Module 2

Conventional Search VS Semantic Search:

Aspect	Conventional Search	Semantic Search
Search Method	Based on exact keyword matching.	Based on understanding the intent and context of the search.
Search Results	Results are based on the exact occurrence of the keyword in assets.	Results are based on the intent behind the search and the context of the terms.
Example	Keyword: "jsmith" → Results: All assets with "jsmith" (exact match).	Keyword: "jsmith" → Results: Assets with "jsmith" plus related content (e.g., emails, documents, etc.).
Result Scope	Limited to exact matches of keywords.	Broader, includes related content even if the exact keyword is not present.
Context	No understanding of the context or user's intent.	Takes into account the user's intent and the context of the search terms.

What is Semantic Search in EDC?

- EDC displays probable matches based on:
- Relationships: Primary Key Foreign Key Relationships, and so on
- Data Domains: Columns inferred as part of the domain discovery
- Search Hints provide additional details on why it includes the data asset in the search results

Example:

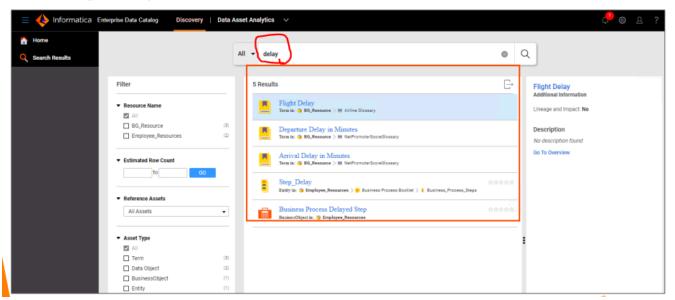
Searching in EDC

- Consider an example where you want to search for sales report for the EMEA region
 - · Keyword: Sales report EMEA
 - Search Results: Includes actual report resource types or objects with region attributes having value EMEA



Example 1

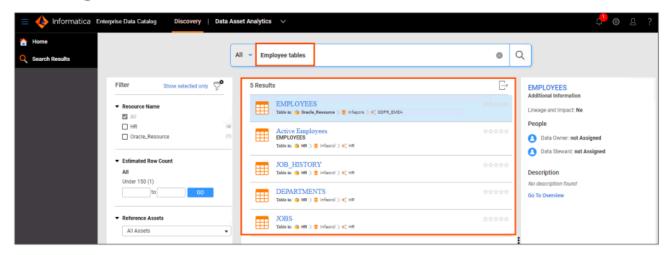
Searching for Implied Assets



هنا عمل بحث علي كلمة delay جابلك كل ال Assets اللي تخص ال

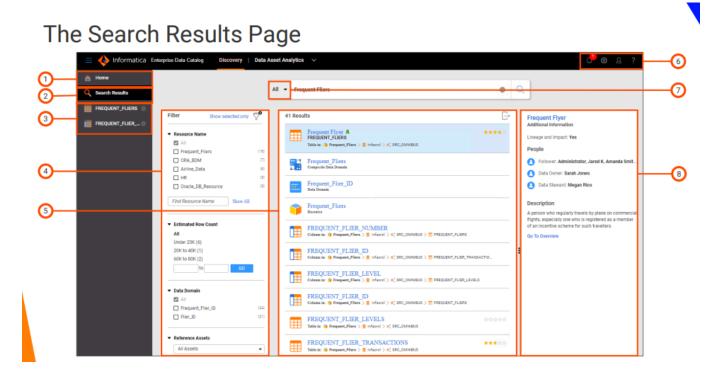
Example 2

Searching for Known Assets



هنا عمل بحث علي Employee tables بحيث يدور علي الجداول بس مش كل ال Assets فا عرض كل الجداول اللي تخص البحث او ممكن يبقا ليها علاقه بمضمون الجدول

Explain User Interface for Search Results Page:



- 1. Go back to Home screen
- 2. Go to latest search results
- 3. List of opened assets. You can click on an asset in the list to go back to it.

٦

- 4. Filter panel. Allows you to refine search results
- 5. List of search result assets
- 6. Main toolbar this is available in all the pages
- 7. Prefilters you can use this to search for specific type of assets
- 8. A quick look at the description and owners of the asset. You can also see if there is any lineage information for the asset.

Additional Search Options:

Available Search Options in EDC:

- Prefilters
- Search by name
- Wildcard search
- Search suggestions
- Keyword search
- Double Quotes Search
- Search Operators
- Search Rank
- Related Search

1-Prefilters:

• Predefined filters to be used before you search for assets

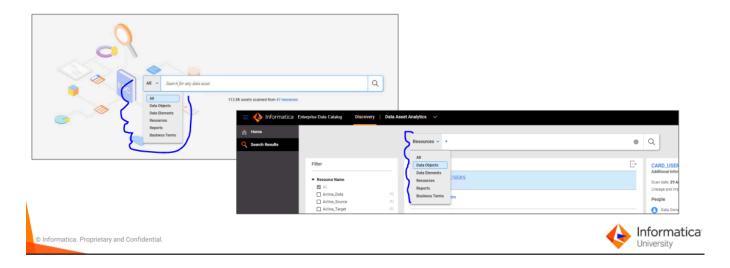
يعتبر فلتر تصفيه تحتد قبل البحث

Used to get search results filtered according to a set criteria

تستخدم لتصفية البحث وفقا للفلتر اللي تم اختيارة

Available with the search bar in the Home page and the Search Results page

موجود في شريط البحث في الصفحة الرئيسية و صفحة عرض نتائج البحث



The default prefilters include Resources:

1-Data Objects

هو عبارة عن وحدة بيانات أكبر، ممكن تحتوي على مجموعة من Data Elements

مثال هيكل أو مجموعة من البياتات مرتبطة ببعضها (مثل جدول، مستند، ملف)

2-Data Elements: Cell & Single Information (تحمل قيمة واحده او خلية و يمكن ان تكون نص او رقم)

تقارير 3-Reports

4-Business Terms مصطلحات تجارية

Resources Displays all the available resources

Data Objects Displays the tabular and mapping assets in a resource

Data Elements Displays the assets within any data set

Business Terms Displays the business terms like Axon glossaries and Business glossaries Reports Displays the reports based on resources

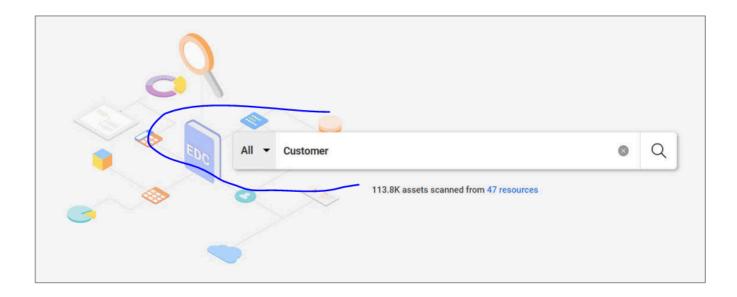
You can also create customized prefilters with the help of a combination of search filters

تقدر تنشئ فلتر مخصوص للبحث

2-Search by name:

Type the search keyword in the field to search for assets

- Search by name البحث من خلال الاسم
- البحث من خلال المرادفات للاسم Search by synonyms



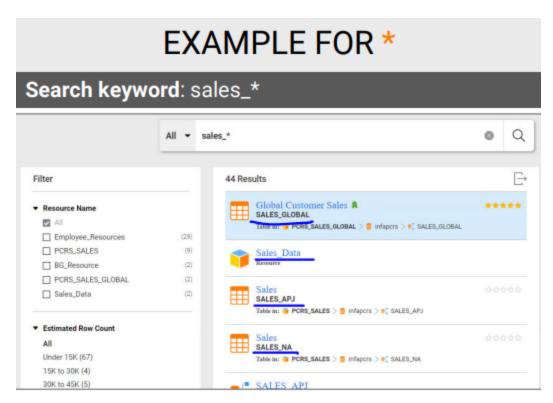
This will display a list of results having a name (or other attributes) similar to the search keyword. You can also search using synonyms as the keyword. EDC will search the integrated Business Glossary for the synonym and return results.

3-Wildcard Search:

Use asterisk () character and question mark (?) character to perform wildcard search

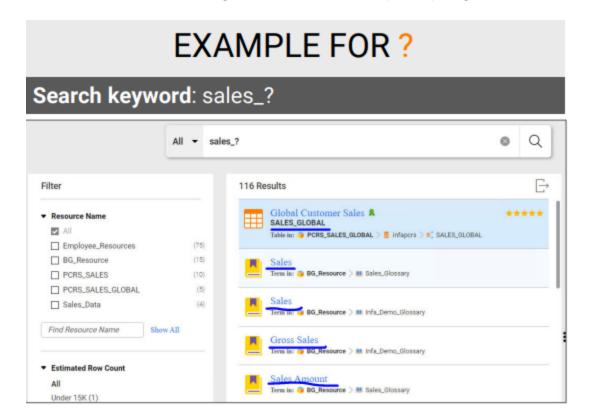
'' matches zero or more non-space characters

هيجيب البحث بظبط او الكلمة اللي تحتوي علي نفس الكلمة



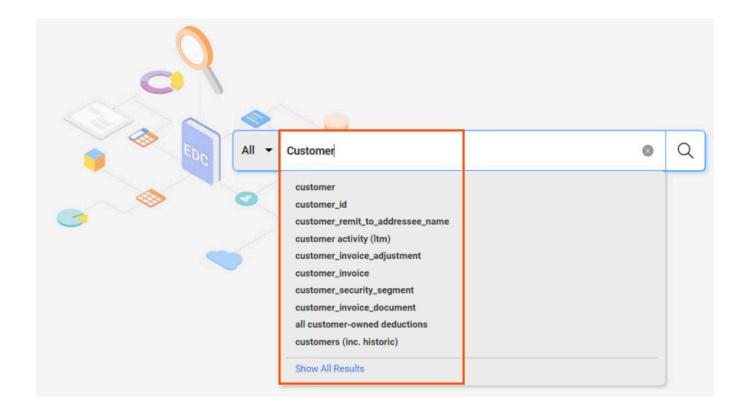
• '?' Matches exactly one non-space character

مفيد لما تكون مش متأكد من حرف واحد فقط في الاسم او الاسم ممكن يكون لوحده او موجود في كلمتين الاول او الاخر



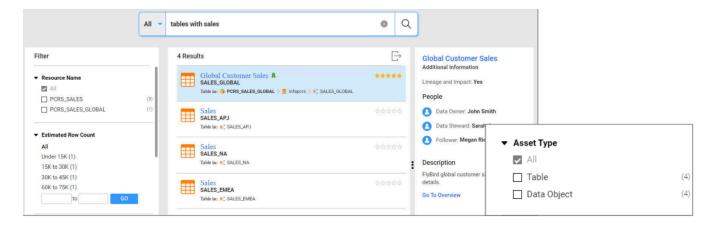
4-Search Suggestions:

When you type a search keyword, EDC provides suggestions matching the keyword



5-Keyword Search:

- Use keyword when you want to search for a specific type of asset
- Use keywords in regular sentences or phrases
- Example: "tables with sales"

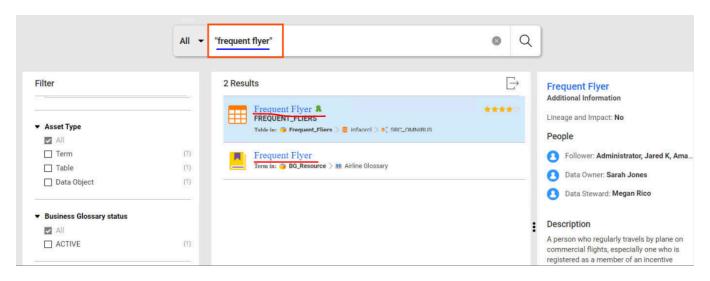


عرض كل الجداول اللي تخص ال Sales

4-Double Quotes Search:

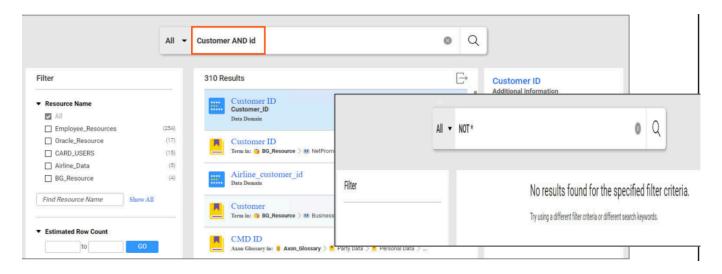
- With the help of double quotes (""), you can find the assets that exactly match the asset name within the double quotes
- This restricts the variations of the asset name in the catalog

لو استخدم "" هيعرض نتائج البحث نفس الكلمة اللي مكتوبة داخل ال Double Quotes



5-Search Operators:

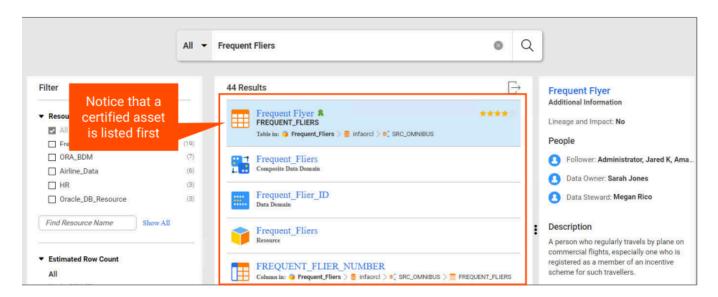
- Use the search operators to make the search results accurate
- Examples: AND, OR, NOT, title, and description



نتائج تحتوي علي الكلمتين معا (أقل أولوية) AND نتائج تحتوي علي كلمة من الاتنين (متوسط الاولوية) NOT هيستبعد اي كلمة (أعلي أولوية)

6-Search Rank:

Search as per the precedence of an asset when compared to other assets that are a part of specific search results



ترتيب النتائج يكون كالتالي:

Certified Assets

• تظهر في أعلى النتائج لأنها موثوقة ومعتمدة من أصحاب البيانات.

[أنواع الأصول التالية (بالترتيب):

Composite Data Domains

Data Domain Group

Data Domains

Axon Glossary

Business Glossary

Reports

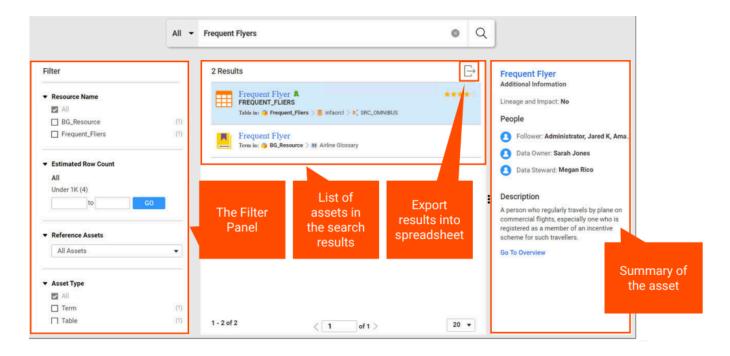
Matching Title

الأصول التي تحتوي على الكلمة في العنوان تظهر قبل التي تحتويها في الوصف أو الخصائص.

(تفاعل المستخدمين) User Interaction

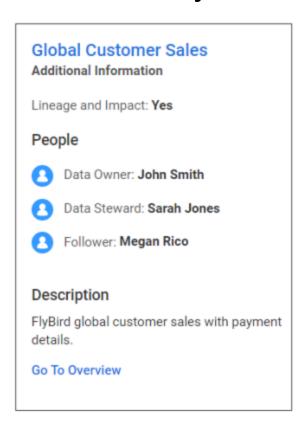
الأصول اللي فيها تقييمات، مراجعات، تعليقات، أو خصائص مخصصة تظهر أعلى من غيرها.

Explore Search Results:



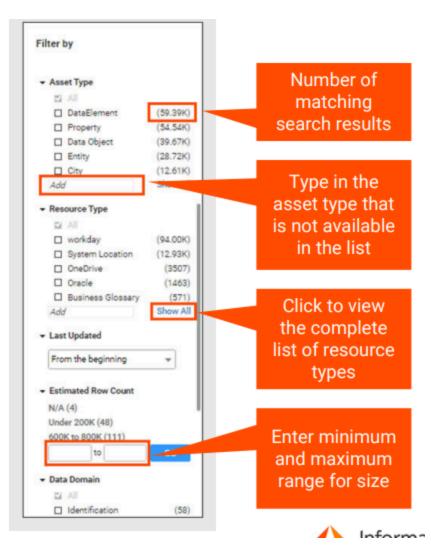
- · When you click on the asset name, it opens the asset details view
- When you click on the asset row, its summary is displayed in the right panel. By default, the first asset is selected and its information displayed in the panel.
- You can use the Filter panel to refine the search

1- Asset Summary:



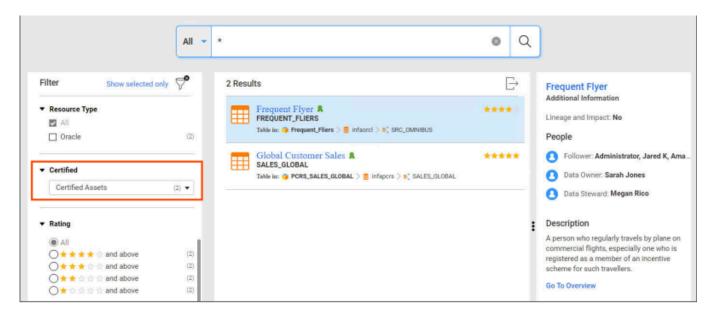
- Summary of the asset is available in the right panel.
- Information includes:
- Whether the asset has lineage information
- · List of stakeholders for the asset: data owners, data steward, and followers
- Description of the asset
- · Profiling data for column assets
- For more information on the asset, you can click the Go To Overview link below the description

2- Refine Results Using Search Filters:



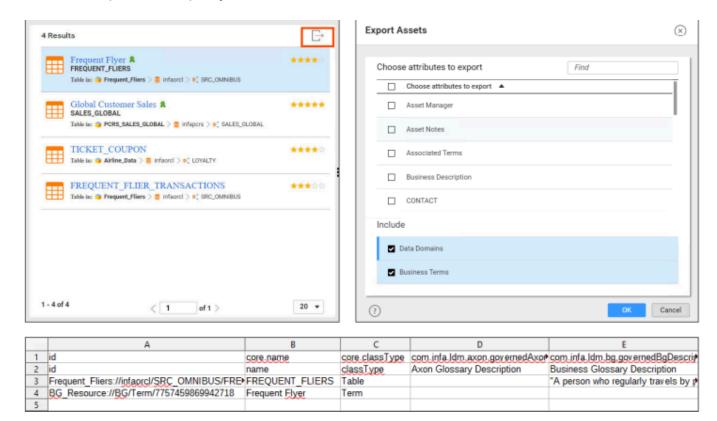
3- Search for Certified Assets:

- · Search filters include a facet named Certified Assets
- · Lists only certified assets related to the search string
- Toggle between All Assets and Certified Assets



4- Export Search Results:

- · Export a list of objects from search results
- · Import objects at a global level from multiple sources
- Monitor import and export jobs in a central UI



Types of Assets:

Axon Glossary Assets

Business Glossary Assets

Tabular Assets

Rule Assets

Scorecard Assets

Column and Field Assets

Data Domain Assets

Composite Data Domain Assets

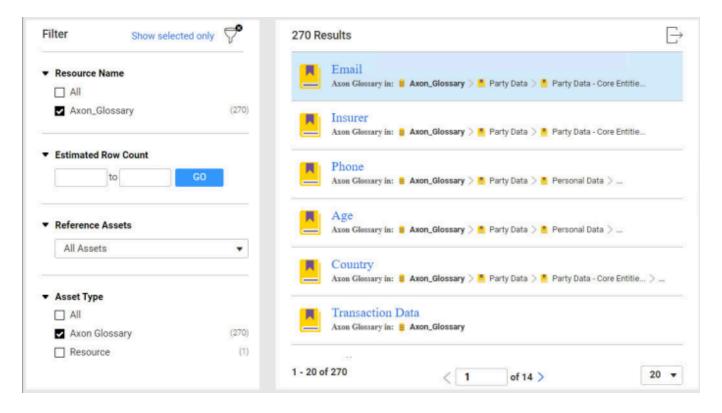
Mapping Assets

Reference Assets

1- Axon Glossary Assets:

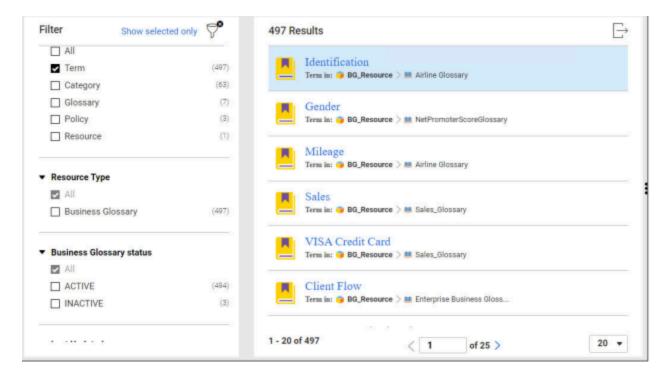
In an Axon Glossary asset, EDC displays the details, related to Axon Glossary assets, classified assets, and related technical assets

• You can assign multiple Axon glossaries as custom attribute values to an asset



2- Business Glossary Assets:

- The Business Glossary assets in the catalog come from the glossaries in the Analyst tool
- You can view the following Business Glossary assets in EDC:
- Glossaries Business Terms Categories Policies
- You cannot view the lineage and impact for Business Glossary assets

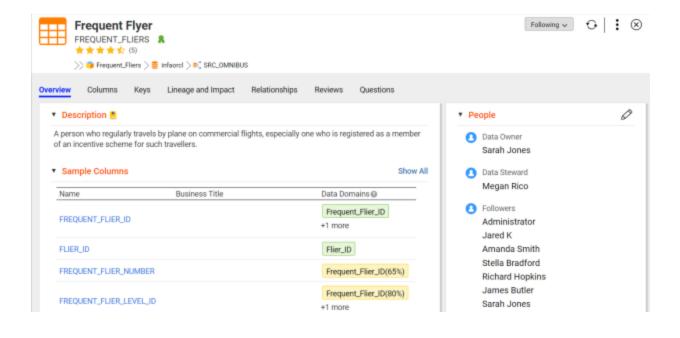


3-Tabular Assets:

You can view details about tabular assets, check the quality of data within it, rate and review them, and ask questions about them.

- Examples of tabular assets:
- Business Intelligence dimension, logical, and presentation tables
 CSV, JSON, and XML files
- Hive tables Relational tables, views, and synonyms Salesforce objects •

You can check the quality of the column or field in a tabular asset if it has profile results.

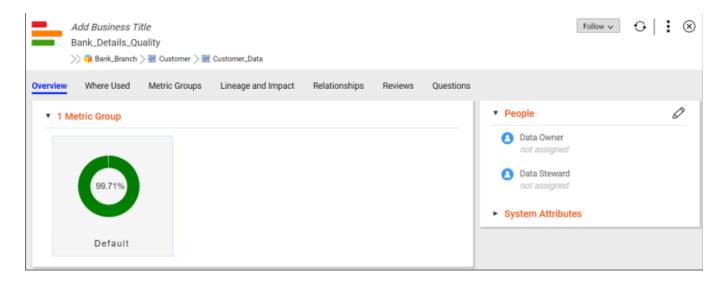


4- Rule Assets:

بيحدد شروط تُطبَّق على بيانات الأعمدة (columns) عند تشغيل Column Profile

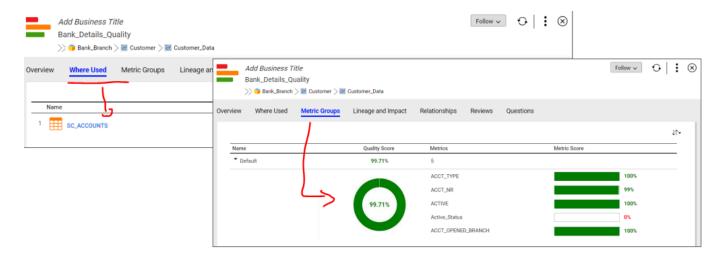
5- Scorecard Assets:

- A scorecard is the graphical representation of the valid values for a column or an output of a rule in profile results تعرض نسبة القيم الصحيحه للعمود او المخرجات
- You can configure data quality resource in the Catalog Administrator to view a Scorecard asset in EDC



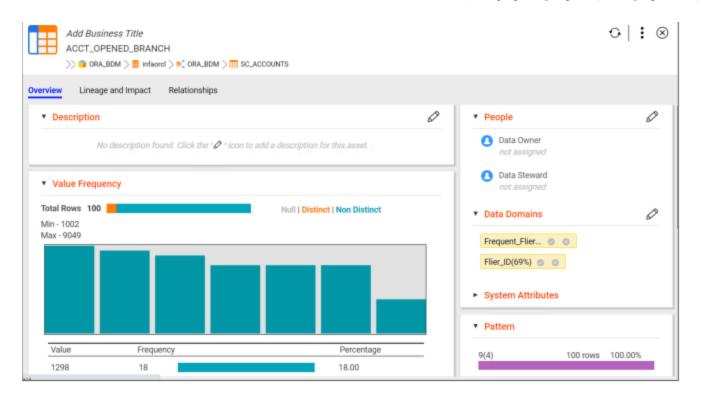
The **Where Used** tab displays the list of tables and path to the tables linked to the scorecard.

You can check the quality of the data in the data source through the Metric Group tab



6- Column and Field Assets:

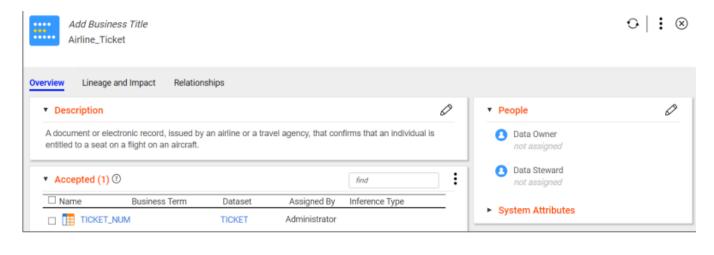
يمكنك عرض تفاصيل أكثر عن العمود و الخلية نفسها



7- Data Domain Assets:

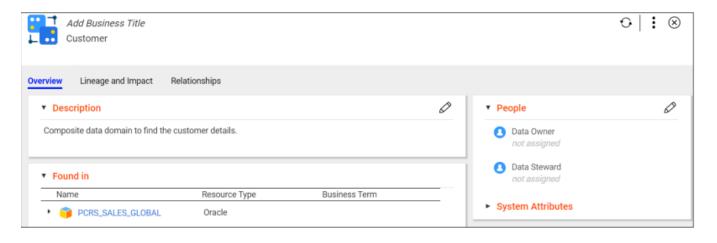
• In EDC, you can view details about Data Domains and accept or reject assets for a data domain

- من خلال الداتا دومين اقدر اوافق او ارفض الAssets ده عن طريق الشرح ومعرفة كل عمود يرمز لاية و كل خلية بتتكلم عن ايه
- Data Domains are inferred for Column and Field assets based on the profiles that users run in Catalog Administrator
- When you curate a data domain, you make the data domain more accurately reflect the type of data that belongs to the data domain



8-Composite Data Domain Assets:

مجال البيانات المركب هو مجموعة من مجالات البيانات أو مجالات البيانات المركبة الأخرى



9-Mapping Assets:



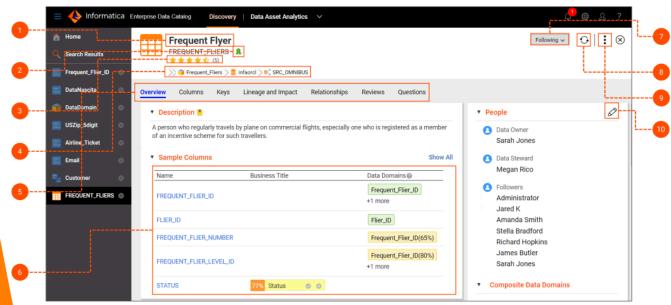
10-Reference Assets

- •EDC displays reference resources and reference assets after configuration
- You can configure a resource to get references from other data sources in Catalog Administrator

View Assets:

The Overview Page





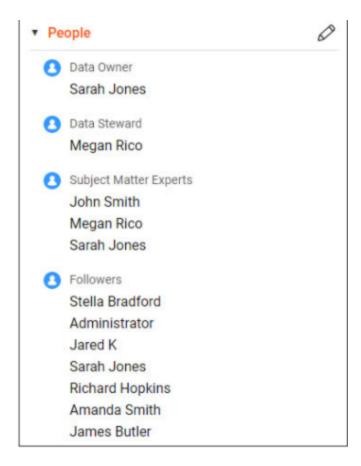
- 1 Business title associated to the asset
- 2 Icon indicating asset certification
- 3 Average rating of the asset
- 4 Asset breadcrumb
- 5 Tabs for viewing various pages of the asset

1

- 6 Sample columns contained in the table asset
- 7 Follow/unfollow the asset
- 8 Refresh the asset
- 9 Menu options to export asset or certify/decertify asset
- 10 Editable properties

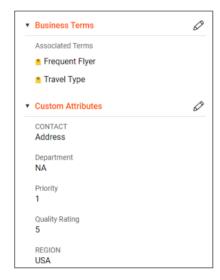
The People Section:

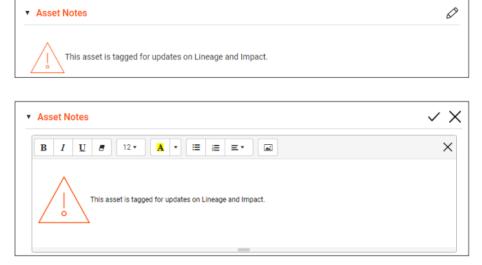
- Data Owner User who owns the asset
- Data Steward User who performs data steward tasks
- Subject Matter Experts Users who are knowledgeable in the asset contents
- Followers List of users who follow the asset



The Custom Attributes Section:

Displays any additional information on the asset





The System Attributes Section :

- Un-editable information extracted at resource level
- Provides information such as:
- Resource name
- Data type
- · Last modified time
- Location
- Output format

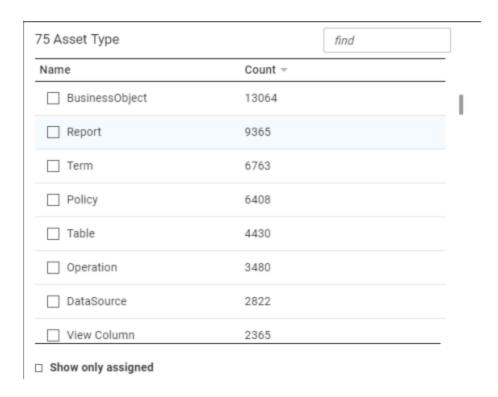
 System Attributes Input Format org.apache.hadoop.mapred.TextInputFormat Last Modified Feb 26, 2019, 1:22 PM hdfs://EICBETA38001.informatica.com:8020/data/nps Output Format org.apache.hadoop.hive.ql.io.HivelgnoreKeyTextOutputFormat LakeProduction Resource Type Hive Rows covered by profiling 129880 sample rows. SerDe Library org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe Asset Type

Types of Assets:

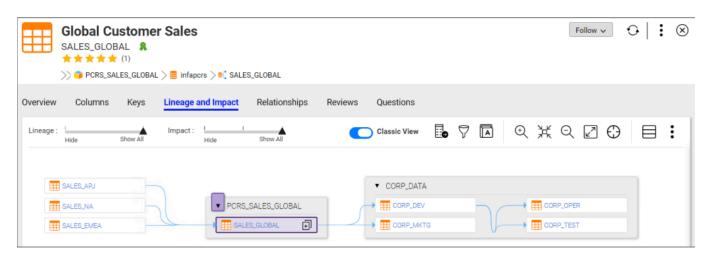
- EDC has many types of assets as many as 75 asset types
- Common assets:
- Resource

Table

- Database
- Schema
- Table
- Column
- Field
- Report
- BusinessObjects
- Terms



View Data Lineage:



The data flow for an asset has two components:

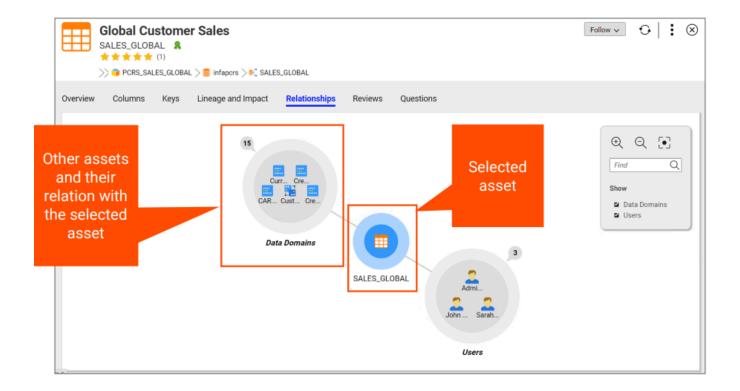
• Lineage – describes the flow of data from the origins to an asset

تقول الداتا جايه منين ورايحه فين

• Impact – describes the flow of data from an asset to its destination

بتقول لو حصل حاجه في الداتا ممكن تأثر على ايه

View Relationships:



Module Summary:

This module showed you how to:

- Navigate through the user interface of Enterprise Data Catalog (EDC)
- Explore the advantages of semantic search
- List additional search features
- View search results
- Explore the Assets view