



JD Edwards EnterpriseOne Internet of Things Orchestrator Frequently Asked Questions

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Executive Overview

The JD Edwards EnterpriseOne Internet of Things (IoT) Orchestrator enables customers to collect, filter, analyze, and act on real-time data as it is being transmitted by IoT devices. JD Edwards EnterpriseOne customers benefit by eliminating costly manual processes, by reacting to—or avoiding—business disruptions in real-time, and by analyzing historical data for continuous process improvement. The building blocks of the JD Edwards EnterpriseOne IoT Orchestrator are:

- **Registration (Cross Reference):** Identifies the devices that are authorized to send data to the IoT Orchestrator and associates those devices with data stored in the JD Edwards EnterpriseOne system, such as equipment number, asset ID, location, business unit, etc.
- **Rules Engine:** Establishes criteria and thresholds against which the IoT Orchestrator evaluates incoming device data to invoke the appropriate action based on conditions.
- **Action (Service Request):** Defines the specific JD Edwards EnterpriseOne application form or custom Java program to be invoked as the result of a predefined condition. The IoT Orchestrator passes incoming device data into the form(s) and launches the applications. Any JD Edwards EnterpriseOne form, including customized forms, can be invoked by the orchestration.

Using these building blocks, business analysts can design orchestrations that tie IoT devices directly to JD Edwards EnterpriseOne applications, thus eliminating costly, mundane, and error-prone manual input and enabling enterprise operations based on accurate, real-time data.



General

Q: What is the “Internet of Things”?

A: The “Internet of Things” (IoT) is a very broad term that describes the ability of nonhuman devices to connect and communicate over the Internet. Examples of IoT devices can be seen everywhere, including automobiles, construction equipment, manufacturing equipment, parking meters, and even household devices.

Q: Why is the Internet of Things important to enterprise applications like JD Edwards EnterpriseOne?

A: JD Edwards EnterpriseOne applications provide feature-rich, mission-critical functionality to enterprises in a wide variety of industries and geographies. However, those applications are only as valuable as the data that goes into them. Sometimes human data entry gets in the way of efficient, responsive, and compliant business processes. Connecting IoT devices directly to applications gives the applications real-time, continuous, accurate data.

For a more detailed discussion about the Internet of Things and why it is important to JD Edwards, refer to the [JD Edwards EnterpriseOne Internet of Things Orchestrator white paper](#).

Q: What is an Internet of Things “Device”?

A: A “device” is a very broad term used to describe the wide variety of methods possible to sense, measure, collect, and transmit data. For example, a device could be a fuel guage, a temperature sensor, a global positioning beacon, or a barcode scanner. In the context of the Internet of Things, a device is generally thought to be operating without the direct guidance of a human user, but rather operating continuously and autonomously.

Q: Does Oracle provide the physical devices for collecting data?

A: Oracle does not provide the physical endpoint IoT devices. Customers should work with the ecosystem of vendors who provide every sort of device—meters, sensors, scanners—to implement the appropriate device for their business requirements. Consult the Oracle [product documentation](#) for details on the input data formats expected by each Oracle product.

Q: If I already have IoT devices deployed, can I use them with the JD Edwards EnterpriseOne IoT Orchestrator?

A: Probably, and we expect customers who already have IoT devices deployed to be among the first to adopt the IoT Orchestrator. That’s a great way to get more value from the devices in which a customer has already invested. The devices need to be able to send data to the IoT Orchestrator according to its documented formats. This can be accomplished by programming software on the device itself, by using an intermediary gateway to translate the data, or by using the Oracle IoT Cloud Service to provide the abstraction between the device and the IoT Orchestrator.

Q: What IoT applications will JD Edwards deliver?

A: Starting with EnterpriseOne Tools release 9.2.0.2, customers can use the Orchestrator Studio to create orchestrations. The Orchestrator Studio provides access to the Orchestrator Client, an application for testing orchestrations that was available with the initial release of the IoT Orchestrator. Also, the initial release of JD Edwards EnterpriseOne IoT Orchestrator includes three example implementations: condition-based maintenance, meter readings, and equipment location. These examples will be useful for learning how the IoT Orchestrator works and as a basis for your custom IoT applications. If you have suggestions for specific IoT applications to be built, delivered, and supported by Oracle, please communicate them through your Oracle account team. Oracle welcomes your input.

Q: Will the JD Edwards EnterpriseOne IoT Orchestrator replace my Business Services?

A: The JD Edwards EnterpriseOne Business Services server is a robust tool for integrating JD Edwards EnterpriseOne inbound and outbound transactions as web services using the SOAP protocol. For certain integration patterns, the



Business Services server remains the method of choice. The IoT Orchestrator—and more specifically the Application Interface Services (AIS) server—provides a new alternative integration method based on the REST service protocol. The nature of IoT device integration makes the REST protocol a better choice for IoT orchestrations. Both BSSV and AIS continue to be important components in the broader JD Edwards EnterpriseOne Integration Platform.

- Q:** What makes JD Edwards EnterpriseOne IoT Orchestrator unique among Oracle IoT solutions?
- A:** The JD Edwards EnterpriseOne IoT Orchestrator is unique because of its inherent and built-in integration with JD Edwards EnterpriseOne. Any device capable of sending a simple data stream over a REST service request can be integrated with any of the 80+ application modules and thousands of application forms and controls, including customized applications and applications not yet invented. Any business process that can be energized with real-time, continuous, accurate input to applications will benefit from having the JD Edwards EnterpriseOne IoT Orchestrator as its hub.
- Q:** Which industries would benefit most from the JD Edwards EnterpriseOne IoT solution?
- A:** Any business process that suffers from the slowness, tedium, inaccuracies, or expense of human input should be studied as an IoT use case. In particular, industries in which expensive assets—such as heavy construction or mining equipment—are in motion or are in remote locations are good candidates for IoT implementations. The concept of connected devices has been used for many years in manufacturing equipment, although it never used the terminology “IoT.” But today’s technology, including the IoT Orchestrator, makes it easier and more cost-effective than ever to tie those devices directly into the JD Edwards EnterpriseOne applications. Because the IoT Orchestrator can invoke any JD Edwards EnterpriseOne applications—and even any Java program—evaluating current business processes for IoT benefits should be a creative, innovative, and inspiring endeavor.

Technical Requirements

- Q:** What is the minimum JD Edwards EnterpriseOne Applications and Tools release?
- A:** The JD Edwards EnterpriseOne IoT Orchestrator is first delivered as part of the web components (AIS server and HTML server) at the Tools 9.1.5.5 level. These web components can be deployed on any Tools release from 9.1.5.1 forward. The IoT Orchestrator can be configured to invoke JD Edwards EnterpriseOne applications at the 9.0 and 9.1 versions. Starting with EnterpriseOne Tools release 9.2.0.2, customers can use the Orchestrator Studio to create orchestrations.
- Q:** Where does the IoT Orchestrator run?
- A:** The IoT Orchestrator is installed and runs as part of the Application Interface Services (AIS) server.
- Q:** On which technology platforms does the IoT Orchestrator run?
- A:** The IoT Orchestrator is an extension of the Application Interface Services (AIS) server; therefore, it shares the same platform requirements. It requires a Java application server, which can be either Oracle WebLogic Server or IBM WebSphere Application Server. There are no special restrictions on the server hardware, operating systems, and databases for the other JD Edwards EnterpriseOne server components. For complete platform certification requirements, refer to the Certifications tab in My Oracle Support and search for the JD Edwards EnterpriseOne Application Interface Services Server.
- Q:** What skill set is required to design IoT orchestrations?
- A:** The IoT Orchestrator allows business analysts to design, test, and deploy IoT orchestrations without writing a single line of programming code. The business analyst should understand the operating conditions that need to be monitored, what data needs to be captured, and which JD Edwards EnterpriseOne applications should be invoked. The IoT Orchestrator is also flexible enough to allow custom Java programs to be used to evaluate complex rule conditions or to serve as the



endpoint service request instead of—or in addition to—invoking a JD Edwards EnterpriseOne application. In this case Java programming skills are required.

Q: Is the Oracle Internet of Things Cloud Service a prerequisite for using the JD Edwards EnterpriseOne Internet of Things Orchestrator?

A: No, the Oracle Internet of Things Cloud Service is not a hard prerequisite for using the JD Edwards EnterpriseOne IoT Orchestrator. However, due to the complementary nature of the features each offers, we can foresee many situations in which they can be used effectively together.

Q: Can I use other cloud service providers with the JD Edwards EnterpriseOne Internet of Things Orchestrator?

A: The input data formats expected by the JD Edwards EnterpriseOne IoT Orchestrator are detailed in the [product documentation](#). Any hardware device, gateway, or third-party system that can provide input in those documented formats can act as a valid source of input to the IoT Orchestrator.

Resources

Q: Where can I find more information?

A: The following supporting resources are available:

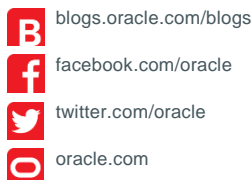
- [JD Edwards EnterpriseOne Tools Internet of Things Orchestrator Guide](#)
- [Internet of Things Resource Page](#) on the JD Edwards Resource Library (www.learnjde.com)
- [IoT Install Details](#) (Doc ID 2026713.1) on My Oracle Support



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