Oracle® Analytics

Deploying Oracle Analytics Server on Oracle Cloud

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Primary Authors: Rosie Harvey, Hemala Vivek

Contributing Authors: Christine Jacobs

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

Contents

Preface

This document describes how to deploy and administer Oracle Analytics Server on Oracle Cloud using Oracle Cloud Marketplace.

Audience

This guide is intended for system administrators or application developers who are installing and configuring Oracle Analytics Server. It is assumed that readers are familiar with Oracle Cloud, Terraform, web technologies, and have a general understanding of Linux or UNIX platform.

Conventions

The following text conventions are used in this document:

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

Videos and Images

Your company can use skins and styles to customize the look of the application, 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.

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About Oracle Analytics Server on Oracle Cloud

This guide explains how to deploy Oracle Analytics Server on Oracle Cloud Infrastructure using Oracle Cloud Marketplace.

What Is Oracle Analytics Server on Oracle Cloud?

Oracle offers you the option to deploy Oracle Analytics Server on Oracle Cloud Infrastructure using Oracle Cloud Marketplace.

When deployed on Oracle Cloud, Oracle Analytics Server provides the same functionality, scalability, security, and support as the on-premises version. All sources and targets supported in the on-premises version are supported on Oracle Cloud. See Certification Information

About Oracle Cloud Marketplace

Oracle Cloud Marketplace offers a rich library of click-to-deploy Terraform stacks that provide a quick way to deploy applications and services on Oracle Cloud Infrastructure.

You can use Oracle Cloud Marketplace to quickly deploy Oracle Analytics Server on Oracle Cloud Infrastructure so your organization can benefit from a deployment on this scalable, secure, highly available, and high performance environment.

The installation for Oracle Analytics Server offered through Oracle Cloud Marketplace creates a simple topology, which represents a sample starting topology for this product.

Oracle Cloud Marketplace offers two applications for Oracle Analytics Server.

- Oracle Analytics Server - BYOL (Bring Your Own License)
- Oracle Analytics Server - UCM (Universal Credits)

See Consumption Modes in https://www.oracle.com/cloud/marketplace.

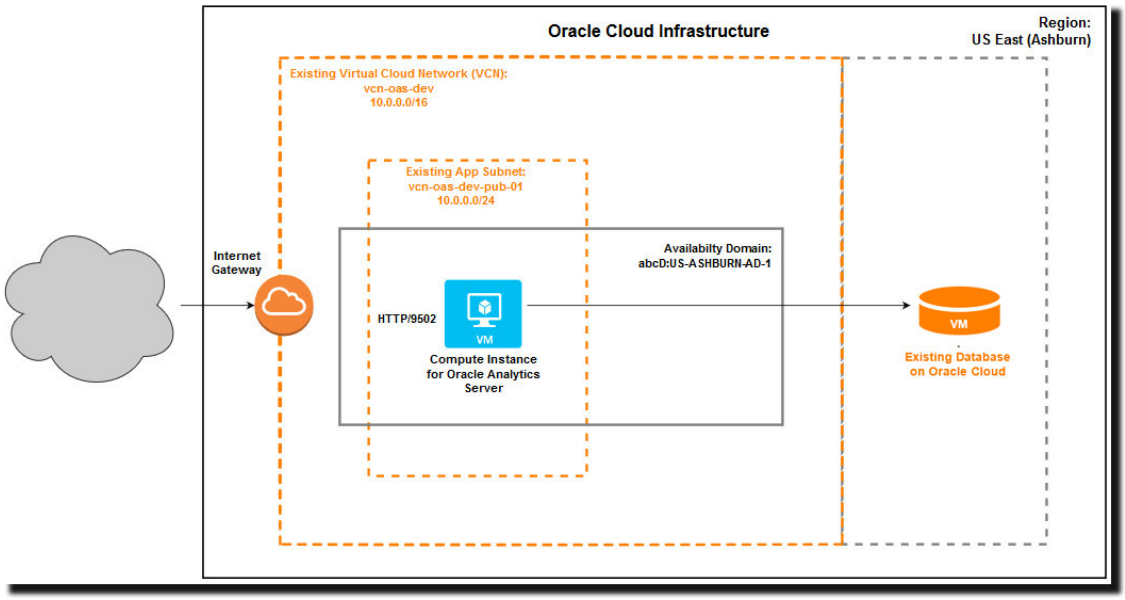
Architecture on Oracle Cloud

Learn about the components and terminology related to Oracle Analytics Server deployments on Oracle Cloud Infrastructure.

Simple Oracle Analytics Server Topology

This topology represents a simple Oracle Analytics Server deployment on Oracle Cloud Infrastructure using Oracle Cloud Marketplace.

Oracle Cloud Marketplace enables you to install a compute instance with a custom Oracle Analytics Server image in a topology similar to the one shown here. The topology diagram indicates several prerequisite Oracle Cloud Infrastructure components shown in orange: virtual cloud network, subnet, cloud database.



Key Components and Terminology

- **Compute instance**: A compute host running in the cloud that allows you to utilize hosted physical hardware, ensuring a high level of security and performance. The compute shape is the resources you allocate to a compute instance.
- **Virtual cloud network and subnets:** A virtual cloud network (VCN) in Oracle Cloud Infrastructure covers a single, contiguous Classless Inter-Domain Routing (CIDR) block of your choice. A subnet is a subdivision of a VCN that consists of a contiguous range of IP addresses that don't overlap with other subnets in the VCN. A VCN includes one or more subnets, route tables, security lists, gateways, and Dynamic Host Configuration Protocol (DHCP) options. If you're new to Oracle Cloud, see Networking in Oracle Cloud Infrastructure documentation.
  You must set up a VCN and subnet for your Oracle Analytics Server compute instance. The Oracle Analytics Server deployment script assigns the compute instance to a VCN and subnet of your choice.

  Subnets can be public or private. Any compute instances you assign to a private subnet can't be directly accessed from outside Oracle Cloud. To administer compute instances on a private subnet, you must create a separate public subnet and bastion compute instance.

- **Load balancer:** (Optional) Provides an extra layer of security, allowing the Oracle Analytics Server compute node to be isolated on a private subnet.
- **NAT gateways, subnets, and partitions:** (Optional) If you set up a NAT gateway, when using public and private subnets, the NAT gateway needs to be added to ingress rules in your load balancer security rules for partitions to work.
- **Bastion compute instance:** (Optional) Provides administrative access to an Oracle Analytics Server domain on a private subnet.
- **Oracle Cloud Database:** Oracle Analytics Server needs access to pluggable database (PDB) on an Oracle Cloud virtual machine DB system in which it can create and store various product schemas.
  - For Oracle Analytics Server 2025, the database must be:
    - Oracle Database Standard Edition (version 19+ or 23ai)
    - Oracle Autonomous Transaction Processing (ATP) (version 19+)
  - For Oracle Analytics Server 2024, the database must:
    - Oracle Database Standard Edition (version 12.1, 12.2, 18+, or 19+)
    - Oracle Autonomous Transaction Processing (ATP) (version 19+)
- **Marketplace:** Oracle Cloud Marketplace is an online store available from the Oracle Cloud Infrastructure console. You can use Oracle Cloud Marketplace to install a compute instance running Oracle Analytics Server software. When you select Oracle Analytics Server in Marketplace, it prompts you for some basic information, and directs you to Resource Manager to create Oracle Analytics Server resources on Oracle Cloud Infrastructure. See Overview of Marketplace in Oracle Cloud Infrastructure documentation.
- **Resource Manager:** You use Resource Manager to deploy Oracle Analytics Server resources on Oracle Cloud Infrastructure. See Overview of Resource Manager in Oracle Cloud Infrastructure documentation.
- **Stack:** A stack is a collection of related cloud resources created and deployed by Resource Manager.

Typical Workflow for Administrators

Use this workflow as a high-level guide to administrator tasks.

Task	Description	More Information
Complete prerequisites prior to deployment	Understand and perform the required prerequisites tasks before you deploy Oracle Analytics Server on Oracle Cloud.	Before You Begin
Deploy Oracle Analytics Server and its required stack	Use Oracle Cloud Marketplace to deploy Oracle Analytics Server on Oracle Cloud Infrastructure. Enter the required metadata, and select the options that you prefer in the setup wizards.	Deploy Oracle Analytics Server Using Oracle Cloud Marketplace
Perform post-deployment tasks	Complete the required post-deployment tasks, including security, access, and resource cleanup.	Complete Post Deployment Tasks

Task	Description	More Information
Set up users	Set up users and groups and assign them appropriate privileges.	Set Up Users to Deploy Oracle Analytics Server on Oracle Cloud
Monitor usage and costs	Monitor the costs of Oracle Analytics Server.	View Usage Costs for Oracle Analytics Server on Oracle Cloud
Scale an instance	Scale out or in by adjusting the number of compute instances.	Scale Oracle Analytics Server on Oracle Cloud
Patch an instance	Apply a patch or roll back a patch.	TBD

Where to Go for More Information

Find information on Oracle Analytics Server, Oracle Cloud, and Oracle Cloud Marketplace.

- Oracle Analytics Server Documentation
- Oracle Cloud Documentation
- Oracle Cloud Infrastructure Documentation
- Oracle Cloud Marketplace Documentation

Latest Product Updates

Here's an overview of new product deployment options for Oracle Analytics Server on Oracle Cloud Infrastructure using Oracle Cloud Marketplace.

April 2025

Update	Description
Oracle Autonomous Transaction Processing	Use Oracle Autonomous Transaction Processing (ATP) 19+ to host schemas for Oracle Analytics Server 2025 and Oracle Analytics Server 2024.

March 2025

Update	Description
Oracle Analytics Server 2025	Use Oracle Cloud Marketplace to quickly deploy Oracle Analytics Server 2025 on Oracle Cloud Infrastructure.

March 2024

Update	Description
Oracle Analytics Server 2024	Use Oracle Cloud Marketplace to quickly deploy Oracle Analytics Server 2024 on Oracle Cloud Infrastructure.

June 2023

Update	Description
Oracle Roving Edge Infrastructure	Oracle's Roving Edge Infrastructure enables you to deploy cloud workloads outside the data center where data is generated and consumed, regardless of network connectivity. Use Oracle Cloud Marketplace to quickly deploy Oracle Analytics Server 2023 on Oracle Roving Edge Infrastructure. Export Oracle Analytics Server 2023 workloads from Oracle Cloud Marketplace to your Oracle Roving Edge Devices (RED). See Oracle Analytics Server Image for Roving Edge Infrastructure - BYOL.

July 2022

Update	Description
Subnet compartment	The Virtual Cloud Network (VCN) and subnet where you deploy the compute instance for Oracle Analytics Server can now be located in different compartments. In the Network Configuration section, there's a new option **Subnet Compartment** so you can select the compartment containing your subnet. See Deploy Oracle Analytics Server Using Oracle Cloud Marketplace .

April 2022

Update	Description
Folder structure	The folder structure for files deployed during Oracle Analytics Server installation and domain configuration has changed. Here is the updated folder structure and the location of some key files: • **`/u01/app`**: Oracle Analytics Server product and binaries, including files such as `config.sh`, `oraInst.loc`. • **`/u01/app/oas-scripts`**: Oracle Analytics Server scripts such as `biconfigcleaner.sh`, `createDataPartition.sh`, `create_oas_domain.sh`, `DefaultSingleNodeOASFirewallPorts.xml`, `generate_biconfig.sh` `oas_installer.sh`, `open_oas_firewall_ports.sh`, `oas_install.finish`. • **`/u01/data`**: Oracle Analytics Server domain directories and files such as `biconfig.rsp`. This partition also includes all the requested boot volume space beyond what is needed for the core Oracle Analytics Server binaries. • **`/u01/data/domains/bi/bitools/bin`**: Oracle Analytics Server domain tools such as `status.sh`, `start.sh`, and other scripts. • **`/var/log`**: Oracle Analytics Server logs such as `oas_cloudinit.log`, `oas_create_domain.log`. Previously these files were deployed under folders named `/tmp` and `/oas/oas_install`.

Update	Description
Log file changes	Deployment log files are now available under the `/var/log` folder (previously under `/tmp`). The names of the log files have changed too. • `oas_cloudinit.log` (previous name `oas_install.log`) • `oas_create_domain.log` (previous name `create_domain.log`)
Only the required firewall ports open by default	When you use Oracle Cloud Marketplace to deploy Oracle Analytics Server and create the domain, only ports required for a single-node install are open by default. Post deployment, you can use the script `open_oas_firewall_ports.sh` to open other ports and change the default port values to suit your environment. For details, see Manage Firewall Ports for Oracle Analytics Server on Oracle Cloud. If you create the domain manually using `config.sh`, you can use the same script (`open_oas_firewall_ports.sh`) to modify your firewall port configuration. If you scale-out your Oracle Analytics Server environment, you must open some additional ports. For details, see Scaled-out, Multi-node Environment - Additional Required Ports.
Built-in user for administrative tasks (`oracle`)	When you use Oracle Cloud Marketplace to deploy Oracle Analytics Server and create the domain, the Oracle Analytics Server compute instance and the domain is created and owned by the `oracle` user. After connecting to your Oracle Analytics Server compute instance as the `opc` user, you must switch to the `oracle` user to complete administrative tasks. For example, you must use the built-in `oracle` user to access Oracle Analytics Server logs, manage firewall ports, scale out, create a domain manually, and so on. See Manage the Compute Instance for Oracle Analytics Server Using the Built-in `oracle` User.

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Deploy Oracle Analytics Server on Oracle Cloud

Let's explore how to deploy Oracle Analytics Server on Oracle Cloud Infrastructure.

Before You Begin

Before you deploy Oracle Analytics Server on Oracle Cloud, you must complete various prerequisite tasks and Oracle recommends that you gather a list of the metadata that you'll need for the quick-deployment process. Oracle provides a checklist to help you plan your deployment.

Subscribe to Oracle Analytics Server on Oracle Cloud

You must have an active Oracle Cloud account (Pay As You Go or Annual Universal Credits) to deploy *Oracle Analytics Server - UCM* (Universal Credits) on Oracle Cloud Infrastructure and you're charged the UCM (Universal Credits) rate.

If you have an Oracle Middleware on-premises license for Oracle Analytics Server, you can use this license to deploy *Oracle Analytics Server - BYOL* (Bring Your Own License). You must also have an active Oracle Cloud account.

Set Up Policies in Oracle Cloud Infrastructure

In Oracle Cloud Infrastructure, you use policies to control access to resources in your tenancy.

Before deploying Oracle Analytics Server on a compartment in Oracle Cloud Infrastructure, your tenant administrator must set up policies that enable you (and other users) to access or create the following resources in specific compartments.

- Marketplace applications

- Compute instances
- Network VPNs and subnets
- Database for storing Oracle Analytics Server schemas
- Resource manager stacks and jobs

1. In Oracle Cloud Infrastructure Console, click  in the top left corner.
2. Click **Identity & Security**. Under **Identity**, select **Policies**
3. Select the root compartment, and then click **Create Policy**.

Set up policies that are appropriate for your organization. Here is a sample policy template, with each row being a policy statement.

```
allow group mygroup_name to read compartments in tenancy
allow group mygroup_name to manage instance-family in compartment
mycompartment_name
allow group mygroup_name to use virtual-network-family in compartment
mycompartment_name
allow group mygroup_name to manage orm-family in compartment
mycompartment_name
```

Set Up Users to Deploy Oracle Analytics Server on Oracle Cloud

When you activate your order for Oracle Cloud services, you get the Cloud Account Administrator role. This role gives you full administration privileges in Oracle Cloud Infrastructure so you can complete all aspects of Oracle Analytics Server setup and much more. There's no need to delegate this responsibility but, if you want to, you can give someone else privileges to deploy or manage Oracle Analytics Server compute instances.

In Oracle Cloud Infrastructure you use IAM security policies to grant permissions. First, you must add the user to a group, and then you create a security policy that grants the group permissions to deploy or manage Oracle Analytics Server on a specific compartment or the tenancy (any compartment in the tenancy). For example, you might create a policy statement that looks like one of these:

```
allow group MyOASAdminGroup to manage all-resources in tenancy
```

```
allow group MyOASAdminGroup to manage all-resources in compartment
MyOracleAnalyticsServer
```

To find out how to create security policy statements, see Set Up Policies in Oracle Cloud Infrastructure.

Create Compartments

When you sign up for Oracle Cloud Infrastructure, Oracle creates your tenancy with a root compartment that holds all your cloud resources. You then create additional compartments within the tenancy (under the root compartment) and corresponding policies to control access to the resources in each compartment.

Before you deploy Oracle Analytics Server on Oracle Cloud, Oracle recommends that you set up the compartment where you want all the resources associated with Oracle Analytics Server to belong.

For example, you might want to set up separate compartments for your stacks, network, database, and Oracle Analytics Server resources. The choice is yours.

Compartment	Oracle Cloud Infrastructure Resources
root	-
• MyStacks	Marketplace stacks Terraform stacks
• MyNetwork	VCN, subnet, and other network resources
• MyOracle_Analytics_Server	Compute instance hosting Oracle Analytics Server
• MyOracle_Database	Oracle Database used by Oracle Analytics Server to host its product schemas

You create compartments in Oracle Cloud Infrastructure Identity and Access Management (IAM). See Setting Up Your Tenancy and Managing Compartments.

Set Up Network Resources

You or your network administrator must set up a virtual cloud network (VCN) and a subnet for your Oracle Analytics Server compute instance before you start.

The subnet can be *public* or *private*. If you want to deploy Oracle Analytics Server on a private subnet you must set up a separate public subnet, with a bastion compute instance or load balancer to provide administrative access. See Overview of Networking in Oracle Cloud Infrastructure documentation.

Ensure that you (or whoever plans to deploy Oracle Analytics Server) has the required policies to access the VCN and subnet you plan to use.

See Overview of VCNs and Subnets.

Set Up an Oracle Cloud Database

Oracle Analytics Server needs access to a database deployed on Oracle Cloud in which it can install various required database schemas. The database must be deployed in the same region as Oracle Analytics Server and accessible from the VCN where you plan to deploy Oracle Analytics Server.

Database Editions and Versions

The database must be a pluggable database (PDB) on an Oracle Cloud virtual machine DB system. See Overview for Bare Metal and Virtual Machine DB Systems.

Oracle Analytics Server supports the following database versions and editions:

- **Oracle Analytics Server 2025**
  - Oracle Database Standard Edition (version 19+ or 23ai)
  - Oracle Autonomous Transaction Processing (ATP) (version 19+)
- **Oracle Analytics Server 2024**
  - Oracle Database Standard Edition (version 12.1, 12.2, 18+, or 19+)
  - Oracle Autonomous Transaction Processing (ATP) (version 19+) *

Database Connection String Format

When you deploy Oracle Analytics Server on Oracle Cloud using Oracle Cloud Marketplace, you're asked to provide the database connection string and database administrator credentials for the database you want to use.

> **Tip**
>
> To ensure Oracle Analytics Server deployment goes smoothly, test the database connection and database administrator credentials before you start.

The database connection string format depends on the type of database you plan to use and the Oracle Analytics Server version you deploy (2025 or 2024).

- **Oracle Database** - **Oracle Analytics Server 2025 and 2024**
  Database connection string format:`<hostname or IP address>:<port>:<PDB_name>.<DB_domain>`

  For example:
  `oasdb.sub12345678901.oasvcn.oraclevcn.com:1512:OASDB1213_pdb1.sub12345678901.oasvcn.oraclevcn.com`

- **Oracle Autonomous Transaction Processing (ATP)** - **Oracle Analytics Server 2025**
  Database connection string format:
  ```
  jdbc:oracle:thin:@(description=(retry_count=<count>)
  (retry_delay=<delay>)(address=(protocol=tcps)(port=<port>)
  (host=<your_hostname_or_ip_address>))
  (connect_data=(service_name=<your_ATP_service_name>)
  (security=(ssl_server_dn_match=<yes_or_no>))
  ```

  For example:
  ```
  jdbc:oracle:thin:@(description=(retry_count=20)(retry_delay=3)
  (address=(protocol=tcps)(port=1521)(host=adb.us-ashburn-1.oraclecloud.com))
  (connect_data=(service_name=myoasdb_medium.adb.oraclecloud.com))
  (security=(ssl_server_dn_match=yes)))
  ```

  You can obtain the connection string from the ATP wallet. See Prerequisites for an Oracle Autonomous Transaction Processing Database.

- **Oracle Autonomous Transaction Processing (ATP)** - **Oracle Analytics Server 2024**
  If you want to use Oracle Analytics Server 2024, you can use Oracle Cloud Marketplace to deploy Oracle Analytics Server but you must *manually* create the Oracle Analytics Server domain with Oracle ATP. In this case, follow these steps to manually create the domain using the Oracle ATP connection string format described here: Configuring the Oracle Analytics Server Domain with the Configuration Assistant.

Product Schemas

Oracle Analytics Server installs several schemas on the Oracle Cloud Database and uses them to store various product metadata.

- <YourSchemaPrefix>_BIPLATFORM - Oracle Analytics
- <YourSchemaPrefix>_IAU - Audit Service
- <YourSchemaPrefix>_IAU_APPEND- Audit Service Append
- <YourSchemaPrefix>_IAU_VIEWER- Audit Service Viewer
- <YourSchemaPrefix>_MDS - Metadata Services

- <YourSchemaPrefix>_OPSS - Oracle Platform Security Services
- <YourSchemaPrefix>_STB - Service Table
- <YourSchemaPrefix>_WLS - WebLogic services

When you deploy Oracle Analytics Server on Oracle Cloud using Oracle Cloud Marketplace, you're asked to provide a *prefix* for these database schemas and a suitable password to access them.

- **Database Schema Prefix** - Prefix added to the name of each database schema created for Oracle Analytics Server. For example, `MyOAS`.
- **Database Schema Password** - Password to access the database schemas used by Oracle Analytics Server. This is a new password so you can enter any suitable value that satisfies the password policy of database you want to use.
  For example, a pluggable database (PDB) on an Oracle Cloud virtual machine DB system has the following password policy:
  - A minimum of 9 and a maximum of 30 characters.
  - At least two uppercase characters.
  - At least two lowercase characters.
  - At least two special characters. The valid special characters are: underscore (_), dollar ($), or a pound or hash sign (#). You can use two of the same characters or any combination of two of the same characters.
  - At least two numeric characters (0 - 9).

Prerequisites for an Oracle Autonomous Transaction Processing Database

If you want to deploy Oracle Analytics Server 2025 product schemas in an Oracle Autonomous Transaction Processing (ATP) database, you must download the ATP wallet, upload it to Oracle Cloud Infrastructure (OCI) Object Storage, and obtain a pre-authenticated URL for the wallet so Oracle Analytics Server can access it in Object Storage. You also need to obtain the connection string for the ATP database from the `tnsnames.ora` file in the ATP wallet zip file.

> **Note**
>
> This topic applies only to Oracle Analytics Server 2025. If you want to use Oracle ATP with Oracle Analytics Server 2024, while you can use Oracle Cloud Marketplace to deploy Oracle Analytics Server, you must *manually* create the Oracle Analytics Server domain with Oracle ATP. In this case, follow these steps: Configuring the Oracle Analytics Server Domain with the Configuration Assistant.

1. Obtain the wallet for your ATP database and download it to your local machine.
   a. In OCI Console, navigate to the details page for the ATP database, click **Database Connection**.
   b. Click **Download Wallet**.
   c. Enter a password to protect the wallet.
   d. Click **Download** to save the client credentials zip file (wallet) to a safe place on your local machine.

   For details, see Download Client Credentials.
2. Upload the ATP wallet zip file to Object Storage.

a. In OCI Console, go to the **Object Storage** page and navigate to the bucket where you want to upload the file.

b. Click **Upload**, then upload the ATP wallet zip file you just downloaded.

For details, see Uploading an Object Storage Object to a Bucket.

3. Create a pre-authenticated request for the ATP wallet zip file and record the pre-authenticated URL for later.

a. Go to the bucket where you uploaded the ATP wallet zip file.

b. Click the Actions menu for the wallet, and select **Create Pre-Authenticated Request**.

c. In the Create Pre-Authenticated Request panel, specify the following values:

- **Name**: Enter a descriptive name for the request.
- **Pre-Authenticated Request Target**: Select **Object**.
- **Access Type**: Select **Permit object reads**.
- **Expiration**: Oracle recommends that you set the date such that the pre-authenticated URL expires immediately after you complete Oracle Analytics Server deployment.

d. Click **Create Pre-Authenticated Request**.

e. Click the **Copy** icon to copy the URL. You must copy and record the URL before you close the dialog. You can't retrieve the URL again.
Pre-authenticated request URL format: `https://<object storage location>/<wallet zip filename>`

For example: `https://objectstorage.us-phoenix-1.oraclecloud.com/p/par_ID/n/namespace_ID/b/mybucket/o/myATPwallet.zip`

For details, see Creating a Pre-Authenticated Request in Object Storage.

4. Copy the connection string for your ATP database service from `tsnames.ora` and record it for later.

a. On your local machine, navigate to the wallet zip file that you downloaded earlier and extract the zip file.

b. Open the `tnsnames.ora` file in a text editor.
A typical `tnsnames.ora` file contains several entries:

```
# TNS entries..
demo_high =   (description=(retry_count=<count>)(retry_delay=<delay>)
(address=(protocol=tcps)(port=<port>)(host=your_hostname_or_ip_address))
(connect_data=(service_name=your_ATP_service_name_high)
(security=(ssl_server_dn_match=<yes_or_no>))
demo_medium = (description=(retry_count=<count>)(retry_delay=<delay>)
(address=(protocol=tcps)(port=<port>)(host=your_hostname_or_ip_address))
(connect_data=(service_name=your_ATP_service_name_medium)
(security=(ssl_server_dn_match=<yes_or_no>))
demo_low =    (description=(retry_count=<count>)(retry_delay=<delay>)
(address=(protocol=tcps)(port=<port>)(host=your_hostname_or_ip_address))
(connect_data=(service_name=your_ATP_service_name_low)
(security=(ssl_server_dn_match=<yes_or_no>))
...
```

c. Copy and record the entire connect descriptor (`description=…`) (shown in **bold**) for the service you want to use. For example, copy the string:

```
(description=(retry_count=<count>)(retry_delay=<delay>)
(address=(protocol=tcps)(port=<port>)(host=your_hostname_or_ip_address))
(connect_data=(service_name=your_ATP_service_name_medium)
(security=(ssl_server_dn_match=<yes_or_no>))
```

Plan Compute Shape and Boot Volume Size

When you deploy Oracle Analytics Server on Oracle Cloud, you're offered a range of compute shapes to suit different scenarios. The larger the compute size (OCPUs and memory), the greater the processing power. You can also select the boot volume size. If you're not sure which sizes to use, contact your sales team to discuss sizing guidelines.

Compute Shape

Oracle Analytics Server can be Oracle Compute Unit (OCPU)-intensive depending on your application. To help you decide which compute size best suits your deployment, consider how many active users you expect to perform concurrent activities.
Oracle Analytics Server supports a range of compute shapes, including:

- **VM.Standard.2.***: The default shape is VM.Standard.2.1.
- **VM.Standard.E4.Flex** and **VM.Standard.E3.Flex**: With these flexible shapes, you can customize the number of OCPUs and the amount of memory.

The exact list of shapes available to you depends on your region. For a description of the difference between VM Standard shapes and a discussion on how to decide which to use, see Standard Shapes.

Boot Volume Size

A boot volume contains the image used to boot the compute instance. Volume performance varies with volume size. The default boot volume for an Oracle Analytics Server compute instance is 400 GB, and this is the minimum size available. You can increase this value up to 32768 GB.

See Overview of Boot Volume.

All the requested boot volume space, beyond what is needed for the core Oracle Analytics Server binaries, is available under the Oracle Analytics Server folder `/u01/data`.

Generate SSH Keys

You must generate a SSH public key and corresponding private key to access the Oracle Analytics Server compute instance on Oracle Cloud using a Secure Shell (SSH) connection.

When you deploy Oracle Analytics Server using Oracle Cloud Marketplace, you're asked to provide the public key you plan to use. See Creating a Key Pair on the Command Line.

Complete Predeployment Checklist

Use a checklist similar to this one to help plan your deployment and make sure you've completed all the prerequisite tasks. The checklist contains all the information you'll need for the quick-deployment process.

My Deployment Checklist

Information Required	Value
Oracle Cloud Infrastructure	
License Type (UCM or BYOL)	.....
Tenancy	.....
Region	.....
Availability Domain	.....
Network Virtual Cloud Network (VCN) and subnet where the compute instance for Oracle Analytics Server is deployed	
Compartment for VCN	.....
VCN	.....
Compartment for Subnet	.....
Subnet	.....
Database Oracle Cloud database where schemas for Oracle Analytics Server are installed	
Database Connect String	....
Database Administrator Username	.....
Database Administrator Password	.....
(Oracle Autonomous Transaction Processing Database Only) URL for the ATP Wallet in Object Storage	....
Prefix for Oracle Analytics Server database schemas	.....
Password to access Oracle Analytics Server database schemas	.....
Compute Instance Details about the compute instance on which Oracle Analytics Server is deployed	
Compartment	.....
Shape	Shape: ..... OCPU: ..... Memory: .....
Boot Volume	.....
SSH Key Pair	Public Key: ..... Path to Private Key: .....
Oracle Analytics Server Domain Administrator access details for the Oracle Analytics Server deployment	
Analytics Administrator Username	.....
Analytics Administrator Password	.....

Deploy Oracle Analytics Server Using Oracle Cloud Marketplace

If you subscribe to Oracle Cloud with Universal Credits or have an Oracle Fusion Middleware on-premises license for Oracle Analytics Server, you can deploy Oracle Analytics Server on Oracle Cloud using Oracle Cloud Marketplace. Two quick-deploy templates are available. Select the one that matches your subscription with Oracle: Universal Credits (UCM) or Bring Your Own License (BYOL).

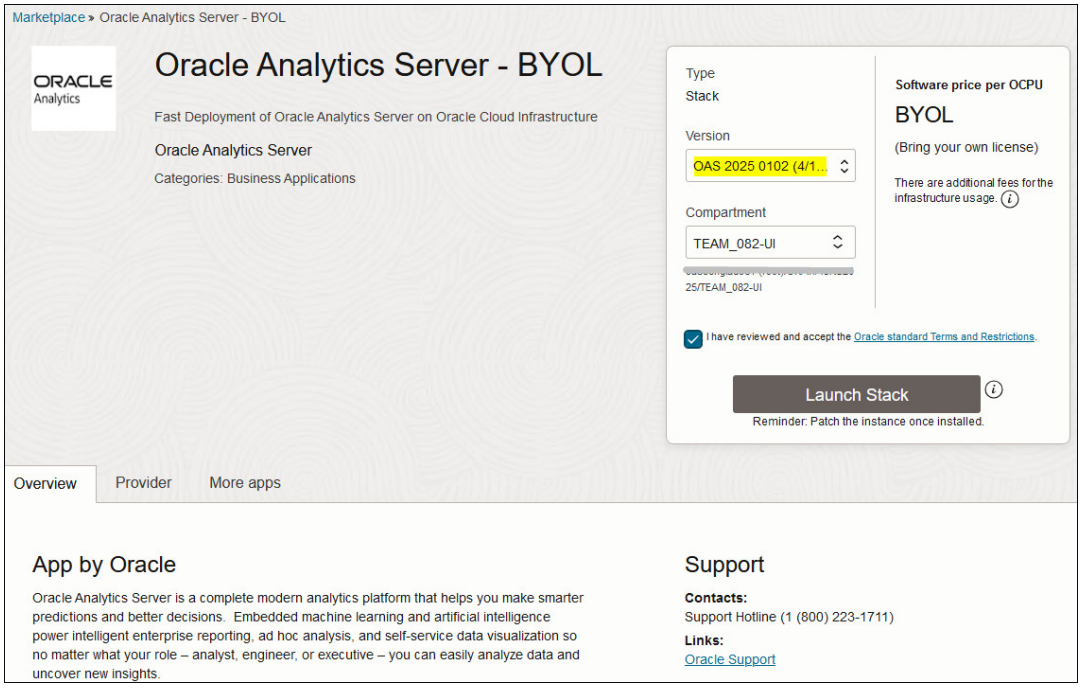
1. Complete the prerequisites tasks and record all the information you need in the checklist provided. See Before You Begin.
2. Sign into Oracle Cloud Infrastructure Console.

   Ensure that you have all the required security policies to deploy Oracle Analytics Server, and access to the compartments containing the prerequisite network and database infrastructure.

3. In Oracle Cloud Infrastructure Console, click  in the top left corner.
4. Click **Marketplace**. Under Marketplace, click **All Applications**.
5. Search for Oracle Analytics Server.
6. Click **Oracle Analytics Server - UCM** or **Oracle Analytics Server - BYOL**.
7. On Oracle Analytics Server's Marketplace page, select the version of Oracle Analytics Server you want to deploy.
8. Select the compartment in which to deploy and run the stack. For example, `MyStacks`.

   This is where you want to store Oracle Resource Manager (ORM) stack and jobs.

9. Review the Oracle standard terms and restrictions, and then select **I have reviewed and accept the Oracle Standard Terms and Restrictions**.
10. Click **Launch Stack**.



11. On the **Create Stack** page, enter details for your stack.

a. Enter a name for your Oracle Analytics Server stack. For example, `My-OAS-Marketplace-Stack`.

b. Add your own description or leave the default. For example, `Stack to install Oracle Analytics Server on my TEST compute instance`.

c. Add tags to organize and track resources within your tenancy.

d. Click **Next**.

12. In **Oracle Analytics Server Compute Instance**, set values for the compute instance on which Oracle Analytics Server will be deployed.

- **Display Name** - Enter a name for the compute instance. For example, `MyTestOAS`.
- **Target Compartment** - Select the compartment in which to deploy the Oracle Analytics Server compute instance that this stack generates. For example, `MyOracle_Analytics_Server`.
  If you want Oracle Analytics Server to use resources located in a different compartment, ensure that you have the required policies to access them. For example, the VCN, subnet, and database you plan to use.
- **Availability Domain** - Select the domain in which to create the compute instance. Required only if your tenancy has more than one availability domain.
- **Shape** - Select a shape for the compute instance.

  If you select a flexible shape, you can specify the number of **OCPUs** and the amount of **Memory** (GB) that you want for the compute instance.

  OCPUs - Enter a value between 1 and 64. The default is 1 OCPU.

  Memory - Enter a value between 1 and 1024 GB. The default is 15 GB.
- **Boot Volume Size** - Select the size of the boot volume in GB. The minimum volume is 400 GB.
- **SSH Public Key** - Browse and select the public SSH key file or paste the value of the SSH key that you created to access the compute instance.

13. In **Network Configuration**, select the network on which you want to deploy the compute instance for Oracle Analytics Server.

- **VCN Compartment** - Select the compartment containing the Virtual Cloud Network (VCN) you want to use. For example, `MyNetwork`.
- **Virtual Cloud Network** - Select the Virtual Cloud Network (VCN) where you want to create the compute instance. For example, `MyVCN`.
- **Subnet Compartment -** Select the compartment containing the subnet you want to use.
- **Subnet** - Select a subnet for the compute instance. For example, `MySubnet`.

> **Note**
>
> If you select a private subnet, you must set up a separate public subnet and a bastion compute instance (or load balancer) to provide administrative access to the compute instance. See Set Up Network Resources.

- **Assign a Public IP Address to the Compute Instance** - Generates a public IP address for the compute instance. Only applicable if you select a public subnet. Don't select this option if the subnet is private.

If you can't see the compartment, VCN, or subnet you want, check you have the required permissions.

14. In **Oracle Analytics Server Domain Configuration**, select **Create Oracle Analytics Server Domain**.

> **Note**
>
> Don't select **Create Oracle Analytics Server Domain**, if you're creating an additional Oracle Analytics Server compute instance to scale out an existing Oracle Analytics Server deployment.

15. Optional: Select **Use Oracle ATP Database** if the database where you plan to store Oracle Analytics Server product schemas is Oracle Autonomous Transaction Processing (ATP). Deselect if you plan to use Oracle Database.

> **Note**
>
> If you want to use Oracle ATP with Oracle Analytics Server **2024** (Step 7) you must manually create the Oracle Analytics Server domain. Deselect the option **Create Oracle Analytics Server Domain**, and skip Step 16. After deploying Oracle Analytics Server, follow these steps to manually create the domain with Oracle ATP: Configuring the Oracle Analytics Server Domain with the Configuration Assistant.

16. Provide details for Oracle Analytics Server domain configuration.

- **Analytics Administrator Username** - Name of the user who will administer Oracle Analytics Server. Because this is a new user, you can enter any suitable username. For example, `myoasadmin`.
- **Analytics Administrator Password** - Password for the Oracle Analytics Server administrator. Because this is a new password, enter any suitable password. The password must be at least 8 characters long and contain only alphanumeric, underscore (_), dollar ($) or pound (#) characters.
- **Database Connection String** - Connect string for the database you want to use to store Oracle Analytics Server product schemas. The database must be a pluggable database (PDB) on an Oracle Cloud virtual machine DB system (either Oracle ATP or Oracle Database).
  - **Oracle Autonomous Transaction Processing (ATP)**
    Use the database connection string format: `jdbc:oracle:thin:@(description=(address=(protocol=tcps)(port=<port>)(host=<your_hostname_or_ip_address>))(connect_data=(service_name=<your_ATP_service_name>))`

    For example: `jdbc:oracle:thin:@(description= (address=(protocol=tcps)(port=1521)(host=adb.us-ashburn-1.oraclecloud.com))(connect_data=(service_name=myoasdb_medium.adb.oraclecloud.com))(retry_count=20)(retry_delay=3)(security=(ssl_server_dn_match=no)))`

    If you haven't done so already, you can obtain the connection string from the ATP wallet. See Prerequisites for an Oracle Autonomous Transaction Processing Database.
  - **Oracle Database**

Use the database connection string format: `<hostname or IP address>:<port>:<PDB_name>.<DB_domain>`

For example:
`oasdb.sub12345678901.oasvcn.oraclevcn.com:1512:OASDB1213_pdb1.sub12345678901.oasvcn.oraclevcn.com`

- **Database Administrator Username** - Name of an existing user with database administration privileges. For example, `myoasdba`.
- **Database Administrator Password** - Password of the user with database administration privileges.
- **Database Schema Prefix** - Prefix added to the name of each database schema created for Oracle Analytics Server. For example, `MyOAS`.
- **Database Schema Password** - Password to access the database schemas used by Oracle Analytics Server. This is a new password so you can enter any suitable value that satisfies the password policy of database you want to use.

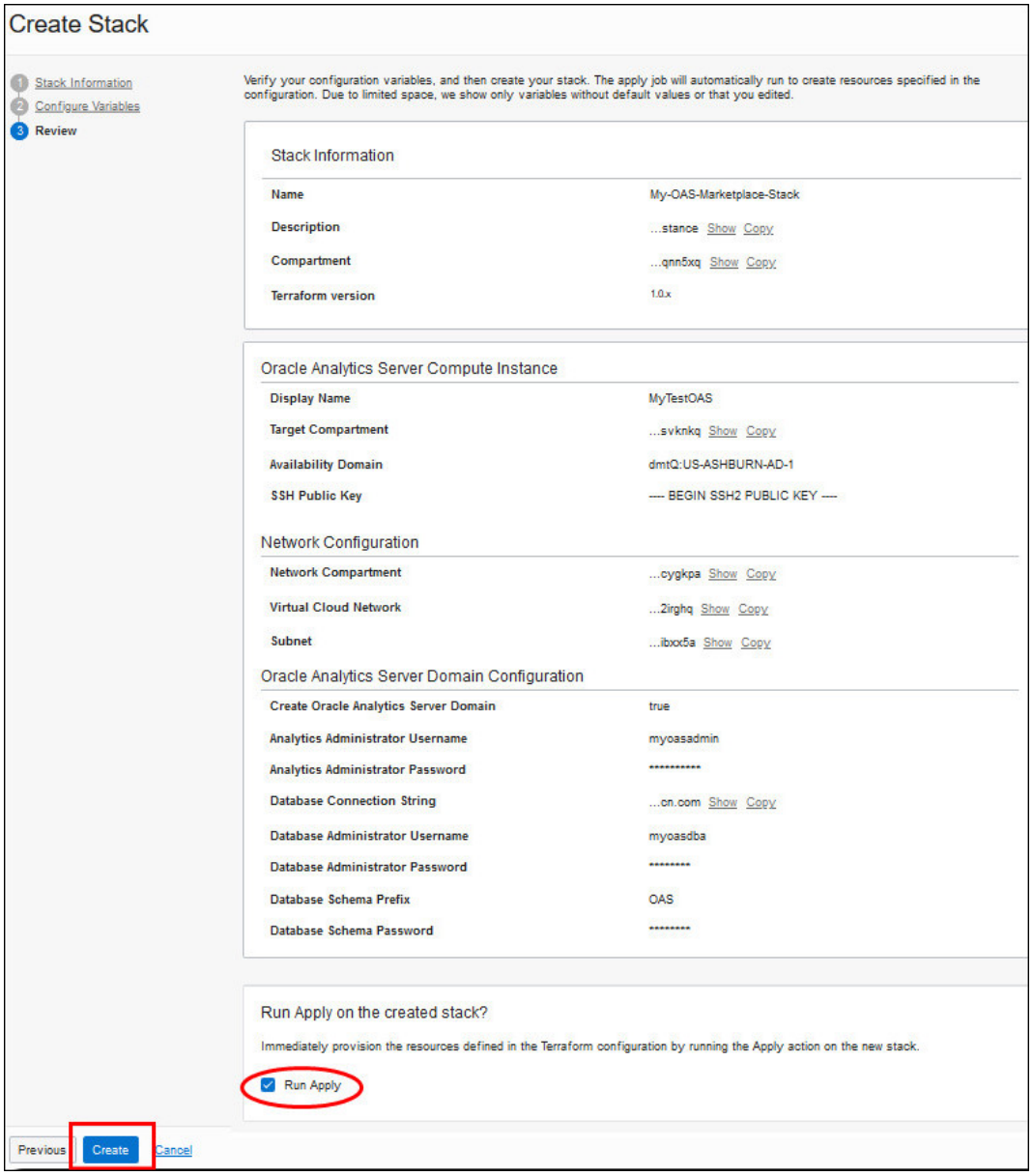
> **Note**
>
> For example, a pluggable database (PDB) on an Oracle Cloud virtual machine DB system, has the following password policy:
>
> – A minimum of 9 and a maximum of 30 characters.
> – At least two uppercase characters.
> – At least two lowercase characters.
> – At least two special characters. The valid special characters are: underscore (_), dollar ($), or a pound or hash sign (#). You can use two of the same characters or any combination of two of the same characters.
> – At least two numeric characters (0 - 9).

- **URL for the ATP Wallet in Object Storage** - (Oracle Analytics Server 2025 only) Pre-authenticated request URL with access to the Autonomous Transaction Processing (ATP) wallet that you uploaded to Object Storage. Use the format: `https://<object storage location>/<ATP wallet zip filename>`
  For example: `https://objectstorage.<region>.oraclecloud.com/p/`*`par_ID`*`/n/`*`namespace_ID`*`/b/mybucket/o/myATPwallet.zip`

  If you haven't done so already, you can create a pre-authenticated request URL for the ATP wallet file from the **Objects** page. See Prerequisites for an Oracle Autonomous Transaction Processing Database.

> **Tip**
>
> To ensure Oracle Analytics Server deployment goes smoothly, test the database connection and database administrator credentials before you create the stack.

17. Click **Next**.
18. Review the information you provided for the compute instance.



19. Make sure you select **Run Apply**, and then click **Create**.

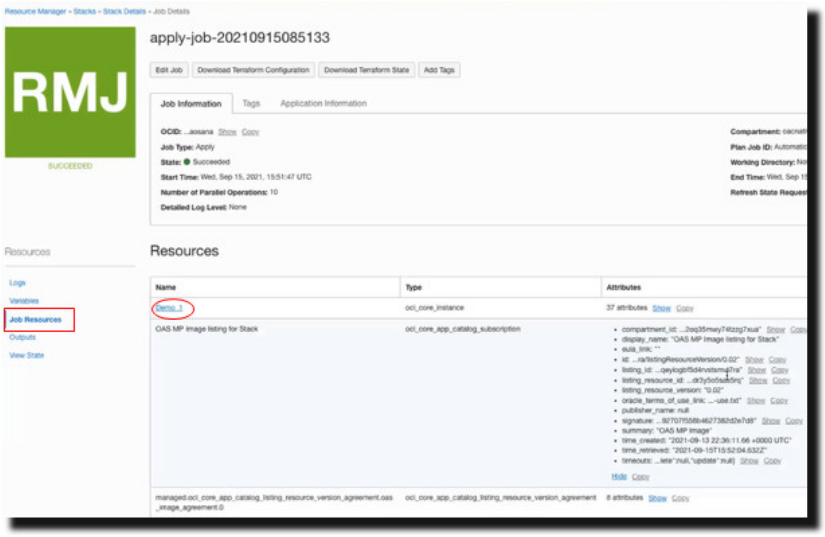
    Monitor progress on the **Job Details** page. When the stack job finishes, the state changes from **In Progress** to **Succeeded**.

    If you opted to create and configure a domain, the process takes about 30 - 40 minutes to complete and starts in the background immediately after the stack job finishes. The exact time depends on multiple factors, including the current load on your network and database.

20. To track the deployment process, use SSH to connect to the compute instance and monitor the deployment logs in the `/var/log` directory (`oas_cloudinit.log` and `oas_create_domain.log`). When Oracle Analytics Server is ready to use, you see the file `/u01/app/oas-scripts/oas_install.finish`.

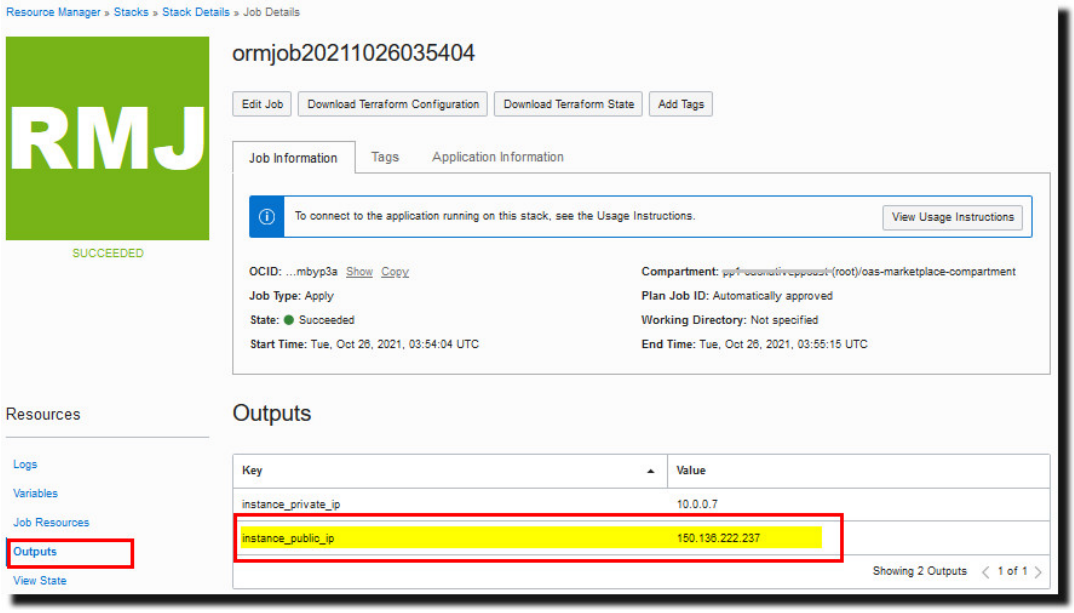
21. In the Job Details page, click **Job Resources** to access the compute instance (oci_core_instance) generated by the stack.

    Click the name of the compute instance to navigate to more detail and bookmark this page because you might need this page later.



22. In the Job Details page, click **Outputs** to see the public IP address assigned to the compute instance (if any).

    If available, copy the public IP address. You can use the public IP to sign-in and verify your Oracle Analytics Server deployment. See Sign-in and Verify Oracle Analytics Server.



23. In the Job Details page, click **View State** to review the Terraform state file for this stack.

    Resource Manager stores the Terraform state file (`.tfstate`) for the stack in JSON format. This file maps your stack's resources to your configuration and maintains essential configuration metadata, such as resource dependencies. See also To view the state of a stack.

    The Terraform state file contains all the data you provided, including the passwords you specified for the domain creation phase. If you don't want these passwords to be visible to anyone who has access to this job, you should skip the domain creation. Instead, you can add all the information required to create the domain to the files on the compute instance, and create the domain manually using the scripts provided. See How do I create the Oracle Analytics Server domain manually? .

Complete Post Deployment Tasks

After you deploy Oracle Analytics Server on Oracle Cloud Infrastructure using Oracle Marketplace, complete the following tasks.

- Test Connectivity to Oracle Analytics Server
- Install Additional Libraries for Machine Learning in Oracle Analytics Server
- Sign-in and Verify Oracle Analytics Server
- Complete Cleanup Tasks
- Set Up SSL in Oracle Analytics Server
- Secure Your Network

Test Connectivity to Oracle Analytics Server

Use Secure Shell (SSH) client software to connect to the Oracle Analytics Server compute instance deployed on Oracle Cloud Infrastructure to perform administrative tasks.

You need the public IP address of the compute instance to use SSH. See Connecting to a Compute Instance on Oracle Cloud Infrastructure.

> **Note**
>
> The way you access a private compute node depends on your environment. For example, you might decide to deploy a bastion host (see Oracle Technical Brief on post-deployment bastion host setup). If your network configuration uses FastConnection or VPN with IPSec, you must provide the network setup that allows you to use SSH to connect to the private compute node.

1. Open any SSL utility, for example openSSL.
2. Connect to your Oracle Analytics Server compute instance and log in.

   ```
   $ ssh -i path_to_private_key_file opc@oas_public_ip
   ```

   path_to_private_key_file is the full path and name of the file that contains the private key associated with the instance you want to access. This is the private key from the public-private key pair that you generated and specified when you deployed Oracle Analytics Server using Oracle Cloud Marketplace.

   `opc` is the default user for the compute instance `opc`.

   oas_public_ip is the public IP address for the compute instance that you obtained from the Console.
3. Optional: Switch to the `oracle` user to explore the Oracle Analytics Server compute instance and perform administrative tasks.

   ```
   sudo su oracle
   ```

See Manage the Compute Instance for Oracle Analytics Server Using the Built-in `oracle` User.

Install Additional Libraries for Machine Learning in Oracle Analytics Server

If you want to use automated machine learning features in Oracle Analytics Server on Oracle Cloud you must install some additional libraries.

You must have system administrator privileges to install these libraries.

At the command line, run the following command to install the libraries:

(Linux) `sudo yum install -y libgfortran`

Sign-in and Verify Oracle Analytics Server

If you opted to create and configure a domain for Oracle Analytics Server, it takes another 30 - 40 minutes *after* the stack job finishes to create the domain and deploy Oracle Analytics Server. The exact time depends on multiple factors, including the current load on your network and database. After checking the logs, you can sign in.

1. If you haven't done so already, verify that Oracle Analytics Server installation is complete.
   a. Open any SSL utility and log in to the compute instance as the `opc` user.

      Use the SSH private key (*`path_to_private_key`* and the public IP address of the Oracle Analytics Server (*`oas_public_ip`*).

      ```
      $ ssh -i path_to_private_key opc@oas_public_ip
      ```

   b. Switch to the `oracle` user.

      ```
      sudo su oracle
      ```

   c. Navigate to the `/u01/app/oas-scripts` directory and look for the file `oas_install.finish`. This file indicates that the installation is complete.

   d. Navigate to the `/var/log` directory and check the log files `oas_cloudinit.log` and `oas_create_domain.log` to verify that the domain created successfully.
2. If you haven't done so already, obtain the public IP address of your Oracle Analytics Server compute instance.

   Earlier, we showed you how to access the IP information from the Job Outputs tab in Resource Manager (see step 20 Deploy Oracle Analytics Server Using Oracle Cloud Marketplace). You can also access the public IP address from the Compute Instance Details page:

   a. In Oracle Cloud Infrastructure Console, click  in the top left corner.

   b. Click **Compute** and then click **Instances**.

   c. Under List Scope on the left side of the page, select the compartment where you deployed Oracle Analytics Server.

   d. Select the name of the compute instance.

   e. Under **Primary VNIC Information**, find and copy **Public IP Address**.

3. To verify Oracle Analytics Server, access the following URL and sign in.

   `http://OAS_Public_IP_Address:port/dv`

   For example: `http://123.45.67.890:9502/dv`

   If you selected the **Create Oracle Analytics Server Domain** stack option, Oracle Analytics Server is set up with the default ports, and you can access Oracle Analytics Server on port `9502`. If you configured the Oracle Analytics Server domain separately, use the port number you specified for the Managed Server.

   Sign in using the administrator credentials you provided to deploy the stack, that is, the values for **Analytics Administrator Username** and **Analytics Administrator Password**.

   When the home page displays, Oracle Analytics Server is ready to use!

4. To verify Oracle Analytics Publisher, access the following URL and sign in.

   `http://OAS_IP_address:Port/xmlpserver`

   For example: `http://123.45.67.890:9502/xmlpserver`

   Oracle Analytics Publisher displays and is ready to use!

Complete Cleanup Tasks

After you deploy Oracle Analytics Server using Oracle Cloud Marketplace and verify your setup, Oracle recommends that you delete the domain configuration file `biconfig.rsp`. This file contains sensitive configuration information and since it's no longer required, you're advised to delete it.

1. Use your favorite SSH client to connect to the compute instance for Oracle Analytics Server. Log in as the `opc` user.

   ```
   ssh -i path_to_private_key opc@oas_public_ip
   ```

2. Switch to the `oracle` user to perform administrative tasks.

   ```
   sudo su oracle
   ```

3. Navigate to `/u01/data`.
4. Delete the file `biconfig.rsp`.

Set Up SSL in Oracle Analytics Server

Oracle highly recommends that you configure Oracle Analytics Server components to communicate over SSL and update the SSL certificates to one that has been signed with a trusted certificate authority.

To do this, follow the same steps as Oracle Analytics Server on premises. See Configure SSL in Oracle Analytics Server in *Managing Security for Oracle Analytics Server*.

Secure Your Network

After you deploy the Oracle Analytics Server stack on Oracle Cloud Infrastructure, take steps to secure your network.

See Ways to Secure Your Network.

3

Administer Oracle Analytics Server on Oracle Cloud

When you deploy Oracle Analytics Server on Oracle Cloud Infrastructure, some administration tasks take place through Oracle Cloud Infrastructure Console.

Delete Oracle Analytics Server Resources

Destroying a stack deletes all the Oracle Analytics Server resources that were created by the stack, including the Oracle Analytics Server compute node.

Billing stops immediately after the destroy operation.

1. In Oracle Cloud Infrastructure Console, enter "stacks" in the search bar and then click **Stacks** (**Resource Manager)**.
2. Click the Oracle Analytics Server stack you want to delete.
3. Click **Destroy**.

   You can monitor the progress of the Destroy job in the Logs tab. When complete, the State changes to **Succeeded**.
4. Click **Stack Details** and then click **More Actions**. Select **Delete Stack**, and then click **Delete**.
5. Optional: Delete the database schemas created for Oracle Analytics Server.

Edit Your Oracle Analytics Server Deployment

You can edit only the name of the Oracle Analytics Server compute instance.

1. In Oracle Cloud Infrastructure Console, click  in the top left corner.
2. Click **Compute**, and then click **Instances**.
3. Under List Scope on the left side of the page, select the compartment containing the compute instance you want to edit.
4. Select the compute instance and click **Edit**.

5. In the Edit instance configuration dialog, enter a new name, and then click **Save changes**.

View Usage Costs for Oracle Analytics Server on Oracle Cloud

You can analyze the cost of your Oracle Analytics Server deployment using the Cost Analysis page. Cost information for Oracle Analytics Server is available under the Compute service.

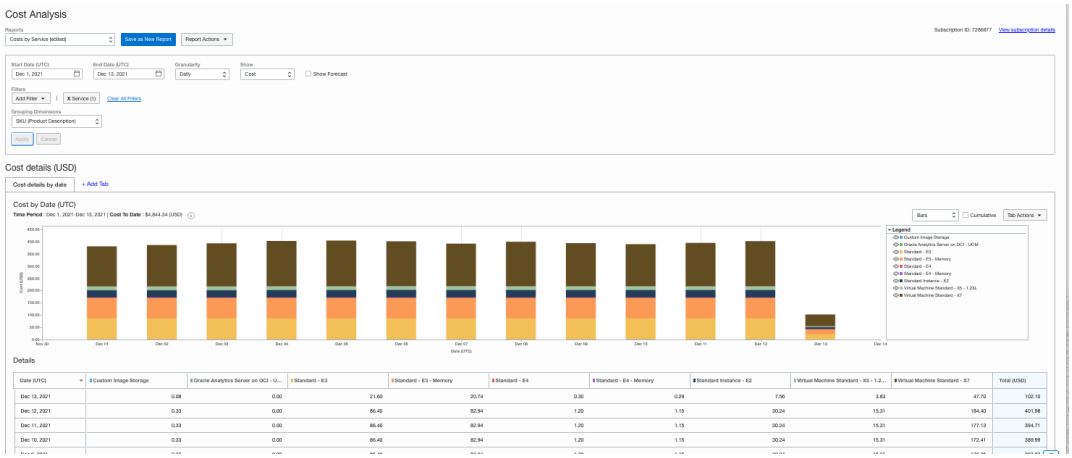
- **Product Description**: Oracle Analytics Server on OCI - UCM
- **Part Number**: B94568

1. Ensure you're assigned to a security policy that allows you to read cost information.

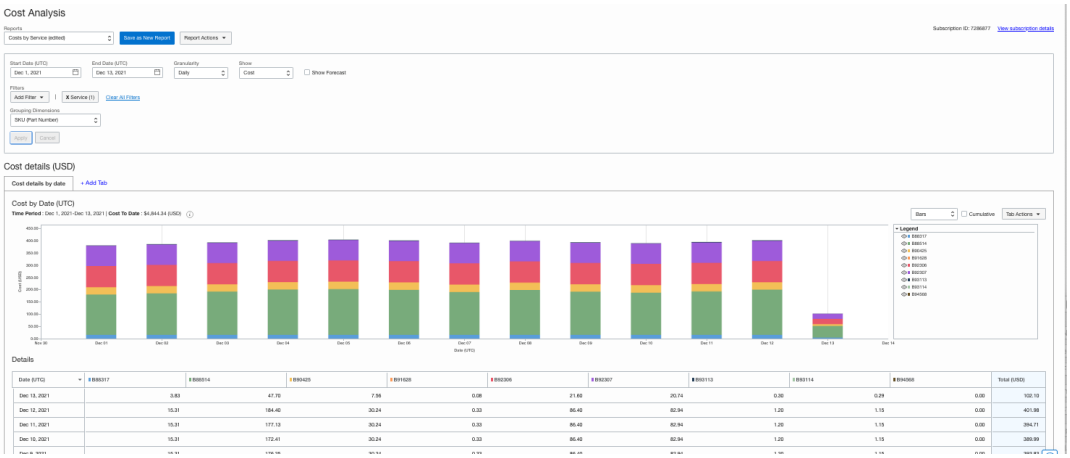
   For example, if you have an Oracle Cloud user group called `AnalyticsServerAdmins`, you might want to allow this group to see cost information. For example, a policy statement that looks like this:

   ```
   allow group AnalyticsServerAdmins to read usage-reports
   ```

2. Navigate to the Cost Analysis Page. Click **Billing and Cost Management**, and then click **Cost Analysis**.
3. In Reports, select **Costs by Service**.
   a. Add a filter for **Service** and select **COMPUTE**.
   b. For Grouping Dimensions, select **SKU Product Descriptions**.
   c. Review costs for **Oracle Analytics Server on OCI - UCM**.



4. In Reports, select **Costs by Service**.
   a. Add a filter for **Service** and select **COMPUTE**.
   b. For Grouping Dimensions, select **SKU (Part Number)**.
   c. Review costs for **B94568** (**Oracle Analytics Server on OCI - UCM**).



Scale Oracle Analytics Server on Oracle Cloud

If you want to scale Oracle Analytics Server by distributing the processing of requests across multiple virtual machine (VM) instances, add another Oracle Analytics Server instance to your environment on Oracle Cloud.

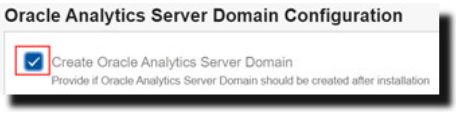
Pre-requisites for scaling Oracle Analytics Server:

- Verify that your environment meets system and network requirements. See Networking Overview and Virtual Networking Quickstart.
- Deploy additional Oracle Analytics Server instance on the same virtual cloud network (VCN) as the primary Oracle Analytics Server instance.

You can use the performance metrics that are provided in Oracle Fusion Middleware Control to monitor process state and to determine when you must increase capacity to improve performance of Oracle Analytics Server on Oracle Cloud.
If you want to use a private subnet, see Configure Public and Private Subnets with a VPN.

1. Use Oracle Cloud Marketplace to deploy Oracle Analytics Server on Oracle Cloud Infrastructure (node 1).

   For node 1, you must select **Create Oracle Analytics Server Domain**, and provide the required domain configuration details. See Deploy Oracle Analytics Server Using Oracle Cloud Marketplace .

2. Use Oracle Cloud Marketplace to deploy a secondary Oracle Analytics Server on Oracle Cloud Infrastructure without a domain (node 2).

   For node 2, don't select **Create Oracle Analytics Server Domain**.

3. Set up shared files and directories between the two nodes.

   The singleton data directory (SDD) stores the metadata. The default location is set to:

   DOMAIN_HOME`/bidata`

The SDD path is defined in the file `bi-environment.xml`, located at

DOMAIN_HOME`/config/fmwconfig/bienv/core/bi-environment.xml`.

a. Use your favorite SSH client to connect to the compute instance for your primary Oracle Analytics Server (node 1). Log in as the `opc` user, and then switch to the `oracle` user.

```
ssh -i path_to_private_key opc@oas_public_ip
sudo su oracle
```

b. Create a mount point for `bidata`. For example, run the following command:

```
mount DOMAIN_HOME/bidata /sdd/bidata
```

This makes `/sdd/bidata` the mount point for SDD.

c. Open the `bi-environment.xml` file for editing, specify the singleton path, and save the file.

For example:

```
<bi:singleton-data-directory>Node1_IP_address:/sdd/bidata/</
bi:singleton-data-directory>
```

Where:

- `bi:singleton-data-directory` is the SDD mount point.
- `Node1_IP_address` is the private IP address of node 1.

d. Log in to node 2 using the SSH utility and ping node 1 to check you can access node 1.

e. Add the additional ports required for your scaled out environment to a customized firewall configuration file, and then run the script `open_oas_firewall_ports.sh` to open the ports. See About Managing Firewall Ports.

4. Set up the global cache. See Set Up the Global Cache.
5. Add (or remove) instances on Oracle Cloud Infrastructure.
   - To add a new instance, see Add New Computers.
   - To remove an existing instance, see Remove Existing Computers.
6. Validate that your system scales correctly. See Validate that Your System Has Been Scaled Correctly.

Patch Oracle Analytics Server on Oracle Cloud

Patching involves copying a small collection of files over an existing installation, that is, updating to a newer, minor update of the same product. The patching process on Oracle Cloud is similar to patching any on-premises installation or deployment. However, the way you obtain the patch is slightly different if you don't have an on-premises license.

Obtain a Patch

The way you obtain patches for your Oracle Analytics Server deployment on Oracle Cloud depends how you subscribe to Oracle Cloud Marketplace.

- **Oracle Analytics Server - BYOL (Bring Your Own License)**: Obtain patches through the **Patches and Updates** tab in My Oracle Support. This is the same method as any on-premises installation or deployment. See *Critical Patch Update (CPU) Advisor For Oracle Analytics Server and Oracle Business Intelligence* (Doc Id 2832967.2).
- **Oracle Analytics Server - UCM (Universal Credits)**: If you don't have any on-premises licenses or access to My Oracle Support, file a Service Request with Oracle Support to obtain patches. After downloading a patch, you apply the patch in exactly the same way as on-premises patching. See *How To Obtain Patches For Oracle Analytics Server on OCI MarketPlace* (Doc Id 2858616.1).

Apply a Patch

The way you apply a patch for your Oracle Analytics Server deployment on Oracle Cloud is exactly the same as on-premises patching. See Apply a Patch.

Manage the Compute Instance for Oracle Analytics Server Using the Built-in `oracle` User

You can use your favorite Secure Shell (SSH) client software to connect to the compute instance for Oracle Analytics Server. After logging in as the `opc` user, Oracle recommends that you switch to the built-in `oracle` user to explore the Oracle Analytics Server compute instance and complete any administrative tasks.

For example, use the built-in `oracle` user if you decide to create the domain manually, scale out, access Oracle Analytics Server logs, and so on.

> **Note**
>
> When you use Oracle Cloud Marketplace to deploy Oracle Analytics Server and create the domain, the domain is also created and owned by the `oracle` user.

1. Use your favorite SSH client to connect to the compute instance for Oracle Analytics Server. Log in as the `opc` user.

   ```
   ssh -i path_to_private_key opc@oas_public_ip
   ```

2. Switch to the `oracle` user to explore the Oracle Analytics Server compute instance and perform administrative tasks.

   ```
   sudo su oracle
   ```

3. Explore Oracle Analytics Server folders. Oracle Analytics Server applications and scripts are installed in the `/u01/app` folder. The domain and domain tools are created in the `/u01/data` folder. Logs are installed under `/var/log`.

   ```
   cd /u01/app
   ls
   ```

```
<Oracle Analytics Server product and binaries, including files such as
config.sh, oraInst.loc>


cd /u01/app/oas-scripts
ls
<Oracle Analytics Server scripts such as biconfigcleaner.sh,
createDataPartition.sh, create_oas_domain.sh,
DefaultSingleNodeOASFirewallPorts.xml, oas_installer.sh,
open_oas_firewall_ports.sh, oas_install.finish>


cd /u01/data
ls
<Oracle Analytics Server domain directories and files such as biconfig.rsp>
<This partition also includes all the requested boot volume space beyond
what is needed for the core Oracle Analytics Server binaries>


cd /u01/data/domains/bi/bitools/bin
ls
<Oracle Analytics Server domain tools such as status.sh, start.sh, and
other scripts>


cd /var/log/
ls
<Oracle Analytics Server logs such as oas_cloudinit.log,
oas_create_domain.log>
```

Manage Firewall Ports for Oracle Analytics Server on Oracle Cloud

Learn about the open ports required for a single-node and a scaled-out topology, and their default values. Understand how you can customize the firewall ports for your environment, and open additional ports.

- About Managing Firewall Ports
- Open Firewall Ports or Change Port Values

About Managing Firewall Ports

When you use Oracle Cloud Marketplace to deploy Oracle Analytics Server and create the domain, only ports required for a single-node install are open by default. Post deployment, you can customize the default configuration file (`DefaultSingleNodeOASFirewallPorts.xml`) to open other ports or change the default port values to suit your environment. If you edit the firewall ports, you must run the script `open_oas_firewall_ports.sh` to effect your changes.

If you create the domain manually using `config.sh`, you must also use the same script (`open_oas_firewall_ports.sh`) to modify your firewall port configuration.

If you scale-out your Oracle Analytics Server environment, you must open some additional ports and run the script `open_oas_firewall_ports.sh` to effect your changes. For details, see Scaled-out, Multi-node Environment - Default Firewall Configuration.

Single Node Environment - Default Firewall Configuration

- **Minimum Required Ports**

  The following tables list the open ports that are required for a single-node environment and their default values.

Oracle WebLogic Server Components	Default Port
Admin Server (HTTP)	9500
Admin Server (HTTPS)	9501
Managed Server bi_server1 (HTTP)	9502
Managed Server bi_server1 (HTTPS)	9503

Oracle Analytics Server Components	Default Port
Cluster Controller (OBICCS)	9508
BI Scheduler (OBISCH)	9511
BI Server (OBIS)	9514

- **Default Configuration**

  The default open ports for a single-node environment are configured in the file `DefaultSingleNodeOASFirewallPorts.xml` as shown:

```
<?xml version="1.0" encoding="utf-8"?>
<!--DefaultSingleNodeOASFirewallPorts.xml-->
<service>
    <short>OAS</short>
    <description>Oracle Analytics Server</description>
    <port protocol="tcp" port="9500"/>
    <port protocol="tcp" port="9501"/>
    <port protocol="tcp" port="9502"/>
    <port protocol="tcp" port="9503"/>
    <port protocol="tcp" port="9508"/>
    <port protocol="tcp" port="9511"/>
    <port protocol="tcp" port="9514"/>
</service>
```

Scaled-out, Multi-node Environment - Default Firewall Configuration

- **Additional Required Ports**

  The following tables list the *additional* open ports that are required for a scaled-out topology and their default values.

Oracle WebLogic Server Components	Default Port
Managed Server bi_server1 (internal	9505
Node Manager	9506

Oracle Analytics Server Components	Default Port
BI Presentation Services (OBIPS)	9507
Cluster Controller Monitor	9509
BI JavaHost (OBIJH)	9510

Oracle Analytics Server Components	Default Port
BI Scheduler Monitor (OBISCH_MONITOR)	9512
BI Scheduler Script (OBISCH_SCRIPT)	9513
BI Server Monitor (OBIS_MONITOR)	9515
WebLogic Coherence Cluster	9516

- **Additional Configuration**

  Additional ports are required for a scaled-out environment. You must add these additional ports to a custom configuration file, and then run the script `open_oas_firewall_ports.sh` to effect your changes. For example:

```
<?xml version="1.0" encoding="utf-8"?>
<!--MyScaledOutMultiNodeOASFirewallPorts.xml-->
<service>
    <short>OAS</short>
    <description>Oracle Analytics Server</description>
    <port protocol="tcp" port="9500"/>
    <port protocol="tcp" port="9501"/>
    <port protocol="tcp" port="9502"/>
    <port protocol="tcp" port="9503"/>
    <port protocol="tcp" port="9508"/>
    <port protocol="tcp" port="9511"/>
    <port protocol="tcp" port="9514"/>
    <port protocol="tcp" port="9505"/>
    <port protocol="tcp" port="9506"/>
    <port protocol="tcp" port="9507"/>
    <port protocol="tcp" port="9509"/>
    <port protocol="tcp" port="9510"/>
    <port protocol="tcp" port="9512"/>
    <port protocol="tcp" port="9513"/>
    <port protocol="tcp" port="9515"/>
    <port protocol="tcp" port="9516"/>
</service>
```

Open Firewall Ports or Change Port Values

You can change firewall port values and open additional ports to support interprocess communications between the various Oracle Analytics Server components.

1. Create a custom firewall configuration file.
   a. Use your favorite SSH client to connect to the compute instance for Oracle Analytics Server. Log in as the `opc` user.

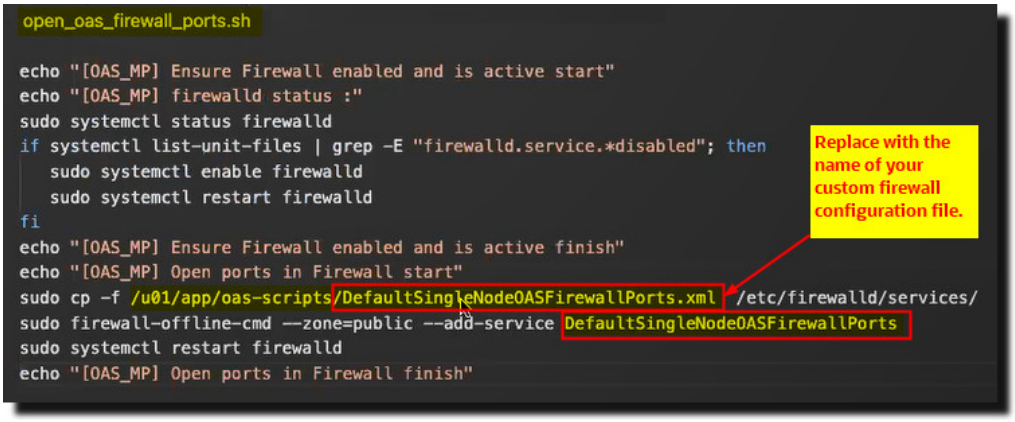
      ```
      ssh -i path_to_private_key opc@oas_public_ip
      ```

   b. Switch to the `oracle` user.

      ```
      sudo su oracle
      ```

   c. Navigate to the folder `/u01/app/oas-scripts`.
   d. Copy the default firewall configuration file `/u01/app/oas-scripts/DefaultSingleNodeOASFirewallPorts.xml` and name the copy `MyOASFirewallPorts.xml` or similar.

2. Configure the required ports in your custom firewall configuration file.
   - For a single node environment, you must include the minimum required ports. See Single Node Environment - Minimum Required Ports.
   - For a scaled-out, multi-node environment, several additional ports are required. See Scaled-out, Multi-node Environment - Minimum Required Ports.
3. Use the script `open_oas_firewall_ports.sh` to open the ports configured in your custom firewall configuration file (`/u01/app/oas-scripts/<Custom Firewall Configuration XML File>`).
   a. Navigate to: `/u01/app/oas-scripts/open_oas_firewall_ports.sh`
   b. If required, edit the script to include the name of your custom firewall configuration file.



   c. Run `open_oas_firewall_ports.sh` to open the ports in your custom firewall configuration script.

Restart Oracle Analytics Server After You Reboot the Compute Instance

If you reboot the compute instance on which you deployed Oracle Analytics Server, you must restart Oracle Analytics Server. For example, you might need to reboot your Oracle Analytics Server compute instance after you make changes, such as applying a patch.

1. In Oracle Cloud Infrastructure Console, click  in the top left corner.
2. Click **Compute** and then click **Instances**.
3. Under List Scope on the left side of the page, select the compartment where you deployed Oracle Analytics Server and then select the compute instance you want to reboot.
4. Click **Reboot** to stop and restart the Oracle Analytics Server compute instance.
5. Manually start Oracle Analytics Server services using `start.sh`.

   The `start.sh` script file is available in the `/u01/data/domains/bi/bitools/bin` folder.

   a. Use your favorite SSH client to connect to the compute instance for Oracle Analytics Server. Log in as the `opc` user.

```
ssh -i path_to_private_key opc@oas_public_ip
```

b. Switch to the `oracle` user.

```
sudo su oracle
```

c. Navigate to the folder `/u01/data/domains/bi/bitools/bin`.

d. Run `start.sh`.

See Start Oracle Analytics Server.

A

Frequently Asked Questions

This section contains the following topics:

How do I know when the deployment and domain creation is complete?

To check whether deployment and domain creation is complete, use SSH to connect to the Oracle Analytics Server compute instance as the `opc` user, switch to the `oracle` user, and look in the `/u01/app/oas-scripts` directory for the file `oas_install.finish`. If you find this file, the installation is complete.

```
>cd /u01/app/oas-scripts/
>ls -la
>...
>-rw-r--r--. 1 root root 0 Nov 05 15:02 oas_install.finish
>...
```

If you selected the option to create and configure a domain, the entire process takes about 30 - 40 minutes to complete.

Where can I find the logs for the installation and check on progress?

The Oracle Analytics Server stack creation process generates a log called `oas_cloudinit.log`. If you opt to create an Oracle Analytics Server domain , you see an additional log called `oas_create_domain.log`. You can find both these logs in the `/var/log/` directory of your Oracle Analytics Server compute instance.

- `oas_cloudinit.log`: Logs progress information during the entire installation process. For example, you see messages about script generation, script execution, the file `biconfig` used for domain creation, the configuration file `DefaultSingleNodeOASFirewallPorts.xml` and script file `open_oas_firewall_ports.sh` used to open ports in the firewall, and details about any files removed during the cleanup phase.

- `oAs_create_domain.log`: Logs status information during the domain creation phase. If domain creation succeeds, you see the following message:

  ```
  [CONFIG] SUCCESS:Collect logs Configuration:Oracle_Analytics_Configuration
  completed successfully
  The configuration of Oracle Distribution completed successfully.
  ```

If a problem occurs, you see an error message with a description of the issue.

How can I verify that Oracle Analytics Server is up and running?

Obtain the public IP address of your Oracle Analytics Server compute instance and enter a URL such as this in your web browser:

`http://OAS_IP_Address:port/analytics`

For example:

```
http://123.45.67.890:9502/analytics
```

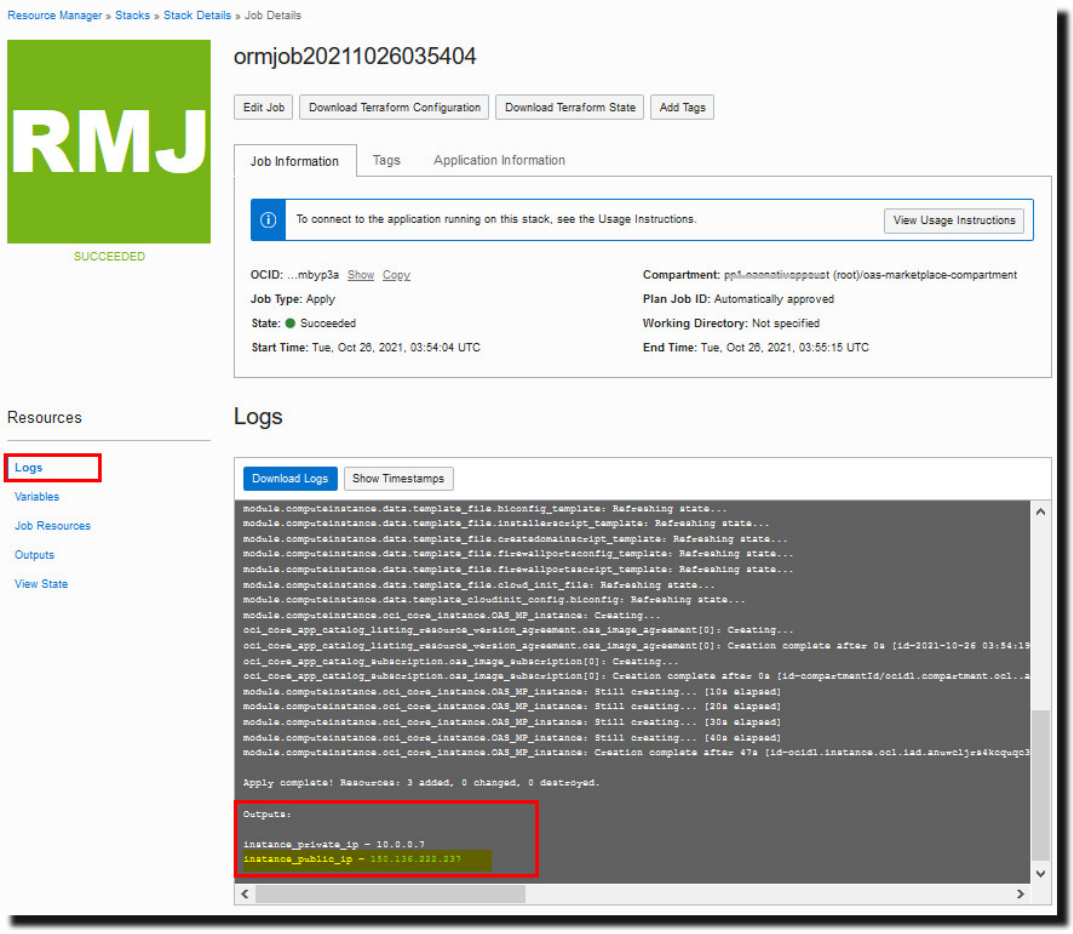
If you selected the **Create Oracle Analytics Server Domain** stack option, Oracle Analytics Server is set up with the default ports, and you can access Oracle Analytics Server on port `9502`. If you configured the Oracle Analytics Server domain separately, use the port number you specified for the Managed Server bi_server1.

See also Next Steps After Configuring the Domain in *Installing and Configuring Oracle Analytics Server*.

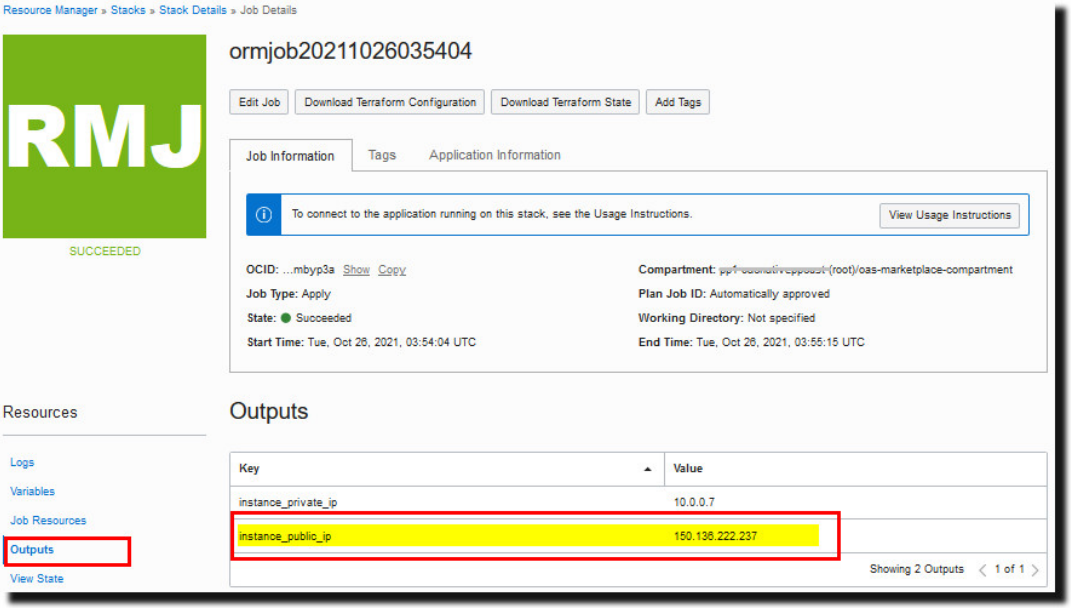
Where can I find the public IP address of my Oracle Analytics Server compute instance?

You can find the public IP address (if available) in several places:

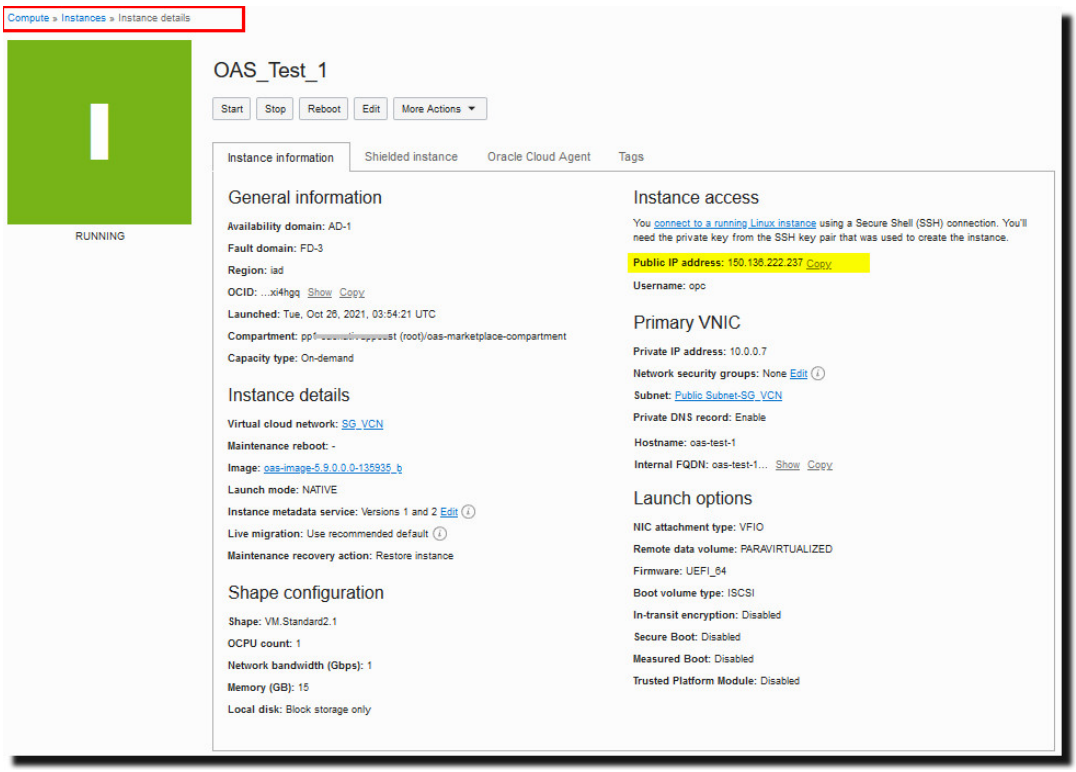
- **Stack Job Log tab:** The public IP address displays in the **Outputs** section at the end of the log.



- **Stack Job Outputs tab**: The public IP address displays in the **Outputs** section for the job.



- **Compute Instance Details page**: Navigate to the compartment where you deployed the Oracle Analytics Server and locate the compute instance. The public IP address displays in the **Instance Access** section for the compute instance.



I rebooted my Oracle Analytics Server compute instance. Why can't I access Oracle Analytics Server?

Oracle Analytics Server doesn't restart automatically after you reboot the computer instance that is hosting Oracle Analytics Server. You must restart Oracle Analytics Server manually using `start.sh`. See Restart Oracle Analytics Server After You Reboot the Compute Instance.

The status of my stack job changed to "Finished". Why can't I access my Oracle Analytics Server compute instance?

If you opted to create and configure a domain, the process takes about 30 - 40 minutes and starts in the background immediately after the stack job finishes. See How do I know when the deployment and domain creation is complete?

If you don't select the option **Create Oracle Analytics Server Domain** when you deploy Oracle Analytics Server or the domain creation fails due incorrect credentials or network issues, you must create the domain manually before you can access Oracle Analytics Server. See How do I create the Oracle Analytics Server domain manually?

How do I create the Oracle Analytics Server domain manually?

If you don't select the option **Create Oracle Analytics Server Domain** when you deploy Oracle Analytics Server or the domain creation fails due incorrect credentials or network issues, you must create the domain manually before you can access Oracle Analytics Server. To do this, you must update the configuration file `/u01/data/biconfig.rsp`, and then either run the Oracle Analytics Server create domain script (`/u01/app/oas-scripts/create_oas_domain.sh`) or run `/u01/app/Oracle/Middleware/Oracle_Home/bi/bin/config.sh`.

1. Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user and then switch to the `oracle` user.

   ```
   ssh opc@oas_public_ip
   ```

```
sudo su oracle
```

2. Navigate to `/u01/data`.
3. In a file editor such as vi, update the configuration file `biconfig.rsp`.

   For example: `sudo vi biconfig.rsp`
4. Navigate to the `/u01/app/oas-scripts` folder.
5. Do one of the following:
   - Execute the existing create domain script to create the domain: `/u01/app/oas-scripts/create_oas_domain.sh`
   - Run `config.sh`: `sudo -u oracle bash /u01/app/Oracle/Middleware/Oracle_Home/bi/bin/config.sh -silent -responseFile /u01/data/biconfig.rsp -invPtrLoc /u01/app/oraInst.loc 2>&1 > /var/log/oas_create_domain.log`

Can I customize Oracle Analytics Server deployment on Oracle Cloud using Terraform?

Yes. Oracle provides two customizable Terraform modules that enable you to quickly deploy Oracle Analytics Server on Oracle Cloud Infrastructure using Resource Manager or Terraform commands: *Oracle Analytics Server - UCM (Universal Credits)* and *Oracle Analytics Server - BYOL (Bring Your Own License)*

Both Terraform modules are available for download from GitHub. To find out more, go to GitHub and search or jump to:

```
oracle-quickstart/oci-oracle-analytics-server
```

For instructions, see Oracle Analytics Server Quick Start Readme.

For general information about Resource Manager and Terraform in Oracle Cloud Infrastructure, see Overview of Resource Manager and Resource Manager and Terraform.

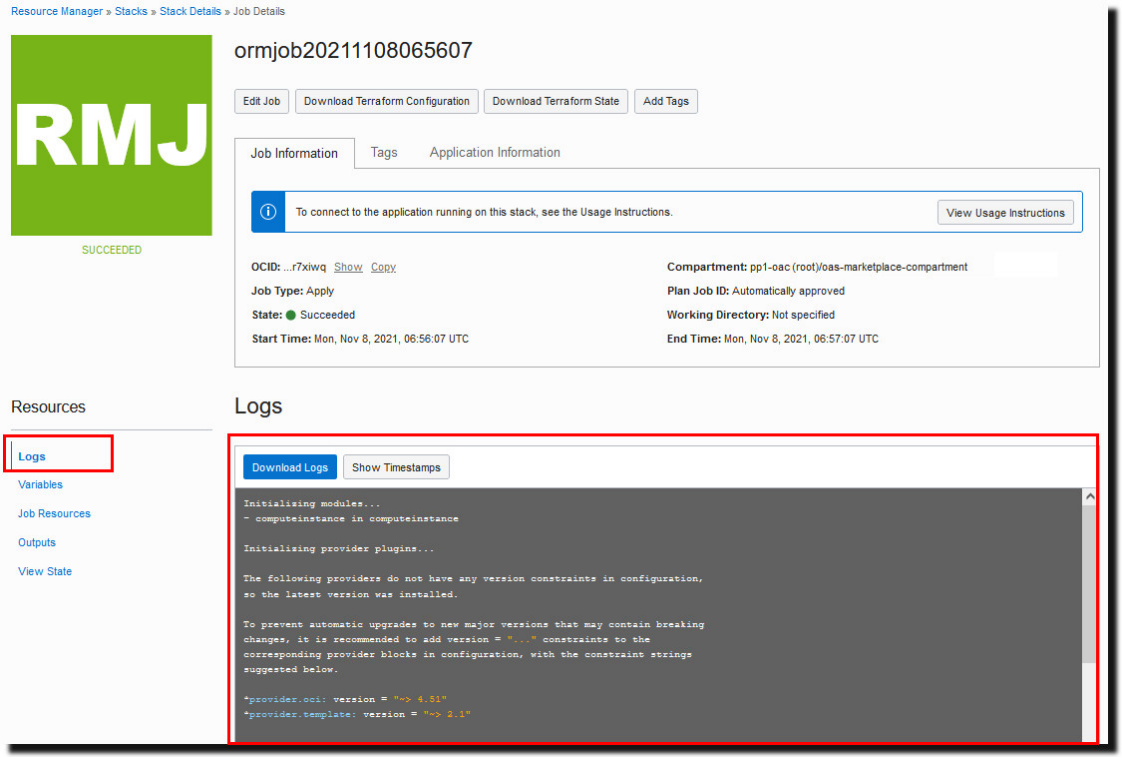
B

Troubleshooting

This topic describes common problems that you might encounter deploying Oracle Analytics Server on Oracle Cloud and explains how to solve them.

I'm having problems creating the stack for Oracle Analytics Server

In the Oracle Cloud Infrastructure Console, navigate to the Logs page for the stack job.



If you're not sure what to do, contact Oracle Support for assistance.

How do I diagnose other installation issues?

When you deploy Oracle Analytics Server on Oracle Cloud several logs are saved to the `/var/log` directory on the compute instance created for Oracle Analytics Server:

You can use your favorite SSH client to log in to the Oracle Analytics Server compute instance to access these logs. Log in as the `opc` user, switch to the `oracle` user, and open the `/var/log/oas_create_domain.log` file.

- `/u01/app/oas-scripts/oas_install.finish` - Indicates that the installation is complete.
- `/var/log/oas_cloudinit.log` - Logs progress information during the entire installation process. For example, you see messages about script generation, script execution, the file `biconfig` used for domain creation, the configuration file `DefaultSingleNodeOASFirewallPorts.xml` and script file `open_oas_firewall_ports.sh` used to open ports in the firewall, and details about any files removed during the cleanup phase.
- `/var/log/oas_create_domain.log` - Logs status information during the domain creation phase. If domain creation succeeds, you see the following message:

  ```
  [CONFIG] SUCCESS:Collect logs Configuration:Oracle_Analytics_Configuration
  completed successfully
  The configuration of Oracle Distribution completed successfully.
  ```

  If a problem occurs, you see an error message with a description of the issue.

How can I confirm a problem with the connection to the database?

Database connection errors can occur for various reasons including an incorrect connection string, an incorrect user name or password, and an invalid or duplicate prefix for the product schemas.

Incorrect connection string

Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user, switch to the `oracle` user, and open the `/var/log/oas_create_domain.log` file. An error message similar to the one shown in the following example indicates that either the database isn't accessible or the connection string for the database is incorrect.

```
Validations are enabled for this session.
Verifying data
[VALIDATION] [ERROR]:Error connecting to 'Oracle database at host <IP
address> port 1521 service name
        pdb.sub07132220290.sgvcn.oraclevcn.com'.  Error: 'Listener refused
the connection with the following error:
ORA-12514, TNS:listener does not currently know of service requested in
connect descriptor '
 - Invalid service name.
[VALIDATION] [SUGGESTION]:Make sure the database is up and running and
connect string, user name and password are correct.
Configuration Failed. Exiting configuration due to data validation failure.
```

Incorrect user name or password

Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user, switch to the `oracle` user, and open the `/var/log/oas_create_domain.log` file. An error message similar to the one shown in the following example indicates that credentials provided for connecting to the database are invalid.

```
Validations are enabled for this session.
Verifying data
[VALIDATION] [ERROR]:Error connecting to 'Oracle database at host <IP
address> port 1521 service name <PDB_Name>.<DB domain>'
- Invalid user name/password
[VALIDATION] [SUGGESTION]:Make sure the database is up and running and
connect string, user name and password are correct. Enter a valid user name
with DBA privileges
Configuration Failed. Exiting configuration due to data validation failure.
```

If the username or password contains illegal characters, you see an error message similar to this:

```
Validations are enabled for this session.
Verifying data
[VALIDATION] [ERROR]:Password contains invalid characters
[VALIDATION] [SUGGESTION]:Ensure password contains only alphanumeric,
underscore (_), dollar ($) or pound (#) characters configuration Failed.
Exiting configuration due to data validation failure.
```

If the password is the incorrect length, you an error message similar to this:

```
Validations are enabled for this session.
Verifying data
[VALIDATION] [ERROR]:Password field 'ADMIN_PASSWORD' must have at least '1'
numerals
[VALIDATION][SUGGESTION]:Enter a more complex password with numerals
[VALIDATION] [ERROR]:Password field 'ADMIN_PASSWORD' must be at least '8'
characters long
[VALIDATION][SUGGESTION]:Enter a longer password
```

Invalid or duplicate prefix for the product schemas

Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user, switch to the `oracle` user, and open the `/var/log/oas_create_domain.log` file. An error message similar to the one shown in the following example indicates that an invalid or duplicate prefix was provided for Oracle Analytics Server product schemas.

```
Validations are enabled for this session.
ACTION - RCU-6016 Specify another prefix.
ERROR - RCU-6016 Invalid prefix specified.
CAUSE - RCU-6016 The specified prefix already exists.[Create schemas using
RCU]:2021-11-03T10:52:07.479+0000
ERROR - RCU-6091 Component validation failed.
CAUSE - RCU-6091 One or more component specific validation failed.
```

Database host or port not accessible

Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user, switch to the `oracle` user, and open the `/var/log/oas_create_domain.log` file. An error message similar to the one shown might indicate that the database port is inaccessible.

```
Validations are enabled for this session.
Verifying data
[VALIDATION] [ERROR]:Error connecting to 'Oracle database at host <hostname>
port 1521 service name <service_name>' - Listener could be down
[VALIDATION] [SUGGESTION]:Make sure the database is up and running and
connect string, user name and password are correct. configuration Failed.
Exiting configuration due to data validation failure.
```

1. Use the `netcat` utility to check connectivity to the database port.

   > **Note**
   >
   > You or your administrator may need to install `netcat` if the utility isn't available.

   ```
   sudo yum install nmap-ncat.x86_64
   ```

2. Test database connectivity with the command:

   ```
   sudo nc -zv <database host or IP> <database port>
   ```

3. If the connection fails, ensure the database and listener are up and running and can accept connections from the database compute node.
4. Ensure the database port is open for connectivity with an ingress rule (in a security list or network security group) for the VCN the database is configured with.
   a. Navigate to the VCN associated with the database and Oracle Analytics Server.
   b. Click **Security Lists**.
   c. Click **Default Security List**, and then click the **Edit All Rules** button.
   d. Add an ingress rule with the following settings:
      - **Source CIDR**: **0.0.0.0/0**
      - **Destination Port**: **1521** (or whatever your database port is)
5. Re-test connectivity with `netcat` to confirm access to the port from the Oracle Analytics Server compute instance.

Why do I see an error message about a *failed authorization* or a *resource not found* when I try to create an Oracle Analytics Server stack?

If you don't have the `manage orm-family` policy, you see the following error message when you attempt to create an Oracle Analytics Server stack:

```
Authorization failed or requested resource not found
```

Ask your administrator to assign you to a group with the following policy:

```
allow group myoasgroup_name to manage orm-family in compartment myoas-compartment_name
```

See Set Up Policies in Oracle Cloud Infrastructure.

Why do I see the error message *404-NotAuthorizedOrNotFound* while creating an Oracle Analytics Server stack?

If you don't have the `manage instance-family` policy, you see the following error message when creating an Oracle Analytics Server stack:

```
Error: 404-NotAuthorizedOrNotFound...
Service: Core Instance
Error Message: Authorization failed or requested resource not found.
```

Ask your administrator to assign you to a group with the following policy:

```
allow group myoasgroup_name to manage instance-family in compartment myoas-compartment_name
```

See Set Up Policies in Oracle Cloud Infrastructure.

Why do I see an error message about public IP addresses and a subnet?

You can't assign a public IP address (ephemeral public IPs) to an Oracle Analytics Server compute instance that is deployed in a *private subnet*. If you decide to use a private subnet,

don't select the stack option **Assign a Public IP Address**. If you do, you see the following error message:

```
Public IP addresses are prohibited in this subnet {ocid1.subnet...
```

Why do I see a maximum stack limit error message?

When you sign up for Oracle Cloud Infrastructure, a set of service limits is configured for your tenancy. If you reach the maximum number of stacks allowed in your tenancy you see the following error message when try to create an Oracle Analytics Server stack:

```
Tenancy has reached maximum limit for total stacks.
```

See Requesting a Service Limit Increase.

What can I do when domain creation fails due to an incorrect or invalid password?

Create the domain manually with the correct password. See How do I create the Oracle Analytics Server domain manually?

What can I do when domain creation fails because '/u01/data/domains/bi' already exists?

Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user, switch to the `oracle` user, and open the `/var/log/oas_create_domain.log` file. An error message similar to the one shown indicates that a previous attempt to create a domain wasn't properly cleaned up before you made another attempt to create the domain.

```
[VALIDATION] [ERROR]:Domain '/u01/data/domains/bi' already exists - A file or
directory '/u01/data/domains/bi' already exists
[VALIDATION] [SUGGESTION]:Choose a new unused location configuration Failed.
Exiting configuration due to data validation failure.
```

1. Clean up the domain:

   ```
   rm -rf /u01/app/Oracle/Middleware/Oracle_Home/user_projects/applications/bi
   rm -rf /u01/data/domains/bi
   ```

2. Create the domain manually. Before running the `create_oas_domain.sh` script file, you must either:
   - Edit the configuration file `biconfig.rsp` and configure a new, unique schema name.
   - Run the RCU utility and remove the unused schemas that were created during the failed domain creation attempt.

   See How do I create the Oracle Analytics Server domain manually?

The installation finished but I can't access Oracle Analytics Server by entering the URL in a browser. What do I need to do?

Use SSH to access the compute instance for Oracle Analytics Server. Log in as the `opc` user, switch to the `oracle` user, and navigate to the folder `/u01/data/domains/bi/bitools/bin`. Run `status.sh` to check whether all the required services are running.

The following information is displayed:

```
Domain status; Using domainHome:/u01/data/domains/bi/bitools/bin…
Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell
Type help() for help on available commands

/Servers/AdminServer/ListenPort=9500
Accessing admin server using URL t3:/<compute instance name>:9500

AdminServer already running
Status of Domain: /u01/data/domains/bi
NodeManager (<compute instance name>:9506:SSL): RUNNING

Name         Type    Machine                  Restart Int  Max Restart  Status
----         ----    -------                  -----------  -----------  ------
AdminServer  Server  <compute instance name>  unknown      unknown
RUNNING
bi_server1   Server  <compute instance name>  unknown      unknown
RUNNING
obips1       OBIPS   <compute instance name>  3600         5000
RUNNING
obijh1       BIJH    <compute instance name>  3600         5000
RUNNING
obiccs1      OBICCS  <compute instance name>  3600         5000
RUNNING
obisch1      OBISCH  <compute instance name>  3600         5000
RUNNING
obis1        BIS     <compute instance name>  3600         5000
RUNNING
```

If any of the services are down, restart Oracle Analytics Server manually using `start.sh`. See Start Oracle Analytics Server.

Why can't I use automated machine learning features in Oracle Analytics Server?

You need to install some additional libraries. See Install Additional Libraries for Machine Learning in Oracle Analytics Server.

How do I get help for Marketplace?

For general help with Oracle Cloud Marketplace, see How Do I Get Support in *Using Oracle Cloud Marketplace*.

When do I contact Oracle Support?

If you encounter a problem deploying Oracle Analytics Server on Oracle Cloud, record any error messages you see in the user interface, and contact Oracle Support for assistance.

If you deployed Oracle Analytics Server - BYOL on Oracle Cloud using your on-premises BYOL license, log a service request with **Oracle Fusion Middleware**. If you used your Oracle Cloud account (Pay As You Go or Annual Universal Credits) to deploy Oracle Analytics Server-UCM, log a service request with **Oracle Cloud** and your query will be forwarded to the Oracle Analytics Server team.