

Oracle® Retail Demand Forecasting Cloud Service

Administration Guide

Release 22.2.401.0

F71317-01

November 2022

F71317-01

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

Primary Author: Melissa Artley

Contributing Author: Venkatachalam Thiyagarajan, James Mork

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 is software or related documentation that 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 about 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.

Value-Added Reseller (VAR) Language

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	vii
Preface	ix
Audience	ix
Documentation Accessibility	ix
Related Documents	ix
Improved Process for Oracle Retail Documentation Corrections	x
Oracle Retail Documentation on the Oracle Help Center (docs.oracle.com)	x
Conventions	x
Administration Process	xi
Oracle Support	xii
1 RDF CS Batch Task Administration	
Application-Specific Batch Tasks	1-1
Run Batch Measure Load Group	1-2
Run Batch Calc Group	1-2
Run Batch Task Group	1-2
Scheduling Configured Batch Administration Tasks	1-3
Dashboard	1-8
Retail Home	1-14
2 Build/Patch Application	
Self Service - Building the RDF Cloud Service Environment from the Bootstrap Environment	2-1
Bootstrap Environment	2-1
Installation from the Bootstrap Environment	2-1
Self Service - Patching the RDF Cloud Service Application	2-4
Template Status	2-8
3 User and Role Maintenance	
User Maintenance through OCI IAM	3-2
OCI IAM User Creation	3-2
Adding a User Group	3-3

Managing Users in OCI IAM..... 3-4

Send Us Your Comments

Oracle Retail Demand Forecasting Cloud Service Administration Guide, 22.2.401.0

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 Technology Network 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

This document describes the administration tasks for Oracle Retail Demand Forecasting Cloud Service.

Audience

This document is intended for administrators.

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 Demand Forecasting Cloud Service 22.2.401.0 documentation set:

- *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*
- *Oracle Retail Demand Forecasting Cloud Service Release Notes*
- *Oracle Retail Demand Forecasting Cloud Service Starter Kit Guide*
- *Oracle Retail Demand Forecasting Cloud Service User Guide*

Also, see these guides:

- Oracle Retail Predictive Application Server Cloud Edition documentation
- *Oracle Retail Science Cloud Services Administration Guide*
- *Oracle Retail Analytics Platform Administration Guide*

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 Technology Network Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.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 (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 are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them 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.
<i>italic</i>	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.

Administration Process

The intent of this document is to guide an RDF Cloud Service (RDF CS) Administrator to perform the recurring administrative activities for the RDF CS application. This document outlines all administration activities required to support a live RDF CS application. In some cases, the detail will be explained in this document, and in other cases, the process will be covered here and details will be explained in the *Oracle Retail Predictive Application Server Cloud Edition Administration Guide*.

The RDF CS Administrative activities can broadly be classified into two categories. This document follows these categories and provide details for the tasks within them.

Regular Activities:

- RDF CS Batch Task Administration
- Patch/Install Domain

Ad-hoc Activities:

- User And Role Maintenance
- Monitor Domain Performance

Regular Activities

Once an RDF CS solution is live, the Administrator is responsible for two key activities that occur on a regular basis. The first of these activities is managing the weekly/daily batch which loads and exports data required for the RDF CS users to manage and share their forecast. Internally, it also does the calculations for necessary data aggregation.

The RDF CS Admin task offers a broad range of options to the Administrator to configure the batch run and maintenance. This document also provides a concise view to the Administrator on troubleshooting when the batch fails or diagnosing rejected records, importing/exporting of data files, reading logs, and modifying the scheduled batch to work around system maintenance or patch periods. The Administrator can also decide to run the export of data exclusively without running a weekly/daily batch.

Patch uptake is another recurring task that an Administrator needs to be familiar with. This document walks through the process of taking a monthly patch and the specifics the Administrator needs to take care of.

Ad-hoc Activities

The Administrator generally comes across certain jobs on an as-needed basis. For example, the need occasionally arises to do the following:

- Add a new user who just joined the team/organization and needs to use the RDF CS application.
- Remove an existing user who has left the organization and needs to be removed from the RDF CS environment.
- Manage a user's access when the role changes within the organization.

This document describes the necessary actions to fulfill this kind of request.

The Administrator can leverage the standard Online Administration Tools (OAT) tasks on an ad-hoc basis without scheduling the task daily or weekly. Ad-hoc administrative activities include properly managing the reclassification of product so that forecast analysts can continue their work without interruption, monitoring domain related information to maintain system performance, loading a hierarchy* from OAT, and so on, are several jobs the Administrator needs to perform intermittently.

*Currently, Hierarchy is also referred to as Dimension for the RDF CS application.

Oracle Support

It is requested that all retailers submit Oracle Retail RDF Cloud Service support requests through a single point-of-contact for each environment; the system administrator is usually designated to perform this role. For the maintenance of bulk user and roles, Oracle Support is a smart solution.

The link to use when submitting Service Requests (SR) is:

<https://support.oracle.com>

To learn more about how Oracle Support works, go through the following training at the My Oracle Support website:

- My Oracle Support (MOS) or Cloud Support Portal for New Users - A Getting Started Resource Center (Doc ID 1959163.1)
- How-to use My Oracle Support - Customer User Administrator (CUA) Role and Responsibilities (Doc ID 1544004.2)
- Oracle Support Accreditation - Series Index (Doc ID 1583898.1)

RDF CS Batch Task Administration

The Oracle Retail Demand Forecasting Cloud Service (RDF CS) batch task is a powerful tool provided to the Administrator to manage periodic load/export of Data/Hierarchy from the front end.

RDF Cloud Service uses the Oracle Retail Predictive Application Server Cloud Edition (RPAS CE) Online Administration Tools as part of scheduling RPAS utilities and scripts that must be scheduled to run batch on Cloud, as the users do not have access to directly schedule scripts or run utilities on the domain server. Administrative users can view the results of the scheduled services in the log on a dashboard through the RPAS CE front end.

RPAS CE Online Administration Tools support the scheduling of standard RPAS utilities and, in addition, scheduling application-specific services. For a more detailed understanding of the Online Administration Tools and standard administration tasks, see the *Oracle Retail Predictive Application Server Cloud Edition Administration Guide*.

The Oracle Retail Job Orchestration and Scheduler (JOS) and Process Orchestration and Monitoring (POM) are used to schedule pre-configured jobs from RDF CS. Any jobs scheduled using JOS/POM from planning applications, in turn will only schedule the jobs as an OAT task which can also be monitored using OAT dashboards like any other tasks scheduled directly within the application.

The following sections explain the application-specific administration tasks that are pre-configured for RDF CS. Customers can also customize the tasks by changing the control files as part of the Extensibility framework. For allowed changes, refer to the *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*.

Application-Specific Batch Tasks

The application-specific batch tasks are a set of tasks which help the Administrator to load/export a predefined set of measures and hierarchies. These tasks are found in the Online Administration Tools as Configured Batch Tasks.

Each task in turn calls predefined batch services to do the required tasks. RDF Cloud Service uses the batch framework to define the batch process.

Some tasks require input data files or hierarchy files as input. These files must be uploaded before the tasks are scheduled. Some tasks export files out of the application. Those files are copied to the Object Store, and Administrators can download these exported files.

For more details about how to upload files to Object Storage and file name convention used for different type of files, see the *Oracle Retail Predictive Application Server Cloud Edition Implementation Guide*.

The following list shows the application-specific administration tasks that are pre-configured for RDF Cloud Service under Configured Batch Tasks:

- [Run Batch Measure Load Group](#)
- [Run Batch Calc Group](#)
- [Run Batch Task Group](#)

These batch tasks are explained in detail in subsequent sections. There are some additional tasks available under Configured Batch Tasks which are generic RPAS-specific tasks. Details about the RPAS-specific tasks can be found in the Batch Administration section in the *Oracle Retail Predictive Application Server Cloud Edition Administration Guide*.

Run Batch Measure Load Group

Use this task to load a predefined set of measures grouped as a measure set in the batch control file `batch_loadmeas_list.txt`. The predefined measure load option, **load_weekly**, is a named set of load measures in the batch control file. If the Administrator decides to load the measure set for **load_weekly**, the Administrator needs to load data for measures which includes measures such as regular sales, promotional sales and clearance sales. All required data files must be uploaded to the ObjectStore location before scheduling this task. If there is no file present to load a particular measure in that measure set, it will be logged as not found and skipped.

This process will only load the data into those measures and will not run any subsequent calculations after it. The Administrator may need to schedule the necessary Run Batch Calc Group task after scheduling this task in order to process the loaded data.

The Predefined Measure Load Options in RDF CS are:

- **Load New Item Facts** - Load attribute weights, forecast start override, and new item rate of sales for new items.

For details about the list of measure files, file format, and source information, see the *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*.

The retailer can customize this task to load different sets of measures by customizing the batch control files. For information about customizing/extensibility of the batch control files and how to upload them, see the *Oracle Retail Demand Forecasting Cloud Service Implementation Guide*.

Run Batch Calc Group

Use this task to run a predefined set of batch rules (as batch calc sets) on the data as defined in the batch control file `batch_calc_list.txt`.

The following predefined batch calculation sets are available in RDF CS:

- **Data Synchronization after Data Loading** – Calculate facts based on loaded data.

Run Batch Task Group

Use this task to schedule a predefined set of batch tasks such as load measure, batch calc, and batch exports in a sequential order. The batch control file `batch_exec_list.txt` defines the steps in the specific order that will be executed during batch task execution. This task is used to schedule a typical weekly (or daily) RDF Cloud Service batch. The customer may need to use this only if they are not using JOS/POM to

schedule their batch jobs. If they use the JOS/POM to schedule the daily or weekly batch jobs, they in turn call this pre-configured batch task.

If any task aborts, a log is created and the process terminates. This task has the option to restart from the last failed service rather than running all the completed services again.

Note: Typically, the Administrator must schedule this task within a time frame after a domain backup and when no users are logged into the domain because this task runs in domain exclusive mode. The Administrator must work with Oracle to find out the time of backups and any other jobs.

The following predefined batch sets are available:

- **Export Approved Forecast** – Export the approved forecast to RDX.
- **Export Forecast Parameters** – Export forecast parameters to RDX.
- **Import Facts** – Import facts from RDX.
- **Import Flexible Grouping** – Import flexible groups from RDX.
- **Import Forecast and Preprocess Components** – Import forecast components and preprocess components from RDX.
- **Import Hierarchies** – Import standard hierarchies from RDX.
- **Load Facts** – Load facts from ObjectStore.
- **Load Hierarchies** – Load hierarchies from ObjectStore.
- **Post Build** – Batch run directly after building the application for the first time.
- **Post Forecast Batch** – After importing forecast and preprocess components, calculate alerts and approve forecasts.
- **Pre-Forecast Batch** – Prepare forecast parameters for export to RDX.

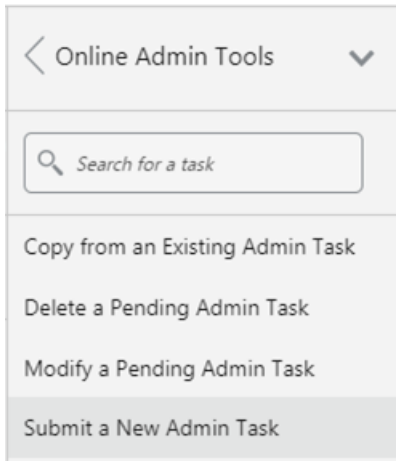
Scheduling Configured Batch Administration Tasks

This section walks through an example of the process for scheduling and monitoring the Configured Batch Administration task in the Run Batch Task Group. The steps for scheduling all other tasks are similar, and most of the tasks do not have additional input parameters specific to that task. For more details about scheduling and monitoring Online Administration Tools tasks, see the *Oracle Retail Predictive Application Server Cloud Edition Administration Guide*.

To schedule and monitor a Configured Batch Administration task:

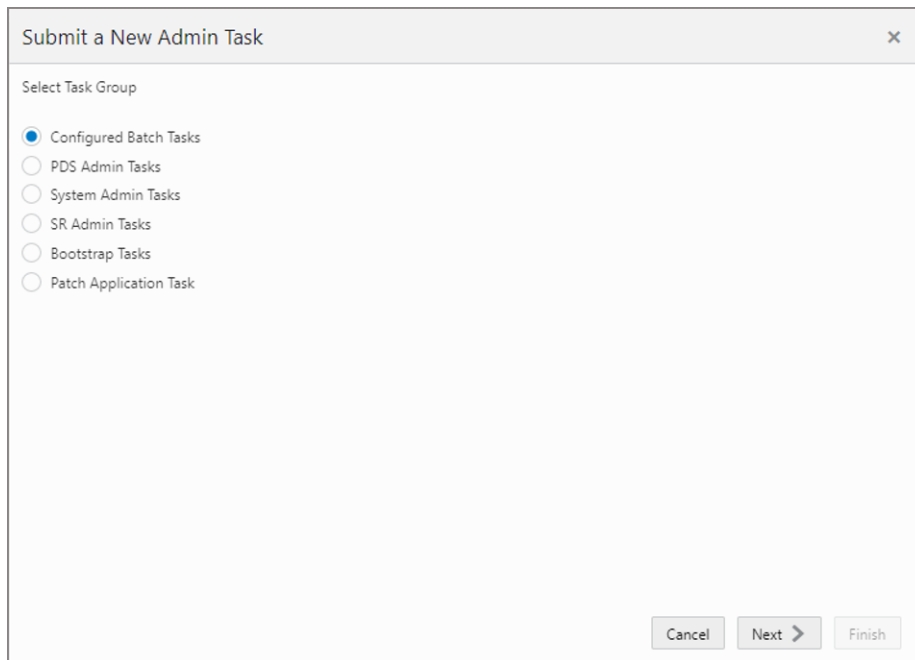
1. Log in to the RDF CS application as an Administration user.
2. In the Tasks list, select **Admin Tasks for RDF CS Customer Domain** and then **Online Admin Tools**. Click **Submit a New Admin Task**.

Figure 1–1 Administration Tasks



3. Select **Configured Batch Tasks** and click **Next**.

Figure 1–2 Select Task Group



4. In the task list, select **Run Batch Task Group** and click **Next**.

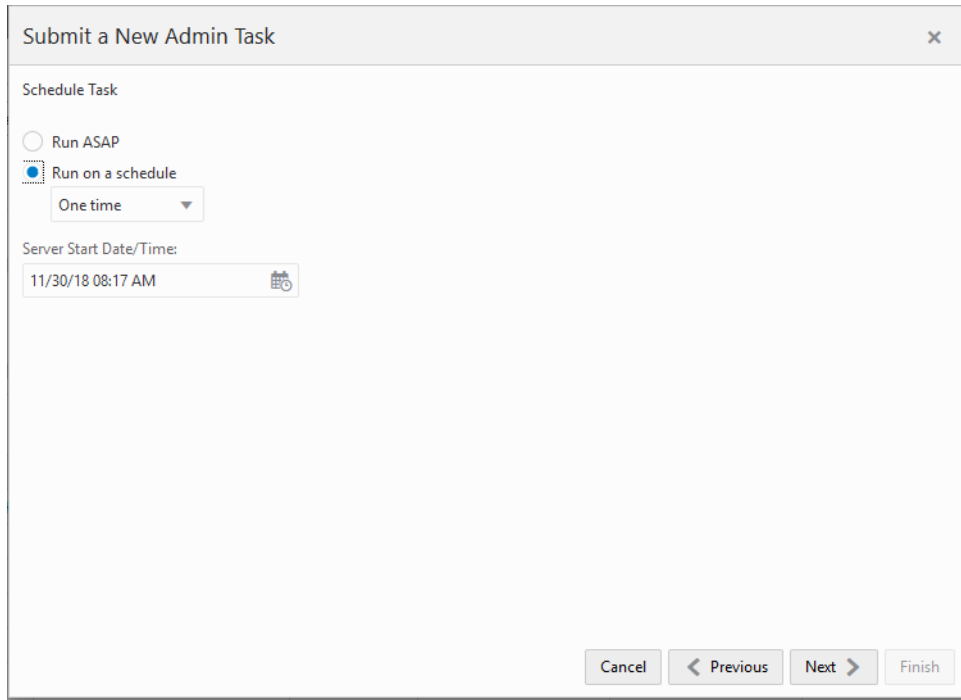
Figure 1–3 Select Task Workbook Wizard Window

5. Enter the Task Label. This task has an additional parameter to choose the *Batch Task Group* to be run. In [Figure 1–4](#), as an example, *Export Approved Forecast* is selected. Click **Next**.

Figure 1–4 Export Approved Forecast

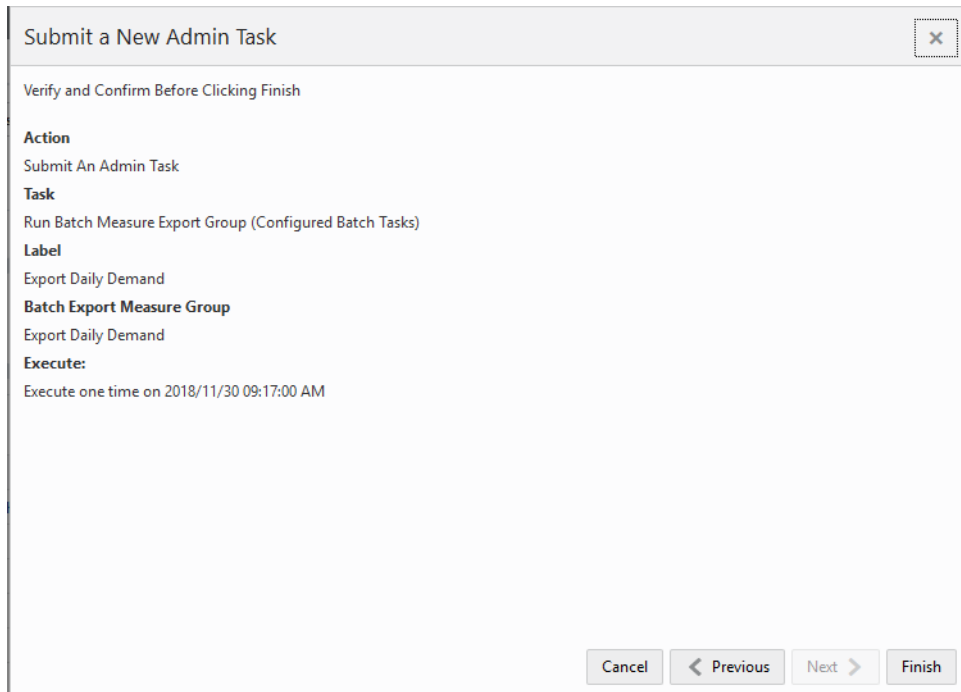
6. To schedule the task to run immediately, select **Run ASAP** and click **Next**. To run on a particular date and time, select **Run on a schedule** (One time, Hourly, Daily, Weekly, or Monthly). Provide the Server Start and Stop Date/Time and click **Next**.

Figure 1–5 Schedule Task Workbook Wizard Window

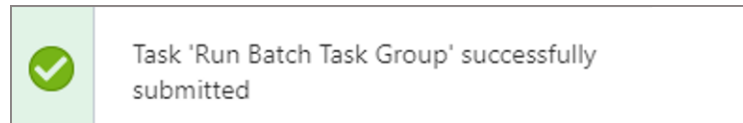


7. In the Confirm Action window, review the task scheduling details. To confirm the scheduling and submit the task, click **Finish**.

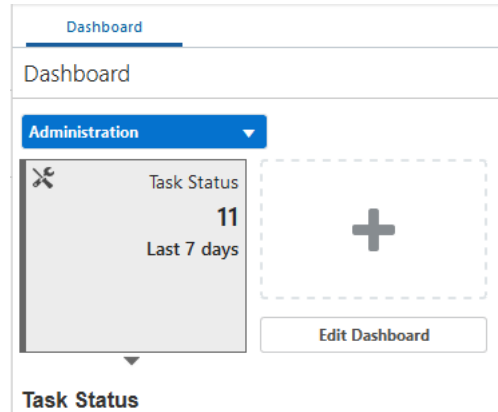
Figure 1–6 Confirm Action Window



The task submitted confirmation message appears.

Figure 1–7 Task Submitted Confirmation Message

- To check the status of all submitted tasks in the Dashboard, click **Dashboard** and select **Administration** from the list of Dashboard Profiles in the drop-down list.

Figure 1–8 Location of Administration Dashboard Selection

At the bottom of the dashboard, it contains the lists of tasks submitted and their status.

Figure 1–9 List of Submitted Tasks

Description	Status	Task Type	Submitted by	Started/Scheduled	Completed	Record Status
Run Daily Batch	In Progress	Run Batch Task Group	ocladrin	7/14/20 4:22:24 PM		---
Run Batch Task Group	Success	Run Batch Task Group	ocladrin	7/14/20 4:14:06 PM	7/14/20 4:20:47 PM	NA
Dashboard for ocladmin	Success	Auto dashboard build	ocladrin	7/14/20 10:23:05 AM	7/14/20 10:24:32 AM	NA

The Status column shows whether a job has completed successfully, failed, or is pending (Scheduled). For any completed (Success/Failed) tasks, click the job name to view the subtask details if any for that job. To view the log, select the task and click **Download Log**. For failed tasks, the logs show the error details

Following is an example of a log showing the cause of an error:

```
<E 2018Apr23 03:13:14.426> loadHier (clnd) failed on domain: mfprcs
<E 2018Apr23 03:13:14.426> ReindexDomain must be run first to prepend CLND Dimensions.
<E 2018Apr23 03:13:14.426> Syntax: reindexDomain -d <domainPath> -hier CLND -prepend
<E 2018Apr23 03:13:14.426> LoadHier must be run again after reindexing the domain.
```

Note: The detailed log file is also uploaded to Object Store so it is available for customers to download. The log file names are first appended with `planning/outgoing/logs/` and with the text `success/failure` (with error code) along with the process name and control file entry set names and the time stamp for easy identification.

For example:

`/planning/outgoing/logs/success.eebatch_calc.exp_set.20190614124917.tar.gz`

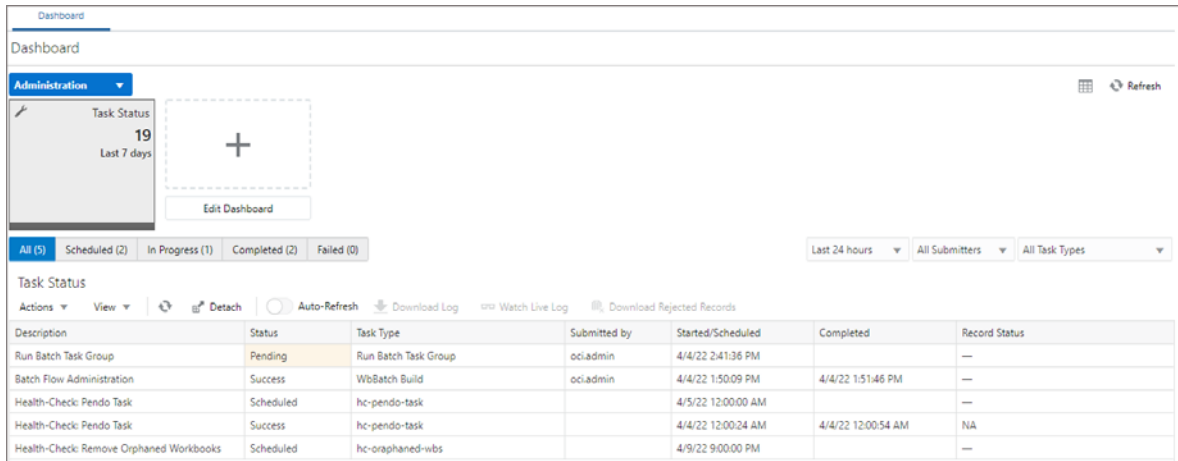
`/planning/outgoing/logs/failure.13.eebatch_exec.setup.20190614043009.tar.gz`

Dashboard

The Dashboard provides pre-configured dashboard profiles to the user once logged into the application. There are five profiles pre-configured for RDF CS:

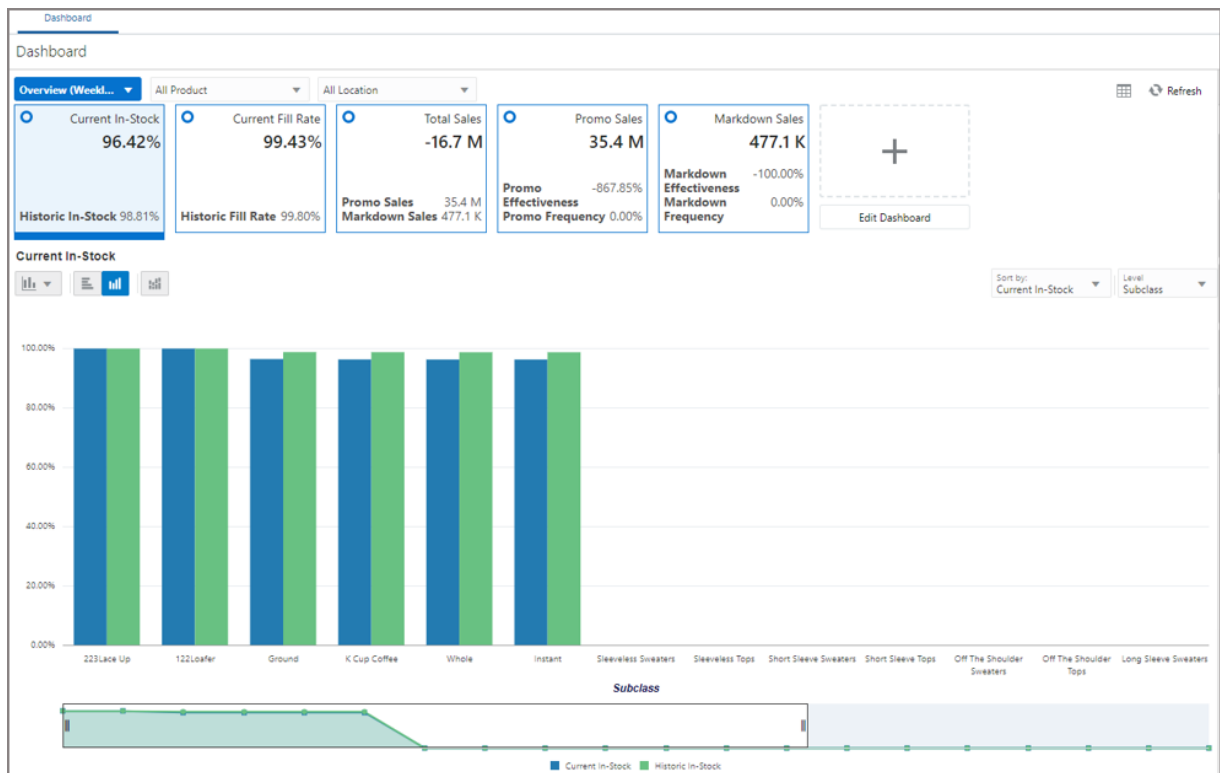
1. Administration (task status)

Figure 1–10 Dashboard - Administration



2. Overview (one per final level)

Figure 1-11 Dashboard - Overview



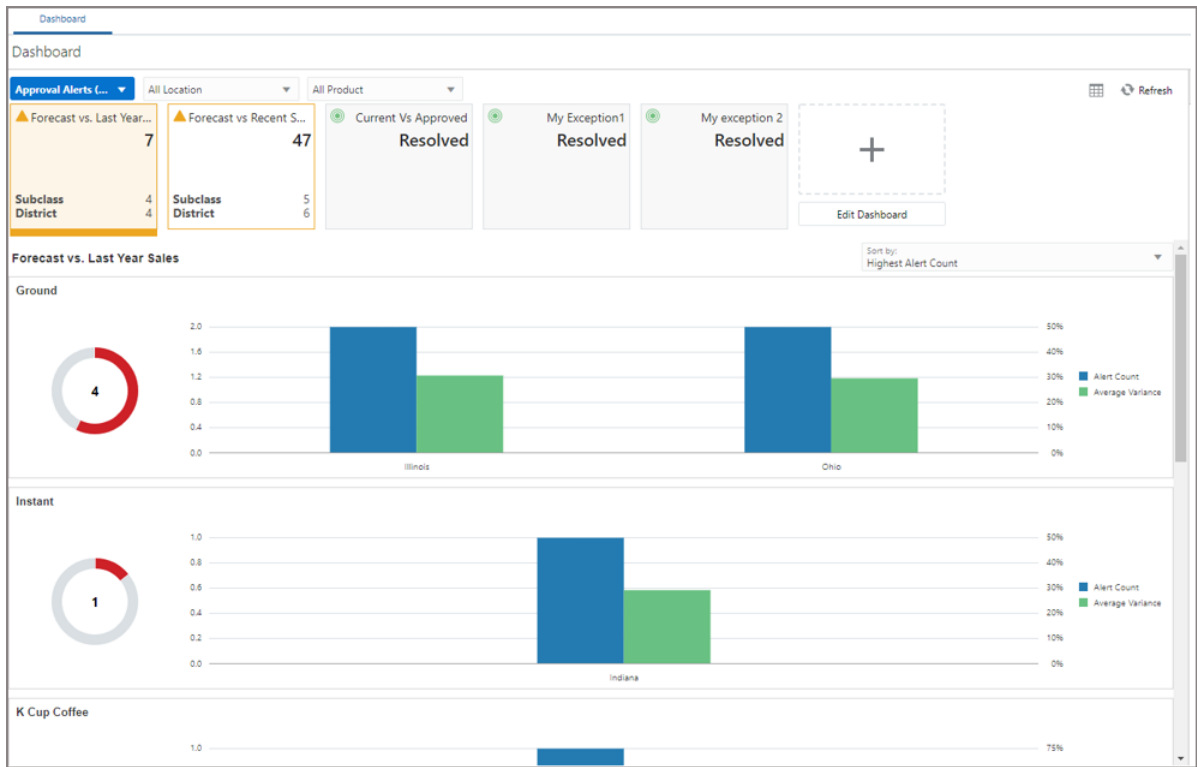
3. Scorecard (one per final level)

Figure 1-12 Dashboard -Scorecard



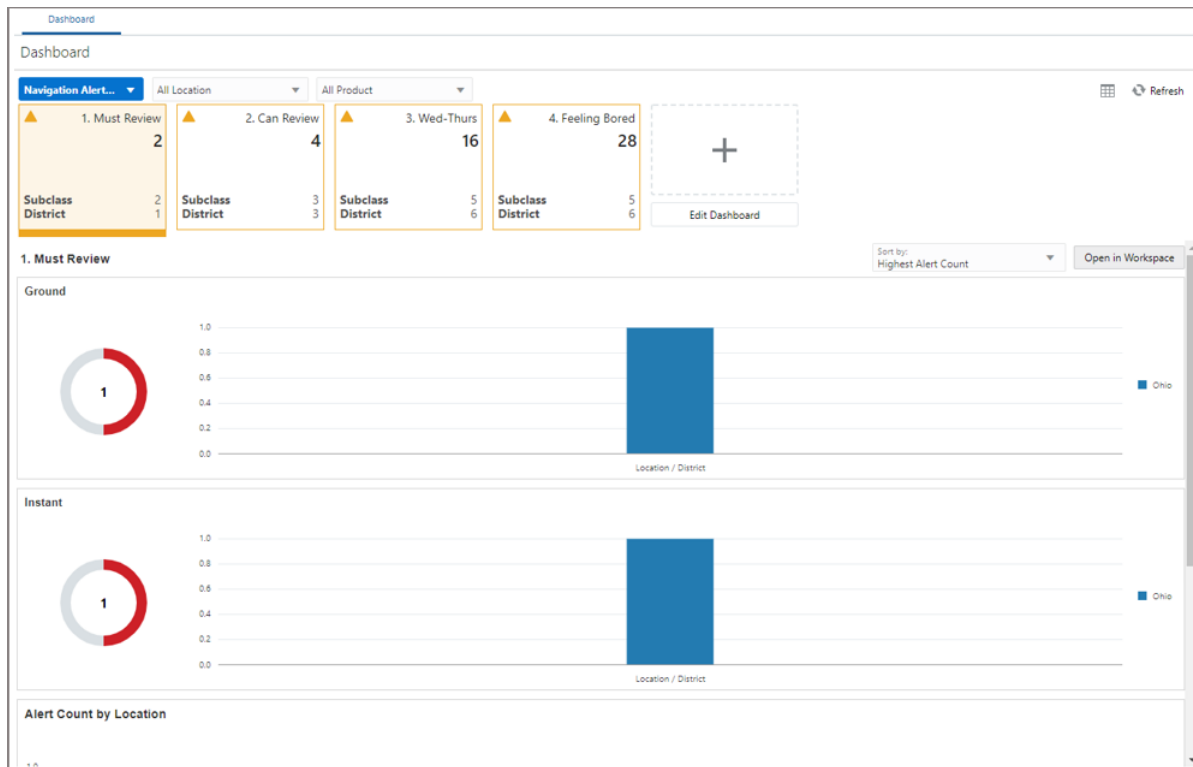
4. Approval Alerts (one per final level)

Figure 1-13 Dashboard - Approval Alerts

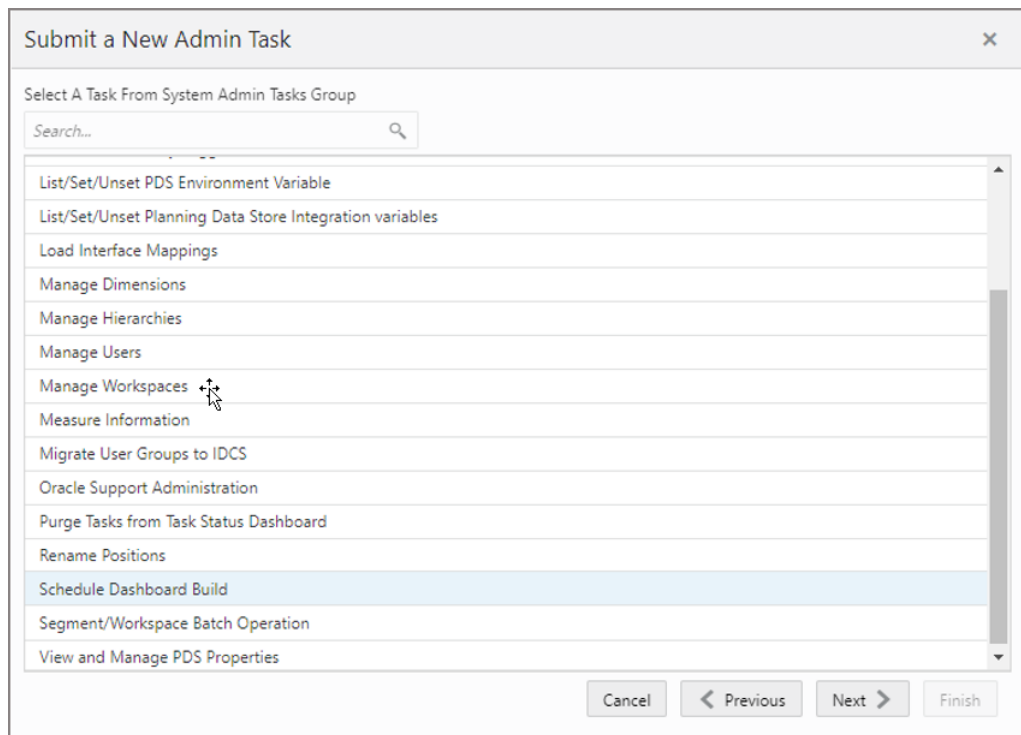


5. Navigation Alerts (one per final level)

Figure 1–14 Dashboard - Navigation Alerts



The dashboard pulls the data from an admin workbook built from the Online Administration Tool. In order to view the dashboard, an Administrator must schedule the dashboard build from the System Admin Tasks.

Figure 1–15 Schedule Dashboard Task**Figure 1–16 Specify Arguments for Schedule Dashboard Workbooks Task**

- Task Label – Enter the name of the build task to review the status of build.
- RPAS_TODAY – Optional if we need to build dashboard as of some other day other than the current date.

- Range dimension – Calendar dimension against which the dashboard will be pre-ranged.
- Pre-Season Range – Number of periods of Range dimension that needs to be included before RPAS_TODAY.
- Post-Season Range – Number of periods of Range dimension that needs to be included after RPAS_TODAY.
- Users – Select All Users or User Groups who can access that dashboard.

Note: For RDF, all of the dashboard profiles are calendar-independent so Range Dimension, Pre-Season Range, and Post-Season Range are not relevant and the defaults can be used.

Retail Home

If Retail Home is configured, it provides a dashboard view of key configured metrics as tiles across multiple applications in the enterprise. RDF CS has the following tile states configured for Retail Home. These metrics are configured on the same dashboard templates. Hence, the regular dashboard segment needs to be built first, in order to see the Retail Home tiles. Retail Home uses a different set of JSON files to get the data from the dashboard segments into these tiles.

RDF CS has the following three tile states configured:

- [Current versus Historic In-Stock](#)
- [Sales versus Promotions](#)
- [Mean Absolute Percent Error](#)

Current versus Historic In-Stock

Metrics displayed in this tile state:

- Current In-Stock
- Historic In-Stock

Figure 1–17 *Current versus Historic In-Stock Tile State*



Sales versus Promotions

Metrics displayed in this tile state:

- Total Sales
- Promo Sales
- Markdown Sales

Figure 1–18 Sales versus Promotions Tile State



Mean Absolute Percent Error

Metrics displayed in this tile state:

- Mean Absolute Percent Error
- Mean Absolute Percent Error (System)

Figure 1–19 Mean Absolute Percent Error Tile State



Build/Patch Application

This chapter describes the process to build or patch an application including:

- [Self Service - Building the RDF Cloud Service Environment from the Bootstrap Environment](#)
- [Self Service - Patching the RDF Cloud Service Application](#)
- [Template Status](#)

Self Service - Building the RDF Cloud Service Environment from the Bootstrap Environment

This section describes the process of building RDF Cloud Service from the bootstrap environment with retailer data and generated configuration for the plug-in options. Once RPAS CE and RDF Cloud Service are installed in the Oracle Cloud environment, the Administrator will have the option to overwrite and build with GA data or with retailer data. The Administrator also has the option to generate the configuration for different plug-in options.

Bootstrap Environment

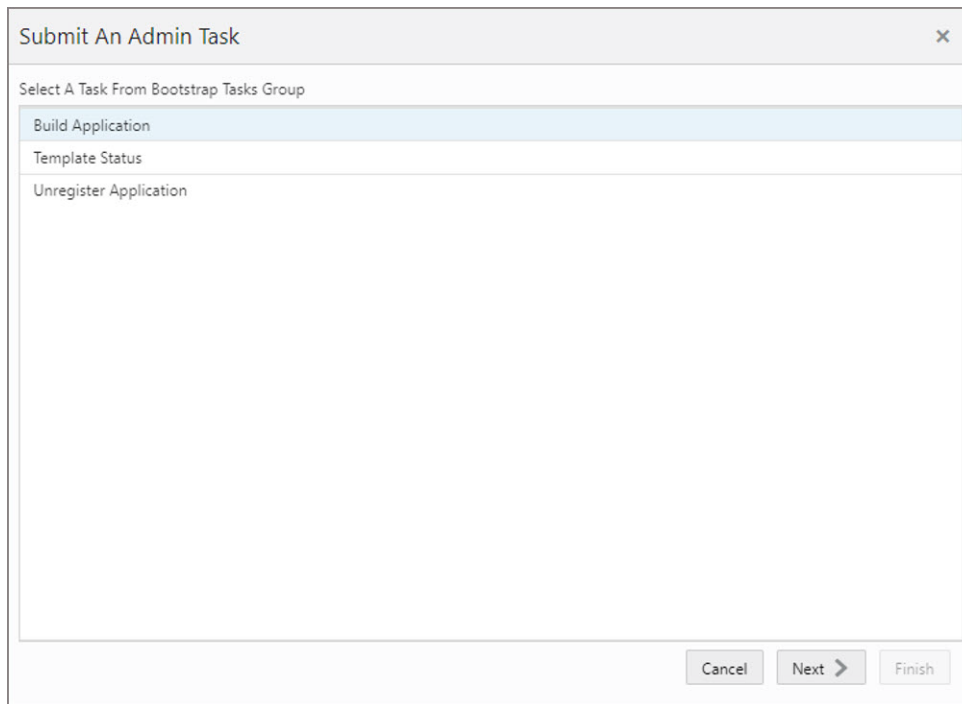
A newly provisioned RDF CS environment is set up with a bootstrap configuration that allows the Administrator to log in and access the Online Administration Tools (OAT) interface before the application has been built. The bootstrap OAT configuration allows only tasks required to construct an application. Once the application has been constructed, the application tasks and the bootstrap activities both will be available. This allows the application to be rebuilt from scratch multiple times if needed.

Installation from the Bootstrap Environment

The following steps take you through the process of building a customer application for RDF Cloud Service using the bootstrap environment:

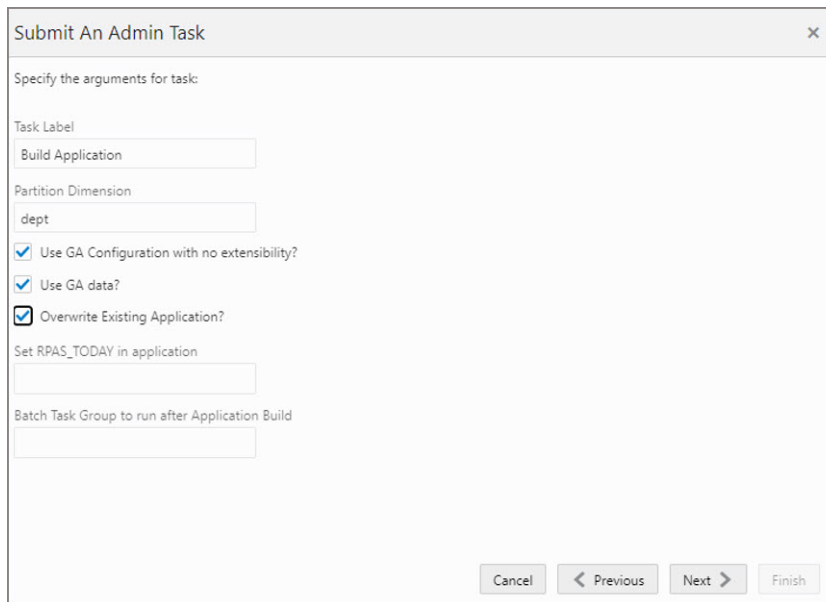
1. After installing RDF Cloud Service, log in to the bootstrap environment as an Administration user.
2. In the Tasks list, select **Administration** and then **Online Admin Tools**. Click **Submit a New Admin Task**.
3. Select the **Build Application** task and click **Next**.

Figure 2–1 Select Build RDF Cloud Service Application Task



4. Set the arguments for the task:

Figure 2–2 Select Build Application Task Arguments



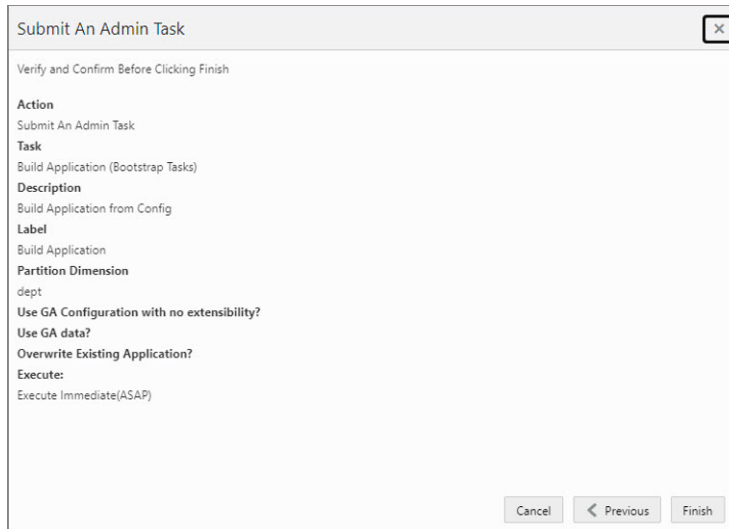
- a. Enter the Task Label.
- b. Partition Dimension is defaulted to dept dimension in for RDF CS. The application is internally partitioned based on this dimension to allow parallel processing of data in the batch.
- c. Select the **Use GA Configuration with no extensibility** check box, only if you need to deploy the pure template configuration without any changes,

otherwise clear this box and upload the new configuration to the **Object Store**. If no configuration is found in **Object Store**, the deploy job will fail.

- d. Select the **Use GA data** option only if the customer wants to deploy the application using the GA data set readily available for the application. If the customer wants to deploy and use their own data set, upload the files to **Object Store**.
 - e. If the application was already created and needs to be overwritten, select the **Overwrite Existing Application** option; otherwise, do not select this option. Selecting this option will drop the existing application and all associated meta data stored, so it will also lose connection to the environment. The customer will need to log out and log in again to view the status of the deploy.
 - f. `RPAS_TODAY` is an optional parameter. It is needed only if the customer is planning to use the GA data set. For RDF GA data, the preferred `RPAS_TODAY` date is **20190331**.
 - g. Select the **Batch Task Group** to run after the Application Build. This is an optional parameter with the default value of `post_build`.
Application Deploy without any batch will not load any hierarchy or data into the application, so the customer may need to run tasks to load hierarchy and data after domain build if they are not providing any task to run during the Application Build.
 - h. After choosing all the necessary options, click **Next**.
5. Select the time to schedule the task and click **Next**. Click **Run ASAP** if the Administrator wants to run the task now or the task can be scheduled by selecting the **Run on a Schedule** option.

Figure 2–3 Schedule Task

6. Review the selections and click **Finish**.

Figure 2–4 Verify and Confirm Selections

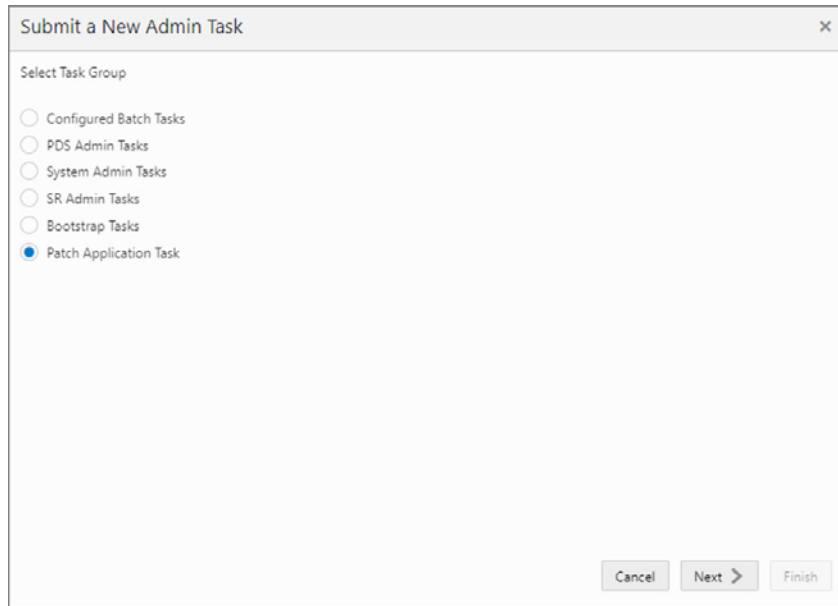
7. After submitting, review the status of that task in the dashboard similar to any other standard administration tasks.
8. After the task is successfully completed, log out and then log in for changes to the task flow to appear.

Self Service - Patching the RDF Cloud Service Application

This section describes the process of patching the RDF Cloud Service application using the Online Administration Tools. Once the RPAS CE and RDF Cloud Service upgrade patches are installed in the Oracle Cloud environment, the RDF CS application will be patched by default with the latest configuration with the last used plug-in options. However, if the customer wants to reapply the patch with changes to the plug-in options, or with extensibility changes, the customer can use this task. Before scheduling this task, the Administrator should ensure that no users are logged in to the application while patching the solution.

The following steps walk you through the process to patch the RDF Cloud Service application as an Administration user:

1. After installing RDF Cloud Service, log in to the application as an Administration user.
2. In the Tasks list, select **Administration** and then **Online Admin Tools**. Click **Submit a New Admin Task**.
3. Select **Patch Application Task** and then click **Next**.

Figure 2-5 Select Patch Application Task

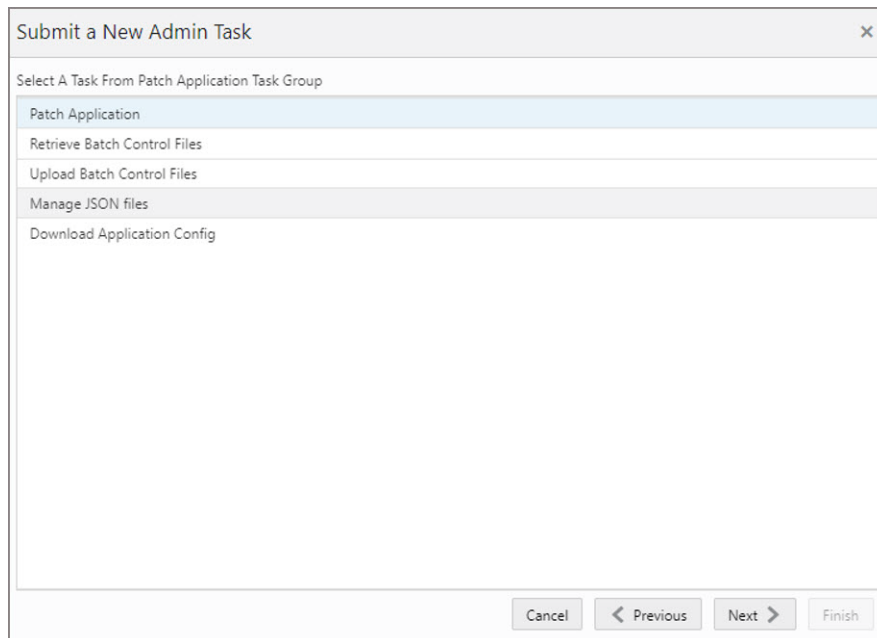
Submit a New Admin Task

Select Task Group

- Configured Batch Tasks
- PDS Admin Tasks
- System Admin Tasks
- SR Admin Tasks
- Bootstrap Tasks
- Patch Application Task

Cancel Next > Finish

4. Select **Patch Application** and set the arguments for the task:

Figure 2-6 Select Patch Application Arguments

Submit a New Admin Task

Select A Task From Patch Application Task Group

Patch Application
Retrieve Batch Control Files
Upload Batch Control Files
Manage JSON files
Download Application Config

Cancel < Previous Next > Finish

Figure 2-7 Select Patch RDF Cloud Service Domain Task Arguments

Submit a New Admin Task

Specify the arguments for task:

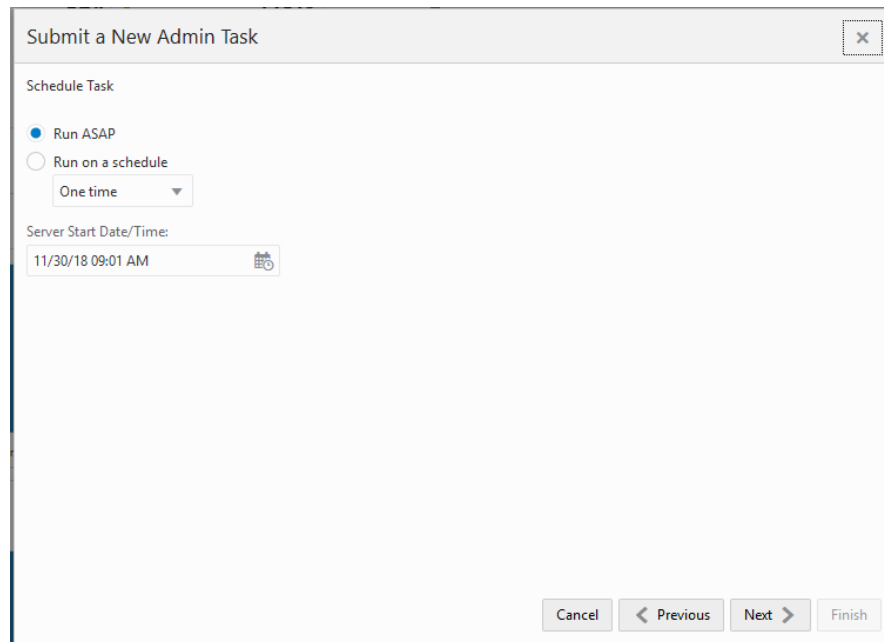
Task Label
Patch Application

Offline Mode Message

Log level

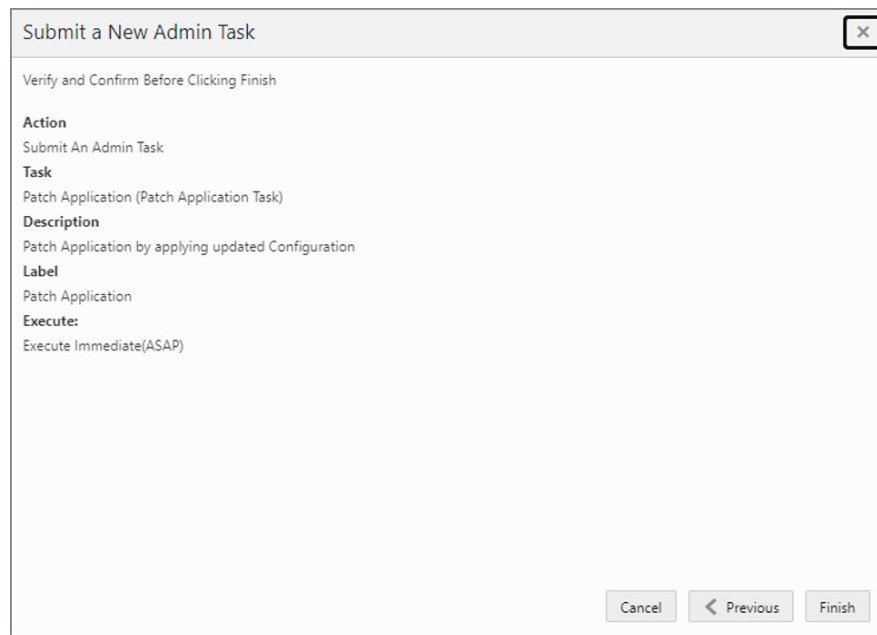
Cancel < Previous Next > Finish

- a. Enter the Task Label.
- b. Enter the Offline Mode Message.
- c. If patching with an updated customer configuration, ensure that the customer configuration has been previously uploaded to the Object Store
- d. After choosing all the necessary options, click **Next**.
5. Select the time to schedule the task and click **Next**. Click **Run ASAP** if the administrator wants to run the task now or the task can be scheduled by selecting the **Run on a Schedule** option.

Figure 2–8 Schedule Task

The screenshot shows a dialog box titled "Submit a New Admin Task". Under the heading "Schedule Task", there are two radio button options: "Run ASAP" (which is selected) and "Run on a schedule". Below the "Run on a schedule" option is a dropdown menu currently set to "One time". Under the heading "Server Start Date/Time:", there is a text input field containing "11/30/18 09:01 AM" and a calendar icon to its right. At the bottom right of the dialog, there are four buttons: "Cancel", "< Previous", "Next >", and "Finish".

6. Review the selections and click **Finish**.

Figure 2–9 Verify and Confirm Selections

The screenshot shows the same dialog box, but now it is in a confirmation state. The title is "Submit a New Admin Task". Below the title, it says "Verify and Confirm Before Clicking Finish". The content is organized into sections: "Action" (Submit An Admin Task), "Task" (Patch Application (Patch Application Task)), "Description" (Patch Application by applying updated Configuration), "Label" (Patch Application), and "Execute:" (Execute Immediate(ASAP)). At the bottom right, there are three buttons: "Cancel", "< Previous", and "Finish".

7. After submitting, review the status of that task in the dashboard similar to any other standard administration tasks.

Template Status

The RDF CS application when provisioned is deployed as a Template application with the Template status of **Activated**. This cannot be changed for RDF CS.

User and Role Maintenance

This chapter describes the process for managing users and roles. The Administrator can create users and assign the level of access as needed. This chapter describes how to create/modify/delete a user and assign roles to a user.

Your Retail Demand Forecasting Cloud Service is configured with Oracle Cloud Infrastructure Identity and Access Management (OCI IAM) for managing users and access

In order to provide application access to end users, the Cloud Service Administrator needs to create the user's account from OCI IAM. For OCI IAM user setup, follow the steps in [OCI IAM User Creation](#). The user must also be assigned to a group in OCI IAM.

Note: The list of groups in [Table 3–1](#) are provided by default. It is not required that additional groups be created by the user.

To complete the user provisioning activity, the same user must be added in the Retail Demand Forecasting Cloud Service application and assigned to the same user group. By default, all the roles as user groups in [Table 3–1](#) will be added to the Application Domain. Only if not present will those user groups need to be added.

RDF Cloud Service is built with role-based access. Permissions are associated with roles. [Table 3–1](#) lists the available roles. Those roles will be created by default during provision time, but if not present, those can be set up in OCI IAM.

Table 3–1 *RDF Cloud Service Default Enterprise Roles*

Application Module	Default Application Roles	Corresponding Application Roles
RDFCS	RDF_ADMIN	RDF_ADMIN
RDFCS	RDF_ANALYSTS	RDF_ANALYSTS
RDFCS	RDF_MANAGERS	RDF_MANAGERS
RDFCS	RDF_ADMIN_PROD	RDF_ADMIN_PROD
RDFCS	RDF_ADMIN_STAGE	RDF_ADMIN_STAGE

Note: Additional roles for authorization and application administration are also required. Refer to the “User Roles” section in the *Oracle Retail Predictive Application Server and Applications Cloud Edition Security Guide*.

The Administrator can assign the roles listed in [Table 3–1](#). Follow the steps in [Managing Users in OCI IAM](#).

For detailed information on the tasks related to user and role, see the following sections:

- [User Maintenance through OCI IAM](#)
 - [OCI IAM User Creation](#)
 - [Managing Users in OCI IAM](#)

For Cloud Service provisions, the customer needs to define required roles as needed for their configuration using OCI IAM. For more details about Atomic User Management (AUM), additional roles available, and access to security details, see the *Oracle Retail Predictive Application Server and Applications Cloud Edition Security Guide*.

User Maintenance through OCI IAM

This section describes how to maintain users through Oracle Cloud Infrastructure Identity and Access Management (OCI IAM).

OCI IAM User Creation

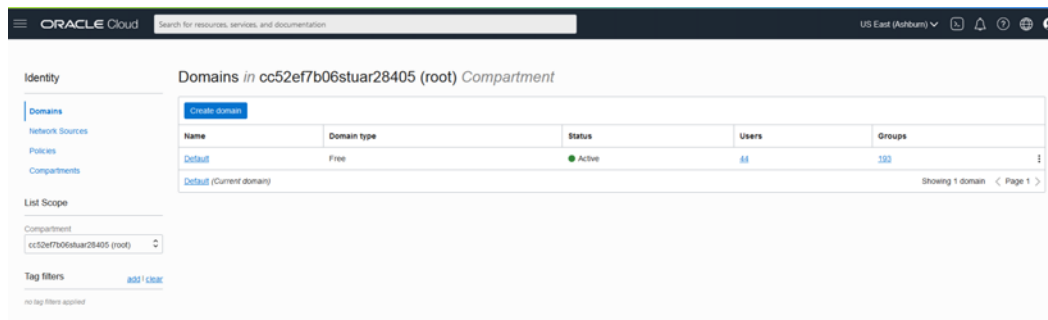
Before users can access the Oracle Retail Demand Forecasting Cloud Service applications, it is necessary to provision access to the system for each user and to assign roles to each user to control what functionality will be available to the user. The access provisioning can be done using OCI IAM. After creation of the user in OCI IAM, the Administrator needs to create the same user with the same user group (that is, the role in OCI IAM) in the Demand Forecasting Cloud Service application.

Note: The OCI IAM Application URL and login with the required administrator access are needed to perform the following steps. The welcome email sent by Oracle includes the URL.

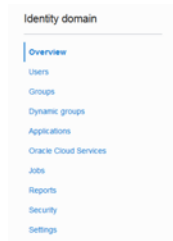
The following steps explain how to define users and assign roles for a new user:

1. Log in to the OCI IAM application. The Domains view is shown by default.

Figure 3–1 OCI IAM Domains



2. Click the Domain name for which you want to create a user. The Domain Overview page appears.
3. From the Domains Overview page, click Users.

Figure 3–2 Domains Overview Menu

- From the Domain Users page, click Create User. The Create User page appears.

Figure 3–3 Create User

Name	Description
DATA_SCIENCE_ORCL_ADMIN_JOB_FSEFRDQ	Data Science Cloud Administration permission for Retailer using Innovation Workbench using APEX Workspace
RETAIL_ASYNC_TASK_JOB_FSEFRDQ	A systemic role for executing async jobs
FORECAST_ANALYST_JOB	Reviews and approves forecasts on a day-to-day basis. An advanced forecast analyst may also be responsible for forecast parameter maintenance and demand modeling activities
PRICING_MANAGER_JOB	The Pricing Manager typically works as part of the buying group for one or more departments. Besides all of the typical management duties involved with having direct reports the Pricing Manager has the responsibility of making sure the company objectives are reflected in the pricing policies implemented by the Pricing Analyst

- Provide the First Name, Last Name, and unique user name. If the option “Use the email address as the user name” is checked, the system automatically takes the email address as the user name.

Note: Oracle recommends using the email address as the user name.

- Assign the user to a group. Typically, this will be the group specific to the provisioned service or application. The user can be assigned to more than one user group, but it is recommended to assign one group to one user.

The available roles are listed in [Table 3–1](#). For example, you could assign the user being created to the RDF_ANALYSTS role.

- Click **Create** to complete the user creation in OCI IAM.

Adding a User Group

User groups provide an intermediate level of security to workbooks that were created and saved by specific users. When new users are assigned to the system, they must be assigned to existing user groups. User groups should consist of individuals with similar job functions or responsibilities. In the Oracle Retail Predictive Planning Suite, the user group corresponds to the user's planning role.

To add a user group:

- Under User Administration, click **Add User Group**. A Workbook Wizard window appears.

2. In the Workbook Wizard window, enter the relevant information into the following fields:
 - In the Group Name field, enter a name for the group.

Note: Each group name must begin with a letter and contain only alphanumeric characters and underscores. It cannot have spaces. User group names are case sensitive.

 - In the Group Label field, enter a descriptive label for the group. This label is displayed when referring to the group throughout RPAS CE.
3. Click **Finish** to add the user group to the database.

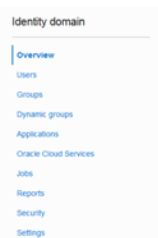
Managing Users in OCI IAM

After users are created in OCI IAM, the Administrator can manage user information, manage user groups assigned to users, delete or revoke user access, and reset a password.

The following steps explain how to manage users in OCI IAM:

1. Log in to the OCI IAM application. The Domains view is shown by default.
2. Click the Domain name for which you want to create a user. The Domain Overview page appears.
3. From the Domains Overview page, click Users.

Figure 3–4 Domains Overview Menu



4. Click the user that you want to edit.
5. You can update the additional information for the selected user. Once updated, click **Update User** to confirm the changes.
6. You can manage the user groups assigned to users in the Groups table.

Assign a New Group

- a. In the Groups table, click **Assign user to groups**.
- b. From the Assign user to group dialog, select the group or groups to add the user.
- c. Click **Assign user**.

Remove a Group

- a. In the Groups table, select the group from which you want to remove the user.
- b. Click **Remove user from group**.

Note: The same user also needs to be deleted from the Demand Forecasting Cloud Service application. This will keep OCI IAM and the application synchronized. Complete the user deletion by following the steps for deleting a user in the User Maintenance chapter of the *Oracle Retail Predictive Application Server Cloud Edition Administration Guide*.

7. A user can be deactivated by selecting **Deactivate** from the More Actions menu and then confirming the selection in the confirmation dialog.
8. A user can be asked to reset their password by selecting **Reset Password** and then confirming the selection in the confirmation dialog. The associated user will get an email with a link to reset the password.

