

Oracle® Retail Science Cloud Services

Administration Guide

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Send Us Your Comments

Oracle® Retail Science Cloud Services Administration Guide, Release 18.0.001

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 guide describes the administration tasks for Oracle Retail Science Cloud Services.

Audience

This guide is intended for administrators.

This guide describes the administration tasks for Oracle Retail Science Cloud Services.

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 Science Cloud Services documentation set:

- *Oracle Retail Science Cloud Services Implementation Guide*
- *Oracle Retail Science Cloud Services Release Notes*
- *Oracle Retail Science Cloud Services User Guide*
- *Oracle Retail Insights Cloud Service Suite/Oracle Retail Science Cloud Services Data Interface*
- *Oracle Retail Insights Cloud Service Suite/Oracle Retail Science Cloud Services Data Interface Details*

Customer Support

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

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

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

Improved Process for Oracle Retail Documentation Corrections

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

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

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>

(Data Model documents are not available through Oracle Technology Network. You can obtain these documents 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.

Administrative Tasks

This chapter describes the processes for maintaining users and roles as well as batch processes. For information regarding standard end user activities such as creating and viewing reports, see the *Oracle Retail Science Cloud Services User Guide*.

Oracle Support

It is considered to be a best practice to have all Oracle Retail Science Cloud Services support requests submitted through a single point of contact for that customer environment; the client designated administrator is usually designated to perform this role.

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

<https://support.oracle.com>

Oracle Identity Cloud Service User and Group Management

Oracle Identity Cloud Service (IDCS) provides an innovative, fully integrated service that delivers all the core identity and access management capabilities through a multi-tenant Cloud platform.

For instructions on managing users and groups in IDCS, follow the Manage Users and Groups IDCS document at the following URL:

<https://docs.oracle.com/en/cloud/paas/identity-cloud/index.html>

Oracle Retail Science Default Enterprise Roles

Oracle Retail Science is built with role-based access. Permissions are associated with roles.

The following roles are available:

Table 1–1 User Roles

Module	Job Role	Role Description
CDT	ANALYTIC_EXPERT_JOB	A user who understands the retailer's business, has some business analytics training, and has been trained in the use of the CDT application.
DT	ANALYTIC_EXPERT_JOB	A user who understands the retailer's business, has some business analytics training, and has been trained in the use of the DT application.

Table 1–1 (Cont.) User Roles

Module	Job Role	Role Description
ASO	CATEGORY_MANAGER_JOB	Product-assortment-centric user who is interested in viewing ASO results and in the translation of data between CMPO, Retail Analytics, and ASO.
	SPACE_PLANNER_JOB	A Store Planner is a corporate employee with responsibility for designing the layout of floor plans, department sizes, and locations, the layout of fixtures and aisles, applying health, safety and welfare guidelines, and managing and publishing floor-plan versions. This user is also responsible for day-to-day micro-space optimization activities.
	MERCHANDISING_ANALYST_JOB	Main business user responsible for day-to-day micro-space optimization activities.
	SPACE_ADMINISTRATOR_JOB	Responsible for general system setup and configuration tasks related to the business.
	FORECAST_MANAGER_JOB	Responsible for analytical configuration, testing, and model diagnosis.
AC	ASSORTMENT_PLANNER_JOB	The Assortment Planner is responsible for creating the category assortments that meet the roles, strategies, and tactics set for the category by the Category Manager. Multiple category assortments are created for each cluster or store. One planner can be responsible for multiple categories.
	MERCHANDISER_JOB	A Store Merchandiser (or In-Store Merchandiser) is an hourly employee who executes the placement and assembly of retail fixtures, the adjustment of shelves, and the arrangement and placement of products on the shelves in accordance with CAD drawings and planograms.
	CLUSTERING_ADMINISTRATOR_JOB	Plans, builds, and analyzes store clusters based on a variety of store and category attributes to support assortment, pricing, and space planning business processes in the Store Clustering Module.
CS	ASSORTMENT_PLANNER_JOB	The Assortment Planner is responsible for creating the category assortments to meet the roles, strategies, and tactics set for the category by the Category Manager. Multiple category assortments are created for each cluster and or store. One planner can be responsible for multiple categories.
	MERCHANDISER_JOB	A Store Merchandiser (or In-Store Merchandiser) is an hourly employee who executes the placement and assembly of retail fixtures, the adjustment of shelves, and the arrangement and placement of products on the shelves in accordance with CAD drawings and planograms.
	CUSTOMER_ANALYST_JOB	Responsible for developing customer segments and analyzing their customer shopping and buying behavior to determine customer differentiation, trends, and opportunities in the Customer Segmentation Module.
	MARKET_ANALYST_JOB	Responsible for reviewing customer segments with business experts, suited (distinctly) for targeted promotion, category and assortment planning, targeted pricing, customer, and market basket analytics in the Customer Segmentation Module.
	CUSTOMER_SEGMENT_ADMINISTRATOR_JOB	Responsible for analytical defaults and configuration, testing, and model diagnosis. This includes Filter, Sampling, and Attribute Mining in the Customer Segmentation Module.
AE	ATTRIBUTE_EXTRACTION_JOB	A user who is familiar with the retailer's product categories and has been trained in the use of the Attribute Extraction.
RSP Administration	ADMINISTRATOR_JOB	A user who understands all the parameters driving the application and is responsible for their configuration. The user is also responsible for integration configuration and management of credential store for CE, RPM, and so on.
RL	RETURN_LOGISTICS_JOB	A user who is familiar with the retailer's product categories and has been trained in the use of the AE application.

Table 1–1 (Cont.) User Roles

Module	Job Role	Role Description
SA	SOCIAL_ANALYTICS_JOB	A user who understands the retailer's business, has some business analytics training, and has been trained in the use of the SA application.
Attribute Binning	ATTRIBUTE_BINNING_JOB	A user who understands the retailer's business, has some business analytics training, and has been trained in the use of the CDT application and attribute binning application.
PRO	PRICING_ADMINISTRATOR_JOB	Responsible for the general system setup and configuration tasks related to the business.
	PRICING_MANAGER_JOB	A user who is responsible for the analytical configuration, testing, and model diagnosis. The user oversees the work done by the pricing analyst.
	PRICING_ANALYST_JOB	Main business user responsible for day-to-day pricing optimization activities (e.g., creating scenarios).
	BUYER_JOB	User who is responsible for a department or departments and who makes the budget decision for pricing recommendations, approves or rejects the OO run, and is responsible for the translation of data between OO and Oracle Retail Price Management (RPM) and Oracle Retail Customer Engagement (CE).
	TARGETED_OFFER_JOB	User (probably works in marketing department) who is responsible for accepting or rejecting targeted offers that are sent out to customers.
HOS	HOS_FORECAST_ANALYST_JOB	A user who understands the restaurant's business, has some business analytics training, and has been trained in the use of the Forecasting application.
	HOS_FORECAST_CORPORATE_ANALYST_JOB	A Corporate Analyst is responsible for ensuring the efficient running and profitability of multiple stores in a restaurant chain. This user works with the store manager to review and override the daily sales forecasts, as needed.
	HOS_FORECAST_STORE_MANAGER_JOB	A Store Manager is responsible for overseeing stock levels and ordering supplies to meet the restaurant's profitability and quality goals. This user reviews, overrides, and approves the daily sales forecast of menu item groups. The store manager is typically responsible for one store.
MR	MENU_RECOMMENDATION_JOB	A user who understands the restaurant's business, has some business analytics training, and has been trained in the use of the Menu Recommendation.
IW	DATA_SCIENCE_ANALYST_JOB	Data Science Retailer Analyst who uses Innovation Workbench using APEX Workspace. This user is a developers who create and edit applications, monitor workspace activity, and view dashboards.
	DATA_SCIENCE_ADMINISTRATOR_JOB	Data Science Retailer Administrator who uses Innovation Workbench using APEX Workspace. This user is a workspace administrators who perform administrator tasks specific to a workspace such as managing user accounts, monitoring workspace activity, and viewing log files.
	DATA_SCIENCE_OLDS_ANALYST_JOB	Data Science Retailer Analyst who uses Innovation Workbench using Python Notebook. This user is a developers who manage and executes paragraphs in Python Notebook
MBI	MARKET_BASKET_ANALYSIS_JOB	A user who understands the retailer's business, has some business analytics training, and is responsible for reviewing sales transaction affinity analysis.

Table 1–1 (Cont.) User Roles

Module	Job Role	Role Description
Chatbot	CHATBOT_SERVICE_JOB	Conversational AI Role to enable integration between Retail Science and Oracle Chatbot.
	CHATBOT_QNA_VIEW_JOB	Conversational AI Role to enable frequently asked question type of bot conversations.
	CHATBOT_VIEW_JOB	Conversational AI Role to enable real time bot conversations.
SPO	SIZE_PROFILE_OPT_JOB	A user who understands size and profile estimations and is able to review and submit them for the retailer's business.

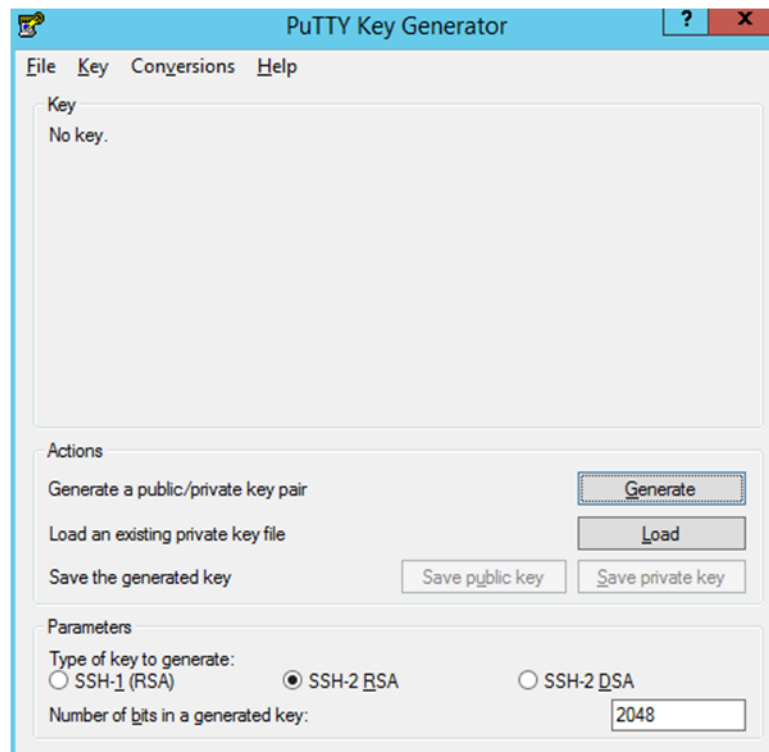
Nightly Batch File Uploads

This section describes the file upload process. For details regarding file contents and formatting refer to the *Oracle Retail Science Cloud Services Implementation Guide*. The Private/Public Keys must be generated and the public Key must be associated with your SFTP Account for the file uploads. The [Adding Authorized Keys](#) section describes the step-by-step method to generate the Keys (2048 bit RSA Keys).

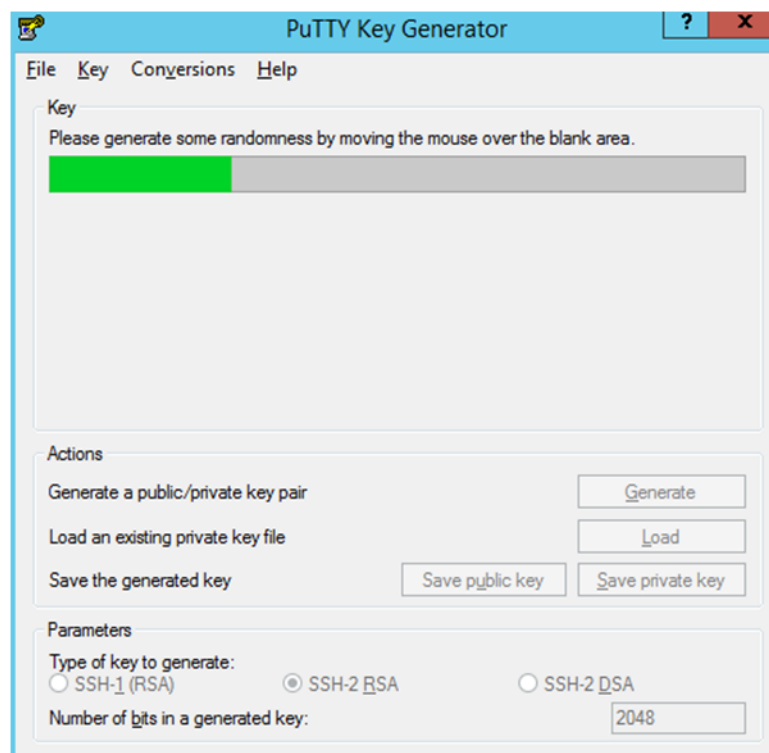
Adding Authorized Keys

Here is the process to generate a 2048 bit RSA key and add the same to the SFTP server. This is done with the help of WinSCP tool on Windows. However, the same can be done using ssh-keygen on Linux as well.

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

Figure 1–1 Key Generator

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

Figure 1–2 Key Generator Progress

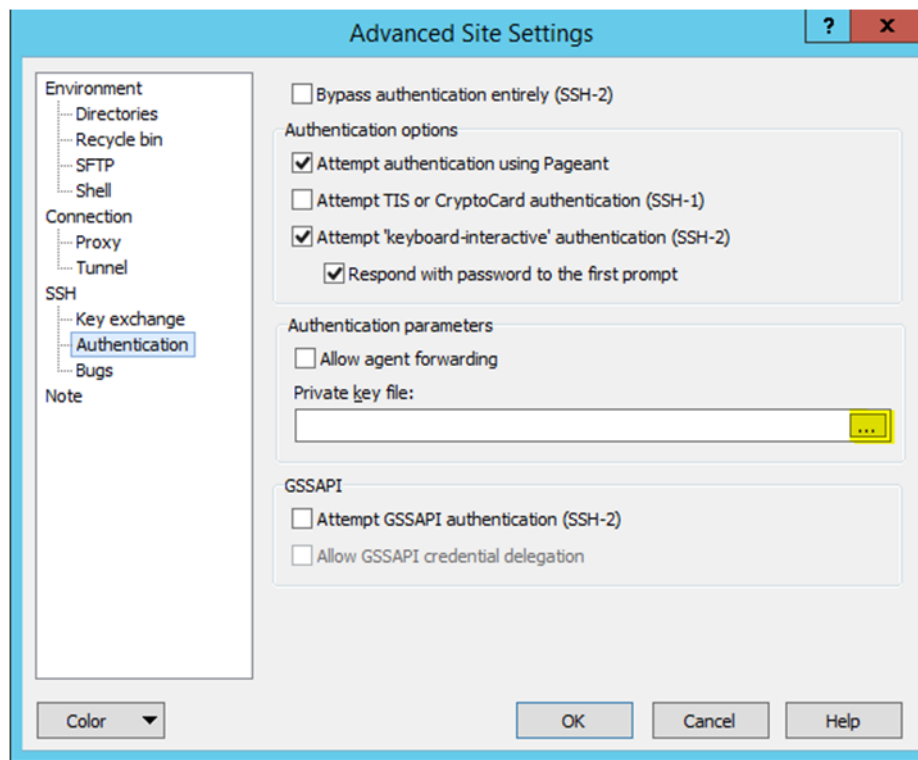
4. Once the key is generated, click the **Save public key** button to save the public key to a file.
5. Click the **Save private key** button to save the Private key to a file. Confirm to save it with/without a passphrase.
6. Open an SR with Oracle Support, to associate the Public half of the Key with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

Steps – Log into WinSCP

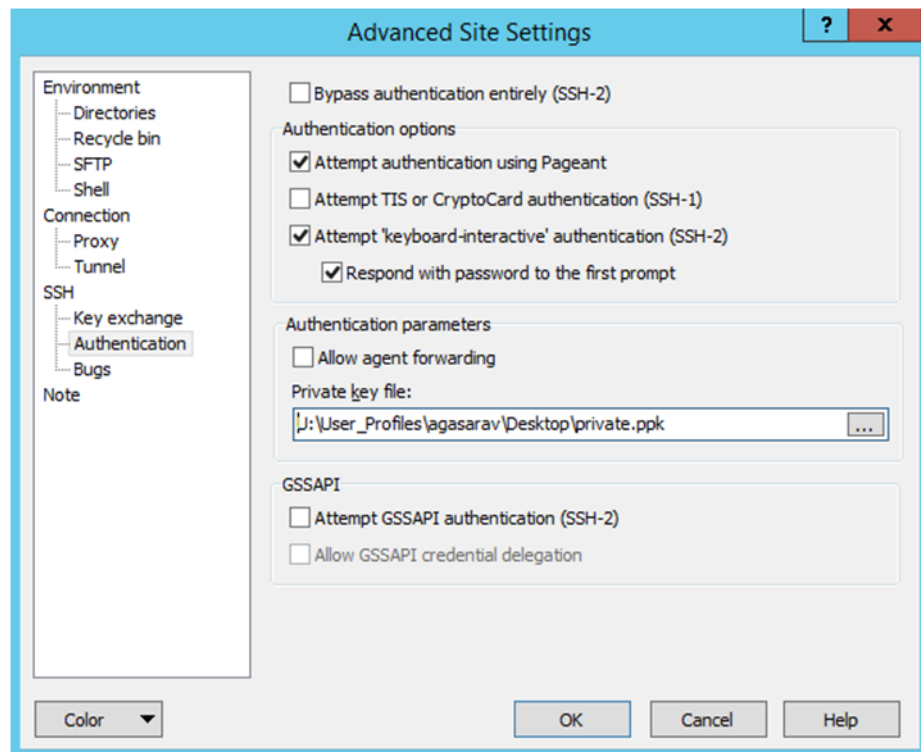
The Upload steps uses the private key generated in the earlier section.

1. Launch WinSCP and connect to <SFTP Server> using port 22.
2. Enter the username and click **Advanced**.
3. Click **Authentication**.
4. In the Private Key File field, click the **Browse** button and select the private key created in the earlier section.

Figure 1–3 Advanced Site Settings Dialog



5. After loading the private key file, click **OK**.

Figure 1–4 Private Key File Loaded

6. Click **Login**. The window does not prompt for a password and logs into the SFTP server. Provide a passphrase if one has been set up.

Steps to Upload the Batch File

Log into the WinSCP by following the [Steps – Log into WinSCP](#) section.

1. Transfer all data files to the directory /<SFTP User>.
2. Create a directory called COMMAND under /<SFTP User> if it does not already exist.
3. Change to the /<SFTP User>/COMMAND directory.
4. Transfer an empty file called COMPLETE.

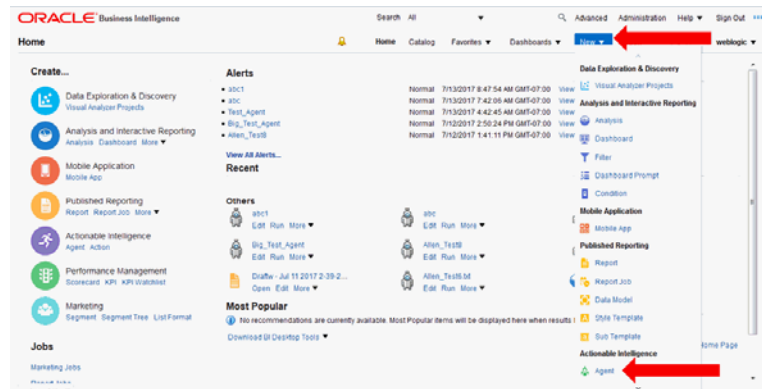
Export File Downloads

Log into the WinSCP by following the [Steps – Log into WinSCP](#) section. Here is the download file process.

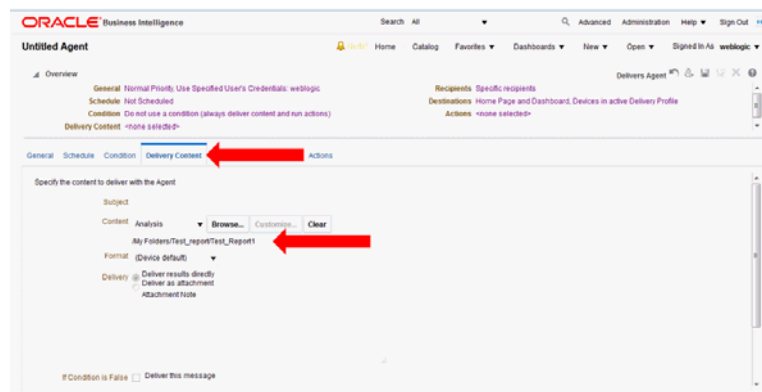
1. Change directory to /<SFTP User>/EXPORT.
2. Download all data files.

Archiving_Reports – Agent Creation and Execution

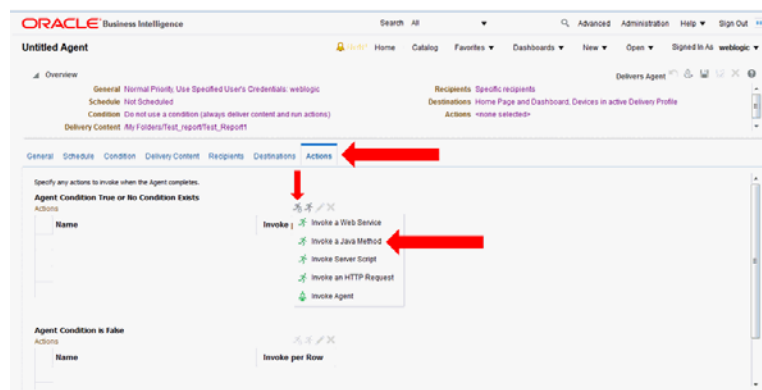
1. After creating an Analysis (report) that must be refreshed and saved to a file for downloading, from the OBIEE home screen select **New -> Agent**.

Figure 1–5 Create a New Agent

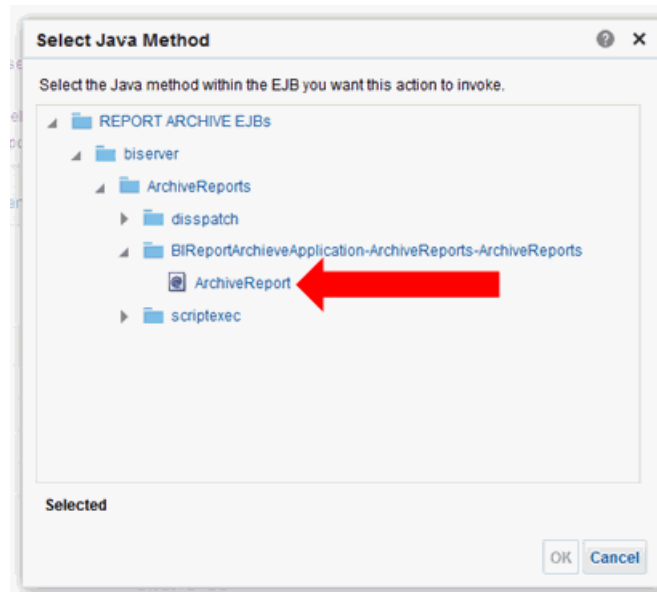
2. After setting the schedule for the Agent execution, go to the Delivery Content tab and select the analysis report. The other settings on this tab such as format will be overridden by other selections on the Actions tab.

Figure 1–6 Delivery Content Tab

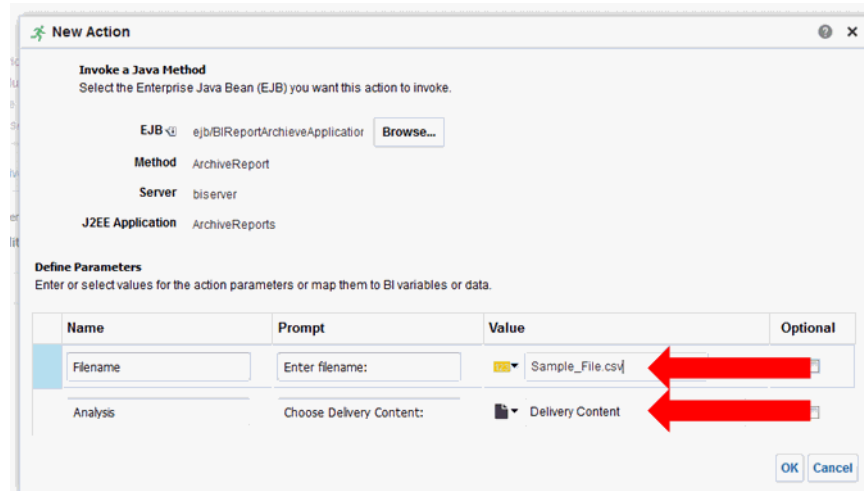
3. Ignore the Recipients and Destinations tabs. Go to the Actions tab and add a new Action that Invokes a Java Method.

Figure 1–7 Action Tab

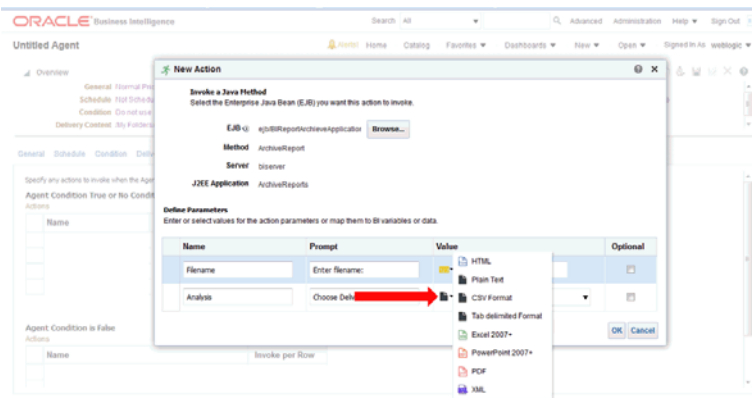
4. Select "REPORT ARCHIVE EJBS / biserver / ArchiveReports / BIReportArchiveApplication-ArchiveReports-ArchiveReports / ArchiveReport".

Figure 1–8 Select Java Method

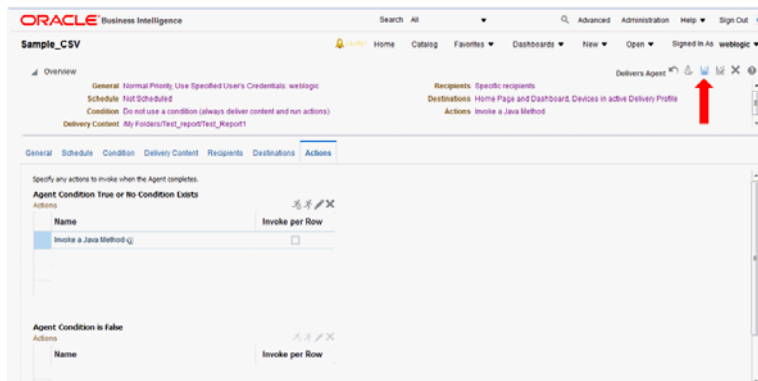
5. Enter the filename that the report must be written to and select **Delivery Content**.

Figure 1–9 New Action Window

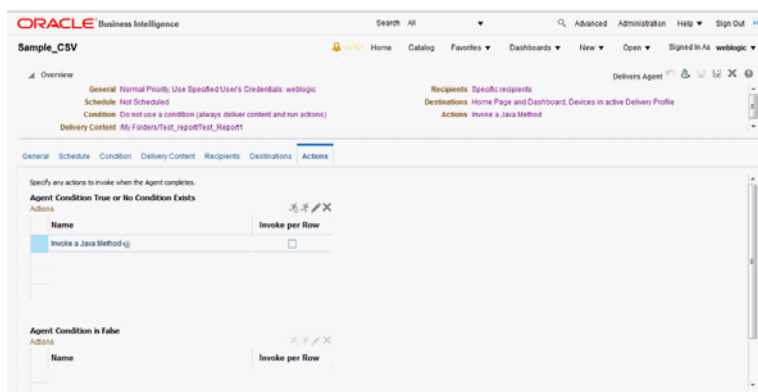
6. Click the small black page icon with the turned corner and select the file format to be written, then click **OK**.

Figure 1–10 Select File Format

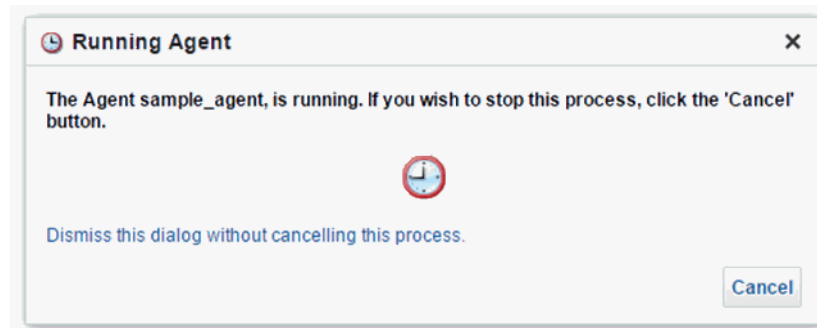
7. Click **Save Agent** and give the Agent a name. At this point the Agent has been defined and will execute according to the defined schedule.

Figure 1–11 Save the Agent

8. If you would like to do an immediate execution of the Agent, you can click **Run Agent Now**.

Figure 1–12 Execute the Agent

The following dialog box displays while the agent is running:

Figure 1–13 *Running Agent Dialog Box*

Oracle Digital Assistance

Oracle Digital Assistance (ODA) is a NLP and Machine Learning-based cloud service that enables application-specific interactions. It is a virtual user that assists end users with complex engagements using transactional data to review key business insights and exceptions. It also provides out-of-the-box knowledge sharing by responding to typical Q&A-style questions for customer service and support. ODA features are supported using voice along with conversational interface to distill end user intents, invoke actions, and provide reasonable responses. This enhances consulting services with minimal training and support.

Digital assistance is not a replacement for a web application but a channel that allows the user to complete context-driven tasks using a combination of text messages, voice and, simple UI.

This chapter lists the tasks that a Cloud Administrator must complete to enable digital assistance.

Cloud Administration

As part of cloud administration and deployment, there are two key task that must be performed in a cloud environment:

- Oracle Autonomous Mobile Cloud Enterprise
- Oracle Retail Science Platform

The following tasks must be performed in the Oracle Autonomous Mobile Cloud Enterprise:

- Accessing/Provisioning Bot Service

Here is the URL to use for Oracle Autonomous Mobile Cloud Enterprise.

<https://docs.oracle.com/en/cloud/paas/mobile-autonomous-cloud/service-administration/getting-started.html#GUID-B958C87C-027F-4BF5-A523-C6B64DB64718>

- Set up SSL certificates for Retail AI

<https://docs.oracle.com/en/cloud/paas/mobile-autonomous-cloud/manage/credentials-csf-keys-and-certificates.html#GUID-C6467B5F-E07D-4947-8A8A-D511457861E2>

The following tasks must be performed in the Oracle Retail Science Platform.

- Set up SSL certificates for Bot Service in Retail AI. The Cloud Team must know how to do this.
- Create users and set up roles.

CHATBOT_SERVICE_JOB	Chatbot Service Role will be configured with Webservices for getting data from application database for transactional bots
CHATBOT_VIEW_ROLE	Role to enable Transactional bot in application UI in the contextual area
QNA_VIEW_ROLE	Role to enable QnA bot in application UI in the contextual area

- Test if you are able to access Bot using following url:
<http://<hostname or ip>:8080/botsui/bot>

General Privacy and Security Information

This appendix describes data privacy and security relevant to Retail Insights (RI).

Privacy by Design

In support of data privacy enhancements, retail applications have created a data privacy web service interface and command line tool to provide retailers with services for requesting access to personal information for review and forget/update the personal information if requested.

Here are examples of the personal information.

- Full Name
- Home address
- Email address
- Date of birth

The following features are provided by Retail Insights for using the data privacy command line tool:

- Right to Access (RTA)

Retailers can accept and respond to end-user requests for data access, correction, and deletion for individual end-user data records they store in the Oracle service.

- Right to be Forgotten (RTF)

In support of an end-user's right to request to forget/update personal information, retailers can delete/update (mask) an end-user's personal data during the services period. Certain data that is critical for the business or that is part of the legal requirement may not be deleted.

Data Minimization

RI uses the database role, enterprise role, and application role to control who has access to the data. Via the front-end, RI provides default enterprise roles based on their corresponding application roles provided by RI. Users assigned to a specific enterprise role can only access a specific function area. See [Chapter 1](#) for details. At the database level, different database roles are assigned to different type of users. The front-end user role only has read permission to RI data. The batch user role has read, insert, update, and delete permission to RI data.

In the future release, RI will provide customers with controls and tools to configure data purging based on certain criteria in order to minimize the amount of data used and the length of storage.

Data Deletion

Retail Insights is a Business Intelligence system that stores the customer centric/merchandising data for a specified time limit only, as this is required for making business decisions. When data reaches the threshold, it is deleted from the system.

Customers will have access to controls to configure data purging in a future release of RI.

Right to Access / Right to Forget

RI provides a web service interface (file RetailAppsDataPrivServices-7.0.1-RetailAppsDataPrivServices.ear) for right to access and right to forget. The service provides a REST call to return end-user information based on a provided key and provides a REST call to forget the end-user based on a provided key. The feature is also available via the command line by using jar file RetailAppsDataPrivServices-7.0.1-RetailAppsDataPrivTool.jar

RI provides three groups (type_id) for right to access and right to forget.

- CustomerRecord
By providing the customer number as key, the end user can access or forget the PII data for the customer, customer address, and history sales information related to this customer.
- Employee
By providing the employee number as key, the end user can access or forget the PII data for the employee.
- Supplier
By providing the primary contact name as key, the end user can access or forget the supplier contact name and supplier contact phone number information.

Data Portability

RI provides the capability for the end users to export the downloaded report to transmit data to another controller.

Encryption

RI uses Oracle Transparent Data Encryption TDE tablespace encryption to encrypt entire RI tablespaces.

Data Masking

Oracle data redaction is used for RI data masking. A data redaction policy has been created in RI on columns W_PARTY_PER_D. ETHNICITY_NAME and W_PARTY_PER_D. ETHNICITY_CODE. Only users who are granted EXEMPT REDACTION POLICY can view the data. Out of the box, only the RI batch user is granted EXEMPT REDACTION POLICY.