Oracle® Cloud

Migrating Oracle Analytics Cloud - Classic Instances to Oracle Cloud Infrastructure

E95096-30
May 2025

Oracle Cloud Migrating Oracle Analytics Cloud - Classic Instances to Oracle Cloud Infrastructure,

E95096-30

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Contents

Preface

Learn how to migrate Oracle Analytics Cloud - Classic instances to Oracle Cloud Infrastructure.

Topics:

Audience

Migrating Oracle Analytics Cloud - Classic Instances to Oracle Cloud Infrastructure is intended for administrators who migrate services and content from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure.

Documentation Accessibility

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Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

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.

- Administering Oracle Analytics Cloud on Oracle Cloud Infrastructure (Gen 2)
- 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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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 your existing Oracle Analytics Cloud - Classic instances to Oracle Cloud Infrastructure using a snapshot.

Topics:

> **Note:**
>
> This Guide describes how to migrate your content from Oracle Cloud Infrastructure - Classic to any region on Oracle Cloud Infrastructure, using a *snapshot*. An alternative tool called *Application Migration* is available from the Oracle Cloud Infrastructure console. Application Migration can discover your Oracle Analytics Cloud - Classic instances, create Oracle Analytics Cloud instances on Oracle Cloud Infrastructure, and migrate your content. Application Migration is available only in specific Oracle Cloud Infrastructure regions. To find out whether Application Migration is available in your region and how to use this tool, see Overview of Application Migration in the Oracle Cloud Infrastructure documentation.

About the Migration Scope

Before migrating Oracle Analytics Cloud - Classic instances to Oracle Cloud Infrastructure, consider the scope and constraints of this migration path.

Summary

- Migration scenarios covered in this Guide
  - Source Oracle Analytics Cloud - Classic instance: Data Visualization or Business Intelligence
  - Source Oracle Analytics Cloud - Classic instance: 5.3 or later
  - Source identity management: Oracle Identity Cloud Service (Cloud accounts) or embedded LDAP server (traditional accounts)
  - Target Oracle Analytics Cloud instance: 5.3 or later
- Not covered in the Guide
  - Oracle Analytics Cloud - Classic instances deployed with Essbase
  - Database migration

Migration scenarios covered in this Guide

With Oracle Analytics Cloud - Classic, you can deploy services with several different feature sets:

- Data Visualization
- Business Intelligence (includes Data Visualization)
- Essbase

This Guide only describes how to migrate services deployed with Data Visualization or Business Intelligence. Before you start migration, Oracle recommends that you patch your service on Oracle Cloud Infrastructure Classic with the latest available update. The migration tools you need aren't available in earlier versions.

You can verify the current version of your source and target environments in Oracle Cloud Infrastructure Console. If you're not sure, check with your administrator.

Not covered in this Guide

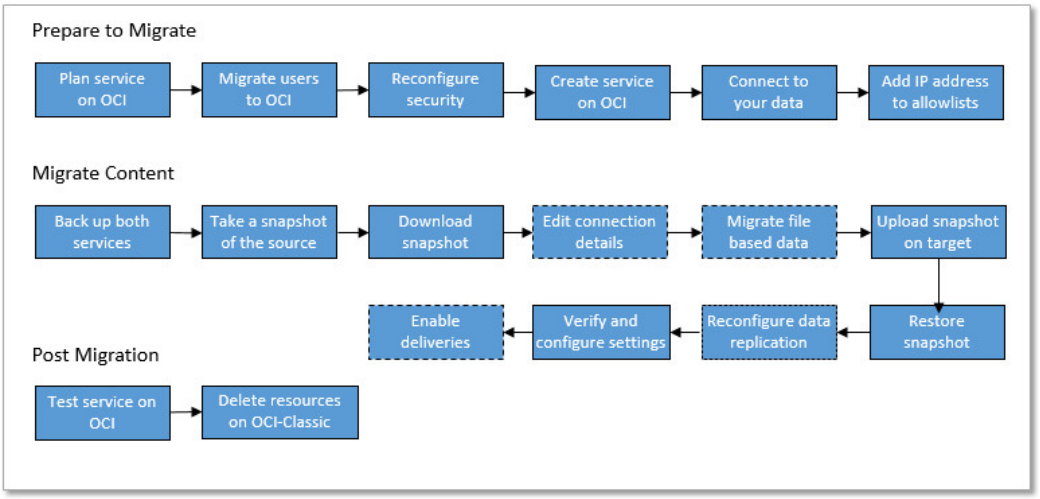
This Guide doesn't describe how to migrate Oracle Analytics Cloud - Classic instances deployed with the Essbase or non-Oracle Analytics Cloud artifacts, such as associated databases, security configuration, and so on. You must migrate non-Oracle Analytics Cloud artifacts separately or re-create them on the target instance.

About the Migration Task Flow

You use migration tools to migrate Oracle Analytics Cloud - Classic instances on Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure. Before you start the migration, you need to prepare and set up a target Oracle Analytics Cloud instance ondata 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
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
Migrate users and groups	• Migrate users and groups from Oracle Identity Cloud Service • Migrate users and roles from embedded WebLogic LDAP	• Migrate Users and Groups from Oracle Identity Cloud Service • Migrate Users and Groups from Embedded WebLogic LDAP Server
Reconfigure single-sign on	(Optional) If SAML Single Sign-on (SSO) is configured in your source environment using `samlssodocker`, set up SSO in your target environment.	**Oracle Cloud Infrastructure Identity and Access Management Identity Domains** • Federating with Identity Providers **Oracle Identity Cloud Service** • Add an Identity Provider • Integrating Oracle Identity Cloud Service with Microsoft Active Directory Federation Services
Integrate with external identity providers	(Optional) Integrate with external 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** • Federating with Identity Providers • Setting Up a Microsoft Active Directory (AD) Bridge • REST API for IAM Identity Domains **Oracle Identity Cloud Service** • Manage Bridges for Oracle Identity Cloud Service • Integrate Oracle Identity Manager with Oracle Identity Cloud Service • REST API for Oracle Identity Cloud Service

Task	Description	More Information
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 on Oracle Cloud Infrastructure (Gen 2). 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 on Oracle Cloud Infrastructure and that you can sign in.	Verify Your Service and Sign In
Reconfigure connections to your data	Update connection information on 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 address of your Oracle Analytics Cloud - Classic instances 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
Export the snapshot locally	Download the snapshot that you want to migrate to your local file system.	Export the Snapshot
Edit database connections	(Only if you migrated your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure) Extract the semantic model .rpd file from the snapshot (BAR), add the new connection string, and then upload the updated semantic model to the target system.	Edit Connections and Upload Semantic Model
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.	Restore the Snapshot on the Target
Migrate data files	(Only if the restore process fails due to connection issues) Use the Data Migration utility to migrate and restore data files from another environment.	Migrate File-based Data

Task	Description	More Information
Reconfigure data replication connections	(Only if you migrated replicated data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure) Verify that the replicated tables and the required system tables exist on the new target database, and then edit the data replication connections to point to the new database.	Move Replicated Data to a Different Target Database
Reconfigure service settings	Verify various administrative settings on the target service.	Configure Service Settings
Activate deliveries	Disable deliveries on the source service and start delivering content from the target service.	Restore and Enable Delivery Schedules
(Optional) Migrate other snapshots	Export individual snapshots that you want to migrate and then import them to your target environment, as required.	Export Snapshots Import Snapshots

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 Your Migrated Service
Clean up services on Oracle Cloud Infrastructure Classic	Remove any resources that you don't need.	Clean Up Infrastructure and Platform Resources in Oracle Cloud Infrastructure Classic

About the Migration Tools

You use a snapshot to migrate your Oracle Analytics Cloud - Classic instance to 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, and settings from your Oracle Analytics Cloud - Classic 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**: Download the latest client tool to modify connection information for your semantic models before you migrate to Oracle Cloud Infrastructure. Only required if you move your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure.

2

Prepare to Migrate Oracle Analytics Cloud - Classic Instances

Before you migrate Oracle Analytics Cloud - Classic 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
Migrate users and groups	• Migrate users and groups from Oracle Identity Cloud Service • Migrate users and roles from embedded WebLogic LDAP	• Migrate Users and Groups from Oracle Identity Cloud Service • Migrate Users and Groups from Embedded WebLogic LDAP Server
Reconfigure single-sign on	(Optional) If SAML Single Sign-on (SSO) is configured in your source environment using `samlssodocker`, set up SSO in your target environment.	**Oracle Cloud Infrastructure Identity and Access Management Identity Domains** • Federating with Identity Providers **Oracle Identity Cloud Service** • Add an Identity Provider • Integrating Oracle Identity Cloud Service with Microsoft Active Directory Federation Services

Task	Description	More Information
Integrate with external identity providers	(Optional) Integrate with external 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** • Federating with Identity Providers • Setting Up a Microsoft Active Directory (AD) Bridge • REST API for IAM Identity Domains **Oracle Identity Cloud Service** • Manage Bridges for Oracle Identity Cloud Service • Integrate Oracle Identity Manager with Oracle Identity Cloud Service • REST API for Oracle Identity Cloud Service
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 on Oracle Cloud Infrastructure (Gen 2). 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 on Oracle Cloud Infrastructure and that you can sign in.	Verify Your Service and Sign In
Reconfigure connections to your data	Update connection information on 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 address of your Oracle Analytics Cloud - Classic instances 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 Analytics Cloud - Classic instance on Oracle Cloud Infrastructure Classic. 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 might need to take another snapshot and repeat the migration if you want to include any changes that they make.

After a service instance is migrated successfully, you can reroute users to the new instance in Oracle Cloud Infrastructure.

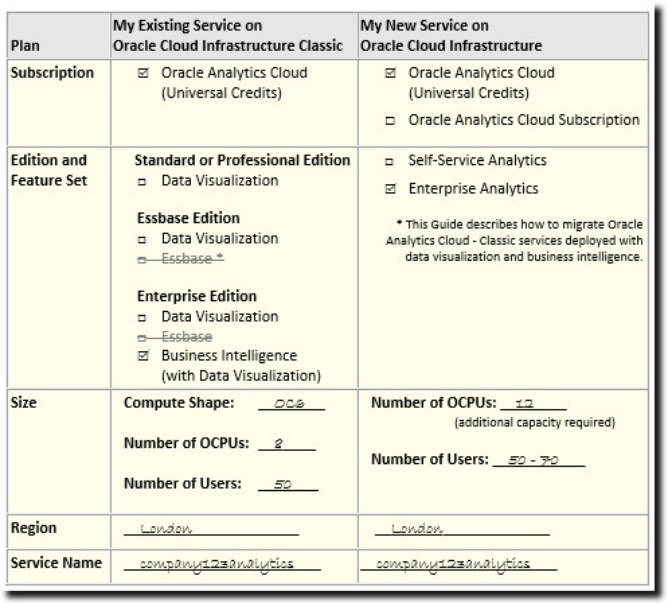
Plan Your Service on Oracle Cloud Infrastructure

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 Service on Oracle Cloud Infrastructure Classic	My New Service on Oracle Cloud Infrastructure
Subscription	☑ Oracle Analytics Cloud (Universal Credits)	☑ Oracle Analytics Cloud (Universal Credits) ☐ Oracle Analytics Cloud Subscription
Edition and Feature Set	Standard or Professional Edition ☐ Data Visualization Essbase Edition ☐ Data Visualization ☐ ~~Essbase *~~ Enterprise Edition ☐ Data Visualization ☐ ~~Essbase~~ ☑ Business Intelligence (with Data Visualization)	☐ Self-Service Analytics ☑ Enterprise Analytics * This Guide describes how to migrate Oracle Analytics Cloud - Classic services deployed with data visualization and business intelligence.
Size	Compute Shape: OC6 Number of OCPUs: 8 Number of Users: 50	Number of OCPUs: 12 (additional capacity required) Number of Users: 50 - 70
Region	London	London
Service Name	company12analytics	company12analytics

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?

Check which edition and feature set you used to create the service on Oracle Cloud Infrastructure Classic. In most cases, you use the same feature set to create your target deployment on Oracle Cloud Infrastructure.

Feature set options available on Oracle Cloud Infrastructure Classic:

- Data Visualization: Self-service data visualization, preparation and smart discovery (Professional Edition)
- Business Intelligence: Enterprise data modeling, reporting features, and data visualization (Enterprise Edition)
- Essbase: Collaborative data collection, scenarios and what-if analysis (Professional Edition or Essbase Edition)

Feature set options available on Oracle Cloud Infrastructure:

- Self-Service Analytics: Suitable if you want to offer only data visualization and migrate only data visualization artifacts (Professional Edition).
- Enterprise Analytics: Suitable if you want to offer data visualization, plus enterprise modeling and reporting features. Required if you want to migrate analyses, dashboards, pixel-perfect reports, and data visualizations (Enterprise Edition).
- Essbase Edition: Required if you want to migrate an Essbase instance. *This guide doesn't describe how to migrate Oracle Analytics Cloud - Classic services deployed with Essbase.

Use this table to determine which feature set you need to migrate Oracle Analytics Cloud - Classic services deployed with data visualization and business intelligence:

Oracle Analytics Cloud - Classic		Oracle Analytics Cloud	Oracle Analytics Cloud Subscription
Edition	**Feature Set**	**Feature Set**	**Edition Required**
Professional Edition	Data Visualization	Self-Service Analytics	Professional Edition
Enterprise Edition	Data Visualization	Self-Service Analytics	Professional Edition
	Business Intelligence	Enterprise Analytics	Enterprise 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 (OCPUs) 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?

Verify the current compute shape of your service on Oracle Cloud Infrastructure Classic. Consider whether or not the size of your current deployment meets your current requirements. For example, if your compute shape on Oracle Cloud Infrastructure Classic is OC6 (8 OCPUs and 60 GB memory) you might want your deployment on Oracle Cloud Infrastructure to have a similar number of OCPUs, more OCPUs, or less OCPUs. The decision is yours.

Oracle Cloud Infrastructure offers a range of compute sizes (OCPUs) to suit different scenarios. The larger the compute size, the greater the processing power. For more guidance, read the 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 service on Oracle Cloud Infrastructure Classic 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 deployed your current service on Oracle Cloud Infrastructure Classic.

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. If you want, you can use the same name as your current service on Oracle Cloud Infrastructure Classic.

Name restrictions 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.

Migrate Users and Roles from Oracle Analytics Cloud - Classic

Before you migrate to Oracle Cloud Infrastructure, you must migrate your users and groups from Oracle Cloud Infrastructure Classic. The way you migrate depends on whether you're using Oracle Identity Cloud Service or an embedded WebLogic LDAP server. If you subscribe to Oracle Analytics Cloud - Classic through Universal Credits, you manage users in Oracle Identity Cloud Service. If you subscribe to Oracle Analytics Cloud - Classic through a traditional metered or unmetered subscription, you might be using an embedded WebLogic LDAP server.

Topics

Migrate Users and Groups from Oracle Identity Cloud Service

Use export and import features in your identity management system to migrate users and groups from an identity domain on Oracle Cloud Infrastructure Classic to another identity domain on Oracle Cloud Infrastructure.

The way you migrate users and groups depends whether your target environment offers Oracle Cloud Infrastructure Identity and Access Management (IAM) identity domains or Oracle Identity Cloud Service (IDCS).

- **Oracle Cloud Infrastructure Identity and Access Management (IAM) Identity Domains**
  - To migrate users, see Export Users from IDCS in *Administering Oracle Identity Cloud Service* and Import Users to IAM Identity Domains in *Oracle Cloud Infrastructure documentation*.
  - To migrate user groups, see Export Groups from IDCS in *Administering Oracle Identity Cloud Service* and Import Groups to IAM Identity Domains in *Oracle Cloud Infrastructure documentation*.
- **Oracle Identity Cloud Service**
  - To migrate users, see Export Users from IDCS and Import Users to IDCS in *Administering Oracle Identity Cloud Service*.
  - To migrate user groups, see Export Groups from IDCS and Import Groups to IDCS in *Administering Oracle Identity Cloud Service*.

Migrate Users and Groups from Embedded WebLogic LDAP Server

If you subscribe to Oracle Analytics Cloud - Classic through a traditional metered or unmetered subscription you might be using an embedded WebLogic LDAP server for identity management. The way you migrate users and groups to Oracle Analytics Cloud on Oracle Cloud Infrastructure (Gen 2) depends whether your target environment offers Oracle Cloud

Infrastructure Identity and Access Management (IAM) identity domains or Oracle Identity Cloud Service (IDCS).

If your service uses an embedded WebLogic LDAP server, use the `wls_ldap_csv_exporter` script to export users and groups to CSV files so you can migrate to Oracle Cloud Infrastructure (Gen 2). Prepare both CSV files so they contain all the information required and then import them on the target environment.

1. Export users and groups from your source environment. Run the `wls_ldap_csv_exporter` script:

   ```
   $ /bi/app/public/bin/wls_ldap_csv_exporter -u weblogic_admin_user -c
   oracle_common_folder_path -D output_dir
   ```

   Typically, *oracle_common_folder_path* is the folder `/bi/app/fmw/oracle_common`

   This script creates two CSV files, one CSV file contains users and the other contains groups. There is also a log file, which describes any invalid or incompatible records that your target environment won't understand.

   - Every user must have a default password.
   - IAM identity domains and IDCS don't support group memberships; that is, where a group is a member of another group. Such records are discarded from the group CSV file and mentioned in the log file.
   - IAM identity domains and IDCS both require several mandatory parameters for users: `User ID,Last Name,First Name,Password,Work Email`. User records that don't include all the required parameters aren't imported.

   Before you import CSV files on your target environment, take some time to make sure the CSV files contain all the required information.

2. Prepare both CSV files for migration.
   a. Review the log file for information about invalid or incomplete records.
   b. Review the users CSV file, and ensure the information is complete.
   c. Repeat for the groups CSV file.
3. Import users from the CSV file you exported earlier:
   - **Oracle Cloud Infrastructure Identity and Access Management (IAM) Identity Domains**

     See Import Users to IAM Identity Domains in *Oracle Cloud Infrastructure documentation*.
   - **Oracle Identity Cloud Service**

     See Import User Accounts to IDCS in *Administering Oracle Identity Cloud Service*.
4. Import groups from the CSV file you exported earlier.
   - **Oracle Cloud Infrastructure Identity and Access Management (IAM) Identity Domains**

     See Import User Groups to IAM Identity Domains in *Oracle Cloud Infrastructure documentation*.
   - **Oracle Identity Cloud Service**

     See Import User Groups in *Administering Oracle Identity Cloud Service*.

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

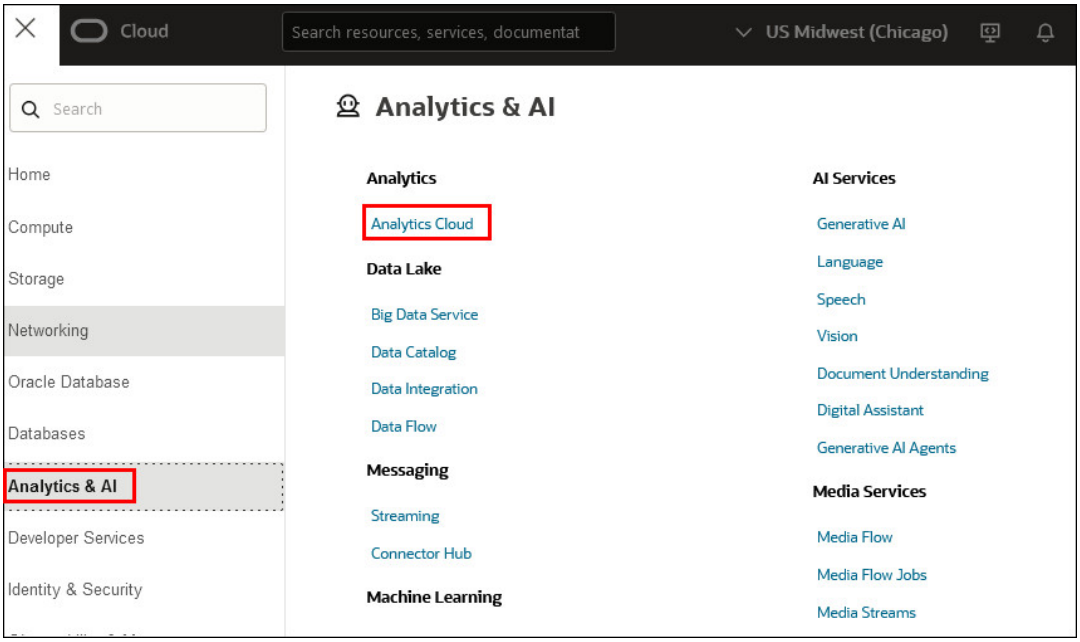
Create a Service using the Console

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.

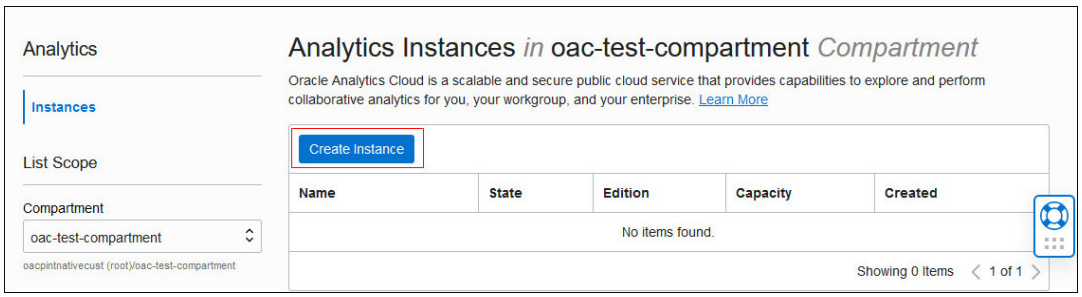
1. Sign in to your Oracle Cloud account.

   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**.



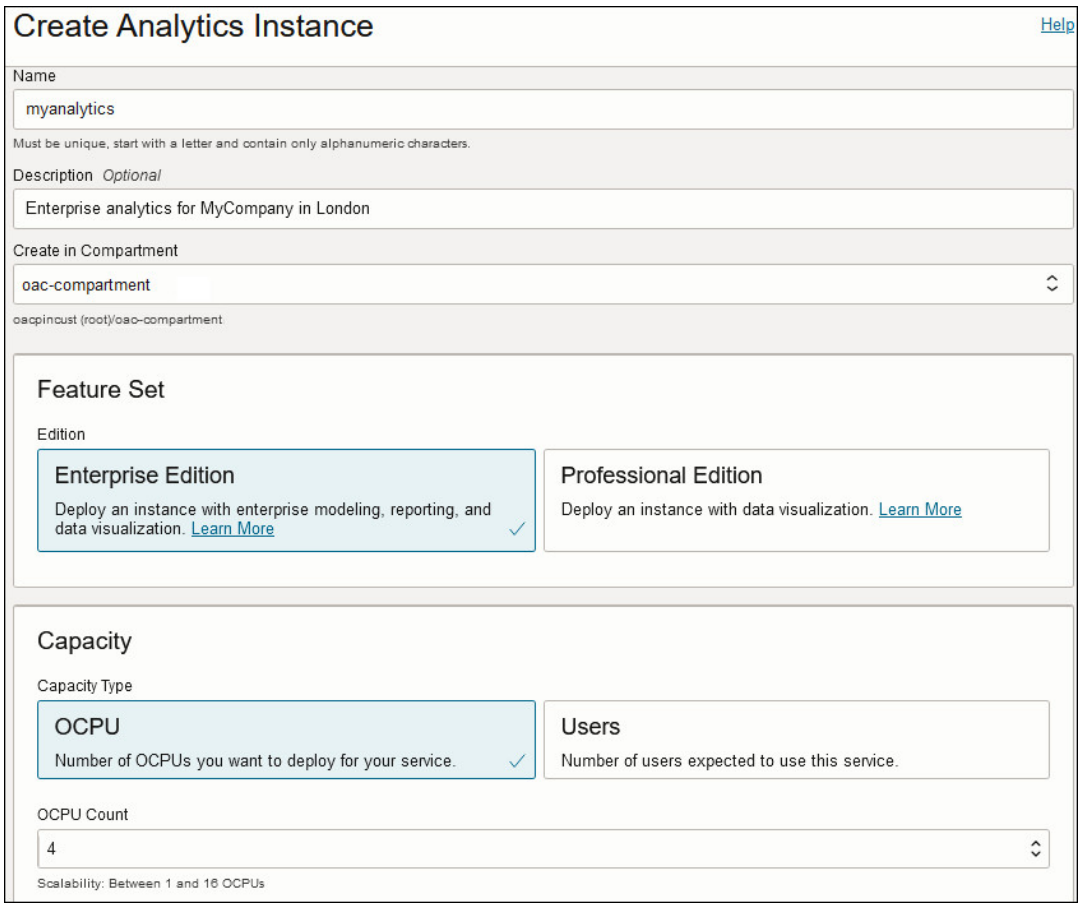
6. Enter a **Name** and a brief description to identify your instance.

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

7. 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:



8. 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.

9. 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.

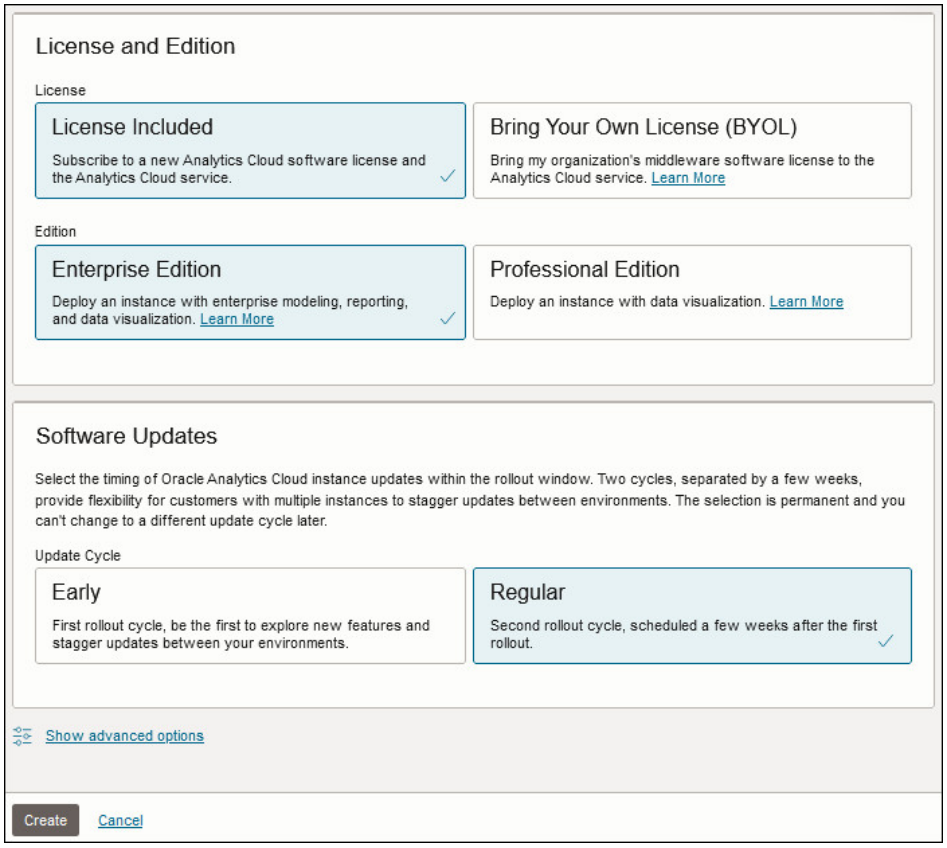
   The **Bring Your Own License (BYOL)** option is available when you select **OCPU** for Capacity.

   If you select **Users**, you must have an Oracle Cloud license for Oracle Analytics Cloud.
10. For **Update Cycle**, select **Early** to receive updates early or keep the default (**Regular**).

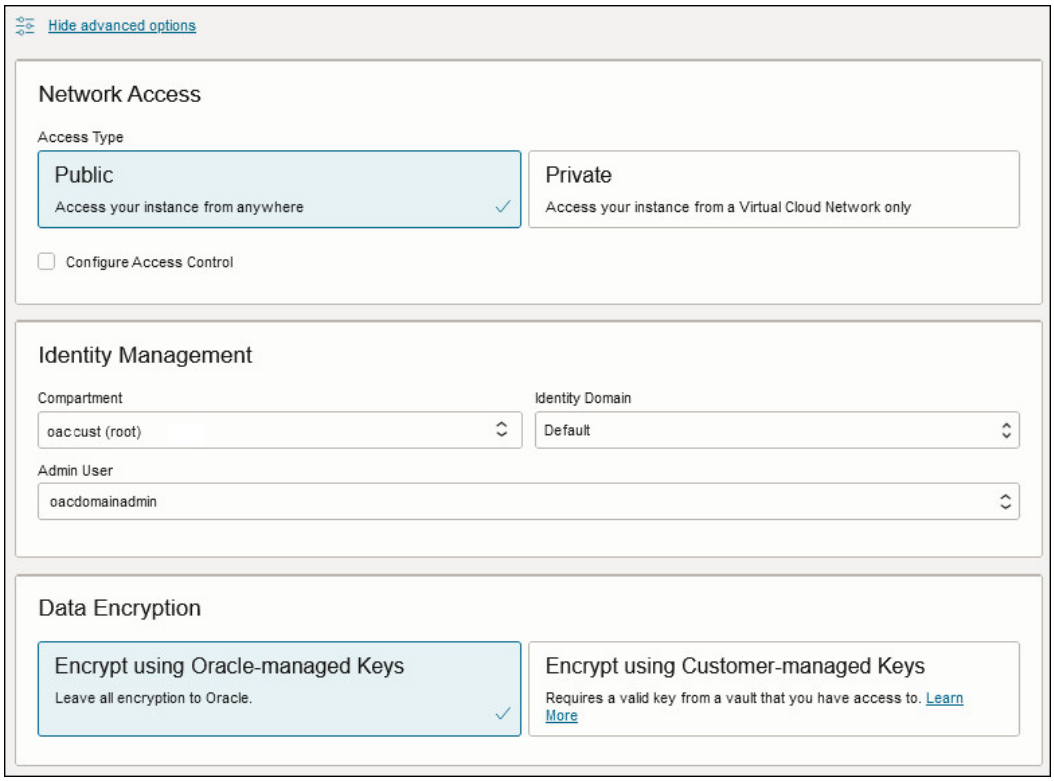
    The selection you make is permanent. You can't switch from the regular update cycle to the early cycle later on (or the other way around). So, it's important to consider whether early updates are suitable for your environment from the start. See Do You Want Early Access to Updates?

    > **Note:**
    >
    > The **Update Cycle** option is available only in commercial, US government, US defense, UK government, and EU sovereign realms.

    For example:



11. Optional: Click **Show Advanced Options** to configure network, identity management, or encryption options.



12. 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).

13. Optional: In **Identity Management**, select a different identity domain or administrator for Oracle Analytics Cloud or keep the default.

    - **Compartment**: If the identity domain you want to use isn't in the same compartment as Oracle Analytics Cloud, select the appropriate compartment.
    - **Identity Domain**: Select the identity domain you want Oracle Analytics Cloud to use. You must have read permissions for domains in the selected compartment. See Which Identity Provider and Administrator Do You Want for Your Service?
    - **Admin User**: Select a user from the selected identity domain to be the administrator for Oracle Analytics Cloud.

    If identity domains aren’t available in your tenancy, the **Identity Management** section doesn't display.

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

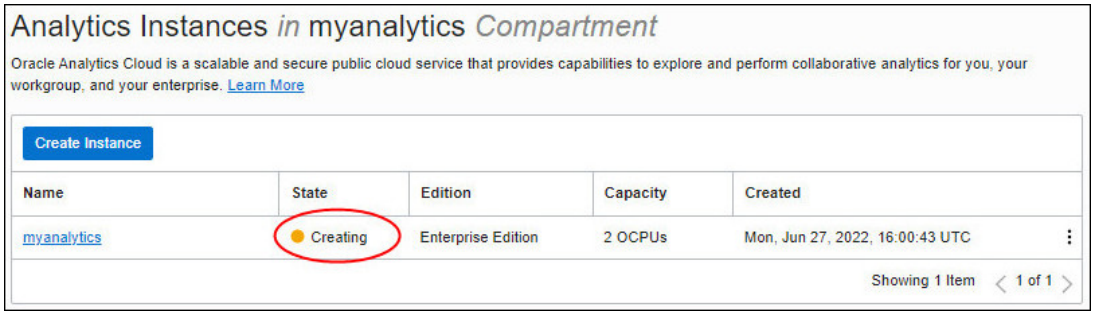
    - **Encrypt using Oracle-managed Keys**: Leave all data encryption to Oracle.
    - **Encrypt using Customer-managed Keys**: Specify the custom encryption key you want to use.

    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**.

15. 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.



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.

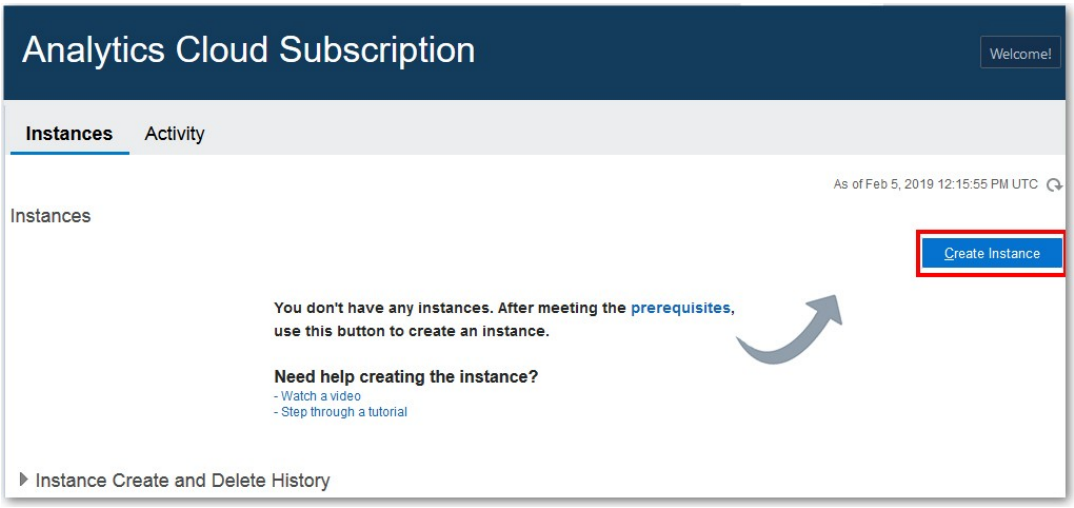
1. Sign in to Oracle Cloud as the Cloud Account Administrator.

   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.

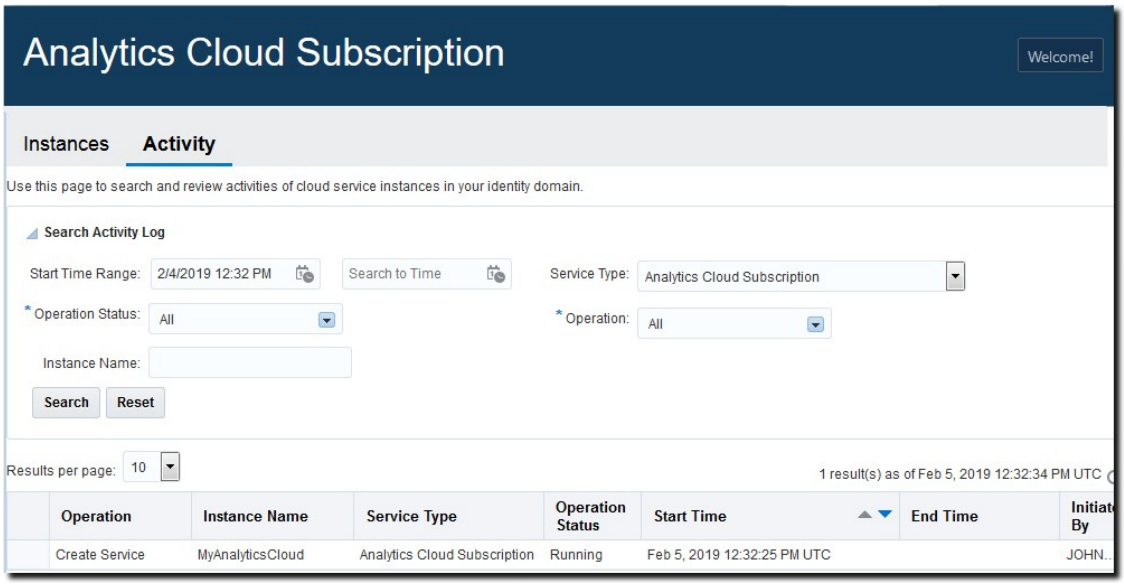
7. If multiple identity domains are available to you, select the **Identity Domain** that you want this service to use and then enter the name of an existing user in this identity domain that you want to assign as the **Service Administrator**.

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.



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**.
4. Sign in with your administrator credentials.

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 service on Oracle Cloud Infrastructure Classic. The steps you need to follow depend where your data is stored.

If you're currently using Oracle Analytics Cloud - Classic 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 Analytics Cloud - Classic instance.

Where is Your Data Stored?	Description	More Information
On-premises database	You can keep your data in on-premises databases such as Oracle Database, Oracle Essbase, MS SQL Server, Teradata, and IBM DB2. Use Data Gateway to access your on-premises data from the new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.	Connect to Data on On-premises Databases

Where is Your Data Stored?	Description	More Information
Oracle Database on Oracle Cloud Infrastructure Classic	First, migrate your data to a database on Oracle Cloud Infrastructure. Reconfigure the database connection to point to the new database before you migrate your Oracle Analytics Cloud Classic instance. There are two ways to do this: • Use the Database Connection dialog in the source Oracle Analytics Cloud Classic instance before you take the final snapshot. Use this method if you use Data Modeler. • Use the Model Administration Tool for Oracle Analytics Cloud to edit the connection information before you migrate the final snapshot. Use this method if you use Oracle Analytics Client Tools to manage your semantic models.	Move Data from Oracle Cloud Infrastructure - Classic
Oracle Database on Oracle Cloud Infrastructure	You can keep your data in the same database. You must reconfigure the database connection on the new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.	Connect to Data on Oracle Cloud Infrastructure
Other cloud databases	You can keep your data in the same database. You must reconfigure the database connection on the new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.	Connect to Data on Other Cloud Databases

Connect to Data on On-premises Databases

You can keep data in your on-premises 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. Set up Data Gateway.
   a. Install and set up Data Gateway.

      See Set up Data Gateway.

   b. Configure and register Data Gateway.

      See Configure and Register Data Gateway.

   You don't need to reconfigure your semantic model (.rpd).

2. Connect to the on-premises database from Oracle Analytics Cloud.

   See Connect to an On-premises Database from Oracle Analytics Cloud.

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)

Connect to Data on Oracle Cloud Infrastructure

If your new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure connects to a database on Oracle Cloud Infrastructure, you must add the IP address of the new Oracle Analytics Cloud instance to the database's allowlist.

1. Determine the IP address of the target Oracle Analytics Cloud instance.

   - **Oracle Analytics Cloud (Universal Credits)**: See Find the IP or Host Name of Your Oracle Analytics Cloud Instance on Oracle Cloud Infrastructure (Gen 2)

2. Add the IP address range or Gateway IPs associated with your target Oracle Analytics Cloud to the allowlist for your database on Oracle Cloud Infrastructure.

   If the database instance is on private IP network, you must install and configure Data Gateway on the compute instance to enable the connection. See Set up Data Gateway.

Connect to Data on Other Cloud Databases

If your new Oracle Analytics Cloud instance on Oracle Cloud Infrastructure must connect to other cloud data sources (non-Oracle), you might need to add the IP address of the new Oracle Analytics Cloud instance to the allowlists for these data sources.

1. Determine the IP address of the target Oracle Analytics Cloud instance.

   - **Oracle Analytics Cloud (Universal Credits)**: See Find the IP or Host Name of Your Oracle Analytics Cloud Instance on Oracle Cloud Infrastructure (Gen 2)

2. If required, add the IP range or Gateway IPs associated with your target Oracle Analytics Cloud to the allowlist for your cloud data sources.

Move Data from Oracle Cloud Infrastructure - Classic

First, move any data stored on Oracle Cloud Infrastructure Classic to a database on Oracle Cloud Infrastructure. Reconfigure the database connection to point to the new database before you migrate your Oracle Analytics Cloud Classic instance.

1. Create a new database instance on Oracle Cloud Infrastructure and migrate your data.

   See Migrate Databases Using the Migration Tools.

2. Determine the connection string for the new database, and then do one of the following:

   - In the source Oracle Analytics Cloud Classic instance, edit the connection using the Database Connection dialog before you take a final snapshot of your system.

     Always use this method if you use Data Modeler in Oracle Analytics Cloud Classic and want to continue to use Data Modeler after you migrate to Oracle Cloud Infrastructure. See Connect to Data in an Oracle Cloud Database.

   - Use the latest Model Administration Tool for Oracle Analytics Cloud to reconfigure the database connection in the source semantic model. You can extract the semantic

model from the final snapshot you plan to migrate. See Edit Connections and Upload Semantic Model.

Use this method if you use Oracle Analytics Client Tools to manage semantic models in Oracle Analytics Cloud Classic.

3. If required, add the IP 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)

Add IP Address Details for Oracle Analytics Cloud to Allowlists

If you added the IP or endpoint of your Oracle Analytics Cloud - Classic instance on Oracle Cloud Infrastructure Classic to one or more allowlists, you must perform this task again for the Oracle Analytics Cloud instance on Oracle Cloud Infrastructure.

1. Determine IP address information for Oracle Analytics Cloud.
   - **Oracle Analytics Cloud (Universal Credits)**: See Find the IP or Host Name of Your Oracle Analytics Cloud Instance on Oracle Cloud Infrastructure (Gen 2)
2. Add the IP range or Gateway IPs associated with Oracle Analytics Cloud to the allowlist for your data sources, as required.

3

Migrate Your Oracle Analytics Cloud - Classic Instances

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

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
Export the snapshot locally	Download the snapshot that you want to migrate to your local file system.	Export the Snapshot
Edit database connections	(Only if you migrated your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure) Extract the semantic model .rpd file from the snapshot (BAR), add the new connection string, and then upload the updated semantic model to the target system.	Edit Connections and Upload Semantic Model
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.	Restore the Snapshot on the Target
Migrate data files	(Only if the restore process fails due to connection issues) Use the Data Migration utility to migrate and restore data files from another environment.	Migrate File-based Data
Reconfigure data replication connections	(Only if you migrated replicated data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure) Verify that the replicated tables and the required system tables exist on the new target database, and then edit the data replication connections to point to the new database.	Move Replicated Data to a Different Target Database
Reconfigure service settings	Verify various administrative settings on the target service.	Configure Service Settings
Activate deliveries	Disable deliveries on the source service and start delivering content from the target service.	Restore and Enable Delivery Schedules
(Optional) Migrate other snapshots	Export individual snapshots that you want to migrate and then import them to your target environment, as required.	Export Snapshots Import Snapshots

Understand Snapshot Options

You can set various options when you take a snapshot of the Oracle Analytics Cloud environment you want to migrate.

Options When You Take a Snapshot

When you take a snapshot you choose the content you want to include in it. You can take a snapshot of your entire environment (everything) or specify only specific content that you want to back up or migrate (custom).

- **Everything** - Saves your entire environment in the snapshot. This option is useful if you want to:
  - Back up everything in case something goes wrong.
  - Migrate everything to a new environment.
  - Clone an existing environment.
- **Custom** - You select which content to save in the snapshot. Some content types are always included while others are optional.

Snapshot Option	Description	Optional?
Data	Data visualization content that users create (Data tab).	
– Datasets	Datasets that users create for data visualizations and data flows.	Always included
– File-based Data	File-based data that users upload to create datasets. For example, data uploaded from a spreadsheet. This option captures references to your data files. Actual data files aren't included in the snapshot.	Optional
– Connections	Data connections that users create so they can visualize their data.	Always included
– Data Flows	Data flows that users create for data visualization.	Always included
– Sequences	Sequences that users create for data visualization.	Always included
– Data Replications	Data replications that users create for data visualization.	Optional
– Semantic Models and Subject Areas	Semantic models that users develop (SMML) and semantic models that users deploy (RPDs).	Always included
Machine Learning	Machine learning models that users create from data flows.	Always included

Snapshot Option	Description	Optional?
Jobs	Jobs that users schedule for data flows, sequences, data replications, and pixel-perfect reports.	Optional
Plug-ins and Extensions	Extensions that users upload to implement custom visualizations and custom maps.	Optional
Configuration and Settings	Service configuration and settings configured through Console. For example, mail settings, database connections, safe domains, data connectivity configurations, and so on. **Note**: System settings aren't included in the snapshot.	Optional
Day by Day	Day by Day content such as the "For You" feed, bring backs, comments, and shared cards.	Optional
Application Roles	– User-defined application roles that administrators create through Console. – Membership details for each application role, that is, the users, groups, and other application roles assigned to each application role.	Always included
Credentials	– **Data connections:** Credentials and other connection parameters, such as host, port, user name, and password. If you exclude credentials, you must reconfigure the connection details after you restore the snapshot. – **Cloud storage:** Credentials required to access cloud storage where file-based data that users upload is stored. If you include file-based data in your snapshot, include the storage credentials if you plan to migrate the content to another environment. If you exclude credentials, you can use the Data Migration utility to download and then upload your data files separately.	Optional
Classic Content	Content that users create in Oracle Analytics Cloud, such as workbooks, analyses, dashboards, and pixel-perfect reports.	Always included

Snapshot Option	Description	Optional?
– Catalog Content	Catalog containing content that users create and save for future use, such as workbooks, analyses, dashboards, reports, deliveries, agents, and so on.	Always included
– Shared Folders (including Workbooks)	Content that is being shared, that is, content that everyone with access to can see. This includes any workbooks saved in the shared folders.	Always included
– User Folders and Personalizations (including Workbooks)	Content stored in user folders. Content that users create and store for their private use. This includes any workbooks that users save in their private folders and any personalizations that they make to these workbooks.	Optional

Options When You Restore a Snapshot

When you restore content from a snapshot you have several options. You can restore only the content that's inside the snapshot, restore everything in your environment, or restore a specific set of items in the snapshot (custom).

- **Replace Snapshot Content Only** - Everything in the snapshot that's supported in your environment is restored. Any content type excluded from the snapshot remains unchanged in your environment.
- **Replace Everything** - Replaces your entire environment using information in the snapshot.
  Any content type excluded from the snapshot is restored to its default state, that is, "no content". For example, if you chose not to include jobs in the snapshot, any jobs that exist on your system are deleted when you restore the snapshot and the jobs feature is restored with default settings. There are some exceptions; if the snapshot doesn't contain any file-based datasets, plug-ins, or extensions these items are left unchanged.

  This option is useful if you want to:

  – Replace everything after something went wrong.
  – Migrate from another service.
  – Clone an existing service.
- **Custom** - You select the content you want to restore. If you don't want to restore certain content types, exclude them before you restore.
  In most cases, the options on restore are the same as the options when you take a snapshot. Some content types are always restored, while others are optional.

> **Note:**
>
> When you restore *catalog content* from a snapshot, delivery schedules aren't automatically restored or activated. This is so you can restore and activate deliveries at a time that suits you. See Restore and Enable Delivery Schedules.

If your snapshot contains items that your environment doesn't support, you see the message "*Not supported in this environment*".

Restoring a Snapshot Taken from a Different Product

You can take snapshots in several Oracle products; Oracle BI Enterprise Edition 12c, Oracle Analytics Cloud, and Oracle Analytics Server.

- **Unsupported Content**

  If you take a snapshot in one product and try to restore it in a different Oracle product, you might find the snapshot contains some items that the target environment doesn't support. When Oracle Analytics detects unsupported content, warning icons display on the Custom page to highlight unsupported items in the snapshot that won't be restored.

  For example, you take a snapshot in Oracle Analytics Cloud and include data replications, file-based datasets, plug-ins and extensions in the snapshot. When you restore the snapshot in Oracle Analytics Server, you notice that these items are marked *not supported*. Oracle Analytics Server doesn't allow you to include data replications, file-based datasets, plug-ins and extensions in an Oracle Analytics Server snapshot or import them from snapshots you created in other products.

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.

1. Sign-in to the target Oracle Analytics Cloud.
2. Verify that the users and roles you imported are available.
   a. Navigate to **Console,** and click **Roles and Permissions**.
   b. Click the **Users** tab and then the **Roles** tab to verify the users and roles.
3. 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 Analytics Cloud.
2. Save the entire environment you want to migrate to a snapshot.
   a. Navigate to **Console,** click **Snapshots**, and then **Create Snapshot**.
   b. For name, enter `Migrate content to Oracle Cloud Infrastructure` or something similar.
   c. Select **Everything**, and the click **Create**.

   See also Take a Snapshot on the Source.

3. Export the snapshot (BAR file) locally.

   You're asked to create a password for the snapshot. You'll need this password when you import the snapshot on the target system.

   See Export the Snapshot.

4. If required, extract the semantic model .rpd file from the snapshot (BAR), add the new connection string, and then upload the updated semantic model to the target system.

   This step is only required if you currently use Model Administration Tool for Oracle Analytics Cloud to manage semantic models and you migrated your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure. See Edit Connections and Upload Semantic Model.

5. Sign-in to the target Oracle Analytics Cloud and import the snapshot.

   See Import the Snapshot on the Target.

6. Restore the snapshot.

   Do one of the following:

   - If you didn't edit your semantic model in Step 4, select **Replace Everything**.
   - If you edited and uploaded your semantic model in Step 4, select **Custom**, and deselect **Data Model and Subject Areas**.

   See Restore the Snapshot on the Target.

7. In Console, verify and configure other settings to complete the migration.

Edit Connections and Upload Semantic Model

Sometimes you must reconfigure the database connection information that's saved inside your source semantic model .rpd file before you migrate to the new Oracle Analytics Cloud on Oracle Cloud Infrastructure. For example, if you moved your data from Oracle Cloud Infrastructure Classic to Oracle Cloud Infrastructure, this is required because the connect string for the new database is different. If you do need to edit the source semantic model, you must upload the updated semantic model on the target *before* you migrate the rest of your content.

> **Note:**
>
> These instructions only apply if you currently use Model Administration Tool for Oracle Analytics Cloud to manage semantic models. If you use Semantic Modeler, you edit database connections through Console in your target environment.

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* Model Administration Tool 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. Locate the final snapshot of your source environment (BAR file) that you downloaded to your local system.

   You must know the password you entered when you downloaded the snapshot. You'll be asked to provide the password later.

4. Run the `expandarchive` command to expand the BAR file and navigate to the semantic model .rpd file.
   a. At a command window, set the `DOMAIN_HOME` variable.

      For example: `C:\> set DOMAIN_HOME=<CLIENT_TOOL_INSTALL_HOME>\domains\bi`

      Where `CLIENT_TOOL_INSTALL_HOME` is the directory where you installed the client tools.

   b. Navigate to the required `scripts` directory:

      For example: `C:\> cd <INSTALL_HOME>\bi\modules\oracle.bi.metadatalcm\scripts>ls`

   c. Run the `expandarchive` command to expand the BAR file.

      Use the format:

      ```
      expandarchive.cmd  <BAR file location> <expand archive directory>
      [encryptionpassword=<password>]
      ```

      For example:

      ```
      C:\TOOLS\Oracle\bi\modules\oracle.bi.metadatalcm\scripts>expandarchive.c
      md C:\Downloads\Migrate.bar C:\OCIMigration encryptionpassword=secret123
      ```

   d. Navigate to the expand archive directory and locate the semantic model file.

      A semantic model file named `default.rpd` is located under `datamodel\rpd\default.rpd`.

5. Use the latest Model Administration Tool to open `default.rpd`.

   The password required to open `default.rpd` is the password you entered to download the snapshot.

6. Navigate to the Physical Layer pane, select the database connection you want to edit, and open the Connection Pool dialog.
7. Edit the connection details In **Data Source Name**, to specify the new database on Oracle Cloud Infrastructure.
8. Save the changes to `default.rpd`.
9. Copy the updated semantic model file (`default.rpd`) back to the BAR file.
10. Upload the updated semantic model file (`default.rpd`) 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 Analytics Cloud to create datasets. When you migrate to a new Oracle Analytics Cloud environment, you can take this file-based data with you. Sometimes, network connectivity or storage access issues might prevent you from migrating the data files in the snapshot. For such cases, 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.

Run the data migration CLI utility if you see the message `Restore succeeded with errors - data restore failed` (or similar) when you try to restore a snapshot that contains data files. This message occurs when:

- You migrate content from a different region.
- You migrate content from Oracle Analytics Cloud on Gen 1 or Oracle Cloud Infrastructure Classic to Oracle Analytics Cloud on Gen 2.
- The restore process fails due to some other network connectivity or storage access issue.

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 and target system both use Oracle Analytics Cloud 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 , and select **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 Analytics Cloud environment
(OAC) to a target Oracle Analytics Cloud environment.
    # Specify the source environment as Oracle Analytics Cloud.
      SOURCE_ENVIRONMENT=OAC
    # Source Oracle Analytics Cloud URL. For example: https://
sourcehost.com:443 or http://sourcehost.com:9704
```

```
      SOURCE_URL=http(s)://<Source Oracle Analytics Cloud 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 Analytics Cloud to your local environment and subsequently upload the data files to the target Oracle Analytics Cloud environment, configure sections `[DownloadDataFiles]` and `[UploadDataFiles]` in `config.properties`.

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

Move Replicated Data to a Different Target Database

In data replication, if you change the target database, you can migrate the current data to the new database, and reconfigure your connections to replicate to your new database.

For example, you might need to do this if your organization migrates from Oracle Cloud Infrastructure - Classic to Oracle Cloud Infrastructure.

1. Make sure that your new target schema has the required privileges and permissions. See What Privileges and Permissions Are Required?.
2. Copy the replicated tables and the following replication system tables to the new target schema.
   - All replicated tables (along with corresponding indexes, constraints)
   - REPL$_ERR_SUMMARY
   - E$_*
   - SDS_*
3. Configure a replication connection for the new target database.
   - If your new target database is of the same type as your old target database, then simply edit your existing replication connection and update the connection details.
     In the Connections page, locate the replication connection, click **Inspect**, and use the General tab to update the details for the new target database.
   - If your new target database is of a different type, then create a new replication connection for that type and specify the connection details.
     Click **Create**, then **Replication Connection**, select the appropriate type, and specify the details.
4. Update each data replication entry that is configured to use the old target database connection details.
   a. Open the **Data Replications** page, and select the data replication you want to edit.
   b. In the **Replication Target** area:
      - If your new target database is of the same type as your old target database, make sure that **Schema** is set correctly for the new database.
      - If your new target database is of a different type, click **Select** and select the new target connection, then click **Schema** and set correctly for the new database.
5. From the Home page, navigate to **Data** and then **Connections**. Locate the replication connection for your target database, click **Inspect**, and use the Tables tab to verify the table information for the new target schema.

You can now resume data replication in incremental mode into the new database.

Configure Service Settings

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

1. Sign-in to the target Oracle Analytics Cloud, and navigate to **Console**.
2. Verify all the application roles that you want are available on the **Application Roles** page.
   Click **Roles and Permissions**, and then **Application Roles**.

See Add Members to Application Roles.

3. Verify your email server configuration on the **Mail Settings** page.

   See Set Up an Email Server to Deliver Reports.

4. Verify your custom plug-ins and extensions on the **Extensions** page.

   See Manage Oracle Analytics Extensions.

5. Verify your virus scanner configuration on the **Virus Scanner** page.

   See Set Up a Virus Scanner.

6. Verify your safe domains are configured on the **Safe Domains** page.

   See Register Safe Domains.

7. If you customized advanced settings in your source service, verify the settings are correct on the **Advanced System Setting** page.

   See Configure Advanced Options.

8. Verify map configuration for data visualizations on the **Maps** page.

   See Add Custom Map Layers.

9. Verify map configuration for analyses and dashboards on the **Manage Map Data** page (Classic Administration).

   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 environment, delivery schedules defined for agents, analyses, and dashboards in the snapshot aren't restored or activated right away. 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.

For example, if you're restoring a production environment, you probably want to restart deliveries as soon as possible. Whereas in a test environment, you might prefer to disable deliveries after restoration and activate them at a later date.

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. Select one of the following:
   - **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 during the restore process and any delivery history is deleted.

  – Existing delivery schedules are disabled.

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

  – Historical delivery details no longer available.

  This option is not recommended. If you do select this option, you must manually enable delivery schedules for all agents, analyses, and dashboards.

5. Click **Restore**.
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.

4

Complete Post-Migration Tasks

After successfully migrating your Oracle Analytics Cloud - Classic content to Oracle Cloud Infrastructure, test your service 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 Your Migrated Service
Clean up services on Oracle Cloud Infrastructure Classic	Remove any resources that you don't need.	Clean Up Infrastructure and Platform Resources in Oracle Cloud Infrastructure Classic

Test Your Migrated Service

After migrating your Oracle Analytics Cloud - Classic 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.
3. Open dashboards to check they display as expected.
4. Open pixel-perfect reports to check the output.
5. If you set up email delivery schedules for your content, verify that they're working.
6. Navigate to the **Home** page, then open workbooks you're familiar with to make sure the visualizations display the correct data.
7. Navigate to the **Data** page.
    a. Verify your datasets.
    b. Check connection details.
    c. Run data flows.
    d. Execute sequences.

Clean Up Infrastructure and Platform Resources in Oracle Cloud Infrastructure Classic

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

1. Delete the Oracle Analytics Cloud - Classic instance.

a. Sign in to your Oracle Cloud account, and navigate to the **Analytics Classic** page.

b. Click **Manage this instance** for the instance you migrated, and then select **Delete**.

c. When prompted for confirmation, click **Delete**.

2. Delete IP reservations that you created for the service.

a. Click **IP Reservations**.

b. Click **Delete** for the IP reservation.

c. When prompted for confirmation, click **OK**.

3. Delete the Oracle Database Cloud Service service instance associated with the Oracle Analytics Cloud - Classic instance.

Don't delete a database if it's still used by other services.

a. Navigate to the **Database Classic** page.

b. Click **Manage this instance** for the database instance, and then select **Delete**.

c. When prompted for confirmation, click **Delete**.

4. Delete any object storage containers that you created in Oracle Cloud Infrastructure Classic to support your source Oracle Analytics Cloud - Classic instances.

Don't delete a container if it's still used by other services.

a. Navigate to the **Storage Classic** page.

b. Click the delete icon for the container.

c. When prompted for confirmation, click **OK**.