



Cloud Coachers

Salesforce Data Cloud (aka CDP)

Salesforce Training Series
September 2024

Hi!

Cloud Coachers



I'm **Paula Quirós**

Marketing Cloud Coach & Managing
Director at Cloud Coachers

Salesforce Marketing Champion



Agenda



Introduction to Data Cloud

Positioning: Genie, CDP, MC Personalization

Solution Overview

Pricing Levers
Use Cases
Implementation tips

Setup & Administration

CDP Provisioning and Permissions

Data Ingestion & Modeling

Data Ingestion Process
Data Streams
Data Categories
Data Source Object Schema
Row-level Transformations
Enable Value suggestion
Data Modeling Process
CDP Standard Data Model
Normalizing Data
Data Mapping
Custom objects
Data Explorer



Identity Resolution

Unified Individual
Identity Resolution Process
Matching Rules
Reconciliation Rules
Profile Explorer

Insights & Segmentation

Calculated Insights
Insights Builder and SQL Builder
Streaming Insights
Metrics on Metrics
Segmentation
Rule Builder
Container Path
Segmentation Tips

Activation

Activation Targets
Activation Membership
Additional Attributes

API & Integrations

Info about the Certification Exam

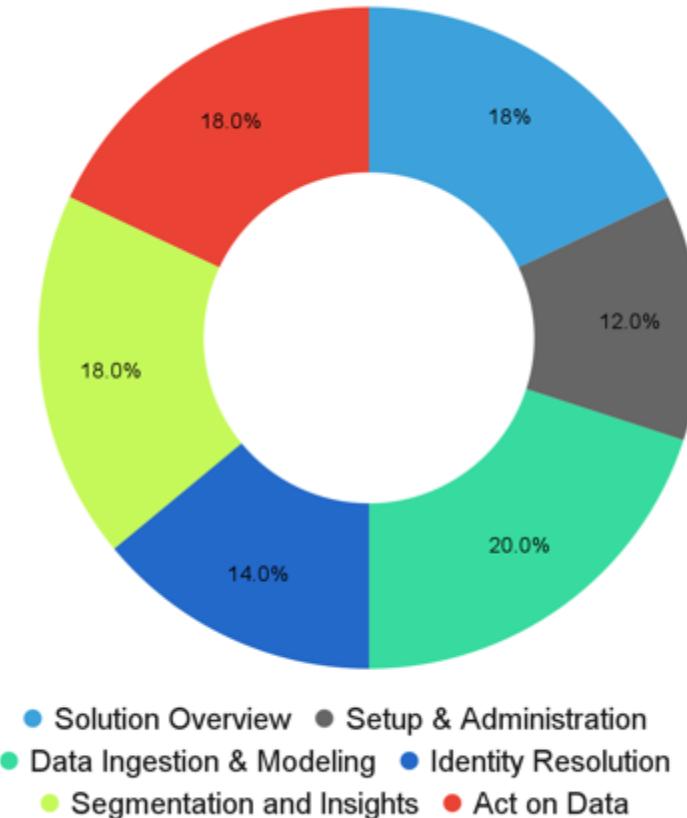


Salesforce Data Cloud

- 60 multiple-choice questions
- 105 minutes allotted to complete the exam
- 62% is the passing score
- Registration fee is USD 200
- No hard-copy or online materials may be referenced during the exam



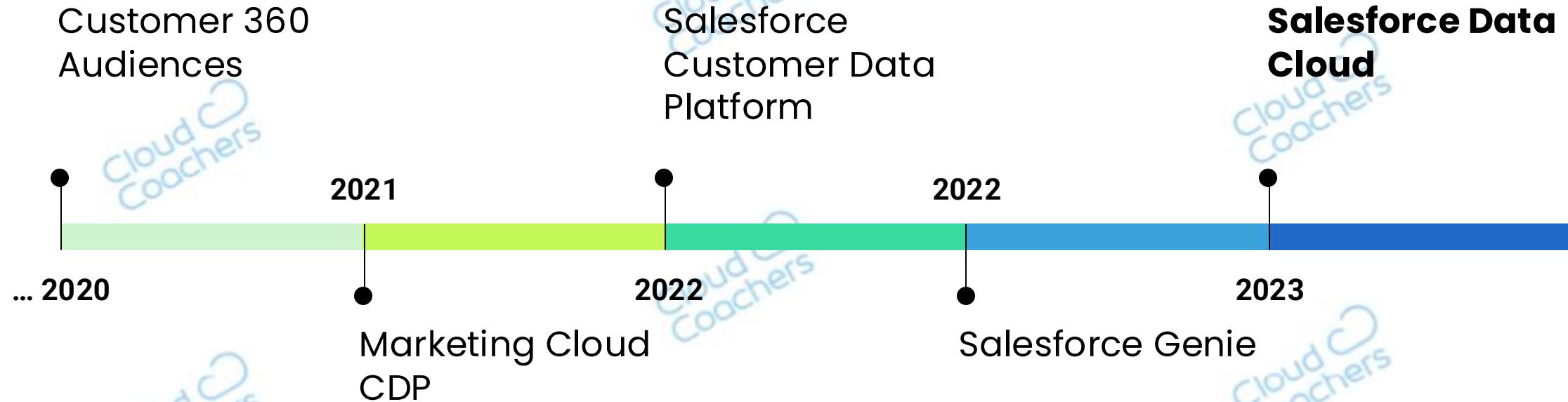
<https://trailhead.salesforce.com/content/learn/modules/cert-prep-data-cloud-consultant>



Introduction to Data Cloud



First of all... naming history



What is a Customer Data Platform?

Salesforce CDP is a self-service customer data platform, or CDP, that drives personalization and engagement.

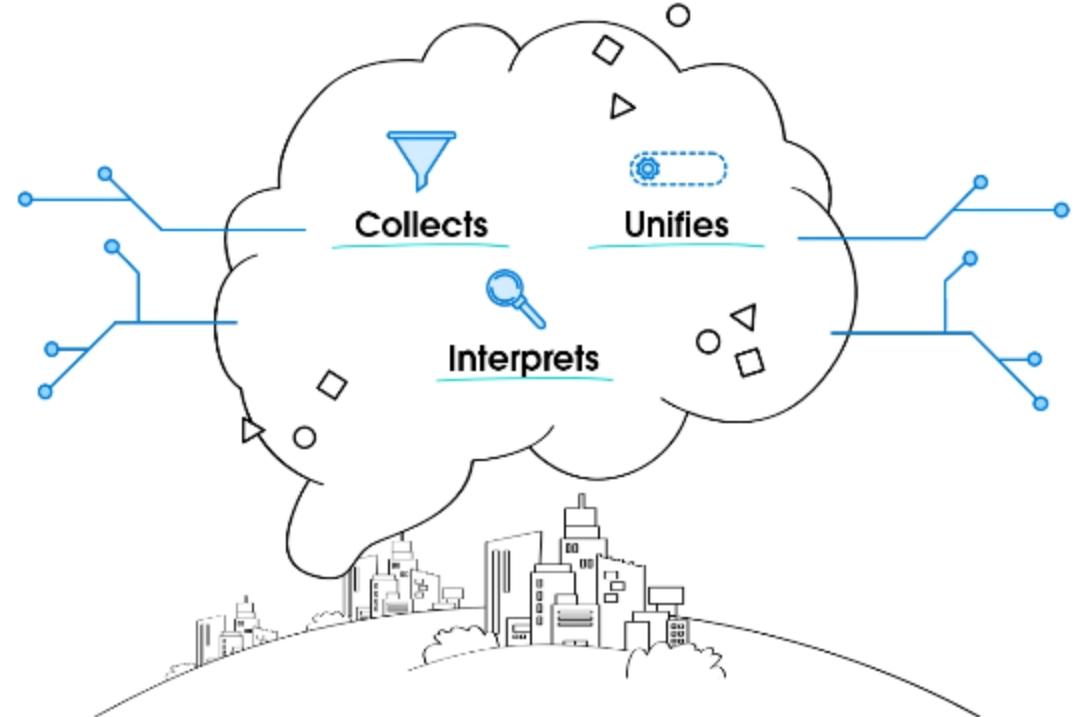
Ingests and unifies data from anywhere to reconcile customer identity and understand the complete picture for each individual.

Salesforce CDP is not just associated with marketing and advertising. It's the SSOT for enterprise data.

What does a CDP do?



- 👍 CDP enables companies to **capture, unify, segment** and **activate** all their customer data.
- 👍 It provides companies a **single source of truth** of their customer and makes that data available for creating personalized experiences across every touchpoint.
- 👍 Using a series of solutions, you can achieve a **single, actionable view of your customer**.



What is Salesforce Data Cloud?



is the **real-time platform for customer magic**.

It's the entire Salesforce Platform now with Customer Data Platform (CDP) capabilities that are a part of it

Salesforce Data Cloud brings the power of real-time data to the entire Customer 360 to create a real-time, **single view of the customer across any cloud**.

Salesforce Data Cloud is The World's 1st Real-Time CRM, anchored on these 3 core pillars of our platform:

- Real-Time Data With Genie
- Intelligence with Einstein
- Automation with Salesforce Flow

Salesforce Data Cloud is the evolution of CDP!

CDP or Genie?

Cloud Coachers



CDP – first version of Genie for Marketing Automation

Genie – beyond Marketing Automation:

- Integration into Salesforce Platform
- Delivering a real-time platform
- Federation with open data platform: BYOM with AWS Sagemaker, or Snowflake.

A photograph of a group of people in a meeting room. In the foreground, a large green circle is overlaid on the left side, containing a smaller blue circle and a yellow plus sign. Another green circle is overlaid on the right side, containing the text "10%".

Solution Overview

10%

Salesforce Data Cloud Overview



Ingestion

Consume data from any cloud and any application

Fast data ingestion from multiple sources

Transform Data

OOB Standard Data model



Identity Resolution

Connect, match, and resolve customer data

Resolve known identity

Data Reconciliation into a unified profile

Stitch Sales, Service, Commerce data



Insights

Embed data with intelligence and make it available to analytic systems

Insights - multi-dimensional metrics

Tableau connector



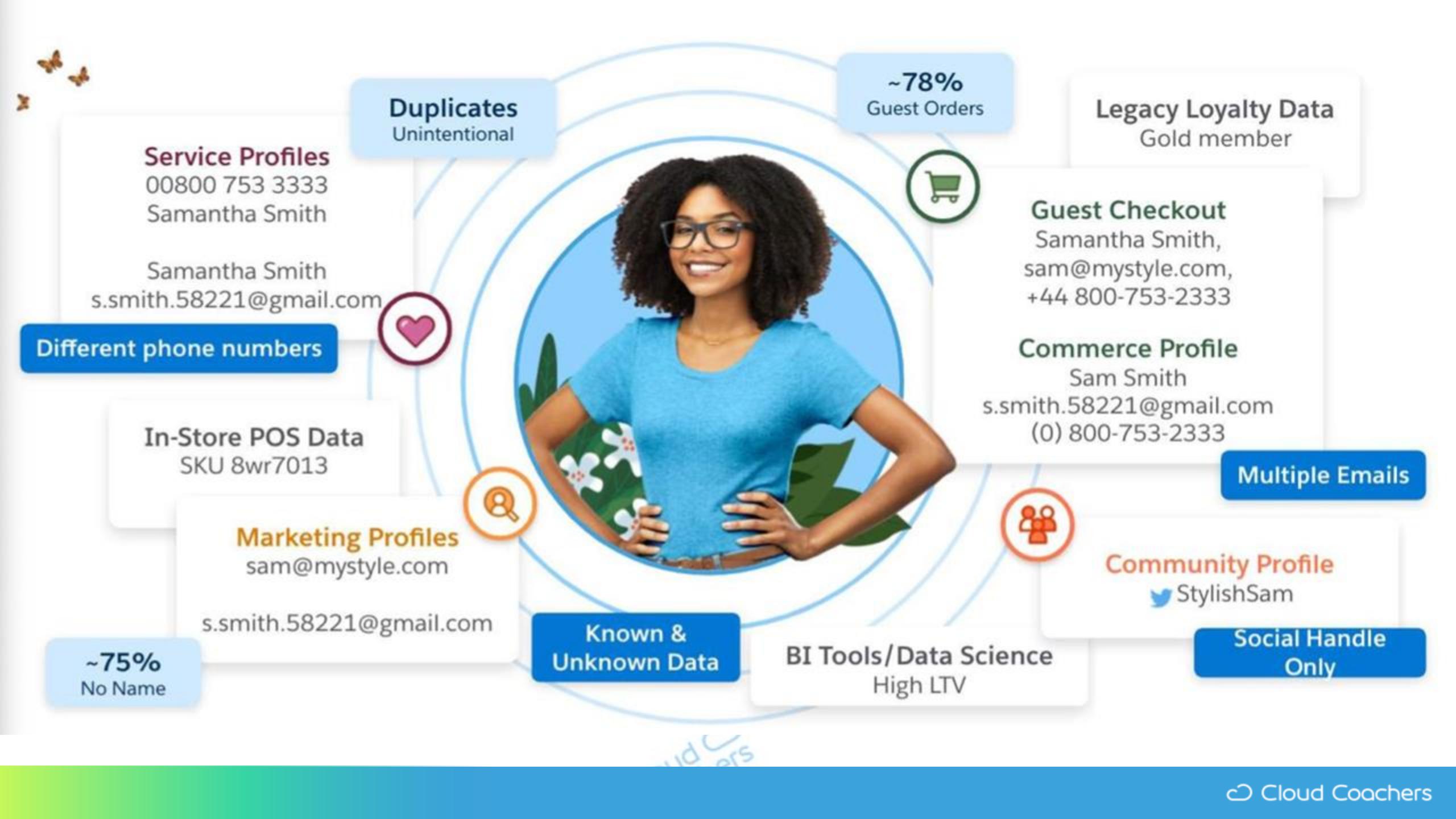
Segmentation & Activation

Create smart segments and activate anywhere

Self-Service and flexible segmentation

On the fly intelligent segments with Einstein

Personalization Everywhere through activations (direct or indirect channels)



How Data Cloud Works

Data Systems

CRM



Cloud Storage



Data Lakes & Warehouses



Mobile & Web

APIs & SDKs

Legacy Systems

Connect at Hyperscale



Out-of-the-Box Connectors



MuleSoft Anypoint Platform



Bring Your Own Lake



Data Bundles



Streaming & Batch Data Ingestion



Streaming & Batch Data Transforms

Harmonize



Data Spaces



Data Models



Data Mapping



Identity Resolution



Data Graphs



Activate



Calculated Insights



Segmentation



Automations



Analytics



Open Access
Bring Your Own Lake
First-Party Advertising
AppExchange
MuleSoft



Grounded AI



Segment Generation



Einstein Copilot Studio
Google Vertex AI
Amazon SageMaker

Data Cloud is Open & Extensible

Bring Your Own Lake



Google Cloud

aws databricks

Bring Your Own Model



Vertex AI



First-Party Advertising

Meta

Google

amazon ads

AppExchange

50+

partner apps
and experts

Data Cloud Process



Connect

What data you wish your users had access to?

Data Streams:
connections and associated data ingested into Data Cloud

Harmonize

Map ingested data into the Customer 360 Data Model

Unify

With **Identity Resolutions**, get a unified view of the customer.

Analyze & Predict

Segmentation: query data and split it out into groups based on different attributes or characteristics.

Activate

Activation Target: location where a segment's data is being sent.

Automate & Take Action.

Ground **AI** in Trusted Data.

Use case examples



Commerce

Build tailored shopper experiences that adapt to real-time customer actions (abandoned cart, actions on mobile...)



Sales

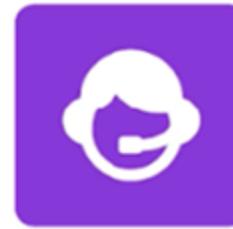
Drive proactive enablement based in customer behaviour.

Use AI to assess customer signals and create relevant plans to close deals created from specific customer signals.



Marketing

Take advantage of all the information you have on customers and prospects to target campaigns, drive loyalty, and reduce the time it takes to convert.



Customer Service

Track satisfaction, see a customer's entire case history in one place, and solve problems faster to reduce the time it takes to deliver market-leading service.



Analytics

Some Use Cases I

1. Easy data ingestion from any platform
1. Data reconciliation
 - a. avoid saturation
 - b. avoid contradictory messaging
1. Sophisticated segmentation with a visual interface
 - a. Group customer by recency, frequency, etc
 - b. Ranking of customer by product / category
1. Activate those segmentations in any platform
 - a. Marketing Cloud Engagement
 - b. MC Personalization
 - c. Google, Meta,...

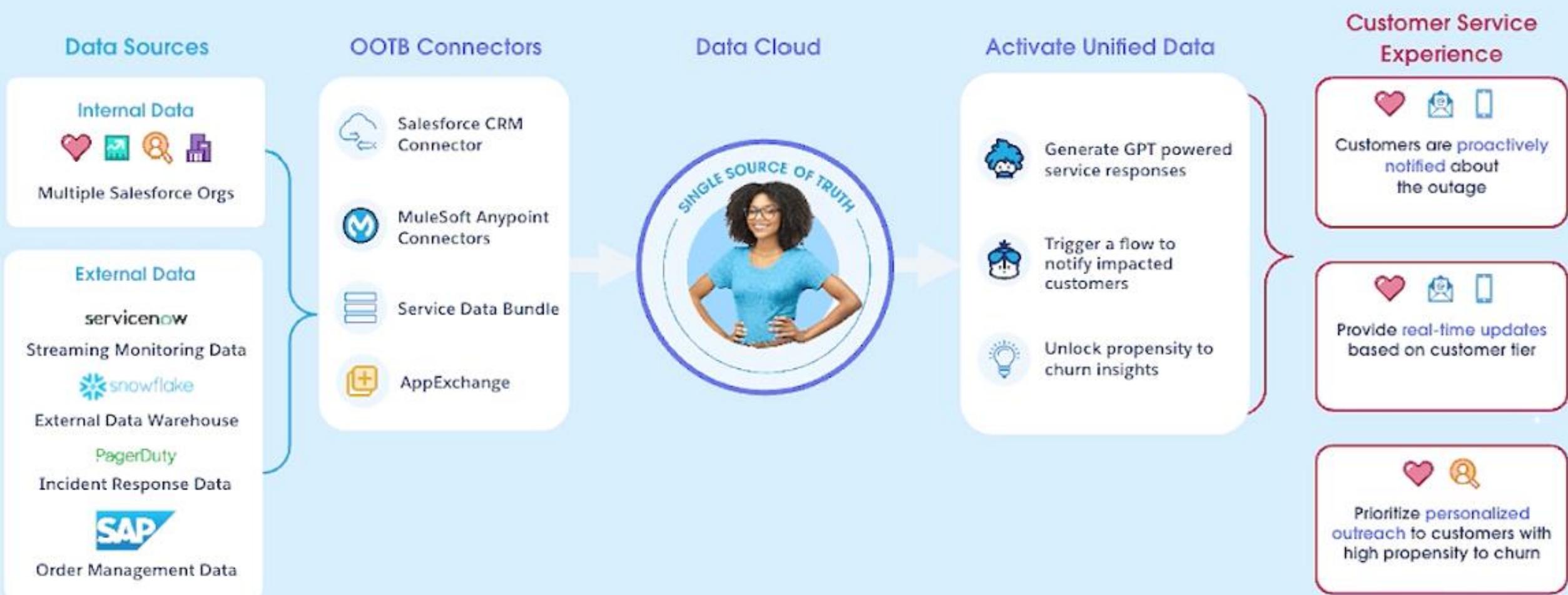


Use Cases II

- Marketing Activation > precision segmentation
- Advertising Activation > Face the cookieless future with first-party data activation at scale. Connect Programmatic, AppExchange activation
- Real-Time Personalization > Interaction management, moment-based journeys, enrich segments with Interactions
- Enhanced Analytics > Prebuilt CDP + Intelligence dashboards

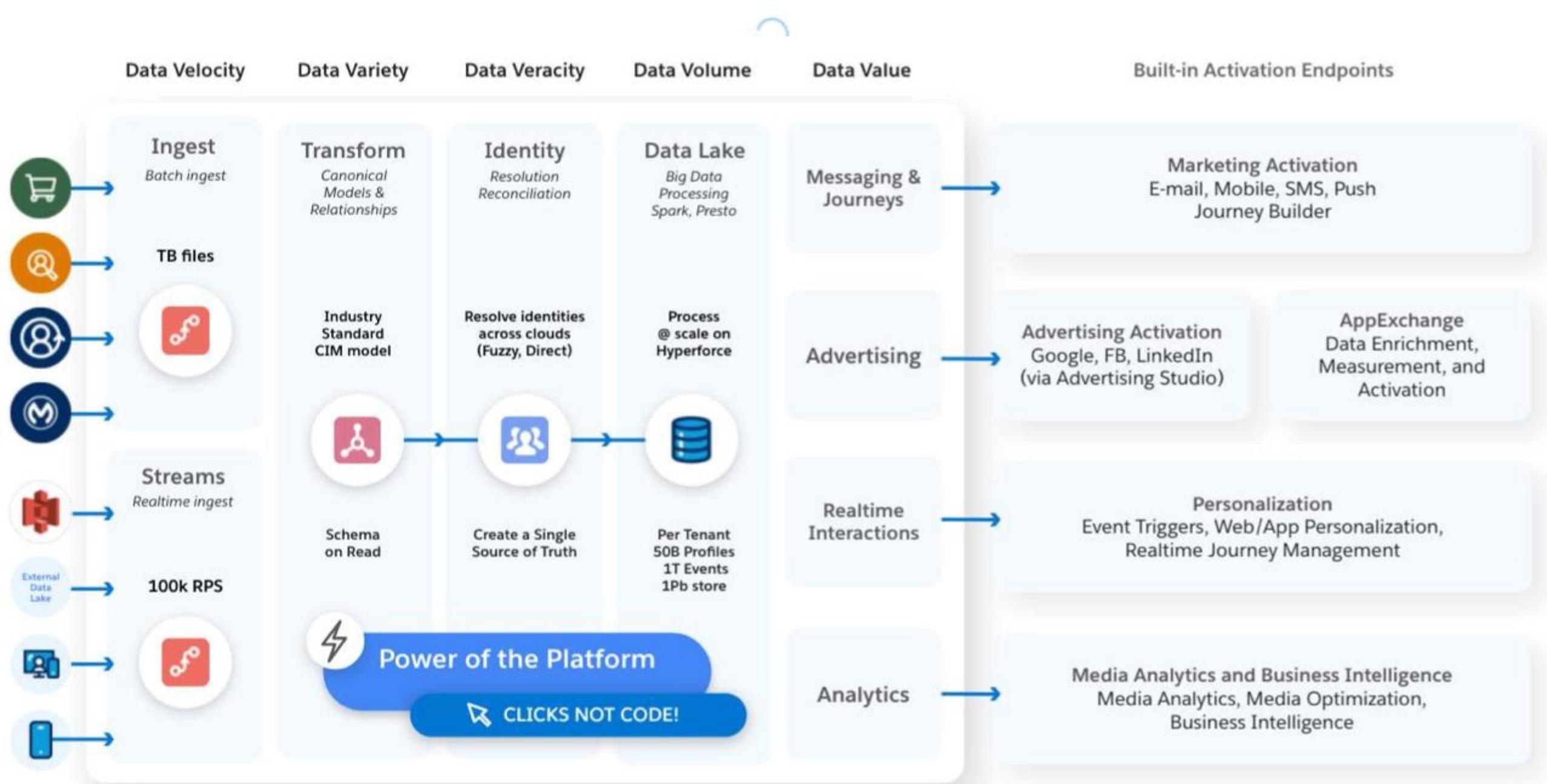
Proactive Service Notifications

⚠️ Service Incident at a Streaming Company



The Data Cloud process





Data Cloud or MC Personalization?



Insights (Data Cloud)

Data Unification with **Batch Ingestion**

Holistic Customer Identity Resolution

Segmentation & Insights

Outbound Messaging
Activation

Development Platform at **Large Data Scale**

Future:
Integrated
Capabilities
(UMP)



Engagement (Personalization)

Real-Time Data Flow & Profile Store

Experiences cut across
Online & Offline

Real-Time **Interaction Management**

Event triggers & **AB Experience Testing**

AI + **Next Best Action**

Positioning Data Cloud to customers



Good Fit



Grey Area



Bad Fit

- Accounts with Salesforce (Sales/Service) and Marketing Cloud
- Accounts that are heavy on Marketing Cloud, often over on Contacts, multi-channel journeys.
- Marketing Cloud with Audience Builder but that are unhappy.

- No Salesforce footprint, and request a CDP with complex use cases.
- Just need marketing automation, and have a small budget
- General tone = only the best of breed
- Large inhouse development focus (resources and skills)

Data Cloud Credits

Data Cloud is consumption-based.

Data Cloud Credits are digital currency to pay for Data Cloud services.

- Data Service usage (batch data pipeline, data queries, streaming calculated insights, ...)
- Data Storage
- Data Spaces
- Marketing Feature service (segmentation, batch activations)
- Ad Audiences
- Sub-second real-time service usage

https://help.salesforce.com/s/articleView?id=sf.c360_a_data_usage_types.htm&type=5



Optimize use of Credits

- ✓ Batch better than streaming
 - Streaming Cls, 55 times more than batch Cls
- ✓ Deactivate outdated segments
- ✓ Only bring in relevant data
- ✓ Process data less often

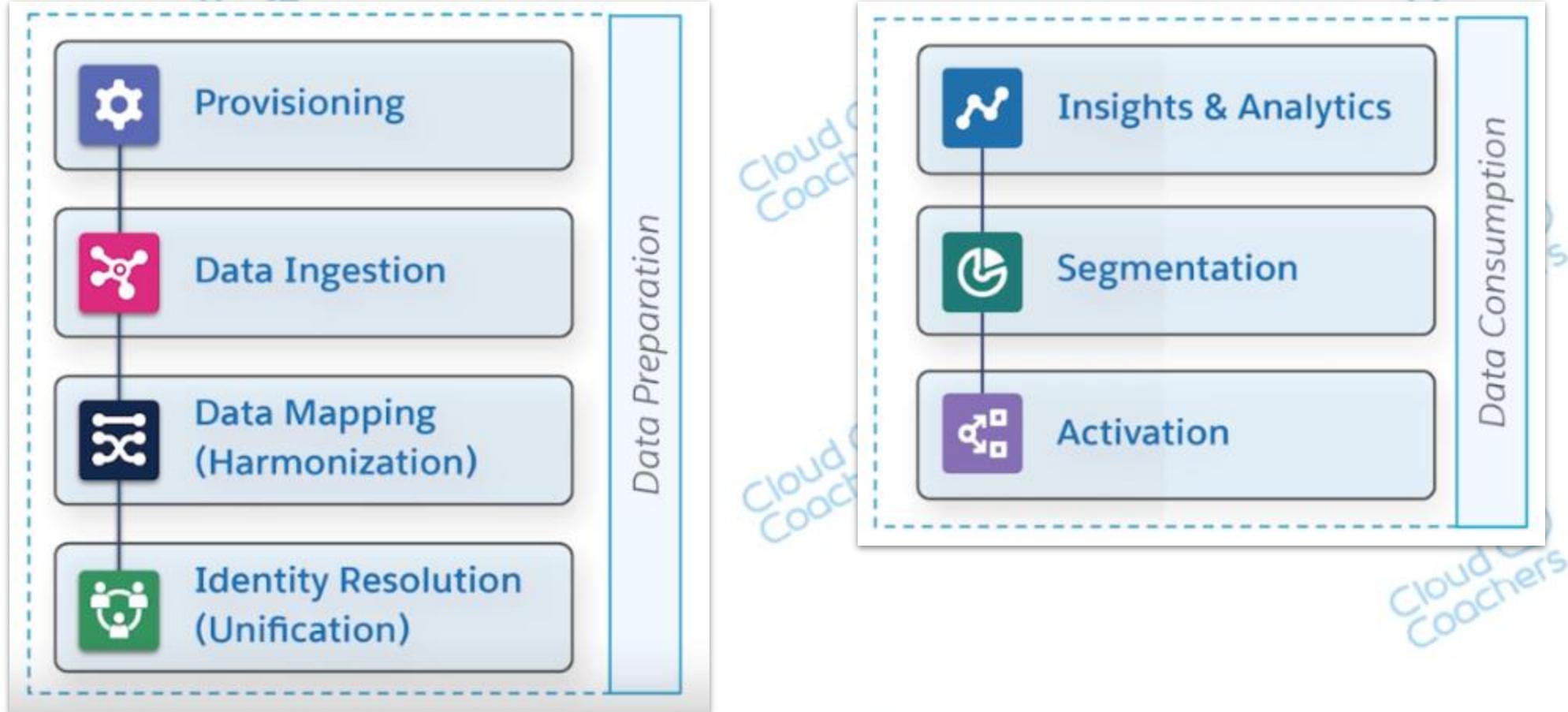
Monitor consumption on the Salesforce Digital Wallet.



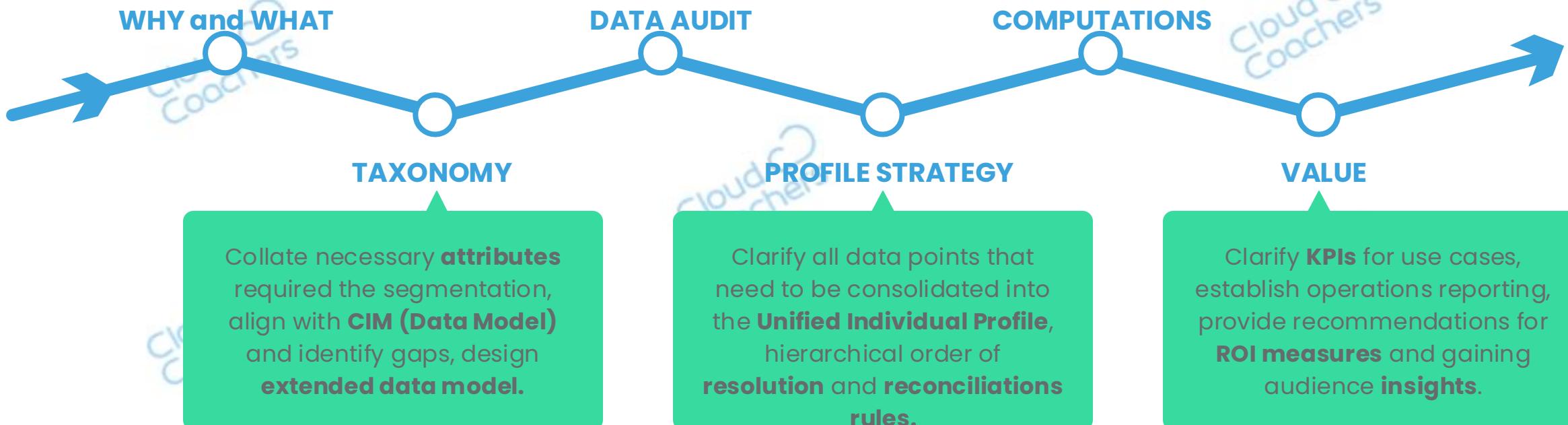
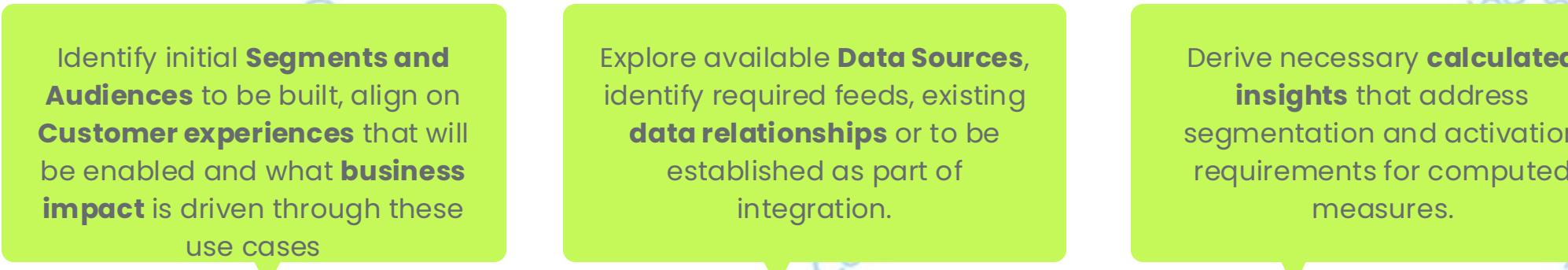
Implementation Tips



Implementation phases



Implementation Methodology



Discovery questions



What should I ask in a discovery?

Data Capture

- What data sources do you have and need for your marketing?
- In what systems are they stored?

Data Unification

- How do you manage deduplication? How do you keep your data quality high?
- What is the leading system for Customer Identity management?

Segmentation

- What are your customer personas/segments/cohorts?
- What rules and attributes defines them?
- Which team manages your segmentation?

Activation

- Which are your activation channels?

Insights / AI

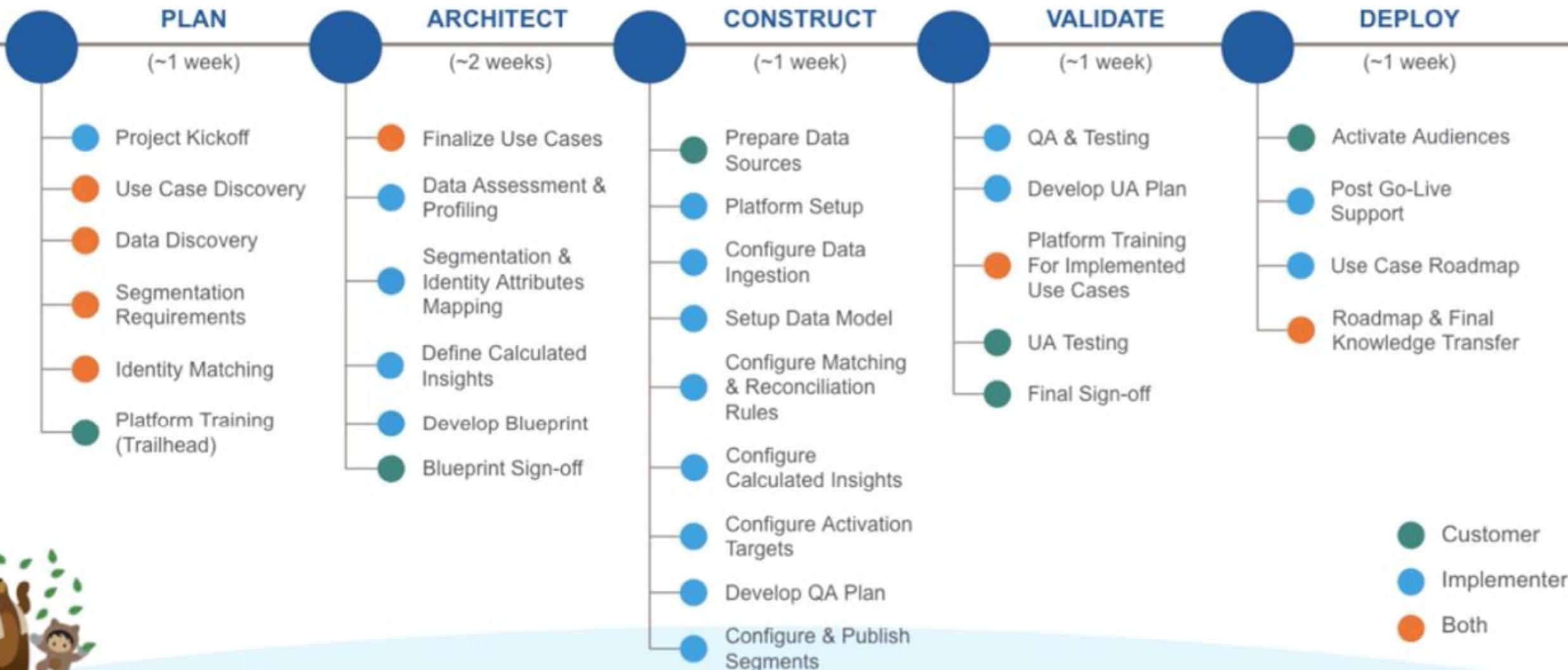
- How do you optimize your segmentation strategy and your ROI ?
- How do you find new potential segments?



QuickStart Implementation Overview

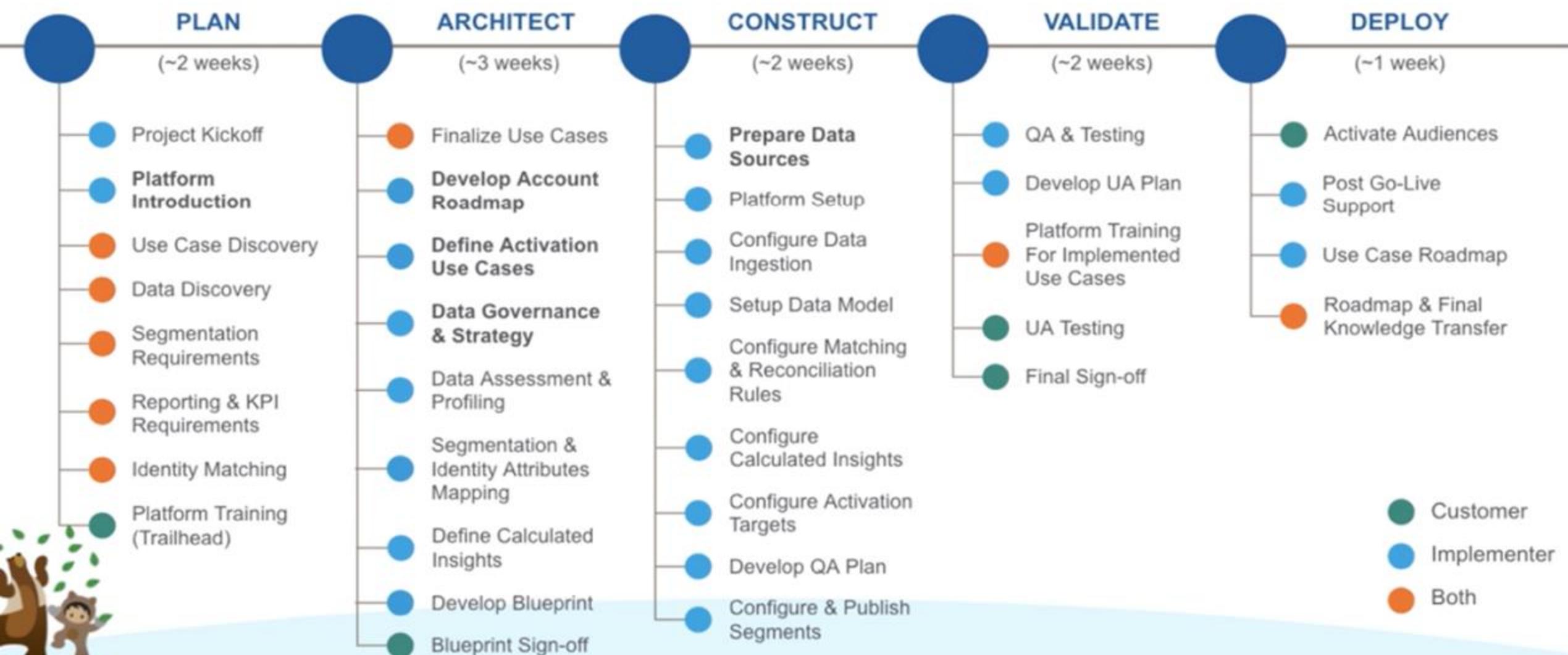


CDP Add-on To Established Marketing Cloud Account



Foundations Implementation Overview

CDP And Marketing Cloud Account Simultaneously

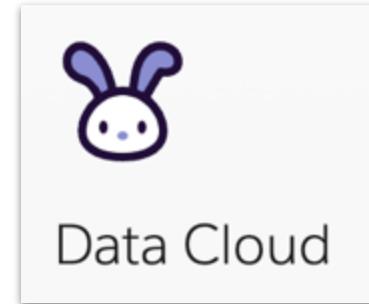


Login details - Data Cloud



Login URL:

<https://login.salesforce.com>



User	Password
marketingcloud+cdpa@cloudcoachers.com	journey.sep24
marketingcloud+cdpb@cloudcoachers.com	journey.sep24
marketingcloud+cdpc@cloudcoachers.com	journey.sep24
marketingcloud+cdpx@cloudcoachers.com	journey.sep24

Login details

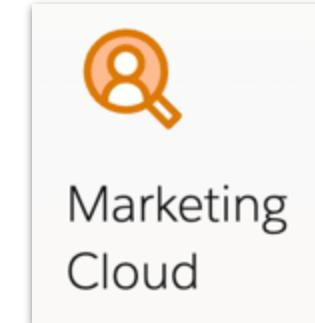
Cloud Co
Coachers



Login URL*:

<https://mc.exacttarget.com>

*Google Chrome recommended



User	Password
CC_1_MC23	journey.ABR24!
CC_2_MC23	journey.Jun23
CC_3_MC23	journey.ABR24!
CC_4_MC23	journey.Sep24

Cloud Co
Coachers

salesforce

Verificar su identidad

Para mantener su cuenta segura, verificamos su identidad.

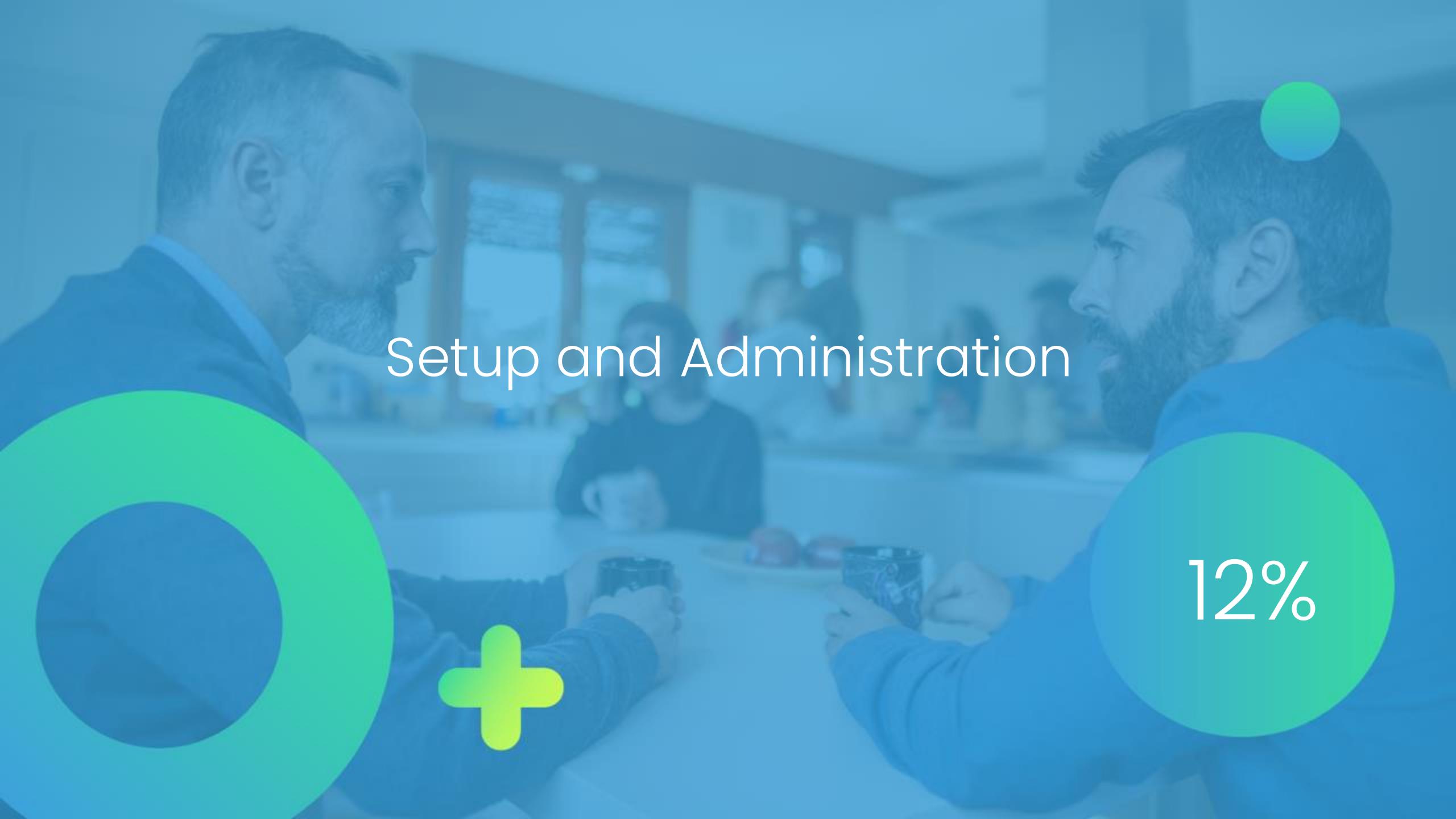
Introduzca el código generado por su aplicación de autenticador.

Acción: Login

Cuenta: CC_1_May21

Código de verificación: _____

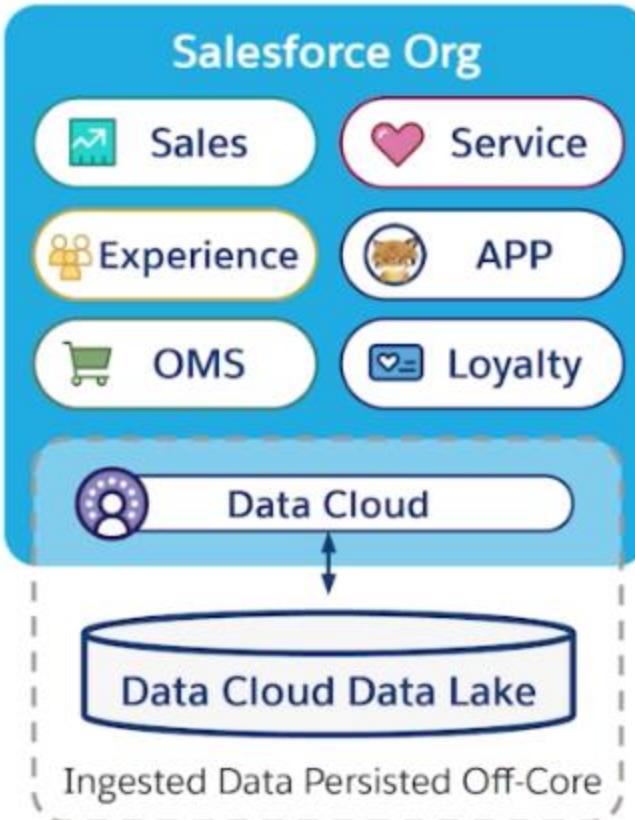
Cancelar Verificar

A photograph of a workshop or classroom setting where several people are gathered around a table, focused on some activity. A large, semi-transparent circular graphic is overlaid on the image. The top half of the circle is a light teal color, while the bottom half is a darker blue. In the center of this circle is a bright yellow-green plus sign. To the right of the circle, the text "12%" is written in white.

Setup and Administration

12%

Data Cloud Provisioning options

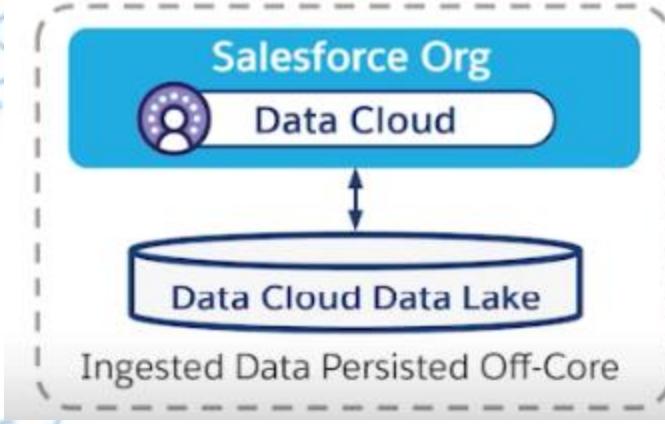


Existing Customer
“Data Org”



Existing Customer
“Data Org(s)”

CRM Connector



Standalone
“Home Org”

Setup I - Provision CDP



1. Assign User Permissions
2. Provision your instance:
 - a. Once you see Data Cloud ready as an application...
 - b. Setup > CDP Setup > Get Started



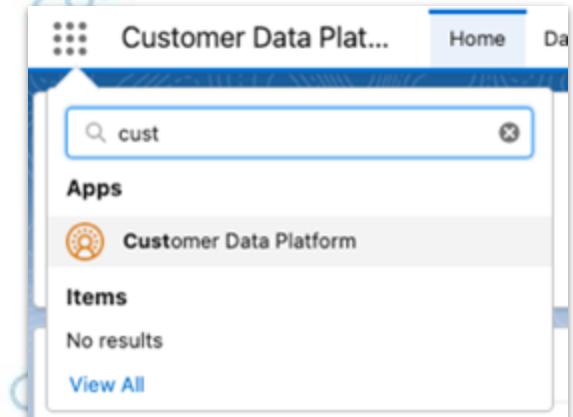
Are you ready to set up Customer Data Platform?

- ✓ Planning your Customer Data Platform instance.
- ✓ Creating your Customer Data Platform instance.
- ✓ Populating your Customer Data Platform instance.
- ✓ Ensuring your instance is ready.

Your instance is located on: **CDP1-AWS-PROD1-USEAST1** ⓘ

Tenant Specific Endpoint ⓘ

gy2tgmdcmnsd9mbrgfsgmmjzm0.c360a.salesforce.com



User Permissions

1. Grant *Data Cloud Admin* Permission Set to the Admin user

1. Grant User Permission sets to the users:
 - a. Data Cloud User
 - b. Data Cloud Marketing Admin
 - c. Data Cloud Marketing Manager
 - d. Data Cloud Marketing Specialist
 - e. Data Cloud Data Aware Specialist

https://help.salesforce.com/s/articleView?id=sf.c360_a_userPermissions.htm&type=5

Permission Sets

On this page you can create, view, and manage permis

In addition, you can use the SalesforceA mobile app to

All  Edit | Delete | Create New View

<input type="checkbox"/>	Action	Permission Set Label
<input type="checkbox"/>	Clone	Data Cloud Admin
<input type="checkbox"/>	Clone	Data Cloud Data Aware Specialist
<input type="checkbox"/>	Clone	Data Cloud Marketing Manager
<input type="checkbox"/>	Clone	Data Cloud Marketing Specialist
<input type="checkbox"/>	Del Clone	Data Cloud Salesforce Connector

User Permissions



- **Data Cloud Admin** – Access all functionality within Data Cloud, including mapping data to the data model and creating data streams, identity resolution rulesets, and calculated insights. Responsible for setup and assigning permission sets. **He cannot segment or activate!**
- **Data Cloud User** – View Data Cloud features.
- **Data Cloud for Marketing Admin** – similar to Admin. Can administer Segmentation and Activation.
- **Data Cloud for Marketing Data Aware Specialist** – Map data to the data model and create data streams, identity resolution rulesets, and calculated insights.
- **Data Cloud for Marketing Manager** – Can manage an overall segmentation strategy, including creating activation targets and activations.
- **Data Cloud for Marketing Specialist** – Create segments.

Data Cloud Permissions



Table key: Full Access View Only Access Denied

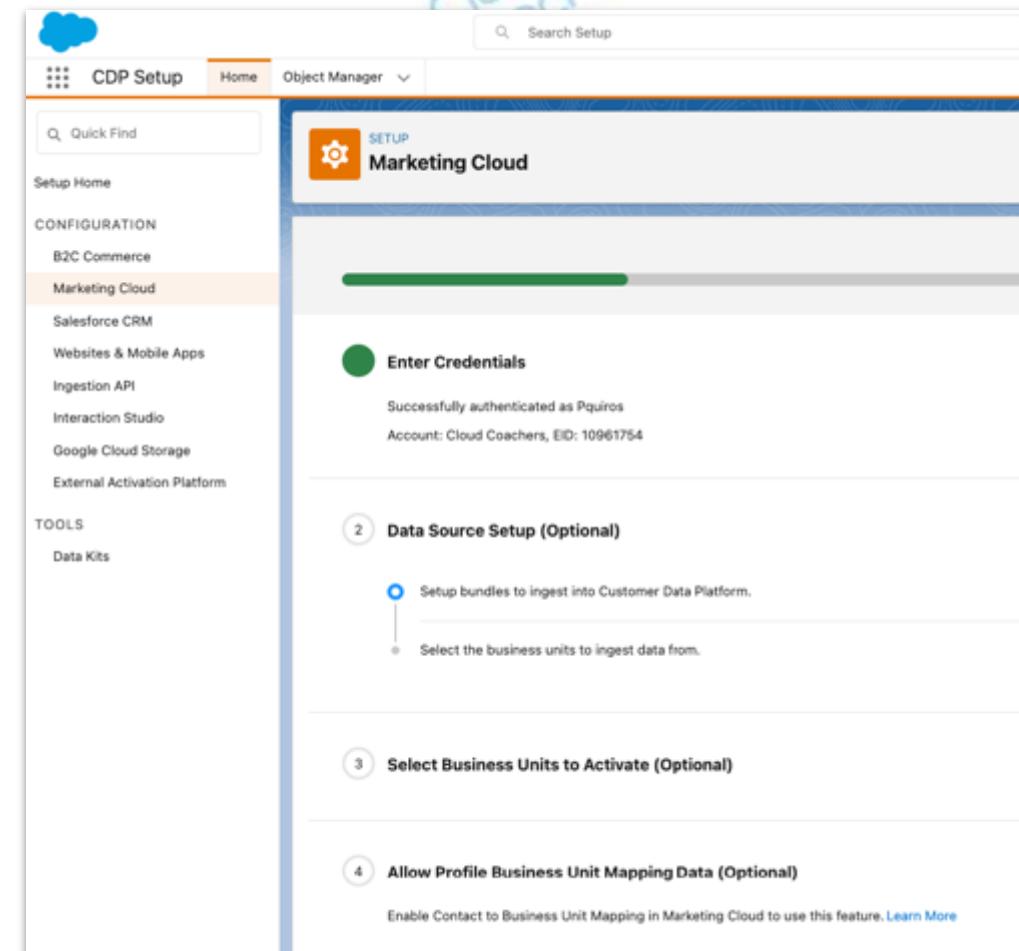
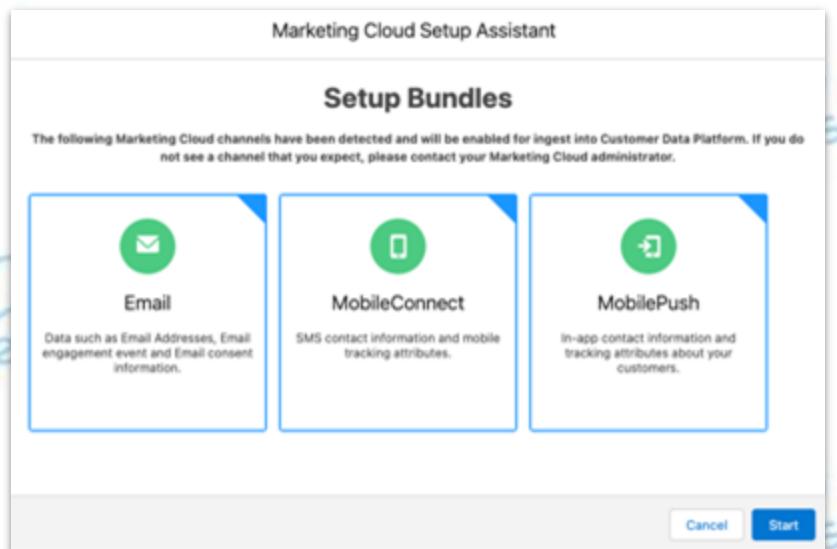
FEATURE	DATA CLOUD ADMIN	DATA CLOUD USER	DATA CLOUD FOR MARKETING ADMIN	DATA CLOUD FOR MARKETING DATA AWARE SPECIALIST	DATA CLOUD FOR MARKETING MANAGER	DATA CLOUD FOR MARKETING SPECIALIST
Data Cloud Setup						
	If the user is also a Salesforce admin		If the user is also a Salesforce admin			
Data Space Management						
Data Space Data Addition						
Data Streams						
Datashares						
Data Lake Objects						
Data Transforms						

Setup II - Connect to MC



Data Cloud Setup > Marketing Cloud

- a. Credentials
- b. Setup Bundles
- c. Business Units
- d. Profile Business Unit Mapping Data



Setup III - Connect to SF Dev Org



Data Cloud Setup > Salesforce CRM

Note: Number of orgs you can connect will depend on your Billable usage

SETUP
Salesforce CRM

Connectors

Connector Name ↑	Connector Type	Status	Updated
1 Cloud Coachers	Salesforce CRM	Active	Jan 16, 2023, 01:07 PM

Standard Data Bundles ⓘ

Name ↑	Installed Version	Latest Version
Salesforce CDP CRM Loyalty	--	1.0
Salesforce CDP CRM Sales	--	1.1
Salesforce CDP CRM Service	--	1.2
Salesforce CDP CRM Unified Health Scoring	--	1.1

Connect an Org

i Connect Salesforce orgs to use as new data sources and data action targets. [Visit Salesforce Help to Learn More.](#)

Cloud Coachers
Org Id: (00DDn000008gwhL)
Sign in to connect home org as a new data source and Data Action Target. **Connect**

Connect Another Org
Sign in to connect another org as a new data source and Data Action Target. **Connect**

Connect a Sandbox Org
Sign in to connect a sandbox org as a new data source and Data Action Target. **Connect**

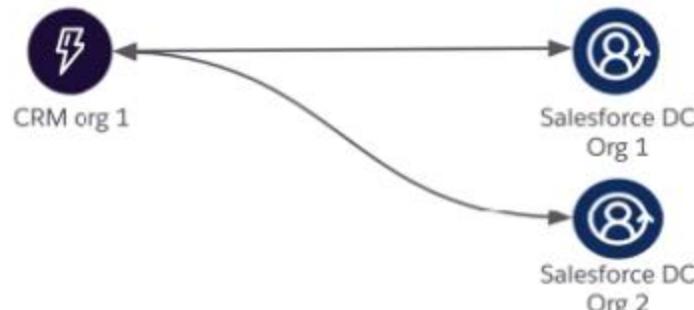
Cancel

CRM - Data Cloud Topology



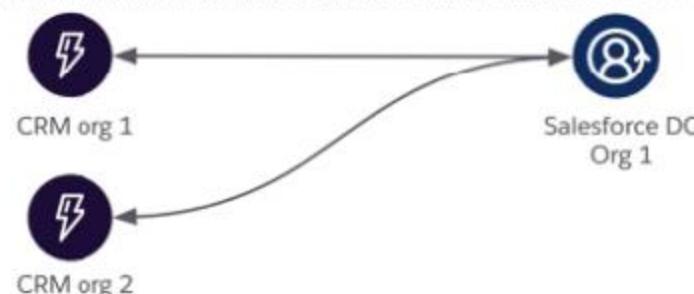
1 CRM org to 1 DC Org
(1:1)

A single CRM instance to a single Data Cloud instance (1:1) e.g. Home Org has both Data Cloud and Loyalty Cloud in the same Org.



1 CRM org to Multiple
DC Orgs (1:n)

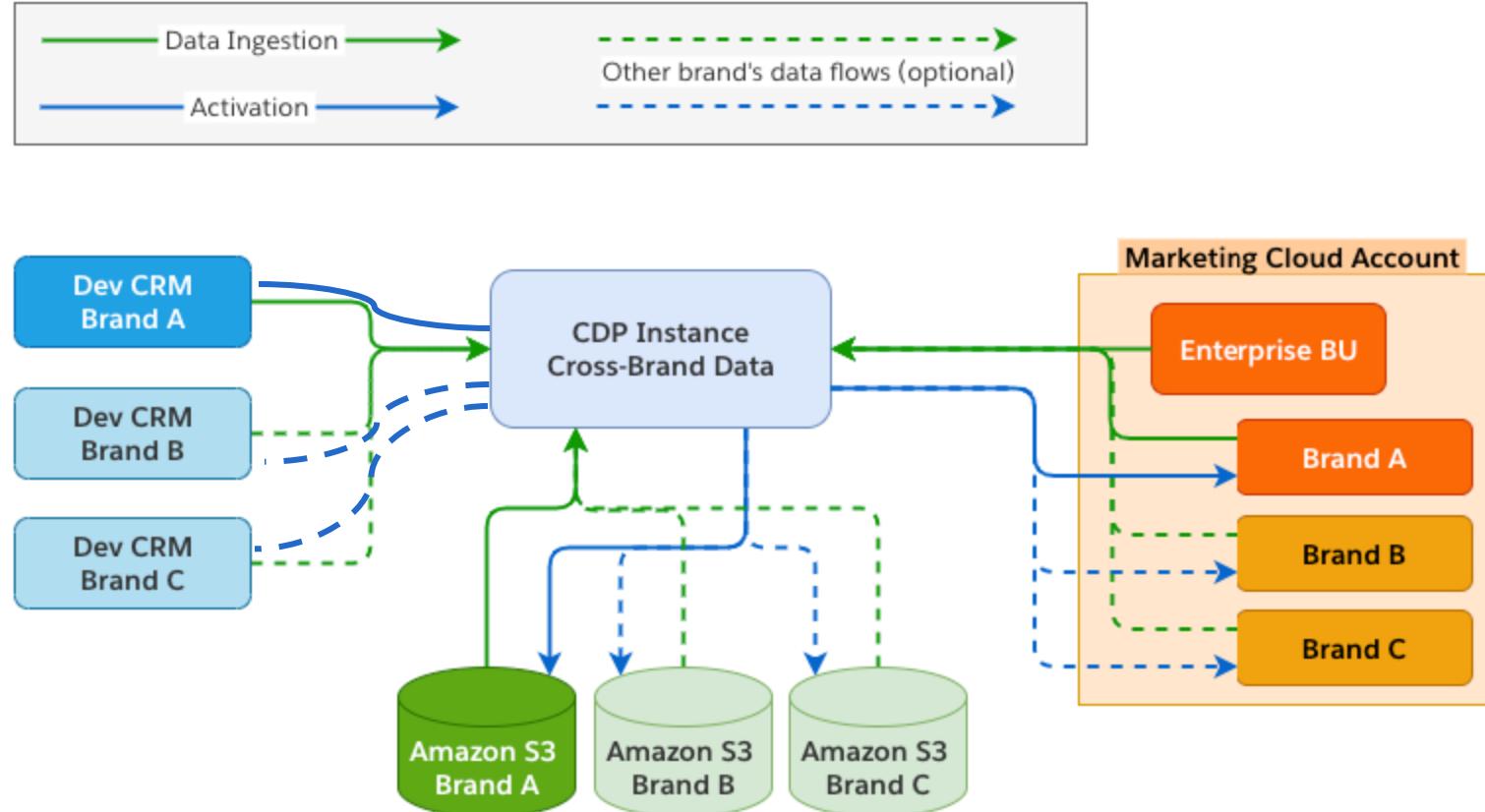
A single CRM instance to more than one Data Cloud instances (1:M) e.g. a single CRM org needs to be segregated by regions or brands



Multiple CRM orgs to
a single DC Org (n:1)

More than one CRM instance to a single instance (M:1) e.g. brand data is aggregated from multiple CRM instances into a single instance (in Data Cloud) for consolidated view.

Example of Integration Diagram

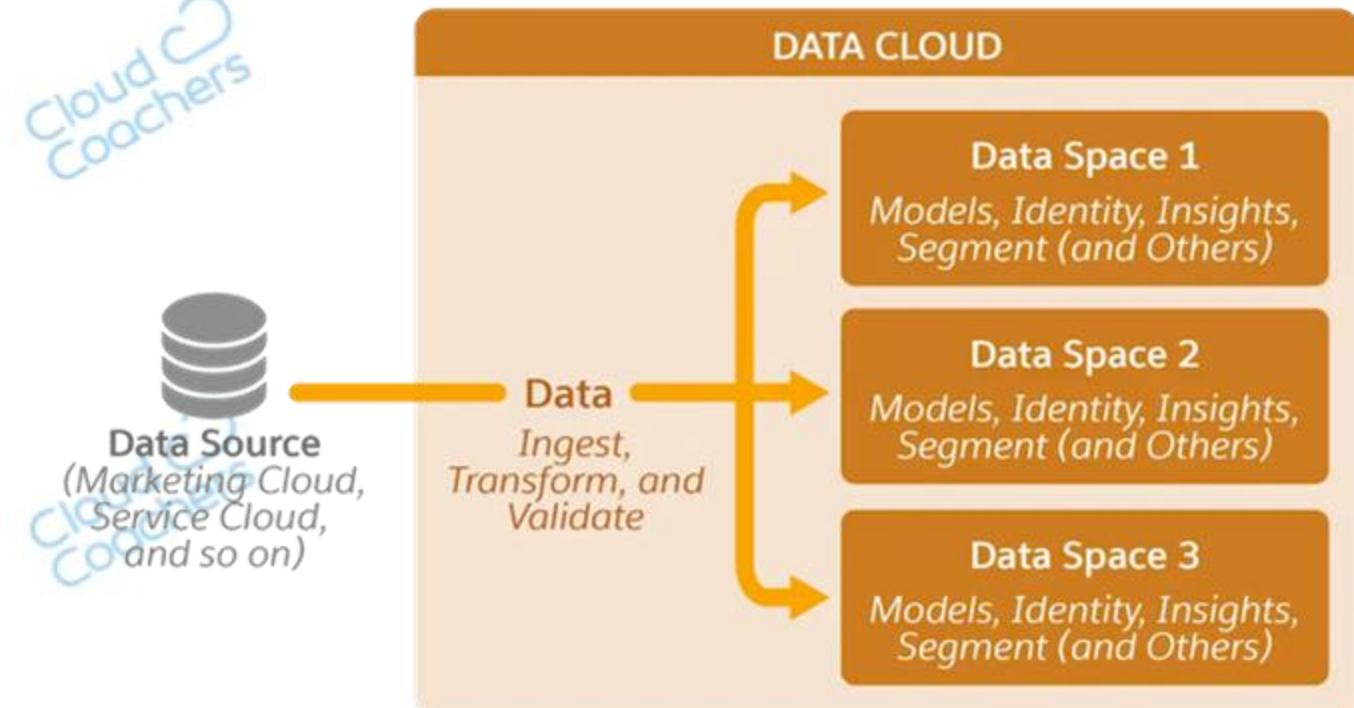


Data Spaces

A logical partitioning of data within a single Data Cloud Instance.

Create a data space to organize data to fit your business needs.

You can segregate your data, metadata, and processes by categories, such as brand, region, or department. Once segregated, users can be granted access to a data space.



Data Spaces - Use Cases



- You're using a single Data Cloud instance and need the flexibility of running multiple brands, regions, and departments.
 - Your business requires your users to see and work on data only in the context of their brand or region.
-
- ✓ Use a single instance of Data Cloud for multiple brands, regions, or departments.
 - ✓ Segregate your data, metadata, and processes for these brands, regions, and departments with full autonomy.
 - ✓ Manage user access control to designated data spaces through permission sets.

Data Spaces – when to use them?



When to use Data Spaces

Single Data Cloud for multiple brands, regions, departments etc

Brands/dept /region need data and process segregation

When to NOT use Data Spaces

Cross brand/region data unification is the main scenario

Data Spaces are NOT a Data residency solution

Data Spaces permissions



FEATURE	DATA CLOUD ADMIN	DATA CLOUD USER	DATA CLOUD FOR MARKETING ADMIN	DATA CLOUD FOR MARKETING DATA AWARE SPECIALIST	DATA CLOUD FOR MARKETING MANAGER	DATA CLOUD FOR MARKETING SPECIALIST
Create, edit, and delete a data space	✓	✗	✓	✗	✗	✗
Add data to a data space	✓	✗	✓	✓	✗	✗

Multi-Brand Management (MC)

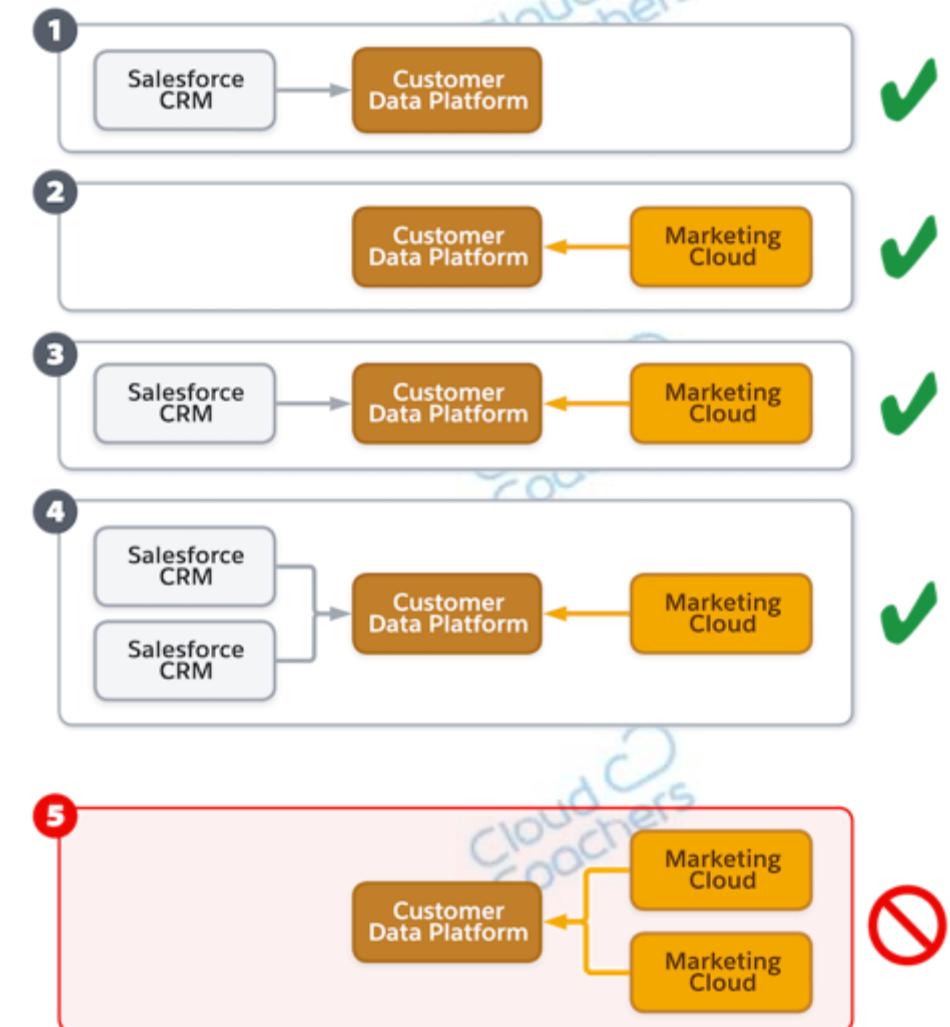


Data Cloud can only receive data from one Marketing Cloud (MC) Enterprise ID (EID).

Within one Marketing Cloud EID, you can selectively map multiple business units (BU) to get data flowing into Customer Data Platform, which tracks the data lineage of this data.

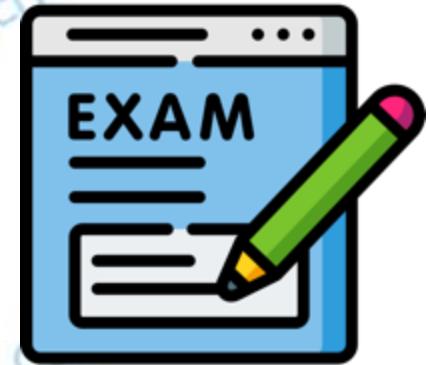
You can also add the data lineage field to filter out different BUs data to create a segment with only selected BUs.

You can connect up to 5 SF CRM orgs to CDP.



Data Cloud some Limits and Guidelines

- Data Cloud Permission Set Licenses = 20000
- Fields per Data Stream = 1050
- Total number of Data Lake Objects = 5000
- Total number of data models = 7500
- Anonymous profiles = Known profiles x5
- Total number of Calculated Insights = 300
- Number of Filters in a Segmentation = 100
- Maximum number of scheduled Publishes per segment per day = 2
- Scheduled Activation Publish Frequency: min 12 - max 24 h
- Number of Activation Targets
 - 10 external
 - 300 in Corporate and Enterprise Edition
- Total Number of Attributes added in an activation = 100
- Total number of attributes with value suggestions = 500





Ethics, Privacy and Consent



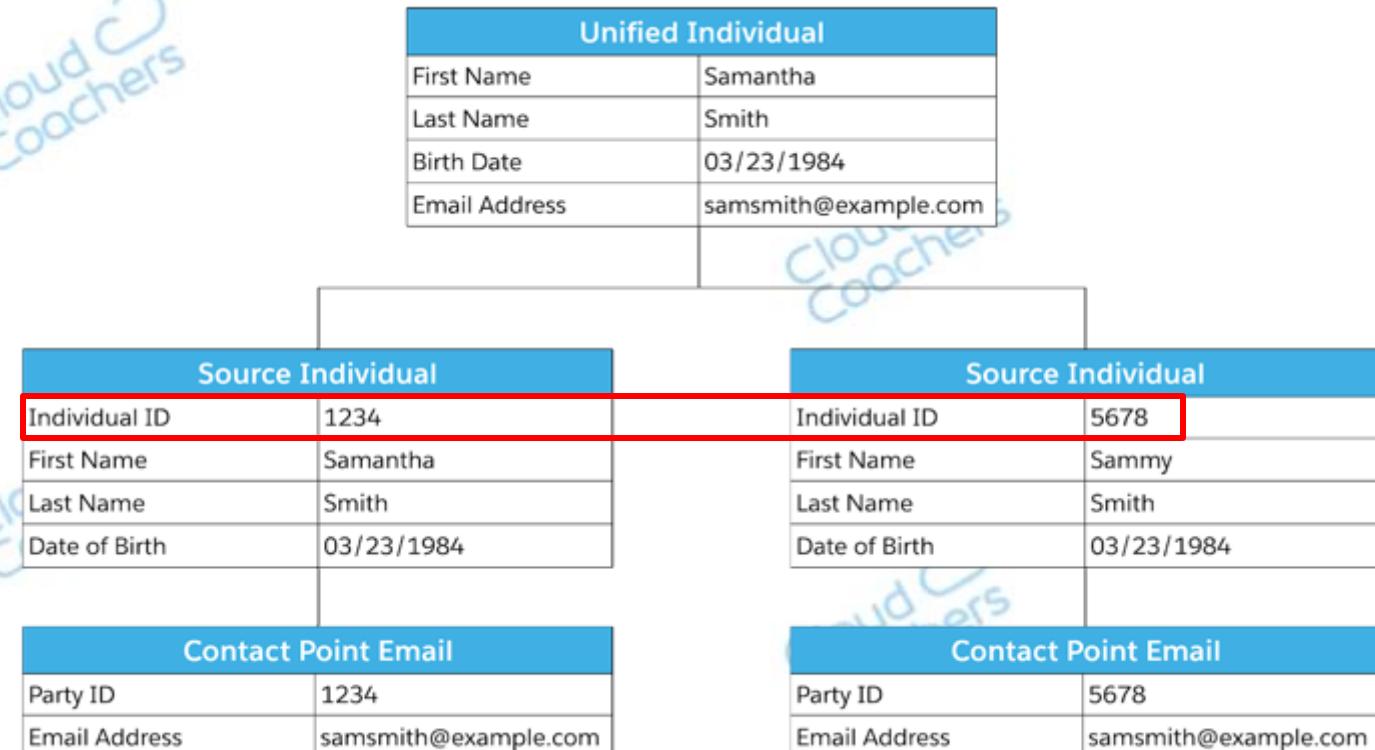
Ethics, Privacy and Consent



Earning and keeping customer trust increasingly means adopting data ethics best practices when using Data Cloud.

Data Subject Rights Request:

- Submit Data Subject Rights requests using **Individual ID** as the identifying parameter.
- Requests must be submitted and processed separately in all connected Salesforce Clouds, including Commerce Cloud.



Right to be Forgotten



- You can submit Data Deletion requests for Individual profiles in Data Cloud.
- All requests must be submitted using the Consent API.
- A Data Deletion request deletes the specified Individual entity and any entities where a relationship has been defined between that entity's identifying attribute and the Individual ID attribute.
- Data Deletion requests are reprocessed at 30, 60, and 90 days to ensure a full deletion.
- You must submit any data deletion requests in all connected systems and Salesforce clouds.

Restriction of Processing



- You can submit Restriction of Processing requests for **Individual** and **Unified Individual** profiles in Data Cloud.
- All requests must be submitted using the Consent API.
- Restriction of Processing requests restrict all data processing for the specified Individual and Unified Individual profiles within 24 hours.
- Carefully consider consumer rights and expectations when building segments based on objects other than Individual and Unified Individual.
- Submit any Restriction of Processing requests in all connected systems and Salesforce clouds.

Consent API and Data Cloud



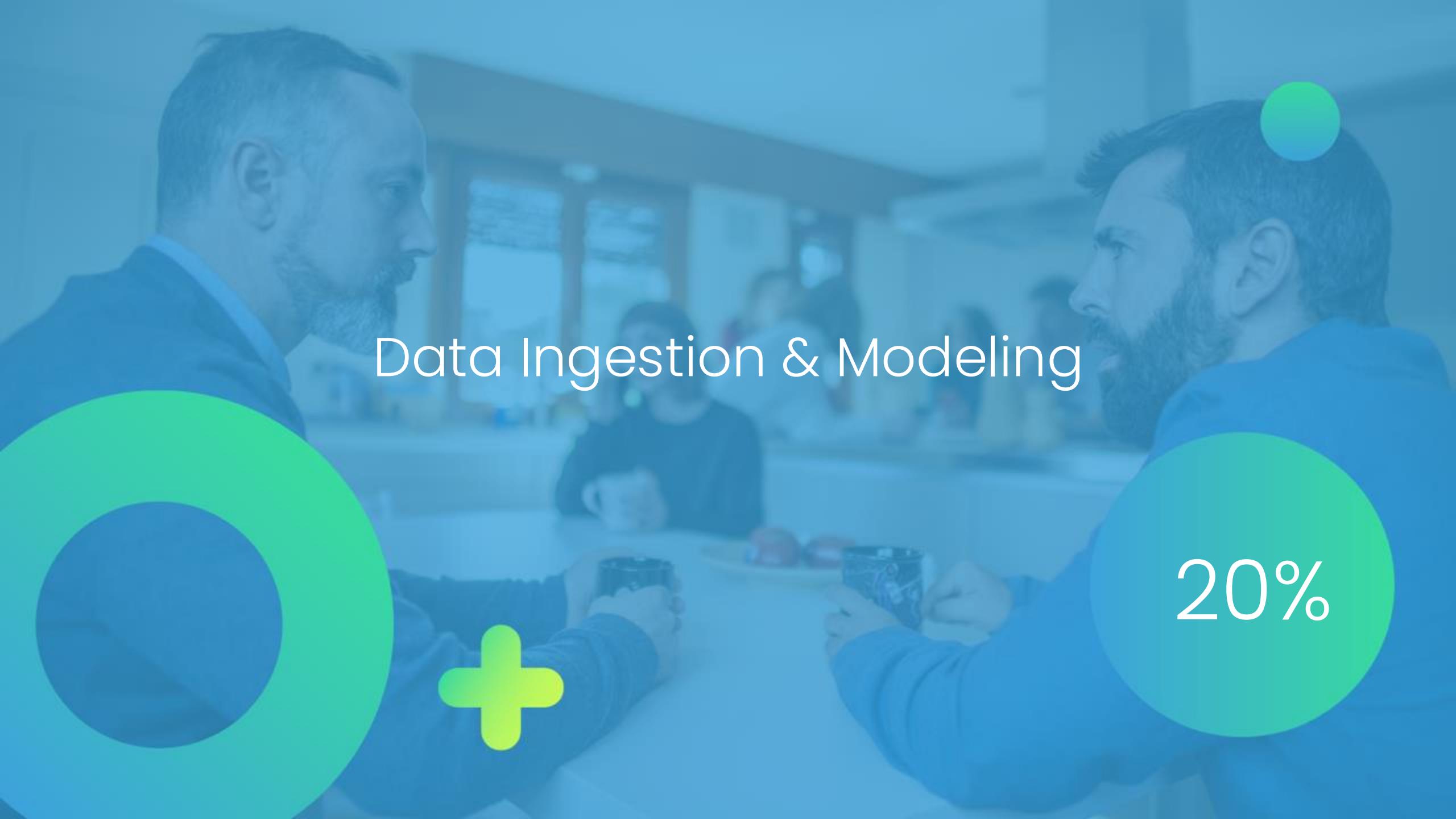
Use the Consent API to read and write to the Data Cloud profile.

To use Data Cloud parameters for Consent API, you must have either the ModifyAllData or the ConsentApiUpdate user permission.

Requiring a permission ensures that the Salesforce admin gives explicit permission.

Actions supported:

- Processing
- Portability
- Shouldforget

A man with a beard and short hair, wearing a dark suit jacket over a white shirt, is looking towards the right side of the frame. He is positioned in front of a presentation slide with a blue background and white text. On the slide, there is a large green circle on the left containing a smaller blue circle, and another green circle on the right containing the text "20%". A yellow plus sign is overlaid on the bottom center of the slide. In the background, there are other people in a room, and a window showing a view of the outdoors.

Data Ingestion & Modeling

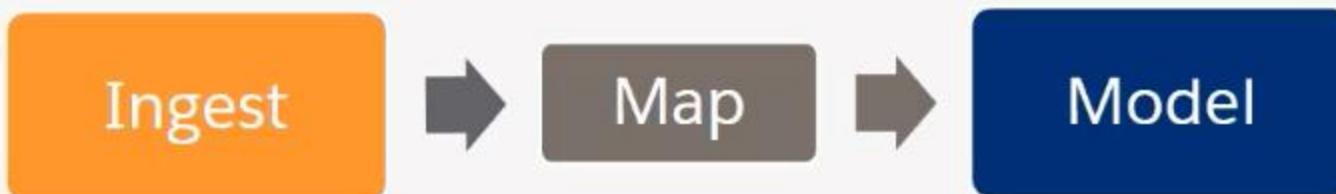
20%

Data Ingestion and Modeling



1. Bring in all raw data
2. Model it

- 2 step process with clear separation between Ingestion and Modeling
- Preserve data per source schema with ingestion to data lake
- Map ingested data to create Data Model with consistent semantics
- Harmonize data in alignment with Cloud Information Model (CIM)
- Marketers work on top of Data Model abstracting them from source schemas



OOTB Data Cloud Connectors



Salesforce Clouds		Connectors & Integrations		API and Mobile
CRM Marketing Cloud B2C Commerce Marketing Cloud Personalization		Amazon S3 Google File Storage SFTP Connector Azure Storage PostgresSQL Meta Ads Google Ads Amazon Kinesis		Web SDK Mobile SDK Ingestion APIs

Third-Party Data Cloud Connectors



Adobe Marketo Engage Connector
ActiveCampaign Connector (Beta)
Amazon Kinesis Connector
Amazon S3 Storage Connector
Azure Storage Connector
Azure Synapse Connector (Beta)
Databricks Connectors (Beta)
Elasticsearch Connector (Beta)
Google Ads Connector
Google Cloud Storage Connector

Jira Connector (Beta)
MariaDB Connectors (Beta)
Meta Ads Connector
MySQL Connectors (Beta)
Oracle Fusion Cloud HCM Connector (Beta)
Oracle Fusion Cloud SCM Connector (Beta)
Oracle Fusion Cloud Financials Connector (Beta)
Oracle Eloqua Connector (Beta)
Oracle Sales Cloud Connector (Beta)
Oracle Service Cloud Connector (Beta)

PostgreSQL Connectors
SAP Hybris Connector (Beta)
SAP SuccessFactors Connector (Beta)
SFTP Connector
SQL Server Connectors (Beta)
ServiceNow Connector (Beta)
ShipStation Connector (Beta)
SingleStore Connector (Beta)
SuiteCRM Connector (Beta)
WooCommerce Connector (Beta)
Zendesk Connector (Beta)

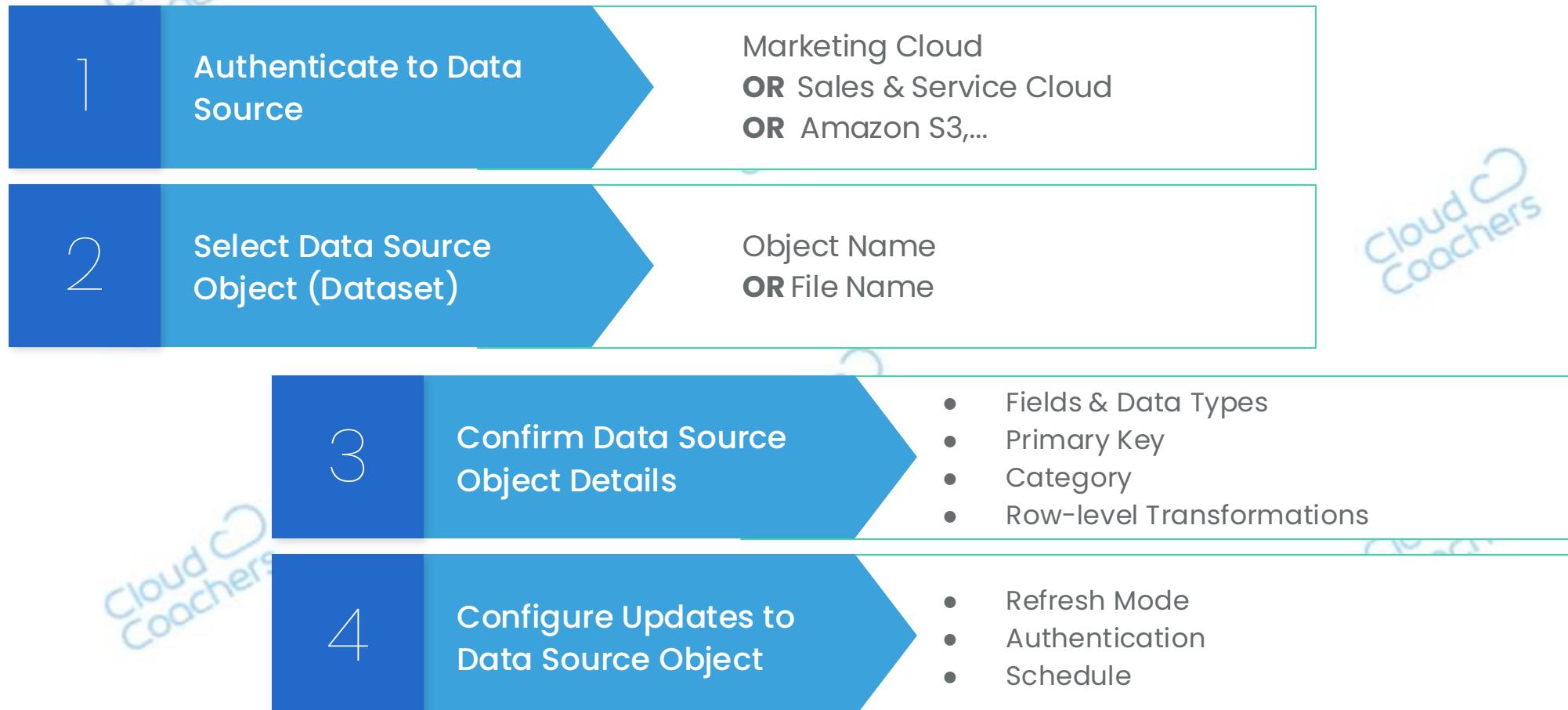
Data Source Objects (DSO)



- Marketing Cloud → Data Extensions
- Salesforce CRM → Objects (Contact, case, lead,...)
- B2C Commerce → Sales Order Entity, Sales Order Customer Entity...
- Amazon S3 or Google Cloud Platform → file name (supports wildcard character (*))

Ingestion

Steps to Bring in Data Source Object “As-Is”



New Data Stream



New Data Stream

Select a source for the data stream to unify your data.

Connected Sources



Marketing Cloud
Starter data bundles and Data Extensions



Salesforce CRM
Import objects from Salesforce CRM



Mobile App
Import events from iOS and Android applications



Website
Import events from your connected websites.



Ingestion API
Stream and/or bulk upload data from external sources



Interaction Studio
Marketing Cloud Interaction Studio Bundle

Other Sources

Load a sample file in order to teach the system about your file's structure. At the end of this set up flow, you'll be able to specify where data should be retrieved from on an ongoing basis.



Amazon S3
Retrieve a file from Amazon Simple Storage Service



Leverage the CDP Connector in MuleSoft Anypoint Platform to more easily integrate with Salesforce CDP.
[Learn More in MuleSoft](#)

Mulesoft Anypoint Exchange



Mulesoft Anypoint Exchange

Access these pre-built connectors and more from Mulesoft Anypoint Exchange. [Learn more](#)

Adobe Marketo	Amazon DynamoDB	Amazon EC2	Amazon Kinesis
Amazon Lambda	Amazon RDS	Amazon Redshift	Amazon S3
Amazon SNS	Amazon SQS	AMQP	Anypoint Custom Metrics
Anypoint MQ	Apache Cassandra	Apache Kafka	AS2
Asana	Azure Cosmos DB	Azure Data Lake Storage	Azure Key Vault
Azure Key Vault Properties Provider	Azure Service Bus	Azure Service Bus Management	BMC Remedy
Box	CAQH	CloudHub	Confluent Schema Registry
Database	DocuSign	Dropbox	EDIFACT EDI
Email	File	FTP	FTPS
Gmail	Google BigQuery	Google Calendar	Google Drive

New Data Stream



New Data Stream

Customer-defined System-defined

Review and optionally edit labels or add formula fields before continuing to the next step.

SFMC Ent Profile Attribute 10961754

Header Label	Field Label	Field API Name	Formula Field	Data Type
1 All Business Units	All Business Units	AllBusinessUnits		Text
2 Curso Interes	Curso Interes	Cursointeres		Text
3 Loyalty_NTO_Beltran	Loyalty_NTO_Beltran	Loyalty_NTO_Beltran		Text
4 Company_name	Company_name	Company_name		Text
5 Birthdate	Birthdate	Birthdate		DateTime (yy)
6 First_Name	First_Name	First_Name		Text
7 Tratamiento	Tratamiento	Tratamiento		Text
8 Recibir comunicaciones por SMS	Recibir comunicaciones por S...	RecibircorrespondenciasporSMS		Number
9 Country	Country	Country		Text
10 SubscriberID	SubscriberID	SubscriberID		Text
11 Gender	Gender	Gender		Text
12 Party Identification Name	Party Identification Name	PartyIdentificationName		Text
13 Recibir Docs Alumnos	Recibir Docs Alumnos	RecibirDocsAlumnos		Number

New Data Stream

Review all data stream fields and edit as needed. The data types can't be changed after data stream creation, so review these carefully.

Category	quiros_ntosubscribers_may22 (15)			New Formula Field
	Header Label	Field Label	Field API Name	Form
Profile Data	1	Data Source	DataSource	✓
Engagement Data	2	Data Source Object	DataSourceObject	✓
Other Data	3	Internal Organization	InternalOrganization	✓
Primary Key	4 Store_ID	Store_ID	store_id	
Customer_Number	5 State	State	state	
	6	Opt_in_Date	opt_in_date	✓
	7 MyNTO_Level	MyNTO_Level	mynto_level	
	8 MyNTO_Balance	MyNTO_Balance	mynto_balance	
	9 Last_Name	Last_Name	last_name	
	10 Interest	Interest	interest	
	11 Gender	Gender	gender	
	12 First_Name	First_Name	first_name	
	13 Email_Address	Email_Address	email_address	
	14 Customer_Number	Customer_Number	customer_number	
	15	Birthdate	birthdate	✓

Previous



Next

Marketing Cloud Data Ingestion



Starter Data Bundles – Email Studio, Mobile Studio,...

- a. Messaging and engagement data (sends, opens, clicks, bounces, complaints, unsubscribes, Einstein Engagement Scores, campaigns, journey and email template metadata)
- a. Contact demographics: subscriber and enterprise profile attributes
- a. Contact points for each channel

Marketing Cloud Data Ingestion



Data Extension

All relationships must be manually configured.

Full Refresh ingest data every 24 hours. The Hourly schedule is how often CDP looks for data from MC.

Exporting Data from Marketing Cloud

- Full Refresh - <50M records
- Delta Extract by Date
- Delta Extract by Number

Starter Data Bundlers - MC



New Data Stream

[Starter Data Bundles](#) [Data Extensions](#)

Choose one of the Standard Marketing Cloud data bundles to quickly get started.

MobileConnect



Create, send, receive, and track SMS and MMS text messages using MobileConnect.

10 Streams Available

MobilePush



Marketing Cloud MobilePush lets you create and send push notifications to encourage use of your app.

16 Streams Available

Email Studio

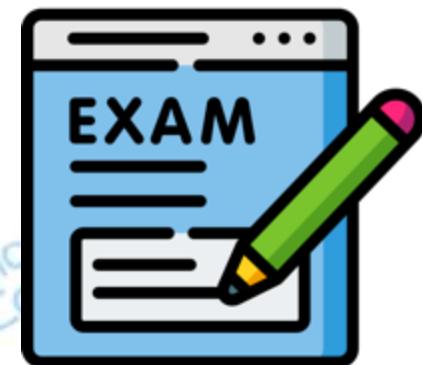


With Email Studio, build and send personalized email from basic newsletters to the most complex campaigns.

18 Streams Available

Data Stream Schedule

- B2C Commerce
 - Sales Orders - hourly
 - Product related info - Daily
- Cloud Storage - schedule or manual trigger
- Ingestion API - 15 minutes
- Interaction Studio - 2 min / full refresh 15 min
- Marketing Cloud
 - Standard data - daily
 - Standard data engagement - hourly
 - DE full extract - daily
 - DE Delta extract - hourly
- Salesforce CRM - hourly upserts



New Data Stream from SC



New Data Stream

i View All permissions are required for any standard or custom objects. [Tell Me More](#)

Select a Salesforce org and a Data Bundle, Object or Data Kit to create a new data stream.

* Salesforce Org

Marketing Cloud 2

Data Bundles All Objects Data Kits

Sales Cloud
 Manage leads, track progress, and automate sales processes with ease.

Service Cloud
 Automate service processes and streamline workflows to transform the agent experience.

Salesforce CRM Data Ingestion



- Starter Data Bundles
 - Sales Cloud bundle: account, contact and lead
 - Service Cloud bundle: Account, case, contact
 - Loyalty Cloud bundle: loyalty related objects (many!)
- Direct Object ingestion
 - Select and configure 1 object at a time
 - You need to map it to the CDP data model
- Data Kits
 - Packages for distribution using SF Platform Packaging.
 - Package data streams, model objects, insights.

Note: Custom objects and fields and some standard objects require that the CDP connector user has those rights, via the *Salesforce CDP Connector Integration* permission set.

Salesforce CRM Data ingestion



Custom Objects:

Add the [View All](#) and [Read](#) permissions to your *Data Cloud Salesforce Connector Integration* permission set in your Salesforce CRM org to ingest standard and custom objects and fields into Data Cloud.

- [View all](#) permissions for the object and its related objects.
- [Read](#) Access for each field.

Permission on the SF org containing the object.

Configure Data Ingestion

Hands on Lab

Marketing Cloud Starter Data bundle:

https://help.salesforce.com/s/articleView?id=sf.c360_amc_bundle_data_categories.htm&type=5

- sends, opens, clicks, bounces, complaints, and unsubscribes.
- A user-defined table called “enterprise profile attributes”.

Lab: Marketing Cloud Data Extensions (custom)

Data in the Marketing Cloud



Upload a package to Marketing Cloud with some example Data Extensions.

Processing Completed (CC CDP Training).
Data extensions load completed. Please review below summary for detailed status.

Customer i
Data from requested data extension was cleared successfully. DataExtension - CustomerKey :FF:
Status = Success

Loyalty Profile i
Data from requested data extension was cleared successfully. DataExtension - CustomerKey :EB:
Status = Success

Loyalty Profile
Data extension populated with 390 records.
Status = Success

Marketing Preference i
Data from requested data extension was cleared successfully. DataExtension - CustomerKey :53:
Status = Success

Marketing Preference
Data extension populated with 2487 records.
Status = Success

Package Manager Deployment Search Term Feedback CC CDP Training Pquires

Deployed Packages > Install
cdp-training-238-mc-data-extensions

Package Upload ✓
Select a zip or a json file for upload, or configure an installed solution
cdp-training-238-mc-data-extensions Created on : January 16, 2023 at 1:17:04 PM Version 1

Package Customization ✓
Customize your deployment by namespace items and completing customization fields

Item Namespace i
Create in Folder Prepend to Name Append to Name Unique Timestamp
Example: object-name

Customization Fields i
No customization fields to configure

What happens in the MC,...



Workflow

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Extract...to S3							
Extract...to S3							
Extract...to S3							
Extract...to S3							
Extract...to S3							
Extract...to S3							
Extract...to S3							

Recent Activity

Complete Started: 16/01/2023 08:50 Completed: 16/01/2023 at 09:04			
Complete Started: 15/01/2023 08:50 Completed: 15/01/2023 at 09:00			
Complete Started: 14/01/2023 08:50 Completed: 14/01/2023 at 08:59			
Complete Started: 13/01/2023 08:50 Completed: 13/01/2023 at 08:57			
Complete Started: 12/01/2023 08:50 Completed: 12/01/2023 at 08:55			

[View Activity](#)

Data in the Commerce Platform (s3)



Upload files to S3 Bucket:

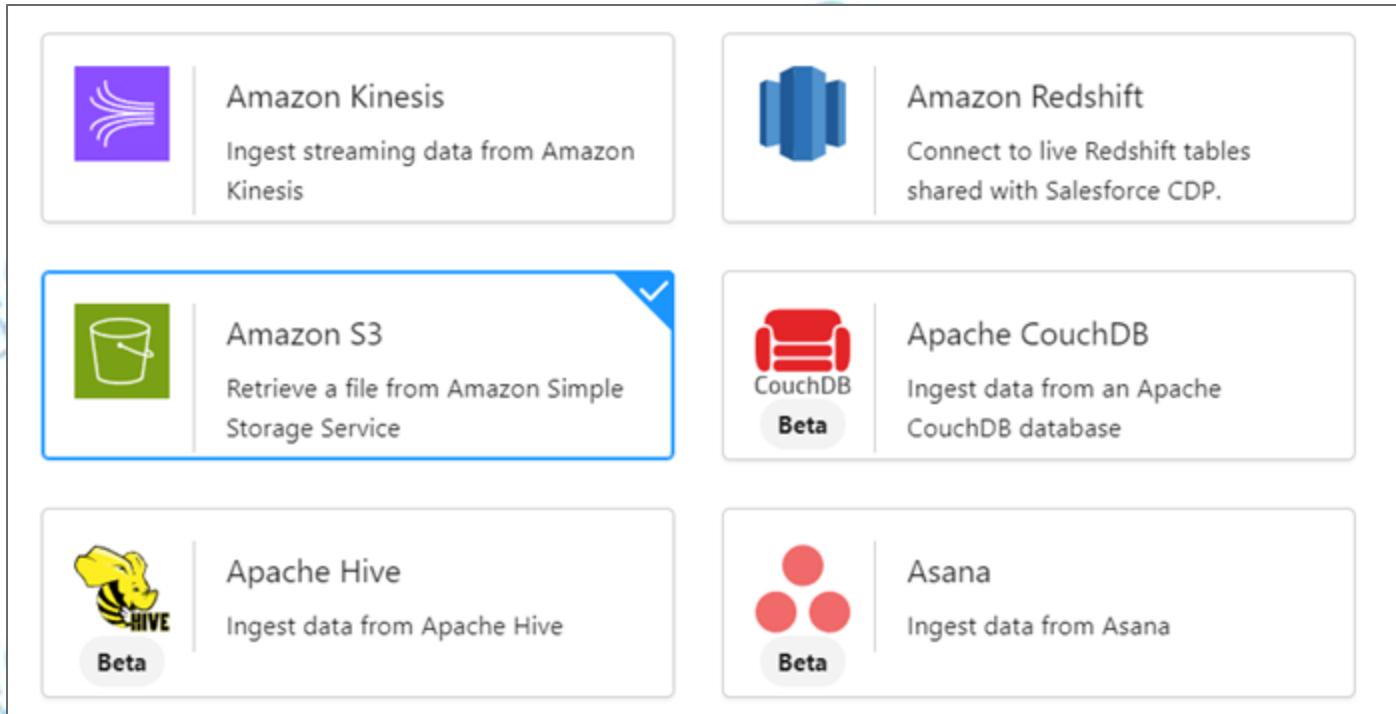
Objetos (6)

Los objetos son las entidades fundamentales que se almacenan en Amazon S3. Puede utilizar el [inventario de Amazon S3](#) para obtener una lista de todos los objetos en su bucket. Tendrá que concederles permisos de forma explícita. [Más información](#)

<input type="checkbox"/>	Nombre	Tipo	Última modificación
<input type="checkbox"/>	S3 Customer Profile.csv	csv	16 Jan 2023 1:42:24 PM CET
<input type="checkbox"/>	S3 Order Headers (1).csv	csv	16 Jan 2023 1:42:23 PM CET
<input type="checkbox"/>	S3 Order Headers.csv	csv	31 May 2022 7:54:34 PM CEST
<input type="checkbox"/>	S3 Order Line Items (1).csv	csv	16 Jan 2023 1:42:23 PM CET
<input type="checkbox"/>	S3 Order Line Items.csv	csv	31 May 2022 7:55:20 PM CEST
<input type="checkbox"/>	Salesforce-c360-Segments/	Carpeta	-

AWS S3 Ingestion

- In Data Cloud Setup navigate to 'Add Connection'
- Search for Amazon S3 (or other connector)



AWS S3 Ingestion

- Name your connection
- Fulfill the AWS access key and AWS secret access key
- Add the bucket Name and Parent Directory

New Amazon S3 Source

*Connection Name

*Connection API Name

Authentication Details

*Authentication Option Access Key/Secret Based Identity Provider Based

*AWS access key

*AWS secret access key

Connection Details

*Bucket Name

*Parent Directory

AWS S3 Ingestion



- Add a date stream
- Paste the name of the folder and of the file

New Data Stream

Select your Amazon S3 connection and choose your object(s).

*Connection

Amazon S3 x

Bucket Name
ai-datacloud

Parent Directory
/

File Details

*File Type

CSV

Parquet

Import from Directory i
ecommerce-data/

*File Name i
S3 Order Line Items.csv

Source Details

*Source i
AwsS3_Amazon_S3

Previous Next

S3 Bucket Permissions required

For Ingestion:

- GetBucketLocation
- GetObject
- ListBucket

For Activation:

- DeleteObject
- GetBucketLocation
- GetObject
- ListBucket
- PutObject

Data Streams

Cloud Coachers



11 items • Updated a few seconds ago

	<input type="checkbox"/> Data Stream Name	▼ Data Connector Type
1	<input type="checkbox"/> eComm Order 524005450	Amazon S3
2	<input type="checkbox"/> Mobile App Events-Behavioral Events 70B099B0	Websites & Mobile Apps
3	<input type="checkbox"/> eComm Customer Profile 524005450	Amazon S3
4	<input type="checkbox"/> MC Customer 524005450	Salesforce Marketing Cloud
5	<input type="checkbox"/> eComm Product Lookup 524005450	Amazon S3
6	<input type="checkbox"/> eComm Related Activity Lookup 524005450	Amazon S3
7	<input type="checkbox"/> eComm Line Item 524005450	Amazon S3
8	<input type="checkbox"/> eComm Store Number Lookup 524005450	Amazon S3
9	<input type="checkbox"/> MC Marketing Preference 524005450	Salesforce Marketing Cloud
10	<input type="checkbox"/> MC Loyalty Tier Lookup 524005450	Salesforce Marketing Cloud
11	<input type="checkbox"/> MC Loyalty Profile 524005450	Salesforce Marketing Cloud

Data Stream Properties



- Source Name – Identifies the source system.
- Category – Determines how data is used:
 - **Profile Data** – persona: individual, account, other profile, and contact points – like entity
 - **Engagement Data** – snapshot in time. Data is time-series oriented. Behavioral events or transactions, like clicks or purchases. Input for calculated insights.
 - **Other** – miscellaneous, like product or store data.

Category

Profile Data

Engagement Data

Other Data

* Primary Key

Select an Option

Record Modified Field i

Select an Option

Organization Unit Identifier

Select an Option

Category

Profile Data

Engagement Data

Other Data

* Event Time Field

Order Date

* Primary Key

Select an Option

Record Modified Field i

Select an Option

Organization Unit Identifier

Select an Option

Profile Data Category



- Primary Key:
 - uniquely identifies a given record within the data set
 - is used to establish whether a new record from the data source should be added to the DSO or an existing one should be updated
- Record Modified Field
 - reference point when the system is deciding whether to update the record continuously, calibrating the latest version of the record.
- Organization Unit Identifier
 - MC MID Business Unit...

The screenshot shows a configuration interface for a "Profile Data Category". At the top, there is a section titled "Category" with three radio button options: "Profile Data" (selected), "Engagement Data", and "Other Data". Below this is a section titled "* Primary Key" which contains a dropdown menu labeled "Select an Option". Further down are sections for "Record Modified Field" (with a dropdown menu) and "Organization Unit Identifier" (with a dropdown menu). The entire "Primary Key" section is highlighted with a blue border.

Engagement Data – Event Time Field



- Event Time Field is required when Category is Engagement
- The dropdown will show only fields of date type. Choose the date field that corresponds to when the event or action happened.
- For example, if the event were purchases, the event time field should correspond to when customer purchased. Ship date happens to be another date in the table, but in this case it is acting as an ancillary detail, not the time the event was actually recorded.

The screenshot shows a user interface for defining data fields. On the left, under 'Category', 'Engagement Data' is selected. Below it, the 'Event Time Field' dropdown is set to 'Purchase_Date', which is highlighted with a purple rectangle. Further down, 'Primary Key' is set to 'OrderID'. On the right, a table titled '7_21_2020_nto___order_headers_csv (12)' lists various fields with their header and field labels. A callout box titled 'Nerd Alert:' contains two pieces of explanatory text. The first text discusses how the event time field acts as a key for data partitioning. The second text explains how this field improves system performance by allowing for efficient querying and ingestion.

Header Label	Field Label
2	Data Source...
3	Internal Org...
4	Total_Amount
5	Store_ID
6	Shipping_Date
7	Purchase_Date

Nerd Alert:

While not officially part of the primary key definition, the event time does determine what “folder” this record gets slotted into in the lake, making it behave as a key when inserting data. That is to say, this should be an immutable field.

This field boosts both ingestion and query performance. If the system can focus on a subset of the lake provided by this date partition, the system increases efficiency.

Primary Key

Cloud Coachers



- The Primary Key enables the system to uniquely identify a record, so that as records are loaded into the object, the system can determine if an existing record should be updated or a new record should be created.

The screenshot shows the Salesforce Data Loader interface. On the left, there's a sidebar with category filters: Profile Data (unchecked), Engagement Data (checked), and Other Data (unchecked). Below that are sections for Event Time Field (Purchase_Date) and Primary Key (OrderID, which is highlighted with a purple box). At the bottom, there's an Organization Unit Identifier dropdown set to "Select an Option".

The main area displays a table titled "7_21_2020_nto___order_headers_csv (12)". The table has columns for Header Label, Field Label, Field API Name, Formula Field, and Data Type. The data rows are:

Header Label	Field Label	Field API Name	Formula Field	Data Type
2	Data Source...	DataSource...	✓	TEXT
3	Internal Org...	InternalOrg...	✓	TEXT
4	Total_Amount	Total_Amou...	total_amount	NUMBER
5	Store_ID	Store_ID	store_id	TEXT
6	Shipping_Date	Shipping_D...	shipping_da...	DATE (MM/dd/y...)
7	Purchase_Date	Purchase_D...	purchase_d...	DATE (MM/dd/y...)

Primary key out of a Formula



Composite Key: If one single field does not uniquely identify a row, we need to “concatenate” 2 fields, and for that we need to build a New Formula Field

- Click “New Formula Field” and write a formula concatenating “Order ID” with “SKU”; set the resulting formula as the “Primary Key”. See [help doc](#) for example.

The screenshot shows the Salesforce Formula Builder interface. On the left, under 'Category', 'Other Data' is selected. In the center, a new formula field is being created with the following details:

- Field Label:** OrderID_SKU
- Field API Name:** OrderID_SKU
- Formula Return Type:** Text
- Data Type:** TEXT
- Tested Value:** OrderID: 36058, SKU: 103210
- Output:** 36058_103210

The 'Transformation Formula' section contains the formula: `CONCAT(sourceField['OrderID'], "_", sourceField['SKU'])`. A purple arrow points from this formula text to the 'Output' field, which displays the result of the formula execution.

Data Source Object Schema



Suggested Data types
of the Data Source
object → Admin needs
to review and confirm
or adjust.

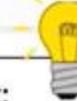
Pay special attention to
Date formats.

s3_order_headers_csv (12)			
Header Label	Field Label	Field API Name	New Formula Field
			Formula ...
1	Data Source	DataSource	✓
2	Data Source Object	DataSourceObject	✓
3	Internal Organization	InternalOrganization	✓
4	Total Amount	total_amount	Number
5	Store Number	store_number	Number
6	Status	status	Text
7	Order Number	order_number	Text
8	Order Date	order_date	DateTime (yyyy-MM-
9	Loyalty Points Accrued	loyalty_points_accrued	Number
10	Delivery Method	delivery_method	Text
11	Customer Number	customer_number	Text
12	aux-day-diff	aux_day_diff	DateTime (MM/dd/yy)

Data attributes



- **Header label:** column headers from raw data. Not editable.
- **Field label:** defaults to header label but is editable; it's the display name in C360 Audiences
- **Field API name:** programmatic reference to field
- **Formula field:** box is checked when it's a derived field.
- **Data type:** Supported data types are **text**, **number**, **date**. For fields of type date, make sure to validate the date format and override if necessary

Header Label	Field Label	Field API Na...	Formula Field	Data Type
Unit_Price	Unit_Price	unit_price	 Nerd Alert: Customer 360 Audiences automatically adds 3 Data Lineage fields: Data-Source, Data Source Object, Internal Organization to every table in order to track each record's origination.	NUMBER
Subtotal	Subtotal	subtotal		NUMBER
SKU	SKU	sku		TEXT
Quantity	Quantity	quantity		NUMBER
OrderID	OrderID	orderid		TEXT
Discount	Discount	discount		NUMBER

Row-level Transformations : Formulas



- Use them to define, cleanse or transform source fields
 - Ex: Primary Keys and Missing Attributes, Normalization (bucketing source data values), Standardization
- Row based calculation only
- Source fields always preserved
- 36 OOB functions
 - Type Conversions: SHA256, MD5, PARSEDATE
 - Date Calculations: DAYSBETWEEN, DAYPRECISION
 - Logical Expressions: IF, AND, OR, NOT
 - Text Manipulation: CONCAT, REPLACE, LEN, FIND, LOWER, CHAR, LEFT, RIGHT
- Supports different Operators (&&, ||, <, >, ==)

Formula example!



Cloud Coachers

Cloud Coachers

New Formula Field

Choose items from the functions and fields tabs to create a formula expression.

* Field Label: Party Identification Id
* Field API Name: Party_Identification_Id
* Formula Return Type: Text

Search function: More ▾

Transformation Formula:

```
CONCAT("PersonIdentifier_MCDEContactKey_", sourceField['Customer ID'])
```

Tested Value:
Customer ID: 123
Output: PersonIdentifier_MCDEContactKey_123

New Formula Field

Choose items from the functions and fields tabs to create a formula expression.

* Field Label: Transaction Weighting
* Field API Name: Transaction_Weighting
* Formula Return Type: Text

Search function: More ▾

Transformation Formula:

```
IF(sourceField['Total Amount'] < 50, 'Unrated', IF  
    (sourceField['Total Amount'] < 100, 'C', IF  
        (sourceField['Total Amount'] < 200, 'B', IF  
            (sourceField['Total Amount'] < 250, 'BB', IF  
                (sourceField['Total Amount'] < 350, 'A', IF  
                    (sourceField['Total Amount'] < 500, 'A+', 'AA'
```

Tested Value:
Total Amount: 420
Test Output: A+

CONCAT (sourceField['Customer ID'],
 '_ContactPointEmail_', sourceField['Email'])

Formula example II

https://help.salesforce.com/s/articleView?id=sf.c360_a_cleansing_data.htm&type=5

This use case scenario helps you convert hours in the day into dayparts in Salesforce CDP.

Scenario: Convert Hours in Day to Dayparts.

RAW DATA	GOAL
Raw data has a column called "Hour of Day".	Create a formula field "Daypart" that assesses the hour of the day and determines if the value is: Morning, Midday, Afternoon, Evening, Overnight.
<ol style="list-style-type: none">1. Set Field Label to Daypart.	
<ol style="list-style-type: none">2. Set Field API Name to daypart.	
<ol style="list-style-type: none">3. Set Formula Return Type to Text.	
<ol style="list-style-type: none">4. Write formula in syntax editor as: IF(sourceField['Hour of Day'] >= 6 && sourceField['Hour of Day'] < 10, 'Morning', IF(sourceField['Hour of Day'] >= 10 && sourceField['Hour of Day'] < 15, 'Midday', IF(sourceField['Hour of Day'] >= 15 && sourceField['Hour of Day'] < 19, 'Evening', IF((sourceField['Hour of Day'] >= 19 && sourceField['Hour of Day'] < 24) (sourceField['Hour of Day'] >= 0 && sourceField['Hour of Day'] < 6), 'Overnight', "Unclassified")))).	
<ol style="list-style-type: none">5. In the test input box, use the following combinations to validate the formula:<ol style="list-style-type: none">a. "Hour of Day" with the value of "6" returns "Morning".b. "Hour of Day" with the value of "12" returns "Midday".c. "Hour of Day" with the value of "18" returns "Evening".d. "Hour of Day" with the value of "19" returns "Overnight".e. "Hour of Day" with the value of "23" returns "Overnight".f. "Hour of Day" with the value of "0" returns "Overnight".g. "Hour of Day" with the value of "5" returns "Overnight".	
<ol style="list-style-type: none">6. Save the formula and verify that "Daypart" is added as a new field.	

Updates to the Data Source Object

Refresh Mode:

- Full Refresh - could slow down processing. Clears out the table entirely in favour of replacing it with new data each time.
- Upsert - like add and update.

New Data Stream

* Data Stream Name
eCommerce Order 5230108

Refresh Mode

 Upssert
Insert new and update existing data

 Full Refresh
Delete existing data and insert new data with each refresh

Ingestion Tips and Best Practices



- Authentication fields are auto-completed from set up, but you do have the opportunity to override them
- **Refresh only new files:** once the files have been retrieved, we can establish a high watermark to track which files have been picked up and which have not and pull only new file accordingly.
- **Treat case of missing file as failure:** When data stream runs on a schedule, if no files are located in the directory, this setting will cause the data stream to fail for that run as a way to provide an alert.
- **My production file does not have headers:** Check this box if the file used during setup had headers, but future files will not.

Authentication Details		
* S3 Bucket Name bucketteer-1f9b3403-4543-4851-a978-4c8de7d	* S3 Access Key	* S3 Secret Key
Directory i c360a_test_data/	File Name i q3airlines_customer_bookings.csv	
<input checked="" type="checkbox"/> Refresh only new files <input type="checkbox"/> Treat case of a missing files as failure <input type="checkbox"/> My production files does not have headers		

A photograph of a group of people in a meeting room. In the foreground, two men are visible; one on the left looking towards the right, and one on the right wearing a blue shirt with a small green circle on his head. In the center, another man is seated at a table with a mug. Large, semi-transparent green circles are overlaid on the image, one on the left side and one on the right side. A bright green plus sign is positioned in the lower center area.

Data Cleansing and Preparation

Data Cleansing and Preparation



Cleaning and preparing your data is crucial for success when using the Data Cloud segmentation and activation capabilities.

- **Streaming Data Transforms** – data transformation occurs in real time.
- **Batch Data Transforms** – data transformation occurs on scheduled time.

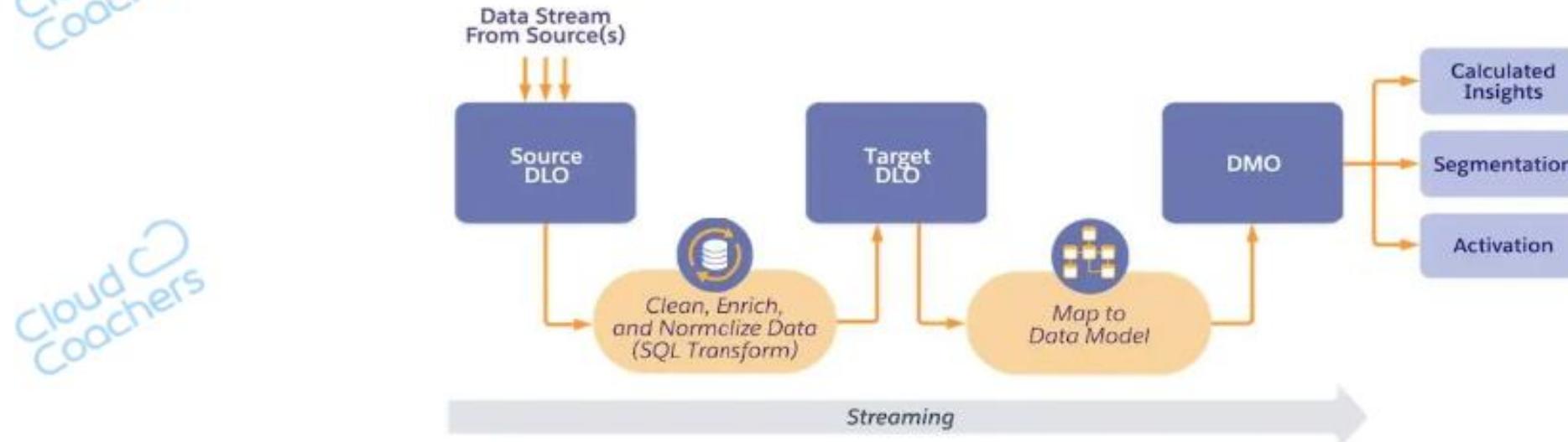
Streaming Data Transforms



Continuously processes data from a source to a target object.

New records are ingested and are immediately transformed and appended to the output object.

- Reads one record from the source data lake object.
- Reshapes and writes records to a different target object.
- Operates as a continuous streaming process, capturing new or changed data.



Streaming Data Transforms Use cases



Normalize Data with UNION Use Case

Normalize data ingested into Data Cloud with streaming data transforms. (like, phone number format: +34 , 0034, phones without prefix etc)

Merge Multiple Data Streams Use Case

The Marketing Cloud Engagement connector in Data Cloud brings in data using two profile data streams. Both streams contain the same primary keys, which can lead to duplicate records when mapped directly to the Individual data model object (DMO). To avoid this issue, merge the two data streams into a single data lake object (DLO) before mapping them to the Data Cloud data model. This process prevents duplication in the DMO.

Split a Data Stream Use Case

A data stream containing guest checkout information includes profile and engagement data. Split the data so that it can be mapped into separate data lake objects (DLOs), one for profile information and one for engagement.

Batch Data Transforms



Data transforms lets you access data from one or more DLOs and transform it to create your own set of data.

Transform data for identity resolution, segmentation, calculated insights, or Salesforce reports. Very similar to streaming data transformation, but doesn't run on real time.

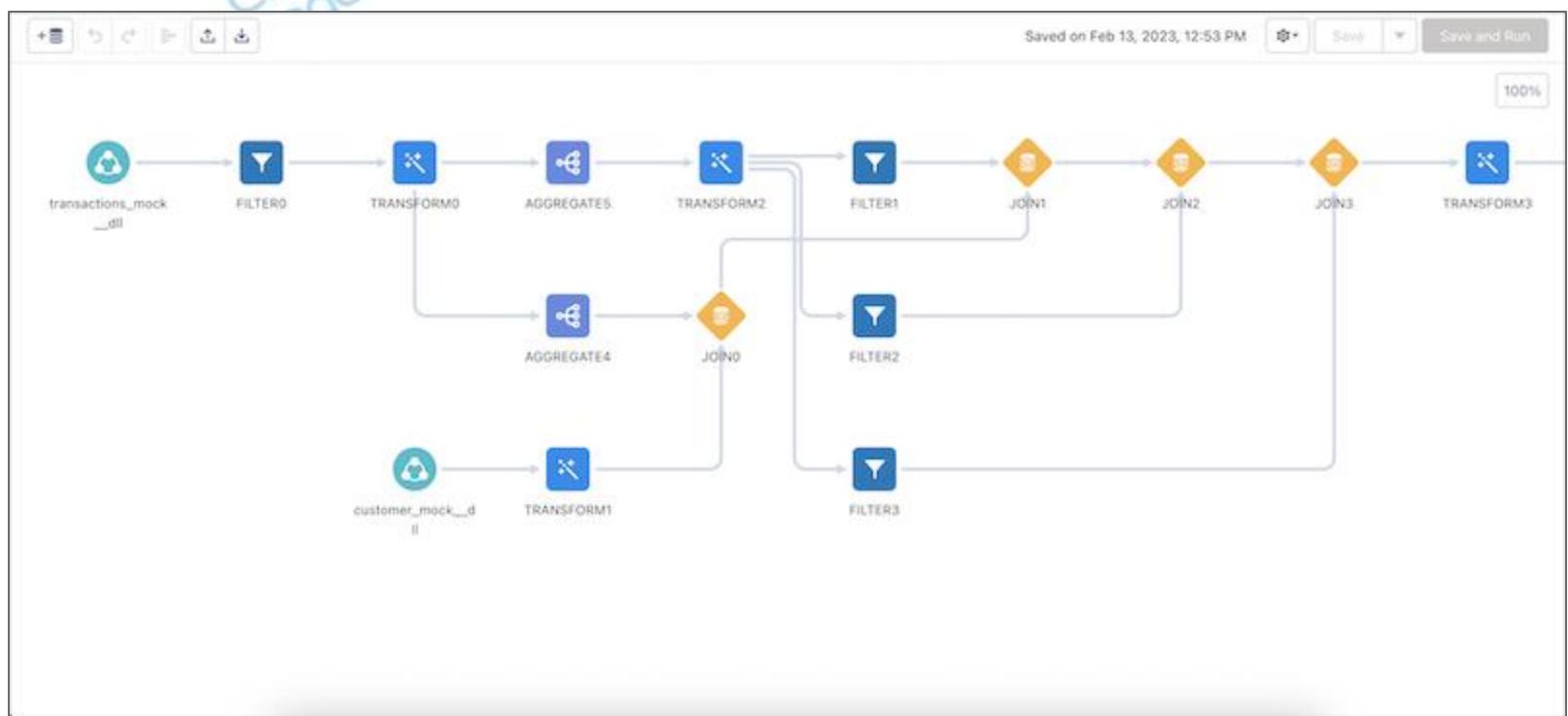
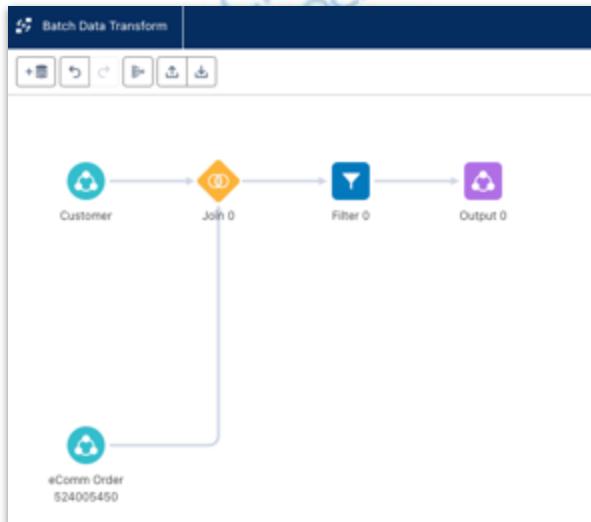
- A repeatable series of operations.
- Initial run pulls in data and defines it.
- Can be run manually or scheduled



Batch Data Transforms canvas



The canvas provides a complete view of data operations, including nodes for appending, aggregating, filtering, transforming, and joining data. You can manipulate data using built-in transformations like concatenation and column type conversions or create custom formulas for complex tasks such as date, string, and numeric operations, window functions, and case statement.



Configure Batch Data Transform

Hands on Lab

- Configure Batch Data Transform using canvas.

Lab

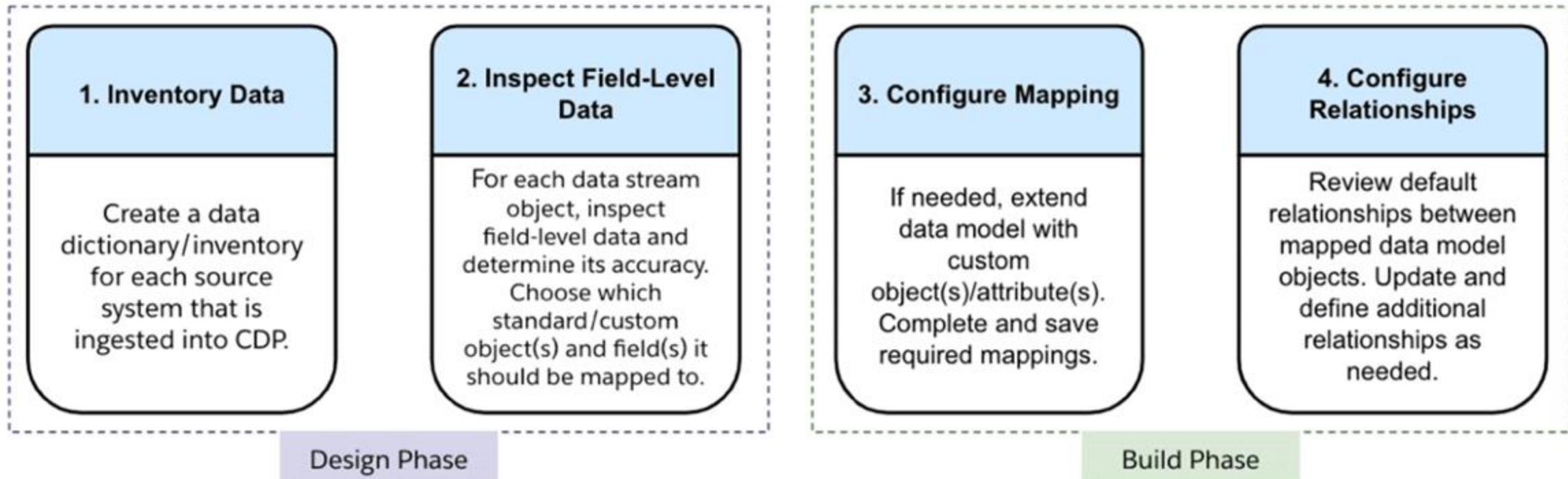
1. Create a custom DLO
2. Create a Batch Data Transform with 1 join, 1 filter
3. Output = your custom DLO
4. Run it
5. Explore it on Data Explorer



Modeling



Data Modeling Process



What data identifies individuals uniquely

Identify relationships between records

Build phase process



Map

Map ingested data into the standard CDP model

Extend the model

Extend the model if needed (due to segmentation and activation requirements)

Define Relationships

Define relationships between data model objects

Data Cloud Standard Data Model



- Canonical Data Model (reduced to its most basic form).
- Continuous Evolution
- Default Mapping included
- Extendable for Custom Requirements
- Includes pre-built models based on common marketing use cases

Model: consistent semantic view on top of the data

Harmonization is the process of mapping the ingested data in alignment with the SF Data Cloud Data Model.

You can extend the standard data model with custom attributes, objects and relationships.

Data Model Best Practises



Best Practices:

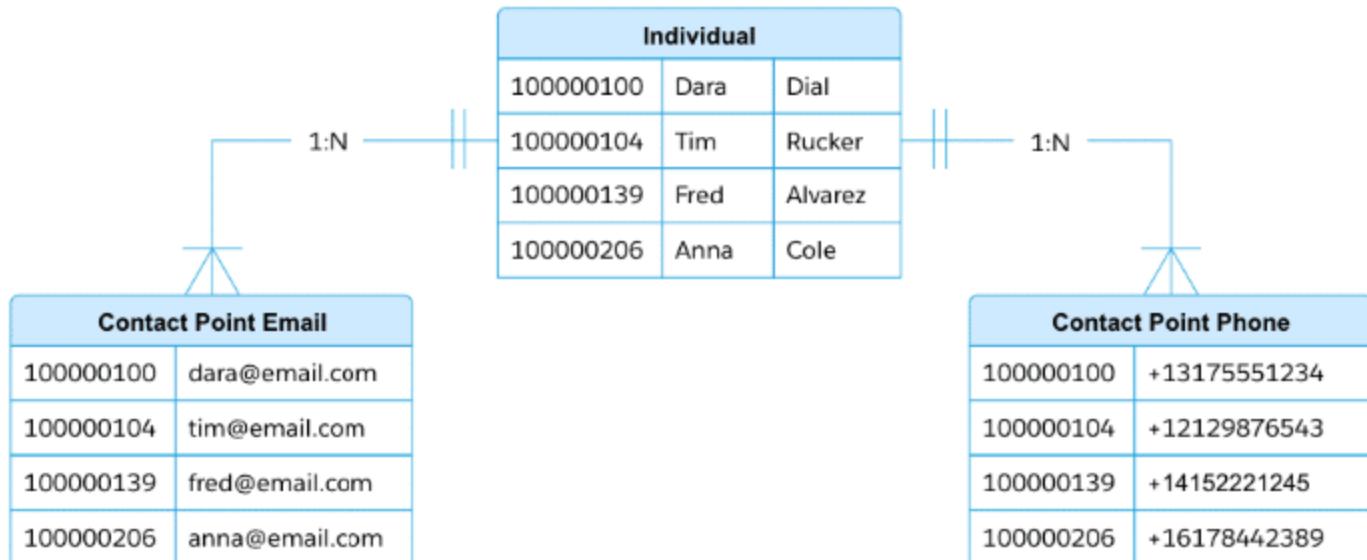
- Maintain and use as much as possible standard data model. This enables future-proofing of the solution and implementation, scalability, interoperability and integrations that are few of the key value propositions of Data Cloud.
- In cases where you can't find appropriate attribute in data stream take a step back and revisit data stream configuration, assessing the need for a formula or an additional field to be included from the original data source.

Types of data

- Denormalized data:
relational data as
column attributes.
Like a MC DE

Customer ID	First Name	Last Name	Email Address	Mobile No
100000100	Dara	Dial	dara@email.com	+13175551234
100000104	Tim	Rucker	tim@email.com	+12129876543
100000139	Fred	Alvarez	fred@email.com	+14152221245
100000206	Anna	Cole	anna@email.com	+16178442389

- Normalized data:
row is broken into
separate table
records with
established
relationships

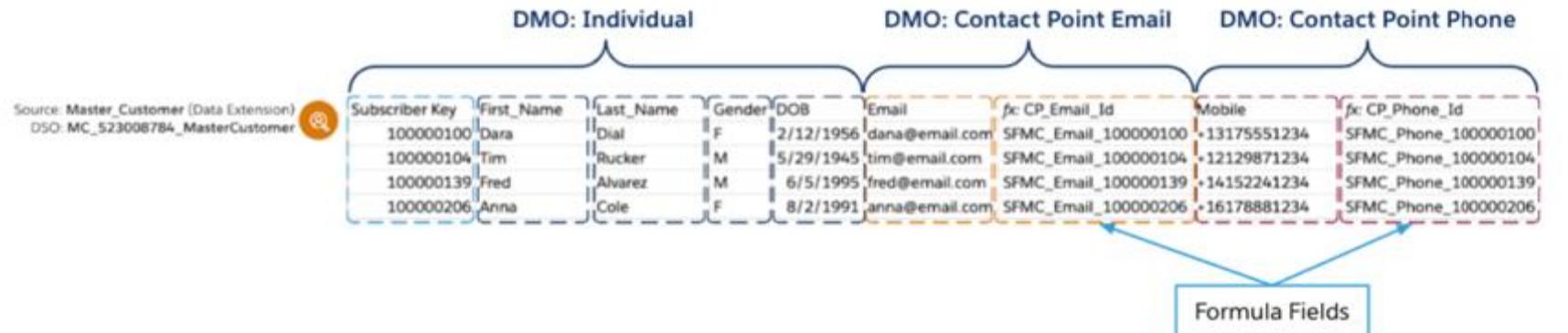


Normalizing Data use cases I



1. Multiple sources mapped to the same DMO
 - a. Marketing Cloud DE > Individual
 - b. Contact from Salesforce CRM > Individual

1. Single Data Source to various DMOs
 - a. Marketing Cloud DE > Individual + Contact Point Email + Contact Point Phone DMOs



Normalizing Data use cases II



3. Single Record into Multiple Records > transpose that record before ingesting it into the Data Cloud and normalize it to fit directly into the Contact Point Email DMO

Source: Master_Customer (Data Extension)
DSO: MC_523008784_MasterCustomer



Subscriber Key	First_Name	Last_Name	Primary_Email	Secondary_Email
100000100	Dara	Dial	dara@email.com	dara@email.net
100000104	Tim	Rucker	tim@email.com	tim@email.net
100000139	Fred	Alvarez	fred@email.com	fred@email.net
100000206	Anna	Cole	anna@email.com	anna@email.net

DMO: Contact Point Email



Source: Master_Customer_Email (Data Extension)
DSO: MC_523008784_MasterCustomerEmail

Subscriber Key	Email Address	fx: CP_Email_Id
100000100	dara@email.com	SFMC_Email_10000100_dara@email.com
100000100	dara@email.net	SFMC_Email_10000100_dara@email.net
100000104	tim@email.com	SFMC_Email_10000104_tim@email.com
100000104	tim@email.net	SFMC_Email_10000104_tim@email.net
100000139	fred@email.com	SFMC_Email_10000139_fred@email.com
100000139	fred@email.net	SFMC_Email_10000139_fred@email.net
100000206	anna@email.com	SFMC_Email_10000206_anna@email.com
100000206	anna@email.net	SFMC_Email_10000206_anna@email.net

Key Concepts



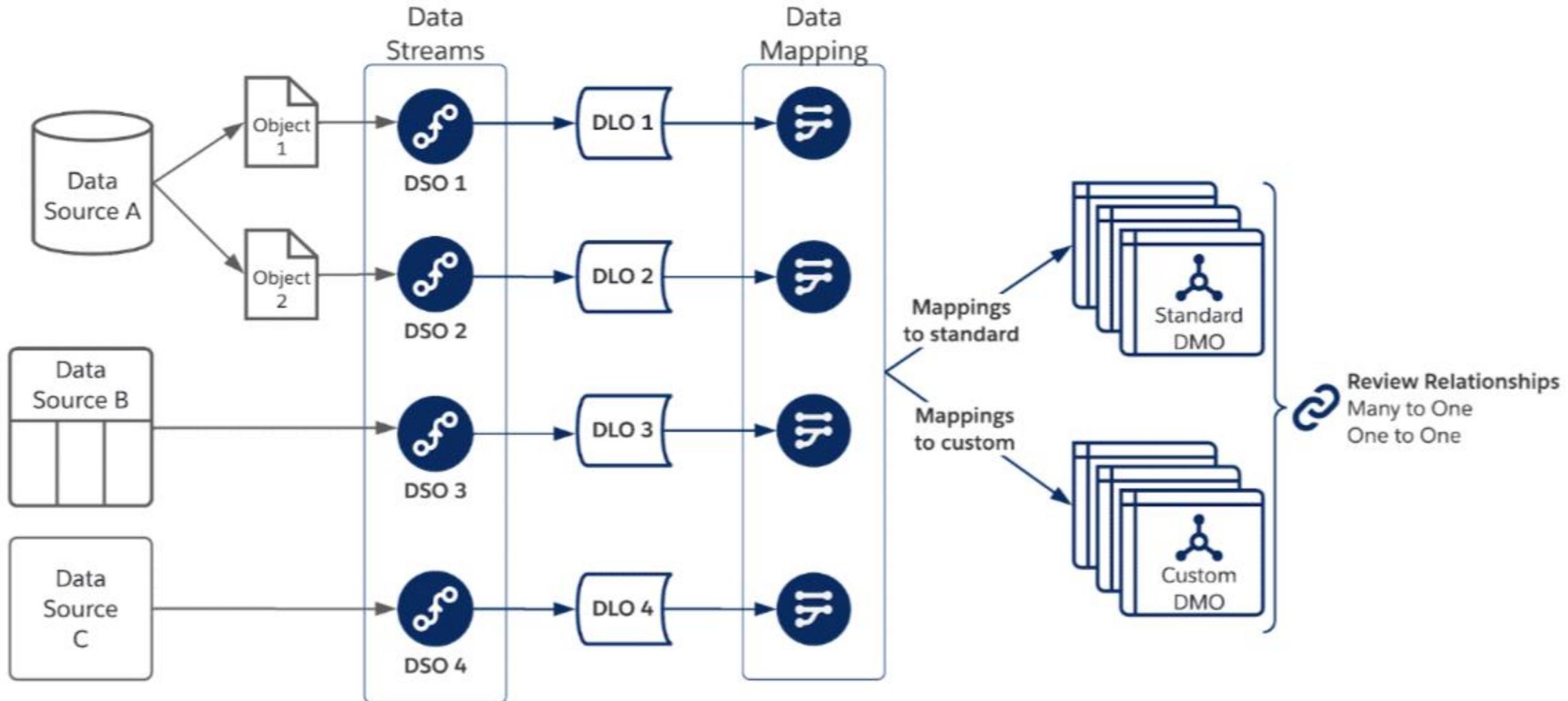
Data Stream/Source Object - DSO	Data Lake Object - DLO	Data Model Object - DMO
A collection of data, such as customer purchases, brought into Data Cloud from a data stream or data bundle.	A container for the data brought into Data Cloud. Data that's been formatted, transformed, categorized & typed.	A conceptual object that references data from mapped DLOs. Like a view. Do not contain data. Are pointers (views) to the DLOs that contain the actual data.
A DSO represents original, ingested data.	A DLO is automatically created from a DSO but you can also manually create it.	A DLO is mapped to a DMO.

Key DMOs (Data Model Objects)

Key DMOs (Data Model Objects)

- **Individual** entity represents people in the database along with their profile and demographic attributes.
- **Contact Point Email** entity will maintain email addresses for an individual.
- **Party Identification** will enable unification of the individuals using specified identifiers. Is set of third-party identifiers for an individual, like Driver License Number, DNI,...
- **Sales Order** entity will maintain summary of transactions (orders) completed by customers over time.
- **Sales Order Product** entity will maintain details of each line item within an order completed by customers over time.
- **Goods Product** entity will maintain details of product that is linked to respective line item within a sales order.

Ingestion and Modeling process



Review Mappings



Data Stream
SFMC Ent Profile Attribute 10961754

+ Follow Add Source Fields New Formula Field Delete

Data Stream Status	Last Run Status	Last Refreshed	Last Processed Records	Total Records
Active	Success	5/24/2022, 3:07 AM	3,566	3,566

Fields Details Refresh History

▼ Data Properties

Object Category Profile	Data Lake Object Name SFMC Ent Profile Attribute 10961754
Object API Name sfmc_ent_profile_attribute_10961754__dl1	

Fields (34)

Head...	↑ ↓	Field La...	Field AP...	Formula...	Data Type	Primary ...	Organiz...	Status	...
1		Party Identifi...	PartyIdentific...	✓	Text				
2		All Business ...	All Business ...	AllBusinessU...	Text				
3		Birthdate	Birthdate	Birthdate__c	Datetime				
4		Business Unit	Business Unit	BusinessUnit...	Text				
5		Company_na...	Company_na...	Company_na...	Text				
6		Country	Country	Country__c	Text				
7		Curso Interes	Curso Interes	Cursointeres...	Text				
8		DataSource	DataSource	DataSource_...	Text				
9		DataSource...	DataSource...	DataSource...	Text				

Search...

Data Mapping

Data mapping can affect Data Protection and P
Me More

Processing mappings.

Only mapped fields or objects with relationships ca
segmentation and insights

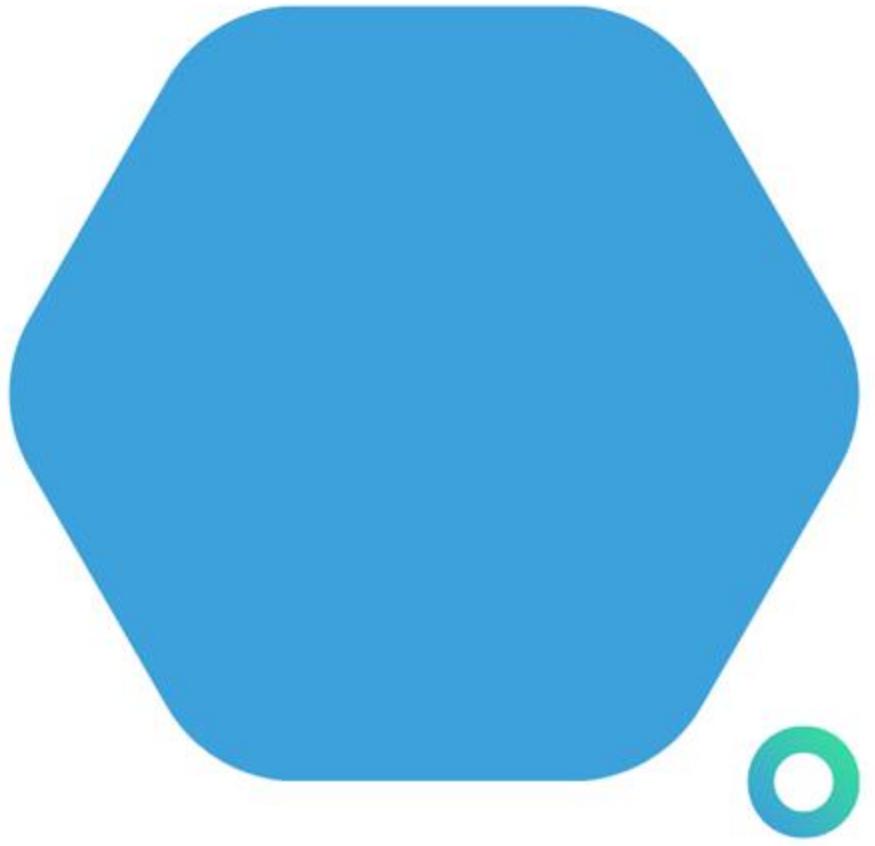
Fields mapped
7/34

Mapped to
Individual, Party Identification

Review Mappings

Post Poll Question

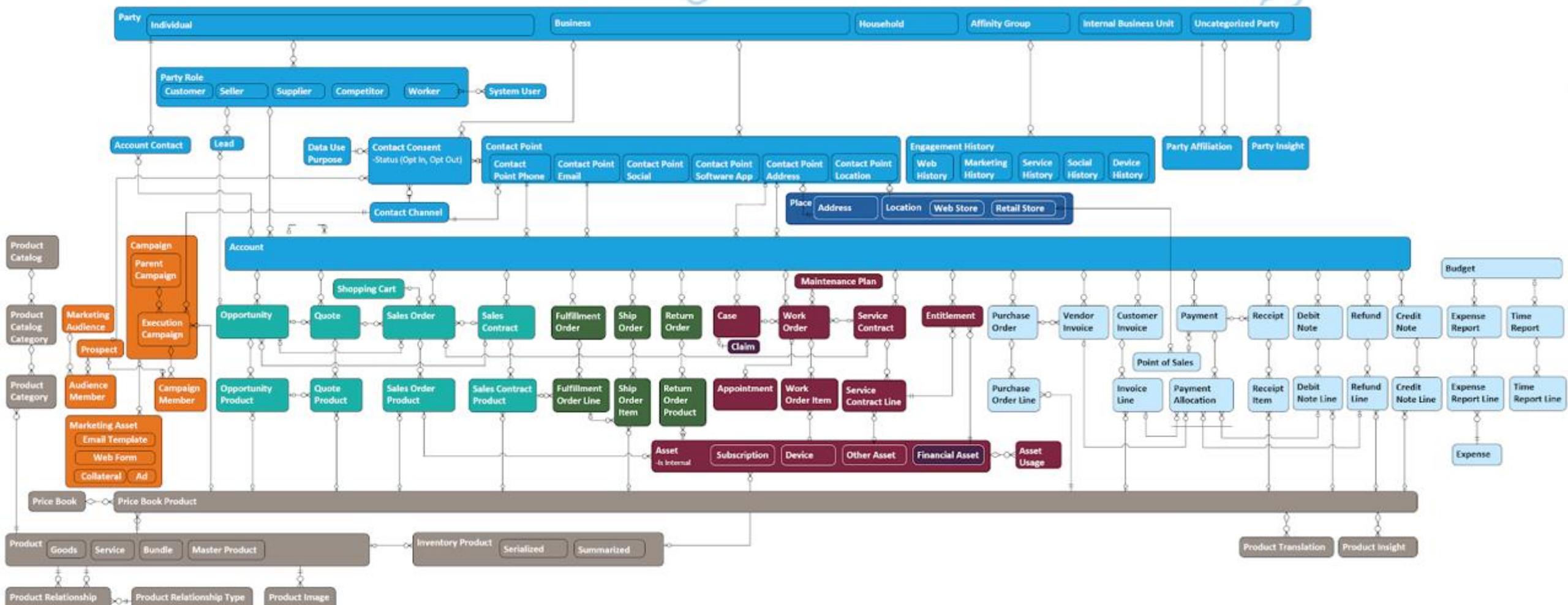
Share an update...



Data
Cloud
Data
Model



Salesforce CDP Data Model



Data Model Diagram Color Legend

Product Party Place Marketing Sales Service Commerce Finance Industry



CUSTOMER 360 DATA MODEL

Overview



Engagement

Product Browse Engagement
ssot_ProductBrowse_dlm

Shopping Cart Engagement
ssot_ShoppingCartEngagement_dlm

Device Application Engagement
ssot_DeviceApplicationEngagement_dlm

Product Order Engagement
ssot_ProductOrder_dlm

used to define

created using

used by person to create

Market Segment
ssot_MarketSegment_dlm

Contact Point

Contact Point Email
ssot_ContactPointEmail_dlm

Contact Point Address
ssot_ContactPointAddress_dlm

Contact Point Phone
ssot_ContactPointPhone_dlm

Contact Point App
ssot_ContactPointApp_dlm

Sales Subject Area

Sales Order Product
ssot_SalesOrderProduct_dlm

is sold instance of

is part of

contains

Sales Order
ssot_SalesOrder_dlm

sold to

purchased via

Product

Master Product
ssot_MasterProduct_dlm

Goods Product
ssot_GoodsProduct_dlm

Bundle Product
ssot_BundleProduct_dlm

Privacy Consent

Contact Point Consent
ssot_ContactPointConsent_dlm

Party Consent
ssot_PartyConsent_dlm

Engagement Channel Type Consent
ssot_EngagementChannelTypeConsent_dlm

Communication Subscription Consent
ssot_CommunicationSubscriptionConsent_dlm

Authorization Form Consent
ssot_AuthorizationFormConsent_dlm

Loyalty Subject Area

Member Benefit
ssot_MemberBenefit_dlm

provided to

provided by

receives

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

person defined by

belongs to

participant is a

Loyalty Program
ssot_LoyaltyProgram_dlm

provides

assigned to

contains

Loyalty Tier
ssot_LoyaltyTier_dlm

belongs to program as

is primary source for

sourced to

grants

represents

represents

originated as

converted to

converted to

represents

represents

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

Loyalty Program Member
ssot_LoyaltyProgramMember_dlm

Member Benefit
ssot_MemberBenefit_dlm

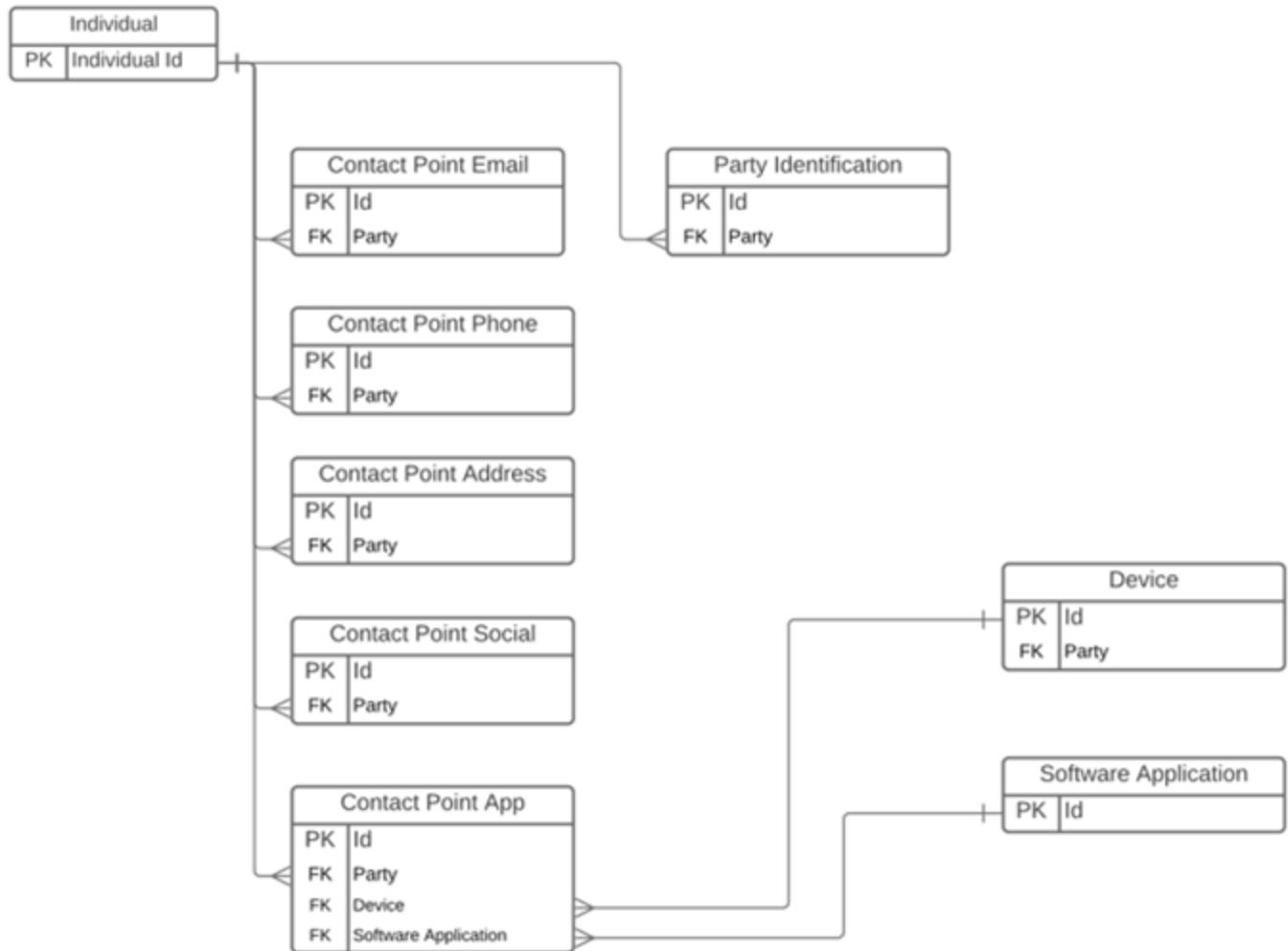
Loyalty Tier Benefit
ssot_LoyaltyTierBenefit_dlm

Loyalty Program
ssot_LoyaltyProgram_dlm

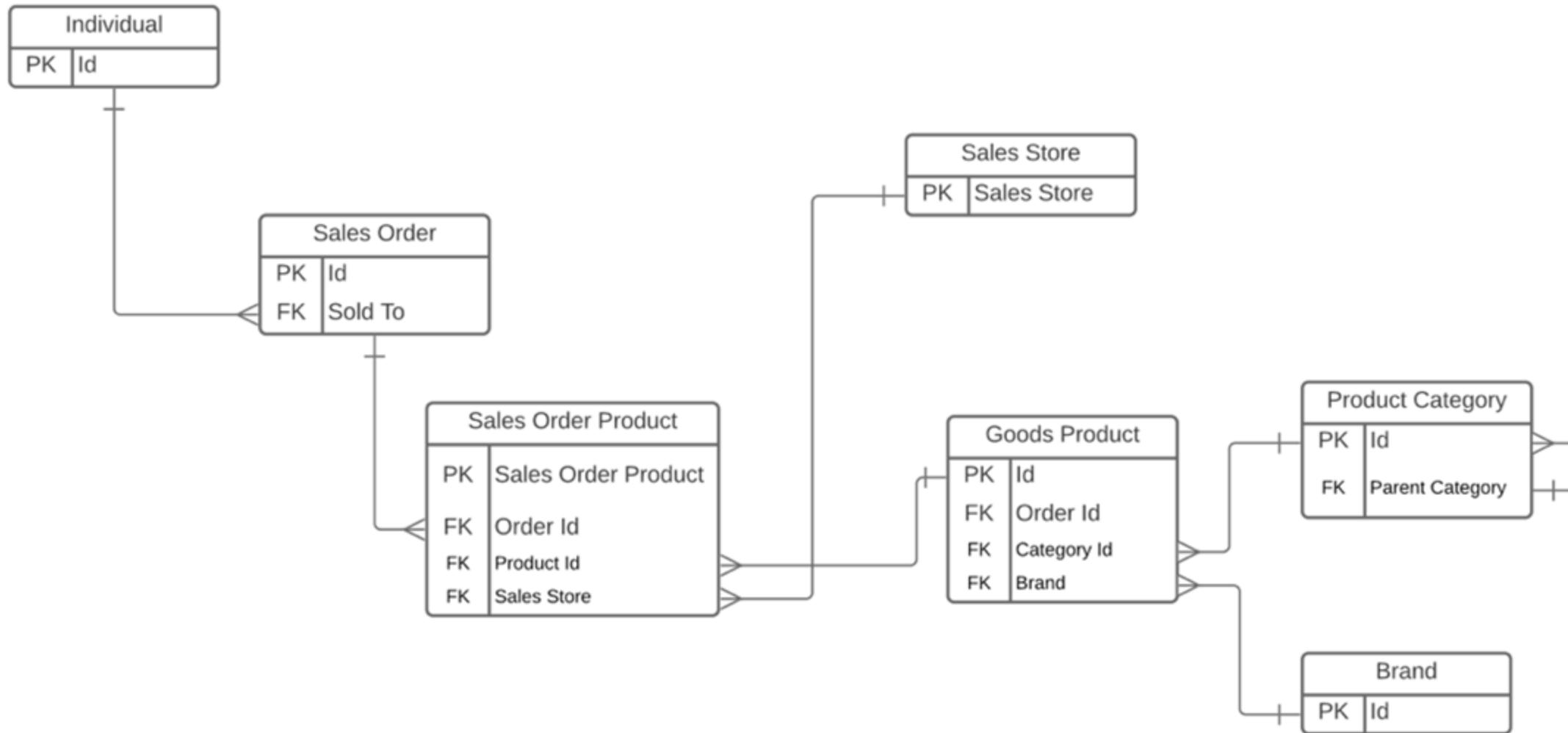
Loyalty Tier
ssot_LoyaltyTier_dlm

Loyalty Benefit
ssot_LoyaltyBenefit_dlm

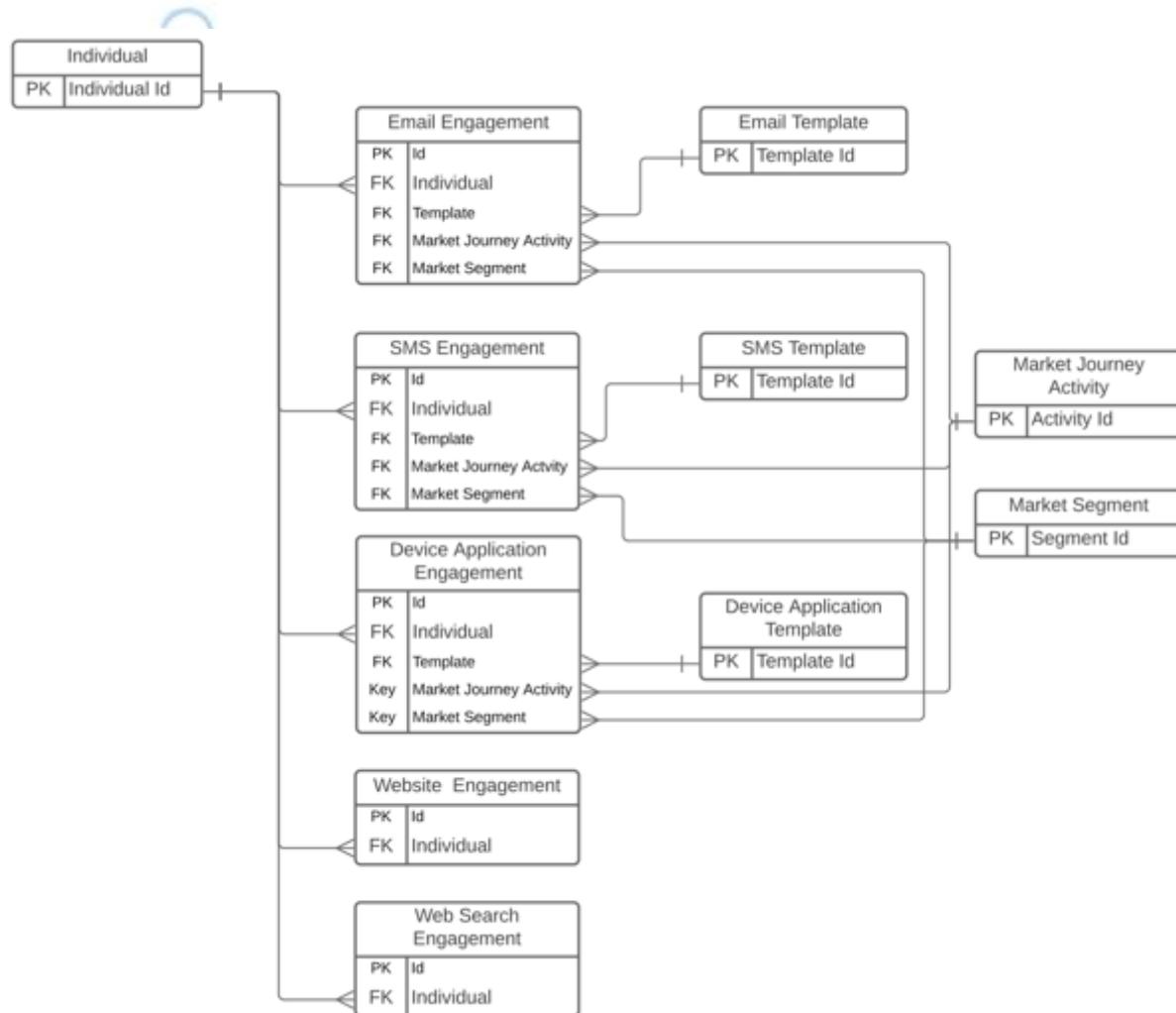
CDP Data Model - Party



CDP Data Model - Sales Order



CDP Data Model - Engagement



Individual & Contact Points



OBJECT TYPE	WHAT IT IS	EXAMPLE
Individual	Represent the person you are, or will be, dealing with using the system	FirstName, LastName, BirthDate, BirthPlace
Contact Point Email	Email address for an individual	info@northerntrailoutfitters.com
Contact Point Phone	Phone number for an individual	+1555123456
Contact Point Address	Mailing address for an individual	123 Main St., Big City, CA12345, USA
Contact Point App	Software Application for an individual and optionally on a specific device	John Doe has Strava App on device iPhone123
Contact Point Social	Social handle for an individual	Twitter: @trustednews
Party Identification	Set of ways to identify an individual	Drivers license number, customer ID
TelephoneNumber	The display name, as defined by the customer. Include this object in places where customers view the number like Profile API and Profile Views.	
FormattedE164PhoneNumber	The E164 formatted phone number. Use in backend systems as the standardized value for processing.	
Country	The country code	US, CA, IT, NZ, AU
PhoneCountryCode	The country dialing code	+1, +91

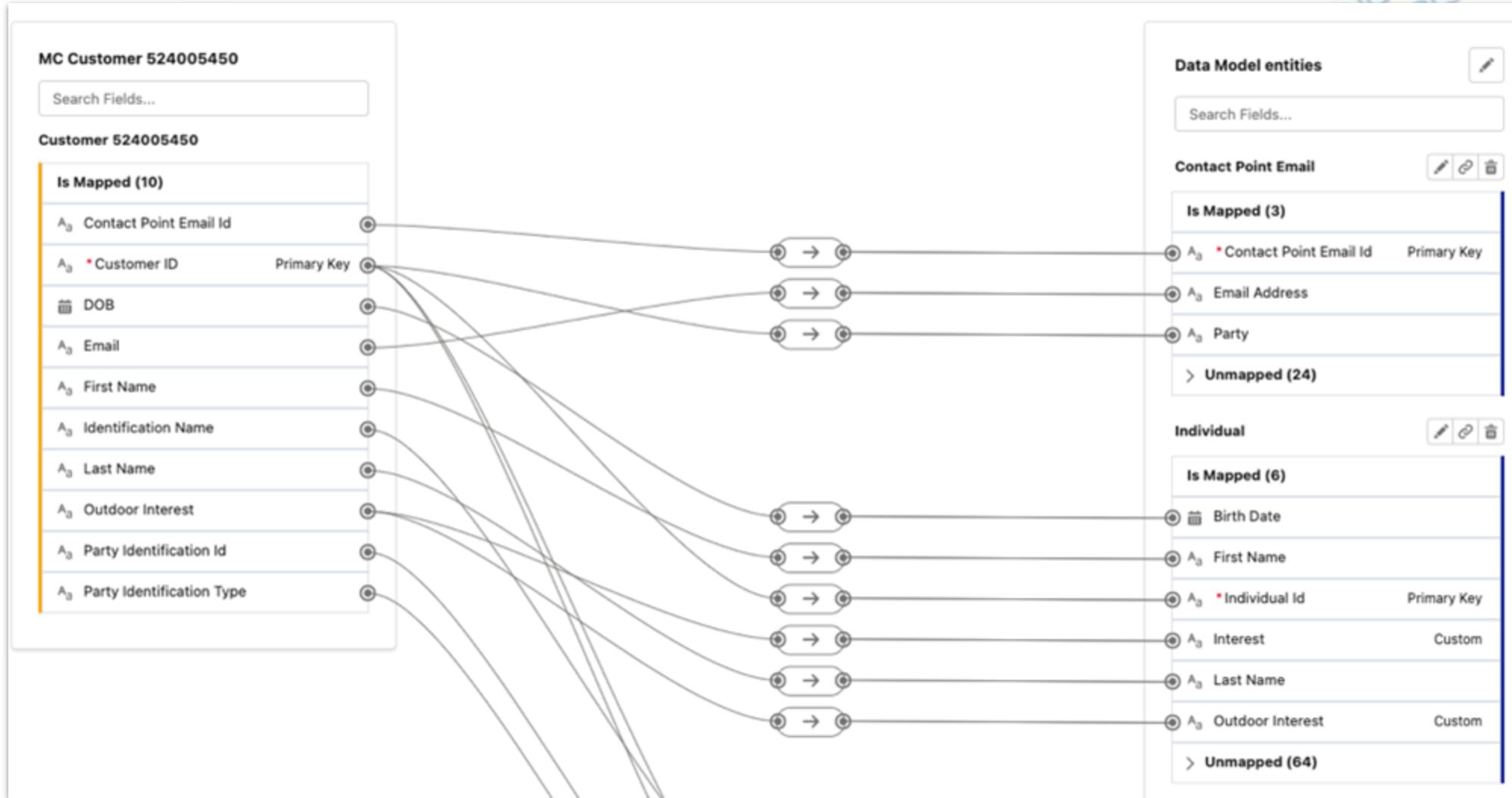
Data Mapping



- ✓ Data ingested by all data streams is written to data lake objects (DLOs).
- ✓ After creating your data streams, you must associate your DLOs to data model objects (DMOs).
- ✓ Only mapped fields and objects with relationships can be used for Segmentation and Activation.
- ✓ Mappings and relationships are set up automatically only for data streams that are deployed through standard data bundles.
- ✓ You must ensure that the required mappings and relationships are set up properly for custom data streams.
- ✓ To use identity resolution, segmentation, and activation, map the required fields and relationships for the **party** area data. You must also map the Individual object and either a Contact Point or the Party Identification object must be mapped in data streams.

Visual Mapping

Cloud Coachers



Enable value suggestion



Enabling value suggestion aids with usability during [segmentation](#).

This feature will enable users to choose values from suggested set, along with type-ahead functionality instead of relying on knowing the exact values stored in this attribute.

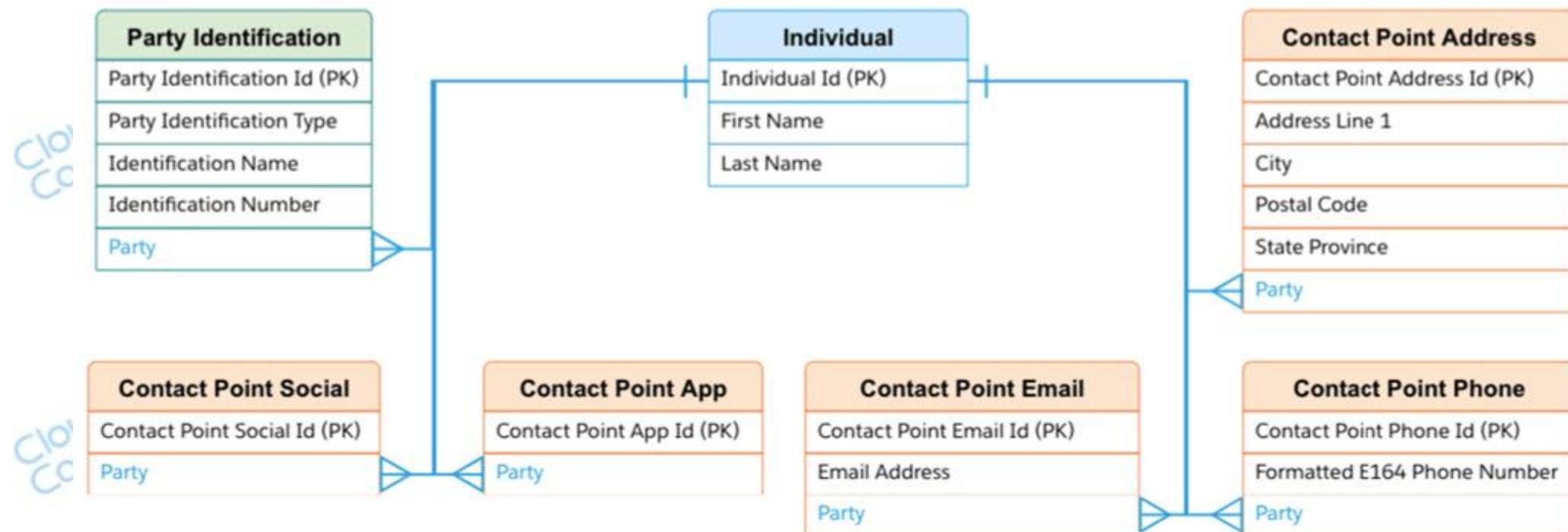
Object Label	Object API Name	Object Category			
Individual	ssot_Individual_dim	Profile Data			
You can change the labels and data types for the selected fields. Only selected items will be added to the custom object.					
Fields	Field Label	Field API Name	Key	Data Type	Enable Value Suggestion
1	Birth Date	ssot_BirthDate__c		DateTime	<input type="checkbox"/>
2	Created Date	ssot_CreatedDate__c		DateTime	<input type="checkbox"/>
3	Data Source	ssot_DataSourceId__c		Text	<input type="checkbox"/>
4	Data Source Object	ssot_DataSourceObjectId__c		Text	<input type="checkbox"/>
5	First Name	ssot_FirstName__c		Text	<input type="checkbox"/>
6	Gender	ssot_GenderId__c		Text	<input type="checkbox"/>
7	Individual Id	ssot_Id__c	Primary Key	Text	<input type="checkbox"/>
8	Interest	Interest__c		Text	<input type="checkbox"/>
9	Internal Organization	ssot_InternalOrganizationId__c		Text	<input type="checkbox"/>
10	Last Modified Date	ssot_LastModifiedDate__c		DateTime	<input type="checkbox"/>
11	Last Name	ssot_LastName__c		Text	<input type="checkbox"/>
12	Outdoor Interest	Outdoor_Interest__c		Text	<input checked="" type="checkbox"/>
13	Person Name	ssot_PersonName__c		Text	<input type="checkbox"/>
14	Photo URL	ssot_PhotoURL__c		Text	<input type="checkbox"/>
15	Salutation	ssot_Salutation__c		Text	<input type="checkbox"/>

Required Mappings



Individual object is linked with other objects via the **Party** attribute (foreign key to Individual.Id).

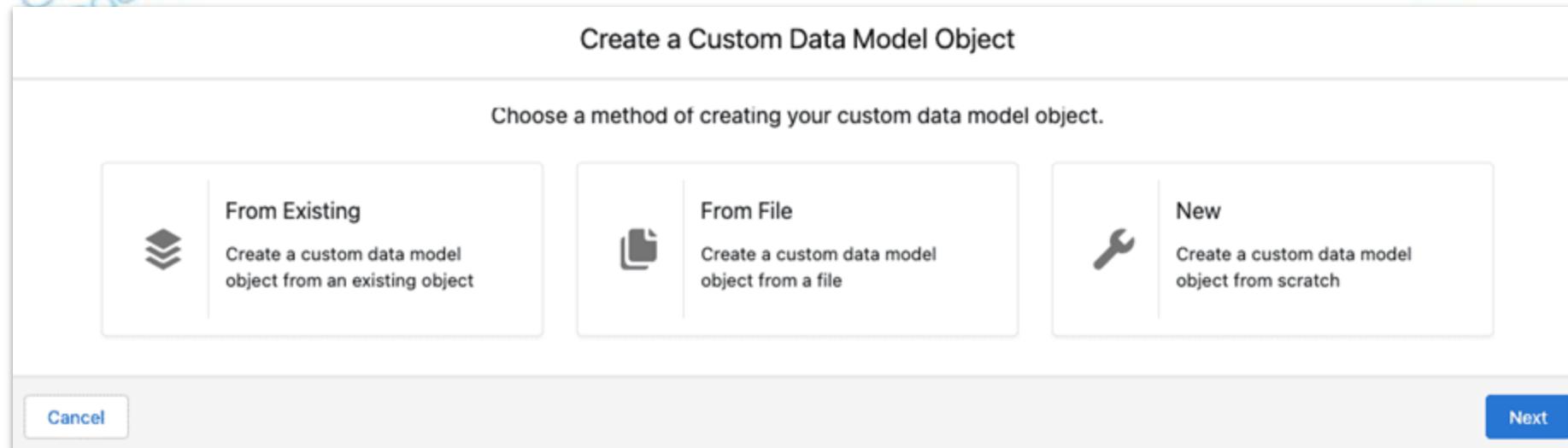
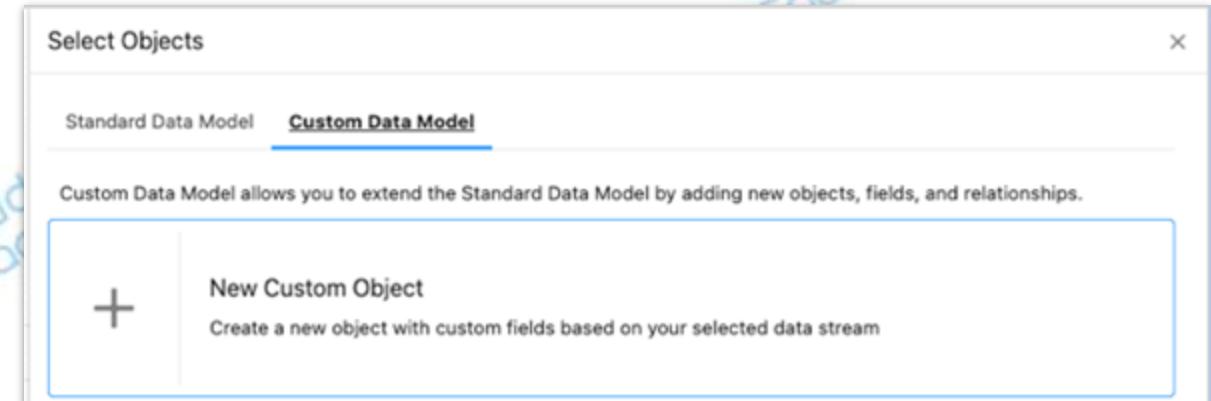
Party = Individual.Id



Custom objects and fields

There are 4 ways to create an object:

- From Existing
- From File
- New – from scratch
- From the DSO



New Custom object in CDP



Data Streams

Compras__c_00D3X000002n7TE Mappings

Search DataStreams...

Compras__c_00D3X000002n7TE

Search Fields...

Compras__c_00D3X000002n7TE

Is Mapped (6)

- A_a Categoría
- A_a Contact
- A_a Creado por el Id.
- Fecha de creación
- Fecha Pedido
- A_a *Número de registro Primary Key
- # Importe

Select Objects

Standard Data Model **Custom Data Model**

Custom Data Model allows you to extend the Standard Data Model by adding new objects, fields, and relationships.

+ New Custom Object
Create a new object with custom fields based on your selected data stream

> Campaign

> Einstein Email Engagement Scores

> Market Journey

Relationships



Cloud
Coachers

Cloud
Coachers

Contact Point Email

Details Relationships

Edit

Relationships					
	Object	Field	Cardinality	Related Object	Related Field
1	Account Contact	Contact Email	ManyToOne	Contact Point Email	Contact Point Email Id
2	Contact Point Email	Party	ManyToOne	Individual	Individual Id
3	Contact Point Email	Party	ManyToOne	Account	Account Id
4	Lead	Contact Point Email	ManyToOne	Contact Point Email	Contact Point Email Id

Delete

Done

Data Category



Data Model Objects (DMO) don't have a first-class concept of category (profile, engagement, other...)

Instead, a DMO inherits its category from the first data source object mapped to it. After the data model object inherits a category, only data source objects with that same category can map to it.

Note: If you are attempting to map a given data source object but do not see the target data model object in the object selector, ensure that the category of your DSO is matching the DSO that is already mapped to the target DMO.

Data Explorer

Cloud Coachers



Data Explorer allows you to inspect the data in

- Data Lake (Source) Objects
- Data Model Objects
- Calculated Insights

It works like List Views - you can edit which columns to see

The screenshot shows the Salesforce CDP Data Explorer interface. The top navigation bar includes links for Home, Data Streams, Data Lake Objects, Data Model, Data Explorer (which is selected), Identity Resolutions, Profile Explorer, Calculated Insights, Data Action Targets, Data Actions, and More. The main content area is titled "Data Explorer Objects" and shows a table with the following columns: Object, Total Columns (11), Data Source Object (eComm Related Activity Lookup 5240054...), and several other columns representing data from the object. The table lists six rows of data, each with a checkbox, a URL, Loyalty Points, Order Line Number, Order Number, Quantity, Related Activity, SKU, and Subtotal. The data includes various activities like Training, Camping, Biking, Climbing, Hiking, and Winter, with dates ranging from 10/10/1944 to 10/11/2025.

Object	Total Columns	Data Source Object	Loyalty Points	Order Line Number	Order Number	Quantity	Related Activity	SKU	Subtotal
S3_eCommerce_5240054fs3://cc-cdp-training/ecomrNULL	11	eComm Related Activity Lookup 5240054...	3,950	2	E0016348-0010002	1	Training	10/10/1944, 05:00 PM	30
S3_eCommerce_5240054fs3://cc-cdp-training/ecomrNULL			25,350	1	E0016348-0010002	3	Camping	10/10/1952, 04:00 PM	360
S3_eCommerce_5240054fs3://cc-cdp-training/ecomrNULL			5,800	1	E0016348-0010001	1	Biking	10/10/1965, 05:00 PM	60
S3_eCommerce_5240054fs3://cc-cdp-training/ecomrNULL			6,000	2	E0016348-0010004	1	Climbing	10/10/2030, 05:00 PM	65
S3_eCommerce_5240054fs3://cc-cdp-training/ecomrNULL			16,000	1	E0016348-0010003	2	Hiking	10/10/2018, 05:00 PM	220
S3_eCommerce_5240054fs3://cc-cdp-training/ecomrNULL			8,500	1	E0016348-0010022	1	Winter	10/11/2025, 05:00 PM	240

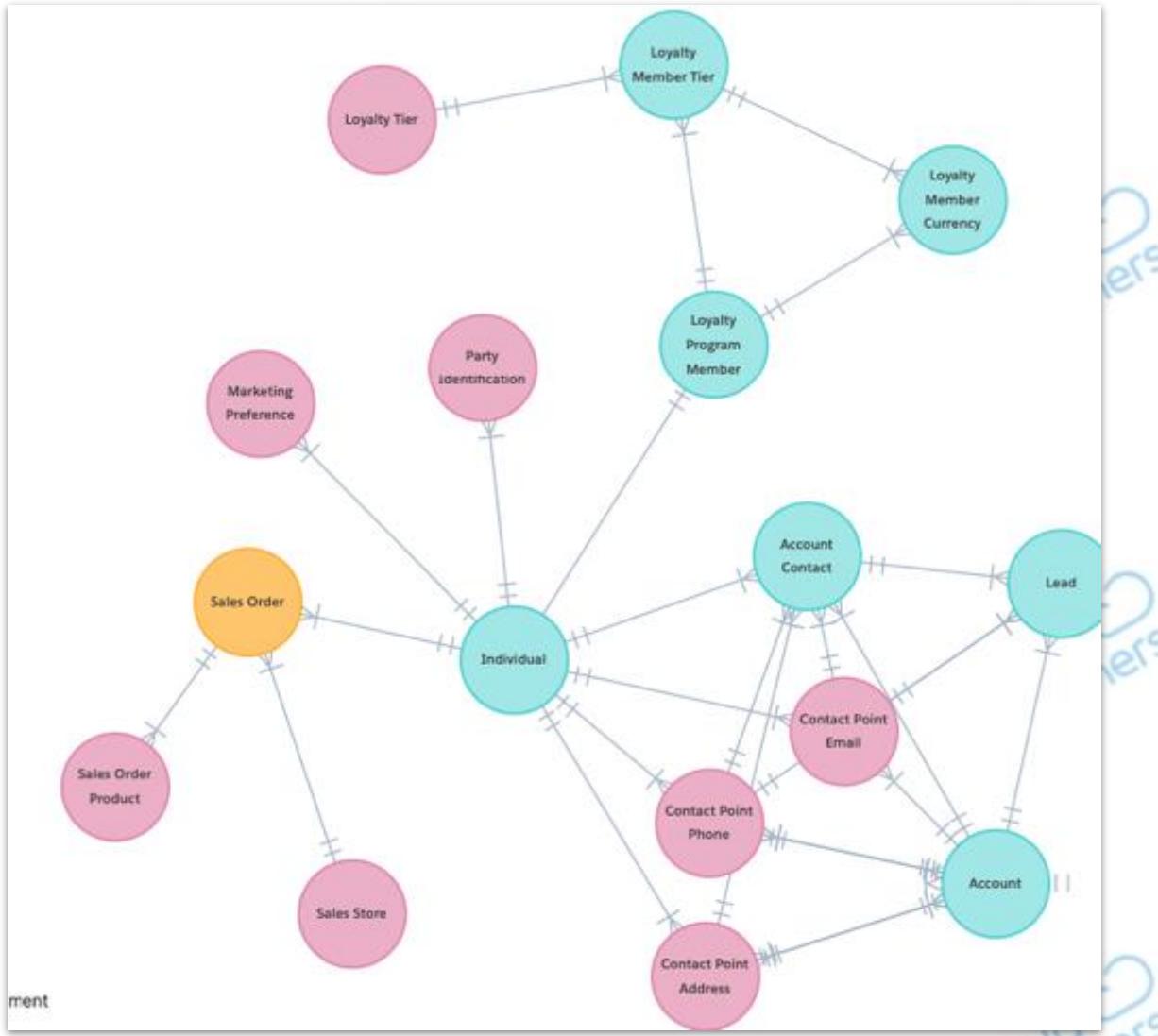
Lab



Configure Data Model

- Ingest MC Customer DE, Marketing Preferences
- Map to DMOs
- Create a custom DMO for Marketing Preferences

Data Model Visual relationships

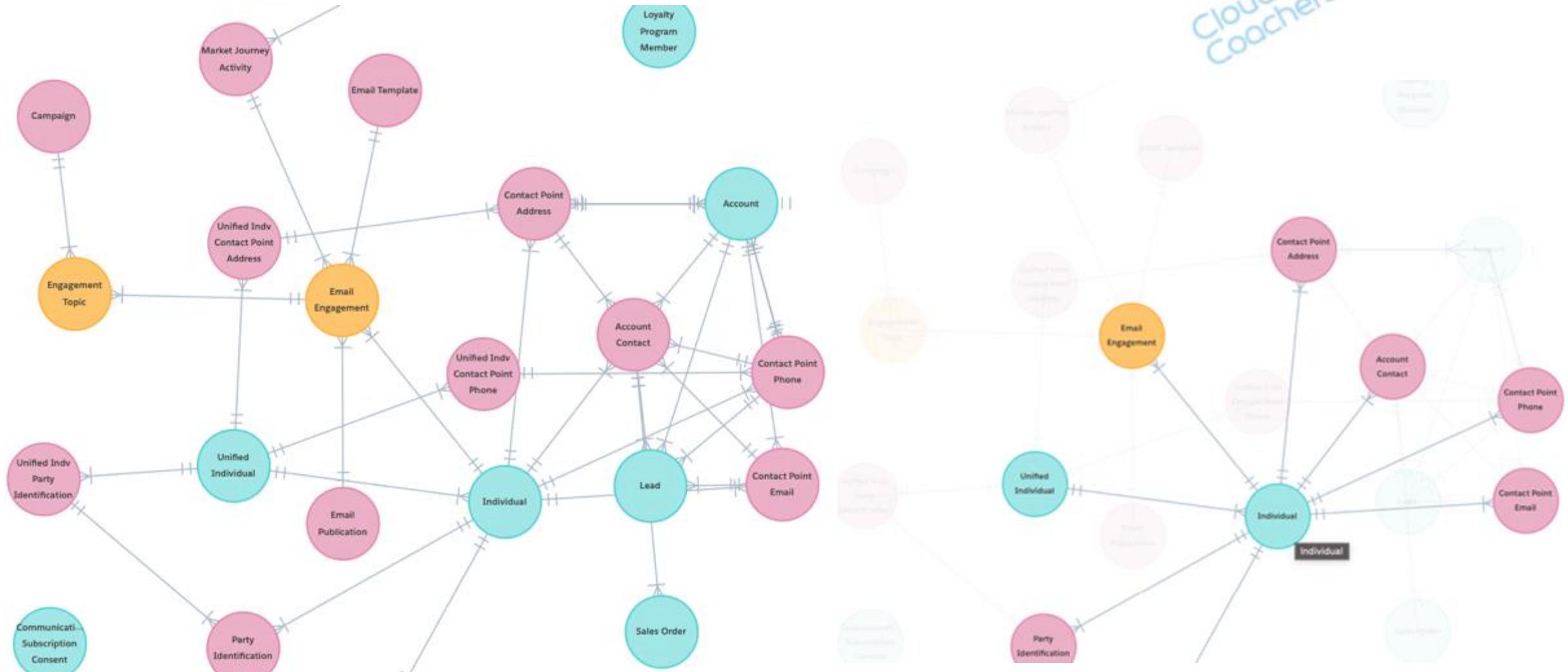


You can see each DMO with its relationships and categories.

Category

- Profile
- Engagement
- Other

Configured Relationships





Identity Resolution



14%

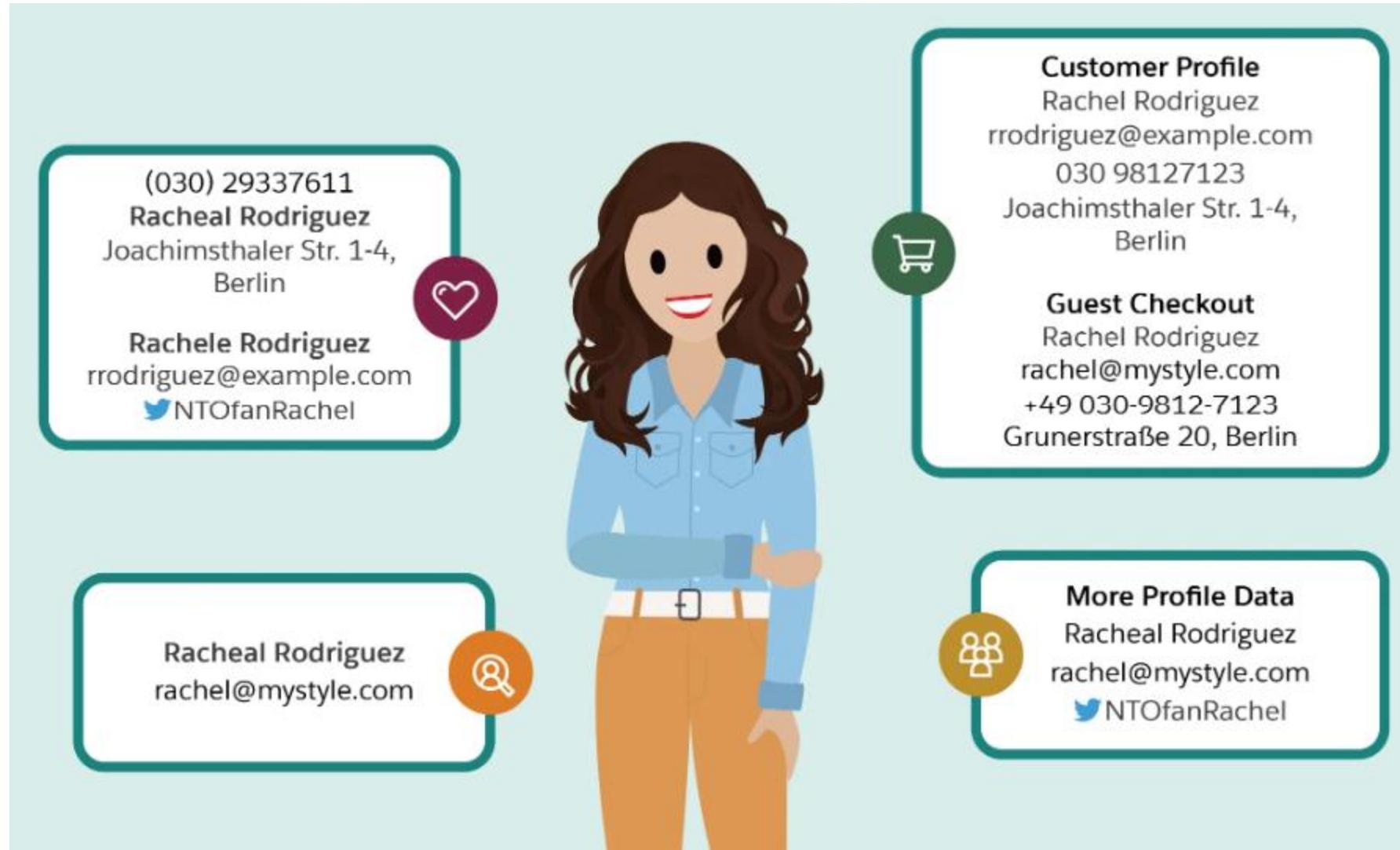
Identity Resolution



Identity Resolution is responsible for producing a **Unified Individual** that combines all profile data, aggregates all contact points and is linked to engagement and transactional data.

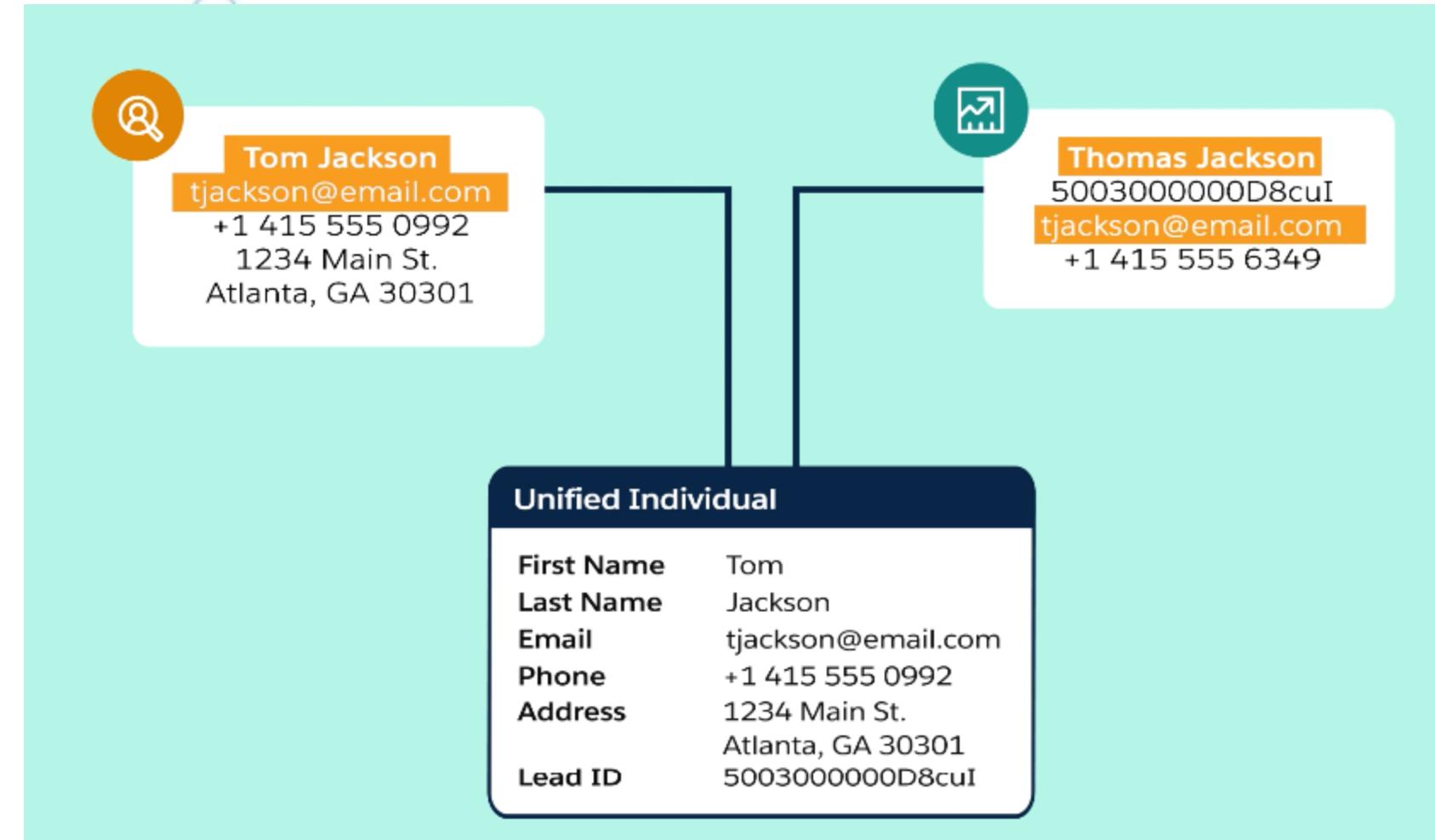


Unified Individual



Source:
<https://trailhead.salesforce.com/en/content/learn/modules/data-and-identity-in-salesforce-cdp/create-unified-individual-records>

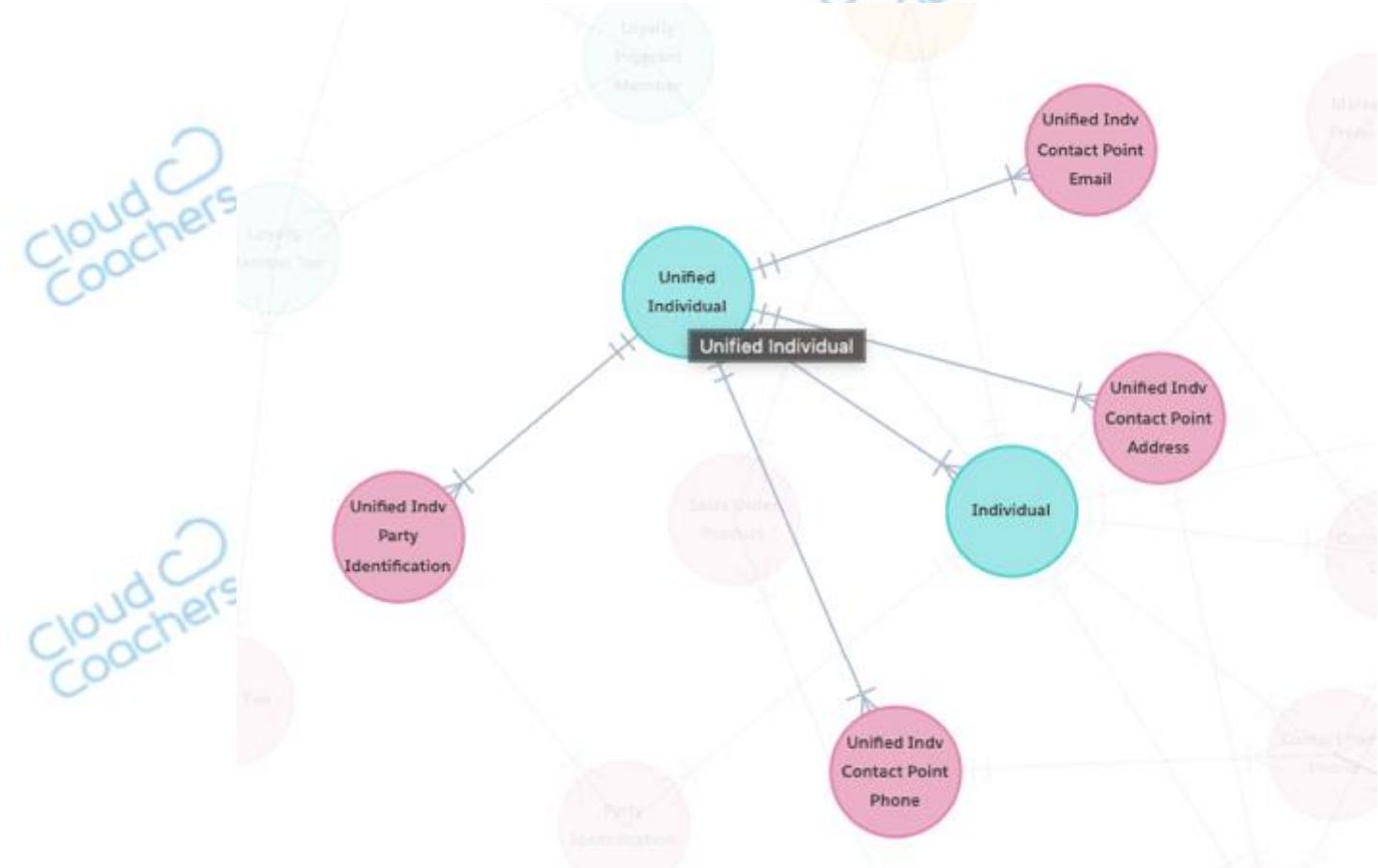
Identity resolution outcome



Unified Individual

Has unique pieces of data contact points.

Several entities on the Data Model host that information.



Unified Individual



Salesforce CDP Home Data Streams ▾ Data Model Data Explorer Identity Unified Profiles Segments ▾ Calculated Insights ▾ Activation Targets ▾ Activations ▾ Tableau Insights Datorama Analytics More ▾

Customer
Erin Beavers Edit Delete

Unified Individual ID
1e5fc985-45a8-3...

Created
09/17/2021

Updated
09/17/2021

Sources (9)
NTO Marketing(3), ...

Lifetime Value

Lifetime Spend	Lifetime Orders	Avg Order Amount	Highest Order Amount	Lowest Order Amount
\$11,847.00	11	\$1,077.00	\$1,275.00	\$912.00

Loyalty Profile

Points	Tier
32548	Platinum

Customer Preferences

Contact Point	Status
(931) 555-0102	Opt-In
ebeavers.55774.0376@hotmail.autonto.com	Opt-In
Collinwood, TN 38450	Opt-In
US	

Recent Orders

Last 30 days

Youth Pill Freestyle Winter Boots
\$72.00
2021-03-06
Product Information

[View All](#)

Segment Membership

- Product
- Affinity and Purchase Intent for Hiking Category
- Did not Engage with Email last 7 Days
- Engaged with Email last 7 Days
- High Value Lapsed Shopper

[View All](#)

Engagement Timeline

Web App Email

D.	D.	D.	E.	R.	R.	R.	P.	C.
Mar ...	ww...	Tablet	Eng...	Paid...	Ene...	Goo...	Fou...	
Mar ...	ww...	Tablet	View	Paid...	Ene...	Goo...	Ess...	

[View All](#)

Identity Resolution for Accounts



- ✓ New on Winter '24 Release
- ✓ 360 Degree view of the Accounts.
- ✓ Unifies account data from multiple sources into unified account profiles.
- ✓ Supports matching on exact business name or normalized address, email, phone, or party identifier.
- ✓ Creates an identity resolution ruleset using Account as the primary data model object.
- ✓ You can create up to 2 rulesets per primary data model object per data space.

New Ruleset

Rulesets contain match and reconciliation rules that specify how to link multiple sources of data into a unified profile.

*Data Space	*Primary Data Model Object	Ruleset ID
default	Select a primary data model object... Individual Account	

Identity Resolution Process



Profile Data across Data Sources

Understand whether or not data from various sources matches expectations.

Match Rules

Make appropriate tradeoffs between over and under grouping of individual records.

Reconciliation Rules

Specify how matched records should be reconciled if there are attribute conflicts.

Validate Results

Inspect resulting unified records and plan for next steps.

Matching Rules



1. Objects

- Individual
- Contact Points
- Device
- Party Identification

2. Field

- First Name
- Last Name
- Email
- Date of Birth
- Phone number

3. Match Method

- Exact
- Fuzzy
 - Low precision
 - Medium precision
 - High precision
- Normalized
 - Email
 - Phone
 - Address

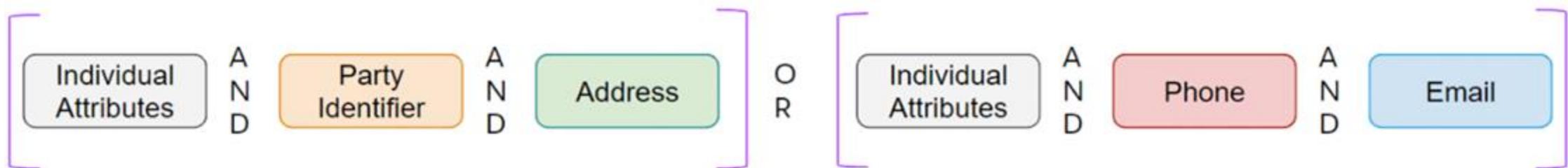
Matching rules best practices



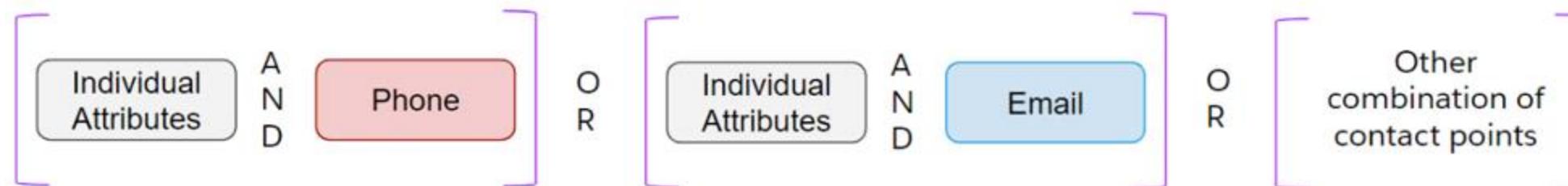
Rules with Individual Attributes and contact points

If too many:

- fewer matched records
- greater certainty in the Individual uniqueness



Ensure names are included (Households that share email address).



Matching rule example



Edit Match Rules

Match Rule Criteria

Add criteria for your match rule. [Tell Me More](#)

* Object	* Field	* Match Method	
Individual	First Name	Fuzzy	<input type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Individual	Last Name	Exact	<input type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Contact Point E...	Email Address	Exact Normalized	<input type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Individual	Birth Date	Exact	<input checked="" type="checkbox"/> Match on Blank

[Add Criteria](#)

* Match Rule Name

Fuzzy Name and Normalized Email and Exact Birth Date

Account Matching Rule example



Edit Match Rules

Match Rule Criteria

Add criteria for your match rule. [Tell Me More](#)

* Object	* Field	* Match Method	
Account	Account Name	Exact	<input type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Contact Point A...	Address Line 1	Exact Normalized	<input type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Contact Point A...	City	Exact	<input type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Contact Point A...	State Province	Exact Normalized	<input checked="" type="checkbox"/> Match on Blank
* Object	* Field	* Match Method	
AND Contact Point A...	Country	Exact Normalized	<input type="checkbox"/> Match on Blank

[Add Criteria](#)

[Back](#) [Next](#)

Reconciliation Rules



Reconciliation rules establish criteria for “picking up a winner” for the Unified Individual and Unified Contact Point records attributes when there’s a clash.

You can decide which data source to choose.

You have these 3 options:

- Most Frequent
- Last Updated (requires Last Modified Date)
- Source Sequence

You can select them at object level or field level.

Reconciliation Rules

Matched data sources may provide different values for the same field. Select the best value to save to the unified record. If you need to update multiple fields, use Update Selected.

- Contact Point Address
- [Contact Point Email](#)
- Contact Point Phone
- Individual
- Party Identification

Reconciliation Rules Options



Last Updated - This rule specifies that the most recently updated value must be selected for inclusion in the unified individual profile. It's worth considering what data gets updated most regularly—would it be customer service data or perhaps Marketing Cloud preference data?

Most Frequent - This rule specifies that the most frequently occurring value must be selected for inclusion in the unified individual profile.

Source Sequence - This rule allows you to sort your data sources in order of most to least preferred for inclusion. Basically it allows you to select based on your confidence in the data source. As an example, you can specify that the system use Marketing Cloud data first and S3 data last.



Last Updated



Most Occurring



Source Sequence

✓ Individual

Default Rule: Most Frequent 



1

Field	Rule	Default
<input type="checkbox"/> Birth Date	Most Frequent	✓
<input type="checkbox"/> Birth Place	Most Frequent	✓
<input type="checkbox"/> Created Date	Most Frequent	✓
<input type="checkbox"/> First Name	Most Frequent	✓
<input type="checkbox"/> Internal Organization	Most Frequent	✓
<input type="checkbox"/> Last Modified Date	Most Frequent	✓
<input type="checkbox"/> Last Name	Most Frequent	✓
<input type="checkbox"/> Loyalty Balance	Source Sequence	
<input type="checkbox"/> Loyalty Tier	Source Sequence	



2

Reconciliation rules – Best Practices

Use rulesets to compare and test match and reconciliation rules. Once you have your first ruleset configured, you can create a second to conduct A/B tests.

Consider the accuracy and cleanliness of your data. Can you clean any data before importing your raw data into Data Cloud?

Determine matching rules and requirements before you begin mapping your data.

Unified individual profiles are only as trustworthy as the source system data. What data source has the most up-to-date information? Use this as a guide for your match and reconciliation rules.

Review your unified individual profiles regularly from Profile Explorer to see if tweaks need to be made to your ruleset.

Example of Reconciliation Rule

Edit Default Reconciliation Rule for Contact Point Email

This reconciliation rule applies to all fields in this data model object by default. Any standard or custom fields you map to this change the rule for specific fields by editing them individually.

Default Reconciliation Rule

Source Priority	Ignore Empty Values
Most Frequent	<input checked="" type="checkbox"/>
✓ Source Priority	
2	↑ ↓
3	↑ ↓
4	↑ ↓

Data Lake Object

MC Customer 524005450
eComm Customer Profile 524005450
Contact_00D680000036cz0
Lead_00D680000036cz0

Validate Results

- Resolution Summary
- Data Explorer, Profile Explorer and Calculated Insights – search for anomalies
- explore specific unified (reconciled) profile records.

Resolution Summary	
 Warnings (1)	
Total Unified Profiles ⓘ	
1.11K / 1.14K Source Profiles	
Consolidation Rate	3%
The amount by which source profiles were combined to produce unified profiles	
Matched Source Profiles	64
The number of source profiles that match another source profile	
Known Unified Profiles	1.11K
The number of unified profiles made up of at least one known source profile	
Anonymous Unified Profiles	0
The number of unified profiles made up of only anonymous source profiles	

Note: Known Unified Profiles count for the license.

Profile Explorer: Unified Individual view



Unified Individual
4220daab-bef3-4126-b436-a168061bda85

Details Related

Internal Organization

Photo URL
</services/images/photo/0036800000lVEHdAAP>

First Name
Edna

Person Name
Edna Frank

Unified Individual Id
4220daab-bef3-4126-b436-a168061bda85

Birth Date
3/9/1945, 5:00 PM

Salutation
Ms.

Last Name
Frank

Last Modified Date
1/16/2023, 3:37 AM

Outdoor Interest

Created Date
1/16/2023, 3:37 AM

Details **Related**

Unified Indv Contact Point Address (1)

Address Line 1
345 Shoreline Park Mount...

Unified Indv Contact Point Email (1)

Email Address
efrank@geneponit.com

Unified Link Individual (1)

Data Source
Salesforce_00D680000036cz0

Individual Id
0036800000lVEHdAAP

Unified Indv Contact Point Phone (1)

Formatted E164 Phone Number
(650) 867-7686

Profile Explorer: Unified Account view



Unified Account AL
2f490ef0c44e2a1043829aec8fb79cd4

Account Name: Youopia

Account Description:

Last Modified Date: 8/5/2024, 2:11 AM

Created Date: 8/5/2024, 2:11 AM

Account Type:

Website:

ICP score:

ICP Grade:

Activity

Account

A v	A v	A v	I.. v	I.. v	D <input checked="" type="checkbox"/>	W v
001...	You...	Sale...				

Unified Accnt Contact Point Ad...

No record found

Calculated Insights

Validate results

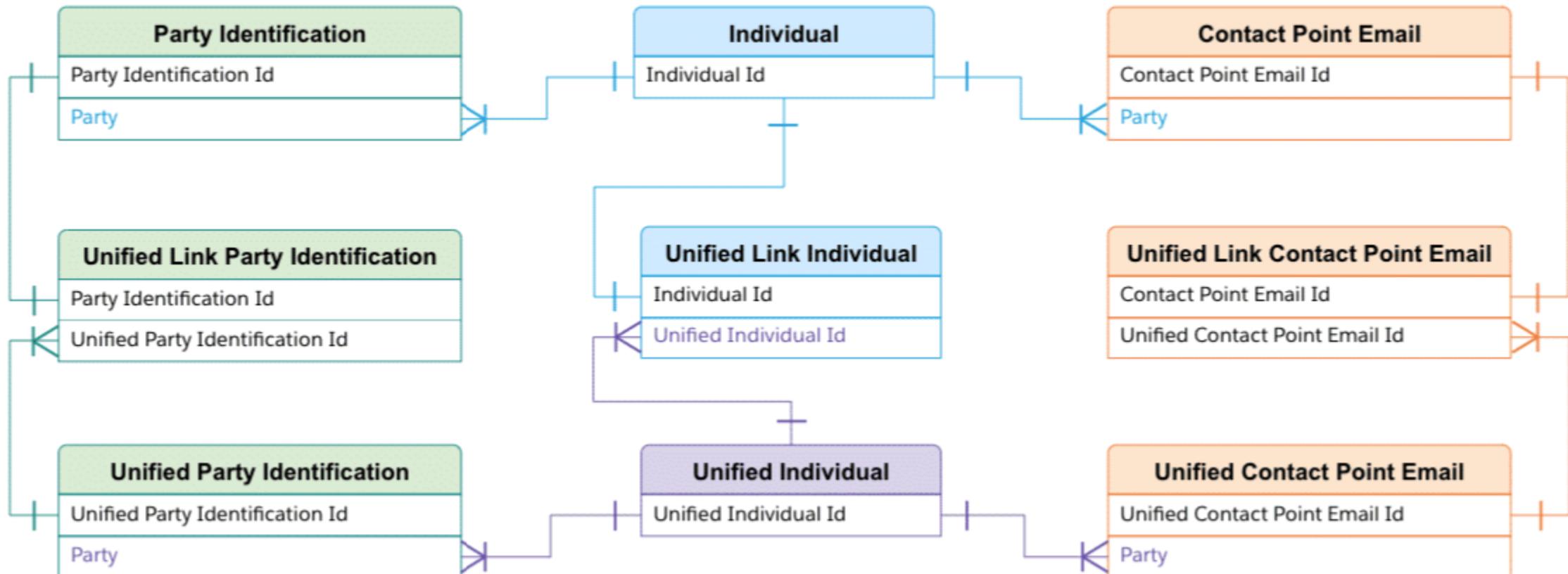
- You can search on [Profile Explorer](#) by Unified Individual name, Individual ID, etc.
- This unified individual has been matched from 2 sources, and has 2 different email addresses.

The screenshot shows a profile page for a unified individual. At the top, there is a red icon with a person symbol and the text "Unified Individual" followed by a unique ID: 6dd23d1b-af4a-4f91-ab52-ade2d47335da. Below this, there are two tabs: "Details" and "Related", with "Related" being the active tab. Under "Related", there are three sections: "Unified Indv Contact Point Address (0)", "Unified Indv Contact Point Email (2)", and "Unified Link Individual (2)". The "Unified Indv Contact Point Email (2)" section contains two email addresses: <DMCKEOWN.10000.0007@hotmail.marketingclouddemo.com> and dmckeown.10000.0007@hotmail.marketingclouddemo.com. The "Unified Link Individual (2)" section lists two data sources: S3_eCommerce_524005450 and SFMC10961754, along with their corresponding individual IDs: 0032700000fg7kuAAA and 100000007. At the bottom, there is another section for "Unified Indv Contact Point Phone (0)".

Individual, Party Identification and Contact Point Email



For any Contact Point Channel, there should be a Unified Link (junction object) and Unified objects.



Monitoring Identity Resolution



This runs periodically after initial publishing.

We can't define the specific time of day it starts.

Identity Resolutions

Recently Viewed ▾

1 item • Updated 3 minutes ago

New

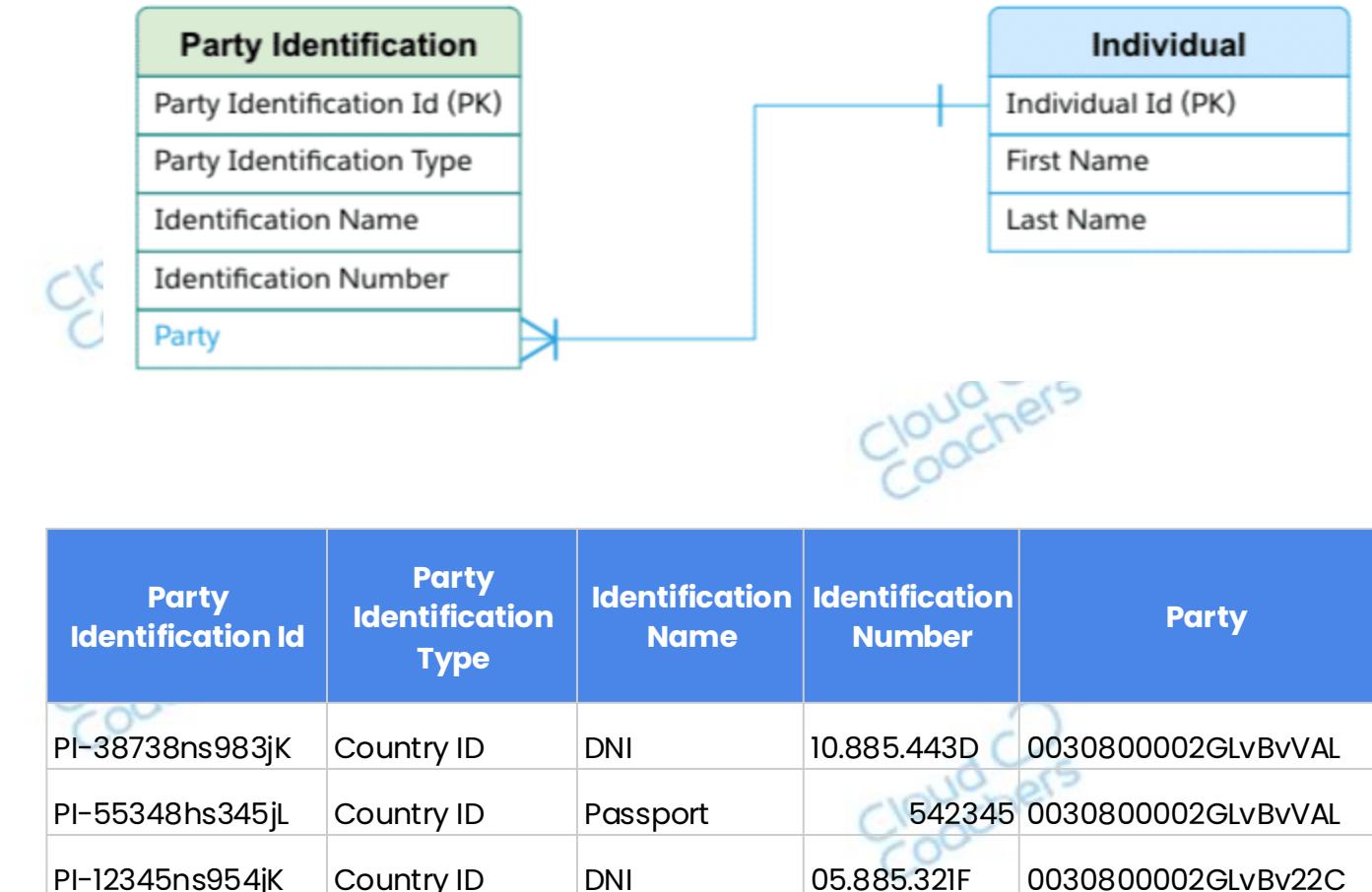
Ruleset Name	Entity	Ruleset Status	Last Job Status	Source Profiles	Matched Sou...	Total Unified ...	Consolidation...
1 Main	Individual	Published	In Progress	498,214	126,416	149,503	20%

Party Identification Matching



Party Identification DMO requires mandatory mapping of **five** attributes:

- Party identification Id - primary key for the record
- Party - foreign key to the Individual record
- Party Identification Name - name of the identity source or space
- Party identification Type - can be optional
- Party identification Number - used in the match rule



Anonymous data



KNOWN DATA

PSEUDONYMOUS DATA



Anonymous and Known Profiles



Use Salesforce CDP to collect and store anonymous profile data.

If individuals are later identified, anonymous profiles can be unified with existing known profiles in identity resolution.

Previously anonymous profile data, creates richer unified profiles for use in segmentation and activation.

For every one known profile in Salesforce CDP, you're allowed five anonymous profiles to support storing anonymous data in Salesforce CDP.

If a unified profile includes only anonymous source profiles, the unified profile is counted as an anonymous unified profile.

Anonymous Profiles



CDP can ingest anonymous profiles.

To categorize the Individual object record as anonymous, be sure to map the *Is Anonymous field* for the respective contributing data source.

Is Anonymous field = 1

Once at least one known Individual profile is matched with an anonymous record, that record will be marked as known going forward

Individual		
	Is Mapped (10)	
<input checked="" type="radio"/>	Birth Date	
<input checked="" type="radio"/>	Created Date	
<input checked="" type="radio"/>	A_a First Name	
<input checked="" type="radio"/>	A_a *Individual Id	Primary Key
<input checked="" type="radio"/>	A_a Is Anonymous	
<input checked="" type="radio"/>	Last Modified Date	
<input checked="" type="radio"/>	A_a Last Name	

Monitor Known Profiles Utilization



Setup under Company Information > Usage-based Entitlements:

Usage-based Entitlements					
Resource	Resource ID	Start Date	End Date	Frequency	Allowance
Maximum Custom BigObjects Rows	(tenant)	12/5/2021	10/2/2022	Once	1,000,000
Maximum Flow Interviews Without UI per Month	(tenant)	12/5/2021	10/2/2022	Monthly	10,000,000,000
Maximum Paused and Waiting Flow Interviews	(tenant)	12/5/2021	10/2/2022	Once	50,000
API Request Limit per Month	(tenant)	12/5/2021	10/2/2022	Monthly	3,000,000
High volume platform events delivered per month to CometD clients	(tenant)	12/5/2021	10/2/2022	Monthly	750,000
Maximum Next Best Action Requests available	(tenant)	12/5/2021	10/2/2022	Monthly	5,000
Salesforce CDP Maximum Number of Segment Publishes	(tenant)	12/5/2021	10/2/2022	Once	20,000
Salesforce CDP Maximum Number of Events	(tenant)	12/5/2021	10/2/2022	Once	7,500,000,000
Maximum Flow Interviews with UI per Month	(tenant)	12/5/2021	10/2/2022	Monthly	20,000,000
Salesforce CDP Maximum Number of Known Profiles	(tenant)	12/5/2021	10/2/2022	Once	45,000

Evaluation of used amount



CDP Configuration	Calculation for Maximum Number of Profiles within CDP
With Identify Resolution	Sum of Known Unified Individuals across all Identity Resolutions + Sum of records in any unmapped Data Streams that are configured as Profile Data category type
Without Identity Resolution	Sum of all records across all Data Streams that are configured as Profile Data category type

Best practice: map any data streams with the Profile Data category to ensure the records are added into the unification process

Identity Resolution Lab



Have a look at Identity Resolution rules in place.

Navigate from one object to another.

Data Cloud Enrichments



Data Cloud enrichments
copy or **query** data
from Data Cloud into
standard Salesforce
component.

You can add **related
lists** and **fields** with
data from Data Cloud to
your Contact, Lead and
Account record pages.

The screenshot shows the Salesforce Setup interface with the 'Object Manager' selected. A modal window titled 'New Data Cloud Copy Fields' is open. On the left, a sidebar for the 'Contact' object lists various setup options, with 'Data Cloud Copy Field' highlighted by a red box. The main pane of the modal has two dropdown menus: 'Data Space' set to 'default' and 'Data Cloud Object' set to 'Unified Individual'. To the right, a section titled 'Data Cloud Enrichment' explains that it enriches data in the org with data from Data Cloud, and provides instructions for copying Data Cloud data into fields. It lists 'Copy Fields' as the method for copying data from Data Cloud into a field in the org, and specifies that DMOs (Data Model Objects) with 1:1 relationships and CIOs (Calculated Insight Objects) with single dimensions are supported. A 'Learn More' button is available for further information. Navigation buttons 'Cancel', 'Next', and a progress bar are at the bottom of the modal.

Data Cloud Enrichments



Copy Fields

Data Cloud Copy Field Enrichments Unified Individual default

Sync Status
Activated

Sync Date Time
None

Field Mapping Object Details Sync History

Field Mapping

1 Fields * 1 Mapped

Data Cloud: Unified Individual



Contact

A_a Outdoor Interest
Outdoor_Interest__c



A_a Outdoor Interest
Outdoor_Interest__c

Data Cloud Related List Enrichments Email Engagement

Related List Enrichment Object Details

Data Space	Data Cloud Object
default	Email Engagement
Child Relationship Name	Unified Object
Email_Engagement__r	Unified Individual
Related List Label	
Email Engagement	

Related List

Enrichments considerations



- Object must be of type engagement in order to be added as a related list.
- By default the time range is of 7 days. You need to create a dynamic related list on the page in order to expand the date range limit.

Related Details

 **Invoices (1)** ⚙️ ⌂

1 item • Sorted by Date • Filtered by Date • Updated a few seconds ago

Invoice number	Date ↓	amount	Internal Or... ▾
1 ae9c163c-d2ef-422e-bac6-ebd23d32412b	6/30/2024	\$5,927.52	▼

[View All](#)

A photograph of a group of people in a meeting room. In the foreground, a large green circle is overlaid on the left side, containing a smaller blue circle and a yellow plus sign. Another green circle is overlaid on the right side, containing the text "18%".

Segmentation and Insights

18%



Insights



What are Insights?



The Insights feature within Data Cloud (CDP) lets you define and calculate *multidimensional metrics* from your entire digital data state in CDP.

Metrics = quantitative measurements

2 types:

- Calculated Insights – from your digital data stored in CDP
- Streaming Insights – from data coming from real-time data sources.

Insights can be used on Segmentation.

Calculated Insights Benefits



- Aggregates data
- supports more complex use cases
- promotes reusability and consistency
- is accessible by external systems

Calculated Insights



Enhance your data by extracting additional insights about your customers.

- Multidimensional Metrics – LTV, CSAT, RFM...
- Use them within Segment Builder
- Activate for personalization

Example: "Product XX customers with lower satisfaction score and using no discount coupons are churning at a higher rate"

Compute average discount and average NPS score. Use this to segment customers in segmentation, and personalize the customer interactions with Activation.

New Calculated Insight

Fields

Search Fields

> Party Identification

> Message Engagement

✓ SALESORDER

- # LIST_PRICE
- A₃ Data Source Object
- # TOTAL_PRODUCT_AMOUNT
- # TOTAL_ADJUSTMENT_TAX_AMOUNT
- A₃ Internal Organization
- # ORDERID
- CHECKOUT_DATE**
- A₃ PROMISE_FULFILLMENT_DATE

Insert >

Calculated Insight can affect Data Protection and Privacy compliance. [Tell Me More](#)

* Expression

```
SELECT
SUM(SALESORDER__dim.grand_total_amount__c) as LTV__c,
Individual__dim.Id__c as CustomerId__c,
MONTH(SALESORDER__dim.checkout_date__c) as PurchaseMonth__c,
PRODUCT__dim.product_category__c as ProductCategory__c
FROM SALESORDER__dim
LEFT JOIN Individual__dim ON SALESORDER__dim.partyid__c = Individual__dim.Id__c
LEFT JOIN SALESORDERPRODUCT__dim on SALESORDER__dim.orderid__c = SALESORDERPRODUCT__dim.orderid__c
LEFT Join PRODUCT__dim on SALESORDERPRODUCT__dim.productid__c = PRODUCT__dim.productid__c
GROUP BY PurchaseMonth__c, ProductCategory__c, CustomerId__c
```

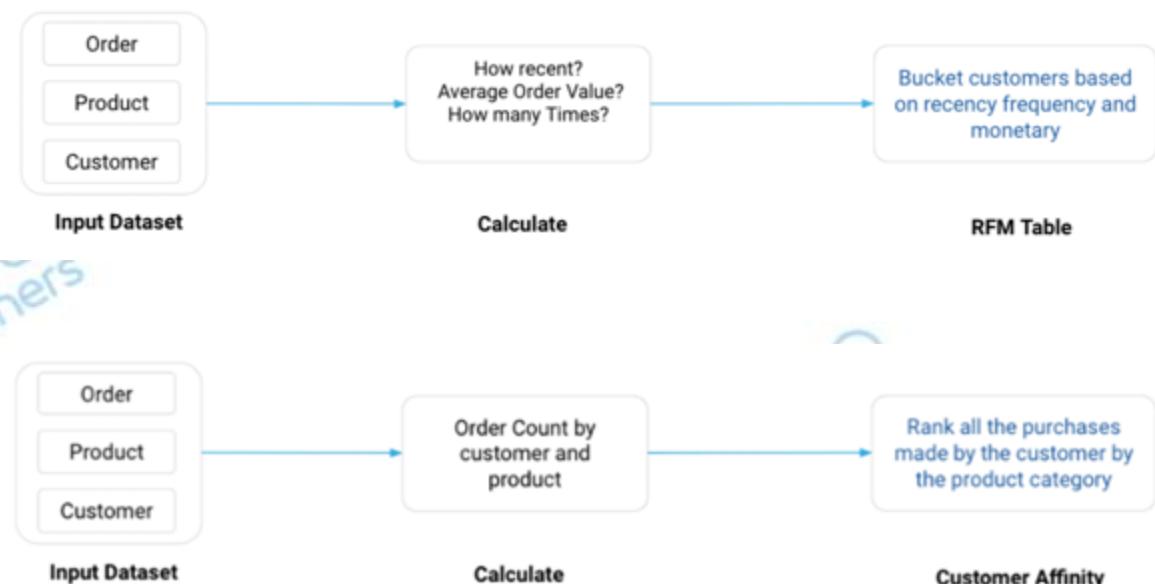
✓ Valid Syntax

Check Syntax

Calculated Insights – Use cases



- **LTV** (LifeTime Value)
 - How much has a customer spent with us from day one?
 - Bucket customer based on spend?
- **RFM** (Recency Frequency Monetary value)
 - Different possibilities to score customers for targeting.
- **Affinity** scores
 - product category affinity for each customer



Insights using SQL



	INNER JOIN or JOIN	LEFT [OUTER] JOIN	RIGHT [OUTER] JOIN	FULL [OUTER] JOIN
Description	Return records that have matching values in both DMOs.	Exclude the records we don't want from DMO 2.	Exclude the records we don't want from DMO 1.	Return all matching records from both DMOs.
Result	Specific sales orders for specific customers.	All sales orders and sales orders for specific customers.	All customers and a few sales orders for specific customers.	All sales orders and all customers, including some matching records.

Streaming Insights



Create metrics on streaming data coming from real-time data sources to use real-time insights.

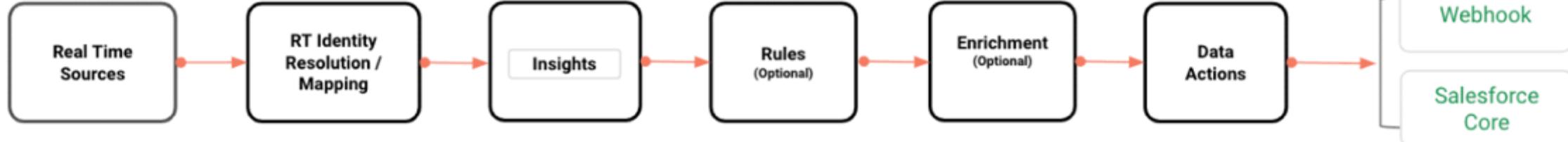
Through **Data Actions** and **Data Action Targets**.

Data Action: triggers automations and send alerts/events based on DMOs or insights.

There are 3 supported Data Action targets:

- Webhook – protected with Salesforce generated secret key.
- Salesforce Platform event
- Marketing Cloud email or journey.

Prerequisites



Pre-requisites

Cloud Coachers



1. Real-time Sources > Map to different objects from Web and Mobile SDK and Marketing Cloud Personalization data streams.
2. Identity Resolution & Data Mapping
3. Insights
4. Match Rules > (Optional) Define how duplicate records are identified.
5. Enrichment > (Optional) Enrich with unified individual data from customers.
6. Data Actions > Use data actions on your created Streaming Insights and evaluate if an action is necessary or an enrichment to enhance data actions with profile-related attributes.

Cloud Coachers

Cloud Coachers

Streaming Insights benefits



- ✓ Process Event Streams (from web or mobile).
- ✓ Drive automation with flows and webhooks
- ✓ Real-time anomaly detection and alerts
- ✓ Real-time calculations
- ✓ Business process orchestration

Streaming Insights – Use Cases



- **Financial Services** – detect fraudulent/suspicious transactions and send the account and related information to the fraud department database.
- **Action-informed Engagement** – send customers a product installation video, based on the product purchase near real time.
- **Service and Support** – log a case if customer visits troubleshooting pages in a time window.

Comparison



Calculated Insights	Streaming Insights
Completes high-volume data processing and metrics generation.	Processes continuous stream as data is received.
Collects data in batches as sets of records and processes them as a unit.	Works on events happening in real-time.
Performs complex calculations usually needing large historic data. <i>Ex: Customer rank by spend.</i>	Handles micro-batches of few records. <i>Ex: Clickstream analysis, ecommerce transactions.</i>

Ways to manipulate the data



- At **ingestion** time, you can use **formulas** to perform operations on row-based data used downstream. On a single record.
- At **segmentation** time, audiences are created with segment operators.
- With **Calculated Insights**, you can use views to make sense of large-scale behavioral data and reuse views to enhance segmentation.
 - With metrics, dimensions and filters.
 - Non-trivial calculations
 - Complex queries across multiple objects and multiple records.
 - Reusability purposes.

How to manipulate the data

Use Case	Formulas	Segmentation Operators	Calculated Insights
Simple logic on a row-based operation	✓	✗	✗
Ease of use, self-service	✗	✓	✗
Highly reusable content	✓	✗	✓
Attribute updated regularly	✗	✓	✓



Managing Insights



You can see here both Calculated and Streaming Insights.

You can edit, clone, enable/disable, delete or refresh the insights.

You can now modify the SQL logic once the Insight is created.

Metrics on Metrics



Calculated Insights on Calculated Insights...

Create Insight #2 and reference results from Insight #1 to orchestrate a more complex solution.

Metrics on Metrics supports three levels of hierarchy.

Managing Insights



Salesforce CDP Home Data Streams ▾ Data Model Calculated Insights ▾ Data Explorer Segments ▾ Activations ▾ Activation Targets ▾ Data Lake Objects ▾ More ▾

Calculated Insights Recently Viewed New

23 items - Updated a few seconds ago

	Calculated Insight Name	Status	Last Run Time	Last Run Status	Created By	Created Date	Last Modified Date	
1	RFM Scores	Active	3/23/2022, 7:19 AM	Success	CAdmi	11/2/2021, 10:08 AM	3/23/2022, 8:04 AM	▼
2	Spend By Customer Clone Dec 16	Active	3/23/2022, 7:19 AM	Success	CAdmi	12/16/2021, 2:01 PM	3/23/2022, 8:04 AM	▼
3	Spend By Customer (Jan 24 2022)	Active	3/23/2022, 7:19 AM	Success	CAdmi	1/24/2022, 8:20 AM	3/23/2022, 8:04 AM	▼
4	Spend By Customer (Jan 24 2022 v2)	Active	3/23/2022, 7:19 AM					
5	Unified Individual - CP Summary	Active	3/23/2022, 7:19 AM					
6	Spend by Customer (builder 1102)	Active	3/23/2022, 7:19 AM					
7	Spend By Customer	Active	3/23/2022, 7:19 AM					
8	Duplicate Subscriber Count	Active	3/23/2022, 7:19 AM					
9	Feb17_testCI	Active	3/23/2022, 6:19 AM					
10	DQ Source - Individual - CP Summary	Active	3/23/2022, 7:19 AM					
11	Identity Resolution - Summary by Source	Active	3/23/2022, 7:19 AM					
12	Geo Fence Stream	Active	2/9/2022, 1:50 AM					

Search this list... Filter Sort Clear Print

Data Explorer Objects

Object Total Columns

Calculated Insights	Spend by Customer Visual Buil...	7		
Date and time values use your Salesforce org's time zone settings.				
<input type="checkbox"/> Customer ID	<input type="checkbox"/> UnifiedID	<input type="checkbox"/> AvgPurchasValue	<input type="checkbox"/> HighestOrderValue	<input type="checkbox"/> LastRunTime
100000103	5fbcb5b23-78e1-4c80-b568-61e4-198	198	1	
100000062	9ba9e551-9d69-4383-baf1-1caf148.33	300	3	
100000028	b4c4660c-702f-40e7-bea5-9c88-82.67	120	3	
100000217	34704ba5-ca4d-417e-ace8-c611-267	267	1	
100000035	cf74e1ac-74a0-47ad-92bd-7731-153.33	180	3	
100000116	b780b693-ca7e-4635-8156-0bd303	303	1	
100000169	9de092dc-1ddf-49a1-92ee-0f2a-240	240	1	

Creating Insights

2 ways:

- Visual Insights Builder – no code
- SQL Builder

New Calculated Insight

 Create with Builder
Create expressions with a visual builder.

 Create with SQL
Write SQL expressions to create your metrics and dimensions from mapped objects and fields.

 Create from a Package
Create an insight from installed Salesforce packages in a few clicks to quickly get started.

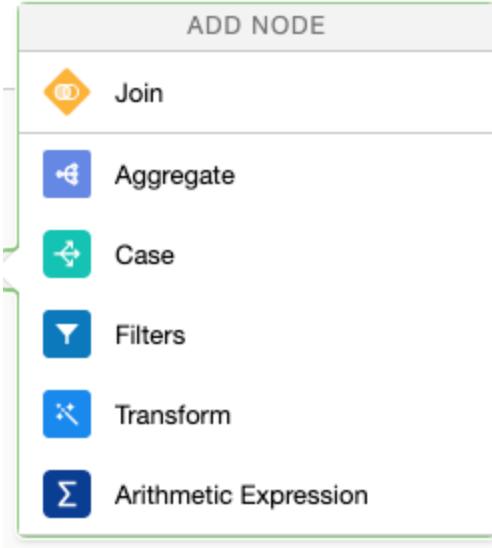
 Create Streaming Insights
Compute streaming metrics across dimensions from your real-time data sources.

[Cancel](#) [Next](#)

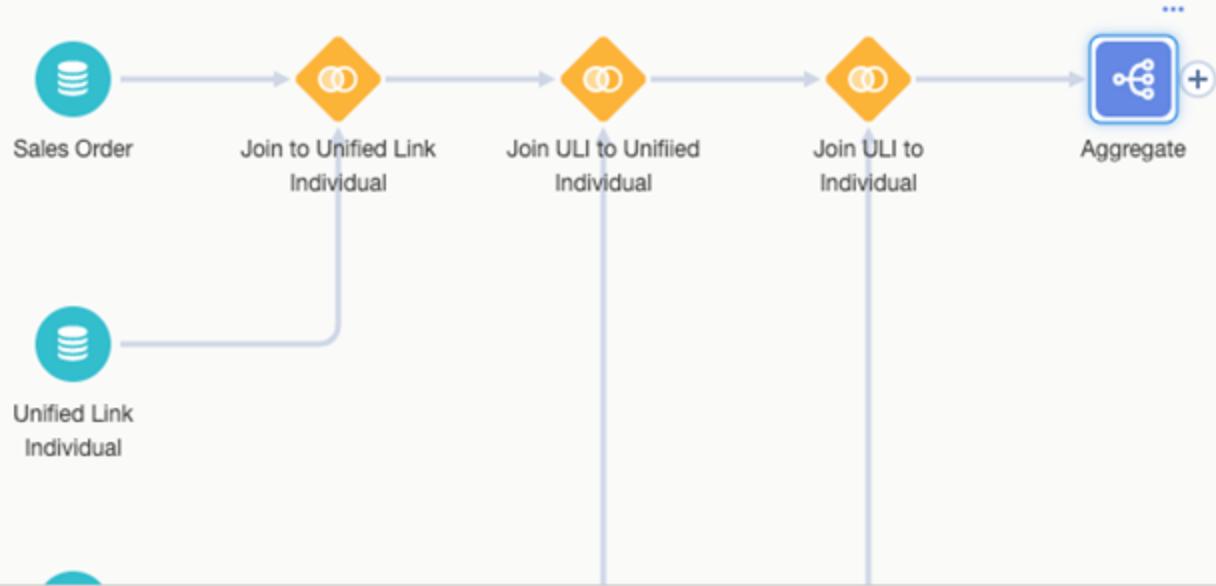
Visual Insights Builder



Insight Builder options



- **Join:** lets you combine datasets in different ways
- **Aggregate:** Calculates on multiple values to return a single value
- **Case:** Goes through conditions and returns a value when the first condition is met.
- **Filters:** Allows you to filter the original dataset by applying conditions.
- **Transform:** Lets you apply transformation functions to your data.
- **Arithmetic Expression:** Allows freeform arithmetic expressions.



AGGREGATE [Aggregate](#)

Sales Order Minimum Grand Total Amount	Delete
Sales Order Maximum Grand Total Amount	Delete
Sales Order Count Sales Order Id	Delete
+	
DIMENSIONS	
Unified Individual Unified Individual Id	Delete

Fields

Fields Name	API Name	Type	Source
LifetimeValue	LifetimeValue	Number	Derived Field
AvgPurchaseValue	AvgPurchaseValue	Number	Derived Field
LowestOrderValue	LowestOrderValue	Number	Derived Field
HighestOrderValue	HighestOrderValue	Number	Derived Field
LifetimeTransactionsCount	LifetimeTransactionsCount	Number	Derived Field
UnifiedID	UnifiedID	Text	Unified Individual
CustomerID	CustomerID	Text	Individual

Measures and Dimensions



Dimensions:

- Fields you would use to group by.
- Ex. Product ID

Measures:

- Fields with numeric value that you would use to make calculations (sum, average, count,...)
- Ex. Grand Total Amount

Define Metric

Search Fields

Metric Functions	Fields Name	Source	Type
Count	Data Source	Sales Order	Text
Sum	Data Source Object	Sales Order	Text
Average	Delivery Method	Sales Order	Text
Maximum	Grand Total Amount	Sales Order	Number
Minimum	Internal Business Unit	Sales Order	Text
Lead	Internal Organization	Sales Order	Text
Lag	Loyalty Point Accrued	Sales Order	Number
Rank	Order Number	Sales Order	Text
Dense Rank	Order Start Date	Sales Order	DateTime

SQL generated by Visual Builder



```
select
AVG(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) as avgpurchasevalue__c,
SUM(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) as lifetimevalue__c,
ssot__Individual__dlm.ssot__Id__c as customerid__c,
UnifiedIndividual__dlm.ssot__Id__c as unifiedid__c,
MAX(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) as highestordervalue__c,
COUNT(ssot__SalesOrder__dlm.ssot__Id__c) as lifetimetransactionscount__c,
MIN(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) as lowestordervalue__c
from
ssot__SalesOrder__dlm
join
IndividualIdentityLink__dlm
on (
ssot__SalesOrder__dlm.ssot__SoldToCustomerId__c =
IndividualIdentityLink__dlm.SourceRecordId__c
)
join
UnifiedIndividual__dlm
on (
IndividualIdentityLink__dlm.UnifiedRecordId__c = UnifiedIndividual__dlm.ssot__Id__c
)
join
ssot__Individual__dlm
on (
IndividualIdentityLink__dlm.SourceRecordId__c = ssot__Individual__dlm.ssot__Id__c
AND IndividualIdentityLink__dlm.ssot__DataSourceObjectId__c =
ssot__Individual__dlm.ssot__DataSourceObjectId__c
)
group by
unifiedid__c,
customerid__c
```

Calculated Insight
Spend by Customer Visual Builder

Status	Last Run Time	Last Run Status
Active		

Details **Expression**

Expression

```
SELECT SUM(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) AS lifetimevalue__c,
MIN(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) AS lowestordervalue__c,
UnifiedIndividual__dlm.ssot__Id__c AS unifiedid__c,
AVG(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) AS avgpurchasvalue__c,
MAX(ssot__SalesOrder__dlm.ssot__GrandTotalAmount__c) AS highestordervalue__c,
COUNT(ssot__SalesOrder__dlm.ssot__Id__c) AS lifetimetransactionscount__c,
ssot__Individual__dlm.ssot__Id__c AS customer_id__c FROM ssot__SalesOrder__dlm JOIN
IndividualIdentityLink__dlm ON (ssot__SalesOrder__dlm.ssot__SoldToCustomerId__c =
IndividualIdentityLink__dlm.SourceRecordId__c) JOIN UnifiedIndividual__dlm ON
(IndividualIdentityLink__dlm.UnifiedRecordId__c = UnifiedIndividual__dlm.ssot__Id__c) JOIN
ssot__Individual__dlm ON (IndividualIdentityLink__dlm.SourceRecordId__c =
ssot__Individual__dlm.ssot__Id__c AND IndividualIdentityLink__dlm.ssot__DataSourceObjectId__c =
ssot__Individual__dlm.ssot__DataSourceObjectId__c) GROUP BY unifiedid__c, customer_id__c
```

Insights - SQL Builder



New Calculated Insight

* Calculated Insight Name

* Calculated Insight API Name

Description

Fields **Insights** **Functions**

Search Fields

- > Account
- > Account Contact
- > Contact Point Address
- > Contact Point Email
- > Contact Point Phone
- > Goods Product
- > Individual
- > Lead
- > Loyalty Member Currency
- > Loyalty Member Tier
- > Loyalty Program Member

Calculated Insight can affect Data Protection and Privacy compliance. [Tell Me More](#)

* Expression

Examples

```
SELECT <Attributes>, <Aggregation[_Measures_]>
FROM <Data Model Object>
JOIN [Inner | Left | Right | Full] <Data Model Object> [Optional]
WHERE <predicate on rows> [Optional]
GROUP BY <columns[_Dimensions_]>
```

SQL Builder tips

Cloud Coachers



Tips

- Measures and Dimensions must end with `_c`.
- Measure must be an aggregate function.
- There must be at least one Measure.
- Only numeric Measures are supported. Non-numeric Measures, for example, `Max(Date)` won't work.
- In CDP, timestamps are stored in Coordinated Universal Time (UTC), which includes CI Insights.
- Calculated Insights are scheduled for refresh every 4 hours

SELECT
SUM(SalesOrder__dlm.GrandTotalAmount__c) as TotalOrderAmount__c,
Individual__dlm.Id__c as CustomerId__c
FROM SalesOrder__dlm
LEFT JOIN Individual__dlm
ON SalesOrder__dlm.SoldToCustomerId__c = Individual__dlm.Id__c
GROUP BY CustomerId__c



Measure	Dimension
TotalOrderAmount__c	CustomerId__c

Deploy from a Package



It's possible to package metadata (including Insights) and deploy it from one CDP org to another via a package.

IT's an opportunity for reuse of best practices and quick deployment in the customer instances.

New Calculated Insight

- Create with Builder**
Create expressions with a visual builder.
- Create with SQL**
Write SQL expressions to create your metrics and dimensions from mapped objects and fields.
- Create from a Package**
Create an insight from installed Salesforce packages in a few clicks to quickly get started.
- Create Streaming Insights**
Compute streaming metrics across dimensions from your real-time data sources.

Installed Packages

Select a Calculated Insight from one of your installed packages.

- Ready to Publish (1)**
 - RFM Scores SOURCE**
 - Required Data Model Objects
Unified Individual, Unified Link Individual, Sales Order
- Not Ready to Publish (0)**
- Published (0)**

Insights Lab



Let's create Calculated Insights

- Visual Builder
- SQL Builder

→ Spend by Customer with SQL

→ RFM Scores



Segmentation



Segment processes



Segment

Filter your data to create useful segments to understand, target, and analyze your customers.

Publish

Publish is the process of searching and building a segment based on the filter criteria. You can publish your segments on a chosen schedule or as needed.

Activate

Activation is the process of moving audience segments to an activation target. For example, during activation, an audience segment is created in a shared data extension that can be used in Marketing Cloud Journey Builder.

Segmentation Engine - no code!



- ✓ Query all the data in the system
- ✓ Create granular segments
- ✓ Understand data composition

Create a segment: how



There are two ways to create a segment.



Einstein Segment Creation

Use artificial intelligence to create your segments



Visual Builder

Use easy drag and drop tool to create your segments

Einstein Segment Creation



Create Segment with Einstein

Segment
Highly Engaged A...

Draft Created by Einstein

Edit Segment Rules

Segment Population Count Population

Segment Description
Accounts with an engagement score greater than 60

Unified Account AL

Attributes	Possible Values	Reasoning
<input checked="" type="checkbox"/> Account Engagement Score	Is Greater Than 60	

Previous Create Segment

Einstein

Describe the segment you want to create using simple phrases. You need to enter at least 2 words or more.

Create a segment of "individuals with account with ISP score greater than 60"

The segment draft is ready for review.

Segment Draft:
Highly Engaged Accounts

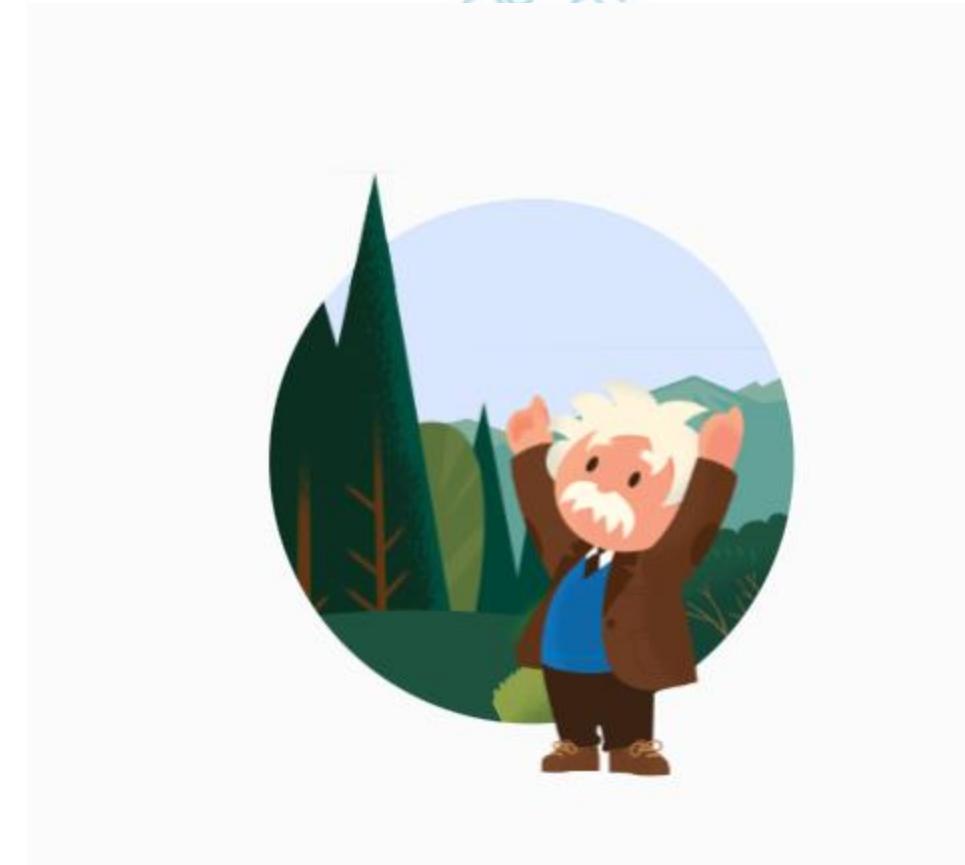
Suggested Actions

Refine Segment

Einstein considerations



- Einstein functionality must be activated previously in set-up.
- The segments can be created only for Unified Individual object.
- The tool uses generative AI, which can produce inaccurate or harmful responses.
- The segment can be edited in visual builder if the results provided don't satisfy the initial requirements.



Visual Builder types



When segmenting with Visual Builder there are 3 types of segments:



Standard Segment

Create a segment based on a data model object and its related objects and insights.



Waterfall Segment

Create a prioritized list of mutually exclusive segments from existing standard segments.



Real-Time Segment

Create a segment based on a real-time data graph. Get responses in milliseconds.

Standard Segment



Segment
Running Shoe Launch for Loyalty Members

Segment On Unified Individual
Publish Schedule Don't refresh

Attributes 1

Search Attributes

Direct Attributes (1)

Unified Individual (29) >

Related Attributes (26) >

85,257 • Population Remainder ⓘ

LTV
LTV_c Is Greater Than 100

Is Loyalty Member Is Equal To Yes

Website Engagement: Count At Least 1
Subcategory Is Equal To Shoes

Sales Order: Count Exactly 0
Purchase Order Date Last Number Of Days 30

Email Engagement: Count Exactly 0
Engagement Date Time Last Number Of Days 7

Case: Count Exactly 0
Case Status Is Equal To Open

Segmentation Concepts



- **Segment creation**
 - Segment On - target object (must be Profile type)
 - Use the Unified Individual as segment target to take advantage of Identity Resolution.
- **Segment Canvas Interface** - direct (1:1) and related (1:N) attributes
- **Attribute library** - direct and related attributes. Based on the objects and relationships mapped during data ingestion.
- **Rule Builder** - create list of prospects and apply segmentation action
- **Container** - way to create relationships between related attributes
- **Count segment** - count of the individuals
- **Publish segment** - publish ad hoc or on schedule to make it available for Activations. Standard publish schedule is 12 or 24 hours.

Note: Each segment can have up to 50 filters and each attribute can have up to 10 nested operators.

Segmentation examples



Device Application Engagement: Count At Least 1
City Name Is In New York, NYC, San Francisco, San Fran

Sales Order: Count At Least 1
Purchase Order Date Is Between 2020-08-01 AND 2020-08-31
Grand Total Amount Is Greater Than 1000

Segment NTO Use case Segment On Individual Publish Schedule Don't refresh Done

Attributes engagement 5,111 Population Segment Status Active Save

Related Attributes (11)
Einstein Email Engagement Scores (1)
Email Engagement Persona

Interest Is Equal To camping
Engagement Topic: Count At Least 1
Engagement Channel Action Contains open
Engagement Date Time Last Number Of Days 60

Rule Builder



Cloud
Coachers

Cloud
Coachers

Direct
(1:1)

Include consumers with

Attribute	Operator	Value
Gender Name	Equal to (=)	Female

Direct (15)

< ... Unified Individual (12)

- First Name
- Last Name
- Gender Name
- Occupation
- Birth Date
- Birth Place

Person	
Pk_Person_Id	1234
Name	Astro
...	...
...	...

PassportDetails	
Pk_Passport_Id	7652
Fk_Person_Id	1234
...	...
...	...

Related
(1:N)

Sales Order Product

* Aggregation Individuals with

Aggregation	Individuals with
Count	At Least 1 Sales Order Product

Attribute Operator Value

Product Description	Contains	Shoes
Model Year	Equal to (=)	2019

Related (123)

< ... Product (17)

- Brand (3)
- Product Category (32)
- Product Category Product (32)
- Product Name
- Product Description
- Product Long Description
- Brand
- Manufacturer Name
- Product SKU

Person	
Pk_Person_Id	1234
Name	Astro
...	...
...	...

Sales Order	
Order_Id	8445
Fk_Person_Id	1234
...	...
...	...

Sales Order	
Order_Id	8439
Fk_Person_Id	1234
...	...
...	...

Container Path



- Containers provide a way to create relationships between your related attributes.
- Attributes within a container act on the same data row in the data model table.
- The Attribute Library displays objects up to five relationships away from the container.
- Two attributes outside of a container have no relationship to one another and filter your segment separately.
- If your attributes are unrelated in your chosen data model, they can't be combined in a container.

Loyalty Member Currency

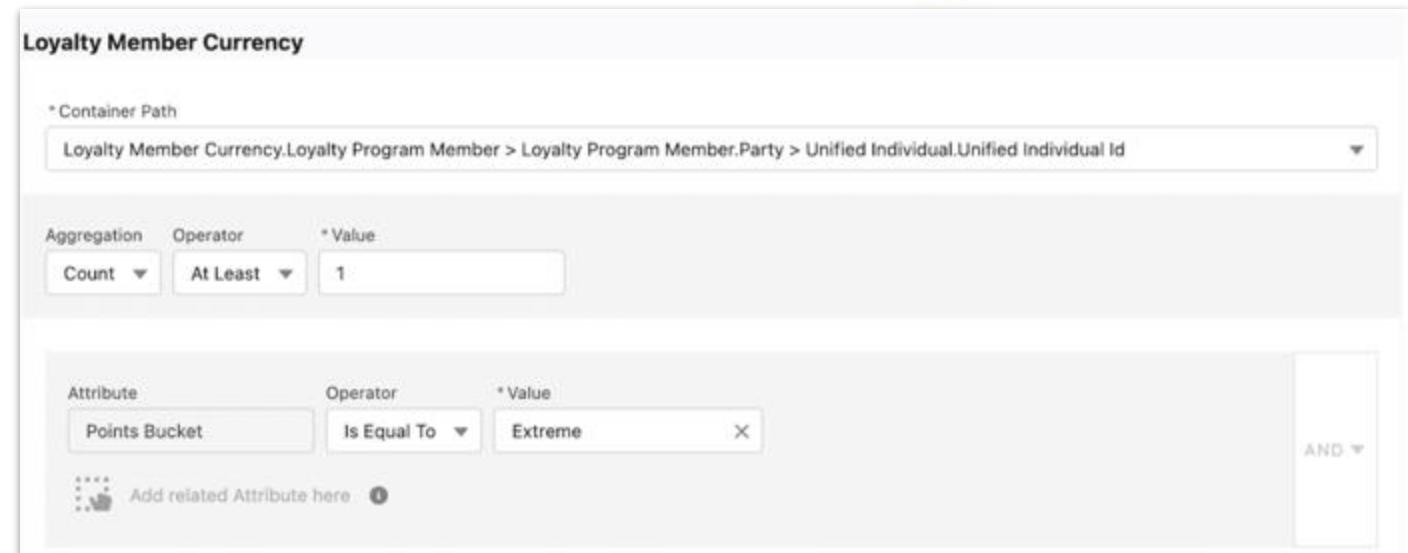
* Container Path
Loyalty Member Currency.Loyalty Program Member > Loyalty Program Member.Party > Unified Individual.Unified Individual Id

Aggregation: Count Operator: At Least * Value: 1

Attribute: Points Bucket Operator: Is Equal To * Value: Extreme

Add related Attribute here

AND



Container path example



If you add **yellow** and **scarf** in the **same container** using AND, the query engine looks for a customer who purchased a “**yellow scarf**” as a single product on the purchase.

If you place yellow and scarf in **separate containers**, the query engine looks for customers who purchased any yellow product and also purchased a scarf of any color.



Waterfall Segment



Waterfall Segment
Waterfall

Segment On
Unified Individual 1

Publish Schedule
Don't refresh

Segment Status
Active

Edit Properties Done Save

Segments	
Shows Unified Individual 1 segments not placed in another segment and without a publish schedule. Learn more in Help	
<input type="text"/> Search Segments	
1	<p>Highly Engaged Audience</p> <p>Population: -</p> <p>Description: Audience with a score, einstein score, and Account Engagement Score greater than 30.</p>
2	<p>Individuals not in Salesforce</p> <p>Population: -</p>
<p>Test1</p> <p>Spanish Audience</p>	

Data Graphs



- Combine and transform normalized table data from data model objects (DMOs) into new, materialized views of your data.
- Data is precalculated, you can make fewer calls, and queries respond in near real time.
- Real-time data graphs are required to run real-time identity resolution, real-time calculated insights, or real-time segments.
- To create a data graph, you select fields from existing DMOs that you want to combine. The fields are aggregated and transformed in a read-only data graph record that formats the combined data as a single JSON blob.

New Real-Time Segment



- Completes on demand in milliseconds.
- Make the segment available in your real-time data graph
- Add the Segment ID and Timestamp fields from the segment membership DMO object to the real-time data graph.
- You can't use a real-time segment with exclusion criteria and nested segments. You also can't use segment counts and manual publish with a real-time segment.

The screenshot shows a user interface for creating a new real-time segment. At the top, it says "New Real-Time Segment". Below that, a question asks "How do you want to create your segment?". Two options are shown: "DataKit Segment" (with a download icon) and "Use a Visual Builder" (with a visual builder icon). The "Use a Visual Builder" option is highlighted with a blue border. The next section, titled "What type of segment do you want to create?", contains three options: "Standard Segment" (with a standard segment icon), "Waterfall Segment" (with a waterfall segment icon), and "Real-Time Segment" (with a real-time segment icon). The "Real-Time Segment" option is also highlighted with a blue border. At the bottom, there are "Cancel" and "Next" buttons, along with a progress bar showing the first step is completed.

Manage Segments



What can you do with your already created segments?

- Edit segment properties
- Edit segment rules
- Copy segments
- Delete segments
- Inactivate segments

Note: if you plan to use the segment again, stop the publish schedule instead of deleting the segment.

Calculated Insights in Segmentation



- ✓ The **Segment On** entity must be a profile when using Calculated Insights in Segments.
- ✓ For Insights to appear in Segments, the table that you segment on must be added to the query as a JOIN.
- ✓ The primary key of the segmented table must also be a **dimension** in your created Insight.

Identity Resolution in Segmentation

You can use attributes from both rulesets to validate and test different population counts.

After using Identity Resolution to create different rulesets for the same entity, entities and attributes created by both rulesets are available in segmentation.

To build a new segment based on the fuzzy ruleset, use *Unified Individual fuzzy* in the Segment On field.

Audience members who opted in to Restriction of Processing are removed from the population when segmenting on Unified Individual or Individual. Data Protection and Privacy compliance controls for personal data are not enforced when segmenting on any other objects. [Tell Me More](#)

New Segment

Segment On	Unified Individual fuzzy	Publish Schedule	Don't refresh
Segment Name	General Match Rules Segment	Start Date	Start Time
Segment Description	Based on second identity resolution ruleset with stricter match rules		
		Expiration Date	

Value Suggestion in Segmentation



Attributes that have been enabled with Enable Value Suggestion in the Data Model allow you to search data values along with Type ahead functionality to surface ingested values for your attributes.

- Only text attributes can be enabled for Value Suggestions.
- Value Suggestion can be enabled for up to 500 attributes in your entire org.
- It can take up to 24 hours for suggested values to be visible after being enabled.
- For attributes with more than 1,000 values, the most frequently occurring 1,000 values in the dataset are displayed alphabetically. Some operators allow you to select multiple values for an attribute.
- Values with more than 255 characters aren't available as suggested values, but you can still type them in to filter on them.



The screenshot shows a configuration interface for a segmentation rule. The rule details are as follows:

Attribute	Operator	Value
Points Bucket	Is Equal To	Type and select value... <input type="text"/>

Below the table, there is a button labeled "Add related Attribute here" with a plus sign icon. A tooltip message at the bottom states: "The Event Date attributes for this container have a dependency on this rule." To the right of the input field, a dropdown menu is open, showing the following options:

- Extreme
- Completa este campo
- High
- Low
- Medium

Use Case examples



- Unified individuals with at least 3 emails opened in the last 30 days
- Unified Individuals who have not purchased in the last 90 days
- Find highly engaged individuals with large purchase sums
- Find customers with low Customer Satisfaction (CSAT) scores and who haven't used discount coupons

General Segmentation tips



- If you're finding that Segment logic is too complex or referencing too many CDP objects, explore using a Calculated Insight to reduce the number of CDP objects referenced by your segment.
- Use a Calculated Insight instead of many attributes and nested operators within your segment.
- Each segment can have up to 50 attributes and each attribute can have up to 10 nested operators.
- Queries honor exact matching on special characters and accents and aren't case-sensitive.
 - For example, querying on *City / Is Equal To / Canon City* doesn't find the city Cañon City.
 - Queries on *City / Is Equal To / Canon City* finds canon city.
- Your Data Cloud org sets the publish time zones on the initial segment save and segment canvas. Updates made to your Salesforce org's time zone aren't reflected in existing segments. To update the time zone of existing segments, resave the segments.

Segmentation examples



Segment On
Unified Individual Publish Schedule
Don't refresh

31 • Population Remainder

Segment Status
Active Save

Spend by Customer
lifetimevalue__c Is Greater Than 700

Sales Order: Count Exactly 0
Order Start Date Last Number Of Months 6

Email Engagement: Count Exactly 0
Engagement Date Time Last Number Of Months 6
Engagement Channel Action Is In Open, Click

Loyalty Member Currency: Count At Least 1
Points Bucket Is Equal To Extreme

Marketing Preference

Aggregation Operator * Value
Count At Least 1

AND▼

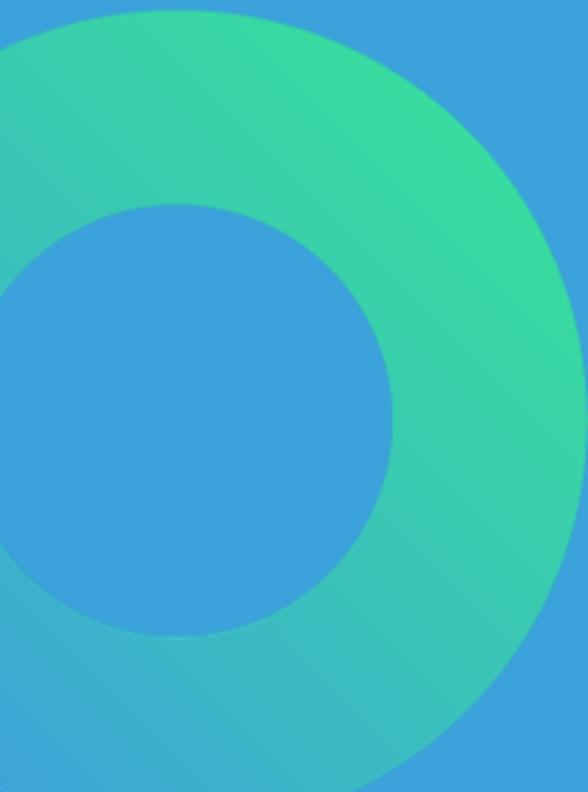
Attribute Operator * Value
Preference Name Is In 2 Value(s) Selected Holiday Deals Competition Entry

Attribute Operator * Value
Opted In Is Equal To true

Add related Attribute here

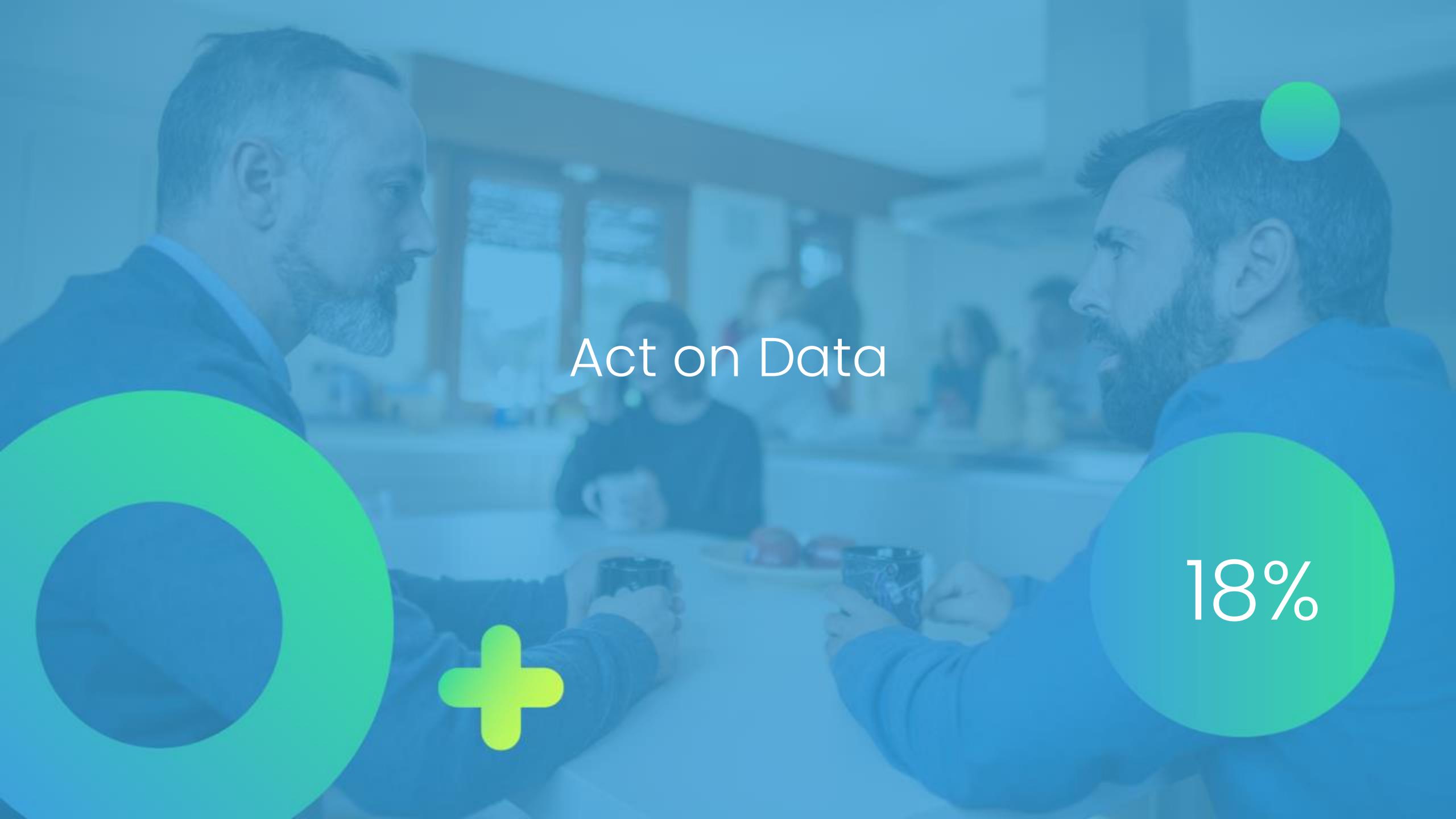
The Event Date attributes for this container have a default date range of 24 months. [Tell Me More](#)

Segmentation Lab



Let's create a few segments:

- High Value Churn Risk
- Extreme Loyalty Members Up for Promotion



Act on Data



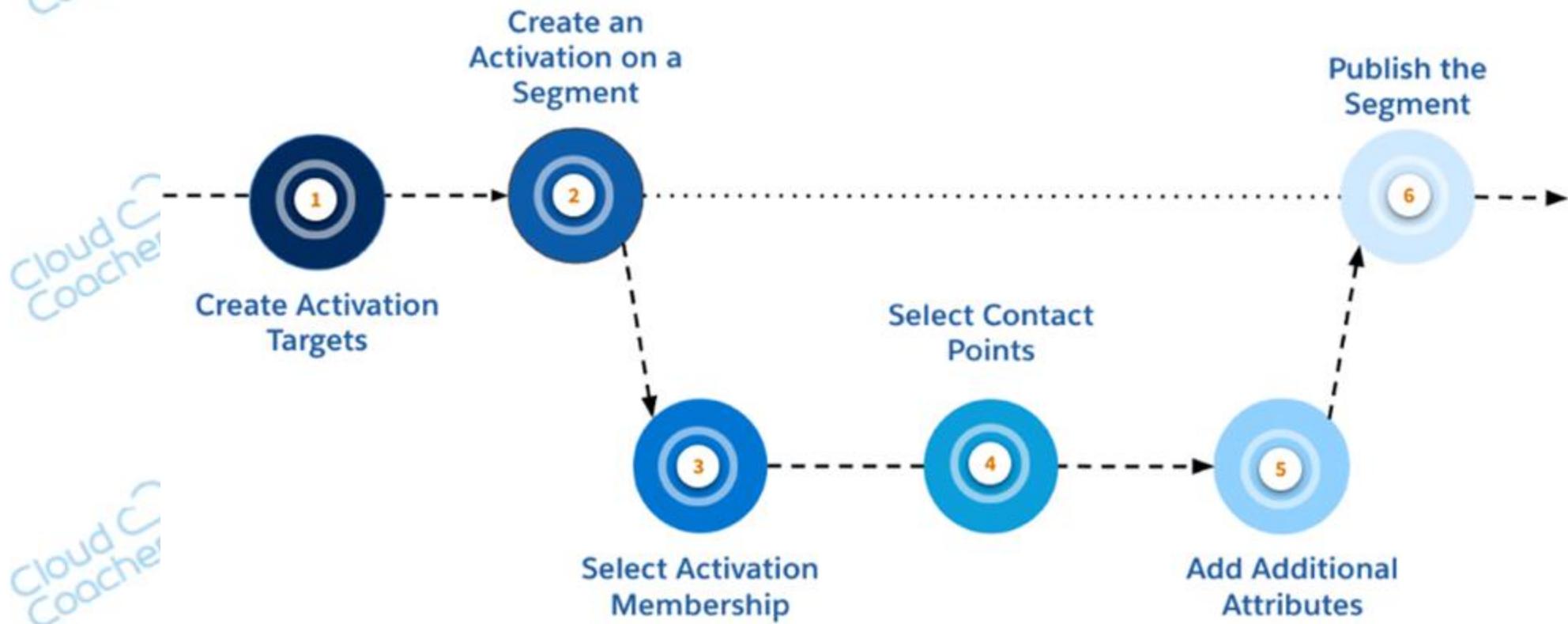
18%

Activation

Cloud Coachers



The process that materializes and publishes your segment to activation platforms.



Activation Targets



- In Marketing Cloud → as Shared Sendable Data Extension
 - DE naming pattern: {first 52 characters of segment name}_16 characters of activation_name}_{32 characters of Alphanumeric Random number}
- Cloud File Storage → from CDP to AWS S3
 - Segments are created in YYYY/MM/DD/HH/{first 100 characters of segment name}/{20 characters of activation name}_{timestamp in yyyyMMddHHmmss format}.
- CDP so that core apps can query for segment membership, Calculated Insights, etc.
- Google, Meta,...
- External Activation → packaged and listed on AppExchange

An activation target is automatically created for each Marketing Cloud Personalization account and B2C Commerce instance connected to CDP.

Advertising Activation Targets

New Activation Target

Select Activation Platform

Salesforce Apps

Cloud Coachers

External Platforms i

All (2) Advertising (2) Publishing (0) Analytics (0) Marketing (0) Technology (0)

Google Ads
Create activation targets using a connected Google Ads account.

Meta (Facebook)
Create activation targets using a connected Meta account.

Activations



Activation Targets

Recently Viewed

3 items • Updated a few seconds ago

Name	Platform
1 CDP_Org_524005450	Customer Data Platform
2 Audiences_524005450	Amazon S3
3 Marketing Cloud CC Training	Salesforce Marketing Cloud

Create an Activation on a Segment

Cloud Coachers

The screenshot shows the Salesforce Marketing Cloud interface. On the left, there's a sidebar with sections like 'Customer Data Plat...', 'Segment' (selected), 'High Value Churn Risk', 'Segment Population' (20), and 'Activations (0)'. The main area is titled 'New Activation' and says 'Select a segment, activation membership, and activation target.' It lists 'High Value Churn Risk' and has an info message about changing special characters. It shows an 'Activation Target' set to 'Marketing Cloud CC Training' and an 'Activation Membership' set to 'Unified Individual (default, based on selected segment)'. To the right is an 'Activation Summary' section with details for the activation.

Activation Summary	
	High Value Churn Risk Edit
Segment On:	Unified Individual
Publish Schedule:	Don't refresh
	Marketing Cloud CC Training Edit
Platform:	Marketing Cloud
Business Units	3khDn0000004CG0I

Attributes Included (1)

1. Unified Individual Id

New Activation

Select a segment, activation membership, and activation target.



High Value Churn Risk



For Marketing Cloud activation targets, we change special characters to underscores in the segment name and activation name.

* Activation Target



Marketing Cloud CC Training [Edit](#)

Activation Summary



High Value Churn Risk [Edit](#)

Segment On: Unified Individual

Publish Schedule: [Don't refresh](#)



Marketing Cloud CC Training [Edit](#)

Platform: Marketing Cloud

Business Units 3khDn0000004CG0I

Attributes Included (1)

1. Unified Individual Id

New

Create a new Activation



New Activation

Email

✓ Selected

Adds the Email Address and Email Subscriber Key attributes for your activation

Email Address Path ⓘ

Unified Indv Contact Point Email.Party > Unified Individ...

Edit

Source Priority Order ⓘ

For Salesforce Marketing Cloud, the primary email addresses with highest click score will be selected.

Priority	Source	Email Type ⓘ
1	SFMC10961754	Any
2	Any	Any

Hide advanced options ^

Activation Membership



- Either Segmented On entity OR
- entities with 1:Many relationship with Segmented On entity

You can use it to add fields from different DMOs

Select a segment, activation membership, and activation target.

* Segment ⓘ
arv individuals v2

* Activation Target ⓘ
Audiences_523010258

* Activation Membership ⓘ
Individual (default, based on selected segment)
✓ Individual (default, based on selected segment)
Account
Loyalty Program Member

Activation Summary

arv individuals v2 ↗
Segment On: Individual
Publish Schedule: ⚠ Don't refresh

Audiences_523010258 ↗
Platform: Amazon S3
Bucket Name: arcdp01-dev

Attributes Included (1)

1. Individual Id

Contact Points



The Contact Point selection determines **which objects and fields** are included in an activation and sent to an activation target.

The *Source Priority Order* is used to determine which contact point value is selected for an activation when multiple values are available.

Marketing Cloud Activation: When multiple email contact points are available from Marketing Cloud for a Unified Individual, Einstein click scores are used to prioritize and pick the email contact point.

Clients can prioritize contact points by source.

Additional Attributes



You can add:

- Attributes of the Activation Membership entity
- Attributes from entities mapped with a direct relationship to the Activation Membership entity

When you include additional attributes in an activation, you can give the attribute a Preferred Attribute Name for that activation. You can add up to 100 additional attributes for an activation.

Attributes Included

Add Attributes

Attribute	Preferred Attribute Name	Filters
1 Unified Individual Id		Not Available
2 First Name	FirstName	Not Available
3 Last Name	LastName	Not Available

Limits on Additional Attributes



You can now add as attributes multiple measures from the same source (the same Calculated Insights)

Each activation is limited to 20 or fewer related attributes across 4 DMOs

Add Additional Attributes

i Add attributes from objects in the same path. You can use up to 30 activations with related attributes. [Tell Me More](#)

i Each activation is limited to 20 or fewer related attributes across 4 data model objects. [Tell Me More](#)

Calculated Insights in Activation



Add your Calculated Insights (CI) metrics (measures) onto any new or existing activation.

You can also add dimension filters to your CI metric for more granular insights on an activation.

The screenshot illustrates the 'Add Additional Attributes' interface in Salesforce Marketing Cloud. On the left, under 'Attributes', there's a search bar and a list of standard attributes: Birth Date, Created Date, First Name, Internal Organization, Last Modified Date, Last Name, Outdoor Interest, Person Name, Photo URL, and Salutation. Below this is a section titled 'Calculated Insights:' which lists several metrics: *Unified Individual - CP Summary* (5), Duplicate Subscriber Count (1), RFM Scores (4), Spend By Customer (5), Spend by Customer (builder 1102) (5), Spend By Customer (Jan 24 2022 v2) (5), Spend By Customer (Jan 24 2022) (5), and Spend By Customer Clone Dec 16 (5). On the right, under 'Unified Individual', there are fields for Unified Individual Id, First Name, Last Name, Person Name, and Outdoor Interest. The 'RFM Scores' and 'Spend By Customer' items are highlighted with a red box, and a red arrow points from the 'Calculated Insights:' list to the 'RFM Scores' field. A note at the bottom right says, 'To add attributes to your activation, drag them onto the canvas.'

Curated DMO



- Multiple segments can be activated to one “curated DMO”.
- Curated DMO’s schema grows horizontally as more segments are activated to the curated DMO.
- Curated DMO attributes (direct attributes & calculated insights) are frozen when the 1st activation to the curated DMO is created.
- All segments activated to the “curated DMO” contain the same set of attributes and calculated insights.
- Curated DMO primary key is the primary key of “Activate on” entity.
- For each segment, 3 attributes are persisted into the curated DMO by default:
 - Segment {segmentid}
 - Segment {segmentid} Name
 - {segmentid} Last Processed
- Curated DMOs are refreshed every 12 hours; support ad hoc refresh with “refresh now” option in segment record home.
- Curated DMOs are available as “read only” in the “Data model” tab. They are not available to map the data streams.
- Curated DMOs are available to view in Data Explorer.

CDP Org (Curated DMO) - Allows query for segment memberships from Salesforce & outside apps

Data Cloud Flows

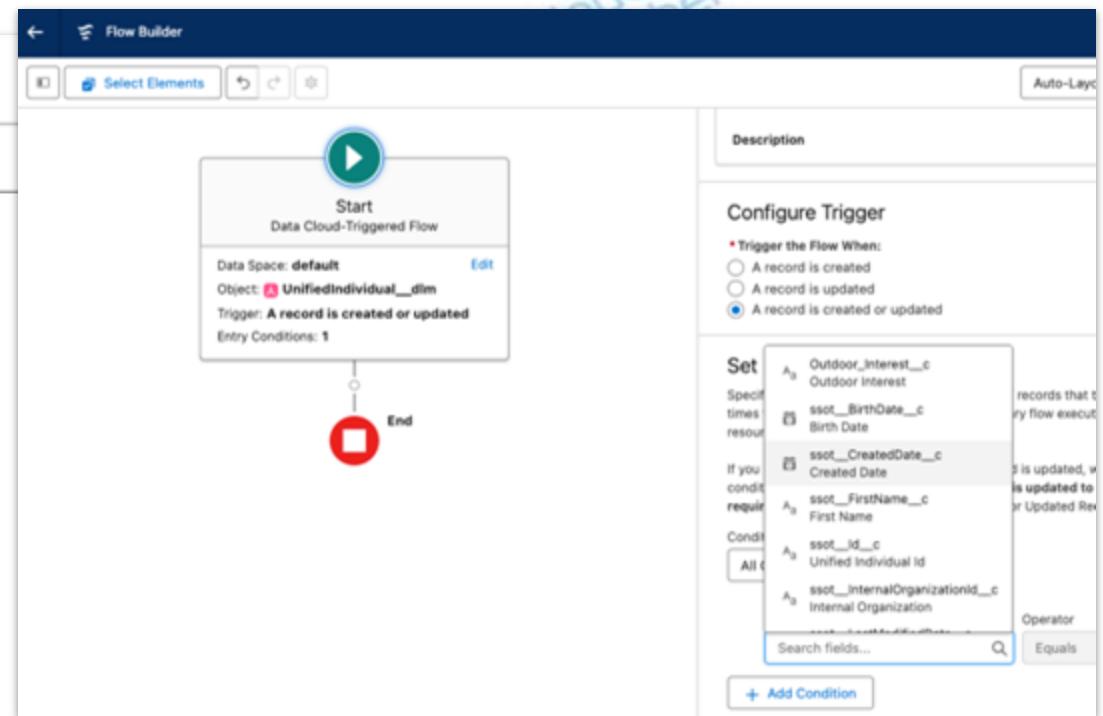


New Flow

Core All + Templates

- Screen Flow**
Guides users through a business process that's launched from Lightning pages, Experience Cloud sites, quick actions, and ...
- Record-Triggered Flow**
Launches when a record is created, updated, or deleted. This autolaunched flow runs in the background.
- Schedule-Triggered Flow**
Launches at a specified time and frequency for each record in a batch. This autolaunched flow runs in the background.
- Platform Event—Triggered Flow**
Launches when a platform event message is received. This autolaunched flow runs in the background.
- Autolaunched Flow (No Trigger)**
Launches when invoked by Apex, processes, REST API, and more. This autolaunched flow runs in the background.
- Data Cloud-Triggered Flow**
Launches when Data Cloud data model object (DMO) or calculated insight object (CIO) conditions are met.
- Record-Triggered Orchestration**
Launches when a record is created or updated. An orchestration lets you create a multi-step, multi-user process.

A red arrow points from the "Data Cloud-Triggered Flow" section towards the "Flow Builder" interface on the right.



Data Cloud Flows

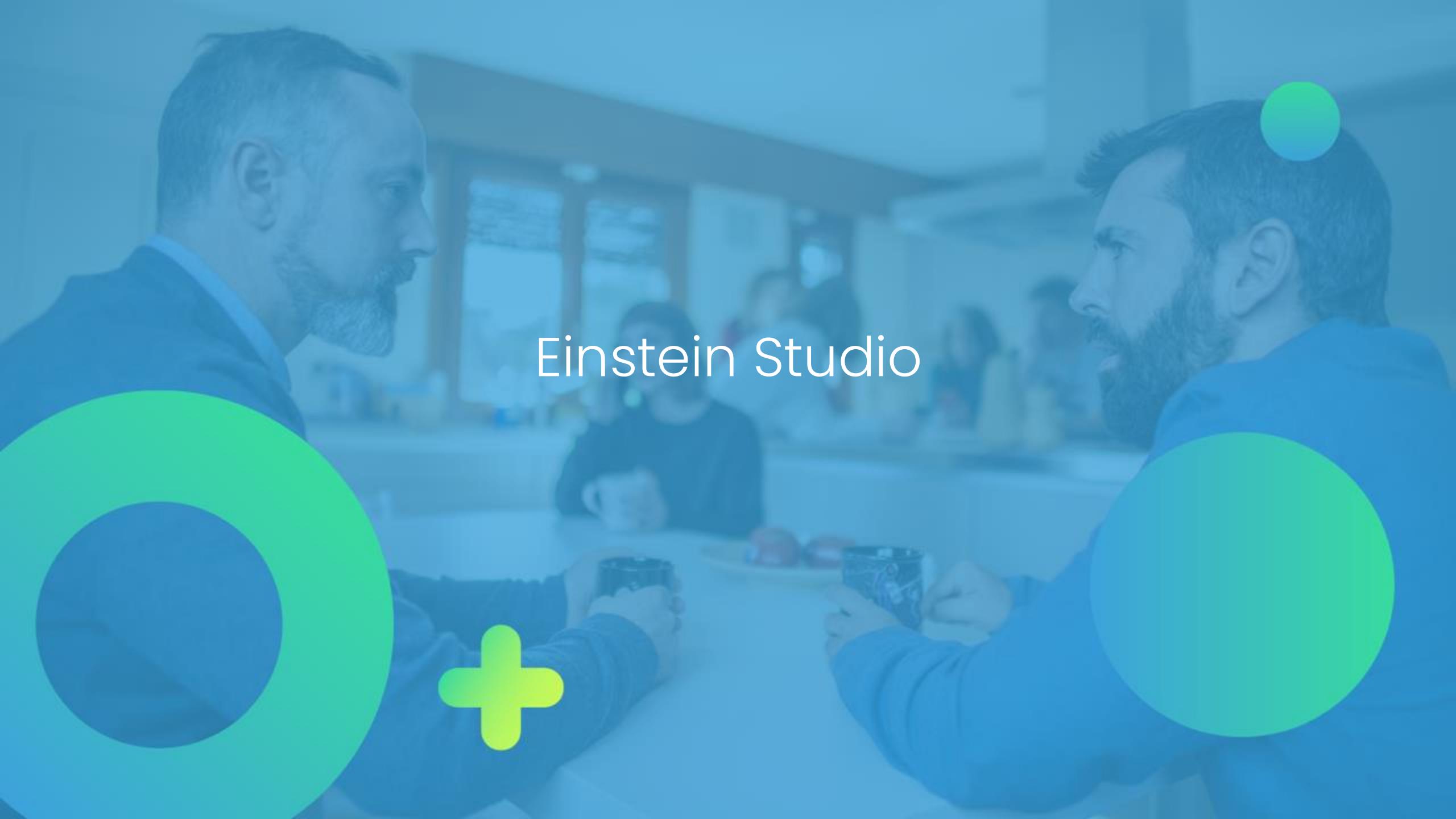
Platform Event-Triggered Flow: automates processes when a data change event message is received.

Activation Lab



**View Activation Targets
Available**

Create a New Activation

A photograph of a man with a beard and short hair, wearing a light blue button-down shirt. He is looking down at a camera he is holding in his hands. The background is slightly blurred, showing what appears to be an indoor setting with other people and equipment.

Einstein Studio



Predictive Models



You can create your own or connect Predictive models from others systems to your Data Cloud

Choose the type of model

 **Create a model from scratch**
Build and customize your own model with clicks, not code.

 **Connect an Amazon SageMaker model**
Bring your SageMaker model output into Data Cloud to quickly operationalize its predictions and recommendations.

 **Connect a Google Cloud Vertex AI model**
Bring your Google Cloud Vertex AI model output into Data Cloud to quickly operationalize its predictions and recommendations.

 **Connect a Databricks model**
Bring your Databricks model output into Data Cloud to quickly operationalize its predictions and recommendations.

Create your own model

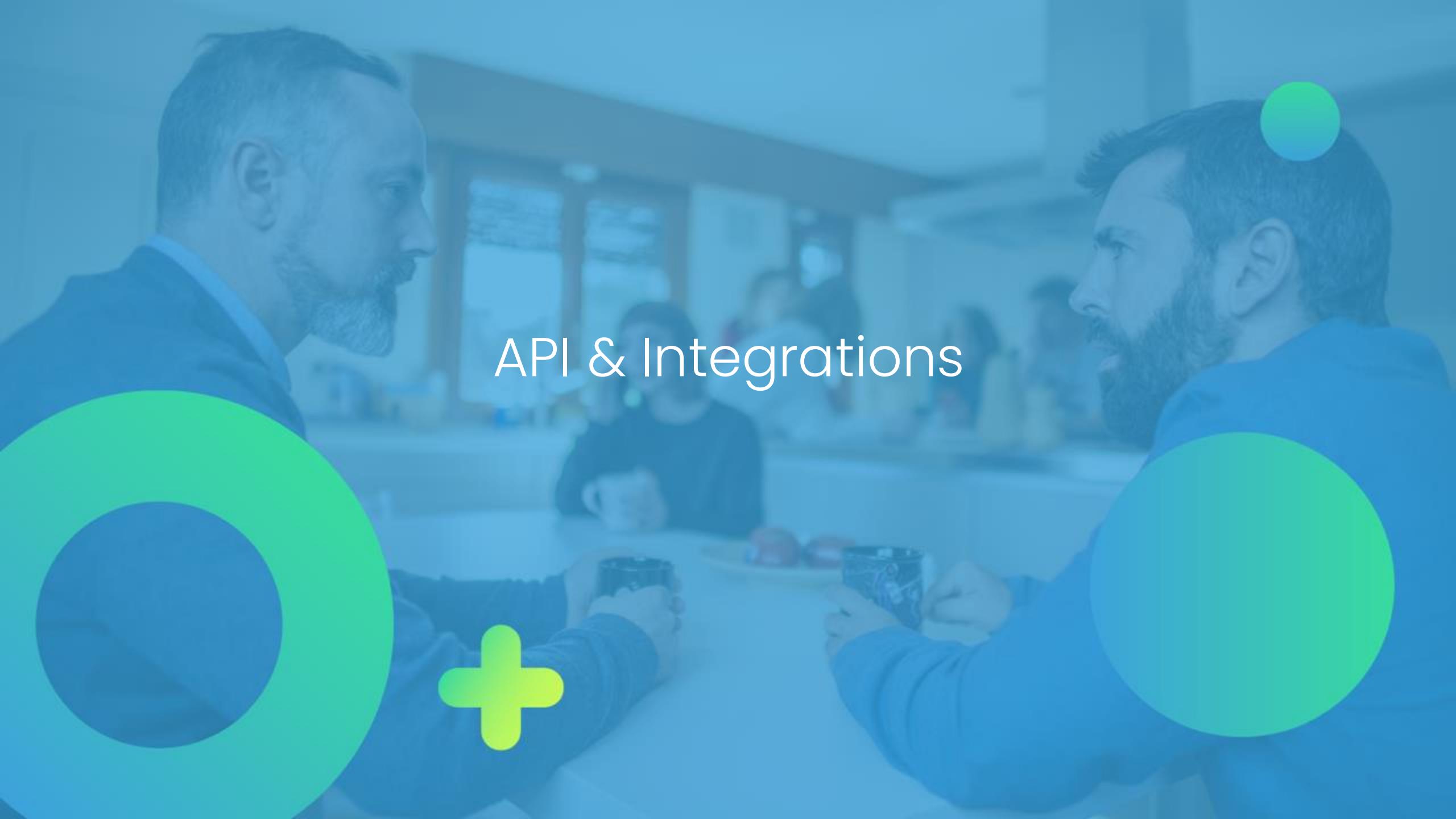


Select the data source for the data model.

Select training data (filtering the records)

Set the goal for the training model

Prepare variables

A photograph of two men in a bar or pub. One man is in the foreground on the left, looking towards the right. The other man is in the background on the right, also looking towards the right. There are several glasses on the bar counter. Overlaid on the image are three large, semi-transparent circles: one on the far left, one on the far right, and one at the top right. A bright yellow-green plus sign is positioned in the lower center area.

API & Integrations

Ingestion API

Cloud Coachers



You can push data from an external system into Data Cloud with [Ingestion API](#)

Ingestion API is a REST API and offers two interaction patterns:

- Bulk → accepts CSV files in cases where data syncs occur periodically.
- Streaming → accepts incremental updates to a dataset as those changes are captured

The same data stream can accept data from the streaming and the bulk interaction.

In Data Cloud, the process of setting up and configuring Ingestion API includes tasks that must be completed by the admin, the data aware specialist, and the developer.

Setup Ingestion API Connector



https://help.salesforce.com/s/articleView?id=sf.c360_a_connect_an_ingestion_source.htm&type=5

Ingestion API Schema File

https://help.salesforce.com/s/articleView?id=sf.c360_a_ingestion_api_schema_req.htm&type=5

Resources!!

https://help.salesforce.com/s/articleView?id=sf.customer360_a.htm&type=5

CDP Implementation Guides:

https://help.salesforce.com/s/articleView?id=sf.Customer_360_implementation_guides.htm&type=5

 Get Started with Data Cloud	 Plan Your Data Strategy	 Set Up and Maintain
Salesforce Help: Get Started	Salesforce Help: Plan Data Strategy	Salesforce Help: Set Up and Maintain
Trailhead: Data Cloud Basics	Salesforce Help: Consumer Privacy and Consent	PDF Guide: Data Cloud Admin Implementation Guide
PDF Guide: Data Cloud Implementation Overview Guide	Trailhead: Build a Data Strategy for Data Cloud	Trailhead: Data Cloud for Admins
Salesforce Developer: Data Cloud Developer Guide	Trailhead: Learn Privacy and Data Protection Law	Salesforce Developer: Acquire and Exchange Your Access Token
	Salesforce Developer: Use the Consent API	External: Triggering Notifications on CDP Status Changes with Flow
	Trailmix: Data Cloud and the Ethical Use of Data	External: Managing Feature Access with Sharing Rules on Data Cloud



Data Cloud Provisioning

Free



Free Data Cloud on Enterprise ed.



The screenshot shows the Salesforce Product Catalog interface. At the top, there's a banner announcing the availability of Data Cloud by 20 September 2023. Below the banner, the main navigation bar includes 'Your Account' and 'Products'. Under 'Products', there's a section for 'All Products'. A specific product listing for 'Data Cloud Provisioning' is highlighted with a red border. This listing includes a small icon, a brief description: 'Get the real-time insights you need to personalize every customer...', and a price of '0,00 € per month'. There are quantity selection buttons and an 'Add to Cart' button. To the right of this, there are other product cards for 'Salesforce Inbox - Enterprise Edition' and 'Customer Community - Enterprise Edition - Logins (Per Month)'. Each card shows its name, a brief description, a monthly price, and an 'Add to Cart' button.

The screenshot shows the Salesforce Cart page. It displays a summary of the items in the cart, including 'Overage Rate: Data Storage (GB)' at 0,18 € and 'Overage Rate: Data Services Credits' at 0,01 €. It also lists 'Data Cloud Provisioning' with a quantity of 0 and a monthly price of 0,00 €. The total amount shown is 'TOTAL* 0,00 € EUR'. Below the total, a note states: '*Plus applicable taxes'. At the bottom, there are links for 'Terms and Conditions' and a note about taxes, along with 'Back' and 'Order & Sign' buttons.

Data Cloud Start Guide



Data Cloud Quick Start Guide:

<https://org62.my.salesforce.com/sfc/p/#000000000062/a/3y000002Rojw/MeAIQlvd9uUzVGEmSWHpclBNDihmdDd9whEk7JRqCFs>

Free Data Cloud does not include Segmentation and Activation

2 Use cases:

1. Unified Leads for Targeted Selling
2. Consolidated View for Service

Steps for Free Data Cloud



1. Add the *Data Cloud Admin* permission set to Admins
2. Navigate to Data Cloud Setup > Get Started
3. Connect to Sales or Service orgs
4. Install Data bundles (Sales or Service Cloud)
5. Create Data Streams
6. Unify data with Identity Resolution
7. Calculated Insights
8. Add *Data Cloud User* permission set to users

Tip: Formatted E164 Phone Number has to be mapped to Business Phone



Thanks!!

