

salesforce

Data Cloud Implementation Overview Guide

Salesforce, Winter '25



Last updated: September 6, 2024

CONTENTS

Welcome to Data Cloud	1
Overview of Data Cloud Implementation Steps	2
Data Ethics	3
Data Cloud Architecture Strategy	4
Data Flow	5
Customer 360 Data Model	6

WELCOME TO DATA CLOUD

Bring data together, unify that data into unified profiles, and then act on that data across Salesforce and externally with Data Cloud.

Who This Guide Is For

This guide is for all roles involved in the implementation of Data Cloud.

Document Goals

The goal of this implementation overview is to provide an overview of setup steps to implement Data Cloud and share important concepts.



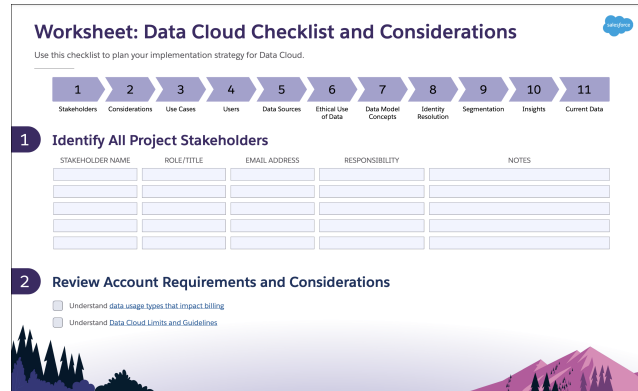
Note: PDF guides are updated regularly, so check the date of any downloaded and saved guides before beginning your implementation.

Before Your Start

- Identify project stakeholders.
- Identify Data Cloud users.
- Document business requirements.
- Identify data sources and integrations.
- Review billing and limitation guidelines.
- Ensure that you have proper permissions and credentials to these data sources.
- Confirm your data and data model requirements: standard, custom, or a hybrid approach
- Determine identity resolution rules needed for creating unified profiles.
- Discuss what Discuss desired audience segments and data required to create those segments.

Checklist and Considerations

Download the interactive PDF worksheet: [Data Cloud Checklist and Considerations](#).



[Overview of Data Cloud Implementation Steps](#)

To set up a new Data Cloud org, there are several implementation steps to complete.

[Data Ethics](#)

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

[Data Cloud Architecture Strategy](#)

Consider these data tenancy and residency factors before enabling Data Cloud.

[Data Flow](#)

Use the power of Data Cloud data in and out of Data Cloud. Data can be ingested and stored in Data Cloud or can be connected via metadata and queried without storage.

[Customer 360 Data Model](#)

The Customer 360 Data Model reduces the complexities of integrating data across cloud applications by providing standardized data guidelines. Extend the data model to create data lakes, generate analytics, train machine-learning models, build a single view of the customer, and more.

Overview of Data Cloud Implementation Steps

To set up a new Data Cloud org, there are several implementation steps to complete.

Let’s review the steps along with the roles responsible to complete them.

Configure Data Cloud and Connect Data Sources

Data drives Data Cloud functionality. The System admin creates users, manages data spaces, and establishes connections with data sources in Data Cloud Setup.

Then the Data Cloud admin or data aware specialist imports or connects your data via zero copy data federation from various sources in its original form or “as-is” using data streams.

Note: Starter data bundles found in Salesforce connectors are designed to give you fast time-to-value. With the starter bundles, most data source objects are created and mapped to the data model automatically.

Prepare and Model Data

Data brought into Data Cloud can be transformed and prepped before mapping. After data is brought in through data streams, data must be mapped to an extensible data model, call the Customer 360 Data Model.

- Extend your original source schema or blueprint if desired through formula fields. Formula fields allow you to cleanse or derive more fields so that your data is in an optimal format for segmentation and content personalization.
- Save the original source fields and the optional formula fields to collectively define your data lake objects (DLOs).
- Harmonize your preserved source schema into a cohesive, source-agnostic view by mapping your DLOs to a data model object. Select a standard data model object (DMO) informed by the Customer 360 Data Model, or create your own.

Create Unified Profiles

Identity Resolution is a key feature of Data Cloud because it unifies data from customers and accounts into unified profiles. A Data Cloud admin or data aware specialist creates identity resolution rulesets in Data Cloud.

- Create a ruleset.
- Configure matching rules.
- Select reconciliation rules.

Build Insights

Now that data is in Data Cloud, users can query and analyze data, create insights to build useful metrics, or train AI models to predict behavior. A Data Cloud admin or data aware specialist can create insights in Data Cloud.

- Create calculated or streaming insights.
- Query large amounts of data across sources.
- Train AI models with grounded data.

Act on Data

After data is integrated with Data Cloud, users have many options to act on that data.

- For users that have the Segmentation and Activation license, create segments of customers then activate the segment for use in Marketing Cloud Engagement, Meta, or s3.
- Market to your customers. Use your audience segments to delight your customers with timely marketing experiences using Journey Builder.
- Analyze the data in Tableau and determine actions based on that analysis.
- Add insights into page layouts in Sales Cloud.
- Share data back to Snowflake or other external lakes using data shares.
- Create a Flow using Data Cloud data to trigger a process for your customer service team.

Data Ethics

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

Data ethics are moral guideposts about the gathering, protection, and use of personally identifiable information and how that affects individuals.


Use and Collect Individual Information Appropriately

Give customers control of their preferences. Customers must have a say in how you use their data. Most importantly, after they provide you with their preferences, be sure to honor them. Data Cloud helps you build a unified profile of customers, to better help you track and honor their preferences throughout all your Omni-Channel marketing practices.

 **Note:** Learn how to develop a [custom preference center](#).

Provide Clear Exchange of Value for Data

Provide clear benefits in exchange for data. What do they get in return? Customers provide data in order to improve their customer experience and make them feel like they matter.

 **Example:** Add convenience by providing recommendations for frequently purchased items. Thank them for community involvement by sending a special offer. Or drive awareness by offering new products or complementary products of interest.

Treat Sensitive Data Carefully

Some data types are more sensitive than others. We can't give you a definitive list of sensitive data points, but we advise you to carefully consider asking for data such as age, gender, or ethnicity. Ultimately it's up to you and your organization to define sensitive data and determine the reasons you're asking for it. Other sensitive data to consider excluding: protected status (race, health, veteran, disability, and so on), gender identity, sexual orientation, religion, ethnicity, citizenship, and political affiliation.

Collect and Use Only What You Need

Limit the use of your data to only what is needed to create more personalized experiences for your customers. Less is more, especially when it comes to demographic, socioeconomic, behavioral, and transactional data.

Choose Partners Carefully

In addition to being mindful and intentional about selecting and ingesting first- and third-party data, be intentional about activating that data through various ad platforms. When engaging with an activation partner, ensure that you understand the chain of custody for data being provided to the partner. What happens after the activation partner uses the data for your campaign? Is it deleted? Reused? Review each contract with your activation partners to ensure that there are clear obligations with respect to the care, custody, and control of any data sent to the partner.

 **Note:** View the [Data Cloud: Guide to the Value of Ethical Data Partnerships](#) guide.

Data Cloud Architecture Strategy

Consider these data tenancy and residency factors before enabling Data Cloud.

When enabled on a Salesforce org, Data Cloud can connect to and unify data from multiple sources. Enterprise-level data modelers and data architects can use Data Cloud to establish a single source of truth (SSOT) for all business units across one or more Salesforce orgs.

Data Cloud Architecture Considerations

If you have one or more Salesforce orgs consider these factors.

- Data needs—Access your organization's data requirements, including data modeling, testing, and the need for separate environments.
- Future growth—Identify your long-term growth objectives to confirm the decision to implement a single Data Cloud instance.

 **Tip:** Get help preparing for and planning your data usage by completing the [Build a Data Strategy for Data Cloud](#) Trailhead module.

Frequently Asked Questions

Does every Salesforce org need its own Data Cloud?


Where to set up Data Cloud, and how many instances of Data Cloud you should set up, depend on your data architecture and data residency requirements.

- Data Residency—Your Data Cloud org may be hosted in a region that differs from other Salesforce Clouds or external source systems. Data Cloud can ingest data from multiple regions, however, you should consult with your legal counsel and review your organization's policies for data residency before doing so. Note that organizations can create one Data Cloud per region and use Data Cloud to unify and enrich data from multiple orgs in that region. For further information on Salesforce's data transfer mechanisms and related topics, see Salesforce's [privacy resources](#).
- Control versus Centralization—Assess whether all orgs require complete control over their data and Data Cloud configurations. If so, creating multiple Data Cloud orgs is advisable; otherwise, connecting multiple orgs to a single Data Cloud allows you to centralize controls across those orgs.

Should Data Cloud be enabled on an existing Salesforce org or a new one?

You can enable Data Cloud on an existing Salesforce org or set up a new Salesforce org to be your Data Cloud home org. Which option you go with depends on whether it makes more sense to separate Data Cloud functionality from your existing Salesforce ecosystem or start fresh.

- Separation of Functionality—Enabling Data Cloud on a new Salesforce org lets you use that org for Data Cloud tasks only. For example, to set up separate administrative teams, set up Data Cloud on a new org where all administrators are Data Cloud admins.
- Shared Functionality—If you enable Data Cloud on an existing Salesforce org, all Data Cloud features are available to users in the existing org. System admins in the existing org can also be Data Cloud admins.

 **Note:** Data Cloud isn't supported in sandbox orgs, so you can't test it in a non-production environment.

How do I request a Data Cloud license?

You can get a Data Cloud license by contacting your account executive or the Salesforce Customer Service Group (CSG) for help.

Optionally, if you're enabling Data Cloud on an existing Enterprise Edition, Performance Edition, or Unlimited Edition Salesforce org, you can get a license via self-service using Your Account.

It can take up to an hour for Data Cloud to be provisioned on your Salesforce org after the license is added.

Data Flow

Use the power of Data Cloud data in and out of Data Cloud. Data can be ingested and stored in Data Cloud or can be connected via metadata and queried without storage.

Data Sources

Data sources are ingested into or connected to Data Cloud in various ways. Ingested data sources include:

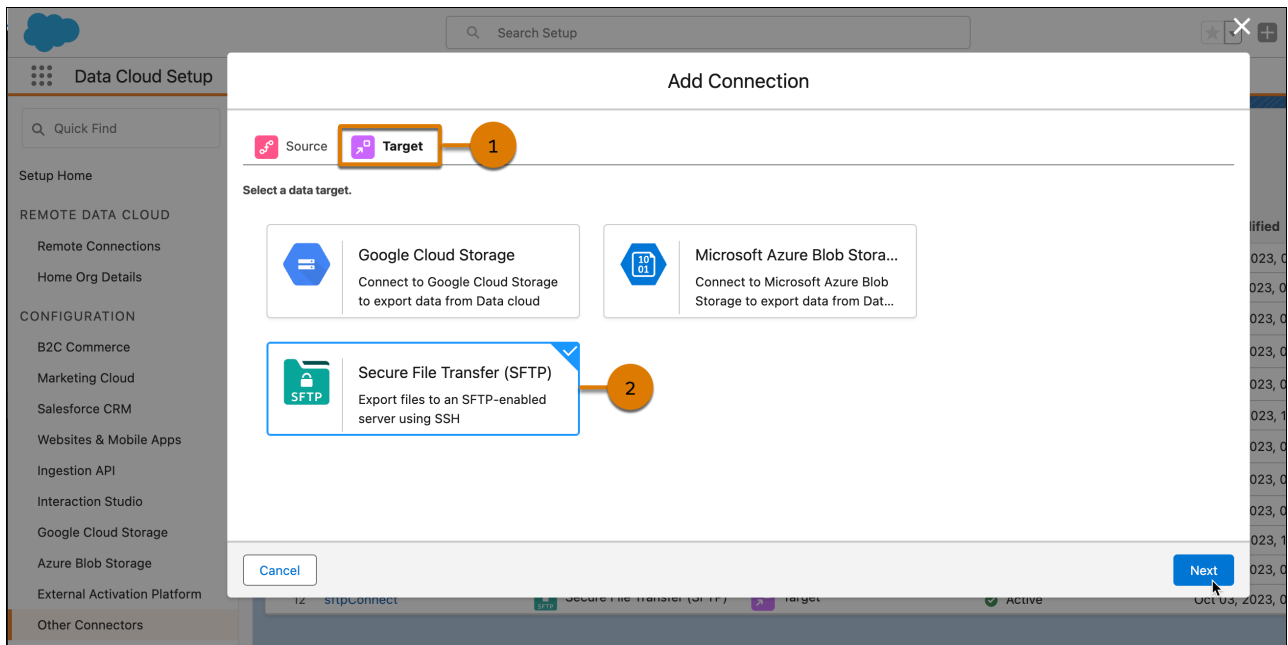
- Salesforce Connectors

- Connector Services
- Connectors and Integrations

Data from those sources is ingested as either streaming or batch data. Near-real time web engagement data is an example of streaming data.

Data Targets and Data Shares

After data is manipulated, harmonized, or segmented in Data Cloud, data can be sent to targets (1) such as an SFTP (2) or shared with integrations, such as Snowflake.



Targets are used to:

- Activate segments to Marketing Cloud Engagement, Amazon S3, SFTP, Google Cloud Storage (GCS), and Microsoft Azure Blob Storage.
- Activate segments to advertising platforms, such as Meta
- Perform tasks in Sales or Service Cloud using data actions
- Analyze data within tools like Tableau or CRM Analytics

Specific functions are associated with targets. Activation targets are created to share audience segments and data action targets are created to initiate an action based on data.

Data Shares allows you to share Data Cloud data with external platforms outside of Salesforce, for example, with Snowflake.

Customer 360 Data Model

The Customer 360 Data Model reduces the complexities of integrating data across cloud applications by providing standardized data guidelines. Extend the data model to create data lakes, generate analytics, train machine-learning models, build a single view of the customer, and more.

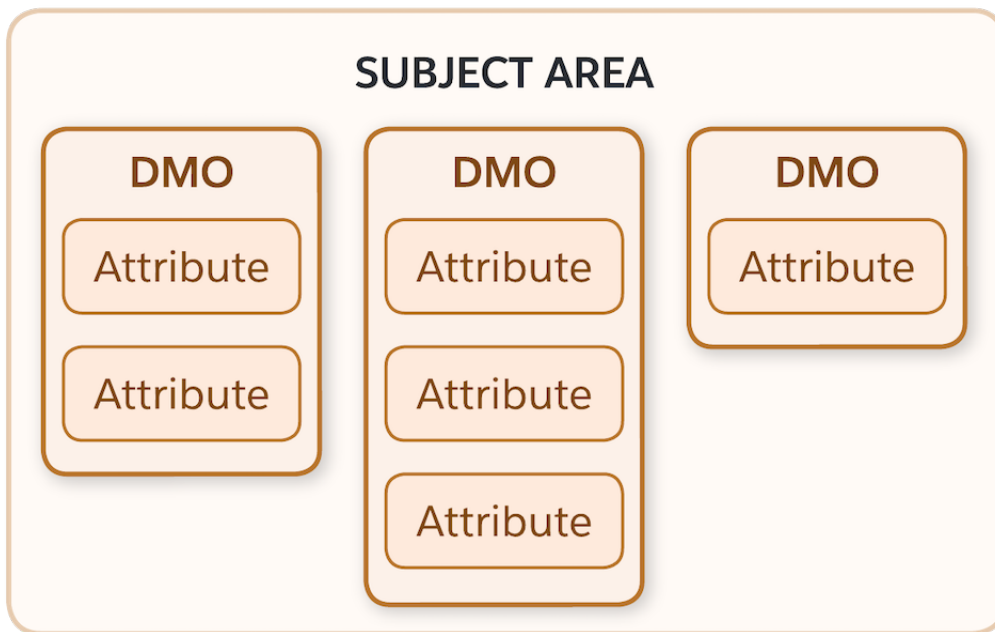
The Customer 360 Data Model is organized into subject areas. Each area represents a major business activity, such as customer information, product, or engagement data. A subject area consists of data model objects (DMO).

A DMO is a view of your data imported into Data Cloud from data streams, insights, and other sources. A DMO uses attributes, or fields, to organize the data in specific and meaningful ways. The term “DMO” can refer to the Salesforce created and managed schema for a DMO or an instance of a DMO in an org based on the schema.

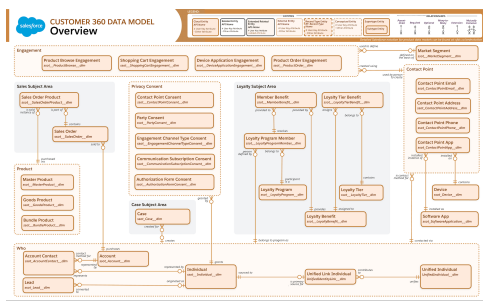
Multiple types of DMOs can be created and used in an org. A standard DMO is created based on the pattern of a schema DMO and inherits the name, shape, and semantics of the referent. You can also create and define custom DMOs directly in an org. Additional subtypes of custom DMOs are created and used for specific features in Data Cloud.

Data imported into Data Cloud must be mapped to a DMO before it can be used for segmentation, activation, analytics, or any other operation. To get started with data mapping, add a connected data source to Data Cloud. After you connect a source, Data Cloud accesses the source so that you can create mapping sets between objects and fields within it and the Customer 360 Data Model.

For more information about DMOs and other object types used in Data Cloud, see [Data Objects in Data Cloud](#).



The Customer 360 Data Model connects disparate data together by linking DMOs together through relationships. Here's the full data relationship diagram for the Customer 360 Data Model.



View the [Overview data model](#) on the Salesforce Architect page.

To learn more about this topic, review the associated Trailhead module.

 [Customer 360 Data Model for Data Cloud](#)

