

JD Edwards EnterpriseOne Orchestrator: A Quick Tour of Recent Enhancements

Quest Webinar

AJ Schifano
Product Manager
Oracle JD Edwards EnterpriseOne

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Agenda

- 1 ➤ Recap of Orchestrator Sessions at COLLABORATE 19
- 2 ➤ Summary of Orchestrator Enhancements by Release
- 3 ➤ A Quick Tour of Enhancements
- 4 ➤ Q & A

COLLABORATE 19 Conference: 29 Orchestrator Sessions



Go Collaborate: Orchestrator & Notifications Sessions 

Thursday	
8:00 AM–12:00	Emera Solutions
8:00 AM–9:00	Fluidn Platform

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Go Collaborate: Orchestrator & Notifications Sessions 

Wednesday	
8:00 AM–9:00	Oracle
8:00 AM–9:00	ERP Suite
9:15 AM–10:15	Oracle
9:15 AM–10:15	Ford Motor ERP Suite
12:45 PM–1:45	Oracle National
12:45 PM–1:45	Terillium
2:00 PM–3:00	Oracle
4:30 PM–5:30	Oracle
4:30 PM–5:30	Circular

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Go Collaborate: Orchestrator & Notifications Sessions 

Tuesday	
10:30 AM–11:30	Oracle
10:30 AM–11:30	GSI
11:30 AM–12:30	Oracle
12:45 PM–1:45	Oracle
12:45 PM–1:45	Refina Sal
12:45 PM–1:45	Oracle
2:00 PM–3:00	Michelin
2:00 PM–3:00	PCB A
4:30 PM–5:30	Emera
4:30 PM–5:30	Penn I

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Go Collaborate: Orchestrator & Notifications Sessions 

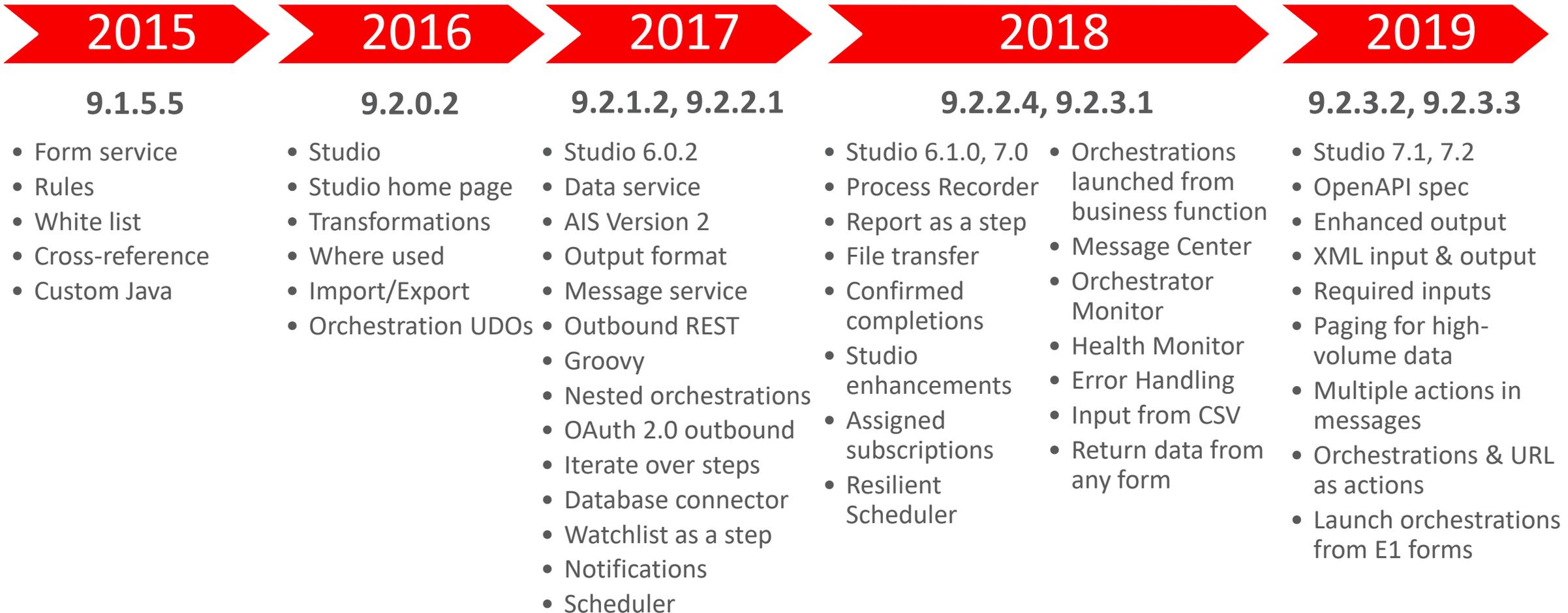
Sunday		
9:00 AM–12:00	brij	JD Edwards EnterpriseOne Orchestrator Workshop
1:45 PM–2:45	JDE E1 Tech SIG	Round Table - How the Orchestrator is being used
Monday		
9:15 AM–10:15	Michelman, Magic	Manufacturing Business Automation: Our Business Pains and Gains; with a 10 month ROI
9:15 AM–10:15	Terillium	Shop Floor IOT Integration Made Simple!
9:15 AM–10:15	ACBM Solutions	Transform Your Assets Into Smart Users
9:15 AM–10:15	LSB Industries	Implementing Notifications at LSB Chemicals
4:30 PM–5:30	Stanley Engineered Fastening, ERP Suites	Digital Transformation in Action with JDE Tools - The Stanley Implementation Journey
4:30 PM–5:30	Ledcor	Using Open Sourced JavaScript components to give users a refreshed view into existing applications

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JD Edwards EnterpriseOne Orchestrator and Notifications

Continuous Stream of Enhancements



What's New?

Input from Comma-separated Values (CSV) File

Iterate over a CSV file as input to an Orchestration

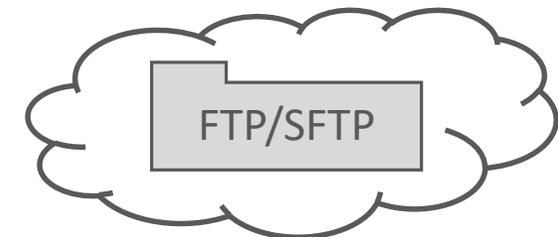
- Configured in the existing FTP Connector in Receive Mode
- Creates an Array to Iterate Over in Next Orchestration Step
- Define CSV Options
 - Location
 - Has Headers?
 - Upload a sample file for Definition or Headers etc.
 - Name the Data Set

Spreadsheet

	A	B	C	D	E	F
	Equipment Number	Description	Site Number	Serial Number	Product Model	Product Family
1	31970	IoT Forklift	200	SN970	IOT	FORKLIFT
2	31971	IoT Forklift	200	SN971	IOT	FORKLIFT
3	31972	IoT Forklift	200	SN972	IOT	FORKLIFT
4						
5						

Comma-separated value format

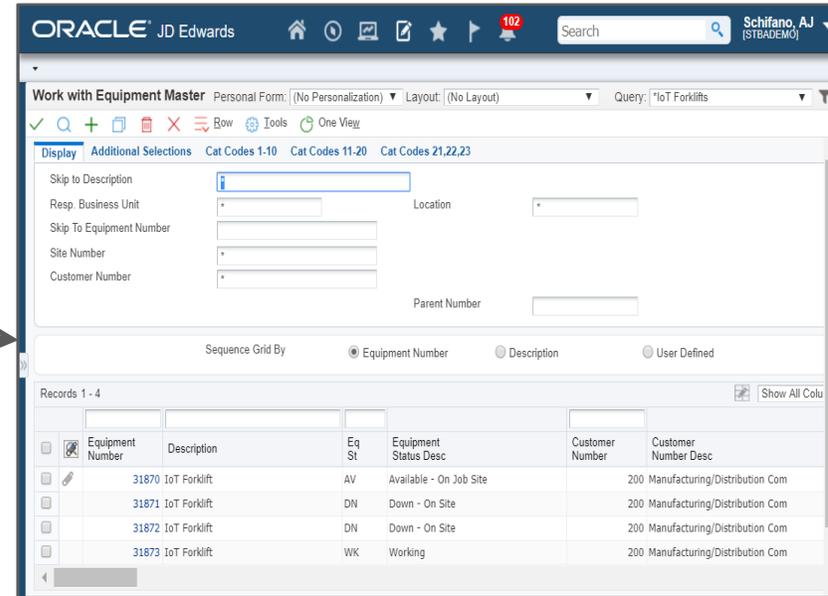
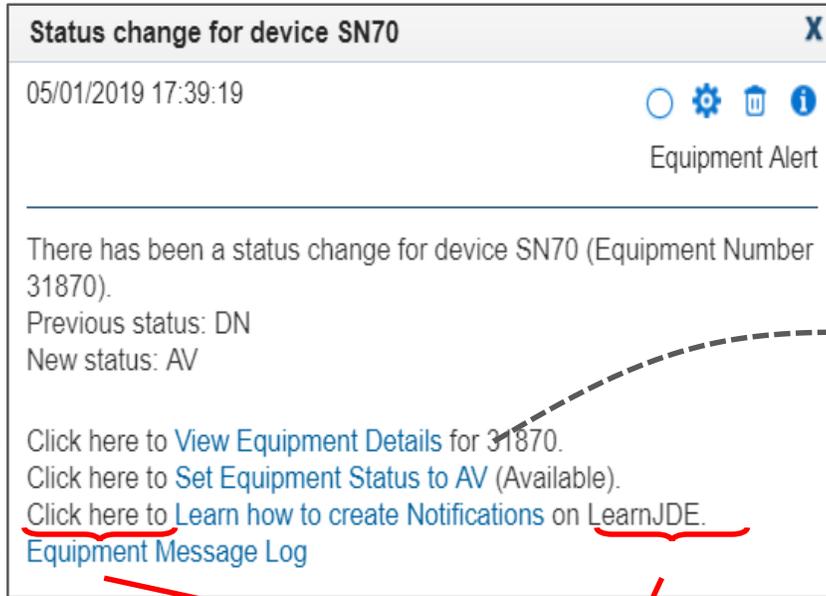
```
Equipment Number,Description,Site Number,Serial
Number,Product Model,Product Family
31970,IoT Forklift,200,SN970,IOT,FORKLIFT
31971,IoT Forklift,200,SN971,IOT,FORKLIFT
31972,IoT Forklift,200,SN972,IOT,FORKLIFT
```



Enhancements to Messages: Orchestrator and Notifications

Tools 9.2.3.2 and Orchestrator Studio 7.1.1

Notification Message



Launch to a personal form: Work with Equipment Master

Multiple Action Links in Messages
 In orchestration or notification messages, include links to multiple applications.

Pretext and Posttext for Links
 In orchestration or notification messages, add text before and after links.

Specify User-defined Objects in Links
 In orchestration or notification messages, specify that the link should launch a personal form or a query.



Report Attachments

Attach the Report output directly to a message

- Report output attaches to emails
- Provides a link to the report output from the Notification and Message Center

Status change for device SN70

05/02/2019 09:30:16 ⓘ ⚙️ 🗑️

Equipment Alert

There has been a status change for device SN70 (Equipment Number 31870).
 Previous status: DN
 New status: AV

Click here to [View Equipment](#)
 Click here to [Set Equipment S](#)
 Click here to [Learn how to cre](#)

Equipment Message Log

Notification message

○ Status change for device SN70 Actions 🗑️

05/02/2019 09:30:16 View Equipment Details

● **Status change for device** Set Equipment Status to AV

05/02/2019 09:30:13 Learn how to create Notifications

● **New Equipment 31870 ha** **Equipment Message Log**

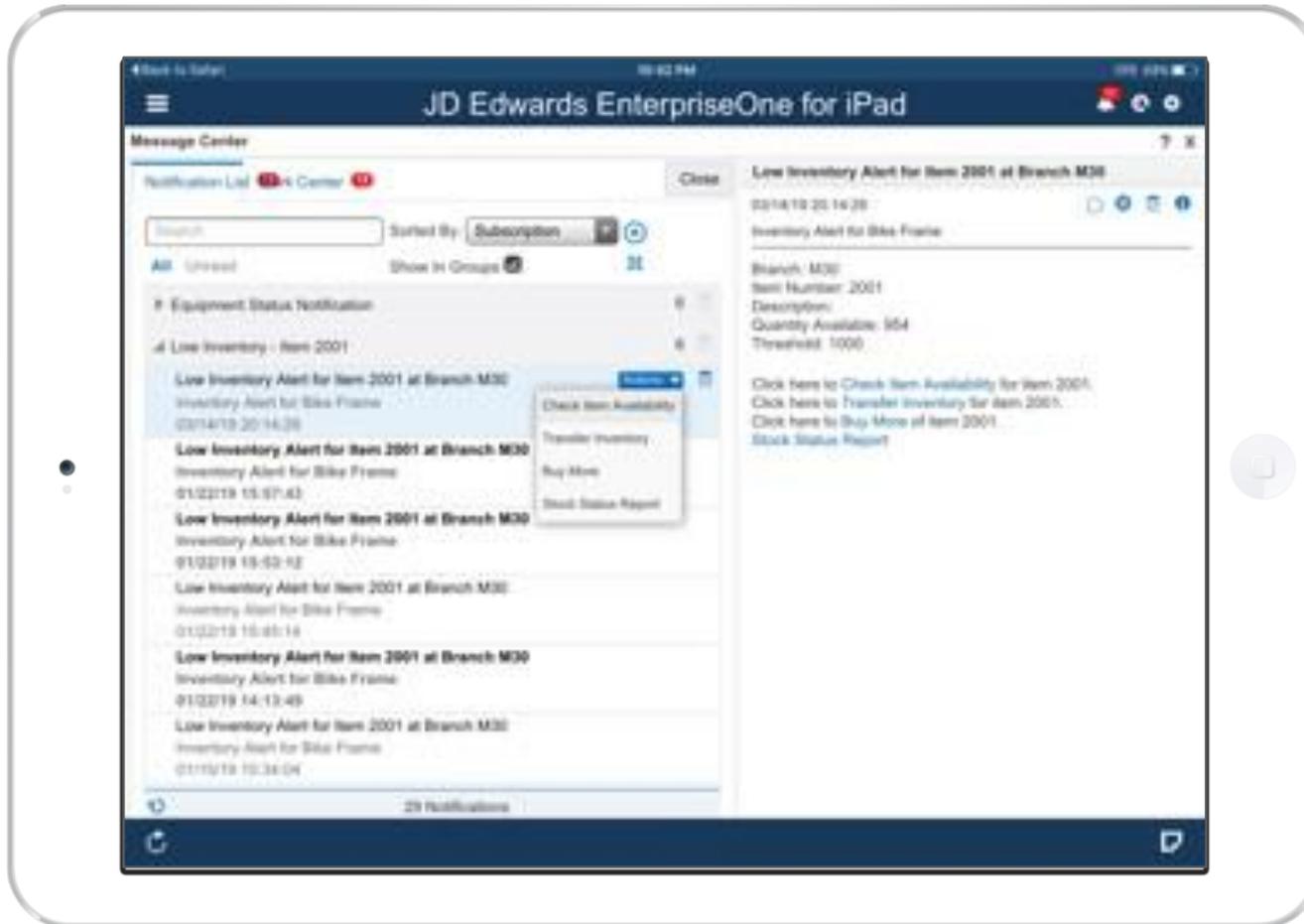
05/02/2019 09:30:13

Orchestrator Studio

Attachments ➕ Add			
Link Text	Job Number	Execution Server	File Type
Equipment Message Log	Job Number	Execution Server	PDF

Message Center on iPad

Tools 9.2.3.3 and Orchestrator Studio 7.1.1



Generally equivalent functionality to using Message Center on a desktop browser.

Take your critical alerts with you.

Click the links to take action.

Launch Orchestrations from EnterpriseOne Applications

Tools 9.2.3.3 and Orchestrator Studio 7.2.0

- Launch an orchestration from an EnterpriseOne form
- Attach to an event (like “OK Button Clicked”) or add a button on the fly
- Map data from the form into the orchestration
- Created “on the glass” as a form extension (UDO), not a customization



Click OK (or any event) and launch an orchestration.

Launch Orchestrations from a Business Function (B98ORCH)

Supports all JDE development constructs

- Call an Orchestration or Notification from Base JDE Development
 - FDA / RDA / BSFN's / Table Events
- Uses an System BSFN B98ORCH
- Defaults to Asynchronous processing
- Allows mapping of 20 Inputs and 20 Outputs if Synchronous
- Can optionally map full JSON payloads In and Out

The screenshot shows the 'Business Functions' configuration window for the function 'CallOrchestrationNotification'. The window includes a search bar, a list of available objects, and a data structure table.

Function Details:
 Function Name : CallOrchestrationNotification
 Function Description : Call Orchestration or Notification
 Source Module : B98ORCH Data Structure : D98ORCH

Transaction Processing:
 Include in Transaction

Available Objects:

- Special Values
 - <Literal>
 - <Blank>
- Business View Column
 - BC Category Code - Address Book 01 (F010)
 - BC Category Code - Address Book 02 (F010)
 - BC Category Code - Address Book 03 (F010)
 - BC Category Code - Address Book 04 (F010)
 - BC Category Code - Address Book 05 (F010)
 - BC Category Code - Address Book 06 (F010)
 - BC Category Code - Address Book 07 (F010)
 - BC Category Code - Address Book 08 (F010)
 - BC Category Code - Address Book 09 (F010)
 - BC Category Code - Address Book 10 (F010)
 - BC Category Code - Address Book 12 (F010)
 - BC Category Code - Address Book 13 (F010)
 - BC Category Code - Address Book 14 (F010)
 - BC Category Code - Address Book 15 (F010)
 - BC Category Code - Address Book 16 (F010)
 - BC Category Code - Address Book 17 (F010)
 - BC Category Code - Address Book 18 (F010)
 - BC Category Code - Address Book 19 (F010)
 - BC Category Code - Address Book 20 (F010)
 - BC Category Code - Address Book 21 (F010)
 - BC Category Code - Address Book 22 (F010)
 - BC Category Code - Address Book 23 (F010)

Data Structure:

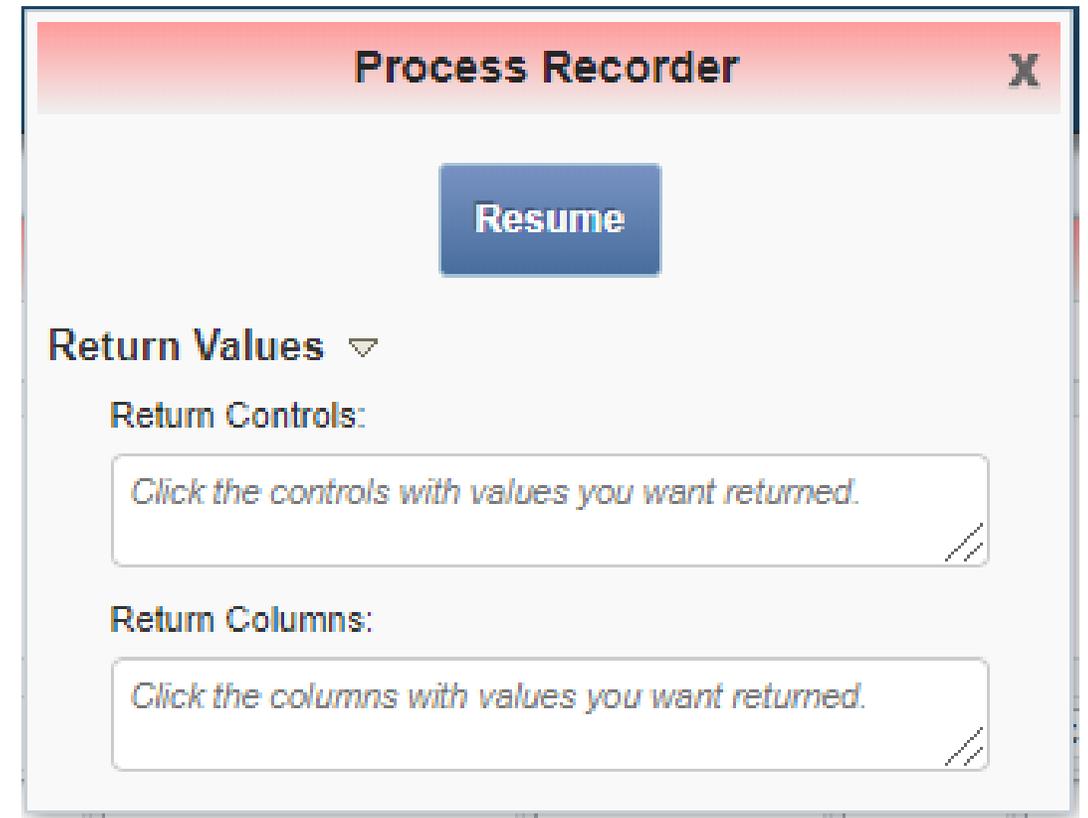
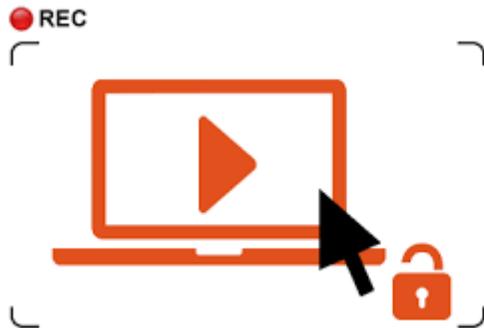
Value	Dir	Data Item
GetAddressBook_Simple	→	szName_FUNCNM
ORCH	→	szType_WOTYP
<NOT Assigned>	→	szInputType_ACTYP
<NOT Assigned>	→	szOutputType_ACTYP
1	→	cWaitForResponse_ER066
VA evt_cErrorFlag_EV01	←	cError_EV01
<NOT Assigned>	→	szInputString_REPTXT
AddressID	→	szName1_ENTRNM
VA evt_szAddressID_DL01	→	szValue1_TSTRING
<NOT Assigned>	→	szName2_ENTRNM
<NOT Assigned>	→	szValue2_TSTRING
<NOT Assigned>	→	szName3_ENTRNM
<NOT Assigned>	→	szValue3_TSTRING
<NOT Assigned>	→	szName4_ENTRNM
<NOT Assigned>	→	szValue4_TSTRING
<NOT Assigned>	→	szName5_ENTRNM
<NOT Assigned>	→	szValue5_TSTRING

Buttons: Business Function Notes, Structure Notes, Parameter Notes, OK, Cancel

Multiple Output Steps for Application Stack

Return data from any / all forms on the App Stack

- Previously could only define outputs from the last step
- Process Recorder is Supported



Date Filtering in Data Requests (“Today + 10 Days”)

Tools 9.2.3.2 and Orchestrator Studio 7.1.1

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Service Requests > Data Request Tools Guide

Service Request Product Code

Enter Short Description

Table/View Name SO Detail History Union For CSI Aggregation Data Set Variable Name

Fields

Description	Data Dictionary	Filter	Return	Aggregate	Having
Order Co [F4211]	KCOO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Order Number [F4211]	DOCO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Or Ty [F4211]	DCTO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Line Number [F4211]	LNID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ord Suf [F4211]	SFXO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business Unit [F4211]	MCU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co [F4211]	CO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Filter Criteria

Match Type Match All Match Any '\$' indicates variable

Conditions

Request Date [F4211] = Today Plus 10 Days

Return Fields and Variable Names

Order Number [F4211]

Ship To Number [F4211]

Order By

Filter Criteria

Match Type Match All Match Any '\$' indicates variable

Conditions

Request Date [F4211] = **Today Plus 10 Days**

Specify Required Orchestration Inputs

Tools 9.2.3.3 and Orchestrator Studio 7.2.0

The screenshot displays the Oracle JD Edwards EnterpriseOne Orchestrator Studio interface. The main window shows the configuration for an orchestration step named "Add Employee to Address Book". The "Orchestration Steps" section is expanded to show the "Add Employee to Address Book" step, which is a "Form Request" type. The "Input" table is visible, showing two input fields: "Employee Name" and another unnamed input field. The "Required" column for the "Employee Name" input is highlighted with a red box, and a toggle switch is turned on, indicating that this input is required. The "Value Type" for "Employee Name" is "String". The "Default Value" column is empty for both inputs. The "Transformations" section is also visible, showing "Service Request Input" and "Available Values" for "Employee Name" and "P01012_Version".

Type	Action	Iterate Over	Name	Value Type	Default Value	Required
Form Request			Add Employee to Address Book Personal SRE_1901110005JDE			
Orchestration Inputs						
			Employee Name	String		<input checked="" type="checkbox"/>
				String		<input type="checkbox"/>
Values from Steps						
System Values						
Variables						

A new switch in Orchestrator Studio to designate the input as required.

Open API Discovery of Orchestrations, Inputs, and Outputs

Tools 9.2.3.3 and Orchestrator Studio 7.2.0

New endpoint: <https://server-url.com:1234/jderest/v2/open-api-catalog>

Full Open API (“Swagger”) Documentation:

- Server Endpoint Information
- List of Orchestrations
- Definition of Inputs, Outputs, Responses
- Allowed Method (Get / Post)
- Allowed Input (consume) and Output (produce) formats (JSON / XML)

New “Version 3” Orchestrations with Enhanced Output

Tools 9.2.3.3 and Orchestrator Studio 7.2.0

Orchestration Output

OK Cancel Select All

Name	Field	Output	Value Type	Select
Category Codes				
People				
▲ Injury/Illness Details				
▲ Injury/Illness Details-Grid	<input checked="" type="checkbox"/> Return All Grid Rows	① Victims		
	Person Name	② Victim Name	③ String	<input checked="" type="checkbox"/>
	Nature of Injury/Illness Description	② Description of Injury	③ String	<input checked="" type="checkbox"/>
▲ People-Grid	<input checked="" type="checkbox"/> Return All Grid Rows	① People Involved		
	Incident Role Description	② Incident Role	③ String	<input checked="" type="checkbox"/>
	Person Name	② Involved Person Name	③ String	<input checked="" type="checkbox"/>

- ① Rename Array Output
- ② Rename Outputs
- ③ Define Output Types:
 - String
 - Numeric
 - Boolean
 - Date (9 formats, ISO)

Orchestration Input and Output as XML

Tools 9.2.3.3 and Orchestrator Studio 7.2.0

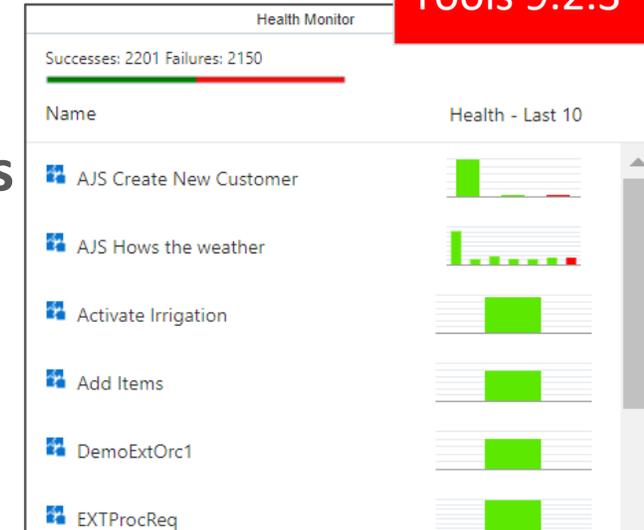
	Input	Output
JSON	Content-Type = application/JSON <pre>{ "Branch" : "30" }, { "ItemNumber" : "2001" }</pre>	Accept = application/JSON <pre>{ "QuantityAvailable": 4816, "Description": "Youth Sport Bike", "ItemNumber": 230 }</pre>
XML	Content-Type = application/XML <pre><InventoryCount> <Branch>30</Branch> <ItemNumber>2001</ItemNumber> </InventoryCount></pre>	Accept = application/XML <pre><?xml version='1.0' encoding='UTF-8'?> <InventoryCount> <QuantityAvailable>498</QuantityAvailable> <Description>Cro-Moly Frame, Red</Description> <ItemNumber>2001</ItemNumber> </InventoryCount></pre>

* Nested arrays are not supported with XML

Orchestrator Monitor

See the Health of your Orchestrations, Notifications and Schedules

- Shows the last 10 run statistics
 - Success Rate %
 - Shortest and Longest Timings
 - Last Failed and Succeeded Date
 - Average Runs per Day
 - Drill into Details for last 10 runs
- Shows Exception Details
 - Drill into Details and Payloads
- Includes Widget for E1 Pages
- Watchlist to alert on errors



Orchestrator Monitor

Health Exceptions

Successes: 2173 Failures: 2140

Close

Show All
 Failures
 Successes

Name	Health - Last 10	Success Rate	Shortest (s)	Longest (s)	Last Success	Last Fail	Runs Per Day
AJS Create New Customer		67%	0.6	9.9	08/13/2018 6:25:51...	08/13/2018 6:28:20...	0.75
AJS Hows the weather		86%	0.6	3.6	07/16/2018 11:33:4...	07/16/2018 11:45:0...	0.22
Activate Irrigation		100%	2.9	2.9	07/17/2018 8:49:11 ...		0.03
Add Items		100%	0.1	0.1	08/06/2018 4:59:55...		0.09
DemoExtOrc1		100%	8.1	8.1	08/16/2018 4:29:41...		1.00
EXTProcReq		100%	7.9	7.9	08/15/2018 10:05:1...		0.50
Except4Garry		0%	0.3	0.4		08/06/2018 9:59:00...	0.18
Garry Groovy		100%	0.1	3.6	08/06/2018 9:58:56...		1.30
Get Vineyard History		100%	0.1	3.5	08/17/2018 1:27:43...		2.19
InOut		48%	0.0	8.4	08/09/2018 9:19:45...	08/07/2018 6:32:20...	168.92

Improved Orchestration Error Handling and Configuration

Standardize Return Codes from Orchestrations

- Configure Http Return Codes for Form Service Errors and Warning
 - Should they be 200's or 500's?
- Configure how to Handle an Exception at each Step
 - Continue with Execution?
 - Abort with optional Orchestration call?
 - Default is to Abort
- Stored in the JDE DB

Full path to exceptions directory	/scratch/u01/home/ora
Exception Scenario List	FSR_ERROR
Exception/Health Monitor User	MICHAEL
Exception/Health Monitor Password	*****

Error Handling

Cross Reference: ItemBranch

User Defined Error Text

Sales Order creation failed

On Error

Abort Continue

Orchestration/Notification

Credit Hold

Input	Available Values	Default Value
Customer	customer	

Define Variables in Orchestrations

Want to pass around data between steps and output it?

- Available just as inputs are, but not part of the Orchestration inputs
- Can be set inside steps
- Can be returned as part of the Orchestration output

	Input	Value Type	Default Value	Required
▶	Orchestration Inputs			
▶	System Values			
▲	Variables			
	My First Variable	String ▼	Initial Value	✘
	Hopefully you get it now	Boolean ▼	False ▼	✘
	Variable	String ▼	Initial Value	✘

Transformations  Iterate Over ▼

Service Request Input Available Values Defau

AB Number

P01012_Version

Define Output Preview

Schedule

User Address Book Number

User Name

System Date

Orchestration Input

My First Variable

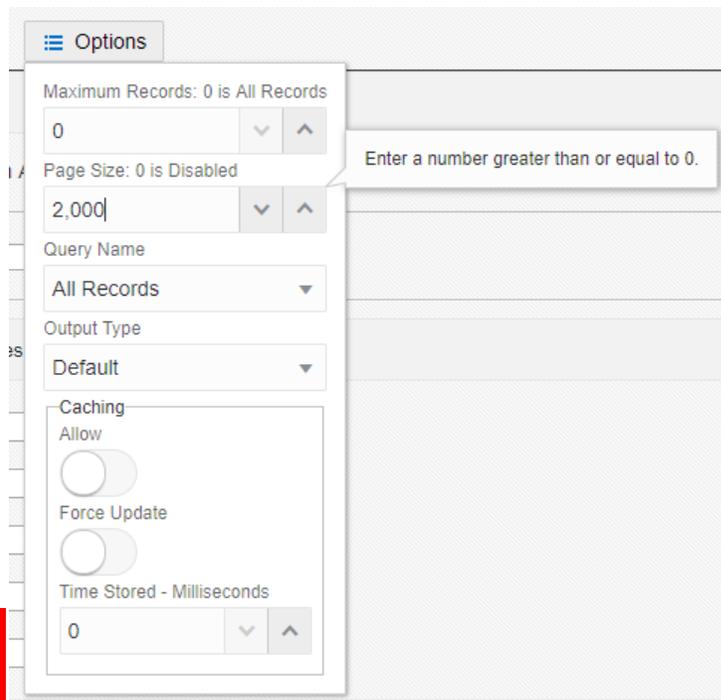
Hopefully you get it now

AB Number

High Volume Data Processing

A little help for high volume Service Requests

- Allow the ability to set a Page Size for data retrieval from JAS either for Form Service or Data Service Requests
- ‘Batches’ the data from JAS to AIS and AIS accumulates it into a single response



Options

Maximum Records: 0 is All Records
0

Page Size: 0 is Disabled
2,000

Query Name
All Records

Output Type
Default

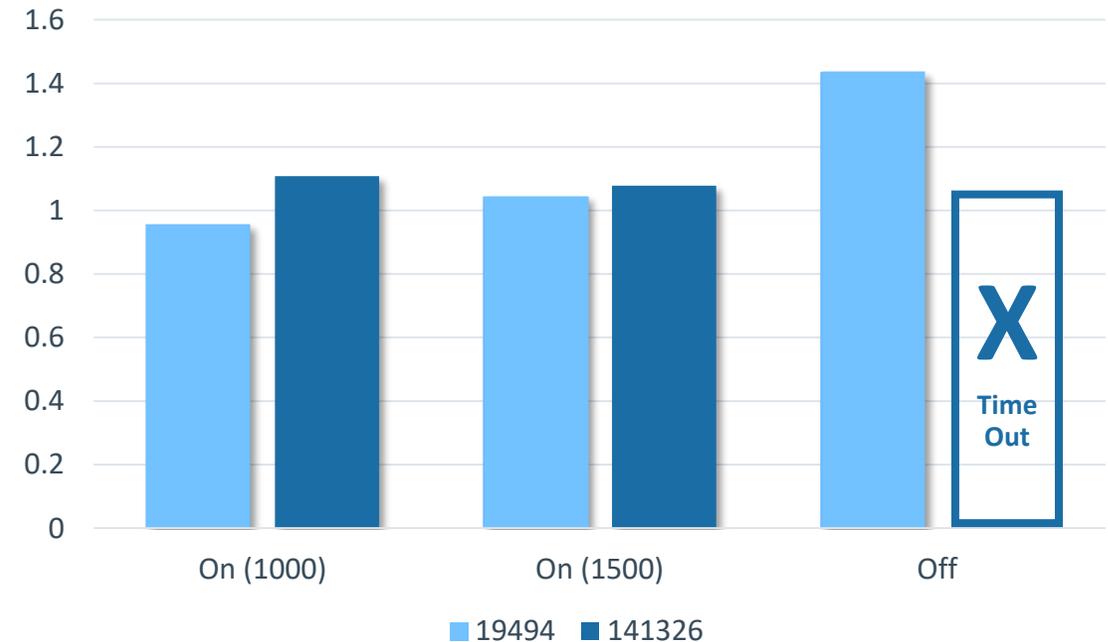
Caching
Allow

Force Update

Time Stored - Milliseconds
0

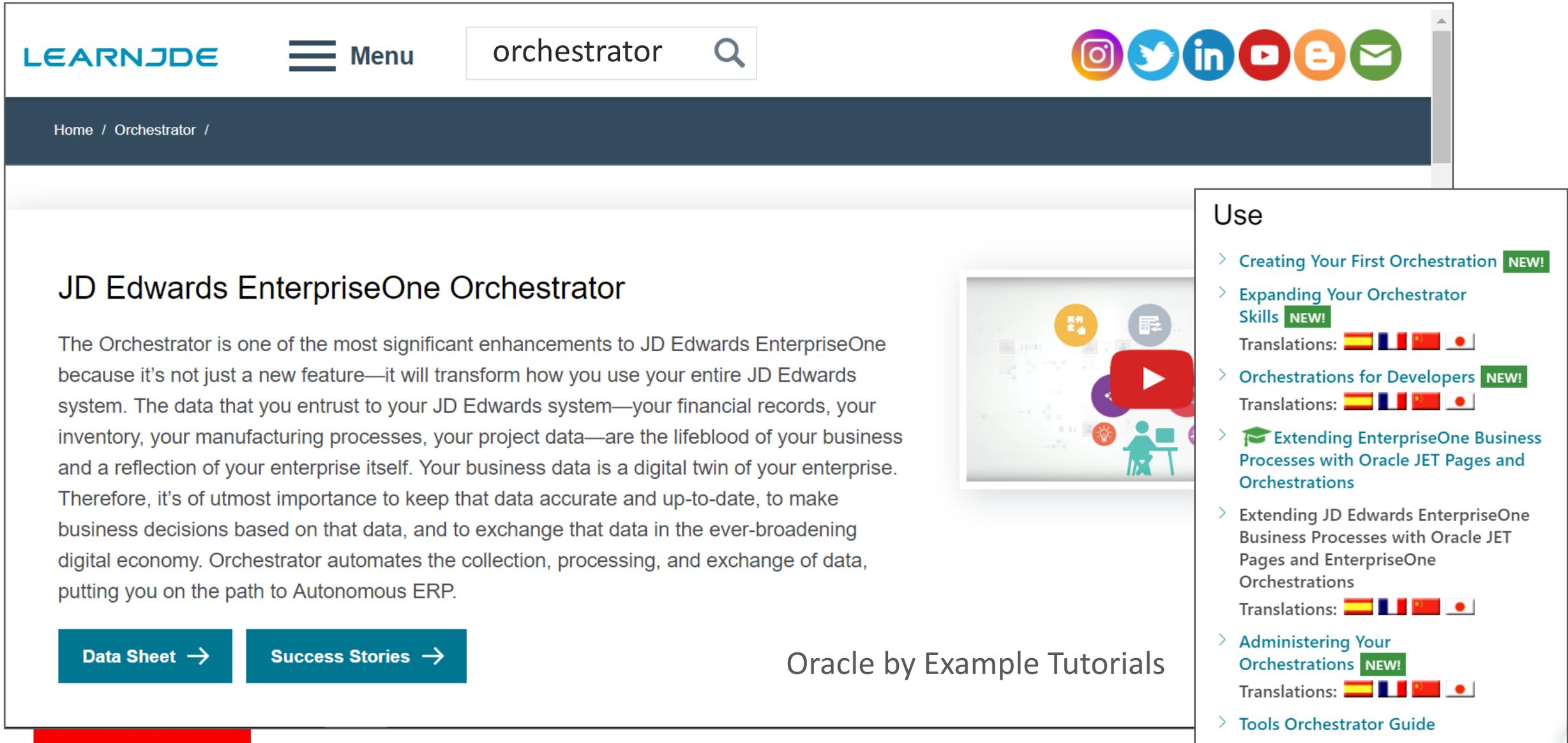
Enter a number greater than or equal to 0.

App Stack P0911 (12 Columns)
Milliseconds per Record (5 run Average)



Q & A

Search “Orchestrator” on LearnJDE.com to Learn More



The screenshot shows the LearnJDE.com website interface. At the top left is the 'LEARNJDE' logo. Next to it is a 'Menu' button with a hamburger icon. A search bar contains the text 'orchestrator' with a magnifying glass icon. To the right of the search bar are social media icons for Instagram, Twitter, LinkedIn, YouTube, Facebook, and Email. Below the search bar is a dark blue breadcrumb trail: 'Home / Orchestrator /'. The main content area features the title 'JD Edwards EnterpriseOne Orchestrator' and a detailed paragraph describing the feature. Below the text are two buttons: 'Data Sheet →' and 'Success Stories →'. To the right of the text is a video player with a red play button icon. On the far right, a 'Use' sidebar lists several articles with 'NEW!' tags and translation flags for Spanish, French, Chinese, and Japanese.

LEARNJDE  Menu  

Home / Orchestrator /

JD Edwards EnterpriseOne Orchestrator

The Orchestrator is one of the most significant enhancements to JD Edwards EnterpriseOne because it’s not just a new feature—it will transform how you use your entire JD Edwards system. The data that you entrust to your JD Edwards system—your financial records, your inventory, your manufacturing processes, your project data—are the lifeblood of your business and a reflection of your enterprise itself. Your business data is a digital twin of your enterprise. Therefore, it’s of utmost importance to keep that data accurate and up-to-date, to make business decisions based on that data, and to exchange that data in the ever-broadening digital economy. Orchestrator automates the collection, processing, and exchange of data, putting you on the path to Autonomous ERP.

[Data Sheet →](#) [Success Stories →](#)



Use

- > [Creating Your First Orchestration](#) **NEW!**
- > [Expanding Your Orchestrator Skills](#) **NEW!**
Translations:    
- > [Orchestrations for Developers](#) **NEW!**
Translations:    
- > [Extending EnterpriseOne Business Processes with Oracle JET Pages and Orchestrations](#)
- > [Extending JD Edwards EnterpriseOne Business Processes with Oracle JET Pages and EnterpriseOne Orchestrations](#)
Translations:    
- > [Administering Your Orchestrations](#) **NEW!**
Translations:    
- > [Tools Orchestrator Guide](#)

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