Oracle® Retail Xstore Office Cloud Service
Administration Guide

Release 24.0.101.0

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Oracle Retail Xstore Office Cloud Service Administration Guide, Release 24.0.101.0

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Oracle® Retail Xstore Office Cloud Service Administration Guide, Release 24.0.101.0

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>
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Preface

The *Oracle® Retail Xstore Office Cloud Service Administration Guide* describes all available functions of Release 24.0.101.0.

Audience

This guide is for technical personnel who configure, maintain and support, or use Oracle Retail Xstore Office.

Documentation Accessibility

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

Access to Oracle Support

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

Related Documents

For more information, see the following documents in the Oracle Retail Xstore Point- of-Service Release Notes.

See the Oracle Retail Xstore Office Cloud Service 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

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 24.0) or a later patch release (for example, 24.0.1). If you are installing the base release or additional patches, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

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 (docs.oracle.com) Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, 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 (docs.oracle.com) 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.

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Oracle Retail Documentation on the Oracle Help Center (docs.oracle.com)

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

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

(Data Model documents can be obtained through My Oracle Support.)

Conventions

The following text conventions are used in this document:

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

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1

Xstore Office Cloud Service

This document provides a summary of the implementation and administration guidelines for Oracle Retail Xstore Office Cloud Service (XOCS). The information is a valuable reference for those involved in implementing this Cloud Service.

The document assumes the reader has knowledge of and access to the following:

- Xstore Office Cloud Service features and functionality
- Xstore Suite implementation concepts and strategies
- Access to all published material related to the Xstore Suite platform

Overview of the Implementation Process

The implementation process includes a needs assessment, business impact analysis, requirements gathering, and other activities. However, this document is concerned only with specific aspects of a technical implementation. In a typical project life cycle, technical implementations can begin only after the environment has been provisioned by Cloud Operations (Cloud Ops) personnel.

When a subscription agreement has been signed, the sales executive initiates a Service Activation Request (SAR), which begins the provisioning process outlined in Figure 2–1.

2

Xstore Office Cloud: Customer Provisioning Flow

Details about the provisioning flow can be found in the *Oracle Retail Identity Management for OCI IAM Startup Guide* here https://docs.oracle.com/en/industries/retail/index.html.

3

Setup Xstore Office Cloud Service

This chapter describes how to set up Xstore Office Cloud Service.

Post Provisioning Steps

After the environments are provisioned, customers can perform the following requests from the Xadmin UI:

Adding additional Org IDs

Adding Additional Organization IDs

By default Xstore Office Cloud Service is setup with a default organization ID. If you want to setup additional organization IDs or do not want to use the default organization ID, see the Organization Management section in the *Oracle Retail Xstore Office Cloud Service User Guide*, for more information about how to add an organization ID.

> **✎ Note:**
>
> Org IDs cannot be changed, only added.

After the environments are provisioned, customers can file a service requests (SR) through the Oracle Ticketing System Service Requests for the following operations:

Updating Merchandise Hierarchy Level Labels

Configuring RTLog Generator

Integrating Oracle Retail Xstore Office Cloud Service (XOCS) with

- Omnichannel Cloud Data Service (OCDS),
- Merchandising Foundational Cloud Services (MFCS),
- Oracle Retail Order Broker (OROB),
- Oracle Retail Customer Engagement (ORCE),
- Oracle Retail XBRi

Integrating Oracle Retail Xstore Office Cloud Service (XOCS) with External Applications

Creating Merchandise Hierarchy Level Labels

Merchandise Hierarchy Levels

The desired Merchandise Hierarchy Levels must be established before item creation/dataloading and enabling some integrations. For viewing and modifying each organization's Merchandise Hierarchy Level configuration, see the *Oracle Retail Xstore Office Cloud Service User Guide*.

Configuring RTLog Generator

RTLog generator for integration with Sales Audit (ReSA) through flat files is installed with default configurations during provisioning.

Customers need to submit an SR to update the configuration of the rtlog generation and specify if they want to integrate with ReSA CLOUD (through FTS or SFTP), or ReSA ON-PREMISES (through REST API)

The SR should contain the following information:

- Environment where this change needs to be made (DEV (or UAT)/Stage/Prod)
- RTLog Generator RESA integration type (Delivery Target): (ReSA CLOUD or ReSA ON-PREMISES)
- RTLog Generator Data Transfer Protocol (Deploy Type): REST or SFTP or FTS
- If the Data Transfer Protocol is REST, no additional info is required. Customers are responsible to call REST API provided by RTLog generator to download RTLog files and upload them to Sales Audit (ReSA). Do not confuse this option as the one to integrate with ReSA through direct REST calls.
- If the Data Transfer Protocol is SFTP, then:
    - RESA SFTP Host: SFTP Host name (CLOUD only)
    - RESA SFTP User: SFTP username (CLOUD only)
    - RESA SFTP working directory: SFTP working directory (CLOUD only)
- If the Data Transfer Protocol is FTS, then:
    - FTS Endpoint url: FTS Endpoint URL

> **Note:**
>
> **Important**
>
> Customers need to submit an SR to update the configuration of the rtlog generation and specify if they want to integrate with ReSA CLOUD (through SFTP or FTS), or ReSA ON-PREMISES (through REST API).

Integrating XOCS with OCDS, MFCS, OROB, ORCE, XBRi

Integrating with OCDS, MFCS, OROB, ORCE and XBRi although done through Xadmin UI (refer to the *Oracle Retail Xstore Office Cloud Service User Guide*) requires that the retailer submits an SR for Oracle Cloud networking to allow the OCDS, OROB, ORCE, XBRi endpoints/(https or sftp) to egress out the Oracle outbound proxy.

The SR should contain the following information. Please refer to Allowlisting External URLs that Integrate with Oracle Retail Xstore Office Cloud Service (Doc ID 2772905.1):

- Environment where this change needs to be made (DEV (or UAT)/Stage/Prod). Please provide the URL of the environment.

- Indicate the Cloud Service with which to integrate along with the https or sftp endpoint details.

Integrating XOCS with External Applications

Integrating with External Applications although done through the Xadmin UI (refer to the *Oracle Retail Xstore Office Cloud Service User Guide*) requires that the retailer submits an SR for Oracle Cloud networking to allow the External Application endpoints (https or sftp) to egress out the Oracle outbound proxy.

The SR should contain the following information. Please refer to Allowlisting External URLs that Integrate with Oracle Retail Xstore Office Cloud Service (Doc ID 2772905.1)

- Environment where this change needs to be made (DEV (or UAT)/Stage/Prod). Please provide the URL of the environment.

- Indicate the External Application's (https or sftp) endpoint details.

Environments

A fully provisioned account has both a production environment and a staging environment. No one other than Oracle Cloud Operations (CloudOps) personnel can have direct access to any of the cloud environments.

Implementation teams access Xstore Office Cloud Service through the Xadmin UI or through REST web service APIs. See the *Oracle Retail Xstore Suite Services Guide* and the *Oracle Retail Xstore Office Cloud Service User Guide* for detailed information on features available in Xstore Office Cloud Service.

The figure below shows the integration data flows and the corresponding webservices APIs that are available in Xstore Office Cloud Service.

Figure 3-1   Xstore Office Cloud Service Integration Data Flow
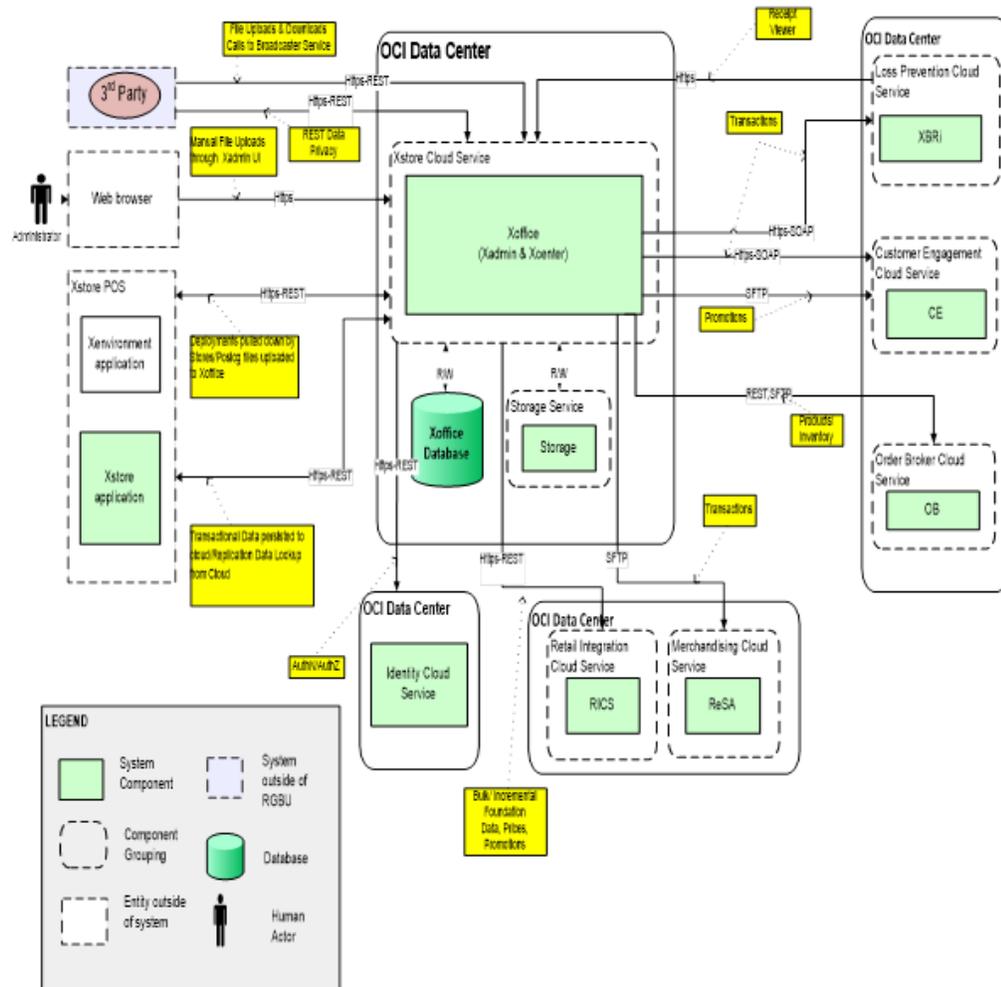
As you can see from the diagram in above Xstore Office Cloud Service does not have its own SFTP server.

Xstore Office Cloud Service does not use a WebDAV server for file deployments and pospoll uploads.

To get data from/upload data to XOCS the retailer will need to use the REST APIs documented in the *Oracle Retail Xstore Suite Services Guide* (My Oracle Support Doc ID: 1994467.1). The guide has details on invoking the File Rest API to PUT/GET/DELETE and view listing of the files in containers.

Another thing worth mentioning is that XOCS environments are provisioned with empty Xcenter and Replication databases and minimum required data in Xadmin database.

It will be responsibility of the retail/SI partner teams to load data in XOCS. Refer to Data Seeding on how to load data in XOCS.

UI Access

At the time of provisioning, the client is provided with an administrative user account (Delegated Customer Admin) on all cloud environments. Each user on the system, including anyone involved with the implementation requiring access to the system, must be provided with an individual account on the service. Accounts can be requested from the Customer Admin on the account. See User Setup for more details.

Web Service Access and Usage

In order to invoke the REST APIs provided by XOCS you first need to setup an OAuth Client.

Follow the instructions in the *Oracle Retail Xstore Office Cloud Service Security Guide* to create an OAuth Client. Specifically the "Xstore Office Setup App".

Example with curl

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

See the Xcenter Endpoints section of the Oracle Retail Xstore Suite Services Guide (My Oracle Support Doc ID: 1994467.1) for details and examples on invoking the File Rest API to PUT/GET/DELETE and view listing of the files in containers.

Data Seeding

After the environments are provisioned the retailer/SI partners will need to load data in Xstore Office Cloud Service.

The data types are generally loaded either through OCDS or MFCS (when using Oracle Merchandising and Pricing cloud Services), REST APIs or Xadmin UI (not recommended).

Organization Hierarchy is the first data set that needs to be loaded in Xstore Office Cloud Service. Organization Hierarchy is required in order for the primary Xadmin user to be able to assign roles for other Xadmin users for specific organizations.

Organization Hierarchy

The provisioning process or Adding Additional Organization IDs should have set up the merchant's organization IDs.

Further creation of the hierarchy can be done via Xadmin UI, uploaded via REST (.mnt and/or .xload file format), or imported through integration OCDS/MFCS.

See the Oracle Retail Xstore Office Cloud Service User Guide on more information about managing the organization hierarchy through Xadmin UI:

See the Web Service Access and Usage section for information on how to create an OAuth client and invoke the REST APIs.

> **✎ Note:**
>
> At least the top level node (*:*) for an organization needs to be setup via one of the methods mentioned above.
>
> Organization Hierarchy is required even when XOCS is integrated with OCDS, even though the integration with OCDS is expected to bring the entire organization hierarchy data into Xstore Office Cloud Service.

Once the organization hierarchy is loaded you can:

*   Configure the integrations and/or configure the broadcasters (refer to the Setup Integrations section in this document)
*   Setup users (refer to the User Setup section in this document)
*   Continue to load the other data (tax location, retail stores, items, departments and so on). Refer to the Other Retail Data section below.

Other Retail Data

This section describes other retail data.

Tax Location

Before loading the retail stores, tax location data set will have to be loaded via a data load file (.mnt, .xload) or through REST API.

See the example below for a sample of a Tax Location:

```
<Header line_count="13" download_id="123" application_date="2018-11-06"
/> INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation"
cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld
id="TaxLocationId"
val="TL-1000"/><fld id="CreateDate" val="1525803068534"/><fld
id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/
><fld
id="Description" val="Ohio Tax Location"/><fld id="Name" val="Ohio
Tax Location"/><originDS>Local</originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao
name="TaxLocation" cmd="INSERT_OR_ UPDATE|UPDATE"><fld
id="OrganizationId"
val="10"/><fld id="TaxLocationId" val="TL-2000"/><fld id="CreateDate"
val="1525803068538"/><fld id="CreateUserId" val="XADMIN"/><fld
id="UpdateDate"
val="1541542977883"/><fld id="UpdateUserId" val="XADMIN"/><fld
id="OrgCode"
val="*"/><fld id="OrgValue" val="*"/><fld id="Description"
```

val="Illinois
Tax Location"/><fld id="Name" val="Illinois Tax Location"/><originDS>Local</
originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation" cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld id="TaxLocationId"
val="TL-AT"/><fld id="CreateDate" val="1525803068540"/><fld id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/><fld
id="Description" val="AT Tax Location"/><fld id="Name" val="AT Tax
Location"/><originDS>Local</originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao
name="TaxLocation" cmd="INSERT_OR_ UPDATE|UPDATE"><fld id="OrganizationId"
val="10"/><fld id="TaxLocationId" val="TL-BR_SP"/><fld id="CreateDate"
val="1525803068559"/><fld id="CreateUserId" val="XADMIN"/><fld
id="UpdateDate"
val="1541542977883"/><fld id="UpdateUserId" val="XADMIN"/><fld id="OrgCode"
val="*"/><fld id="OrgValue" val="*"/><fld
id="Description" val="Brazil State - SAO PAULO"/><fld id="Name" val="Brazil
State
- SAO PAULO"/><originDS>Local</originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao
name="TaxLocation" cmd="INSERT_OR_ UPDATE|UPDATE"><fld id="OrganizationId"
val="10"/><fld id="TaxLocationId" val="TL-DE"/><fld id="CreateDate"
val="1525803068542"/><fld id="CreateUserId" val="XADMIN"/><fld
id="UpdateDate"
val="1541542977883"/><fld id="UpdateUserId" val="XADMIN"/><fld id="OrgCode"
val="*"/><fld id="OrgValue" val="*"/><fld id="Description" val="DE
Tax Location"/><fld id="Name" val="DE Tax Location"/><originDS>Local</
originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation" cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld id="TaxLocationId"
val="TL-ES"/><fld id="CreateDate" val="1525803068543"/><fld id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/><fld
id="Description" val="ES Tax Location"/><fld id="Name" val="ES Tax
Location"/><originDS>Local</originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation" cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld id="TaxLocationId"
val="TL-FR"/><fld id="CreateDate" val="1525803068545"/><fld id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/><fld
id="Description" val="FR Tax Location"/><fld id="Name" val="FR Tax
Location"/><originDS>Local</originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao
name="TaxLocation" cmd="INSERT_OR_ UPDATE|UPDATE"><fld id="OrganizationId"
val="10"/><fld id="TaxLocationId" val="TL-GB"/><fld id="CreateDate"
val="1525803068547"/><fld id="CreateUserId" val="XADMIN"/><fld
id="UpdateDate"
val="1541542977883"/><fld id="UpdateUserId" val="XADMIN"/><fld id="OrgCode"
val="*"/><fld id="OrgValue" val="*"/><fld id="Description" val="GB
Tax Location"/><fld id="Name" val="GB Tax Location"/><originDS>Local</
originDS></dao></ConfigData>

INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation"
cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld
id="TaxLocationId"
val="TL-IT"/><fld id="CreateDate" val="1525803068549"/><fld
id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/
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id="Description" val="IT Tax Location"/><fld id="Name" val="IT Tax
Location"/><originDS>Local</originDS></dao></ConfigData>
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name="TaxLocation" cmd="INSERT_OR_ UPDATE|UPDATE"><fld
id="OrganizationId"
val="10"/><fld id="TaxLocationId" val="TL-MX"/><fld id="CreateDate"
val="1525803068555"/><fld id="CreateUserId" val="XADMIN"/><fld
id="UpdateDate"
val="1541542977883"/><fld id="UpdateUserId" val="XADMIN"/><fld
id="OrgCode"
val="*"/><fld id="OrgValue" val="*"/><fld id="Description" val="MX
Tax Location"/><fld id="Name" val="MX Tax Location"/><originDS>Local</
originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation"
cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld
id="TaxLocationId"
val="TL-NL"/><fld id="CreateDate" val="1525803068551"/><fld
id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/
><fld
id="Description" val="NL Tax Location"/><fld id="Name" val="NL Tax
Location"/><originDS>Local</originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao
name="TaxLocation" cmd="INSERT_OR_ UPDATE|UPDATE"><fld
id="OrganizationId"
val="10"/><fld id="TaxLocationId" val="TL-PT"/><fld id="CreateDate"
val="1525803068553"/><fld id="CreateUserId" val="XADMIN"/><fld
id="UpdateDate"
val="1541542977883"/><fld id="UpdateUserId" val="XADMIN"/><fld
id="OrgCode"
val="*"/><fld id="OrgValue" val="*"/><fld id="Description" val="PT
Tax Location"/><fld id="Name" val="PT Tax Location"/><originDS>Local</
originDS></dao></ConfigData>
INSERT~XML_PERSISTABLES~<ConfigData><dao name="TaxLocation"
cmd="INSERT_OR_
UPDATE|UPDATE"><fld id="OrganizationId" val="10"/><fld
id="TaxLocationId"
val="TL-SE"/><fld id="CreateDate" val="1525803068557"/><fld
id="CreateUserId"
val="XADMIN"/><fld id="UpdateDate" val="1541542977883"/><fld
id="UpdateUserId"
val="XADMIN"/><fld id="OrgCode" val="*"/><fld id="OrgValue" val="*"/

```
><fld
id="Description" val="SE Tax Location"/><fld id="Name" val="SE Tax
Location"/><originDS>Local</originDS></dao></ConfigData>
```

If integrations to Oracle Retail Merchandise Cloud Service have been set up, data will be loaded through OCDS/MFCS. See the *Oracle Retail Xstore Suite/Merchandising Suite Implementation Guide* for more information.

Retail Stores

Stores can be created either through Xadmin UI, upload via REST (.mnt, .xload) or through integrations with OCDS or MFCS. See the *Oracle Retail Xstore Office Cloud Service User Guide* on more information about managing retail stores through Xadmin UI.

Other Foundation Data

Item, Merchandise Hierarchy, and so on can be loaded via the Xadmin UI, file upload via REST (.mnt, .xload files), or through integrations with OCDS or MFCS (these integrations will retrieve the data, create .mnt files and schedule deployments for .mnt files to be processed by data loader at stores).

Report Organizer

Flash Sales reports displayed in the Xadmin UI require the existence of rpt_organizer records. Creation of records in Xcenter's rpt_organizer table are the responsibility of the Retailer.

To populate the rpt_organizer table a mnt file can be created and uploaded to Xstore Office Cloud Service for each organization. See the Oracle Retail Xstore Point of Service Host Interface Guide for details about creating an mnt file with content similar to the following:

```
<Header line_count="5" destination="XCENTER_ONLY" />
INSERT|REPORT_ORGANIZER|FLASH_SALES|SALES|GROSSSALES|10
INSERT|REPORT_ORGANIZER|FLASH_SALES|SALES|NETSALES|20
INSERT|REPORT_ORGANIZER|FLASH_SALES|SALES|RETURNS|30
INSERT|REPORT_ORGANIZER|FLASH_SALES|SALES|DISCOUNTS|40
INSERT|REPORT_ORGANIZER|FLASH_SALES|SALES|TOTALTAX|50
```

Other Data Sets

Other data sets like employees can be loaded either through the Xadmin UI or through the REST API (.mnt, .xload).

Data Loading

Data can be deployed to the Xcenter database (and stores) by using the REST web service to put a file in the "autodeploy" directory. Review the details of the service in the Oracle Retail Xstore Suite Services Guide from the online documentation. For more information about the "autodeploy" feature, see the Oracle Retail Xstore Office Cloud Service User Guide on how to

Automatically Deploy Data Manager Changes and Data Manager Automatic Deployment Time.

Call this service via REST like PUT:

https://<host>:<port>/<tenancy_id>/xcenter/rest/DEFAULT/20/file/autodeploy/1000/mydatafile.mnt

where <tenancy_id> references the prod, stage or dev (or uat) environment.

See the Web Service Access and Usage section for information on how to create an OAuth client and invoke the REST APIs.

User Setup

A Customer Administration User will be created as part of the Xstore Office Cloud Service provisioning process. Before end users can access the Xstore Office Cloud Service application it is necessary to create and provision users. This includes provisioning access to the system, assigning organizations, a role and org nodes to each user to control what functionality will be available to them.

Upload an org hierarchy .mnt file(s) by invoking the File Resource REST API before trying to setup users. Details on the File Resource REST API are in the *Oracle Retail Xstore Suite Services Guide*. Details on the credentials needed for invoking any REST API is in the *Oracle Retail Xstore Office Cloud Service Security Guide*.

Users can be created via the Identity Cloud Service (IDCS) or the Oracle Cloud Infrastructure Identity and Access Management (OCI IAM) UI. Refer to the *Oracle Cloud Administering Oracle Identity Cloud Service Guide* on the steps how to create users via the Identity Cloud Service (IDCS) UI. Refer to the Oracle Cloud Infrastructure Documentation on the steps how to create users.

The ability to add and edit users through the Xadmin UI is no longer available. The users are synchronized from IDCS or OCI (IAM) at a configurable interval. The Xadmin UI still supports the ability to assign locales, organizations, roles and organization nodes to a user (see the *Oracle Retail Xstore Office Cloud Service User Guide*).

User Roles and Security

User roles, role groups, and security configurations in general are administered through the Xadmin User Management UI (see the *Oracle Retail Xstore Office Cloud Services User Guide*).

Setup Integrations

Integrations can be configured through the Xadmin UI.

Refer to the Integrations chapter in this document for more information.

Setup Xstore Registers for Xstore Office Cloud Service

Any Xstore register that communicates with Xstore Office Cloud Service must first be enrolled in IDCS or OCI IAM via Xstore Office Cloud Service. This can be done either via Xadmin On-Premise or Xenvironment. Refer to the *Oracle Retail Xstore Office Cloud Service Security Guide* about the steps to be followed for Cloud Enrollment of Xstore Clients.

System Configuration Considerations

See the *Oracle Retail Xstore Office Cloud User Guide* for a list of properties available for configuration.

To stay within the storage allocation for your cloud service make sure you configure Data Purging intervals accordingly.

4
Customization and Extension Considerations

This chapter describes customization and extension considerations.

Core Application Customization Considerations

Core application code - no customization to the core application code is permitted. No access to the database or data model is permitted.

Data model extensions are allowed. Similar to on-premises installation, extension tables (for example, trn_trans_p) can be used to add additional virtual columns to any base table.

Custom tables can be created by uploading DTX files via the Xadmin UI.

Data Model Customizations are read and applied at runtime without a server restart.

Configurations customizations – no customer specific war is produced. The following portions of the customer overlay are uploaded through the Xadmin UI:

Files to support menu configuration

- MenuConfig.xml
- ActionConfig.xml

File to enable use of additional extension tables (%_p)

- PmTypeMappingConfig.xml

Files to enable use of system configuration

- SysConfig.xml (formerly known as SystemConfig.xml)
- SystemConfigMetadata.properties

Query Definition - The new query type (DTXQL) should be used for all queries customizations in XOCS.

- SQL and DtxQueryHandler queries are deprecated as of 18
- SQL and DtxQueryHandler queries in overlays will not work with XOCS

All customizations are preserved automatically as part of the application upgrade process.

Reporting Customization Considerations

Reports customization is not available in XOCS 18.0 and 18.1.

Customization and Extension Considerations 4-1

Reporting Customization Considerations

Starting with XOCS 19.0 any custom reports are added through the Xadmin UI. The report definitions are preserved automatically as part of the application upgrade process.

Files to support report customization that can be loaded through the Xadmin UI are:

- Query configs (version1/query/*.xml)

- Report configs (version1/report/*.xml)

- Report definitions and layouts (*.xdt and *.rtf)

Consult the *Oracle Retail Xstore Office Cloud Service User Guide* for all customizations capabilities.

5

Integrations

This chapter describes possible integrations with Xstore Office Cloud Service.

Several integrations are possible, especially those sending data from Xstore Office using the broadcaster framework. For more information about broadcasters, see the information on Xstore Office Broadcaster System in the *Oracle Retail Xstore Suite Implementation and Security Guide*.

For cloud, broadcasters can be configured from the Xadmin UI. For more information on how to configure broadcasters, see the Broadcaster Management section in the *Oracle Retail Xstore Office Cloud Service User Guide*.

For information on Integrations configurations, see Integration Management section in the *Oracle Retail Xstore Office Cloud Service User Guide*.

For more information about how to configure web service authentication for Retail Omnichannel products, see the *Omnichannel Web Service Authentication Configuration Guide* (My Oracle Support Doc ID: 2728265.1)

Oracle Retail Customer Engagement (ORCE)

Xstore Office sends information to Oracle Retail Customer Engagement (ORCE formerly Relate) via Broadcaster integration. It uses either ORCE custom authorization or OAuth2. The XOCS client will have to be granted the correct AppRole(s) defined in ORCE.

Xstore Office also uses SFTP to pull files from ORCE. The status is updated to POLL_FILE_STATUS and files extracted into the auto file-transfer directory.

Oracle Retail XBRi Loss Prevention (XBRi)

Xstore Office sends information to Oracle Retail XBRi Loss Prevention (XBRi) via Broadcaster integration. It uses either XBRi custom authorization or OAuth2. The XBRi broadcaster will be configured via the Broadcaster UI.

Oracle Retail Order Broker (OROB)

Xstore Office sends product (ITM_ITEM) and inventory (INV_STOCK_LEDGER_ACCT) data to Oracle Retail Order Broker (OROB) via OROB's REST file service and uses either OAuth 2 or Basic Auth for authentication depending on where the OROB Service is hosted.

Alternatively, Xstore Office can be configured to use SFTP to send to OROB using an SSH public/private key mechanism.

Oracle Retail Order Management (OROMS)

Since 18.0, direct integration to Oracle Retail Order Management System (OROMS) has been removed from Xstore Office. Instead, direct integration to OROMS happens from Xstore directly.

Oracle Retail Merchandising Suite

For more information about the integrations to Oracle Retail Merchandising Suite, refer to the *Oracle Retail Xstore Suite/Merchandising Suite Implementation Guide*.

For more information about the Omnichannel Cloud Data Service, see the next section.

Omnichannel Cloud Data Service (OCDS)

The Omnichannel Cloud Data Service is a repository for the merchandising and pricing data used by Xstore Office Cloud Service.

OCDS receives merchandising and pricing data from the Oracle Retail Merchandising Suite. Data flows from Merchandising to OCDS through Oracle Bulk Data Integration (BDI) and Oracle Retail Integration Bus (RIB) infrastructure technologies.

Merchandising and pricing data in OCDS used by Xstore and Xstore Office Cloud Service includes:

- Merchandise Hierarchy
- Organizational Hierarchy
- Stores
- Item Dimensions
- Items
- Related Items
- Value Added Tax (VAT) rules and item associations
- Initial Prices
- Regular and Clearance Price Changes
- Promotions

Omnichannel applications request data from OCDS by calling RESTful Web Services. Applications can request all data for a data type or only new, deleted, or changed data in OCDS since a point in time. Xstore Office Cloud Service typically call OCDS at regular intervals. For example, a typical request to OCDS from an Xstore Office Cloud Service could be, "What merchandise hierarchy data has changed since yesterday at midnight?".

Merchandising Foundation Cloud Service (MFCS)

The Merchandising Foundation Cloud Service expose similar REST web services as are exposed by OCDS enabling Xstore Office to communicate directly with MFCS without the need of OCDS.

See *Oracle Retail Xstore Suite /Oracle Retail Merchandising Suite Implementation Guide* for details.

Oracle Retail Payment Cloud Service Integration

Support for integration to the Oracle Retail Payment Cloud Service has been added. This allows retailers to load all the store locations into the Oracle Retail Payment Cloud Service to streamline the setup.

Oracle Retail Sales Audit (REST Service)

XOCS transactions are broadcasted to Sales Audit (ReSA) directly though the REST API exposed by Sales Audit (ReSA). The transactions are posted to Sales Audit (ReSA) as JSON payloads. No RTLog generator is required as the middleman.

See the *Oracle Retail Xstore Suite/Oracle Retail Merchandising Suite Implementation Guide* for details.

Oracle Retail Sales Audit (RTLog File)

XOCS transactions are broadcasted to the RTLog generator to convert to flat files in RTLog format for Sales Audit (ReSA) to consume.

RTLog files are either delivered to Sales Audit (ReSA) automatically through FTS or SFTP, or customers can choose to download RTLog files and upload them to Sales Audit (ReSA) themselves.

See the Configuring RTLog Generator section for more details on different delivery options.

See the *Oracle Retail Xstore Suite /Oracle Retail Merchandising Suite Implementation Guide* for details.

Third-Party Integrations

Additional third-party integrations that need retail transaction data from Xcenter can access the Broadcaster REST Service to retrieve POSLogs. See the *Oracle Retail Xstore Suite Services Guide* for details on this service endpoint.

Tax Service Integration Avalara

Avalara is the external tax service for Xstore. Avalara provides tax data in mnt data format. Xstore Office reaches out to this external tax service to fetch data periodically or on-demand.

Additional Services

For more details on additional REST services provided by Xstore Office, see the *Oracle Retail Xstore Suite Services Guide* on ReSTful Web Services.

6
Data Migration

All of the data from the merchant's on-premises Xcenter database (or chosen subsets of it) can be uploaded to the cloud through support via the Xstore Suite. Merchants can use the Data Migration Utility (DMU) packed with 18.0+ Xstore Suite.

For more information on the installation and usage of the Data Migration Utility tool, refer to the *Data Migration Guide* (Paper) on My Oracle Support.

7

Data Extraction

Once the merchant's Xstore Office Cloud Service licence expires, the hosted data can be requested via a service request (SR).

The servicing technician can use Oracle Data Pump to extract the data like in the following example.

expdp dbauser/dbapass@MyCloudDB schemas=XCENTER,XADMIN,XCENTER_REPLICATION directory='/u01/app/oracle/oradata/' dumpfile=xoffice.dmp logfile=expdp-office.log

If the Xcenter application is still running and the data is small enough to download (several GBs), the resulting DMP file can be placed for download in a directory like /u02/app_files/pospoll, which is a directory configured in /usr/local/xcenter-config/xcenter.properties.

The file could then be downloaded like GET:

https://<host>:<port>/<tenancy_id>/xcenter/rest/DEFAULT/20/file/pospolls/EXPDAT01.DMP

where <tenancy_id> references the prod, stage or dev (or uat) environment.

8

Cloud Operations

This chapter deals with cloud operations.

Alerts and Logs

CloudOps personnel assume responsibility for system availability and performance. General system alerts and related procedures are outside the scope of this document.

Systems integrators are responsible for establishing all external tools (that is, heartbeats) intended to monitor performance and connectivity to XOCS web services. Performance and other operational issues must be reported through the standard Oracle ticketing system.

For more information about how to view log files, see the *Oracle Retail Xstore Office Cloud Service User Guide*.

However, every release we add new features to our cloud solution that will offer enhanced visibility either through the UI or through REST API on the status of the cloud operations performed by our customers.

If there are issues with the implementation, those must be reported through the standard Oracle ticketing system so that the Oracle Cloud teams can look at the logs and provide a solution.

Frequently Asked Questions

This section lists frequently asked questions.

Frequently Asked Questions

1. What is the process to report issues with Xstore Office Cloud Service (XOCS)?

    Answer: Issues must be reported through the standard Oracle ticketing system.

2. How do we deploy xadmin.war/xcenter.war changes in the feature?

    Answer: We do not allow changes to the war files. Refer to the Customization and Extension Considerations chapter for customization capabilities.

3. Store register(s) are enrolled in IDCS or OCI IAM for integration with Xstore Office Cloud Services. Are there any other considerations for POSPoll upload and so on?

    Answer: Once a store is enrolled, Xenvironment/Xstore and so on are integrated to communicate with XOCS using OAuth. Pospoll upload will also happen using the same protocol.

4. Any limitation on sending large volume of data via WS? Any recommendations?

    Answer: XOCS REST APIs support chunking - the ability to upload parts of a file at a given time.

5. We can not deploy foundation data through the Xadmin UI, as there is no Store setup as part of initial provisioning process.

    Answer: See Data Seeding and Web Service Access and Usage.

6. How can we configure Xcenter connection in base-xstore.properties for Xstore/Xstore Mobile?

    dtv.datasource.xcenter.Enabled=true

    dtv.datasource.xcenter.Timeout=30000

    dtv.datasource.xcenter.ping.Timeout=1000

    xcenter.db.user=

    xcenter.db.pwd=

    xcenter.protocol=

    xcenter.host=

    xcenter.port=8080

    xcenter.provisioningid=

    idp.connectionURL=

    Answer: No changes are required here. Please enroll this store by following the Xenvironment Store Enrollment steps.

    For more information, see the *Oracle Retail Xstore Office Cloud Service Security Guide*, chapter Cloud Enrollment of Xstore Clients, section Xenvironment:

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

Any necessary properties will be automatically populated after this process is complete.

7. How can we configure a new organization ID in Xcenter? Currently the configured organization ID is 1.

   Answer: For more information, see the Adding Additional Organization IDs section.

8. How can we load data to Xcenter DB if currently there is no Xstore Office on-premises installation (so DMU tool cannot be used)?

   Answer: Using REST APIs and Xadmin UI. Follow these steps:

   a. Create the Setup OAuth Client following these steps:

      For more information, see the Creation of the Setup OAuth Client in IDCS or OCI IAM section in the *Oracle Retail Xstore Office Cloud Service Security Guide*.

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

   b. Setup Xstore Office Cloud Service. For more information, see the Setup Xstore Office Cloud Service chapter in this document.

9. How can we manage XOCS dataloader changes?

   Answer: You can upload updated table schemas via the Customizations UI and load data in those tables via the REST APIs. See the Customization and Extension Considerations chapter in this document.

10. How has Xstore Office Cloud Service been configured (1 app - 1 db?)? Is there any "always on" configuration in order to manage automatic failover?

    Answer: This is managed by the Cloud Service. Cloud services have Active Passive DR support. An identical environment called DR is kept in sync with PROD and on standby. Xstore Office Cloud Service is deployed in a cluster of servers with load balancing.

11. I enrolled the registers for Xstore Office Cloud Service and Windows is restarted, not only the application. Is this correct?

    Answer: Restarting the Xstore during the enrollment is to be expected. The application is trying to sync the config path updates, system properties updates, and database updates (that is IDCS or OCI IAM credentials) across all the registers (non lead registers), xservices and so on within the store.

12. What needs to be added to get IDCS or OCI IAM to sync a user with XOCS?

    Answer: Since XOCS 19.0, the "sync" has been changed to run every 60 mins (by default). The "sync" is a bit of a misnomer, in that it only pulls down updates/additions/deletions made to the users in IDCS or OCI IAM. Once you create the user in IDCS or OCI IAM, also ensure that you "assign" that user the "User Access" AppRole.

    For XOCS 20.x (or higher) environments:

    This would need to be done to the RGBU_XTROFFCS_PRDXX_XOFFICE App OR RGBU_XTROFFCS_STGXX_XOFFICE App OR RGBU_XTROFFCS_DEVXX_XOFFICE (or RGBU_XTROFFCS_UATXX_XOFFICE) App OR RGBU_XTROFFCS_PARXX_XOFFICE (where XX represents an index number) depending on the environment (Prod, Stage or Dev (or Uat) or Par) to which the user is to be given access. In that app, go to the Application Roles tab and Assign the user to the "User Access" AppRole.

For XOCS 19.x environments:

This would need to be done to the RGBU_XTROFFCS_PRD_XOFFICE App OR RGBU_XTROFFCS_UAT_XOFFICE App OR RGBU_XTROFFCS_DEV_XOFFICE depending on the environment (Prod, UAT or Dev). In that app, go to the Application Roles tab and Assign the user to the "User Access" AppRole.

13. We need to extract records from COM_FLIGHT_INFO table from XOCS cloud and I think XOCS provides a way to extract information from table via DTX WS call right? Something like:

    https://<host>:<port>/<tenancy_id>/xcenter/rest/DEFAULT/20/dtx/FlightInformation/<org_id>

    where <tenancy_id> references the prod, stage or dev (or uat) environment.

    Answer: You have to supply the entire primary key to use that syntax. If you want to list all items from the query, you have to run a DTXQL query. The syntax for DTXQL can be found in the Query Configuration chapter in the Oracle Retail Xstore Point of Service Frameworks & Technologies Guide.

    The syntax for running a query can be found in the Oracle Retail Xstore Suite Services Guide in the ReSTful Web Services chapter, section GetByQueryResource.

14. Is it possible to get pospoll.zip via web service?

    Answer: Yes, through the File Resource REST API.

15. Can I use DTXQL against the custom table?

    Answer: Yes – you can use DTXQL for custom tables.

16. I would like to use DTXQL to apply some constraints about query. But I cannot make it work, moreover, I cannot find any answer in documentation/XSD files, that it would be actually possible.

    a. a. Joining twice to properties table.

       I have multiple properties in customer table. I want to use two of them in a query. However there seems to be no way to use <Join> twice with the same table, since framework is not able to distinguish them.

    b. Using NOT IN/NOT EXISTS operator.

       Customer may be assigned to multiple groups (crm_customer_affiliation). I want to select a customer which is NOT assigned to any of given groups (passed as list).

    c. Grouping conditions (nested AND/OR)

       User may specify customer's province. If any is specified, only customers with given province should be found. If parameter is missing, only customers with NO province should be found. In SQL it should be like:

       […] WHERE (argProvince is null AND customer.province is null) OR (argProvince is not null AND argProvince=customer.province)

       Is there any way to manage given scenarios without converting whole query to RAW SQL?

       Answer: Raw SQL is not supported in Xstore Office Cloud Service. The limitations identified have been resolved in 19.0.

17. We are trying to create the "App" account for Xstore using curl. In our documentation it asks for the customer's "Provision ID". They do not seem to have that. The only information they have is Subscription ID. Is this the same?

When running Curl we are getting a 401 error.

Answer: You can use DEFAULT for the provisioning ID.

The user credentials used when creating this app must have an IDCS or OCI IAM Role of "Application Administrator" or "Identity Domain Administrator", so only privileged users can invoke this API.

18. When creating the application user in IDCS or OCI IAM for Xstore to logon to Xstore Office Cloud Service, is there a specific application(s) that need to be assigned to the user?

Answer: For the user to be able to log into Xadmin, these are the steps in the *Oracle Retail Xstore Office Cloud Service Security Guide* in the Security Considerations for Developers chapter, section Creation of Users.

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

In IDCS or OCI IAM:

a. Create the user.

b. In the menu/left frame select Oracle Cloud Services.

   For XOCS 20.x (or higher) environments:

   Look for the RGBU_XTROFFCS_PRDXX_XOFFICE App OR RGBU_XTROFFCS_STGXX_XOFFICE App OR RGBU_XTROFFCS_DEVXX_XOFFICE (or RGBU_XTROFFCS_UATXX_XOFFICE) App OR RGBU_XTROFFCS_PARXX_XOFFICE (where XX represents an index number) depending on Production or Staging or Development (or UAT) or Partner.

   For XOCS 19.x environments:

   Look for the RGBU_XTROFFCS_PRD_XOFFICE App OR RGBU_XTROFFCS_UAT_XOFFICE App OR RGBU_XTROFFCS_DEV_XOFFICE App depending on Production or UAT or Development.

c. In that app go to the Application Roles tab and Assign the user (see link above) to the "User Access" AppRole.

In Xadmin:

a. Since XOCS 19.0, the Xadmin Sync job that syncs users between IDCS or OCI IAM and Xadmin has been changed to run every 60 mins (by default).

b. Once the Sync has finished, the Admin user, goes to the User Management screen in Xadmin where the "synced" user will show up. Click on that User and grant a Role/Org Hierarchy/Org Id and so on.

c. Once this is done, the new user can log in.

19. When configuring Xstore to speak to Xcenter we have enrolled the register. Do we need to populate the user and password in the Xstore DatasourceConfig.xml or will that be set during enrollment?

Answer: When you enroll Xstore via Xenvironment, an OAuth Client is created and details returned to Xenvironment. Once Xenvironment reboots, it and other Xstore registers all use that same set of credentials to communicate with Xcenter using REST APIs. No additional configuration (other than Store Enrollment) is required.

20. After dropping a file to be autodeployed, how would we know how many records were successfully processed by the dataloader?

Answer: The logs that are generated by dataloader (summary.ini, sucess.dat, failures.dat and dataloader.log) for each dropped file are available to be downloaded through the File REST API.

Example: https://<host>:<port>/<tenancy_id>/xcenter/rest/DEFAULT/20/file/autodeploy/{org}/archive/{folder_with_dropped_file_name}/dataloaderLogs

where <tenancy_id> references the prod, stage or dev (or uat) environment.

The above URL lists all the log files that are available for the processed file.

Example to download a particular log file:

https://<host>:<port>/<tenancy_id>/xcenter/rest/DEFAULT/20/file/autodeploy/{org}/archive/{folder_with_dropped_file_name}/dataloaderLogs/summary.ini

where <tenancy_id> references the prod, stage or dev (or uat) environment.

> **Note:**
>
> See the *Oracle Retail Xstore Point of Service Host Interface Guide* for more information about the DataLoader and the logs that are generated. See the *Oracle Retail Xstore Suite Services Guide* for more information on the File REST API's.