOne Orchestrator can use to invoke external services provided by Oracle Cloud Infrastructure. Specifically, this feature enables the use of Oracle Cloud Infrastructure API Signature Version 1 to authenticate to services such as Oracle Document Understanding.

New Security option in Connector

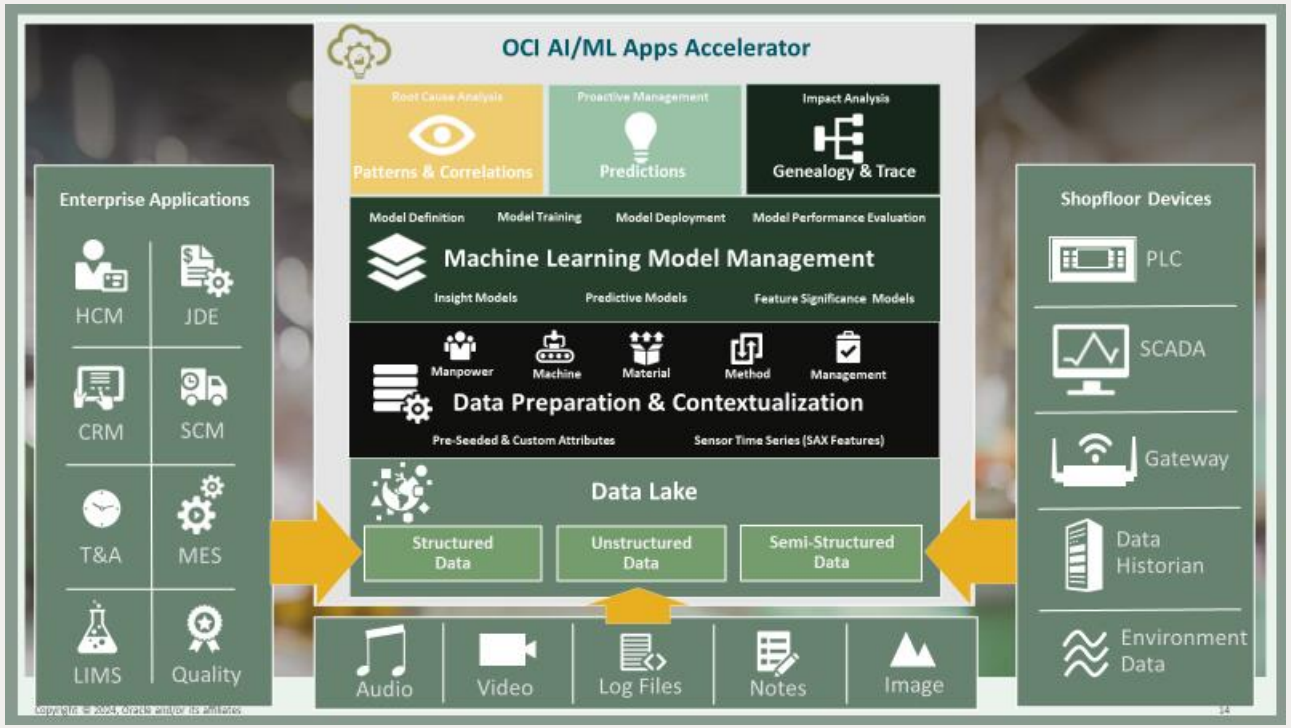


See OCI Documentation:
https://docs.oracle.com/en-us/iaas/Content/API/Concepts/sdk_authentication_methods.htm

Authenticate to and use (orchestrate) a LONG list of OCI REST APIs

OCI AI/ML Accelerator for JD Edwards

Release 24
9.2.8



- Provides a jump-start to customers looking to leverage AI/ML for solving business challenges
- Identifies patterns and correlations in data
- Pre-built and pre-trained machine learning models
- Accelerator is customizable based on individual use cases
- Sample use case: Root cause analysis of noise levels of Gear Boxes: https://www.youtube.com/watch?v=1PFNzhosvXU

OCI AI/ML Apps Accelerator

Root Cause Analysis

Patterns & Correlations

Proactive Management

Predictions

Impact Analysis

Genealogy & Trace

Model Definition | Model Training | Model Deployment | Model Performance Evaluation

Machine Learning Model Management

Insight Models | Predictive Models | Feature Significance Models

Manpower | Machine | Material | Method | Management

Data Preparation & Contextualization

Pre-Seeded & Custom Attributes | Sensor Time Series (SAX Features)

Data Lake

Structured Data | Unstructured Data | Semi-Structured Data

Audio | Video | Log Files | Notes | Image

Enterprise Applications

HCM | JDE

CRM | SCM

T&A | MES

LIMS | Quality

Shopfloor Devices

PLC

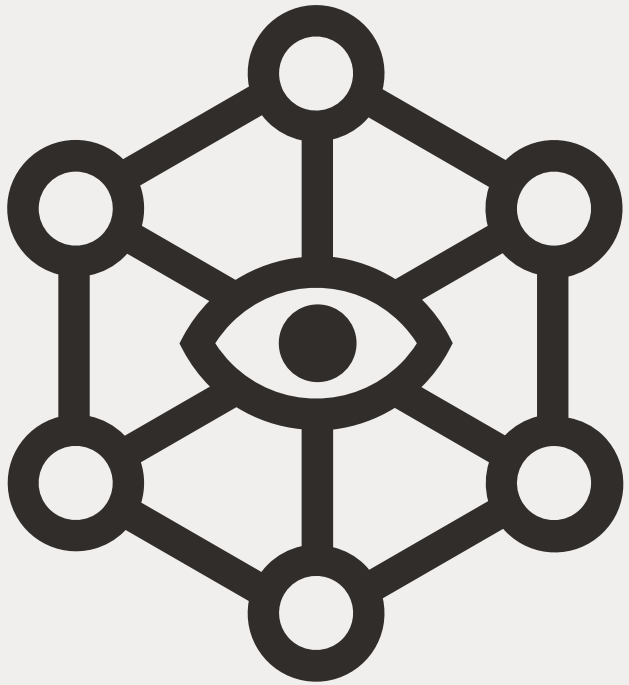
SCADA

Gateway

Data Historian

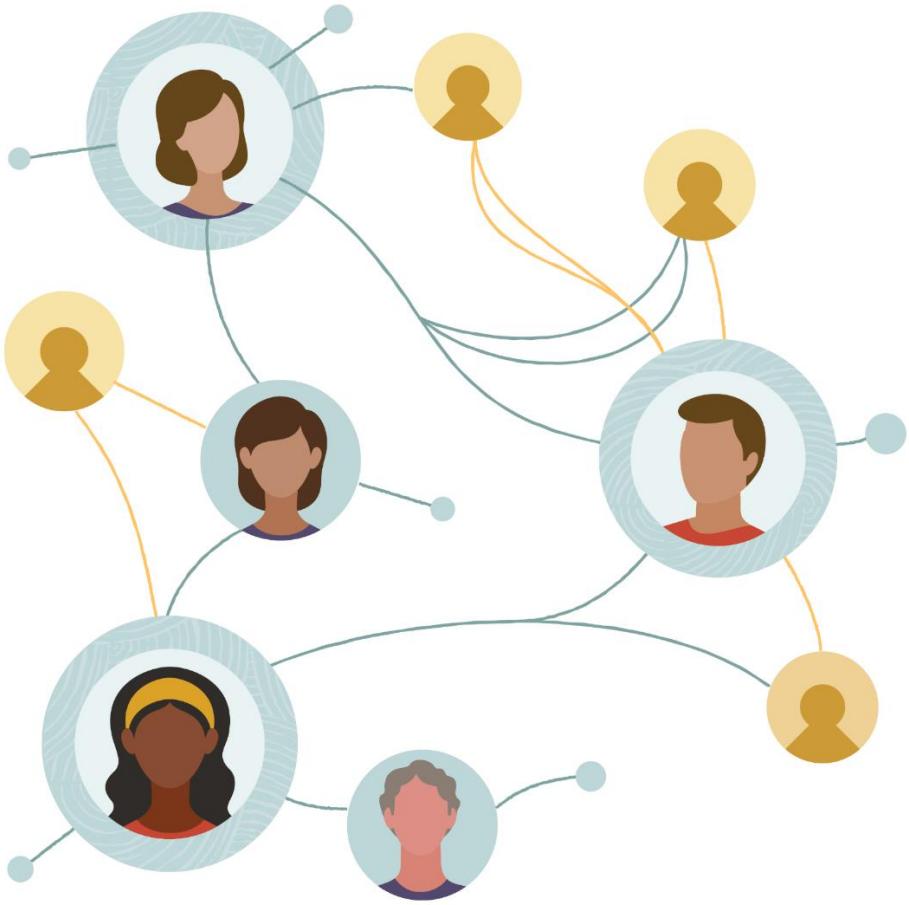
Environment Data

Oracle AI/ML and JD Edwards: Enabling the next frontier of your innovation



Stay Connected

- OracleJDEdwards
- JD Edwards Professionals
  JD Edwards Partner Group
- Oracle JD Edwards
- OracleJDEdwards
- My Oracle Support
- Quest Oracle Community
- LearnJDE
- The JDE Connection



Thank you

Mark Herwege
Master Principal Solution Engineer JDE
Oracle Applications Unlimited Western Europe
mark.Herwege@oracle.com


ORACLE