JD Edwards Tools Update and Roadmap

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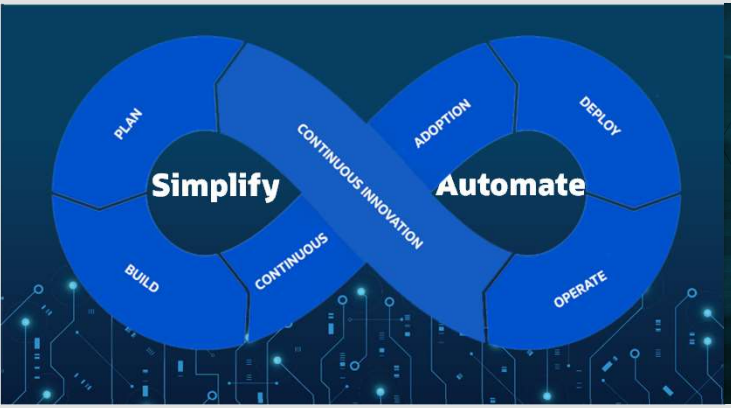
The JD Edwards Product Strategy

Simplify, Optimize and Transform your JD Edwards ERP



Simplify Automation

- Efficient Run and Maintain
- Enterprise Class Infrastructure
- Continuous Innovation and Deployment

ERP Optimization

- Customer Driven Productivity
- Extend Existing Business Processes
- Regulatory compliance

Digital Transformation

- Process Automation
- Low/No code UI
- Integrations and Extensibility

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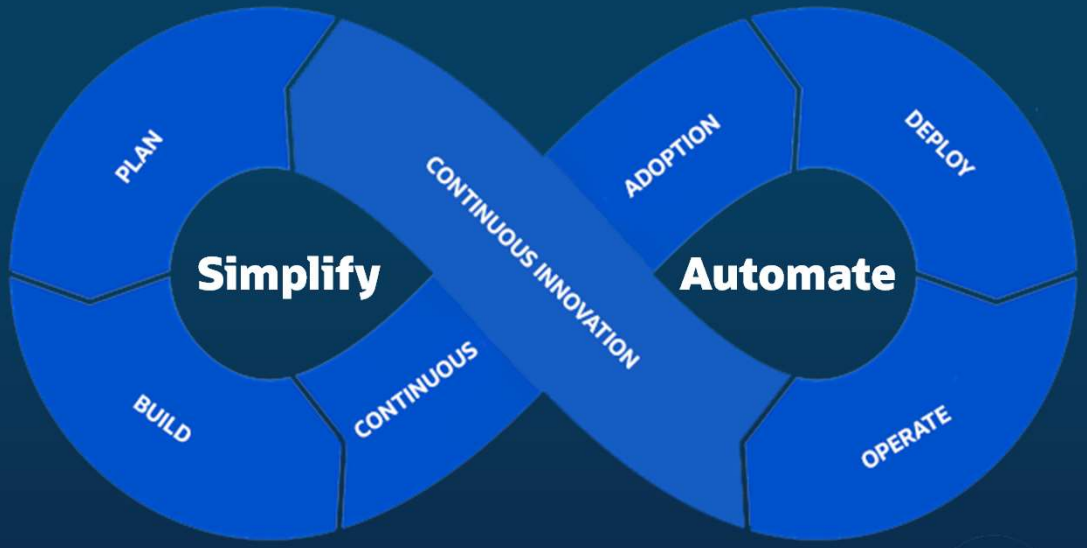

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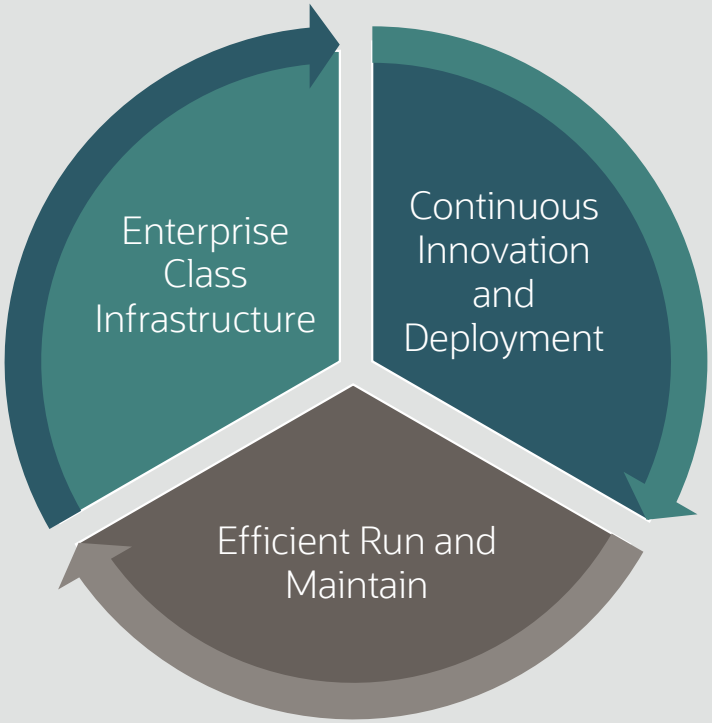
JD Edwards Strategy – Simplify and Automate

Increased Innovation at a Lower TCO

Global, Enterprise Class infrastructure at a lower cost than On-premises



Leverage new capabilities to transform business processes

Automate common IT activities to deliver the highest quality of service

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Efficient Run and Maintain

Run and Maintain Challenges

- Time consuming manual system administration activities
- IT resources are focused on supporting systems instead of innovation
- System maintenance interrupts business processes and activities

System Admin

Troubleshooting

Patching

Simplified System Admin

Automation of repetitive system upkeep requirements, Reimagined Server Manager

Automated Problem Detection

System self-monitoring, Dev-ops technologies for simplified troubleshooting

Lower System Admin Costs

Automation and simplified tools for package build and deployment of JDE

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Efficient Run and Maintain

Continuous Stream of Enhancements

New!

2015 - 2016

- **Management of User Defined Objects (Unified Life Cycle Management)**
- **Remove the 10 character restriction for User Id & Password**
- Customization Workbench
- Server Manager As Service Provider
- Replace OC4J with Oracle WLS
- Objects in Database
- Universal Cache Browser

2017

- **Track Object Usage**
- Track Object Usage – BSFN
- Server Manager - Foundation and REST API
- Store Media Objects in Database or File System
- Deploying UDOs using Change Assistant

2018

- **Server Manager support for One Click Provisioning**
- UDO Management Usability
- AIS Server REST APIs: New and updated media object services

2019

- **Collect and Generate Diagnostics**
- Reduce Roundtrip Network Traffic
- Orchestration for System Administration
- Color Coding Environments
- Support of File Path Encryption for Downloads

2020

- Enhanced Security with Complex DB Password Support*
- *Simplification of Development Client **
- *Automated Troubleshooting support for Kernel failures**
- *Web Enable OMW**

- * *Planned*

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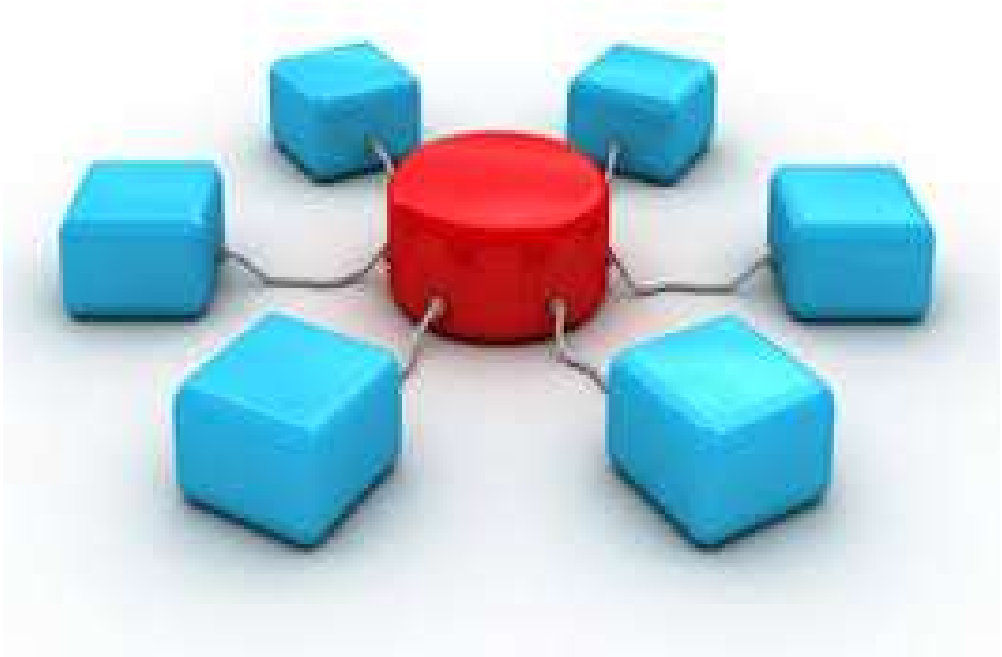
Planned
SIG Request

Simplification of Development Client



- Thin development client with a centralized database
- Reduce Dev Client footprint
- Developers can develop anywhere, anytime – access to changes from any client
- Eliminates mandatory check in and backup
- Significant Reduction in client package build time!

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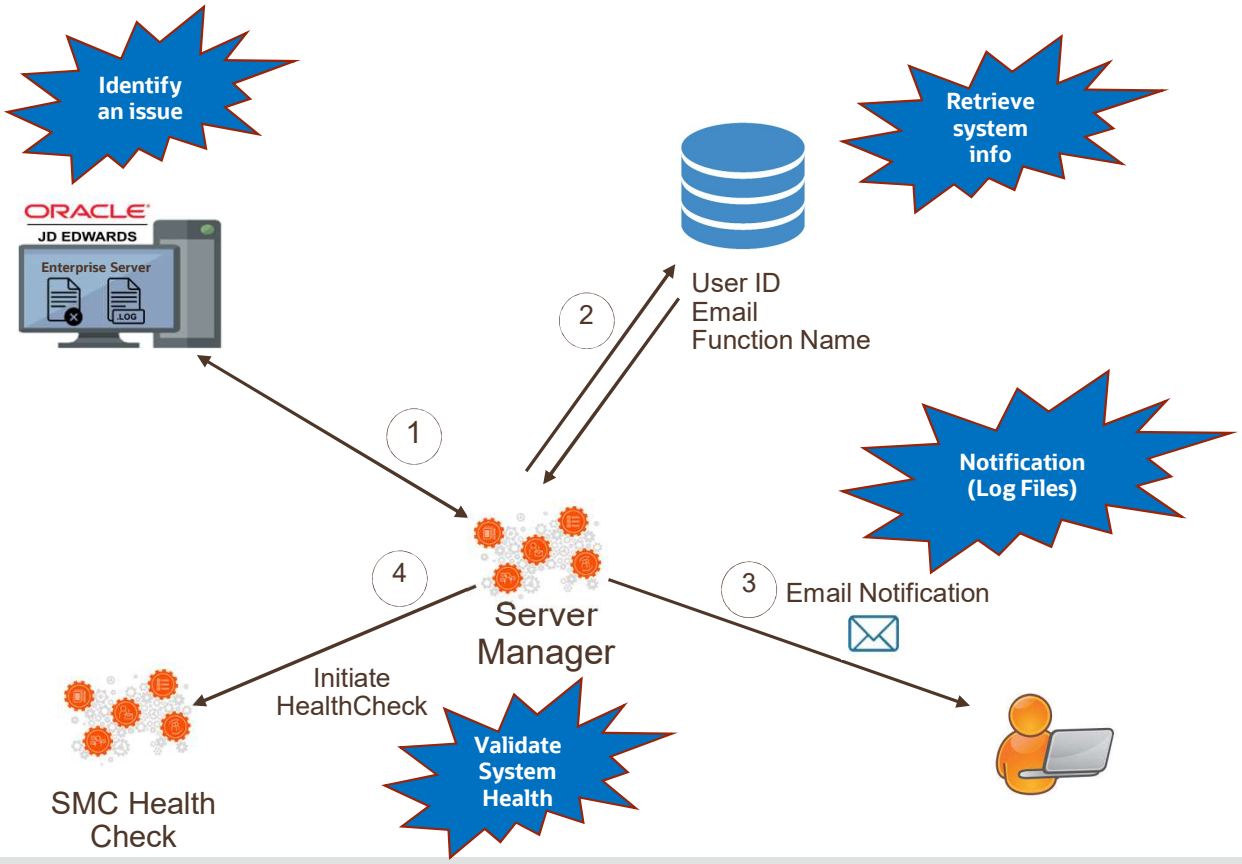
Planned
SIG Request

Automated Troubleshooting for Kernel Failures



- Reduce time and effort to triage customizations
- Streamlines interaction with Oracle Support
- Improves overall system stability

Tech SIQ Requests – Simplified Administration

Planned SIG Request

- **Color Code Environments – 9.2.4**
- **Web Based OMW – Planned**
- **Schedule Server Package Deployments - Planned**
- Security Audit History Environment – Planned
- Longer Database Proxy Password – Planned

Quest ID	Enhancement Description	Oracle Number
10744	Web based admin tools	30569194, 30569197, 30569201, 30569209
10790	Simplify installation of local data base on development client (32 bit ?)	30424807
10827	Security Audit History should include environment	30329088
11469	move job on hold to a different Q - general Q management	11053296
11471	Parallel batch Q's	11053296
11490	Deploying packages & perform package build via command line	30412394
11550	zombie maintenance	30412230
11711	Mobile: Need to be able to deploy a package from mobile device/app	30412433
11808	OMW change of status on mobile/web	30425171
11901	ALLOW FOR MANAGING OTHER OBJECTS WITH OMW WEB P98220W	22072521
11999	Server Manager monitor notifications with details when failures/events	30412057
12002	Schedule server package deployments	30424773
12008	Resubmit a job from WSJ with same process options and data selection	30397282
12146	Database proxy cannot be greater than 10 characters	26373197
12158	In composed page the Configured Tile, Tile Type = Batch version.	23594790
12333	Zombie Tracking Tool.	30412325
12352	Report for Ochestration that pulls all the elements together	30506219

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Enterprise Class Infrastructure

Innovative Solutions to Real World Challenges

Infrastructure Challenges

- Dated system architecture practices
- Need to size for peak workloads
- Disruptive and costly to refresh system
- Difficult to implement HA/DR
- Running an outdated or unsupported platform that requires proprietary skills

Automation

Elasticity

Cloud Infrastructure

Proven system architecture

Automates best practices architecture and migration from On-premises to Cloud

Pay for what you use

Workload and policy driven scalability at all layers of the architecture

Next gen infrastructure

Cutting edge, High performance, majority platform, with managed infrastructure at a low TCO

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Enterprise Class Infrastructure

Continuous Stream of Enhancements

New!

2015 - 2016

- JDE Automation for OCI-C
- JDE Trial Edition Image for OCI-C
- JDE Payload for OCI-C
- **Files to the Database**
- Java Cloud Service forJDE
- SM Automation for OCI-C

2017

- **One Click Provisioning**
- Object Tracking
- One Click Provisioning WLS and DB for JDE on OCI-C
- White Paper – HA & DR Scenarios for JDE on OCI-C
- White Paper – JDE on Baremetal Infrastructure OCI
- One Click Refresh

2018

- Simplified Upgrade to One Click Target OCI
- Improved Migration Utilities
- Automated Provisioning – Windows and iSeries
- **JDE Reference Architecture** Definition for OCI
- One Click Automation to Provision Reference Architecture OCI
- One Click Refresh

2019

- One Click Support for Multiple DB Provisioning
- **Trial Edition for OCI**
- One Click Adoption of DBCS
- Marketplace Images
- Terraform Infrastructure Automation
- Whitepaper – Scalable Elastic Deployment
- One Click and Trial Edition Refresh

2020

- **White Paper – Simplify and Automate JDE**
- Server Manager Support - Elasticity OCI
- One Click and Trial Edition Refresh
- *Certification of ADB**
- *Server Manager Scalability & Performance**
- *Scalable Elastic Deployment of JDE**

** Planned*

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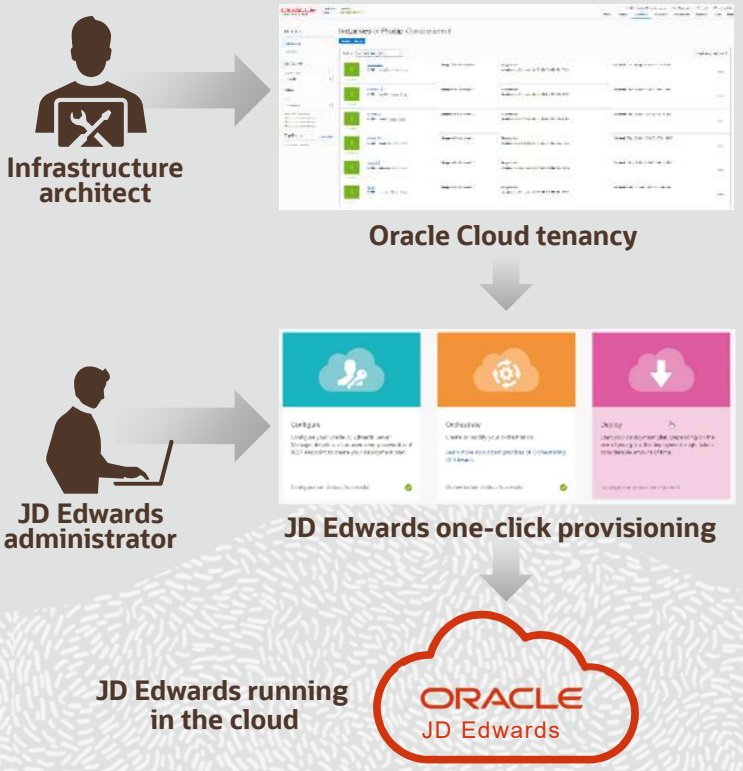
Automation - Anatomy of a JD Edwards Migration to OCI

- Utilize the ***Terraform Infrastructure Automation*** scripts from OCI Marketplace
- ***Reference Architecture Automation*** creates subnets and security lists, provisions storage, compute and database, and installs software
- ***One-click Provisioning*** tool consumes a base configuration of JD Edwards from Terraform Infrastructure Automation
- ***Utilize Migration Utilities*** to move data and configuration details
- ***Let the JD Edwards Automated Provisioning work its magic!***



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Elasticity - Elastic Infrastructure for JD Edwards

Elasticity is your system's ability to balance your ever changing processing requirements against the system resources needed to manage your workloads.

Elasticity

JDE on OCI Elasticity

- Pay for what you use!
- Workload Driven
  - OCI Auto-scaling
- Autonomous DB
- JDE Server Elasticity
  - Docker Containers for Quick Spin up/down

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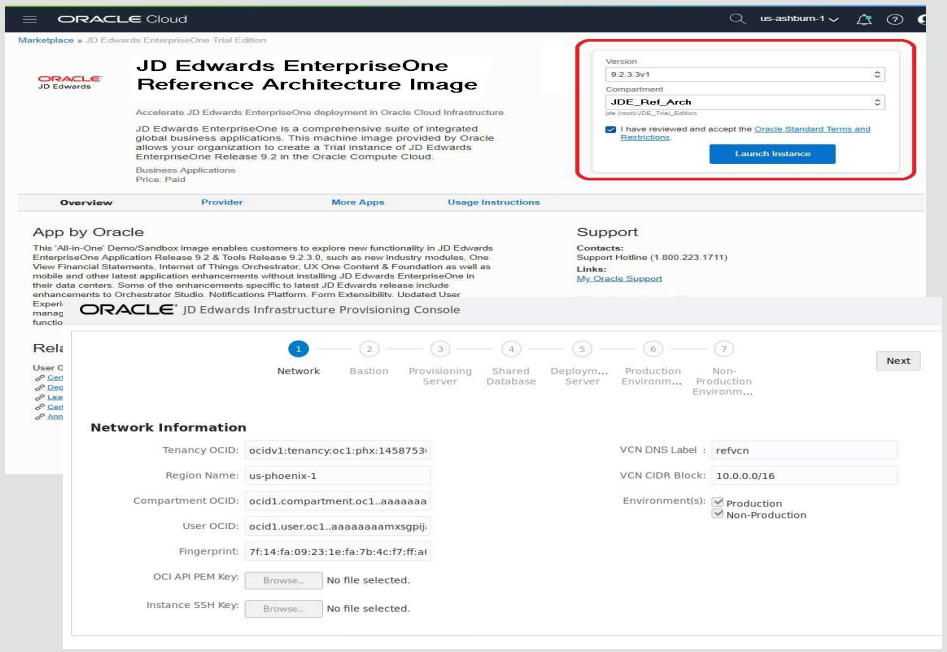
Terraform Server Image on OCI Marketplace

Tools 9.2.4



- Standardized OCI Market Place Image
- Market Place Image Significantly Speeds the JDE Infrastructure Provisioning Process
- Alignment to JDE Reference Architecture for Infrastructure Provisioning

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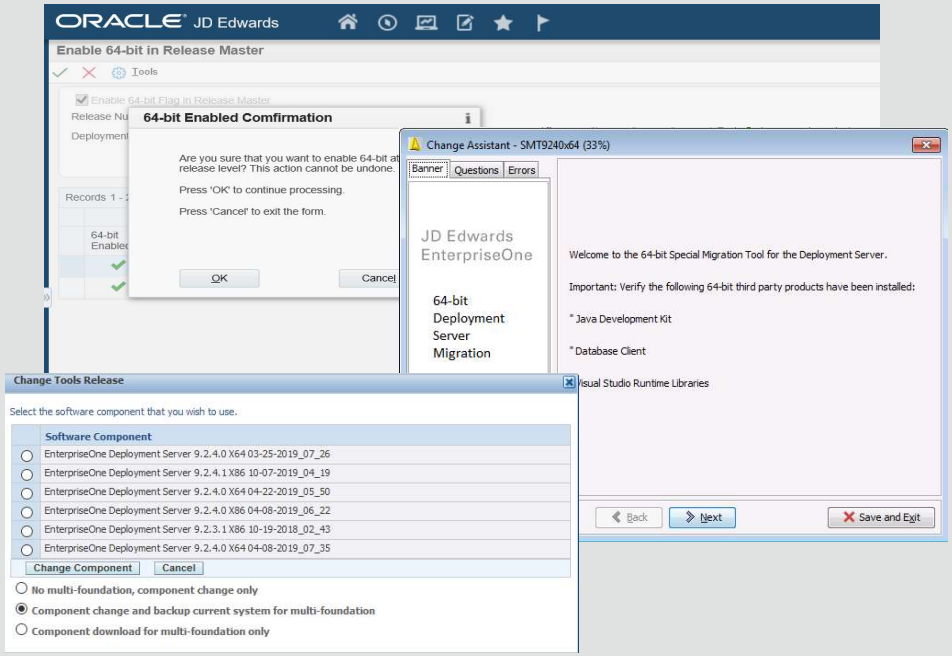
9.2.4
SIG Request

64-bit - Future Proof Architecture

Deployment Server Support



- No need to manage both 32-bit and 64-bit artifacts, saving time and resources on activities such as package build
- Able to future proof as database, operating systems and 3rd party vendors stop supporting 32-bit solutions
- Once converted, delivering ability to purge all 32-bit artifacts from database and file system

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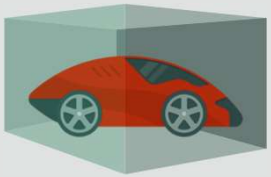
Planned

Oracle Autonomous Database for JD Edwards

Let the Database do the Work

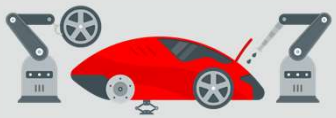
Self-Driving

Save on Human Labor
Automates database and infrastructure management, monitoring, tuning



Self-Securing

Prevent Human Error
Protects from both external attacks and malicious internal users



Self-Repairing

No Human Intervention
Protects from all downtime including planned maintenance

- No downtime for planned maintenance with customizable extended database drain time
- No impact on business momentum with zero downtime
- Transaction continuity with extended drain time improves data integrity
- Eliminate human intervention for planned maintenance activities

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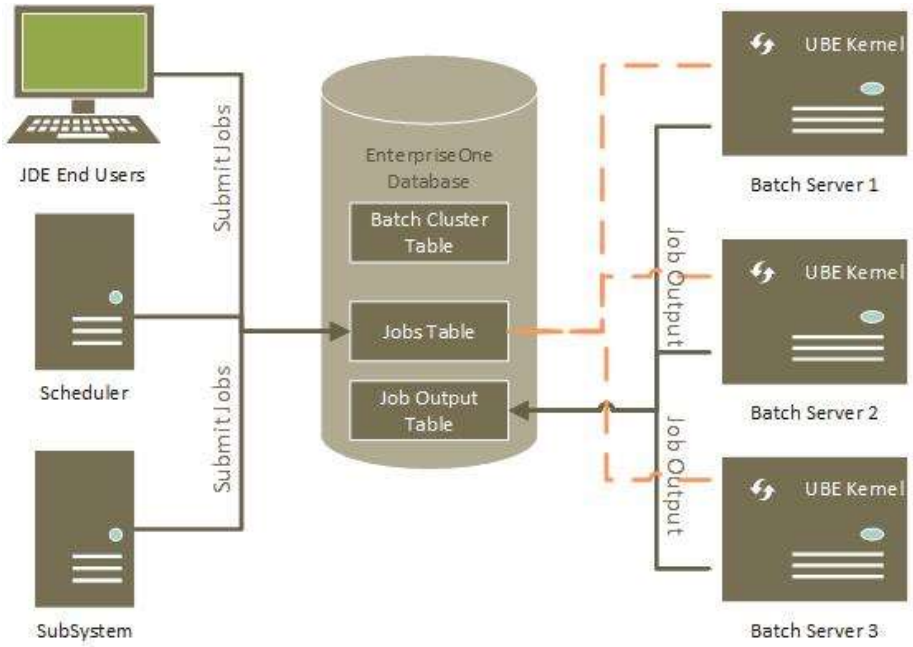
Virtual Batch Queues

Enhanced Report Management for EnterpriseOne 9.2

Planned
SIG Request



Key Drivers:

- Efficient use of server resources based upon batch processing volume
- Provide High Availability and Failover of batch processing
- Support fluctuating business demands

Value Solution:

- Load Balance batch processing based upon workloads
- Enable Batch Queue Properties Across Multiple Servers
- Supports All Batch Job Submission Methods
- Output Centralized to Repository for Anytime/Anywhere Access

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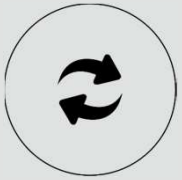
Continuous Innovation and Adoption

Continuous Adoption Challenges

- High Effort to Upgrade
- Time and Effort to Retrofit Customizations
- Ongoing Cost to Validate
- Impact to Business Processes



Upgrade

Extensibility

Validation

Simplified Upgrade

Reduces time and effort required to get code current and retrofit customizations

Retire Customizations

Business analyst tailor user experiences and process on the glass

Continuous Testing

Focus testing on only impacted business processes

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Continuous Innovation and Deployment

Continuous Stream of Enhancements

New!

2015 - 2016

- Simplified Upgrade
- Page Composer
- Images
- Form Personalization
  - Move Fields
  - Hide Fields
  - Resize Fields
  - Change form name
- List view grid format
- Spring board
- Watchlist Pane
- External Forms
- Access User Language from E1 Pages
- Keyword Search
- Framework for UX One - Landing Page/Spring Board

2017

- Form Personalization
  - Change Tab Sequence
  - Make Fields Required
  - Rename Fields
- Enterprise Search
- Task Search
- Track Object Usage
- Enhancements to simplify staying current

2018

- Form Extensibility
  - Add Business view columns Query Forms
  - Add Business view columns (Edit Forms)
- Form Personalization
  - Personalize Exits
- Rename Grid headers
- Simplified Upgrade on One-Click Provisioned Target Oracle and Windows

2019

- Form Extensibility
  - Add Fields from Table to Business View
  - Orchestrator Support
  - Add Button
- Form Personalization
  - Default Form Security
  - Customer Requested
- Decustomizer Report
- Merge Tools for UBE, BSVW, and Table

2020

- Form Extensibility
  - Show/Hide
  - Create For/Row Exits*
  - Move between Tabs*
- Page Composer
  - User Defined Favorites
  - Task Folders
  - Specify UDO options

* Planned

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Upgrade Simplification
Removing Time and Effort

SIG Request

- ✓ Simplify Provisioning 9.2 environment
- ✓ Code Current Target (Apps and Tools)
- ✓ Reduce Retrofitting
- ✓ Move to OCI & Upgrade in single process

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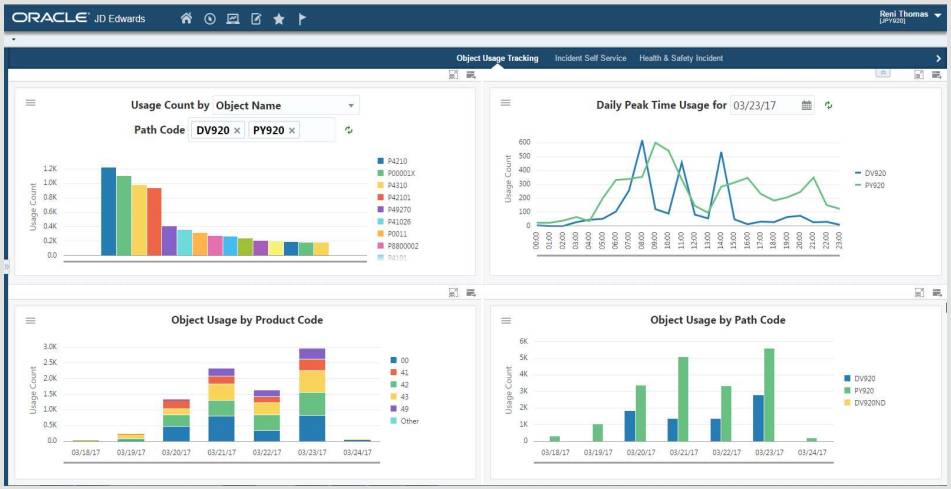
SIG Request

Simplifying Process of Staying Current



- Object Usage Tracker & Impact Analysis - 9.2.2
- Customization Object Analyzer (Decustomizer) – 9.2.3.4
- New Merge Tools 9.2.4

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UX One Frameworks

Query Manager	One View	CafeOne	Watchlists	Composed Pages	Form Personalization	List View	Enterprise Search	Orchestrator Studio	Form Extension	Notifications
TR 9.1	TR 9.1	TR 9.2.0.2	TR 9.2.0.3	TR 9.2.0.2	TR 9.2.1	TR 9.2.0.5	TR 9.2.1.2	TR 9.2.0.2	TR 9.2.2.4	TR 9.2.2

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UX One Framework Improvements

Continuous Innovation

Tools 9.2.4 & 9.2.4.3 SIG Request

- Form Personalization - Base Form Security
  - Standard layout without customizations
- Form Extensibility - Associating Orchestrator with Grid Records
  - Simplifies & avoids many redundant manual tasks while manipulating Grid records.
- Simplify access to common used pages to increase productivity
  - User define favorite E1 Pages to display
- Enforce Business process with tailored E1 Pages for specific Business Units or Roles
  - Specify a Query and Personal Form to be run executed in Menu Designer
- Streamline Navigation in the iPad Container
  - New capability to add Task Folders to E1 Pages provides same experience as browsers

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UX One Framework vs Customizations

Extensibility Approach

- UX One Framework
- Available to end users

Available to the End Users in 13 Mins

Customization Approach

Week 1
- Business Analyst Defines requirement
- Waiting time for Developer Availability

Week 2
- Development Work
- Wait for Package Build
- Package Build time

Week 3
- Package Build becomes available
- Business Analyst on Vacation

Week 4
- Business Analyst Change Review
- New Package Build

Week 5
- Revalidation
- Available to End users

Available to the End Users in 22 Days

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Reasons to Leverage UX One Framework

Drastic reduction in time to delivery

Reduction in the Resource time

New Approach

Business Analyst

Reduction in the Skillset required

Less dependency on IT

Reduction in the Maintenance cost

Eases the continuous adoption

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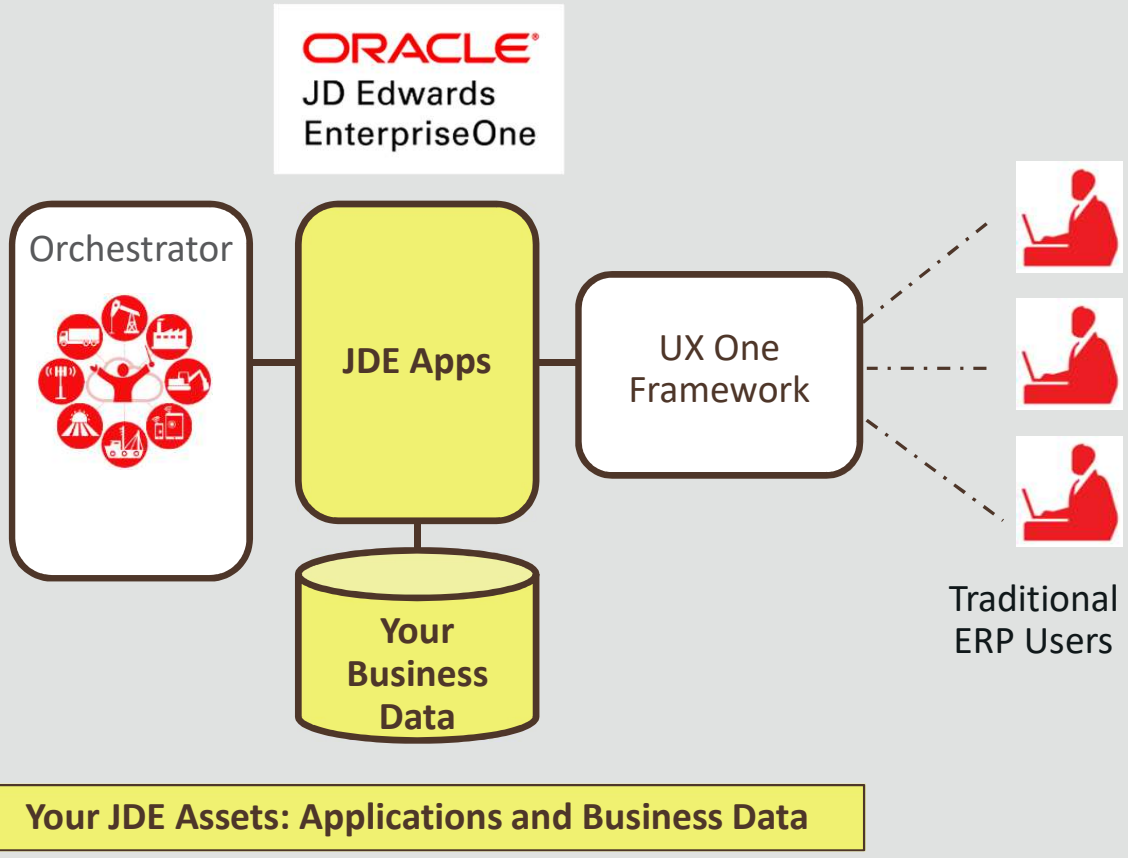
JD Edwards Digital Platform

Transform Your Processes with Digital Technologies

Realize the value of your enterprise data

- Mobile User interface
- Low / No Code User Interface
- Digital Assistants / Chatbots
- Enterprise Process Automation (RPA)
- JD Edwards Process Automation
- Business logic extensibility
- Machine to machine integration (IoT)
- Cloud Integration (SaaS, PaaS)
- Third Party Integrations
- Emerging technologies



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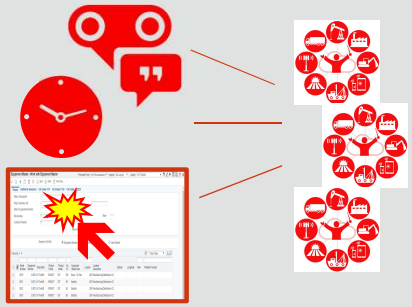
Orchestrated Process Automation

Simplify or eliminate tedious tasks

Challenges

- Repetitive transactions are a burden to human users
- Humans make mistakes
- ERP data is missing, erroneous, or late



Use the Tools You Have

Use orchestrations as automated transactions.

Simplify and Eliminate

A single orchestration can encompass many manual steps.

Initiate from Anywhere

Invoke orchestrations from RPA tools, schedulers, chatbots, and JDE forms.

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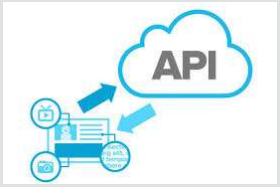
JD Edwards Integration and Extensibility

Extending JD Edwards Challenges

- Time to Delivery Solutions
- Unique Skill Sets Required
- Changing Technology
- High Cost to Maintain

On the Glass

Industry Tools



Standards Based

Personalization
Empower the business analysts to simplify the end user experience to increase productivity

Remove Proprietary Tools
Common tools reduces the cost of development and enable future technology trends

REST Services
Future proof integrations by leveraging industry standards

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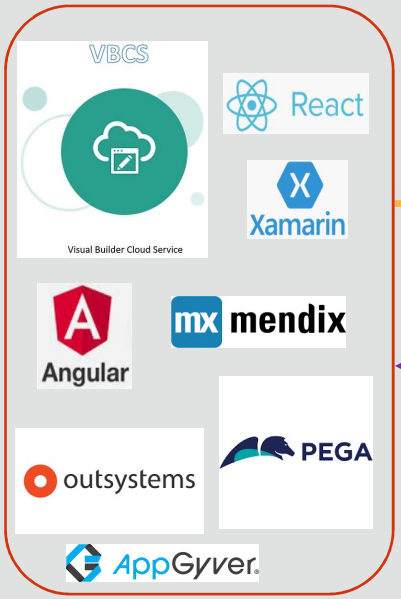
JD Edwards Low/No Code

Fit for purpose UI using tool of your choice

Choose Your Low/No Code Development Tool

Orchestrations to Connect to JD Edwards

Rapid Application Development to enable Mobile Access, Chatbots, IoT, Collaboration…



ORACLE
JD Edwards EnterpriseOne

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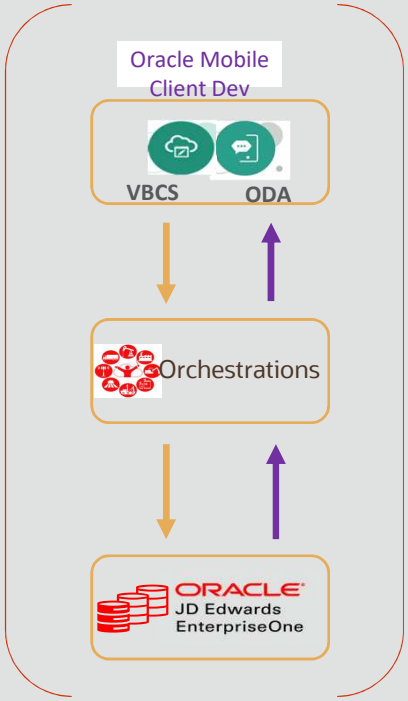
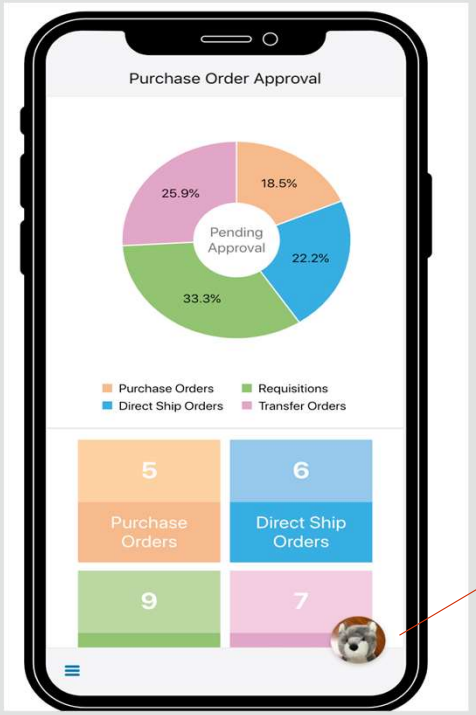
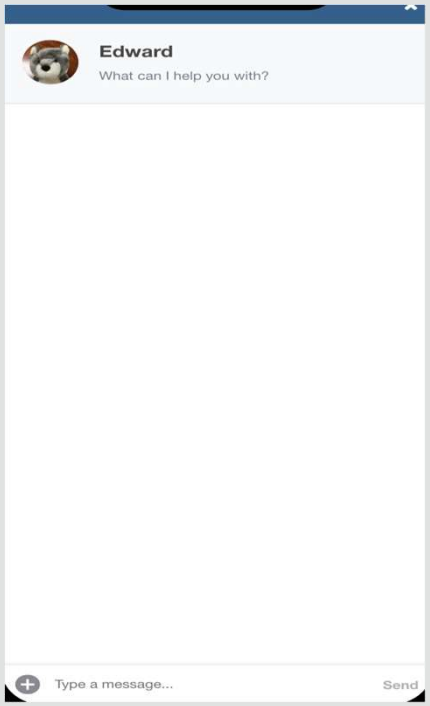
VBCS Mobile application integrated with Oracle Digital Assistant







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JD Edwards EnterpriseOne Orchestrator and Notifications

Continuous Stream of Enhancements

2015 -2016

- Form service
- Rules
- White list
- Cross-reference
- Custom Java
- Studio
- Studio home page
- Transformations
- Where used
- Import/Export
- Orchestration UDOs

2017

- Studio 6.0.2
- Data service
- AIS Version 2
- Output format
- Message service
- Outbound REST
- Groovy
- Nested orchestrations
- OAuth 2.0 outbound
- Iterate over steps
- Database connector
- Watchlist as a step
- Notifications
- Scheduler

2018

- Studio 6.1.0, 7.0
- Process Recorder
- Report as a step
- File transfer
- Confirmed completions
- Studio enhancements
- Assigned subscriptions
- Resilient Scheduler
- Orchestrations launched from business function
- Message Center
- Orchestrator Monitoring
- Health Monitor
- Error Handling
- Input from CSV

2019

- Studio 7.1, 7.2
- Orchestrations launched via apps "on the glass"
- OpenAPI spec
- Enhanced output
- XML input & output
- Required inputs
- Paging for high-volume data
- Multiple actions in messages
- Orchestrations & URL as actions
- Redesigned Studio
- Scheduler UI
- Simplified Studio deployment
- Simplified security for Studio
- Iteration over grid rows
- Mapping output to grid rows

2020

- Categories for search and export
- Orchestration Debugger
- Calling business functions as steps
- Embed orchestrations without a connector
- *Automated testing**
- *Orchestrator Studio usability**
- *Customer-requested enhancements**

Orchestrator Enhancements on LearnJDE:

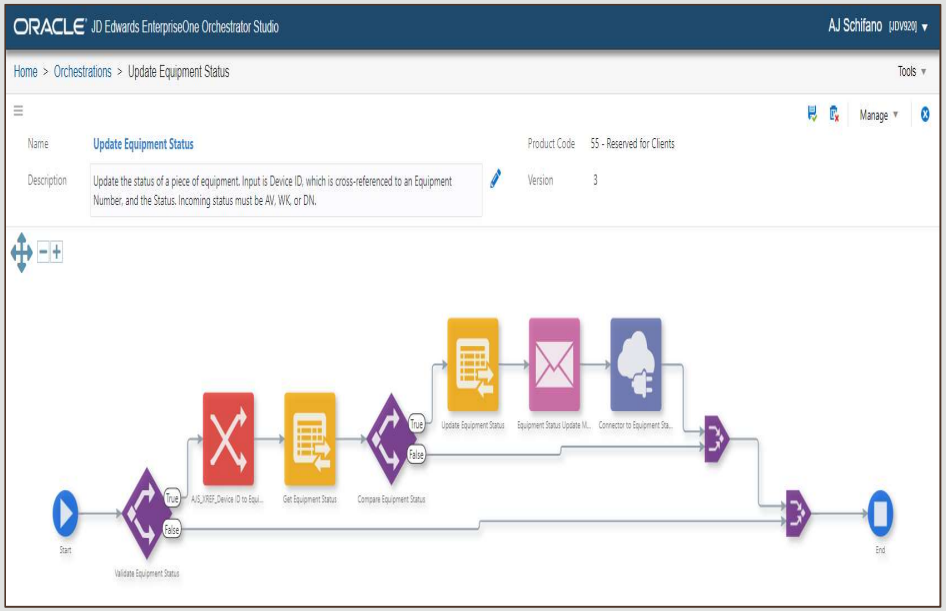
https://docs.oracle.com/cd/E84502_01/learnjde/orchestrator_enhancements.html

** Planned*

9.2.4
SIG Request

Redesigned EnterpriseOne Orchestrator Studio

Simple, Graphical and Intuitive



- Improved UX for technical and nontechnical users
- Graphical flow allows easier visibility to steps
- Top-level access to all orchestration components
- Add, move, or delete steps with ease
- Run orchestrations for testing within the same interface
- Improved Orchestration Management
- Simplified management via AIS server
  - ADF server no longer required

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9.2.4.3
SIG Request

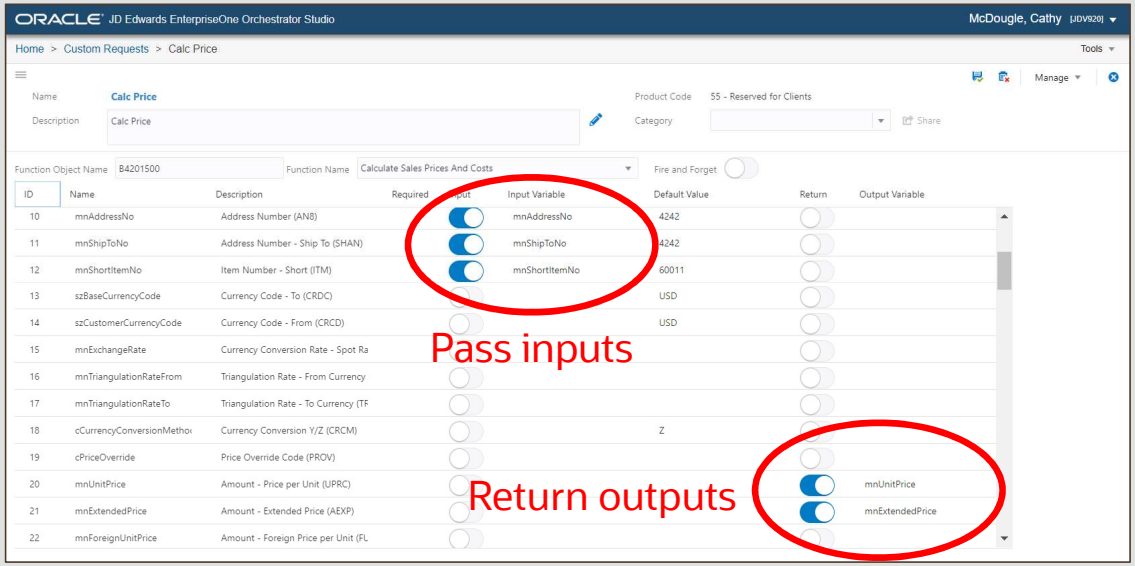
Call a Business Function as an Orchestration Step

What: Orchestrator enables you to invoke a business function as a step in an orchestration.

Value: Provides another option to invoke efficient, direct access to JD Edwards logic or custom business logic.

How:

- In addition to “Groovy” and “Java” you can now to select “Business Function” as the type for a Custom request
- Pass inputs into the business function and receive outputs back, depending on how the BSFN was written
- Run synchronously or asynchronously (“Fire and Forget”)
- Faster, more direct logic than using a form request or data request



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9.2.4.3

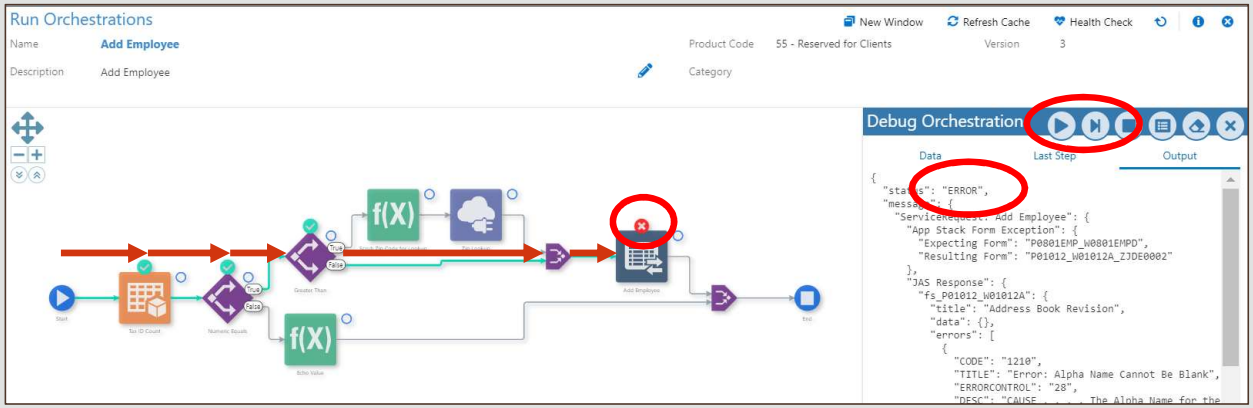
Orchestration Debugger

What: View the step-by-step execution of an orchestration.

Value: Quickly find why an orchestration ends in error or produces unexpected output.

How:

- New “Debug” button on the Run Orchestrations page
- Follow the path through rules
- Inspect and manually change the values of variables at each step
- Set break points or click step-by-step
- See the final output built at each step



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Planned

Assertion Framework for Orchestrations

Using orchestrations as test cases

Challenges

- End-to-end validation of a business process can be complex
- Business needs assurance that critical processes are functioning and producing correct data

✓

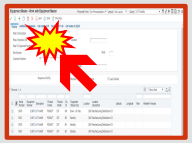
Use the Tools You Have

Use orchestrations as test cases to validate business processes

✓

Ensure that Data is Valid

Define the expected values (“assertions”) for test cases and investigate deviations



1-2-3

Simplified Capture of Tests

Use the Orchestrator “Record a Process” feature to create tests and expected values

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Summary and Call to Action

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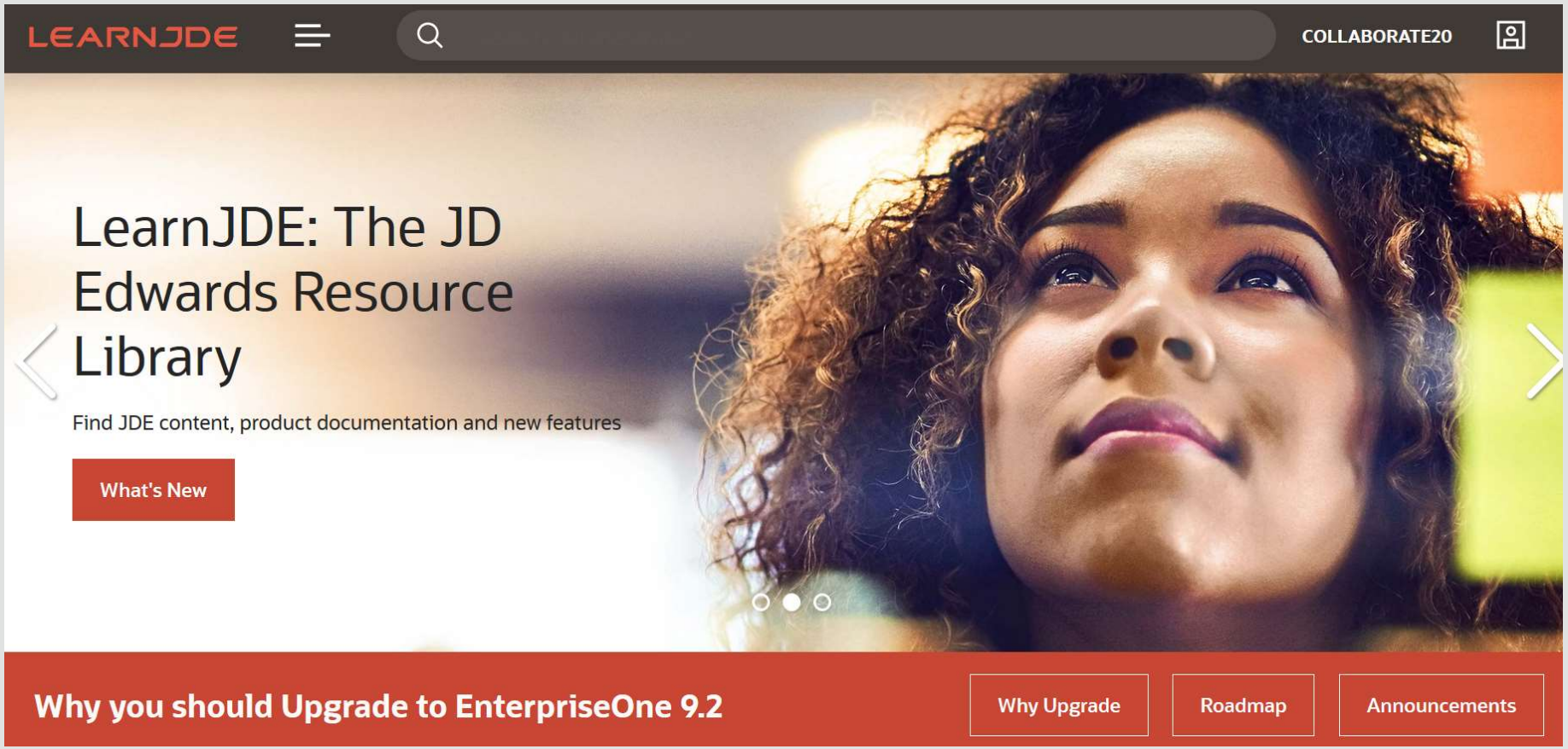

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Simplify and Automate the Administration of Oracle JD Edwards EnterpriseOne 9.2

Simplify and Automate the ongoing maintenance of JD Edwards to ensure that the product's total cost of ownership remains low while taking advantage of the significant innovation opportunities available in the Oracle JD Edwards ecosystem.

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Link to Whitepaper

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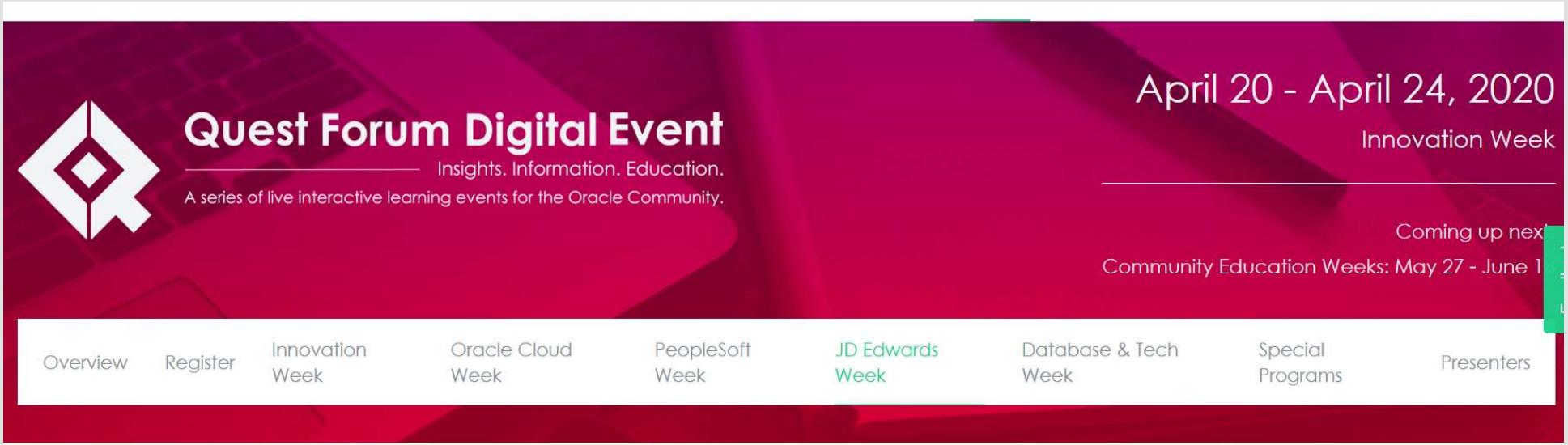
JD Edwards Week – June 8-11, 2020



https://questoraclecommunity.org/events/conferences/questforumdigitalevent/jd-edwards-week/

JD Edwards Week: June 8 – 11, 2020

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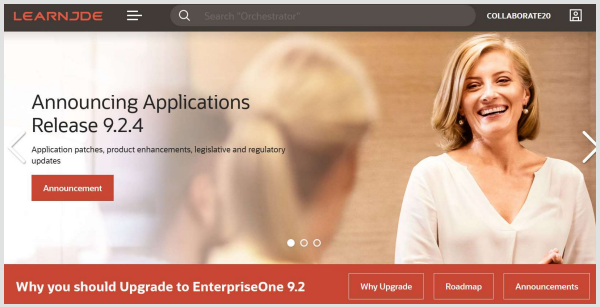

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