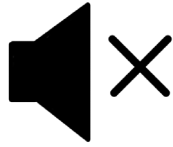


May 16<sup>th</sup>, 2023

# Custom Metadata Integration in Cloud Data Governance & Catalog

- Avanish Srivastava, Principal Solutions Architect
- Rakesh Varma Kucharlapati, Principal Customer Success Architect
- Khadarvali Shaik, Sr Solution Architect

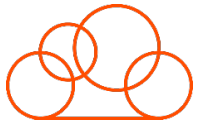
# Housekeeping Tips



- Today's Webinar is scheduled for **1 hour**
- The session will include a webcast and then your questions will be answered live at the end of the presentation
- All dial-in participants will be muted to enable the speakers to present without interruption
- Questions can be submitted to "All Panelists" via the **Q&A option** and we will respond at the end of the presentation
- The webinar is **being recorded** and will be available on our **INFASupport YouTube channel** and **[Success Portal](#)** - where you can download the **slide deck** for the presentation. The link to the recording will be emailed as well.
- Please take time to complete the **post-webinar survey** and provide your feedback and suggestions for upcoming topics.

# Feature Rich Success Portal

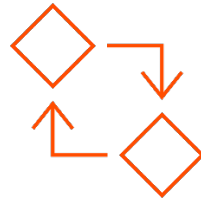
---



Bootstrap trial and  
POC Customers



Enriched Customer  
Onboarding  
experience



Product Learning  
Paths and Weekly  
Expert Sessions



Informatica  
Concierge



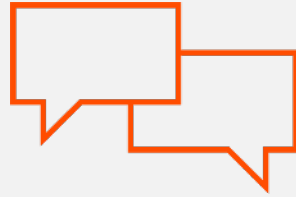
Tailored training and  
content  
recommendations

# More Information



## Success Portal

<https://success.informatica.com>



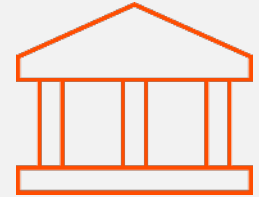
## Communities & Support

<https://network.informatica.com>



## Documentation

<https://docs.informatica.com>



## University

<https://www.informatica.com/in/services-and-training/informatica-university.html>

# Safe Harbor

The information being provided today is for informational purposes only. The development, release, and timing of any Informatica product or functionality described today remain at the sole discretion of Informatica and should not be relied upon in making a purchasing decision.

Statements made today are based on currently available information, which is subject to change. Such statements should not be relied upon as a representation, warranty or commitment to deliver specific products or functionality in the future.

# Agenda

1

Introduction to  
CDGC/IDMC

2

Custom Metadata  
Use Cases

3

Scanner  
Configuration  
Process Flow

4

Custom Models &  
Metadata Prep

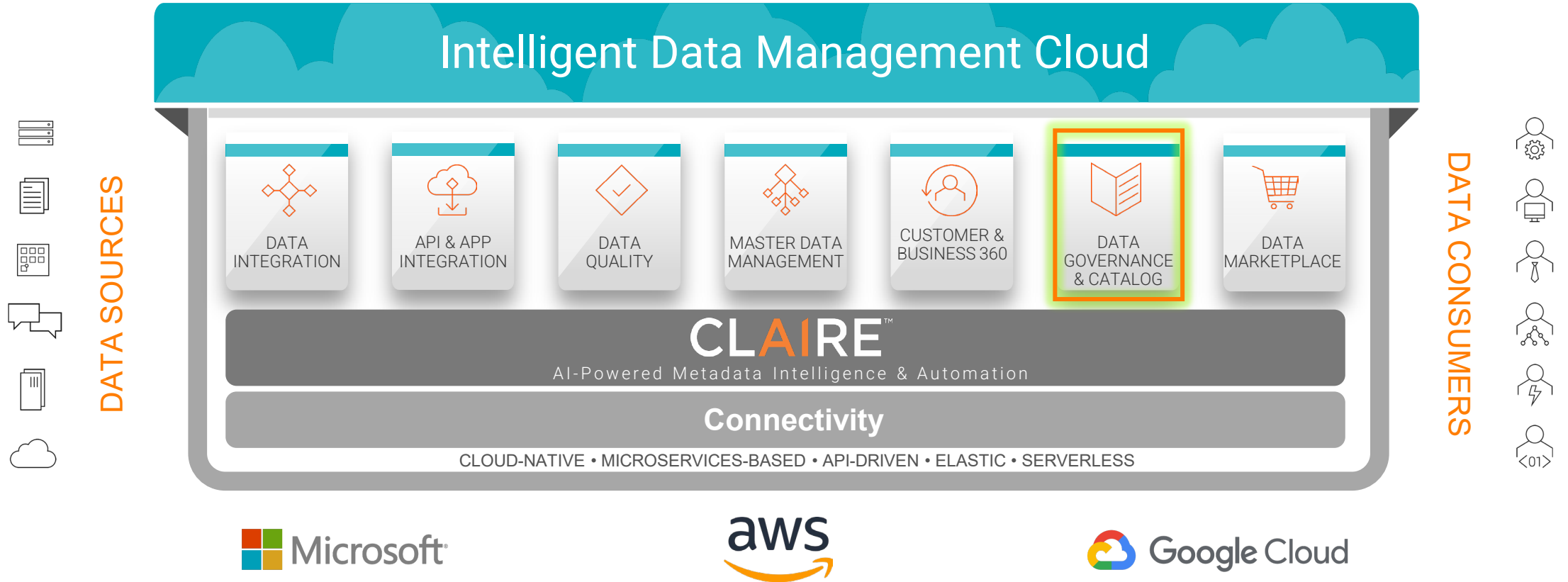
5

Custom Lineage

6

Demo/Q&A

# Intelligent Data Management Cloud



# Custom Metadata Integration

## What is Custom Metadata?

Custom Metadata is any technical metadata ingested in the Informatica Cloud Catalog which is not scanned directly through an out of the box connector.

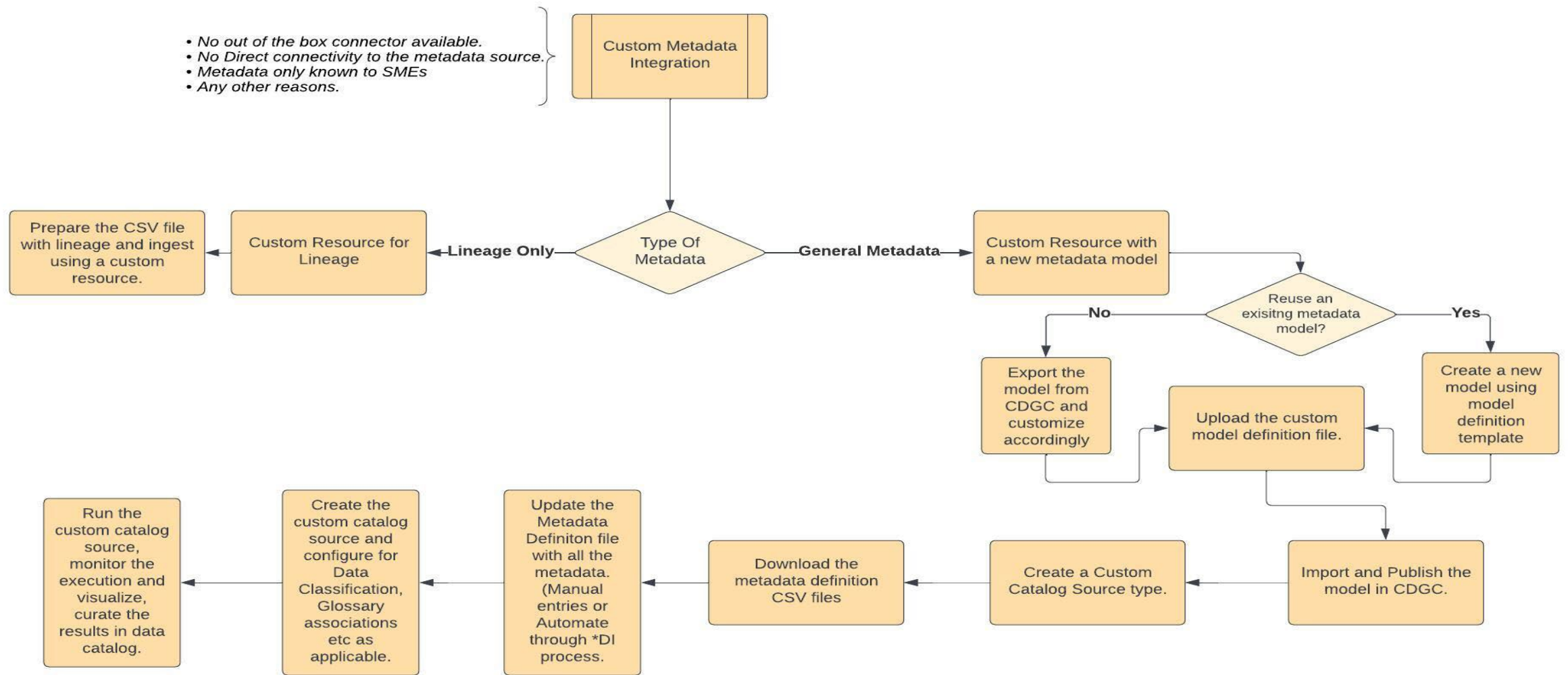
## Why is Custom Metadata needed?

1. There is no Out of the box scanner offered by Informatica for the metadata source.
2. The metadata source is not accessible due to firewalls. For example, accessing metadata from partners, subsidiaries etc.
- 3 Connectivity challenges at application levels prohibiting connections to the backend systems for metadata scanning.
4. The metadata doesn't exist in any system but only known to the SMEs.

## How to ingest Custom Metadata

Informatica provides custom metadata integration capabilities for the users to author their own technical metadata by allowing them to define a custom metadata model and then scan the custom metadata into the catalog in CSV files.

# Custom Metadata Scanner Process Flow



\*A tech preview feature is added in April'23 to generate custom metadata using Informatica CDI. Refer Product docs for more information

# Custom Model Building Blocks

- Package
  - The package represents a container for the classes in the model
- Classes
  - A class describes a group of objects that share the same characteristics. Each class has a set of attributes, those that belongs to itself or from its super classes.
  - Ex: Folders, Files, Report, Schema, Table, Column etc.
- Associations
  - An association represents the relationship between two objects in the catalog. You can create associations between the objects within the custom catalog source and to objects already synced to the catalog
  - Ex: Project to Folder to File ;DB to Schema to Tables to Columns
- Attributes
  - An attribute describes the characteristics of an object. Define the model attributes and how they apply to classes and relationship by creating attributeClass entries and attributeRelationship entries.
  - Ex: File Type, Folder Created , DataType, Length, PrimaryKey

Note : Verify that the package name does not contain com.infa.odin, com.informatica or infa. These keywords are reserved for system models.

# Unsupported Metadata Sample For Custom Model

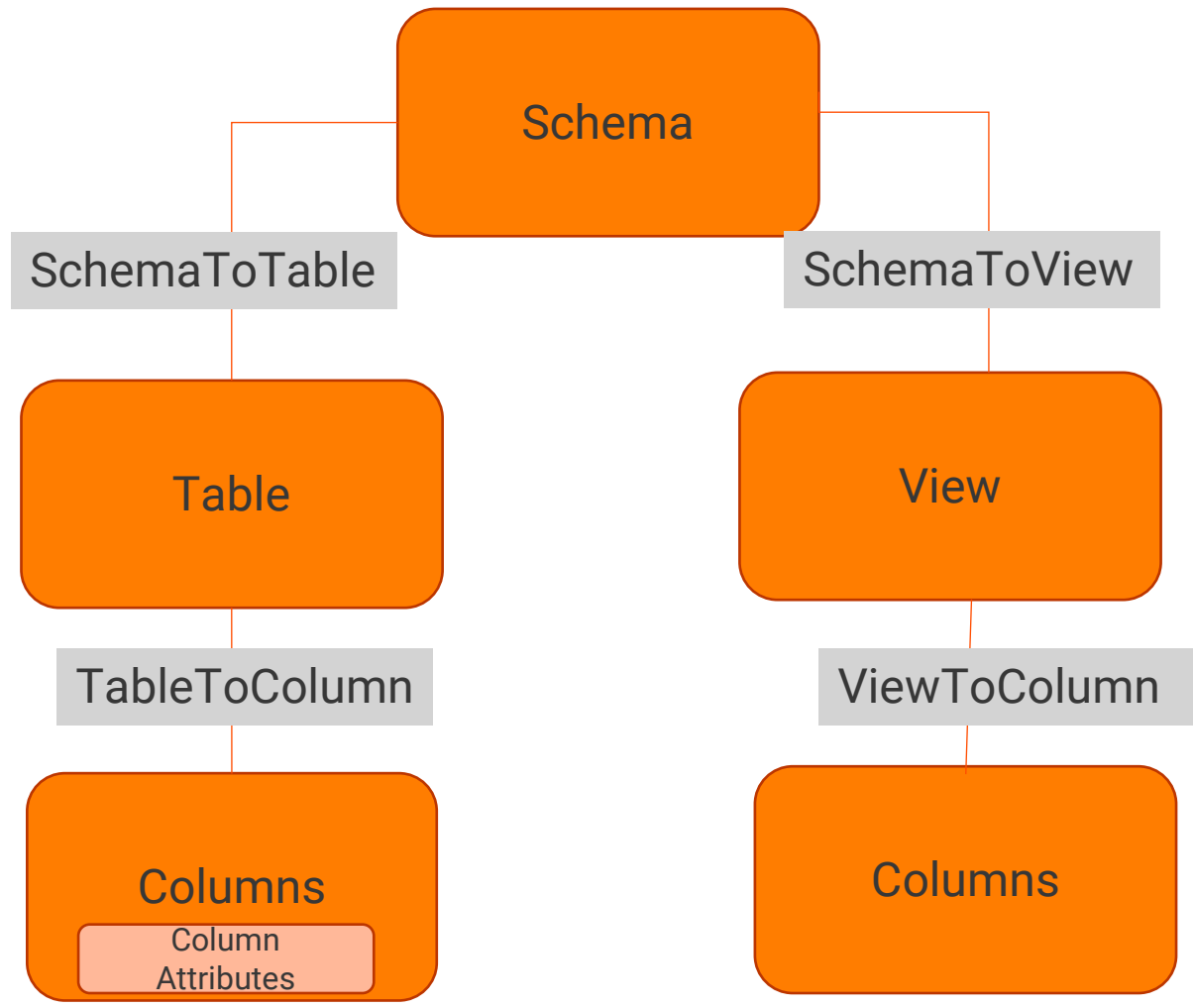
Custom Metadata extracted from Unsupported Source				
Application	Dataset	Data Attribute	View Dataset	View Attribute
INFA_VENDOR	CUSTOMERS	ID	VW_CUSTOMERS	ID
INFA_VENDOR	CUSTOMERS	NAME	VW_CUSTOMERS	NAME
INFA_VENDOR	CUSTOMERS	ADDRESS	VW_CUSTOMERS	ADDRESS
INFA_VENDOR	CUSTOMERS	EMAIL ADDRESS	VW_CUSTOMERS	EMAIL ADDRESS

# Custom models

## Package Design Template

Metadata Objects	Schema	Table	View	Columns
Metadata	INFA_VENDOR	CUSTOMERS	VW_CUSTOMER S	ID, NAME, ADDRESS.. etc.
Classes	X	X	X	X
Associations	X	X	X	X
Attributes				X
Class Attributes				X

# Custom model



Classes

Association between Classes

# Package & Classes Definition

```
"packageName": "report.customdb",
  "packageDescription": "Model for custom DB Objects",
  "packageLabel": "Custom DB Objects",
  "deprecated": false,
  "subsystem": false,
  "classes": [
    {
      "name": "CustomSchema",
      "label": "Schema",
      "description": "",
      "isFirstClass": true,
      "superClasses": [
        "core.DataSource",
        "core.IClass"
      ],
      "deprecated": false,
      "isAbstract": false,
      "indexType": "FULL",
      "appendOnly": true,
      "extensions": [],
      "softDeleted": false
    }
  ]
```

Classes Created in  
MCC

## Model Details

### Classes

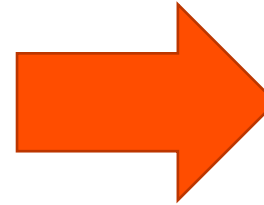
Schema

View Columns

Table Columns

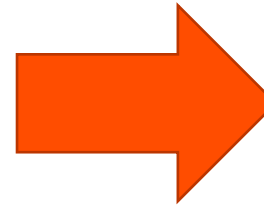
Table

View

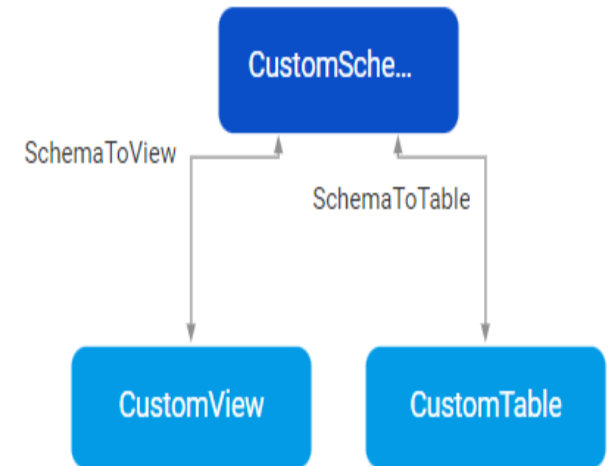


# Association between Classes

```
"associations": [  
  {  
    "name": "SchemaToView",  
    "label": "Schema To View",  
    "fromClass":  
"report.customdb.CustomSchema",  
    "toClass": "report.customdb.CustomView",  
    "fromLabel": "Schema",  
    "toLabel": "View",  
    "associationKinds": [  
      "core.ParentChild",  
      "core.IAssociation"  
    ],  
    "deprecated": false,  
    "unidirectional": false,  
    "aggregate": false,  
    "description": ""  
  }  
]
```

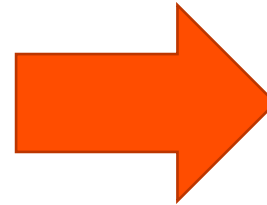


## Association Created in MCC



# Attributes

```
"attributes": [  
  {  
    "name": "Length",  
    "label": "Length",  
    "dataType": "core.String",  
    "description": "",  
    "multivalued": false,  
    "deprecated": false,  
    "derived": false,  
    "data": false,  
    "defaultValues": [],  
    "custom": false,  
    "isSystem": false,  
    "embedded": false,  
    "reference": "",  
    "projectionType": "PRIMITIVE",  
    "referencedAttributes": [],  
    "searchConfiguration": {  
      "suggestable": false,  
      "aggregatable": false,  
      "sortable": false,  
      "fuzzy": true,  
      "attributeType": "VIEWABLE"  
    },  
    "projectionExpressions": []  
  }  
]
```



## Attributes Created in MCC

### Model Details

> Classes

✓ Attributes

Length

PrimaryKey

Data type

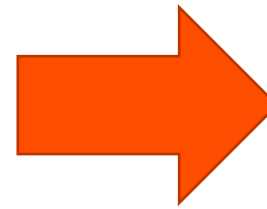
Nullable

> Associations



# Model imported into MCC

```
{  
  "packageName": "report.customdb",  
  "packageDescription": "Model for custom DB Objects",  
  "packageLabel": "Custom DB Objects",  
  "deprecated": false,  
  "subsystem": false,  
  "classes": [  
    "requiredPackages": [  
    "associations": [  
    "attributes": [  
    "classAttributes": [  
      "dataTypes": [],  
      "associationKinds": [],  
      "associationAttributes": [],  
      "references": [],  
      "associationKindAttributes": [],  
      "classUserKeys": [],  
      "classPartitionKeys": [],  
      "associationPartitionKeys": [],  
      "identity": "",  
      "version": 1,  
      "modifiedBy": ""  
    ]  
  ]  
}
```



The screenshot shows the Informatika Metadata Command Center interface. The top navigation bar includes the Informatika logo and 'Metadata Command Center'. A sidebar on the left contains navigation options: '+ New...', 'Home', 'Explore', 'Monitor', 'Configurations', 'Customizations', and 'report.customdb' (which is selected). The main content area displays the details for 'report.customdb' under the heading 'CUSTOM DB OBJECTS'. It is divided into two sections: 'General Information' and 'Model Details'. The 'General Information' section shows 'Name: Custom DB Objects' and 'Description: Model for custom DB Objects'. The 'Model Details' section has a 'Find' input field and a tree view of the model's structure. The tree view is expanded to show 'Classes', which includes 'Schema', 'View Columns', 'Table Columns' (highlighted), 'Table', and 'View'. Below 'Classes' is the 'Attributes' section, which includes 'Length', 'PrimaryKey', 'Data type', and 'Nullable'. At the bottom of the 'Model Details' section is the 'Associations' section, which includes 'Schema To View', 'Schema To Table', 'View To ViewColumn', and 'Table To TableColumn'. A 'Collapse' button is visible at the bottom left of the interface.

# Download Custom Metadata Model

The screenshot displays the Informatica Metadata Command Center interface. A modal dialog titled "Download Template for Metadata Model" is open, showing a list of six templates. The "Custom DB Objects" template is selected. The background shows the "Customizations" section with "Metadata Models (7)" and a list of package names.

**Download Template for Metadata Model**

All Templates (6)

Name ↑	Package Name	Description
BI	com.models.Analytics	BI Report models
Custom DB Objects	report.customdb	Model for custom DB Objects
IBM Cognos	com.infa.odin.models.cognos	Model for the IBM Cognos business int...
Looker	com.infa.odin.models.looker	Model for the Looker business intelligen...
MicroStrategy	com.infa.odin.models.mstr	Model for the business intelligence too...
Report BI	report.analytics	Business Intelligence Report Custom ...

**Metadata Models (7)**

Package Name

- custom.DemoOracle
- custom.sucessdb
- custom.alteryx
- report.analytics
- report.customdb
- custom.dbtmodel
- com.infa.odin.models.custom

# Custom Metadata Template files

 links

 report.customdb.CustomSchema

 report.customdb.CustomTable

 report.customdb.CustomTableColumn

 report.customdb.CustomView

 report.customdb.CustomViewColumn

# Metadata Files for Data Preparation

Each of the file show in previous slide is containing the below columns (some are optional);In order to prepare the metadata, we need to fill in these details.

Header Field	Description
core.externalId	<b>Required.</b> Unique identity of the object. The ID cannot contain a comma.
core.reference	Optional. Set to true if you want to use this object as a reference asset. Reference assets are used in place of actual assets to view the data lineage among one or more sources that don't exist in the catalog. For more information about using reference assets for custom lineage, see <a href="#">Referenced catalog sources</a> and <a href="#">Create custom lineage</a> .
core.assignable	Optional. Set to true if you want this object to be available for connection assignment. If set to true, you can assign connections to this object to view the complete lineage.
core.name	<b>Required.</b> Name of the object.
core.description	Optional. Description of the object.
core.businessName	Optional. Specify the name of the business term that you want to associate with this object.
core.businessDescription	Optional. Specify the description of the business term that you want to associate with this object.

# Metadata Files for Data Preparation

- links
- report.customdb.CustomSchema
- report.customdb.CustomTable
- report.customdb.CustomTableColumn
- report.customdb.CustomView
- report.customdb.CustomViewColumn

## report.customdb.CustomSchema.csv

	A	B	C	D	E	F	G
1	core.externalId	core.name	core.description	core.assignable	core.businessDescription	core.businessName	core.reference
2	INFA_VENDOR	INFA_VENDOR	This schema contains tables/views related to customer info				

## report.customdb.CustomTable.csv

1	core.externalId	core.name	core.description	core.businessDescription	core.businessName	core.reference
2	INFA_VENDOR/CUSTOMERS	CUSTOMERS	This table contains data related to the vendors			

## report.customdb.CustomView.csv

1	core.externalId	core.name	core.description	core.businessDescription	core.businessName	core.reference
2	INFA_VENDOR/VW_CUSTOMERS	VW_CUSTOMERS	This view stores the customers info			

# Metadata Files for Data Preparation

## report.customdb.CustomTableColumn.csv

	core.externalId	core.name	core.description	core.businessDescription	core.businessName	report.customdb.Datatype	report.customdb.Length	report.customdb.Nullable
2	INFA_VENDOR/CUSTOMERS/NAME	NAME	Name of the vendor			Varchar	100	Yes
3	INFA_VENDOR/CUSTOMERS/ADDRESS	ADDRESS	Address details of the vendor			Varchar	500	Yes
4	INFA_VENDOR/CUSTOMERS/ID	ID	Unique identifier of the vendor			INT	10	No
5	INFA_VENDOR/CUSTOMERS/EMAIL_ADDRESS	EMAIL_ADDRESS	Email Address of the vendor			Varchar	100	Yes

## report.customdb.CustomViewColumn.csv

	core.externalId	core.name	core.description
2	INFA_VENDOR/VW_CUSTOMERS/NAME	NAME	Name of the vendor
3	INFA_VENDOR/VW_CUSTOMERS/ADDRESS	ADDRESS	Address details of the vendor
4	INFA_VENDOR/VW_CUSTOMERS/ID	ID	Unique identifier of the vendor
5	INFA_VENDOR/VW_CUSTOMERS/EMAIL_ADDRESS	EMAIL_ADDRESS	Email Address of the vendor

# Data Preparation for Association

## Links.csv

1	Source	Target	Association
2	\$resource	INFA_VENDOR	core.ResourceParentChild
3	INFA_VENDOR	INFA_VENDOR/CUSTOMERS	report.customdb.SchemaToTable
4	INFA_VENDOR	INFA_VENDOR/VW_CUSTOMERS	report.customdb.SchemaToView
5	INFA_VENDOR/CUSTOMERS	INFA_VENDOR/CUSTOMERS/NAME	report.customdb.TableToTableColumn
6	INFA_VENDOR/CUSTOMERS	INFA_VENDOR/CUSTOMERS/ADDRESS	report.customdb.TableToTableColumn
7	INFA_VENDOR/CUSTOMERS	INFA_VENDOR/CUSTOMERS/ID	report.customdb.TableToTableColumn
8	INFA_VENDOR/CUSTOMERS	INFA_VENDOR/CUSTOMERS/EMAIL_ADDRESS	report.customdb.TableToTableColumn
9	INFA_VENDOR/VW_CUSTOMERS	INFA_VENDOR/VW_CUSTOMERS/NAME	report.customdb.ViewToColumn
10	INFA_VENDOR/VW_CUSTOMERS	INFA_VENDOR/VW_CUSTOMERS/ADDRESS	report.customdb.ViewToColumn
11	INFA_VENDOR/VW_CUSTOMERS	INFA_VENDOR/VW_CUSTOMERS/ID	report.customdb.ViewToColumn
12	INFA_VENDOR/VW_CUSTOMERS	INFA_VENDOR/VW_CUSTOMERS/EMAIL_ADDRESS	report.customdb.ViewToColumn
13	INFA_VENDOR/CUSTOMERS	INFA_VENDOR/VW_CUSTOMERS	core.DataSetDataFlow
14	INFA_VENDOR/CUSTOMERS/NAME	INFA_VENDOR/VW_CUSTOMERS/NAME	core.DirectionaDataFlow
15	INFA_VENDOR/CUSTOMERS/ADDRESS	INFA_VENDOR/VW_CUSTOMERS/ADDRESS	core.DirectionaDataFlow
16	INFA_VENDOR/CUSTOMERS/ID	INFA_VENDOR/VW_CUSTOMERS/ID	core.DirectionaDataFlow
17	INFA_VENDOR/CUSTOMERS/EMAIL_ADDRESS	INFA_VENDOR/VW_CUSTOMERS/EMAIL_ADDRESS	core.DirectionaDataFlow

# Final Input File for Custom Resource to ingest custom Metadata

> This PC > Documents > TTW\_Custom\_Scanner > 3 > report.customdb\_load

Name	Date modified	Type	Size
links	5/9/2023 6:19 PM	Microsoft Excel Co...	2 KB
report.customdb.CustomSchema	5/9/2023 6:08 PM	Microsoft Excel Co...	1 KB
report.customdb.CustomTable	5/9/2023 6:01 PM	Microsoft Excel Co...	1 KB
report.customdb.CustomTableColumn	5/9/2023 6:17 PM	Microsoft Excel Co...	1 KB
report.customdb.CustomView	5/9/2023 6:01 PM	Microsoft Excel Co...	1 KB
report.customdb.CustomViewColumn	5/9/2023 6:01 PM	Microsoft Excel Co...	1 KB

> This PC > Documents > TTW\_Custom\_Scanner > 3

- GenericLinks
- report.customdb\_load
- GenericLinks
- report.customdb\_load
- report.customdb\_metadata\_template
- reportcustomdb

# Creation of Custom Resource

- New...
- Home
- Explore
- Monitor
- Configurations
- Customizations
- report.customdb
- Vendor\_Sales\_Re...

## Vendor\_Sales\_Report

< Back   Next >   Save   Run   X

- 1 Registration
- 2 Configuration
- 3 Associations
- 4 Schedule

### General Information

**Name:** \* Vendor\_Sales\_Report

**Description:** Khadar: Custom Metadata Model to create vendor sales report

### Connection Information

**Catalog Source Type:** Custom Scanner

**Metadata Source Type:** \* ?  CSV Files    CDI Task **Technical Preview**

**Source Type:** \* ?  Upload    Provide a Local Path [Download Template](#)

**File Details:** \* ? report.customdb\_load.zip

Last uploaded file: [report.customdb\\_load.zip](#)



# Resource Configuration

① Registration    ② Configuration    ③ Associations    ④ Schedule

✓ Metadata Extraction    ✓ Data Classification    ✓ Glossary Association

Enable Metadata Extraction:

### Configuration Parameters

No configuration parameters available.

✓ Metadata Extraction    ✓ Data Classification    ✓ Glossary Association

Enable Data Classification:

Use the selection option to choose between CLAIRE generated classifications and data classification rules.

Generated Data Classifications powered by CLAIRE™ ?     Data Classification Rules ?

Add Data Classification

# Resource Configuration

✓ Metadata Extraction   ✓ Data Classification   ✓ Glossary Association

Enable Glossary Association:

Enable auto-acceptance ⓘ   Confidence Score Threshold for Auto-Acceptance: \* ⓘ  90 %

**i** Considers all published business terms in the glossary while making recommendations to associate your technical assets.

# Custom Resource view from CDGC

- + New...
- Home
- Browse
- Vendor\_Sales\_Re...
- CUSTOMERS
- INFA\_VENDOR

Top Level

## Vendor\_Sales\_Report

CUSTOM SCANNER CATALOG SOURCE

- Overview
- Hierarchy**
- Relationships
- Stakeholders
- Properties
- Tickets
- History

Create System

OVERALL RATING: ☆☆☆☆ Add  
LIFECYCLE: PUBLISHED  
LAST UPDATED: May 9, 2023, 4:42 PM

### Content (1)

Name	Type	Description
INFA_VENDOR	Schema	This schema contains tables/views related to customer info
CUSTOMERS	Table	This table contains data related to the vendors
ADDRESS	Table Columns	The particulars of the place where someone lives or an organiz...
EMAIL_ADDRESS	Table Columns	The email addres that can be used to get in touch with an indivi...
ID	Table Columns	Each item has an item number that uniquely identifies it.
NAME	Table Columns	A name is a term used for identification by an external observer...
VW_CUSTOMERS	View	This view stores the customers info
ADDRESS	View Columns	The particulars of the place where someone lives or an organiz...
EMAIL_ADDRESS	View Columns	The email addres that can be used to get in touch with an indivi...
ID	View Columns	Each item has an item number that uniquely identifies it.
NAME	View Columns	A name is a term used for identification by an external observer...

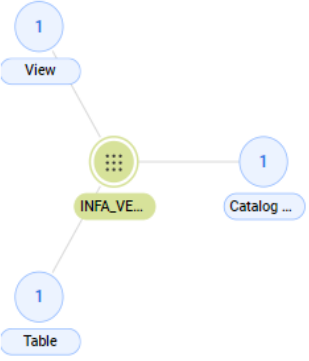
### INFA\_VENDOR SCHEMA

Overview Related Assets (3)

Last Updated: May 9, 2023, 4:33 PM

Stakeholders:

Related Assets:



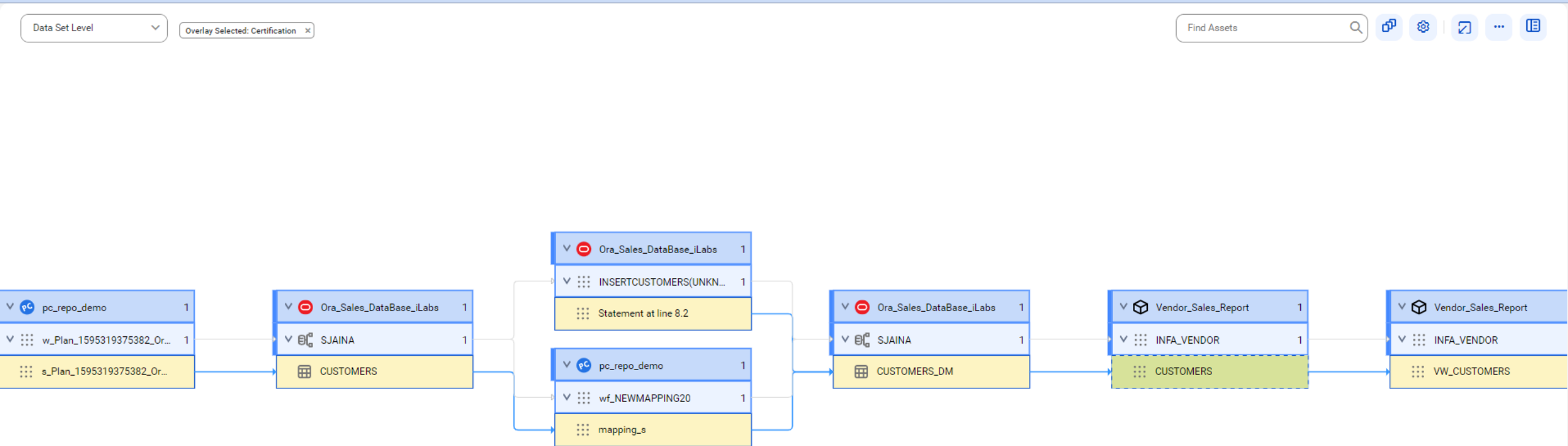
# Custom Lineage

Lineage link between Native Metadata and Custom Metadata			
From table	From Column	To Table	To Column
Customer (Oracle Table)	Name (Oracle Column)	CUSTOMERS (Dataset)	NAME (Data Attribute)

## Links.csv

	A	B	C
1	Source	Target	Association
2	c2006c4a-141d-30a1-acae-89968d1c2c13	875fe4db-4dc4-3855-b030-7218a7d6b264://INFA_VENDOR/CUSTOMERS~report.customdb.CustomTable	core.DataSetDataFlow
3	c2006c4a-141d-30a1-acae-89968d1c2c13	875fe4db-4dc4-3855-b030-7218a7d6b264://INFA_VENDOR/CUSTOMERS/ID~report.customdb.CustomTableColumn	core.DirectionaDataFlow
4	c2006c4a-141d-30a1-acae-89968d1c2c13	875fe4db-4dc4-3855-b030-7218a7d6b264://INFA_VENDOR/CUSTOMERS/NAME~report.customdb.CustomTableColumn	core.DirectionaDataFlow
5	c2006c4a-141d-30a1-acae-89968d1c2c13	875fe4db-4dc4-3855-b030-7218a7d6b264://INFA_VENDOR/CUSTOMERS/ADDRESS~report.customdb.CustomTableColumn	core.DirectionaDataFlow

# Lineage View at Dataset Level

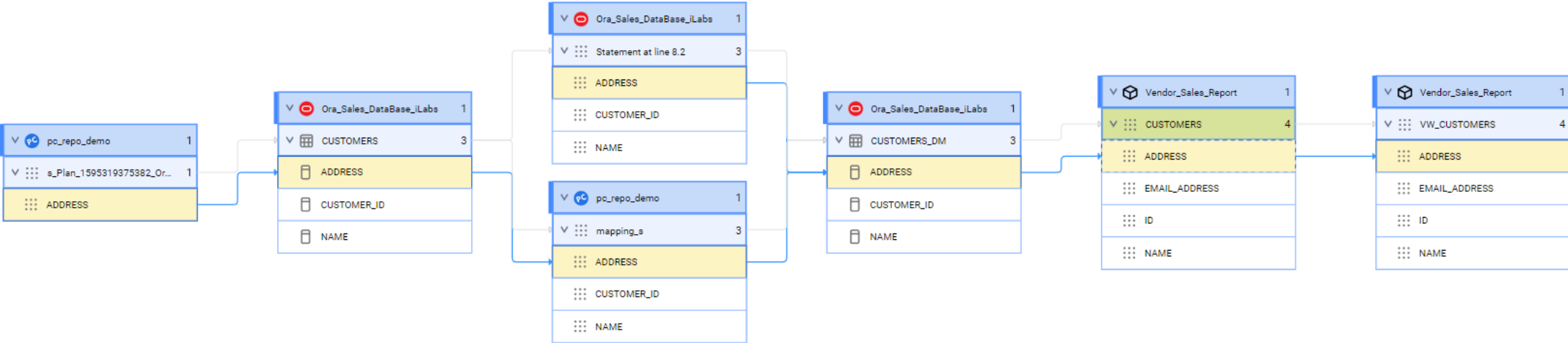


# Lineage View at Data Element Level

Data Element Level

Overlay Selected: Certification

Find Assets



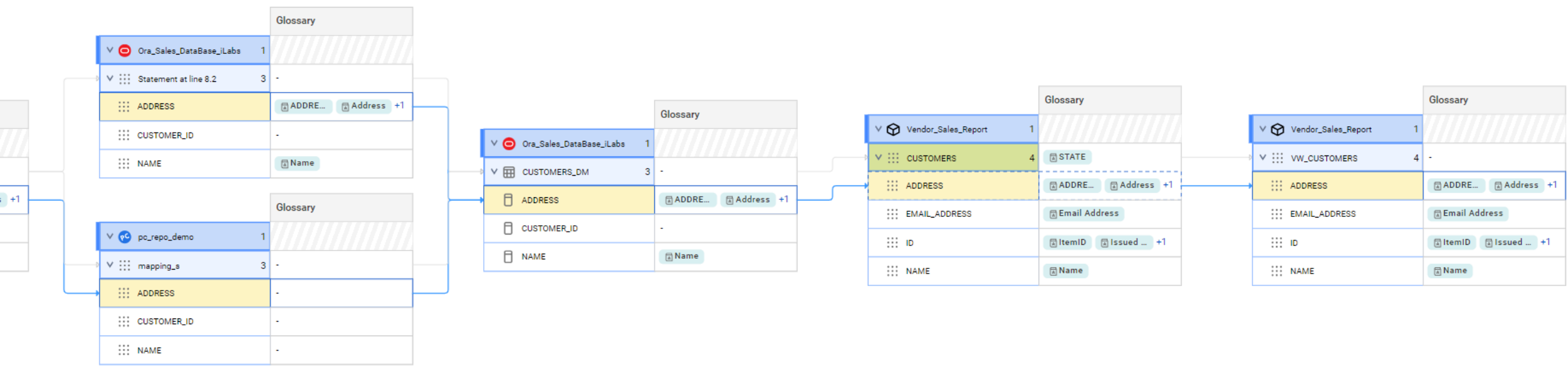
# Lineage View and Overlay with Glossary

Data Element Level Overlay Selected: Certification, Busine...

Find Assets  





# References

Metadata Sources in CGDC

<https://docs.informatica.com/data-governance-and-quality-cloud/metadata-command-center/current-version/catalog-source-configuration/supported-source-systems.html>

Custom Metadata Scanner

<https://docs.informatica.com/data-governance-and-quality-cloud/metadata-command-center/current-version/catalog-source-configuration/custom-metadata-integration.html>

CDGC Metadata Scanning Best Practices

<https://success.informatica.com/explore/tt-webinars/scanning--data-discovery-best-practices-in-cloud-data-governanc.html>

Working with Assets in Catalog

<https://docs.informatica.com/data-governance-and-quality-cloud/cloud-data-govenance-and-catalog/current-version/working-with-assets/preface.html>

Pre-Defined Data Classifications in CDGC

<https://docs.informatca.com/data-governance-and-quality-cloud/metadata-command-center/h2l/1715-predefined-data-element-classifications-in-cloud-data-gover/abstract.html>

Sizing Guidelines for Secure Agent in CDGC

<https://docs.informatica.com/data-governance-and-quality-cloud/metadata-command-center/h2l/1651-sizing-recommendation-and-performance-optimization-for-meta/abstract.html>

DEMO

Q&A