

# Oracle UTC To World Timezone with DST

## Recipe Doc Templates Version Tracking

### Project-Based Recipe:

Version Number	Is Latest?	Changes from Prev. Version
1.1	Yes	The recipe installation procedure.

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Oracle UTC To World Timezone with DST

# Chapter 1: About This Recipe

## Overview

Use this recipe to convert UTC to local time zone with DST.

The purpose of this recipe is to calculate local time zones worldwide while taking daylight saving into account. Many customers prefer to use their local time zone while any kind of transaction. Since some nations don't observe Daylight Saving Time, calculations are simple for them. However, the daylight savings start, and end dates differ among nations. This solution is ready to use and can be applied to any project that needs to calculate daylight saving time worldwide. The following key features and benefits can be seen in this recipe:

1. One common integration to calculate daylight saving time worldwide.
2. There is no need for External API, JavaScript, DB invocation to calculate daylight saving time.
3. Any future changes need to be done in lookup, which will be reflected without making any code changes.

## System and Access Requirements

The systems and access permissions required to successfully run the recipe. Include the following information:



- Oracle Integration, Version 24.04 or higher

# Chapter 2: Before You Install the Recipe

You must provision OIC Gen 3 instance successfully.

## Chapter 3: 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, scroll to the **Accelerators & Recipes** section.
2. Click **Search All**.
3. Find the recipe package that you want to install.
4. Select the package, and then click the **Install**  icon.
5. After the package is installed, click the **Configure**  icon on the recipe card to configure the resources deployed by the package.

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

### Configure the OIC REST Connection


1. In the Connections section, click the connection name.
2. 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.

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


### Configure the Lookup Table

The recipe contains the **ORCL-OIC\_WORLD\_TIMEZONE\_LOOKUP** lookup table. Edit the following keys as necessary.


1. In the Configuration Editor, click **Lookups** to view the lookup tables in the recipe. Hover over the lookup table, then click **Edit** .
2. In the lookup table, specify values for the following keys.

Key	Description	Example
<b>TZ_identifier</b>	The key to fetch all the remaining values from the lookup.	Australia/Melbourne
<b>Country</b>	Country for the timezone mentioned in TZ_identifier	Australia
<b>SDT</b>	Time different from UTC during Standard time	+10:00
<b>DST</b>	Time different from UTC during day light savings time	+11:00
<b>DST_Flag</b>	If timezone follows daylight savings time	Y / N
<b>DST_Start_Month</b>	Start of Daylight-Savings months in Number	09, 10, 11, 12
<b>DST_Start_Day</b>	Start of Daylight-Savings Day	Sunday, Monday


Key	Description	Example
<b>DST_Start_Day_Series</b>	Daylight-Savings start day series of Month	1, 2, 3 OR -1 (In case last Saturday, Sunday etc of a month)
<b>DST_Start_Time</b>	Daylight-Savings Start Time	02:00:00
<b>DST_End_Month</b>	End of Daylight-Savings months in Number	09, 10, 11, 12
<b>DST_End_Day</b>	End of Daylight-Savings Day	Sunday, Monday
<b>DST_End_Day_Series</b>	Daylight-Savings end day series of Month	1, 2, 3 OR -1 (In case last Saturday, Sunday etc of a month)
<b>DST_End_Time</b>	Daylight-Savings end Time	03:00:00

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

The recipe contains another lookup **ORCL-OIC\_DAY\_OF\_WEEK\_LOOKUP** table. Edit the following keys as necessary.

1. In the Configuration Editor, click **Lookups** to view the lookup tables in the recipe. Hover over the lookup table, then click **Edit** .
2. In the lookup table, specify values for the following keys.

Key	Description	Example
<b>startDayOfWeek</b>	Consider the first day of a month	Sunday, Monday etc
<b>Sunday</b>	Then first occurrence for Sunday would be	1
<b>Monday</b>	Then first occurrence for Monday would be	2
<b>Tuesday</b>	Then first occurrence for Tuesday would be	3
<b>Wednesday</b>	Then first occurrence for Wednesday would be	4
<b>Thursday</b>	Then first occurrence for Thursday would be	5
<b>Friday</b>	Then first occurrence for Friday would be	6
<b>Saturday</b>	Then first occurrence for Saturday would be	7

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

## Chapter 4: Activate and Run the Recipe

After you've configured the connections and other resources, activate the recipe, and run it.

1. In the project workspace, click **Activate**. In the Activate project panel, with the default project deployment selected, choose an appropriate tracing option, then


click **Activate**.

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

2. Run the recipe from an external application.
  - a. In the Integrations section of the project workspace, click **Actions ...** on the integration flow, then select **Run**.
  - b. On the Configure and run page, click **Endpoint metadata**.
  - c. In the panel that opens, copy the **Endpoint URL** value. This is the integration flow's endpoint URL.
  - d. From the external application, send a `POST` request to this endpoint URL along with the data. Provide the data in the `POST` request's **Body** field. See the following step for sample data.
3. Test the recipe in Oracle Integration.
  - a. In the Integrations section of the project workspace, click **Actions ...** on the integration flow, then select **Run**.
  - b. On the Configure and run page, in the Request section, click **Body** and enter sample data.

For example:

```
{
  "timeZone": "Australia/Melbourne",
  "inputDateInUTC": "2024-06-28T10:00:00.000Z"
}
```

- c. Click **Run**
      - i. The Activity stream pane appears displaying the status of the integration instance's execution.
    - d. In the Response section of the test page, you'll find a success status `200 OK`, with the response returned.
4. View the response in the Activity stream pane. Click **View payload**  on the last item of the activity stream to view the response returned.

Sample Response:

```
{
  "sourceTime" : "2024-06-28T10:00:00.000Z",
  "dstStartDate" : "2024-10-06T02:00:00Z",
  "dstEndDate" : "2024-04-07T03:00:00Z",
  "dstTime" : "2024-06-28T20:00:00+10:00"
}
```

## Related Documentation

- *Using the REST Adapter with Oracle Integration 3*
- *Using the Oracle Mapper with Oracle Integration 3*