Oracle® Cloud

Using the Oracle Taleo Business Edition (TBE) Adapter with Oracle Integration Generation 2

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Preface

This guide describes how to configure this adapter as a connection in an integration in Oracle Integration.

> **Note:**
>
> The use of this adapter may differ depending on the features you have, or whether your instance was provisioned using Standard or Enterprise edition. These differences are noted throughout this guide.

Topics:

- Audience
- Documentation Accessibility
- Diversity and Inclusion
- Related Resources
- Conventions

Audience

This guide is intended for developers who want to use this adapter in integrations in Oracle Integration.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at `http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc`.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit `http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info` or visit `http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs` 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

See these Oracle resources:

- *Using Integrations in Oracle Integration Generation 2*
- *Using the Oracle Mapper with Oracle Integration Generation 2*

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.

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Understand the Oracle Taleo Business Edition (TBE) Adapter

Review the following conceptual topics to learn about the Oracle Taleo Business Edition (TBE) Adapter and how to use it as a connection in integrations in Oracle Integration. A typical workflow of adapter and integration tasks is also provided.

Topics:

- Oracle Taleo Business Edition (TBE) Adapter Capabilities
- What Application Version Is Supported?
- About Oracle Taleo Business Edition (TBE) Adapter Use Cases
- Workflow to Create and Add an Oracle Taleo Business Edition (TBE) Adapter Connection to an Integration

> **Note:**
>
> There are overall service limits with Oracle Integration. A service limit is the quota or allowance set on a resource. See Service Limits.

Oracle Taleo Business Edition (TBE) Adapter Capabilities

The Oracle Taleo Business Edition (TBE) Adapter enables you to create an integration in Oracle Integration.

The Oracle Taleo Business Edition (TBE) Adapter uses Oracle Taleo Business Edition (TBE) (formerly known as Taleo Business Edition) APIs to provide access to objects and operations such as requisitions, employees, offers, and so on. See Taleo Business Edition REST API Guide.

Object	Operations

Requisition	• Create Requisition
	• Delete
	• Download Attachment
	• Get Requisition
	• Get a Requisition's:
	  – Candidate
	  – Comments
	  – Contact Log
	  – Department
	  – Division
	  – Expense
	  – Hiring Manager
	  – History Log
	  – Location
	  – Offer Approvers
	  – Owners
	  – Questions
	  – Recruiter
	  – Region
	  – Status
	• Search Requisition
	• Update Requisition
	• Upload Attachment
	• Upsert Requisition

Candidate	• Create Candidate
	• Delete
	• Download Attachment
	• Download Resume
	• Get Candidate
	• Get a Candidate's
	  – Background Check
	  – Certificates
	  – Comments
	  – Contact Log
	  – Education
	  – History Log
	  – Interviews
	  – Offer
	  – References
	  – Referred by ID
	  – Requisition
	  – Residence History
	  – Status
	  – Work History
	• Resume to Candidate
	• Search Candidate
	• Update Candidate
	• Upload Attachment
	• Upload Resume
	• Upsert Candidate

Object	Operations

Employee	• Create Employee
	• Delete
	• Download Attachment
	• Get Employee
	• Get an Employee's
	  – Candidate
	  – Certificates
	  – Comments
	  – Contact Log
	  – Department
	  – Division
	  – Education
	  – History Log
	  – Indirectly Reports To
	  – Location
	  – Manager
	  – Offboard Status
	  – Onboard Status
	  – Packets
	  – References
	  – Region
	  – Residence History
	  – Review Manager
	  – Status
	  – Work History
	• Search Employee
	• Update Employee
	• Upload Attachment
	• Upload Resume
	• Upsert Employee

Offer	• Create Offer
	• Delete
	• Download Offer Letter
	• Get Offer
	• Get an Offer's
	  – Approval Status
	  – Approvals
	  – Candidate
	  – Manager
	  – Requisition
	  – Status
	• Update Offer
	• Upsert Offer

Object	Operations
Account	• Get Account • Delete • Search Account, • Update Account • Upsert Account • Upload Attachment • Download Attachment • Operations supporting account relationships
Answer Question	• Create Answer • Delete • Get Answer • Update Answer • Upsert Answer
Background Check	• Create Background Check • Delete • Get Background Check Candidate • Get Background Check User, • Get Background Check • Update Background Check • Upsert Background Check
Candidate Application	• Create Candidate Application • Delete • Download Attachment • Download Resume • Get Candidate Application • Update Candidate Application • Upload Attachment • Upsert Candidate Application
Careers Web Site	• Get Careers Website • Search Careers Website
Certificate Candidate	• Create Certificate • Delete • Get All Certificates • Get Certificate • Update Certificate • Upsert Certificate
Certificate Employee	• Create Certificate • Delete • Get All Certificates • Get Certificate, • Update Certificate • Upsert Certificate
Comment	• Create Comment • Delete • Get Comment • Update Comment • Upsert Comment and operations supporting Comment relationships

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Object	Operations
Competency	• Create Competency • Delete • Get Competency • Update Competency • Upsert Competency
Contact	• Create Contact • Delete • Download Attachment • Get Contact • Search Contact • Update Contact • Upsert Contact • Operations supporting Contact relationships
Contact Log	• Create Contact • Delete • Download Attachment • Get Contact • Search Contact • Update Contact • Upsert Contact • Operations supporting Contact relationships
Department	• Create Department • Delete • Get All Departments • Get Department • Update Department • Upsert Department • Operations supporting Department relationships
Division	• Create Division • Delete • Get All Divisions • Get Division • Update Division
Education Candidate	• Create Education • Delete • Get All Education • Get Education • Update Education • Upsert Education
Education Employee	• Create Education • Delete • Get All Education • Get Education • Update Education • UpsertEducation
Entity Link	• Create Entity Link • Delete • Get All Linked Records For One Record • Get Entity Link • Get a single relationship by entity name

Object	Operations
Expense	• Create Expense • Delete • Get Expense • Get Expense Candidate • Get Expense Requisition • Get Expense User • Update Expense • Upsert Expense
Interview	• Create Interview • Delete • Get Interview • Update Interview • Upsert Interview and operations supporting Interview relationships
Interview Feedback	• Create Interview feedback • Delete • Get Interview feedback • Update interview feedback • Upsert interview feedback and operations supporting Interview feedback relationships
Location	• Create Location • Delete • Get All Locations • Get Location • Update Location • Upsert Location and operations supporting Location relationships
Packet	• Delete • Get Packet and operations supporting packet relationships •
Pm Review	• Create Pm review • Delete • Download Attachment • Get Pm review • Search Pm review • Update Pm review • Upload Attachment • Upsert Pm review and operations supporting Pm review relationships
Question	• Create Question • Delete • Get All Questions • Get Question • Update Question • Upsert Question and operations supporting Question relationships
Reference Candidate	• Create Reference • Delete • Get All References • Get Reference • Update Reference and Upsert Reference

Object	Operations
Reference Employee	• Create Reference • Delete • Get All References • Get Reference • Update Reference and Upsert Reference
Region	• Create Region • Delete • Get All Regions • Get Region • Update Region • Upsert Region and operations supporting Region relationships
Requisition Template	• Create Requisition template • Delete • Get Requisition template • Search Requisition template • Update Requisition template • Upsert Requisition template and operations supporting Requisition Template relationships
Residence Candidate	• Create Residence • Delete • Get All Residences • Get Residence • Update Residence • UpsertResidence
Residence Employee	• Create Residence • Delete • Get All Residences • Get Residence • Update Residence • Upsert Residence
Status	• Get Entity Status • Get Entity Status By Name • GetStatus
User	• Create User • Delete • Download Attachment • Get User • Search User • Update User • Upsert User • Operations supporting User relationships
Work History Candidate	• Create Work History • Delete • Get All Work Histories • Get Work History • Update WorkHistory and Upsert WorkHistory

Object	Operations
Work History Employee	• Create Work History • Delete • Get All Work Histories • Get WorkHistory • Update Work History • UpsertWorkHistory

Oracle Taleo Business Edition (TBE) Adapter is one of many predefined adapters included with Oracle Integration. You can configure Oracle Taleo Business Edition (TBE) as a target connection in an integration in Oracle Integration.

What Application Version Is Supported?

For information about which application version is supported by this adapter, see the Connectivity Certification Matrix.

See Connectivity Certification Matrix.

About Oracle Taleo Business Edition (TBE) Adapter Use Cases

The Oracle Taleo Business Edition (TBE) Adapter can be used in scenarios such as the following.

Employee On-Boarding

When a candidate is converted to a new employee, the employee's information is pushed out to other systems, such as an enterprise resource planning (ERP) system, a human capital management (HCM) system, or both. Updates from the HCM system could be sent back to Oracle Taleo Business Edition (TBE), such as updates to a candidate's address or phone number.

Employee Off-Boarding

If Oracle Taleo Business Edition (TBE) is used for off-boarding tracking, an update is sent from Oracle Taleo Business Edition (TBE) to an ERP system, sales system, or other system to off-board the employee, cutting off access to these systems.

Requisition Requests

Some companies may initiate requisitions outside of Oracle Taleo Business Edition (TBE) and subject them to an internal approval process. After it is approved, the requisition is sent to Oracle Taleo Business Edition (TBE), and then it is opened on the career center and can be pushed out to job boards. Oracle Taleo Business Edition (TBE) tracks the status of and candidates for the requisition. Updates, including when a requisition is filled or cancelled, can be synchronized from Oracle Taleo Business Edition (TBE) to the requisitioning system.

Workflow to Create and Add an Oracle Taleo Business Edition (TBE) Adapter Connection to an Integration

You follow a very simple workflow to create a connection with an adapter and include the connection in an integration in Oracle Integration.

This table lists the workflow steps for both adapter tasks and overall integration tasks, and provides links to instructions for each step.

Step	Description	More Information
1	Access Oracle Integration.	Go to `https://instance_URL/ic/home/`.
2	Create the adapter connections for the applications you want to integrate. The connections can be reused in multiple integrations and are typically created by the administrator.	Create an Oracle Taleo Business Edition (TBE) Adapter Connection
3	Create the integration. When you do this, you add invoke (target) connections to the integration.	Creating Integrations in *Using Integrations in Oracle Integration Generation 2* and Add the Oracle Taleo Business Edition (TBE) Adapter Connection to an Integration.
4	Map data between the trigger connection data structure and the invoke connection data structure.	Mapping Data in *Using Integrations in Oracle Integration Generation 2*
5	(Optional) Create lookups that map the different values used by those applications to identify the same type of object (such as gender codes or country codes).	Creating Lookups in *Using Integrations in Oracle Integration Generation 2*
6	Activate the integration.	Activating Integrations in *Using Integrations in Oracle Integration Generation 2*
7	Monitor the integration on the dashboard.	Monitoring Integrations in *Using Integrations in Oracle Integration Generation 2*
8	Track payload fields in messages during runtime.	Assigning Business Identifiers for Tracking Fields in Messages and Managing Business Identifiers for Tracking Fields in Messages in *Using Integrations in Oracle Integration Generation 2*
9	Manage errors at the integration level, connection level, or specific integration instance level.	Managing Errors in *Using Integrations in Oracle Integration Generation 2*

2

Create an Oracle Taleo Business Edition (TBE) Adapter Connection

A connection is based on an adapter. You define connections to the specific cloud applications that you want to integrate.

Topics:

- Prerequisites for Creating a Connection
- Create a Connection
- Upload an SSL Certificate

Prerequisites for Creating a Connection

You must satisfy the following prerequisites to create a connection with the Oracle Taleo Business Edition (TBE) Adapter:

- Have a premium support level subscription to Oracle Taleo Business Edition (TBE)
- Have a Oracle Taleo Business Edition (TBE) user account with the **Administrator** role
- Know your unique company code (sometimes called a zone) from Oracle Taleo Business Edition (TBE)

Create a Connection

Before you can build an integration, you have to create the connections to the applications with which you want to share data.

To create a connection in Oracle Integration:

1. In the left navigation pane, click **Home** > **Integrations** > **Connections**.
2. Click **Create**.

> **✏ Note:**
>
> You can also create a connection in the integration canvas of:
> - An orchestrated integration (See Define Inbound Triggers and Outbound Invokes.)
> - A basic routing integration (See Add a Trigger (Source) Connection.)

3. In the Create Connection — Select Adapter dialog, select the adapter to use for this connection. To find the adapter, scroll through the list, or enter a partial or full name in the **Search** field and click

🔍
Search.

4. In the Create Connection dialog, enter the information that describes this connection.

   a. Enter a meaningful name to help others find your connection when they begin to create their own integrations. The name you enter is automatically added in capital letters to the **Identifier** field. If you modify the identifier name, don't include blank spaces (for example, SALES OPPORTUNITY).

   b. Enter optional keywords (tags). You can search on the connection keywords on the Connections page.

   c. Select the role (direction) in which to use this connection (trigger, invoke, or both). Only the roles supported by the adapter are displayed for selection. When you select a role, only the connection properties and security policies appropriate to that role are displayed on the Connections page. If you select an adapter that supports both invoke and trigger, but select only one of those roles, you'll get an error when you try to drag the adapter into the section you didn't select. For example, let's say you configure a connection for the Oracle Service Cloud (RightNow) Adapter as only an **invoke**. Dragging the adapter to a **trigger** section in the integration produces an error.

   d. Enter an optional description of the connection.

5. Click **Create**.

   Your connection is created. You're now ready to configure the connection details, such as connection properties, security policies, connection login credentials, and (for certain connections) agent group.

Configure Connection Properties

Enter connection information so your application can process requests.

1. Go to the **Connection Properties** page.

2. In the **Connection URL** field, enter https://tbe.taleo.net/dispatcher.

Configure Connection Security

Configure security for your Oracle Taleo Business Edition (TBE) Adapter connection by providing your company code, user name, and password.

1. Go to the **Security** section.

2. Enter your login credentials:

   a. Select the security policy. Only the Custom Security Policy is supported. It cannot be deselected.

   b. Enter your company code (sometimes called a zone).

   c. Enter a username and password to connect to Oracle Taleo Business Edition (TBE). This user should have the **Administrator** role.

   d. Reenter the password a second time.

Test the Connection

Test your connection to ensure that it's configured successfully.

1. In the page title bar, click **Test**. What happens next depends on whether your connection uses a Web Services Description Language (WSDL) file.

If Your Connection...	Then...
Doesn't use a WSDL	The test starts automatically and validates the inputs you provided for the connection.
Uses a WSDL	A dialog prompts you to select the type of connection testing to perform: • **Validate and Test**: Performs a full validation of the WSDL, including processing of the imported schemas and WSDLs. Complete validation can take several minutes depending on the number of imported schemas and WSDLs. No requests are sent to the operations exposed in the WSDL. • **Test**: Connects to the WSDL URL and performs a syntax check on the WSDL. No requests are sent to the operations exposed in the WSDL.

2. Wait for a message about the results of the connection test.

   • If the test was successful, then the connection is configured properly.

   • If the test failed, then edit the configuration details you entered. Check for typos, verify URLs and credentials, and download the diagnostic logs for additional details. Continue to test until the connection is successful.

3. When complete, click **Save**.

Upload an SSL Certificate

Certificates are used to validate outbound SSL connections. If you make an SSL connection in which the root certificate does not exist in Oracle Integration, an exception is thrown. In that case, you must upload the appropriate certificate. A certificate enables Oracle Integration to connect with external services. If the external endpoint requires a specific certificate, request the certificate and then upload it into Oracle Integration.

To upload an SSL certificate:

1. In the left navigation pane, click **Home** > **Settings** > **Certificates**.
   All certificates currently uploaded to the trust store are displayed in the Certificates dialog. The

   ⚙

   link enables you to filter by name, certificate expiration date, status, type, category, and installation method (user-installed or system-installed). Certificates installed by the system cannot be deleted.

2. Click **Upload** at the top of the page.
   The Upload Certificate dialog box is displayed.

3. Enter an alias name and optional description.

4. In the **Type** field, select the certificate type. Each certificate type enables Oracle Integration to connect with external services.

   • **X.509 (SSL transport)**

   • **SAML (Authentication & Authorization)**

   • **PGP (Encryption & Decryption)**

X.509 (SSL transport)

1. Select a certificate category.

   a. **Trust**: Use this option to upload a trust certificate.

      i. Click **Browse**, then select the trust file (for example, `.cer` or `.crt`) to upload.

   b. **Identity**: Use this option to upload a certificate for two-way SSL communication.

      i. Click **Browse**, then select the keystore file (`.jks`) to upload.

      ii. Enter the comma-separated list of passwords corresponding to key aliases.

      > **✎ Note:**
      >
      > When an identity certificate file (JKS) contains more than one private key, all the private keys must have the same password. If the private keys are protected with different passwords, the private keys cannot be extracted from the keystore.

      iii. Enter the password of the keystore being imported.

   c. Click **Upload**.

SAML (Authentication & Authorization)

1. Note that **Message Protection** is automatically selected as the only available certificate category and cannot be deselected. Use this option to upload a keystore

certificate with SAML token support. Create, read, update, and delete (CRUD) operations are supported with this type of certificate.

2. Click **Browse**, then select the certificate file (`.cer` or `.crt`) to upload.

3. Click **Upload**.

PGP (Encryption & Decryption)

1. Select a certificate category. Pretty Good Privacy (PGP) provides cryptographic privacy and authentication for communication. PGP is used for signing, encrypting, and decrypting files. You can select the private key to use for encryption or decryption when configuring the stage file action.

   a. **Private**: Uses a private key of the target location to decrypt the file.

      i. Click **Browse**, then select the PGP file to upload.

      ii. Enter the PGP private key password.

   b. **Public**: Uses a public key of the target location to encrypt the file.

      i. Click **Browse**, then select the PGP file to upload.

      ii. In the **ASCII-Armor Encryption Format** field, select **Yes** or **No**. **Yes** shows the format of the encrypted message in ASCII armor. ASCII armor is a binary-to-textual encoding converter. ASCII armor formats encrypted messaging in ASCII. This enables messages to be sent in a standard messaging format. This selection impacts the visibility of message content. **No** causes the message to be sent in binary format.

      iii. From the **Cipher Algorithm** list, select the algorithm to use. Symmetric-key algorithms for cryptography use the same cryptographic keys for both encryption of plain text and decryption of cipher text.

   c. Click **Upload**.

3

Add the Oracle Taleo Business Edition (TBE) Adapter Connection to an Integration

When you drag the Oracle Taleo Business Edition (TBE) Adapter into the invoke area of an integration, the Adapter Endpoint Configuration Wizard appears. This wizard guides you through configuration of theOracle Taleo Business Edition (TBE) Adapter endpoint properties.

These topics describe the wizard pages that guide you through configuration of the Oracle Taleo Business Edition (TBE) Adapter as an invoke in an integration. The Oracle Taleo Business Edition (TBE) Adapter cannot be used as a trigger in an integration.

Topics:

- Basic Info Page
- Configure Oracle Taleo Business Edition (TBE) Adapter Operations
- Summary Page

Basic Info Page

You can enter a name and description on the Basic Info page of each adapter in your integration.

Element	Description
What do you want to call your endpoint?	Provide a meaningful name so that others can understand the responsibilities of this connection. You can include English alphabetic characters, numbers, underscores, and hyphens in the name. You can't include the following characters:
	• No blank spaces (for example, `My Inbound Connection`)
	• No special characters (for example, `#;83&` or `righ(t)now4`) except underscores and hyphens
	• No multibyte characters
What does this endpoint do?	Enter an optional description of the connection's responsibilities. For example:
	`This connection receives an inbound request to synchronize account information with the cloud application.`

Configure Oracle Taleo Business Edition (TBE) Adapter Operations

You can choose a Business Object and an operation to perform on it on the Oracle Taleo Business Edition (TBE) Adapter Operations page.

For a complete list of operations that you can perform on each business object, see Oracle Taleo Business Edition (TBE) Adapter Capabilities.

Element	Description
Select a Business Object	Select a business object that you want to interact with.
	Enter text into the **Enter business object name** field to display only business objects that contain that text.
Select operation to perform	Select the operation that you want to perform on the business object you chose.
	Enter text into the **Enter operation name** field to display only operations that contain that text.

Summary Page

You can review the specified adapter configuration values on the Summary page.

Element	Description
Summary	Displays a summary of the configuration values you defined on previous pages of the wizard.
	The information that is displayed can vary by adapter. For some adapters, the selected business objects and operation name are displayed. For adapters for which a generated XSD file is provided, click the XSD link to view a read-only version of the file.
	To return to a previous page to update any values, click the appropriate tab in the left panel or click **Back**.
	To cancel your configuration details, click **Cancel**.

4

Oracle Taleo Business Edition (TBE) Adapter Samples

You can use the Oracle Taleo Business Edition (TBE) Adapter in end-to-end scenarios such as the following:

Topics:

- Synchronize New Employee Records Between Oracle Taleo Business Edition (TBE) and Oracle NetSuite

Synchronize New Employee Records Between Oracle Taleo Business Edition (TBE) and Oracle NetSuite

You can use the Oracle Taleo Business Edition (TBE) Adapter to create an integration between Oracle Taleo Business Edition (TBE) and Oracle NetSuite.

The integration can periodically check for new employees in Oracle Taleo Business Edition (TBE) and create the new employee in Oracle NetSuite.
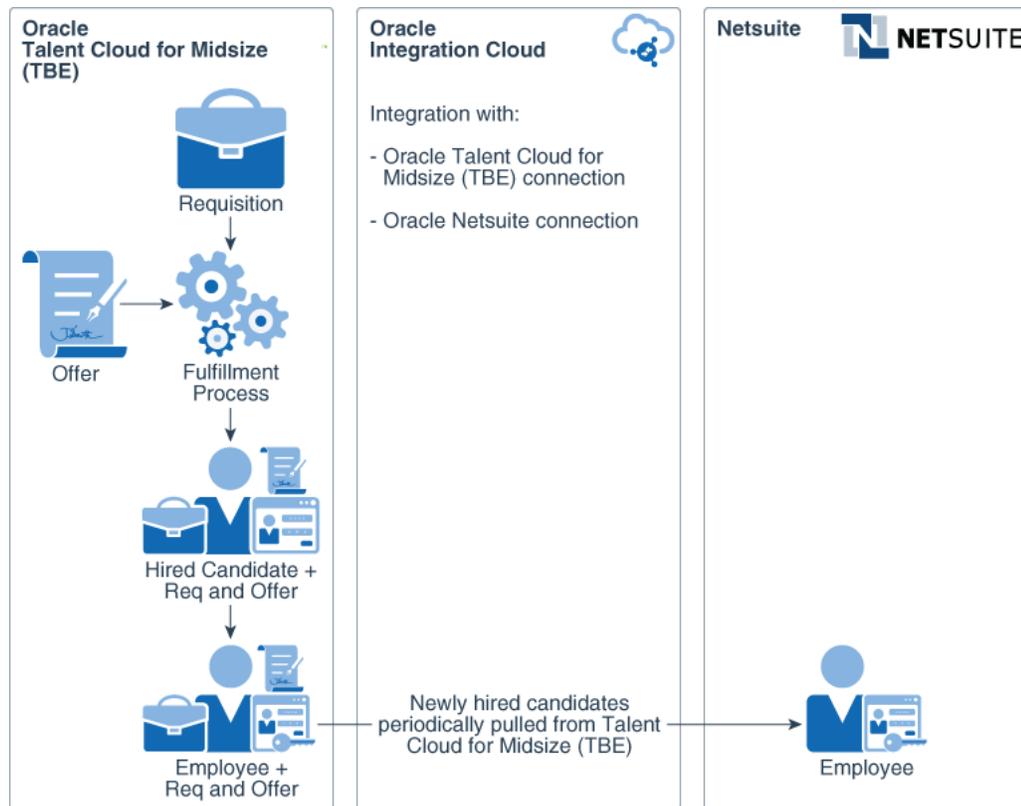
Add the Oracle Taleo Business Edition (TBE) Connection to an Integration

Now that you have created a connection to Oracle Taleo Business Edition (TBE), you can add it to your integration.

What you need:
If you haven't already done so, create a new connection to Oracle Taleo Business Edition (TBE). See Create an Oracle Taleo Business Edition (TBE) Adapter Connection.

1. In the navigation pane in Oracle Integration, click **Integrations**, then **Integrations**.

2. Create an integration.

   a. Click **Create**.

   b. In **Create Integration — Select a Style**, select **Scheduled Orchestration**.

      The Oracle Taleo Business Edition (TBE) connection can only be a target(invoke) connection so it needs something to trigger it. A scheduled orchestration enables you to trigger daily data transfer from Oracle Taleo Business Edition (TBE) to another application.

   c. In **Create New Integration** , specify a name for your integration along with a description if desired and click **Create**.

3. Add the Oracle Taleo Business Edition (TBE) connection to your integration.

    a. In the Integration Designer, select **Invokes** on the right, find the connection you created for Oracle Taleo Business Edition (TBE), and drag it to the line coming from **Schedule**.

    b. In the **Basic Info** page, specify a meaningful name as this name is displayed in your integration and you cannot change it after.

    c. In the **Operations** page, select the business object and the corresponding operation that you want to perform and click **Next**.

    For example, to get new employee records from Oracle Taleo Business Edition (TBE), select the **Employee** object, and the operation **Search Employee** .

    d. At the **Summary** page, click **Done**.

    Your integration now includes the Oracle Taleo Business Edition (TBE) connection you have added and configured.

4. In this example, you need to limit records returned from Oracle Taleo Business Edition (TBE) to employees that were recently added to the system. You can accomplish this with the mapper.

    a. Select the **Map to** icon between the schedule icon and the Oracle Taleo Business Edition (TBE) connection, and then click **Edit**.

    b. In the **Target** pane, expand the **SearchEmployee** and **QueryParameters** elements.

    c. Set the value of the **addedWithin** attribute to `1`.

    This limits the response to employees that have been added within the last day.

Map the Oracle Taleo Business Edition (TBE) Data to Another Application

Once you add the Oracle Taleo Business Edition (TBE) connection to your integration, you need to add the connection to the other application to your integration and map data between the applications.

For example, you are configuring an integration in which you get new employee records from Oracle Taleo Business Edition (TBE) and create new employee records in Oracle NetSuite. You want the integration to check for new employee records every day at midnight. You need to map Oracle Taleo Business Edition (TBE) data to Oracle NetSuite.

To create a new connection to the application to which you want to map data from Oracle Taleo Business Edition (TBE)

1. In the navigation pane in Oracle Integration, click **Integrations**, then **Integrations**.

2. Search for the integration that you created that contains Oracle Taleo Business Edition (TBE), and click **Edit**.

3. Add the connection to your other application to your integration.

    a. In the Integration Designer, select **Invokes** on the right, find the connection you created, and drag it to the line between **NewEmployeesfrom** and **Stop**.

    b. In the **Basic Info** page, specify a meaningful name as this name is displayed in your integration.

    c. In the **Operations** page, select the business object and the corresponding operation that you want to perform, and then click **Processing Options**. Select the **Insert record on Update if not Exist** option.

> For example, to add new employee records to Oracle NetSuite, select the **Basic**, **Add** operation, and the object **Employee**.

> **d.** At the **Summary** page, click **Done**.

> Your integration now includes the connection you have added and configured.

4. Map data from Oracle Taleo Business Edition (TBE) to another application.

   a. Select the **Map to** icon between the Oracle Taleo Business Edition (TBE) connection and your other application connection and click **Edit**.

   b. In the **Map** page, click the source and the target fields, and then click **Map+**.

   For example, to send employee data from Oracle Taleo Business Edition (TBE) to Oracle NetSuite, you might want to map the following fields:

   - Employee first and last name, address, department, hire date, address.

   - IDs are assigned by each application so you would not map Employee ID.

5. Test your mappings.

   a. In the mapper toolbar, click **Test**.

   b. In the **Input** panel, click **Generate Inputs** to automatically generate the payload.

   c. Click **Execute** to generate results in the **Output** panel.

   d. Review the results in the **Output** panel to ensure that your input was processed correctly.

   Return to the mapper to make any mapping changes and keep testing until you get the desired results.

Assign Business Identifiers

Business identifiers enable you to track payload fields in messages during runtime. You can specify up to three business identifier fields for tracking during design time. One of these fields must be selected as the primary business identifier field. The primary business identifier enables you to track fields across integration flows during runtime, and is always available. At runtime, the status of business identifiers is visible on the Track Instances page and (if integration errors have occurred) the Errors page. If you created scheduled parameters, they are available for assignment as business identifiers.

If you have not yet configured at least one business identifier tracking field in your integration, an error icon is displayed in the design canvas. See Assign Business Identifiers.

To assign business identifiers:

1. In the navigation pane in Oracle Integration, click **Integrations**, then **Integrations**.

2. Click the specific integration to which to add business identifiers. You can only add business identifiers to integrations that are *not* active. If an integration is active, you can only view its existing business identifiers.

3. From the **Actions** ☰ menu, select **Tracking**.

   The Business Identifiers For Tracking dialog is displayed. The source payload for the selected integration is displayed on the left side. You can only assign business

identifiers to fields of source payloads. You cannot assign business identifiers to fields of target payloads.

4. From the **Source** section, drag the payload field that you want to track to the **Drag a trigger field here** section. A green checkmark indicates that this is the primary business identifier. At least one identifier is required. If you only add one, it is automatically selected as the primary key. If you created scheduled parameters, they are available for assignment as a primary or secondary business identifier.

You can filter the display of source structures by clicking the **Filter** link. This enables you to filter on whether or not fields are used and on the type of field (required fields, custom fields, or all fields).

5. In the **Tracking Name** field, optionally enter a descriptive name to track during runtime (for example, `OrgId`). The name is displayed when this field is used to filter messages on the Track Instances page or (if there is an integration error) the Errors page during runtime.

6. In the **Help Text** field, optionally enter instructions to enable users to know what to enter in this field during runtime (for example, `Enter a valid organization number`). These instructions are displayed inside the empty field when it is used on the runtime Track Instances page to filter messages.

7. Click **Done**.

Activate an Integration

Once you create an integration and the progress indicator shows 100 percent, you can activate that integration to the runtime environment. An integration shows as 100% and is eligible for activation after you have specified the source connection, the target connection, the data mappings, and the tracking fields.

To activate an integration:

> **Note:**
>
> If you activate a new version of an existing integration, tracking instances or logs of the old version are not deleted. However, related artifacts are deleted and redeployment is performed on the back end. Monitoring data is also removed.

1. In the left navigation pane, click **Home** > **Integrations** > **Integrations**.

2. Go to the row of the integration to activate.

3. Click the

    ⏻

    icon to activate the integration.

    The Confirmation dialog is displayed.

4. Select options appropriate to your integration.

Element	Description
Contribute integration mappings to Oracle Recommendations	Click to enable the Oracle Recommendations Engine.
	Uses the collective intelligence to recommend which fields should be mapped while developing an integration. These recommendations are built based on the mappings contributed to Oracle Recommendations Engine anonymously. You can change this on the Recommendations page by selecting **Settings** > **Recommendations** in the navigation pane.
Enable Asserter Recording	Click to capture payloads and record instances for playing back and testing,

Element	Description
Enable tracing	Click to enable detailed tracing information in the activity stream.
	When this checkbox is selected, detailed logging information about messages processed by this integration flow at runtime is collected. This can aid in troubleshooting issues. However, detailed tracing may also impact performance. To disable tracing, you must deactivate the integration, then reactivate it without selecting the **Enable tracing** checkbox.
	If you do not enable tracing, minimal logging details are created in `ics-flow.log` to indicate when the activated integration begins and completes execution (regardless of execution success or failure). You can download the logs on the Dashboard page.
	If you want to enable payload tracing to log input and output payloads to the activity stream, click the **Include payload** checkbox.
	When this checkbox is selected, information from the payload is also written to the log files, which can be downloaded and viewed. For example, you see more detailed logging information about payload activity at several points in the integration flow, such as the payload prior to data mapping and the payload after data mapping. This action can present a security risk and also impact the performance of your system. This setting is not recommended for a production environment.

5. Select an activation option. The options available are based on the type of integration you are activating:

   a. Click **Activate** (if you are activating a nonscheduled integration).

   b. Click **Activate and Schedule** (if you are activating a scheduled integration).

      The Run *integration_name* page is displayed. Create a schedule for running this integration, and click **Save**. See Define the Integration Schedule.

   A status message is displayed in the banner at the top of the page. For example:

   ◢ Integration Echo (1.2.0) submitted for activation. Click refresh if status is in progress

      - Upon successfull activation, click on "How To Run" to get endpoint URL to trigger this integration.
      - You can also go to Tracking page to track instances.

6. If integration is unsuccessful, an **Activation Failed** warning icon is displayed in the banner. If you click the icon, a dialog is displayed with the option to download details about the activation failure incident.
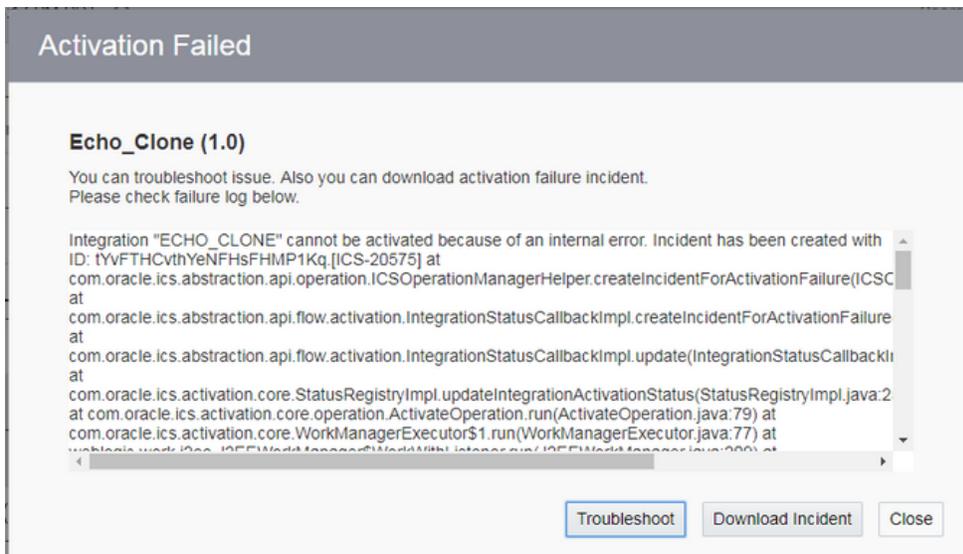
- If your integration includes a function that is not completely configured, an error message is displayed in the banner. You must complete configuration of this function before you can activate the integration. Click inside the integration and note the following errors/warnings:

  - An error icon is displayed on the function call action that uses the incomplete function. The **Error** panel on the right side of the integration canvas provides specific details about the incomplete function.

  - A warning icon is displayed on the mapper that uses the inputs and outputs of this function. After completing function configuration, you must verify the input and output mappings before activating the integration.

  If activation is successful, the status of the integration changes to **ACTIVE** in the row.

7. Click the

   icon to display details about how to run, test, and track instances for this integration.

   For example:

   If you selected to enable tracing, the words **TRACE ENABLED** are displayed under the icon you clicked to activate the integration. If you click the integration instance on the Track Instances page, the menu includes an option called **View Activity Stream** for viewing payload details.

   To access the detailed trace logging information:

   a. In the left navigation pane, click **Home** > **Monitoring** > **Integrations** > **Dashboards**.

   b. Click **Download Diagnostic Logs** to download Oracle Integration logs and diagnostics logs.

8. View active integrations by clicking the integration name or selecting **View** from the menu. The active integration is displayed with a message saying **View Only** in the banner at the top.

Note the following details about read-only mode:

- No **Save** button is displayed.

- There are no **Invokes**, **Actions**, or **Errors** icons.

Run and Monitor a Scheduled Integration

You can monitor scheduled integration runs on the **Track Runs** page. You can view the total number of messages processed, the number of successfully processed messages, and the number of failed messages. Scheduled integrations can be those with a defined schedule or those submitted ad-hoc through the **Submit Now** option.

To run a scheduled integration:

1. In the navigation pane, click **Integrations**, then **Integrations**.

2. Hover over the integration, then click **Actions**
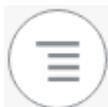
   and select **Schedule**.

   The Schedule and Future Runs page is displayed.

3. From the menu, select **Submit Now**.

   If the submittal was successful, a message is displayed with an ID number.

4. Click the ID number.

   The Track Runs page is displayed. If the submitted integration does not appear, click the **Refresh** icon. Details about the run are displayed.

Define the Integration Schedule

You can define a schedule for running orchestrated integrations, such as the frequency at which to run the integration, whether to run the schedule based on an iCal expression, whether the schedule run should never expires, whether the schedule should have a fixed expiration date, and so on.

To define an integration schedule:

> **Note:**
>
> - You cannot separately export the schedule of an integration.
>
> - When the user that created and scheduled an integration is locked or deleted, the schedule does not run. Ensure that this user is not locked or deleted.

1. Go to the Integrations page.

2. Find the scheduled integration.

    These integrations are identified by a

    schedule trigger icon in the far left column. There are several ways in which to create a schedule on an integration.

3. If you want to first design and activate the integration and then create the schedule:

    a. Click the

        icon. The Activate Integration dialog box is displayed.

    b. Click **Activate and Schedule**.

4. If you want to first create a schedule for an integration that you design and activate later:

    - Select **Add Schedule** from the

        menu.

        > **Note:**
        >
        > For integrations with no defined schedules, the menu shows **Add Schedule**. For integrations that have a defined schedule, the menu switches to **Schedule**.

    The page for defining the schedule execution details is displayed.

5. If you want to schedule basic integration runs, click **Simple**. For this type, there is a minimum frequency limit of ten minutes. If you try to define a schedule frequency of under ten minutes, a validation error occurs.

    - In the **Frequency** section for a **Simple** schedule, click the icon to display a dropdown list for selecting the frequency with which to run the integration. As you define one frequency, you can specify additional values by clicking the icon to the right of the **Frequency** section.

        - **Only Once**: This is the default selection. This selection clears all settings except for the **From** field.

        - **Hours and Minutes**: Specify the hours and minutes at which to run the integration.

        - **Days**: Specify the days on which to run the integration.

        - **Weeks**: Specify the weeks during which to run the integration.

        - **Months**: Specify the months during which to run the integration.

6. If you want to schedule integration runs with an iCal expression, click **iCal**.

> ✏️ **Note:**
>
> - There is a one minute limitation on how frequently you can run scheduled integrations with an iCal expression. Anything below this limit is not supported.
> - You cannot use lookups in iCal expressions.

- Enter an iCal expression, and click **Validate Expression**. For example:

  - The following expression indicates that this integration runs each month on the 1st, 10th, and 15th days of the month at 5:15 AM, 10:15 AM, 3:15 PM, and 8:15 PM.

    ○ Simple ● iCal

    Validate Expression

    ```
    FREQ=MONTHLY;
    BYMONTHDAY=1,10,15;
    BYHOUR=5,10,15,20;BYMINUTE=15;
    ```

  - You can also define multiple schedule frequencies. The following schedule runs every day between the hours of 5:30 PM – 7:30 PM, and during these hours it executes every 10 minutes. This configuration requires three schedules separated by the & sign:

    ```
    FREQ=DAILY;BYHOUR=17;BYMINUTE=30,40,50;BYSECOND=0;
    &FREQ=DAILY;BYHOUR=18;BYMINUTE=0,10,20,30,40,50;BYSECOND=0;
    &FREQ=DAILY;BYHOUR=19;BYMINUTE=0,10,20,30;BYSECOND=0;
    ```

    Validate Expression

    ```
    FREQ=DAILY;BYHOUR=17;
    BYMINUTE=30,40,50;
    BYSECOND=0;
    &FREQ=DAILY;BYHOUR=18;
    BYMINUTE=0,10,20,30,40,50;
    ```

  - The following schedule runs daily at 8 AM and also monthly at 12 PM on day 1 and day 2.

    ```
    FREQ=DAILY;BYHOUR=8;&FREQ=MONTHLY;BYMONTHDAY=1,2;BYHOUR=12;
    ```

    Validate Expression

    ```
    FREQ=DAILY;BYHOUR=8;&FREQ=MONTHLY;BYMONTHDAY=1,2;BYHOUR=12;
    ```

  If validation is successful, the following message is displayed at the top:

```
iCal expression is valid.
```

7. In the **This schedule is effective** section, click the link to the right of **From**.

    A menu is displayed for defining the start date of the schedule.

8. If you want to start the integration run when the schedule is activated:

    - Click **When schedule starts**.

9. If you want to explicitly set an integration run start date:

    a. Select **Modify start date**.

    b. Click the **Calendar** icon to select the month, year, and day and the hour, minute, and second at which to start the integration run.

    c. Click **OK**.

10. If you want the schedule run to never expire:

    - Select **Never (repeat indefinitely)**.

11. If you want the integration run to have a fixed expiration date:

    a. Select **Choose expiry date**.

    b. Click the **Calendar** icon to select the month, year, and day and the hour, minute, and second at which to end the integration run.

    c. Click **OK**.

12. From the **Time zone** list, select a value. By default, this field shows the value you selected on the Preferences page.

    The

13. Click **Save**, then click **Update & Save** when prompted.

    If successful, a message is displayed in the upper right corner.

    ```
    Schedule Run name saved successfully
    ```

    If there are any errors, a validation message is displayed in the upper right corner that describes how to resolve the errors.

14. Click .

    The Schedule and Future Runs page is displayed.
    There are two sections on the Future Runs page:

    - Schedule section: This section is collapsed by default. Clicking the top bar (showing schedule name and buttons) expands the section and shows the schedule.

    - Future Runs table: This remains empty until the schedule is started. Once you start the schedule, you can see data.

15. If you have already activated the integration, select an option to run the integration:

    a. Select **Submit Now** from the ☰ menu.

    b. If you are a user with the ServiceAdministrator role, you can change the user with which to submit the schedule.

Clicking **Submit Now** triggers the integration immediately. Clicking **Start Schedule** triggers the integration using the defined schedule. (with frequencies and other definitions).

   c. Select how to initiate an instance of the integration when prompted. Otherwise, click **Cancel**.

- **Ad hoc request**: The instance is executed independently of the scheduled run for the integration (if any).

- **As part of schedule**: The instance runs in sequence with the scheduled run and shares schedule parameters (if any).

   d. Click **Submit Now**.

or

   a. Select **Start Schedule** on the Schedule and Future Runs page to activate the integration schedule.

   b. If you are a user with the ServiceAdministrator role, you can change the user with which to submit the schedule.

   c. Click **Start** when prompted. Otherwise, click **Cancel**.

16. If you have not yet activated the integration, return to the Integrations page and click ⏻ .

17. Run the scheduled integration as described in the previous steps.