Oracle® Cloud

Getting Started with Oracle Integration 3

F45535-23
April 2024

Oracle Cloud Getting Started with Oracle Integration 3,

F45535-23

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Preface

This document describes how business analysts and integration specialists get started working with Oracle Integration 3.

Topics:

Audience

This guide is intended for business analysts and developers who want to get an overview of Oracle Integration 3, what it can do, and how to use recipes to build their first integration.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at `https://www.oracle.com/corporate/accessibility/`.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit `https://support.oracle.com/portal/` or visit `Oracle Accessibility Learning and Support` if you are hearing impaired.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Resources

For more information, see these Oracle resources:

- Oracle Integration documentation on the Oracle Help Center.
- Oracle Cloud at `http://cloud.oracle.com`.

Conventions

The following text conventions are used in this document.

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Welcome to Oracle Integration 3

Oracle Integration 3 is a cloud-native version of Oracle Integration. It delivers improved performance and time to market for new features, a new look and feel, and improvements in provisioning new instances by more deeply leveraging the power of Oracle Cloud Infrastructure.

Oracle Integration 3 remains a fully managed, preconfigured environment that gives you the power to integrate your cloud and on-premises applications. Select from our growing portfolio of hundreds of adapters and recipes to connect with Oracle and third-party applications.

Topics:

A Quick Introduction to Oracle Integration

Integration is a fundamental part of your digital business development. It involves connecting on-premises applications and cloud applications and services.

With Oracle Integration, you can:

- Develop *integrations* to design, monitor, and manage connections between your applications.
- Create *process applications* to automate and manage your business work flows.
- Build custom *web and mobile applications*.
- Store and retrieve files in Oracle Integration using the embedded SFTP-compliant *file server*.
- Create integrations that use *B2B* e-commerce to extend business processes to reach trading partners.

Critical business processes, such as those related to human capital management (HCM), customer experience (CX), and enterprise resource planning (ERP), are frequently slow and inflexible. For example, a multistep process such as Lead to Opportunity to Quote to Order can involve four or more applications and require human exception management at every step of the process. In this scenario, the lack of integration between departments as well as the delays caused by human-based problem resolution can result in lost revenue, frustrated customers, and high costs.

Oracle Integration changes all that. It empowers you to:

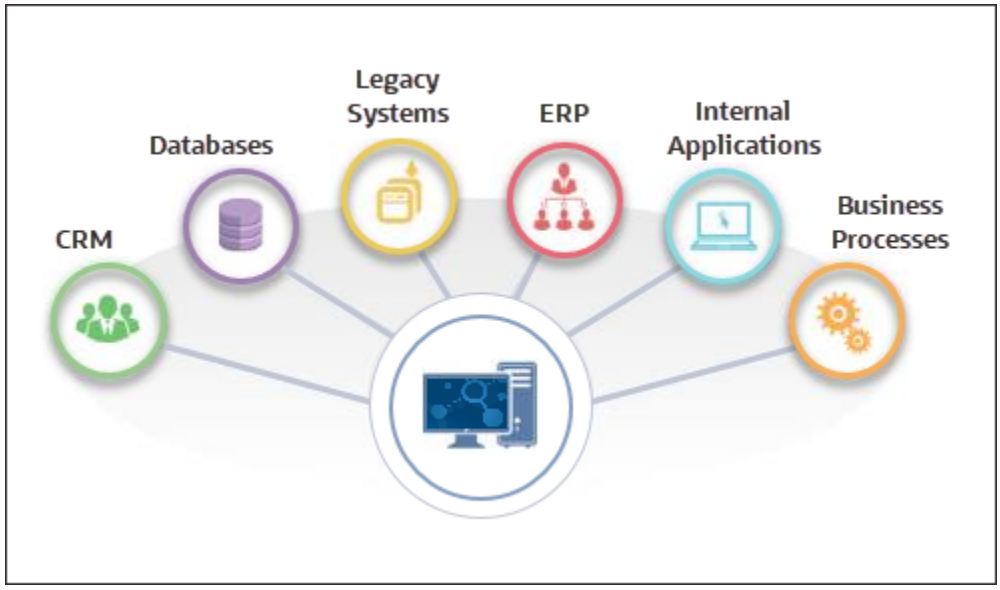
- Establish connectivity between the many applications and people that are part of the entire business process life cycle.

- Assemble existing technologies into new business services to better align with the changing pace of new business demands.
- Deliver new business innovations faster by rapidly connecting diverse applications and key business roles.
- Gain 360-degree views across your entire business. Easily monitor and analyze every application, integration, and workflow spanning the business process life cycle.

Connect to Everything

Integration solves the application silo problem. It brings together data and workflows between disparate software applications for them to function as one.

Integrations deal with live operational data. Data can be processed either in real-time or in batch, and between two or more applications, events, or application programming interfaces (APIs).



Deployment Flexibility

With integrations, you can connect to anything without getting bogged down in technical implementation details.

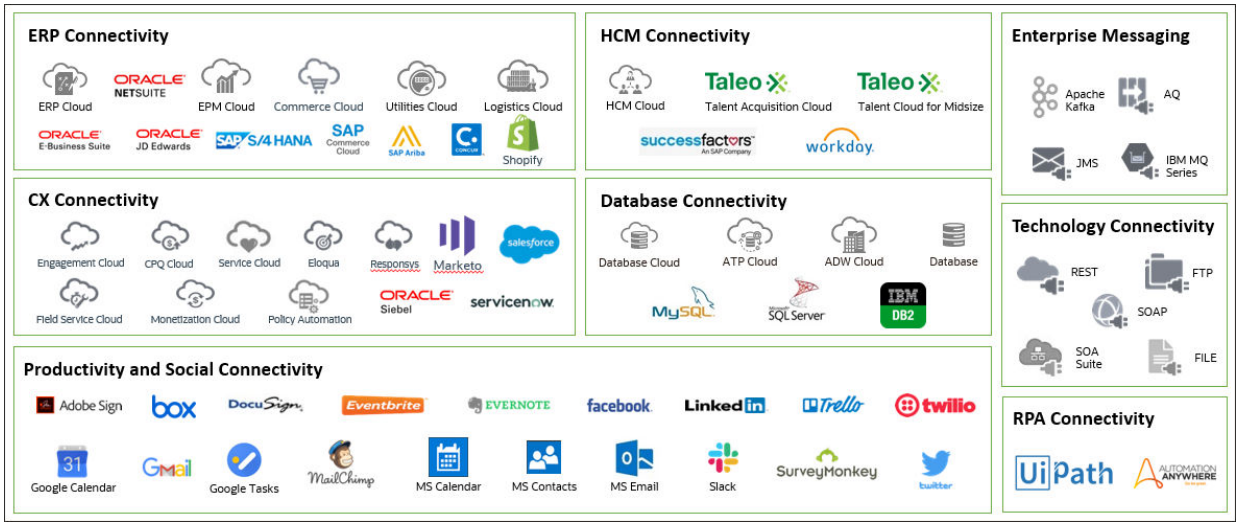
You can bring data and applications together across on-premise and cloud systems: cloud to cloud, cloud to on-premises (ground), and on-premises to on-premises (ground to ground).

Library of Prebuilt Adapters

When you develop an integration from scratch, your first task is to create a connection for each application that you're going to connect to. The connection defines how you'll connect to the application. When you create a connection, your first step is to select an adapter.

An **adapter** provides the means for Oracle Integration to connect to different applications. After you choose an adapter, you provide the information that lets the adapter successfully find and connect to a particular instance of an application. The information might include the application URL, the security policy to use, and the credentials for signing in to the application.

Oracle Integration includes dozens of prebuilt adapters that make it easy for your integrations to connect to a range of Oracle and third-party applications, including applications that handle your customer relationships, human resources, supply chain, resource planning, e-commerce, social media, and databases. Also, the FTP, REST, and SOAP adapters let you use standard file, web, and messaging protocols. And all adapters let you connect to applications that are on-premises or in the cloud.



For a full list of adapters currently supported by Oracle Integration, see Adapters. New adapters are added all the time.

The Rapid Adapter Builder

The Rapid Adapter Builder in Oracle Integration enables you to build an adapter for any application that exposes RESTful APIs, without having to develop complex code from scratch.

As discussed in the previous section, Oracle Integration has an ever-growing library of application-specific adapters that you can readily use for your integration scenarios. However, when an Oracle-provided adapter is not available for your purpose, you can build your own adapter using the Rapid Adapter Builder. It provides all the necessary infrastructure to build adapters for Oracle Integration. An adapter built using the Rapid Adapter Builder can offer the same capabilities as an Oracle-provided adapter. You can implement behaviors similar to those available in the existing adapters on Oracle Integration.

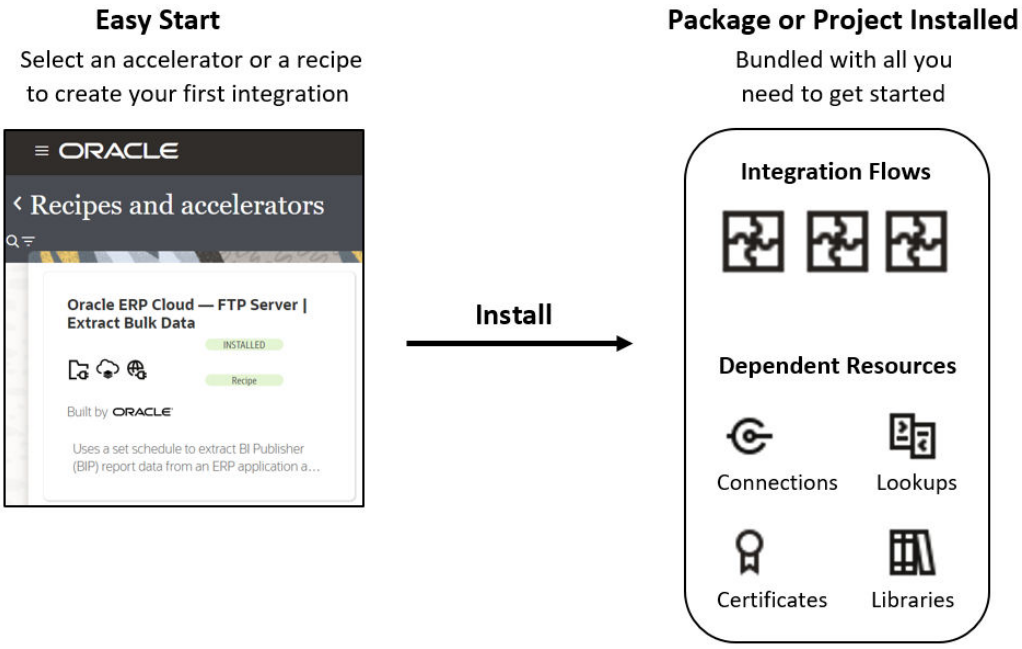
The Rapid Adapter Builder is available as a Visual Studio Code (VS Code) extension, which helps you generate the code required to build an adapter. Using this extension, you can iteratively develop your adapter and publish it to Oracle Integration. See *Using the Rapid Adapter Builder with Oracle Integration 3*.

Integration Recipes and Accelerations

You don't need to develop an integration flow or use case from scratch. You can install ready-made integration recipes and accelerators from the Home page.

Recipes and accelerators are collectively known as **prebuilt integrations**. **Recipes** are sample use cases that give you a head start. **Accelerators** are run-ready business integrations or technical patterns of larger scale.

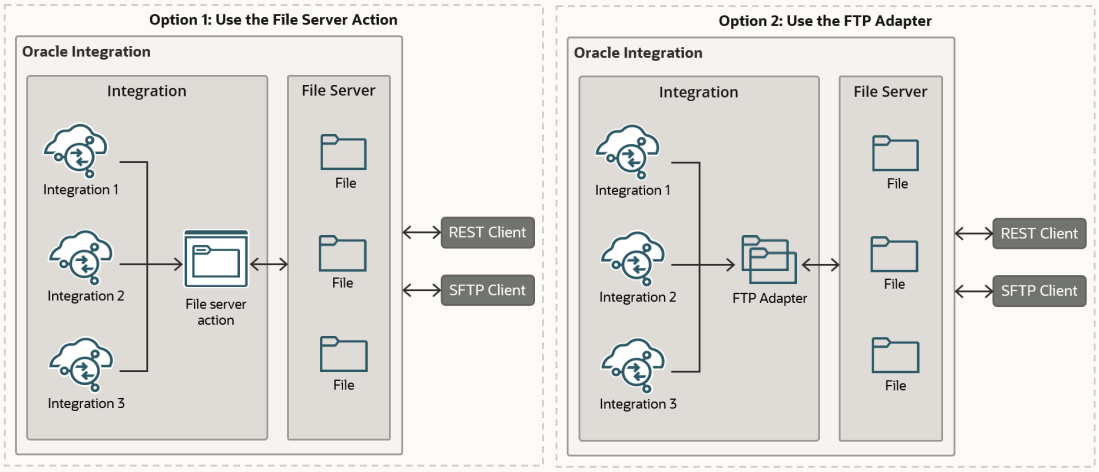
When you install a recipe or an accelerator, it's installed as a package or project. The package or project contains all the resources you need for an application-integration scenario. The resources it contains include one or more integrations flows and dependent resources, such as, connections, certificates, lookups, and libraries.



For a full list of recipes and accelerators currently available for Oracle Integration, see Recipes and Accelerators in the Oracle Help Center. The collection is growing all the time.

Embedded File Server

Use **File Server** to store files or transfer real-time data among applications securely. File Server provides an embedded Secure File Transfer Protocol (SFTP) server within Oracle Integration, so you can focus on building integrations without needing to host and maintain a separate SFTP server.



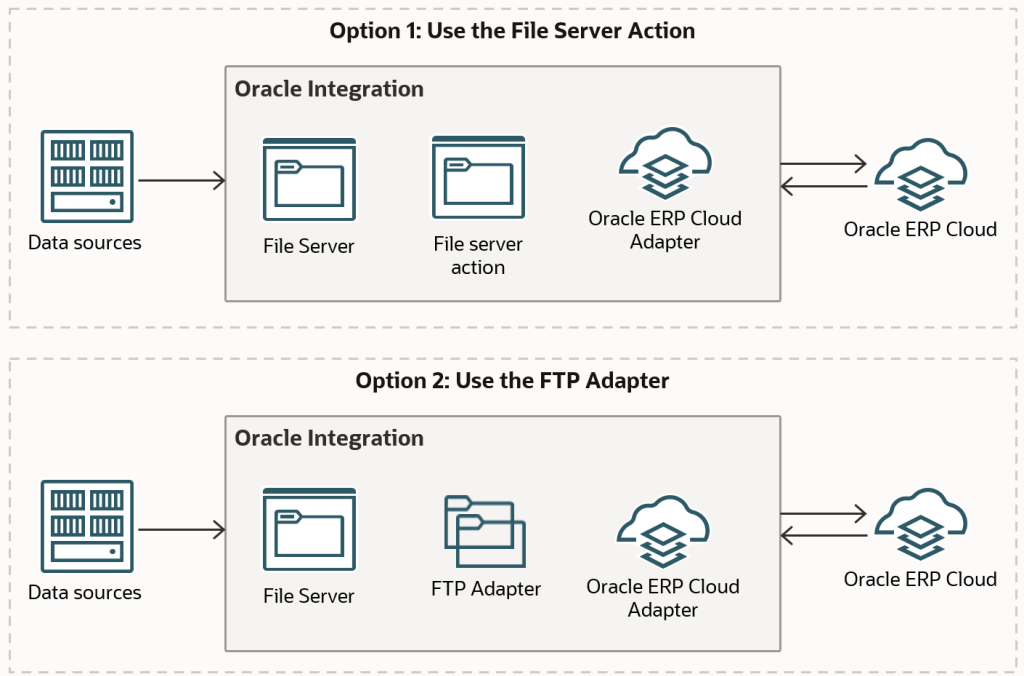
With File Server, you can:

- Design integrations that process your files that reside in the embedded file server.
- Eliminate the cost and operational expenses associated with hosting and maintaining an SFTP server by moving your SFTP server to the cloud. If you have an on-premises SFTP server, then you can move your SFTP files into File Server in Oracle Integration and use the SFTP adapter to connect.
- Give your vendors or partners access to Oracle Integration to upload and download files with their SFTP client software. A common protocol for communication with partners is SFTP. File Server enables partners to send information such as purchase orders, invoices, shipping information, and so on through SFTP.

Example: Read, Transform, Write

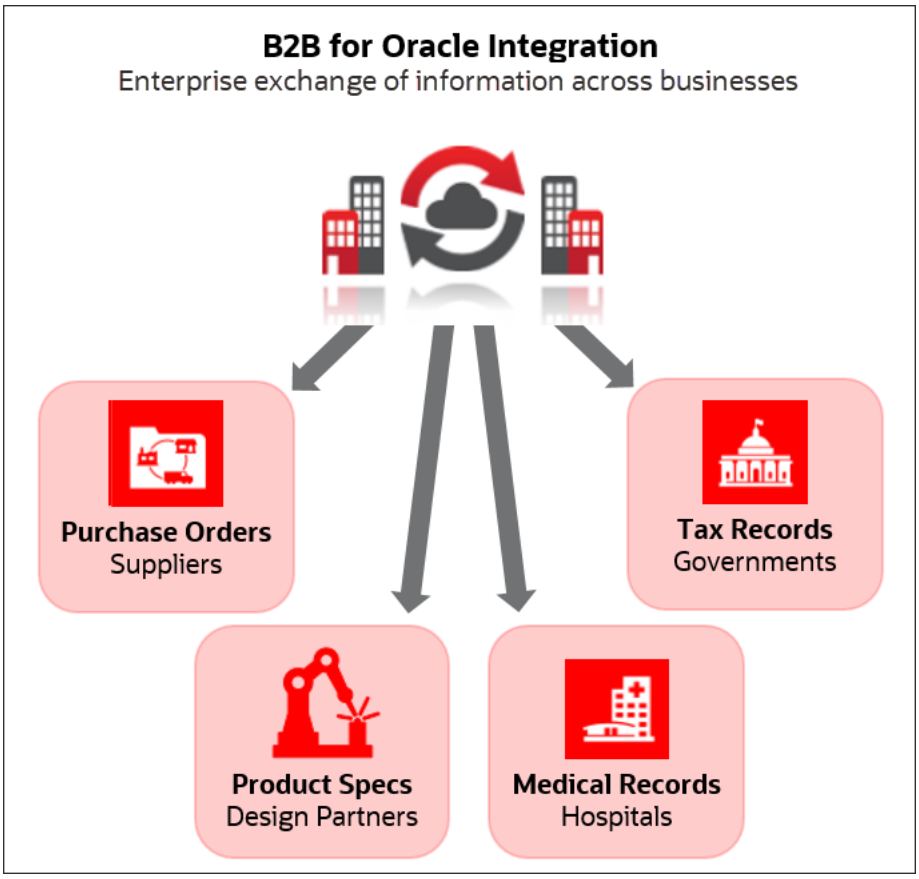
For example, if you have applications that export bulk data to an SFTP server, Oracle Integration can pick up the file, translate it into the required format, and send it to the target system. For instance, E-Business Suite generates a zip file with external transactions and uploads it to File Server. An integration can then read the file, transform it into the format required by the ERP system, and trigger bulk import of the data.

You have two options for connecting to File Server: the FTP Adapter and the File server action.



Business-to-Business Communications

B2B for Oracle Integration provides support for business-to-business (B2B) e-commerce. You can communicate with trading partners, and send and receive data in integrations with B2B.



B2B for Oracle Integration lets you:

- Securely exchange business documents, such as purchase orders or product specifications, with your trading partners using standard Electronic Data Interchange (EDI) formats.
- Securely exchange outside the enterprise with your trading partners.

In B2B e-commerce, an enterprise extends its business processes to reach trading partners, for example, suppliers, manufacturers, hospitals, and government agencies. B2B e-commerce represents classic business processes, mature business documents, and industry-tempered messaging services. It requires a unified business process platform, end-to-end instance tracking, visibility and auditing, integrated process intelligence, process and service governance, and centralized security.

Connect to Oracle SOA Suite

If you currently use Oracle SOA Suite (either on premises or in the cloud using Oracle SOA Cloud Service or Oracle SOA Suite on Marketplace), adding Oracle Integration to your setup unlocks new features and capabilities.

- Oracle SOA Suite is a customer-managed deployment that is available either on-premises or in Oracle Cloud Infrastructure.

  In contrast, Oracle Integration is an Oracle-managed PaaS platform. With Oracle Integration, Oracle manages responsibilities such as upgrades, patching, high availability, performance tuning, and scaling.

- Oracle Integration provides a rich set of SaaS adapters to connect natively to Oracle SaaS applications (both on premises and in the cloud).

  These include Oracle Cloud ERP, Oracle Cloud HCM, Oracle E-Business Suite, Oracle CX Sales and B2B Service, and others. See the Adapters page on the Oracle Help Center for the growing list of Oracle Integration adapters.
- Oracle Integration provides a low-code platform where you can easily build drag-and-drop integrations between cloud and on-premise applications.

To retain your investment in Oracle SOA Suite, you can connect your existing SOAP-based and REST-based composite applications to Oracle Integration. Creating the connection is easy using the connectivity agent and Oracle SOA Suite Adapter. Then, you can develop new integrations in Oracle Integration that connect your existing Oracle SOA Suite composite applications to other products and services. Over time, you can reimplement your Oracle SOA Suite composite applications and artifacts in Oracle Integration. See:

- Oracle SOA Suite Adapter Capabilities in *Using the Oracle SOA Suite Adapter with Oracle Integration 3*.
- About Creating Hybrid Integrations Using Oracle Integration in *Using Integrations in Oracle Integration 3*.

> **Note:**
>
> If you are using Oracle SOA Suite on-premises, you can reduce your overhead by moving fully to the cloud. Migrating to Oracle SOA Suite on Marketplace provides a Platform as a Service (PaaS) computing platform solution for running applications in the cloud. It includes a complete set of service infrastructure components for designing, deploying, and managing composite applications. See Differences Between Oracle SOA Suite On-Premises and Oracle SOA Suite on Marketplace in Oracle SOA Suite on Marketplace.

For documentation about the Oracle SOA Suite offerings on different platforms, see Oracle SOA Suite on the Oracle Help Center.

Automate and Optimize End-to-End Business Processes

Automate and optimize any **process** in your organization. For example, you can automate core business processes such as loan origination if you're a bank, shipping and handling if you're a delivery service, or opportunity to order if you're in retail.

With the Oracle Cloud Infrastructure Process Automation design-time (Designer) and the runtime (Workspace) environments, you can rapidly design, automate, and manage business processes in the cloud. When you use Oracle Cloud Infrastructure Process Automation with Oracle Integration, the power to integrate and work with cloud applications increases manifold in your process applications with access to integrations that are designed in Oracle Integration. See Use Process Automation with Oracle Integration 3 in *Using Oracle Cloud Infrastructure Process Automation*.

To use Process Automation with Oracle Integration, you must first enable it with an Oracle Integration instance from the Oracle Cloud Infrastructure (OCI) Console. See

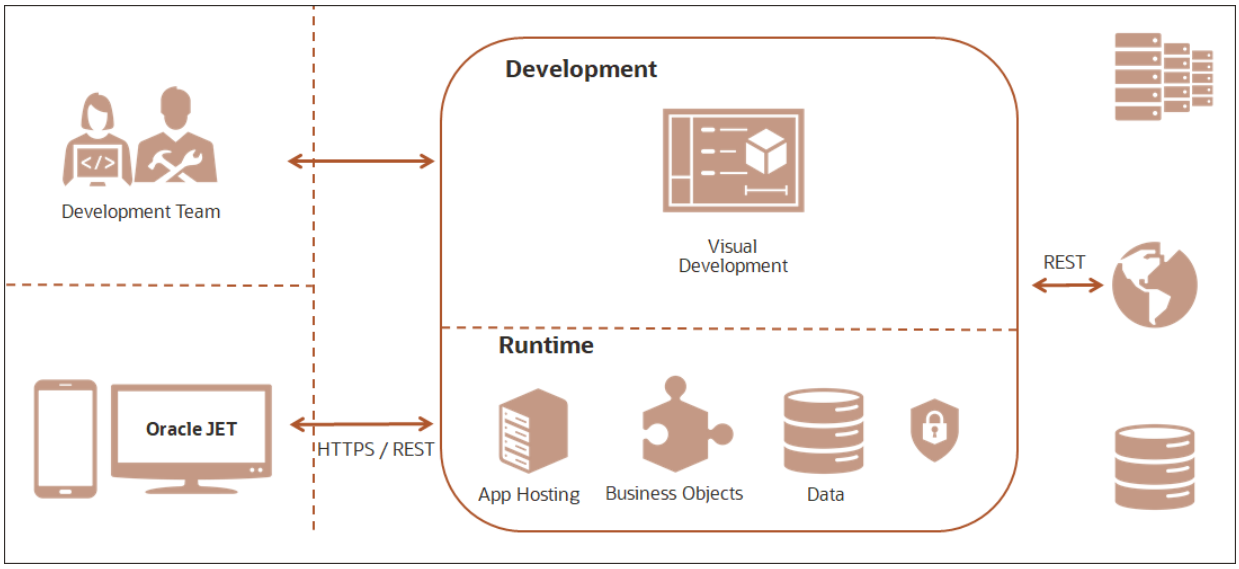
Enable Process Automation with Oracle Integration 3 in *Administering Oracle Cloud Infrastructure Process Automation*.

The following Oracle Cloud Infrastructure Process Automation documentation is available on the Oracle Help Center:

- *What's New for Oracle Cloud Infrastructure Process Automation*
- *Known Issues for Oracle Cloud Infrastructure Process Automation*
- *Administering Oracle Cloud Infrastructure Process Automation*
- *Using Oracle Cloud Infrastructure Process Automation*
- *REST API for Oracle Cloud Infrastructure Process Automation*
- *Licensing Information User Manual for Oracle Cloud Infrastructure Process Automation*

Build Web and Mobile Apps in Minutes

With **Visual Builder**, you can extend your applications to meet your unique needs and build great web and mobile applications yourself. There's no coding, no setup, and no IT resources required.



Visual Builder provides all the necessary tools for you to build, publish, and host modern web and mobile applications:

- Configure and customize Oracle Cloud applications using the same development environment that Oracle Cloud applications are built on.
- Use cloud-based visual tools to rapidly create and host web and mobile applications with minimal coding required.
  - Use the what-you-see-is-what-you-get (WYSIWYG) page designer to drag and drop UI components and visually create your pages.
  - Create custom reusable business objects that store data and implement business logic.

  - Publish your application with the push of a button and make it available to users.
- Easily connect REST APIs to integrate data from other applications into yours. For more complex needs, developers can extend the functionality of the application using standard JavaScript, HTML, and CSS.

Visual Builder also provides the infrastructure for securing access to your application, data, and the Oracle Cloud services that your application consumes.

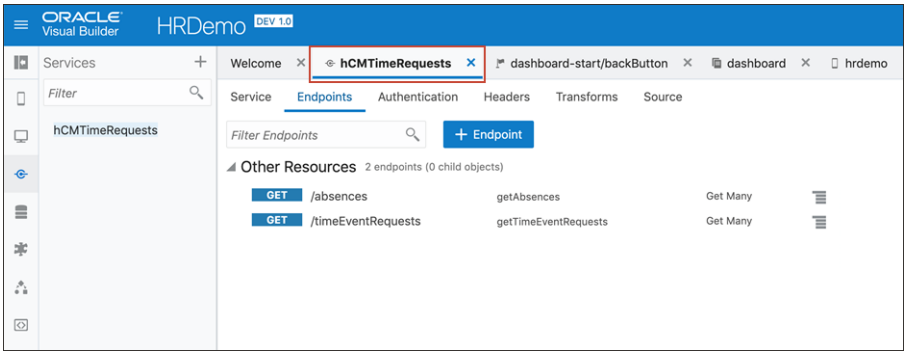
To use Visual Builder in Oracle Integration, you must first complete prerequisite tasks. See Use Visual Builder in Oracle Integration in *Provisioning and Administering Oracle Integration 3*.

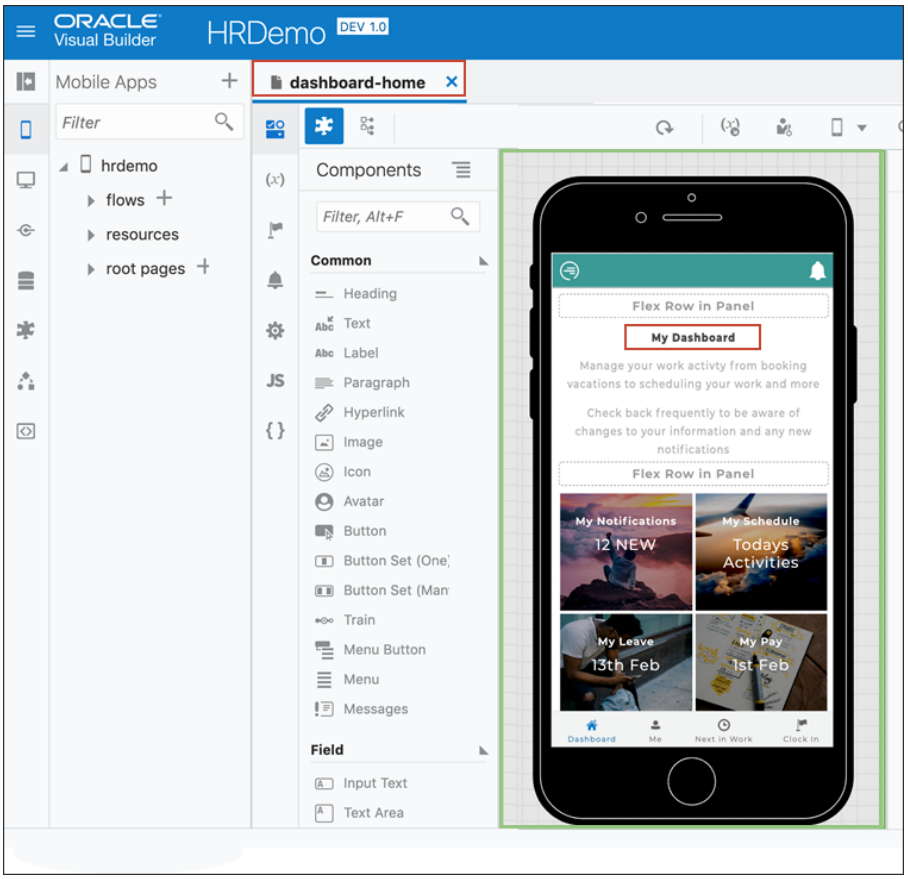
The following Visual Builder documentation is available on the Oracle Help Center:

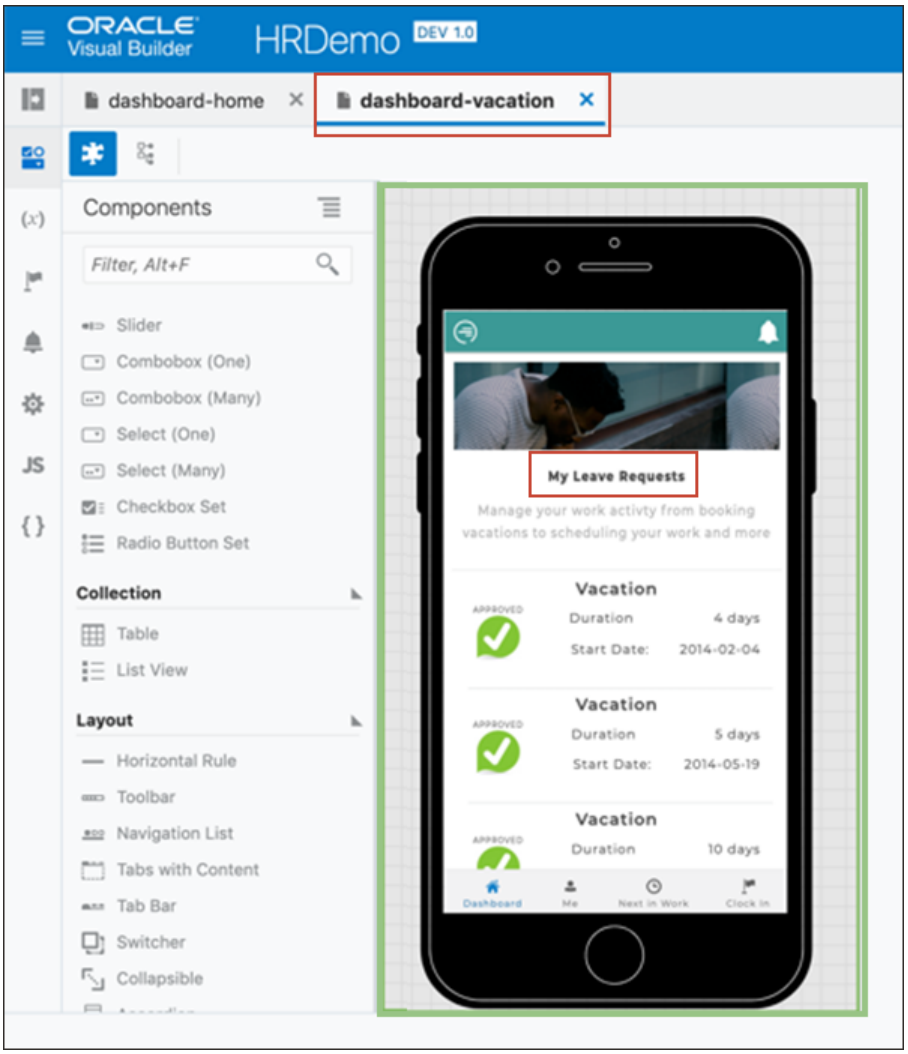
- *Administering Oracle Visual Builder in Oracle Integration 3*
- *Developing Applications with Oracle Visual Builder in Oracle Integration 3*
- *Developing Integrated Spreadsheets Using Oracle Visual Builder Add-in for Excel*
- *Managing Data Using Oracle Visual Builder Add-in for Excel*
- *Oracle Visual Builder Page Model Reference*
- *Accessing Business Objects Using REST APIs*

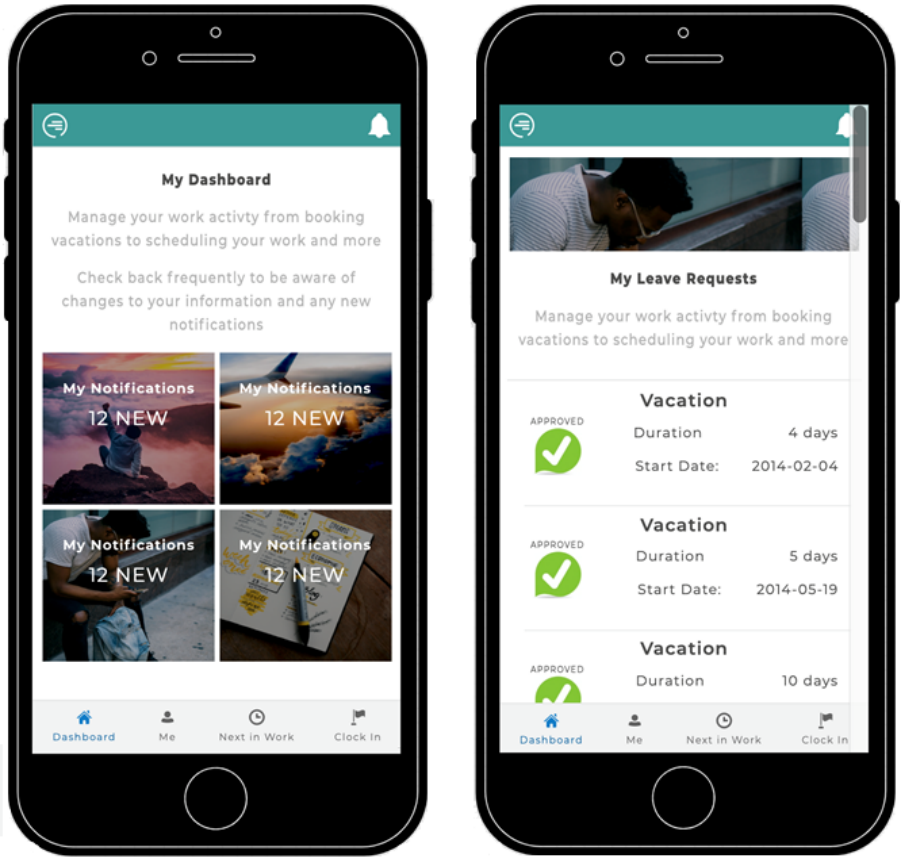
Steps to Build a Mobile App

It's as easy as 1, 2, 3, ...4.

Step	Description
1	**Connect your data sources** 

Step	Description
2	**Create your dashboard page** 

Step	Description
3	**Display backend data** 

Step	Description
4	**Go live** And just like that, you're done. Your first mobile app built specifically to meet your needs. You can use the app on both Android and Apple iOS devices. You can share just within your company or via Google Play and Apple App Stores if needed. 

Supported Browsers

Oracle Integration 3 supports the following browsers.

For...	See...
Oracle Cloud Infrastructure Console (to perform administrative tasks such as provisioning and administering your instance)	Supported Browsers
Oracle Integration 3 user interface (to design, deploy, and monitor integrations; automate business processes; provide real-time business visibility and analytics; build web and mobile applications; and more)	What platforms are supported by Oracle JET **Note**: Oracle Integration supports JET version 13.

2

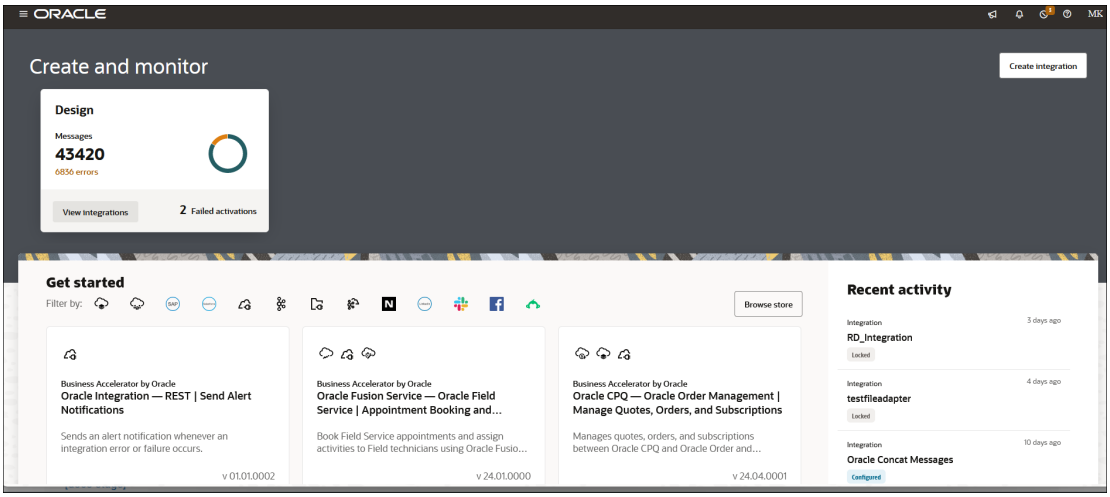
Navigate and Explore

After your system is provisioned and user roles are assigned, begin exploring the rich features of Oracle Integration.

Topics:

Get Familiar with the Home Page

When you sign in to Oracle Integration, the Home page opens. From here, you can navigate to the product features you want, view a mini dashboard of relevant metrics and status, and link directly to your current tasks, applications, and work in progress.



Take a moment to get familiar with all you can do on the Home page.

Home Page Element	Description
☰	Click to show or hide the navigation pane and menu. The Home page gives you quick access to what you do in Oracle Integration. However, it's not your only option. At any time, you can click **Show/Hide navigation menu** ☰ to access all pages, tools, dashboards, and settings.
🔔	Click to display notifications about important events or issues concerning this Oracle Integration instance.
Alerts icon	Click to display alerts. For example, an alert is visible if you have activated more than 90% of the allowed limit of 700 integrations. The alert provides a link to the Integration dashboards page for details.
Create and monitor	Gives you a snapshot of key metrics for your integrations and visual applications. For a break down of the total numbers, hover over a color on the circle graphic. For quick access to more details, click an individual card.
Create integration	Click to select either **Application** or **Schedule** to open the **Create integration** pane for creating a new application or schedule integration. If you want to create the new integration in a project, select the project name from the **Project** drop-down list, or type a new project name to create a new project that includes your new integration. If you do not want to create the integration in a project, see Create an Integration in *Using Integrations in Oracle Integration 3*.
Get started	Lists the recipes and accelerators available in Oracle Integration, which you can use to jump-start your integration development. Filter the list by clicking the **Filter by** product icons. To browse the entire collection, click **Browse store**.
Recent activity	Provides direct access to the integrations most recently updated. This provides a quick and easy way to return to your work.

View Oracle Integration Announcements

View alerts about important events or issues concerning your Oracle Integration instances.

1. In the upper corner of the Home page, click 🔔 to display the Announcements window, which lists important items for your Oracle Integration instance.

   A number on the icon indicates the number of upcoming announcements that are unread. (Unread announcements that have passed their dates are not reflected in the number.)

   > **Note:**
   >
   > Announcements must be enabled for your instance. If you see a message that there are no announcements, contact your Oracle Integration administrator.

In the Announcements window, items are listed by publish date, with most recent items at the top. Announcements typically indicate required actions (such as tagging) or upcoming maintenance, and the list is refreshed every hour. A blue dot appears next to unread announcements.

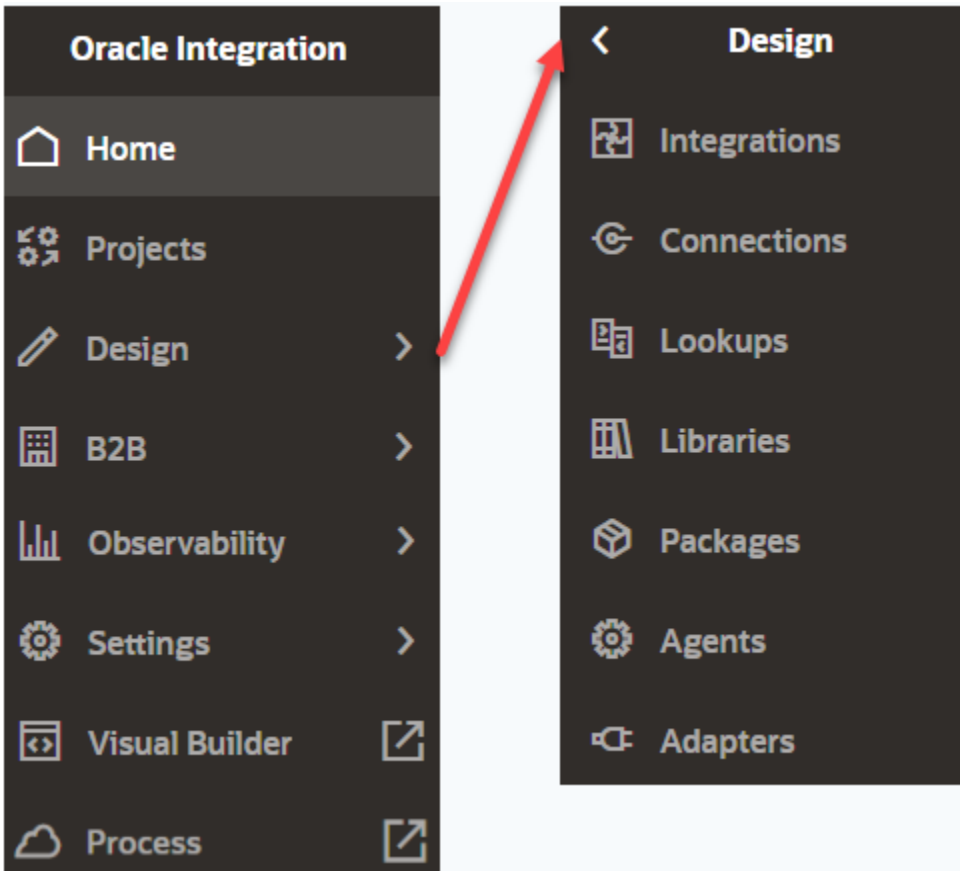
2. Mark an item as read by hovering over the item's row and selecting **Mark as Read** from the options menu that is displayed.

Explore the Navigation Pane

Use the navigation pane to access all the pages, tools, dashboards, and settings in Oracle Integration.

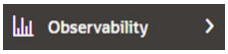
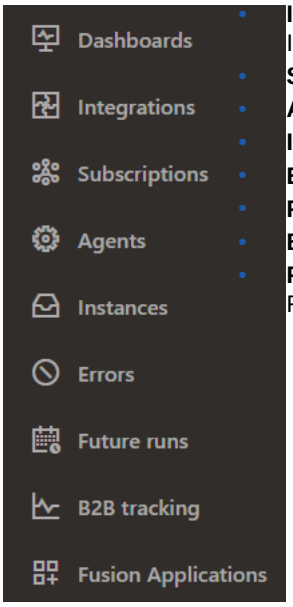
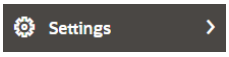
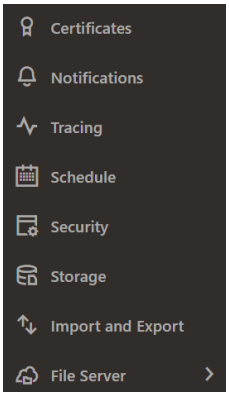
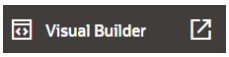
When you start Oracle Integration, the navigation pane is hidden. To view the navigation pane, click **Show/Hide navigation menu** ☰ in the top corner of the Home page.

The menu displayed in the navigation pane depends on your assigned role, your selection, and your location in Oracle Integration. The navigation pane may display the main menu or a submenu.



Browse the menu and submenu selections, which give you access to the Oracle Integration runtime environment, design-time environment, development tools, and administration settings.

Menu Selections	More Information
Home	Access the launch pad and high-level dashboard for Oracle Integration, search for recipes and accelerators, and open recently worked on projects.
Projects	Launch the page to create integration projects. An integration project consists of self-contained assets (integrations, connections, lookups, and JavaScript libraries) bundled into a solution that can be developed, managed, and monitored as a single unit from a single workspace. For more information about working with projects, see the following topics: • About Integration Projects • Designing, Managing, and Monitoring Integrations in Projects
Design Integrations Connections Events Lookups Libraries Packages Agents Adapters	Launch the design-time environment for integrations. Configure connections, and create and activate integrations. Work with lookups, libraries, packages, agents, and adapters. For more information about the submenu selections, see the following topics: • **Integrations:** Create an Integration • **Connections:** Create Connections • **Events:** Create Integrations to Publish and Subscribe to Events • **Lookups:** Map Data and Create Lookups • **Libraries:** Use JavaScript Libraries in Integrations • **Packages:** Manage Packages • **Agents:** Download and Run the Connectivity Agent Installer • **Adapters:** View Preinstalled Adapters
B2B Documents Schemas Trading partners Host profile	Exchange business documents between Oracle Integration and a trading partner securely and reliably. For more information about the submenu selections, see the following topics: • **Documents:** Work with B2B Documents • **Schemas:** Work with B2B Schemas • **Trading partners:** Use B2B for Oracle Integration in Trading Partner Mode • **Host profile:** Define the Host Profile

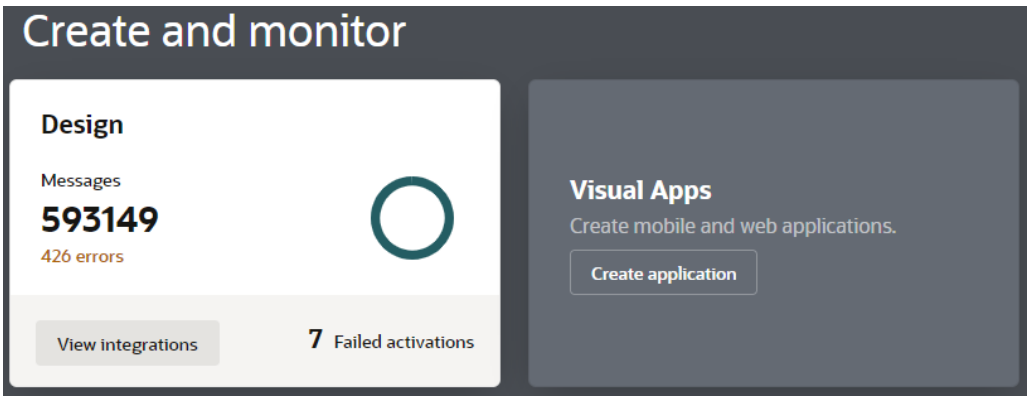
Menu Selections	More Information
 	Monitor integrations in the runtime environment. For more information about the submenu selections, see the following topics: • **Dashboards:** View the Dashboard • **Integrations:** Monitor the Message Processing Status of Integrations • **Subscriptions:** Monitor Event Subscription Integration Status • **Agents:** Monitor Agents • **Instances:** Track Integration Instances • **Errors:** Manage Errors • **Future runs:** View the Scheduled Integration Runs Calendar • **B2B tracking:** Track B2B Messages • **Fusion Applications:** Diagnose and Manage Event-Based Oracle Fusion Applications Integrations
 	Configure settings for security certificates, notifications, tracing, schedules, time limits for inactive sessions, storage buckets, and import and export of design-time metadata. Access File Server settings for preferences, users, groups, and folders. For more information about the submenu selections, see the following topics in *Using Integrations in Oracle Integration 3*: • **Certificates:** Manage Security Certificates • **Notifications:** Configure Notification Emails • **Tracing:** Change the Tracing Level on an Active Integration • **Schedule:** Globally Change the Submitter of Integration Schedules • **Security:** Set the Time Limit for Inactive Sessions • **Storage:** Step 2: Configure the Instance Object Storage Bucket • **Import and Export:** Step 3: Export and Import Design-Time Metadata Between Instances For File Server settings, see Administer File Server.
	Launch Visual Builder to create and publish web and mobile applications. For more information about working with Visual Builder, see Get Started with Visual Builder in *Developing Applications with Oracle Visual Builder in Oracle Integration 3*.

Menu Selections	More Information
Process	Launch Oracle Cloud Infrastructure Process Automation to rapidly design, automate, and manage business processes in the cloud. For more information about working with Oracle Cloud Infrastructure Process Automation, see Use Process Automation with Oracle Integration 3 in *Using Oracle Cloud Infrastructure Process Automation*.

Get Stats at a Glance

The **Create and monitor** section on the Home page gives you a snapshot of key metrics for your integrations and visual applications.

For a breakdown of the total numbers, hover over a color on the circle graphic. For quick access to more details, click an individual card.



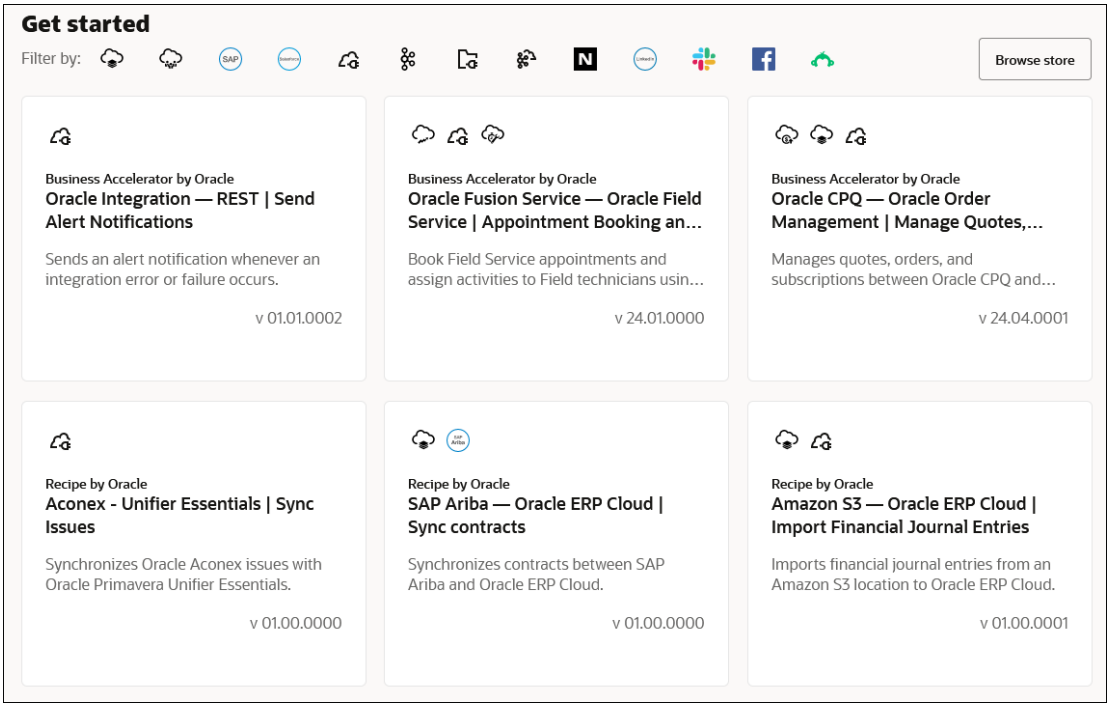
Summary Item	Description	Action
Design	Shows the total number of messages, errors, and failed activations.	Click **View integrations** to open the Integrations page listing all integrations, where you can search and filter for integrations of interest. To see more, click **errors** below the message count or hover over and click areas on the circle graphic to open the **Dashboards** page and get a comprehensive view of how your integrations are performing. See View the Dashboard in *Using Integrations in Oracle Integration 3*.

Summary Item	Description	Action
Process Apps	Shows the total number of process applications that have been activated over a specified time. Use the drop-down menu to select a period of the last 24 hours, 48 hours, or 7 days. To see the number of completed processes, position the cursor over the green area. To see the number of processes that are in progress, position the cursor over the blue area	Click to launch Oracle Cloud Infrastructure Process Automation to rapidly design, automate, and manage business processes that can be used in integrations. See Overview of Oracle Cloud Infrastructure Process Automation.
Visual Apps	Shows the total number of visual applications. Hover over each pie section to see the number of applications in that category.	Opens the Visual Builder page, which provides access to all visual applications. On this page, you can create new applications and work with existing ones. See Get Started with Visual Builder in *Developing Applications with Oracle Visual Builder in Oracle Integration 3*.

Explore Recipes and Accelerators

Oracle Integration offers a rich set of prebuilt, sample use cases called **recipes**, and also run-ready business and technical integrations called **accelerators**. Recipes and accelerators give you a head start in creating your integrations and provide end-to-end connections for critical business problems.

The **Get started** section on the Home page displays some of the available recipes and accelerators.



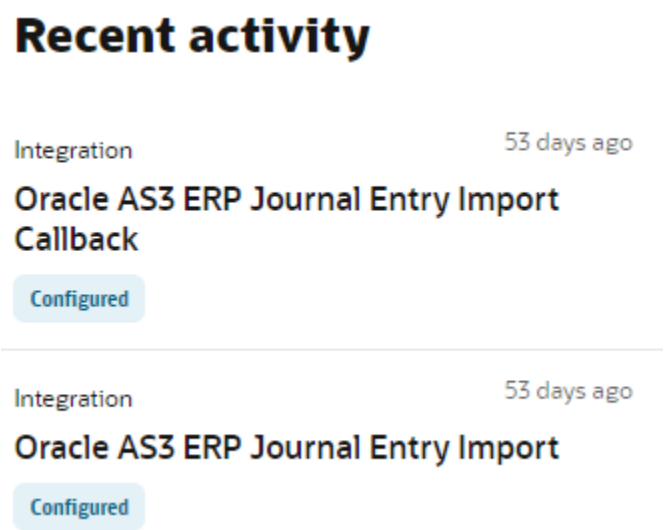
To browse the entire collection, click **Browse store**, and then search, filter, and sort the list to find the accelerator or recipe you want to use.

You can install a recipe or accelerator, configure its connections, and activate its integrations. See Get Started with Integration Recipes and Accelerators.

Open Recently Worked On Items

The **Recent activity** section on the Home page lists the items that you worked on recently.

No need to navigate the menus and search for where you left off. Instead, click the card in the **Recent activity** section to return to your work. It's fast, direct, and personalized for you.



Keep Everything Organized with Projects

With projects, all related integrations and their components are in a single unified workspace. Additionally, projects provide robust life-cycle management and streamlined updates to prebuilt integrations.

Flexibility to solve your business problems

A project keeps related integrations and their components in a single workspace. The number of projects that you create and the integrations that you include in each project is up to you, allowing you to create a custom solution that supports your business goals. For example, projects can help you achieve the following objectives:

- **Organize the work of each line of business that works in an instance**

  For instance, create one or more projects for ERP integrations, one or more projects for HCM integrations, and so on.

- **Keep all components related to a single solution together**

For instance, create one project for each solution, such as including all integrations and components for synchronizing Salesforce opportunities with Oracle Fusion Cloud Applications in a single project, and creating other projects for other solutions.

4 reasons to work in projects

1. **Build, manage, and monitor everything in one place**

   A project helps you get started quickly and confidently because you build all the components an integration needs within a project. You don't need to click all over the user interface to find the right page to create a connection, lookup, or JavaScript library. It's all right there within your project, including the ability to monitor your integrations.

2. **Build faster by reusing components**

   After you've built an integration or two within a project, creating additional integrations is even faster and easier. The connections, JavaScript libraries, and lookups from existing integrations are all at your fingertips, offering easy one-stop shopping. Just grab what you need from the streamlined user interface and start building.

3. **Future-proof your prebuilt integrations with easy updates**

   Accelerators provide prebuilt integrations that you can easily customize, but what happens to your customized integration when a new version of the accelerator is released? When you install the accelerator in a project, you can automatically update to the new version into your integration without reworking your customizations. Use accelerators with confidence, knowing that you can always accept the newest version without having to set aside time to modify and troubleshoot your integration.

4. **Deploy with confidence**

   Within a project, you might have integrations that you're building and testing, as well as integrations that you're monitoring because they've been deployed to production. Additionally, each integration might have many versions that you've created as you optimized the integration. With a project deployment, you can easily select the integrations and their versions that you want to activate and quickly see the integration versions that you've deployed together.

You don't have to create your integrations in projects. But given all the benefits they offer, why not try them out? See Design, Manage, and Monitor Integrations in Projects in *Using Integrations in Oracle Integration 3*.

Questions? Ask Oracle Assistant

Oracle Assistant is a digital assistant that can answer common questions about Oracle Integration. If you have questions about Oracle Integration, ask Oracle Assistant.

Oracle Assistant joined Oracle Integration in August 2021 and was developed using Oracle Digital Assistant. You can ask questions in full sentences and Oracle Assistant will try getting the best answer for you, even searching the product documentation. You can ask general questions about Oracle Integration or specific questions about its capabilities.

When you ask questions, try to be as specific as you can in what you're looking for. For example, if you're looking for information on three-legged Oauth configuration, tell the assistant "Oauth three-legged configuration", instead of "Oauth integration". You'll get better answers that way.

Oracle Assistant is constantly improving, so the assistant does get better with time. The more you use the assistant, the more the assistant improves.

You can tell Oracle Assistant:

- "Find" with a keyword to immediately search the product documentation for information.
- "Not helpful", to make a note so that the team can improve Oracle Assistant.

If you want to move the icon a different place on the page, click on it and drag it to a new position.

3

Get Started with Integration Recipes and Accelerators

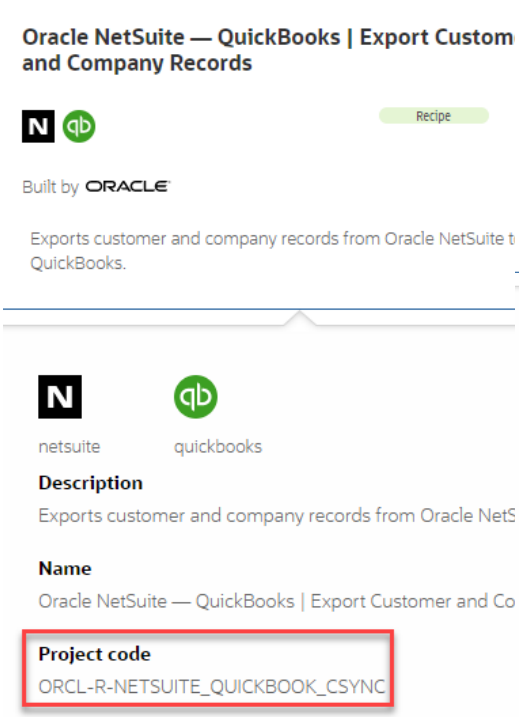
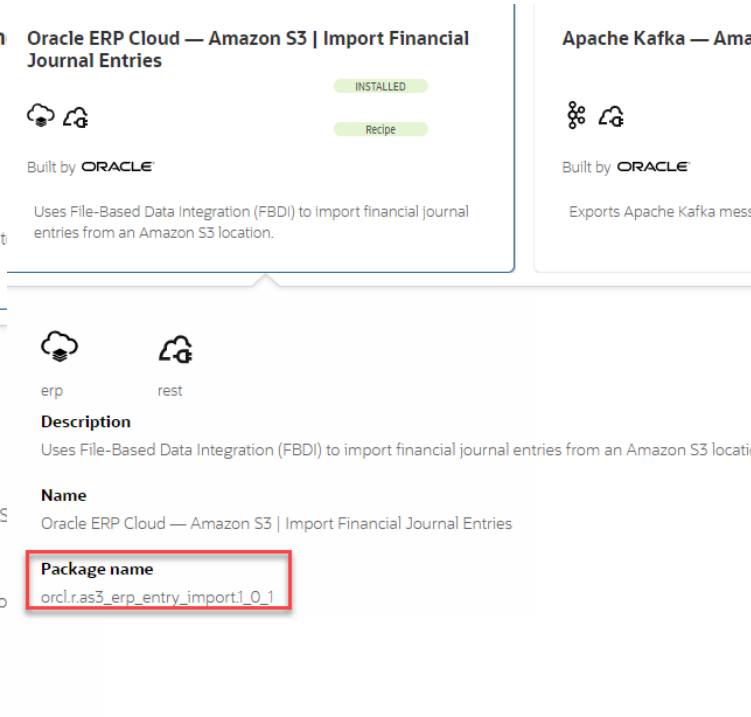
Recipes and accelerators, collectively known as *prebuilt integrations*, are preassembled integration solutions.

A recipe or accelerator contains all the resources required for a specific integration scenario. The resources include integration flows, connections, lookups, and certificates. Use a recipe or accelerator to quickly get started building an integration.

Recipes are either project-based or package-based:

- When you install a *project-based recipe*, you can access it on the Projects page in Oracle Integration. All recipes made available since the Projects feature was introduced are project-based.
- When you install a *package-based recipe*, you can access it on the Packages page in Oracle Integration. Before the Projects feature was introduced, all recipes were package-based. If you want to convert one of the package-based recipes into a project, you can import the recipe's integration flows (IAR files) into a new project.

To determine whether a recipe in the Integration Store is project-based or package-based before you install it, hover over the recipe card and click **Open Details** ⌄ to expand the information pane. The recipe details show either **Project code** (for a project-based recipe) or **Package name** (for a package-based recipe).

Project-based recipe	Package-based recipe
	

Topics:

Learn About Differences Between Recipes and Accelerators

Recipes are sample use cases that give you a head start. **Accelerators** are run-ready business integrations or technical patterns of larger scale.

Here's a comparison of recipes and accelerators.

Recipes	Accelerators
A recipe is a sample use case that gives you a head start.	A business accelerator provides an end-to-end business process or use case (for example, marketing to lead, hire to retire, or concept to launch). A technical accelerator provides a common technical solution (for example, sending alerts on failures). They are meant to be called by another integration.
Not supported by the producer	Managed and supported by the producer
Fully editable in the Oracle Integration designer	Configurable and extendable
Can't auto-upgrade to new versions	Upgrades provided by producer
Configurator in Oracle Integration	Configurator in Oracle Integration and as native SaaS
Always free	Paid offering (as decided by producer)

Find Recipes and Accelerators

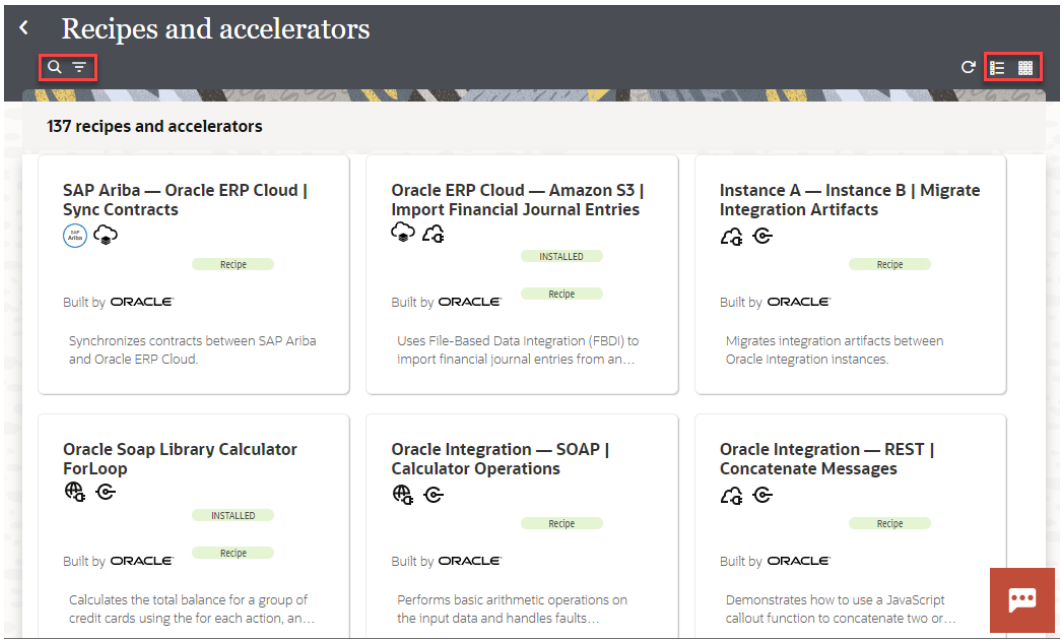
The Home page displays a partial listing of the available accelerators and recipes. It also provides access to the Integration Store, where you can browse the entire portfolio of preassembled solutions.

To determine whether a recipe in the Integration Store is project-based or package-based before you install it, hover over the recipe card and click **Open Details** ⌄ to expand the information pane. The recipe details show either **Project code** (for a project-based recipe) or **Package name** (for a package-based recipe).

To find a recipe or accelerator:

1. On the Oracle Integration Home page, in the **Get started** section, click **Browse store**.

   The Integration Store is displayed. Note that you can toggle the display between a list view and a card view.



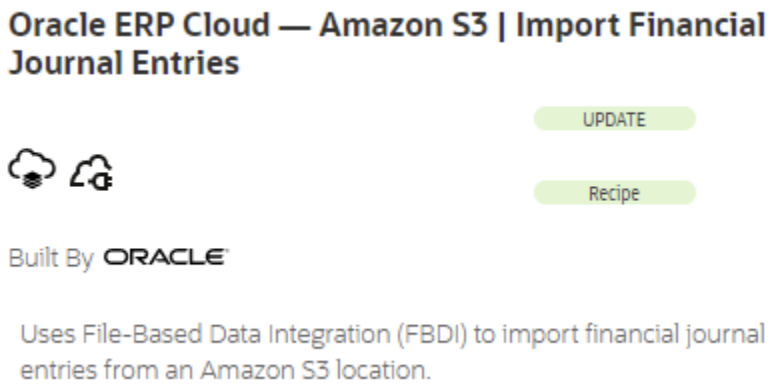
2. Use the **Search** , **Filter** , and view tools to narrow your search, filter and sort the list, and change how the list is displayed.

Get More Details About Recipes and Accelerators

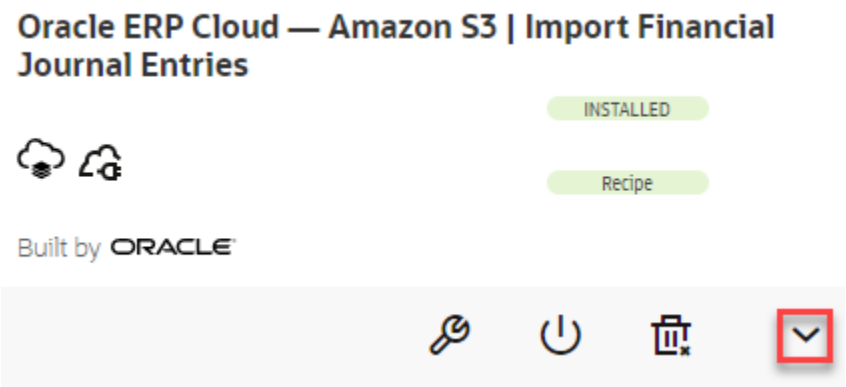
The Integration Store displays useful information to help you decide whether you want to use a particular recipe or accelerator.

At a glance, you can see:

- The adapters used by the recipe (or accelerator), identified by product icons. Position the cursor over the icons to see the name of an adapter.
- The two applications that the recipe (or accelerator) connects to, followed by a brief purpose of the recipe.
- The status of the recipe (or accelerator). The **INSTALLED** status indicates that the recipe, as well as all its dependent resources, are already deployed in Oracle Integration.
- The type of the artifact, whether it's a **Recipe** or **Accelerator**.



To see more information, such as a full description, package or project name, version, publication date, and a link to the associated adapter documentation, hover over the card and click **Open Details** to expand the information pane.



Install Recipes and Accelerators

When you install a recipe or accelerator, Oracle Integration deploys the integration flows and associated resources of the recipe or accelerator. These resources include the connections, certificates (PGP keys), lookups, and libraries.

> **Note:**
>
> Oracle Integration comes with the Resequence Messages technical accelerator automatically installed. Therefore, the card for this accelerator shows as **INSTALLED** on the Recipes and Accelerators page when you sign in.

To install a recipe or accelerator:

1. Find the recipe or accelerator that you want to install.
2. Hover over the recipe or accelerator card and click **Install** +.

   When you install a recipe (or an accelerator), it's installed as a package or project. Follow the instructions in the Configure Resources topic to configure the recipe accordingly.

> **Note:**
>
> For project-based accelerators, Oracle periodically releases updates to the Integration Store. You can upgrade an installed accelerator project to a newer version automatically without making manual changes to your existing installation. See Upgrade an Accelerator Project.

View Details About a Resource

When you're editing a recipe (or an accelerator), you can view details about the integration flows and associated resources within the recipe.

To view the details for a resource:

- **For package-based prebuilts:** In the Configuration Editor, hover over a resource and click **Open Details** ⌄.
- **For project-based prebuilts:** In the Project Workspace, in a resource section (for example, the Connections section), click **View all resources** at the bottom. On the resulting page, hover over a resource and click **Open Details** ⌄.

The resource row expands and displays the following information:

- The resource details, such as, name, identifier, type, and so on.
- The total number of integration flows in the recipe that use the resource.
- The name of each integration flow in the recipe that uses the resource.

Configure Resources

After you install a recipe (or accelerator), you need to configure the integration flow(s) and associated resources within the recipe.

You can perform the following configuration actions for a recipe (or accelerator):

- You can **edit** integrations flows, connections, certificates (PGP keys), lookups, and libraries. You must have administrator privileges to edit certificates.
- You can **replace** connections and certificates in some recipes. However, you can't replace them if an integration flow in the recipe is either active or locked. You can't replace them if they are included in a business or technical accelerator.
- You can **update** integration property values for any integration flow in which properties have been defined.
- You can **add** schedules to any integration flow that uses a Scheduled Orchestration style (also called pattern). These integration flows run according to the schedule you define.

To configure a recipe (or accelerator), hover over an installed recipe in the Integration Store, and click **Configure** .

Depending on the recipe type (package-based or project-based), a corresponding configuration page opens, where you can configure the resources.

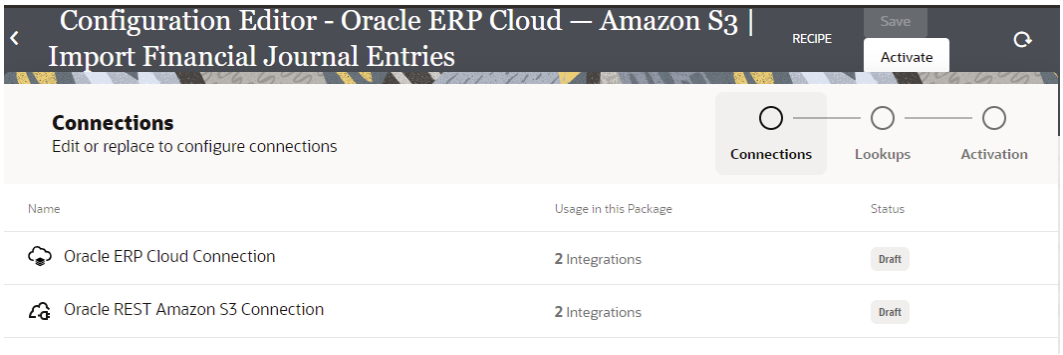
- Configure Resources in a Package
- Configure Resources in a Project

Configure Resources in a Package

When you click **Configure** on a recipe or accelerator card, the Configuration Editor is displayed if it's a package-based prebuilt.

1. View the details on the editor.

   The title bar includes the name of the recipe or accelerator. Click **Connections**, **Lookups**, **Activation**, **Certificates**, and **Libraries** to view the resources that are included in the package.



2. Hover over a row to reveal the options for configuring, editing, or replacing a resource.

Click...	Valid for...	Description
Add schedule	Integrations	Define when the integration flow runs. This option is available only if the integration flow uses a Scheduled Orchestration style. Click **Actions** ⋯ on an integration flow to reveal this option.
Update property values	Integrations	Update integration property values for any integration flow in which properties have been defined. Click **Actions** ⋯ on an integration flow to reveal this option.
Edit	Integrations Connections Certificates Lookups Libraries	Access the corresponding page for editing the integration flow or any other resource. For more information about editing these resources, see: • Configure Connection Properties. • Manage Security Certificates. • Map Data and Create Lookups. • Use Libraries to Manage Functions for Integrations.

Click...	Valid for...	Description
Replace	Connections Certificates	Replace a connection or a certificate (PGP key) across all the integration flows in a package. • You can replace a connection resource only with another resource of the same role (trigger, invoke, or trigger and invoke). In addition, the connection status must be **Configured**. You can't replace a connection with a connection whose status is **Draft**. If a compatible connection resource doesn't exist, a message is displayed. • You can replace a PGP key only with a key of the same type of key. For example, you can replace a public PGP key with another public PGP key, but not with a private PGP key.
Revert	Connections Certificates	Restore the original connection or certificate (PGP key). If you replace a connection or certificate (PGP key) resource, then **REPLACED** displays after the name of the resource, and **Revert** is available.
Open Details	Connections Certificates Lookups Libraries	Display the number and name of the integration flows in this package that use the selected resource.

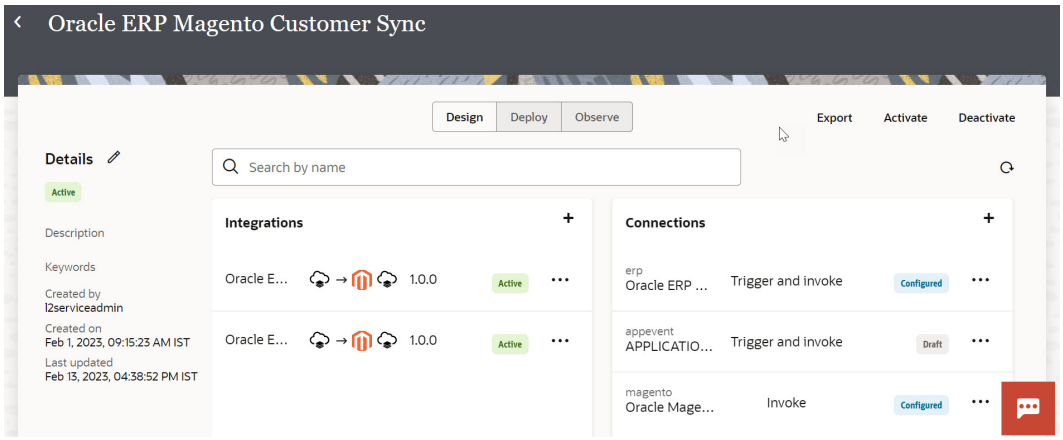
3. Make the necessary edits to the resources and save your changes, then click **Go back** to return to the Configuration Editor.
4. Continue to edit each resource. When you are ready, you can activate the package from the Configuration Editor or the Integration Store.

Configure Resources in a Project

When you click **Configure** on a recipe or accelerator card, the Project Workspace is displayed if it's a project-based prebuilt.

1. View the details in the workspace.

   The title bar includes the name of the recipe or accelerator. The **Integrations**, **Connections**, **Lookups**, and **Libraries** sections contain the respective resources of the recipe project.



2. Within a section (for example, **Connections**), click **Actions** ⋯ on a resource to reveal the options for editing, configuring, or deleting a resource.

Click...	Valid for...	Description
Add schedule	Integrations	Define when the integration flow runs. This option is available only if the integration flow uses a Scheduled Orchestration style.
Update property values	Integrations	Update integration property values for any integration flow in which properties have been defined.
Edit	Integrations Connections Certificates Lookups Libraries	Access the corresponding page for editing the integration flow or any other resource. For more information about editing these resources, see: • Configure Connection Properties. • Manage Security Certificates. • Map Data and Create Lookups. • Use Libraries to Manage Functions for Integrations.
Refresh endpoints	Integrations	Refresh the endpoints of an integration flow in a project that includes endpoints that support refreshing artifacts. See Refresh Endpoints for Integrations.
Extend **Note:** Available in Accelerator projects only.	Integrations	Extend an integration flow in an accelerator project to process predefined custom objects by adding and configuring an extension group. See Extend an Integration in an Accelerator Project.

Click...	Valid for...	Description
Refresh metadata	Connections	Refresh the currently-cached metadata available to adapters that have implemented metadata caching. See Refresh Integration Metadata.
Delete	Connections Certificates Lookups Libraries	Delete an existing resource. To add a new resource to a project, click **Add** in the respective section.

3. Make the necessary edits to the resources and save your changes, then click **Go back** to return to the Project Workspace.
4. Continue to edit each resource. When you are ready, you can activate the project from the workspace or the Integration Store.

Activate Recipes and Accelerators

After you configure the resources of a recipe (or an accelerator), you can activate it.

- **From the Integration Store:** Hover over the recipe card and click **Activate** ⏻.
- **From the Configuration Editor or Project Workspace:** Click **Activate** in the title bar. In the Activate Package or Activate project panel, click **Activate** again.

  A message confirms that the integrations in the prebuilt have been activated. Refresh the page to view the updated status of the integrations.

Uninstall Recipes and Accelerators

Uninstalling a recipe or accelerator deletes it and all its resources.

You can't uninstall a recipe (or accelerator) if an integration flow of the recipe is the **ACTIVE** or **LOCKED** state.

Note that, when you uninstall a recipe, you'll lose all the changes you made to the recipe's resources, including changes made to integration flows. Although you can reinstall the recipe, the resources are installed freshly in this case, without your modifications. If you'd like to make changes to an installed recipe, you can edit its resources instead of uninstalling it completely.

Note that you can't edit the integration flows in an accelerator. In this case, you can reinstall to restore an accelerator.

To uninstall a recipe or accelerator:

1. Find the recipe or accelerator that you want to uninstall.
2. Hover over the recipe or accelerator card and click **Uninstall** 🗑.
3. Select which version you want to uninstall, then click **Uninstall**.

A

Recipes Reference

Oracle Integration includes a growing portfolio of recipes for integrating different applications for customer relationship management and customer experience (CRM/CX), enterprise resource planning (ERP), human capital management (HCM), social networking, and more.

For an overview of recipes and accelerators and how to use them, see Get Started with Integration Recipes and Accelerators. In this section, you'll find more information about many of the Oracle Integration recipes, with steps to install, configure, activate, and run each recipe. For a full list of recipes and accelerators currently available for Oracle Integration, see Recipes and Accelerators on the Oracle Help Center.

Topics:

Customer Relationship Management (CRM) Recipes

Oracle Integration includes a set of recipes that help you integrate applications related to managing the relationship with your customers. These recipes handle common business tasks such as converting opportunities to quotes to orders, dispatching service technicians, managing membership, and synchronizing customer data.

Topics:

Create and Retrieve Organization Details from Oracle Service Cloud (RightNow)

Use this recipe to retrieve an organization from Oracle Service Cloud (RightNow) using the SOAP adapter.

> **Note:**
>
> This recipe is available as **Create and Retrieve Org Details from Oracle Service Cloud (RightNow)** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

The integration in this recipe uses the SOAP adapter to retrieve an organization from Oracle Service Cloud (RightNow) based on its ID.

The SOAP adapter request contains the ID of the organization to retrieve.

The response contains the ID and the address of the organization. The address includes the street, city, postal code, and country.

The integration that results from installing this recipe is named: `Oracle SOAP ServiceCloud Get Organization`.

System and Access Requirements

- Oracle Integration
- Oracle Service Cloud (RightNow)

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Before you run the integration created with this recipe, you must configure the connections to the SOAP service and Oracle Service Cloud (RightNow):

- To create a connection to the SOAP service, follow the steps described in Create a SOAP Adapter Connection in *Using the SOAP Adapter with Oracle Integration 3*.
- To create a connection to Oracle Service Cloud (RightNow), follow the steps described in Create an Oracle Service Cloud (RightNow) Adapter Connection in *Using the Oracle Service Cloud (RightNow) Adapter with Oracle Integration 3*.

Related Documentation

To learn more about the adapters used in this recipe see:

- *Using the SOAP Adapter with Oracle Integration 3*
- *Using the Oracle Service Cloud (RightNow) Adapter with Oracle Integration 3*

Create Orders in Oracle Fusion Cloud Service for Oracle CPQ Opportunities

Use this recipe to streamline the entire opportunity-to-quote-to-order process by integrating Oracle Fusion Cloud Service and Oracle Configure, Price, and Quote (Oracle CPQ).

> **Note:**
>
> This recipe is available as **Oracle B2B Service — Oracle CPQ | Convert Opportunity-to-Quote-to-Order** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe allows users to create quotes and sales orders for an opportunity. It provides a consistent user interface flow that originates in Oracle Fusion Cloud Service.

Transaction data is passed seamlessly between the two applications, ensuring accuracy and allowing Oracle Fusion Cloud Service users to take advantage of the on-demand configuration, pricing, and quoting capabilities of Oracle CPQ.

The benefits include:

- Allows users to create quotes with accurate pricing and generate company specific proposals
- Simplifies quoting and reduces duplicate entry for sales reps managing opportunities that require quotes
- Enables sales reps to accurately configure and price complex products in an intuitive and easy to use manner

System and Access Requirements

- Oracle Fusion Cloud Service, Release 9 or later
- Oracle CPQ, 2015 R1 or later
- Oracle Integration

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Oracle CPQ Cloud-Oracle Sales Cloud Integration through Oracle Integration Cloud Service Implementation Guide

Integrate Oracle Fusion Cloud IoT Intelligent Applications with Oracle Field Service Cloud

Use this recipe to automate the process of dispatching technicians to jobs based on alerts from Internet of Things (IoT) enabled devices. It integrates Oracle Fusion Cloud IoT Intelligent Applications and Oracle Field Service Cloud.

> **Note:**
>
> This recipe is available as **Oracle IoT Cloud — Oracle Field Service Cloud | Dispatch Technicians** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe enables you to dispatch technicians quickly and increase productivity by having activities automatically created, without any manual interventions, from Oracle Fusion Cloud IoT Intelligent Applications to Oracle Field Service Cloud. You can also keep better track of incidents and activities by minimizing human errors.

The capabilities include:

- End-to-end integration between Oracle Field Service Cloud and Oracle Fusion Cloud IoT Intelligent Applications
- Automatic activity creation based on alerts from IoT enabled devices
- Display IoT device details within Oracle Field Service Cloud

System and Access Requirements

- Oracle Field Service Cloud, Version 18A or later
- Oracle Fusion Cloud IoT Intelligent Applications
- Oracle Integration

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Oracle Field Service Cloud / IoTCS Integration using OIC

Sync Incidents and Resources Between Oracle Field Service Cloud and Oracle Fusion Cloud B2C Service

Use this recipe to synchronize incidents and resources between Oracle Field Service Cloud and Oracle Fusion Cloud B2C Service.

> **Note:**
>
> This recipe is available as **Oracle Field Service Cloud — Oracle B2C Service | Sync Incidents and Resources** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe supports bi-directional, data synchronization of incidents and resources between Oracle Field Service Cloud and Oracle Fusion Cloud B2C Service. It includes out-of-the-box data mapping of salient attributes.

Oracle Field Service Cloud manages the most intimate customer service channel: field service appointments. These interactions may be the only time your customer engages with your organization face-to-face, and thus have a significant impact on customer relationships.

Oracle Fusion Cloud B2C Service helps you serve your customers at their point of need, whether that customer is searching for assistance via your corporate social channels, an email inquiry, a voice call to a support agent, or a website chat.

This recipe includes the following features:

- End-to-end integration between Oracle Field Service Cloud and Oracle Fusion Cloud B2C Service as an out-of-the-box solution using Oracle Integration
- Automatic creation of activities in Oracle Field Service Cloud when an incident is created in Oracle Fusion Cloud B2C Service
- Synchronize modified fields between incidents and activities
- Create and update resources in Oracle Fusion Cloud B2C Service when created or updated in Oracle Field Service Cloud

System and Access Requirements

- Oracle Field Service Cloud, 17.2 or later
- Oracle Fusion Cloud B2C Service, 16.8 or later
- Oracle Integration

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Oracle Field Service Cloud / Oracle Service Cloud Integration using ICS

Enterprise Resource Planning (ERP) Recipes

Review these enterprise resource planning (ERP) recipes if you're looking to integrate applications that manage your day-to-day business activities such as transferring files, importing financials, and managing the supply chain (inventory, purchase orders, receiving, and shipping).

Topics:

- Automate File Transfer an FTP server to Oracle EPM Cloud
- Extract Bulk Data from Oracle ERP Cloud to an FTP server
- Import Financial Journal Entries from Amazon S3 to Oracle ERP Cloud
- Import Financial Journal Entries from an FTP server to Oracle ERP Cloud
- Process Inventory, Order, and Shipping Info Between Oracle ERP/SCM Cloud and Oracle WMS Cloud
- Synchronize Inventory Items Between Oracle Product Hub Cloud and Oracle E-Business Suite
- Synchronize Supplier Updates Between Oracle Procurement Cloud and Oracle ATP

Automate File Transfer an FTP server to Oracle EPM Cloud

Use this recipe to automate file transfer from an FTP server to Oracle Enterprise Performance Management Cloud (Oracle EPM Cloud).

> **Note:**
>
> This recipe is available as **Oracle EPM Cloud — FTP Server | Automate File Transfer** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe demonstrates how easily you can transfer a file from any FTP/sFTP location to Oracle EPM Cloud using Oracle Integration.

The integration uses a scheduled orchestration pattern to automatically transfer the file on a regular basis. It uses the standard FTP and REST adapters available in Oracle Integration to read the file from the source location (FTP server) and then transfer it to the destination (Oracle EPM Cloud).

You store the file to be transferred on File Server, an embedded sFTP server within Oracle Integration. To use File Server, you must enable it for your Oracle Integration instance. See Enable File Server in *Using File Server in Oracle Integration 3*.

System and Access Requirements

- Oracle Integration, 18.1.5 or later
- Oracle EPM Cloud, 18.03 or later
- A secure FTP (sFTP) server or File Server.

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- File Transfer EPM-FTP Using Integration Cloud Sample OIC Integration Flow (File transfer to EPM Cloud from FTP location) Implementation Guide
- *Using File Server in Oracle Integration 3*

Extract Bulk Data from Oracle ERP Cloud to an FTP server

Use this recipe to export bulk data from Oracle Enterprise Resource Planning (ERP) Cloud and import it into an FTP server.

> **Note:**
>
> This recipe is available as **Oracle ERP Cloud — FTP Server | Extract Bulk Data** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe extracts BI Publisher (BIP) report data from Oracle ERP Cloud in an asynchronous manner. The integration uses a scheduled orchestration pattern so that you can schedule when to extract the data extract and how often. The extracted reports are then transferred and uploaded to an FTP server. The reports are now available to users and applications directly from the FTP location. If required, you can enrich or edit the extracted report data within the integration.

The sample integration performs these actions:

- Query bulk data from Oracle ERP Cloud.
- Receive the data via the ERP trigger.
- Invoke it through the SOAP Adapter and get the data from a business event.
- Complete the process. If the import completes successfully as per the Oracle ERP Cloud callback, then upload the file received in the callback to the FTP server. If the import fails, then send an email notification.

You can upload the extracted reports to File Server, an embedded sFTP server within Oracle Integration. To use File Server, you must enable it for your Oracle Integration instance. See Enable File Server in *Using File Server in Oracle Integration 3*.

System and Access Requirements

- Oracle Integration, Version 19.2.3.0.0 (190518.1400.28490)
- Oracle ERP Cloud, Version 19A (11.13.19.01.0)
- A secure FTP (sFTP) server or File Server

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Overview | Extract Bulk Data from ERP Cloud_Async
- Use Cases | Extract Bulk Data from ERP Cloud _Async
- User Guide | Extract Bulk Data from ERP Cloud_Async
- *Using File Server in Oracle Integration 3*

Import Financial Journal Entries from Amazon S3 to Oracle ERP Cloud

Use this recipe to import financial journal entries from an Amazon S3 location to Oracle ERP Cloud. The recipe uses File-Based Data Integration (FBDI).

> **Note:**
>
> This recipe is available as **Oracle ERP Cloud — Amazon S3 | Import Financial Journal Entries** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe reads a file from an Amazon S3 location, does a simple transformation, and then imports the financial journal entries into Oracle ERP Cloud.

The message flow of business data goes from Amazon S3 through Oracle Integration to Oracle ERP Cloud, and then back to the Amazon S3 location.

The integration uses a scheduled orchestration pattern to download the file from the Amazon S3 location, process it, and import it into Oracle ERP Cloud. In a scheduled orchestration, you can configure when and how often the download occurs.

The import process records the results in a log file. To send this log file back to the Amazon S3 location, the integration uses an app-driven orchestration. The trigger to start an app-driven orchestration is based on an event happening. In this case, the log file is ready for export.

The integration uses the standard REST and Oracle ERP Cloud Adapters available in Oracle Integration.

System and Access Requirements

- Oracle Integration, Version 19.3.1.0.0 (190624.1100.29532) or later
- Oracle Fusion Cloud Enterprise Resource Planning, Version 19A (11.13.19.01.0) or later
- Amazon S3

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Overview | V0 Import Journal Entries | Amazon S3/Oracle Financials Cloud (ERP Cloud)
- Use Case | V0 Import Journal Entries | Amazon S3/Oracle Financials Cloud (ERP Cloud)
- User Guide | V0 Import Journal Entries | Amazon S3/Oracle Financials Cloud (ERP Cloud)

Import Financial Journal Entries from an FTP server to Oracle ERP Cloud

Use this recipe to import financial journal entries from an FTP Server location to Oracle ERP Cloud. The recipe uses File-Based Data Integration (FBDI).

> **Note:**
>
> This recipe is available as **Oracle ERP Cloud — FTP Server | Import Financial Journal Entries** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe reads a file from an FTP location, does a simple transformation, and then imports the financial journal entries into Oracle ERP Cloud. The integration flow can be invoked explicitly either as a web service or as a scheduled orchestration.

The sample integration performs the following actions:

- Read the ledger-entries file from the FTP location.
- Unzip the file.
- Stage the file in Oracle Integration and read each entry.
- Transform the data as required. For example, this sample integration changes the value in the currency column.
- Use the Oracle ERP Cloud Adapter to send the file to Oracle ERP Cloud, configure a callback, and invoke the import process with the required parameters.
- Report the results. After the import is completed, Oracle Integration receives the result of the import from Oracle ERP Cloud. If the import completes successfully, then upload the log file to the FTP server. If the import fails, then send an email notification.

You can store the ledger-entries file on File Server, an embedded sFTP server within Oracle Integration. To use File Server, you must enable it for your Oracle Integration instance. See Enable File Server in *Using File Server in Oracle Integration 3*.

System and Access Requirements

- Oracle Integration
- Oracle ERP Cloud
- A secure FTP (sFTP) server or File Server

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Overview | V0 Import Journal Entries | Cloud FTP Location/Oracle Financials Cloud (ERP Cloud)
- Use Case | V0 Import Journal Entries | Cloud FTP Location/Oracle Financials Cloud (ERP Cloud)
- User Guide | V0 Import Journal Entries | Cloud FTP Location/Oracle Financials Cloud (ERP Cloud)
- *Using File Server in Oracle Integration 3*

Process Inventory, Order, and Shipping Info Between Oracle ERP/SCM Cloud and Oracle WMS Cloud

Use this recipe to process information related to inventory, purchase orders, receiving, and shipping. It demonstrates a sample integration between Oracle Enterprise Resource Planning (ERP)/Supply Chain & Manufacturing (SCM) Cloud and Oracle Warehouse Management (WMS) Cloud.

> **Note:**
>
> This recipe is available as **Oracle ERP/SCM Cloud — Oracle WMS Cloud | Process Inventory, Order, and Shipping Info** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe syncs inventory, and maps receipts to purchase orders, receipts to receiving, and shipments to orders.

It includes the following individual integrations in one package:

- `OCWMS_INVENTORY_ADJUSTMENT`: Makes inventory adjustments from Oracle WMS Cloud to Fusion inventory.

- `OCWMS_RECEIPT_ADVICE`: Takes purchase order receipts in Oracle Inventory Management Cloud and maps them to purchase orders in Oracle WMS Cloud.
- `OCWMS_RECEIPT_CONFIRMATION`: Maps receipt confirmation from Oracle WMS Cloud to Fusion receiving.
- `OCWMS_SHIPMENT_REQUEST`: Maps shipment requests from Fusion shipping to orders in Oracle WMS Cloud.
- `OCWMS_SHIPMENT_CONFIRMATION`: Maps shipments from Oracle WMS Cloud to the confirmation in Fusion shipping.
- `OCWMS_ECHO_LGFDATA`: Used for internal XML transformation. No user configuration is necessary.

The integration uses the standard REST Adapter available in Oracle Integration to create a connection to a specific instance of Oracle WMS Cloud. The connection is then used to create an integration, which calls Oracle WMS Cloud web services, as well as exposes web services that Oracle WMS Cloud can call to push out data. The sample flow uses the Oracle ERP Cloud Adapter to connect to ERP Cloud instances (Fusion/Cloud Inventory).

System and Access Requirements

- Oracle WMS Cloud, Version 9.0.0 or later
- Oracle Inventory Management Cloud, Version 18A or later
- Oracle Integration

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- Oracle Warehouse Management Cloud Integrating with Integration Cloud Services
- *Using the Oracle ERP Cloud Adapter with Oracle Integration 3*
- *Using the REST Adapter with Oracle Integration 3*

Synchronize Inventory Items Between Oracle Product Hub Cloud and Oracle E-Business Suite

Use this recipe to create a corresponding inventory item in Oracle E-Business Suite when an item is created in Oracle Product Hub Cloud.

> **Note:**
>
> This recipe is available as **Oracle Product Hub Cloud — Oracle E-Business Suite | Synchronize Inventory Items** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe synchronizes inventory item records from Oracle Product Hub Cloud to Oracle E-Business Suite in real time. It uses the standard Oracle ERP Cloud Adapter and the Oracle E-Business Suite Adapter. To use the recipe, you must install the recipe package and configure the connections and other resources within the package.

When an inventory item is created in Oracle Product Hub Cloud (which is part of Oracle ERP Cloud), the integration flow of the recipe is triggered. The integration flow receives the inventory item details from Oracle Product Hub Cloud and creates a corresponding item in the PLM module of Oracle E-Business Suite, thereby synchronizing item records between the two systems.

> **Note:**
>
> - You can run this recipe for one inventory item at a time.
> - Updating an item in Oracle Product Hub Cloud doesn't trigger the recipe.

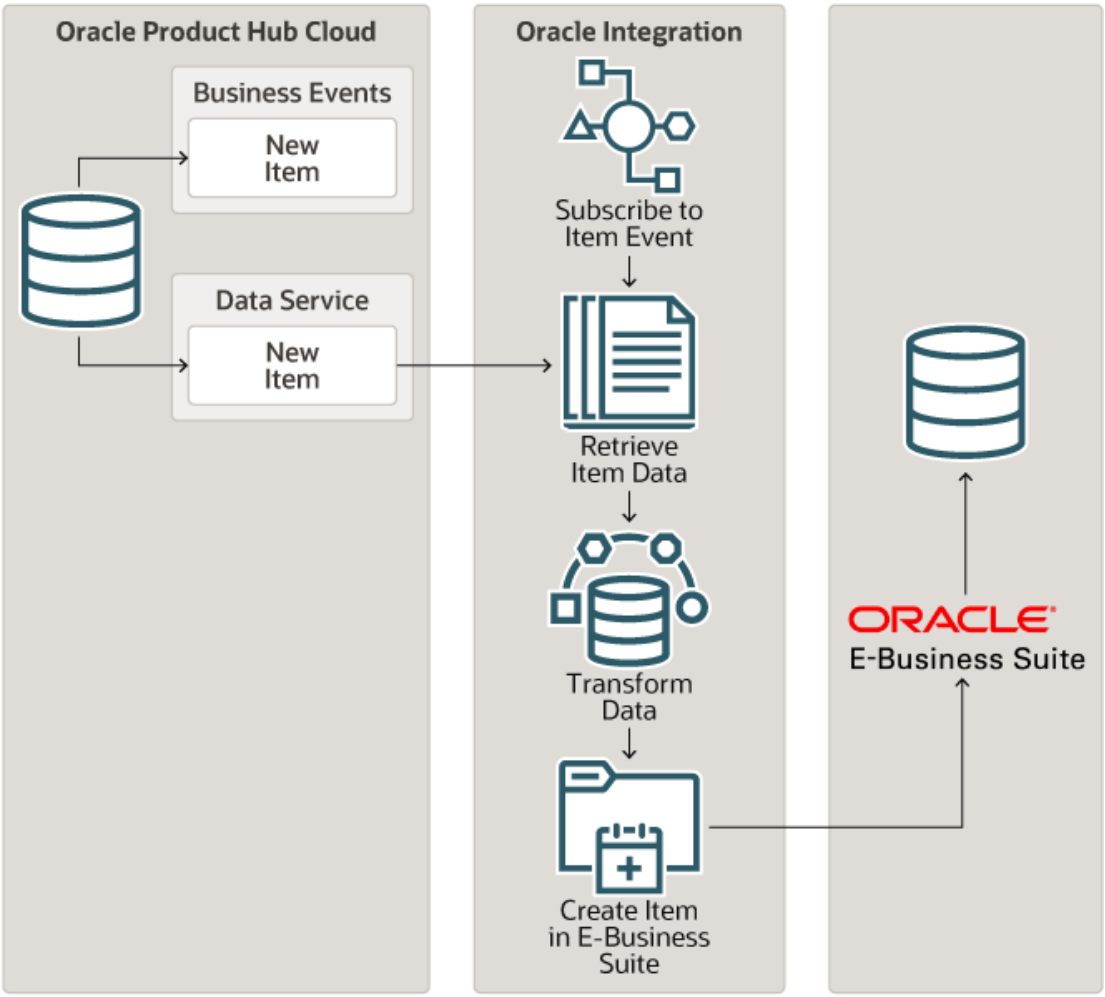
System and Access Requirements

- Oracle Integration, Version 21.2.2.0.0 (210505.1400.40944) or higher
- Oracle E-Business Suite, Version 12.2.X
- Oracle ERP Cloud
- An account on Oracle E-Business Suite with the Administrator role
- Accounts on Oracle ERP Cloud with the Administrator role and the Product Data Steward role (in order to create new items)

Recipe Schema

This section provides an architectural overview of the recipe.

The integration flow of the recipe is triggered when an inventory item is created in Oracle Product Hub Cloud. It receives the inventory item data, transforms the data to the format supported by Oracle E-Business Suite, and finally creates a corresponding inventory item in Oracle E-Business Suite.



Topics:

- Before You Install the Recipe
- Install and Configure the Recipe
- Activate and Run the Recipe

Before You Install the Recipe

You must perform the following configuration tasks on your Oracle ERP Cloud instance and Oracle E-Business Suite instance in order to successfully connect to these external systems using Oracle Integration and achieve synchronization.

1. Configure Oracle ERP Cloud
2. Configure Oracle E-Business Suite

Configure Oracle ERP Cloud

To access the Oracle ERP Cloud (or Oracle Product Hub Cloud) instance from Oracle Integration, you'll require a separate user account on Oracle ERP Cloud.

Log in to your Oracle ERP Cloud instance as an **Administrator** and perform the following tasks.

1. Create a user account for Oracle Integration. Make a note of the user name and password you set for the account. You'll use the credentials of this account to connect to Oracle ERP Cloud from Oracle Integration.
2. Assign the following roles to the user account. For more information, see Assign Required Roles to an Integration User in *Using the Oracle ERP Cloud Adapter with Oracle Integration 3*.
   - `Integration Specialist`
   - `Oracle ERP Cloud-specific data access to the integration user`

Configure Oracle E-Business Suite

To access E-Business Suite from Oracle Integration, you must perform certain configurations on your E-Business Suite instance. In addition, you'll require a separate user account on E-Business Suite with necessary security grants.

Log in to your Oracle E-Business Suite instance as an **Administrator** and execute the following tasks.

1. Create a user account for Oracle Integration. Make a note of the user name and password you set for the account. For the general procedure to create a new user account, see Create an Application User on Oracle E-Business Suite. (Skip the role assignment specified in the referenced topic as it's not applicable to this recipe.)
2. Perform the general configurations listed on the following page: Setup Tasks for Enabling the Oracle E-Business Suite Adapter. Here, make sure you provide the security grants to the user account created for Oracle Integration.
3. In addition to the REST services you deployed in the previous step, you must deploy the Catalog Item Maintenance (`EGO_ITEM_PUB`) REST service, and create a security grant on this service for the user account created for Oracle Integration.
   a. Deploy the Catalog Item Maintenance service with the following details:
      - Enter `plmsvc` as the service alias.
      - Select the **Process Item (convenience wrapper version)** method.
   b. After the service is deployed, create a grant on the **Process Item (convenience wrapper version)** method for the user account created for Oracle Integration.

   For more information on deploying REST services and creating security grants, see Deploying REST Web Services and Managing Grants for Interfaces with Support for SOAP and REST Web Services in *Oracle E-Business Suite Integrated SOA Gateway Implementation Guide*.

Install and Configure the Recipe

On your Oracle Integration instance, install the recipe package to deploy and configure the integration and associated resources.

1. On the Oracle Integration Home page, in the **Get started** section, click **Browse store**.
2. Find the recipe you want to install.
3. Hover over the recipe, then click **Install** +.

A message confirms that the recipe was successfully installed, and the recipe card shows **INSTALLED**.

4. Hover over the recipe again, and click **Configure** to configure the resources of the recipe.

   The Configuration Editor opens, displaying all the resources of the recipe package. Configure the following resources before you activate and run the recipe.

   - Configure the Oracle ERP Cloud Connection
   - Configure the Oracle E-Business Suite Connection
   - Configure the Lookup Table

Configure the Oracle ERP Cloud Connection

Configure the connection details for the Oracle ERP Cloud connection.

1. In the Configuration Editor, under **Connections**, hover over the connection, then click **Edit** .
2. In the Properties section, enter the following details:
   - The Oracle ERP Cloud host name. For example: `https://your_domain_name.fa.DC.oraclecloud.com`
3. In the Security section, enter the following details:

Field	Information to Enter
Security Policy	Select **Username Password Token**.
User Name	Enter the user name of the account created for Oracle Integration on Oracle ERP Cloud. See Configure Oracle ERP Cloud.
Password	Enter the password of the account created for Oracle Integration on Oracle ERP Cloud.

4. Click **Save**. If prompted, click **Save** again.
5. Click **Test** to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.

   A message confirms if your test is successful.

6. To return to the Configuration Editor, click **Go back** .

Configure the Oracle E-Business Suite Connection

Configure the connection details for the Oracle E-Business Suite connection.

1. In the Configuration Editor, under **Connections**, hover over the connection, then click **Edit** .
2. In the Properties section, enter the following details:
   - The URL of your Oracle E-Business Suite instance.
3. In the Security section, enter the following details:

Field	Information to Enter
Username	Enter the user name of the account created for Oracle Integration on Oracle E-Business Suite. See Configure Oracle E-Business Suite.
Password	Enter the password of the account created for Oracle Integration on Oracle E-Business Suite.

4. Click **Save**. If prompted, click **Save** again.
5. Click **Test** to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.

   A message confirms if your test is successful.
6. To return to the Configuration Editor, click **Go back** .

Configure the Lookup Table

Edit the lookup table to enter the necessary details.

1. In the Configuration Editor, click **Lookups** to view the lookup tables in the recipe.

   Hover over the lookup table to edit, then click **Edit** .
2. Against the **toEmail** field, enter the email address to which run-time exception emails are to be sent.
3. Against the **fromEmail** field, enter the email address from which run-time exception emails are to be sent.
4. Against the **p_organization_code** field, enter the code of the organization in Oracle E-Business Suite with which to associate the new items created by this recipe.
5. Click **Save**. If prompted, click **Save** again.
6. To return to the Configuration Editor, click **Go back** .

Activate and Run the Recipe

After you've configured the connections and the lookup table, you can activate and run the recipe.

1. In the Configuration Editor, click **Activate** in the title bar. In the Activate Package dialog, click **Activate** again.

   A message confirms that the integration has been activated. Refresh the page to view the updated status of the integration.
2. Run the recipe.
   a. Log in to the Oracle ERP Cloud instance using a separate account, for example, as a user with the Product Data Steward role.
   b. Click the **Product Management** tab on the home page, and then select **Product Information Management**.
   c. On the resulting page, click **Tasks** from the right pane, and then click **Create Item**.
   d. In the Create Item dialog:

i. Enter an organization.

ii. Leave the **Create New** radio button selected.

iii. Enter `1` in the **Number of Items** field.

> **Note:**
>
> For successful execution of the recipe, you must create a single item.

iv. Select the required item class and template.

v. Click **OK**.
If you're shown a warning message, click **Yes**.

e. On the Create Item page:

i. Enter a name and description for the item.

ii. From the **Save** drop-down list, click **Save and Close**.

You've now successfully created an item and triggered the recipe.

3. Monitor the running of the integration flow in Oracle Integration.

a. In the Configuration Editor, click **Activation** to view the integrations in the recipe. Hover over the integration to monitor, then click **Actions** ⋯ and select **Run**, then **Track Instances**.

b. On the Track Instances page:

i. You'll see the integration flow of the recipe being triggered and executing successfully.
The recipe now creates a new inventory item in Oracle E-Business Suite corresponding to the item created in Oracle ERP Cloud.

ii. Select the row of the integration instance that just executed, and click **View Details**.
The Activity Stream pane appears, in which you can view the ID of the inventory item created in Oracle E-Business Suite.

4. Log in to your Oracle E-Business Suite instance as an Administrator and check for the new item record.

a. On the home page, enter `Master Items` in the search field.

b. From the search results, select the Master Items entry corresponding to the role and organization you've configured in the recipe.

c. In the resulting dialog, on the **Functions** tab, select the **Item Search** entry and click **Open**.

d. In the Find Items dialog, against the **Item Mask** field, enter the name of the inventory item you created in Oracle ERP Cloud. Click **Find**.

Verify the item details displayed.

Related Documentation

- *Using the Oracle ERP Cloud Adapter with Oracle Integration 3*
- *Using the Oracle E-Business Suite Adapter with Oracle Integration 3*

Synchronize Supplier Updates Between Oracle Procurement Cloud and Oracle ATP

Use this recipe to synchronize supplier updates between Oracle Procurement Cloud and Oracle Autonomous Transaction Processing (ATP) database.

> **Note:**
>
> This recipe is available as **Oracle Procurement Cloud — Oracle ATP | Synchronize Supplier Updates** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe updates the Oracle ATP database in real time when supplier data (for example, products and services, transaction taxes, payments, addresses, sites, contacts) is updated in Oracle Procurement Cloud. The recipe contains two integration flows, one for receiving the supplier data updates from Oracle Procurement Cloud and then updating the same into an Apache Kafka topic, and another for writing the supplier data updates from the Apache Kafka topic into the Oracle ATP database table. The integrations use app-driven orchestration, and the standard Oracle ERP Cloud Adapter, Apache Kafka Adapter, and Oracle Autonomous Transaction Processing Adapter.

To use the recipe, you must install the recipe package and configure the connections and other resources within the package. Subsequently, you can activate the integrations. When supplier data is updated in Oracle Procurement Cloud, the first integration (*Oracle ERP Kafka Supplier Sync Producer*) is triggered. The integration flow receives the updates from Oracle Procurement Cloud and writes the updates into an Apache Kafka topic. This in turn triggers the second integration (*Oracle Kafka ATP Supplier Sync Consumer*) which consumes the updates from the Apache Kafka topic and writes the updates to the Oracle ATP database table, thereby synchronizing the supplier data updates between the systems.

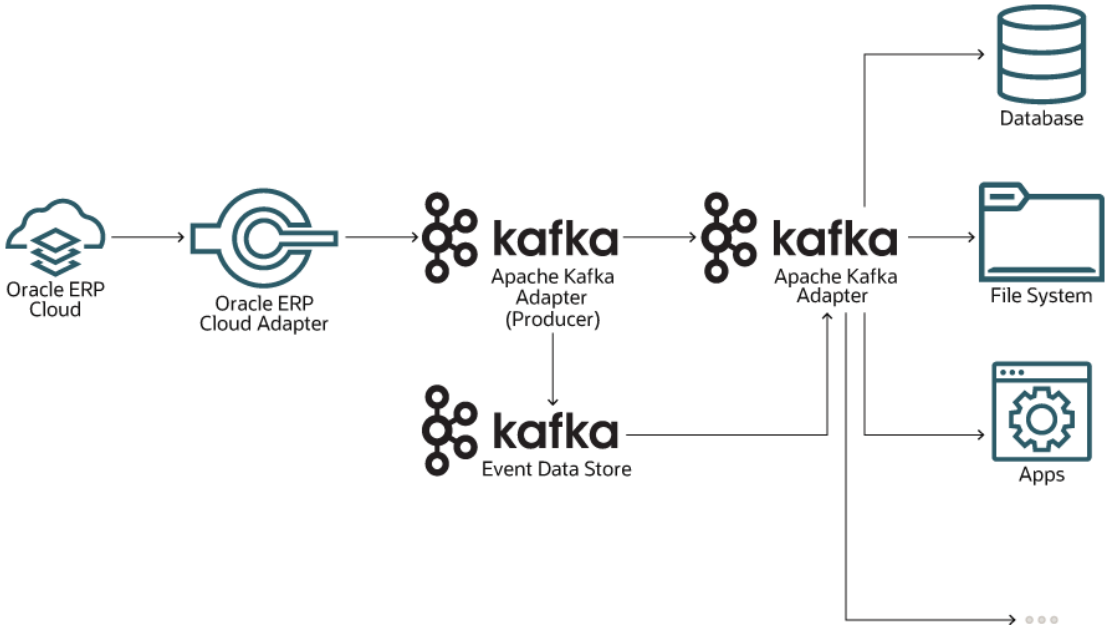
System and Access Requirements

- Oracle Integration, Version 21.2.2.0.0 (210505.1400.40944)
- Oracle ERP Cloud
- Oracle ATP
- Apache Kafka
- An account in Oracle ERP Cloud with the Administrator and Procurement Manager roles
- An account in Apache Kafka with the Administrator role
- An account in Oracle ATP with the Administrator role
- An Oracle ATP database table with write access

Recipe Schema

This section provides an architectural overview of the recipe.

An event is raised in Oracle ERP Cloud (Oracle Procurement Cloud) when supplier data is updated. This triggers the first integration flow in Oracle Integration. The integration flow uses the Oracle ERP Cloud Adapter and the Apache Kafka Adapter (Producer) to get and write the updates to an Apache Kafka topic. This in turn triggers the second integration flow which uses the Apache Kafka Adapter (Consumer) and Oracle Autonomous Transaction Processing Adapter to write the supplier data updates from the Apache Kafka topic to an Oracle ATP database table.



Topics:

- Before You Install the Recipe
- Install and Configure the Recipe
- Activate and Run the Recipe

Before You Install the Recipe

You must perform the following configuration tasks on your Oracle ERP Cloud, Apache Kafka, and Oracle Autonomous Transaction Processing (ATP) instances in order to successfully connect to these external systems using Oracle Integration and achieve synchronization.

1. Configure Oracle ERP Cloud
2. Configure Apache Kafka
3. Configure Oracle Autonomous Transaction Processing (ATP)

Configure Oracle ERP Cloud

To access the Oracle ERP Cloud (or Oracle Procurement Cloud) instance from Oracle Integration, you'll require a separate user account on Oracle ERP Cloud.

Log in to your Oracle ERP Cloud instance as an **Administrator** and perform the following tasks.

1. Create a user account for Oracle Integration. Make a note of the user name and password you set for the account. You'll use the credentials of this user account to connect to Oracle ERP Cloud from Oracle Integration.
2. Assign the following roles/privileges to the user account. For more information, see Assign Required Roles to an Integration User in *Using the Oracle ERP Cloud Adapter with Oracle Integration 3*.
   - `Integration Specialist`
   - `AttachmentsUser`
   - `FND_MANAGE_CATALOG_SERVICE_PRIV`
   - `ASM_IMPLEMENTATION_MANAGER_DUTY`

In addition to creating a separate user account and assigning roles/privileges to it, you have to enable supplier events from Oracle ERP Cloud. See Enable Supplier Events.

Enable Supplier Events

To get the required supplier data updates from Oracle Procurement Cloud, you need to subscribe to supplier Create/Update events in Oracle ERP Cloud.

The Supplier Create/Update events include the Supplier Number and SupplierID attributes in the output payload. Oracle Integration uses the event attributes to invoke the Supplier REST API and get the required supplier data updates from Oracle Procurement Cloud.

1. Log in to your Oracle ERP Cloud instance.
2. Click **My Enterprise** from the navigator on the home page, and then click **Feature Updates**.
3. In the Features Overview page, select the **Available Features** tab.
4. Enter `Suppliers` in the functional area search field.

   All available features that belong to the suppliers functional area get listed.
5. In the row for the feature Enabled Outbound Supplier Profile Integration Using Oracle Cloud, click **Enabled**.
6. In the resulting window, select the **Enable** check box for the feature Enable Outbound Supplier Profile Integration Using Oracle Cloud.
7. Click **Done**.

Configure Apache Kafka

Complete certain configuration tasks to successfully connect to Apache Kafka from Oracle Integration and achieve synchronization.

For more information, see Prerequisites for Creating a Connection in *Using the Apache Kafka Adapter with Oracle Integration 3*.

1. Get the Apache Kafka Cluster Bootstrap Server URL.

   For more information, see Prerequisites for Creating a Connection in *Using the Apache Kafka Adapter with Oracle Integration 3*.

2. Install the Connectivity Agent
3. Create an Apache Kafka Topic

Install the Connectivity Agent

As Apache Kafka is hosted on-premise and is behind a firewall, you must install and configure the connectivity agent to allow Apache Kafka to interact with applications in the cloud.

Before you install the connectivity agent, review the following:

- System Requirements
- Connectivity Agent Restrictions

To install and configure the connectivity agent:

1. Create an agent group.

   Note the agent group as you will need to select it while configuring the Apache Kafka connection from Oracle Integration.

2. Download and install the connectivity agent.

Create an Apache Kafka Topic

1. From the command prompt execute the following command to create a topic named `supplier_topic`:

   ```
   kafka-topics.bat --zookeeper 127.0.0.1:2181 --topic supplier_topic --
   create -partitions 3 --replication-factor 1
   ```

   You get a message that the topic is created.

2. To view the topic you just created, execute the following command:

   ```
   kafka-topics.bat --zookeeper 127.0.0.1:2181 -list
   ```

   A list of topics, including the `supplier_topic` that you created, is displayed.

Configure Oracle Autonomous Transaction Processing (ATP)

Complete certain configuration tasks to successfully connect to Oracle ATP from Oracle Integration.

The following steps give an overview of the tasks you need to perform to obtain information and details for configuring the Oracle ATP connection property and security from Oracle Integration. For detail information, see Prerequisites for Creating a Connection in *Using the Oracle Autonomous Transaction Processing Adapter with Oracle Integration 3*.

1. Download the client credentials wallet.

   This is a zip file containing the client security credentials. By default the file name is `Wallet_<databasename>.zip`. You can save this file as any file name you want.

2. Get the database service name.

   Note that the service name must be same as the one in the `tnsnames.ora` file in the client credential wallet.

3. Get the wallet password.

   You'll be prompted to enter a wallet password while downloading the client credentials wallet. Note the password as you'll need it while configuring the Oracle ATP connection security from Oracle Integration.

In addition to the above configuration tasks, you need to set up a database table in your Oracle ATP instance to synchronize supplier information. See Create an Oracle ATP Database Table.

Create an Oracle ATP Database Table

1. Log in to your Oracle Autonomous Database (Transaction Processing) instance.
2. Navigate to the Service console, and in the left Autonomous Transaction Processing navigation menu, click **Development**.
3. Click **Database Actions**.
4. In the Database Actions page, under the Development section, click **SQL**.
5. Using data definition language define and create your database object - a database table named `v_Supplier` - and specify the fields as shown in the table below.

Field Name	Data Type	Not Null	Primary Key
v_SupplierId	number	Yes	Yes
v_SupplierName	varchar2(20)	-	-
v_SupplierNumber	number	-	-
v_BusinessRelationship	varchar2(20)	-	-
v_Status	varchar2(20)	-	-
v_DUNSNumber	int	-	-
v_TaxRegistrationNumber	varchar2(20)	-	-

Field Name	Data Type	Not Null	Primary Key
v_TaxpayerId	varchar2(20)	-	-
v_TaxpayerCountryCode	varchar2(20)	-	-
v_SupplierTypeCode	varchar2(20)	-	-
v_TaxOrganizationType	varchar2(20)	-	-

Install and Configure the Recipe

On your Oracle Integration instance, install the recipe package to deploy and configure the integration and associated resources.

1. On the Oracle Integration Home page, in the **Get started** section, click **Browse store**.
2. Find the recipe you want to install.
3. Hover over the recipe, then click **Install** .

   A message confirms that the recipe was successfully installed, and the recipe card shows **INSTALLED**.
4. Hover over the recipe again, and click **Configure** to configure the resources of the recipe.

   The Configuration Editor opens, displaying all the resources of the recipe package. Configure the following resources before you activate and run the recipe.

   - Configure the Oracle ERP Cloud Connection
   - Configure the Oracle Apache Kafka Connection
   - Configure the Oracle ATP Connection
   - Configure the Lookup Table

Configure the Oracle ERP Cloud Connection

Configure the connection details for the Oracle ERP Cloud connection.

1. In the Configuration Editor, under **Connections**, hover over the connection, then click **Edit** .
2. In the Properties section, enter the following details:
   - Enter the Oracle ERP Cloud host name. For example: `https://your_domain_name.fa.DC.oraclecloud.com`
3. In the Security section, enter the following details:

Field	Information to Enter
Security Policy	Select **Username Password Token**.
User Name	Enter the user name of the account created for Oracle Integration on Oracle ERP Cloud. See Configure Oracle ERP Cloud.
Password	Enter the password of the account created for Oracle Integration on Oracle ERP Cloud.

4. Click **Save**. If prompted, click **Save** again.
5. Click **Test** to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.

   A message confirms if your test is successful.
6. To return to the Configuration Editor, click **Go back** .

Configure the Oracle Apache Kafka Connection

Configure the connection details for the Oracle Apache Kafka connection.

1. In the Configuration Editor, under **Connections**, hover over the connection, then click **Edit** .
2. In the **Bootstrap Servers** field, enter the Bootstrap Server URL you obtained earlier while configuring Apache Kafka.

   See Configure Apache Kafka.
3. In the **Security Policy** field, select **No Security Policy**.
4. In the **Agent Group** section, select the agent group.
   a. Click **Configure Agents**.
   b. On the Select an Agent Group dialog, select the agent group that you had configured while installing the connectivity agent.

      See Install the Connectivity Agent.
   c. Click **Use**.
5. Click **Save**. If prompted, click **Save** again.
6. Click **Test** to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.

   A message confirms if your test is successful.
7. To return to the Configuration Editor, click **Go back** .

Configure the Oracle ATP Connection

Configure the connection details for the Oracle ATP connection.

1. In the Configuration Editor, under **Connections**, hover over the connection, then click **Edit** .
2. In the Properties section, enter the following details:

   In the **Service Name** field, enter the service name of your Oracle ATP instance. See
   Configure Oracle Autonomous Transaction Processing (ATP).
3. In the Security section, enter the following details:
   - In the **Security Policy** field, select **JDBC Over SSL** from the drop-down list.
   - In the **Wallet** field, click **Upload** to upload the credential wallet file that you obtained earlier.
   - Enter the password for your credential wallet file in the **Wallet Password** field.

- Enter your Oracle ATP account username in the **Database Service Username** field.
- Enter your Oracle ATP account password in the **Database Service Password** field.

See Configure Oracle Autonomous Transaction Processing (ATP).

4. Click **Save**. If prompted, click **Save** again.
5. Click **Test** to ensure that your connection is successfully configured. In the resulting dialog, click **Test** again.

   A message confirms if your test is successful.

6. To return to the Configuration Editor, click **Go back** .

Configure the Lookup Table

Edit the lookup table to enter the necessary details.

1. In the Configuration Editor, click **Lookups** to view the lookup tables in the recipe. Hover over the lookup table to edit, then click **Edit** .
2. Edit a lookup. For example, against the **toEmail** field, enter the email address to which run time exception emails are to be sent.

   You can update and modify the lookups as per your requirement.

3. Click **Save**. If prompted, click **Save** again.
4. To return to the Configuration Editor, click **Go back** .

Activate and Run the Recipe

After you've configured the connections and the lookup table, you can activate and run the recipe.

1. In the Configuration Editor, click **Activate** in the title bar. In the Activate Package dialog, click **Activate** again.

   A message confirms that the integration has been activated. Refresh the page to view the updated status of the integration.

2. Run the recipe.
   a. Log in to the Oracle ERP Cloud instance as a user with the Procurement Manager role.
   b. Click the **Procurement** tab from the navigator in the home page, and then select **Suppliers**.
   c. In the resulting page, select **Manage Suppliers Task** and then search for a supplier you want to update.
   d. In the supplier details, update one of the fields. For example, update the value in the **D-U-N-S Number** field.

   You've successfully triggered the recipe.

3. Monitor the running of the integration flow in Oracle Integration.
   a. In the Configuration Editor, click **Activation** to view the integrations in the recipe. Hover over the integration to monitor, then click **Actions** ... and select **Run**, then **Track Instances**.

b. On the Track Instances page, you'll see the integration flows of the recipe being triggered and executing successfully.

   The recipe now updates the corresponding supplier's D-U-N-S Number in the Oracle ATP database table.

4. Log in to the Oracle ATP instance and check for the updated supplier data.

   a. Open the `V_SUPPLIER` SQL worksheet and execute the following query:

      ```
      "SELECT * FROM V_SUPPLIER"
      ```

   b. In the query result, verify that the value in the supplier's `v_dunsnumber` column matches the value that was updated in Oracle Procurement Cloud.

      If the value matches, then synchronization is achieved successfully.

Related Documentation

- *Using the Oracle ERP Cloud Adapter with Oracle Integration 3*
- *Using the Apache Kafka Adapter with Oracle Integration 3*
- *Using the Oracle Autonomous Transaction Processing Adapter with Oracle Integration 3*

Human Capital Management (HCM) Recipes

The Human Capital Management (HCM) recipes help you integrate applications related to recruiting, managing, and developing the employees in your company.

Topics:

- Export Employee Data from Oracle HCM Cloud to an Identity Management System

For documentation on all available HCM recipes, explore our Recipes and Accelerators page.

Export Employee Data from Oracle HCM Cloud to an Identity Management System

Use this recipe to build an outbound integration to a customer identity management system when a new hire is created in Oracle HCM Cloud.

> **Note:**
>
> This recipe is available as **Oracle HCM Cloud — Identity Management | Sync Directories** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe demonstrates how to build an outbound integration to a customer identity management system when a new hire is created in Oracle HCM Cloud

Using the ATOM feed within the Oracle HCM Cloud Adapter, this recipe illustrates the ability to subscribe to New Hire notifications, build a full data set of profile data using additional REST calls, and then write the results in a different format to a third-party system.

System and Access Requirements

- Oracle Integration
- Oracle HCM Cloud, Release 13 or later
- FTP server
- `DateTimeLib4_1.0.jar`
- `getEmployeeResponse.json`
- `newEmployeeFile.csv`

Install, Configure, and Run the Recipe

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Related Documentation

- PDF documentation and supporting files

Oracle Integration Starter Recipes

The starter recipes are basic integrations that required no additional setup. Use the following starter recipe to see how easy it is to activate, run, view results, and monitor an integration between endpoints.

Topic:

- Transfer a File

For documentation on all available starter recipes, explore our Recipes and Accelerators page in Oracle Help Center.

Transfer a File

Use this recipe to read an opaque file from a "/" directory and write the file to an "/upload" directory in a simple scheduled orchestration. After activating the integration, you go to the Actions menu and select Submit now or Add Schedule to run the scheduled integration.

> **Note:**
>
> This recipe is available as **Oracle Integration — FTP | Transfer File** in the Integration Store. Oracle provides this recipe as a sample only. The recipe is meant only for guidance, and is not warranted to be error-free. No support is provided for this recipe.

Overview

This recipe demonstrates how to read an opaque file from a `/` directory and write the file to an `/upload` directory in a scheduled orchestrated integration. An FTP Adapter reads the file from the `/` directory and another FTP Adapter writes the file to the `/upload` directory. An assign action is configured to assign variables for the file name and file size.

A logging message is created to indicate that the file name has been read. The message is logged to the activity stream for viewing.

You can also track the integration and monitor message status.

System and Access Requirements

- Oracle Integration

Install and Configure the Recipe

For more information and steps to install and configure recipes, see Get Started with Integration Recipes and Accelerators.

On your Oracle Integration instance, install the recipe package to deploy and configure the integration and associated resources.

On the Oracle Integration Home page, in the **Get started** section, click **Browse store**.

Find the recipe you want to install.

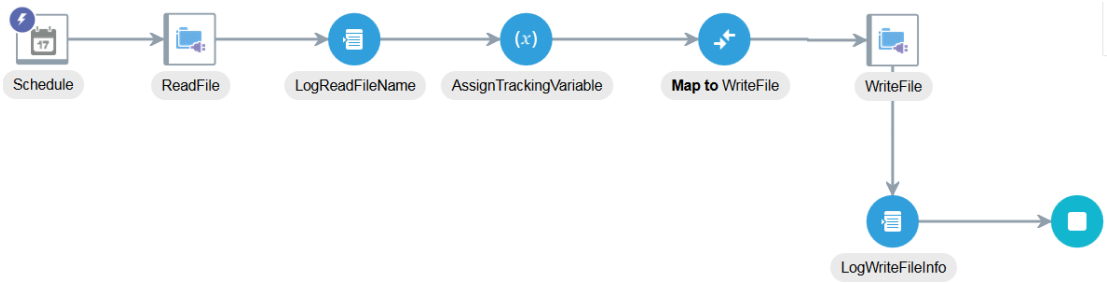
Hover over the recipe, then click **Install** +.

Hover over the recipe again, and click **Configure** to configure the resources of the recipe.

Run the Sample

This sample demonstrates how to read an opaque file from a "`/`" directory and write the file to an "`/upload`" directory in a scheduled orchestrated integration. An FTP

Adapter reads the file from the `/` directory and another FTP Adapter writes the file to the `/upload` directory. An assign action is configured to assign variables for the file name and file size. A logging message is created to indicate that the file name has been read. The message is logged to the activity stream for viewing. You also track the integration and monitor message status.



Complexity
Medium.

Prerequisites
None.

How To Activate

1. In the navigation pane, click **Design**, then **Integrations**.
2. Hover your cursor over the **File Transfer** sample, then click **Activate** ⏻. Click **Activate** when prompted.
3. Wait for the icon to turn green and the word **Active** to appear in the **Status** column, indicating that the integration is activated.

How to Configure
Before you can activate and run this sample, you must configure the connection and security properties of the **Sample FTP connection** FTP Adapter used in this sample.

1. In the navigation pane, click **Design**, then **Connections**.
2. Click **Sample FTP connection**.
3. Go to the **Properties** section to specify information to connect to the application/endpoint and process requests.
   a. For **FTP Server Host Address**, enter `speedtest.tele2.net`.
   b. For **FTP Server Port**, enter `21`.
4. Go to the **Security** section.
   a. For **Security Policy**, select **FTP Server Access Policy**.
   b. For **Username**, enter `anonymous`.
   c. Enter the same password twice. You can use any password.
   d. Click **Save**.

5. Click **Test** to test your configuration. A message is displayed that describes the results of the test. If successful, you are ready to activate the integration.

   ```
   Connection Sample FTP connection was tested successfully.
   ```

6. Click **Save**.

How To Run

1. In the navigation pane, click **Design**, then **Integrations**.
2. Hover your cursor over the **File Transfer** sample, then click ... then **Run**. A dialog is displayed with details about running, tracking, and testing the integration.
3. Click **Submit Now**.
   The Submit Now dialog is displayed.
4. Click **Submit Now**.
   The following message is displayed at the top of the page.

   ```
    CONFIRMATION
   Submit Now request to run integration File Transfer Sample
   (version_number) was submitted successfully with request id number.
   ```

How To Monitor

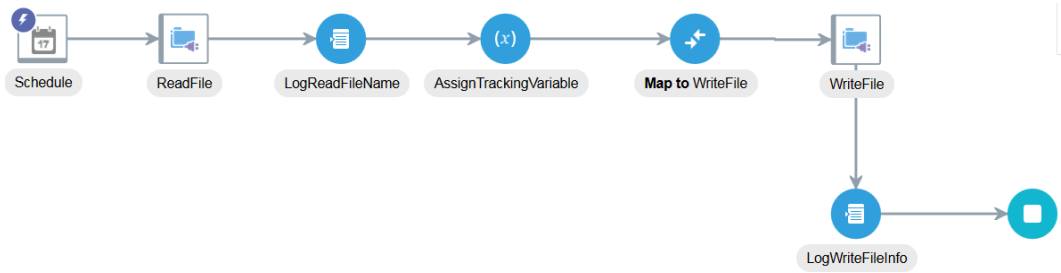
1. Click the instance number in the message at the top to go to the Track Instances page.
   The **File Transfer sample** integration instance is listed as in progress. You can see the filename and file size, which enables you to look for particular files in case of problems.
2. Wait for the run to complete.
3. In the navigation pane, click **Integrations** and note that the message was successfully received and processed without any errors. For this example, **Schedule is not defined** is displayed because this scheduled integration was invoked with the **Submit Now** option.

How To View

1. In the navigation pane, click **Design**, then **Integrations**.
2. Click the **File Transfer** integration.

   A read-only version of the integration is displayed for viewing. Because the integration is active, it cannot be edited.
3. View the flow of the integration:
   - The **Schedule** icon indicates that this is a scheduled orchestrated integration. The schedule invokes this integration.
   - An FTP Adapter (**ReadFile**) is configured to read a file in binary mode from the / directory of the server you specified in the Connections page. No schema is defined for this file transfer, so it is treated as an attachment.
   - A logging message is created to indicate that the file name has been read. The message is logged to the activity stream.
   - An assign action is configured to assign variables for the file name and file size. This enables you to track issues based on filename and size.

- An FTP Adapter (**WriteFile**) is configured to write a file to the `/upload` directory on the same server that matches the file name pattern of `1KB%yyMMddHHmmssSS%.zip`.
- A logging message is created to indicate the file name has been uploaded to the `/upload` directory. The message is logged to the activity stream.



Learn More About the Features in this Recipe

- Scheduling Integration Runs
- FTP Adapter Capabilities
- Creating Orchestrated Integrations
- Logging Messages with a Logger Action
- Assigning Values to Scalar Variables in an Assign Action
- Getting Started with the Mapper

Social and Productivity Recipes

Explore the social and productivity recipe to create integrations with applications that let you grow your presence on social media or make your routine tasks easier and simpler.

Topics:

- Interact with Facebook

For documentation on all available social and productivity recipes, explore our Recipes and Accelerators page in Oracle Help Center.

Interact with Facebook

Use these recipes to retrieve the details of a Facebook page.

> **Note:**
>
> These recipes are available in the **REST — Facebook | Get Page Details** package in the Integration Store. Oracle provides these recipes as samples only. These recipes are meant only for guidance, and are not warranted to be error-free. No support is provided for these recipes.

Overview

Using the recipes in the REST — Facebook | Get Page Details package, you can:

- Get all the posts published by a Facebook page.
- Get the entire feed of a Facebook page, including posts and links published by the page or by the visitors to the page.

To run a Facebook recipe, you must configure the Oracle Facebook Connection with the details necessary to access Facebook. You can then trigger the recipe through a REST request and supply the `page-id` of the Facebook page for which you want to retrieve details. The Facebook Adapter in the recipe is subsequently invoked, and it fetches the details of the specified page from Facebook. The response containing the page data is returned to you.

Integration Name	Description	REST Commands and Example Payloads

Get Page Posts	Retrieves all the posts published by a Facebook page.	**REST API Command:**
		
		GET: https://<host:port>/ic/api/integration/v1/flows/rest/ORCL-R-FACEBO_GET_PAGE_POSTS/1.0/getPosts?key=page-id&value={facebook_page_id}
		
		Example Response Payload:
		
		{
		"postResource.definitions.postType": {
		"data": [
		{
		"created_time": "2019-10-17T09:41:54+0000",
		"story": "",
		"id": "114257499511181_1240634186121094"
		}
		]
		}
		}

Integration Name	Description	REST Commands and Example Payloads
Get Page Feed	Retrieves the entire feed of a Facebook page, including posts and links published by the page or by the visitors to the page.	**REST API Command:** **GET:** https://<host:port>/ic/api/integration/v1/flows/rest/ORCL-R-FACEB_GET_PAGE_FEED/1.0/getPageDetails?key=page-id&value={facebook_page_id} **Example Response Payload:** { "postResource.definitions.postType": { "data": [{ "created_time": "2021-03-12T04:13:57+0000", "story": "James London wrote on ExamplePage's timeline — with David Ryan.", "id": "101637441997647_108967031264688" }, { "created_time": "2021-03-12T04:13:38+0000", "message": "Example message1","id": "101637441997647_108966757931382" }, { "created_time": "2021-03-12T04:11:30+0000", "message": "Example message2","id": "101637441997647_108965954598129" }, { "created_time": "2021-03-12T03:55:31+0000", "message": "Example message3", "id": "101637441997647_108955377932520" }, { "created_time": "2021-03-11T17:59:11+0000", "message": "Example message4", "id": "101637441997647_108577494636975" }, { "created_time": "2021-03-11T17:58:26+0000", "message": "Example message5", "id": "101637441997647_108577171303674" }, { "created_time": "2021-03-10T15:05:16+0000", "message": "Example message6", "id": "101637441997647_107388018089256" }], "paging": { "cursors": { "before": "QVFIUmdRR3VaSXJZAM2F1aEt PeXFNdy1NNk1weENIbG5IVkNaeldCRFo5aWd1Mng2 R0JSZAElWVFBINzBnSmJBYzhTRjNfQl85VHZAvc3E 5RkNYems2ZAzR0R01tN2pYZ AWdGalZAQblpoeWNaOXN0Skd2WGlOMkZABMVNQZAl 9GemtibU1FcXdE", "after":

Integration Name	Description	REST Commands and Example Payloads
		"QVFIUkwycGp3MG11YnVZAbFNBMzkwd09PanUtbzVKVHVPVTVuREwxcDdLNjkzNHRHR013ekl4RVhqbW9iNlJfOW5QREpTQVVNVjFqZAGdheGNlMTdtOVowa2xSMHdNSkJQME53RzM4T2ZADQnhyUWpNMEY1Rk1XMDZAxbHd1ZAXpWLXdiUDNS" } } } }

System and Access Requirements

- Oracle Integration
- Facebook

Install, Configure, and Run the Recipes

For more information and steps to install, configure, and run recipes, see Get Started with Integration Recipes and Accelerators.

Configure the Oracle REST Trigger Connection and the Oracle Facebook Connection present in the recipe package. You only need to configure these connections once. Both the recipes in the package use the same connections.

You must supply the following information when you configure these connections.

Connection Name	Parameters
Oracle REST Trigger Connection	The connection parameters are already configured for you. Test and save the connection.
Oracle Facebook Connection	**Security** • **Security Policy:** FaceBook OAuth Authorization Code Credentials. • **Client Id:** The App ID of your Facebook application. • **Client Secret:** The App Secret of your Facebook application. • **Scope:** The necessary `scope` parameters for the recipe. For more details, see Create a Facebook Adapter Connection in *Using the Facebook Adapter with Oracle Integration 3*.

Related Documentation

- *Using the Facebook Adapter with Oracle Integration 3*

Other Recipes

Oracle is continually expanding its portfolio of recipes. In addition to the recipe documents listed here, you can find documentation for the latest recipes on the Recipes and Accelerators page in the Oracle Help Center.

B
Technical Accelerators Reference

In addition to prebuilt recipes, Oracle Integration includes technical accelerators. Technical accelerators provide a common technical solution (for example, sending alerts on failures). They are meant to be called by another integration.

Topics:

Resequence Messages

The Resequence Messages technical accelerator provides a means for you to ensure that messages entering the system are processed in a specific order.

> **Note:**
>
> Oracle Integration comes with the Resequence Messages technical accelerator automatically installed. Therefore, this accelerator will already be listed as **INSTALLED** on the Recipes and Accelerators page when you sign in.

Topics:

Description

You often need to ensure that messages are processed in a strict order. Let's look at a pattern that enforces an order using Oracle Integration and the Resequence Messages technical accelerator. The pattern also deals with the case where you must limit the concurrency of calls to an endpoint system.

The Sequencing Problem

The basic problem is that you have a stream of requests that must be executed in order, for example, create account, update account address, and update account contacts. The latter two activities can't occur until the first one has completed.

Before you can sequence messages, you need to know the order in which the messages should be processed. So, you need to use some sort of sequencing ID. This ID could be a

timestamp or an actual sequence identifier. If you're using timestamps, then the closer to the message origin that the timestamp is applied the better. For example, if you take the timestamp from when the message arrives in Oracle Integration, then a network delay may have already caused our messages to be out of order.

Typically, you don't want all messages to be in the same ordered sequence. In our account example, only messages for a given account need to be ordered. Messages for different accounts can execute in parallel. So, now you also need some sort of group ID to identify different sequence streams within your message stream.

After you have the messages and know their order, you can process them. Inherent in a resequencing solution is some sort of delay to allow messages to arrive out of order and then be sorted into order. The size of the delay specifies how much time you can accept a message to be delayed before you go ahead without it.

The Resequencing Solution

The Resequence Messages technical accelerator includes a set of integrations, connections, and scripts that use standard Oracle Integration features. The integrations that handle the message resequencing are generic. You can use and reuse the technical accelerator to resequence different types of business integrations without modification to the integrations provided in the technical accelerator package.

The Resequence Messages technical accelerator:

- Processes the input message based on the desired sequence ID rather than on the order in which the messages arrive.
- Parks each message in storage for a certain period of time (parking time) so that any out-of-sequence messages have a chance to be processed in the desired order.
- Lets you configure the maximum number of message groups being processed in parallel in order to throttle the outgoing calls.
- Takes care of all error handling, including system errors, network errors, and bad requests.

Prerequisite

The solution uses a database to store the input messages. You can create the required database tables by using a SQL script.

To create the required database tables:

- Search and download the `DDL SQL script` provided in this blog.
- Run the script to create the database tables.

Key Parameters

The Resequence Messages technical accelerator uses the following key parameters to reorder messages.

Field	Description
gtype - Group Type	The type of stream. Different message types can be sequenced in parallel, for example, account updates and personnel updates are different group types.
gid - Message Group	A field in the request that identifies a specific stream of messages to be sequenced.
id - Message Identifier	A unique identifier for this message.
sequenceId - Message Sequence	A field in the request or a timestamp that is used to determine how to sequence the messages in a stream.
Parking Time	The amount of time that messages may be delayed in order to ensure messages are processed in the desired order.
Message Concurrency	The maximum number of message groups to be processed in parallel.

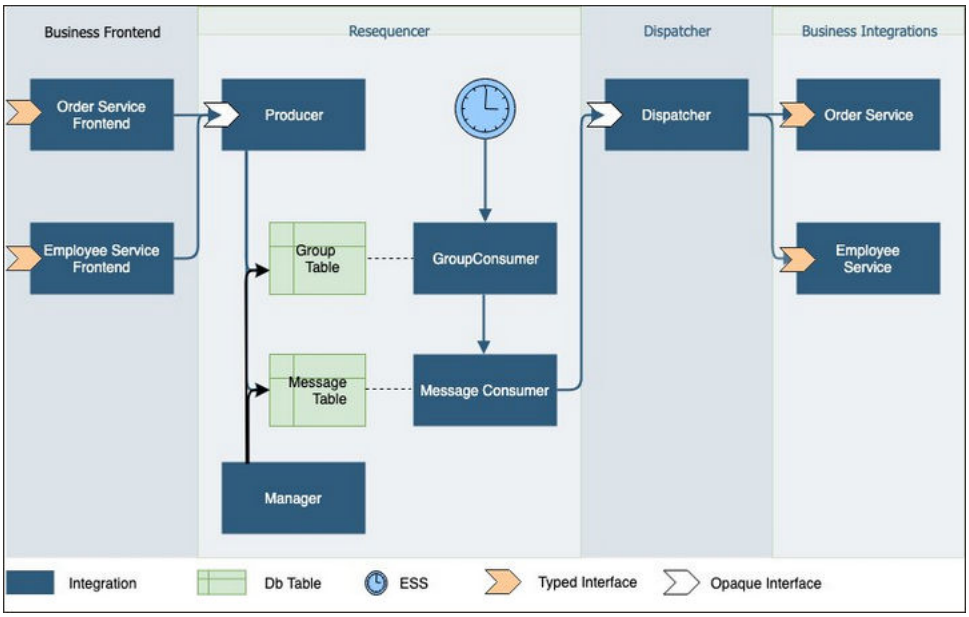
Connections

The Resequence Messages technical accelerator uses the following connections. After you install the accelerator, you need to configure each connection.

Connection	Type	Description
RSQ DB	Invoke	ATP database used by the resequencer
RSQMessageConsumer	Trigger and invoke	Used to cause load distribution of calls to message consumer
RSQManager	Trigger	Used to invoke manager interface
RSQProducer	Trigger	Used to invoke producer interface
RSQDispatcher	Trigger	Used to invoke dispatcher interface
TestService	Invoke	Used to invoke a sample test service

Architecture

Let's look at the architecture for the Resequence Messages technical accelerator.



Business Front-end Integrations

An integration in this tier serves as the front end to the resequencer and the real business integration so that the message can go through the resequencer integrations to be reordered. The front-end integrations are specific to the use case and act as a means of converting typed requests into a common format, including group and sequencing fields.

Also, the front-end integrations receive the typed business payload, extract ID, and group ID from the message before calling the standardized producer message.

Resequencer Integrations

The Resequence Messages technical accelerator includes a set of reseqencer integrations. These integrations handle the message resequencing and are generic. You can use them to resequence different types of business integrations. No additional modifications are necessary.

Resequencer Integrations	Description
Producer	Serves as the entry point of the resequencer. The **producer** integration receives the resequencing message, creates a new row in the group table if it's not already there, and sets the status of the group to **N**. It then creates a message in the message table. Sample message payload: `{ "gid": "gid", "gtype": "order", "id": "mid", "sequenceId": 123, "payload": "string repesentation of the payload" }`

Resequencer Integrations	Description
Group Consumer	Detects the active groups and invokes the **message consumer** integration. The integration is scheduled to run every minute. When scheduling, use this expression: `FREQ=MINUTELY;INTERVAL=1;` The group consumer integration finds active groups, limiting parallelism to throttle outgoing calls to prevent overloading the target system. For each active group, the integration invokes a message consumer.
Message Consumer	Processes active messages of the given group. It receives the group ID and type from the group consumer integration. It loads active messages of the group ordered by sequenceID. The messages have to be at least as old as the parking time. This ensures that there's a window for the message to arrive out of order but be processed in order. The integration loops through active messages, marks the message status as **P**, and invokes the dispatcher. Note that exceptions can occur here. After the dispatcher returns for a given message it is delete and the group status may be updated to mark the group status to be **C** if there are no active messages, or **N** if there are new active messages. Sample message payload: `{ "id": "Engineering", "type": "employee" }`

Manager

The **manager** integration supervises the resequencer. It supports three operations.

Operation	Path and Method	Description
Get configs	Path: /configs Method: GET	Returns the config of all the types. Example of invocation: `$ curl https://my.integration.cloud/ic/api/integration/v1/flows/rest/RSQMANAGER/1.0/configs -v -u username:password`

Operation	Path and Method	Description

Update config	Path: /configs/{type}
	Method: PUT
		Update the config for the given type. Example of invocation:
		`$ curl -X PUT https://my.integration.cloud/ic/api/integration/v1/flows/rest/RSQMANAGER/1.0/configs/employee -v -u username:password -H "Content-Type: application/json" -d@config.json`
		config.json example:
		`{ "maxConcurrent": 5, "timeWindow": 11 }`

Recover Group	Path: /types/{type}/groups/{group}/recover Method: PUT	Deletes stuck messages in the message table and reactivates the group by setting its status to 'N'. Example of invocation: `$ curl -X PUT https://my.integration.cloud/ic/api/integration/v1/flows/rest/RSQMANAGER/1.0/types/employee/groups/eng/recover -v -u username:password -H "Content-length: 0"`

Dispatcher

The **dispatcher** is a request/response integration that reconstructs the original payload and sends it to the real backend integration. Unlike the resequencer integrations, the dispatcher isn't generic because it needs to invoke specific business integrations.

The dispatcher receives the message and converts the payload to the original typed business payload. It uses the group ID to find the business end point and invoke it synchronously. Exceptions can happen here.

Here is the dispatcher interface:

```
{ "id": "Engineering",

"gid" : "Zebra", "gtype" : "order", "sequenceId" : 123,

"payload" : "original payload"

}
```

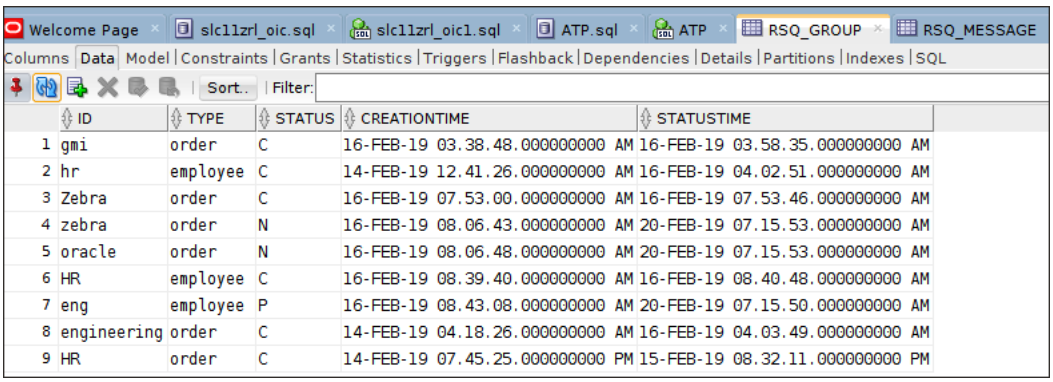
Business Integrations

A **business integration** is the real integration that processes the business messages. It has its own typed interface. For each business front-end integration, there should be a corresponding business integration.

Error Handling

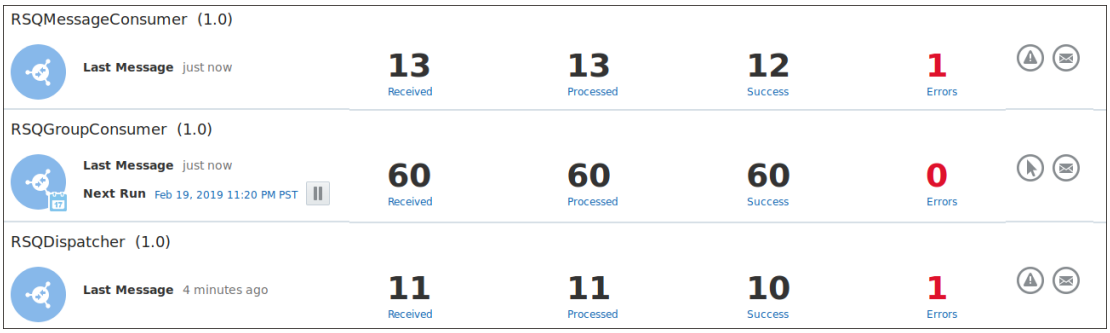
Exceptions can occur when the dispatcher integration invokes the business integration.

Exceptions bubble up to the message consumer integration and cause the message consumer instance to fail. When this happens, the group status stays at **P** in the database.



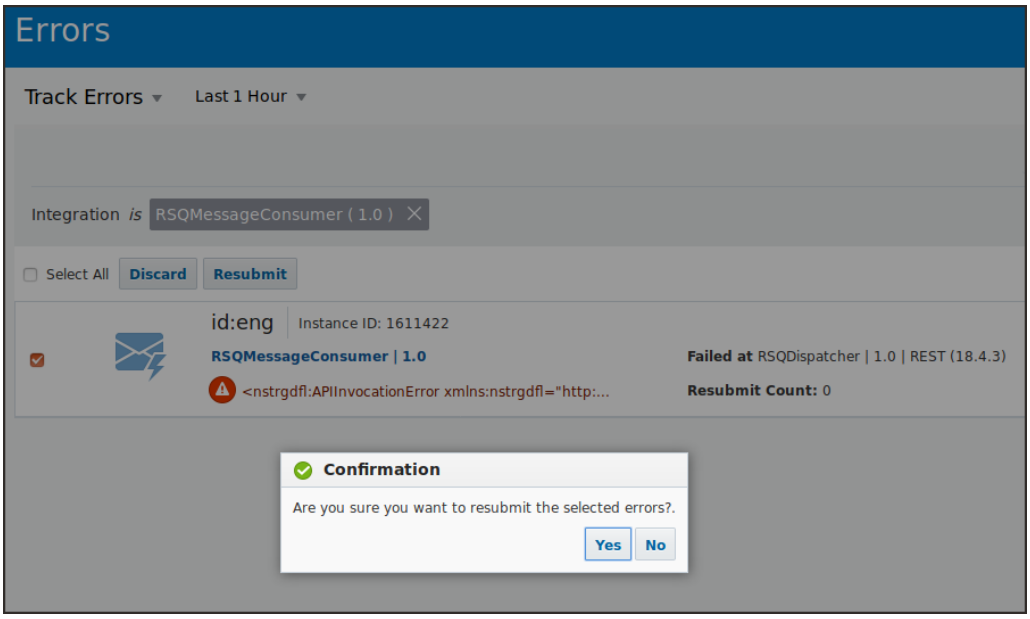
	ID	TYPE	STATUS	CREATIONTIME	STATUSTIME
1	gmi	order	C	16-FEB-19 03.38.48.000000000 AM	16-FEB-19 03.58.35.000000000 AM
2	hr	employee	C	14-FEB-19 12.41.26.000000000 AM	16-FEB-19 04.02.51.000000000 AM
3	Zebra	order	C	16-FEB-19 07.53.00.000000000 AM	16-FEB-19 07.53.46.000000000 AM
4	zebra	order	N	16-FEB-19 08.06.43.000000000 AM	20-FEB-19 07.15.53.000000000 AM
5	oracle	order	N	16-FEB-19 08.06.48.000000000 AM	20-FEB-19 07.15.53.000000000 AM
6	HR	employee	C	16-FEB-19 08.39.40.000000000 AM	16-FEB-19 08.40.48.000000000 AM
7	eng	employee	P	16-FEB-19 08.43.08.000000000 AM	20-FEB-19 07.15.50.000000000 AM
8	engineering	order	C	14-FEB-19 04.18.26.000000000 AM	16-FEB-19 04.03.49.000000000 AM
9	HR	order	C	14-FEB-19 07.45.25.000000000 PM	15-FEB-19 08.32.11.000000000 PM

On the Monitoring Integration page, you can see the failed dispatcher instance and the message consumer instance.



Recover System Error

If the problem is caused by a system error, such as a networking issue, then you can recover by resubmitting the failed message consumer instance after the system error is resolved.



Recover Bad Request

If the error is caused by a bad request, then resubmitting the request will not help. In this case, you need to skip the bad request and move on. To do this, invoke the resequencer manager integration to remove the stuck message and reactivate the group:

```
$ curl -X PUT https://my.integration.cloud/ic/api/
integration/v1/flows/rest/RSQMANAGER/1.0/types/employee/
groups/eng/recover -v -u username:password -H "Content-length:
0"
```