Oracle Fusion Cloud Sales Automation

How do I manage geographies?

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1 Conceptual Overview

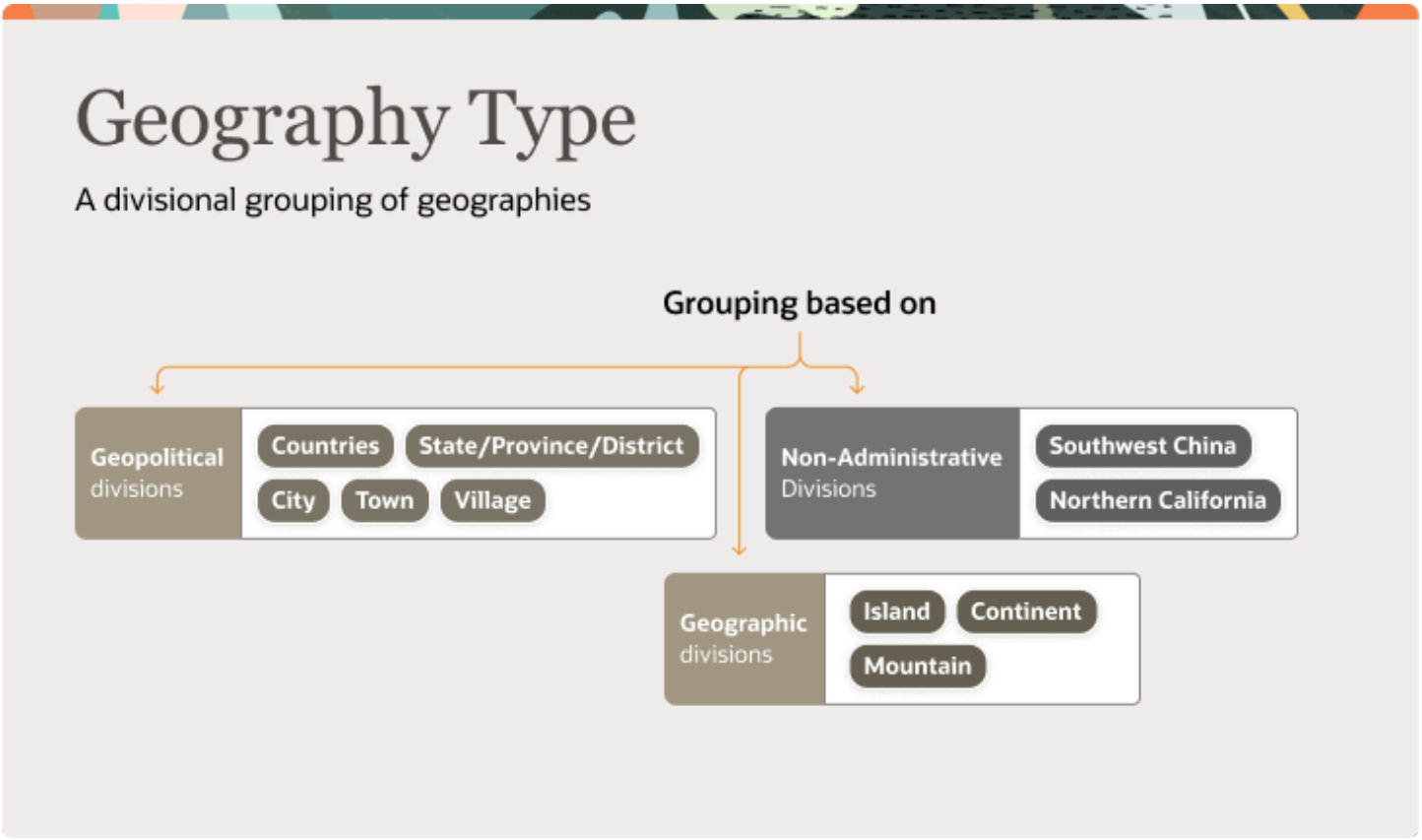
Overview of Geographies, Geographic Entities, and Locations

A geography is a physical space on Earth, such as a location or region, that's defined by a boundary. For example, it may be existing geopolitical locations such as San Jose or Peru.

These geographical locations are used in applications to manage business requirements such as sales territories, transportation deliveries, taxation, logistics, and so on.

Geography Type

A divisional grouping of geographies is named as Geography Types. It could be a geopolitical division such as Country, First Order Administrative Divisions (example: State, Province, District, and so on), City, Town, Village, or Non-Administrative Divisions (example: Southwest China, Northern California, and so on) or physical geographic divisions such as Island, Continent, Mountain, and so on.



Geography Use

Specifying the purpose and use of these geographies is known as Geography Use. Data could be classified for use by processes such as Taxation, Sales, Transportation, Marketing and so on.

Master Reference Geography Use

Master Reference Geography Use is data that's classified as being the source of truth. This data is used as a reference for creating User-defined Geography Uses and as the source when working with geographical data such as validating addresses or importing data. This data can be obtained from a third party or manually entered. It is defined by widely recognized administrative or political boundaries such as States, Provinces, Counties, Cities, and so on.

Master Reference Geographies

Master Reference Geographies are geographical boundary names and physical boundaries that are classified as being part of the Master Reference Geography Use. Examples include the State of California, the Province of Alberta, The Country of India, and so on.

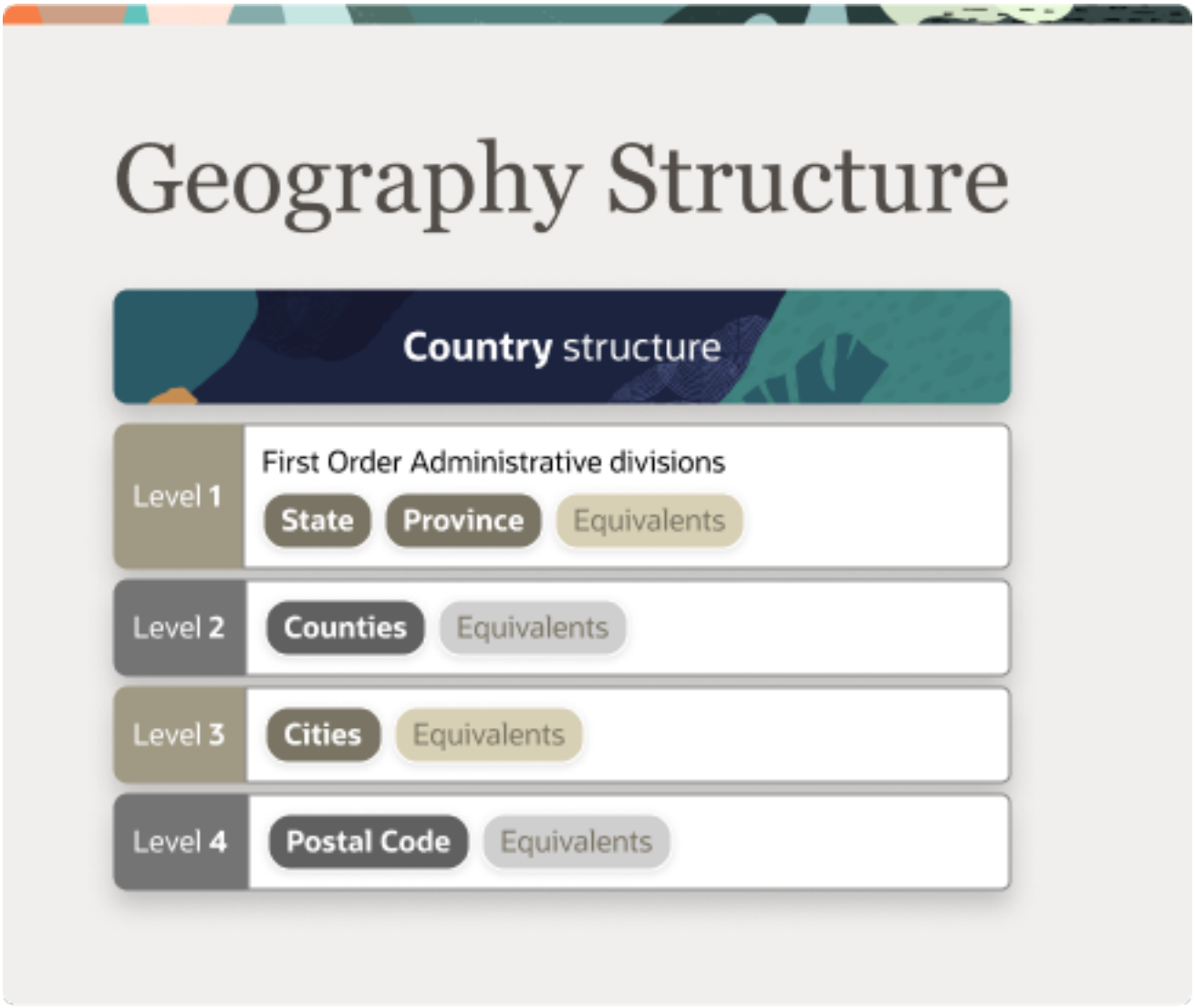
Master Reference Geography Type

Master Reference Geography Type is a layer of Master Reference Geographies. Examples of Master Reference Geography Types would include States, Cities, Provinces, Countries, and so on.

Geography Structures

You can use the geography structure to define geography types for a country and then relate the geography types.

For example, you can define geography types called State, City, and Postal Code. Then you can rank the State geography type as the highest level within the country, the City as the second level, and the Postal Code as the lowest level within the country structure.



A geography structure is a hierarchical grouping of geography types for a country. The following table describes the geography structure for the United States.

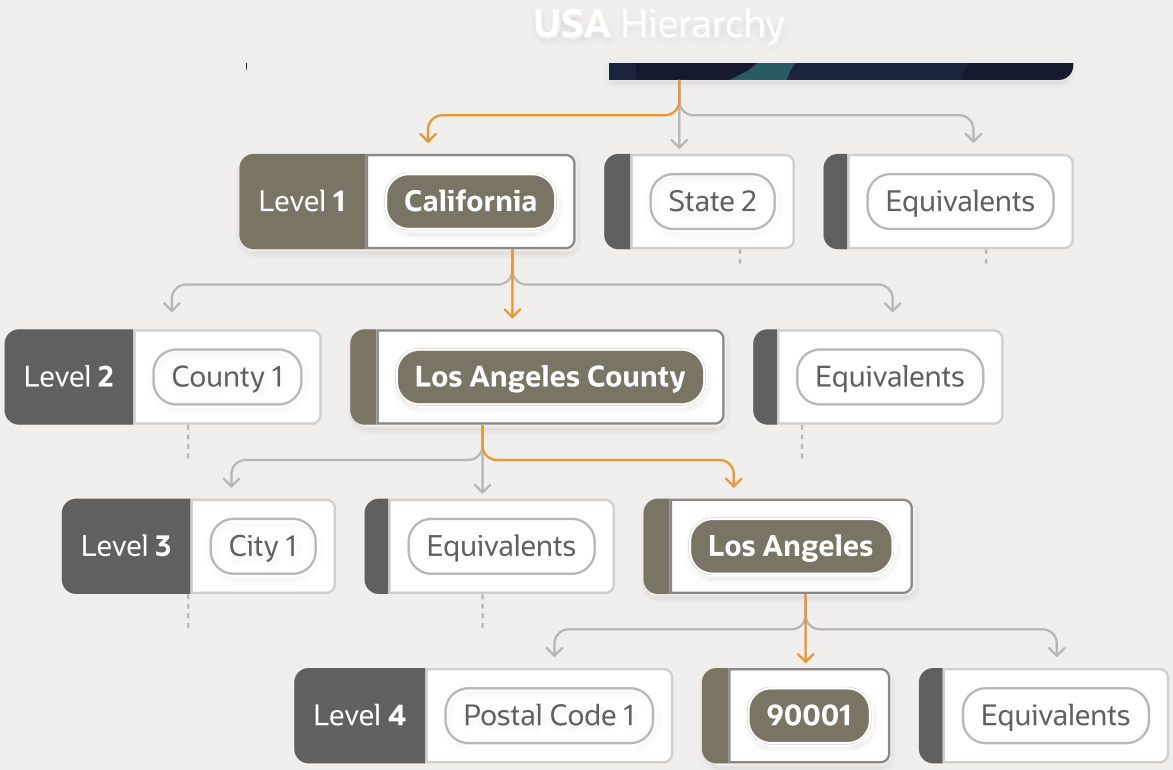
Level	Geography Type
1	State
2	County
3	City
4	Postal Code

Geography Hierarchy

Geography hierarchy is a data model that creates conceptual parent-child relationships between geographies.

Once the geography structure is defined, the geographies for each geography type can be added to the geography hierarchy. For example, in the geography hierarchy of United States you can create a geography called California using the State geography type.

Geography Hierarchy



Overview of Zone Types and Zones

A geography hierarchy is a data model that creates conceptual parent-child relationships between geographies.

Geography hierarchies can be classified as follows:

- Master Reference Geography Hierarchy: This refers to the predefined geography hierarchy and is considered as the source of truth. It is defined by widely recognized administrative or political boundaries such as States, Provinces, Counties, Cities, and so on. This hierarchy can be obtained from a supplier or manually entered. This geography hierarchy is the source when validating addresses or importing data. Examples are the State of California, the Province of Alberta, The Country of India, and so on.
- User Defined Geography Hierarchy: This refers to geography hierarchy defined by the user. This geography hierarchy may be created using the Master Reference Geography, obtained from a supplier, or entered manually. A user-defined geography hierarchy can have:
    - Zone Types
    - Zones

Zone Types

Zone types categorize and group zones together, for example, the zone types of Income Tax and Shipping Regions.

Zone types need to be created before you define a zone for the geographical boundary. You can create a zone type which will contain geographical boundaries from anywhere in the world, or you can create a zone type that will only contain geographies from within a specified country. When you create a zone type that's bounded by a country you can define which geography types or geographies you will be able to choose when you create a zone.

Zones

Zones are geographical boundaries for a zone type, for example, the San Jose Tax zone. Zones are based on the master reference geography hierarchy data.

Zones are created within a zone type, and you can associate geographies to define the zone. For example, for the Shipping Regions zone type you can create a West Coast zone which has the state of California as one of its geographies. Within a geography you can specify a postal range. So, for the state of California, for example, you can specify that the zone spans from postal code 90001 to 90011.

Zones Created in Master Geographies

Here is the list of zones created using master geographies in each product offering and the tasks to load them:

Product Offering	Task Name
Territory Geographies	Manage Territory Geographies
Tax	Manage Tax Zone Types
Shipping	Manage Shipping Zones
Compensation	Compensation Zones

2 Set Up Geography Data

Before You Start

You should have Oracle Sales or any other Fusion Cloud Service subscription that comes with the geographies feature and should have received the e-mail with your environment and initial sign-on information.

Case Study

The case study defines the scope of this playbook through a fictitious company named Vision Corp. It's a global high-tech company that sells laptops and multiple server product lines to businesses and other organizations.

Vision Corp. must import and set up reference geography data for the countries where it does business. The company can use this data to set up validation for address elements, such as states and cities, to prevent address data entry errors.

Vision Corp. imports and sets up reference geography data from Loqate for the countries it's available. For the rest of the countries where it does business, it uses Oracle Address, Email, and Phone Verification to prevent address data entry errors.

Verify You Have Required Licenses, Roles, and Privileges

You should have the following licenses:

Licenses:

- Oracle Sales or any other Fusion Cloud Service subscription that come with the geographies feature.
- Oracle Address, Email, and Phone Verification, if you plan to verify addresses.

Verify that you have the roles, or you have added the privileges to your job roles listed in this page:

User

Initial Setup User
Bonnie Vickers

Roles

- Application Implementation Consultant
- Sales Admin

Privileges

- ORA_GEO_ADMIN_DUTY
- HZ_RUN_TRADING_COMMUNITY_RESOURCE_REPORTING_HIERARCHY_GENERATION_PRIV
- HZ_RUN_TRADING_COMMUNITY_GEOGRAPHY_NAME_REFERENCING_MAINTENANCE_PRIV
- HZ_RUN_TRADING_COMMUNITY_IMPORT_BATCH_PROCESS_PRIV
- ORA_HZRESOURCE_ORGANIZATION_ADMINISTRATOR_DUTY
- ORA_ZX_TAX_ADMINISTRATION_DUTY_CRM
- ORA_HRC_HUMAN_CAPITAL_MANAGEMENT_APPLICATION_ADMINISTRATOR_JOB
- ORA_ZCH_MASTER_DATA_MANAGEMENT_APPLICATION_ADMINISTRATOR_JOB
- ORA_MANAGE_TRADING_COMMUNITY_IMPORT_BATCH_DUTY
- ORA_MANAGE_TRADING_COMMUNITY_IMPORT_PROCESS_DUTY
- Run Trading Community Geography Name Referencing Maintenance
- Run Trading Community Resource Reporting Hierarchy Generation

Roles:

- Application Implementation Consultant
- Sales Admin

Privileges:

- ORA_GEO_ADMIN_DUTY
- HZ_RUN_TRADING_COMMUNITY_RESOURCE_REPORTING_HIERARCHY_GENERATION_PRIV
- HZ_RUN_TRADING_COMMUNITY_GEOGRAPHY_NAME_REFERENCING_MAINTENANCE_PRIV
- HZ_RUN_TRADING_COMMUNITY_IMPORT_BATCH_PROCESS_PRIV
- ORA_HZRESOURCE_ORGANIZATION_ADMINISTRATOR_DUTY
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- ORA_MANAGE_TRADING_COMMUNITY_IMPORT_BATCH_DUTY
- ORA_MANAGE_TRADING_COMMUNITY_IMPORT_PROCESS_DUTY
- Run Trading Community Geography Name Referencing Maintenance
- Run Trading Community Resource Reporting Hierarchy Generation

Overview of Geography Setup

You must import and set up reference geography data for the countries where you do business. You can use this data to set up validation for address elements, such as states and cities, to prevent address data entry errors.

Oracle licenses geography data from Loqate that you can import, at no additional cost. You can also license geography data from another supplier. For more information about importing third party geography data, see the Import Country Structure and Import Geographies topics of the Understanding Import and Export Management for Sales and Fusion Service.

Alternatively, you can verify your address data using Oracle Address, Email, and Phone Verification. This service lets you verify that an address is an actual postal address as well as cleanse the address to conform to postal requirements. However, note that you require a separate license for Oracle Address, Email, and Phone Verification.

Vision Corp., the organization in our case study, imports and sets up reference geography data from Loqate for the countries it's available. For the rest of countries where it does business, it uses Oracle Address, Email, and Phone Verification to prevent address data entry errors.

This table lists the tasks you must complete to set up geography data.

Step	Description	Task Name	Where to Get More Details
Set Up Geography Structure	You can define geography types and then define how the geography types are hierarchically related within the country structure.	Manage Geographies	See the topic: *Set Up Geography Structure*

Step	Description	Task Name	Where to Get More Details
Set Up Geography Hierarchy	After defining the geography structure, you can add geographies for each geography type in the geography hierarchy.	Manage Geographies	See the topic: *Set Up Geography Hierarchy*
Set up Geography Validation	For the countries for which you imported geography data, enable validation down to address level required for your business, such as sales territories, and specify which address elements require lists of values. When you enable validation on an address element, the application suggests alternatives during address entry. Enabling a list of values requires the user to make a selection from a list. Both validation and lists of values are enforced in the UIs.	Manage Geographies	See the topic: *Setting Up Geography Validation*
Import Geography Data	Import Oracle-licensed geography data for the countries you do business from Loqate. Search for the country for which you want to import geography data on the Manage Geographies page and select the Import Geography Data action. The Import Geography Data action is disabled if Loqate doesn't support the country; or Oracle-licensed geography data or any third-party geography data is already imported for the country; or geography data and hierarchy data is already manually created for the country.	Manage Geographies	See the topic: *Import Geography Reference Data Licensed by Oracle*
Import Geography Zone Data	You can define zones that are specific to your business needs. For example, San Jose Tax zone or West Coast shipping zone.	Import Management	See the topic: *Import Your Geography Zone Data*
Import Territories	You can replicate your sales organization's regions by defining territory geography zones.	Manage Territory Geographies	See the topic: *How You Import and Export Territory Geography Zones*
Turn on Validation for Address Import	The validation selection you make on the Manage Geographies page affects entries made in the application UI only. You must use the task Manage Administrator Profile Values to set the profile option Geography Address Validation Enabled to Yes to validate the addresses you import.	Manage Administrator Profile Values	See the topic: *Turn on Validation for Address Import*

Step	Description	Task Name	Where to Get More Details
	You must also make sure that the address data you import matches what the geography reference data expects. In case of data mismatch, add an alternate geography data in the Manage Geographies UI. For example, for the **Aosta** province in Italy, third-party geography data has a value of **AOSTA** and Loqate has a value of TR. To resolve this conflict, in case you imported the data from third-party earlier, add AO as an alternate province name in the Manage Geographies UI.		
Set up Geocoding	You can use the Geocoding feature to find the latitude and longitude coordinates of the locations where your business is operating.	Manage Geographies	See the topic: *Set Up Geocoding*
Enable Address Mapping	Enable the mapping of account and contact addresses. With mapping enabled, your salespeople on the go can view their contacts on a map and obtain directions on their mobile phones with the click of a button.	Manage Geographies	See the topic: *Enable Address Mapping Using Geocoding*
Turn on Real Time Address Cleansing	Enable real time address cleansing to validate and correct geography attributes and the address line attributes as you enter address information in the application. **Note:** To use the address cleansing functionality, a separate license for Oracle Address, Email, and Phone Verification is required.	Manage Geographies	See the topic: *Enable Real Time Address Cleansing*

3 Set Up Geography Structure and Hierarchy

Set Up Geography Structure

The first step for defining a country is to create a geography structure in which geography types are part of the country structure, and then define how the geography types are hierarchically related within the country structure.

Geography structure can be defined using the **Manage Geographies** task, or can be imported using tasks in the **Define Geographies** activity.

> **Note:** During import of geography data from any provider if one or more geography levels aren't available, n/a is substituted for those geography levels. For example, the list of values in the address UIs of accounts, contacts, suppliers, persons, and so on are displayed as n/a for such geography levels.

Define Geography Types for a Country

You can use any of the master reference geography types to create your geography structure. If required, you can create a geography type, before adding it to the country structure. Each geography type is added at a lower level to the current lowest level.

> **Note:** You can't delete geography types that have associated geography data. You can only delete the lowest level geography type of the country structure.

You can use a geography type that you create within the country structure for other country structures as well.

Relate Geography Types for a Country

You can determine how a country's geographies are hierarchically related by creating the hierarchy of the geography types in the geography structure. When you define a country's structure, the geography type Country is implicitly at the highest level of the geography structure with level as 1. The subsequent geography types that you add after country are numbered in sequence.

You must add a geography type as a level in the country structure before you can define a geography for that geography type in a country. For example, before defining the state of California, the State geography type must be added to the United States country structure. To quickly create country structure, you can copy a structure from another country and modify the geography types for the country.

Set Up Geography Hierarchy

As part of managing the geography hierarchy you can view, create, edit, and delete the geographies for each geography type in the country structure.

A geography hierarchy can be created using the Manage Geographies task, or can be imported using tasks in the Define Geographies activity.

The application uses geography hierarchy information to facilitate business processes that rely on geography information, such as, tax calculation, order sourcing rules, and sales territory definition. The geography hierarchy information is centrally located and shared among other application offerings.

The geography hierarchy includes geography, geography type, geography usage, master reference geography hierarchy and user defined zones.

You can also add a primary and alternate name and code for each geography.

If you delete a geography level, all the children in that geography hierarchy are also deleted. For example, under a state you have defined zones using a range of postal codes. Later, you delete the state because you no longer support that state in your business. All the zones defined within that state are also deleted.

How do I add a geography to the geography hierarchy?

You can add a new geography to the geography hierarchy. The new geography can be added under any level of the hierarchy for an existing geography type in the country geography structure.

For example, we can add a new postal code 94065 under United State, California, San Mateo, Redwood City.

1. As a setup user, click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area.
2. Click the Tasks menu and click Search. Search for **Manage Geographies**.
3. On the Manage Geographies page, enter US in the **Code** field. Click **Search**.
4. Click **Hierarchy Defined** for United States.

   > **Note:** If there are many child geographies for the selected parent geography, a message asking you to refine the search criteria is displayed. The child geographies are displayed after you refine the search criteria. If there are many search results, you may have to further refine the search criteria. The maximum number of child geographies that can be displayed is controlled by the ORA_HZ_GEO_HIERARCHY_LIMIT profile option. You can change the value of this profile option by navigating to the Setup and Maintenance work area, click the Tasks menu, and search for Manage Administrative Profile Values task. Search for the ORA_HZ_GEO_HIERARCHY_LIMIT profile option and change the value.

5. Search using State as the Geography Type and CA as the Code.
6. Drill down to San Mateo and select Redwood City.
7. Click **Actions** > **Create**.
8. Type 94065 for Name in the **Primary Name and Alternative Names** section.
9. Click **Save and Close**.
10. Click **Save and Close**.
11. Click **Done**.

How do I edit a specific geography in the geography hierarchy?

You can edit the following details of a geography hierarchy using the Manage Geography Hierarchy page:

- geography's date range
- primary and alternate names
- primary and alternate codes

- creating geographies within the hierarchy such as adding a postal code for a city.

1. As a setup user, click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area.
2. Click the Tasks menu and click Search. Search for **Manage Geographies**.
3. On the Manage Geographies page, enter US in the **Code** field. Click **Search**.
4. Click **Hierarchy Defined** for United States.

   Note: If there are many child geographies for the selected parent geography, a message asking you to refine the search criteria is displayed. The child geographies are displayed after you refine the search criteria. If there are many search results, you may have to further refine the search criteria. The maximum number of child geographies that can be displayed is controlled by the ORA_HZ_GEO_HIERARCHY_LIMIT profile option. You can change the value of this profile option by navigating to the Setup and Maintenance work area, click the Tasks menu, and search for Manage Administrative Profile Values task. Search for the ORA_HZ_GEO_HIERARCHY_LIMIT profile option and change the value.

5. Search using State as the Geography Type and CA as the Code.
6. Select CA and click **Actions** > **Edit**.
7. (Optional) Select the row that you want to specify as the primary name under the **Primary and Alternative Names** section and click **Actions** > **Set Primary**.
8. (Optional) Select the row that you want to specify as the primary code under the **Primary and Alternative Codes** section and click **Actions** > **Set Primary**.
9. Click **Save and Close**.
10. Click **Save and Close**.
11. Click **Done**.

How do I edit alternative names and codes for an existing country?

You can add or edit alternative names and codes for an existing geography in the geography hierarchy.

For example, you can add a FIPS code of 06 for the state of California.

1. As a setup user, click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area.
2. Click the Tasks menu and click Search. Search for **Manage Geographies**.
3. On the Manage Geographies page, enter US in the **Code** field. Click **Search**.
4. Click **Hierarchy Defined** for United States.

   Note: If there are many child geographies for the selected parent geography, a message asking you to refine the search criteria is displayed. The child geographies are displayed after you refine the search criteria. If there are many search results, you may have to further refine the search criteria. The maximum number of child geographies that can be displayed is controlled by the ORA_HZ_GEO_HIERARCHY_LIMIT profile option. You can change the value of this profile option by navigating to the Setup and Maintenance work area, click the Tasks menu, and search for Manage Administrative Profile Values task. Search for the ORA_HZ_GEO_HIERARCHY_LIMIT profile option and change the value.

5. Search using State as the Geography Type and CA as the Code.
6. Select CA and click **Actions** > **Edit**.
7. In the **Primary and Alternative Codes** section, click **Actions** > **Add**.

8. Type 06 under **Code** and select FIPS code as the **Code Type**.
9. Click **Save and Close**.
10. Click **Save and Close**.
11. Click **Done**.

4 Set Up Geography Validation

How do I manage geography validation?

After defining the geography hierarchy, you need to specify the structure for the country.

You can choose which address style format you would like to use for the country, and for each selected address style format you can map geography types to address attributes. You can also select which geography types to include in address validation or tax validation, and which geography types will display in a list of values during address entry in other user interfaces. The geography validation level for the country, such as error or warning, can also be selected. Geography validation determines the geography mapping and validation for a country's *address styles*, and the overall address validation control for a country.

The **No Styles Format** address style format is the default address style format for a country. By defining the mapping and validation for this format you will ensure that validations can be performed for any address in the country. After the **No Styles Format** is defined you can set up additional mapping for specific address styles.

For each address style format, you can define the following:

- Map to attribute
- Enable list of values
- Tax validation
- Address validation
- Address validation control

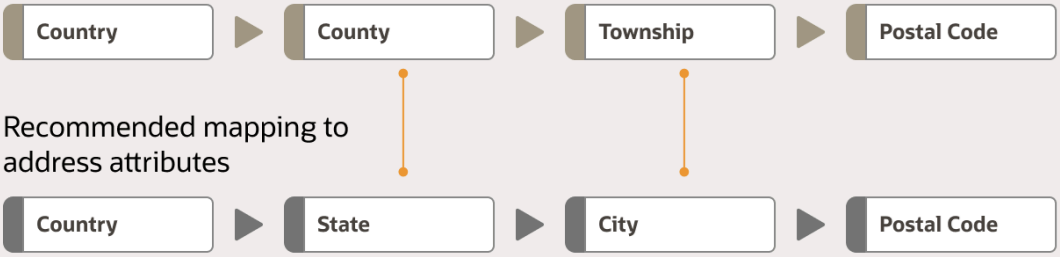
Attribute Mapping

For every address style format, you can map each geography type to an address attribute. For example, you can map the **State** geography type to the **State** address attribute for the United States, or map the **State** geography type to the **County** address attribute for the United Kingdom. The geography types that appear are based on how the country structure is defined. The list of address attributes that appear are based on address formats delivered with the application, or your customer defined address formats.

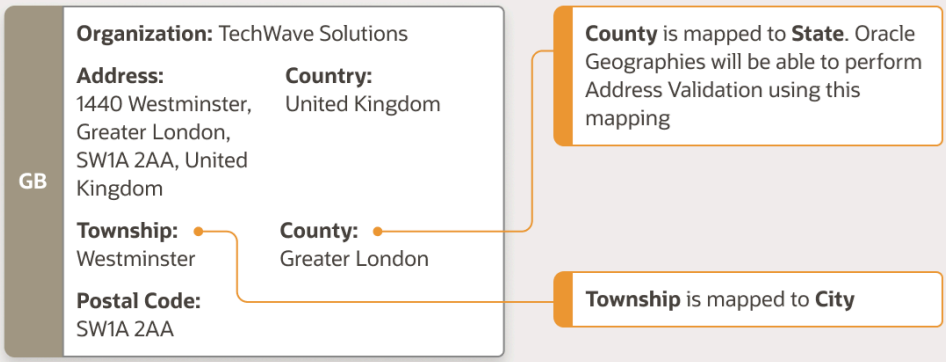
Note: You only need to map geography types that you want to use for address or tax validation purposes.

Attribute Mapping

Great Britain geography structure



Recommended mapping to address attributes



Enable List of Values

Once a geography type is mapped to an attribute, then you can specify whether the geography type will appear in a list of values during address entry in user interfaces. It is very important to review carefully if you want to enable a list of values. You should only enable a list of values if you have sufficient geography data imported or created for that geography. If the setup for master geography data is incomplete, then the geography data is either not imported or created. As a result, the list of values for the address attribute doesn't list any geography data.

Once you have enabled a list of values for an address attribute, you can only select the geography data available for the geography type. This means that if a specific geography value isn't available in the geography hierarchy, you can't create an address with a different geography value.

> **Note:** Enable List of Values applies to the UI only. It doesn't apply to import, web services, or REST APIs. For these, all of the required geography types must have a value in the request when creating or updating an address.

Tax Validation

You can also specify whether a geography type will be included in tax validation. For example, for the United States North America address style format you specify that County, State, and City are used for tax validation. This will mean that when a transaction involves an address with the North America address style, the address must have the correct county, state, and city combination based on the geography hierarchy data, to be considered valid for tax calculation.

Address Validation

You must set up address validation for those geography elements that you plan to use in your application. Address validation checks whether geography elements of an address such as state, city, postal code, and so on are valid as per master geography data. Setting up validation also helps ensure that the addresses are correct and deliverable during entry. You can select states or other address elements from lists to ensure accuracy during entry. For example, when you enter a postal code, the application can validate if the postal code exists. Note that address validation isn't the same as address verification. Address Verification updates and enhances your address. Address verification depends upon Oracle or any third-party address verification services to perform verification.

You can specify whether a geography type will be included in address validation. For example, when the user enters a United States address using the North American address style format, the address must have the correct country, state, and postal code combination based on geography hierarchy data to be considered geographically valid.

If an address element is mapped to a geography type, but not selected for geography validation usage, then during address entry suggested values are provided for the address element, but the address element isn't validated.

You need to verify that the default mapping between **Geography Type** and **Map to Attribute** is valid in the Geography Mapping and Validation region and update it if required when you define geography validation.

After setting geography validation, all features that directly and indirectly depend upon geographies are impacted. For example, multiple applications such as ERP, CX, and SCM that use geographies are impacted.

Oracle recommends that you use the following valid mapping for the countries that Loqate supports:

Country Name	Country Code	Geography Type	Map to Attribute
Andorra	AD	• `Country` • `Parroqia`	• `Country` • `State`

Country Name	Country Code	Geography Type	Map to Attribute
		• Settlement • Postal Code	• City • Postal code
Angola	AO	• Country • Provincia • Municipio • Comuna • Localidad	• Country • Province • County • City • Additional address attribute 2
Argentina	AR	• Country • Province • Department • Municipality • Postal Code	• Country • Province • County • City • Postal code
Australia	AU	• Country • State • City • Postal Code	• Country • State • City • Postal code
Austria	AT	• Country • Bundensland • Bezirk • Gemeinde • Postal Code	• Country • State • County • City • Postal code
Belgium	BE	• Country • Gewest • Provincie • Gemeente • Postal Code	• Country • Additional address attribute 1 • Province • City • Postal code
Bolivia	BO	• Country • Departmento • Provincia • Canton	• Country • Additional address attribute 1 • Province • City
Bosnia and Herzegovina	BA	• Country • District • Kanton	• Country • Additional address attribute 1 • Province

Country Name	Country Code	Geography Type	Map to Attribute
		• Opcine • Nasalje • Postal Code	• County • City • Postal code
Brazil	BR	• Country • State • City • Postal Code	• Country • State • City • Postal code
Bulgaria	BG	• Country • Oblast • Obshhina • Settlement • Postal Code	• Country • Additional address attribute 1 • Province • City • Postal code
Canada	CA	• Country • Province • City • Postal Code	• Country • Province • City • Postal code
Cayman Islands	KY	• Country • Island • District • Postal Code	• Country • State • City • Postal code
Chile	CL	• Country • Region • Provincia • Kommune • Postal Code	• Country • State • County • City • Postal code
China **Note:** China geography structure is supported but geocoding isn't supported.	CN	• Country • Province • City • Postal Code	• Country • Province • City • Postal code
Croatia	HR	• Country • Zupanije • Grad • Postal Code	• Country • Province • City • Postal code

Country Name	Country Code	Geography Type	Map to Attribute
Cuba	CU	• Country • Provincia • Municipio • City • Postal Code	• Country • Province • County • City • Postal code
Cyprus	CY	• Country • Periochi • Dimos • Postal Code	• Country • Province • City • Postal code
Czech Republic	CZ	• Country • Kraj • Okres • Obec • Postal Code	• Country • State • County • City • Postal code
Denmark	DK	• Country • Amt • Settlement • Postal Code	• Country • Province • City • Postal code
Dominican Republic	DO	• Country • Provincia • Municipio • Town • Postal Code	• Country • Province • County • City • Postal code
Ecuador	EC	• Country • Province • Canton • City • Postal Code	• Country • Province • County • City • Postal code
Estonia	EE	• Country • Maakond • Vald • Postal Code	• Country • State • City • Postal code
Finland	FI	• Country • Maakunta • Kunta	• Country • State • Locality

Country Name	Country Code	Geography Type	Map to Attribute
		• Settlement • Postal Code	• City • Postal code
France	FR	• Country • Region • Department • Commune • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
Germany	DE	• Country • Bundesland • Gemeinde • Postal Code	• Country • State • City • Postal code
Great Britain	GB	• Country • County • Township • Postal Code	• Country • State • City • Postal code
Greece	GR	• Country • Periferia • Nomi • Dimotika • Postal Code	• Country • State • County • City • Postal code
Guadalupe	GP	• Country • Commune • Postal Code	• Country • City • Postal code
Guam	GU	• Country • State • County • Municipality • Postal Code	• Country • State • County • City • Postal code
Guernsey	GG	• Country • City • Parishes • Villages • Postal Code	• Country • City • Additional address attribute 2 • Additional address attribute 3 • Postal Code

Country Name	Country Code	Geography Type	Map to Attribute
Hungary	HU	• Country • Megye • Jaras • Telepules • Settlement • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code
Iceland	IS	• Country • Jaras • Telepules • Settlement • Postal Code	• Country • Province • County • City • Postal code
India	IN	• Country • State • City • Postal Code	• Country • State • City • Postal code
Indonesia	ID	• Country • Province • City • Postal Code	• Country • Province • City • Postal code
Ireland	IE	• Country • Province • Post County • Postal_Code	• Country • State • City • Postal Code
Isles of Man	IM	• Country • Locality • Settlement • Postal Code	• Country • City • Additional address attribute 2 • Postal code
Israel	IL	• Country • District • Subdistrict • City • Postal Code	• Country • State • County • City • Postal code
Italy	IT	• Country • Regione	• Country

Country Name	Country Code	Geography Type	Map to Attribute
		• Provincia • Comune • Postal code	• Additional address attribute 1 • Province • City • Postal code
Jamaica	JM	• Country • Parish • Settlement	• Country • State • City
Japan	JP	• Country • Prefecture • City • Postal Code	• Country • State • City • Postal code
Jordan	JO	• Country • Muhafazat • Liwa • Tajma • Postal Code	• Country • State • County • City • Postal code
Kenya	KE	• Country • County • Division	• Country • State • City
Latvia	LV	• Country • Rajons • Pilseta • Postal Code	• Country • State • City • Postal code
Liechtenstein	LI	• Country • Wahlkreis • Gemeinde • District • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
Lithuania	LT	• Country • County • Municipality • Ward • Postal Code	• Country • State • County • City • Postal code

Country Name	Country Code	Geography Type	Map to Attribute
Luxembourg	LU	• Country • Canton • Commune • Settlement • Postal Code	• Country • State • County • City • Postal code
Malaysia	MY	• Country • State • District • Subdistrict • Postal Code	• Country • State • County • City • Postal code
Malta	MT	• Country • Region • Local_Council • Postal Code	• Country • State • City • Postal code
Martinique	MQ	• Country • Department • Arrondisement • Commune • Postal Code	• Country • State • County • City • Postal code
Mexico	MX	• Country • State • Municipality • Locality • Postal Code	• Country • State • County • Additional address attribute 2 • Postal code
Netherlands	NL	• Country • Province • Municipality • Town • Postal Code	• Country • Province • County • City • Postal code
New Zealand	NZ	• Country • Region • Town • Postal Code	• Country • State • City • Postal code
Norway	NO	• Country	• Country

Country Name	Country Code	Geography Type	Map to Attribute
		• Fylke • Kommune • Postal Code	• Province • City • Postal code
Oman	OM	• Country • Muhafazah • District • City	• Country • State • County • City
Peru	PE	• Country • Region • Provincia • Distrito • Postal Code	• Country • Province • County • City • Postal code
Poland	PL	• Country • Wojewodztwo • Powiat • Gmina • Postal Code	• Country • Province • County • City • Postal code
Portugal	PT	• Country • Distrito • Concelho • Settlement • Postal Code	• Country • Province • County • City • Postal code
Puerto Rico	PR	• Country • Commonwealth • Municipio • Barrio • Postal Code	• Country • State • County • City • Postal code
Qatar	QA	• Country • Municipality • Zone	• Country • State • City
Reunion Island	RE	• Country • Region • Department • Commune • Postal Code	• Country • State • County • City • Postal code

Country Name	Country Code	Geography Type	Map to Attribute
Romania	RO	• Country • Region • County • Settlement • Locality • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code
Russia	RU	• Country • Federal_District • Federal_Subject • Oblast • Postal Code	• Country • Additional address attribute 1 • State • City • Postal code
San Marino	SM	• Country • Comune • Postal Code	• Country • State • Postal code
Singapore	SG	• Country • Region • District • Postal Code	• Country • State • City • Postal code
Slovakia	SK	• Country • Kraj • Okres • Obec • Postal Code	• Country • Province • County • City • Postal code
Slovenia	SI	• Country • Regija • Upravna Enota • Obcina • Settlement • Postal Code	• Country • Additional address attribute 1 • Province • County • City • Postal code
South Africa	ZA	• Country • Province • District_Municipality • Local_Municipality	• Country • Province • County • City

Country Name	Country Code	Geography Type	Map to Attribute
		• Postal Code	• Postal code
South Korea	KR	• Country • Jibang • Siti • Postal Code	• Country • State • City • Postal code
Spain	ES	• Country • Autonomous_Community • Province • City • Postal Code	• Country • Additional address attribute 1 • Province • City • Postal code
Sri Lanka	LK	• Country • Province • District • Divisional_Secretariat • Postal Code	• Country • Province • County • City • Postal code
Swaziland **Note:** This country maybe labeled Eswatini in Manage Territories.	SZ	• Country • District • Inkhundla • Town • Postal Code	• Country • Province • County • City • Postal code
Sweden	SE	• Country • Lan • Settlement • Postal Code	• Country • Province • City • Postal code
Switzerland	CH	• Country • Kanton • Bezirk • Gemeinde • Postal Code	• Country • State • County • City • Postal code
Taiwan	TW	• Country • County • Town • Postal Code	• Country • State • City • Postal code
Thailand	TH	• Country	• Country

Country Name	Country Code	Geography Type	Map to Attribute
		• Region • Changwat • Amphoe • Postal Code	• Additional address attribute 1 • State • City • Postal code
Tunisia	TN	• Country • Governorate • Delegation • Postal Code	• Country • State • City • Postal Code
Turkey	TR	• Country • Sehir • Ilce • Kasaba • Postal Code	• Country • Province • County • City • Postal code
United Arab Emirates	AE	• Country • Emirate • City • Area • Postal Code	• Country • State • City • Additional address attribute 2 • Postal Code
United States	US	• Country • State • County • City • Postal Code	• Country • State • County • City • Postal code
Uruguay	UY	• Country • Departamento • City • Postal Code	• Country • State • City • Postal code
Vatican City	VA	• Country • Municipal • Settlement • Postal Code	• Country • Province • City • Postal code
Vietnam	VN	• Country • Region • Tihn	• Country • Additional address attribute 1

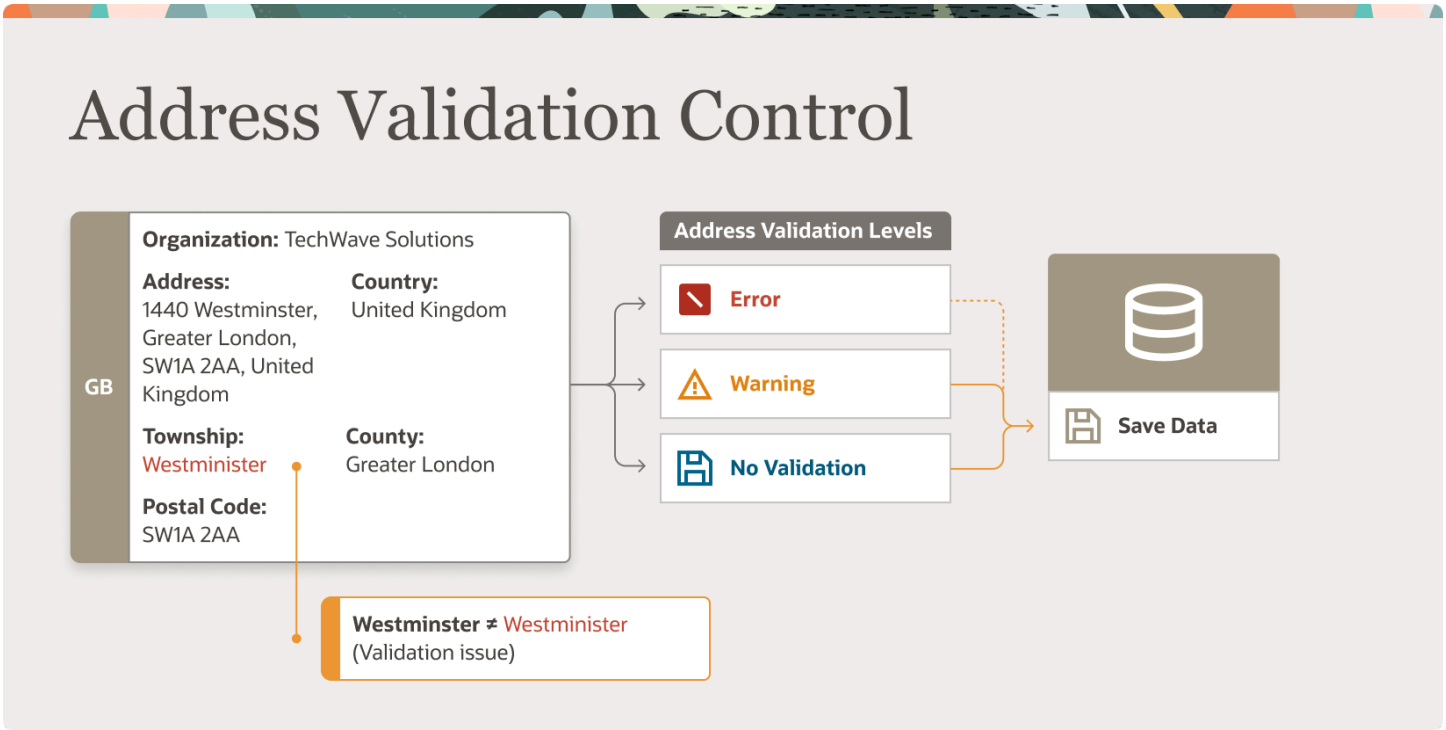
Country Name	Country Code	Geography Type	Map to Attribute
		• Quan • Thank Pho • Postal Code	• Province • County • City • Postal code

Note: For either the tax or address validation, don't skip any level unless you're certain that the selected geography types can uniquely identify geographies. For example, the United States country structure is: State, County, City, and Postal Code, and you want to select just State and Postal Code for address or tax validation. However, for the combination of California and 94065, the city can be either Redwood Shores or Redwood City. In this case, you should also select at least the City geography type for address or tax validation.

Address Validation Control

You can select the address validation level for a country. Validation will check if the entered address maps to the geography hierarchy data available for the country, and the address validation control determines whether you can save an address that didn't pass validation during address entry. For example, if the

validation level is **Error**, then an address can't be saved if the values don't match the geography hierarchy data.



These are the address validation levels you can choose:

- **Error** - only completely valid addresses can be saved, with all mandatory address elements entered.
- **No Validation** - all addresses can be saved including incomplete and invalid addresses.

Regardless of the result of validation, the validation process will try to map any address attribute to a geography of the country, and store any mapping it could establish based on the available data. This is called ***Geography Name Referencing*** and it's executed as part of validation. The result of this referencing is used in several business processes in the application to map an address to a specific geography or zone. Therefore, Geography Name Referencing is the process of validating and mapping address elements of existing location table records against master reference geographies. For example, CA value in the STATE column of the HZ_LOCATIONS table is mapped to the master reference geography of CA (California).

The Geography Dimension value in territories is derived from sell-to addresses of sales accounts. To use geography dimensions in territories, you must validate the geography elements in the addresses, such as state, city, and postal

code. You can validate the address by enabling geography validation for each country using the Manage Geographies task. Perform the following in the Manage Geographies task:

- Enable at least one level in the geography hierarchy for geography validation.
- Enable geography validation for all geography levels that you intend to use for territory definition for each country.
- If needed, enable a list of values containing specific geography elements. This will help users search and select appropriate geography values during addresses entry and eliminate all possibilities of wrong address entry.

You can set geography validation control to Error in the Manage Geography Validation page. This ensures that users can only use valid geography elements in addresses.

> **Note:** If you have already created addresses before setting up address validation for a country, you must enable geography validation and then execute the *Validate Geographies of Addresses Against Master Geographies* task for that country. This validates all your geography elements.

Related Topics

- How can I save an address that didn't pass geography validation?
- How do I validate geographies of addresses against master geographies and generate naming references?
- Setting Up Geography Validation

Setting Up Geography Validation

You must set up geography validation to enable geography setup, help users fill in missing address information, and validate address information. For example, if you enter the postal code you can retrieve the rest of the address, such as, city and state.

For example, an organization named Vision Corp., wants its salespeople to use a list of values to enter the states in their addresses. Also, it plans to set up territories at the state level. So validation must be set up at the state level.

To define geography validation for Vision Corp.:

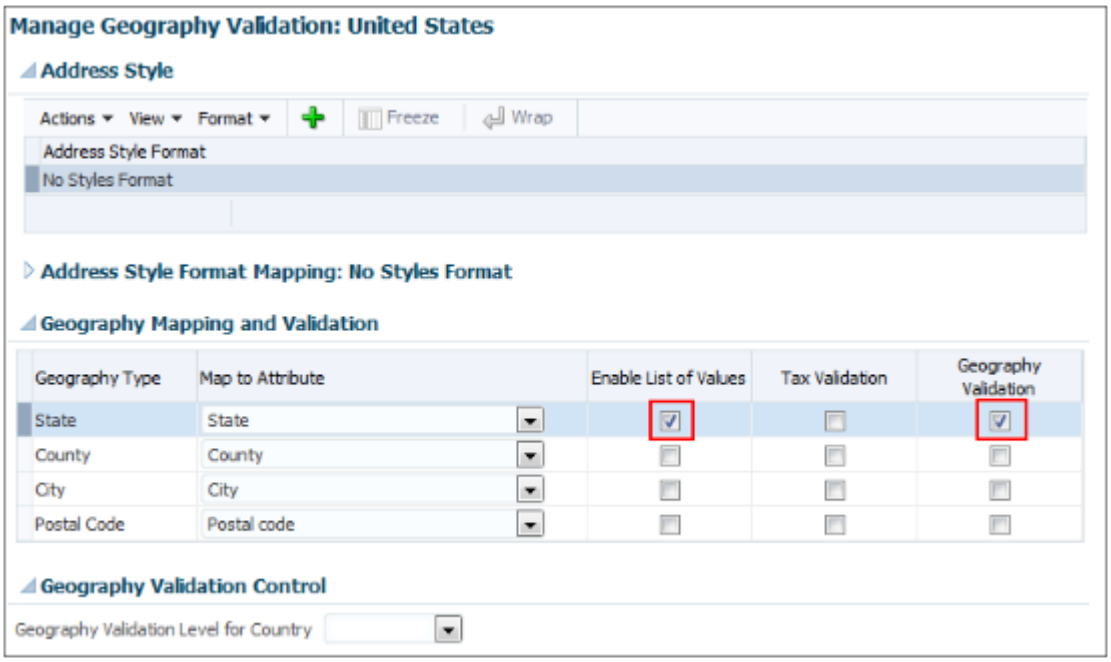
1. As a setup user, click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area.
2. Click the Tasks menu and click Search. Search for **Manage Geographies**.
3. Search for a country. For example, you can search by entering either the country name United States or the two letter ISO code US, and clicking Search. Search for a country. For example, you can search by entering either the country name United States or the two letter ISO code US, and clicking **Search**.
4. Select the country, such as United States, in the Search Results area.
5. Click the **Go to Task** button in the Validation Defined column.

   The Manage Geography Validation page appears. The geography types available for the country are shown in the Geography Mapping and Validation region.
6. Ensure that the **No Styles Format** address style is selected. You define validation for the No Styles Format address style so that the validations are performed for all addresses in the country.
7. Select **Enable List of Values** in the Geography Mapping and Validation region to display the geography type as list of values during address entry in user interfaces. For example, for Vision Corp, select **Enable List of Values** for State.

This ensures correct values are entered for states, so that territory assignments work.

> **Note:** You should only enable a list of values if you have sufficient geography data for that geography type.

8. Select **Geography Validation** for a geography type to include it in geography validation. For example, for Vision Corp, select **Geography Validation** for State.



You must enable geography validation for all geography levels that you intend to use for territory definition. The territory assignments may fail if the geography data used isn't validated. If Vision Corp. decided to set up territories at the postal code level, it would have to set up validation for state, city, county, and postal code.

> **Note:** If an address element isn't selected for geography validation usage, then during address entry suggested values will be provided for the address element, but the address element isn't validated.

9. Select the appropriate geography validation control level to determine whether you can save an address that fails validation during address entry. For example, Vision Corp. wants to save all addresses including incomplete and invalid addresses, so select **No validation** in the Geography Validation Level for Country list.

> **Note:** If Vision Corp. decided to save only valid addresses, it would have to set the geography validation control level to **Error** in the Geography Validation Level for Country list.

10. Click **Save and Close**.

Best Practices for Geography Validation

After geography data setup, you must configure geography validations.

Here are some best practices to configure geography validation:

- The configuration of geography validation rules depends upon your application needs. If you want to ensure that only valid addresses must are allowed:
  a. As a setup user, go to Manage Geographies, search for a country, and click Validation Defined.
  b. Set Geography Validation based on the application requirements.

     > **Note:** For either the tax or geography validation, don't skip more than one consecutive level unless you're certain that the selected geography types can uniquely identify geographies. For example, the United States country structure is: State, County, City, and Postal Code, and you want to select just State and Postal Code for geography or tax validation. However, for the combination of California and 94065, the city can be either Redwood Shores or Redwood City. In this case, you should also select at least the City geography type for geography or tax validation.

  c. Set the Geography Validation Level for Country in the Geography Validation Control section to Error.
- If you require validated addresses for your downstream applications:
  a. Go to Manage Geographies, search for a country, and click Validation Defined.
  b. The best practice is Enable List of Values and setup validation for all geography levels and geography types.
  c. Run the Validate Geographies of Addresses Against Master Geographies scheduled process to review address validation results.
- To ensure that the addresses are validated and there are no downstream impacts:
  a. Go to Manage Administrator Profile Values and set the Number of workers for a given Geography Name Referencing request (HZ_GNR_NUM_OF_WORKERS) profile option to 5.
  b. Run the Validate Geographies of Addresses Against Master Geographies scheduled process with Parameters: Location Table Name: HZ_LOCATIONS, Run Type: ALL, Country Code: [Country code for which Geography Name Referencing (GNR) needs to be generated].
  c. Run the Validate Geographies of Addresses Against Master Geographies scheduled process with Parameters: Location Table Name: PER_ADDRESSES_F, Run Type: ALL, Country Code: [Country code for which GNR needs to be generated].
  d. You can then use the report to identify if the existing addresses are incorrect. Correct these addresses as a onetime activity.

How do I manage Geography Structures, Hierarchies, and Validation?

You can add geography structure by first defining the geography types using the Manage Geographies task. You can then create geography hierarchy and geography validations also using the Manage Geographies task.

This example shows how you can configure the geography structure, geography types within the structure, geography hierarchy, and geography validation for a country geography, using the United Kingdom country geography as an illustration.

The following table summarizes the key decisions for this scenario.

Decisions to Consider	In This Example
Copy an existing country structure?	No, create a new country structure.
What is the structure of the geography types?	Create geography types with the following ranking structure: 1. County 2. Post Town
What is the geography hierarchy?	Create the following hierarchy: 1. Country of United Kingdom 2. County of Berkshire 3. Post Town of Reading
Which address style format will you use when mapping geography validations?	The default address style format called the No Styles Format.
Are you using Oracle Fusion Tax for tax purposes?	No, don't select Tax Validation for the geography types.

Define the Geography Structure

You can add the County and Post Town geography types to the United Kingdom geography structure.

1. As a setup user, enter GB in the **Code** field on the Manage Geographies UI page and click **Search**.
2. On the Manage Geographies page, click **Structure Defined**.
3. On the Manage Geography Structure page, click the **Create** button next to the **Copy Country Structure From** field.
4. In the Geography Structure section, select the County list item in the **Add Geography Type** field.
5. Click **Add**.
6. Select the Post Town list item in the **Create and Add Geography Type** field.
7. Click **Add**.
8. Click **Save and Close**.

> **Note:** You can't modify or delete a geography type.

Define the Geography Hierarchy

You can add the geographies for the County and Post Town geography types using the geography hierarchy user interfaces to create the geography hierarchy for United Kingdom. You can also use Import Management to import geography hierarchies using a CSV or XML file.

1. As a setup user, enter GB in the **Code** field on the Manage Geographies UI page and click **Search**.

2. On the Manage Geographies page, click **Hierarchy Defined**.

> **Note:** If there are many child geographies for the selected parent geography, a message asking you to refine the search criteria is displayed. The child geographies are displayed after you refine the search criteria. If there are many search results, you may have to further refine the search criteria. The maximum number of child geographies that can be displayed is controlled by the ORA_HZ_GEO_HIERARCHY_LIMIT profile option. You can change the value of this profile option by navigating to the Setup and Maintenance work area, click the Tasks menu, and search for Manage Administrative Profile Values task. Search for the ORA_HZ_GEO_HIERARCHY_LIMIT profile option and change the value.

3. In the Geography Hierarchy section, click United Kingdom to highlight the table row, and click **Create**.
4. In the **Create County** page, Primary and Alternate Names section, enter Berkshire in the **Name** field.
5. Click **Save and Close**.
6. In the Geography Hierarchy section, click Berkshire to highlight the table row, and click **Create**.
7. In the **Create Post Town** page, Primary and Alternate Names section, enter Reading in the **Name** field.
8. Click Save and Close.

Define the Geography Validations

You can define the geography mapping and validation for the United Kingdom default address style format to specify the geography validations for the geography types you added to United Kingdom. You can then map the geography types to attributes, enable the geography types for Lists of Values and Geography Validation, and set the geography validation level.

1. As a setup user, click **Validation Defined** on the Manage Geographies UI page.
2. In the Address Style section, click **No Styles Format** to highlight the table row.
3. For the County geography type, click the **County** list item in the **Map to Attribute** field.
4. Select the **Enable List of Values** and **Geography Validation** options.
5. For the Post Town geography type, click the **City** list item in the **Map to Attribute** field.
6. Select the **Geography Validation** option.
7. In the Geography Validation Control section, select **Error** in the **Geography Validation Level for Country** list.
8. Click **Save and Close**.

Turn on Validation for Address Import

By default, the validation you specified on the Manage Geography Validation page is enforced for creating addresses in the UI only. You must set the profile option Geography Address Validation Enabled to Yes for the validation to be enforced during import.

Follow these steps to set the profile option:

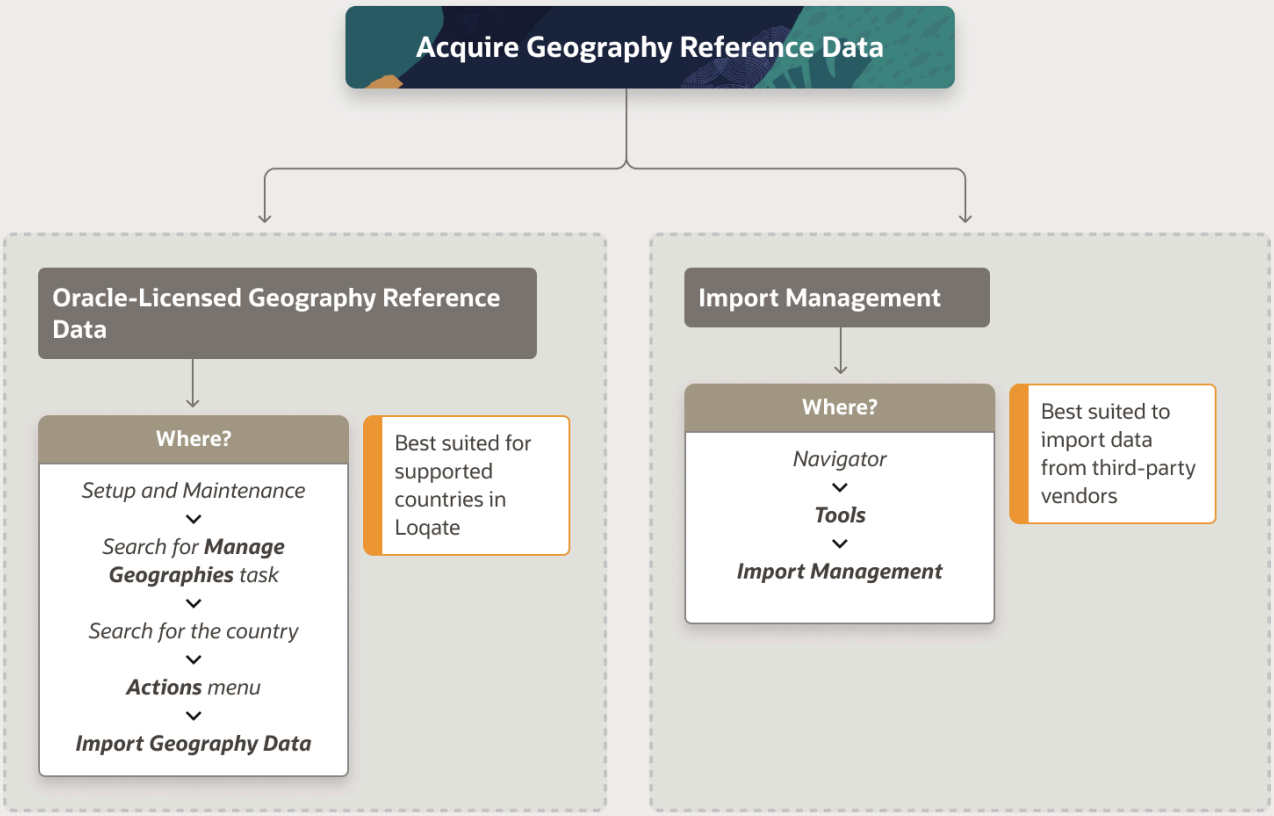
1. Open the **Manage Administrator Profile Values** task from the implementation project or by searching for it in the Setup and Maintenance work area. The Manage Administrator Profile Values page appears.
2. In the Profile Display Name field located in the Search: Profile Option region, enter Geography Address Validation Enabled.
3. Click **Search**.
4. With the profile option selected in the search results, select **Yes** from the Profile Value list.
5. Click Save and Close.

5 Manage Geography Data

How do I acquire Geography Reference Data?

You can import geographies using either Oracle-licensed geography reference data or Import Management.

You can acquire geography reference data in the following ways:


Acquire Geography Reference Data
Oracle-Licensed Geography Reference Data
Where?
Setup and Maintenance
Search for Manage Geographies task
Search for the country
Actions menu
Import Geography Data
Best suited for supported countries in Loqate
Import Management
Where?
Navigator
Tools
Import Management
Best suited to import data from third-party vendors

Note: The processing time for importing geography data can vary based on several variables, such as, the volume of data to be loaded and it could take several hours to complete.

Oracle-Licensed Geography Reference Data

You can import Oracle-licensed data from Loqate, for those countries where the data is available. For more information about the supported countries, see the List of Available Countries with Loqate Geography Reference Data topic. You can import geography data using the **Manage Geographies** task. Search for the country, and select **Import Geography Data** from the **Actions** menu. If the licensed data isn't available or is already set up for a particular country, then the **Import Geography Data** action is disabled.

Note:

- If you are licensed to use HCM Cloud Payroll for the United States, you must import your geography data from Vertex. For more information, see the United States Payroll implementation and administering guides.
- If you are licensed to use HCM Cloud Payroll for Canada, you can import your geography data from either Loqate, or your own geography data vendor. Loqate is the Oracle-licensed geography vendor across all Oracle applications, but it isn't mandatory. You may use any other geography vendor, but it must be comparable in structure by using a 2-character province code. For more information, see the Canada Payroll implementation and administering guides.
- By exporting this "Geography" data from the Oracle environment to Your environment, You agree that (a) Oracle is granting You only a restricted right to download the exported data specifically for Your use with the Oracle Fusion services, (b) this data may not be used, transferred, or uploaded for any other purposes; and (c) except for the restricted right granted in (a), all provisions of the Oracle Cloud Services Agreement (CSA) or Schedule C, as applicable to You, remain in full force and effect, including specifically section 3.4 thereof.
- Geography Round-Trip Export Import is currently not supported.

Import Management

The Import Management process reads the data included in your XML or text file and imports the data into the application.

To access Import Management functionality, go to **Navigator** > **Tools** > **Import Management**

For more information, see the Import Your Geography Data topic.

Import Geography Data is disabled for a country if the geography data for that country isn't available from Loqate or if the geography structure or hierarchy is already defined for that country. The existing master geography hierarchy can be from Loqate or non-Loqate. For example, Pakistan isn't supported currently in the supported list of 82 countries. If you try to import geography data for Pakistan after defining geography structure or geography hierarchy for it, Pakistan would be grayed out in the import list.

Related Topics

- Setup Data Import and Export for Oracle Accounting Hub Cloud
- Create Legal Jurisdictions, Addresses and Authorities

Import Geography Reference Data Licensed by Oracle

You can use this procedure to import geography reference data licensed by Oracle. If the data you want to import is unavailable in Loqate or is already imported, then the Import Geography Data action is disabled.

> **Note:** The geography data is provided by Loqate and is third-party content. As per Oracle policy, this software and documentation may provide access to or information about content and services from third parties. Oracle and its affiliates aren't responsible for and disclaim all warranties of any kind with respect to the third-party content and services. Oracle and its affiliates aren't responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

To import geography data:

1. Sign in as a setup user having the role Master Data Management Applications Administrator.
2. Open the Manage Geographies task from the implementation project. Or you can go to **Navigator** > **My Enterprise** > **Setup and Maintenance** > **Tasks** and search for Manage Geographies. Alternatively, in the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
3. Enter either the country name in the **Country Name** field or the two-letter ISO code of the country in the **Country Code** field.

    Examples of ISO country codes include US (United States) and AT (Austria).
4. Click **Search**.

    The Search Results display the country.
5. Select the country in the search results. Don't click the link.
6. Select **Import Geography Data** from the **Actions** menu.

    > **Note:** The Import Geography Data action is disabled if the country isn't available from Oracle Address, Email, and Phone Verification Loqate or if the country data is already imported.

7. Click **OK** to close the warning message.
8. Click **OK** to close the confirmation message.

The import of larger countries may require several hours to complete. You can track the progress of the import process by selecting **Scheduled Processes** from the Navigator menu.

After the import is complete, you can search for the country again in the Manage Geographies page. Check marks now appear in the **Structure Defined** and **Hierarchy Defined** columns indicating that the import completed successfully.

The **Geocoding Defined** and **Address Cleansing Defined** columns are used for additional features that you set up separately:

- Geocoding enables mapping features in your application, such as the display of customer locations on a map in the UI. For details, see the topic: Enable Address Mapping.
- Address cleansing makes it possible to validate addresses down to the street level. Address cleansing requires you to obtain a separate license for Oracle Address, Email, and Phone Verification.

Note: Report any issues with Loqate data to Oracle Support who will contact the appropriate team for correction. Alternatively, you can make manual changes to the geography data by using the Manage Geographies task in the Setup and Maintenance work area. If you decide to use geography data from another data provider, then Oracle Support can delete the data and you can then load your data using Import Management.

List of Available Countries with Loqate Geography Reference Data

Oracle Applications Cloud provides third-party Loqate geography data for import. Here's the list of countries for which the Loqate geography data is available for import.

Country Name	Country Code
Andorra	AD
Angola	AO
Argentina	AR
Australia	AU
Austria	AT
Belgium	BE
Bolivia	BO
Bosnia and Herzegovina	BA
Brazil	BR
Bulgaria	BG
Canada	CA

Country Name	Country Code
Cayman Islands	KY
Chile	CL
China	CN
Croatia	HR
Cuba	CU
Cyprus	CY
Czech Republic	CZ
Denmark	DK
Dominican Republic	DO
Ecuador	EC
Estonia	EE
Finland	FI
France	FR
Germany	DE
Great Britain	GB
Greece	GR
Guadalupe	GP
Guam	GU
Guernsey	GG
Hungary	HU
Iceland	IS

Country Name	Country Code
India	IN
Indonesia	ID
Ireland	IE
Isles of Man	IM
Israel	IL
Italy	IT
Jamaica	JM
Japan	JP
Jordan	JO
Kenya	KE
Latvia	LV
Liechtenstein	LI
Lithuania	LT
Luxembourg	LU
Malaysia	MY
Malta	MT
Martinique	MQ
Mexico	MX
Netherlands	NL
New Zealand	NZ
Norway	NO

Country Name	Country Code
Oman	OM
Peru	PE
Poland	PL
Portugal	PT
Puerto Rico	PR
Qatar	QA
Reunion Island	RE
Romania	RO
Russia	RU
San Marino	SM
Singapore	SG
Slovakia	SK
Slovenia	SI
South Africa	ZA
South Korea	KR
Spain	ES
Sri Lanka	LK
Swaziland	SZ
Sweden	SE
Switzerland	CH
Taiwan	TW

Country Name	Country Code
Thailand	TH
Tunisia	TN
Turkey	TR
United Arab Emirates	AE
United States	US
Uruguay	UY
Vatican City	VA
Vietnam	VN

Import Your Country Structure Data

You can use Import Management to create Country Structure records. It is recommended you use Import Management only if you're importing high-volume third-party data.

If you 're importing licensed data from one of our vendors, then you can create the country structure by navigating to **Setup and Maintenance** > **Manage Geographies Task** page.

To import Country Structure records, perform the following tasks:

1. Map your source data to Oracle Applications Cloud object attributes.
2. Create source Comma Separated Values (CSV) file for import.
3. Create the import activity.
4. Review the import results.

How You Map Your Source Data to Target Object Attributes

To import your Country Structure data into Oracle Applications Cloud, you need to populate a CSV file with your source data and map that source data to target object attributes in Oracle Applications Cloud.

You need to do the following before creating the CSV file for data import:

- Identify how your source data attributes map to the target object attributes in Oracle Applications Cloud.
- Identify the target object attributes that are required in the CSV file for a successful import.

Required Attributes and Validations for Country Structure Object

To import data successfully into Oracle Applications Cloud, your CSV file must include values for the required attributes. This table lists the required attributes for importing new Country Structure records, prerequisite setup tasks for the attributes, and specific validations, if any, for Country Structure import:

Attribute	Description	Prerequisite Setup Task/ Import Validations	Creating a Country Structure Record
CountryCode	The code for the country for which the country structure is applicable.	The GeographyType has to be "Country" and the LevelNumber has to be "1" for a country. You can't pass different country codes when importing a record.	Yes
GeographyType	Geopolitical divisions such as Country, State, City, and so on. For example, for US the different geography types would be State, County, City, and Postal Code. For India, the different geography types would be State, District, City, and Postal Code. For Mexico, it would be State, Municipality, Locality, and Postal Code.	The country has to be present.	Yes
LevelNumber	You need these to create parent-child relationships between geography types for your country. The values can be 1, 2, 3, and so on.	To define a country, you must specify the LevelNumber as 1.	Yes

You can view the Country Structure object and its attributes in the Manage Import Objects page of the Import Management flow. You can find attribute information like type, length, description, and so on, on the Manage Import Objects page. You can view the list of valid values for country codes in the UI by navigating to the Manage Geographies task and searching with % as the Country Code value. For more information on Geographies, see Overview of Geographies, Geographic Entities, and Locations in the Related Topics section.

Note: Note the following:

- The import job will fail if you try to load any already existing country structure. Delete the existing country structure in the UI in Manage Geographies Tasks and import again.
- You can't load additional lower geography structure levels for an existing country structure while importing geography country structure. You can add additional geography levels in the UI for an existing country structure in the Manage Geographies task page.

Create the Source CSV File

You include the data that you want to import into Oracle Applications Cloud in a source CSV file.

You can use the templates available in the Import Objects UI page to create the source CSV file. To download a template:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Objects**.

2. Select the **Country Structure** object in the table and click **Download**.

You can now edit the downloaded file and provide values for the required attributes.

Note: For help in populating the CSV file and to avoid any issues in entering values, see the topic Potential Issues When Opening CSV Files With Excel in Related Topics section.

Create the Import Activity

After you have the CSV file ready, create an import activity to import the information. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select Country Structure from the **Object** drop-down list.
4. Select the CSV file in the **File Name** field, and click **Next.**
5. You would see that the source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Click **Validate Data** to check the file for unmapped columns or data format issues. Click **Next.**
7. Review the import details on the **Review and Submit** page, and click **Submit** when you're ready.

Review the Import Results

Check if your import succeeded on the **Manage Imports** page. This page shows the status of all active, completed, and unsuccessful imports. To check the status of the import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click All Imports and search for the import activity that you created earlier.
3. Check the **Status** column for the import activity. The import is successful if the status displays as **Completed**. You can drill down on the import activity to go to the **Import Status** page which provides the status details of the import activity. Here, you can download and review the successfully imported user data records, the mapping details used for import activity, and the data file that you provided in CSV format.

Related Topics

- Overview of Geographies, Geographic Entities, and Locations
- How do I manage geography validation?
- Potential Issues When Opening CSV Files in Excel
- How do I import data?

Example of Importing Country Structure Data

You use the country structure of a country to define which geography types are part of the country and how the geography types are hierarchically related within the country.

For example, you can create geography types called State, City, and Postal Code. Then you can rank the State geography type as the highest level within the country, the City as the second level, and the Postal Code as the lowest level within the country structure.

To add a country structure using import management, your source file must contain information about the country to which the country structure belongs. You can view the list of valid values for country codes in the UI by navigating to the Manage Geographies task and searching with % as the Country Code value. You also need to specify the level at

which the geography types need to be placed. By default, all countries are at Level 1. You create the country structure by increasing the level number as you go down the country structure. You place the geography types such as states, provinces, and so on at Level 2, districts or counties at Level 3, and so on. To add a country structure, your source file must include the values that let the import process identify the existing records.

Sample Input CSV File

You include the data that you want to import into CX Sales and Fusion Service in a source CSV file. Here is a sample input CSV file for country as US.

CountryCode	LevelNumber	GeographyType
US	1	COUNTRY
US	2	STATE
US	3	COUNTY
US	4	CITY
US	5	POSTAL CODE

Here is another input CSV file for importing the country structure for India.

CountryCode	LevelNumber	GeographyType
IN	1	COUNTRY
IN	2	STATE
IN	3	DISTRICT
IN	4	CITY
IN	5	POSTAL CODE

In case you want to import the country structure for Mexico, your input CSV file would look like this:

CountryCode	LevelNumber	GeographyType
MX	1	COUNTRY
MX	2	STATE
MX	3	MUNICIPALITY

CountryCode	LevelNumber	GeographyType
MX	4	LOCALITY
MX	5	POSTAL CODE

In this example, we are importing the Country Structure for US. You must create a source file (CSV) file with the attributes as shown in this table and import it using Import Management.

Attribute Name	Value	Description
CountryCode	US	The code for the country for which the country structure is applicable.
LevelNumber	1	The level number of the geography in the hierarchy. For example, Country is at Level 1 (Top level) and State (California) is at Level 2. You need these to create parent-child relationships between geography types for your country.
GeographyType	COUNTRY	Geopolitical divisions such as Country, State, City, and so on. For example, for US the different geography types would be State, County, City, and Postal Code. For India, the different geography types would be State, District, City, and Postal Code. For Mexico, it would be State, Municipality, Locality, and Postal Code.

Create an import activity to import the information. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select **Country Structure** from the Object drop-down list.

   > **Note:** In the **Advanced Options** section, the option **Enable High-Volume Import** is selected by default. This mode is designed to import millions of records at once.

4. Select the CSV file in the **File Name** field, and click **Next**.
5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next**.
7. Review the import details on the **Review and Submit** page, and click **Submit**.

Importing Third Party geography reference data using Import Management

This example demonstrates how to import third party geography reference data using Import Management.

In this example, you have a source file containing geography data that you want to import into the application to make the geography data available for real time address validation and tax purposes. A geography is any region with a boundary around it, regardless of its size. It might be a state, a country, a city, a county, or a ward.

Summary of the Tasks

You perform the following steps to create an import activity and activate the import:

1. Determine what information is in the source file.
2. Create and schedule the import activity.

Before You Start

1. You use the country structure of a country to define which geography types are part of the country. For more information about an example of importing a country structure, see the topic "Example of Importing Country Structure Data".
2. Ensure that Source ID values are unique for each row of data within a single import.
3. Ensure that all the parents of a child geography are included in your data file so that the child geography can be added. For example, if you originally imported US, CA, and San Francisco, and now you want to import the city of San Jose in CA, then your data file must include US, CA, and San Jose.
4. Check that your source data file has the correct values for the geography data that you have already loaded. For example, if your initial import included the value US for country and CA as state, and in a subsequent import you have California as a state, then your geography import creates two state records (CA and California) in the application data, with the US as the country parent.

Determine the Information in the Source File

The source geography data files must include a unique Source ID value for each row of data and Parent Source ID value for the parent of that row of data. You include the data that you want to import into CX Sales and Fusion Service in a source CSV file. A sample input CSV file for country as US is shown in this table.

RecordTypeCode	PrimaryGeography	CountryCode	LevelNumber	SourceId	ParentSourceId	LanguageCode
0	`United States`	US	1	1	<blank>	US
1	`California`	US	2	11	1	US
1	`San Mateo`	US	3	111	11	US
1	`Redwood City`	US	4	1111	111	US
1	`94065`	US	5	11111	1111	US

RecordTypeCode	PrimaryGeography	CountryCode	LevelNumber	SourceId	ParentSourceId	LanguageCode

Here is a sample CSV file to import geographies with alternate name and code for country India:

RecordType	PrimaryGeogr	CountryCode	LevelNumber	SourceId	ParentSOurcel	IdentifierType	IdentifierSubT	IdentifierValue
0	`India`	IN	1	1				
1	`Karnataka`	IN	2	2	1			
1	`Bengaluru`	IN	3	3	2			
2	`Bengaluru`	IN	3	3	2	NAME	Standard_ Name	`Bangalore`
1	`Whitefield`	IN	4	4	3			
1	`560066`	IN	5	5	4			
2	`560066`	IN	5	5	4	CODE	ISO_ COUNTRY_ CODE	91

Note: Keep a note of the following:

- The hierarchy is modeled in the CSV file using the SourceId and ParentSourceId. The ParentSourceId for the Country Record (level Number 1) is always null.
- If defining an alternate name (`RecordTypeCode` = 2) for any level below the country (`LevelNumber` >1), ensure that the SourceId and ParentSourceId columns match the values for the original record respectively.
- You can't update geographies via import.
- You can't add alternate names or alternate code of country via import. You can do so only via UI.
- Before adding a new alternate name, make sure that the alternate name doesn't exist with the same value for any other geography name. You can check the existing values for alternate names in the Manage Geographies task page under Hierarchy Defined.
- You can find the list of IdentifierSubTypes in Manage Geography Lookups page in the UI.
- PrimaryGeographyCodeType and PrimaryGeographyCode can't be added after PrimaryGeographyName is created via import (CSV) just create them together. Alternatively, you can add PrimaryGeographyCodeType and PrimaryGeographyCode from the UI after the import is complete.

You must create a source file (CSV) file with the attributes and import it using Import Management as shown in this table.

Attribute Name	Value	Description
RecordTypeCode	1	The record type code that represents the intent of the import data. The values are: • 0 - indicates the geography that already exists in the base table. • 1 - indicates the intent to create a new geography. • 2 - indicates the intent to add an alternate identifying name or code to an existing geography.
PrimaryGeographyName	India	This is the primary geography name. This will be marked as the primary name for the Geography and also displayed in the Manage Geographies Page.
CountryCode	IN	This indicates the Country Code for the country for which you're importing data.
LevelNumber	2	The level number of the geography in the hierarchy. For example, Country is at Level 1 and State (California) is at Level 2.
SourceId	2	The source ID for the geography, along with the parent source ID is used to identify the geography parent and child relationship within the source file data and the interface table data.
ParentSourceId	1	The parent source ID for the geography, along with the source ID is used to identify the geography's parent and child relationship with records within the source file data. This should be null for the country record, as Country is at the top of the hierarchy.
IdentifierType	Name	The type of the identifier. It can be either Name or Code.
IdentifierSubtype	Standard_Name or Standard_Code	The IdentifierSubtype can be Standard_Name or Secondary_Name. The default value is Standard_Name. The valid Sub Types for Type "CODE" are FIPS_CODE, GEO_CODE, ISO_COUNTRY_CODE, PRIMARY_CITY, or UNKNOWN
IdentifierValue	Bangalore	The value of the identifier.

You can create an import activity, enter the import details, and schedule the import.

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.

2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select **Geography** from the Object drop-down list.

> **Note:** In the **Advanced Options** section, the option **Enable High-Volume Import** is selected by default. This mode is designed to import millions of records at once.

4. Select the CSV file in the **File Name** field, and click **Next**.
5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next**.
7. Review the import details on the **Review and Submit** page, and click **Submit**.

How do I replace the existing master geography data with revised Oracle-Licensed geography data?

Before you replace existing geography data, you must check its impact on all parts of the application. You can then import and set up reference geography data for the countries where you do business.

Using the Oracle-licensed geography reference data, you no longer have to source geography data from a third party. You can import Oracle-licensed data from Loqate, including the country structure and hierarchy information, either to create a new geography setup or replace your existing geography data.

All customers with the exception of United States HCM Payroll customers, can use the information in this section to replace existing geography data with Loqate geography data. You can follow these steps if you're using Nokia or any other geography data and now want to move to Loqate geography data.

Before you begin, perform the following steps:

- Backup existing geography data including customizations, if any.
- Backup territory geographies.
- Perform impact analysis by contacting the support team to identify the use of geography IDs downstream.

> **Note:** Before deleting the geography data, make sure that GEOGRAPHY_ID isn't referenced in any downstream applications such as TAX, FIN, Legal, and so on. Geography data is used across Oracle Cloud applications such as Human Capital Management, TAX, and Legal. Global Single Instance POD users share the same geography data and before deleting geography data, the geography usage POD analysis is required. The Oracle Support team can help you identify the downstream impact.

The process of replacing the existing master geography data with revised Oracle-Licensed geography data is depicted in this diagram:

Create an Export File of All Territories

Where?

Setup and Maintenance
⌄
Search for ***View Active Territories*** *task*
⌄
Actions
⌄
Export
⌄
Export Selected Territory Hierarchy

Delete the Territory Geography Data

Where?

Setup and Maintenance
⌄
Search for ***Manage Territory Geographies*** *task*
⌄
View All Hierarchies
⌄
Highest level country node
⌄
Delete

Delete the Master Geography Data

Where?

Setup and Maintenance
⌄
Search for ***Manage Geographies*** *task*
⌄
Select country and click ***Actions***
⌄
Manage Geography Structure
⌄
Delete each level of the structure

Import Oracle-Licensed Geography Reference Data

Where?

Setup and Maintenance
⌄
Search for ***Manage Territory Geographies*** *task*
⌄
Enter country name or ISO code and Search
⌄
Select country, go to ***Actions***
⌄
Import Geography Data

Run the Geography Name Referencing Process

Where?

Tools
⌄
Scheduled Processes
⌄
Schedule New Process
⌄
Search for and run ***Validate Geographies of Addresses Against Master Geographies***

Recreate and Load the Territory Geography Data

Where?

Setup and Maintenance
⌄
Search for ***Enable Dimensions and Metrics*** *task*
⌄
Actions
⌄
Load and Activate

Restore the Invalid Territory Definitions

Where?

Create an Export File of All Territories

In case you have implemented Customer Data Management along with the sales functionality, you must export all territories before deleting the master geography data because removing the master geography data invalidates the territory definitions that are based on the Geography dimension. You can either export the definitions of all territories to a file or make manual corrections. If there are a large number of territories, export the territories definition to a file for the territories import process. However, if there are very few affected territories, then you can choose to either export the territories definition to a file or make corrections manually.

This procedure is applicable only if there are territories defined using the Geography dimension.

Perform the following steps to create an export file of all territories.

1. From the Territories and Quotas work area, click **View Active Territories** in the Tasks pane.
2. In the View Active Territories page, select the territory at the highest level.
3. Click the **Actions** list, and select **Export**, and then **Export Selected Territory Hierarchy**.
4. In the Warning dialog box, click **OK**.
5. Click the **Actions** list and select **Export**, and then **View Export** Status.
6. Review the status of the export job and verify if it has completed successfully.
7. In the Exported Data File column, click the .zip file against your export job, and click **Save**. All the territories are exported to a compressed file on your system.
8. Click **OK**.
9. Click **Done** in the View Active Territories page.

Delete the Territory Geography Data

A territory definition has references to the territory geography data and master geography data. Territory geography data is based on the master geography data, in case you have implemented Customer Data Management along with the sales functionality, you must delete the territory geography data prior to deleting the master geography data. When you delete the territory geography data, all territories that are defined using geography dimension become invalid.

This procedure is applicable only if territory geographies are defined.

Perform the following steps to delete the territory geography data.

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Sales
    - Functional Area: Territories
    - Task: Manage Territory Geographies
2. On the Manage Territory Geographies page, click **View All Hierarchies**.
3. Select the highest level node for the country for which you want to replace the master geography data and click the **Delete** icon.
4. In the Warning dialog box, click **OK**.
5. In the Confirmation dialog box, click **OK**. The parent node of the territory geography data and its children are deleted.
6. Repeat steps 3 to 5 to delete all the higher nodes in the territory geography data.
7. Click **Save and Close**.

The Territory Management application retains a copy of the dimension members referenced in the territory definitions. This copy is updated when you trigger the **Load and Activate** process from the **Enable Dimensions and Metrics** task. Therefore, although the territory geography data is deleted, the territory definitions may appear to remain valid.

Delete the Master Geography Data

Delete the existing geography data one country at a time. We recommend that you raise a service request for assistance in deleting the geography data.

Delete Geography Structure

If you have created a geography structure, it prevents the geography imports from working or working as desired. For example, if the geography structure exists, the Import Geography option may not be enabled for a country in Manage Geographies even if Loqate predefined geography data is available for that country and the geography hierarchy doesn't exist yet.

> **Note:** If any geography hierarchy was created manually, it must be deleted first.

If the geography structure was created manually, you can follow these steps to delete it. However, we recommend that you raise a service request for assistance in deleting the geography structure.

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. On the Manage Geographies page, enter either the country name or the two-letter ISO code (for example, US), and click Search.
3. Select the country in the search results and click **Actions** > **Manage Geography Structure**.
4. In the Manage Geography Structure page, delete each level of the structure.
5. Click Save and Close.

You can now proceed to importing geography data.

> **Note:** If other setup or transaction data exists that's based on the geography data, replacement procedures for that setup must also be followed.

Import Oracle-Licensed Geography Reference Data

Use this procedure to import Loqate geography data on the Manage Geographies UI page one country at a time. If the country data you want isn't supported by Loqate geography seed data and point the Loqate supported country list here, then the Import Geography Data action is disabled.

The geography data is provided by Loqate and is third-party content. As per Oracle policy, this software and documentation may provide access to or information about content and services from third parties. Oracle and its affiliates aren't responsible for and expressly disclaim all warranties of any kind with respect to third-party content and services. Oracle and its affiliates aren't responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Perform the following steps to import Oracle-licensed geography reference data.

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile

- Task: Manage Geographies

  Alternatively, you can go to **Navigator** > **My Enterprise** > **Setup and Maintenance** > **Tasks** and search for Manage Geographies.

2. On the Manage Geographies page, enter either the country name or the two-letter ISO code (for example, US), and click **Search**.
3. Select the country in the search results.
4. Click the **Actions** list, and select **Import Geography Data**.

   > **Note:** Import Geography Data is disabled for a country if the geography data for that country isn't available from Loqate or if the geography structure or hierarchy is already defined for that country. The existing master geography hierarchy can be from Loqate or non-Loqate.

5. In the Warning dialog box, click **OK**.
6. In the Confirmation dialog box, click **OK**.

The import of larger countries may require several hours to complete. Note that countries may have different amount of data depending on the structure and the data can grow exponentially which correlates with different load times.

You can track the progress of the import process by selecting Scheduled Processes from the Navigator.

> **Note:** To access the Scheduled Processes work area, you must be signed in as a user with the Employee abstract role. The initial user doesn't have this role assigned, but the other users you created do.

After the import is complete, you can search for the country again in the Manage Geographies page. Check marks now appear in the **Structure Defined** and **Hierarchy Defined** columns indicating the import completed successfully.

Next, click the **Validation Defined** icon to define the validations, enable List of Values, and choose address style format for a country as set up before. For more information, see the Geography Validation topic.

The **Geocoding Defined** and **Address Cleansing Defined** columns are used for additional features which you must license from Oracle and set up separately.

- Geocoding makes it possible to display customers in the vicinity of a mobile address. You set up **Geocoding Enabled** for those countries where you're using Around Me functionality in CX Sales Cloud Mobile.
- Cleansing makes it possible to validate addresses down to the street level.

Add any geography customizations.

Run the Geography Name Referencing Process

The Geography Name Referencing (GNR) process validates address elements in location tables, such as HZ_LOCATIONS, against the master geography data.

Run the GNR process in the following situations:

- When you are using geography based address validation (not third party address validation services).
- GNR data is needed for your business processes (such as ERP Tax).

> **Note:** Note: You can't update existing data, such as effective start date, in the GNR process tables for the locations.

Perform the following steps to run the GNR process.

1. Navigate to **Tools** > **Scheduled Processes** work area.
2. On the Overview page, click **Actions** > **Schedule New Process**.
3. Click the **Name** list and search for **Validate Geographies of Addresses Against Master Geographies**, and then click **OK**.
4. Click **OK** in the Schedule New Process dialog box.
5. In the Process Details dialog box, enter the following details:
    - **Location Table Name**: HZ_LOCATIONS
    - **Run Type**: ALL
    - **Usage Code**: GEOGRAPHY
6. Enter the country code in the Country Code field.
7. Click **Submit**.
8. In the Confirmation dialog box, click **OK**.
9. Click **Close**.
10. In the Scheduled Processes page, click the **Refresh** icon.
11. Verify if the status of the process has completed successfully.

Find the locations failing in Geography Name References using: https://cloudcustomerconnect.oracle.com/posts/b1e16b06ae. Fix Geography Name References failures by updating addresses with the latest geography data.

Recreate and Load the Territory Geography Data

In case you have implemented Customer Data Management along with the sales functionality, you can recreate the territory geography data, after the master geography data is imported, using either of the following methods:

- Import process: If you created the original territory geography data using the import process, then use the same import file to recreate the territory geography structure. For more information about importing the territory geography data using Import Management, see Import Your Sales Territory Data in the Oracle CX Understanding Import and Export Management for Sales and Fusion Service guide.
- Manual creation process: You can manually recreate the territory geography data structures, as they existed before their deletion, using the Manage Territory Geographies task. For more information about creating zones and adding geographies to a zone, see *Managing Territory Geographies*.

After you have recreated the territory geography data, perform the following steps to load the data.

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Sales
    - Functional Area: Territories
    - Task: Enable Dimensions and Metrics
2. On the Enable Dimensions and Metrics page, click the **Actions** list, and select **Load and Activate**. The process loads the territory geography data to make dimension members available for selection when defining territories.
3. In the Confirmation dialog box, click **OK**.
4. Click **Done**.

Restore the Invalid Territory Definitions

After recreating the territory geography hierarchies and running the Load and Activate option from the **Enable Dimensions and Metrics** task, the geography dimensions are populated with the new geography members. The geography members in the territory appear as invalid because your territories still reference the old copies of the dimension members that were deleted. The new members aren't referenced automatically by the territories. You must re-reference the territory definitions from the old geography dimension members to the new ones.

You can restore the invalid territory definitions by either importing the previously created export file or making manual corrections to the territories.

To restore valid territory definitions using territories import:

1. Open the export file you saved in the Creating an Export File of All Territories step. The compressed file contains four CSV files.
2. Open **TERR_HEADER.CSV** file.
3. Enter **REPLACE** in the Action column for all territories that are based on geography dimension.
4. Save the file in CSV format and compress it together with three other CSV files.
5. From the Territories and Quotas work area, click **View Active Territories** in the Tasks pane.
6. Click the **Actions** list, and select **Import to Proposal**, and then **Import Territories**.
7. Select the newly created compressed file and click **OK**.
8. Click the **Actions** list and select **Import to Proposal**, and then **View Import Status**.
9. Review the status of the export job and verify if it has completed successfully.
10. Click **OK**.
11. From the Tasks pane, click **Manage Territory Proposals**.
12. In the Manage Territory Proposals page, on the Current Territory Proposals table, search for the proposal with your import file name.
13. Click the import file name to open the territory proposal.
14. Click **Edit Coverage** to verify that the territory definitions are valid.
15. Verify that there are no values listed as invalid in the Selected Dimension Members section.
16. Click **Save and Close**.
17. Click **Activate**. The territory proposal of your import file is activated.

To restore valid territory definitions through manual corrections:

1. From the Territories and Quotas work area, click **Manage Territory Proposals** in the Tasks pane.
2. In the Manage Territory Proposals page, click the **Create** icon.
3. In the Create Territory Proposals dialog box, enter a name and click **Save and View**.
4. In the Territory Proposals page, add all the territories with the Geography dimension value other than the value Any to the proposal.
5. Select a territory and click **Edit Coverage**.
6. In the Edit Coverage page, select **Geography** from the Dimensions list. The invalid dimension members are displayed in the Selected Dimension Members pane.
7. Expand the values in the Available Dimension Members section or search for the member that has the same name as the one marked invalid in the Selected Dimension Members pane.
8. Select one or more new geography dimension members from Available Dimension Members pane and click **Add** icon to the Selected Dimension Members pane.
9. Click the **Remove** icon to remove the invalid members from the Selected Dimension Members pane.
10. Click **Save and Close**.
11. Repeat steps 4 to 10 for all territories that were based on Geography dimension.

12. Click **Activate**. After the activation process is complete, your territory definitions are valid again and are referencing to the new geography data.

Although this method is always applicable, it's most appropriate when you have to restore territory definitions for a smaller number of territories.

To run the batch assignment process for opportunities:

1. From Navigator, click **Scheduled Processes**.
2. In the Schedule Processes page, click **Schedule New Process**.
3. In the Schedule New Process dialog box, search for the **Request Revenue Territory Assignment** process and select it.
4. Click **OK**.
5. In the Process Details dialog box, enter **OpenOpportunitiesByCreationDate** in the View Criteria Name field. This selects all revenue lines belonging to open opportunities that were created in the last 'X' days.
6. Enter **BindOptyCreationDateFrom=** followed by the date.

   For example, if BindOptyCreationDateFrom=2014-01-01, then all open opportunities which were created between 1st January 2014 till the current date, are processed.
7. Click **Submit** to schedule the process.
8. In the Confirmation dialog box, make a note of the process identifier for monitoring the process, and click **OK**.
9. Click **Close**.
10. In the Schedule Processes page, click the **Refresh** icon.
11. Review the status of the process job and verify if it has completed successfully.

> **Note:** Review a small subset of the open opportunities to confirm that the territory assignment is as expected.

To run the batch assignment process for sales accounts:

1. Ensure that the **ZCA_SA_AUTO_ASSIGN_ON_CREATE** and **ZCA_SA_AUTO_ASSIGN_ON_UPDATE** profile options are set to Yes in the **Manage Customer Center Profile Options** task.
2. From Navigator, click **Customers**.
3. In the Customers page, click **Create Account**.
4. In the Create Account page, enter a name and address of the sales account, and select the **Address is sell to** check box.
5. Click **Save and Close**.
6. From Navigator, click **Customers**.
7. In the Search pane, search for the name of the sales account you created and select it.
8. In the section Customer Information, select **Sales Account Team**. The details of the sales account and territories associated with the sales account are displayed.

   This indicates that the sales account was created successfully and the batch assignment was run automatically to assign the matching territories to the sales account.

To run the batch assignment process manually from the Scheduled Processes page, perform the following steps.

1. From Navigator, click **Scheduled Processes**.
2. In the Schedule Processes page, click **Schedule New Process**.
3. In the Schedule New Process dialog box, search for the **Request Account Assignment** process and select it.
4. Click **OK**.
5. Enter **SalesAccount_Work_Object** in the Work Object Code field and **SalesAccountTerritory_Candidate_Object** in the Candidate Object Code field.

6. Select **Territory** in the Assignment Mode list.
7. Enter **AllSalesAccountsVC** in the View Criteria Name field. This selects all sales accounts.
8. Click **Submit** to schedule the process.
9. In the Confirmation dialog box, make a note of the process identifier for monitoring the process, and click **OK**.
10. Click **Close**.
11. In the Schedule Processes page, click the **Refresh** icon.
12. Review the status of the process job and verify if it has completed successfully.

> **Note:** Review a small subset of the accounts to confirm that the territory assignment is as expected.

Verify that the downstream applications using geography data is working fine.

Import Your Geography Zone Data

You can use Import Management to create, update, or delete Geography Zone records. Zones are geographical boundaries for a zone type, for example, the San Jose Tax zone. Zones are based on the master reference geography hierarchy data.

To import Geography Zone records, perform the following tasks:

1. Map your source data to Oracle Applications Cloud object attributes.
2. Create source Comma Separated Values (CSV) file for import.
3. Create the import activity.
4. Review the import results.

How You Map Your Source Data to Target Object Attributes

To import your Geography Zone data into Oracle Applications Cloud, you need to populate a CSV file with your source data and map that source data to target object attributes in Oracle Applications Cloud.

You need to do the following before creating the CSV file for data import:

- Identify how your source data attributes map to the target object attributes in Oracle Applications Cloud.
- Ensure prerequisite setups are done, if applicable.
- Understand your options for uniquely identifying the records.
- Ensure parent records exist before importing child records.
- Identify the target object attributes that are required in the CSV file for a successful import.

Before You Start

You must do some basic checks before starting your import. For example, make sure that:

- Your CSV file is ready.
- You have created the *Geography Type* in the UI.
- You have completed all the prerequisites for importing each attribute in your source data.

- You have all parent records in place before importing child records.

Select a Unique Identifier for Your Records

All records must be unique in the application. You can use one of these to identify records:

- Public unique identifiers: If you're creating records, then you can provide an easily understandable public unique identifier. These are, usually, denoted with 'Number' and visible in the business object's UI. PUID attributes are usually named <object> Number. If you're updating a record with a Number attribute, then use the Number attribute to identify the record. For more information about public unique identifiers, see *How You Use Alternate Keys to Import Records*

Required Attributes and Validations for Geography Zone Object

To import data successfully into Oracle Applications Cloud, your CSV file must include the required attributes. Ensure that you provide valid values for the attributes. This table lists the required attributes for importing new Geography Zone records, required attributes for updating Geography Zone records, prerequisite setup tasks for the attributes, and specific validations, if any, for Geography Zone import:

Required Attributes and Validations for Geography Zone Object

Attribute	Description	Prerequisite Setup Task/Import Validation	Creating a Geography Zone Record	Updating a Geography Zone Record	Deleting a Geography Zone Record
ZoneName	The name of the zone.	NA	Required	Conditionally Required. Either Zone Name or Zone Geography ID must be provided.	Conditionally Required. Either Zone Name or Zone Geography ID must be provided.
ZoneType	The type of the zone.	Zone type must be created before importing.	Required	Required	Required
ZoneCode	The code of the zone.	NA	Required	Required	Required
ZoneGeographyUse	The usage of geography zone. Value is from lookup type ORA_HZ_GEO_USAGE. Sample values are TAX, SHIPPING, ORA_COMPENSATION and ORA_SERVICE. You can't pass multiple Geography Usage in single CSV input. One CSV should have data for one usage only. You can't pass multiple Geography Usage in single CSV input. One CSV should have data for one usage only.	NA	Required	Required	Required
ZoneGeographyId	The unique identifier of the zone geography.	NA	Not Required	Conditionally Required. Either	Conditionally Required. Either

Attribute	Description	Prerequisite Setup Task/Import Validation	Creating a Geography Zone Record	Updating a Geography Zone Record	Deleting a Geography Zone Record
				Zone Name or Zone Geography ID must be provided.	Zone Name or Zone Geography ID must be provided.

You can view the Geography Zone object along with all its child objects and attributes in the Manage Import Objects page of the Import Management flow. You can find attribute information like type, length, description, and so on, on this page.

Note:

- You can only export the Geography Zone data which are linked to Geographies. Zone data which do not have any Geography data will not get exported.
- "PrimaryRecordNum" is an internal column and can't be used to import or export Geography Zones.
- Once you delete the data it can't be restored. It's recommended to have a backup of the existing data before deleting using *export management*.

Create the Source CSV File

You include the data that you want to import into Sales and Fusion Service in a source CSV file.

You can use the CSV templates available in the Import Objects UI page to create the source CSV file. To download a CSV template:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Objects**.
2. Select the **Geography Zone** object in the table and click **Download**.

You can now edit the downloaded file and provide valid values for the required attributes.

Note: For help in populating the CSV file and to avoid any issues in entering values, see the topic *Potential Issues When Opening CSV Files With Excel*

Create the Import Activity

After you have the CSV file ready, create an import activity to import the information. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select Geography Zone from the **Object** drop-down list.
4. Select the CSV file in the **File Name** field, and click **Next.**
5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next.**

7. Review the import details on the **Review and Submit** page, and click **Submit** when you're ready.

Review the Import Results

Check if your import succeeded on the **Manage Imports** page. This page shows the status of all active, completed, and unsuccessful imports. To check the status of the import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click All Imports and search for the import activity that you created earlier.
3. Check the **Status** column for the import activity. The import is successful if the status displays as **Completed**. You can drill down on the import activity to go to the **Import Status** page which provides the status details of the import activity.

Related Topics

- Overview of Zone Types and Zones
- How do I manage Geography Structures, Hierarchies, and Validation?

Examples of Managing Geography Zone Data

You can use import management to add master geography to a zone, update zone relationship start or end date, and delete a zone relationship. Zones are geographical boundaries for a zone type, for example, the San Jose Tax zone. Zones are based on the master reference geography hierarchy data. Zone types categorize and group zones together, for example, the zone types of Income Tax and Shipping Regions.

Before You Start

You must do some basic checks before starting your import. For example, make sure that:

- Your CSV file is ready.
- You have created the *Geography Type* in the UI.

Required Attributes and Validations for Input CSV File

To import data successfully into Oracle Applications Cloud, your CSV file must include values for the required attributes. This table lists the required attributes to add master geography to a zone, update zone relationship start or end date, and delete a zone relationship:

Required Attributes and Validations Input CSV File

Attribute	Description	Add Master Geography to a Zone	Update Zone Relationship Start or End Date	Delete a Zone
ZoneType	The type of the zone.	Required	Required	Required
ZoneGeographyUse	The usage of geography zone. Value is from lookup type ORA_HZ_GEO_USAGE. Sample values are TAX, SHIPPING, ORA_COMPENSATION and ORA_SERVICE.	Required	Required	Required
ZoneName	The name of the zone.	Conditionally Required. Either Zone Name or Zone	Conditionally Required. Either Zone Name or Zone	Conditionally Required. Either Zone Name or Zone

Attribute	Description	Add Master Geography to a Zone	Update Zone Relationship Start or End Date	Delete a Zone
		Geography ID needs to be provided.	Geography ID needs to be provided.	Geography ID needs to be provided.
ZoneGeographyId	The unique identifier of the zone geography.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.
MasterGeoCountryCode	The country code of the master geography such as US	Required	Required	Required
MasterGeoType	The type of the master geography such as STATE or COUNTY.	Required	Required	Required
MasterGeoName	The name of the master geography such as Santa Barbara, TX, CA, and so on.	Required	Required	Required
MasterGeoElement	The hierarchy of the geography based on the structure of the country. You can find the structure in hz_geo_structure_levels table.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.
MasterGeographyId	The unique identifier of the master geography.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.
ZoneRelationshipId	The unique identifier of the zone relationship.	Not Required	Conditionally Required. Either Zone Relationship ID or Master Geography Name + Master Geography Element/Master Geography Id needs to be provided.	Conditionally Required. Either Zone Relationship ID or Master Geography Name + Master Geography Element/Master Geography Id needs to be provided.
RelationshipStartDate	The date when the zone relationship starts.	Not Required	Required	Not Required
RelationshipEndDate	The date when the zone relationship ends.	Not Required	Required	Not Required

You can now create an import activity, enter the import details, and schedule the import.

Create the Import Activity

After you have the CSV file ready, create an import activity to import the information. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select Geography Zone from the **Object** drop-down list.
4. Select the CSV file in the **File Name** field, and click **Next.**
5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.

6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next.**
7. Review the import details on the **Review and Submit** page, and click **Submit** when you're ready.

Related Topics

- Overview of Zone Types and Zones
- How do I manage Geography Structures, Hierarchies, and Validation?

Examples of Managing Postal Code Range

You can use import management to add From and To postal codes to a geography zone, update start or end date of postal code range, and delete a postal code range.

Before You Start

You must do some basic checks before starting your import. For example, make sure that:

- Your CSV file is ready.
- You have created the *Geography Type* in the UI.

Required Attributes and Validations for Input CSV File

To import data successfully into Oracle Applications Cloud, your CSV file must include values for the required attributes. This table lists the required attributes to add From and To postal codes to a geography zone, update start or end date of postal code range, and delete a postal code range:

Required Attributes and Validations Input CSV File

Attribute	Description	Add From and To Postal Codes	Update Start or End Date of Postal Code Range	Delete a Postal Code Range
ZoneType	The type of the zone.	Required	Required	Required
ZoneGeographyUse	The usage of geography zone. Value is from lookup type ORA_HZ_GEO_ USAGE. Sample values are TAX, SHIPPING, ORA_ COMPENSATION and ORA_ SERVICE.	Required	Required	Required
ZoneName	The name of the zone.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.
ZoneGeographyId	The unique identifier of the zone geography.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.	Conditionally Required. Either Zone Name or Zone Geography ID needs to be provided.
MasterGeoCountryCode	The country code of the master geography such as US	Required	Required	Required

Attribute	Description	Add From and To Postal Codes	Update Start or End Date of Postal Code Range	Delete a Postal Code Range
MasterGeoType	The type of the master geography such as STATE or COUNTY.	Required	Required	Required
MasterGeoName	The name of the master geography such as Santa Barbara, TX, CA, and so on.	Required	Required	Required
MasterGeoElement	The hierarchy of the geography based on the structure of the country. You can find the structure in hz_geo_structure_levels table.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.
MasterGeographyId	The unique identifier of the master geography.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.	Conditionally Required. Either Master Geography Element or Master Geography ID needs to be provided.
ZoneRelationshipId	The unique identifier of the zone relationship.	Not Required	Conditionally Required. Either Zone Relationship ID or Master Geography Name + Master Geography Element/Master Geography Id needs to be provided.	Conditionally Required. Either Zone Relationship ID or Master Geography Name + Master Geography Element/Master Geography Id needs to be provided.
FromPostalCode	Postal code from which the zone starts.	Required	Conditionally Required. Provide value for either GeographyRangeId or FromPostalCode and ToPostalCode.	Conditionally Required. Provide value for either GeographyRangeId or FromPostalCode and ToPostalCode.
ToPostalCode	Postal code till which the zone ends.	Required	Conditionally Required. Provide value for either GeographyRangeId or FromPostalCode and ToPostalCode.	Conditionally Required. Provide value for either GeographyRangeId or FromPostalCode and ToPostalCode.
GeographyRangeId	The unique identifier of the geography range.	Not Required	Conditionally Required. Provide value for either GeographyRangeId or FromPostalCode and ToPostalCode.	Conditionally Required. Provide value for either GeographyRangeId or FromPostalCode and ToPostalCode.

You can now create an import activity, enter the import details, and schedule the import.

Create the Import Activity

After you have the CSV file ready, create an import activity to import the information. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select Geography Zone from the **Object** drop-down list.
4. Select the CSV file in the **File Name** field, and click **Next.**

5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next.**
7. Review the import details on the **Review and Submit** page, and click **Submit** when you're ready.

Related Topics

- Overview of Zone Types and Zones
- How do I manage Geography Structures, Hierarchies, and Validation?

How You Import and Export Territory Geography Zones

Territory geography zones are geographical boundaries that you can set up to replicate your organization's regions, such as a Pacific Northwest sales region.

You can set up territory geography zones in one application instance, and then after the territory geography zones are defined you can export the territory zones and import them into another application instance.

To define your territory geography zones and then import your territory zones into another application instance, you must complete the following steps:

1. Import the master reference geography data into the application.
2. Define your territory geography zones using the Manage Territory Geographies task.
3. Export the territory geography zones.
4. Import the territory geography zones into another application instance.

Import the Master Reference Geography Data

Firstly, you must import the master reference geography data. Master reference geography data includes geography elements, such as country, state, and city, and is required for any geographical information that you store in the application, such as address information used in customer and sales records. For more information, see the topic Geography Hierarchy. Master reference geography data can be imported into the application using the Import Management.

Define Your Territory Geography Zones

After the master reference geography data has been imported, you can then create your territory geography zones in the application using the Manage Territory Geographies task in Setup and Maintenance. For more information, see the *Manage Territory Geographies* topic.

Export the Territory Geography Zones

After you have completed importing the master reference geography data and defining your territory geography zone tasks, you can create a configuration package to export the territory zone data.

Import the Territory Geography Zones

After you have downloaded your configuration package for your territory geography zone setup, you can import the territory zones into another application instance.

Note: Ensure that you import your master reference geography data into the new application instance before you import the configuration package.

Related Topics

- Geography Hierarchy

Manage Territory Geographies

This example shows how to create a territory zone hierarchy using territory zone types, territory zones, and geographies.

Create a territory zone type and a top-level territory zone, then create more territory zones below the top-level territory zone, and add geographies to the zones.

Creating a Zone Type and Zone

This example shows how to define a territory hierarchy with Pacific Northwest and Pacific West as sales regions. To start the configuration of the hierarchy, you must create a zone type and zone.

1. On the Manage Territory Geographies page, Zones Hierarchies region, click **Actions** and then **Add Zone**.
2. On the Add Zone page, click **Create New Zone Type**, and enter Country Sub Division in the **Zone Type** field.
3. Create your first zone under the Country Sub division zone type by completing the fields, as shown in this table:

Field	Value
Name	West Coast Sales
Code	WEST_COAST
Start Date	1/1/11

4. Click **Submit**.

Creating Zones Below Another Zone in the Hierarchy

This example shows how to create two territory zones below the West Coast Sales zone.

1. On the Manage Territory Geographies page, Zones Hierarchies region, select the West Coast Sales zone that you have just created.
2. Click **Actions**, and then **Add Zone**.
3. On the Add Zone page, click **Create New Zone Type**, and enter Country Sub Division Regions in the **Zone Type** field.

4. Create a new zone by completing the fields, as shown in this table:

Field	Value
Name	Pacific Northwest Sales
Code	PAC_NW
Start Date	1/1/11

5. Click **Submit**.
6. On the Manage Territory Geographies page, Zones Hierarchies region, select the West Coast Sales zone again.
7. Click **Actions** and then **Add Zone**.
8. Click the **Use Existing Zone Type** option, and select the Country Sub Division Regions zone type.
9. Complete the fields, as shown in this table:

Field	Value
Name	Pacific West Sales
Code	PAC_W
Start Date	1/1/11

10. Click **Submit**.

Adding Geographies to a Zone

This example shows how to add geographical boundaries to the Pacific West Sales zone.

1. On the Manage Territory Geographies page, Zones Hierarchies region, select the Pacific West Sales zone.
2. Click **Actions** and then **Add Geography**.
3. On the Add Geography page, enter United States in the **Country** field, and then click **Search**.
4. On the Add Geography page, enter CA in the **State** field, and then click **Search**.
5. Select CA, and click **OK**.
6. Click **Submit**.
7. On the Confirmation window, select **Add geography only**, and then click **OK**.
8. Repeat steps 1 to 7 to add more geographies to the Pacific West Sales zone and Pacific Northwest Sales zone.

Import Your Territory Geographies Data

You can use Import Management to create or update Territory Geographies records.

To import Territory Geographies records, perform the following tasks:

1. Map your source data to Oracle Applications Cloud object attributes.
2. Create source Comma Separated Values (CSV) file for import.
3. Create the import activity.
4. Review the import results.

How You Map Your Source Data to Object Attributes

To import your Territory Geographies data into Oracle Applications Cloud, you must populate a .csv file with your source data and map that source data to target object attributes in Oracle Applications Cloud.

You need to do the following before creating the CSV file for data import:

- Identify how your source data attributes map to the target object attributes in Oracle Applications Cloud.
- Ensure prerequisite setups are done, if applicable.
- Understand your options for uniquely identifying the records.
- Ensure parent records exist before importing child records.
- Identify the target object attributes that are required in the CSV file for a successful import.

Before You Start

You must do some basic checks before starting your import. For example, make sure that:

- You have completed all the prerequisites for importing each attribute in your source data.
- You have all parent records in place before importing child records.

Select a Unique Identifier for Your Records

To import data into Oracle Applications Cloud, your CSV file must include some specific attributes that enable the import process to uniquely identify the records. The file import process uses the attribute values to automatically map your source data to the target object attributes in Oracle Applications Cloud.

The preferred options to uniquely identify an object record are as follows:

- Internal ID: If you're identifying a record that already exists in Oracle Applications Cloud, then you can use the internal ID of the record, a system-generated unique identifier Attributes with "id" in the attribute name are typically internal IDs. Use this option only if you're updating Geographies. You can determine the internal ID of a record by exporting Oracle Applications Cloud object data, or by doing a transactional database query. Using an internal ID typically provides better performance and reduces the import duration. For the Territory Geographies object, the attributes are Batch Id and Interface Row Id.
- Public unique identifiers: If you're creating new records, then you can provide a user-friendly public unique identifier (attributes denoted with 'Number' and usually visible in the business object's UI). If you update a record for which you have previously provided a Number attribute, or for which a Number attribute is visible in the object's UI, you can use the Number attribute to identify the record. For the Territory Geographies object, the attribute is Import Activity Identifier.

Required Attributes and Validations for the Territory Geographies Object

To import data successfully into Oracle Applications Cloud, your CSV file must include the required attributes. Ensure that you provide valid values for the attributes. The following table lists the required attributes for importing new Territory Geographies records, prerequisite setup tasks for the attributes, and specific validations, if any, for Territory Geographies import:

Attribute	Description	Prerequisite Setup Task/ Import Validations	Creating a Territory Geographies Record
GeographyOrZoneName	The primary name of the geography or zone.	The geography name code is validated against the country structure to check if the structure is defined for this country.	Required
GeographyOrZoneType	The type of the geography or zone.	No validation	Required

You can view the Territory Geographies object and attributes in the Manage Import Objects page of the Import Management flow. You can find attribute information like type, length, description, and so on, on this page.

Create the Source CSV File

You include the data that you want to import into Sales and Fusion Service in a source CSV file.

You can use the templates available in the Import Objects UI page to create the source CSV file. To download a template:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Objects**.
2. Select the **Territory Geographies** object in the table and click **Download**.

You can now edit the downloaded file and provide valid values for the required attributes.

> **Note:** For help in populating the CSV file and to avoid any issues in entering values, see the topic Potential Issues When Opening CSV Files With Excel in Related Topics section.

Create the Import Activity

After you have the CSV file ready, create an import activity to import the information. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select Territory Geographies from the **Object** drop-down list.
4. Select the CSV file in the **File Name** field, and click **Next.**
5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next.**
7. Review the import details on the **Review and Submit** page, and click **Submit** when you're ready.

Review the Import Results

Check if your import succeeded on the **Manage Imports** page. This page shows the status of all active, completed, and unsuccessful imports. To check the status of the import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click All Imports and search for the import activity that you created earlier.
3. Check the **Status** column for the import activity. The import is successful if the status displays as **Completed**. You can drill down on the import activity to go to the **Import Status** page which provides the status details of the import activity.

Related Topics

- Potential Issues When Opening CSV Files in Excel
- How do I import data?

Example of Importing Territory Geography Data

This example demonstrates how you can import data using Import Management. In this example, you have a source file containing territory geography data that you want to import into the application.

A territory is an area of responsibility of a salesperson over a set of sales accounts. A territory can be based on various dimensions, such as the geography, product, organization type, industry, business size, account, account type, and sales channel dimension. The territory geography defines the boundaries of a territory according to the selected dimensions, such as Europe, USA, or Asia. Dimensions are attributes that define jurisdictional boundaries of territories. You can use geography dimensions to define territories by country or postal code, based on Territory Geographies. You must create or import territory geographies before they can be used in territory definitions.

Summary of the Tasks

You perform the following steps to create an import activity and activate the import.

1. Determine what information is in the source file.
2. Create and schedule the import activity.

Before You Start

1. You use the country structure of a country to define which geography types are part of the country. For more information about an example of importing a country structure, see the topic "Example of Importing Country Structure Data".
2. Ensure that the combination of the Source ID and Parent Source ID values is unique for each row of data within a single import. However, your source data files don't need to have the same Source ID and Parent Source ID values as your previously imported geography data. If the geography structure levels and the parents for each geography value are the same, then the changed IDs will not affect the import.
   For example, when importing a country, which is the upper node, and its state, you may provide the following values:
   - Data for a country: SOURCE_ ID = 1; PARENT_ID = (NULL). The PARENT_ID is null because the country is the upper level of the territory geography hierarchy and has no parent.
   - Data for a province: SOURCE_ ID = 2; PARENT_ID = 1 (the source ID of the country)

Determine the Information in the Source File

You include the data that you want to import into Sales and Fusion Service in a source CSV file. A sample input CSV file is shown below.

GeographyOrZo	LanguageCode	SourceId	ParentSourceId	GeographyOrZo	ZoneCode	CountryName	GeoParentName1
GLOBAL	US	1		GLOBAL	GBL	USA	United States
North America	US	2	1	COUNTRY		Canada	

GeographyOrZo	LanguageCode	SourceId	ParentSourceId	GeographyOrZo	ZoneCode	CountryName	GeoParentName1
REGION 1	US	3	2	REGION		USA	United States

Note: Note the following:

- The hierarchy is modeled in the CSV file using the SourceId and ParentSourceId. The ParentSourceId for the Country Record (level Number 1) is always null.
- If defining an alternate name (RecordTypeCode = 2) for the country, ensure that the ParentSourceId is the same as the SourceId for the Country record (RecordTypeCode=0) and the SourceId is a unique number.
- If defining an alternate name (RecordTypeCode = 2) for any level below the country (LevelNumber >1), ensure that the SourceId and ParentSourceId columns match the values for the original record respectively.

You must create a source file (CSV) file with the attributes and import it using import management as shown in this table.

Attribute Name	Value	Description
GeographyOrZoneName	GLOBAL	The primary name of the geography or zone.
LanguageCode	US	The unique language code of the country to which the territory geography belongs. The default value is US.
SourceId	1	The source ID for the territory geography, along with the parent source ID, is used to identify the territory geography's parent/child relationship within the source file data and subsequent interface table data.
ParentSourceId	11	The parent source ID for the geography, along with the source ID is used to identify the geography's parent and child relationship with records within the source file data. This should be null for the country record, as Country is at the top of the hierarchy.
GeographyOrZoneType	COUNTRY	The type of the geography or zone.
ZoneCode	GBL	A unique user-defined code of the zone to which the territory geography belongs. It's used only for zones.
CountryName	USA	The name of the country for that geography. It's used only for master geographies.

Attribute Name	Value	Description
GeoParentName1	United States	This is used to specify the complete path of any master geography, starting with the country name. For example, if your TerritoryGeographyName is San Francisco, then the path of the master geography is GeoParentName1 = "United States".

You can create an import activity, enter the import details, and schedule the import. To create an import activity:

1. Go to **Navigator** > **Tools** > **Import Management** > **Import Queue**.
2. Click **Create Import Activity** in the **Manage Imports** page.
3. In the **Enter Import Options** page, provide a name for the import activity, and select **Territory Geographies** from the Object drop-down list.

   > **Note:** In the **Advanced Options** section, the option **Enable High-Volume Import** is selected by default. This mode is designed to import millions of records at once.

4. Select the CSV file in the **File Name** field, and click **Next**.
5. The source and target attributes are automatically mapped in the **Map Fields** page. Review and edit the mappings if required.
6. Check the file for unmapped columns or data format issues by clicking **Validate Data**. Click **Next**.
7. Review the import details on the **Review and Submit** page, and click **Submit**.

Related Topics

- Export Data

Create Countries

This procedure lists the steps to create countries in the application.

The countries are seeded in the application. If you're unable to find a specific country in the Manage Geographies page, then you can add it to the application.

> **Note:** The application provides support for Loqate geography data for countries. For countries where Loqate geography data isn't available, you can purchase the geography data from a third-party data provider and load it into the application using Import Management. For more information, see the *How do I acquire Geography Reference Data?* topic. If countries aren't available in the application, then use the procedure outlined in this topic to create them.

Perform the following steps to create a new country.

1. In the Setup and Maintenance work area, go to the following:
   - Offering: Customer Data Management
   - Functional Area: Enterprise Profile

- Task: Manage Geographies

2. On the Manage Geographies page, click **Actions** > **Create Country**.
3. In the Create Country dialog box, select the name of the country and click **Save**.
4. Click **Done**.

Note: You can now import the geography data for the newly created country using Loqate geography data available in the application. In case geography data for your country isn't available from Loqate, you can purchase the geography data from a third-party data provider and import it using Import Management.

Related Topics

- How do I replace the existing master geography data with revised Oracle-Licensed geography data?

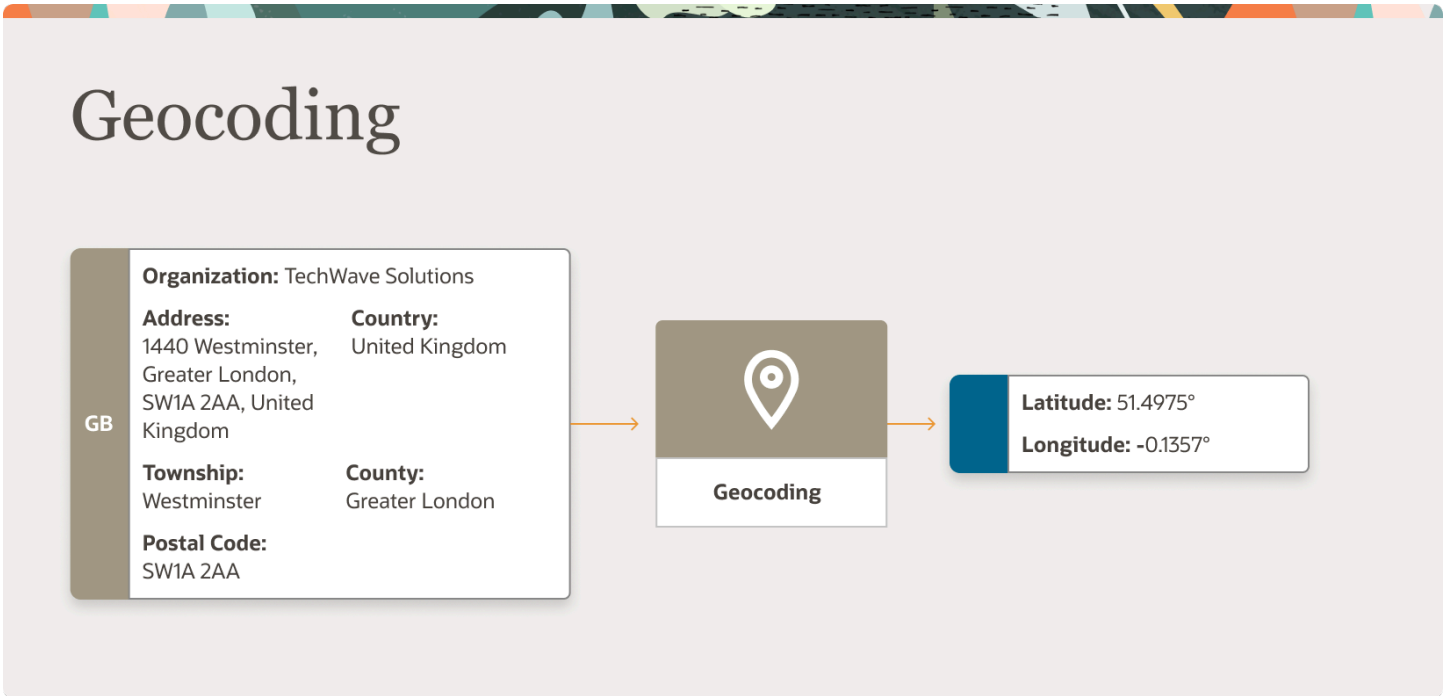
6 Set Up Geocoding

What is Geocoding?

Geocoding is the process of finding latitude and longitude coordinates from geographic data such as street addresses or postal codes. Once these coordinates are available, you can use the spatial services feature to identify nearby points of interest, such as customer and contact addresses.

The application integrates the Geocoding feature with eLocation (http://elocation.oracle.com/maps_oracle_dot_com_main.html), which is a Geocoding service provided by Oracle.

Note: Geocoding for Hong Kong isn't supported.



By default, the Geocoding option is turned off in the application. You can enable the Geocoding option using these steps:

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. On the Manage Geographies page, search for the country for which you want to enable geocoding. You can either search by the country name or country code.
3. Click **Search**. The search results for the matching country names are displayed.
4. Select the country for which you want to enable the geocoding option.
5. Select **Geocoding Defined** for the country.

If the Geocoding feature is enabled, the feature can be scheduled to run at regular time intervals. This ensures that newly created or updated locations are picked up and geocoded whenever you create or update an address using the user interface, web services, bulk import, or using import management.

Related Topics

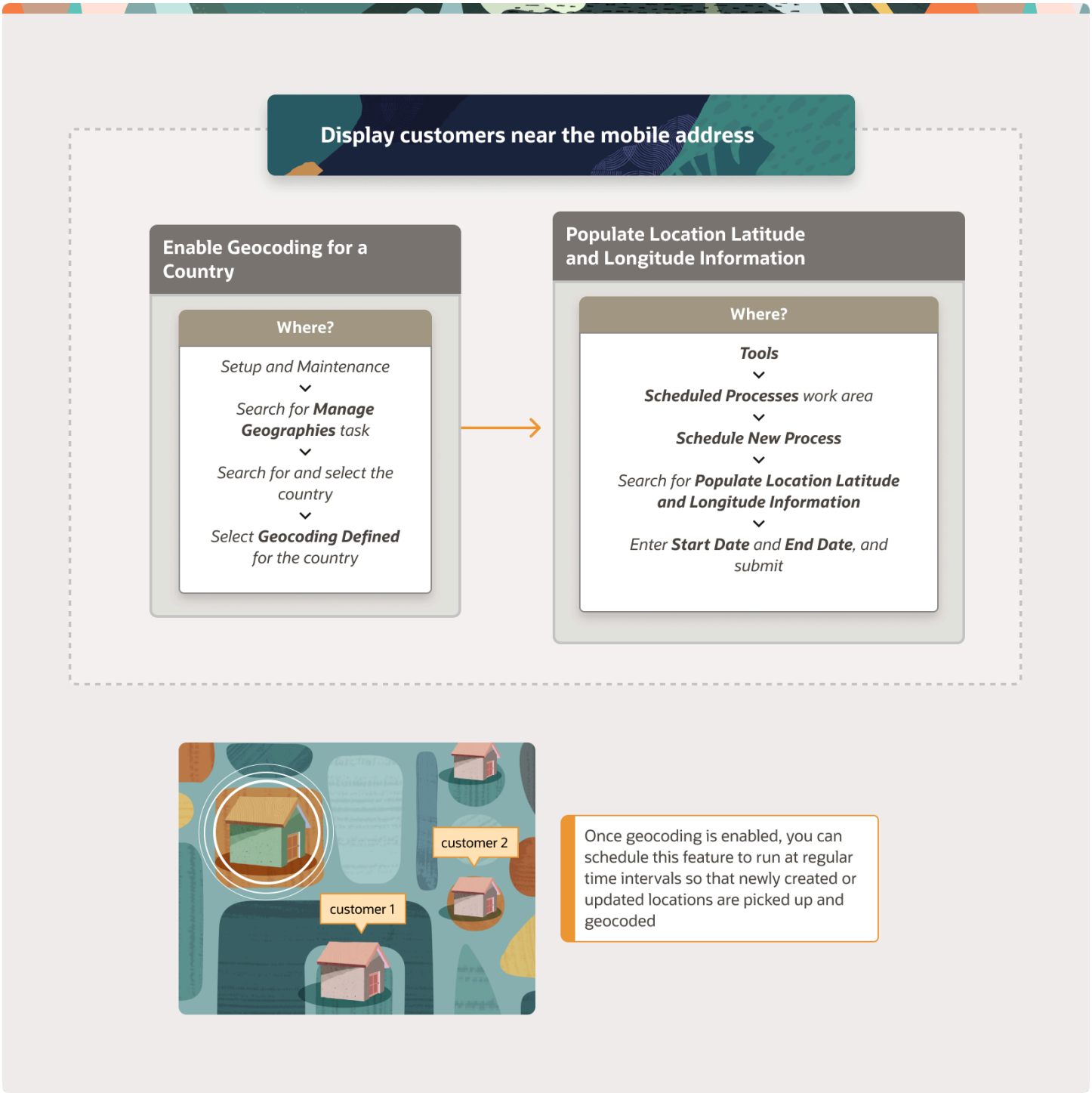
- What are Spatial Services?
- Set Up Geocoding

Set Up Geocoding

Geocoding is a process that determines the latitude and longitude coordinates for a location.

By default, geocoding is turned off in the application. You can use geocoding to display customers in the vicinity of a mobile address.

Here is an image depicting customers in the vicinity of a mobile address:



Enable Geocoding for a Country

To enable geocoding for a country, complete these steps:

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. On the Manage Geographies page, search for the country for which you want to enable geocoding. You can either search by the country name or country code.
3. Click **Search**. The search results for the matching country names are displayed.
4. Select the country for which you want to enable the geocoding option.
5. Select **Geocoding Defined** for the country.

Populate Location Latitude and Longitude Information

Once geocoding is enabled, you can schedule this feature to run at regular time intervals so that newly created or updated locations are picked up and geocoded. To schedule the geocoding feature to run at regular intervals, complete these steps:

1. Navigate to **Tools** > **Scheduled Processes** work area.
2. On the Overview page, click **Actions** > **Schedule New Process**.
3. Click the Name list and search for Populate Location Latitude and Longitude Information, and then click **OK**.
4. Enter the parameters such as Start Date and End Date, and click **Submit**.

Related Topics

- Populate Location Latitude and Longitude Information

Enable Address Mapping Using Geocoding

You can quite literally put your accounts and contacts on the map by enabling geocoding as described in this topic. Geocoding turns the addresses you enter or import into longitude and latitude coordinates so that the locations can be displayed on a map.

> **Note:** Geocoding isn't the same as the Geo Code Types defined in Geography Hierarchies. Examples of Geo Code Types are FIPS code, ISO country code, and so on. You can view Geo Code Types on the Manage Geography Hierarchy page under the Code Type column.

Enabling address mapping involves two steps:

1. You turn on the geocoding feature
2. You run a process that converts the addresses into coordinates

Your sales team must enter valid postal addresses for geocoding to work, so it's a good idea for you to validate the addresses in your application by subscribing to Oracle Address, Email, and Phone Verification.

Geocoding Options

Salespeople can use geocoding in two ways:

- In the office, salespeople can view the location of an account address on the map while editing the account record.
- Using `Oracle CX Cloud Mobile` on their smartphones, salespeople can view a map showing the locations of accounts and contacts within a certain radius of their current location, or any other location they choose. They can obtain travel directions to any of the locations with the tap of a finger (`CX Cloud Mobile` passes the coordinates to the native mapping application on the phone).

Enable Geocoding

To enable Geocoding, click the arrow mark under the Geocoding Defined column header and make sure that the arrow mark transforms into a tick mark. Here are the steps:

1. Open the **Manage Geographies** task from the implementation project or from Setup and Maintenance work area using the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. On the Manage Geographies page, search for a country you imported using either its name or its two letter ISO code. For example, you can search by entering either the country name United States or the two letter ISO code US, and clicking **Search**.
3. Select the **Geocoding Defined** icon.
4. Click **Done**.

Run the Populate Location Latitude and Longitude Process

Once geocoding is enabled, you can schedule the Populate Location Latitude and Longitude Information process to run at regular time intervals so that newly created or updated locations are selected and geocoded. Addresses that salespeople enter or addresses that you import don't show up on the map until the process completes, so schedule the process to run as frequently as necessary and each time you import. To schedule the geocoding feature to run at regular intervals, complete these steps:

1. Navigate to the **Scheduled Processes** from the **Tools** work area.
2. Click **Schedule New Process**.
3. Click the Name drop-down list icon and the **Search** link at the bottom of the list.
4. In the Search and Select: Name window, search for Populate Location Latitude and Longitude Information.
5. Select the process name form the search result and click OK.
6. Click OK in the Schedule new Process dialog box to confirm the name and description of the new process.
7. In the Process Details page, click **Advanced** to view the advanced options.
8. You can make the following entries on the Parameters Tab:

Parameter	What to Enter
Country Code	Leave this field blank if you want to generate the coordinates for all the countries you enabled for geocoding, or enter a specific country code.

Parameter	What to Enter
Start Date, End Date, and Regenerate Geocode	Leave these fields blank. The geocoding process picks up any addresses that haven't been geocoded previously.
Batch Size	Leave this field blank. If the Populate Location Latitude and Longitude Information scheduled process is run without any parameters, the process picks all addresses of countries for which geocoding is enabled. This scheduled process can populate a maximum of 10,000 address locations. If the total number of addresses to be geocoded are more than 10,000, you may have to run this scheduled process many times with each batch of size of 1000 addresses. This scheduled process populates Latitude and Longitude values in the HZ_LOCATIONS table. This scheduled process continues to pickup already processed addresses for which the latitude or longitude parameters are null.

9. Click Process Option to set options such as Language, Territory, Currency, and Time Zone.
10. Click OK to the Process Options page.
11. Schedule the process to run regularly:
    - Click the Schedule tab.
    - Select Using a Schedule and specify the frequency.
12. Click Submit. The application confirms your process was submitted.
13. Click OK to the confirmation message. You can monitor the process completion on the Overview page.

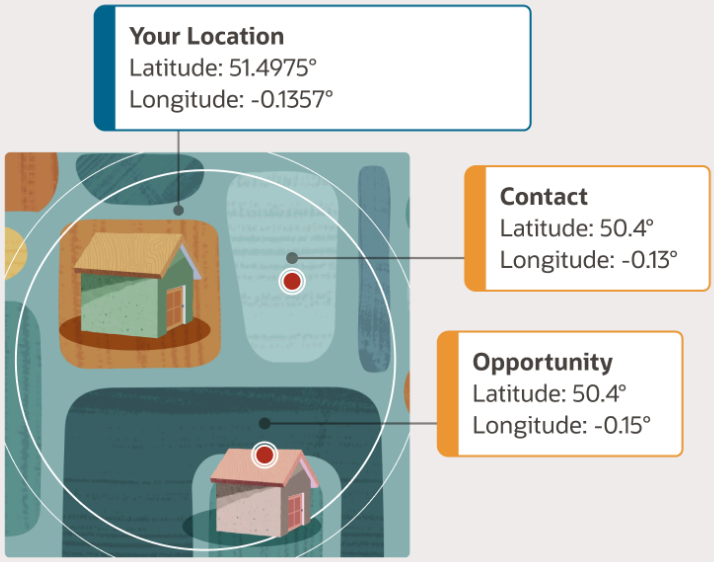
Use Web Services to Populate Location Attributes for the Around Me Feature

Use this procedure to populate location attributes using Web services for the Around Me feature in countries that aren't supported by the eLocation service. The Around Me feature enables you to quickly locate information about your surroundings.

This feature uses your current location to run a proximity search on objects with location information, such as contacts, opportunities, and customers.

Around Me Feature

Around Me uses your current location to run a proximity search on objects with location information, such as contacts, opportunities, and customers.



Create an Address with the Location Attributes Using the LocationService Web Service

Perform the following steps to create an address with location attributes, such as latitude and longitude, using the createLocation operation.

1. Extract the Web Services URL:
    a. Sign in to the **Oracle Enterprise Manager Applications Control** using the WebLogic Server credentials.
    b. Select **Oracle Fusion Customer Relationship Management** from the navigation tree, and then select `Fusion Applications`.
    c. From the tree, select **CrmCommonApp**, and then select `CrmCommonApp (CRMCommonServer_1)`.
    d. In the Web Services pane, click **Test** for the LocationServiceSoapHttpPort port.
    e. In the Test Web Service pane, copy the URL of a WSDL that appears in the WSDL field until "?wsdl", and then paste to a notepad.
2. Derive the Payload:
    a. Launch the WSDL URL in a Web browser to open the LocationService endpoint page.
    b. In the LocationServiceSoapHttpPort pane, select **createLocation** from the Operation list.
    c. In the Location pane, complete the fields, as shown in the following table.

Field	Value
Country	CN
Address1	Chaoyang District
City	Shanghai
Postal Code	200233
State	China
CreatedByModule	AMS
Latitude	20.36789
Longitude	-39.34444

> **Note:** Deselect all the other parameters in this Location pane. Also, deselect LocationProfile, OriginalSystemReference, and LocationInformation options.

d. Click the **XML Source** option.

> **Note:** This option appears next to the Operation list.

e. Copy the XML source and paste to a notepad.

3. Call the Web Service:

a. Open the **Oracle Fusion Service Tester** page.
b. In the WebService URL field, paste the WSDL URL that you derived from Step 5 of the Extracting the Web Services URL section.
c. Enter the user name and password credentials.
d. In the **Payload** pane, paste the XML source that you derived from Step 5 of the Deriving the Payload section.
e. Click `Invoke`. The Output Payload pane displays the output payload.

4. Test the Web Service:

a. Sign in to the **Oracle Fusion Applications Home** Page.
b. Navigate to the Customer Center work area.
c. Search the address that you added.
d. Click the **Addresses** section.
e. From the **Actions** list, select the **View Geography Information** option.
f. Verify the latitude and longitude details.

Update the Location Attributes of an Address Using the LocationService Web Service

Perform the following steps to update the location attributes of an address, such as latitude and longitude, using the updateLocation operation.

1. Extract the Web Services URL:

a. Sign in to the **Oracle Enterprise Manager Applications Control** using the WebLogic Server credentials.
b. Select **Oracle Fusion Customer Relationship Management** from the navigation tree, and then select **Oracle Fusion Applications**.
c. From the tree, select **CrmCommonApp**, and then select `CrmCommonApp (CRMCommonServer_1)`
d. In the Web Services pane, click **Test** for the LocationServiceSoapHttpPort port.
e. In the Test Web Service pane, copy the URL of a WSDL that appears in the WSDL field until "?wsdl", and then paste to a notepad.

2. Derive the Payload:

a. Launch the WSDL URL in a Web browser to open the LocationService endpoint page.
b. In the LocationServiceSoapHttpPort pane, select **updateLocation** from the Operation list.
c. In the Location pane, complete the fields, as shown in the following table.

Field	Value
LocationId	300100078489616

Field	Value
	Note: Enter the location ID that was generated in Step 1 of the Testing the Results section.
Latitude	30.36789
Longitude	-40.34444

Note: Deselect all the other parameters in this Location pane. Also, deselect LocationProfile, OriginalSystemReference, and LocationInformation options.

d. Click the **XML Source** option.

Note: This option appears next to the Operation list.

e. Copy the XML source and paste to a notepad.

3. Call the Web Service:

a. Open the **Oracle Fusion Service Tester** page.
b. In the WebService URL field, paste the WSDL URL that you derived from Step 5 of the Extracting the Web Services URL section.
c. Enter the user name and password credentials.
d. In the **Payload** pane, paste the XML source that you derived from Step 5 of the Deriving the Payload section.
e. Click `Invoke`. The Output Payload pane displays the output payload.

4. Test the Web Service:

a. Sign in to the **Oracle Fusion Applications Home** Page.
b. Navigate to the Customer Center work area.
c. Search the address that you updated.
d. Click the **Addresses** section.
e. From the **Actions** list, select the **View Geography Information** option.
f. Verify the latitude and longitude details.

7 Set up Address Cleansing

How You Set up Address Cleansing

Address cleansing validates, corrects, and standardizes address information that you enter in the application. Address cleansing, unlike geography validation, validates both the geography attributes and the address line attributes.

To use the address cleansing functionality, you need to have license for the customer data quality application, because the feature is delivered using data quality integration.

You can specify the real-time address cleansing level for each country by choosing either of these options:

- **None**: Specifies no real time address cleansing.
- **Optional**: Provides option to cleanse addresses.

Once you have enabled address cleansing for a country, a **Verify Address** icon appears at address entry points in the application. Click the icon to perform address cleansing and receive a corrected, standardized address. If the application doesn't find a matching address, then an alert message is displayed.

Enable Real Time Address Cleansing

Address cleansing validates, corrects, and standardizes address information that you enter in the application. Address cleansing, unlike geography validation, validates both the geography attributes and the address line attributes.

Note that you need a separate license for Oracle Address, Email, and Phone Verification, to use the address cleansing functionality.

Here's how you can define address cleansing for the countries in which you do business.

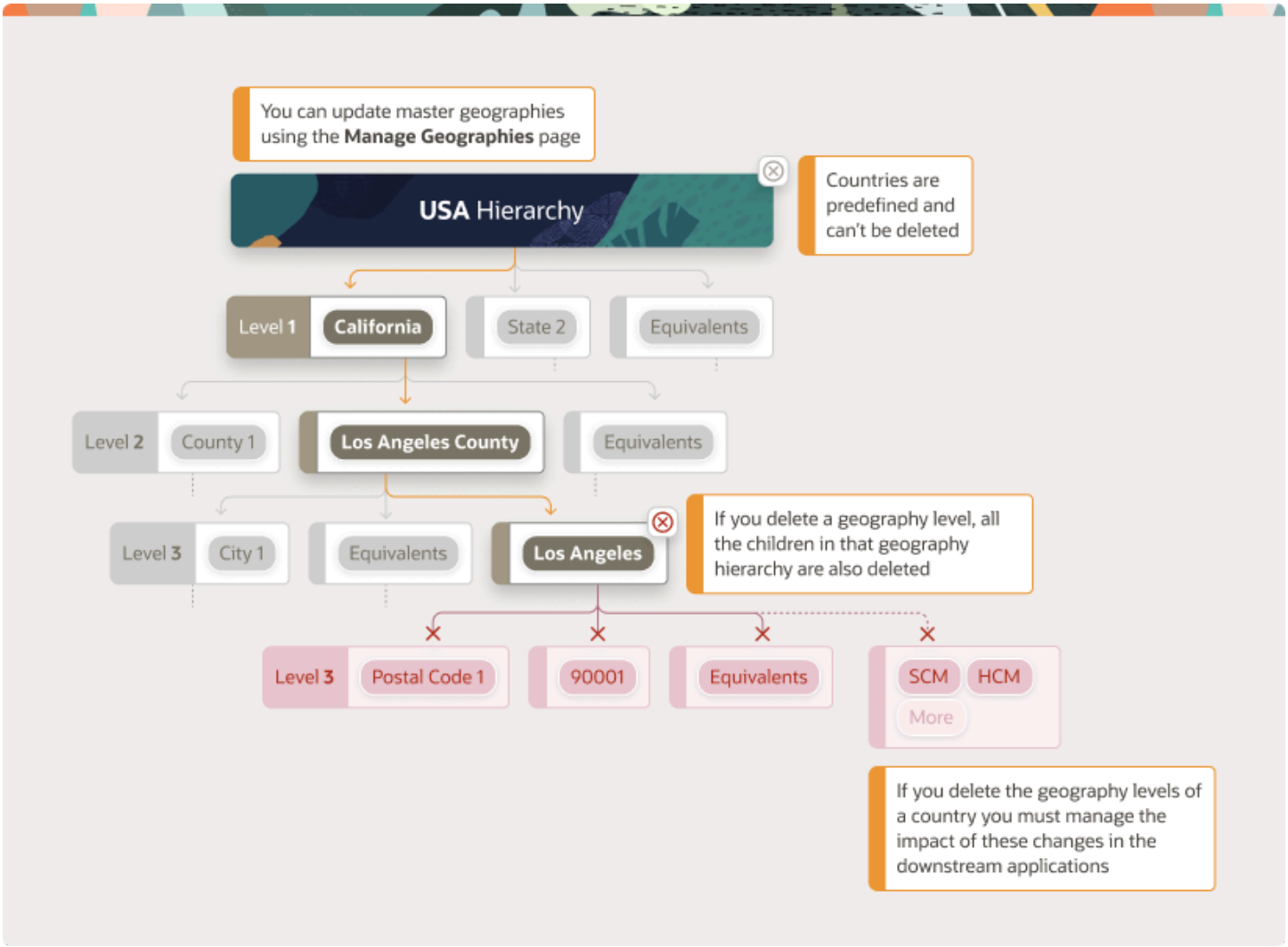
1. Open the **Manage Geographies** task from the implementation project or from Setup and Maintenance work area using the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. Search for a country that you want to enable Address Cleansing using either by name or by its two letter ISO code. For example, you can search by entering either the country name United States or the two letter ISO code US, and clicking Search.
3. Select the country in the Search Results area.
4. Click the Go to Task button in the Address Cleansing Defined column to enable the Verify Address button for account, contact or household on the simplified UI.
5. In Address Cleansing Level dialog box, set the Real-Time Address Cleansing Level to Optional to enable the option to cleanse addresses. If the level is set to None, it specifies no real-time address cleansing.
6. Click Save and Close.

8 Considerations While Working With Master Geographies

Considerations While Working With Master Reference Geographies

Master reference geographies are the definitive, single-source-of-truth geographical data used as the foundation for defining and maintaining geographical boundaries and types. These predefined geographies, like countries, states, and cities, are essential for storing address information and creating geographical hierarchies that drive various business processes across enterprise applications suites.

This image graphically depicts the points you must remember while working with geographies in Oracle Fusion Cloud Apllications:


You can update master geographies using the **Manage Geographies** page
USA Hierarchy
Countries are predefined and can't be deleted
Level 1
California
State 2
Equivalents
Level 2
County 1
Los Angeles County
Equivalents
Level 3
City 1
Equivalents
Los Angeles
If you delete a geography level, all the children in that geography hierarchy are also deleted
Level 3
Postal Code 1
90001
Equivalents
SCM
HCM
More
If you delete the geography levels of a country you must manage the impact of these changes in the downstream applications

Considerations for working with master geographies:

- You can update master geographies using the Manage Geographies page, but you can't update master geographies using Import Management.
- Countries are predefined so you can't delete them. You can delete the geography levels of a country in the geography hierarchy, such as state, city, and so on using the Manage Geographies page.
- If you delete the geography levels of a country in the geography hierarchy, such as state, city, and so on, you must manage the impact of these changes in the downstream applications, such as SCM, ERP, HCM, and so on.
- If you delete a geography level, all the children in that geography hierarchy are also deleted. For example, if you define city and postal codes under a state, and you later delete the state, all the cities and postal codes under this state are also deleted.

Manage Geography Lookups

You can manage geography lookups using the Manage Geography Lookups page.

Perform these steps:

1. Click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area and go to the following:
    - Offering: Sales
    - Functional Area: Sales Foundation
    - Task: Manage Geography Lookups
2. On the Manage Geography Lookups page, click any of the following lookups:

Lookup Type	Meaning	Description
HZ_GEOGRAPHY_USAGE	Geography Validation Purpose	Purpose of geography validation, for example, tax. This lookup type can't be edited.
HZ_GEO_DISPLAY_ONLY	Zone Definition	Interface elements used to define zones. This lookup type can't be edited.
HZ_GEO_GNR_RUN_TYPE	Geography Name Referencing Program Run Type	You can specify the type of records that must be processed using the geography name referencing (Validate Geographies of Addresses Against Master Geographies) scheduled process. This lookup type can't be edited.
HZ_GEO_IDENTIFIER_TYPE	Geography Identifier Type	Identifier type for geography, for example, name or code. This lookup type can't be edited.

Lookup Type	Meaning	Description
HZ_GEO_POSTAL_CODE_RANGE_FLAG	Postal Code Range Provided	Values indicate whether a postal code range was used to define a set of postal codes. This lookup type can't be edited.
HZ_GEO_DATA_PROVIDER	Geography Information Provider	Names of the source of geography information. You can add new geography providers.
HZ_GEO_IDENTIFIER_SUBTYPE	Geography Identifier Subtype	Identifier sub type for geography, for example, primary. You can specify the primary and secondary names and codes for geographies.

3. View or edit the values as applicable.
4. Click Save and Close to return to the list of lookups.
5. Click Done to exit the page.

Geography Profile Options

This topic lists geography profile options, descriptions, default values, and the impact these profile options have on different aspects of geographies.

This topic also lists address profile options that impact geographies.

To view the details of these profile options:

1. Click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area.
2. Click the Tasks menu and click **Search**. Search for **Manage Administrator Profile Values** task and open it.
3. Search using the profile option code.

To change the default values of these profile options:

1. Click **Navigator** > **My Enterprise** > **Setup and Maintenance** work area.
2. Click the Tasks menu and click **Search**. Search for **Manage Administrator Profile Values** task and open it.
3. Search using the profile option code.
4. Change the profile value.

Profile Option Code	Profile Option Name	Default Value	Description	Impact	Related Topics
HZ_POST_IMPORT_GNR_INVOKE	Address Validation After Import	Y	Runs the Geography Name Referencing (GNR) process after geography data import. The recommended value for this profile option value is N. This helps improve the import performance. After	This profile option is applicable to File-based Import (used in high volume import) and Import Management	See *How do I validate geographies of addresses against master geographies and generate naming references?*

Profile Option Code	Profile Option Name	Default Value	Description	Impact	Related Topics
			setting this to N, GNR process isn't invoked for every import.		
ORA_HZ_GEO_HIERARCHY_LIMIT		100000	Specify the maximum number of nodes that each parent node can handle for any geography element.	This profile option is applicable to Application UI and Import Management (only for geography object)	See, *What are the best practices for managing Geography mismatches?* *How do I manage Geography Structures, Hierarchies, and Validation?*
ORA_HZ_ENABLE_DAAS_LOQATE	DaaS GBG | Loqate Data Import Enabled	Yes	Enable the import of DaaS GBG | Loqate geography information.	This profile option is applicable to Scheduled Process, Application UI, and Import Management	see, *How to Import Nokia Geography Data*
ORA_HZ_DAAS_GEO_ENDPOINT	DaaS Geography Server Endpoint Information	`https://geo.app.daas.us-phoenix-1.ocs.orac`	Specify the endpoint information, such as the host name and the port number, of the DaaS geography server.	This profile option is applicable to Application UI and REST	
HZ_SHARE_LOCATIONS	Location Sharing Mode	Share among all parties	Select if location can be shared among different persons and organizations.	This profile option is applicable to File-based Import. This profile option isn't applicable in Import Management.	
HZ_LANG_FOR_COUNTRY_DISPLAY	Language for Country Display		Specify the default language used to translate the country name for international addresses. This is typically the language of the country where an item is mailed from.	This profile option is applicable to Application UI and REST	
HZ_GEOCODING_BATCH_SIZE	Geocoding Subprocess Batch Size	1000	Specify the maximum number of locations that each batch subprocess can handle for geocoding.	This profile option is applicable to Scheduled Process	
HZ_GNR_NUM_OF_WORKERS	Number of workers for a given Geography Name Referencing request	1	Determines the number of sub-processes for Validate Geographies of Addresses Against	This profile option is applicable to Scheduled Process	See *Best Practices for Geography Validation* See *How do I validate geographies of addresses against master geographies*

Profile Option Code	Profile Option Name	Default Value	Description	Impact	Related Topics
			Master Geographies scheduled process.		*and generate naming references?*
HZ_GNR_COMMIT_SIZE	Batch Size for committing records in Geography Name Referencing process	N/A	The Batch Size for committing records in Geography Name Referencing process	This profile option is applicable to Application UI, Scheduled Process, File-based Import, and Import Management.	See *How do I validate geographies of addresses against master geographies and generate naming references?*

Here are the list of address profile options:

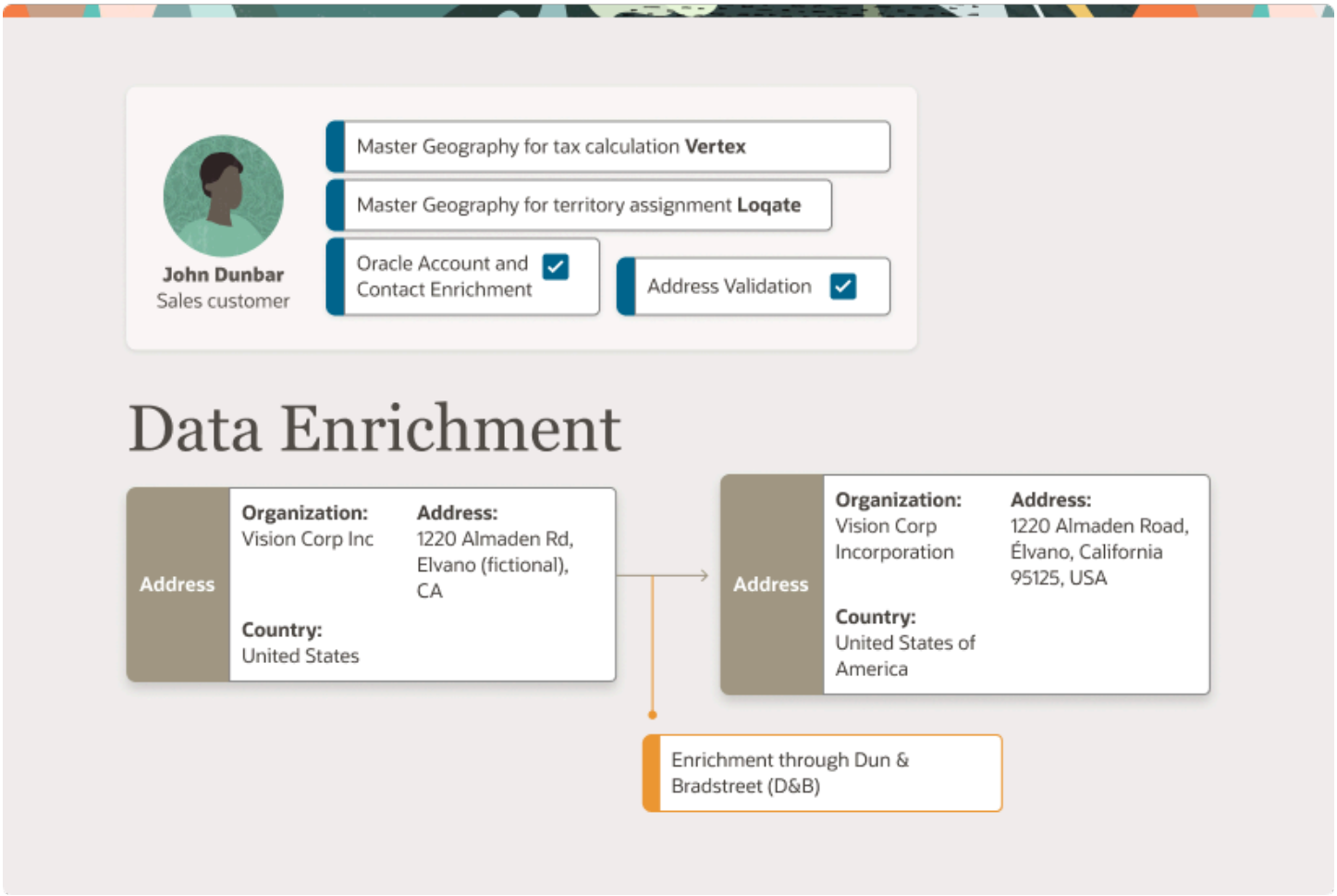
Profile Option Code	Profile Option Name	Default Value	Description	Impact	Related Topics
HZ_UPDATE_STD_ADDRESS	Update Standardized Addresses Enabled	No	Enable to allow the update addresses that are already standardized using postal information.	This profile option is applicable to Application UI and REST	
ORA_HZ_INCLUDE_REGIONAL_COUNTRY	Regional Country in Address Formats Included	No	Enable address format functions to include regional country. You must set the value to yes to include regional country.	This profile option is applicable to Application UI	See, *How to have different contact address fields depending on the country selected?*
HZ_DEFAULT_ADDR_STYLE	Address Style Default	Postal Address	Specify a default style for address formatting.	This profile option is applicable to Application UI and REST	
HZ_ADDRESS_DISABLE_ALT_NAMES	Hide Alternate Address Names	No	Hide alternate names in the Address list of values. This option, when enabled, displays only the primary geography names for the address.	This profile option is applicable to Application UI	
ORA_HZ_IMPORT_MULTI_ADDRESS_TYPE	Import Processing for Multiple Address Types Enabled	Yes	Enable the processing of multiple address types for Account, Contact, Address, Organization, and Person objects.	This profile option is applicable to Import Management	See *Import Your Household Data How do I import account data? How do I import contact data?*

What are the best practices for managing Geography mismatches?

This topic employs a couple of use cases to illustrate the best practices for setting up Master Reference Geographies for sales customers using the Oracle Account and Contact Enrichment by Dun & Bradstreet (D&B) for Sales for data enrichment, and the Oracle Address, Email, and Phone Verification for address, email, and phone number verification.

In these use cases, it is assumed that while the Loqate geography reference data is configured as master geography, Tax calculation is being done using Vertex master

geography data. Also, address validation is enabled based on the customer's requirement.



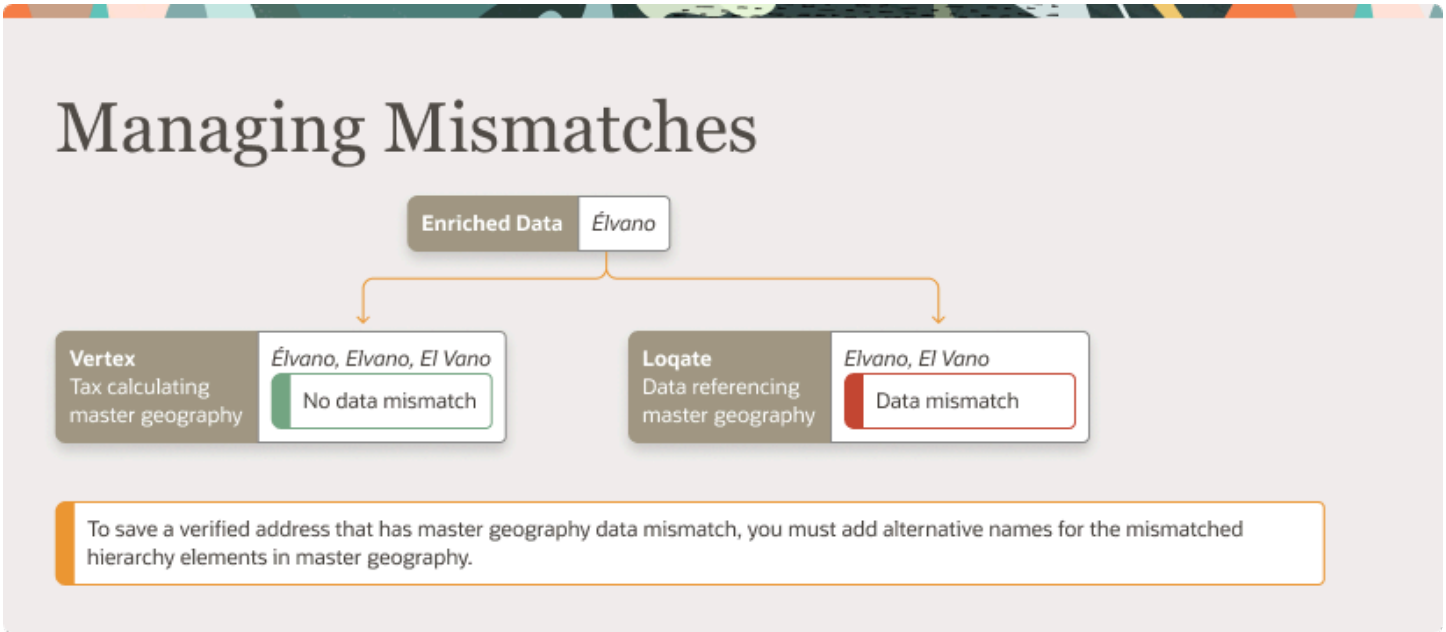
When you perform the real-time enrichment of accounts or contacts using the Oracle Account and Contact Enrichment by Dun & Bradstreet (D&B), if there's a geography data mismatch between the predefined master geography data and the Dun and Bradstreet (D&B) data, then the Service enriches the accounts and contacts data but you can't edit or save the enriched data unless the master geography data mismatches are resolved. In addition, you can verify the enriched address using the Oracle Address, Email, and Phone Verification, however, in case of mismatches between

Oracle Account and Contact Enrichment by Dun & Bradstreet (D&B) (Loqate) and predefined master geography data you can't save the verified address.

The second use case describes the setup required to enable address verification and to avoid data conflicts between the Oracle Address, Email, and Phone Verification and master reference geography data.

Use Case 1: Manage Mismatches with Master Reference Geography Data

You're a sales customer using master reference geographies for territory assignments or tax calculation and have purchased Oracle Account and Contact Enrichment by Dun & Bradstreet (D&B) for data enrichment and Oracle Address, Email, and Phone Verification for address verification. In this case, while the Loqate geography reference data is configured as master geography, Tax calculation is being done using Vertex master geography data. Also, address validation is enabled based on the customer's requirement.



Best Practice: Review geography mapping for the countries where you do business. If the geography mapping for a specific country isn't mapped according to the country-specific address attributes, update the mapping. Oracle recommends performing enrichment before verifying address.

Suppose that you're doing real time enrichment of account or contact. If there's a geography data mismatch between the predefined master geography and the D&B data, the Oracle Account and Contact Enrichment by Dun & Bradstreet (D&B) still enriches the accounts and contacts data but can't edit or save the enriched account or contact unless the

master geography data mismatches are resolved. However, you can verify the enriched address using the Oracle Address, Email, and Phone Verification.

To save a verified address that has master geography data mismatch, you must add alternative names for the mismatched hierarchy elements in master geography. The following are the steps to add alternative name for the mismatched hierarchy element:

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. On the Manage Geographies page, search for the country by the name or country code, for example US.
3. Click the Go to Task button in the Hierarchy Defined column. The Manage Geographies Hierarchy page for the particular country appears.

    > **Note:** If there are many child geographies for the selected parent geography, a message asking you to refine the search criteria is displayed. The child geographies are displayed after you refine the search criteria. If there are many search results, you may have to further refine the search criteria. The maximum number of child geographies that can be displayed is controlled by the ORA_HZ_GEO_HIERARCHY_LIMIT profile option. You can change the value of this profile option by navigating to the Setup and Maintenance work area, click the Tasks menu, and search for Manage Administrative Profile Values task. Search for the ORA_HZ_GEO_HIERARCHY_LIMIT profile option and change the value.

4. Highlight the mismatched hierarchy element, for example California State, and click the Edit icon.
5. Click the Add icon on the Edit page.
6. Add an alternative name CA for the California state geography element.
7. Click Save and Close

Once the alternative name is added for the mismatched hierarchy element in master geography, you can save the enriched address.

Use Case 2: Avoid Conflicts with Master Reference Geography Data

You're a sales customer who doesn't use geographies for territory assignment or tax calculation and has purchased Oracle Account and Contact Enrichment by Dun & Bradstreet (D&B) for data enrichment and the Oracle Address, Email, and Phone Verification for address verification. To enable address verification and to avoid data conflicts between the Oracle Address, Email, and Phone Verification and master reference geography data you must do the following setups:

- Deselect the Geography Validation option in the Geography Mapping and Validation region to avoid Oracle Address, Email, and Phone Verification data conflicts with master reference geography data. By deselecting this option you can avoid any UI level validation against master geographies while adding address.

- Select Geography Validation Level for Country as No validation to verify address data by Oracle Address, Email, and Phone Verification.


John Dunbar
Sales customer
Oracle Account and Contact Enrichment
Avoid Data Conflicts
Geography Validation
Geography Validation
You can avoid any UI level validation against master geographies while adding address
Geography Validation Level for Country
Geography Validation Level for Country
No Validation
To verify address data by Oracle Address, Email, and Phone Verification

Perform the following steps on the Manage Geography Validation page to enable address verification and to avoid data conflicts between the Oracle Address, Email, and Phone Verification and master reference geography data:

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Customer Data Management
    - Functional Area: Enterprise Profile
    - Task: Manage Geographies
2. On the Manage Geographies page, search for the country by the name or country code, for example US.
3. Click the Go to Task button in the Validation Defined column. The Manage Geography Validation page appears.
4. Deselect the Geography Validation check boxes for all the geography attributes to avoid any UI level validation against master geographies while entering the addresses. If the Enable List of Values check boxes are selected then, in case of data conflicts, Geography Naming References records aren't created.

Note: If any of the Geography Types listed isn't applicable to the selected country's territory structure, then you must deselect the geography validation for that type.

If you're planning to create territories based on a particular Geography Type, such as County, then you must deselect all the Geography Validation levels under that Geography Type (in this case City and Postal Code) based on which you want to create the territory.

Tip: Review the Address Style Formats that are selected on the Manage Geography Validation page. The review is required because on the Account or Contact Simplified UI page, address attributes are displayed based on the address formats and verified or enriched addresses are saved in Oracle Applications Cloud based on the selected address formats.

Related Topics

-

9 FAQs for Loqate Support

How to Import Nokia Geography Data

We recommend that you use Loqate geography data. However, if you need to use Nokia data for one or more countries for business reasons you can do so.

By default, Import Geography Data task invokes Loqate geography data.

Note: Oracle doesn't support any Nokia geography data fixes.

Perform these steps to import Nokia geography data:

1. Set the profile value of the ORA_HZ_ENABLE_DAAS_LOQATE profile option to No in the Setup and Maintenance work area by going to the following:
    - Offering: Sales
    - Functional Area: Sales Foundation
    - Task: Manage Administrator Profile Values
2. Import the Nokia geography data for a country as follows:
    a. Navigate to the Manage Geographies task in the Setup and Maintenance work area by going to the following:
        - Offering: Sales
        - Functional Area: Sales Foundation
        - Task: Manage Geographies
    b. On the Actions menu, Click Import Geography Data for a country.

    Note: The Import Geography Data action is disabled for a country if the geography data for that country isn't available from Loqate or if the country data is already imported using either Loqate, Nokia, or any third party geography data.

    After the geography data is loaded, the data provider name (Loqate or Nokia) is displayed in the Hierarchy Defined section in Manage Geographies.

How many countries does Loqate support? How do I get support for any additional country?

Loqate supports 82 countries. Any additional country support beyond the 82 must be logged as an enhancement request.

To log the enhancement request, go to *Idea Lab*.

Related Topics

- How to submit an enhancement request on Idea Lab

Will I be charged for Loqate data?

There's no charge or licensing requirement for Loqate geography data.

I am an existing customer, how will I be impacted? Can I import both Loqate and Nokia geography data?

No. You can import either Loqate or Nokia geography data, but you can't import from both providers for a single country. We recommend that you use Loqate geography data because Loqate supports 82 countries including existing 62 Nokia supported countries.

If you're already using Nokia geography data, you can select one of these two options:

- Option 1: You need not do anything and continue to use Nokia geography data. Oracle doesn't support any Nokia geography data fixes.
- Option 2: You can replace Nokia geography data with Loqate geography data. This is a manual process today. You must follow manual steps and work closely with the support team to import new Loqate geography data. For more information about this process, see Replace Existing Master Geography Data with Revised Oracle-Licensed Geography Data section in this chapter.

How frequent are updates to Oracle licensed geography reference data available?

The geography reference data is updated on a quarterly basis but the update of the latest geography reference data refresh isn't automated. You will be informed about the geography reference data refresh using release readiness documents.

How is geography data updated? Are updates available for all countries at the same time?

When you import the geography data for a country for the first time you would get the latest Loqate geography data. But if your Loqate geography data is more than three months old, you have to uptake the latest Loqate geography data by following the steps in the Replace Existing Master Geography Data with Revised Oracle-Licensed Geography Data topic.

Related Topics

- How do I replace the existing master geography data with revised Oracle-Licensed geography data?

Can I import Vertex or other third-party geography data in Manage Geographies?

Yes, you can continue to import geography data of your choice. Oracle provides support for Loqate geography data out of the box.

Can I import geography data for multiple countries in one import job?

No. You can submit only one import job for a country. After submitting the import job, you can search for a different country and submit another import job for that country. Currently, you can only search and import Loqate data for one country at a time using the Manage Geographies task in Setup and Maintenance menu.

10 FAQs for Define Geographies

How You Search Geographies in the Language You Prefer

You can search geographical data using the language that you prefer.

You can search geographical data using the language that you prefer after setting up the profile option Filter Geographies Using User Language (HZ_GEO_FILTER_BY_USER_LANG). You must first define the profile option HZ_GEO_FILTER_BY_USER_LANG and then specify the language you want to use using these steps:

1. Create the profile option as follows:
    a. Click **Navigator** > **My Enterprise** > **Setup and Maintenance** > **Search** and search for Manage Profile Options.
    b. Click Create new profile option icon and enter the following:
        - Profile Option Code: HZ_GEO_FILTER_BY_USER_LANG
        - Profile Display Name: Filter Geographies Using User Language
        - Application: Trading Community Model
        - Module: Trading Community Model
        - Description: provide the description
        - Start Date: specify a date
    c. Click Save and close.
    d. In Profile Option Levels table, select `Enabled` and `Updateable` for the site level.
    e. Click Save and Close.
2. Set the default value for the profile option as follows:
    a. Click **Navigator** > **My Enterprise** > **Setup and Maintenance** > **Search** and search for Manage Administrator Profile Values.
    b. Search HZ_GEO_FILTER_BY_USER_LANG as the profile option code.
    c. Add new Site level profile value.
    d. Specify the new profile in the following format:

        <COUNTRY_CODE1>:<GEOGRPHY_LEVEL1>, <GEOGRAPHY_LEVEL2>;<COUNTRY_CODE2>:<GEOGRAPHY_LEVEL1>

        Where Geography Level values start with value 1 for country and increment for each level that's defined in the country's geography structure setup.

        For example, the following are the geography levels for Canada:

        Country - 1, State - 2, Province - 3, City - 4, Postal Code - 5

        Similarly, the following are the geography levels for United States:

        Country - 1, State - 2, County - 3, City - 4, Postal Code - 5

Example 1: If you want to filter data for Canadian Cities, then the profile value is CA:3 where CA is the country code for Canada and 3 is geography level value for City.

Example 2: If you want to filter data for both State and Cities for United States, then value should be US:2,4

Example 3: If you want to filter data for multiple countries as given in both example 1 and example 2, then use semi colon as delimiter, like CA:3;US:2,4

e. Click Save and Close.

Suppose you load geography data for Canada in English and French. By default when you search this data using say Postal Code H4A 0A1, the following is the search result:

When you search this data using say Postal Code H4A 0A1, the following is the search result:

- H4A 0A1, Montreal, QC
- H4A 0A1, Montreal, Quebec
- H4A 0A1, Montréal, QC
- H4A 0A1, Montréal, Quebec

But you may want the search results to be displayed in the language you prefer. So, if you set the language as English, the following must be displayed:

- H4A 0A1, Montreal, QC
- H4A 0A1, Montreal, Quebec

And if you set the language as French, the following must be displayed:

- H4A 0A1, Montréal, QC
- H4A 0A1, Montréal, Quebec

When do I define address cleansing?

When address data entered into the application must conform to a particular format, to achieve consistency in the representation of addresses. For example, making sure that the incoming data is stored following the correct postal address format.

Why can't I update a geography structure by copying an existing country structure?

You can only update a geography structure by adding existing geography types, or by creating new geography types and then adding them to the geography structure.

You can only copy an existing country structure when you're defining a new country structure.

How many levels in a geography structure can I define?

We recommend that you add up to six levels, starting with country at level 1, while defining geography structures. If you add more than six levels containing list of values or validations, then the sixth level and above may not work as expected in the Address UI of accounts, contacts, suppliers, persons, and so on.

Why can't I delete a level of the country geography structure?

If a geography exists for a country geography structure level then you can't delete the level.

For example, if a state geography has been created for the United States country geography structure, then the State level can't be deleted in the country geography structure.

What happens if I add or update the details of a country?

Any change in the country details is reflected in pages associated with geographies such as Manage Territories, addresses list of values in the Account and Contact UI, and so on. However, the list of countries in the Manage Geographies isn't updated.

How can I add a geography that's at a lower level to any geography in a geography hierarchy?

Select the geography that you want to create a geography at lower level, and then click the **Create** icon. This lets you create a geography for a geography type that's one level lower to the geography type you selected. The structure of the country's geography types are defined in the Manage Geography Structure page.

How can I verify whether the third-party geography structure and hierarchy I imported are available in the application?

You can track the progress of the geography structure and hierarchy import process by navigating to the Scheduled Processes page and viewing the status of the third-party geography data import process.

Once the process completes, the status changes to Succeeded. You can then verify the newly imported geography structure and hierarchy in the Setup and Maintenance work area by navigating to the following: offering: Customer Data Management; functional area: Enterprise Profile; task: Manage Geographies, where you first loaded the third-party geography data.

> **Note:** Before you load geography data for a country from a third party provider, ensure that no geography structure or hierarchy is saved for that country. If geography structure or hierarchy data is already available, the load process fails.

How can I enable geocoding?

You can enable geocoding for a country by turning the Geocoding option for that country in the Setup and Maintenance work area.

Navigate to the following:

- offering: Customer Data Management
- functional area: Enterprise Profile
- task: Manage Geographies

Search for the country for which you want to enable geocoding and click the **Geocoding Defined** icon. If geocoding is enabled for a country, the Geocoding Defined icon displays a check mark.

Once you have enabled geocoding for a country, you must run the Run Geocode Generation scheduled process on the Run Geocode Generation task. Before you run the job, however, ensure that you have specified the country code of the country for which you want to generate the geocodes.

Where can I view the geocode values of a location?

You can search for and view the geocode values of a party's location in the Party Center and the Customer Center pages.

Navigate to the Addresses section of the party's profile and click either **View, Columns, Latitude** and **View, Columns, Longitude**, or **View, Columns, Manage Columns, Latitude** and **Longitude**. This displays the latitude and longitude, or geocode values, associated with the location of the party.

> **Note:** Geocode information display is available only when geocoding is enabled for the country to which the address belongs.

Related Topics

- What attributes are referenced to populate latitude and longitude during geocoding?

What are Spatial Services?

Spatial services allow users to find points of interest such as customers, contacts, and so on using the latitude and longitude coordinates of an address.

The Oracle Fusion Mobile Sales application provides these services for sales representatives to discover accounts and contacts around their location.

Where can I update and view the geography name reference information for parties?

To view the geography name reference information associated with parties, you need to ensure that you have created an address for the party. You can create or update party addresses in the Organizations, Persons, and Groups work areas.

Once you have updated an address, you must either wait for the Run Geocode Generation scheduled process to run automatically as scheduled or start geocode generation manually from the Setup and Maintenance work area by navigating as follows:

- offering: Customer Data Management
- functional area: Enterprise Profile
- task: Run Geocode Generation

Once the Run Geocode Generation job has updated the geography information for the country associated with the party you updated, you can search for and view the geography name reference information associated with the party in the Organizations, Persons, and Groups work areas. Navigate to the person, organization, or group whose address you want to verify and click **Actions, View Geography Information**. This displays a dialog box that displays the updated geography information, complete with address values enhanced using geography name reference.

> **Note:** Geography name reference enriched geography information display is available only when geography validation is enabled for the country to which the address belongs.

How can I save an address that didn't pass geography validation?

Search and select for the country name in the Manage Geographies page, and then click the **Validation Defined** option. In the Manage Geography Validation page, select **No Validation** in the Geography Validation Level for Country drop-down list. This option saves addresses that don't pass the geography validation, including incomplete and invalid addresses.

Why is Import Geography Data Disabled in Manage Geographies?

Import Geography Data is disabled for a country if the geography data for that country isn't available from Loqate or if the geography structure or hierarchy is already defined for that country.

The existing master geography hierarchy can be from Loqate or non-Loqate geography data providers. For example, Pakistan isn't supported currently in the supported list of 82 countries. If you try to import geography data for Pakistan after defining geography structure or geography hierarchy for it, Pakistan would be grayed out in the import list.

Note: If the hierarchy is defined, delete the geography hierarchy data first and then the geography structure.

How do I validate geographies of addresses against master geographies and generate naming references?

Use the Validate Geographies of Addresses Against Master Geographies scheduled process helps you validate an address against master geography data and generates geography naming references.

Geography Name Referencing (GNR) process validates address elements in location tables, such as HZ_LOCATIONS, against the master geography data.

When to Use

This scheduled process validates address data against master geographies. This scheduled process checks whether geography elements of an address like state, city, postal code, are valid as per master geography data. It also stores Geography Name Referencing information for the address. Note that geography validation isn't the same as address verification. *Address Verification* depends upon Oracle or any third-party address verification services for verifying addresses.

You can run this scheduled process for the following reasons:

- When you must generate or refresh the geography naming references data for a location.
- After creating new locations or updating existing locations using import and when geography naming references generation at the time of creation is turned off.
- When the master geography hierarchy has changed after the geography naming references data is computed and we require to re-compute the geography naming references data.
- We recommend that the profile option value of the *HZ_POST_IMPORT_GNR_INVOKE profile option* is set to N. When this profile option value is set to N, the Validate Geographies of Addresses Against Master Geographies scheduled process isn't invoked after every import following bulk uploads. Instead, you must schedule this scheduled process every week during off peak hours. This helps improve the geography data import performance.
- Schedule this process after loading Persons or Employees in HCM.

The time taken to complete one instance of this scheduled process (GNR job) depends upon the following factors:

- The number of locations or addresses in the application
- The number of validation levels set for a given country
- The number of geographies for the given country

To process a large volume of addresses for a country using this scheduled process, fine tune the following profile options:

- HZ_GNR_NUM_OF_WORKERS: By default, the value of this profile option is 1. So only one worker job is created. Increase this number based on the number of jobs you want to use.
- HZ_GNR_COMMIT_SIZE: By default, the value of this profile option is 1000 records. Increase this number based on the number of records you want to process.

Privileges Required

Verify that you have the following privilege or role:

- Role:
  - Application Implementation Consultant
- Privilege:
  - Run Trading Community Geography Name Referencing Maintenance

Before You Start

Review the following before scheduling this scheduled process:

- Recommended Frequency:
  - Run this scheduled process whenever the geography naming references data for a location is generated or refreshed.
- Compatibility:
  - This process is self-incompatible and also incompatible with the Group Territory Geographies process.

- If multiple instances are submitted, the first instance runs and subsequent instances remain in blocked status until the first instance is completed.

Parameters

Parameter	Optional or Mandatory	Description	Parameter Values	Special Combinations Required	Notes
Location Table Name	Mandatory	Specifies the table name containing the address records that you want to process.	HZ_LOCATIONS PER_ADDRESSES_F	None	The PER_ADDRESSES_F value works only for tax validation and not for address validation. For example, if you are using this GNR process in HCM and you select the PER_ADDRESSES_F option, then this scheduled processes can be used for tax purposes but not for validating employee addresses.
Run Type	Mandatory	Specifies the data set to be processed. Specify if you want to process all records, only records that previously resulted in error, or only new records that were never processed. The choice to process all records can take considerable amount of time to complete. In taxation applications, an upgrade parameter is available, if the application is installed at the time of upgrade. If you already processed all records or upgraded recently, you may select only the New or the Error parameter.	ALL ERROR NEW	None	ALL-Validates all Locations Error-Re-validates erroneous records NEW-Validates new locations
Usage Code	Optional	Specifies the validation usage code. This parameter specifies whether the GEOGRAPHY or TAX validation must be run. Specify to run the program for either the tax or geography validation	GEOGRAPHY TAX	None	Use GEOGRAPHY for address validation.

Parameter	Optional or Mandatory	Description	Parameter Values	Special Combinations Required	Notes
		usage. The program provides results that correspond to validation rules associated with the selected usage.			
Country Code	Optional	Specifies the ISO Country Code for which the process is run. Enter the country for which addresses must be processed.	Example: US	None	N/A
From Location ID	Optional	Specifies the beginning Location ID from which validation should be run	Numeric Value	From Location ID should be less than To Location ID	N/A
To Location ID	Optional	Specifies the ending Location ID till which validation should be run	Numeric Value	To Location ID should be greater than From Location ID	N/A
Start Date	Optional	Specifies the begin Location Effective Start Date	Date	Format : YYYY/MM/DD Example: 2019/12/24 Start Date should be lower than End Date	N/A
End Date	Optional	Specifies the begin Location Effective End Date	Date	Format : YYYY/MM/DD Example: 2019/12/24 End Date should be higher than Start Date	N/A

Geography Name Referencing (GNR) records are created for addresses based on the country structure for a particular country and the validations defined on that structure. The following table displays the relationship between validations defined and the creation of GNR records. It also shows how the records change when correct or incorrect data are provided as values for addresses.

Use Case	Address Validations Defined	Address	GNR Records	GNR Map Status
Correct data with no validations	None	Country: US State: CA	GNR record created for country	Success

Use Case	Address Validations Defined	Address	GNR Records	GNR Map Status
		City: Redwood City Postal Code: 94065		
Correct data with validations turned on for all levels	Country: US Validations Defined for: State, County, City, Postal Code	Country: US State: CA City: Redwood City Postal Code :94065	GNR Records created for country, state, county,city and postal code	Success
Correct date with validation defined only for last level	Country: US Validations Defined for: Postal Code	Country: US State: CA City: Redwood City Postal Code: 94065	GNR Records created for country, state, county,city and postal code	Success
Correct date with validation defined only for last level. Postal Code is unique and falls within single city in the county.	Country: US Validations Defined for: Postal Code	Country: US State: CA City: Postal Code: 94065	GNR Records created for country, state, county,city and postal code.	Success
Correct data with validation on middle level	Country: US Validations Defined for: City	Country: US State: CA City: Redwood City Postal Code: 94065	GNR Records created for country, state, county,city and postal code	Success
Correct data with validation on middle level. Postal Code is unique and falls within single city in the county.	Country: US Validations Defined for: City	Country: US State: CA City: <NULL> Postal Code: 94065	GNR Records created for country, state, county,city and postal code .	Success

Use Case	Address Validations Defined	Address	GNR Records	GNR Map Status
Incorrect data for last level with validation on middle level	Country: US Validations Defined for: City	Country: US State: NY City: New York Postal Code: 1111	GNR Records created for country, state, county and city	Success
Incorrect data for last levels with validation on middle level	Country: US Validations Defined for: State	Country: US State: CA City: Abc Postal Code: 94065	GNR Records created for country and state	Success
Incorrect data for last levels with validation on middle level	Country: US Validations Defined for: State	Country: US State: CA City: Redwood City Postal Code: 111	GNR Records created for country, state, county and city	Success
Incorrect data for last level with validations turned on for all levels	Country: US Validations Defined for: State, County, City, Postal Code	Country: US State: CA City: Redwood City Postal Code: 10027 (assume 10027 postal code does not exist)	GNR Records created for: Country state county city	Error
Incorrect data for middle level followed by correct data on subsequent levels with validations turned on for all levels	Country: US Validations Defined for: State, County, City, Postal Code	Country: US State: CA City: Abc Postal Code: 94065	GNR Records created for: Country State	Error

Use Case	Address Validations Defined	Address	GNR Records	GNR Map Status
Incorrect data for middle level with validation defined only for last level	Country: US Validations Defined for: Postal Code	Country: US State: CA City: Abc Postal Code: 94065	GNR Records created for country and state	Error
Correct data with validation defined only for last level. Same Postal Code is in two cities (which are in the same county).	Country: US Validations Defined for: Postal Code	Country: US State: CA City: <NULL> Postal Code: 94065	GNR Records created for Country, State, County	Error

Related Topics

- How do I manage geography validation?
- Setting Up Geography Validation
- How can I save an address that didn't pass geography validation?
- Address Validation using Geography Naming Reference (GNR) Report