Discover the Awesome Power of JD Edwards Orchestrator
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Program Agenda

1. Digital Transformation
2. Orchestrator Powers Digital Transformation
3. New (and not so new) Features
4. Notifications
5. But Wait...There’s More
Disruption & Transformation

Business
- Disruption & Transformation
- Win Customers
- Talent Crisis
- Workforce Engagement
- Segment of One
- Process Standardization
- Regulatory Compliance
- Planning, IFRS15 & ASC606
- Budgeting & Forecasting
- Cost Reduction
- Profit Margin
- Global Expansion
- Inventory Management
- Transportation Logistics
- Warehousing

Technology
- Disruption & Transformation
- Internet-of-Things
- Machine Learning
- Chatbots
- Virtual Reality
- Bitcoin
- Cloud
- Hybrid
- Mobile
- Big Data
- Artificial Intelligence
- 3D Printing
- Data Analytics
- Digital Transformation
- Data Science
- Autonomous Driving
- Drones

Competition
- Disruption & Transformation
- Payments / POS
- Uber
- Lyft
- Didi
- Square
- Netflix
- Spotify
- YouTube
- PANDORA
- Uber
- Taxi.EU
- Izettle
- Spotify
- Musical.ly
- Netflix
- YouTube
- Musical.ly

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Technologies That Enable Digital Transformation

- MOBILE
- DOCUMENT & SOCIAL
- BUSINESS INTELLIGENCE
- BIG DATA
- COGNITIVE COMPUTING
- IoT
- INTEGRATION
- PROCESS
Digital Transformation Means Transforming JD Edwards Too

Digital Transformation:
• Mobile, IoT
• UX One, personalization
• Citizen Developer
• No-code integrations
• Light Touch
• Database In-Memory
• Cloud
  • Orchestrator
  • Notifications
The Nonstop Pulse of Your Business
Participants in Digital Transformation

- Desktop transactions
- Executive dashboards
- Third-Party / Cloud integration
- Indirect users
- IoT devices
- Mobile / kiosk users
Digital Transformation with Orchestrator

- Mobile Applications
- Internet of Things
- Third-party systems
- Oracle Cloud
- JDE UX One
- Process Automation
- JDE Apps
- Business Logic
- Business Data
- The Digital Economy
- The Digital Gold

Oracle Cloud
Orchestrator Studio
Orchestrator
Your App Here
Process Automation
JDE UX One
JDE Apps
Business Logic
Business Data
The Digital Economy
The Digital Gold

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Orchestrations Are (Micro)services

Business analysts create microservices

Enter Work Order
Alert Lease Expiring
Equipment Status Down
Create Sales Order
Alert Low Inventory

Application Interface Services

APIs

Orchestrator

Orchestrator Studio

JDE Apps

Business Logic

Business Data
JD Edwards EnterpriseOne Orchestrator

New Features (and a Review of Key Features)
JD Edwards EnterpriseOne Orchestrator

Continuous Stream of Enhancements

2015-3  |  2016-Q1  |  2016-Q3  |  2016-Q4  |  2017-Q2  |  2017-Q4  |  2018-Q2

Orchestrator

- Form service
- Rules
- White list
- Cross-reference
- Custom Java
- Studio 1.0.0
- Studio 2.0.0
- Studio home page
- Transformations
- Where used
- Import/Export
- Studio 3.0.0
- Orchestration
- UDOs
- Studio 5.0.1
- Data service
- AIS Version 2
- Output format
- Message service
- Outbound REST
- Groovy
- Nested orchestrations
- Studio 6.0.2
- OAuth 2.0 outbound
- Iterate over steps
- Database connector
- Watchlist as a step
- Studio 6.1.0
- Process Recorder
- Report as a Step
- File Transfer
- Confirmed Completions
- Studio Enhancements
- Resilient Scheduler

Notifications

- Notifications
- Assigned Subscriptions
- Resilient Scheduler

Visit LearnJDE.com for details
Form Service Using Process Recorder

Record a Process. Automatically Invoke any JD Edwards Application Forms.

1. Open a JDE application.
2. Start the Process Recorder.
3. Save the form service.
4. Use the form service in an orchestration.
5. REST call to invoke the orchestration.
Report Service
Report as an Orchestration Step

- Data Selection
- Data Sequencing
- Processing Options
- Output Options

New with Tools 9.2.2.4
File Transfer

Get a File

Send a File

FTP/SFTP

New with Tools 9.2.2.4
Confirmed Completion of Orchestrations

Why?
To provide a record of an orchestration that did not complete.

What?
A log file written to AIS server

Types of Errors Recorded:
- JSON payload parse failure
- Invalid orchestration inputs
- Any non 200 status response from HTML server (includes connection and security failures)
- Any non 200 status response from external REST calls
- Failure to find or access orchestration components
- Invalid FSR/DS/XREF request (failed to execute at all)
- Failure to find XREF or Whitelist when orchestration is aborted
- Failure to connect to an external database
- Any exception from a groovy script
- Warnings and errors returned in form service responses

New with Tools 9.2.2.4
Data Request as an Orchestration Step

Access and Aggregate Data from JD Edwards EnterpriseOne Tables and Views

1. Load a JDE table or business view
2. Choose the fields you need
3. Optionally perform aggregations
4. Filter the data using criteria
5. Assign variable names for use in subsequent orchestration steps

JDE Data
Database Connector – Call any SQL Database

Read from or write to any Non-JDE Database

- For data that does not “belong” as part of JDE transaction tables
- Use soft coding to specify external database connection, driver, and security
- Use Orchestrator Studio UI for soft coding configuration
- Read from and write to any SQL database using JDBC and Groovy scripting

Archive Data to Data Warehouse
Save Status
Get Status
One View Watchlists as Orchestration Steps

Retrieve data from Watchlists

- Watchlist Name
- Number of Records
- Is Critical, Is Warning
- Critical Threshold, Warning Threshold
- Description, Object Name
- Form ID, Form Title
- Query Name, Query Object Name
- Last Run Time
Orchestrations Can Call Other Orchestrations

Call Your Own Orchestrations ... Or Someone Else's

• Can call local orchestrations from another orchestration without any configuration
• Use soft coding to specify external Orchestrator compliant end points
• For security reasons, calls are executed from the HTML server instance NOT the AIS instance.
Connector – Call any RESTful endpoint

Call the Weather Service – or anything else you want

- Can call any REST endpoint
- Use Soft coding to specify external compliant endpoints
- Use Orchestrator Studio UI for soft coding configuration
- Supports Basic Authentication and OAuth 2.0
- Allows configuration of a proxy if required
- Allows custom HTTP headers to be added if required
- All fields can be encrypted just like the normal soft coding record
Send Message Service

• Ability to send messages (Email / SMS) via AIS
• Uses JDE Send Message system function
• Sends messages to the Work Center if there is no default messaging contact set up in Email / Internet options from Who’s Who
• Send To:, Cc:, and Bcc:
  – Address Book Number
  – Contact (Who’s Who line from Address Book)
  – Group Distribution List
  – SMTP e-mail address(es)
• Attach:
  – Subject & Message
  – Text substitution
  – Shortcut to a JDE application (with data structure)
  – Message from data dictionary
Apache Groovy Support

Need even more awesome in your orchestration?

- Take your orchestrations to the next step with Groovy scripting embedded in your orchestration
- Supports multiple touch points within an orchestration
  - Custom service request
  - Custom rule
  - Output manipulation
- Direct integration with the logging system for ease of debugging and warnings
- Takes inputs and creates output just like any other Service Request Step or Rule
Update Samples and Oracle by Example

A library of Oracle-by-Example and recorded tutorials for basic and intermediate Orchestrator and Notification capabilities.

www.LearnJDE.com
JD Edwards EnterpriseOne Notifications

Stay in touch with your business and your ERP whether you are at your desk or on the go

Powered by Orchestrator
To: Joe Manager

Large Orders

Congratulations!
You have 8 sales orders over $100,000.

Work With Sales Order Headers

E-mail

JDE User Interface

SMS Text message

E-mail
Types of Notifications

**Exception**
Accountant is notified about journal entries that are out of balance

**Action Required!**
Credit manager is notified that an order for a key customer is on hold

**Proactive**
Inventory manager is notified when inventory levels are approaching defined limits

**Informational**
Customer service manager is notified when a key customer’s order has shipped

**Reminder**
Manager is reminded of expense reports to be approved

JDE UI
The “bell”

Browser pop-up

E-mail

SMS Text message

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The “bell”

Browser pop-up

E-mail

SMS Text message

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The “bell”

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JDE UI
The “bell”

Browser pop-up

E-mail

SMS Text message
JD Edwards EnterpriseOne: ERP with a Pulse
But wait...there's more

The path to Autonomous ERP
Autonomous ERP

People Work Less
- Management by exception
- Proactive notifications
- Streamlined actions
- High value task

Machines Work More
- Condition/Rule-based actions
- Real-time evaluation
- Machine Learning
Humans: Alert → Analyze → Act

Autonomous Systems: Detect → Decide → Do

Alert

Analyse

Act

External Data

Cloud Services

Third-Party Systems

ERP Business Data
Harmonizing Humans and Bots

Robotic Process Automation

Alert

Analyze

Act

Detect

Do

Decide

Machine Learning

Monotony

Autonomy

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Autonomous Systems: Detect → Decide → Do

Orchestrations: Detect → Decide → Do

**Vineyard Irrigation Automaton**

- **Detect:** Soil moisture
- **Detect:** Rain forecast
- **Detect:** Temp forecast
- **Decide:** Irrigate?
- **Do:** Create JDE transaction
- **Do:** Start irrigation system
- **Detect:** End of irrigation
- **Do:** Update JDE transaction

**ERP Business Data**

- External Data
- Cloud Services
- Third-Party Systems
Autonomous Systems: Detect → Decide → Do

Orchestrations: Detect → Decide → Do

Inventory Replenishment Automaton

- **Detect**: Low inventory
- **Detect**: Low market price
- **Detect**: Blanket order open
- **Decide**: Order inventory?
- **Do**: Create purchase order
- **Do**: Submit purchase order
- **Detect**: Inventory received
- **Do**: Update inventory

External Data
Cloud Services
Third-Party Systems
JD Edwards EnterpriseOne: ERP with an Autonomous Pulse
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• Tutorials
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Integrated Cloud
Applications & Platform Services