Oracle Account and Contact Enrichment by D&B

Using Account and Contact Enrichment by Dun & Bradstreet

May 2025

Oracle Account and Contact Enrichment by D&B
Using Account and Contact Enrichment by Dun & Bradstreet

May 2025

E37283-68

Copyright © 2025, Oracle and/or its affiliates.

Author: Crescentia David, Annie Khan, Shruti Agarwal, Bikram Gill, Keerthy Jayaraj, Surya Kavuluri, Ashwini Malthankar, Harisha Shankaramurthy, Alicia Wu

Contents

	Get Help	i
1	Getting Started With DaaS	3
	Get Started with Account and Contact Enrichment	3
	About Data as a Service	3
	How to Begin with DaaS Subscriptions	4
	About DaaS Roles and Users	6
	How to Modify DaaS Subscriptions	6
	Integrate with Oracle Sales or Fusion Service	6
	Integrate with Oracle Eloqua	7
	Understand DaaS Subscriptions	11
	Understand Attributes	12
	Understand Data Records in the User Interface	22
	Use the REST APIs	23
2	Use DaaS	25
	Use Account Enrichment and Contact Enrichment	25
	Typical Workflow for Using DaaS	25
	About Administration	27
	Set Admin Defaults	27
	Use the Business Metric Page	29
	Find New Data Records	30
	Add New Data Records	40
	Match Data Records	6
	Export Account Hierarchies	79
3	Manage Exports	89
	Manage Export Jobs	89
	Typical Workflow for Managing Export Jobs	89
	Explore the Jobs Page	89
	View Jobs	9~



Troubleshoot Jobs	94
4 Manage Mappings	99
Manage Mappings	99
About Mappings	99
Typical Workflow for Using Mappings	114
Explore the Mappings Page	115
Create Mappings	116
Edit Mappings	123
5 Frequently Asked Questions for DaaS	131
Frequently Asked Questions for DaaS	
	ובו
	131 131
FAQ — Subscriptions	131
FAQ — Subscriptions FAQ — Enriching Records	131 133
FAQ — Subscriptions	131 133
FAQ — Subscriptions FAQ — Enriching Records FAQ — Exports and Jobs	131 133 134
FAQ — Subscriptions FAQ — Enriching Records FAQ — Exports and Jobs FAQ — Mapping Files and Export Files	131 133 134 135



Get Help

Here's an introduction to some information sources that can help you use the application and this guide.

Get Support

You can get support at My Oracle Support. For accessible support, visit Oracle Accessibility Learning and Support.

Here are some more links to help you get started quickly:

- Contact My Oracle Support
- Create your Oracle account
- · Work effectively with Support
- Create a technical service request

Join Our Community

Use Cloud Customer Connect to get information from industry experts at Oracle and in the partner community.

You can use these forums to connect with other customers, post questions, and watch events:

- Supplier Management
- DataFox for Sales

Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program.

Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to oracle_aiapps_doc_feedback_grp@oracle.com.

Thanks for helping us improve our user assistance!





1 Getting Started With DaaS

Get Started with Account and Contact Enrichment

Rather than spending time searching for sales leads and missing contact data, you can use Oracle Account Enrichment and Oracle Contact Enrichment to find up-to-date records and then export that data into CX Sales, Eloqua, or another Oracle Cloud application.

Topics:

- About Data as a Service
- How to Begin with DaaS Subscriptions
- About DaaS Roles and Users
- Integrate with Oracle CX Sales and Fusion Service
- Integrate with Oracle Eloqua
- Understand DaaS Subscriptions
- Understand Attributes
- Understand Data Records in the User Interface
- Use the REST APIs

See Oracle Cloud Terminology in Getting Started with Oracle Cloud for definitions of terms found in this and other documents in the Oracle Cloud library.

About Data as a Service

Oracle Account Enrichment and Oracle Contact Enrichment provide Data as a Service (DaaS), with access to over 125 firmographic attributes for more than 347 million company records and 135 million contact records worldwide.

We collect and process these records from our partner data provider Dun & Bradstreet. Oracle Account and Contact Enrichment by D&B is licensed for use with Oracle Cloud Applications subscriptions. It integrates with Sales, Fusion Service, and Eloqua, and you can use our APIs to integrate with other Oracle Applications.

With DaaS, you can:

- Keep your company and contact data up to date in all your applications. You can normalize, standardize, and correct company and contact data in real time or batch mode.
- Meet business objectives by matching and enhancing your business contact data with external reference data.
 You can find new companies and contacts, and identify new contacts within company hierarchies.
- Improve the completeness, accuracy, and integrity of data, which allows better prospecting, database validation, and competitive insights.



How to Begin with DaaS Subscriptions

Here's a summary of the key steps to get Oracle Account Enrichment and Oracle Contact Enrichment subscriptions provisioned in an Oracle Cloud Infrastructure (OCI) data center.

1. Order a subscription for DaaS.

DaaS includes Oracle Account Enrichment for company data and Oracle Contact Enrichment for contact data. For more information on subscriptions, see *Understand DaaS Subscriptions* and *FAQ — Subscriptions*.

For details about ordering and activating your subscription, see *Order Oracle Cloud Applications* in *Getting Started with Oracle Cloud Applications*.

2. Add subscription to your Oracle Cloud account.

You'll receive an email titled "Action Required: Welcome to New Oracle Cloud Service Subscription(s)." Follow the instructions in the email:

- If you have an Oracle Cloud account, then click the Add to existing cloud account button. We recommend using your existing Oracle Cloud account to manage all your Oracle services.
 - i. Specify your cloud Tenant name and click Continue
 - ii. Specify your username and password and click **Sign In**.

The **Add Subscription** page is displayed.

- **iii.** Add the new subscription to your tenancy. This page indicates the subscription name, subscription ID, and subscription description (with product SKU).
 - **Note:** Adding a subscription to a tenancy can't be done.
- If you're a new customer, then click the Create new cloud account button. The New Cloud Account Information sign up form is displayed.
 - i. Specify your First name, Last name, and Email address. The email address is also the username for signing into the account. The person you specify here is the first administrator who can access the account and can create other users. This role also has full administrator permissions in your account.
 - ii. Specify a password and confirm.



- **iii.** Specify a Tenancy Name. This is also called your cloud account name. When choosing a tenancy name, note the following:
 - The tenancy name or cloud account name is used to identify your account. The name is also used to create the URLs to access your cloud services. For example, if you call your tenancy "abccorp", an application URL might look like:

https://abccorp-oracleservice.service.us.phoenix-1.ocs

- The tenancy name must be unique, start with a lowercase letter and have no more than 25 lowercase letters or numbers. You can't use spaces or special characters.
- iv. Select a Home region where your services will be hosted.

Note: Your home region is the geographic location where your account and identity resources will be created. You can't change this after signing up. If you are not sure which region to select as your home region, contact your sales representative before you create your account.

- v. Read the terms of use and click Create Tenancy.
- 3. Create the Data Environment.

You'll receive a another email titled "Get Started Now with Oracle Cloud". Click the Sign In button in the email. The Create environment page is displayed.

- Specify the cloud account name, credentials that you provided while creating cloud account and click
 Create.
- **b.** On the Create environment page, specify the admin email and click **Create**.

Note: Ensure that you don't select the Update option.

A page containing the environment information is displayed.

- **c.** Click the environment name to view the environment details.
- **d.** Copy the Service console URL from the Environment information tab and other links you need from the Additional links tab.
- Create the OAuth client credentials as follows:

Follow the instructions mention *on this page* to add Confidential Application. When you reach the step to click the **OAuth configuration** tab and click **Edit OAuth configuration**, perform the following steps:

- a. Select Configure the application as a client now.
- **b.** Select the following options in the Authorization section:
 - Resource owner
 - Client credentials
 - Refresh token
- c. Click Submit.

Note: For any integration or using Oracle Account and Contact Enrichment by D&B APIs, you require the client credentials. Use these steps:

- i. Copy the Client ID in the General Information section.
- ii. Copy the **Show secret** information in the **Client secret** section.
- d. Click Actions > Activate.

You are now ready to start working on the application.



About DaaS Roles and Users

The following roles are created during DaaS provisioning:

- DATASERVICE ADMINISTRATOR (administrator access)
- DATASERVICE_USER (user access)

The administrator role is required for setting default attributes and mappings and syncing data. The user role lets users do the following tasks:

- Search company and contact information
- Export search or match results
- View, create, and modify attribute mappings
- Update user information
- View search export and match export jobs

Perform the following steps to assign users:

- 1. Go to Navigator > Identity & Security > Domains.
- 2. Click the current domain name.
- 3. Click the **Oracle cloud services** tab.
- 4. Drill down on the cloud service name.
- **5.** Click the **Application roles** tab.
- **6.** Click the ... icon and click **Manage users**.

You can view and assign user on the Manage user assignments page.

Users cannot add or remove other users or change roles.

To create users, see *Create Users* topic.

How to Modify DaaS Subscriptions

You can expand or renew your subscription by contacting Oracle Sales. You'll get an activation email with the subject: Your service has been updated.

Integrate with Oracle Sales or Fusion Service

Integrate with Sales so sales reps can create and edit accounts and contacts with data from D&B. They can also enrich records to better target accounts and get autocomplete information for accounts on data entry.

This assumes you have an active Sales subscription, and then add a subscription for Oracle Account Enrichment or Oracle Contact Enrichment.

1. In Sales, configure the **Manage Data Enrichment Integration** task.



In the Setup and Maintenance work area, go to the following:

- Offering: Sales
- Functional Area: Integrations
- Task: Manage Data Enrichment Integration

Note: The user doing the integration must have the DATASERVICE_CLIENT_API_APPID role. See *About DaaS Roles and Users*.

- 2. Select to enable DaaS.
- 3. For DaaS Credentials, select **OAuth Authentication**.

Note: Basic authentication is being deprecated. If you still use it, do not include the question mark special character (?) in the password.

For information about adding a confidential application and getting the Client ID and Secret, see *Add a Confidential Application* in *Administering Oracle Identity Cloud Service*.

Note: On the Client page of the Add Confidential Application wizard, in the Authorization section, select **Resource Owner**, **Client Credentials**, and **Refresh Token** as Allowed Grant Types. Leave **Redirect URL** blank.

4. For **URL**, remove /data/ui from the end of the instance address listed in your Welcome email and in the Cloud Console.

For example, https://mydataservice-myidentitydomain.data.us2.oraclecloud.com.

Integrate with Oracle Eloqua

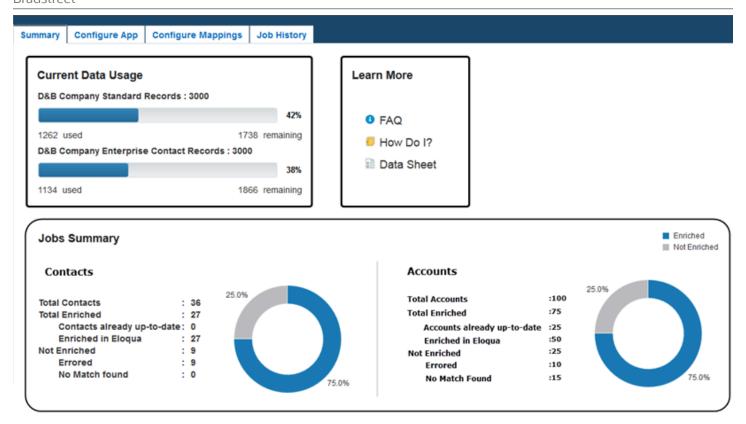
The DaaS Enrichment app lets you update company and contact data within Eloqua.

This app includes two services:

- The DaaS Lead Enrichment action service for contact data (which requires a subscription for Oracle Contact Enrichment)
- The DaaS Account Enrichment menu service for company data (which requires a subscription for Oracle Account Enrichment)

For information about using the app, see Match Data in Eloqua and Add New Companies and Contacts to Eloqua.





Install and Configure the DaaS Enrichment App

As administrator, follow this one time task to install and configure the DaaS Enrichment app with your DaaS subscription:

- 1. Install the DaaS Enrichment app by going to the URL you received after purchasing and clicking **Accept and Install**. You must be logged in to Eloqua to accept.
- 2. On the **Configure App** page, enter the following credentials for your DaaS subscription:
 - DaaS Service URL
 - DaaS Username
 - DaaS Password

These credentials are listed on the Welcome email your account administrator received when you activated your DaaS subscription. If you can't find this email, your account admin can resend it from the Oracle Cloud Console.

Click **Test Credentials**. When successful, click **Save** to save the configuration. Now, each time an Eloqua user accesses the app, DaaS uses this saved information for authentication. The app is available in the AppCloud Catalog.

3. On the **Configure Mappings** page, select a default mapping for both the Lead Enrichment service and the Account Enrichment service. This default mapping will appear first for users to select when they use the app. Mappings define how DaaS attributes map to Eloqua attributes.

You can view the attribute mappings in the provided **MarketingCloudContact&CompanyMatch**, **MarketingCloudContactMatch** or **MarketingCloudCompanyMatch** mappings, but you cannot update or delete these preconfigured mappings. To add (and enrich) more of your Eloqua attributes, you must create a new mapping based on one of these provided mappings. You can create as many new mappings as you want. Follow the steps in *Create Mappings for Eloqua*.

On the **Configure Mappings** page, you can also select the default **Match Confidence** level. For records that match, DaaS applies an internal match score. If the score meets your threshold, then DaaS replaces the matched records with enriched records. (This also shows as the **DNB Match Score** company mapping attribute.) Users can select to override default mapping settings at the campaign level. The default value of 70 is recommended.

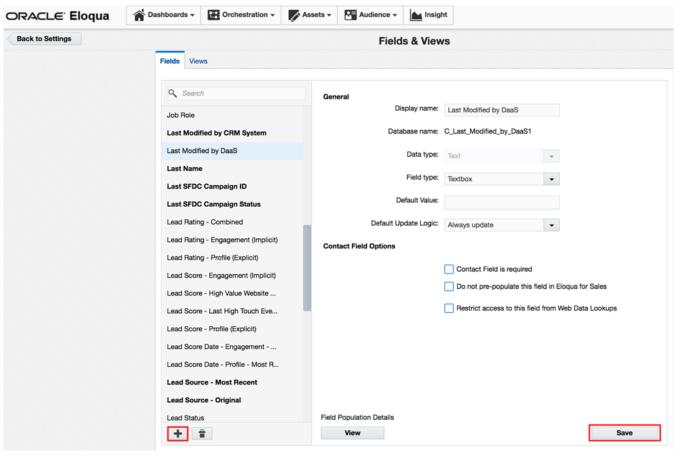
See About Matching Records.

The other Administrator tabs shows the following:

- The **Summary** page shows the current data usage on your DaaS subscription. If attributes returned from enrichments include both contact attributes and company attributes (in additional to the basic company attributes on the contact record, such as company name or address), then the usage of both the contact records and company records increases. DaaS doesn't allow enrichment if there aren't enough remaining records in your quota. For example, if you try to enrich 15 contacts associated with 2 companies, but you have only 13 remaining contacts and 0 company records.
- The **Job History** page shows DaaS enrichment jobs from all users. (Users see job history only at the campaign level.)
- **4.** An Eloqua administrator must create certain fields and views before users can add or enrich data from DaaS. Follow the steps in *Prerequisite: Create Fields and Views in Eloqua*.



- 5. In Eloqua, add the Last Modified By DaaS field.
 - a. Select the **Setup Fields & Views** tab.
 - **b.** On the **Fields** tab, click the **+** button to add a field, and select the type of field as either Contact or Account.
 - c. Enter Display name = Last Modified By Daas, Data type = Text, and Field type = Textbox.
 - d. Click Save.





Note: Enrichments from DaaS come to Eloqua in the Bulk API, which by default has a top Data Import Priority setting in Eloqua. If the Eloqua administrator changes the data priority settings (for example, so that CRM data has the top priority), then users may see different results.

Understand DaaS Subscriptions

Oracle Account Enrichment subscriptions let you search, match, and export Dun & Bradstreet (D&B) company records, and Oracle Contact Enrichment subscriptions let you search, match, and export D&B contact records.

The following subscriptions are licensed for use with Oracle Cloud Applications subscriptions:

- Oracle Account Enrichment Cloud Service, for company records
- Oracle Contact Enrichment Cloud Service, for contact records

These yearly subscriptions provide a long-term use of the data that's updated monthly from D&B. The subscription terminates at the end of a year, when you can renew it or order another subscription.

Active subscriptions can be expanded (that is, new parts can be added) if you cannot wait until the end of your subscription period to make the change. The start date and end date apply to the entire subscription; that is, there is one start date and one end date for a subscription, and the end date applies to all parts in the subscription regardless of when a part was added. On termination, the entire subscription is destroyed. After orders process, Oracle Cloud sends a notification email to activate the service.

DaaS Subscription	Yearly
Subscription period	365 days
Term period	No limit
Record license period	365 days
Maximum no of concurrent orders	No limit
Maximum number of orders for a customer per year	No limit
Company records minimum-maximum	1000-5 million
Contact records minimum-maximum	1000-5 million
Per-subscription Address Verification records	1000-5 million (no limitation, user can specify any positive number)
Unlimited Address Verification records	No limit



For more information on subscriptions, see *FAQ* — *Subscriptions*.

Update Your Subscription

You can expand or renew your subscription by contacting Oracle Sales. You will get an activation email titled: Your service has been updated. Then follow these steps:

- On the Cloud Console Dashboard, select your active Data service.
- On the Overview page, click the Action Menu to then click Modify.
- On the Modify page, leave all default values, and click the **Modify** button.
- Click Modify again to confirm that you want to update this instance.
- You get an activation email titled: Your service instance has been updated.

Understand Attributes

DaaS, through its partnership with Dun & Bradstreet (D&B), provides company and contact attributes to search and enrich data.

Oracle also provides additional attributes not from D&B (and not listed here), free of charge, such as **MatchScore** and **ContactCount**.

Topics:

- Account Enrichment Attributes
- Contact Enrichment Attributes

Note: Attribute names may look slightly different in different mappings. Also, some D&B attributes have an alphanumeric code value. DaaS renders the corresponding descriptions of these codes in our interface. For example, Location Type may appear in DaaS with a value of Single Location, Headquarters, or Branch. However, these descriptions aren't included in the generated output files. In the export files, these Location Type values appear as 0, 1, or 2. See D&B Reference Tables.

Account Enrichment Attributes

The following company attributes are provided with Oracle Account Enrichment subscriptions. The **Geographic Availability** column lists whether the attribute applies to all (global) companies or only U.S companies.

To learn more about how these attributes map to other applications, see *About Mappings* and *Edit Existing Mappings*.

Company Attribute	Geographic Availability	Description
2 Byte ISO Country Code	Global	The two byte alpha character ISO code for the country where the business is located.



Company Attribute	Geographic Availability	Description
3 Year Growth Percentage on Employees	US only	The percentage increase or decrease in the number of employees over a 3-year period. Includes a + or - sign denoting positive or negative growth in sales.
3 Year Growth Percentage on Sales Volume	US only	The percentage increase or decrease in the sales volume over a 3-year period. Includes a + or - sign denoting positive or negative growth in sales.
ASE Ticker	US only	The symbol used to trade the company's stock on the American Stock Exchange.
Business Name	Global	The primary or registered name of the business.
Census FIPS Country Code	US only	The Federal Information Processing Standards county code identifying the county where the subject is located.
Census FIPS Territory Code	US only	The Federal Information Processing Standards territory code for where this subject is located. These territory codes are defined and developed by the National Institute of Standards and Technology (NIST) organization within the US federal Department of Commerce.
City	Global	The name of the city where the business is physically located. Generally in local language.
Company Description	Global	Narrative company description.
Country	Global	The 2-byte alpha character ISO code for the country where the business is located.
Country Access Code	Global	The international dialing code required to connect to the phone or fax number when dialing internationally.
County	Global	The full name of the county where the business is located.
Currency Code	Global	A code value that describes the type of currency in which the sales volume (local currency) is expressed.
Delinquency Risk	US only	Based on the standard Commercial Credit Score, which predicts the likelihood of a company becoming severely delinquent over the next 12 months. Grouped into risk ranges.
Domestic Ultimate Business Name	Global	The primary name of the domestic ultimate business.
Domestic Ultimate D&B Country Code	Global	D&B geographical code identifying the country where the domestic ultimate is located.
Domestic Ultimate DUNS Number	Global	A subsidiary within the global family tree that is the highest-ranking member within a specific country. May contain leading zeros, which are lost if the field is treated as numeric.
Domestic Ultimate FIPS Country Code	Global	The Federal Information Processing Standards code value that identifies the country where the domestic ultimate company is located.



Company Attribute	Geographic Availability	Description
Domestic Ultimate State Province Abbreviation	Global	The abbreviated name of the state or province in which the domestic ultimate is located.
DUNS Number	Global	A randomly generated 9-digit number assigned by D&B to identify unique business establishments. May contain leading zeros, which are lost if the field is treated as numeric.
Employees Here	Global	The number of employees at this location.
Employees Here Reliability Code	Global	A code value that describes the reliability of the Employees Total value.
Employees Total	Global	The total number of employees in the business organization; it should include subsidiary and branch locations.
Employees Total Reliability Code	Global	A code value that describes the reliability of the Employees Total value.
Facsimile Number	Global	The primary fax number for the business with no formatting or punctuation. This string contains all telecommunication number components (area code, exchange, number).
Federal Tax ID Number	US only	A number assigned by the Internal Revenue Services (IRS) that either uniquely identifies or helps to identify a subject, also referred to as Federal Taxpayer Identification Number.
FIPS MSA Code	US only	The Federal Information Processing Standards code value that identifies the Metropolitan Statistical Area (known as the MSA) where this subject is located. These MSA codes were defined and developed by the National Institute of Standards and Technology (NIST) organization within the US Federal Department of Commerce.
Full Postal Code	Global	Full postal code as received by D&B.
GEO Code Accuracy	Global	A code value that describes how close the coordinates for a location are to "rooftop" level.
Global Exchange Name	Global	The exchange where the stock symbol is listed.
Global Ultimate Business Name	Global	The name of the ultimate company.
Global Ultimate D&B Country Code	Global	D&B geographical code identifying the country where the ultimate company is located.
Global Ultimate DUNS Number	Global	The top-most responsible entity within the corporate family tree. May contain leading zeros, which are lost if the field is treated as numeric.
Global Ultimate FIPS Country Code	Global	The Federal Information Processing Standards code value that identifies the country where the ultimate company is located.
Global Ultimate Indicator	Global	Indicates whether the site record is the Global Ultimate D-U-N-S within the corporate family tree.



Company Attribute	Geographic Availability	Description
Global Ultimate State Province Abbreviation	Global	The abbreviated name of the state or province in which the domestic ultimate is located.
Headquarter DUNS Number	Global	The D-U-N-S number of the headquarter organization. May contain lead zeros, which are lost if field is treated as numeric.
Hierarchy Code	Global	A number used with the status and subsidiary indicators to pinpoint the location of an establishment within a corporate hierarchy. The hierarchy on the global ultimate is '01'. A branch hierarchy is the same as its headquarters. A subsidiary's hierarchy is one more than its parent's.
Import Indicator	Global	A code value that identifies whether the business imports goods or services for remanufacture or sale, exports products or services to a foreign country, or is an agent for goods.
		This appears as Foreign Trade on a company profile.
Labor Surplus Indicator	US only	Indicator of labor surplus area as defined by the United States Department of Labor and available only from the US.
Latitude	Canada, Germany, UK, US	The angular distance north or south from the earth's equator measured through 90 degrees.
Latitude Short	Canada, Germany, UK, US, Mexico, Vietnam, Belgium, Australia, Netherlands, Republic of Korea	The angular distance north or south from the earth's equator measured through 90 degrees. Note: This is a less granular view of the Latitude field.
Legal Status Code	Global	A code value that describes the legal structure of the business.
line-of-business	Global	A description of the operations or activities of the business. Relates to the primary four-digit 1987 US SIC.
Location Type	Global	A code value that describes the organizational status of the business; for example, Single Location, Headquarters, Branch.
Longitude	Canada, Germany, UK, US	The angular distance east or west from the prime meridian measured through 180 degrees.
Longitude Short	Canada, Germany, UK, US, Mexico, Vietnam, Belgium, Australia, Netherlands, Republic of Korea	The angular distance east or west from the prime meridian measured through 180 degrees. Note: This is a less granular view of the Longitude field.



Company Attribute	Geographic Availability	Description
Mailing Address 1	Global	The address line where a business has its mail delivered. Generally in local language.
Mailing Address 2	Global (not used in US)	The second street address line where a business has its mail delivered. Generally in local language.
Mailing City	Global	The city name where the business has its mail delivered. Generally in local language.
Mailing Full Postal Code	Global	The postal code where the business has its mail delivered.
Mailing State	Global	The abbreviation for the state or province where the business has its mail delivered.
Major Industry Category Code	Global	A code value that denotes under which major industry category an establishment falls.
Marketability Indicator	Global	Indicates that the record satisfies D&B global marketability rules.
Merge Date	Global	Date New DUNS Number was applied.
Merge Reason	Global	A code that provides the reason for the new DUNS number located in th New DUNS field.
Minority Owned Indicator	US only	Whether or not the business is owned by a member of a minority group.
Minority Owned Type	US only	Indicates the ethnicity of the minority holding an ownership interest.
NAICS Code1_1	Global	The North American Industry Classification System equivalent for the combination of the first 4 bytes and the first 4 byte node of the primary SIC code.
NAICS Code1_2	Global	The NAICS equivalent for the combination of the first 4 bytes and the second 4 byte node of the primary SIC code.
NAICS Code1_3	Global	The NAICS equivalent for the combination of the first 4 bytes and the third 4 byte node of the primary SIC code.
NAICS Code1_4	Global	The NAICS equivalent for the combination of the first 4 bytes and the fourth 4 byte node of the primary SIC code.
NAICS Code2_1	Global	The NAICS equivalent for the combination of the first 4 bytes and the first 4 byte node of the secondary SIC code.
NAICS Code2_2	Global	The North American Industry Classification System equivalent for the combination of the first 4 bytes and the second 4 byte node of the secondary SIC code.
NAICS Code2_3	Global	The NAICS equivalent for the combination of the first 4 bytes and the third 4 byte node of the secondary SIC code.



Company Attribute	Geographic Availability	Description
NAICS Code2_4	Global	The NAICS equivalent for the combination of the first 4 bytes and the fourth 4 byte node of the secondary SIC code.
NAICS Code3_1	Global	The North American Industry Classification System equivalent for the combination of the first 4 bytes and the first 4 byte node of the third SIC code.
NAICS Code3_2	Global	The NAICS equivalent for the combination of the first 4 bytes and the second 4 byte node of the third SIC code.
NAICS Code3_3	Global	The NAICS equivalent for the combination of the first 4 bytes and the third 4 byte node of the third SIC code.
NAICS Code3_4	Global	The NAICS equivalent for the combination of the first 4 bytes and the fourth 4 byte node of the third SIC code.
NAICS Code4_1	Global	The North American Industry Classification System equivalent for the combination of the first 4 bytes and the first 4 byte node of the fourth SIC code.
NAICS Code4_2	Global	The NAICS equivalent for the combination of the first 4 bytes and the second 4 byte node of the fourth SIC code.
NAICS Code4_3	Global	The NAICS equivalent for the combination of the first 4 bytes and the third 4 byte node of the fourth SIC code.
NAICS Code4_4	Global	The NAICS equivalent for the combination of the first 4 bytes and the fourth 4 byte node of the fourth SIC code.
NAICS Code5_1	Global	The North American Industry Classification System equivalent for the combination of the first 4 bytes and the first 4 byte node of the fifth SIC code.
NAICS Code5_2	Global	The NAICS equivalent for the combination of the first 4 bytes and the second 4 byte node of the fifth SIC code.
NAICS Code5_3	Global	The NAICS equivalent for the combination of the first 4 bytes and the third 4 byte node of the fifth SIC code.
NAICS Code5_4	Global	The NAICS equivalent for the combination of the first 4 bytes and the fourth 4 byte node of the fifth SIC code.
NAICS Code6_1	Global	The North American Industry Classification System equivalent for the combination of the first 4 bytes and the first 4 byte node of the sixth SIC code.



Company Attribute	Geographic Availability	Description
NAICS Code6_2	Global	The NAICS equivalent for the combination of the first 4 bytes and the second 4 byte node of the sixth SIC code.
NAICS Code6_3	Global	The NAICS equivalent for the combination of the first 4 bytes and the third 4 byte node of the sixth SIC code.
NAICS Code6_4	Global	The NAICS equivalent for the combination of the first 4 bytes and the fourth 4 byte node of the sixth SIC code.
NAS Ticker	US only	The symbol used to trade the company's stock on the NASDAQ Small Cap Exchange.
National Identification Code	Global	A code value that describes the type of national ID number provided; for example, '12' = CRO, '14' = Siren.
National Identification Number	Global	The business identification number used in some countries for business registration and tax collection. Examples include CRO numbers in the UK and the French Siren numbers.
New DUNS Number	Global	New DUNS Number for the business that should be used to replace the existing DUNS Number on the record.
NMS Ticker	US only	The symbol used to trade the company's stock on the NASDAQ National Market.
Number of Business Family Members	Global	The number of family members including the global ultimate and all subsidiaries and branches of the entire family tree worldwide. All family members within a particular tree carry the same count.
NYSE Stock Exchange	US only	The symbol used to trade the company's stock on the New York Stock Exchange.
Operates From Residence Indicator	US only	A flag stating whether or not the business is run from a residential address.
Out of Business Indicator	US only	Indicates that the business is out of business or inactive based upon D&B policies and procedures.
Over the Counter Stock Exchange	US only	The symbol used to trade the company's stock on the Over the Counter Stock Exchange.
Owns Rents Code	Global	A code value that indicates if the business owns or rents the building it occupies.
Parent DUNS Number	Global	The D-U-N-S number of the parent organization. May contain leading zeros, which are lost if the field is treated as numeric.
Parent Headquarter Business Name	Global	The primary name of the parent/headquarter company.
Parent Headquarter D&B Country Code	Global	D&B geographical code identifying the country where the parent/headquarter is located.
Phone Number	Global	The primary phone number for the business with no formatting or punctuation. This string contains all telecommunication number components (area code, exchange, number).



Company Attribute	Geographic Availability	Description
Primary Competitor 1	Global	DUNS number of the company deemed to be competitor for the business.
Primary Competitor 2	Global	DUNS number of a company deemed to be competitor for the business.
Primary Competitor 3	Global	DUNS number of a company deemed to be competitor for the business.
Primary Indicator	Global	Indicates whether or not the ticker is the primary one for the business.
Public Private Indicator	Global	Indicates whether ownership of the business is public or private.
Sales Volume Local Currency Reliability Code	Global	A code value that describes the reliability of the annual sales/revenue figure that is expressed in local currency.
Sales Volume (Local Currency)	Global	The total annual sales/revenue for this business, expressed in US dollars as a signed, decimal field. If the sales/revenue is collected in local currency, then the local value is converted to US dollars.
Sales Volume US Dollars	Global	The total annual sales/revenue for this business in local currency. Not available on branch locations.
Sales Volume (US Dollars) Reliability Code	Global	A code value that describes the reliability of the annual sales/revenue figure that is expressed in US dollars.
Secondary Competitor 1	Global	DUNS number of a company deemed to be competitor for the business.
Secondary Competitor 2	Global	DUNS number of a company deemed to be competitor for the business.
Small Business Indicator	US only	Whether or not a business meets certification eligibility criteria established by the SBA effective July 1, 1999. All firms must be certified by one of the Small Disadvantaged Business Certification Agencies.
State	Global	The abbreviation for the physical state or province name where the business is located.
State Name	Global	The full name of the physical state or province name where the business is located.
Stock Symbol	US only	The most commonly known symbol used to trade the company's stock.
Street Address 1	Global	The first street address line where a business is physically located. Generally in local language.
Street Address 2	Global (not used in US)	The second street address line where a business is physically located. Generally in local language.
Subsidiary Status	Global	Whether or not the subject business is more than 50% owned by anothe organization.
Trade Style Name	Global	A trading style name used by a business. It is an additional name used by a company. Also referred to as "Doing Business As" (DBA) and "Also Known As" (AKA).



Company Attribute	Geographic Availability	Description
Trade Style Name 2	Global	A second trading style name used by the business.
Trade Style Name 3	Global	An additional name used by a business for advertising and/or buying purposes - a "doing business as" name.
Trade Style Name 4	Global	An additional name used by a business for advertising and/or buying purposes - a "doing business as" name.
Trade Style Name 5	Global	An additional name used by a business for advertising and/or buying purposes - a "doing business as" name.
URL	Global	The primary URL for the company.
US 1987 SIC 1	Global	The US 1987 Standard Industrial Classification (SIC) code system categorizes business establishments based upon the type of activity done by that business at that location. A business can have up to six SIC codes and each SIC can have four extensions. The first-listed SIC code represents the primary operations of the business. Then, SIC codes are assigned in descending order according to the percentage of the revenue contributed by each function of the business. The SIC code of a parent/ultimate may include the activities of its subsidiaries. SIC Code 2 Category = The name of the Standard Industrial Classification code for the second line-of-business operations as ranked by percent of
US 1987 SIC 2	Global	The Standard Industrial Classification code for the second line-of-business operations as ranked by percent of sales/revenue.
US 1987 SIC 3	Global	The Standard Industrial Classification code for the third line-of-business operations as ranked by percent of sales/revenue.
US 1987 SIC 4	Global	The Standard Industrial Classification code for the fourth line-of- business operations as ranked by percent of sales/revenue.
US 1987 SIC 5	Global	The Standard Industrial Classification code for the fifth line-of-business operations as ranked by percent of sales/revenue.
US 1987 SIC 6	Global	The Standard Industrial Classification code for the sixth line-of-business operations as ranked by percent of sales/revenue.
Woman Owned	US only	A business that is at least 51% owned by, and whose management and daily business operations are controlled by, a woman.
Year Started	Global	The year when the current ownership or management assumed control of the business or the year established if no control change has taken place. This is not provided for branch records.



Contact Enrichment Attributes

For non-US contacts, DaaS only provides the following personally identifiable information (PII) for business contacts: the contact's First Name, Last Name, Job Title, Gender, and Company Address associated with the company's DUNS#.

The following contact attributes are provided with Oracle Contact Enrichment subscriptions. The **Geographic Availability** column lists whether the attribute applies to all (global) companies or only U.S companies. Many countries in the European Union do not expose certain information due to GDPR (General Data Protection Regulation). For example, the Direct Dial Phone attribute is only available for contacts from companies in the US.

To learn more about how these attributes are mapped to other applications, see *About Mappings* and *Edit Existing Mappings*.

Contact Attribute	Geographic Availability	Description	
Company Phone	US only	The company phone number at which the professional can be reached (for current role assignments).	
Company Phone Extension	US only	The phone extension associated with the company phone number indicated on this record.	
Direct Dial Phone	US only	The direct-dial phone number associated with this person in this role. It includes country code, area code and phone number.	
DUNS Number	Global	DUNS number of the business location.	
Email Address	US only	The main email address associated with this person's role or contact record.	
First Name	Global	The first name of the person.	
Gender	US only	The gender of the person.	
Individual ID	US only	The unique identifier of the professional.	
Last Name	Global	The last name of the person.	
Last Update Date Role	US only	The date ANY of the role data was last updated. This date is assigned by Professional Contacts database.	
Middle Name	US only	The middle name of the person.	
MRC Code	Global	The management responsibility code, which is a code that has been derived from the vanity title or standardized title. This consists of 4 characters. The first position of the MRC Code indicates the general function of the individual, such as executive or finance. The second position indicates the general title of the individual, such as owner or director. The last two digits indicate a role under the general function and general title. For example, the role code CW = founder.	
Prefix	Global	The prefix (Mr., Ms., Dr.) associated with the person's name.	



Contact Attribute	Geographic Availability	Description
Role ID	US only	Unique identifier of the professional's job at a particular DUNS location.
Suffix	Global	The last name suffix of the person.
Title	Global	The title associated with the person's role. This is the title as it would read on a person's business card.

Understand Data Records in the User Interface

The user interface (UI) shows all data, no matter what subscription you purchased: You browse and search against the entire data set, and you're not charged anything.

However, when you try to export (download) or match a record, the service verifies the type of subscription you purchased. If you purchased a company enrichment subscription, then only company records are downloaded. Your subscription is charged only when the record is downloaded with a search export or a match export.

Why is some data blank?

Some data on the UI is blank because the data provider doesn't have a corresponding value for that field.

Downloaded files contain all attributes as column headers. Data may be blank if the record does not have values.

Why is some data hashed out?

Some data on the UI is hashed out until you purchase the record. You purchase a record when you download or record or when you match a record and the matched record is downloaded to a file. The following attributes are hashed out until downloaded:

Company and Contact Records:

- D-U-N-S Number
- Domestic Ultimate D-U-N-S Number
- Global Ultimate
- Parent D-U-N-S Number
- Headquarter D-U-N-S Number

Company Records:

- Trade Style 3
- Trade Style 4
- Trade Style 5



Contact Records:

- · Company Phone
- Extension
- Primary Phone
- Email

Use the REST APIs

Use the REST APIs for any task available in the user interface, including search for, match, and export records. Some tasks, like Get Company Hierarchy Tree, are only available in the API.

Access the REST APIs in the following format:

https://serviceName-identityDomain.data.us2.oraclecloud.com/data/api

For example:

https://data1234-usoracle1234.data.us2.oraclecloud.com/data/api/v3/export

Note:

- Use the latest version APIs. For example, if you see APIs for V2 and V3, choose V3. Older versions are supported only for applications that have already integrated with them.
- For Authentication, select **Oauth**. For example, in SoapUI, enter the following in Resource to get the token: / data/api/v4/oauth2/token. Then, enter that access token to search in the API.
- Error messages in the APIs are translated. Developers should set the HTTP header, so the service can determine the language.





2 Use DaaS

Use Account Enrichment and Contact Enrichment

Learn about common ways to search and export data or to match and export data to CX Sales, Eloqua, or another Oracle Cloud application.

Topics:

- Typical Workflow for Using DaaS
- About Administration
- Set Admin Defaults
- Use the Business Metrics Page
- Find Companies and Contacts
- Add New Companies and Contacts
- Match Data
- Export Account Hierarchies

Typical Workflow for Using DaaS

This section describes common tasks using DaaS:

Task	Description	More Information	
Order Oracle Company Enrichment and Oracle Contact Enrichment	Purchase a subscription.	How to Begin with DaaS Subscriptions	
Monitor service	Check the day-to-day operation of your service, monitor performance, and review important notifications.	Within DaaS, expand the drawer on the search page to show Administration options. From here, you can access the Jobs page, the Mappings page, and the Business Metrics page. People with the DATASERVICE_ADMINISTRATOR role also see the Settings page.	
		 Administration Jobs Mappings Business Metrics Settings 	
		For information about how the Service Administrator can view all Oracle Cloud	



Task	Description	More Information
		information, see <i>Manage Your Oracle Cloud Service</i> in <i>Getting Started with Oracle Cloud</i>
Review admin settings	Before doing any data enrichment, export, or synchronization, verify that the default settings are correct for your environment. (For example, by default, DaaS does not process delisted records per General Data Protection Regulation). If you don't see records, or matches for records, that you expect to see, try setting the Enterprise Companies admin filter to No. Review and modify the default search/match filters,	Set Admin Defaults
	export file format, and export mappings.	
Create a new mapping of attributes in DaaS to your application	Create a mapping to accommodate all your attributes.	Create New Mappings
аррисаноп	When you export company or contact data from DaaS to an application, you select a mapping between the attributes in the export file that you create and those in the application.	
	In most cases, the provided mappings (including the mappings to Sales and to Eloqua) are sufficient. In some cases, you may have a few attributes that require a new mapping. You cannot delete the provided mappings. However, you can create a new map based on a default map and edit the attributes that way.	
Export data from DaaS to your application	After you find company or contact data in DaaS, export it into your application.	Add New Companies and Contacts
Match your records with those from DaaS, and then enrich those records	Match your company or contact data against the DaaS directory. After matches are identified, enriched data can be imported back into your application to ensure that your records are accurate and complete.	Match Data
View the status of search export and match export job requests	View the job requests submitted to DaaS. (When you search for records and export those records, or when you match a set of records and export those records, a job request is submitted.)	View the Status of Jobs
View the log file for failed or rejected jobs	Check the log file to understand why jobs failed or were rejected.	Analyze the Log File for Failed or Rejected Records
View data usage on the Business Metrics page	Check to see how many records are used from the pool of records available in your subscription.	Use the Business Metric Page



About Administration

Expand the drawer on the search page to show **Administration** options. From here, you can access the **Jobs** page, the **Mappings** page, and the **Business Metrics** page. People with the DATASERVICE_ADMINISTRATOR role also see the **Settings** page, where they can configure default settings.

Administration

- Jobs
- Mappings
- Business Metrics
- Settings

Set Admin Defaults

On the **Settings** page, or in the API, administrators can set the default export filters, export file type, and export mappings. They can also schedule sync jobs.

Export Filters

Select the default search/match export filters to suit your users. You can configure the following filters for companies:

- **Companies in Business**: These filters display currently active companies, based on internal Dun & Bradstreet (D&B) definitions.
 - Enterprise Companies: Set to Yes to display companies with over 100 employees OR revenues over 100 million US\$.
 - Medium Companies: Set to Yes to display companies with between 50 and 100 employees OR revenues between 10 and 100 million US\$.
 - Small Companies: Set to Yes to display companies with fewer than 50 employees OR revenues less than 10 million US\$.
- Marketable Indicator: These filters display records based on D&B global marketability rules.
 - Out of Business: Set to Yes to display companies that are not operating or inactive.
 - Delisted: Set to Yes to display companies that shouldn't be contacted for direct marketing per General Data Protection Regulation (GDPR). By default, Delisted is not selected. If you select this filter, then companies and contacts that have indicated that they do not want to be contacted will appear in search results, and if those records marked Delisted are selected, they will be matched, synced, or exported. Companies and contacts marked as Delisted should not be included in marketing campaigns. It's important to note that company hierarchies contain Delisted records, regardless of this setting, to ensure that the hierarchy does not break.
 - Defunct: Set to Yes to display companies whose original company DUNS number is no longer tracked by D&B. When you search for some defunct companies (for example, a company that was acquired), DaaS returns the defunct company record along with the new DUNS number. The value in the New DUNS attribute is the DUNS number of the new legal entity after a merger or the DUNS number of the acquired company after an acquisition. D&B also defines a DUNS number as "defunct" in other scenarios, such



as when it's a duplicate DUNS number of another record, or when a branch report becomes a separate entity.

Note: If users aren't seeing matches for records they expect to see, consider setting the Enterprise Companies filter to No. D&B does not track data from companies that are inactive or no longer in business.

Companies can fall into multiple categories. For example, a company is listed as both Enterprise and Medium if it has over 100 employees (enterprise) and revenue between 10 and 100 million US\$ (medium). Because of this, the total count may not add up to the total count listed for Companies In Business plus Defunct and Out of Business companies.

Selection of multiple filters is considered an OR operation. For example, with the Small and Defunct filters, DaaS returns companies that meet either small criteria or defunct criteria. (This is the same result for all filters; for example, when users select CA and NY under the Location filter, DaaS returns companies located in California or New York.)

Export File

You can change the export file format for future exports from the default plain text (.txt) to Excel (.xlsx). Users can still download export files previously run in the original format of the file. However, they can't download previously submitted export files using a different format. They would need to run the export again with the new file format.

Note: CX Sales and Eloqua Marketing Cloud support text file imports.

Export Mappings

Select the default export mapping types. For example, CX mappings are set by default, and if you integrate with Eloqua and not CX Sales, you can change to Marketing Cloud mappings.

You can also create new mappings here to use as your default mappings.

Sync Data

On the Sync Data tab, you can download an export file that contains updates (or "syncs") to the licensed records that have information updated since the last export or sync. Select the data type (company or contact), the mapping type, and click **Sync** to generate the updated data.

To exclude records from the sync (if you're no longer interested in getting updates for it), browse to a file containing a list of comma-separated company IDs, person IDs, or DUNS numbers to exclude. Also select the mapping type to generate the updated data. Click **Exclude** to exclude everything in the list from the sync data job.

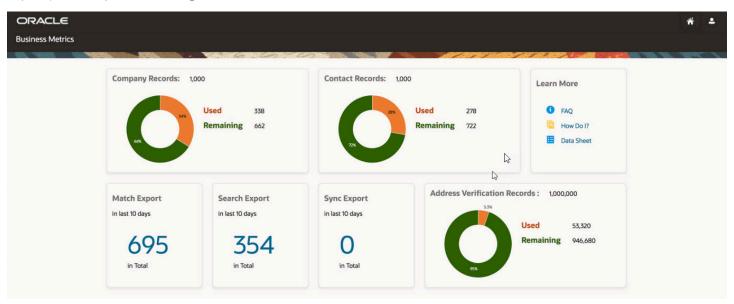
New Sync Data jobs appear on the **Jobs** page. A log file shows any updates to excluded records, expired records (which increase your subscription usage), and the recording point of access.

See also: Admin Settings in REST API for Oracle Account and Contact Enrichment.



Use the Business Metric Page

Expand the **Administration** drawer to open the **Business Metrics** page. It shows the latest information about your export jobs and your remaining data records.



It has the following key areas:

Section	Description
Company Records Contact Records	Displays the number of records used and remaining for export based on the subscription.
Learn More	Provides access to additional resources.



Section	Description
Match Exports	Displays the number of match export records in the last 10 days for all the users provisioned to use DaaS. These records are ready for export into an Oracle Cloud application. Click the number (or click Jobs in the Administration drawer) to see a complete list of export jobs and to download files for import.
Search Exports	Displays the number of search export records in the last 10 days for all the users provisioned to use DaaS. These records are ready for export into an Oracle Cloud application. Click the number (or click Jobs in the Administration drawer) to see a complete list of export jobs and to download files for import.
Sync Exports	Displays the number of updates (or "syncs") to licensed records that have information updated since their last sync. Click the number (or click Jobs in the Administration drawer) to see a complete list of sync jobs. A log file shows any updates to excluded records, expired records (which increase your subscription usage), and the recording point of access.
	Select the data type (company or contact) and the mapping to generate the updated data. To exclude records from the sync (if you're no longer interested in getting updates for it), browse to select a file containing a list of comma-separated company IDs or person IDs to exclude. Also select the mapping to generate the updated data. Everything in the list is excluded from the sync data job.
Address Verification Records	If you have a subscription to the Address Verification Cloud, you also see the number of records used and remaining based on the subscription.

Many components of the user interface (such as the Jobs page, the Mappings page, the Business Metrics page, the Match and Export page, and error messages) are translated for the following languages:

- · Brazilian Portuguese
- Simplified Chinese
- Traditional Chinese
- French
- German
- Italian
- Japanese
- Korean
- Spanish

The fallback language is English.

Find New Data Records

Find Companies and Contacts

Topics:

Search for a Company or Contact



- Use Advanced Search
- Manage Saved Searches
- · Explore the Record Details

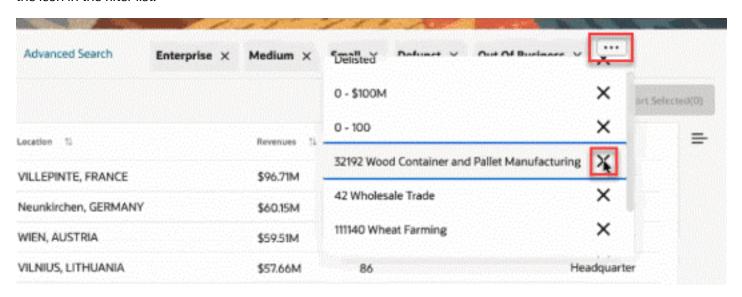
Search for a Company or Contact

The first step to finding companies or contacts is to search DaaS. Add filters to narrow your results.

Company filters include **Location**, **Location Type**, **Revenues**, **Employees**, **Primary NAICS Codes**, and **Primary US SIC Codes**. With the **Location** filter, you can select to search certain countries. When you add a country, you can further narrow results to specific states or provinces in that country. Similarly with the industry codes, you can drill down into more and more specific industry categories.

Contact filters include **Department**, **Management Level**, **Title**, **Standardized Title**, **Location**, **Location Type**, **Revenues**, **Employees**, **Primary NAICS Codes**, and **Primary US SIC Codes**.

When you have more than five filters selected, you can see the additional filters, or remove individual ones, by clicking the icon in the filter list.



Each search result includes a quick profile showing industry, location, revenue, number of employees and number of contacts. Click the company overview page or the company or contact profile page to see many additional attributes.

The following attributes are searched for *company* searches:

- Company Name
- Trade Style
- Website
- DUNS #
- Street Address 1
- Street Address 2
- Postal Code
- City



- County
- State
- Country
- Stock

The following attributes are searched for *contact* searches:

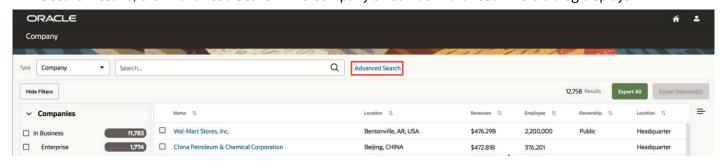
- · First Name, Middle Name, Last Name
- Email
- Job Title
- · Contact Direct Phone Number
- Contact Work Phone
- Line of Business
- Street Address 1
- Street Address 2
- Postal Code
- City
- County
- State
- Country

Note: Contact records are only returned if you have purchased a subscription for contacts.

Use Advanced Search

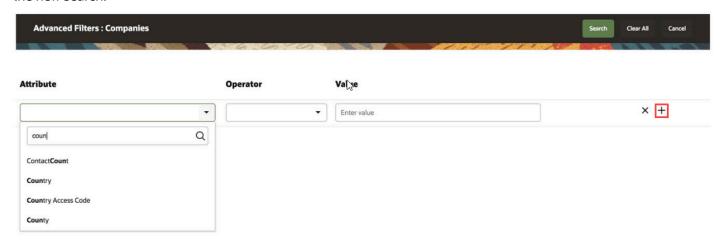
After running a search, you can add custom filters to suit your needs.

1. In the search results, click **Advanced Search**. The Company or Contact Advanced Filters dialog displays.





- 2. Select an attribute, operator, and value for filters to refine your search.
- 3. Filters with a magnifying glass in the Value column (as in the **Country** attribute) can suggest values based on data you enter. That is, as you enter the first couple letters or numbers, the application autosuggests values. For example, for SIC Code, you could enter ag to search for agriculture-related SIC codes. You can add or remove filters, then apply the new search.



Note: With autosuggested values, Oracle recommends that you wait until values render, and then select from that list. Free form text values you enter in these fields (that were not autosuggested values) are not included in the filter criteria.

Based on the attribute selected, the Operator and Value columns update to show only relevant options. Operator options may include the following: Equals, Not Equals, Contains, Not Contains, Is Greater Than Equals To, Is Less Than Equals To, Between, Starts With, Not Null, In, Not In, and Radius.

Example 1: With the **DUNS Number** attribute, you can select the IN operator and then upload a file with a list of comma-separated DUNS numbers to search for companies in that list.

Example 2: With the **US Postal Code** attribute, if you select the Between operator, then you could search for companies whose zip code is between two values (such as, between 94000 and 95000). If instead, you select the



Radius operator, then you could search for companies within a specified distance of a zip code (such as, within a 30 mile radius of 94065).

Management Level uses the following code values supplied by D&B management responsibility codes:

- o C-Level = 0, 1, 2
- o Vice-President = 5
- Director = 6
- Manager = 7
- o Other = greater than 7, and A, B, D, Z, or value is NULL

Postal code radius searches cannot be used with another postal code (US or international) attribute. Also, international postal code radius searches must include one country attribute using the equals operator. Note that



a radius search from a zip code could span across countries, if the distance exceeds the country boundary. The following countries support radius search:

- Aland Islands
- Algeria
- Andorra
- Argentina
- Australia
- Austria
- Bangladesh
- Belgium
- Brazil
- Bulgaria
- 。 Canada
- Croatia
- Czech Republic
- Democratic Republic of Congo
- o Denmark
- Dominican Republic
- England
- Faroe Islands
- Finland
- France
- French Guiana
- Germany
- Greenland
- Guadeloupe
- 。 Guam
- Guatemala
- Guernsey
- Hungary
- Iceland
- 。 India
- Ireland
- 。 Isle Of Man
- Italy
- Japan
- Jersey



- Liechtenstein
- Lithuania
- Luxembourg
- Macedonia
- Malaysia
- Malta
- Marshall Islands
- Martinique
- Mayotte
- Mexico
- Moldova
- Monaco
- Netherlands
- New Zealand
- Northern Ireland
- Northern Marianas
- Norway
- Pakistan
- Philippines
- Poland
- Portugal
- Puerto Rico
- Reunion
- 。 Romania
- Russian Federation
- Samoa American
- San Marino
- Scotland
- 。 Slovakia
- Slovenia
- South Africa
- Spain
- Sri Lanka
- St Pierre
- Svalbard & Jan Mayen
- Sweden
- Switzerland

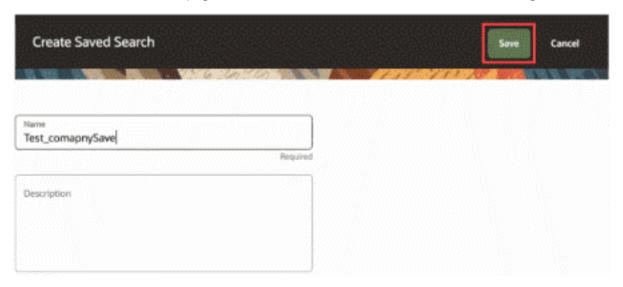


- Thailand
- Turkey
- United Kingdom
- USA
- Vatican City
- Virgin Islands US
- Wales

Manage Saved Searches

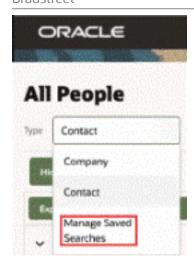
Use saved searches to quickly identify companies or contacts with a specific set of search filters. When you have search filters selected that you want to reuse in the future, click the **Save** button on the search page.

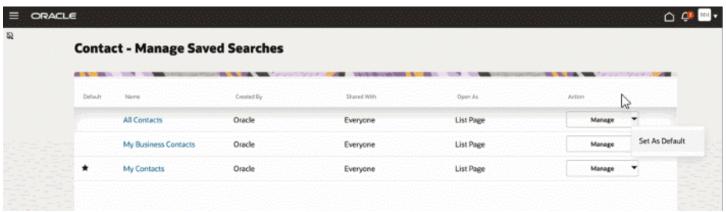
On the **Create Saved Search** page, enter a name for the saved search, and click **Save** again.



When starting a search, you can select **Company**, **Contact**, or **Manage Saved Searches**. Select **Manage Saved Searches** to select a saved search. On that page, you can also rename or delete saved searches or set a saved search as the default search.







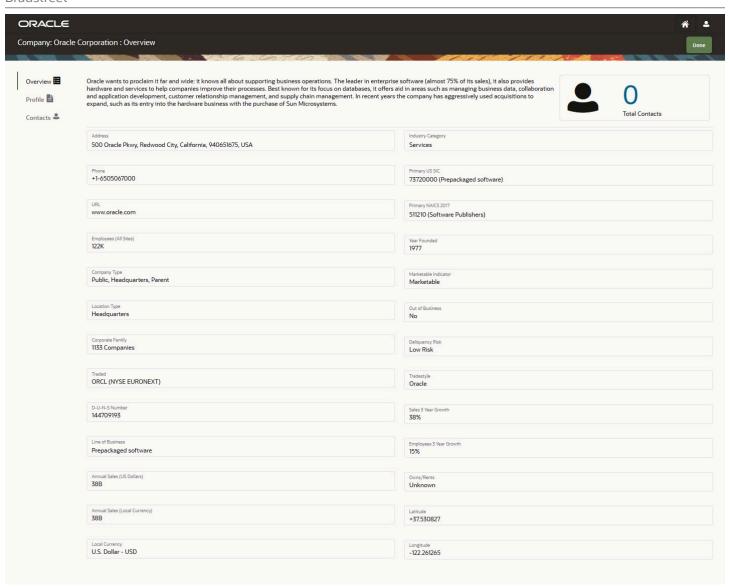
Explore the Record Details

From search results, click a company or contact name to open an overview page with summary information.

For contacts, you see a contact profile, including the company profile with which the contact is associated.

For companies, you see a left pane tab for Company Overview (as shown), Company Profile (which shows additional attributes), and Company Contacts. The Company Contact tab lists management level and department, and from that page you can select contacts to export.







Some details (such as D-U-N-S Number, Global Ultimate D-U-N-S Number, Parent D-U-N-S Number, Headquarter D-U-N-S Number, Trade Style 3, Trade Style 4, Trade Style 5, Company Phone, Extension, Primary Phone, and Email) are shown only when the record has been purchased. For purchased records (that is, records that have been exported or matched), fields are blank if the data provider does not have a corresponding value.

Add New Data Records

Add New Companies and Contacts

You can export new company data, with or without contacts, from DaaS into CX Sales, Eloqua or another Oracle Cloud application.

Topics:

- Add New Companies and Contacts to Oracle Sales
- Add New Companies and Contacts to Eloqua
- Add New Companies and Contacts to Other Applications

Add New Companies and Contacts to Oracle Sales

You can add a contact to Oracle Sales only after exporting that contact's corresponding company with DaaS. Even if the company already exists in Sales, you must re-export or match the contact's company with DaaS before you can import the contact in Sales.

Topics:

- Add New Companies to Sales
- Add New Contacts to Sales

Note: If you export more records than remain in your quota, then only the available records are exported. When you reach your quota, the export process stops. For example, if you have 100 company records left, and you export 200 records, then the export process completes with a message in the job details that you've reached the quota limit for company records.

Add New Companies to Sales

To add companies to Sales:

- Search for Data in DaaS
- Export Data from DaaS
- Import Data into Sales
- Verify the Import of Data into Sales



DaaS provides the **Sales and Service** template type, as well as the following mappings:

- CXCompanyExport
- CXContactExport
- CXCompanyMatch
- CXContactMatch

Mappings created with the Sales and Service template type create a ZIP file, which contains the individual CSV files for import. See *DaaS Files for Import Management in Sales*. Download and extract the ZIP file to a local folder, and then import each CSV file. The Account. CSV file (the parent file) must be imported first, before the child files.

Search for Data in DaaS

The first step to finding data is to search DaaS with the search box.

Export Data from DaaS

When you export data from DaaS, you must select a mapping between the attributes in the export file that you create and those in Sales. You can use a provided mapping or you can create a new mapping. Then, you export the company data into a file for later import.

- a. From your search results, click **Select Companies to Export**.
 - Choose **Export All** for everything listed in the **Results** section.
 - Choose **Export Selected** for selected items in the **Results** section.
- **b.** In the Export dialog, enter information in the following table:

Field	Description
Name	Enter a unique name for your export mapping. Consider a name that matches the name of the company or contact you are targeting; for example, <code>company_company_export</code> or <code>company_contact_export</code> . If you don't specify a name, then <code>DAAS_COMPANY_EXPORT_year_month_day_time</code> is applied to a company mapping and <code>DAAS_CONTACT_EXPORT_year_month_day_time</code> is applied to a contact mapping.
Description	Optionally, enter a description for the mapping.
Mapping	Select a mapping from the list. You can select a default mapping for most import jobs into Sales. To add the data using Import Management in Sales (recommended), select CXCompanyExport or CXContactExport. Skip to Step 6 to continue with the procedure. Default mappings set by the administrator cannot be edited or deleted. If you need different attributes in the mapping, you can create a new map based on a default map to edit the attributes: click Create Mapping, and from the Template Type list select Sales and Service.



Field	Description
	Note: You may want to create a new mapping if you only need a subset of the provided attributes, or if you created a custom attribute in Sales that you need to map to a DaaS attribute.
Include Company Hierarchies	If you have an Oracle Account Enrichment subscription, you can select to export company hierarchies, to show all relationships (headquarters, subsidiaries, branches, and so on) within the company family.

The Create Mapping page displays with the attributes discovered in your search of DaaS. Now, you must map those attributes to the attributes in Sales.

c. Use the following elements to complete the mapping:

Note: When data is exported from DaaS with the **Sales and Service** template, Import Management auto-maps all the mappable fields. To map and import unmapped fields to custom attributes, use the Save As feature on the Import Map page. Custom attributes must be created separately using a sandbox in Application Composer.

Element	Description
Name	Enter a unique name for your export mapping.
×	Click this icon to remove any attributes you don't want.
Add Attribute	Use this to add any attributes you extended in Sales. Or, add an attribute mapping that you accidentally removed but that you still want added. For each drop-down list displayed, select the attribute or object. See <i>Edit Sales Mappings</i> for information about the Sales attributes.

- d. Click **Save & Select**. The Select Mapping dialog displays.
- **e.** Save the file to your local drive.

Import Data into Sales

To import the company or contact data that you downloaded from DaaS into Sales, create an import activity.

To import the files into Sales:

Note: Mappings created with the Sales and Service template type create a ZIP file, which contains the individual CSV files for import. Download and extract the ZIP file to a local folder, and then import each CSV file. The Account.csv file (the parent file) must be imported first, before the child files (Address.csv, Classification.csv, AdditionalIdentifier.csv, AdditionalName.csv).

a. From the Navigator, click **Tools > Import Management**.



- **b.** On the **Manage Imports** page, click the **Create Import Activity** button.
- c. On the **Enter Import Options** page, provide values for each field as shown in the following table:

Field	Description
Name	Name of the import.
Object	Select Account for companies. Select Contact for contacts.
File Name	Browse and select a text file in CSV format. Provide a file name within 40 characters. Note: If your source file has more than 50,000 records, then you must manually split the file into several smaller files with less than 50,000 records each. The file import page only permits 50,000 records for each import job. Alternatively, you can use the External Cloud Data Loader Client, which can accept files with more than 50,000 records. See the My Oracle Support (support.oracle.com) document External Data Loader Client.
Enable High Volume Import	DaaS imports should select this option (under Advanced Options).

d. Click **Next**. The **Map Fields** page shows the first row of the data from your source file. By default, the application tries to automatically map each of the source file columns to the appropriate target object attribute. If some of the columns in your file couldn't be mapped, then drag the target attribute onto the Attribute Name column under the Source File region.

The data in unmapped columns aren't imported.

e. Select a predefined mapping from the list of available mappings under the Import Mapping drop-down list. If you're reusing an import mapping, then both the source and target columns are already populated.

Leave the Attribute Name field blank for any column that you don't want to import.

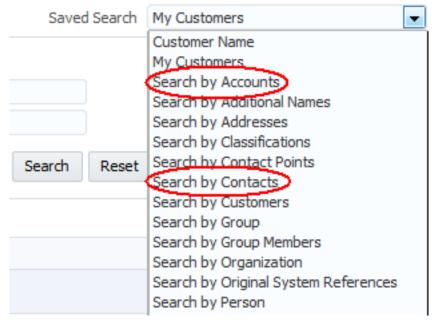
- f. Click Validate Data to check the field mapping.
- g. Click Next. On the Review and Submit page, review the import activity configuration. If you didn't run the prevalidation on the Map Fields page, then you get a notification message to run the validation process.
- h. Click **Validate Data** to check the data in your source file. Any validation errors display on the Mapping Validation screen. If you get warnings about unmapped columns, then you can ignore these columns, and proceed to submit the import job.
- i. Click **Submit** to queue the import. Repeat this for all child CSV import files.

Verify the Import of Data into Sales.



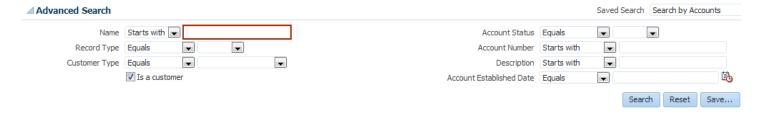
To check that the company or contact data from DaaS was imported successfully into Sales:

a. On the Manage Customers page, from the **Saved Search** list, select **Search by Accounts** or **Search by Contacts**.



b. In the **Name** field, enter the name of one of the companies or contacts in the file that you imported, and then use the other fields to further narrow your search (such as, **Customer Type Equals Prospect**). Click **Search**.

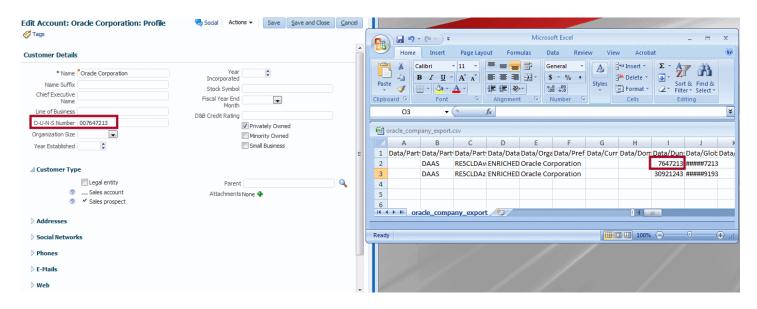
Manage Customers



c. In the **Search Results** table, click the company name to see details of the imported data. For contacts, click the company name associated with the customer name that you entered to see details of the imported data.



d. Verify that the following fields match the information for the company or contact in the file. For example, confirm that the D-U-N-S numbers match.



Add New Contacts to Sales

To add new contacts to companies that already exist in your Sales application, first either export the contact's company data (see *Add New Companies to Sales*) or match the contact's company data (see *Match Data in Sales*). Then, you can add new contacts the same way you add new companies.



Add New Companies and Contacts to Eloqua

You can add companies and contacts to Oracle Eloqua by following these steps.

Topics:

- Search for Data in DaaS
- Export Data from DaaS
- Import Data into Eloqua
- Verify the Import of Data into Eloqua
- Prerequisite: Create Fields and Views in Eloqua

Watch this video to see how to find new leads from DaaS.

Note: An Eloqua administrator must create certain fields and views before users can add or enrich data from DaaS. This is a one-time task. See *Prerequisite: Create Fields and Views in Eloqua*.

Tasks

Search for Data in DaaS

The first step to finding companies or contacts is to search DaaS. Click



Search.

See Use Advanced Search.

Export Data from DaaS

When you export data from DaaS, you select a mapping between the attributes in the search export file that you create and those in Eloqua. You can use a provided mapping or you can create a new mapping. Then, you export the company data into a file for later import.

- a. From your search results, click Select Companies to Export or Select Contacts to Export.
 - Choose **Export All** for everything listed in the **Results** section.
 - Choose Export Selected for selected items in the Results section.
- b. In the Export dialog, complete the fields using the descriptions in the following table:

Field	Description
Name	Enter a unique name for your export mapping. Consider a name that matches the name of the company or contact you are targeting; for example, <code>company_company_export</code> or <code>company_contact_export</code> . If you don't specify a name, then <code>DAAS_COMPANY_EXPORT_year_month_day_time</code> is applied to a company mapping and <code>DAAS_CONTACT_EXPORT_year_month_day_time</code> is applied to a contact mapping.



Field	Description
Description	Optionally, enter a description for the export mapping.
Mapping	Select a Marketing Cloud mapping from the list. For most match export jobs, you can use the default MarketingCloudCompanyMatch for companies, MarketingCloudContactMatch for contacts or MarketingCloudContact&CompanyMatch for both.
	Default mappings set by the administrator cannot be edited or deleted. See <i>Edit Marketing Cloud Mappings</i> . If you need to add fields, you can create a new mapping by clicking Create Mapping then selecting Marketing Cloud from the Template Type list.
	Note: New mappings are created using the existing Marketing Cloud template map definition. You may want to create a new mapping if you only need a subset of the provided attributes, or if you created a custom attribute in Eloqua that you need to map to a DaaS attribute.

The Create Mapping page displays with the attributes discovered in your search of DaaS. Now, you must map those attributes to the attributes in Eloqua. When you select the **Marketing Cloud** template, DaaS automatically maps the discovered attributes to those in Eloqua.

c. Use the following elements to complete the mapping:

Element	Description
Name	Enter a unique name for your export mapping.
×	Click this icon to remove any attributes you don't want.
Add Attribute	Use this to add any attributes you extended in Eloqua.
	Or, add an attribute mapping that you accidentally removed but that you still want added. For each drop-down list displayed, select the attribute or object.
	See Edit Marketing Cloud Mappings for information about Marketing Cloud attributes.

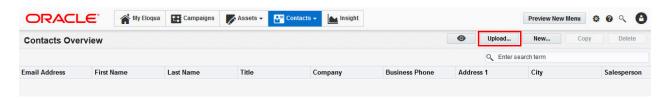
- d. Click **Save & Select**. The Select Mapping dialog appears.
- **e.** From the **Mapping** list, select the mapping that you just created, and click **Download** to save the file to your local drive.
- **f.** When prompted, save the file to a location on your machine in CSV format.
- g. View the contents of the file to see the number of records.

Import Data into Eloqua

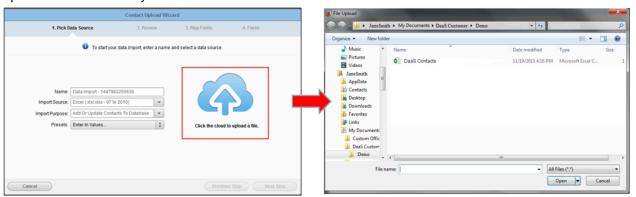


Next, import the CSV file into Eloqua:

a. In Eloqua, from the Contacts tab, navigate to Contacts, and click Upload.

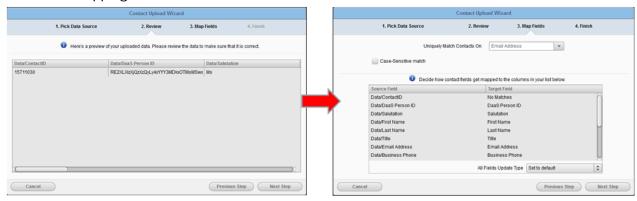


b. Upload the contact file you downloaded from DaaS.

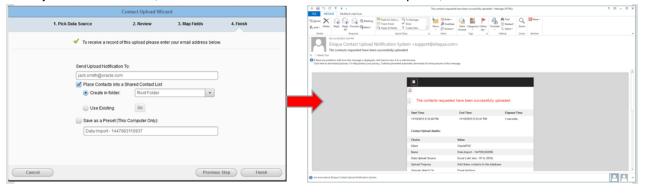




c. Review the mapping.



d. Enter your email address, select to receive confirmation email for upload, and click **Finish**.



There are two ways to store data in Eloqua:

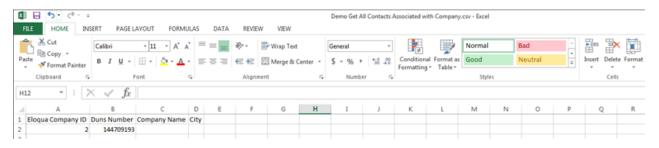
- i. Store both contact and company attributes on the contact record in Eloqua.
- **ii.** Store contact attributes on the contact record, and store company attributes on the account record, using the DUNS Number to connect them.

If you already uploaded both the contact and company data into the contact records, then there's no need to proceed with finding the company.

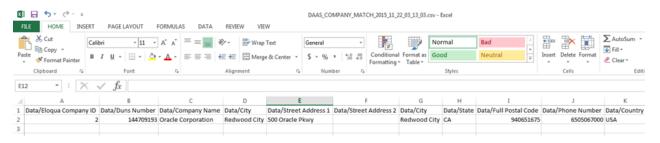


To additionally find the *company* associated with this new contact, follow these steps:

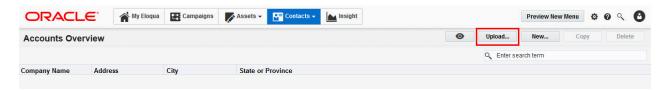
a. Prepare the file to find companies in DaaS.



- b. Upload the file with the DUNS number for matching.
- c. Perform company match based on the DUNS number.
- **d.** Export the results, and save the file to your machine in CSV format. Downloaded company record:

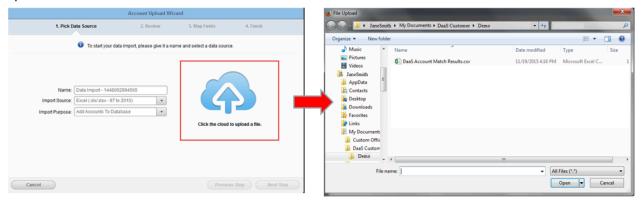


e. In Eloqua, from the Contacts tab, navigate to Accounts, and click Upload.

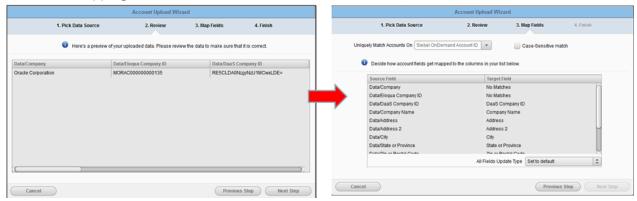




f. Upload the accounts.

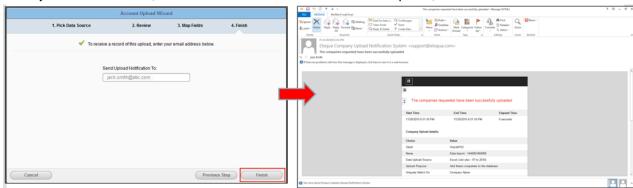


g. Review the mapping.





h. Enter your email address, select to receive confirmation email of upload, and click Finish.



Verify the Import of Data into Eloqua

To check that the company or contact data from DaaS imported successfully, view the uploaded record in Eloqua; for example:



Prerequisite: Create Fields and Views in Eloqua

An Eloqua administrator must create certain fields and views before users can add or enrich data from DaaS. This is a one-time task.

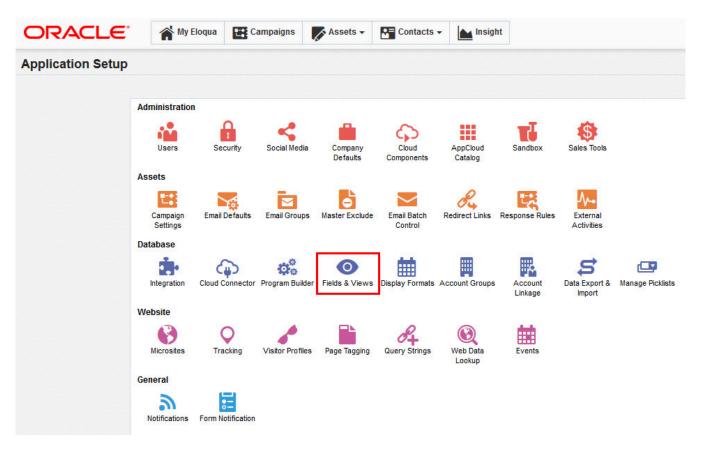
First, add the following DaaS fields to Eloqua:

Object	Display Name	Data Type	Field Type	Description
Contact	DaaS Person ID	Text	Textbox	The unique ID of the contact in DaaS, used to look up the same contact in DaaS in the future for updated contact data.
Company	DaaS Company ID	Text	Textbox	The unique ID of the company in DaaS, used to look up the same company in DaaS in the future for updated contact data.
Contact	DUNS Number	Text	Textbox	The unique D&B ID of the company on the contact record.
Company	DUNS Number	Text	Textbox	The unique D&B ID of the company on the company record.



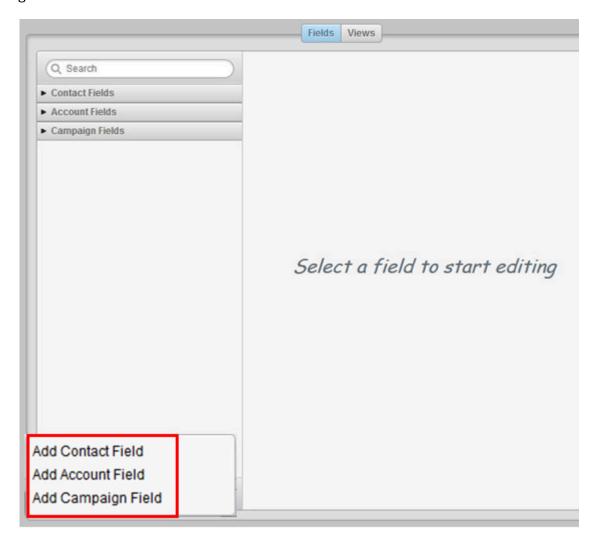
Note: If you store contact attributes on the contact record and company attributes on the account record, then you must create the DUNS Number field twice: once for contacts and once for companies. This connects the two records together.

- 1. Log on to Eloqua, and from the wrench icon, select **Setup**.
- 2. Select the Fields and Views tab.



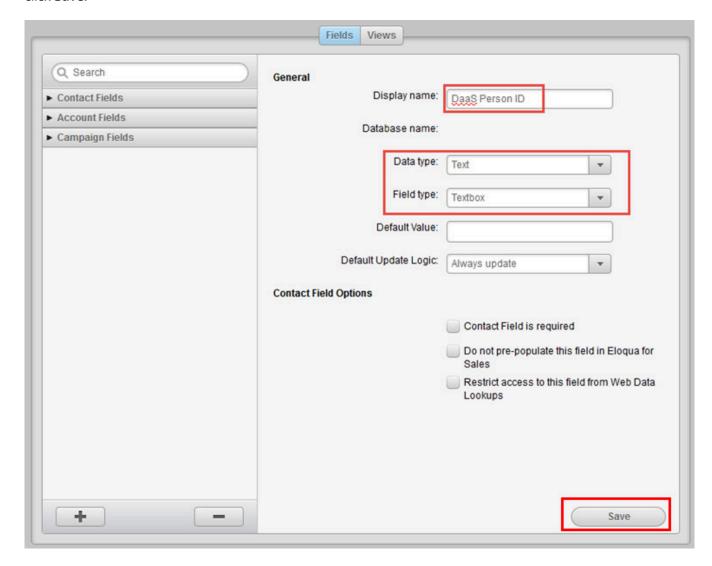


3. On the **Fields** tab, click the **+** button to add a field. Select the type of field (Contact or Account) as shown at the beginning of this task.





4. Enter the **Display name**, **Data type** and **Field type** for that field as shown at the beginning of this task, and click **Save**.



5. Repeat until you have entered all four fields shown at the beginning of this task.

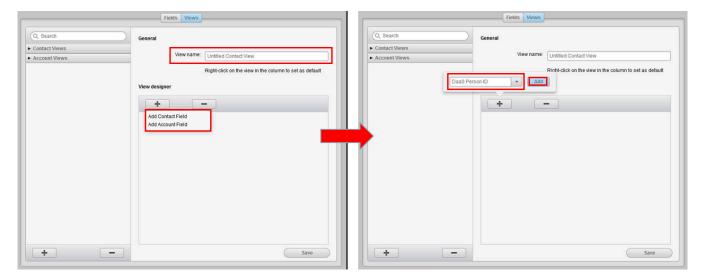
Next, on the **Views** tab, add the DaaS for Sales views to Eloqua.

1. Click the + button and select to add either a contact view or an account view.



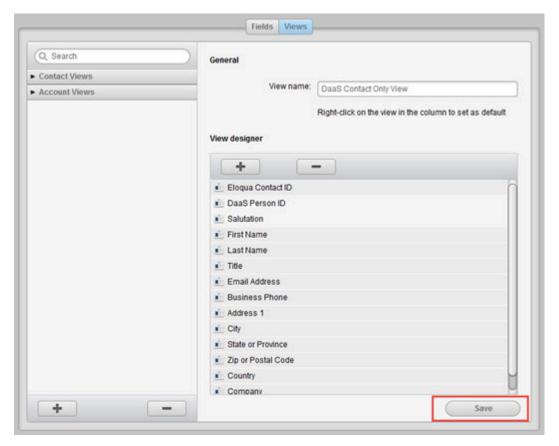
2. Add fields to the view by entering the view name and selecting the type of field (contact or account).

Then enter the type of field you want to add (like DaaS Person ID), and click Add.





3. Click Save, so that you can use the view when adding companies and contacts from DaaS.



The following views should exist in Eloqua for users to add or enrich data from DaaS.

DaaS Company View

Field Name	Description
DaaS Company ID	Custom field to capture unique ID of contact from DaaS
Eloqua Company ID	Eloqua unique company ID
Company Name	Eloqua standard field
Address	Eloqua standard field
Address 2	Eloqua standard field
City	Eloqua standard field
State or Province	Eloqua standard field



Field Name	Description
Zip or Postal Code	Eloqua standard field
Country	Eloqua standard field
Business Phone	Eloqua standard field
Fax	Eloqua standard field
DUNS Number	The unique D&B ID of the company on the company record.

DaaS Contact View

Field Name	Description
DaaS Person ID	Custom field to capture unique ID of contact from DaaS
Eloqua Contact ID	Eloqua unique contact ID
Salutation	Eloqua standard field
First Name	Eloqua standard field
Last Name	Eloqua standard field
Title	Eloqua standard field
Email Address	Eloqua standard field
Business Phone	Eloqua standard field
Address 1	Eloqua standard field
City	Eloqua standard field
State or Province	Eloqua standard field



Field Name	Description	
Zip or Postal Code	Eloqua standard field	
Country	Eloqua standard field	
Company	Eloqua standard field	
DUNS Number	The unique D&B ID of the company on the contact record.	

Note: If you're storing contact attributes on the contact record and company attributes on the account record in Eloqua, then make sure that you have the DUNS Number field in both contact and company views to connect the two records together.

Add New Companies and Contacts to Other Applications

To add new companies or contact to other Oracle Cloud applications (such as Business Intelligence Cloud Service), perform the following tasks:

- Search for Data in DaaS
- Export Data from DaaS
- Import DaaS Data into Your Application

Task

Search for Data in DaaS

The first step to finding data is to search DaaS. Click



Search.

Export Data from DaaS

When you export company data from DaaS into an application for the first time, you create a mapping between the attributes in the export file that you create and those in the application.

To create mappings and then export those mappings to a file for later import:

- a. From your search results, click **Select Companies to Export**.
 - Choose **Export All** for everything listed in the **Results** section.
 - Choose **Export Selected** for selected items in the **Results** section.



b. In the Export dialog, complete the fields using the descriptions in the following table.

Field	Description
Name	Consider a name that matches the name of the company or contacts that you are targeting, <code>company_company_export</code> and <code>company_contact_export</code> . If you don't specify a name, then <code>DAAS_COMPANY_EXPORT_year_month_day_time</code> is applied to a company mapping and <code>DAAS_CONTACT_EXPORT_year_month_day_time</code> is applied to a contact mapping.
Description	Optionally, enter a description for the export mapping file.
Mapping	Select a mapping from the list. You can select CompanyExport for most company export jobs or ContactExport for most contact export jobs. Skip to Step 6 to continue with the procedure. Click a mapping to edit it, or if you prefer to create a new mapping, then click Create Mapping . From the Template Type list, select Generic . You then can choose a file to
	import for the mapping.

The Create Mapping page displays with the attributes discovered in your search with DaaS. When you select **Generic** template type, the Create Mapping page only lists the discovered attributes in DaaS. You must later map the attributes.

c. Use the following elements to complete the mapping:

Element	Description
Name	Enter a unique name for your export mapping file.
×	Click this icon to remove any attributes whose values you don't want.
Add Attribute	Add any attributes that you use in your application. Or, add an attribute mapping that you accidentally removed but that you still want added. For each drop-down list displayed, select the attribute or object.

- d. Click **Save & Select**. The Select Mapping dialog displays.
- **e.** From the **Mapping** list, select the mapping you just created, and click **Download** to save the file to your local drive.
- **f.** When prompted, save the file.
- g. View the contents of the file to see the number of records.

Import DaaS Data into Your Application



Using your application utilities, import the file into the application. See your application-specific documentation for details.

Match Data Records

Match Data

You can match company and contact data against the DaaS directory of millions of company and contact records. After matches have been identified, data from these matched records can be enriched and imported into your application.

Topics:

- About Matching and Enriching Records
- Match Data in CX Sales
- Match Data in Eloqua
- Match Data in Other Oracle Cloud Applications

About Matching and Enriching Records

DaaS can enrich company and contact records after first matching the record in your application with the record from D&B.

For records that match, DaaS applies an internal match score. If the score meets the threshold specified in the **Match Confidence** field (or the related **Match Score** mapping attribute), then DaaS enriches the records with the matched records. In other words, the match confidence value specifies the accuracy threshold of the matching process. The default value is 70. You can select a value between 1 and 100, where 100 represents a match confidence of 100%. However, if you increase the value higher than 70, the number of matched records may be fewer, or there may be no matches found. If you decrease the value, then more matches are found, but the accuracy of the match may be lower.

After the match process completes, you export the matched data in a file from DaaS into your application.



Note:

- Do not open a text file with a different document editor (such as Microsoft Excel), since it may change the formatting or values and render the file incorrectly. To open a text file in a different document editor, first right-click the file and save it as .csv or .xls. (Administrators can change the default export file format from plain text to Excel.)
- If you match export more records than remain in your available quota, only the available records are exported.
 When you reach your quota, the export process stops. For example, if you have 100 company records left, and you export 200 company records, then the export process completes with a message in the job details that you've reached the quota for company records.
- The service switches from real time to batch for jobs with more than five records. When batch matching contacts, the DUNS number is hashed out in the UI and in the enriched output file.

Topics:

- Match Contact Records
- Match Company Records
- Examples of Company Attribute Combinations

Match Contact Records

For contact records, DaaS tries to match its records against the following **contact** attributes:

- FirstName
- LastName
- Business Name
- Externalld
- MiddleName (optional)
- RawPhoneNumber (optional)
- PhoneNumber (optional)
- EmailAddress (optional)
- · Title (optional)

When matching contacts from Oracle CX Sales , the contact must belong to an account in CX Sales; therefore, the following attributes must be present for a contact match: Externalld and Parent Daasld. The Externalld and Parent Daasld attributes, which are equivalent to the ObjectKey and ObjOrigSystemReference attributes in CX Sales, aren't used for matching, but they must be present in the input.

- Externalld = Partyld (attribute in OSC) of PersonProfile (object in CX Sales)
- Parent DaaS ID = ObjOrigSystemReference (attribute in CX Sales) of ContactRelationship (object in CX Sales)



When matching contacts from Oracle Eloqua, Externalld along with other attributes must be present. For details about required attributes in Marketing Cloud mappings, see *Create Mappings for Eloqua Marketing Cloud*.

When matching contacts from other Oracle Cloud applications (such as Business Intelligence Cloud Service, where you want to match contacts not assigned to a company), DaaS can match a contact with just one of the following attributes:

- Email
- FirstName + LastName + PhoneNumber
- DUNS#

Match Company Records

The D&B attributes Match Score, Match Data Profile, and Match Grade Strength are included in default mappings for company match exports.

- **Match Score** returns the match confidence setting. Because D&B scores in the range of 1–10 (instead of 1–100), this attribute transmits the D&B raw match score in the range of 1-10 in match results. For example, if you set the Match Confidence field to 50 on the Match page, then the Match Score attribute returns a value of 5.
- Match Data Profile and Match Grade Strength match to additional data in the D&B Match Reference files. With Match Data Profile, for each of the 14 components, a two-digit numeric code identifying the type of the information used in the comparison is returned. Match Grade Strength provides 11 digits for US companies and 7 digits for non-US companies. To understand the values of these response digits, see https://directplus.documentation.dnb.com/html/guides/Identify/IdentityResolution.html#matchgrade-strings.

For company records, DaaS tries to match its records against various combinations of attributes. For example, when submitting a match request by DUNS number, the service requires a valid DUNSNumber attribute and an Externalld (Company ID) attribute. When submitting a match request by phone number, the service requires the PhoneNumber attribute along with the Country and Externalld attributes.

The following attribute combinations are supported (and new mappings must include one of the following combinations):

- DaaSID + ExternalId
- DUNSNumber + Externalld
- PhoneNumber + Country + Externalld
- Name + Country + Externalld
- Address (Street, Town, State/Territory) + Country + Externalld (for US and Canada)
- Address (Street, Town) + Country + Externalld (for all countries except US and Canada)
- Registration Number + Country + Externalld (for all countries except US and Canada)
- Domain + either URL or EmailAddress + Externalld

See Examples of Company Attribute Match Combinations.

When matching companies from Oracle CX Sales, the company must belong to an account in CX Sales; therefore, the mapping file must include the required CX Sales attribute Partyld. In other words, if you create a new mapping, it must have the column Data Attribute of Externalld mapped to the column Target Attribute of Partyld. This company identifier (Externalld, equivalent to Partyld in CX Sales), isn't used for matching, but it must be present in the input. For details about required attributes, see Create Mappings for CX Sales.



Note:

- If you get error message DCS-1059, make sure that your mapping file has column Data Attribute = Externalld mapped to column Target Attribute = Partyld. Or, make sure that your input file contains a column header called Externalld (or any name) with values that uniquely identifies the account record in CX Sales.
- When matching a company record from DaaS, the DUNS number *is not* included or shown in the matched output file. When matching a company record from CX Sales, the DUNS number *is* delivered as part of the matched record and is rendered in the CX Sales interface.

When matching companies from Oracle Eloqua, the attributes Externalld, Name, and City must be present. For details about required attributes, see *Create Mappings for Eloqua Marketing Cloud*.

When matching companies from other Oracle Cloud applications, each record in the input file should have a unique identifier value, such as Company ID. When creating a Generic Match Export mapping, this Company ID should be mapped to the DaaS attribute Externalld.

Examples of Company Attribute Match Combinations

This section shows examples of company attribute combinations, based on a sample map with the following attributes:

Source Attribute	DaaS Attribute
Externalld	External ID
Daasld	Company ID
DunsNumber	DUNS Number
BusinessName	Business Name
Country	Country
PhoneNumber	Phone Number
Url	URL
Address1	Street Address 1
Address2	Street Address 2
City	City
State	State
NatldNum	National Identification Number

DaaSId + ExternalId

Sample input file:

Daasid, Externalid
RE5CLDAwMTAwNzk4OCwxLDE=, 1
RE5CLDE0NDcwOTE5MywxLDE=, 2
RE5CLDUwMTMzNzq5MywxLDE=, 3



Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

1, RE5CLDAwMTAwNzk4OCwxLDE=, 001007988, "Friend Box Company,
Inc.", USA, 9787740240, www.friendbox.com, 90 High St,, Danvers, MA,

2, RE5CLDEONDcwOTE5MywxLDE=, 144709193, Oracle
Corporation, USA, 6505067000, www.oracle.com, 500 Oracle Pkwy,, Redwood City, CA,

3, RE5CLDUwMTMzNzg5MywxLDE=, 501337893, ALDI STORES
LIMITED, ENGLAND, 1827711800, www.aldi.co.uk, 32 Station Street,, ATHERSTONE,, 02321869

DUNSNumber + ExternalId

Sample input file:

DunsNumber, ExternalId 001007988, 1 144709193, 2 501337893, 3

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

1,RE5CLDAwMTAwNzk4OCwxLDE=,001007988, "Friend Box Company,
Inc.",USA,9787740240, www.friendbox.com,90 High St,, Danvers, MA,

2,RE5CLDEONDcwOTE5MywxLDE=,144709193,Oracle
Corporation,USA,6505067000,www.oracle.com,500 Oracle Pkwy,,Redwood City,CA,
3,RE5CLDUwMTMzNzg5MywxLDE=,501337893,ALDI STORES
LIMITED,ENGLAND,1827711800,www.aldi.co.uk,32 Station Street,,ATHERSTONE,,02321869

PhoneNumber + Country + Externalld

Sample input file:

PhoneNumber, Country, ExternalId 6505067000, US, 1 1316263263, Scotland, 2 1827711800, England, 3

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

1,RE5CLDE0NDcwOTE5MywxLDE=,144709193,Oracle
Corporation,USA,6505067000,www.oracle.com,500 Oracle Pkwy,,Redwood City,CA,
3,RE5CLDIxMTEwMjIOMCwxLDE=,211102240,ALDI STORES GENERAL PARTNER
LIMITED,ENGLAND,1827711800,,Holly Lane,,ATHERSTONE,,06517417
2 RE5CLDIVOTEVMZE0NiwxLDE= 229123146 THE ROYAL BANK OF SCOTLAND PUBLIC LIMITE

2,RE5CLDIyOTEYMZE0NiwxLDE=,229123146,THE ROYAL BANK OF SCOTLAND PUBLIC LIMITED COMPANY,SCOTLAND,1316263263,,175 Glasgow Road,,EDINBURGH,,SC090312

BusinessName + Country + Externalld

Sample input file:

BusinessName, Country, ExternalId



```
Oracle Corporation, USA, 1
"Friend Box Company, Inc.", US, 2
THE ROYAL BANK OF SCOTLAND GROUP PLC, GB, 3
Geosite Surveys Nigeria Ltd, NIGERIA, 4
```

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

1. RESCLDEONDOWOTESMywyLDE= 144709193, Oracle

1,RE5CLDEONDCwOTE5MywxLDE=,144709193,Oracle
Corporation,USA,6505067000,www.oracle.com,500 Oracle Pkwy,,Redwood City,CA,
2,RE5CLDAwMTAwNzk4OCwxLDE=,001007988,"Friend Box Company,
Inc.",USA,9787740240,www.friendbox.com,90 High St,,Danvers,MA
4,RE5CLDM2NDcwNzg5OCwxLDE=,364707898,Geosite Surveys Nigeria
Ltd,NIGERIA,53253281,,Enerhen Road,,Delta State,,RC:6712
3,RE5CLDIxNDUxMzA4NywxLDE=,214513087,THE ROYAL BANK OF SCOTLAND GROUP PUBLIC
LIMITED COMPANY,SCOTLAND,1316263015,www.rbs.com,Group Taxation Business House F
Gogarburn P O Box 1000,,EDINBURGH,,SC045551

Note: Either country or country code can be passed. GB is the ISO code for Scotland.

Address (Street, Town, State/Territory) + Country + Externalld (for US and Canada)

Sample input file:

```
Address1, City, State, Country, ExternalId "3200 Vine St", Cincinnati, Ohio, USA, 1 500 Oracle Pkwy, Redwood City, California, USA, 2 90 High St, Danvers, Massachusetts, USA, 3
```

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

NatIdNum

2,RE5CLDE0NDcwOTE5MywxLDE=,144709193,Oracle
Corporation,USA,6505067000,www.oracle.com,500 Oracle Pkwy,,Redwood City,CA,
3,RE5CLDAwMTAwNzk4OCwxLDE=,001007988,"Friend
1,RE5CLDA4MDE1MjU4NSwxLDE=,080152585,Cincinnati Educational and Research For
Veterans Foundation,USA,5138613100,www.cervf.org,3200 Vine St,,Cincinnati,OH,

Address (Street, Town) + Country + Externalld (for all countries except US and Canada)

Sample input file:

```
Address1, City, Country, ExternalId 32 Station Street, ATHERSTONE, England, 1 "Room 301A, Finance Center Mansion, No.1000, Qihang Road, Pudong", Shanghai, CN, 2 22 30 PARIS 8, Paris, France, 3
```

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

2,RE5CLDUyNzg1MjkyNywxLDE=,527852927,"Kch International Logistics (Shanghai) Co., Ltd.",CHINA,2168356135,,"Room 301A, Finance Center Mansion, No.1000, Qihang Road, Pudong",,Shanghai,,310000400437622

1,RE5CLDUwMTMzNzg5MywxLDE=,501337893,ALDI STORES
LIMITED,ENGLAND,1827711800,www.aldi.co.uk,32 Station Street,,ATHERSTONE,,02321869



- 3,RE5CLDI2MzQ2NDgzNCwxLDE=,263464834,CATUSSE AXEL,FRANCE,689614502,,22 B RUE DE PARADIS,,PARIS,,53471226000015
- Registration Number + Country + Externalld (for all countries except US and Canada)

Sample input file:

NatIdNum, Country, ExternalId CH40030222982, Switzerland, 1 02321869, England, 2 310000400437622, CHINA, 3

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

3,RE5CLDUyNzg1MjkyNywxLDE=,527852927, "Kch International Logistics (Shanghai) Co., Ltd.",CHINA,2168356135,, "Room 301A, Finance Center Mansion, No.1000, Qihang Road, Pudong",,Shanghai,,310000400437622

2,RE5CLDUwMTMzNzg5MywxLDE=,501337893,ALDI STORES
LIMITED,ENGLAND,1827711800,www.aldi.co.uk,32 Station Street,,ATHERSTONE,,02321869
1,RE5CLDQ4MTQ2MjE5NSwxLDE=,481462195,HANGARTNER TERMINAL AG in
Liquidation,SWITZERLAN,628346161,,Rautistrasse 75,,ZÜRICH,ZH,CH40030222982

Domain + either URL or Email + Externalld

Sample input file:

Url,Country,ExternalId
www.walmart.com,US,1
www.oracle.com,US,2
www.aldi.co.uk,England,3

Sample output file:

Data/ExternalId, Data/DaasId, Data/DunsNumber, Data/BusinessName, Data/Country, Data/PhoneNumber, Data/Url, Data/Address1, Data/Address2, Data/City, Data/State, Data/NatIdNum

1,RE5CLDA1MTk1Nzc2OSwxLDE=,051957769, "Wal-Mart Stores,
Inc.",USA,4792734000, www.walmart.com,702 SW 8th St,,Bentonville,AR,

2,RE5CLDE0NDcwOTE5MywxLDE=,144709193,Oracle
Corporation,USA,6505067000, www.oracle.com,500 Oracle Pkwy,,Redwood City,CA,

3,RE5CLDUwMTMzNzg5MywxLDE=,501337893,ALDI STORES
LIMITED,ENGLAND,1827711800,www.aldi.co.uk,32 Station Street,,ATHERSTONE,,02321869

Match Data in Oracle Sales

This section describes matching just company data or matching *both* company and contact data. (To match contacts in Sales, you first must match company data.)

DaaS provides the **Sales and Service** template type, as well as the following mappings:

- CXCompanyExport
- CXContactExport
- CXCompanyMatch



CXContactMatch

Mappings created with the Sales and Service template type create a ZIP file, which contains the individual CSV files for import. See *DaaS Files for Import Management in Sales*. Download and extract the ZIP file to a local folder, and then import each CSV file. The Account. CSV file (the parent file) must be imported first, before the child files.

To match only company data in Sales:

- 1. From Sales, export the records that require matching into a CSV file. Use the provided match export map that specifies which attributes you are exporting, and specify the filter criteria that the application uses to select the records for export.
 - See Export Data for Matching.
- **2.** Match your data. Compare the file from Sales with the records in DaaS to see if there is a record match. When a record matches, DaaS replaces the record in the file.
 - See Find Matching Records in DaaS.
- 3. Import the CXV match files into Sales by creating import activities.
 - See Import Match Export Data into Sales.
- **4.** Confirm the company information that you imported is now in Sales.
 - See Verify the Import of Data into Sales.

To match *contacts*, you must perform all the tasks for companies first, and then contacts. The following table describes the flow of tasks to match first company data, followed by contact data. There are two flows for performing matching for both companies and contacts.

Option 1: Match Companies First, then Contacts	Option 2: Match Companies and Contacts Together
This column describes the flow of the tasks to match first company data, followed by contact data:	Alternatively, this column describes the flow of tasks to match company data and contact data together:
Export the company records. See Export Data for Matching.	1. Export the company records. 2. Export the contact records. See Export Data for Matching.
Match your company data. See Find Matching Records in DaaS.	3. Match your company data. 4. Match your contact data. See Find Matching Records in DaaS.
3. Import first the account file, then the child files, into Sales by creating import activities. See Import Match Export Data into Sales.	 5. Import first the account file, then the child files, into Sales by creating import activities. 6. Import the contact file into Sales by creating an import activity. See Import Match Export Data into Sales.
4. Confirm that the company information you imported is now in Sales.	7. Confirm that the company information you imported is now in Sales.



Option 1: Match Companies First, then Contacts	Option 2: Match Companies and Contacts Together
See Verify the Import of Data into Sales. 5. Export the records for contacts. See Export Data for Matching. 6. Match contact data. See Find Matching Records in DaaS. 7. Import the files into Sales by creating import activities. See Find Matching Records in DaaS. 8. Confirm that the contact information you imported is now in Sales. See Verify the Import of Data into Sales.	8. Confirm that the contact information you imported is now in Sales. See Verify the Import of Data into Sales.

Export Data for Matching

In Sales, export the records that you want to match in DaaS to a CSV file. When setting up the export job, you must select the attributes that you want to export and the filter criteria that determine what records are exported. When you export for the first time, the choices you make are saved automatically as a map. You can reuse the same map on subsequent export jobs.

To export company and contact data from Sales:

- 1. From the Navigator, click **Tools > Export Management**.
- 2. On the Manage Export page, click the Create Export Activity button.
- 3. On the **Enter Export Options** page, provide values for each field as shown in the following table:

Field	Description
Name	Name of the import.
Object	Select Account for companies. Select Contact for contacts.
File Name	Browse and select a text file in CSV format. Provide a file name within 40 characters.
Language Independent Header	Exports to DaaS should select this option to export the column headers (under Advanced Options).

- **4.** Click **Next**. The **Map Fields** page shows the export objects and account attributes.
- 5. Select a mapping under the Export Mapping drop-down list. If you're reusing an import mapping, then both the source and target columns are already populated.



- **6.** Click **Next**. On the **Review and Submit** page, review the export activity configuration. Attributes that can be used for matching in DaaS are listed. All child attributes for accounts can be exported in a single file.
- **7.** Click **Submit** to queue the export.

Find Matching Records in DaaS

To search and export company information:

- 1. In DaaS, navigate to the **Match and Export** page.
- 2. Use the following parameters to specify how you want matching done:

Parameter	Description
Job Name	Enter a unique name for the match export job. (This field is optional. If you don't enter a job name, then the service automatically generates one for you.)
Job Description	Enter a description for the match export job. (This field is optional.)
Data	Select Company or Contact to narrow the matching you want to perform.
File	Click Browse to locate the export file that you downloaded from Sales in <i>Export Data for Matching</i> .
Match Confidence	This value specifies the accuracy threshold of the matching process. Select a value between 1 and 100, where 100 represents a match confidence of 100 percent. The default is 70. Note: The Match Score attribute returns the match confidence setting. Because D&B scores in the range of 1–10 (instead of 1–100), this attribute transmits the D&B raw match score in the range of 1-10 in match results. For example, if you set the Match Confidence field to 50 here, then the Match Score attribute returns a value of 5 in the output file.
Match Limit	Specify the maximum number of records to return. The default is 1. Note that if you set this to a number greater than 1, then you could get multiple records in the CSV file. To avoid errors importing into Sales, you should review the file and save only the 1 file you want before import.
Mapping	Select a mapping from the list. You can select a default mapping for most import jobs into Sales. To add the data using Import Management in Sales, select CXCompanyExport or CXContactExport .



Parameter	Description
	Default mappings set by the administrator cannot be edited or deleted. If you need different attributes in the mapping, you can create a new map based on a default map to edit the attributes: click Create Mapping , and from the Template Type list select Sales and Service . You can create new mapping by clicking Create Mapping then selecting Sales and Service
	from the Template Type list.
	Click Save & Select to use your edited or new mapping.
Filters	Select to filter companies, based on internal Dun & Bradstreet (D&B) definitions.
	In Business : Select to include companies of all sizes and revenues that are currently operating.
	 Enterprise: Select to match companies with over 100 employees OR revenues over 100 million US\$.
	 Medium: Select to match companies with between 50 and 100 employees OR revenues between 10 and 100 million US\$.
	 Small: Select to match companies with less than 50 employees OR revenues less than 10 million US\$.
	Marketable Indicator : Select to include companies of all sizes and revenues that are currently operating.
	 Out of Business: Select to match companies that are not operating or inactive.
	Delisted: Select to display companies that should not be contacted for direct marketing per General Data Protection Regulation (GDPR). If you select this filter, then companies and contacts that have indicated that they do not want to be contacted will appear in search results, and if those records marked Delisted are selected, they will be matched, synced, or exported. Companies and contacts marked as Delisted should not be included in marketing campaigns. It's important to note that company hierarchies contain Delisted records, regardless of this setting, to ensure that the hierarchy does not break.
	Defunct: Select to match companies whose original company DUNS number is no longer tracked by D&B. When you search for some defunct companies (for example, a company that was acquired), the service returns the defunct company record along with the new DUNS number. The value in the New DUNS attribute is the DUNS number of the new legal entity after a merger or the DUNS number of the acquired company after an acquisition. D&B also defines a DUNS number as "defunct" in other scenarios, such as when it is a duplicate DUNS number of another record, or when a branch report becomes a separate entity.

- **3.** Click **Export**, and you're taken to the **Jobs** page to view the job status.
- **4.** When the job completes, click the number on Match Exports to review the matched data file. See *Viewing the Status of Match Export Jobs* and *Analyzing the Log File for Failed or Rejected Records*.

Import Match Export Data into Sales

To import the matched company or contact data that you downloaded from DaaS back into Sales, create an import activity. Enter basic data about the file to set up the import activity, specifying how the columns in your import file map to the attributes in the application, scheduling the import activity, and activating it.

To import the files into Sales:



Note: Mappings created with the Sales and Service template type create a ZIP file, which contains the individual CSV files for import. Download and extract the ZIP file to a local folder, and then import each individual CSV file. The Account.csv file (the parent file) must be imported first, before the child files (Address.csv, Classification.csv, AdditionalIdentifier.csv, AdditionalName.csv).

- 1. From the Navigator, click **Tools > Import Management**.
- 2. On the Manage Imports page, click the Create Import Activity button.
- 3. On the **Enter Import Options** page, provide values for each field as shown in the following table:

Field	Description
Name	Name of the import.
Object	Select Account for companies. Select Contact for contacts.
File Name	Browse and select a text file in CSV format. Provide a file name within 40 characters. Note: If your source file has more than 50,000 records, then you must manually split the file into several smaller files with less than 50,000 records each. The file import page only permits 50,000 records for each import job. Alternatively, you can use the External Cloud Data Loader Client, which can accept files with more than 50,000 records. See the My Oracle Support (support.oracle.com) document External Data Loader Client.
Enable High Volume Import	DaaS imports should select this option (under Advanced Options).

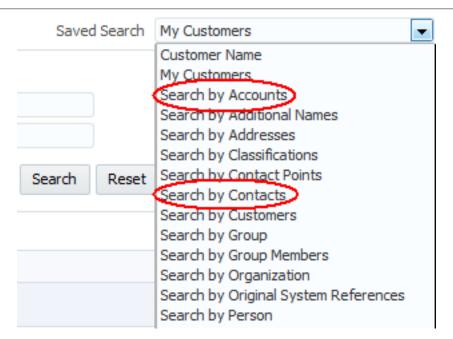
- **4.** Click **Next**. The **Map Fields** page shows the first row of the data from your source file. By default, the application tries to automatically map each of the source file columns to the appropriate target object attribute. If some of the columns in your file couldn't be mapped, then drag the target attribute onto the Attribute Name column under the Source File region.
 - The data in unmapped columns aren't imported.
- 5. Select a predefined mapping from the list of available mappings under the Import Mapping drop-down list. If you're reusing an import mapping, then both the source and target columns are already populated. Leave the Attribute Name field blank for any column that you don't want to import.
- Click Validate Data to check the field mapping.
- 7. Click **Next**. On the **Review and Submit** page, review the import activity configuration. If you didn't run the prevalidation on the Map Fields page, then you get a notification message to run the validation process.
- 8. Click **Validate Data** to check the data in your source file. Validation errors, if any, are displayed on the Mapping Validation screen. If you get warnings about unmapped columns, then you can ignore these columns, and proceed to submit the import job.
- 9. Click **Submit** to gueue the import. Repeat this for all CSV import files.

Verify the Import of Data into Sales

To verify that the company or contact data from DaaS was imported successfully into Sales:

- 1. On the **Manage Customers** link. The Manage Customer page displays.
- On the Manage Customers page, from the Saved Search list, select Search by Accounts for companies or Search by Contacts for contacts.



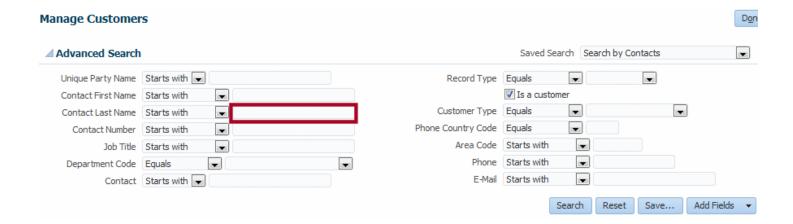




3. In the **Unique Party Name** field, enter the name of one of the companies (or the last name of one of the contacts) in the file that you imported, and then click **Search**.

Manage Customers





- **4.** In the **Search Results** table, click the company name to see the details of the imported data. For contacts, click the company name associated with the contact name that you entered to see the imported data.
- **5.** Verify that fields match the information for the company or contact in the file. For example, confirm that the DUNS numbers match.

Note: When submitting a match request using DaaS, the DUNS number for company records *is not* included or shown in the matched output file. When submitting a match request using Sales, the DUNS number *is* delivered as part of the matched record and is rendered in the Sales interface.



Match Data in Eloqua

Oracle Eloqua users can use the DaaS Enrichment app to ensure that they have the most up-to-date information for their companies and contacts.

Topics:

- Match and Enrich Leads in Eloqua
- Match and Enrich Accounts in Eloqua

Watch this video to see how to update contacts in Eloqua with the DaaS Lead Enrichment app.

Match and Enrich Leads in Eloqua

Suppose you want the data for all your leads to include titles, because you want to send a marketing email targeted at only C-level leads. You can enrich the leads with 3rd party data from DaaS and send email to only appropriate people. Follow these basic steps:

- 1. Create a multistep campaign.
- 2. Select a segment with your leads as the target audience for the campaign.
- 3. Connect it with the DaaS Lead Enrichment app.
- 4. Save the campaign.
- **5.** Activate the campaign to enrich the contact data. After the leads are enriched, you can open the app to see details about the enrichment job.
- 6. Select to send email to leads if they have a C-level title.

To batch enrich leads on a regular basis, create a segment in an "always on" campaign that includes *all* leads and connect it with the DaaS Lead Enrichment app. Or, you can have contacts in a segment filtered through programs and then sent to a campaign with the DaaS Lead Enrichment app to get enriched automatically:

- Create a program (Create a Contact Program Blank Contact Program).
- 2. On the program canvas, associate the program to a campaign where you have the DaaS Lead Enrichment app. (For example, you could enrich contacts with city = New York or with annual revenue > 1000000.)
- **3.** Select the segment you want to use, and click **Send To Program**. These contacts are automatically added to the campaign DaaS Lead Enrichment app and will be enriched.

The following campaign-specific tabs display for basic marketing users:

- **Summary**: Use this page to see the current data usage based on your DaaS subscription, a summary of enrichments in the campaign, and **Learn More** links that take you to the Oracle Help Center for DaaS.
- **Mapping**: Use this page to select the mapping for your campaign enrichment. This page also lets you override the match confidence level set by your administrator.
- Job History: Use this page to see details about all or selected enrichment jobs in this campaign, such as the number of contacts in Eloqua already up-to-date and the number of contacts in Eloqua enriched by DaaS in this campaign.

Note: Your browser may block popups on the cloud action menu. If so, select the option to allow popups for this site.



Match and Enrich Accounts in Eloqua

After the DaaS Enrichment app has been configured, Eloqua users can use it to ensure that their *accounts* (or companies) have the most up-to-date information, and can target the right audience with the right message.

For information on installing and configuring the DaaS Enrichment app, see *Integrate with Oracle Eloqua*.

- 1. Create an account group in Eloqua:
 - a. Select Audience Tools Account Groups.
 - **b.** On the Account Groups page, select **Accounts New Account Group**.
 - **c.** Click **Group Members**, and select to add companies to the group. (Alternatively, you can upload a file containing a list of companies to the group.)
- 2. From the AppCloud menu, select the Oracle DaaS Account Enrichment app.
- **3.** Create an account enrichment job:
 - a. On the app's Manage Jobs page, click **Create New Job**.
 - **b.** Select the account group you created, and move it to the **Account Groups to be Enriched** pane. (For the mapping, all seeded OMC Company Match and custom mappings that the admin created are listed. You can leave the default mapping and match confidence level.)
 - c. Click **Save and Run** to run this job immediately. (Alternatively, click **Save** and run the job later on the Manage Jobs page.)
 - **d.** In the dialog, enter a name for the job, and click **OK**.
 - If the account already has the latest data, then it does not get picked up for matching. If it doesn't have the latest data, then the account is matched with DaaS, and fields in Eloqua that were specified in the mapping are updated with enriched company data.
- **4.** Optionally, change the default filters DaaS uses for searching and matching. See *Set Admin Defaults*.

The following tabs display for basic marketing users:

- **Summary**: Use this page to see the current data usage based on your DaaS subscription, a summary of enrichments, and **Learn More** links that take you to the Oracle Help Center for DaaS.
- **Manage Jobs**: Use this page to create new jobs. You can also search for, edit, run, or delete existing jobs. You can only manage jobs that you've created.
- **Job History**: Use this page to see details about all or selected enrichment jobs, such as the number of accounts in Eloqua already up to date and the number of accounts in Eloqua enriched by DaaS.

Match Data in Other Oracle Cloud Applications

This section describes the tasks for matching company or contact records in other Oracle Cloud applications (such as Business Intelligence Cloud Service).

Task	More Information
1. Export the application records that require matching into a file. Use the export map that specifies which attributes you're exporting, and specify the filter criteria	Export Data for Matching



Task	More Information
that the application uses to select the records for export job.	
2. Match your data. Compare the file from your application with the records in DaaS to see if there is a record match. For records that match, DaaS replaces the matched record in the file with its records.	Find Matching Records in DaaS
3. Import the file into your application.	Import Matched Data into Other Oracle Cloud Applications

Export Data for Matching

Using your application utilities, export the data from your application to a file. See your application-specific documentation for details.

Note: DaaS administrators can change the default export file format from plain text to Excel. See Set Admin Defaults.

Find Matching Records in DaaS

Compare the file from your application with the records in DaaS to see if there is a record match. For records that match, DaaS replaces the matched record in the file with its records. After the match process completes, export the matched data from DaaS to a file for export back into your application.

To search and export company information:

- 1. In DaaS, navigate to the **Match and Export** page.
- 2. Use the following elements to specify how you want the match export job done:

Parameter	Description
Job Name	Enter a unique name for the match export job. (This field is optional. If you don't enter a job name, the service automatically generates one for you.)
Job Description	Enter a description for the match export job. (This field is optional.)
Data	Select Company or Contact to narrow the match export job that you want to perform.
File	Click Browse to locate the export file that you downloaded from your application in <i>Export Data for Matching</i> .
Match Confidence	This value specifies the accuracy threshold of the matching process. Select a value between 1 and 100, where 100 represents a match confidence of 100 percent. The default is 70.
	Note: The Match Score attribute returns the match confidence setting. Because Dun & Bradstreet scores in the range of 1–10 (instead of 1–100), this attribute transmits the D&B raw



Parameter	Description
	match score in the range of 1-10 in match results. For example, if you set the Match Confidence field to 50 here, then the Match Score attribute returns a value of 5 in the output file.
Match Limit	Specify the maximum number of records to return. The default is 1.
	Note that if you set this to a number greater than 1, then you could get multiple records in your file. To avoid errors importing into your application, you should review the file and save only the 1 file you want before import.
Mapping	Select an existing mapping for the export.
	Or, click View Mapping , then Create Mapping to create a new mapping with the Generic template type. Click Save & Select to use your edited or new mapping.
Filters	Select to filter companies, based on internal Dun & Bradstreet (D&B) definitions. In Business: Select to include companies of all sizes and revenues that are currently operating.
	 Enterprise: Select to match companies with over 100 employees OR revenues over 100 million US\$. Medium: Select to match companies with between 50 and 100 employees OR revenues
	 between 10 and 100 million US\$. Small: Select to match companies with less than 50 employees OR revenues less than 10 million US\$.
	Marketable Indicator : Select to include companies of all sizes and revenues that are currently operating.
	 Out of Business: Select to match companies that are not operating or inactive.
	Delisted: Select to display companies that should not be contacted for direct marketing per General Data Protection Regulation (GDPR). If you select this filter, then companies and contacts that have indicated that they do not want to be contacted will appear in search results, and if those records marked Delisted are selected, they will be matched, synced, or exported. Companies and contacts marked as Delisted should not be included in marketing campaigns. It's important to note that company hierarchies contain Delisted records, regardless of this setting, to ensure that the hierarchy does not break.
	Defunct: Select to match companies whose original company DUNS number is no longer tracked by D&B. When you search for some defunct companies (for example, a company that was acquired), the service returns the defunct company record along with the new DUNS number. The value in the New DUNS attribute is the DUNS number of the new legal entity after a merger or the DUNS number of the acquired company after an acquisition. D&B also defines a DUNS number as "defunct" in other scenarios, such as when it is a duplicate DUNS number of another record, or when a branch report becomes a separate entity.

- **3.** Click **Match**, and you are directed to the **Jobs** page to view the job status.
- **4.** When the job completes, click the number on Match Exports to review the matched data file. See *Viewing the Status of Match Export Jobs* and *Analyzing the Log File for Failed or Rejected Records*.

Import Matched Data into Other Oracle Cloud Applications

Using your application utilities, import the file from DaaS back into your application. See your application-specific documentation for details.



Export Account Hierarchies

When you export one or more companies from DaaS, you can select to include company hierarchies with the export. Hierarchies provide a more complete picture of account opportunities across all related businesses and help you stay up to date with changes in corporate structures.

Topics:

- About Company Hierarchies
- Export Hierarchies for Oracle CX
- Export Generic Hierarchies
- Export Selected Records in a Hierarchy

About Company Hierarchies

When you select the **Include Company Hierarchies** check box, DaaS exports companies with their hierarchies. DaaS links the company DUNS number with its headquarters, branches, parents, and subsidiaries to create the complete company hierarchy.

Note: Selecting **Include Company Hierarchies** exports *ALL* company records in that hierarchy. (Some company hierarchies include hundreds of records.) You cannot choose only certain records in the hierarchy to export. A dialog asks for confirmation that you want to include all companies in that hierarchy.



This **Include Company Hierarchies** check box is enabled for Oracle Account Enrichment subscribers. It could be *disabled* for the following reasons:

- You select contacts to export.
- You are using an Oracle Marketing Cloud mapping.

DaaS first identifies the Global DUNS Number for the company record you're exporting. Then it identifies all other company records with that same Global DUNS Number and the relationships between the companies. Companies in the hierarchy file are sorted by the Global Ultimate Company followed by companies in its hierarchy.



The Subsidiary Indicator and Status Code attributes identify parent node information. The Status Code attribute defines the status of the business, such as Single Location (0), Headquarters (1), or Branch (2). Status Code is used along with Subsidiary Indicator to identify if the business is a subsidiary or a branch.

A subsidiary is a separate legal entity that reports up to a Parent DUNS Number. A subsidiary never has an HQDUNS#. DaaS uses the Domestic Ultimate DUNS Number above the subsidiary as the parent for the subsidiary. If Domestic Ultimate DUNS Number does not exist, then it uses the Global Ultimate DUNS Number as the parent for the subsidiary.

A *branch* is not a legal entity by itself but part of a legal entity that is the Headquarter DUNS. A branch never has a Parent DUNS Number. DaaS uses the Headquarter DUNS for the branch as the parent for the branch. If Headquarter DUNS does not exist, then it uses Domestic Ultimate DUNS Number as the parent. And if Domestic Ultimate DUNS Number does not exit, then it uses Global Ultimate DUNS Number as the parent.

Note: Hierarchy exports don't include defunct or out-of-business companies. See *Set Admin Defaults*. Additionally, no hierarchy generates if you exceed your subscription quota. The service doesn't support (or charge for) partial hierarchy creation.

Export Hierarchies for Oracle CX

CX Sales supports exporting HZ_DNB_HIERARCHY type hierarchies, which show *all* relationships between different companies within a corporate family in the D&B database. (Relationships happen when one business entity "controls" another business entity because it has financial or legal responsibility for it, creating a Headquarters-Branch or Parent-Subsidiary relationship.) When generating this D&B hierarchy, DaaS returns the ultimate parent of the requested company and all related entities (that is, the full family hierarchy). It cannot return only the direct line entities between the company and the global ultimate (upward company hierarchy) or the children entities of the company (downward company hierarchy).

The D&B hierarchy in DaaS updates monthly and reflects mergers, acquisitions, openings, and closings. As companies grow and change, you can use the D&B hierarchy to understand how an organization is structured, view and assess risks across different part of an organization, identify sales opportunities, and negotiate purchase conditions from a better position. You can also understand the changes in the corporate structure, compare them with the account hierarchy structure in CX Sales, and see account opportunities across all related businesses.

When used with a CX Sales mapping, DaaS creates the following mapping files required to import hierarchies into CX Sales.

- Account.csv
 - Address.csv
 - Classification.csv
 - AdditionalIdentifier.csv
 - AdditionalName.csv
- Hierarchy.csv
- HierarchyMembers.csv

For detailed information about these files, see *DaaS Files for Import Management in CX Sales*.

The data steward then imports these files into CX Sales:

- 1. Import the accounts (Accounts.cvs file) and then import child files that are part of the account hierarchies. The import process creates the account if it doesn't already exist in CX Sales.
- 2. Import the hierarchy definition (Hierarchy.csv file).



3. Import existing companies as company hierarchy members (HierarchyMembers.csv) into the hierarchy defined in #2.

When importing a company hierarchy into CX Sales, you must create an import activity for each file in D&B hierarchy. From the Navigator, click **Tools > Import Management > Create Import Activity**.

Each import activity also needs a corresponding mapping definition that describes how the DaaS source file attributes map to the corresponding CX Sales target attributes. CX Sales does not provide a predefined map definition for creating a D&B customer hierarchy or for creating a member: a data steward must define the mappings in order to create an import activity for importing a company hierarchy, and also a second import activity for adding the companies to the company hierarchy.

Mappings required by the Manage File Import task:

- Mappings for companies: Use existing mapping definitions for companies, or create a custom mapping for accounts based on the Account object.
- Mapping for the hierarchy definition: Create a mapping in CX Sales based on the Hierarchy object.
- Mapping for hierarchy members: Create a mapping in CX Sales based on the Hierarchy Nodes object.

For example:

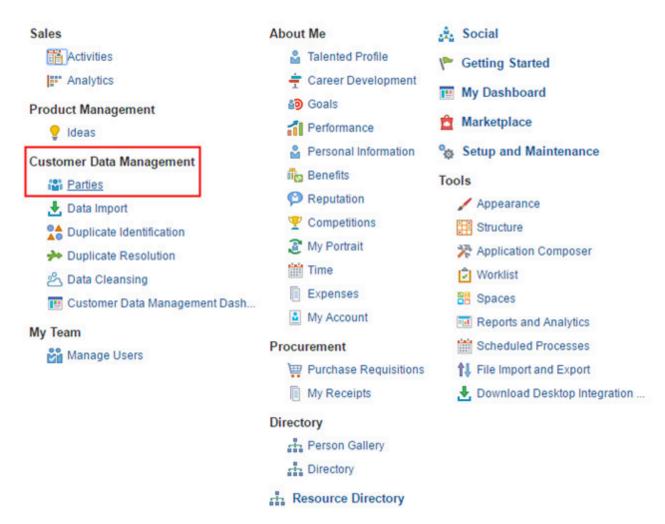
- 1. Create the Customer Hierarchy Mapping.
 - Create new mapping "CreateCustomerHierarchyMapping" on the Manage Imports page.
 - Set Object = Customer hierarchy.
 - Define the source and target attributes for the mapping.
- 2. Create the Members mapping.
 - o Create new mapping "CreateNodeMapping" on the **Manage Imports** page.
 - Set Object = Customer hierarchy member.
 - Define the source and target attributes for the mapping.
- 3. Import all hierarchy files.
 - Create a new task using the Manage Imports to import the customer file.
 - Create tasks using the **Manage Imports** to import all the account files (object name = Account), as well as the hierarchy file (object name = Customer Hierarchy), and the hierarchy members file (object name = Customer Hierarchy Member).

(The hierarchy created is type HZ_DNB_HIERARCHY.)



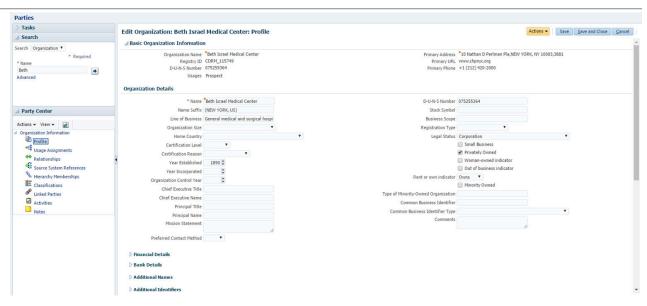
- 4. Verify that the hierarchy imported into CX Sales.
 - Log in to Oracle CX as an administrator, and navigate to Customer Data Management Parties.

Navigator



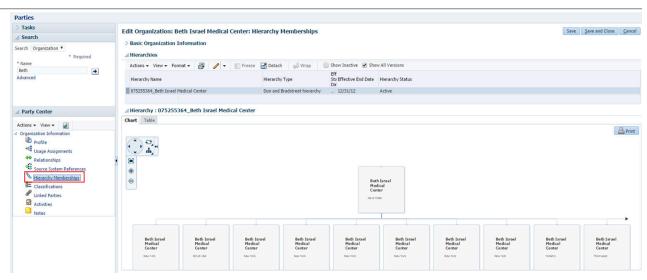
Search for a customer; for example, Beth Israel.





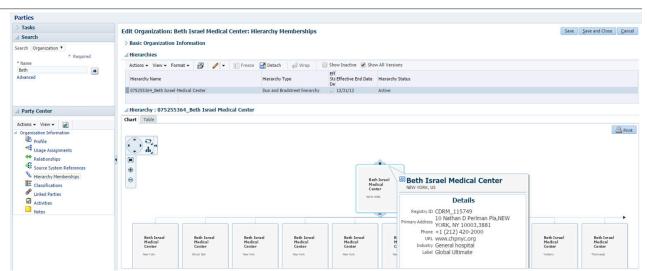
o In the Party Center tree view, select **Hierarchy Memberships**.



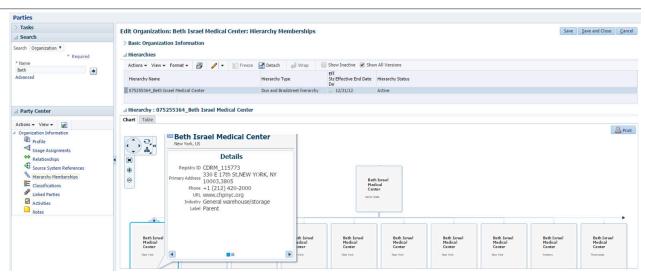


Select the tree node for the details in the hierarchy.









DaaS only supports creation of new company hierarchies and deletion of existing company hierarchies. To update an existing D&B hierarchy imported from DaaS, you must first delete the existing D&B hierarchy in CX Sales, and then import the D&B hierarchy again. The import process imports the hierarchy as a new hierarchy. To delete an existing D&B hierarchy imported from DaaS, set the "Data/ActionCode" to DELETE.

Export Generic Hierarchies

When used with a Generic mapping, DaaS creates two files: the company file (which consists of records selected by user), and the companies hierarchy file (which contains a minimal data set of the all the companies in hierarchy). You're charged only for records exported without all data elements for company records.



This minimal data set identifies all companies under the same Global Ultimate DUNS Number. Consuming applications can reference information in the hierarchy file to create company hierarchies using the following attributes:

- OrganizationName (column E)
- DunsNumberC (column I)
- GlobalUltimateDunsNumbC (column J)
- GlobalUltimateBusinessName (column EX)
- GlobalUltimateIndicator (column EY)
- Parent/HeadquarterBusinessName (column FD)

The following file formats are supported for generic hierarchy exports: TXT, XLST, JSON, and XML.

Export Selected Records in a Hierarchy

Selecting the **Include Company Hierarchies** check box in the user interface exports *all* company records in that hierarchy, and some hierarchies include hundreds of records! To identify the companies in a hierarchy before downloading the records, use the **Get Company Hierarchy Tree** API.

1. Download the hierarchy tree with /api/v4/search/companies/hierarchy/{daasid}. This returns the hierarchy for a company, including the following attributes: daasid, business name, hierarchy indicator, location type, aggregated revenue, and aggregated employees. (The following facets refine search results within one or more hierarchies: company_hier_indicator, company_gl_du_ids, and company_standalone_id.)

Note: To get a hierarchy tree, you must provide a DaaS ID (which is created when you export or match a company or contact record).

See REST API for Oracle Account and Contact Enrichment.

- 2. Review the downloaded CSV file containing the hierarchy structure, and identify any companies in the hierarchy you want to download.
- 3. In the user interface, search for that company with company name or any of the other attributes.
- 4. Export only those records that you want from the hierarchy. You're charged only for those companies exported.

Note: If you need the full D&B hierarchy created in CX Sales or Customer Data Management, then you must export the complete hierarchy.





3 Manage Exports

Manage Export Jobs

This section describes how to view and manage search export and match export jobs in Oracle Account and Contact Enrichment (DaaS).

Topics:

- Typical Workflow for Managing Export Jobs
- Explore the Jobs Page
- View the Status of Jobs
- Analyze the Log File for Failed or Rejected Records

Typical Workflow for Managing Export Jobs

When you export data to an application from DaaS, or when you match your application records with those from DaaS, a job request is submitted to DaaS.

Task	Description
Explore the Jobs Page	Learn how to use the Jobs page to manage jobs.
View the Status of Search Export Jobs	Analyze search export job requests.
View the Status of Match Export Jobs	Analyze match export job requests.
Analyze the Log File for Failed or Rejected Records	Learn about the error messages associated with failed and rejected match export jobs.

Explore the Jobs Page

To see all export jobs, navigate to the the Jobs page, or click the numbers listed for **Search Exports**, **Match Exports** or **Sync Exports** on the Business Metrics page.

Topics:

- What You Can Do with Export Jobs
- What You See on the Jobs Page



What You Can Do with Export Jobs

On the Exports page, use the **Find** search box to locate specific export jobs. For example, to find a job by its name, enter the name in the search field and click the magnifying glass icon. See *View the Status of Jobs*.

Use the **Show** box to display only the following:

- All exports
- Match exports in the last 10 days
- Search exports in the last 10 days
- Sync exports in the last 10 days
- All match exports
- · All search exports
- · All sync exports

Click the row for a job to see its detailed status, and click the file name to download the file for the job.

What You See on the Jobs Page

The following table describes the details shown on the Exports page:

Exports Table Column	Description
Name	View the names of the files associated with the jobs.
Data	Track whether the jobs are for companies or contacts.
Туре	Determine whether or not the job was a search export or a match export job.
ID	See the unique ID assigned to the job.
Submitted By	View the users who have been submitting jobs.
Start Time and End	Determine how long a job took.
Status	Review the status of the job: Completed , Running , or Failed .
	The Detailed Summary section of a job has information about the status. See <i>Analyze the Log File for Failed or Rejected Records</i> to understand the errors.
	Note : As soon as a job is in Running status, it can't be stopped.
Download	Click to download the file associated with the job.
Details for a Selected Search Export Job	Description
Exported	View the number of records exported.



Exports Table Column	Description
Download	View the name of the file that you can download to see what records were exported.
Details for a Selected Match Export Job	Description
Matched 66%	Review a graphical summary of match export jobs to gauge how the match request went.
Detailed Summary	 Click to download the file associated with the job. Matched: Shows how many records were matched. For records that match, DaaS replaces the matched records in the file with its records. After the matching process completes, you can then export the matched data for export back into CX Sales or another application. Rejected: Shows the number of records that were not matched due to a rejection. See Analyze the Log File for Failed or Rejected Records to understand the possible reasons for a rejection. Failed: Shows the number of records that were not matched due to a failure. See Analyze the Log File for Failed or Rejected Records to understand the possible reasons for a failure. Error Log File: Lets you download failed or rejected jobs from the log file. See Analyze the Log File for Failed or Rejected Records to understand the errors.

View Jobs

View the Status of Jobs

Topics:

• View the Status of Search Export Jobs



View the Status of Match Export Jobs

View the Status of Search Export Jobs

To view search export jobs:

- 1. From the Jobs page, select to show All Search Exports.
- 2. To further filter the job results, use **Sort Ascending** and **Sort Descending** in the columns. For example, if you use **Sort Ascending** and **Sort Descending** in both the **Type** and **Data** columns, then you can sort jobs based on company or contact data, as well as search export and match export jobs.
- **3.** Find the jobs that interest you from the table:

Element	Description
Name	View the names of the files associated with the jobs.
Data	Track whether the jobs are for companies or contacts.
Туре	Determine whether or not the job was a search export or a match export job.
Job ID	View the unique ID assigned to the jobs.
Submitted By	View the users who have been submitting jobs.
Start Time and End Time	Determine how long a job took.
Status	Review the status of the export: Completed, Running , or Failed . See the Detailed Summary section of the job for more information about the status. See <i>Analyze Failed Export Jobs</i> to understand the possible reasons for a failure. Note : As soon as a job is in Running status, it can't be stopped.
Download	Click to download the file associated with the job. DD

- **4.** Select an export job from the Exports table to view a summary of the number of records exported to a file. You can use this file to export data from DaaS into an Oracle Cloud application.
- 5. Click the name of the file to download the file to your desktop.

View the Status of Match Export Jobs

To view match export jobs:

1. From the Jobs page, select to show All Match Exports.



- 2. To further filter the job results, use **Sort Ascending** and **Sort Descending** in the columns. For example, if you use **Sort Ascending** and **Sort Descending** in the **Data** column, you can sort jobs based on company or contact data.
- **3.** Find the jobs you are interested in from the table:

Element	Description	
Name	View the names of the files associated with the jobs.	
Data	Track whether the jobs are for companies or contacts.	
Туре	Determine whether or not the job was a search export or a match export job.	
Job ID	View the unique ID assigned to the jobs.	
Submitted By	View the users who have been submitting jobs.	
Start Time and End Time	Determine how long a job took.	
Status	Review the status of the match: Completed, Running, or Failed. See the Detailed Summary section of the job for more information on the status. See <i>Analyze Rejected Match Export Jobs</i> and <i>Analyze Failed Match Export Jobs</i> . Note: Once a job is in Running status, it cannot be stopped.	
Download	Click to download the file associated with the job.	

4. Select a job to view a summary of the status:

Job Status Value	Description
Matched	Shows how many records were matched. For records that match, DaaS replaces the matched records in the file with its records. After the matching process completes, you can then export the matched data for export back into CX Sales or another application.
Failed	See Analyze Failed Match Export Jobs.
Rejected	See Analyze Rejected Match Export Jobs.

5. Click the file name to download successful match export jobs, or click the log file to download the log for match export job with Failed or Rejected results.



Troubleshoot Jobs

Analyze the Log File for Failed or Rejected Jobs

The following topics describes explain failed and rejected export jobs.

Topics:

- Analyze Rejected Match Export Jobs
- Analyze Failed Match Export Jobs
- Troubleshoot Rejected or Failed Match Export Jobs
- Analyze Failed Export Jobs

Note: There are no rejection errors for export jobs.

Analyze Rejected Match Export Jobs

A match export job is rejected if a record in the CSV or TXT input file is missing a required field. In other words, if you delete a mandatory attribute when you create or update a mapping, then your match job will be rejected. You'll get an error saying column headers mapped to mandatory attributes are missing from the input file. (These attributes aren't required for creating Search Export mappings.)

Topics:

- Rejected Matches with Oracle CX Sales
- Rejected Matches with Oracle Eloqua Marketing Cloud

See About Matching Records.

Note: As an exception, you can upload an input file with a single column header titled **DUNS Number**, and mandatory attributes are ignored. As long as the DUNS numbers are valid, the service enriches the records just based on DUNS numbers.



Rejected Matches with Oracle CX Sales

- A company record is rejected for matching if the DaaS Id field is invalid or if any of the following fields is missing:
 - Partyld (for example, CRM ID)
 - Name
 - City
 - Country

Note: When DaaS matches a record, it creates an internal attribute called Daas ID. If a record doesn't have this DaaS ID attribute, that means the record hasn't been matched before. If the **Country** field isn't provided in the input record, then **US** is set internally as the default country code: the job is not rejected.

- A contact record is rejected if the Parent DaaS Id field is invalid or if any of the following fields is missing:
 - Partyld (for example, CRM ID)
 - Last Name
 - First Name
 - Parent Company Name
 - Parent DaaS Id
- Both company and contact records are rejected if DaaS is unable to make a match because the **External Id** field is missing from the input file.

See Create Mappings for CX Sales and Understand Record-Level Export Failures.

Rejected Matches with Oracle Eloqua Marketing Cloud

- A company record is rejected if any of the following fields is missing:
 - Eloqua Company Id
 - City
 - Company Name
- A contact record is rejected if any of the following fields is missing:
 - Eloqua Contact Id
 - First Name
 - Last Name

Here is an example for a missing value in column **Eloqua Contact Id**, which is mapped to **DaaS External Id**:

- ExternalID,DaasID,Status,ErrorStatement,RecordSequence -1,,REJECTED,DCS-10002:Record is rejected for matching. External ID is missing in the record.,1

See Create Mappings for Eloqua Marketing Cloud.



Analyze Failed Match Export Jobs

There are two types of match export failures:

- · Job-level failures
- Record-level failures

Understand Job-Level Match Export Failures

Job-level match export failures occur if the input file format is invalid (for example, the file format is different than what your administrator selected) or if unexpected server-side errors happen during match export (for example, unreachable EDQ server, failure to send JMS, failure to persist record, or failure to construct output file).

The following error message appears for an invalid file format:

DCS-5009: Invalid file format. Select a valid file.

The following error message appears for unexpected errors:

Job 10032 - cont_25k_noappend_1 : FAILED ... DCS-5001: An unexpected error occurred while processing the request. Contact the system administrator.

Understand Record-Level Match Export Failures

Record-level match export failures occur if records find no match. In these cases, DaaS could not find a match among the records provided by D&B.

The following error message appears for no match found:

DCS-2002: No records found matching the input. Action: Update your input record with more information to find a match.

See *About Matching Records* to read more about the mandatory attributes used to match records.

Troubleshoot Rejected or Failed Match Export Jobs

The following log file shows a match export log with both **FAILED** and **REJECTED** status:

ExternalId	Status	ErrorStatement		ence
10014	FAILED	DCS-2002: No records found matching the input. Action: Update your input record v		
10012	10012 FAILED DCS-2002: No records found matching the input. Action: Update your input record v			
10022	FAILED	DCS-2002 : No records found matching the input. Action: Update your input record v	3	
-1	REJECTED	DCS-1020: Record is rejected for enrichment. External ID is missing in the record. A	1	
-1	REJECTED	DCS-1020 : Record is rejected for enrichment. External ID is missing in the record. A	2	



The **Record Sequence** column indicates what row in your file must be corrected. The records start from row number 2 in the input file (because row number 1 holds the column headers). You must add one to the sequence to locate the source of the problem in the input file.

In the following example:

- The records that were REJECTED are those that are missing the Partyld values. PartylD is the company ID provided by CX Sales. If someone mistakenly deleted the value, then the record is rejected.
- The records that were **FAILED** are those where DaaS couldn't find a match among the company records provided by D&B. In other words, a match of the company does not exist in DaaS. For a company to match, the company name and city must match.

1	Address1	City	Country	PartyId	Daas Identifier	OrganizationName	State	County	PrimaryPhoneNumber
2	test1	San Mateo	US			Alicia Actual Industries	OK	McCurtain	1.23E+09
3	6392 Westside Rd Ste J	redding	US		RE5CLDYyNjY5OTY3NywxLDE=	North Valley Bank		California	2.07E+09
4	143 Jordan Bridge Rd	Sabattus	IN	10022		Jillson	ME		1.31E+10
5	990 N Daleville Ave	DALEVILLE	US	10012		100 Hispanic Women	ОК	McCurtain	1.23E+09
6	4200 Bluffridge Dr	Austin	US	10013		Duncan, Suzanne Busch PHD	TX	Travis	5.12E+09
7	400 N Dalton St	Valliant	US	10014		confidential, industries	ОК	McCurtain	1.58E+10
8	7115 E Wt Harris Blvd	charlotte	US	10015		Rite Aid Corporation	Alaska	north carolina	9.08E+09
9	530 Rte 46	Wayne	US	10016		Spylen Benefit Inc		New Jersey	1.31E+10
10	791n W Gulliver Lake Ro	Gulliver	US	10019		ASAP Asphalt	MI	Schoolcraft	9.06E+09
11	5810 Kittyhawk Dr	rowlett	US	10020		Briarwood Custom Homes LLC	С	texas	1.31E+10

Analyze Failed Export Jobs

There are two types of export failures:

- Job-level failures
- · Record-level failures

Understand Job-Level Export Failures

Job-level export failures occur if you export too many records or if unexpected server-side errors happen during export (for example, failure for a record to persist or failure to construct an output file).

The following error message appears for exceeding the export limit:

DCS-2018 : The number of records in the output exceed the maximum limit of records that can be exported by the Export service. Action: Update your query criteria/the number of records to be exported.

The following error message appears for unexpected errors:

DCS-5001: An unexpected error occurred while processing the request. Contact the system administrator.



Understand Record-Level Export Failures

Record-level export failures occur if records find no match. The job shows completed, but an error message is displayed for the individual record that failed.

The following error messages can appear for exceeding the export quota limit:

DCS-2019: Your request has been interrupted because the quota limit has been reached for Company. Action: Contact your account administrator for more information.

or

DCS-2020=Your request has been interrupted because the quota limit has been reached for Contact. Action: Contact your account administrator for more information.



4 Manage Mappings

Manage Mappings

This section describes how to manage the attribute mappings you use to *Add New Companies and Contacts* and *Match Data*.

Topics:

- About Mappings
- Typical Workflow for Using Mappings
- Explore the Mappings Page
- Create New Mappings
- Edit Existing Mappings

About Mappings

When you match or export data from DaaS, you select a mapping between the attributes in the export file and those in your application. The mappings define which attributes will be present in the export file.

Note: Mappings that contain contact attributes require a DaaS subscription for contact records. For example, the MarketingCloudContact&CompanyMatch mapping requires a DaaS subscription for Oracle Contact Enrichment and Oracle Account Enrichment.

Topics:

- DaaS Provided Mappings
- DaaS Files for Import Management in Sales

DaaS Provided Mappings

DaaS provides the following **search export** mappings:

- CXCompanyExport (for Oracle Sales)
- CXContactExport (for Oracle Sales)
- MarketingCloudCompanyExport (for Oracle Eloqua)
- MarketingCoudContactExport (for Oracle Eloqua)
- MarketingCloudContact&CompanyExport (for Oracle Eloqua)
- CompanyExport (for other applications)
- ContactExport (for other applications)
- EngagementCloudCompanyExport (for Oracle Sales File-Based Import deprecated)



EngagementCloudContactExport (for Oracle Sales File-Based Import – deprecated)

DaaS provides the following **match export** mappings:

- CXCompanyMatch (for Oracle Sales)
- CXContactMatch (for Oracle Sales)
- MarketingCloudCompanyMatch (for Oracle Eloqua)
- MarketingCloudContactMatch (for Oracle Eloqua)
- MarketingCloudContact&CompanyMatch (for Oracle Eloqua)
- EngagementCloudCompanyMatch (for Oracle Sales File-Based Import deprecated)
- EngagementCloudContactMatch (for Oracle Sales File-Based Import deprecated)

These provided mappings include default mappings to Sales or Eloqua independent of the input file. The other provided mappings (for other applications) have no default mappings, but the input file includes required attributes. In many cases, these provided mappings are sufficient. However, you may want to create a new mapping if you only need a subset of the attributes, or if you created a custom attribute in Sales or Eloqua that you need to map to a DaaS attribute. You can create new mappings from the existing map definition templates.

DaaS Files for Import Management in Sales

To support Import Management, DaaS provides the **Sales and Service** template type, as well as the following mappings: **CXCompanyExport**, **CXCompanyMatch**, and **CXContactMatch**. When you use these mappings, DaaS create a ZIP file that contains the individual CSV files for import. Download and extract the ZIP file to a local folder, and then import each CSV file. The parent file (Account. CSV) must be imported into Sales first, before the child files.

Note: DaaS generates a CSV file only generated when it has records to populate into the file: DaaS won't generate empty files. If an export or match job doesn't have data, then DaaS doesn't generate a corresponding CSV file.

When used with a CX mapping, DaaS creates the following mapping files required to import into Sales.

Account Import Files:

- Account.csv: This is the parent mapping file for the account. It contains all companies with the same GlobalUltimateDUNSNumber as the company being exported.
 - Address.csv: This is a child account file that maps the DaaS contact (account) attributes to the Sales Address Child Object. If an account has two addresses (Main and Mailing), then DaaS generates two rows: one to store the Main address, and one to store the Mailing address. Therefore, the DaaS generated file has two sets of mappings for PartylD (PartySourceSystem + PartySourceSystemReferenceValue): one for Mailing and one for Main. If the Main address is the same as Mailing Address, then DaaS only delivers one row. Main Address is set to the "Primary" address.
 - AdditionalName.csv: This is a child account file that maps the DaaS company attributes to the Sales
 Additional Name Object. The DaaS generated CSV has the following values for each child row: Partyld,
 PartySourceSystem, PartySourceSystemReferenceValue, SourceSystem, SourceSystemReferenceValue.
 If a company record has five Trade Style names, then the CSV file contains five rows: one for each
 tradestyle.
 - AdditionalIdentifier.csv: This is a child account file that maps the DaaS company attributes to the Sales Additional Identifier Object.
 - Classification.csv: This is a child account file that maps the DaaS company attributes to the Sales Classification Object. The DaaS generated CSV file has the following values for each child row: Partyld,



PartySourceSystem, PartySourceSystemReferenceValue, SourceSystem, SourceSystemReferenceValue. If a company record has 10 classification codes (code, category), then the CSV file contains 10 rows: one for each classification.

Account Import Files for Hierarchies:

- Hierarchy.csv: Contains the hierarchy definition for one or multiple company hierarchies. Each row represents a single company hierarchy. Before you import this file, you must import the Accounts.csv file in Sales, which is a parent object.
- *HierarchyMember.csv*: Contains information on the relationships of the company nodes in the hierarchy. Before you import this file in Sales, you must import the Accounts.csv file and the Hierarchy.csv file.

Contact Import Files:

- Contact.csv: Mapping of the DaaS contact attributes to the Sales Contact Object.
- ContactPoint.csv: Mapping of the DaaS contact attributes to the Sales Contact Point Child Object. If a contact record has multiple contact points, such as Email, Phone, and so on, then the CSV file contains multiple rows: one for each contact point.

The default mappings for Sales include required attributes and some other attributes. In many cases, these mappings are sufficient. However, you may want to include additional DaaS attributes, such as MarketableIndicator, Parent/ HeadquarterBusinessName, or Competitors. To add any of these DaaS attributes, you must create a custom attribute for the DaaS attribute in Sales, and then map that new attribute to the DaaS attribute in the **Manage Oracle Data as a Service Attribute Mapping and Preferences** task.

Account.csv

Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
1	Walmart Inc.	OrganizationName	
2		Partyld	
3		PhoneCountryCode	
4		RawPhoneNumber	
5		RawFaxNumber	
6	www.walmart.com	URL	
7	DAAS	SourceSystem	
8	RE5CLDA1MTk1Nzc2OSwxLE	SourceSystemReferenceValu	
9	1980	YearEstablished	
10	WMT	StockSymbol	
11	514405000000	CurrentFiscalYearPotentialRe	
12	203611671 (US example)	TaxpayerIdentificationNumb	Previously, this Sales attribute name was JgzzFiscalCode.
13	00015 (code refers to US Social Security Number)	NationalldentificationCode	DaaS to pass the code and description for the code (example:



Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
	00017 (code refers to France Siret Number) 00012 (UK Cro Number)		US Social Security Number - 00015)
14	51957769	DUNSNumber	
15		ParentDUNSNumber	
16	51957769	DomesticUltimateDUNSNum	
17	N	PublicPrivateOwnershipFlag	
18		Importindicator	
19		ExportIndicator	
20		SmallBusinessIndicator	
21	N	WomanOwnedIndicator	
22	N	MinorityOwnedIndicator	
23		MinorityOwnedType	
24		RentOrOwnIndicator	
25		LaborSurplusIndicator	
26	N	OutOfBusinessIndicator	
27	HQ	HQBranchIndicator	
28	51957769	GlobalUltimateDUNSNumbe	
29	N	ParentOrSubsidiaryIndicator	
30	11700	EmployeesAtPrimaryAddres	
31		EmployeesAtPrimaryAddres	
32		EmployeesAtPrimaryAddres	
33	2200000	EmployeesTotal	
34	2	TotalEmployeesEstimatedInd	
35		TotalEmployeesMinimumInc	
36	003 (description: corporation)	LegalStatus	
37	Department stores	LineOfBusiness	
38	0020 (code for the US)	Currency	
39	ENRICHED	DataCloudStatus	
40		MatchScore	



Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
41	Walmart is an unstoppable retail force that has.	Description	DaaS populates D&B "Company Description" to "Description".
42	М	MarketableIndicator	
43	D	GEOCodeAccuracy	
44	0	SalesVolumen(USDollars)Rel	
45	514405000000	Sales Volume(US Dollars)	
46		SalesVolumeLocalCurrencyR	
47	Walmart Inc.	DomesticUltimateBusinessN	
48	42	DomesticUltimateFIPSCount	
49	805	DomesticUltimateD&BCount	
50	AR	DomesticUltimateState/ ProvinceAbbreviation	
51	Walmart Inc.	GlobalUltimateBusinessNam	
52	Υ	GlobalUltimateIndicator	
53	42	GlobalUltimateFIPSCountryC	
54	805	GlobalUltimateD&BCountry(
55	AR	GlobalUltimateState/ ProvinceAbbreviation	
56	51957769	HeadquarterDUNSNumber	
57	Walmart Inc.	Parent/ HeadquarterBusinessName	
58	1	HierarchyCode	
59	7896	NumberofFamilyMembers	
60		OvertheCounterStockExchar	
61	WMT	NYSEStockExchange	
62	MSN	ASETicker	
63	MKSI	NMSTicker	
64	BKSC	NASTicker	
65	N	OperatesFromResidenceIndi	
66	884745530	PrimaryCompetitor1	
67	-99	3YearGrowthPercentageonS	
68	-99	3YearGrowthPercentageonEr	



Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
69	L	DelinquencyRisk	
70	5	CensusFIPSTerritoryCode	
71	7	CensusFIPSCountyCode	
72	6999528	PrimaryCompetitor2	
73	6961700	PrimaryCompetitor3	
74	6997142	SecondaryCompetitor1	
75	151064821	SecondaryCompetitor2	
76	New York Stock Exchange	GlobalExchangeName	
77	Υ	PrimaryIndicator	
78	2580	FIPSMSACode	
80	805	ParentHeadquarterD&BCour	
81		RecordStatus	
82		NewDUNSNumber	
83		ReasonRecertification	
84		DateRecertification	
85	514405000000	MaximumARR(US Dollars)	
86	2200000	MaxEmployees	
87	514405000000	DomesticMaxARR(USD)	
88	2200000	DomesticMaxEmployees	
89	95511	ContactCount	

Address.csv

Attribute Number	Example	DaaS Column Header	Notes
1	USA	Country	
2	Υ	PrimaryFlag	 If DaaS only sends one address, then the address is set as "Primary".
			 If DaaS send two addresses (either during account creation or enrichment), the D&B Address with Address 1, Street Address 2, City name, State is set to "Primary = Y".
			 DaaS generates one row for Main/Primary Address and



Attribute Number	Example	DaaS Column Header	Notes
			one row for Mailing Address if values are different.
3	123 Main Street	Address1	
4		Address2	
5	San Mateo	City	
6	1338	PostalPlus4Code	
8	со	State	
9		StateName	
10	San Mateo	County	
11	36.364313	Latitude	
12	36.3643	LatitudeShort	
13	-94.216848	Longitude	
14	-94.2168	LongitudeShort	
15	96712	PostalCode	
16	967121338	FullPostalCode	
17	DAAS	SourceSystem	DaaS populates attribute Orig System.
18	DaaS generated hex number	SourceSystemReferenceValu	
19	OSC Account ID	Party ID	This is the ID of the CX account record and used in the enrichment use case. DaaS gets the value from Sales.
20	DAAS	PartySourceSystem	DaaS generates value.
21	DaaS generated hex number	PartySourceSystemReferenc	DaaS generates value. This is the DaaS generated Company ID used to import the account to Sales.
22		AddressType	This maps to AddressType. Type examples: SHIP_TO, BILL_TO, SELL_TO. If DaaS only sends one address, the address is set to "Primary" and AddressType = BILL_TO. If DaaS sends two addresses (either during account creation or enrichment), the D&B Address 1, Address 2, City, State is set to the Type = BILL_TO. If DaaS sends two addresses, the D&B Mailing Address 1,



Attribute Number	Example	DaaS Column Header	Notes
			Mailing Address 2, Mailing City, Mailing State should be set the Type = SHIP_TO.
			 DaaS generates one row for Main Address and one row for Mailing Address if values are different.
	P.O. BOX 1068	Address1	CSV file contains 22 columns and multiple rows for child records.
		Address2	
	Honolulu	City	
	н	State	
		StateName	
		PostalCode	
	968308931	FullPostalCode	
		Country	
	DAAS	SourceSystem	DaaS sends value DAAS.
	DaaS generated hex number	SourceSystemReferenceValu	
	OSC Account ID	Partyld	The ID of the Sales Account record and used in the enrichment use case. DaaS gets the value from Sales.
	DAAS	PartySourceSystem	DaaS sends value DAAS.
		PartySourceSystemReferenc	DaaS generates value. Refers to the Parent DaaS OSR pair for the DaaS Account
		AddressType	This maps to AddressType. Type examples: SHIP_TO, BILL_TO, SELL_TO.
			 If DaaS only sends one address, the address is set to "Primary" and AddressType = BILL_TO.
			If DaaS sends two addresses (either during account creation or enrichment), the D&B Address Address 1, Address 2, City, State is set to the Type = BILL_TO.
			 If DaaS sends two addresses, the D&B Mailing Address 1, Mailing Address 2, Mailing City, Mailing State should be set the Type = SHIP_TO.



Attribute Number	Example	DaaS Column Header	Notes
			 DaaS generates one row for Main Address and one row for Mailing Address if values are different.

AdditionalName.csv

Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
1		Partyld	
2		PartySourceSystem	
3		PartySourceSystemReferenc	
4		SourceSystem	
5		SourceSystemReferenceValu	
6	ALIAS	NameType	
7	IBM	Name	
	ALIAS	NameType	CSV file contains seven columns and multiple rows for child records.
	Vendor Payables	Name	
	ALIAS	NameType	
	lbm/Hillenbrand	Name	
	ALIAS	NameType	
	lbm-Endicott	Name	
	ALIAS	NameType	
	lbm-Endicottabcd	Name	

Additionalldentifier.csv

Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
1	ID_NUMBER	PartyldentifierType	ID_NUMBER is a hardcoded string passed by DaaS to Sales.
2	3128924	PartyldentifierValue	Example: D&B sends 3128924, which is the US Social Security Number.
3		Partyld	



Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
4	DAAS	PartySourceSystem	Refers to the Parent DaaS OSR pair for the Company from DaaS.
5	RE5CLDA1MTk1Nzc2OSwxLE	PartySourceSystemReference	Refers to the Parent DaaS OSR pair for the Company from DaaS.
6	ANY ID COMPANY	IssuingAuthorityName	In File-Based Data Import, the transformation rule populated this field with the value of ANY ID COMPANY.
7	DAAS	SourceSystem	
8	abcdefghijklmnopq	SourceSystemReferenceValu	

Classification.csv

Attribute Number	DaaS Data: Example	Import Object Attribute Display Name	DaaS Column Header	Notes
1		Primary	PrimaryFlag	If DaaS sends MajorIndustryCategoryCode, then set PrimaryFlag = Y. If DaaS doesn't send MajorIndustryCategoryCode, then Sales randomly picks one NAICSClassCategory or SICClassCategory as Primary. Users can go to the Sales UI and change the Primary flag.
2		Party ID	Partyld	
3	DAAS	Party Source System	PartySourceSystem	
4	DaaS generated Hex	Party Source System Reference Value	PartySourceSystemReferenceValue	
5		Source System	SourceSystem	
6		Source System Reference Value	SourceSystemReferenceValue	
7	ORA_HZ_MAJOR_INDUSTRY	Classification Category	ClassCategory	
8	7	Classification Code	ClassCode	When code gets passed, the UI renders the value associated with the code. O Misc/public administration, 1 Agriculture, 2 Mining, 3 Construction, 4 Manufacturing, 5 Transportation/comm/utilities, 6 Wholesale trade, 7 Retail trade, 8 Financial services/insurance/real estate, 9 Services



Attribute Number	DaaS Data: Example	Import Object Attribute Display Name	DaaS Column Header	Notes
9	ORA_HZ_NAICS_2017	Classification Category	ClassCategory	
10	452210	Classification Code	ClassCode	
		Classification Category	ClassCategory	CSV file contains 10 columns and multiple rows for child records.
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
	ORA_HZ_NAICS_2017	Classification Category	ClassCategory	
	452319	Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
	ORA_HZ_NAICS_2017	Classification Category	ClassCategory	
	445110	Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	



Attribute Number	DaaS Data: Example	Import Object Attribute Display Name	DaaS Column Header	Notes
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
	ORA_HZ_NAICS_2017	Classification Category	ClassCategory	
	452311	Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	



Attribute Number	DaaS Data: Example	Import Object Attribute Display Name	DaaS Column Header	Notes
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	
		Classification Category	ClassCategory	
		Classification Code	ClassCode	



Hierarchy.csv

Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
1		SourceLangFlag	
2	HZ_DNB_HIERARCHY	TreeStructureCode	
3	060704780_Apple Inc.	TreeCode	
4	060704780_Apple Inc.	TreeName	
5		IconName	Allows user to save hierarchy icon name.
6		TreeDescription	Allows user to save hierarchy description.
7	060704780_Apple Inc.	TreeVersionName	
8		TreeVersionDesc	For hierarchy tree version description.
9		TreeVersionComment	For hierarchy tree version comment.
10		AsOfDate	
11		EffectiveStartDate	
12		EffectiveEndDate	
13	US	LangCode	

HierarchyMember.csv

	DaaS Data: Example	DaaS Column Header	Notes
1		AsOfDate	
2		LabelShortName	
3		ParentPartyld	
4		ParentPartyNumber	Identifies Parent Party Number.
5		ParentPartyOrigSysRef	
6		ParentPartyOrigSystem	
7		Partyld	
8		PartyNumber	
9		PartyOrigSysRef	
10		PartyOrigSystem	



	DaaS Data: Example	DaaS Column Header	Notes
11		TreeCode	
12		TreeStructureCode	

Contact.csv

Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
1		Partyld	
2	DAAS	SourceSystem	
3	DaaS generated hex	SourceSystemReferenceValu	The DaaS OSR pair for the contact record.
4	ENRICHED	DataCloudStatus	
5		AddressLine1	
6		City	
7		Country	
8		PostalCode	
9		PostalPlus4Code	
10		FullPostlCode	
11		State	
13	MR.	SalutoryIntroduction	
14	Johnny	FirstName	
15	R	MiddleName	
16	Peter	LastName	
17	Oracle Dba	JobTitle	
18	Z699	MRCCode	
19	MALE	Gender	
20		NameSuffix	
21	300000115379450	AccountPartyld	
22	DAAS	AccountSourceSystem	
23	RE5CLDgwNjA10DYzMiwxLC	AccountSourceSystemRefere	In File-Based Data Import, this was Parent DaaS ID. To keep OS/OSR names consistent, this changed to Organization Original System Reference.
24	51957769	DUNSNumber	



Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
25	248962401	IndividualID	
26	24627880755	RoleID	
27	7/28/2015	LastUpdatedDateRole	
28	Other	Department	
29	Director	ManagementLevel	
30	Director	StandardizedTitle	
31	75	MatchScore	

ContactPoint.csv

Attribute Number	DaaS Data: Example	DaaS Column Header	Notes
1		Partyld	Contact Party ID
2	DAAS	PartySourceSystem	
3	DaaS generated Hex for the Contact person	PartySourceSystemReference	
4	DAAS	SourceSystem	
5	DaaS generated Hex for the email	SourceSystemReferenceValu	
6	john.doe@microsoft.com	EmailAddress	
7		ContactPointType	DaaS sets the value to EMAIL/ PHONE
8	1234	PhoneExtension	
9	5953333	PhoneNumber	
10	3035953333	RawPhoneNumber	
11		PrimaryFlag	If RawPhoneNumber is available, the PrimaryFlag for that child record PrimaryFlag is set to "N" in CSV.

Typical Workflow for Using Mappings

This table covers the typical workflow for working with mappings.



Task	Description
Explore the Mappings Page	Learn about the Mappings page to manage search export and match export mappings.
Create Mappings for Sales	Create a new mapping for use with Sales.
Create Mappings for Eloqua	Create a new mapping for use with Eloqua.
Create Mappings for Other Oracle Cloud Applications	Create a new mapping for use with other applications.
Edit an Existing Mapping	Modify an existing mapping.

Explore the Mappings Page

From the Mappings page you can select, delete, or create a mapping of the attributes in DaaS to the attributes in your application.

Topics:

- What You Can Do from the Mappings Page
- What You See on the Mappings Page

What You Can Do from the Mappings Page

On the Mappings page, you see a list of all mappings in your system. The following mappings are provided. They should be sufficient for most search export and match export jobs:

- CXCompanyExport and CXContactExport for search export mappings to Oracle Sales using Import Management
- MarketingCloudCompanyExport, MarketingCoudContactExport, and MarketingCloudContact&CompanyExport for search export mappings to Oracle Eloqua
- CXCompanyMatch and CXContactMatch for match export mappings to Oracle Sales using Import Management
- MarketingCloudCompanyMatch, MarketingCloudContactMatch, and MarketingCloudContact&CompanyMatch for match export mappings to Oracle Eloqua
- CompanyExport and ContactExport for export mappings to other Oracle Cloud applications

You cannot delete these provided mappings. But you can create a new map based on a default map and edit the attributes that way.

The following table highlights what you can do from the Mappings page:

Element	Description
Template Type	Select the kind of mapping template you need:



Element	Description	
	 Sales and Service: Use to create a mapping template to use with Import Management in Sales. Marketing Cloud: Use to create a mapping template to use with Eloqua. Generic: Use to create a mapping template to use with other Oracle Cloud applications. 	
×	Click the X icon to remove a custom mapping.	
Row for a mapping	Click the mapping name to edit the mapping. See <i>Edit an Existing Mapping</i> . To edit a mapping, click the mapping name, and click Create Mapping to create a new mapping by editing the existing mapping.	

What You See on the Mappings Page

This table describes the details shown on the Mappings page:

Column	Description
Mapping Name	Unique name for the search export or match export mapping.
Data Type	Whether the mapping is for companies or contacts.
Mapping Type	Whether the job is for a search export or a match export mapping.
Template Type	Identification that the mapping is for Oracle Sales, Oracle Eloqua, or for another application (no value).
Date	Date the mapping was created.

Create Mappings

Create New Mappings

Topics:

- Creating Mappings for CX Sales
- Create Mappings for Eloqua
- Create Mappings for Other Oracle Cloud Applications



Create Mappings for Oracle Sales

To create a new mapping for use with Oracle Sales:

- 1. Navigate to the Mappings page.
- 2. Click Create Mapping.
- 3. Use the following elements to complete the mapping:

Element	Description
Name	Enter a unique name for your export mapping.
Data Type	Select Company or Contact to obtain the correct list of mappings.
Mapping Type	Specify whether the mapping is for a Search Export or a Match Export job to Sales.
Template Type	Select Sales and Service to create a mapping for use with Sales. DaaS automatically maps the discovered attributes to those in Sales.
Add Attribute	Add an attribute mapping that you accidentally removed but you still want added. If you extended the attributes in Sales, use Add Attribute for any attributes that you extended in Sales. For each list displayed, select the attribute or object. See <i>Edit Sales Mappings</i> for more information about the Sales attributes.

Note: Match Export mappings require that certain attributes exist. If you delete required attributes, then your import job fails. See *About Matching Records* and *Analyze Rejected Match Export Jobs*. If you get error DCS-1059, make sure that your mapping file has Column Data Attribute = Externalld mapped to Column Target Attribute = Partyld, or, make sure that your input file contains a column header called Externalld (or any name) with values that uniquely identifies the account record in Sales.

- 4. Click Save & Select.
- 5. Apply the mapping to a search export or match export job by following these procedures:
 - Add New Companies to Sales
 - Enrich Data in Sales

When prompted for the mapping, select the one that you created.

Create Mappings for Eloqua

Mappings define how DaaS attributes map to Eloqua attributes. Default mappings can't be edited or deleted, but you can create a new mapping based on a default mapping to add (and enrich) more of your attributes. To create a new mapping for use with Oracle Eloqua:



- 1. Navigate to the Mappings page.
- 2. Click Create Mapping.
- **3.** Use the following elements to complete the mapping:

Element	Description
Name	Enter a unique name for your export mapping.
Data Type	Select Company or Contact to obtain the correct list of mappings.
	To create a mapping for both companies and contacts, select Contact for the Data Type, and then add both contact and company fields to it.
Mapping Type	Specify whether the mapping is for a Search Export or a Match Export job to Eloqua.
Template Type	Select Marketing Cloud to create a mapping for use with Eloqua Marketing Cloud. When you select the Marketing Cloud template, DaaS automatically maps the discovered attributes to those in Eloqua.
Add Attribute	For each dropdown list that is displayed, select the attribute.
	Mappings for <i>lead</i> (contact) enrichment must have one of the following options of required attributes:
	。 External ID, Email
	External ID, First Name, Last Name, Primary Phone
	 External ID, First Name, Last Name, Business Name
	 External ID, First Name, Last Name, DUNS Number
	。 External ID, First Name, Last Name, Parent DaaS ID
	Mappings for <i>account</i> (company) enrichment require the External ID, Business Name and City attributes.
	If you delete mandatory attributes, then import jobs will fail. See <i>Rejected Matches with Oracle Eloqua Marketing Cloud</i> .
	The number of attributes available for the mappings depends on which subscription you've purchased. See <i>Understand Attributes</i> for information about attributes in each subscription. See <i>Edi Marketing Cloud Mappings</i> for information about Marketing Cloud attributes.

Note: Match Export mappings require that certain attributes exist. If you delete mandatory attributes, then your import job will fail. See *About Matching Records* and *Rejected Matches with Oracle Eloqua Marketing Cloud*.

- 4. Click Save & Select.
- **5.** Apply the mapping to a search export or match export job by following the procedures in *Add New Companies and Contacts to Eloqua*.

When prompted for the mapping, select the one that you created.



Create Mappings for Other Oracle Cloud Applications

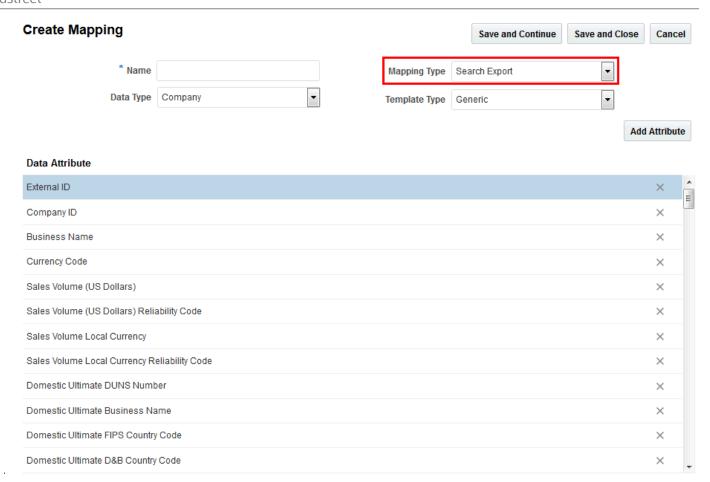
To create a new mapping for use with other Oracle Cloud applications (such as Business Intelligence Cloud Service):

- **1.** Navigate to the Mappings page.
- 2. Click Create Mapping.



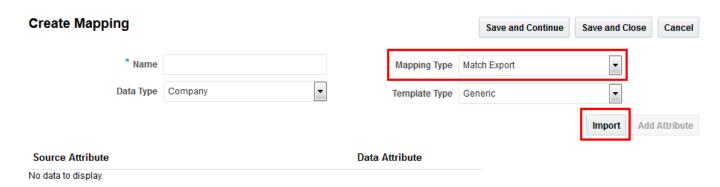
3. From the **Template Type** list, select **Generic** to create a new mapping for use with your Oracle Cloud application. If you are creating a Search Export mapping, the page lists the discovered attributes in DaaS.







If you are creating a Match Export mapping, you must first click **Import** to select the file from your application that contains the data for mapping. You then need to manually map the source attributes from your application to the DaaS attributes.



Note: When matching companies from other Oracle Cloud applications, each record in the input file should have a unique identifier value, such as Company ID. When creating a Generic Match Export mapping, this Company ID should be mapped to the DaaS attribute Externalld.

4. Use the following elements to complete the mapping:

Element	Description
Name	Enter a unique name for your export mapping.
Data Type	Select Company or Contact to obtain the correct list of mappings.
Mapping Type	Specify whether the mapping is for a search export or match export job.
Template Type	Select Generic .
×	Click this icon to remove any attributes whose values you don't want.
Add Attribute	Add an attribute mapping that you accidently removed but you still want added. If you extended the attributes in your application, use Add Attribute to add it in.



Element	Description

Note: Match Export mappings require that certain attributes exist. If you delete mandatory attributes, then your import job will fail. See *About Matching Records*.

- 5. Click Save.
- **6.** Apply the mapping to a search export or match export by following these procedures:
 - Add New Companies and Contacts to Other Oracle Cloud Applications
 - Match Company and Contact Data in Other Oracle Cloud Applications

When prompted for the mapping, select the new mapping.

Edit Mappings

Edit Existing Mappings

To modify an existing mapping:

Note: Mappings included with DaaS can't be deleted.

- 1. Navigate to the Mappings page.
- 2. From the **Mapping Name** column, click the name of a mapping that you want to edit.

The Edit Mapping page displays. Here, you can add and remove attributes from the mapping. You can also modify the mappings of attributes to the equivalent attributes in CX Sales or Eloqua Marketing Cloud. When you select to modify a template for other Oracle Cloud applications, the Edit Mapping page lists only the discovered attributes in DaaS. Later, you must map the attributes.

Use the following elements to modify the mapping:

Element	Description	
×	Click this icon to remove any attributes whose values you don't want.	
Add Attribute	Add an attribute mapping that you accidentally removed but you still want added. Use Add Attribute for any attributes you extended in CX Sales, Eloqua, or another Oracle Cloud application.	
	For each list, select the attribute or object.	
	See Understand Attributes.	



Element	Description

3. Click Save.

The Mappings page displays.

- **4.** Apply the modified mapping to a search export or match export job. When prompted for the mapping, select the one you just modified. See:
 - Add New Companies and Contacts
 - Match Data

Note: Some Dun & Bradstreet attributes have an alphanumeric code value. DaaS renders the corresponding descriptions of these codes in our interface. For example, **Location Type** may appear in DaaS with a value of Single Location, Headquarters, or Branch. However, these descriptions aren't included in the output files. In search export or match export files, these **Location Type** values appear as 0, 1, or 2.

See Edit CX Sales Mappings and Edit Marketing Cloud Mappings.

Edit Sales Mappings

The Sales mappings contain the full list of company and contact attributes we export. However, DaaS provides some attributes that don't have a corresponding map to an attribute in Sales. Follow these steps to edit your mapping (that is, to

- 1. Either identify the Sales attribute and object that should be mapped to the DaaS attribute and object, or create a custom attribute in Application Composer and add the custom attribute to the Account or Contact profile page. See Sales documentation for information on creating custom attributes.
- 2. Map the DaaS attribute (shown as "not mapped" in the following table) to the attribute identified or created in step 1 in DaaS.
- 3. Map that DaaS attribute to the attribute identified or created in step 1 in Sales.

DaaS provides the Sales and Service template type, as well as the following mappings:

- CXCompanyExport
- CXContactExport
- CXCompanyMatch
- CXContactMatch

Mappings created with the Sales and Service template type create a ZIP file, which contains the individual CSV files for import. Download and extract the ZIP file to a local folder, and then import each CSV file. The Account. CSV file (the parent file) must be imported first, before the child files. See the section DaaS Files for Import Management in Sales in About Mappings.



Edit Marketing Cloud Mappings

Topics:

- Understand the MarketingCloudCompanyExport Mapping
- Understand the MarketingCloudCompanyMatch Mapping
- Understand the MarketingCloudContactExport Mapping
- Understand the MarketingCloudContactMatch Mapping
- Understand the MarketingCloudContact&CompanyExport Mapping
- Understand the MarketingCloudContact&CompanyMatch Mapping

Note: Mappings included with DaaS can't be deleted.

See About Matching Records.

Understand the MarketingCloudCompanyExport Mapping

Note: Mappings that contain contact attributes require a subscription for contact records. For example, the MarketingCloudContact&CompanyMatch mapping requires a subscription for both Oracle Contact Enrichment (for contact attributes) and Oracle Account Enrichment (for company attributes).

Use the following table to understand how MarketingCloudCompanyExport attributes map to Eloqua Marketing Cloud attributes.

Data Attribute	Subscription Level	Eloqua Attribute	Description	Column in TXT/ CSV File
External ID	internal attribute	Eloqua Company ID	The unique ID of a company in Eloqua.	Eloqua Company ID
Company ID internal attribute DaaS Company ID		DaaS Company ID	The ID of a company in DaaS for Sales.	DaaS Company ID
Business Name	Oracle Account Enrichment	Company Name	The primary or registered name of the business.	Company Name
Street Address 1	Oracle Account Enrichment	Address	The first street address line where a business is physically located. Generally in local language.	Address
Street Address 2	Oracle Account Enrichment	Address 2	The second street address line where a business is physically located. Generally in local language.	Address 2



Data Attribute	Subscription Level	Eloqua Attribute	Description	Column in TXT/ CSV File	
City Oracle Account City Enrichment		City	The name of the city where the business is physically located. Generally in local language.	City	
State Name	Oracle Account Enrichment	State or Province	The full name of the physical state or province name where the business is located.	State or Province	
Full Postal Code	Oracle Account Enrichment	Zip or Postal Code	The postal code where the business is physically located.	Zip or Postal Code	
County Oracle Account Country Enrichment		Country	The full name of the county where the business is located.	Country	
Phone Oracle Account Business Phone Number Enrichment		Business Phone	The primary phone number for the business with no formatting or punctuation. This string contains all telecommunication number components (area code, exchange, number).	Business Phone	
Number Enrichment		Fax	The primary facsimile number for the business with no formatting or punctuation. This string contains all telecommunication number components (area code, exchange, number).	Fax	
Major Industry Category	internal attribute	Company Category	A value that denotes under which major industry category an establishment falls.	Company Category	
DUNS Number	Oracle Account Enrichment	DUNS Number	A randomly generated nine-digit number assigned by D&B to identify unique business establishments. May contain lead zeros, which are lost if field is treated as numeric.	DUNS Number	

Understand the MarketingCloudCompanyMatch Mapping

The Marketing Cloud CompanyMatch mapping attributes are the same as the Marketing Cloud CompanyExport attributes – see *Understand the MarketingCloudCompanyExport Mapping*.

Understand the MarketingCloudContactExport Mapping

Use the following table to understand how MarketingCloudContactExport attributes map to Eloqua Marketing Cloud attributes.



Data Attribute	Subscription Level	Eloqua Attribute	Description	Column in TXT/ CSV File
Person ID	internal attribute	DaaS Person ID	The ID of a contact in DaaS for Sales.	DaaS Person ID
External ID	internal attribute	Eloqua Contact ID	The ID of the contact in Eloqua.	Eloqua Contact ID
Prefix	Oracle Contact Enrichment	Salutation	The prefix (Mr, Ms, Dr, and so on) associated with the professional's name.	Salutation
First Name	Oracle Contact Enrichment	First Name	The first name of the professional.	First Name
Last Name	Oracle Contact Enrichment	Last Name	The last name of the professional.	Last Name
Title	Oracle Contact Enrichment	Title	This is the title associated with the professional's role. This is the title as it would read on a professional's business card.	Title
Email	Oracle Contact Enrichment	Email Address	This is the main email address associated with this professional's role/contact record.	Email Address
Primary Phone	Oracle Contact Enrichment	Business Phone	This is the direct dial phone number associated with this professional in this role.	Business Phone
DUNS Number	Oracle Contact Enrichment	DUNS Number	DUNS number of the business location.	DUNS Number

Understand the MarketingCloudContactMatch Mapping

The Marketing Cloud ContactMatch mapping attributes are the same as the Marketing Cloud ContactExport mapping attributes – see *Understand the MarketingCloudContactExport Mapping*.

Understand the MarketingCloudContact&CompanyExport Mapping

Use the following table to understand how MarketingCloudContact&CompanyExport attributes map to Eloqua Marketing Cloud attributes.

Data Attribute	Attribute Type	Subscription Level	Eloqua Attribute	Description	Column in TXT/ CSV File
Person ID	Contact	internal attribute	DaaS Person ID	The ID of a contact in DaaS for Sales.	DaaS Person ID



Data Attribute	Attribute Type	Subscription Level	Eloqua Attribute	Description	Column in TXT/ CSV File
External ID	Contact	internal attribute	Eloqua Contact ID	The ID of the contact in Eloqua.	Eloqua Contact ID
Prefix	Contact	Oracle Contact Enrichment	Salutation	The prefix (Mr, Ms, Dr, etc.) associated with the professional's name.	Salutation
First Name	Contact	Oracle Contact Enrichment	First Name	The first name of the professional.	First Name
Last Name	Contact	Oracle Contact Enrichment	Last Name	The last name of the professional.	Last Name
Title	Contact	Oracle Contact Enrichment	Title	The title associated with the professional's role. This is the title as it would read on a professional's business card.	Title
Email	Contact	Oracle Contact Enrichment	Email Address	The main email address associated with this professional's role/contact record.	Email Address
Primary Phone	Contact	Oracle Contact Enrichment	Business Phone	The direct dial phone number associated with this professional in this role.	Business Phone
Street Address 1	Company	Oracle Account Enrichment	Address 1	The first street address line where a business is physically located. Generally in local language.	Address 1
City	Company	Oracle Account Enrichment	City	The name of the city where the business is physically located. Generally in local language.	City
State	Company	Oracle Account Enrichment	State or Province	The name of the state/province where the business is located. Generally in local language.	State or Province
Primary Full Postal Code	Company	Oracle Account Enrichment	Zip or Postal Code	The 5-digit postal code where the business is physically located.	Zip or Postal Code
Country	Company	Oracle Account Enrichment	Country	The name of the country where the business is located. In English.	Country



Data Attribute	Attribute Type	Subscription Level	Eloqua Attribute	Description	Column in TXT/ CSV File
Organization Name	Company	Oracle Account Enrichment	Company	The primary or registered name of the business. Derived from the associated company record.	Company
Sales Volume (US Dollars)	Company	Oracle Account Enrichment	Annual Revenue	The total annual sales/revenue for this business, expressed in US dollars as a signed, decimal field. If the sales/revenue figure is collected in local currency, the local value converts to US dollars. Note: Data converts to US dollars based on the date of the financial figures/statement of the record. If the sales/revenue figure is from Jun-2009, the conversion rate is as of Jun-2009.	Annual Revenue
Employees Total	Company	Oracle Account Enrichment	Employees	The total number of employees in the business organization; it should include subsidiary and branch locations.	Employees
Major Industry Category	Company	internal attribute	Industry	A value that denotes under which major industry category an establishment falls.	Industry
Facsimile Number	Company	Oracle Account Enrichment	Fax	The primary facsimile number for the business with no formatting or punctuation. This string contains all telecommunication number components (area code, exchange, number).	Fax
Street Address 2	Company	Oracle Account Enrichment	Address 2	The second street address line where a business is physically located. Generally in local language.	Address 2
DUNS Number	Contact	Oracle Contact Enrichment	DUNS Number	DUNS number of the business location.	DUNS Number

Understand the MarketingCloudContact&CompanyMatch Mapping

The Marketing Cloud Contact&CompanyMatch mapping attributes are the same as the Marketing Cloud Contact&CompanyExport mapping attributes – see *Understand the MarketingCloudContact&CompanyExport Mapping*.





5 Frequently Asked Questions for DaaS

Frequently Asked Questions for DaaS

This section provides answers to frequently asked questions for DaaS.

Topics:

- FAQ Subscriptions
- FAQ Enriching Records
- FAQ Exports and Jobs
- FAQ Mapping Files and Export Files
- FAQ Privacy and Security

FAQ — Subscriptions

Frequently-asked questions about DaaS subscriptions.

For an overview of DaaS subscriptions, see *Understand DaaS Subscriptions*.

How do I get another Welcome email?

After your subscription is activated, you receive a **Welcome to Oracle Cloud** email that lists the service URL. If you can't find this email, you can resend it from the Oracle Cloud Console.

Can I change my subscription?

The following subscription plans are offered:

- Oracle Account Enrichment (yearly)
- Oracle Contact Enrichment (yearly)

You can renew your subscription, and you can add to your subscription's existing pool of records. For example, suppose you purchased 100 account records. Later, you add can more records to your subscription. See *How to Modify DaaS Subscriptions*.

How do I unlock my account?

If you're unable to access DaaS and are getting emails that you account is locked and then unlocked, see *this note on Oracle Support*.



Can I use this with any application?

Oracle Account and Contact Enrichment by D&B is licensed for use with Oracle Cloud Applications subscriptions. It is integrated with Sales, Fusion Service, and Eloqua. You can use our APIs to integrate with other Oracle Applications.

How many records can I purchase?

The *minimum* number of records that can be purchased is 2,000 records in total (companies and contacts).

The maximum number of records that can be purchased is 5 million records in total (company and contacts).

How are records counted?

When you export or match (enrich) a record, the record is given a unique ID. This **DAAS ID** attribute appears on the output file. As soon as a record has a DAAS ID, the record counts toward your subscription limit.

Records must be used before the subscription period ends: they do not rollover with renewals or other changes to the service.

Is the same record counted multiple times toward my subscription limit?

A record that is re-processed during an active subscription period does *not* count against your subscription limit. For example, when you match and download record ABC in January, record ABC counts toward your annual subscription limit. When you re-match and download the same record ABC in February, it does *not* count toward your subscription limit. In other words, you can export or match a record as many times as you want for 365 days from the date you first performed an export or match on the record, without having to pay again for the record. After 365 days, any new export or match of that record is counted toward your new subscription limit.

Note: This works differently for Address, Email, and Phone Verification subscriptions. Every time you submit a verification request, the service subtracts one record from your subscription limit, even if the record had been previously verified.

What happens if I download records by mistake?

All downloaded records count toward your subscription limit. You cannot get credit back for records you download accidentally.

What happens if I export more records than I have available?

If you export more records than remain in your available quota, then only the available records are exported. When your quota is reached, the export process stops. For example, if you have 100 company records left, and you export 200 company records, then the export process shows as completed with the a message in the job details that the quota limit has been reached for company records.

How do I make sure I don't go over my available records?

On the Business Metrics page, you can see the number of records that have been downloaded for export and the number of records available based on your subscription plan.



Will I be notified about my subscription quota or end date?

Quota: Upon reaching 80% and 90% of your quota, Oracle sends a reminder email that your subscription is running out of quota. When you reach 100% of your quota, you can no longer enrich or verify data.

End Date: 60 days and 30 days prior to your subscription end date, Oracle sends a termination notice. Post termination, the service will be active and available for 60 days only. After 60 days, the service will no longer be accessible, unless the service is renewed.

Contact your Oracle Account Manager to submit a renewal request or an order to add more records to your service.

What happens to my data when my subscription expires?

When your subscription ends, the records you purchased (downloaded) are still owned by you. In the purchase order, you agreed to delete D&B licensed material; however, Oracle doesn't delete anything after the subscription ends.

FAQ — Enriching Records

First match the account (company) records associated with the contacts and then import the matched records into CX Sales. During the match process, Oracle Account Enrichment adds an identifier to each company record indicating that it has been matched.

How do I update CX Sales contacts?

- 1. From CX Sales, export accounts.
- 2. Match accounts using Oracle Account Enrichment.
- 3. Import accounts into CX Sales.

Next, from CX Sales, export the contacts for the accounts that you want to update. The contacts that belong to accounts that have already been matched will have a unique identifier. Match the contacts using Oracle Contact Enrichment, and import the matched contact file to CX Sales.

- 1. From CX Sales, export contacts.
- 2. Match contacts using Oracle Contact Enrichment.
- 3. Import contacts into CX Sales.

See Match Data in CX Sales.

How come when I enrich a record from CX Sales in real time, it says there is no matching record, but in DaaS I can search and find that same record?

DaaS has the filters **Enterprise Companies** and **Companies in Business** enabled by default. These filters apply to search and match for both batch match in DaaS and real-time enrichment from other applications (such as CX Sales or Eloqua Marketing Cloud). If you're not seeing matches for records you expect to see, go to Admin settings and deselect the **Enterprise Companies** filter. See *Set Admin Defaults*.

How do I configure service association with CX Sales?

Oracle CX Sales and DaaS (Oracle Account Enrichment and Oracle Contact Enrichment) have different subscriptions. The account administrator for CX Sales needs to associate the two services, so CX Sales knows which DaaS subscription to access. See *Integrate with Oracle CX Sales or B2B Service*.



Is there a limit on the number of records I can submit to match?

The maximum number of records you can match is based on the number of records in your input file multiplied by the limit value. The total value can't exceed 250,000 records. If the total value exceeds the limit, then reduce the records in the input file or decrease the match export limit value.

You are not charged to re-enrich the same record. Suppose you match and enrich 10,000 leads in a marketing campaign. You can re-enrich these same 10,000 contacts for 365 days as part of your subscription.

What is Match Limit — or, what if a match returns multiple records?

For real-time matches, and for all company matches, DaaS returns the one best match. For batch matches, and for contact matches, you can configure the **Match Limit** setting (on the **Match** page) to return more than one record when it finds multiple matches. The default value for **Match Limit** is 1.

For example, say you have 10,000 records in your input file, and you have changed the **Match Limit** setting from 1 to 10. Imagine DaaS finds multiple matches (over 10 matches) for "John Doe". It returns the best 10 records for John Doe. Also imagine it finds multiple matches for each of the 10,000 records in the file. Then, 10,000 records times 10 matches for each record = 100,000 records in the batch output file, and you are charged for 100,000 records from your subscription quota.

If you set **Match Limit** to a number greater than 1, then to avoid errors with the import, you should review the file and save only the 1 file you want before import.

Is the state required for matching companies?

The D&B match service has slightly different requirements for real-time and batch processing. (The service switches from real-time processing to batch processing for match jobs with more than five records.) For example, real-time matching only requires the company name and country attributes. Batch processing requires company name, country, and state attributes: you get an error with batch processing if you do not include the state.

Why did my match fail with duplicate external IDs?

Document editors like Microsoft Excel may change the formatting or the values in an enriched text file generated by DaaS, so it renders incorrectly. Do not open an enriched text file with a different document editor, and do not reformat the file. To open it in an editor like Excel, first right-click the file and save it as .csv or .xls.

FAQ — Exports and Jobs

The user interface shows all data: You browse and search against the entire data set. However, when you try to export (download) or match a record, the service verifies the type of subscription you purchased. If you purchased a subscription

Can I download contact records with an Oracle Account Enrichment subscription?

The user interface shows all data: You browse and search against the entire data set. However, when you try to export (download) or match a record, the service verifies the type of subscription you purchased. If you purchased a subscription for Oracle Account Enrichment, then only company records are downloaded.



Is there a record limit on exports?

The maximum number of records you can export on a single request is 100,000. You can export more records by submitting another export request.

Is the data in my export file corrupted?

The data is not corrupted. Some Dun & Bradstreet attributes have an alphanumeric code value. DaaS renders the corresponding descriptions of these codes in our interface.

For example, **Location Type** may appear in DaaS with a value of Single Location, Headquarters, or Branch. However, these descriptions are not included in the output files. In search export or match export files, these **Location Type** values appear as 0, 1, or 2.

Another example is the attribute **Minority Classification**, which has the following code values:

- Blank not available / not applicable
- ASN Asian American
- BLK African American
- HSP Hispanic American
- IND Indian Subcontinent American
- NAT Native American
- OTH Other

The descriptions associated with these codes are not written to the output files. Instead, the actual alphanumeric codes are in the export files.

Why do some attributes in the export file have no value?

Either the data provider does not have data for those attributes, or you purchased a subscription that doesn't include that attribute. (The output file contains all attributes, independent of subscription.)

How do I stop a job in "Running" mode?

You cannot stop a job after it has been submitted.

FAQ — Mapping Files and Export Files

No, the default mapping files cannot be modified. You can create a new mapping file based on the default mapping file definition.

Can I modify the default mapping files?

No, the default mapping files cannot be modified. You can create a new mapping file based on the default mapping file definition.



FAQ — Privacy and Security

D&B provides GDPR-compliant data. You can contact D&B Customer Service to request access to your information, and if any of your personal data is inaccurate you have a right to request rectification. You also can request that your data be restricted.

How do I opt of marketing lists or request that my data be deleted or restricted?

D&B provides GDPR-compliant data. You can contact **D&B Customer Service** to request access to your information, and if any of your personal data is inaccurate you have a right to request rectification. You also can request that your data be deleted or restricted, and you can opt-out of marketing lists. See detailed privacy information, including how to contact D&B Customer Service, on the following sites:

- For European Union: https://www.dnb.co.uk/utility-pages/privacy-policy.html
- For United States: https://www.dnb.com/utility-pages/privacy-policy.html



6 D&B Reference Tables

Several D&B attributes have an alphanumeric code value. Oracle renders the corresponding descriptions of these codes in our interface. However, the descriptions associated with these codes are not written to output files: only the code values are in export files.

For example, **Location Type** may appear with a value of Single Location, Headquarters, or Branch, but in export files, these **Location Type** values appear as 0, 1, or 2. Other examples of D&B attributes with code values include currency, city/state/county/country, title, minority classification, SIC, and NAICS.

There are two files from D&B that list all attributes with code values:

- Attributes and Code Tables: This file shows values for attributes that are listed directly.
- Referenced Code Tables: This file shows the lookup values for referenced attributes.



