

Oracle® Cloud

Migrating Oracle Business Intelligence Cloud Service Instances to Oracle Cloud Infrastructure



F15039-25
November 2023



Oracle Cloud Migrating Oracle Business Intelligence Cloud Service Instances to Oracle Cloud Infrastructure,
F15039-25

Copyright © 2019, 2023, Oracle and/or its affiliates.

Primary Author: Rosie Harvey

Contributors: Oracle Analytics Cloud development, product management, and quality assurance teams

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, software documentation, data (as defined in the Federal Acquisition Regulation), 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 embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. 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®, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside 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, Epyc, and the AMD 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.

Contents

Preface

Audience	v
Documentation Accessibility	v
Diversity and Inclusion	v
Related Documents	vi
Conventions	vi

1 Learn About Migrating to Oracle Cloud Infrastructure

About the Migration Scope	1-1
About the Migration Task Flow	1-2
About the Migration Tooling	1-6

2 Prepare to Migrate Oracle BI Cloud Service Instances

About Downtime Requirements	2-2
Plan Your Service on Oracle Cloud Infrastructure	2-2
Create Your Service on Oracle Cloud Infrastructure	2-5
Create a Service using the Console	2-5
Create a Service with Oracle Analytics Cloud Subscription	2-9
Verify Your Service and Sign In	2-10
Migrate Users and Roles from Oracle BI Cloud Service	2-11
Connect to Your Data	2-13
Move Data from Oracle Database Cloud Schema Service	2-14
Move Data from Oracle Cloud Infrastructure - Classic	2-15
Connect to Data on On-premise Databases	2-16

3 Migrate Your Oracle BI Cloud Service Instances

Understand Snapshot Options	3-2
Back Up Your Target Service Before Migration	3-2
Migrate Your Content	3-3
Edit Semantic Model Connections for Data Modeler	3-4

Edit Connections in the .rpd File and Upload the Semantic Model	3-5
Migrate File-based Data	3-5
Verify and Configure Service Settings	3-8
Restore and Enable Delivery Schedules	3-9

4 Complete Post-Migration Tasks

Test the Migrated Service Instance	4-1
Clean Up Infrastructure and Platform Resources in Oracle BI Cloud Service	4-1

Preface

Learn how to migrate from Oracle Business Intelligence Cloud Service to Oracle Analytics Cloud on Oracle Cloud Infrastructure.

Topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Diversity and Inclusion](#)
- [Related Documents](#)
- [Conventions](#)

Audience

Migrating Oracle Business Intelligence Cloud Service to Oracle Cloud Infrastructure is intended for administrators who migrate services and content from Oracle Business Intelligence Cloud Service to Oracle Analytics Cloud on Oracle Cloud Infrastructure.

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.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Documents

These related Oracle resources provide more information.

- [Getting Started with Oracle Analytics Cloud on Oracle Cloud Infrastructure \(Gen 1\)](#)
- [Administering Oracle Analytics Cloud on Oracle Cloud Infrastructure \(Gen 2\)](#)
- [Administering Oracle Analytics Cloud](#)
- [Configuring Oracle Analytics Cloud](#)

Conventions

Conventions used in this document are described in this topic.

Text Conventions

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.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Videos and Images

Your company can use skins and styles to customize the look of the Oracle Analytics Cloud, dashboards, reports, and other objects. It is possible that the videos and images included in the product documentation look different than the skins and styles your company uses.

Even if your skins and styles are different than those shown in the videos and images, the product behavior and techniques shown and demonstrated are the same.

1

Learn About Migrating to Oracle Cloud Infrastructure

Learn about how to migrate from Oracle BI Cloud Service to Oracle Analytics Cloud on Oracle Cloud Infrastructure.

Topics:

- [About the Migration Scope](#)
- [About the Migration Task Flow](#)
- [About the Migration Tooling](#)

About the Migration Scope

Before migrating from Oracle BI Cloud Service to Oracle Analytics Cloud on Oracle Cloud Infrastructure, consider the scope and constraints of this migration path.

Migration Requirements

Migration Scenario	Source Oracle BI Cloud Service	Target Oracle Analytics Cloud
Cloud Service	Oracle BI Cloud Service Latest update (19.2.2 or later)	Oracle Analytics Cloud Latest update (5.3 or later)
Cloud Database	Oracle Database Cloud Schema Service on Oracle Cloud Infrastructure Classic Or, Oracle Database Classic Cloud Service on Oracle Cloud Infrastructure Classic.	Oracle Database on Oracle Cloud Infrastructure ¹
Cloud Subscription	Traditional metered subscription or nonmetered subscription to Oracle Cloud	Oracle Cloud subscription for Oracle Analytics Cloud. Either: <ul style="list-style-type: none">• Universal Credits• Fixed Oracle Analytics Cloud Subscription
Identity Management	Traditional identity management through Oracle Cloud Infrastructure Classic Console (previously called My Services)	Either: <ul style="list-style-type: none">• Oracle Cloud Infrastructure Identity and Access Management (IAM) Identity Domains²• Oracle Identity Cloud Service³

¹ See "Not covered in this Guide".

² If your Oracle Cloud account offers IAM Identity Domains.

³ If your Oracle Cloud account doesn't offer IAM Identity Domains.

If you're not sure which versions are running in your source and target environments, ask your Oracle representative.

Not Covered in This Guide

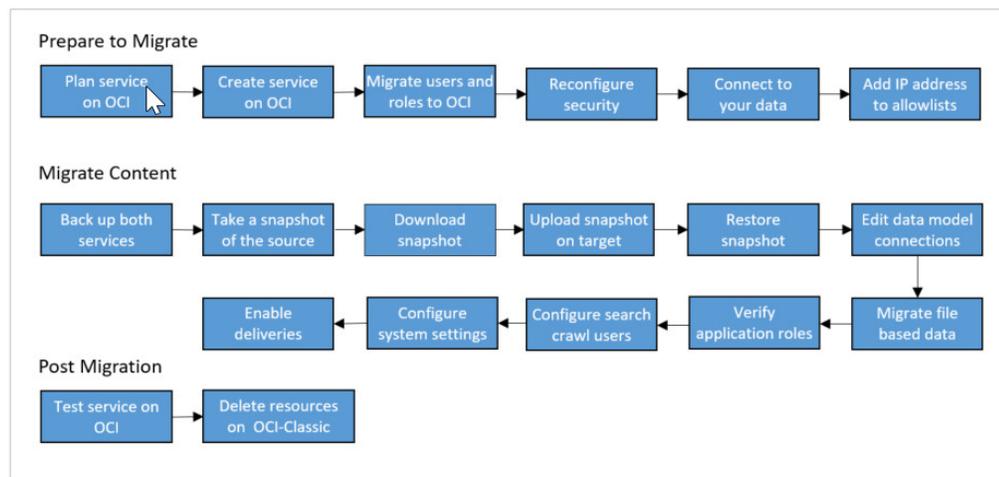
Migration scenario	Description	More Information
Database migration	Oracle Analytics Cloud doesn't include an Oracle Database. You must migrate your Oracle Database Cloud Schema Service (or Oracle Database Classic Cloud Service) on Oracle Cloud Infrastructure Classic to a suitable Oracle Database on Oracle Cloud Infrastructure.	Migrate Databases Using the Migration Tools

About the Migration Task Flow

You use a snapshot to migrate an Oracle BI Cloud Service instance to Oracle Analytics Cloud on Oracle Cloud Infrastructure. Before you start the migration, you need to prepare and set up a target Oracle Analytics Cloud instance on Oracle Cloud Infrastructure. Here's what you need to do.

- [Prepare to Migrate](#)
- [Migrate Your Service](#)
- [Complete Post-Migration Tasks](#)

Overview



Prepare to Migrate

Task	Description	More Information
Plan your new service	Plan your Oracle Analytics Cloud deployment on Oracle Cloud Infrastructure. Think about what you want before you start.	Plan Your Service on Oracle Cloud Infrastructure

Task	Description	More Information
Complete your order and sign in to your Oracle Cloud account	You must have a subscription for Oracle Analytics Cloud (or Oracle Analytics Cloud Subscription) to create services on Oracle Cloud Infrastructure. As Cloud Account Administrator, you can complete all setup tasks.	Signing in for the First Time
Create a service on Oracle Cloud Infrastructure	Create an Oracle Analytics Cloud instance with the required size and shape on Oracle Cloud Infrastructure. If you subscribe through Universal Credits, create the service with Oracle Analytics Cloud. If you have a non-metered subscription, create the service with Oracle Analytics Cloud Subscription.	Create a Service with Oracle Analytics Cloud Create a Service with Oracle Analytics Cloud Subscription
Verify your service	Verify that your service is up and running and that you can sign in.	Verify Your Service and Sign In
Migrate users and roles	Migrate users and roles from your traditional Oracle BI Cloud Service account to the identity management system available in your Oracle Cloud account.	Migrate Users and Roles from Oracle BI Cloud Service
Reconfigure single sign-on	(Optional) If SAML Single Sign-on (SSO) is configured in your source environment using <code>samlssodocker</code> , set up SSO in your target environment.	Oracle Cloud Infrastructure Identity and Access Management Identity Domains <ul style="list-style-type: none"> Federating with Identity Providers Oracle Identity Cloud Service <ul style="list-style-type: none"> Add an Identity Provider Integrating Oracle Identity Cloud Service with Microsoft Active Directory Federation Services

Task	Description	More Information
Integrate with external other identity providers	(Optional) Integrate with identity providers in your target environment. For example, Microsoft Active Directory and other identity providers that support the Security Assertion Markup Language (SAML) 2.0.	Oracle Cloud Infrastructure Identity and Access Management Identity Domains <ul style="list-style-type: none"> Federating with Identity Providers Setting Up a Microsoft Active Directory (AD) Bridge REST API for IAM Identity Domains Oracle Identity Cloud Service <ul style="list-style-type: none"> Manage Bridges for Oracle Identity Cloud Service Integrate Oracle Identity Manager with Oracle Identity Cloud Service REST API for Oracle Identity Cloud Service
Reconfigure connections to your data	Update connection information for the target Oracle Analytics Cloud instance. If your data is stored in a database on Oracle Cloud Infrastructure Classic you must move the data to Oracle Cloud Infrastructure.	Connect to Your Data
Add the IP address of your service to allowlists	If you registered the IP of your Oracle BI Cloud Service instance in any data source allowlists, you must perform this task again for the new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.	Find the IP or Host Name of Your Oracle Analytics Cloud Instance

Migrate Your Service

Task	Description	More Information
Understand snapshot options	Understand what you can include or exclude when you take a snapshot.	Understand Snapshot Options
Check your target is ready for migration and take a backup	Verify that the required users and roles are available in your target service and take a snapshot in case you need to roll back.	Back Up Your Target Service Before Migration
Take a snapshot of the source	Capture the content you want to migrate on the source system.	Take a Snapshot on the Source
Download the snapshot locally	Download the snapshot that you want to migrate to your local file system.	Download the Snapshot
Import the snapshot to the target	Sign in to the target system and import the snapshot.	Import the Snapshot on the Target

Task	Description	More Information
Restore the snapshot content	Select the newly imported snapshot in the list of saved snapshots and restore the content in the snapshot. After restoring the snapshot you must perform additional tasks to complete the migration. For example, you must edit your semantic model connections, verify application role assignments, and more.	Restore the Snapshot on the Target
Edit semantic model connections for Data Modeler	(Mandatory if you use Data Modeler) Review, edit, and save all your database connections to activate them in Oracle Analytics Cloud. Reconfigure the Default Connection if you used this in Oracle BI Cloud Service.	Edit Semantic Model Connections for Data Modeler
Edit semantic model connections	(Mandatory if you use BI Administration Tool to manage semantic model connections for Oracle BI Cloud Service and you migrated your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure) Edit the semantic model .rpd file, add the new connection string, and then upload the updated semantic model to the target system.	Edit Connections in the .rpd File and Upload the Semantic Model
Migrate data files	Use the Data Migration utility to migrate and restore data files from another environment.	Migrate File-based Data
Verify application role assignments	Verify that users and groups in your target service have the correct application roles in Oracle Analytics Cloud.	Verify and Configure Service Settings
Reconfigure search crawl users	Change the name of the users configured to index semantic model content and catalog content.	Verify and Configure Service Settings
Verify and configure service settings	Verify various administrative settings on the target service.	Verify and Configure Service Settings
Activate deliveries	Enable deliveries to start delivering content from the target service.	Restore and Enable Delivery Schedules

Complete Post-Migration Tasks

Task	Description	More Information
Test the migrated service	Check the content you migrated is available on Oracle Cloud Infrastructure and everything works as you expect.	Test the Migrated Service Instance
Clean up services on Oracle Cloud Infrastructure Classic	Remove any resources that you don't need.	Clean Up Infrastructure and Platform Resources in Oracle BI Cloud Service

About the Migration Tooling

You use a snapshot to migrate your Oracle BI Cloud Service instance to Oracle Analytics Cloud on Oracle Cloud Infrastructure. In certain situations, you might also use the Data Migration Utility or Developer Client Tool.

- **Snapshots:** Migrates your content, file-based data, application role assignments, and other settings from your Oracle BI Cloud Service instance to Oracle Cloud Infrastructure.
- **Data Migration Utility:** Migrates your file-based data to Oracle Cloud Infrastructure. Only required if network connectivity or storage access issues prevents data file migration with the snapshot.
- **Oracle Analytics Client Tools:** Enables you to modify connection information for your semantic models after you migrate to Oracle Cloud Infrastructure. Only required if you uploaded semantic model .rpd files built with the Oracle BI Enterprise Edition BI Administration Tool to Oracle BI Cloud Service.

2

Prepare to Migrate Oracle BI Cloud Service Instances

Before you migrate Oracle BI Cloud Service instances to Oracle Cloud Infrastructure plan and prepare for migration.

Task	Description	More Information
Plan your new service	Plan your Oracle Analytics Cloud deployment on Oracle Cloud Infrastructure. Think about what you want before you start.	Plan Your Service on Oracle Cloud Infrastructure
Complete your order and sign in to your Oracle Cloud account	You must have a subscription for Oracle Analytics Cloud (or Oracle Analytics Cloud Subscription) to create services on Oracle Cloud Infrastructure. As Cloud Account Administrator, you can complete all setup tasks.	Signing in for the First Time
Create a service on Oracle Cloud Infrastructure	Create an Oracle Analytics Cloud instance with the required size and shape on Oracle Cloud Infrastructure. If you subscribe through Universal Credits, create the service with Oracle Analytics Cloud. If you have a non-metered subscription, create the service with Oracle Analytics Cloud Subscription.	Create a Service with Oracle Analytics Cloud Create a Service with Oracle Analytics Cloud Subscription
Verify your service	Verify that your service is up and running and that you can sign in.	Verify Your Service and Sign In
Migrate users and roles	Migrate users and roles from your traditional Oracle BI Cloud Service account to the identity management system available in your Oracle Cloud account.	Migrate Users and Roles from Oracle BI Cloud Service
Reconfigure single sign-on	(Optional) If SAML Single Sign-on (SSO) is configured in your source environment using <code>samlssodocker</code> , set up SSO in your target environment.	Oracle Cloud Infrastructure Identity and Access Management Identity Domains <ul style="list-style-type: none">Federating with Identity Providers Oracle Identity Cloud Service <ul style="list-style-type: none">Add an Identity ProviderIntegrating Oracle Identity Cloud Service with Microsoft Active Directory Federation Services

Task	Description	More Information
Integrate with external other identity providers	(Optional) Integrate with identity providers in your target environment. For example, Microsoft Active Directory and other identity providers that support the Security Assertion Markup Language (SAML) 2.0.	Oracle Cloud Infrastructure Identity and Access Management Identity Domains <ul style="list-style-type: none"> Federating with Identity Providers Setting Up a Microsoft Active Directory (AD) Bridge REST API for IAM Identity Domains Oracle Identity Cloud Service <ul style="list-style-type: none"> Manage Bridges for Oracle Identity Cloud Service Integrate Oracle Identity Manager with Oracle Identity Cloud Service REST API for Oracle Identity Cloud Service
Reconfigure connections to your data	Update connection information for the target Oracle Analytics Cloud instance. If your data is stored in a database on Oracle Cloud Infrastructure Classic you must move the data to Oracle Cloud Infrastructure.	Connect to Your Data
Add the IP address of your service to allowlists	If you registered the IP of your Oracle BI Cloud Service instance in any data source allowlists, you must perform this task again for the new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.	Find the IP or Host Name of Your Oracle Analytics Cloud Instance

About Downtime Requirements

The migration process doesn't affect the availability of your existing Oracle BI Cloud Service. Users can continue to sign in and use the service.

Note:

If you do allow users to access and make changes *after* you've taken the final snapshot for migration, you need to take another snapshot and repeat the migration if you want to include any changes that they make.

After the Oracle BI Cloud Service instance is migrated successfully, you can reroute users to the new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.

Plan Your Service on Oracle Cloud Infrastructure

Take some time to plan your service on Oracle Cloud Infrastructure before you create it. Consider the size, shape, and location of your current deployment and decide what you want your Oracle Cloud Infrastructure to look like, before you start. If it helps, use a checklist similar to the one shown here.

- Planning checklist - an example
- Which type of subscription do you need?
- Which feature set do you need?
- What sizing options are available to you?
 - How many OCPUs do you think you'll need?
 - How many people will use the service?
- Where do you want to deploy your service?
- What name do you want for your service?

Planning checklist - an example

Use a checklist similar to this one to help you decide.

Plan	My Existing Oracle BI Cloud Service	My New Oracle Analytics Cloud on Oracle Cloud Infrastructure
Subscription	<input type="checkbox"/> Oracle BI Cloud Service (Traditional Metred) <input checked="" type="checkbox"/> Oracle BI Cloud Service (Traditional Nonmetred)	<input checked="" type="checkbox"/> Oracle Analytics Cloud (Universal Credits) <input type="checkbox"/> Oracle Analytics Cloud Subscription
Feature Set	Business Intelligence (with Data Visualization)	<input type="checkbox"/> Self-Service Analytics <input checked="" type="checkbox"/> Enterprise Analytics
Size	Number of Users: <u>50</u>	Number of Users: <u>75</u> (additional user capacity required) Number of OCPUs: <u>N/A</u>
Region	<u>London</u>	<u>London</u>
Service Name	<u>company236</u>	<u>company236</u>

Which type of subscription do you need?

If you subscribe through Universal Credits, you create Oracle Analytics Cloud services on Oracle Cloud Infrastructure (Gen 2). If you have a non-metered subscription, you use Oracle Analytics Cloud Subscription to create services on Oracle Cloud Infrastructure.

- Oracle Analytics Cloud (Universal Credits): Oracle Cloud Infrastructure (Gen 2)
- Oracle Analytics Cloud Subscription: Oracle Cloud Infrastructure (Gen 1)

Which feature set do you need?

In most cases, you need Oracle Analytics Cloud - Enterprise Analytics.

Feature sets available on Oracle Cloud Infrastructure:

- **Enterprise Analytics:** Suitable if you want to offer data visualization, plus enterprise modeling and reporting features. Required if you want to migrate analyses, dashboards, and data visualizations (Enterprise Edition).
- **Self-Service Analytics:** Suitable if you want to offer only data visualization and migrate only data visualization artifacts (Professional Edition).
- **Essbase:** Not applicable when you migrate from Oracle BI Cloud Service (Essbase Edition).

What sizing options are available to you?

When you create an Oracle Analytics Cloud service, you either specify the number of Oracle Compute Units (OCPU) you want to deploy or the number of people you expect to use the service.

Size Options	Oracle Analytics Cloud (Universal Credits)	Oracle Analytics Cloud Subscription
Number of OCPUs	Yes	Yes
Number of Users	Yes	Yes

How many OCPUs do you think you'll need?

Oracle Cloud Infrastructure offers a range of compute sizes (OCPU) to suit different scenarios. The larger the compute size, the greater the processing power. If you're not sure which compute shape best suits your needs, discuss your requirements with your Oracle representative.

For more guidance, read the Oracle Analytics Cloud on Oracle Cloud Infrastructure topic [How many OCPUs do you think you'll need?](#)

How many users will use the service?

Alternatively, you can specify how many people you expect to use the service. Verify how many people are using your Oracle BI Cloud Service and consider whether or not this number of users is likely to increase.

For more guidance, read the Oracle Analytics Cloud on Oracle Cloud Infrastructure topic [How many people do you expect to use the service?](#)

Where do you want to deploy your service?

Verify the region where you deploy Oracle BI Cloud Service.

Oracle Cloud Infrastructure is hosted in similar geographic areas, also called regions. If multiple regions are available to you, decide where you want to deploy your service. For example, Phoenix, Ashburn, Frankfurt, London. To find out which regions are available, see www.oracle.com/cloud/data-regions.html.

What name do you want for your service?

Think about a suitable name for your service. The name that you specify is displayed in Oracle Cloud Infrastructure Console and in the URL for your service.

Name conventions on Oracle Cloud Infrastructure:

- Must contain between 1 and 25 characters.
- Must start with an ASCII letter: a to z or A to Z.
- Must contain only ASCII letters or numbers.
- Mustn't contain any other special characters.
- Must be unique within the identity domain.

Create Your Service on Oracle Cloud Infrastructure

As Cloud Account Administrator, you can create services on Oracle Cloud Infrastructure. If you subscribe through Universal Credits, create the service with Oracle Analytics Cloud. If you have a non-metered subscription, create the service with Oracle Analytics Cloud Subscription.

Topics

- [Create a Service with Oracle Analytics Cloud](#)

Oracle recommends that you deploy new services on Oracle Cloud Infrastructure Gen 2. If you don't have access yet, see [When and how do I access the new administration console for Oracle Cloud Infrastructure \(Gen 2\)?](#)

- [Create a Service with Oracle Analytics Cloud Subscription](#)

Create a Service using the Console

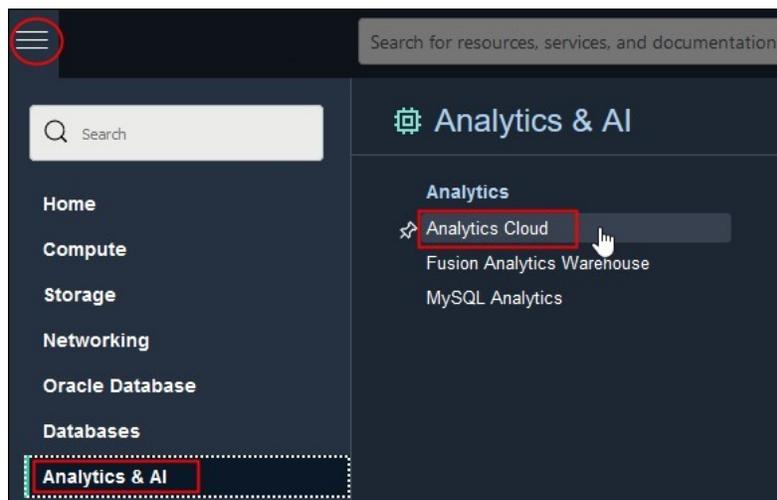
You can use Oracle Cloud Infrastructure Console to set up a service instance with Oracle Analytics Cloud.

You must belong to an OCI group that is granted the required policies to create an Analytics instance. See [Give Users Permissions to Manage Analytics Cloud Instances](#).

1. Sign in to your Oracle Cloud account.

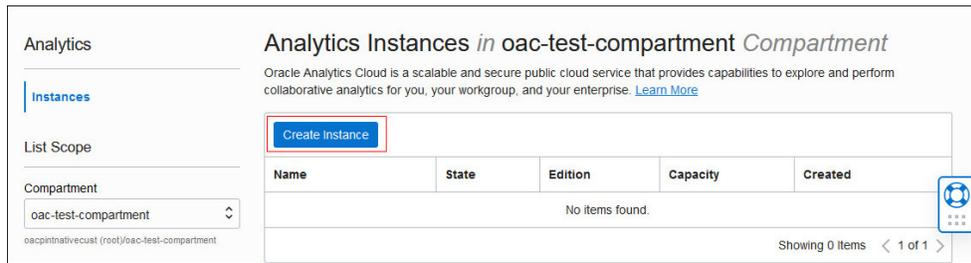
The way you sign in depends whether your cloud account uses identity domains or federates with Oracle Identity Cloud Service. See [Signing In to the Oracle Cloud Infrastructure Console](#).

2. In Console, click  in the top left corner.
3. Click **Analytics & AI**. Under **Analytics**, click **Analytics Cloud**.



4. From the **Compartment** list, select the compartment in which you want to create the service.

5. Click **Create Instance**.



6. Enter a **Name** and a brief description.

The name must start with a letter and can contain only letters and numbers.

7. For **Capacity**, select the size of your deployment.

Configure the capacity type that matches your subscription, that is, either *OCPUs per hour* or *Users per month*.

- **OCPU:** Select the number of OCPUs you want to deploy.
 - **Production environment:** Select between 2 and 52 OCPUs.
 - **Non-production environment:** Select 1 OCPU if you want to create an instance for test purposes.

See [What's the Difference Between Production and Non-Production Environments](#).

You must select the **OCPU** option if you plan to use your Oracle Middleware on-premise license with Oracle Analytics Cloud (BYOL).

- **Users:** Enter the number of users you expect to use this service.

You can split your capacity over multiple services. For example, if your subscribe to 100 users per month, you might deploy a test instance for 10 users and a production instance with the remaining 90 users.

8. For **License**, select **License Included** to subscribe to an Oracle Cloud license for Oracle Analytics Cloud or **Bring Your Own License (BYOL)** to use your Oracle Middleware on-premise license with Oracle Analytics Cloud and be charged the Bring Your Own License (BYOL) rate.

The **Bring Your Own License (BYOL)** option is available when you select **OCPU** for Capacity.

If you select **Users**, you must have an Oracle Cloud license for Oracle Analytics Cloud.

9. Select the **Edition** that matches your subscription.

- **Enterprise Edition:** Deploys an instance with enterprise modeling, reporting, and data visualization.
- **Professional Edition:** Deploys an instance with data visualization.

For example:

Create Analytics Instance [Help](#)

Name
myanalytics
Must be unique, start with a letter and contain only alphanumeric characters.

Description *Optional*
Enterprise analytics instance for MyCompany in the London region

Create in Compartment
oac-test-compartment
oacpintnativeoust (root)/oac-test-compartment

Capacity

Capacity Type
OCPU
Number of OCPUs you want to deploy for your service. ✓

Users
Number of users expected to use this service.

OCPU Count
6
Scalability: Between 1 and 8 OCPUs

License and Edition

License

License Included
Subscribe to a new Analytics Cloud software license and the Analytics Cloud service. ✓

Bring Your Own License (BYOL)
Bring my organization's middleware software license to the Analytics Cloud service. [Learn More](#)

Edition

Enterprise Edition
Deploy an instance with enterprise modeling, reporting, and data visualization. [Learn More](#) ✓

Professional Edition
Deploy an instance with data visualization. [Learn More](#)

Show Advanced Options

Create [Cancel](#)

10. Optional: Click **Show Advanced Options** to configure network or encryption options.

Hide Advanced Options

Network Access

Public
Access your instance from anywhere

Private
Access your instance from a Virtual Cloud Network only

Configure Access Control

Data Encryption

Encrypt using Oracle-managed Keys
Leave all encryption to Oracle.

Encrypt using Customer-managed Keys
Requires a valid key from a vault that you have access to. [Learn More](#)

Create [Cancel](#)

11. In **Network Access**, configure how you want users to access Oracle Analytics Cloud: over the public internet or through a private network.

- **Public:** Enable access over the public internet.

The Public option deploys Oracle Analytics Cloud with a public internet accessible endpoint. If required, you can configure access control rules to restrict access by public IP address, public CIDR block range, VCN, and Oracle services. See [Restrict Access to Oracle Analytics Cloud Deployed with a Public Endpoint](#).

- **Private:** Enable private access from an on-premise network or hosts on a virtual cloud network (VCN). Private access means that traffic doesn't go over the internet.

The Private option deploys Oracle Analytics Cloud with a private endpoint. Before you configure this option, you must set up the Oracle Cloud Infrastructure VCN that you plan to use with a subnet for Oracle Analytics Cloud. If required, you can restrict access to private endpoints through network security groups. If your network security groups aren't set up yet, you can save this task for later. See [Deploy Oracle Analytics Cloud with a Private Endpoint](#).

You can configure access control rules for a public endpoint or change the VCN, subnet, and network security group access for a private endpoint, later on as required. However, you *can't change* your network access selection from public to private (or private to public).

12. Optional: In **Data Encryption**, customize how Oracle Analytics Cloud encrypts customer data.

- **Encrypt using Oracle-managed Keys:** Leave all data encryption to Oracle.
- **Encrypt using Customer-managed Keys:** Specify the custom encryption key you want to use.

You can configure data encryption now or later. If you haven't created a master encryption key yet, leave this task for later. See [Encrypt Sensitive Information](#).

Your Oracle Analytics Cloud instance must be deployed with **Enterprise Edition**. Custom encryption isn't available on Oracle Analytics Cloud instances deployed with **Professional Edition**.

13. Verify that the details are correct, and click **Create**.

It takes about 20 minutes to create the service. Display the Instance page to check the current status.

Analytics Instances *in myanalytics* *Compartment*

Oracle Analytics Cloud is a scalable and secure public cloud service that provides capabilities to explore and perform collaborative analytics for you, your workgroup, and your enterprise. [Learn More](#)

Create Instance

Name	State	Edition	Capacity	Created	
myanalytics	● Creating	Enterprise Edition	2 OCPUs	Mon, Jun 27, 2022, 16:00:43 UTC	⋮

Showing 1 Item < 1 of 1 >

Create a Service with Oracle Analytics Cloud Subscription

You use Oracle Cloud Infrastructure Console to set up a service with Oracle Analytics Cloud Subscription. Follow these steps if you have a non-metered subscription.

1. Sign in to Oracle Cloud as the Cloud Account Administrator.

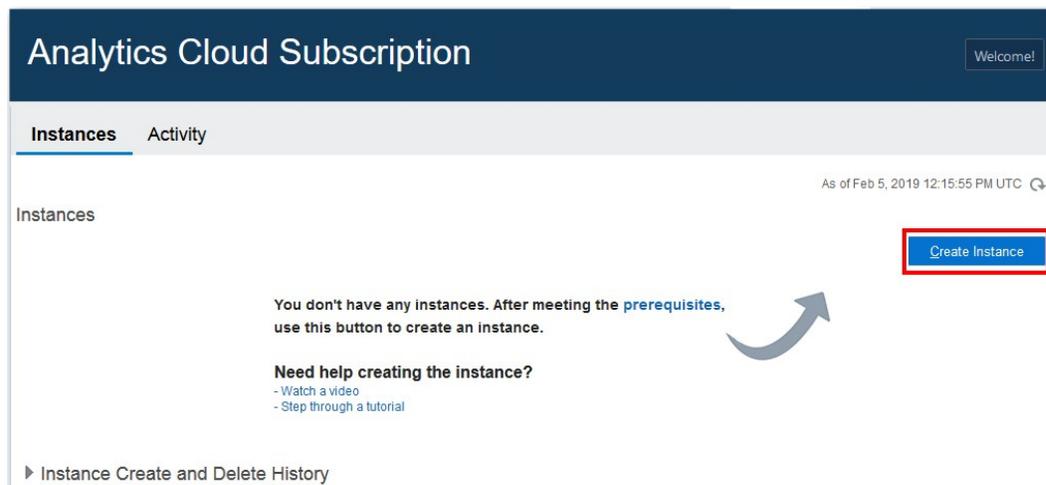
If you're signing in for the first time, you can find your account name and login information in your welcome email.

2. In Oracle Cloud Infrastructure Console, click  in the top right corner.

3. Click **Service User Console**, and then click **Oracle Analytics Cloud Subscription**.

If you don't immediately see **Oracle Analytics Cloud Subscription**, enter **Analytics Cloud Subscription** in the search box.

4. Click **Create Instance**.



5. For **Instance Name**, enter a name for your service instance.

The name must start with a letter and can contain only letters and numbers.

6. For **Notification Email**, enter the email address of the person you want to notify when this service is ready to use and receive other status updates about this service in the future.

This person is usually you, the Cloud Account Administrator who's setting up the service.

7. If multiple identity domains are available to you, select the **Identity Domain** that you want this service to use and then enter the name of an existing user in this identity domain that you want to assign as the **Service Administrator**.

You don't see these options if only one identity domain is available.

8. If several geographical regions are available to you, select the **Region** where you want to deploy Oracle Analytics Cloud. For example, uk-london-1.

9. If several edition options are available to you, select the **Edition** that matches the type of service you want to create.

- **Professional**

- **Essbase ***
- **Enterprise**

* Oracle Analytics Cloud -Essbase Edition isn't available in Oracle Cloud accounts created after 12th December 2019.

10. Determine the size of your service.

- To size your service based on how many users you're entitled to as part of your subscription, set **Subscription Type** to **Number of Users**, and then enter the number of users (between 10 and 3000).
- To size your service based on how many Oracle Compute Units (OCPUs) you're entitled to as part of your subscription, set **Subscription Type** to **Number of OCPUs**, and then select the number of OCPUs you want.

11. Click **Next**.

12. Verify that the details are correct, and click **Create**.

It takes about 20 minutes to create the service. Oracle sends an email to the designated email address when your service is ready. Display the Activity page to check the current status.

The screenshot shows the 'Analytics Cloud Subscription' interface. The 'Activity' tab is selected, and the search activity log is displayed. The search criteria include a start time range of 2/4/2019 12:32 PM, a service type of 'Analytics Cloud Subscription', and an operation status of 'All'. The search results table shows one entry: 'Create Service' for 'MyAnalyticsCloud' with a status of 'Running' and a start time of 'Feb 5, 2019 12:32:25 PM UTC'.

Operation	Instance Name	Service Type	Operation Status	Start Time	End Time	Initiated By
Create Service	MyAnalyticsCloud	Analytics Cloud Subscription	Running	Feb 5, 2019 12:32:25 PM UTC		JOHN...

Verify Your Service and Sign In

Oracle sends an email to the designated email address when your Oracle Analytics Cloud service is ready. Navigate to your service in Oracle Cloud Infrastructure Console, obtain the service URL, and then sign in to verify your Oracle Analytics Cloud service is up and running.

1. Sign in to your Oracle Cloud account.
2. In Oracle Cloud Infrastructure Console, click  in the top left corner.
3. Do one of the following:
 - Oracle Analytics Cloud (Universal Credits) - Click **Analytics & AI**. Under **Analytics**, click **Analytics Cloud**.

Select the compartment in which you created the service, the name of the new service, and then click **Analytics Home Page**. See *Verify Your Service*.

- Oracle Analytics Cloud Subscription - Click  in the top right corner, click **Service User Console**, and then click **Oracle Analytics Cloud Subscription**

Click **Manage this instance** for your service, and then click **Oracle Analytics Cloud URL**. See *Verify Your Service*.

4. Sign in with your administrator credentials.

Migrate Users and Roles from Oracle BI Cloud Service

Before you migrate your Oracle BI Cloud Service content to Oracle Cloud Infrastructure, you must migrate users and roles from your traditional Oracle BI Cloud Service account to the identity management system available with your Cloud account: Oracle Cloud Infrastructure Identity and Access Management (IAM) Identity Domains or Oracle Identity Cloud Service (IDCS).

1. Navigate to the users and roles you want to export from Oracle BI Cloud Service.

- a. Sign in to your traditional Oracle Cloud account.
- b. Click **Users**.

2. Migrate users (Users tab).

Export user information to a CSV file (`users.csv`) and import the users on your target identity management system.

- a. On the **Users** tab, click **Export**.
- b. Open `users.csv` to verify it contains the users you want to migrate.
- c. Change the `User Login` column heading to `User ID` and the `Email` column heading to `Work Email`.

At a minimum, the file must have these exact column headings: `User ID, Last Name, First Name, Work Email`. See

Import User Accounts in Administering Oracle Identity Cloud Service. You can download a sample file from this topic to verify the required format.

- d. Add a `Password` column heading with dummy passwords, if required.
- e. Save your changes to the CSV file.
- f. In Oracle Cloud Infrastructure Console, navigate to the **Users** tab and click **Import**.

For details, refer to the documentation for your identity management system:

- [Import Users to IAM Identity Domains](#) in *Oracle Cloud Infrastructure documentation*.
- [Import Users to IDCS](#) in *Administering Oracle Identity Cloud Service*.

- g. Click **Browse** to locate and select the CSV file that contains the users you want to import (`users.csv`).

3. Migrate roles (Roles tab and Custom Roles) and import them as groups on your target identity management system.

You can't export roles from your traditional account. You must manually create a CSV file that includes any roles in Oracle BI Cloud Service that you want to migrate, together with

their current user assignments. The CSV file you create can include roles and custom roles.

In Oracle Cloud Infrastructure Console, you import these roles and custom roles as *groups*. The format of the CSV file must match the format required to import groups. At a minimum, the file must have these exact column headings: `Display Name`, `Description`, `User Members`.

In Oracle Analytics Cloud, you see these groups on the **Roles** tab and then you assign them to the same application role that they had in Oracle BI Cloud Service.

- a. Create a CSV file named `Groups.csv`.
- b. On the **Roles** tab, locate the predefined roles associated with the Oracle BI Cloud Service instance you want to migrate, and then copy `Display Name`, `Description`, and `User Members` information to the CSV file.

Include:

- `<BICServiceName>.BICloudServiceAdministrators`
- `<BICServiceName>.BICloudServiceAdvancedContentAuthors`
- `<BICServiceName>.BICloudServiceConsumers`

Exclude:

- `TenantAdminGroup` (Identity Domain Administrator), `db_administrator`, `db_developer`, `db_user`, and other service roles.

- c. On the **Custom Roles** tab, identify any other roles used by the Oracle BI Cloud Service instance you want to migrate, and then copy `Display Name`, `Description`, `User Members` information to the CSV file.

For example, your `Groups.csv` file might contain information that looks something like this:

Display Name	Description	User Assignments
<code>mycompany.BICloudServiceAdministrators</code>	Users authorized to administer the service and delegate privileges to others	<code>CBrown</code>
<code>mycompany.BICloudServiceAdvancedContentAuthors</code>	Users authorized to create and share content	<code>AGold;BJones;DMarks</code>
<code>mycompany.BICloudServiceConsumers</code>	Users authorized to view and explore content	<code>JSmith;Swasher;TYoung</code>
<code>SalesManagers</code>	Managers in the Sales organization	<code>AGold;BJones;</code>
<code>SalesTeam</code>	Members of the Sales organization	<code>AGold;BJones;JSmith;SWasher</code>

- d. In Oracle Cloud Infrastructure Console, use the information you collected in `Groups.csv` to create the required groups in Oracle Cloud Infrastructure Identity and Access Management (IAM) Identity Domains or Oracle Identity Cloud Service (IDCS).

Navigate to the **Groups** tab. Create groups with exactly the same names, descriptions, and user assignments as the roles you recorded in `Groups.csv`. The names are case-sensitive.

For details, refer to the documentation for your identity management system:

- [Import Groups to IAM Identity Domains](#) in *Oracle Cloud Infrastructure documentation*.
 - Managing Groups in IDCS in *Administering Oracle Identity Cloud Service*.
4. Verify that the users and groups you migrated are available in Oracle Analytics Cloud.
 - a. Sign-in to Oracle Analytics Cloud and navigate to **Console**.
 - b. Click **Users and Roles**.
 - c. On the **Users** tab, verify the list of users and check whether users have the correct role (group).
 - d. On the **Roles** tab, verify the list of roles (groups) and check whether the correct users are assigned to each role.
 5. Grant Oracle Analytics Cloud application roles to your users and groups.
 - a. Click the **Application Roles** tab.
 - b. Grant appropriate Oracle Analytics Cloud application roles to the roles that you migrated from Oracle BI Cloud Service. Refer to the table.

Grant Application Role in Oracle Analytics Cloud...	To Each Role You Migrated to Oracle Cloud Infrastructure...
BI Service Administrator	<BICServiceName>.BICloudServiceAdministrators
DV Content Author	<BICServiceName>.BICloudServiceAdvancedContentAuthors
BI Content Author	<BICServiceName>.BICloudServiceAdvancedContentAuthors
DV Consumer	<BICServiceName>.BICloudServiceConsumers
BI Consumer	<BICServiceName>.BICloudServiceConsumers

Connect to Your Data

The way you connect your Oracle Analytics Cloud deployment on Oracle Cloud Infrastructure to your data is similar to your existing Oracle BI Cloud Service. The steps you need to follow depend where your data is stored.

If you're currently using Oracle BI Cloud Service to analyze data in an Oracle Database on Oracle Cloud Infrastructure Classic, you must first move your data to Oracle Cloud Infrastructure before you migrate your Oracle BI Cloud Service instance.

Where is Your Data Stored?	Description	More Information
Oracle database on Oracle Cloud Infrastructure Classic: <ul style="list-style-type: none"> • Oracle Database Cloud Schema Service • Oracle Database Classic Cloud Service 	<p>Oracle Analytics Cloud doesn't include an Oracle database on Oracle Cloud.</p> <p>First, migrate your data to an Oracle database on Oracle Cloud Infrastructure.</p> <p>You can reconfigure the database connection to point to the new database <i>after</i> you migrate your Oracle BI Cloud Service instance. There are two ways to do this:</p> <ul style="list-style-type: none"> • Use the Connections page in the target Oracle Analytics Cloud instance. Use this method if you use Data Modeler. • Use the Oracle Analytics Model Administration Tool for Oracle Analytics Cloud to edit the connection information. Use this method if you use Oracle BI Administration Tool to manage semantic models for Oracle BI Cloud Service. 	<p>Move Data from Oracle Database Cloud Schema Service</p> <p>Move Data from Oracle Cloud Infrastructure - Classic</p>
On-premises database	<p>You can keep your data in on-premises databases such as Oracle Database, MS SQL Server, Teradata, and IBM DB2.</p> <p>Use Data Gateway to access your on-premises data from the Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.</p>	Connect to Data on On-premise Databases

Move Data from Oracle Database Cloud Schema Service

Move any data stored on Oracle Database Cloud Schema Service to a database on Oracle Cloud Infrastructure and then migrate Oracle BI Cloud Service to Oracle Cloud Infrastructure. After migration, reconfigure the *Default Connection* for any semantic models that used this connection in Oracle BI Cloud Service so the semantic models connect to the new database.

You must have the Database Administrator role to export data from Oracle Database Cloud Schema Service and import data on the target database. If you don't know the secure FTP user password required to export the data, you need the Identity Domain Administrator role to reset the password. See [Set Up Secure FTP Account](#).

1. Disable any data loading operations scheduled for Oracle BI Cloud Service.
2. Export data from Oracle Database Cloud Schema Service.

See Export Your Database Schema.

3. Create a new database instance on Oracle Cloud Infrastructure and migrate your data using Oracle Data Pump.

See [Migrating Databases to the Cloud](#).

4. If required, add the IP address range or Gateway IPs associated with your Oracle Analytics Cloud service to the allowlist for the new database on Oracle Cloud Infrastructure.
 - **Oracle Analytics Cloud (Universal Credits):** See Find the IP or Host Name of Your Oracle Analytics Cloud Instance on Oracle Cloud Infrastructure (Gen 2)
 - **Oracle Analytics Cloud Subscription:** See IP Ranges and Gateway IPs for Oracle Analytics Cloud
5. Determine the connection string for the new database, then reconfigure this database as the **Default Connection** in Oracle Analytics Cloud.

You complete this step after migration. See [Edit Semantic Model Connections for Data Modeler](#) or [Edit Connections in the .rpd File and Upload the Semantic Model](#).

Move Data from Oracle Cloud Infrastructure - Classic

Move any data stored on Oracle Cloud Infrastructure Classic to a database on Oracle Cloud Infrastructure. You can reconfigure the database connection used in Oracle BI Cloud Service to point to the new database *after* you migrate your Oracle BI Cloud Service instance.

1. Create a new database instance on Oracle Cloud Infrastructure and migrate your data.
See [Migrate Databases Using the Migration Tools](#).
2. If required, add the IP address range or Gateway IPs associated with your target Oracle Analytics Cloud, to the allowlist for the new database on Oracle Cloud Infrastructure.
 - **Oracle Analytics Cloud (Universal Credits):** See Find the IP or Host Name of Your Oracle Analytics Cloud Instance on Oracle Cloud Infrastructure (Gen 2)
 - **Oracle Analytics Cloud Subscription:** See IP Ranges and Gateway IPs for Oracle Analytics Cloud
3. Migrate your Oracle BI Cloud Service instance.
See [Migrate Your Oracle BI Cloud Service Instances](#).
4. Determine the connection string for the new database, and then reconfigure the database connection in Oracle Analytics Cloud.

You complete this step after migration.

- If you used Data Modeler in Oracle BI Cloud Service and want to continue to use Data Modeler after you migrate to Oracle Cloud Infrastructure, see [Edit Semantic Model Connections for Data Modeler](#).
- If you used BI Administration Tool to manage semantic models in Oracle BI Cloud Service, use the latest Developer Client Tool for Oracle Analytics Cloud to reconfigure the database connection in the semantic model that you used in Oracle BI Cloud Service. See [Edit Connections in the .rpd File and Upload the Semantic Model](#).

Connect to Data on On-premise Databases

You can keep data in your on-premise database. If you haven't done so already you need to install Data Gateway on the network where you host the data and set up a connection to the target Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.

1. Install and set up Data Gateway.
See [Set up Data Gateway](#).
2. Configure and register Data Gateway.
See [Configure and Register Data Gateway](#).
3. If required, add the IP address range or Gateway IPs associated with your target Oracle Analytics Cloud to the allowlist for your on-premises database (on your firewall).
 - **Oracle Analytics Cloud (Universal Credits):** See [Find the IP or Host Name of Your Oracle Analytics Cloud Instance on Oracle Cloud Infrastructure \(Gen 2\)](#)
 - **Oracle Analytics Cloud Subscription:** See [IP Ranges and Gateway IPs for Oracle Analytics Cloud](#)
4. Migrate to Oracle Analytics Cloud.
See [Migrate Your Content](#).
5. Use the latest Model Administration Tool for Oracle Analytics Cloud to update connection pool settings for the on-premises database in the semantic model .rpd file that you used in Oracle BI Cloud Service.
See [Edit Connections in the .rpd File and Upload the Semantic Model](#).

3

Migrate Your Oracle BI Cloud Service Instances

When your target environment is ready, capture the information you want to migrate in a snapshot and copy it to Oracle Analytics Cloud on Oracle Cloud Infrastructure.

In most cases, after you restore the snapshot, you must modify your semantic model connections to get them to work in Oracle Analytics Cloud. The way you do this depends whether you used Data Modeler or BI Administration Tool to manage your semantic models in Oracle BI Cloud Service. Instructions on how to edit semantic model connections, together with other tasks you must do to complete migration are listed in the table.

Task	Description	More Information
Understand snapshot options	Understand what you can include or exclude when you take a snapshot.	Understand Snapshot Options
Check your target is ready for migration and take a backup	Verify that the required users and roles are available in your target service and take a snapshot in case you need to roll back.	Back Up Your Target Service Before Migration
Take a snapshot of the source	Capture the content you want to migrate on the source system.	Take a Snapshot on the Source
Download the snapshot locally	Download the snapshot that you want to migrate to your local file system.	Download the Snapshot
Import the snapshot to the target	Sign in to the target system and import the snapshot.	Import the Snapshot on the Target
Restore the snapshot content	Select the newly imported snapshot in the list of saved snapshots and restore the content in the snapshot. After restoring the snapshot you must perform additional tasks to complete the migration. For example, you must edit your semantic model connections, verify application role assignments, and more.	Restore the Snapshot on the Target
Edit semantic model connections for Data Modeler	(Mandatory if you use Data Modeler) Review, edit, and save all your database connections to activate them in Oracle Analytics Cloud. Reconfigure the Default Connection if you used this in Oracle BI Cloud Service.	Edit Semantic Model Connections for Data Modeler
Edit semantic model connections	(Mandatory if you use BI Administration Tool to manage semantic model connections for Oracle BI Cloud Service and you migrated your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure) Edit the semantic model .rpd file, add the new connection string, and then upload the updated semantic model to the target system.	Edit Connections in the .rpd File and Upload the Semantic Model

Task	Description	More Information
Migrate data files	Use the Data Migration utility to migrate and restore data files from another environment.	Migrate File-based Data
Verify application role assignments	Verify that users and groups in your target service have the correct application roles in Oracle Analytics Cloud.	Verify and Configure Service Settings
Reconfigure search crawl users	Change the name of the users configured to index semantic model content and catalog content.	Verify and Configure Service Settings
Verify and configure service settings	Verify various administrative settings on the target service.	Verify and Configure Service Settings
Activate deliveries	Enable deliveries to start delivering content from the target service.	Restore and Enable Delivery Schedules

Understand Snapshot Options

When you take a snapshot in Oracle BI Cloud Service you capture everything in your environment. When you restore the snapshot on Oracle Analytics Cloud you can restore everything in the target Oracle Analytics Cloud or only restore the content in the snapshot.

- Replace Everything** - Replaces your entire environment using information in the snapshot. Any content type excluded from the snapshot is restored to its default state in the target environment, that is, "no content". For example, if you decided to set up a virus scanner before restoring the snapshot, the new virus scanner configuration is removed.

There are some exceptions; if the snapshot doesn't contain any file-based datasets, plug-ins, or extensions these items are left unchanged in Oracle Analytics Cloud.
- Replace Snapshot Content Only** - Everything that's in the snapshot is restored. Any content type excluded from the snapshot remains unchanged in the target environment. For example, if you set up a virus scanner before restoring the snapshot, your virus scanner configuration remains.
- Custom** - You select the content you want to restore. If you don't want to restore certain content types, exclude them before you restore.

Back Up Your Target Service Before Migration

Verify that your target Oracle Analytics Cloud is ready for migration and then take a snapshot in case you need to roll back the service to its pre-migration state.

- Sign-in to the target Oracle Analytics Cloud.
- Verify that the users and roles you imported are available.
 - Navigate to **Console**, and click **Users and Roles**.
 - Click the **Users** tab and then the **Roles** tab to verify the users and roles.
- Take a backup of the target Oracle Analytics Cloud.

- a. Navigate to **Console**, and click **Snapshots**.
- b. Click **Create Snapshot**.
- c. For description, enter "Snapshot before content migration" or something similar.
- d. Select **Everything**, and then click **Create**.

Migrate Your Content

Capture the content you want to migrate in a snapshot and restore that snapshot on your target Oracle Analytics Cloud.

1. Sign-in to the source Oracle BI Cloud Service.
2. If you're using Data Modeler to build and manage semantic models, you must remove spaces from database connection names before you take your final snapshot.
 - a. Navigate to **Console**, and click **Connections**.
 - b. Check whether any of your connection names include a space.
 - c. If required, edit connection names, removing all spaces, and save the connection.
 - d. Allow some time for new names to refresh through the system before moving on to the next step.
3. Save the entire environment you want to migrate to a snapshot.
 - a. Navigate to **Console**, click **Snapshots and Models**, and then **New Snapshot**.
 - b. For **Description**, enter "Migrate content to Oracle Cloud Infrastructure" or something similar.
 - c. Click **OK**.
4. Download the snapshot locally.
 - a. Select the snapshot that you want to download.
 - b. Click the **Manage Snapshot** menu, and select **Download**.

You're asked to create a password for the snapshot. Don't forget this password. You'll need this password when you upload the snapshot on the target system.
 - c. Enter and confirm a password for the snapshot. The password must contain at least 8 characters.
 - d. Click **OK**.

The snapshot downloads as an Oracle Business Intelligence archive file (.bar).
5. Sign-in to the target Oracle Analytics Cloud and import the snapshot.

See [Import the Snapshot on the Target](#).
6. Restore the snapshot, and select **Replace Everything**.

See [Restore the Snapshot on the Target](#).

After restoring the snapshot you must perform additional tasks to complete the migration. For example, you must reconfigure your semantic model connections, verify application and roles, very and configure various settings, and activate deliveries.
7. Edit your semantic model connections.

See [Edit Semantic Model Connections for Data Modeler](#) or [Edit Connections in the .rpd File and Upload the Semantic Model](#).

8. Migrate data files manually if the restore process fails to migrate them.
See [Migrate File-based Data](#).
9. Verify application role assignments and other system settings.
See [Verify and Configure Service Settings](#).
10. Activate deliveries.
See [Restore and Enable Delivery Schedules](#).

Edit Semantic Model Connections for Data Modeler

If you used Data Modeler in Oracle BI Cloud Service, you must make some updates to the database connection information you migrated to Oracle Analytics Cloud to get your semantic models to work in Oracle Analytics Cloud. For example, if you used the Default Connection in Oracle BI Cloud Service you must recreate this connection in Oracle Analytics Cloud. If you migrated any other database connections, you must activate these one-by-one to start using them in Oracle Analytics Cloud.

1. Sign-in to the target Oracle Analytics Cloud and navigate to **Console**.
2. Activate all the semantic model connections migrated to Oracle Analytics Cloud.
 - a. Click **Connections**.
 - b. Edit and save each connection migrated from Oracle BI Cloud Service to activate the connection.

If the connection details have changed, you can edit these at the same time. For example, if you moved your data from a database on Oracle Cloud Infrastructure Classic to a database on Oracle Cloud Infrastructure.
3. If any of your semantic models used the **Default Connection** in Oracle BI Cloud Service, reconfigure this connection in Oracle Analytics Cloud to point to the database on Oracle Cloud Infrastructure that contains the data you migrated from Oracle Database Cloud Schema Service.
 - a. Determine the connection string for the new database on Oracle Cloud Infrastructure.
 - b. In **Console**, click **Connections**.
 - c. Click **Create**, and specify the name as **DefaultConnection** or some other name if you prefer.
 - d. Enter connection details for the new database.

In Oracle Analytics Cloud, you can't include spaces in the connection name, so the connection name in Oracle Analytics Cloud (**DefaultConnection**) doesn't exactly match the name in Oracle BI Cloud Service (**Default Connection**). This means you must reconfigure any semantic model using **Default Connection** to point to the new connection named here.
 - e. In Data Modeler, change the connection for any semantic models that previously used **Default Connection**.

See [Open Data Modeler and Connect a Model to a Different Database](#).
 - f. Validate, and publish any models that you change to synchronize the new connection. See [Use Data Modeler](#).

Edit Connections in the .rpd File and Upload the Semantic Model

Sometimes you must reconfigure the database connection information inside your source semantic model .rpd file after you migrate to Oracle Analytics Cloud on Oracle Cloud Infrastructure. For example, this is required when you move your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure because the connect string for the new database is different. If you need to edit the semantic model .rpd file, you must upload the updated semantic model to Oracle Analytics Cloud immediately *after* content migration.

Note:

These instructions only apply if you used BI Administration Tool to manage semantic models in Oracle BI Cloud Service. If you use Data Modeler, you edit connection information for semantic models through Console.

1. Determine the connection string for the new database on Oracle Cloud Infrastructure.
2. If you haven't done so already, download and install the *latest* client tools for Oracle Analytics Cloud from:
<http://www.oracle.com/technetwork/middleware/oac/downloads/oac-tools-4392272.html>
For instructions, see Download and Install Oracle Analytics Client Tools.
3. Use the latest Model Administration Tool to open the semantic model .rpd file that you used in Oracle BI Cloud Service .
4. Navigate to the Physical Layer pane, select the database connection you want to edit, and open the Connection Pool dialog.
5. Edit the connection details In **Data Source Name**, to specify the new database on Oracle Cloud Infrastructure.
6. Save the changes to the semantic model .rpd file.
7. Upload the updated semantic model .rpd file to the target Oracle Analytics Cloud instance.
Navigate to the **Console**, click **Snapshots**, click the **Page menu**, and then click **Replace Data Model**.

Migrate File-based Data

Users upload data files, such as spreadsheets, to Oracle BI Cloud Service to create datasets. When you migrate to a new Oracle Analytics Cloud environment, you can take this file-based data with you. Oracle Analytics Cloud offers a CLI utility (command-line interface) that enables you to move your data files to the new location. The snapshot CLI utility also moves any map-related plug-ins and extension files that users might upload for their data visualizations.

The CLI utility allows you to move data files directly from one environment to another in a single step. Or if you prefer, you can download your file-based data to a ZIP file and then upload the data files to your chosen environment in two separate steps.

1. Check your environment details.
 - Verify that the source Oracle BI Cloud Service and the target Oracle Analytics Cloud both include the latest update (5.3 or later). The CLI utility isn't available in earlier versions.
If you're not sure, ask your Oracle representative.
 - Check that the source and target system are both up and running, and Oracle Analytics Cloud is configured with valid storage credentials.
 - Check your local environment. You need Java 1.8 or later to run the CLI utility.
 - Make sure you can access the source environment and the target Oracle Analytics Cloud from the local environment where you plan to run the CLI utility.
 - Verify the name and location of the snapshot that you downloaded earlier containing your file-based data. For example, `/tmp/20190307095216.bar`.

2. Download the CLI utility.

- a. In your target Oracle Analytics Cloud, click **Console** and then click **Snapshots**.
- b. Click the Page menu , select **Migrate**, then **Download Data Migration Utility**.

Follow the instructions to save the `migrate-oac-data.zip` file locally.

3. Unzip `migrate-oac-data.zip`.

The ZIP file contains three files:

- `migrate-oac-data.jar`
- `config.properties`
- `readme`

4. If you want to migrate data files stored in your source environment directly to the target in a single step, configure the section `[MigrateData]` in `config.properties`.

```
[MigrateData]
# Migrate data files from a source Oracle BI Cloud Service
environment (BICS) to a target Oracle Analytics Cloud environment.
  # Specify the source environment as Oracle BI Cloud Service.
  SOURCE_ENVIRONMENT=BICS
  # Source Oracle BI Cloud Service URL. For example: https://
sourcehost.com:443 or http://sourcehost.com:9704
  SOURCE_URL=http(s)://<Source Oracle BI Cloud Service
Host>:<Source Port>

  # Name of a user with Administrator permissions in the source
environment. For example: SourceAdmin
  SOURCE_USERNAME=<Source Administrator User Name>
  # Location of the source snapshot (.bar file). For
example: /tmp/20190307095216.bar
  BAR_PATH=<Path to Source Snapshot>
```

```
# Target Oracle Analytics Cloud URL. For example: https://
targethost.com:443 or http://targethost.com:9704
TARGET_URL=http(s)://<Target Oracle Analytics Cloud Host>:<Target
Port>
# Name of a user with Administrator permissions in the target
environment. For example: TargetAdmin
TARGET_USERNAME=<Target Administrator User Name>
```

5. If you want to first download data files from your source Oracle BI Cloud Service to your local environment and subsequently upload the data files to the target Oracle Analytics Cloud environment, configure sections [DownloadDataFiles] and [UploadDataFragments] in config.properties.

```
[DownloadDataFiles]
#Download Data Files: Download data files from Oracle BI Cloud Service
storage to a local repository
# Specify the source environment as Oracle BI Cloud Service.
SOURCE_ENVIRONMENT=BICS
# Source Oracle BI Cloud Service URL. For example: https://
sourcehost.com:443 or http://sourcehost.com:9704
SOURCE_URL=http(s)://<Source Oracle BI Cloud Service Host>:<Source
Port>

# Name of a user with Administrator permissions in the source
environment. For example: SourceAdmin
SOURCE_USERNAME=<Source Administrator User Name>
# Location of the source snapshot (.bar file). For example: /tmp/
20190307095216.bar
BAR_PATH=<Path to Source Snapshot>
# Local data file directory. Make sure you have enough space to
download the data files to this directory. For example: /tmp/
mydatafiledir
DATA_FRAGMENTS_DIRECTORY=<Data Files Directory>
# Data fragment size. Data files are downloaded in fragments.
Default fragment size is 500MB.
MAX_DATA_FRAGMENT_SIZE_IN_MB=500
```

```
[UploadDataFiles]
#Upload data files: Upload data files to the target Oracle Analytics
Cloud.
# Target Oracle Analytics Cloud URL. For example: https://
targethost.com:443 or http://targethost.com:9704
TARGET_URL=http(s)://<Target Oracle Analytics Cloud Host>:<Target
Port>
# Name of a user with Administrator permissions in the target
environment. For example: TargetAdmin
TARGET_USERNAME=<Target Administrator User Name>
# Local directory containing the data files you want to upload. For
example: /tmp/mydatafiledir
DATA_FRAGMENTS_DIRECTORY=<Data Files Directory>
# Location of the source snapshot (.bar file). For example: /tmp/
```

```
20190307095216.bar
  BAR_PATH=<Path to Source Snapshot>
```

6. Run the `migrate-oac-data.jar` file in your local environment.

Syntax:

```
migrate-oac-data.jar [-config configfile] [-d] [-help] [-m] [-u]
```

Where:

- `-config configfile`: Name of the `config.properties` file
- `-d`: Downloads data locally using information in `config.properties`
- `-help`: Displays help
- `-m`: Migrates data using source and target information in the `config.properties` file
- `-u`: Uploads data using information in the `config.properties` file

For example, to migrate data files in a single step:

```
java -jar migrate-oac-data.jar -m -config config.properties
```

For example, to download data files locally:

```
java -jar migrate-oac-data.jar -d -config config.properties
```

For example, to upload data files:

```
java -jar migrate-oac-data.jar -u -config config.properties
```

7. Sign in to your target Oracle Analytics Cloud.
8. To expose the data files in Oracle Analytics Cloud, you must restore the snapshot that you used to migrate the rest of your content for a second time. This time, you must select the **Custom** restore option.
 - a. Open the Console, and click **Manage Snapshots**.
 - b. Select the snapshot containing your data files.
 - c. Select the **Custom** restore option, and then select the option **File-based data**. Deselect all other options.
 - d. Click **Restore**.
9. Verify that your data files are available.

Verify and Configure Service Settings

Many settings are migrated for you. Take some time to review various configuration options on the target Oracle Analytics Cloud and reconfigure settings, if required.

1. Sign-in to the target Oracle Analytics Cloud and navigate to **Console**.

2. Verify that all the application roles that you want are available and they're assigned to the correct users and roles.
 - a. In Console, click **Users and Roles**.
 - b. Click **Application Roles**.

See Add Members to Application Roles.

3. Reconfigure search crawl users.

The user name that is configured immediately after migration includes the tenancy prefix required for Oracle BI Cloud Service. You must remove the tenancy prefix because this isn't required in Oracle Analytics Cloud.

- a. In Console, click **Search Index**.
- b. On the Data Model tab, click the **Set User** search icon for the **User to Run Crawl As** field, and select the name of a user with administrative permissions in Oracle Analytics Cloud.

For example, you might change the user name from **<Tenancy>.MyAdminUser** to **MyAdminUser**. If you prefer, you can select the name of a different user.

- c. Click the **Catalog** tab, and repeat the steps to select a search crawl user for catalog content.
4. In Console, click **Mail Server** to verify your email server configuration.
See Set Up an Email Server to Deliver Reports.
 5. In Console, click **Safe Domains** to verify your safe domains are configured.
See Register Safe Domains.
 6. In Console, click **Maps** to verify map configuration for data visualizations.
See Add Custom Map Layers.
 7. In Console, click **Extensions** to verify your custom plug-ins and extensions.
See Manage Custom Plug-ins.
 8. In Console, click **Virus Scanner** to configure a virus scanner configuration.
See Set Up a Virus Scanner.
 9. In Console, click **System Settings** to verify and configure advanced options available on this page.
See Configure Advanced Options.
 10. In Classic Administration, click **Manage Map Data** to verify map configuration for analyses and dashboards.
See Set Up Maps for Dashboards and Analyses.

Restore and Enable Delivery Schedules

When you restore content from a snapshot or migrate content from a different Oracle BI Cloud Service, delivery schedules defined for agents, analyses, and dashboards in the snapshot aren't restored or activated right away in Oracle Analytics Cloud. When you're ready to restore deliveries on your system, you can decide whether to enable or disable delivery schedules on your system. This is useful as you might not want to immediately start delivering content.

1. In the Oracle Analytics Home page, click the **Navigator**, and then click **Console**.
2. Click **Monitor Deliveries**.
3. To restore deliveries, click the **Action** menu for the page and select **Restore Deliveries**.
4. Select whether to restore and activate deliveries or restore deliveries only.

- **Maintain Delivery Schedule Status** - All delivery schedules maintain their status (enabled or disabled).
 - Existing delivery schedules remain unchanged.
 - New delivery schedules created during the restore process inherit the schedule status that's defined in the corresponding agent, analysis or dashboard.

For example, this option is useful when you restore deliveries in a production environment where you want deliveries to be active immediately.

- **Disable Delivery Schedules for New Deliveries** - Delivery schedules that are created during the restore process for agents, analyses, and dashboards are disabled. Existing delivery schedules remain unchanged.

For example, this option is useful when you restore deliveries in a test environment where you don't need to activate deliveries immediately.

- **Disable All Delivery Schedules And Delete All History** - (Not recommended) All delivery schedules are disabled.

- All existing delivery schedules are disabled.
- New delivery schedules created for agents, analyses, and dashboards during the restore process are disabled.

If you select this option you must manually enable delivery schedules for all agents, analyses, and dashboards.

5. Click **Restore**.

Click **OK** to confirm.

6. To activate a delivery, click the Action menu for the delivery, and select **Enable**.

To activate multiple deliveries at once, select **Shift** + click or **Ctrl** + click to select all the deliveries you want to activate, then right-click and select **Enable**.

If necessary, click **Edit** to redefine the delivery schedule.

7. To prevent clutter, delete any history or deliveries you don't want anymore. Click the Action menu for the delivery:

- **Delete History** — Removes historical information that you don't want to see any more.
- **Delete Delivery** — Deletes the delivery and all its history.

4

Complete Post-Migration Tasks

After successfully migrating your Oracle BI Cloud Service content to Oracle Cloud Infrastructure, test your new Oracle Analytics Cloud instance thoroughly, and then perform cleanup and other optional configuration tasks.

Task	Description	More Information
Test the migrated service	Check the content you migrated is available on Oracle Cloud Infrastructure and everything works as you expect.	Test the Migrated Service Instance
Clean up services on Oracle Cloud Infrastructure Classic	Remove any resources that you don't need.	Clean Up Infrastructure and Platform Resources in Oracle BI Cloud Service

Test the Migrated Service Instance

After migrating your Oracle BI Cloud Service instance to Oracle Cloud Infrastructure, test your service thoroughly to ensure it's production-ready.

1. If you use Data Modeler, verify your semantic models and their database connections.
2. Run analyses to check they display the correct data.
You might need to click **Refresh** to see the data.
3. Open dashboards to check they display as expected.
4. If you set up email delivery schedules for your content, verify that they're working.
5. Navigate to the **Home** page, then open workbooks you're familiar with to make sure the visualizations display the correct data.
6. Navigate to the **Data** page.
 - a. Verify your datasets.
 - b. Check connection details.

Clean Up Infrastructure and Platform Resources in Oracle BI Cloud Service

After testing your Oracle Analytics Cloud instance on Oracle Cloud Infrastructure you can delete the source Oracle BI Cloud Service instance and other supporting resources in Oracle Cloud Infrastructure Classic such as the associated cloud database. Remove these resources from Oracle Cloud Infrastructure Classic to avoid costs for services that you no longer use.

1. Delete the Oracle BI Cloud Service instance.
 - a. Sign in to your traditional Oracle Cloud account, and navigate to the Oracle BI Cloud Service Service Details page.

