Oracle® Retail Order Broker Cloud Service 19.7

Administration Guide

F45808-03

January 2022

ORACLE

Oracle® Retail Order Broker Cloud Service Administration Guide, Release 19.7

F45808-03

Copyright © 2022, Oracle and/or its affiliates. All rights reserved.

Primary Author: Elise Kaplan

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Oracle Retail VAR Applications

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

(i) the MicroStrategy Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.

(ii) the Wavelink component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.

(iii) the software component known as Access Via™ licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.

(iv) the software component known as Adobe Flex™ licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, “alteration” refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.

Contents

Send Us Your Comments v

Preface vi

Audience vi
Documentation Accessibility vi
Related Documents vi
Customer Support vi
Improved Process for Oracle Retail Documentation Corrections vii
Oracle Retail Documentation on the Oracle Help Center vii
Conventions vii

1 Pre-Provisioning

Activate Your Service into a Cloud Account 1
Activating into a New Oracle Cloud Account 2
Activating into an Existing Oracle Cloud Account 2
Prepare Project Team 2

2 Provisioning

Access OCI IAM 1

3 Frequently Asked Questions

Cloud Account Activation 1

4 Setting Up Data

Before You Start 2
Logging in for the First Time 2
Creating an Organization 3
Creating the Default System 4
Creating Each Additional System that will Integrate with Order Broker Cloud Service 6
Creating User Profiles 8
Before You Start: Background on IDCS or OCI IAM Integration 8
IDCS or OCI IAM User Synchronization 9
Scheduling the Identity Cloud User Synchronization Job 14
Assigning the Default Shipping System to the Admin User Profile 14
Uploading Proximity Data 14
Creating Location Types 15
Setting up a Default Carrier and, Optionally, Additional Carriers 16
Creating the Default Unfulfillable Location 18
Setting up Preferences for your Organization 18
Scheduling Jobs 22
About Scheduling Imports 23
Restart All 24
Adjust and Save Preferences 24
Adding Authorized Keys 25
Setting Up Web Service Authentication 26

Send Us Your Comments

Oracle Retail Order Broker Cloud Service Administration Guide, Release 19.7

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

> **Note:** Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Online Documentation available on the Oracle Help Center Web site. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: retail-doc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at http://www.oracle.com.

Preface

The Order Broker Cloud Service Administration Guide describes the process an administrator follows to set up essential data for the Routing Module.

Audience

This Administration Guide is intended for administrators who are responsible for system configuration.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
http://www.oracle.com/us/corporate/accessibility/index.html.

Access to Oracle Support

Customers that have purchased support have access to electronic support at 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.

Related Documents

For more information, see the following documents in the Order Broker Cloud Service Release 19.7 documentation set:

- *Order Broker Cloud Service Release Notes*
- *Order Broker Cloud Service Operations Guide*
- *Order Broker Cloud Service Online Help*
- *Order Broker Cloud Service Vendor Portal Online Help*
- *Oracle Retail Order Broker Cloud Service Store Connect Online Help*

See the Order Broker Cloud Service 19.7 documentation library at the following URL:

https://docs.oracle.com/en/industries/retail/index.html

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Help Center Web site.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Help Center at the following URL:

https://docs.oracle.com/en/industries/retail/index.html

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Help Center

Oracle Retail product documentation is available on the following web site:

https://docs.oracle.com/en/industries/retail/index.html

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, emphasis, screen names, book titles, or terms defined in text or the glossary.
italic	Italic type indicates field labels 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

Pre-Provisioning

Pre-provisioning is the period after contracts are signed, but before receiving your environments, where some key activities can occur related to your upcoming implementation. For Order Broker Cloud Service implementations, your Customer Success Manager (CSM) will be your main point of contact for these activities.

Activate Your Service into a Cloud Account

You will receive an activation e-mail from Oracle in the initial stages of provisioning — often immediately following your subscription order being booked. You will need to activate your cloud service into a cloud account in order to begin the provisioning activities for your Oracle Retail service(s). Promptly completing the activations steps will better enable on-time environment delivery.

On activation of your cloud account you will have access to Oracle Cloud Infrastructure Console and the Identity and Access Management (OCI IAM) and your default Identity Domain will be created. An identity domain is a container for managing users and roles, federating and provisioning of users, secure application integration through Oracle Single Sign-On (SSO) configuration, and OAuth administration. It represents a user population in Oracle Cloud Infrastructure and its associated configurations and security settings.

Your default identity domain with be of the Oracle Apps type. Each identity domain type is associated with a different set of features and object limits.

You can create additional identity domains. Multiple identity domains are useful when you need separate environments for a single cloud service or application (for example, one environment for development and one for production). The default approach for Oracle Retail is for a single identity domain for all environments.

Note: Activation of your cloud service into a cloud account does NOT impact billing or the subscription service period - those details are connected to the subsequent environment delivery of Order Broker Cloud Service.

Activating into a New Oracle Cloud Account

Note: An Oracle Cloud Account is not the same as your My Oracle Support account. The Oracle Cloud Account exists within the OCI console and includes your identity domain(s) for managing user access and security.

To start the setup, you'll click the Activate link provided in the e-mail received. Then the following steps are required:

1. Provide the desired name for the Oracle Cloud Account.

   A best practice is to use a name which will encompass the scope of services to be managed in the account, such as a combination of your company name and "retail". For example, **mystoresretail**. After activation, you can adjust the displayed

   name for the cloud account.

2. Provide your e-mail address as the customer administrator who receives the activation e-mail.

   The e-mail address must match the initial e-mail. If you would like a different contact to be used as the administrator, this can be managed after activation in coordination with your CSM.

3. The activation success message will display, and you will receive a new welcome e-mail with access credentials.

Activating into an Existing Oracle Cloud Account

Activate your Retail cloud service within the Account Management section of your existing Oracle Cloud Account.

1. Log in to your existing Oracle Cloud Account.

   Clicking the **Activate** link brings you to the login page.

2. Within the Dashboard, click on the Account Management menu and then select the Activate tab.

   Available services to activate will be listed; you may need to select Show: Pending Activations.

3. Click the Cloud Service Account Setup button to complete setup. This setup will enable you to select the current Oracle Cloud Account as the destination for the cloud service activation.

If you have any issues with the above, see the *Frequently Asked Questions* chapter.

Prepare Project Team

During this time, you will also be putting together your project plan for the deployment and go-live phases of your implementation. It is important to consider the following during this planning phase to prepare your project team for implementation:

- **OCI Identity & Access Management** - As noted above, you will be using OCI IAM UI for user management for Order Broker. During the pre-provisioning timeframe, familiarize yourself with this solution and its features.

  https://docs.oracle.com/en-us/iaas/Content/Identity/home.htm

- **Security Configurations** - During this phase, you should designate a portion of your team to becoming familiar with OCI IAM and the roles, duties, and privileges for Order Broker. You can also start designing the roles that you will need for your users, and what duties will be assigned to your custom roles. For more details, please refer to *Setting Up Data*.

2

Provisioning

Once your environments are ready for you, the person designated as your service administrator will receive a welcome e-mail: one for each cloud service and each environment (stage, production, and so on). This e-mail has several key pieces of information:

- Username: This user is referred to as the Service Administrator user in this document. A temporary password will be sent in a separate e-mail
- Link to the OCI IAM Domains UI
- Links to Order Broker Cloud Service
- SFTP Information
- Customer Support (CSI) Number

It is recommended that you save this e-mail for future reference, because at this point the service administrator is the only person with access.

Access OCI IAM

Once you receive your welcome e-mail, it is recommended that you, as the system administrator, log into the OCI IAM console to verify your access and set a new password. You will also be assigned the application administrator group for both your production and pre-production environments. Note that the group for pre-production will have an added extension (_PREPROD) in order to differentiate between the two. These should not be deleted.

It is also recommended that you add additional administrators in order to have a backup administrator and share in user management administration, as at this point no one else in your organization will have access to OCI IAM or Order Broker. For assistance in creating users or adding them to groups, see *Setting Up Data* in this guide.

3

Frequently Asked Questions

Cloud Account Activation

Since Order Broker Cloud Service is installed using the default OCI IAM domain details, it is important to ensure any activation concerns are resolved during the pre-provisioning/provisioning period, as making changes after Order Broker is provisioned may require extended downtime.

What should I do if I cannot activate my service into an existing Oracle Cloud Account?

Inform your CSM or sales representative if you run into issues, providing the following information:

- Existing Oracle Cloud Account name
- Subscription ID of a service in the account
- Administrator e-mail for the account

What do I do if I experience errors or failures while attempting to activate my Cloud account?

The administrator e-mail address must match the e-mail which received the activation notification. If this does match and you are still running into issues, inform your CSM or sales representative, providing the following information:

- Intended activation approach (new Oracle Cloud Account or activate within an existing)
- Any error or failure messages received—include screen shots if possible

Can I use another identity management solution?

Only OCI IAM is supported in Order Broker Cloud Service implementations, however OCI IAM could also be integrated with external identity management providers, like Active Directory, using its APIs.

I have multiple pre-prod environments and want to have different security configurations for the same users/roles in each, can I do that?

The recommended approach is to create roles in OCI IAM that reflect the configuration needs for each environment. Or you could consider creating two user IDs for the same person to reflect the different role configurations that they need to test.

Why do I see other users in my OCI IAM instance (for example, batchuser)?

The Oracle Cloud Operations team will also seed a set of integration users required by the solutions as part of the provisioning process. These are users used for integration or internally for batch and other processing and **should not be deleted**.

I can see links in the task list, but why don't I see any links under the Settings task bar option?

The links under the Settings icon require you to have the SETTINGS_MENU_DUTY associated with your group/role. If you aren't seeing these options, then that duty may be missing from the group/role you are assigned to. Validate your group/role assignment in OCI IAM. If you are linked to the administrator group/role and are still not seeing the links, then you should log an SR for further assistance.

Why can I see links in the Settings task bar option, but not the Security link?

The Security link under the Settings icon require you to have the ADMIN_CONSOLE_DUTY associated with your group/role. If you aren't seeing this option, then that duty may be missing from the group/role you are assigned to. Validate your group/role assignment in OCI IAM. If you are linked to the administrator group/role and are still not seeing the links, then you should log an SR for further assistance.

4

Setting Up Data

Purpose: Follow the steps below to set up data for the Routing Module as part of Order Broker Cloud Service installation. The Routing Module enables you to search for locations to fulfill orders, create orders across the enterprise, and track order activity.

Other setup steps and options: See the Online Help for more information on setting up data, including steps for configuration of the Routing Engine, as well as steps required for:

- Configuring the Supplier Direct Fulfillment module.
- Configuring the Store Connect module.
- Additional configuration options, such as probability rules and zone fulfillment.
- Testing operations, such as searching for locations and creating orders.
- Details on importing and exporting data, including additional import and export options.
- Changing the time zone for screens, reports, emails, and order update history.

Note: For a cloud implementation, Oracle staff need to make sure that any external URLs are added to the proxy server's allow list.

NOTE: In this document, user details / company name / address / email / telephone number represent a fictitious sample. Any similarity to actual persons, living or dead, is purely coincidental and not intended in any manner.

In this chapter:

- Before You Start
- Logging in for the First Time
- Creating an Organization
- Creating the Default System
- Creating Each Additional System that will Integrate with Order Broker Cloud Service
- Creating User Profiles

  - Before You Start: Background on IDCS or OCI IAM Integration
  - IDCS or OCI IAM User Synchronization
  - Scheduling the Identity Cloud User Synchronization Job
- Assigning the Default Shipping System to the Admin User Profile
- Uploading Proximity Data
- Creating Location Types
- Setting up a Default Carrier and, Optionally, Additional Carriers
- Creating the Default Unfulfillable Location
- Setting up Preferences for your Organization
- Scheduling Jobs
  - About Scheduling Imports
  - Restart All
  - Adjust and Save Preferences
- Adding Authorized Keys
- Setting Up Web Service Authentication

Before You Start

Before you begin configuration of Order Broker Cloud Service. you need:

- **URL:** The URL to use when logging into Order Broker.
- **Default user profile:** A default admin user profile for you to use when completing configuration in Order Broker, including creating additional users, configuring systems, setting preferences, and importing data.

Contact your Oracle representative for the user ID of the default admin user. This user needs to exist in both Order Broker and IDCS (Oracle Identity Cloud Service) or OCI IAM (Oracle Cloud Infrastructure Identity and Access Management).

You will need to assign the *Default Shipping System* to the user profile once you have completed these configuration steps below.

- New install: You need to create all users in IDCS or OCI IAM to map to all users in Order Broker, including Order Broker users, Store Connect users, vendor users, and web service users. See Creating User Profiles for more information.
- Upgrade to release 19.0 or higher: You need to create all users in IDCS or OCI IAM before users can begin using Order Broker, including Order Broker users, Store Connect users, vendor users, and web service users, if their records do not already exist in IDCS or OCI IAM. Users can use the *Can't sign in?* link at the login page to set their passwords.

See Creating User Profiles for more information on creating users.

Logging in for the First Time

Use IDCS or OCI IAM: You need to select the *Use IDCS* flag at the Tenant-Admin screen if it is not already selected. To display this screen, select **Systems > Tenant**

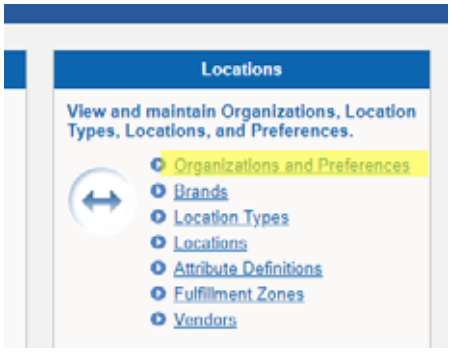
while logged in as the default admin user. If the flag is not already selected, select it now.

Creating an Organization

About organizations: The organization is the second level in the Order Broker Cloud Service hierarchy, below the tenant. All systems are assigned to a single organization, and item searching, order creation, and drop ship fulfillment takes place within the organization. You need at least one organization.

For more information: See the **Order Broker Routing Engine Overview** in the Online Help for a discussion of the organization hierarchy.

1. Select **Organizations and Preferences** at the home screen.



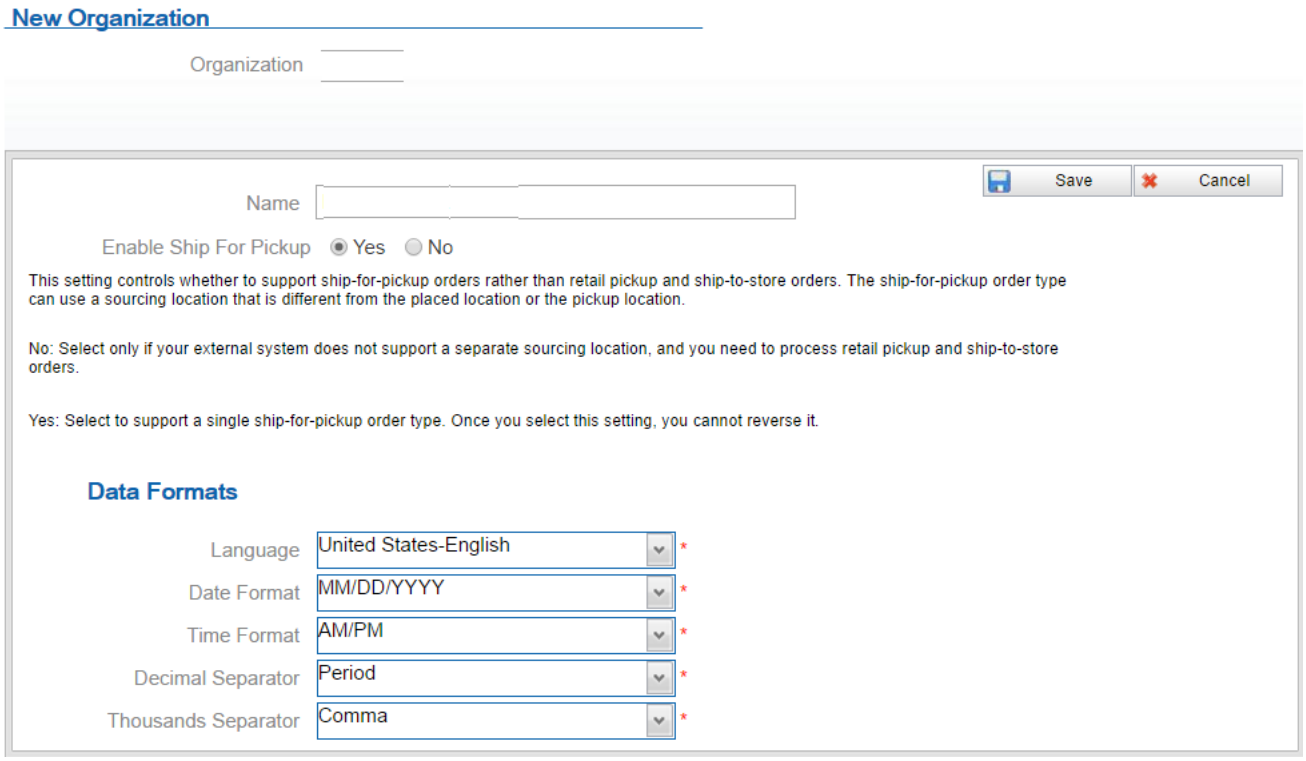
2. At the **Organizations and Preferences** screen:

   - Enter the organization code in the *Organization* field. The organization code can be 1 to 10 positions long, can include spaces and special characters, and must be unique within Order Broker.
   - Enter the name for the organization in the *Name* field. The name can be from 1 to 35 positions long, and can include spaces and special characters.
   - Click **New**.

   - At the **New Organization** screen:
     * If ship-for-pickup orders will not be enabled, set the *Enable Ship For Pickup* option to **No**.

> **Important:** See the Routing Engine Overview in the Operations Guide or the online help for considerations on enabling ship-for-pickup.

* Complete the **Data Formats** fields to control the formats for reports, forms, and system-generated emails.



* Click **Save**.

Creating the Default System

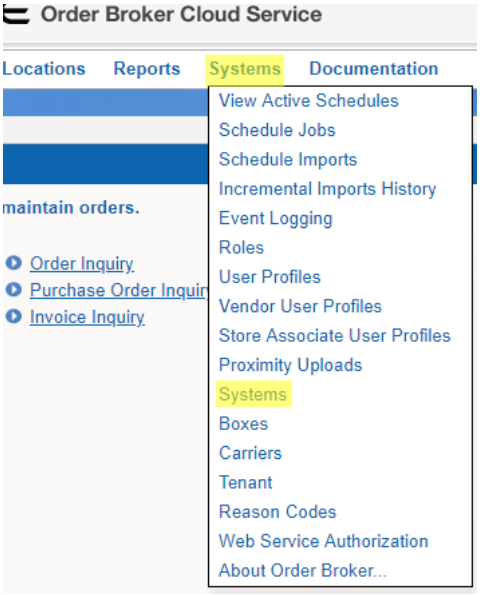
About systems: Each system in Order Broker Cloud Service represents an application, such as Oracle Retail Order Management System Cloud Service or Xstore, that shares inventory information via Order Broker Cloud Service and creates cross-channel orders or purchase orders.

About the default system: The default system identifies the application that is the system of record for product creation and naming. The first system created for your organization is automatically flagged as the default. System product codes in other systems are cross references to the products in the default system.

Note: If you integrate with Oracle Retail Order Management System Cloud Service, the system code should be the same as the company number, without padding zeros: for example, 6 rather than 006. Also, the code for the system must match the setting of the *Locate System (K50)* system control value.

Note: The system flagged as the Vendor Default should not be the default system for the organization.

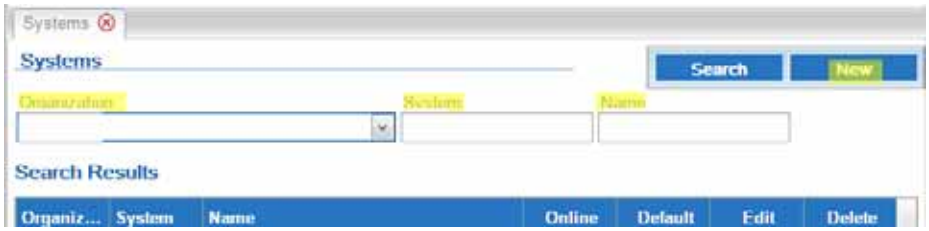
1. Select **Systems > Systems** to advance to the **Systems** screen.



2. At the **System** screen:

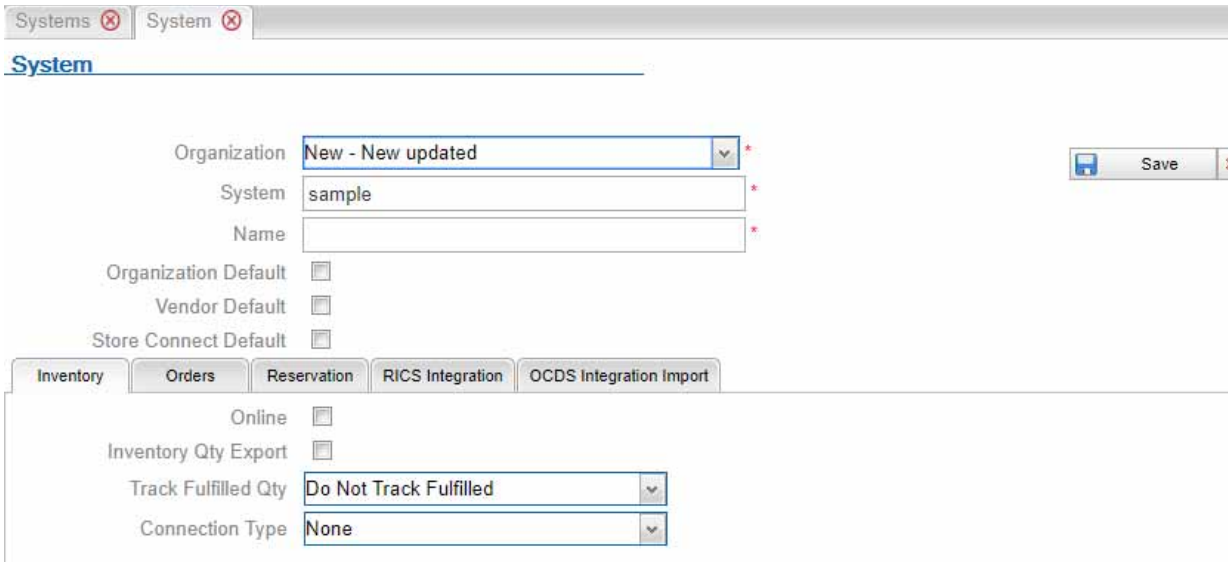
3. Select an organization from the *Organization* drop-down box.

   - Enter a system code in the *System* field. System codes can be 1 to 10 positions in length, can include spaces and special characters, and must be unique.
   - For Order Management System or CWDirect, the system code should be the same as the company number, without padding zeros.
   - Optionally, enter a name in the *Name* field. Names can be 1 to 40 positions in length and can include spaces and special characters. If you do not enter a name here, you need to enter it at the System screen when creating a system.



   - Click **New**. If:
     * The system already exists in the organization, or if you did not select an organization or enter a *System* code, Order Broker displays an error message;

* Otherwise, you advance to the **System** screen, where you can complete the creation of the system.



Note:

- If you click **Cancel** at the **System** screen after clicking **New**, the system is not created.
- The *Organization Default* flag is selected when you create the first system for an organization, and the flag cannot be unselected at this time. To designate a different system as the default, you need to create another system and flag that system as the default; this unflags the first system.

Order Management System or CWDirect integration: The code for the Order Management System or CWDirect system must match the setting of the *OROB System (K50)* or *Locate System (K50)* system control value. However, names for systems do not need to be the same as the Order Management System or CWDirect company descriptions.

For more information: See the **System** screen in the Online Help for information on additional system configuration options.

Creating Each Additional System that will Integrate with Order Broker Cloud Service

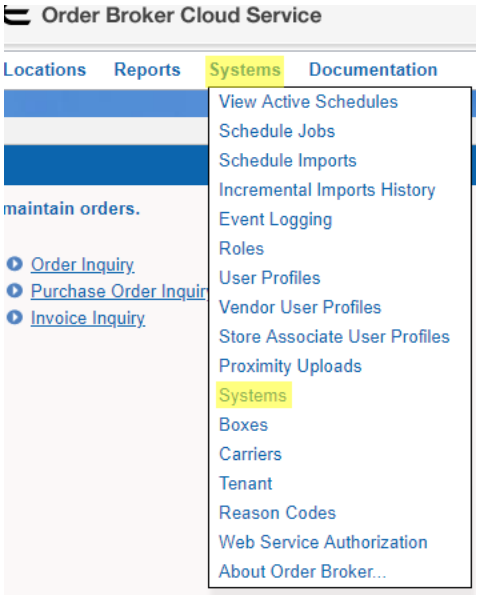
Follow the steps below to create:

- A default vendor system, if you will use the Supplier Direct Fulfillment module.

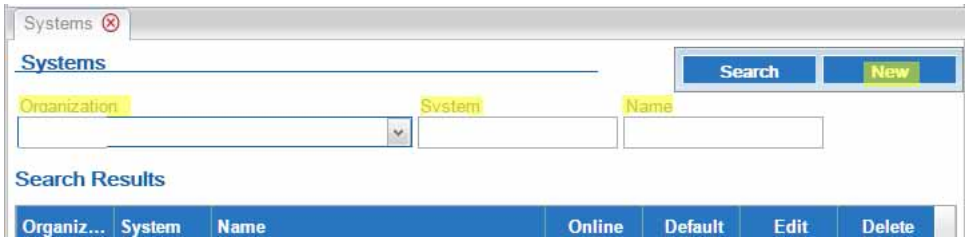
  Note: The system flagged as the Vendor Default should not be the default system for the organization.

- The Store Connect system, if you will use the Store Connect module.
- Each additional system, such as a POS system.

1. Select **Systems** > **System**.



2. At the **System** screen, select your organization from the *Organization* drop-down box.



3. Enter a system code in the *System* field. System codes can be 1 to 10 positions in length, can include spaces and special characters, and must be unique within the organization.

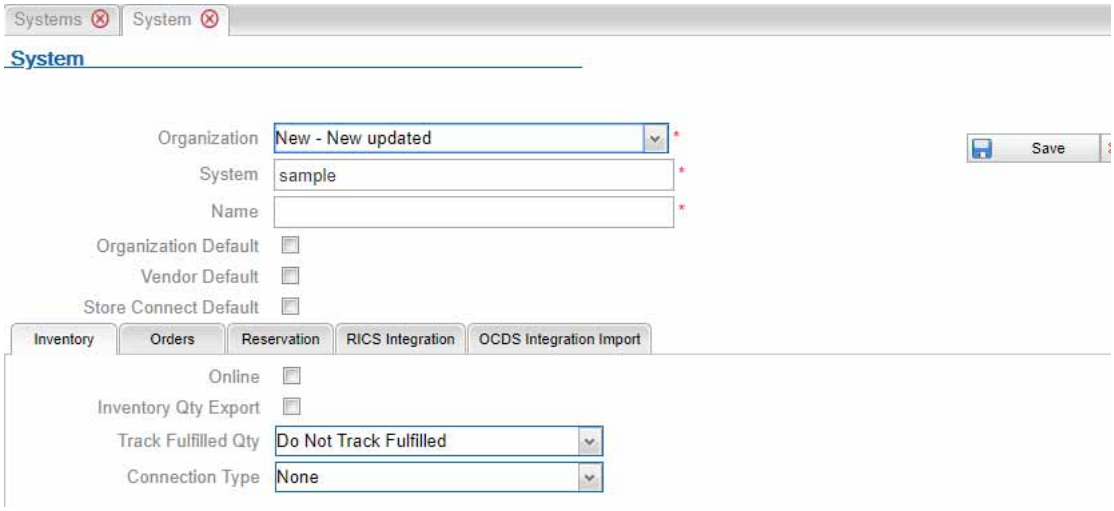
> **Note:** When creating the Store Connect system, you should not use a system code that begins with `STC-`, as these characters are used as part of the name for the user group in IDCS or OCI IAM. You can use `STC_` (with an underscore rather than a hyphen) instead.

4. Enter a name in the *Name* field. Names can be 1 to 40 positions in length and can include spaces and special characters. If you do not enter a name here, you need to enter it at the **System** screen when creating a system.

5. Select **New**:

   - If the system already exists in the organization, or if you did not select an organization or enter a system code, Order Broker Cloud Service displays an error message;

6. Otherwise, you advance to the **System** screen, where you can complete the creation of the system.



7. Select **Save**.

> **Note:** If you select **Cancel** at the **System** screen without first selecting **Save**, the system is not created.

See the **System** screen in the Online Help for information on the fields and options available at this screen.

Creating User Profiles

In this section:

- Before You Start: Background on IDCS or OCI IAM Integration
- IDCS or OCI IAM User Synchronization
  - Required Setup in Order Broker for Identity Cloud Service User Synchronization
  - User Creation in IDCS or OCI IAM
  - Importing Users through the Identity Cloud User Synchronization Job
  - Creating Vendor Users
  - Creating Store Associate Users
- Scheduling the Identity Cloud User Synchronization Job

Before You Start: Background on IDCS or OCI IAM Integration

Background on user mapping with IDCS or OCI IAM and user setup:

- Authentication for all users takes place using the password defined for the user in IDCS (Oracle Identity Cloud Service) or OCI IAM (Oracle Cloud Infrastructure Identity and Access Management); however, if OAuth authentication is enabled, the user ID defined in Order Broker for a Web Service user maps to a client ID

defined in IDCS or OCI IAM, and IDCS or OCI IAM defines a token for web service authentication, rather than a password.

About OAuth: OAuth is a standard for web service authentication through the use of access tokens rather than passwords.

- Role assignments in Order Broker control the user's screen and feature authority at Order Broker, Store Connect, and Vendor Portal screens. You can change the role assignments for existing users through the **Role Wizard**. See the *Role Wizard* in the online help for more information.
- No role authority is required for web service users.
- Since Order Broker requires a lower case user ID, you should create lower case user IDs in IDCS or OCI IAM for validation into Order Broker.
- When the user logs into Order Broker or Store Connect, the user ID entered at the login screen must match the user ID in IDCS or OCI IAM. If the user ID in IDCS or OCI IAM is the Cloud Service User ID, then the user enters the Cloud Service User ID at the login screen.
- User ID matching is case-sensitive, whether through the Order Broker user ID or the Cloud Service User ID.
- Order Broker, Store Connect, and vendor users can use the *Can't sign in?* link at the login page to reset their passwords.

Multiple omni-channel systems: You can use the same IDCS or OCI IAM user records for multiple omni-channel systems. You can use the Cloud Service User ID as a cross-reference to Order Broker users and Store Connect users, but this option is not available for Vendor Portal users or web service users. You can also use the same user ID for any user type, except that Order Broker requires a lowercase user ID, as noted above.

Although Order Management System uses an uppercase user ID, user validation is not case-sensitive, so a lowercase user ID from IDCS or OCI IAM passes validation.

Authentication for outbound web service requests: Use IDCS or OCI IAM to set up users for the authentication of web service requests across omni-channel systems, such as Order Management System Cloud Service or Customer Engagement Cloud Services if the omni-channel systems use the same instance of IDCS or OCI IAM.

IDCS or OCI IAM User Synchronization

About identity cloud service user synchronization: Use IDCS or OCI IAM to create users for omnichannel applications, including Order Broker Cloud Service and Oracle Retail Order Management System Cloud Service. Users that exist in IDCS or OCI IAM and are configured there for Order Broker Cloud Service access are then created in Order Broker Cloud Service:

- Through the **Identity Cloud User Synchronization** job, available through the **Schedule Jobs** screen, or,
- Automatically, when the user logs into Order Broker Cloud Service.

Users are created in Order Broker Cloud Service with the default authority defined from IDCS or OCI IAM, described below.

If you need to create Store Associate users and/or Vendor users in addition to Order Broker Cloud Service users, see Creating Vendor Users or Creating Store Associate Users, below.

The **Identity Cloud User Synchronization** job does not delete, deactivate, or update authority for any user records, including vendor users and store associates, in Order Broker Cloud Service. Use the related screen in Order Broker Cloud Service to update users once they have been created.

Web service authentication: The **Identity Cloud User Synchronization** job does not create web service users. See Setting Up Web Service Authentication for information on creating web service users.

Required Setup in Order Broker for Identity Cloud Service User Synchronization

The following steps describe creating Order Broker Cloud Service (retailer) user profiles.

Setup at the Tenant (admin) screen: Complete the **Identity Cloud Service** settings at the **Tenant** screen:

- **Use IDCS:** This flag must be selected.
- **Client ID:** The Name identifying Order Broker Cloud Service as an application in IDCS or OCI IAM. Typically formatted as `RGBU_OBCS_ENV_APPID` where `OBCS` identifies Order Broker Cloud Service and `ENV` identifies the environment, such as production.
- **Endpoint URL:** The URL to use for requests to IDCS or OCI IAM.
- **Client Secret:** The client secret assigned by IDCS or OCI IAM and used for authentication. Select **Show Secret** in the Configuration tab in IDCS or OCI IAM to display the secret.

See the **Tenant (admin)** screen in the online help for more information.

About the default user: The `default` user is created automatically, with a user name of Identity Cloud Default User. This is not an actual user record that can log into Order Broker Cloud Service; instead, it serves as a template for creating actual users. You cannot delete the `default` user.

Configuring the default user: Before creating additional, actual users, update the `default` user with the settings to apply to actual users when they are created in Order Broker Cloud Service:

- Role assignments with a *Role Type* of **Retailer**, controlling the default authority to Order Broker Cloud Service screens. See the Role Wizard for more information.
- The *Default Shipping System* that controls system product code to display as the **Item #** at the **Order** screen, as well as the organization to default at other screens.

Multiple groups of users: You can modify the configuration of the `default` user if you will import multiple groups of users into Order Broker Cloud Service. For example, you could first configure the `default` user with just order inquiry and maintenance authority, import a group of users, and then reconfigure the `default` user with different authority for the next group of users.

User Creation in IDCS or OCI IAM

You can use the following process in IDCS or OCI IAM to create users and control their attributes through group assignment, using the application record in IDCS or

OCI IAM for Order Broker Cloud Service, The application record typically has a *Name* such as RGBU_OBCS_<ENV>_APPID, where ENV represents the environment.

- Create one or more groups to use for assignment of roles to users. For example, create an ob_users group to use for creation of regular users, and an ob_admin group to use for creation of admin users. Assign the group to the appropriate application role in IDCS or OCI IAM: either OBCS_Admin or OBCS_User.
- Create each user in IDCS or OCI IAM, specifying the user's first name, last name, user name, and email address.

  About defining the user name in IDCS or OCI IAM:

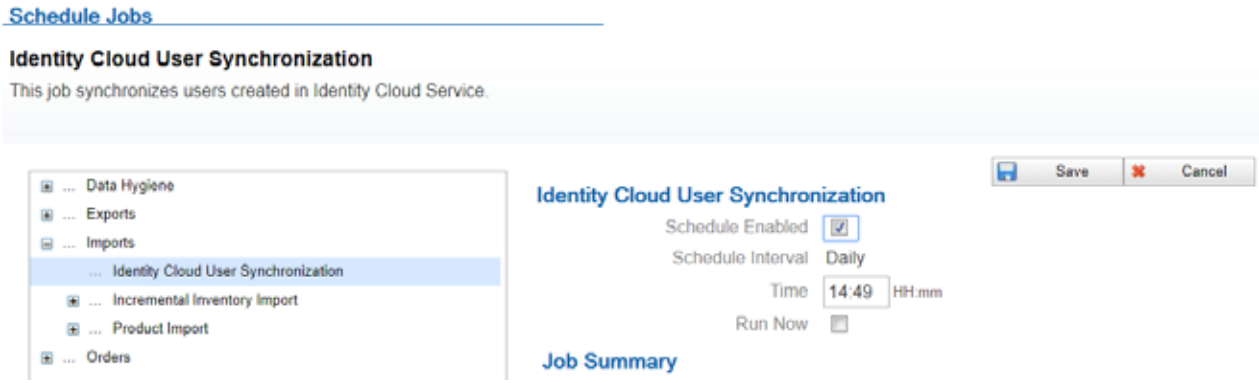
  - The user name be lower case.
  - The user name in Order Broker Cloud Service cannot exceed 10 positions, so the name assigned in IDCS or OCI IAM will be truncated in Order Broker Cloud Service f it exceeds 10 positions. If multiple users imported from IDCS or OCI IAM share the same first 10 positions of the user name, the import process will use the first 9 positions and assign a unique character as the 10th position. For example, if user names created in IDCS or OCI IAM are joannejohnson and joannejohnston, the first user created in Order Broker Cloud Service is joannejoh1, and the second user created in Order Broker Cloud Service is joannejoh2.

    * Assign each created user to the appropriate group.
    * Assign each group to the Order Broker Cloud Service application in IDCS or OCI IAM.
    * Assign each user to the appropriate application role in IDCS or OCI IAM.
    * Assign or reset the password for each user in IDCS or OCI IAM. This triggers an email to the email address specified for the user, who can log in using either the user name defined in IDCS or OCI IAM if it does not exceed 10 positions, or the email address.

Note: If the user logs in after configuration in IDCS or OCI IAM, this creates the user record in Order Broker Cloud Service; otherwise, the record is created through the import job, described below.

Importing Users through the Identity Cloud User Synchronization Job

After completing the required setup describe above, Select **Systems > Schedule Jobs** and run the **Identity Cloud User Synchronization** job to import the new users from IDCS or OCI IAM.



Each new user is created in Order Broker Cloud Service with the application role assignments from IDCS or OCI IAM:

- The user ID, name, email address, and cloud service user ID are from IDCS or OCI IAM; however, if the user ID is longer than 10 positions or is a duplicate of an existing user ID of 10 positions, it is truncated as described above.
- The admin flag is selected if the user is assigned to the OBCS_Admin application role in IDCS or OCI IAM.
- The role-based authority is from the `default` user's current settings.

After creation: Once users are created in Order Broker Cloud Service, you can maintain them; for example, you can change the email address, date formats, user name, authority, and default shipping system for Order Broker Cloud Service users, and you can flag a user as inactive so that the user cannot log in; however, this does not update the user's record in IDCS or OCI IAM. You can also delete the users from Order Broker Cloud Service, although this does not delete the corresponding records in IDCS or OCI IAM, and the user would be created again in Order Broker Cloud Service the next time the synchronization job runs.

> **Note:** The synchronization job does not update existing users in Order Broker Cloud Service.

Creating Vendor Users

If you also need to create vendor users in Order Broker Cloud Service, use the following process:

- In Order Broker Cloud Service, create one or more vendors. See the **Vendors** screen in the online help for more information.
- In Order Broker Cloud Service, create one or more role assignments with a *Role Type* of **Vendor**, controlling the default authority to Vendor Portal screens. Select the *Identity Cloud User Default* flag at the **Specify Role Name** step of the **Role Wizard**.
- In Order Broker Cloud Service, run the **Identity Cloud User Synchronization** job to create the vendor user groups in IDCS or OCI IAM corresponding to each

vendor created in Order Broker Cloud Service. The vendor user group is created as <system>|<vendor>, where <system> is the system code identifying the default vendor system, and <vendor> is the code identifying the vendor. The synchronization job performs this creation in IDCS or OCI IAM each time it runs based on the existing roles in Order Broker Cloud Service.

- In IDCS or OCI IAM, assign each vendor user group to the OBCS_Vendor_User application role for the Order Broker Cloud Service application.
- In IDCS or OCI IAM, create each vendor user and assign it to the vendor user group associated with the same vendor. See User Creation in IDCS or OCI IAM for background on creating the user in IDCS or OCI IAM and notes about defining the user name.

> **Note:** Assign the vendor user only to the vendor user group associated with the correct vendor. Order Broker Cloud Service does not support assigning a vendor user to more than one vendor.

- Run the **Identity Cloud User Synchronization** job again to import new vendor users from IDCS or OCI IAM. The vendor users are assigned role-based authority based on the vendor role types set up through the **Role Wizard** with the *Identity Cloud User Default* flag selected.

> **Note:** The synchronization job does not update existing vendor users in Order Broker Cloud Service.

Creating Store Associate Users

If you also need to create store associate users in Order Broker Cloud Service, use the following process:

- In Order Broker Cloud Service, create the default Store Connect system for your organization. See the **Systems** screen in the online help for more information.
- In Order Broker Cloud Service, create one or more role assignments with a *Role Type* of **Store Associate**, controlling the default authority to Store Connect screens. Select the *Identity Cloud User Default* flag at the **Specify Role Name** step of the **Role Wizard**.
- In Order Broker Cloud Service, run the **Identity Cloud User Synchronization** job to create store user groups in IDCS or OCI IAM for each system that is flagged as the Store Connect default for an organization. The user group is named `STC-SYSTEM`, where `SYSTEM` is the system code of the Store Connect default system in your organization. The synchronization job performs this creation in IDCS or OCI IAM each time it runs based on the existing roles in Order Broker Cloud Service.
- In IDCS or OCI IAM, assign each store user group to the OBCS_Store_User role.
- In IDCS or OCI IAM, create each store associate user and assign it to the store user group associated with the appropriate system. See User Creation in IDCS or OCI IAM for background on creating the user in IDCS or OCI IAM and notes about defining the user name.
- In Order Broker Cloud Service, run the **Identity Cloud User Synchronization** job again to import new store associate users from IDCS or OCI IAM.

- Use the **Edit Store Associate User Profile** screen to finish configuration of the store associate user, including assigning one or more locations and flagging the user as active. The *Requires Location* field at the **Store Associate User Profiles** screen indicates that the store associate user requires location assignment.

> **Note:** The synchronization job does not update existing store associate users in Order Broker Cloud Service.

Scheduling the Identity Cloud User Synchronization Job

Schedule the **Identity Cloud User Synchronization** job to run daily.

Assigning the Default Shipping System to the Admin User Profile

Follow the steps above under Creating User Profiles to assign the *Default Shipping System* to the Admin user profile. The *Default Shipping System* assigned to a user indicates the system product code to display on Order Broker screens.

> **Note:** The *Default Shipping System* is not a required field at the User Profile screen if you have not yet created any systems in Order Broker.

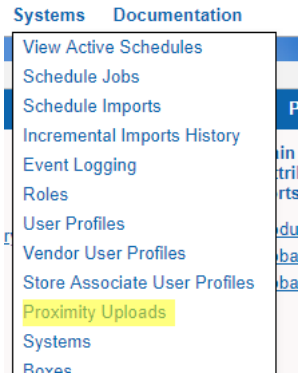
Uploading Proximity Data

About proximity data: Proximity data enables you to search for merchandise or assign orders based on the approximate distance from a store, warehouse, or customer address.

> **Note:** This step is required only if you are using proximity locator searching for locations through the Routing Engine, and only if you are not using the Oracle Maps Cloud Service. You can also perform this step at a later time.

If you are using Proximity Locator searching to restrict locate items searches or order assignment based on geographical location, and if you are not using the Oracle Maps Cloud Service, obtain the required `.CSV` file of postal code information before you begin the upload:

1. Select **Systems** > **Proximity Uploads**.



2. At the **Proximity Uploads** screen:
   - Select **Canada**, **International**, or **United States** from the *Proximity Data Type* drop-down list.
   - Enter the *Country Code* to apply to proximity records.
   - Use the **Choose Files...** button below the *File Name* field to select the `.CSV` file on your local computer.
   - Select **Upload**.

3. Wait until the upload status is completed. Optionally, you can select **Refresh** to check the status.

For more information: See the **Proximity Uploads** screen in the Online Help for more information, including the file layout and troubleshooting. Also, see the **Order Broker Routing Engine Overview** in the Online Help or the Operations Guide for a discussion of proximity locator searching and preferences, including the use of the Oracle Maps Cloud Service.

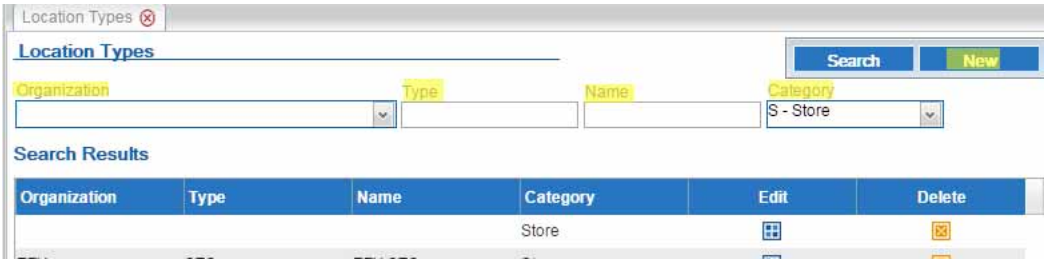
Creating Location Types

About location types: Location types identify a group of locations based on the system to which they belong, such as your order management system or your POS system, as well as their function, such as distribution center or retail store.

At least one location type is required for you to create locations.

1. Select **Locations** > **Location Types**.

2. At the **Location Types** screen, select your organization at the *Organization* drop-down box, if necessary.



3. In the *Type* field, enter a code to represent the location type. The code cannot exceed 10 positions.
4. In the *Name* field, enter a name for the location type. The name cannot exceed 40 positions.
5. Select the correct category from the *Category* drop-down box.
6. Select **New**. The location type is created.

Setting up a Default Carrier and, Optionally, Additional Carriers

About carriers: A carrier is required on each order. At a minimum you need to set up a default carrier, specified at the **Preferences** screen.

If the Submit Order message creating a retail pickup, delivery, or ship-to-store order:

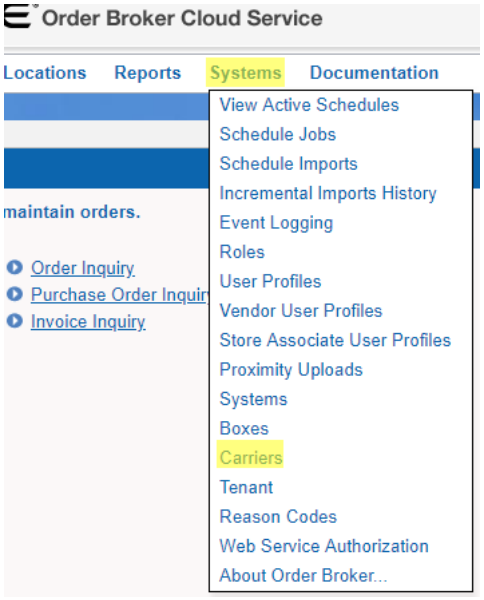
- specifies a `ship_via` that matches a carrier you have set up through the **Carriers** screen, Order Broker Cloud Service uses this carrier on the order and resets the carrier as active, if needed.
- specifies a `ship_via` that does not match a carrier you have set up through the Carriers screen, Order Broker Cloud Service creates the carrier and uses this carrier on the order.
- does not specify a `ship_via`, Order Broker Cloud Service uses the default carrier you specify at the **Preferences** screen.

Default carriers for other order types:

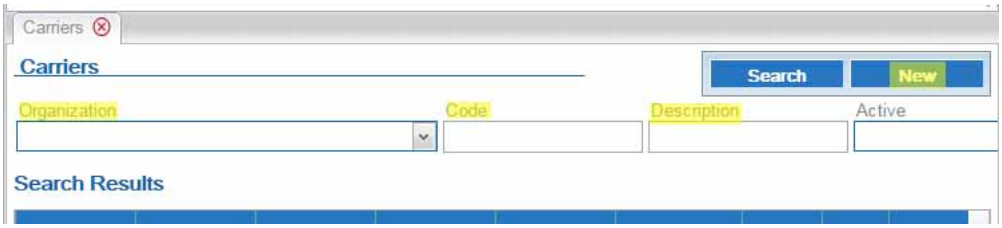
- For a pickup order, Order Broker Cloud Service uses the default PICKUP carrier it creates automatically, regardless of whether a `ship_via` is passed in the Submit Order message.
- For a ship-to-store order, Order Broker Cloud Service uses the default SHIP2STORE carrier it creates automatically, regardless of whether a `ship_via` is passed.

The following steps are required to set up the default carrier:

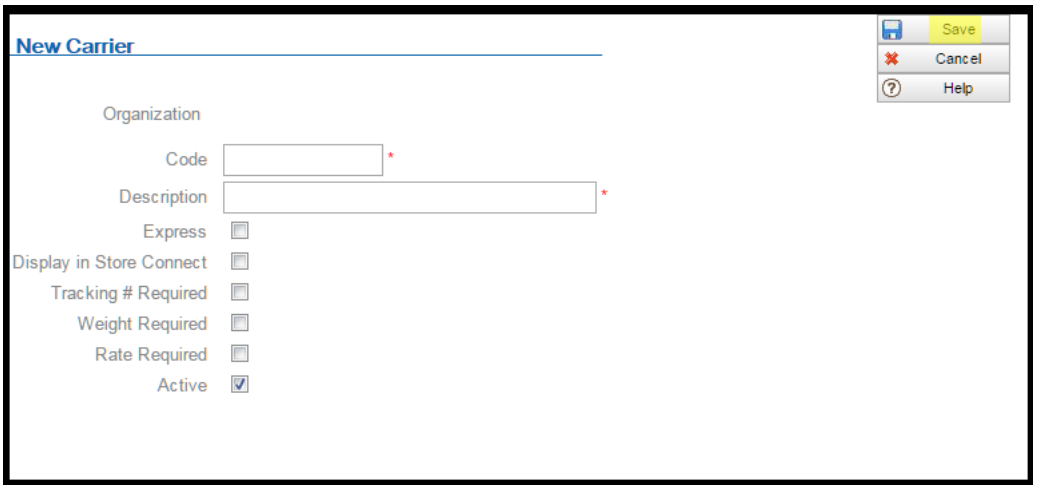
1. Select **Systems > Carriers.**



2. At the **Carriers** screen, select your organization if necessary and, optionally, enter a *Code* and *Description*. If you do not enter them here, you can enter them at the **New Carrier** window. Select **New**.



3. At the **New Carrier** window, complete any additional fields and select **Save**.



For more information: See the **Carriers** screen in the Online Help.

Creating the Default Unfulfillable Location

About the default unfulfillable location: The Routing Engine assigns an order to the default unfulfillable location when it cannot find a location to fulfill the order. You need to specify a default unfulfillable location at the **Preferences** screen.

1. Select **Locations** > **Locations.**
2. At the **Locations** screen:
   - Select your organization if necessary.
   - In the *Type* field, select the location type. The default unfulfillable location is ordinarily a warehouse or distribution center type.
   - In the *Location* field, enter a location code. The code cannot exceed 10 positions.
   - In the *Name* field, enter a name for the location. The name cannot exceed 40 positions.
   - In the *System* field, select the default system for your organization.
   - Select **New.**
3. At the **New Location** screen, enter any additional information about the default unfulfillable location, and select **Save** to save your entries.

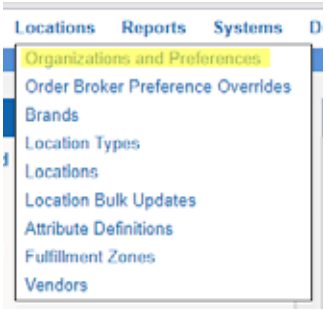
For more information: See Setting up Preferences for your Organization for information on identifying the default unfulfillable location for the Routing Engine.

Setting up Preferences for your Organization

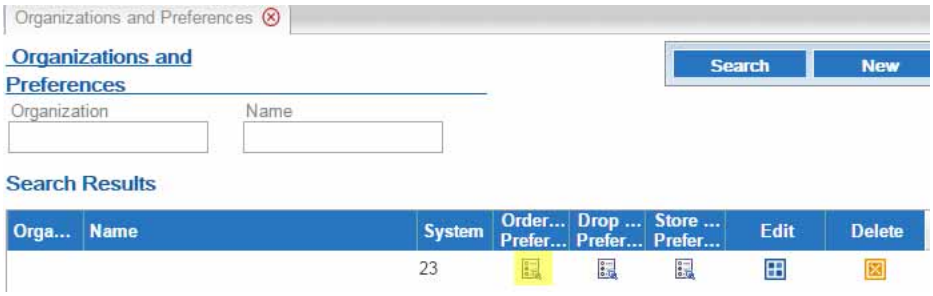
About preferences: Use the **Preferences** screen to set rules governing locate item searching and order assignment. You can set preferences at the organization, location type, and location level.

Saving again after running imports: After you import locations, products, system products, and product locations, you will need to reopen the **Preferences** screen, make any desired updates, and select **Save** to have your preferences apply to all locations. See Scheduling Jobs for more information.

1. Select **Locations > Organizations and Preferences.**

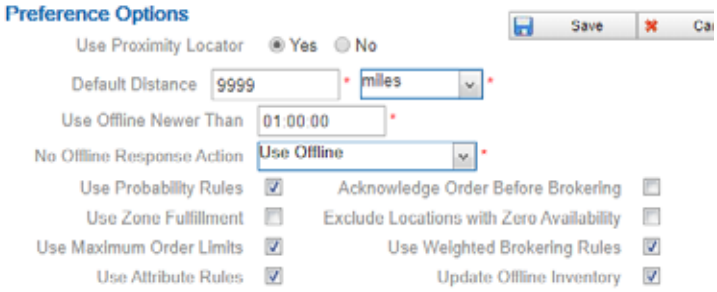


2. At the **Organizations and Preferences** screen, select the *Order Broker Preferences* icon ( ) for your organization.



3. At the **Preferences** screen:

   - Specify basic Routing Engine options, including whether to use the Proximity Locator, the default distance to use when searching for a location, and whether to use probability rules and zone fulfillment.



   - At the **Order Broker Settings** tab:

     * Specify whether to group shipment locations in responses to LocateItems requests for delivery or retail pickup orders, simply indicating whether the requested merchandise is available for shipment rather than listing locations in the LocateItems response.

     * Indicate whether to support splitting orders or lines, or process partial status updates for order lines.

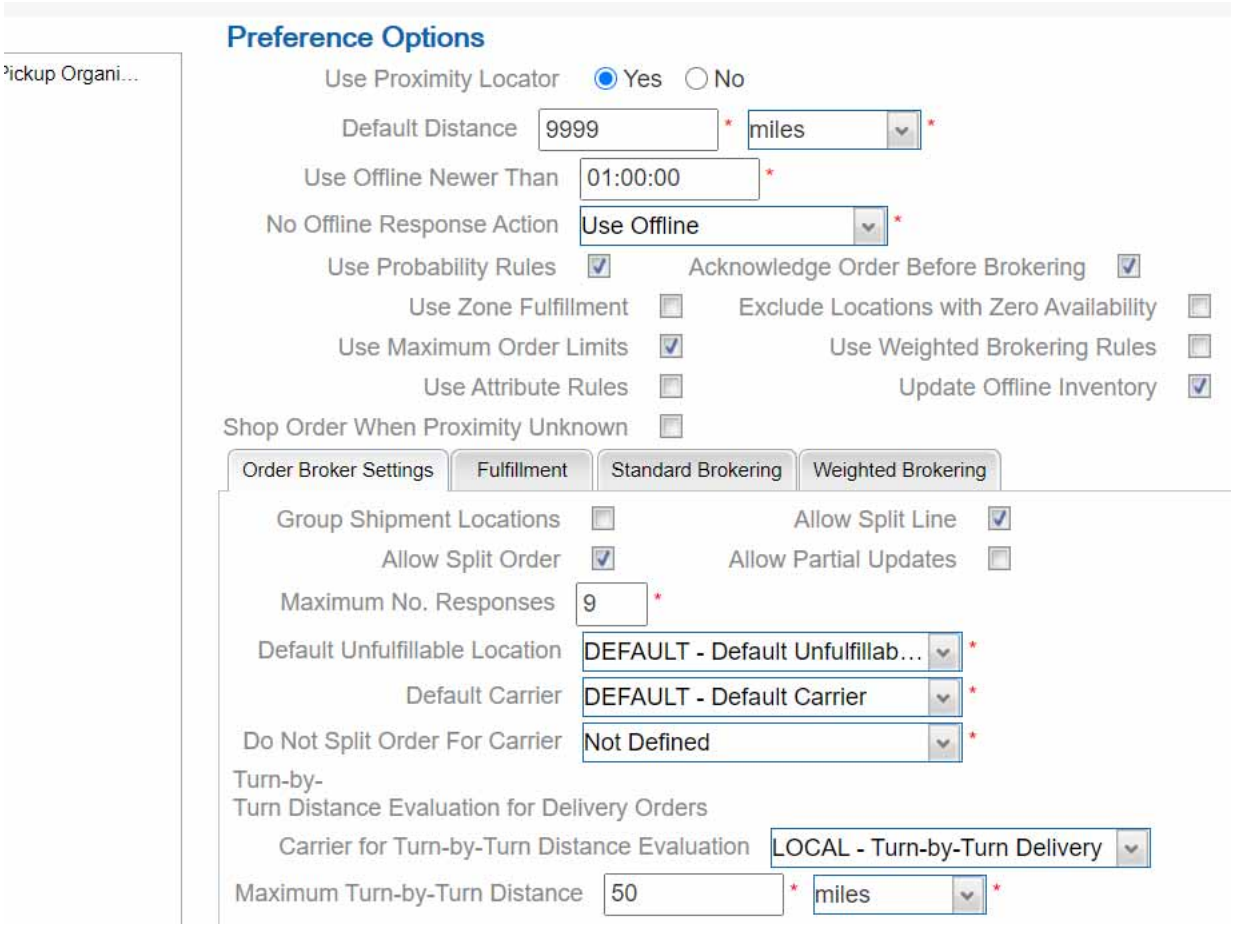
     * Specify the maximum number of locations to return in a LocateItems response.

     * Specify the default unfulfillable location (set up through Creating the Default Unfulfillable Location). This location needs to have all of the Yes/No options under **Fulfillment** (*Backorder Available*, *Pickup Available*, *Delivery Available*, and *Retail Pickup Available*, or *Ship For Pickup Sourcing* and *Ship For Pickup Receiving/Pickup*) set to **No**.

     * Specify the default carrier (set up through Setting up a Default Carrier and, Optionally, Additional Carriers).

     * Optionally, configure turn-by-turn distance calculation rather than straight-line distance calculation for delivery orders using a specified carrier. Turn-by-turn distance calculation is available only if you use Oracle Maps Cloud Service. In order to enable turn-by-turn distance calculation,

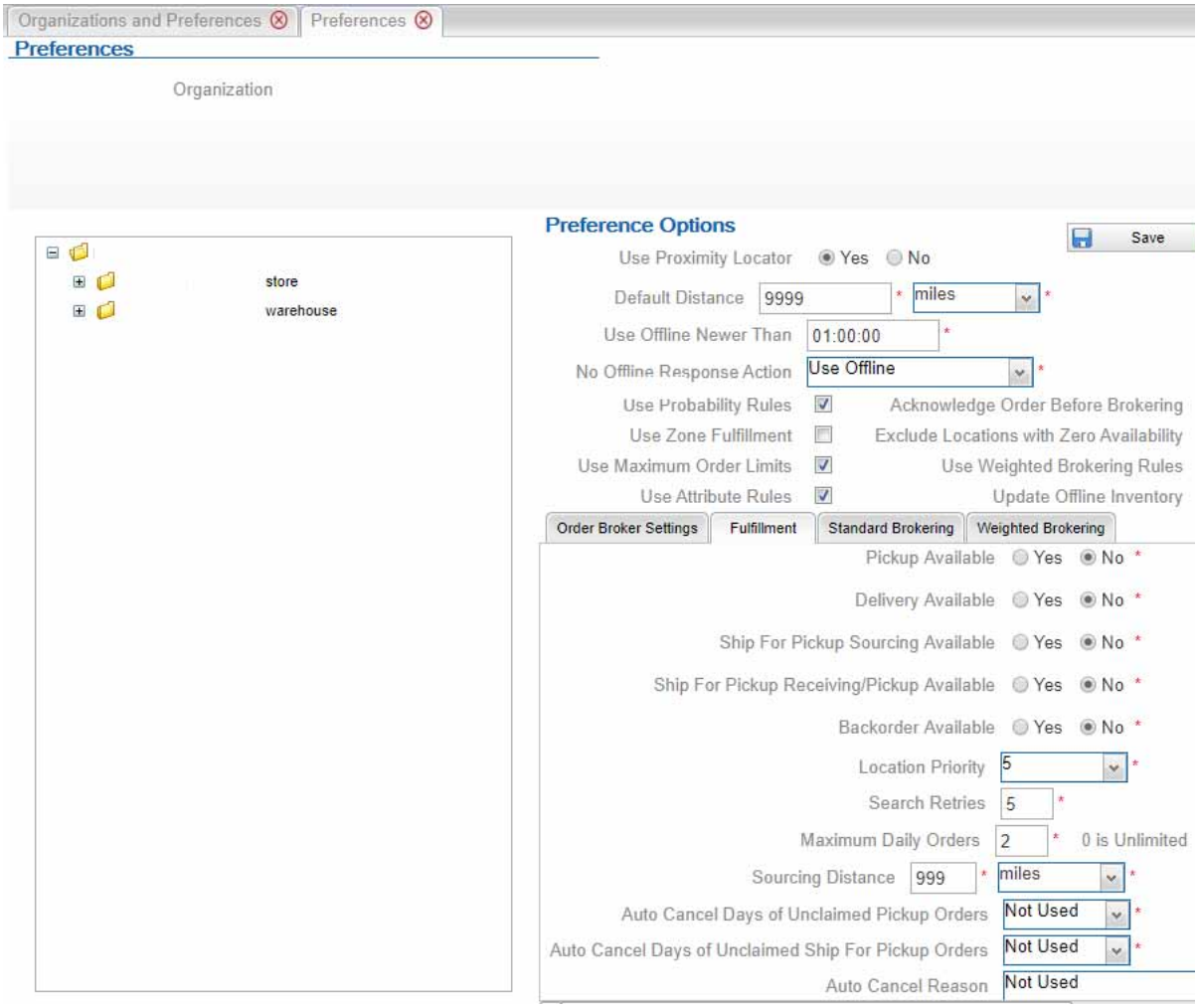
the *Turn-by-Turn Distance URL* also needs to be specified at the Tenant-Admin screen.



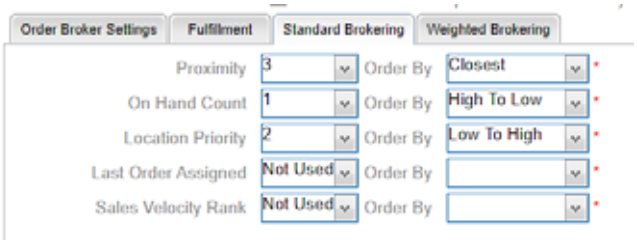
For more information: See the **Preferences** screen in the online help for information on the additional options available at this tab.

- At the **Fulfillment** tab:
  * Specify the fulfillment types supported. Note that the options here differ based on whether ship-for-pickup orders are supported.
  * Specify the priority to use for order assignment, and the maximum number of orders to assign per day.
  * At the organization level, specify the maximum number of times to reassign (“reshop”) an order if it is rejected by the assigned fulfilling or sourcing location.
  * If your organization supports ship-for-pickup orders, specify the sourcing distance for the Routing Engine to use when shopping for sourcing locations.

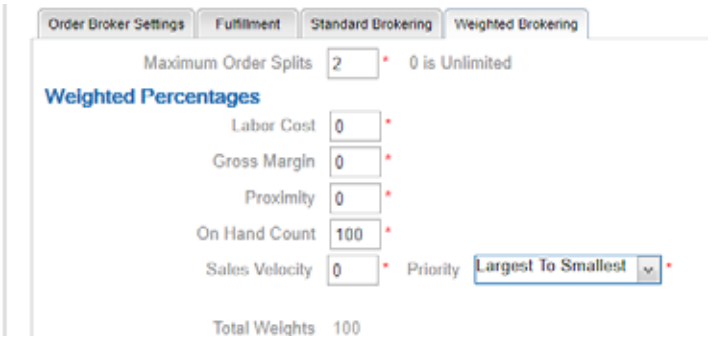
* Also at the **Fulfillment** tab, complete the settings related to automatically canceling unclaimed pickup or ship-for-pickup orders.



- At the **Standard Brokering** tab, complete the fields that control brokering orders if you do not use Weighted Brokering.



- At the **Weighted Brokering** tab, complete the fields that control brokering orders if you do use Weighted Brokering.



For more information: See the **Preferences** screen in the Online Help for complete field descriptions and background.

> **Important:** You need to set all Order Broker preferences at the organization level before integrating any external systems with Order Broker Cloud Service. See the description of the **Preferences** screen for complete information on setting preferences.

Preference overrides: Optionally, you can set up overrides at the order type and system level for the Routing Engine to use when searching for fulfilling locations. For example, you can have the Routing Engine sort locations for pickup orders by proximity, while it sorts locations for delivery and retail pickup orders by available quantity. Unless you set up overrides, each level "inherits" the settings from the **Preferences** screen. See the **Order Broker Preference Overrides** screen in the Online Help for more information.

Scheduling Jobs

Use the **Schedule Jobs** screen to create schedules for jobs:

- Data Hygiene:
  - Completed Order Private Data Purge
  - Daily Clean Up
- Exports:
  - Fulfilled Inventory Export
  - Inventory Quantity Export
  - Sales Order Data Extract
- Imports:
  - Identity Cloud User Synchronization
  - Incremental Inventory Import
  - Product Import
- Orders:

- Auto Cancel Unclaimed Pickup Orders
- Email Notifications

See the **Schedule Jobs** screen in the online help for more information.

> **Note:** Do not attempt to schedule jobs before creating systems.

About Scheduling Imports

About imports: The automated import process enables you to import and update locations, products, system products, product locations, and product barcodes from an integrated system.

> **Note:** If you are using the Oracle Maps Cloud Service instead of the proximity upload to support proximity locator searching, you should complete Oracle Maps Cloud Service configuration before importing locations, so that the latitude and longitude of each location can be assigned as it is created. Contact your Oracle representative for information on implementing the Oracle Maps Cloud Service.

Import from default system first? In order to create product records in the default system before you create system product records in any other systems, you need to run the import for the default system before the other systems.

Processing steps: If you use the File Storage API, the import checks the OROB-IMPORTS container in the FILE_STORAGE table for a pipe-delimited file containing each type of information for import (location, product, system product, product location, and product bar code). Otherwise, if you use secure FTP, the import checks the *Product Import Files* folder specified at the **Tenant - Admin** screen for the pipe-delimited files. The cloud administrator specifies the locations of these folders. See *Importing Items/Products, Inventory, Barcodes, and Locations into the Database* in the online help for background on the import process.

> **Important:** Oracle recommends that you schedule imports daily at a time when demands on the system are limited, and when it does not interfere with the database backup, and that you do not schedule more than one import at a time against the same database.

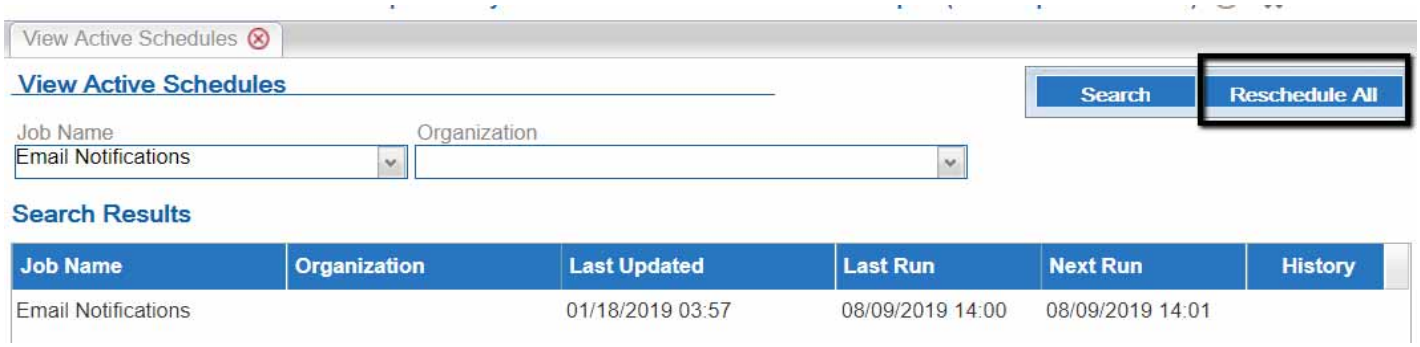
Mapping from integrating systems: Consult the integrating system's documentation and complete the **Schedule Jobs** screen for systems that support the import process, including Order Management System.

For more information: See the **Order Broker Routing Engine Overview** in the online help for a process overview, and see **Schedule Jobs** in the online help for file layouts, file naming conventions, and mapping details.

Restart All

Use the **Reschedule All** option at the **View Active Schedules** screen to start all scheduled jobs and programs listed above. as well as:

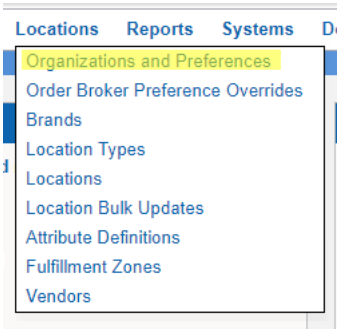
- scheduled report generation
- polling of orders for Store Connect.



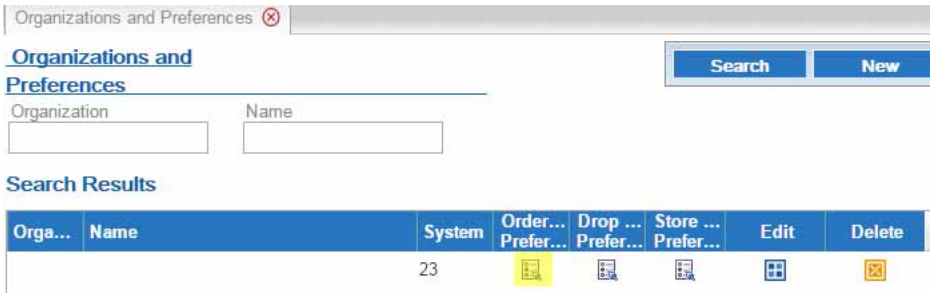
Adjust and Save Preferences

After importing locations, products, system products, and product locations, you need to return to the **Preferences** screen, make any necessary adjustments, and select **Save** again to apply the preference settings. You also need to save your preference settings after creating a new location to have the settings apply to each new location.

1. Select **Locations > Organizations and Preferences.**



2. At the **Organizations and Preferences** screen, select the *Order Broker Preferences* icon ( ) for your organization.

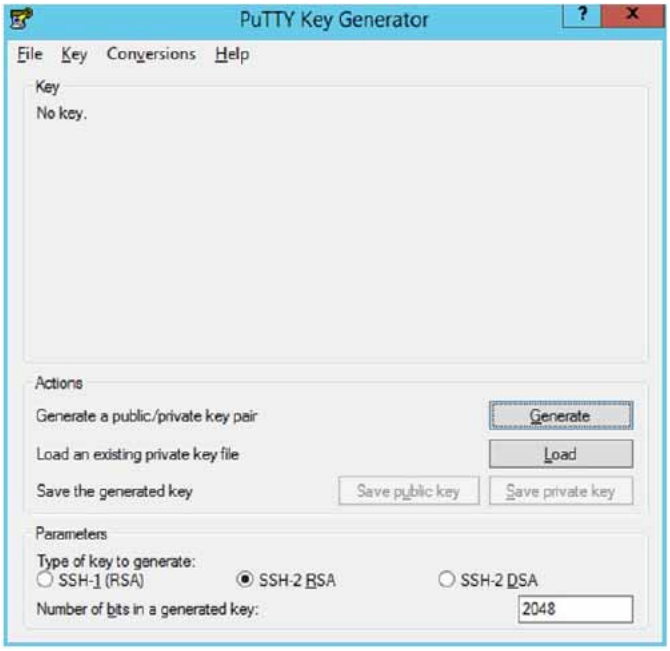


At the **Preferences** screen, make any necessary changes at the organization, location type, or location type level, and select **Save**.

Adding Authorized Keys

If you use FTP, use this process to generate a 2048 bit RSA key and add it to the SFTP server. This provides access to the application without a password. With Windows, use the WinSCP tool or with Linux, use ssh-keygen.

1. Launch WinSCP and select Tools/Run PuttyGen.
2. Select SSH-2 RSA for the type of key to generate and enter 2048 for the number of bits in a generated key field and click Generate.



Key Generator

3. Move the mouse over the blank space in the window until the key is generated.

Key Generator Progress

4. Once the key is generated, click **Save public key** to save the public key to a file.
5. Click **Save private key** to save the Private key to a file. Confirm whether to save it with or without a passphrase.
6. Open an SR with Oracle Support to associate the Public half of the Key with your SFTP account. Make sure to attach the Key with the SR.

Setting Up Web Service Authentication

See the Retail Omnichannel Web Service Authentication Configuration Guide on My Oracle Support for web service configuration instructions.