# Oracle Utilities Data Intelligence Data Intelligence Administration Guide





Oracle Utilities Data Intelligence Data Intelligence Administration Guide,

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### **Preface**

Learn how to set up, configure, and administer Oracle Utilities Data Intelligence.

### Audience and Scope

This guide is intended for administrators who must set up and configure Oracle Utilities Data Intelligence.

# **Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <a href="https://www.oracle.com/corporate/accessibility/">https://www.oracle.com/corporate/accessibility/</a>.

## Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info</a> or visit <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs</a> if you are hearing impaired.

### Conventions

The table below describes the conventions used in this document.

#### **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.

# Get Started with Oracle Utilities Data Intelligence

Let's explore Oracle Utilities Data Intelligence and what you need to know to get started.

### About Oracle Utilities Data Intelligence

Oracle Utilities Data Intelligence is a suite of analytics applications that provides real-time access to data in the on-premise Oracle Utilities Customer To Meter application and in cloud services such as Oracle Customer Cloud Service and Oracle Meter Solution Cloud Service. It is powered by Oracle Autonomous Data Warehouse and Oracle Analytics Cloud, and it offers a library of ready-to-use, best practice key metrics across customer and meter applications to help you make quick and collaborative decisions. It includes rich pre-built analytical subject areas, measures, key performance indicators, and workbooks that allow you to create visualizations from your data and derive strategic insights.

Oracle Utilities Data Intelligence is based on the <u>Fusion Data Intelligence</u> platform. This guide therefore contains references to Fusion Data Intelligence documentation where you can find more detailed guidance and information. Note that not all Fusion Data Intelligence documentation is applicable to Oracle Utilities Data Intelligence.

### **About Subject Areas**

One of the key benefits of Oracle Utilities Data Intelligence is that it comes with predefined subject areas that are specific to the utilities industry.

A subject area is a data model that presents business data for analysis in a manner that reflects the structure of the business. Subject areas enable analysts to structure queries in the same intuitive fashion as they ask business questions.

The subject areas of Oracle Utilities Data Intelligence are simple and mask the complexity of the underlying data structure.

For examples of questions that subject areas can help you answer, see the <u>Oracle Utilities</u> <u>Data Intelligence Analytics Reference Guide</u>.

### About Oracle Data Visualization

Oracle Utilities Data Intelligence leverages <u>Oracle Data Visualization</u>, which is a component of Oracle Analytics Cloud.

Oracle Data Visualization enables you to easily create visualizations and workbooks that reveal trends in your company's data and help you answer questions and discover important insights about your business. Creating visualizations and workbooks is easy in <a href="Oracle Data">Oracle Data</a> <a href="Wisualization">Visualization</a>. The application is designed so that your data analysis work is flexible and exploratory.

Exploring data in <u>Oracle Data Visualization</u> is different than using pre-built analytics and dashboards because it allows you to experiment with your data by adding or removing columns, creating filters, or applying different visualizations to your data. You can understand



your data from different perspectives and fully explore your data to find correlations, discover patterns, and see trends.

For more information, see Explore, Visualize, and Analyze Data.

### Region Availability

The table below shows the regions where Oracle Utilities Data Intelligence is currently available.

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### Language Support

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Oracle Utilities Data Intelligence currently only supports English.

### **Supported Source Application Versions**

The tables below specify the source application versions which are supported in the 25.12 Oracle Utilities Data Intelligence release.

### **Supported Cloud Applications**

Source Cloud Application	Version
Customer Care and Billing Cloud Service	• 24C
	• 25.4
	• 25.10
Customer Cloud Service	• 24C
	• 25.4
	• 25.10
Digital Asset Cloud Service	• 24C
	• 25.4
	• 25.10
Meter Solution Cloud Service	• 24C
	• 25.4
	• 25.10
Work and Asset Cloud Service	• 24C
	• 25.4
	• 25.10

### **Supported On-Premises Applications**

Application	Version
Customer Care and Billing	• 2.9.0.2.0
	• 25.4
	• 25.10
Customer to Meter	• 2.9.0.2.0
	• 25.4
	• 25.10
Digital Asset Management	• 25.10
Meter Data Management	• 2.5.0.2.0
_	• 25.4
	• 25.10
Work and Asset Management	• 2.4.0.2.0
- -	• 25.4
	• 25.10

# Comparison of Capabilities between Analytics Cloud Associated with Oracle Energy Water Data Intelligence and Standalone Analytics Cloud

As an Oracle Utilities Data Intelligence service administrator, you perform certain tasks differently in the Oracle Analytics Cloud instance associated with Oracle Utilities Data Intelligence than the standalone Oracle Analytics Cloud instance.

For more information, see the Fusion Data Intelligence <u>documentation</u>, which explains the differences. The information there also applies to Oracle Utilities Data Intelligence.



# Usage Guidelines for Oracle Autonomous Data Warehouse Associated with Oracle Utilities Data Intelligence

Oracle Utilities Data Intelligence provisions instances of Oracle Autonomous Data Warehouse to store data. As part of the integrated SaaS offering of Oracle Utilities Data Intelligence, Oracle doesn't allow or recommend certain Oracle Autonomous Data Warehouse administration tasks.

For more information, see the Fusion Data Intelligence <u>documentation</u> which explains these guidelines. The information there also applies to Oracle Utilities Data Intelligence.

### Prerequisites for Oracle Utilities Data Intelligence

The prerequisites needed to provision Oracle Utilities Data Intelligence include an Oracle Cloud account. You can provision Oracle Utilities Data Intelligence in one of the <u>regions</u> where the product is available. You must activate the Oracle Cloud account from your Welcome email before you start using it and before you activate your Oracle Utilities Data Intelligence order. See <u>Activate Your Order</u> in the Oracle Cloud documentation.

### Activate Your Oracle Utilities Data Intelligence Subscription

After your order for the Oracle Utilities Data Intelligence subscription has been processed, you receive the Welcome email. The name of the service in the body of this Welcome email is "Oracle Utilities Data Intelligence, XXX" where XXX represents the Oracle Utilities Data Intelligence subscriptions you purchased, such as Customer Analytics or Device Analytics.

- Review <u>Important Read Before Activating</u> below.
- Write down the name of the Oracle Cloud Infrastructure account or tenancy where you want the Oracle Utilities Data Intelligence instance to be created. (A "cloud account" is also known as "tenancy".) If you have FDI or Fusion Applications, write down the tenancy name where both are deployed.
- 3. Ensure that your cloud administrator has been granted the OCI\_Administrator role or OCI\_Administrators group (whichever is available) for the OCI account in which the Oracle Utilities Data Intelligence service will be activated. See Role Needed to Activate.
- 4. Activate the Oracle Utilities Data Intelligence subscription into the same OCI account you identified in step 2. See Activate the Oracle Utilities Data Intelligence Subscription below.
- Verify that your subscriptions have been activated correctly by going to the Subscriptions page in the Oracle Cloud Infrastructure Console. See <u>Subscriptions</u> for details.

### Important - Read Before Activating

- If you already have Oracle Fusion Data Intelligence or an Oracle Fusion Cloud Applications account, then the best practice is to always activate Oracle Utilities Data Intelligence into the same account. Doing so saves you time, cost, and complexity when setting up your security integration between Oracle Utilities Data Intelligence and Oracle Fusion Data Intelligence, as well as improved ongoing synchronization performance.
- From Release 25.12, Universal Credits (UCC) are no longer a prerequisite for activating Oracle Utilities Data Intelligence. However, you may require UCC in specific scenarios:
  - AI/ML Services for advanced analytics and automation.



- Object Storage Service (OSS) for scalable data storage.
- If a UCC subscription exists in your Oracle Utilities Data Intelligence account, then you don't need another UCC subscription.

### Role Needed to Activate

You must be a cloud administrator with the OCI Administrator role or be in the OCI Administrators group for the Oracle Cloud account that you're trying to activate your subscriptions into to activate your Oracle Utilities Data Intelligence subscription successfully.

For more information, see Role Needed to Activate in the Fusion Data Intelligence documentation, which also applies to Oracle Utilities Data Intelligence.

### Activate the Oracle Utilities Data Intelligence Subscription

Activate your Oracle Utilities Data Intelligence subscription into your Oracle Cloud account. After Oracle processes your subscription order, you receive an email asking you to activate the subscription. As part of the activation process, you sign into the Cloud account that has your Oracle Utilities applications already in it.

Upon signing in, you are taken to the **Add Subscription** page in the Oracle Cloud Infrastructure Console where you'll add the Oracle Utilities Data Intelligence subscription to the Cloud account.

After you add the Oracle Utilities Data Intelligence subscription, it can take up to an hour for the activation process to complete. You'll receive another email confirming that your subscription is ready. Don't proceed to the next step until you've received this email.

Locate your Oracle Utilities Data Intelligence Welcome email that you received from Oracle Cloud.



### (i) Note

The name of the service in the body of this Welcome email is "Oracle Utilities Data Intelligence, XXX" where XXX represents the name of the subscription you purchased, such as Customer Analytics or Device Analytics.

- 2. In the email, click Add to existing cloud account.
- On the Oracle Cloud page, click Sign In using a Cloud Account Name.
- In Cloud Account Name, enter the tenancy name of the existing Oracle Cloud account that has Oracle Utilities Data Intelligence and then click Next.

If you don't see your existing Oracle Cloud account that has Oracle Utilities Data Intelligence in it, stop and submit a service request against "Oracle Utilities Data Intelligence" in My Oracle Support so that it gets routed to the correct team. For this service request, select Significant Impairment as Issue Type and in Problem Type, click Activate, Create, Delete, Manage EWDI Instance and then select EWDI Activation. Ensure that you include the account name you are trying to activate into along with a screen shot showing that you've been assigned this role in that Cloud account.

- On the Oracle Cloud Account Sign In page, sign in as follows:
  - If the tenancy is set up with single sign-on, then in the Single Sign-On (SSO) section, select the applicable identity provider and click Continue to display the sign-in details.



In the Oracle Cloud Account sign-in details, verify that the tenancy name is your Oracle Utilities Data Intelligence Cloud account, enter your credentials, and then click **Sign In**.

- If the tenancy isn't set up with single sign-on, then in the Oracle Cloud Account sign-in details, verify that the tenancy name is your Oracle Utilities Data Intelligence Cloud account, enter your credentials and then click **Sign In**.
- 6. On the Add subscription page that displays, click the applicable row to select the subscription that matches the subscription listed in the activation email and then click Add subscription.

### (i) Note

Stop here if you don't see the subscription that you wish to activate. It likely means that you don't have the OCI\_Administrator role or Administrators group (whichever is available) assigned to you. You must contact your cloud account administrator. If you've been assigned the OCI\_Administrator role or are part of the Administrators group, then enter a service request against "Oracle Utilities Data Intelligence" in My Oracle Support so that it gets routed to the correct team. Ensure that you include the account name you are trying to activate into along with a screen shot showing that you've been assigned this role in that Cloud account.

7. In the Thanks for adding your subscriptions message, click Close.

It can take up to an hour to receive an email with the subject "Your services are ready!".

- 8. Open the email that you receive from Oracle Cloud stating that your services are ready and click **Sign in**. Use your Cloud account credentials.
- In the Oracle Cloud Infrastructure Console, click the Navigator menu icon, click Analytics
   AI, and then under Analytics, click Data Intelligence.
- 10. On the Utilities Data Intelligence Instances page, verify that the subscriptions listed in the Compartment banner match your Oracle Utilities Data Intelligence order and the Create Instance button is enabled.

Before you click **Create Instance**, ensure that you set up user access using single sign-on. See <u>Set Up User Access to Oracle Utilities Data Intelligence Using Single Sign-On</u>. Once you set up user access, you can create your instance.

To create an instance, see <u>Create an Oracle Utilities Data Intelligence Subscription</u> Instance.

### Before You Begin with Oracle Utilities Data Intelligence

Oracle Utilities Data Intelligence is available on Oracle Cloud Infrastructure and uses a few other Oracle Cloud Infrastructure services.

When you order Oracle Utilities Data Intelligence, you get access to Oracle Autonomous Data Warehouse and an Oracle Analytics Cloud subscription.

When you activate your Oracle Utilities Data Intelligence order, you get the Service Administrator role. This role gives you full administration privileges on the service, so you can complete all aspects of Oracle Utilities Data Intelligence setup and create other users. There is no need to delegate this responsibility, but if you want someone else to set up Oracle Utilities Data Intelligence, you can add more users and assign them to the required roles.



Here's the information about how Oracle Utilities Data Intelligence uses other Oracle Cloud Infrastructure services and what you need to do if you're setting up Oracle Utilities Data Intelligence for the first time.



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# Sign in to the Oracle Cloud Infrastructure Console

After you activate your Oracle Utilities Data Intelligence subscription, sign in to the Oracle Cloud Infrastructure Console to access your services. To sign in, you need:

- Your cloud account name (also sometimes referred to as your tenancy name)
- User name and password



For all commercial regions, except for the Serbia Central (Jovanovac) region, sign in to the console at https://cloud.oracle.com.

If you're the first user on the account and were invited by Oracle Cloud, then you're automatically added to the Administrators group. You can invite other members of the organization by adding users in Oracle Cloud Infrastructure Identity and Access Management.

For more information, see <u>Sign In to the Console</u> in the Oracle Cloud Infrastructure documentation.

### **Access Your Service**

Sign in to the Oracle Cloud Infrastructure Console and use the navigation menu in the upper left to navigate to the service pages where you create, manage, and view your cloud resources.

For more information about the components of the interface, see <u>Get to Know the Console</u> in the Oracle Cloud Infrastructure documentation.

### Add Users with Administrator Permissions

If you want another user to administer the service, then provide the user with the same permissions as the default administrator of the service.

For instructions see <u>Add Users with Administrator Permissions</u> in the Fusion Data Intelligence documentation, which are the same for Oracle Utilities Data Intelligence.

# Set Up Oracle Utilities Data Intelligence

As the cloud account administrator, create the service instance for Oracle Utilities Data Intelligence.

## Typical Workflow to Set Up Oracle Utilities Data Intelligence

If you're setting up Oracle Utilities Data Intelligence for the first time, then follow these tasks as a guide.



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# Set Up User Access to Oracle Utilities Data Intelligence Using Single Sign-On

You can set up how users from Oracle Utilities cloud applications access Oracle Data Intelligence using single sign-on. For more information and instructions, see <u>Set Up User Access to Oracle Fusion Data Intelligence Using Single Sign-On</u> in the Fusion Data Intelligence documentation.

This setup simplifies how you manage user names and passwords. You must complete this setup before you create your Oracle Utilities Data Intelligence instances, except as indicated in scenarios #5 and #6, which require further setup after you create the Oracle Utilities Data Intelligence instance.

# Create an Oracle Utilities Data Intelligence Instance

As an administrator, you can create instances for Oracle Utilities Data Intelligence to enable your users to start using it.

### About Creating an Instance

Use the **Create Instance** page in Oracle Utilities Data Intelligence directly without specifying the data source. When you do this, you can:

- Decide which compartment to use.
- Select the Oracle Utilities Application source instance of your choice.
- Set up the identity provider of your choice.
- Analyze data from sources other than Oracle Utilities Applications, such as Fusion Data Intelligence, without initially specifying an Oracle Utilities Applications URL.
- Bring data from third-party products even if you don't have any Oracle Utilities Applications product.
- Bring data from a non-Oracle Utilities Applications source and anOracle Utilities
   Applications source in the same instance. You must provide Oracle Utilities Applications details prior to loading data from Oracle Utilities Applications.
- Terminate the instance from the instance details page in Oracle Utilities Data Intelligence.

After the instance is created, you must complete these tasks:



- Create a data connection to an applicable source by logging a service request. See <u>Create</u> a <u>Connection to Your Source Applications</u>.
- Set up and manage your users and groups in Oracle Identity Cloud Service.

After the instance is created, as an administrator, assign the **FAW Service Administrator** group to the applicable users to manage the instances in the tenancy. If your tenancy uses identity domains, see the **Adding Users to Groups** section in <u>Using the Console</u>. To add this group to an existing user in Oracle Identity Cloud Service, see <u>Assign Groups to the User Account</u>. To sign into the instance, a user must have any of the groups mentioned in *System Groups* assigned to them.

#### Create an Oracle Utilities Data Intelligence Subscription Instance

Create a service instance to manage your cloud resources.

Prior to creating the instance, you may want to view the service limits of Oracle Autonomous Data Warehouse and Oracle Analytics Cloud using the Limits, Quotas and Usage page in the Oracle Cloud Infrastructure Console. See <u>Viewing Your Service Limits</u>, <u>Quotas and Usage</u>. If you're unable to create the instance with an error due to inadequate capacity, then you can either get in touch with the administrator for the tenancy or submit a service request through My Oracle Support to describing the issue.

If you're planning to access your instance from a virtual cloud network only, then prior to creating an instance with private network access, you must ensure that the prerequisites are in place. See <u>Deploy Oracle Utilities Data Intelligence with a Private Endpoint</u>.

- Sign in to the Oracle Cloud Infrastructure Console. If you've provisioned Oracle Utilities
   Data Intelligence with single sign-on, then sign in using the federated Oracle Identity Cloud
   Service.
- 2. Click the Navigation menu icon.
- 3. In the navigation options, click **Analytics & AI**. Under Analytics, click **Data Intelligence**.
- 4. On the Instances page, in Compartment, select a compartment if you want to place the service instance in a compartment other than the default root compartment that Oracle created for you.

**Note**: Ensure that you have created a compartment before you select it here. See <u>Managing Compartments</u>.

On the Instances page, click Create Instance.

Note: If you haven't purchased a subscription, then the Create Instance button isn't active.

- 6. On the **Create Instance** page, enter a Display Name, Name, Description, and an email to receive notifications about the instance in Notification Email.
- Under Offerings, verify that the displayed subscriptions match your Oracle Utilities Data Intelligence order and select Development/Test as your first instance.



8. In Fusion Application Connection, deselect the Set up Fusion Connection check box.



9. In Autonomous Data Warehouse Credentials, provide the password for the OAX\_USER user who can access the Oracle Autonomous Data Warehouse that's provisioned in your tenancy to store the transformed data. To reset the password for this user, see Reset the Password for OAX\_USER Schema.

#### 10. In Network Access, do the following:

- Select Public to access the instance from anywhere.
- Select Private to access your instance from a virtual cloud network only. Prior to
  creating an instance with private network access, you must ensure that the
  prerequisites are in place. See <u>Deploy Oracle Utilities Data Intelligence with a Private Endpoint</u>.

#### 11. Click Create Instance.

Oracle sends an email to the designated email address when your service is ready. You can display the Activity page to check the current status. When the status changes from CREATING to ACTIVE, the service is ready to use.

Navigate to the Details page for the new service to access the Oracle Utilities Data Intelligence URL and the associated Oracle Autonomous Data Warehouse and Oracle Analytics Cloud instances.

Because you haven't yet set up a connection to an Oracle Utilities Data Intelligence source, Oracle Utilities Data Intelligence displays a message on the **Data Configuration** page asking you to set up a data source connection as an initial step. See <u>Create a Connection to Your Source Applications</u>.

If you had set up provisioning of Oracle Utilities Data Intelligence with single sign-on, then your service is associated with the federated Oracle Identity Cloud Service instance. If you hadn't set up single sign-on for Oracle Utilities Data Intelligence, then your service is associated with the default Oracle Identity Cloud Service instance that you received with your Oracle Cloud account.

#### Verify Your Instance and Sign In

Oracle sends an email to the designated email address when your Oracle Utilities Data Intelligence service instance is ready.

- 1. Sign in to the Oracle Cloud Infrastructure Console.
- 2. Click the Navigation menu icon.
- 3. In the navigation options, click **Analytics & AI**. Under Analytics, click **Data Intelligence**.
- 4. Navigate to your service instances page.
- 5. If you've chosen public network, then navigate to the Analytics Application URL to verify that your Oracle Utilities Data Intelligence service instance is up and running. If you've chosen private network, then contact your networking team for access to the Oracle Utilities Data Intelligence url.

# Deploy Oracle Utilities Data Intelligence with a Private Endpoint

When you set up an Oracle Utilities Data Intelligence instance, you have the option to restrict access through a private endpoint. For more information, see the instructions in the Fusion Data Intelligence documentation, which are the same for Oracle Utilities Data Intelligence.



## View Work Requests

View the actions performed on your instance such as create, update, and terminate an instance as a work request. For instructions, see the Fusion Data Intelligence documentation.

## **View Subscriptions**

View the subscriptions associated with your instance.

- Sign in to the Oracle Cloud Infrastructure Console.
- 2. Click the Navigation menu icon.
- In the navigation options, click Analytics & AI. Under Analytics, click Data Intelligence.
- Navigate to your service instances page.
- 5. On the Instances page, click the instance for which you want to view the list of actions that have been performed.
- On the instance details page, under Resources, click Subscriptions.

# **Update Your Subscriptions**

You can increase the storage and compute of your existing Oracle Utilities Data Intelligence subscription or add a new subscription to your existing subscription by contacting your sales representative.

For example, you can add the Oracle Utilities Data Intelligence Device Analytics Service to your existing Oracle Utilities Data Intelligence subscription that already has the Oracle Utilities Data Intelligence Customer Analytics.

After your order for addition or modification of subscriptions is processed, you'll receive an email asking you to activate the "update subscriptions" order.

#### Note

Don't use the Activate link in the email to activate your "update subscriptions" order. Instead follow these steps to update the subscriptions.

- 1. Sign in to the Oracle Cloud Infrastructure Console.
- 2. Click the Navigation menu icon.
- 3. In the navigation options, click **Analytics & AI**. Under Analytics, click **Data Intelligence**.
- On the Instances page, click the instance for which you want to update the subscriptions.
- 5. On the instance details page, click **Update Offerings**.
- In Offerings, verify that the changes to your subscriptions match the "update subscriptions" order.
- Enter Update to confirm the changes and then click Save Changes.



# Update the Administrator Password for Oracle Utilities Data Intelligence

Update the ADMIN schema password for the Oracle Autonomous Data Warehouse that is provisioned in your tenancy if the password for that ADMIN schema has changed.

Follow the instructions for this task in the Fusion Data Intelligence documentation.

# Reset the Password for OAX\_USER Schema

Oracle Utilities Data Intelligence provides default schemas (also known as users) such as the ADMIN schema and OAX\_USER schema.

To change the password for the OAX\_USER schema, see the instructions in the Fusion Data Intelligence documentation.

#### Reset the Password for Custom Schemas

Follow the instructions for this task in the Fusion Data Intelligence documentation.

# Update the Notification Email

You can view and update the notification email address set for an instance on the instance details page.

- 1. Sign in to the Oracle Cloud Infrastructure Console.
- 2. Click the Navigation menu icon.
- 3. In the navigation options, click **Analytics & AI**. Under Analytics, click **Data Intelligence**.
- 4. On the Instances page, click an instance to open the instance details page.
- On the instance details page, click Update Email to modify the current notification email address.
- 6. In Update Notification Email, enter the email address and click **Save Changes**.

# Scale Up Oracle Utilities Data Intelligence Solution

Oracle Utilities Data Intelligence comes with Oracle Autonomous Data Warehouse and a connected Oracle Analytics Cloud. If you want additional capacity in either of these solutions, then you must work with you sales representative to purchase more.

For more information about your scaling and performance monitoring options, see <u>About Scaling Up Your Resources</u>.

# **Configure Advanced Options**

You can set several advanced options using the Console. For more information and instructions, see the Fusion Data Intelligence <u>documentation</u>.

# Create a Connection to Your Source Applications

To create a data connection to your Oracle Utilities Data Intelligence source applications, log a service request with Oracle Utilities Data Intelligence Support through My Oracle Support. You will need to include several details about your instance as part of the service request. The steps below explain how to find and copy the details you need.

- 1. Sign in to the Oracle Cloud Infrastructure Console.
- Click the Navigator menu icon, click Analytics & AI, and then under Analytics, click Data Intelligence.
- Select the Compartment in which your Oracle Utilities Data Intelligence instance was created
- 4. Select the Oracle Utilities Data Intelligence 'Display Name' to get more details for that instance.
- 5. Copy the following information:
  - Instance OCID
  - Instance Name
  - Region
  - URL
- 6. Get your list of SKUs/Subscriptions which are available on your instance. This detail can be obtained by navigating to the service instance page. Click on your instance and in the instance details page, under **Resources**, click **Subscriptions**.
- 7. Based on the above SKUs/subscriptions you have and the sources to be configured, include the following details related to the source environment in the service request based on the scenario:

Scenario	Information to Provide	
The source environment is software-as-a-service (for example, Customer Cloud Service).	Provide the source application URL.	
The source environment is on-premises.	Provide the following database details:	



Scenario	Information to Provide	
You have OCI GoldenGate.	a. Sign in to the Oracle Cloud Infrastructure Console.	
	b. Click the Navigator menu icon, click Oracle Database, and click on Goldengate.	
	c. Under Data replication deployments click on View Resources.	
	d. Click on the appropriate GoldenGate instance.	
	<ul> <li>e. From the Deployment Information tab, gather the following details and include them in the service request:</li> <li>GoldenGate OCID</li> <li>GoldenGate URL</li> <li>GoldenGate Infra(CIDR)/Subnet</li> </ul>	
You have on-premises GoldenGate.	ovide the following: GoldenGate Subnet GoldenGate Master key wallet (shared through a secure medium)	

**8.** Submit the service request and wait for confirmation in the service request regarding completion of connector setup.

### **Test Your Data Connection**

After the service request has been updated to confirm that the data connection has been created, you can test it to ensure it works properly.

- 1. Sign in to your service.
- 2. In the Oracle Utilities Data Intelligence Admin Console, under **Application Administration**, click **Data Configuration**.
- 3. On the Data Configuration page, under Configurations, click Manage Connections.
- **4.** On the **Manage Connections** page, click **Connections**, then select or search for the connection you want to test.

Nu m be r	SKU/Subscription	Connectors Available
1	Oracle Utilities Data Intelligence, Customer Analytics	Oracle Utilities Customer Data Oracle Utilities Base Data
2	Oracle Utilities Data Intelligence, Customer Insights	Oracle Utilities Customer Insights
3	Oracle Utilities Data Intelligence, Customer Program Management Analytics	Oracle Utilities Customer Program Data
4	Oracle Utilities Data Intelligence, Device Analytics	Oracle Utilities Meter Data Oracle Utilities AMI Data Oracle Utilities Base Data
5	Oracle Utilities Data Intelligence, Grid Operations Insights	Oracle Utilities Grid Insights Data Oracle Utilities Base Data
6	Oracle Utilities Data Intelligence, Work and Asset Analytics	Oracle Utilities Work and Asset Data



- 5. Click the **Action** menu for the connection and select **Test Connection**. Repeat this step for each of the connector(s) made available for each SKU/subscription available on your instance.
- Once the test connection is successful, click the Action menu for the connection again and select Refresh Metadata for each of the connections.

On the **Activity** tab, you can check the status of the test connection request.

# Configure Oracle Utilities Data Intelligence Data

As the cloud account administrator with the Functional Administrator or System Administrator application role, you specify the data load and reporting configuration details, and create data pipelines for functional areas that determine how the source data from Oracle Utilities Cloud Applications is loaded and displayed in Oracle Utilities Data Intelligence.

Any data you load into the autonomous data warehouse in Oracle Utilities Data Intelligence is subject to the data access controls that may not always match those in the source system.

For example, if User1 doesn't have the rights to access some data in your source system, then when you bring that data over to the autonomous data warehouse in Oracle Utilities Data Intelligence, this User1 can access that particular data. If you want to have the same controls on the data, then you must ensure that this particular User1 has the same data access rights as your source system in your Oracle Utilities Data Intelligence user setup.

## Configure the Fiscal Year Calendar

A fiscal calendar defines the period of time a company uses for accounting purposes, which may differ from the regular (Gregorian) calendar year. The fiscal calendar ensures consistency in financial reporting, budgeting, and forecasting by establishing clear start and end dates for each fiscal period. By configuring the fiscal calendar, you can create visuals and analyze data in your preferred fiscal periods in four granularities: year, quarter, period, and day.

For each source application connected to Energy and Water Data Intelligence, you must first populate financial calendars for the entire calendar interval for which the Calendar Dimension will be loaded.

For instructions on how to define the account and financial calendar, go to the documentation library of any of the Oracle Utilities enterprise cloud applications. Once there, search for and select the *Administrative User Guide* link, and then go to the section 'Defining the Account Calendar.'

- Customer Cloud Service Documentation Library
- Meter Solution Cloud Service Documentation Library
- Work and Asset Cloud Service Documentation Library

# **Enable Other Languages**

You can display dimensions, dimension attributes, facts, fact measures, and subject area labels in your preferred language, making it easier to understand and navigate the system. The following source applications can have a language pack installed to support other languages: Customer Cloud Service, Digital Asset Cloud Service, Meter Solution Cloud Service, and Work Asset Cloud Service.



#### Install or Confirm the Existence of Your Desired Language Pack

To enable another language, you must have the desired language pack installed in one or more of the source applications that are connected to Oracle Utilities Data Intelligence.

For source applications that are on the cloud, there is support for defining other languages. For on-premises source applications, there is support for defining other languages as well as installing a language pack. See the <u>User Language</u> and <u>Defining Languages</u> topics in the Oracle Utilities Customer Cloud Service documentation. The instructions there are the same for all source applications.



Not all languages are supported out of the box in the source cloud applications.

# Provide Oracle Utilities with Access to Object Storage

Oracle Utilities needs read and write access to your Oracle Cloud Infrastructure (OCI) <u>object storage</u> in order to retrieve files as well as deliver files to you. Oracle Utilities will provide you with a public key for this step. When this task is complete, Oracle Utilities can perform data load tasks for you, such as <u>delivering AMI data</u> to your object storage for analysis and custom data science use cases.

- Optional. Create a compartment for organizing resources. See <u>Create a Compartment</u>.
- 2. Create a bucket in your object storage. See Creating an Object Storage Bucket.
- 3. Add a policy for users to access objects within the bucket. See <u>Securing Object Storage</u>. Apply the following policy to allow the group access to the bucket:

Allow group DOMAIN/GROUP to manage objects in compartment COMPARTMENT\_NAME where target.bucket.name='BUCKET NAME'

- Open and submit a service request in My Oracle Support and request a public key from Oracle Energy and Water. Oracle Energy and Water will respond and send a public key.
- 5. Sign in to the OCI console. See Signing in to the OCI Console.
- 6. Click **My Profile** at the top-right corner.
- Under Resources at the bottom left of the screen, select API Keys and click Add API Key. The Add API Key dialog is displayed.
- Select Paste a public key or Choose public key file to add the public key shared by Oracle Utilities. A Configuration file preview dialog displays.
- 9. Note the user, tenancy, and region details that display in the preview.
- Copy the user, tenancy, and region details from the preview and share them with Oracle Utilities in the service request you opened requesting the public key.





Once access to your object storage is set up, Oracle Utilities will coordinate with you regarding any initial or incremental data load tasks that are necessary. Oracle Utilities will then notify you when these tasks are complete so that you can proceed with the step to <a href="mailto:enable-the-Global Bundle Repository">enable the Global Bundle Repository</a>. Wait for confirmation from Oracle Utilities that you have completed any required data load tasks before you proceed.

# **Enable the Global Bundle Repository**

Bundles are snapshots of application artifacts such as configurations and customizations at a certain point in time. The Global Bundle Repository is an app-store like experience for users to import bundles created by Oracle, partners, or other users.

The Global Bundle Repository is not enabled by default and must be enabled before you can use it.

#### Note

Before completing this task, you must first receive confirmation from Oracle Utilities that access to your object storage has been granted, and that any required data load and configuration tasks have been completed. See <a href="Provide Oracle Utilities with Access to Object Storage">Provide Oracle Utilities with Access to Object Storage</a> for more information.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, under Application Administration, click Enable Features.
- 3. Under the Application Settings category, select Bundle Repository.

# Set Up the Pipeline Parameters

Oracle Utilities Data Intelligence comes with pipeline parameters that apply to all functional areas. The parameters available include:

- Data Refresh Schedule: Specify the frequency and when you want the incremental data load to happen. The incremental data refresh happens once a day for each connection. While specifying the timezone, the recommendation is to use city names to handle the daylight savings. For example, instead of selecting timezone such as EST or PST, select America/Los\_Angeles. In this case, the data refresh process calculates the value mentioned in the Time field based on the local time irrespective of daylight savings.
- Initial Extract Date: Initial extract date is used when you extract data for a full load.
   Transactional data created after the initial extract date processes and loads to the warehouse. It reduces the initial data load volume. After extracting the data for a functional area, avoid changing the initial extract date.

Set up the pipeline parameters for your data model file before running your data pipelines for the functional areas. You can set up and schedule the parameters independently of each other.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, under Application Administration, click Data Configuration.



- On the Data Configuration page, click the Data Source menu. The menu displays a list of pipelines by functional area, such as Customer or Device.
- 4. Select the functional area for which you want to set up pipeline parameters.
- 5. Click Pipeline Settings.
- 6. On the Pipeline Settings page, under **Data Refresh Schedule**, from the **Interval** list, select the frequency of the data refresh. Depending on the selected interval, specify the time, day, and month when you want the incremental data load to happen.

#### Note

The Frequent Data Refresh Schedule and Frequent Refresh Tables actions are not supported in Oracle Utilities Data Intelligence.

Under Global Parameters, from the Initial Extract Date, select the date from which to load the transaction data.

# **About Augmenting Your Data**

Enhance the data used in your analytics with additional data, various calculations, and combinations to enable comprehensive analytics and multi-faceted visualizations. By augmenting the data, you can reduce or even eliminate the manual intervention in developing meaningful insight of the business data.

For more information about data augmentation, see the Fusion Data Intelligence documentation. Note that viewing objects is not applicable to Oracle Utilities Data Intelligence. However, you can view source tables.

## Complete a One-Time Data Augmentation

Running a data augmentation job is a pre-requisite for deploying the Oracle Utilities Data Intelligence bundles. These steps need to be performed once for each of the connector(s) which are made available through your SKUs/subscriptions in the Oracle Utilities Data Intelligence instance.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, under Application Administration, click Data Configuration.
- On the Data Configuration page, from the Data Source menu, select the connector you want to create a data augmentation for (for example, "Oracle Energy and Water Customer Data").
- 4. Click the **Data Augmentation** tile, and then click **Create** from the menu and choose **Data Augmentation**.
- 5. In the Source Selection screen, do the following:
  - In Augmentation Type, select Create Dataset.
  - In Source Dataset Type, select Supplemental Data.
  - In Source Table type, select System Provided.



- In Source table: , select any source table that is a low volume table, such as Installation Product (CI\_INSTALL\_PROD). This way, the job can be completed faster.
- 6. Click Next.
- In the Attribute Selection screen, a few attributes columns will be selected by default. Click Next.
- In the Column Options screen, the settings for the columns will be selected by default. Click Next.
- In the Schedule and Save page, provide the necessary details depending on the connector:

Connector	Name	Description	Table Suffix
Oracle Utilities Customer Data	INIT_DA_JOB_CUST	Initial data augmentation job for Customer Data connector	INIT_DA_CI_INSTALL_ PROD
Oracle Utilities Customer Insights	INIT_DA_JOB_OUCI	Initial data augmentation job for Customer Insights connector	DIM_UTILITY
Oracle Utilities Meter Data	INIT_DA_JOB_DVC	Initial data augmentation job for Meter Data connector	INIT_DA_CI_INSTALL_ PROD
Oracle Utilities Work and Asset Data	INIT_DA_JOB_WACS	Initial data augmentation job for Work and Asset Data connector	INIT_DA_CI_INSTALL_ PROD
Oracle Utilities Customer Program Data	INIT_DA_JOB_DACS	Initial data augmentation job for Customer Program Data connector	INIT_DA_CI_INSTALL_ PROD
Oracle Utilities Grid Insights Data	INIT_DA_JOB_GRID	Initial data augmentation job for Grid Insights Data connector	INIT_DA_CI_INSTALL_ PROD
Oracle Utilities AMI Data	INIT_DA_JOB_AMI	Initial data augmentation job for AMI Data connector	INIT_DA_CI_INSTALL_ PROD
Oracle Utilities Base Data	INIT_DA_JOB_BASE	Initial data augmentation job for Base Data connector	INIT_DA_CI_INSTALL_ PROD

- 10. In Schedule, click Run Immediately and click Finish.
- **11.** Monitor the status of the data augmentation job by going to the Admin Console and choosing **Request History**. The status should indicate completed successfully.
- 12. Verify that the pipeline status is marked as **Activation Complete** for the triggered data augmentation job. This can be checked under the **Data Augmentation** section in which the job was created in previous steps.



# Deploy Your Oracle Utilities Data Intelligence Release Bundle

After you have <u>created an instance</u> for Oracle Utilities Data Intelligence, <u>tested your connection</u> to the source application, and completed the <u>one-time data augmentation job</u>, you can deploy the Oracle Utilities Data Intelligence bundle from the Global Bundle Repository.

Bundles are snapshots of application artifacts such as configurations and customizations at a certain point in time. The Global Bundle Repository is an app-store like experience for users to import bundles created by Oracle, partners, or other users.

When you deploy the Oracle Utilities Data Intelligence bundle, you gain access to the prebuilt subject areas, metrics, dashboards, and reports from the source application.

#### Import the Utilities Bundles

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, click Bundle Repository under Application Administration.
- 3. On the Global Bundle Repository page, click the Bundle repository tab.
- 4. Look for and select one or more bundles titled 'Energy and Water <Type> Analytics', where <Type> refers to the type of analytics you have purchased. For example, you might see bundles for 'Energy and Water Customer Analytics' or 'Energy and Water Device Analytics'.
- Click Import.
- In the dialog that displays, select the checkbox to agree to the terms and conditions, and click Submit.

The bundle appears as **Scheduled** in the **Activity** tab. You can refresh the page to view the latest status. When it is finished importing, it is displayed as **Completed**.

### Deploy the Energy and Water Bundles

You deploy the Energy and Water bundles after you import them from the Global Bundle Repository. Any bundles you have imported appear in the **Local Bundles** tab of the Global Bundle Repository.

- Contact Oracle Utilities Data Intelligence Support and ask what date and time the bundles can be deployed. This way you ensure that the bundles are deployed at a time when data will be available from the source application.
- 2. Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, click Bundle Repository under Application Administration.
- 4. On the Global Bundle Repository page, click the Local Bundles tab.
- Locate the bundle you want to deploy.
- 6. Click the actions menu (...) and select **Deploy**.
- In the Deploy Bundles dialog, click Select Date and Time. Enter the date and time you received from the Oracle Utilities support team.
- Click Deploy.



# About Data Pipelines for Functional Areas

Data pipelines for functional areas load data specific to a functional area into Oracle Utilities Data Intelligence. These pipelines hold configuration parameters specific to a functional area, such as financial transactions.

For more information, such as the list of allowed actions for data pipelines, see <u>About Data Pipelines for Functional Areas</u> in the Fusion Data Intelligence documentation.

#### About Data Refresh Performance

Oracle strives constantly to improve performance for data loading in pipelines.

The performance of loading data for your instance will vary. The time to complete data processing, both full warehouse loads and incremental data loads, depends on various factors.

For more information, see <u>About Data Refresh Performance</u> in the Fusion Data Intelligence documentation.

# Set Up Global Parameters

Specify the report parameter that you want to use across your Oracle Utilities Data Intelligence offerings.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, click Reporting Configuration under Application Administration.
- On the Reporting Configuration page, click Global Parameters.
- 4. In the Global Parameters region, in the Enterprise Calendar menu, select Gregorian.
- 5. Click Save.

# View Load Request History

You can view the data pipeline load request history by functional area, load type, and status along with other details for tracking and reference purposes.

The request history doesn't display the incremental loads. Because the request history shows only past load requests, any unscheduled loads don't affect the existing pipelines and you can reactivate any functional area or augmentation.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, click Data Configuration under Application Administration.
- 3. On the Data Configuration page, under **Activity History**, click **Request History**.
- 4. On the Request History page, view the history of loads that have been performed.



# View the Audit Log

You can view the data configuration-related actions that were performed such as activation of a data pipeline for a functional area, setting up of reporting parameters, and saving a data augmentation.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, click Data Configuration under Application Administration.
- On the Data Configuration page, under Activity History, click Audit Log.
- On the Audit Log page, view the list of all the performed actions.

## View Records Rejected in Extraction

The extraction service stores rejected records in the Warehouse Refresh Statistics dashboard. You can view this dashboard to see which records were rejected and analyze why they were rejected. For more information, see <u>View Records Rejected in Extraction</u> in the Fusion Data Intelligence documentation.

#### Create a Dimension Alias

Dimension alias are alias names on the warehouse dimension tables. You can specify the alias names for the Dimension type augmentations and the data that's in the warehouse already as dimensions. The alias names enable you to reuse the existing warehouse tables with different names in the subject areas.

For more information, see the Fusion Data Intelligence documentation.

# **About Managing Data Connections**

You can connect to a variety of data sources and remote applications to provide the background information for reports. You can blend the additional data from the various data sources with the prebuilt datasets to enhance business analysis.

For more information, see the Fusion Data Intelligence documentation.

# Disable Data Pipeline

As the cloud account administrator with the functional administrator or system administrator application role, you can disable the data pipeline and enable it again.

For more information, see the Fusion Data Intelligence documentation.

#### View Notifications and Emails

You can view the notifications sent by Oracle regarding various operations and the emails sent by Oracle regarding various actions taken by Oracle and actions that you must complete.

For more information, see the Fusion Data Intelligence documentation.



# **Enable Event Notifications**

You can track and control customized events and notifications to streamline your business operations. This service provides an effective automated solution for creating consolidated events and notification workflows.

For more information, see the Fusion Data Intelligence documentation.

# Manage Users, Roles, and Groups

As the service administrator or security administrator, you create users and groups, and manage their access to Oracle Utilities Data Intelligence content, such as <u>subject areas</u> and workbooks. All users must be assigned to a system group and role, as well as one or more functional groups and roles based on your requirements.

## About Users, Roles, and Groups

There are two types of roles in Oracle Utilities Data Intelligence: system and functional roles.

- System roles control if users have read or write access to content.
- Functional roles control what types of content (such as catalog folders, subject areas, and workbooks) users can access.

Groups are mechanisms to organize users with common permissions. Groups are assigned to roles so that all the users who are added to the group inherit the permissions associated with the role.

- System groups are assigned to system roles that control read or write access.
- Functional groups are assigned to functional roles that control what types of content the group can access.

All users must be assigned to a system group and one or more functional groups.

## Manage Users

Users accessing Oracle Utilities Data Intelligence must exist in Oracle Cloud Infrastructure Identity and Access Management.

You can manually create new users through the Oracle Cloud Infrastructure Console. See <u>Creating a User</u>.

### Manage Groups

Oracle Utilities Data Intelligence uses groups to provide users access to subject areas, objects, and data. Users must be assigned to a *system group* and one or more *functional groups* based on your requirements.

- System groups provide users with Author or Consumer access to content (such as subject areas) in Oracle Utilities Data Intelligence.
- Functional groups provide users with access to different types of content (such as Customer Analytics or Device Analytics) in Oracle Utilities Data Intelligence.

The table below shows the system groups and functional groups available, and the permissions that come with each.



System Group	Functional Group	Permissions
Author	Data Intelligence Customers	Provides <b>Read &amp; Write</b> access to <b>Customer and Common</b> subject areas and workbooks.
	Data Intelligence Customer Insights	Provides <b>Read &amp; Write</b> access to <b>Customer Insights</b> subject areas and workbooks.
	Data Intelligence Digital Assets	Provides <b>Read &amp; Write</b> access to <b>Digital Asset</b> subject areas and workbooks.
	Data Intelligence Grid Insights	Provides <b>Read &amp; Write</b> access to <b>Grid Insights</b> subject areas and workbooks.
	Data Intelligence Meters	Provides <b>Read &amp; Write</b> access to <b>Meter, AMI, and Common</b> subject areas and workbooks.
	Data Intelligence Work Assets	Provides <b>Read &amp; Write</b> access to <b>Work and Asset</b> subject areas and workbooks.
Consumer	Data Intelligence Customers	Provides <b>Read Only</b> access to <b>Customer and Common</b> subject areas and workbooks.
	Data Intelligence Customer Insights	Provides <b>Read Only</b> access to <b>Customer Insights</b> subject areas and workbooks.
	Data Intelligence Digital Assets	Provides <b>Read Only</b> access to <b>Digital Asset</b> subject areas and workbooks.
	Data Intelligence Grid Insights	Provides <b>Read Only</b> access to <b>Grid Insights</b> subject areas and workbooks.
	Data Intelligence Meters	Provides <b>Read Only</b> access to <b>Meter, AMI, and Common</b> subject areas and workbooks.
	Data Intelligence Work Assets	Provides <b>Read Only</b> access to <b>Work and Asset</b> subject areas and workbooks.

# **Create System Groups**

- 1. Sign in to the Oracle Cloud Infrastructure Console Identity and Access Management.
- Create a group with the name "Data Intelligence Licensed Authors". This will be used for users who need "Author" (read and write) access to content. See <u>Creating a Group</u> for detailed steps.
- Create a group with the name "Data Intelligence Licensed Consumers". This will be used for users who need "Consumer" (read only) access to content. See <u>Creating a Group</u> for detailed steps.

# Add Users to System Groups

After you have created the necessary system groups, you add users to them. If you have not created users yet, see Manage Users.



- Sign in to Oracle Cloud Infrastructure Identity and Access Management.
- Add Author users to the "Data Intelligence Licensed Authors" group.

See Adding Users to a Group.

Add Consumer users to the "Data Intelligence Licensed Consumers" group.

See Adding Users to a Group.

#### **Create Functional Groups**

- Sign in to Oracle Cloud Infrastructure Identity and Access Management.
- Create the following groups for users who need access to the corresponding content. See <u>Creating a Group</u> for detailed steps.
  - "Data Intelligence Customers" group for users who need to access Customer Analytics content.
  - "Data Intelligence Digital Assets" group for users who need access to Digital Asset content.
  - "Data Intelligence Grid Insights" group for users who need access to Grid Insights content.
  - "Data Intelligence Meters" group for users who need to access Device Analytics content.
  - "Data Intelligence Work Assets" group for users who need access to Work and Asset content.

## Add Users to Functional Groups

After you have created the necessary functional groups, you add users to them. If you have not created users yet, see <u>Manage Users</u>.

- 1. Sign in to Oracle Cloud Infrastructure Identity and Access Management.
- 2. Add users who need to access to specific types of content to the corresponding functional groups. For example, add users who need access to Customer Analytics content to the "Data Intelligence Customers" group, or add users who need to access to Digital Asset content to the "Data Intelligence Digital Assets" group. See <a href="Adding Users to a Group">Adding Users to a Group</a> for detailed steps.

#### Map System Groups to System Roles

After you create the system groups and add users to them, you must assign the system groups to system roles in the Oracle Utilities Data Intelligence Admin Console.

- Sign in to the Oracle Utilities Data Intelligence Admin Console.
- Click Security under Service Administration.
- 3. On the Security page, click the **Application Roles** tab.
- In the Application Roles list, search for and select the Data Intelligence Licensed Author Role.
- Click Assign Groups.
- 6. In the Add Group Mapping window that displays, search for and select **Data Intelligence**Licensed Authors and click **Save**.



- 7. Return to the Application Roles list.
- 8. Search for and select the **Data Intelligence Licensed Consumer Role**.
- 9. Click Assign Groups.
- 10. In the Add Group Mapping window that displays, search for and select Data Intelligence Licensed Consumers and click Save.

#### Map Functional Groups to Functional Roles

If you <u>created your functional groups</u> with the prescribed names (such as "Data Intelligence Customers" and "Data Intelligence Meters"), then you do not need to map the groups to a functional role. This mapping is done automatically.

However, if you create functional groups with names different from the prescribed names, then you must map the functional groups to the corresponding functional roles through the Oracle Utilities Data Intelligence Admin Console.

- 1. Sign in to the Oracle Utilities Data Intelligence Admin Console.
- 2. Click Security under Service Administration.
- 3. On the Security page, click the **Application Roles** tab.
- 4. In the Application Roles list, search for and select **Data Intelligence Customers**.
- Click Assign Groups.
- 6. In the **Add Group Mapping** window that displays, search for and select the group you created to only have access to Customer Analytics content, and click **Save**.
- 7. Return to the Application Roles list.
- Repeat the above steps for any other functional groups you created that have names different from the prescribed names.

# Customize Oracle Utilities Data Intelligence

You can customize the semantic model and groups to extend it for your business requirements.

As a modeler or modeler administrator, you can customize your semantic model. Customization enables you to make the data that you moved into the analytics warehouse more useful for reporting. As a security administrator, you can add security configurations to secure the subject areas and data with prebuilt and custom duty and data type of application roles.

For details about the customization activities you can perform, see the <u>Customize Fusion Data Intelligence</u> topic in the Fusion Data Intelligence administration guide. The information there is applicable to Oracle Utilities Data Intelligence.

# Set Up Additional Data for Grid Insights

Utilities that purchase Oracle Utilities Data Intelligence can also purchase Grid Insights analytics and visualizations to be included with it. Grid Insights analytics contain data related to devices on the grid such as transformers, meters, and electric vehicles. With this information, you can discover trends and patterns that help you better maintain the reliability and efficiency of the grid while promoting energy conservation and sustainability.

As an administrator, you must perform additional tasks to set up Grid Insights data and make it available in Oracle Utilities Data Intelligence for analysis and visualization. See <u>Grid Insights</u> <u>Prerequisites</u> in the *Data Intelligence Analytics Reference Guide* for more information.

# Manage Oracle Utilities Data Intelligence

As the cloud account administrator with the functional administrator or system administrator application role, you can manage your Oracle Utilities Data Intelligence instance to ensure that you have the latest application updates, backups to restore in case of emergencies, and snapshots of your application artifacts.

# Manage Fusion Data Intelligence Updates

Since Oracle Utilities Data Intelligence is based on the Fusion Data Intelligence platform, you will need to update to the latest Fusion Data Intelligence release when a new one becomes available. For more information, see <a href="Manage Application Updates">Manage Application Updates</a> in the Fusion Data Intelligence documentation.

# **Bundle Your Custom Application Artifacts**

As a service administrator, you can manage snapshots of your application artifacts as bundles. Bundles are snapshots of your application artifacts such as configurations and customizations at a certain point in time. Moreover, "bundles" in this context refers to snapshots created by you, rather than bundles created by Oracle for the Global Bundle Repository.

For more information about creating and working with your own bundles, see the Fusion Data Intelligence <u>documentation</u>. Most of the information there applies to the actions you can perform in Oracle Utilities Data Intelligence.

# Configure a Virus Scanner

To keep Oracle Utilities Data Intelligence virus-free, Oracle highly recommends that you set up the virus scanning servers used by your organization running on either 443 or 1708 ports only, to scan any files that are uploaded to Oracle Utilities Data Intelligence.

When you configure virus scanning, the scanner checks all uploaded files, including data files from the data pipeline and snapshots that you upload to restore content or to migrate content from another environment.

- Sign in to your service.
- In the Oracle Utilities Data Intelligence Admin Console, click Virus Scanner under Service Administration.
- 3. On the Virus Scanner page, enter the host and port of the virus scanning server. For example, my.virus.scanning.serverexample.com.
- 4. Click Save.
- 5. To remove the current virus scanner configuration, click **Delete**.



# About Backup and Restore

Oracle Utilities Data Intelligence relies on Oracle Autonomous Data Warehouse as its data store and Oracle Analytics Cloud for its semantic models and reports. You have several options for performing backup and restore operations with these tools. For more information, see <u>About Backup and Restore</u> in the Fusion Data Intelligence documentation.

# **About Disaster Recovery**

Oracle Utilities Data Intelligence is built upon Oracle Cloud Infrastructure and leverages the Oracle PaaS services for disaster recovery. For more information, see <a href="About Disaster Recovery">About Disaster Recovery</a> in the Fusion Data Intelligence documentation.

# About Scaling Up Your Resources

You can scale the resources provided by default with Oracle Utilities Data Intelligence based on your workload.

An activated subscription enables a cloud account administrator and service administrator to create the following types of instances:

- Development/Test
- Additional test environment (ATE)
- Production

The development/test and ATE instances typically have smaller capacity compared to the production instance. These instances are different in the following ways:

- The development instance and ATE are for testing with a subset of data such as the last one (1) year as opposed to the full history, as well as a subset of concurrent business users.
- The development instance is to develop or test reports and customizations before deploying them in the production instance for business users.
- The production instance is for production-level business needs, such as all historical data and all business users.
- The production instance has higher resources and therefore higher performance.
- Oracle monitors the production instances to ensure a satisfactory level of service for the predefined content.

Prior to scaling these instances, note the following:

- You must speak to your sales representative if you want to scale up compute and storage resources on Oracle Autonomous Data Warehouse and Oracle Analytics Cloud instance
- You can't scale down below the provisioned capacity.
- You might need to scale up the Oracle Analytics Cloud instance associated with your Oracle Utilities Data Intelligence instance in scenarios such as these:
  - Extensive semantic model extensions
  - Extensive custom reports
  - Use of large custom data sets



- Merge of external applications into the Oracle Utilities Data Intelligence semantic model.
- Sluggish report performance due to many concurrent users
- You can monitor the Oracle Analytics Cloud instance associated with your Oracle Utilities
   Data Intelligence instance using the Metrics option. For more information, see <u>Monitor</u> <u>Metrics</u> in the Oracle Analytics Cloud.
- You might need to scale up the Oracle Autonomous Data Warehouse instance associated with your Oracle Utilities Data Intelligence instance in scenarios such as these:
  - Extensive use of data warehouse tools such as Oracle Machine Learning (OML) and Application Express (APEX)
  - Custom data that exceeds 50 GB
  - Extensive custom queries
  - Use of custom apps or tools against the database
  - Many concurrent users running reports
- You can monitor your Oracle Autonomous Data Warehouse instance using the Performance Hub and Metrics Explorer options. See <a href="Monitor and Manage Database">Monitor and Manage Database</a>
  <a href="Performance">Performance</a> and <a href="Monitor Metrics">Monitor Metrics</a> in the Oracle Autonomous Data Warehouse documentation.
- You can scale up the development/test instance and ATE in scenarios such as these:
  - Testing customizations before deploying them to the production instance.
  - Stress-testing that requires temporarily scaling up the instance.
  - Bringing additional volumes of data into the development/test instance and ATE.

You must speak to your sales representative if you want to scale up any of your compute and storage resources.