

Logistics Digital Assistant

Getting Started Guide

Release 23B



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Supplemental Documents 21

Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

Get Help in the Applications

Use help icons  to access help in the application.

Get Support

You can get support at [My Oracle Support](#). For accessible support, visit [Oracle Accessibility Learning and Support](#).

Join Our Community

Use [Cloud Customer Connect](#) to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, and watch events.

Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the [Oracle Accessibility Program](#). (if videos) Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to otm-doc_us@oracle.com.

Thanks for helping us improve our user assistance!

2 Introduction

What Is Oracle Digital Assistant?

The purpose of this document is to help you get started deploying the *Oracle Digital Assistant* (ODA) and using it with Transportation and Global Trade Management as the Logistics Digital Assistant. This guide is intended for your group's ODA contact, your ODA administrator, your Oracle Identity Cloud Service (IDCS) administrator, and your Transportation and Global Trade Management Cloud administrator.

The Oracle Digital Assistant is a platform that enables creating and deploying digital assistants, which are AI-driven interfaces that help users accomplish a variety of tasks in natural language conversations. It is an independent Oracle product, a Platform-as-a-service (PaaS) offering. Several Oracle SaaS products have delivered pre-built digital assistant skills on the ODA platform.

The Logistics Digital Assistant is designed as a family of conversational skills for Oracle Logistics Cloud built on top of the ODA platform. The OTM Order Shipment status inquiry skill is the first skill delivered. With this capability, you can then use it to find out the status of an order, or to list any shipments scheduled to arrive today, for example.

Deployment Process Overview

This guide walks through the several steps required to deploy the Oracle Digital Assistant (ODA). These include:

1. Deploying the Oracle Digital Assistant Platform
2. Pulling the Transportation and Global Trade Management Skill
3. Setting Up a Web Channel
4. Configuring an Authentication Service
5. Configuring Transportation and Global Trade Management
6. Extending the Skill

3 Deploying the Oracle Digital Assistant Platform

Place an Order for Oracle Digital Assistant

The Logistics Digital Assistant runs on top of Oracle Digital Assistant (ODA). Therefore, your organization needs to subscribe and set up an ODA instance. If you already have an ODA instance, you can skip this section.

The following documentation briefly describes the process to subscribe, and set up an ODA instance: *Order the Service and Provision an Instance*.

You can place an order in one of these ways:

- Navigate to <https://www.oracle.com/application-development/cloud-services/digital-assistant/> and click on the chat bubble at the lower right hand side corner to initiate a sales chat.
- Contact your Oracle sales representative.

Set Up Digital Assistant as an Individual Service

After you have subscribed to ODA, see *Set up Digital Assistant as an Individual Service* for instructions on setting up the digital assistant.

4 Pull Transportation and Global Trade Management Skill

Skill Overview

Digital assistants are AI-driven interfaces that help users accomplish a variety of tasks in natural language conversations. Skills are individual bots that are focused on specific types of tasks, for example, order and shipment status inquiry in the context of Transportation and Global Trade Management Cloud.

Oracle has released a pre-built skill in the ODA skill store: *OTM Order Shipment Status*. Your ODA administrator needs to pull that skill to your ODA instance in order to use this pre-built capability.

1. Pull the *OTM Order Shipment Status* Skill from ODA Skill store.
2. Click the menu icon, select **Development > Store**, click the tile for the skill you want, *OTM Order Shipment Status*, and click the **Pull** button.
3. After the Pull is complete, access the pulled skill via **Development > Skills**, click on the tile for the skill, and review the skill details.
4. Train the intent recognition engine. Click on **Train**, then select **Trainer Tm**, and click **Submit**.

5 Set Up a Web Channel

Configure the Oracle Web Channel

The out-of-the-box OTM Order Shipment Status skill uses the web channel and is hosted on the Oracle Transportation and Global Trade Management Cloud web server. Your ODA administrator should follow these steps to configure and set up the skill on the web server.

To configure the Oracle Web channel:

1. Choose **Development**, then **Channels** from the menu.
2. Choose **Users**.
3. Click **Add Channel** and then **Oracle Web** as the channel type.
4. Complete the dialog:
 - a. Enter the **channel name**.
 - b. For authenticated connections:
 - i. Switch off the **Client Authentication Enabled** toggle to determine whether the SDK is connecting to client authentication-enabled channel.
 - ii. Enter a list of **OTM instance URLs** that can access the channel. Enter an asterisk (*) for unrestricted access.
 - iii. In the **Max. Token Expiration (Minutes)** field, set the maximum amount of time for the JWT token.
 - c. Set the **Session Expiration (minutes)**.
 - d. Click **Create**. Oracle Digital Assistant will generate the Channel ID and the Secret Key that you need to initialize the SDK. Keep it close at hand because you'll need them when configuring the HTML page to host the chat widget.
5. Route the channel to your skill or digital assistant.
6. Switch **Channel Enabled** to *On*.

Note: This *article* steps you through running the SDK with an authenticated channel.

6 Set Up Authentication

Create an IDCS Confidential App

The out-of-the-box OTM Order Shipment Status skill uses 3-legged OAuth supported by Oracle Identity Cloud Service (IDCS). Users of the Digital Assistant have to be valid Oracle Transportation and Global Trade Management Cloud users with suitable REST API and Digital Assistant accesses configured using Access Control List in Oracle Transportation and Global Trade Management Cloud. Your IDCS administrator needs to create a confidential app in your Oracle Transportation and Global Trade Management Cloud's IDCS instance to perform user authentication.

In addition to these steps, see the [Add a Confidential Application](#) instructions in the **Administering Oracle Identity Cloud Service** guide.

1. Log into the IDCS administration console. The URL and login credentials are in the welcome email.
2. Under **Applications** click on the **+ Add** button to add a new Confidential application. Select **Confidential Application**.
3. Provide a name for the application. e.g ODA Confidential App, and then click **Next**.
4. Select **Configure this application as a client now**.
5. Select *Authorization Code* and *Refresh Token* as **Allowed Grant Types**.
6. Provide a value for the Redirect URL. This is the URL where users will be redirected to ODA after authentication/authorization in Oracle Identity Cloud Service. Refer to [ODA documentation](#) for coming up with your own Redirect URL.
7. Turn on **Bypass Consent**.
8. Under **Token Issuance Policy**, select the option *All* for Authorized resources.
9. Click the **Add Scopes** button under Resources.
10. Click on the *urn:opc:resource:consumer* resource using the **>** button.
11. Select the *urn:opc:resource:consumer all* checkbox to select all scopes.
12. Click **Add**.
13. Click **Next**.
14. Select the **Configure this application as a resource server now** option.
15. Select the **Is Refresh Token Allowed** check box.
16. Specify the Rest API Endpoint URL of the target OTM instance as the value of the **Primary Audience**.
17. Click **Finish**.
18. Make note of the **Client ID** and **Client Secret**, and click **Close**.
19. Click **Activate**.
20. Click **OK** in the confirm dialog to activate the application.

Configure the ODA Instance to Point to the IDCS Instance

In this section, your ODA administrator adds the newly created IDCS confidential app to the list of Authentication Services on your ODA instance. Later on you will point your OTM Order Shipment Status skill to this Authentication Service, that way any login to your digital assistant skill will be directed to the right authentication service.

For more details, see the [ODA Documentation](#).

1. Open your ODA instance.
2. Under **Settings > Authentication Service**, create a new authentication service.
3. In the **Grant Type** field, select *Authorization Code*.
4. In the **Identity Provider** field, select *Oracle Identity Cloud Service*.
5. Enter a **Name**.
6. In the **Token End Point URL** field, enter `https://<idcs-service-Instance>/oauth2/v1/token`.
7. In the **Authorization End Point URL** field, enter `https://<idcs-service-instance>/oauth2/v1/authorize`.
8. In the **Client ID** and **Client Secret** fields, enter the Client ID and Client Secret that were generated in the previous step from the IDCS Confidential App.
9. In the **Scopes** field, enter `urn:opc:resource:consumer::all`.
10. In the **Subject Claim** field, enter `sub`.

Configure the ODA Instance to Point to the OTM Instance

Here, your ODA administrator points your Digital Assistant skill to the corresponding Oracle Transportation and Global Trade Management Cloud instance so that it can query the right source for data.

1. Open the OTM skill that you pulled from the skill store.
2. Navigate to **Settings**.
3. Navigate to the **Configuration** tab.
4. Under **Custom Parameters**, click on *OTMInstance* to edit it. Then enter your OTM instance URL.
5. Under **Custom Parameters**, click on *AuthenticationService* to edit it. Enter the new authentication service that you created in the previous section.

7 Set Up in Transportation and Global Trade Management

Mandatory Configuration

Web Property Configuration

In order to establish connection with your IDCS and ODA instances, your Oracle Transportation and Global Trade Management Cloud administrator needs to set up the corresponding URLs as web-tier properties.

While you are here, add the Digital Assistant icon in the global header to open the digital assistant within Transportation and Global Trade Management. It is optional but highly recommended. If you don't want to add this icon, skip Steps 23 through 28.

1. Log into Transportation and Global Trade Management as a DBA user.
2. Go to **Configuration and Administration > Property Management > Property Sets**.
3. Edit the CUSTOM property set.
4. Enter "Setting LDA properties" in the **Reason for Change** field.
5. Enter a **Sequence** number that is not already used.
6. Select "Set" in the **Instruction** field.
7. Enter "glog.webserver.digitalAssistant.url" in the **Key** field.
8. Enter your ODA instance URL as the **Value**.
9. Enter "Digital Assistant ODA URL" as the **Description**.
10. Click **Save**.
11. Enter a **Sequence** number that is not already used.
12. Select "Set" in the **Instruction** field.
13. Enter "glog.webserver.digitalAssistant.channelId" in the **Key** field.
14. Enter the Web Channel ID as the **Value**.
15. Enter "Digital Assistant Web Channel ID" as the **Description**.
16. Click **Save**.
17. Enter a **Sequence** number that is not already used.
18. Select "Set" in the **Instruction** field.
19. Enter "glog.webserver.digitalAssistant.authorizeUrl" in the **Key** field.
20. Enter the Authorization URL as the **Value**. E.g. "https://<idcs-service-instance>/oauth2/v1/authorize"
21. Enter "Digital Assistant Authorization URL" as the **Description**.
22. Click **Save**.
23. Enter a **Sequence** number that is not already used.
24. Select "Set" in the **Instruction** field.
25. Enter "glog.webserver.digitalAssistant.embedInHeader" in the **Key** field.
26. Enter "TRUE" as the Value. (By default it is set to "FALSE.")
27. Enter "Turn on Digital Assistant Icon in Global Header" as the **Description**.
28. Click **Save**.
29. Click **Finished**.

Set the RECALC ORDER LATEST EST DELIVERY DATES Parameter

The skill leverages the Latest Estimated Delivery Date field on the Order Release. Therefore, a parameter in the domain default parameter set needs to be configured in order to populate this field.

Set the RECALC ORDER LATEST EST DELIVERY DATES parameter to TRUE, in order for the LatestEstDeliveryDate on Order Release to populate.

Create the End User

Each end user of the digital assistant must be set up as a user in Oracle Transportation and Global Trade Management Cloud.

1. As a DBA user, Go to **Configuration and Administration > User Management > User Manager**.
2. If you are not working with an existing user record, create a new one.
3. In the **Nickname** field, enter the email address for the user. This email address must be the same as the email address for the corresponding IDCS user.

Grant Access Control Lists to the User

Your Oracle Transportation and Global Trade Management Cloud administrator needs to grant each user access to the following access control lists.

- Digital Assistant
 - REST - Shipment - View
 - REST - Location - View
 - REST - Order - View
 - REST - Item - View
 - REST - Tracking Event - View
1. While editing the user, in the Access Control List section, enter *Digital Assistant* in the **Access Control** field.
 2. Select the **Granted** check box.
 3. Click **Save**.
 4. Enter *REST - Shipment - View* in the **Access Control** field.
 5. Select the **Granted** check box.
 6. Click **Save**.
 7. Enter *REST - Location - View* in the **Access Control** field.
 8. Select the **Granted** check box.
 9. Click **Save**.
 10. Enter *REST - Order - View* in the **Access Control** field.
 11. Select the **Granted** check box.
 12. Click **Save**.
 13. Enter *REST - Item - View* in the **Access Control** field.
 14. Select the **Granted** check box.

15. Click **Save**.
16. Enter *REST - Tracking Event - View* in the **Access Control** field.
17. Select the **Granted** check box.
18. Click **Save**.
19. Click **Finished**.

Optional Configuration

Customize DIGITAL ASSISTANT CONFIGURATION Logic Configuration

Your Oracle Transportation and Global Trade Management Cloud administrator has the option of creating a custom logic configuration to control the default time window and order criteria qualifier in the digital assistant.

1. Navigate to **Shipment Management > Power Data > General > Logic Configuration**.
2. In the **Logic Configuration Type** field, select *DIGITAL ASSISTANT CONFIGURATION*.
3. Click Search.
4. Select the check box next to *DIGITAL ASSISTANT CONFIGURATION DEFAULT*.
5. Select **Actions > Copy Logic Configuration**.
6. Enter a new name in the **Logic Configuration ID** field.
7. Edit the configuration options:
 - a. **DIGITAL ASSISTANT AUTOCOMPLETE**: By setting this field to true, the user will be able to see autocomplete suggestions based on the partial phrases that he/she typed. Default is TRUE.
 - b. **DIGITAL ASSISTANT ORDER CRITERIA QUALIFIER**: This field defines the primary Order ID used to look up an order on the Digital Assistant. Used in the chat dialog if you do not want to search by order release XID. If this value is set, the system will look for orders by reference number based on this qualifier instead of the order release XID. You can configure any ORDER_RELEASE_REFNUM to be the Order ID. If left blank, the system uses the Order Release XID. Default is Order Release GID.
 - c. **ORDER LIMIT**: By default, when you click the Get Recent Orders or Get Late Orders button, the system returns maximum 100 orders. This limit can be adjusted. The maximum allowed is 1000.
Note: The parameter value cannot be empty. It must be filled.
 - d. **DIGITAL ASSISTANT TIME WINDOW**: This field defines a time window, counted in number of days. The digital assistant will only return orders that are expected to deliver between the current date (date of the query) and the defined number days into both the past and the future. Default is 7.

Attach Custom DIGITAL ASSISTANT CONFIGURATION Logic Configuration to a User Preference

If you do not attach any DIGITAL ASSISTANT CONFIGURATION Logic Configurations to a user, the user will just use the default DIGITAL ASSISTANT CONFIGURATION Logic Configuration. Your Oracle Transportation and Global Trade Management Cloud administrator can make your customized DIGITAL ASSISTANT CONFIGURATION active by attaching it to the desired users.

1. Navigate to **Configuration and Administration > Preferences > User Preferences**.

2. Modify an existing user preference or create a new user preference.
3. Under Preferences, in the **Names** field, select *Digital Assistant Configuration Preferences*.
4. In the **Value** field, choose the DIGITAL ASSISTANT CONFIGURATION Logic Configuration that you created earlier.
5. Click **Save**.
6. Click **Finished**.

Launch the Bot

Now you have completed all the necessary set up and configuration steps. The Logistics Digital Assistant is ready to be used.

The digital assistant is accessible via the following methods:

- Click the icon in the global header to open the digital assistant within Transportation and Global Trade Management, if the `glog.webserver.digitalAssistant.embedInHeader` property is set to "true".
- Directly navigate to the digital assistant URL, `<your OTM instance url>/GC3/digitalAssistant`.
- Additionally, you can configure additional channels on the ODA platform to integrate with a messaging tool of your choice, such as WhatsApp, Microsoft Teams, Slack, Facebook Messenger, Amazon Alexa, SMS, etc.

When you see the chat interface, try testing the bot by asking it to "get orders." Once you have thoroughly tested the bot, you can share the URL with your end users.

8 Translation and Multi-Lingual Capabilities

Translation Overview

The OTM Order Shipment Status skill has English as its default language. It is also prepackaged with 20 languages in the resource bundle. The bot is able to display output messages in any of these 20 languages to the user.

In order to enable non-English languages on the bot, the following steps are necessary:

- 1. Set Up the Target Language:** For each log in user, set up the desired language under User Preferences in OTM. Once the user logs in, the target language will be set as the primary language for the chat session.
- 2. Configure Translation for User Input:** In order to correctly classify the user intent, the bot needs to understand the user input. There are 2 ways:
 - Use ODA's Native Multi-lingual Capability:** the following languages are natively supported in the pre-built **OTM Order Shipment Status** skill as of 21C:
 - English
 - German
 - Portuguese
 - Italian
 - French
 - Dutch
 - Spanish

You may need to enhance the native multi-lingual classification accuracy with additional test samples in your desired languages. Check out the latest list of ODA's *Natively-Supported Languages* and follow *this documentation* to add the target language to the OTM Order Shipment Status Skill.

- Use Translation Services:** In the absence of native multi-lingual capability, the OTM Order Shipment Status Skill needs a third party translation service for translating non-English user input into English before classifying the user intent. Here is the documentation for enabling Translation Services: *Create a Multi-Language Skill that Targets Languages That Are Not Supported Natively*.

Note: As of 21C, 5 strings related to "late orders" are not yet translated in the pre-packaged resource bundle. These translations will be delivered in a later release.

9 Extend the OTM Order Shipment Status Skill

Extend the Skill

The OTM Order Shipment Status skill can be extended by partners and/or your ODA administrator.

For more information, please refer to this document: [Extending Digital Assistants and Skills](#)

10 Appendix: Supplemental Documents

Supplemental Documents

- *Oracle Cloud Infrastructure Documentation: Digital Assistant*
- *Getting Started with Oracle Digital Assistant for Cloud Applications: Configure Digital Assistant*: Describes how to configure across different skills.
- *Implementing Sales: Configure Sales Assistant*: Shows how the Sales application skill, and the different intents supported by them. Transportation and Global Trade Management Cloud can do something similar while referencing the ODA docs.
- *Oracle Digital Assistant - Activate a Digital Assistant in Oracle Cloud HCM*: A tutorial on setting up Oracle Digital Assistant with another Oracle product.

