v1.0

DESelect

Your Data and Salesforce Marketing Cloud

DESelect

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Foreword

Truth be told, when I began taking on Marketing Cloud projects, I often found myself overwhelmed. Even though I had been familiar with Salesforce CRM for several years, I had to spend a great deal of time looking around SFMC, trying to figure it out. I lacked a 'helicopter view' – an overview of what it was about and how it worked.

Without a clear view, it's all too easy to start down a certain path with your data model, and then after a great deal of work, come to realize it could've been done differently. Even worse, it needs doing all over again.

If this weren't enough of a challenge, the terminology could be rather inconsistent and confusing. As Eliot Harper, Salesforce MVP, once put it: "How do you confuse a Salesforce Admin? Explain that a Lead in Sales Cloud is a Contact in Marketing Cloud. And a Campaign in Sales Cloud is not a Campaign in Marketing Cloud." Eliot had a point.

Documentation was scarce back then, and it was mostly legacy information from the ExactTarget era. Thankfully, things are different these days, and aside from improved documentation, there are a great many information-sharing initiatives in the community.

Nonetheless, we felt that having a complete guide to the Marketing Cloud data model would still be very valuable for Marketing Cloud newcomers and veterans alike.

This eBook aims to offer the overview I felt to be missing when I began with Marketing Cloud. To help you understand what you're doing and what implications your decisions may have when creating your data model.

DESelect is the brainchild of people who have faced the same Marketing Cloud challenges as you. Our whole mission focuses on being the preferred segmentation solution for SFMC by making it easy (and fun!) for marketers to work with their data. We see this eBook as an extension of that mission: Ultimately, to make your life easier!

As we value the SFMC community, your input matters. If you have feedback or would like us to cover a topic in the future, please let us know. You can email us at hello@deselect.io.

I hope you enjoy this eBook.

Anthony Lamot.
CEO & Co-Founder, DESelect

Introduction

What is Marketing Cloud?

Salesforce Marketing Cloud (SFMC, or simply Marketing Cloud) is a marketing automation platform developed by Salesforce. In 2020, it ranks as one of the leading marketing automation platforms.

Salesforce Marketing Cloud as one of the leading Marketing Automation tools. Source: Gartner.

Who is this eBook for?

We wrote this eBook for all Marketing Cloud users. Whether you're a data specialist, an email or technical marketer, whether you work in a specific industry, work at an agency or are a consultant, this eBook was written with all relevant audiences in mind and our goal has been to make it as useful to you as possible.

Throughout the text, you will notice that certain chapters are indicated as primarily focused on Marketing Cloud admins, while others for email specialists. The idea is to make it more convenient to navigate within the eBook and quickly be able to find exactly what you need.

How to read this eBook

The purpose of this book is to serve as a guide for data management in Marketing Cloud. The book is logically divided into sequential sections that unravel the data processes in Salesforce Marketing Cloud (SFMC).

Main subjects covered in this ebook:

- What is a data model?
- Identifying and preparing data for Salesforce Marketing Cloud
- How to define your data model in Salesforce Marketing Cloud
- How to leverage data in the studios and builders of Salesforce Marketing Cloud
- How to manage data in Salesforce Marketing Cloud

We tried to make this as practical as possible and hope you will find it to be a useful tool to add to your Salesforce toolbox. You can use it as a practical handbook; returning to the information you might need at any time.

What is not covered in this eBook?

Our goal is to empower marketers with the knowledge of data management in Marketing Cloud. We deliberately focused on specific areas to keep the book consistent and as practical as possible.

This eBook doesn't cover certain studios like Audience Studio, Mobile Studio, Advertising Studio, Web Studio, or Interaction Studio. Neither does it cover other Salesforce solutions for data management like Datorama or Customer360. We might cover these in the future. If that interests you, let us know by emailing at hello@deselect.io! Just as we develop DESelect based on the needs of our customers, we align our content strategy with the needs of the Salesforce 'Ohana' - you!

If you'd like to learn about other aspects of Marketing Cloud not covered in this eBook, you can subscribe to our newsletter here and be the first to learn about SFMC best practices.

In the next chapter, you will find out what a data model is, and what kind of data model is used in Marketing Cloud.

Chapter 1 - What is a data model?

Diving straight in, a data model is a framework that organizes the elemental relationships within a database, standardizing their relationship with one another and the properties of real-world entities. For instance, a data model may specify that a data element representing a house should comprise several other elements, which represent the building materials, the number of rooms, as well as defining its inhabitant.

On the one hand, the term 'data model' (DB) can refer to the formalization of objects and relationships found in a particular application domain. For example, the customers, products, and order information held by an organization.

At other times it refers to the set of concepts used in defining such formalizations: For example, concepts such as entities, attributes, relations, or tables. This eBook uses the term in both senses.

We think that all Salesforce Marketing Cloud users will benefit from this chapter. It gives a short and sweet overview of what a data model really is and what type of data model you will use in Marketing Cloud.

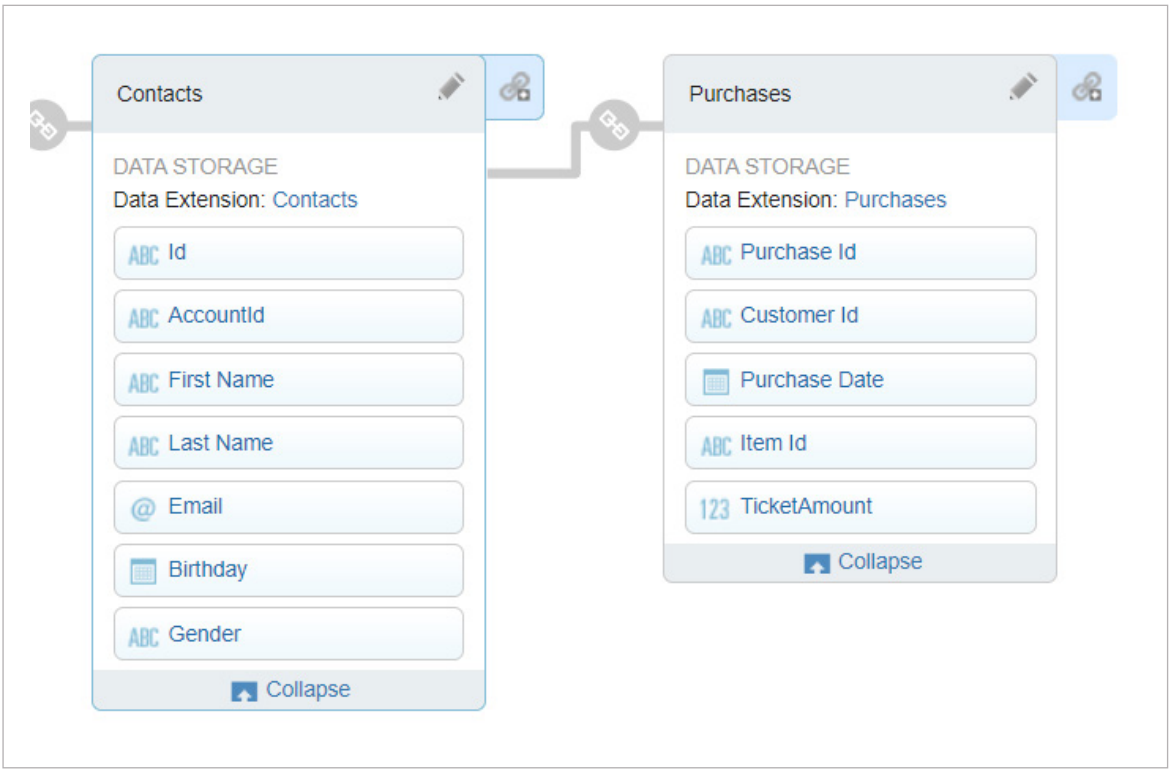
Which databases are used within Salesforce Marketing Cloud?

Relational databases aim to represent the world in a logical way

One such database is a **relational database** – a digital database founded on the relational model of data.

Normalization is the process of organizing data. This includes the creation of tables and then establishing relationships between them, according to rules designed to protect the data while making the database more flexible. This eliminates redundancy and inconsistent dependency.

The normalized data model is used in the data designer function of Contact Builder, which we cover in more detail in a later chapter. Keep reading and we'll get to that :)



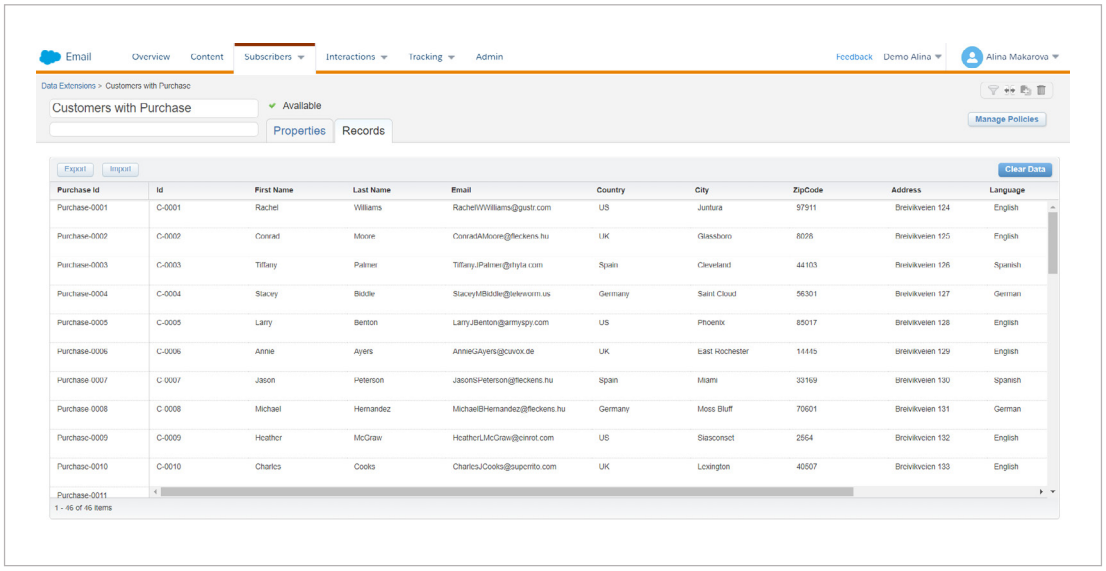
Normalized data model in Marketing Cloud.

Flat-file databases represent the world in a more practical way

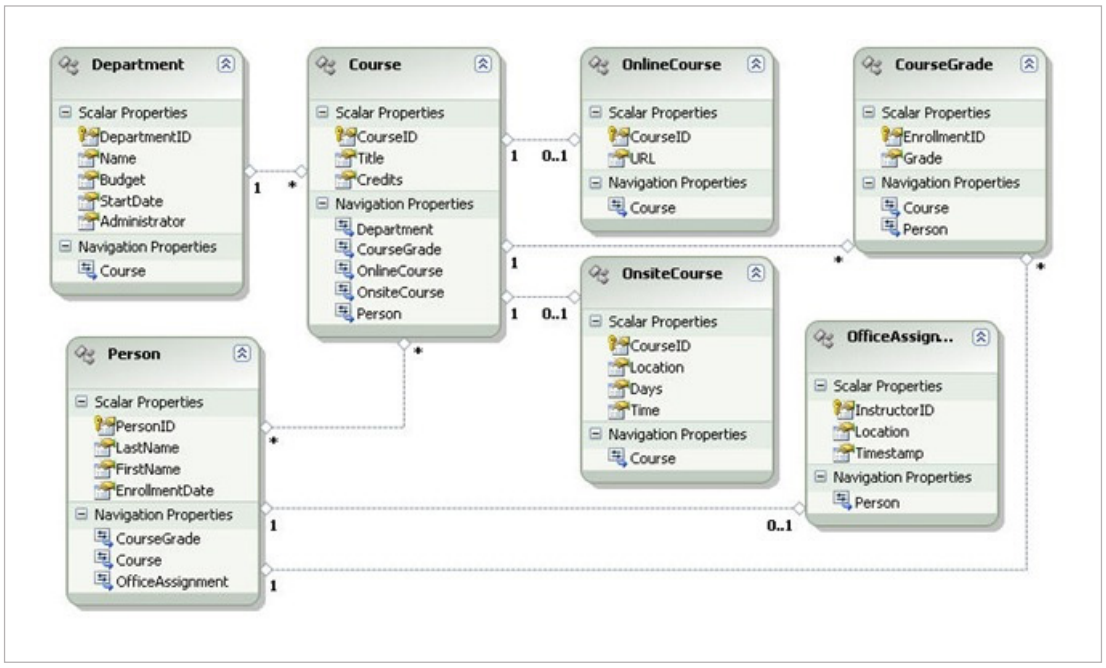
However, it's also possible to **denormalize** data, by designing your data model using as few objects as possible, so you can read data with simple queries and fewer joins between tables. Essentially, when you denormalize data you get flat-files DBs.

With a **flat-file** database, records follow a uniform format, and there are no structures for indexing or recognizing relationships between these records. The file is simple. A flat-file can be plain text or a CSV. Relationships can be inferred from the data, but the database format does not make those relationships explicit.

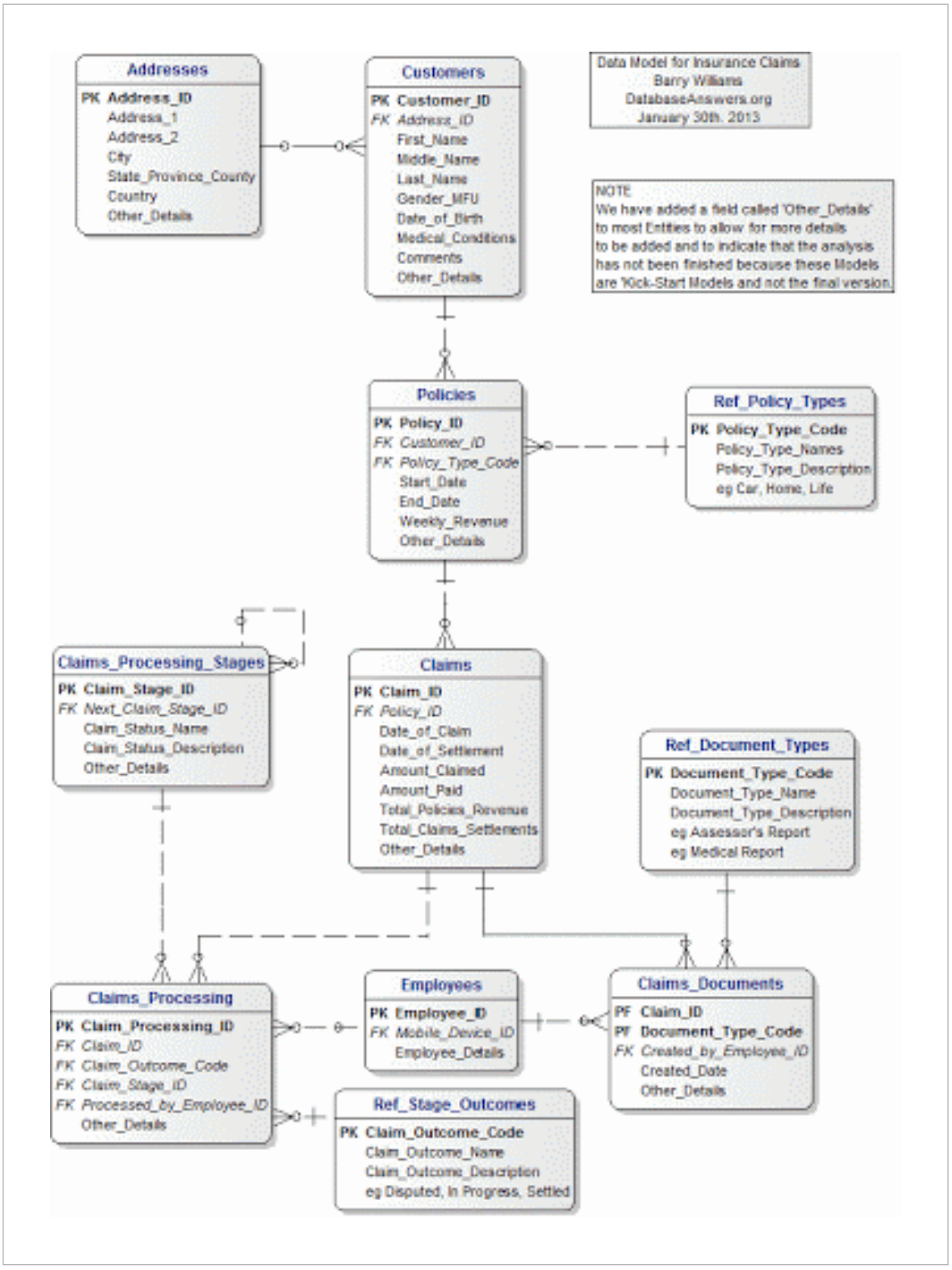
An example of a flat-file data model would be a data extension in Salesforce Marketing Cloud.



Example of a flat-file data model.

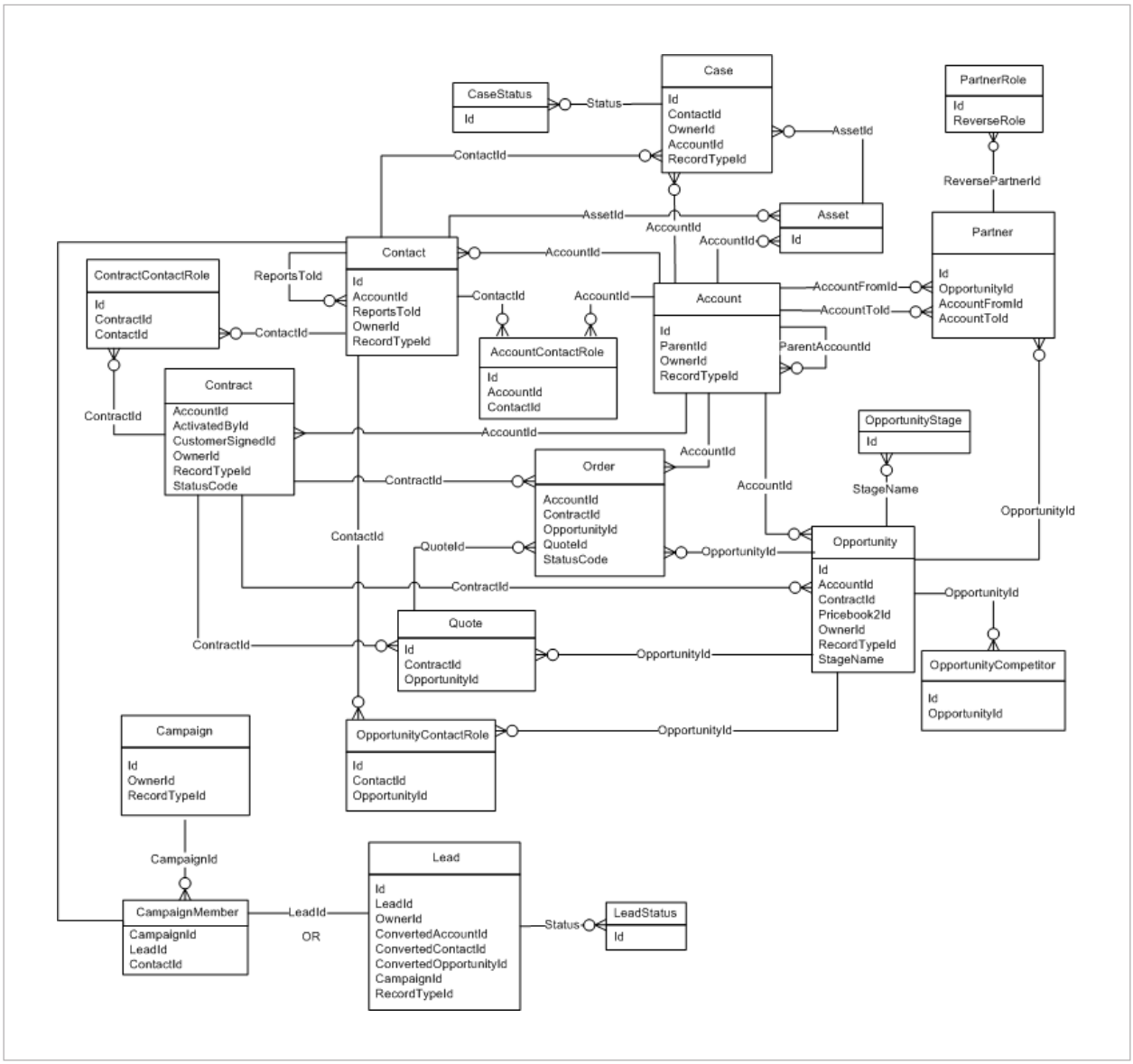


(Normalized data model for the education industry. Source: HESA.)



(Normalized data model in the insurance industry. Source.)

These tables might be familiar to some Salesforce users, as the Salesforce CRM uses a normalized data model like the one below:



(Salesforce CRM normalized data model. Source.)

However, when you start to manipulate the data in relational data models in Marketing Cloud (for instance when querying the data), it converts into the flat-file data model for easier use in the actual marketing campaigns. In Marketing Cloud, you will use tables called data extensions (as visualized in the screenshot above). We will cover the subject of Salesforce Marketing Cloud data extensions later in the eBook. Keep reading :)

It is important to remember that your data (just like your customers!) will continue to evolve. Many factors can influence that. For example, over time you may add or rework data sources that feed into Marketing Cloud, which might impact your data model. You may initiate new campaign initiatives that require an enhancement of your data model or require you to recombine pieces of your relational data model into new flat-files.

We refer to this as "having an agile data model". Your agility is the key to ensure easy adaption to any new reality, to make sure you can keep optimally leveraging your data model in a future-proof way.

In the next chapter, we'll dive into data itself, identifying what data we need to store in Marketing Cloud and how to prepare your data to upload in SFMC.

Data Privacy

We live in an age where data privacy is paramount for organizations that collect, store, and manipulate users' data. It's key to comply with GDPR and CCPA data privacy guidance (amongst other worldwide data privacy regulations).

Be aware of your organization's **data retention policy**. It stipulates when data might no longer serve its purpose (and should thus be deleted). This documentation also records whether the data retention period has expired. The process of implementing a data retention policy begins by knowing what kind of data your organization holds so that you might classify it.

Data privacy also implies the right to be forgotten; where a Contact's entire record must be deleted upon request. In Chapter 3 we will discuss Contact deletion options in Marketing Cloud.

Chapter 2 - Identifying and preparing the data for Salesforce Marketing Cloud

So in our last chapter, we explored the nitty-gritty of the different types and uses for data models, as well as some cautionary words about data privacy. In this next chapter, we'll talk about preparing your data specifically for Marketing Cloud.

We assume that this chapter can be most beneficial for Marketing Cloud Admins and Marketing Automation professionals. Since in order to leverage most of the functionality mentioned in this chapter you have to obtain a certain level of permissions.

What source data do you want to use in Salesforce Marketing Cloud?

As we'll see, Salesforce Marketing Cloud (SFMC) provides a great deal of flexibility to our data model. As a consequence, SFMC can support nearly as many use cases and journeys as you can think of, provided you have the data to support them.

For starters, it can make great sense to collect Subscribers, leads, and other customer information, and store it in SFMC. This can immediately be used for campaigns, or even trigger the start of a real-time journey such as a welcome or confirmation email.

Many SFMC customers choose to connect their Customer Relationship Management (CRM) to the platform. This allows them to not only push relevant contact information to SFMC but also commercial information, such as orders (usually B2C) or opportunities (usually B2B). Doing so allows for myriad automated journeys, and can provide marketers with the right information to execute cross-sell or up-sell campaigns.

Depending on your industry, you may also be able to obtain useful commercial data from other systems. For instance, think of common retail point-of-sale (POS) systems that can be used during the customer checkout process. The digital equivalent is of course eCommerce platforms, of which we've seen a great rise not just in B2C, but also in B2B. Other customers may keep track of things like orders in enterprise resource planning (ERP) software. This too can provide useful data to be leveraged (or at least to trigger) a journey inside SFMC.

Whilst the above examples cover the use of that data for *commercial* purposes, you may have realized you can also use SFMC for *transactional* communication. The platform even allows you to set up different send classifications that come with their own unsubscribe mechanisms. Indeed, there are communications from which a customer should not even be able to unsubscribe. Think of communications you may have a legal obligation to send out, such as invoices or updates in your terms & conditions. You can also create transactional send journeys by managing transactional API messages using Journey Builder. We will cover Journey Builder and how to use it soon. Keep reading :)

Some customers seek to connect their social media to SFMC in different ways. A common use case is connecting the out-of-the-box Facebook lead capture feature, supported by Salesforce Marketing Cloud Advertising Studio.

If you're considering triggering different kinds of time-sensitive and real-time communication, you may wish to contemplate logging certain 'events' inside SFMC. Think of events such as webpage visits, physical store visits (using technology such as beacons or geofencing), or user actions inside one of your mobile apps. Besides leveraging such data as triggers for real-time communication (mobile push message, SMS, etc.), just having the data in SFMC may open up interesting scenarios for targeted outbound campaigns. Just be mindful of the amount of data you may need to store.

There could be other data you want to use (event attendees, brokered data, legacy data from your previous marketing automation platform, etc.) and there are probably as many cases as there are tools and systems out there. However, it's not important to have all your data inside SFMC. Neither is it important to have all your data in SFMC at once. What is important is that such data is useful and used. Marketing automation platforms, just like your organization, tend to evolve and grow. Take it one step at a time. After all, you'll also need to consider how to get your data inside of SFMC.

It's more important to realize the data that you actually need to use in Marketing Cloud; think in advance which marketing channels you'll use. Is it just email marketing? Or is it full-on mobile marketing and complex journeys? Thinking in this way will help you determine what kind of data you'll need to store in Marketing Cloud. Remember it's not a data warehouse!

How will you integrate your data in Salesforce Marketing Cloud?

There are several ways you can integrate data inside Marketing Cloud. Deciding this will depend a lot on the source and the purpose of the data. Remember that just because a certain way to integrate data is available, does not mean you have to use it. Always prioritize the journeys you want to support, then consider how best to support them.

The most basic way to integrate data is through manual imports. Throughout SFMC, there are places you can upload files in different formats, such as CSV or Excel files. Check out the video tutorials we made on how to upload CSV files in Marketing Cloud here. This process is relatively quick, easy, and may already be familiar to many marketers. It could be used when you first set up SFMC, have a one-off list (from an event, for example) that you want to use, or when you don't have an immediate alternative. However, imports can be laborious and increase the risk of human error. It also leaves the door open for poor data quality or even mismanagement of customer consent. This is an important consideration in the post-GDPR era.

Many SFMC customers will already be using Salesforce CRM solutions, such as Sales Cloud or Service Cloud. Sometimes, these solutions are collectively referred to as 'Salesforce Core'. For simplicity's sake, we'll use the term SFDC (Salesforce.com) which has been around for longer. In this case, it usually makes a lot of sense to use 'Marketing Cloud Connect', the out-of-the-box connector that is available in Salesforce Marketing Cloud under the Contact Builder. We'll revisit this subject in the next chapter in more detail. In the meantime, just be aware that this connector is unidirectional (data will only sync from SFDC to SFMC, not vice versa), and a given record may take up to ten minutes to sync (which may be a problem for journeys that need to be real-time).

If you're looking to integrate a system other than SFDC with SFMC and that integration does not have to be real-time, then using FTP (file transfer protocol) integration may be a good option. SFMC allows you to set up FTP server locations on which files can be placed (manually or automatically). SFMC can then fetch these files and import the data they contain into the platform. For this, you will need to use SFMC Automation Studio, which can fetch and import data at a set time – something commonly referred to as a "batch process". By the way, the same process in reverse can allow you to export data to other systems.

You can set up automation on an everyday basis; this way you'll avoid uploading all the data in Marketing Cloud at once. Instead, you'll upload only the data you need for the specific campaigns.

FTP integration can support many use cases, but if you're looking for something that can let data sync in real-time and be more secure, you may want to go with API integration. A word of caution: This will effectively require you to write and manage your code to integrate SFMC to other internal applications. This may be excessive if it's only to support a specific journey or use case. If you intend to make this integration robust and scalable, this may require the allocation of several full-time resources. Having said that, API integration is the way to go for real-time communication and truly leveraging capabilities like triggered send.

A technical side note to the API integration: A significant portion of the SFMC API is not based on REST API (the more common industry standard these days), but also SOAP API (which resembles XML to some extent). In particular, the SFMC API to manage data is SOAP-based, so there is no real way around this. As a developer, you will first want to create a standardized methodology to interact with SFMC. This is essentially what we did at DESelect to create the plug-and-play app that it is. By taking care of a robust API ourselves, we allow customers to leverage all their data immediately, and in real-time, inside of our app.

If you look for a way to integrate additional data sources (either real-time or in automatic patch uploads), then DESelect Connect may be something for you! Essentially, this is our connector custom-made for Marketing Cloud, allowing admins to integrate data sources with simple plug-and-play.

Lastly, there are some ways to integrate data inside of SFMC that could be categorized as 'other', because they serve to connect very specific apps or modules within the platform. For instance, Mobile Push allows you to integrate Marketing Cloud with a mobile app your company has built.

What data to store in Salesforce Marketing Cloud and how to use it?

With Marketing Cloud, you have a powerful platform in which to store and integrate many data sources. Throughout this chapter, we've emphasized the importance of asking some key questions: What journeys do you want to support with SFMC? What campaigns will you run using SFMC? How will you use your data within SFMC? Only when you've answered such questions will you have a framework to help decide what data sources to integrate into SFMC. Once things have taken off, you will want to review and revise that framework from time to time. Consider then if there are new journeys you want to implement, or perhaps more personalized versions of existing journeys can be designed. When that happens you can always return to this eBook for guidance.

Business units in Marketing Cloud

If you're an Enterprise 2.0 tenant (like most Marketing Cloud users these days), you've probably come across the concept of business units in Marketing Cloud. What are they for? And how can you leverage business units for your needs?

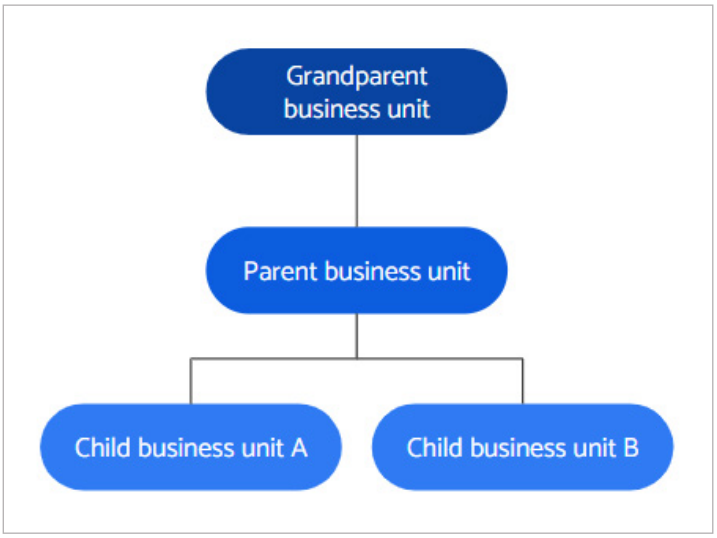
Marketers work within Marketing Cloud as team or sub-team members. These teams can be divided into various categories depending on the enterprise or specific use cases. The marketing teams can be categorized based on factors like region, markets, organizational hierarchy, products, brands, or any particular setup. This categorization helps the organization and its marketing teams recreate an ideal working environment within Marketing Cloud.

This functionality is facilitated within Marketing Cloud through a feature known as 'business units'. business units within Salesforce Marketing Cloud help organize and control access to the information with various marketing teams. Content can be in the form of templates, Subscriber data, and settings. business units can control all of these.

A Business Unit typically performs one or many business functions and has a specific place in the organizational hierarchy. Usually, each Business Unit has a manager, strategic objectives, a level of autonomy, and responsibility for its profit and loss.

How are business units organized?

Business units are created in Marketing Cloud in the form of a hierarchy. The top business unit is called the 'Parent Business Unit', and sub-business units are called 'Child business units'. The top parent is sometimes also referred to as the 'Grandparent' or enterprise business unit (EBU). The business unit hierarchy is illustrated in the below image:



How is the data shared between business units?

The Subscriber data shared by the Parent business unit (with its Child business units) should be placed inside the Shared Data Extension folders inside Email Studio. This will be helpful to reuse the information across the business units without copying it manually.

Where to integrate data?

Normally, you'll integrate with the EBU, especially when you use Marketing Cloud Connect. Since from there you may make queries to create data extensions you'll share across business units. We'll cover the subject of shared data extensions later in this eBook. Keep reading! :)

It's also possible to have business units for separate parts of the business, that can be quite different since they are connected with different CRMs. In this case you integrate them separately per business unit.

In the next chapter, you will find out how to organize your data in Marketing Cloud using Contact Builder. Moreover, we'll cover what it entails and how to leverage Data Designer. We'll also explain how you can avoid using Data Designer and still have a great data overview in Marketing Cloud.

Chapter 3 - How to define your data model in Salesforce Marketing Cloud

So we've got into how to use your data within Marketing Cloud, but what about Contacts and defining your data model? In this next section, we explore the big wide world of SFMC Contact Builder. Keep reading! :)

What is Contact Builder in Salesforce Marketing Cloud and what is it for?

Contact Builder is a Marketing Cloud "builder" (essentially an app) that allows you to manage contacts and related data. You use Contacts to store demographic, commercial, transactional, and behavioral information about individuals. The main purpose of Contact Builder is to organize your contact data into a single customer view.

Why would you use Contact Builder?

- Leverage information from any Marketing Cloud app for any contact. The data in Contact Builder (as discussed in the earlier chapters) is presented in a form of the relational data model.
- Design, map, and link data about your customers
- Add synchronized data sources from Salesforce CRM to Salesforce Marketing Cloud using Marketing Cloud Connect (if applicable).

With this single view of your customer, you take an important step towards creating personalized and targeted campaigns. In other words, you can deliver a better customer experience.

Contact Builder stores customer data that can later be used in Email Studio, while creating actual email campaigns. Data management in Email Studio will be covered later in the eBook. Keep reading :)

This next chapter will most likely be most beneficial for Marketing Cloud Admins and Marketing Automation professionals. This is because you have to obtain a certain level of permissions in order to leverage most of the functionality mentioned in this chapter.

How to get access to Contact Builder

There are several roles that can be assigned to users, granting access to Contact Builder. Normally, Marketing Cloud admins assign these roles, which can vary from having basic app access to having permissions for more specific functions within Contact Builder.

Why should you give someone access to Contact Builder?

It's important to provide access to contact data in Contact Builder for various Salesforce Marketing Cloud users. For instance, for a marketing agency to create templates in Content Builder, you would probably like to restrict access to features like contact deletion.

On the other hand, you would like to provide admins with permissions for Marketing Cloud Connect, and data deletion in Contact Builder.

How can you provide access to Contact Builder?

To administer access to Contact Builder, you will need the necessary administrative permissions and navigate to Setup. Within Salesforce Marketing Cloud, click on your name (top right), and then click on 'Setup'. There, under 'Users', you can assign roles to define access to Contact Builder. As recommended earlier, you can also create custom roles. To do so, click on 'Roles', and click on 'Create' to define a new custom role.

It is a best practice to create a custom role for marketers (or other groups of users) who need access to Contact Builder, so you assign them specific and relevant permissions.

What are "contacts" in Salesforce Marketing Cloud Contact Builder?

A "contact" is a data record that contains contact information (like an email address or phone number), and to which other relevant data may be related (like personal details, demographic information, behavioral data). A contact ideally refers to a single person, although there may be situations where you may actually end up having several contacts that represent the same person. For instance, you may know a person by two email addresses (business and personal), for which two 'contacts' are created.

However, one of the advantages of Contact Builder is that it can help you build a single view of your customer. So ideally, your contacts represent persons one to one. This means you may need to connect different pieces of contact information (like email or phone) to the same contact in Salesforce Marketing Cloud. Because of this, it's a best practice to use a unique identifier, defined by a system (think Salesforce CRM Ids) or potentially by the business, as the Contact Key.

How to identify contacts in Contact Builder?

Each contact in Marketing Cloud Contact Builder can be identified by a unique Contact Key and a Contact ID. The Contact Key and Contact ID are two sides of the same coin: You can define the Contact Key while the Contact ID is automatically generated by SFMC.

Where can I find my contacts?

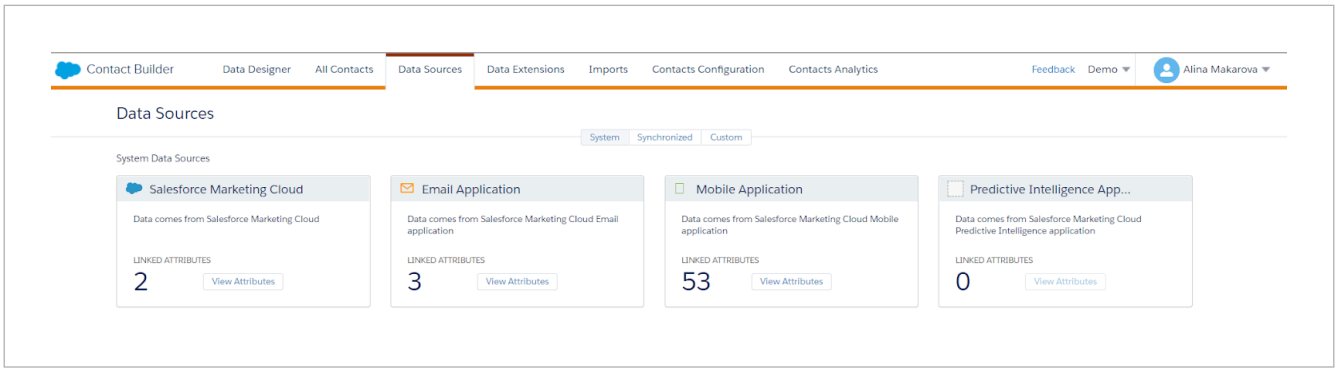
You'll find contacts via the All Contacts tab within Contact Builder. Here, you can choose to view your contacts coming from different sources and channels.

Contact information is also stored in data extensions. These are basically tables that contain a variety of data. Data extensions are used in Data Designer within Contact Builder, which we will explain further. Note that, in Contact Builder, data extensions are also known as attribute sets.

Where does the data about contacts come from?

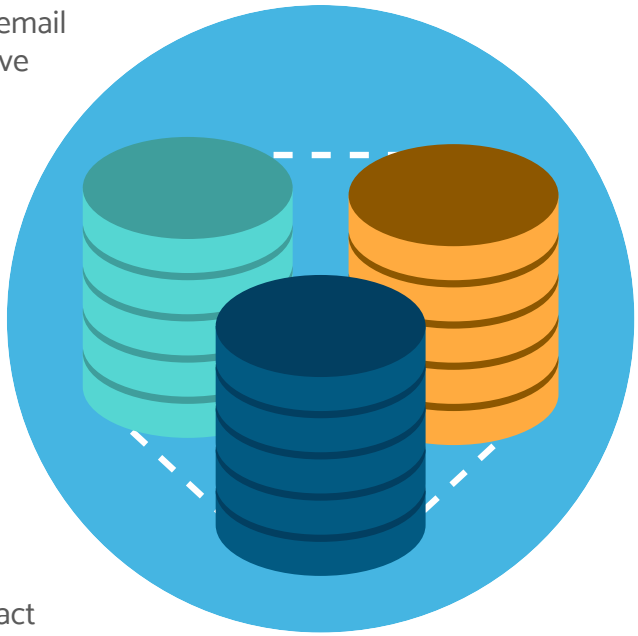
Define where your data comes from and what you really need to store in Marketing Cloud. There are several options here. For instance, your data source can be an external preference center, or perhaps leads collected through your website. It can also come from POS if you use retail purchase data, or from product catalog CSV. In the earlier chapter we already discussed how the data appears in Marketing Cloud.

Read further to find out about the synchronized and custom data sources.



('Data Sources' overview page in Contact Builder.)

What is a Contact Key?



A contact is managed across different channels (like email or SMS) using a single Contact Key. Let's say you have a contact in Email Studio that you identify using her email address, and in Mobile Studio you use her mobile phone number. Without the Contact Key, it would be difficult for Marketing Cloud to be able to relate these two pieces of contact information. The Contact Key identifies a contact within a Marketing Cloud account across business units, and ties together different pieces of contact information across channels through which you interact with that contact.

Ideally, a given contact has the same Contact Key regardless of the channel you use to communicate. Make sure you are consistent across all channels when assigning a Contact Key to a contact. The Contact Key is essentially a Subscriber Key in Email Studio. So to be consistent, use the Subscriber Key value in Email Studio as your unique Contact Key in Contact Builder. Note that a Subscriber Key is generated the moment you send an email through Email Studio to the Subscriber.

Contact Keys across different Studios in Salesforce Marketing Cloud

A Contact Key is used across different channels in Marketing Cloud, which means you will find it across different "studios" in SFMC. For instance, when importing contacts in MobileConnect, you use the Contact Key as well. If you want to import data in MobilePush, you also need to specify the Contact Key.

You might use a mobile number as a Contact Key for MobileConnect, or email as a Contact Key for Mobile Push. However, the best practice is to create a Contact Key using a unique identifier (unique ID/ customer ID) that you can use throughout different studios in SFMC.

Contacts and Subscribers in Marketing Cloud: What's the difference?

Subscribers in Email Studio

In Salesforce Marketing Cloud (SFMC) Email Studio, your customers are referred to as Subscribers. You'll find this option in the header menu when you open Email Studio. Refer to your All Subscribers list for a master list of all people (Subscribers) who receive emails from your organization.

Your Subscribers in Email Studio may constitute a subset of your "Contacts" and hence count towards the number of Contacts covered by your contract with Salesforce, which can be found in Contact Builder. To better understand how your Subscribers relate to your contact model and how they are counted, refer to Salesforce's article on contact definitions for more guidance.

Each Subscriber in Marketing Cloud has a unique Subscriber Key. This Subscriber Key in SFMC is a user-defined identifier that represents a Subscriber. There are two other keys in Marketing Cloud that are worth knowing:

- Contact Key: This is a unique value you assign to identify a contact within your Marketing Cloud account that can be found in Contact Builder. The Contact Key is essentially a Subscriber Key in Email Studio.
- Primary Key: The primary key is a unique field on a data extension that identifies a specific, unique data point. This can be the contact key, but it can also be something unique to the data, like a stock-keeping unit (SKU).

Subscriber Key Best Practices

Many admins choose to use email addresses as Subscriber Keys, which have the benefits of simplicity and which can lower your Contacts count (and hence be more cost-efficient). This approach can work if you have a relatively simple data model and are using primarily Email Studio within SFMC.

However, best practices dictate the use of a unique id as Subscriber Key. For instance, a customer may have more than one email address or phone number, and using a unique id allows you to tie these different addresses and numbers to a single contact, instead of having multiple Contacts for the same customer.

This unique id will often be a Salesforce CRM ID, assuming you are synchronizing your data between Salesforce CRM and Marketing Cloud. For instance, companies who use Sales Cloud often choose to use the Contact ID and Lead ID as a Subscriber Key. Of course, note that this may increase the number of Contacts you have within SFMC. Companies not using Salesforce CRM may choose a unique identifier generated by another system.

Subscribers in SFMC also receive a Subscriber ID, which is a unique system-generated identifier representing a Subscriber. Essentially, for each unique Subscriber Key, SFMC will generate a unique Subscriber ID. These are typically not visible to SFMC users and can be used as surrogate keys by internal Marketing Cloud systems. These fields are visible when tracking extracts and system data views in Query Activities. It's best to avoid using these values for Marketing Cloud activities, as they can cause performance issues.

All Contacts and All Subscribers: What's the difference?

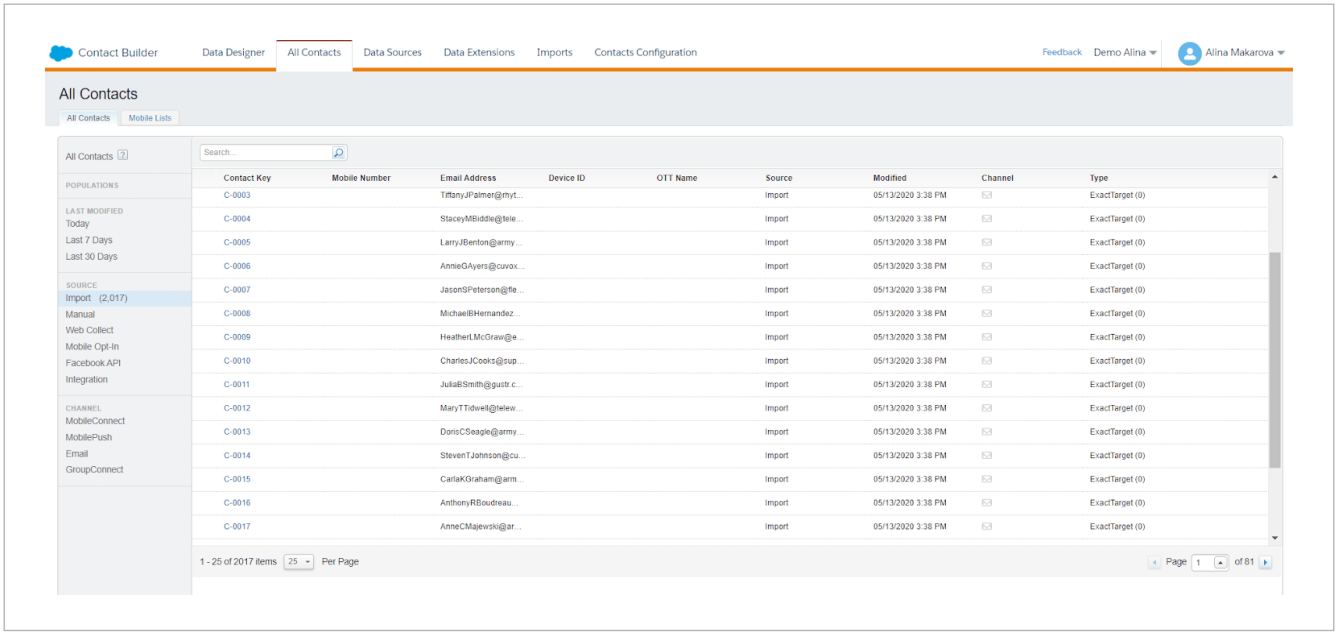
Differentiating between Contacts and Subscribers is important when using multiple Marketing Cloud channels.

A contact is a person you send messages to, through any marketing channel. A contact appears in the All Contacts section.

Keep in mind that all Subscribers are Contacts, but not all Contacts are Subscribers. For instance, if you send an email to your contact, one becomes a Subscriber. Remember that when you create a sendable data extension, you need to define a Subscriber Key. Later it will become your Contact Key in Contact Builder. However, you can also have Contacts, to whom you've never sent an email. Those individuals are still your Contacts but not your Subscribers.

The All Contacts list includes all Contacts in a Marketing Cloud account across all Business Units. The All Subscribers list specifically refers to subscribers created in Email Studio. Email Studio contains the All Subscribers list to prevent sends to unsubscribed email addresses. However, this action applies only to Email Studio information and activities. A contact can unsubscribe from a subscription in Email Studio and still receive messages from other apps, such as MobileConnect or MobilePush.

By default, Contact Builder uses a different demographic source of information for each channel. The different demographic attribute groups displayed in Contact Builder contain this information. However, the unique Contact Key value used to identify a specific contact remains consistent for all channel apps. To use a single set of demographic information for all channels, create an attribute group in Contact Builder. Use that group as the source of information for your marketing activities.



(The 'All Contacts' tab in Salesforce Marketing Cloud.)

How to extract All Contacts to a data extension from Marketing Cloud?

Should you ever need to extract all your Contacts data, then you have to create a support ticket with Salesforce. They can include the system attributes that are part of the central Contacts table.

You can then use this data extension for queries to isolate Contacts you want to delete.

Make sure to clear the All Contacts data extension, give it a data retention policy or make it sendable if you want to completely clear out all data from the Contacts you want to remove.

Manual Contact creation in Contact Builder

Imagine that you need to test an email for a future campaign, and you would like to send a test email to a test contact. At this point, you might wonder if it is possible to manually create Contacts in the Contact Builder? The answer is yes! When you create a data extension in Contact Builder, you can later manually add records to that data extension. It is a quick way to create fake Contacts that can be later used for various tests. This is one of the main (and sometimes the only) reasons that non-admins need access to Contact Builder.

Check out this video we created, where we show how to manually create Contacts.

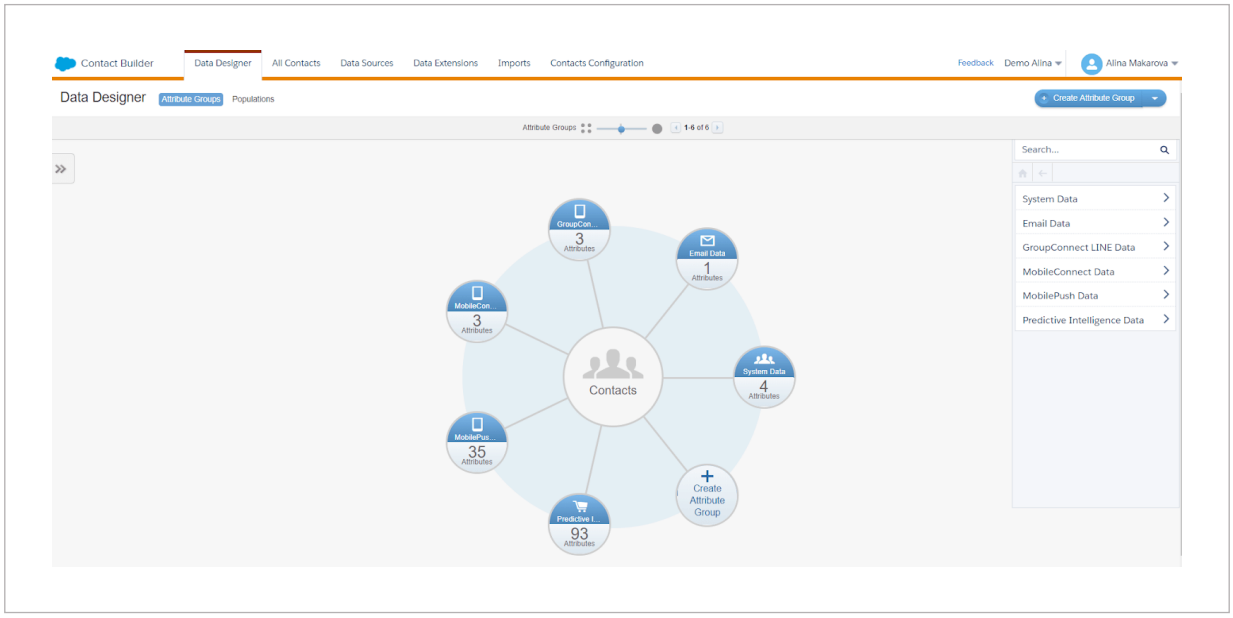
Import activities in Contact Builder

You use import activities to add new data in data extensions, for use in the Contact Builder. There are several opportunities to import data in Contact Builder. For instance, if your file exceeds 20 MB you need to use the FTP option to import the data. Alternatively, if your files are smaller you need not rely on FTP servers. You can choose a CSV file from your computer or choose from an existing data extension.

Some more instructions on how to use import activities in SFMC can be found here.

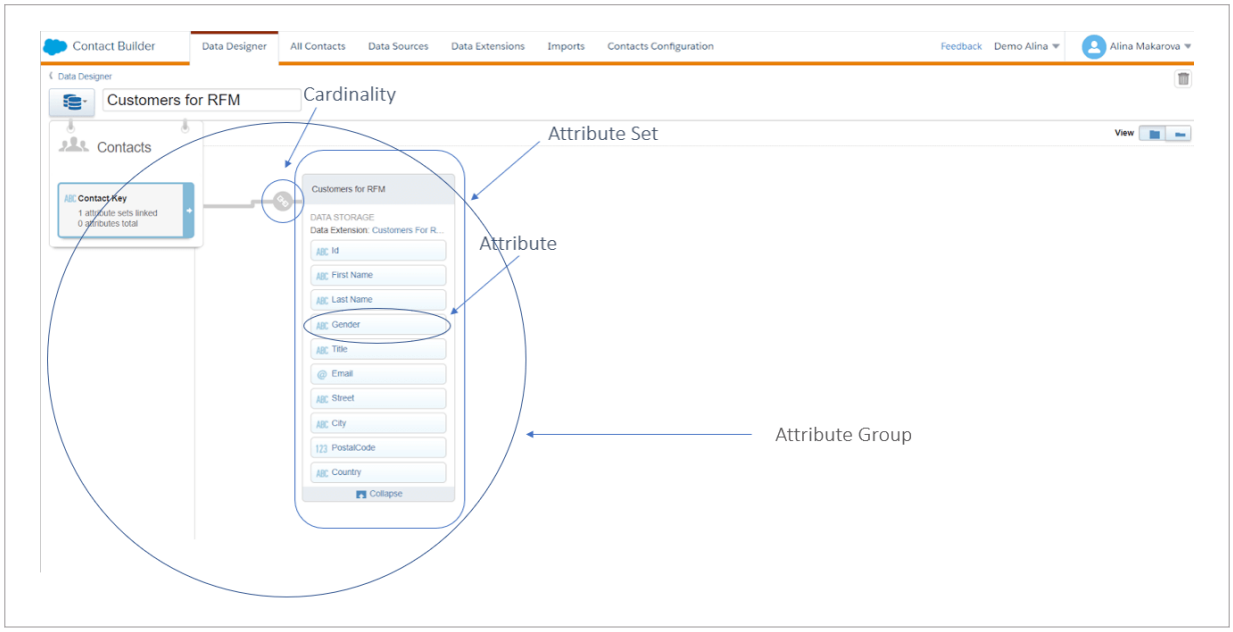
Data Designer

Data Designer is probably the main tool in Contact Builder. You use this tool to view and manage contact data. You need it to aggregate a contact's demographic and behavioral data, defining how that data relates to a contact record. Businesses use the combined data to enrich the customer experience and better serve customers.



(An overview of 'Data Designer' within Contact Builder.)

Within Data Designer, data is stored using **populations, attribute groups, attribute sets, and attributes**. Attribute groups can be related to one another as well as your Contacts using **data relationships**.



(Attribute Group overview in Salesforce Marketing Cloud.)

Populations in Contact Builder in Salesforce Marketing Cloud

As explained here on Trailhead, if you're using the most up-to-date Journey Builder functionality, most of the time you won't need to use populations. Instead, it's best to save populations for specific use cases where you need to create complex queries, such as if your account uses field-level encryption, or when you're using API Entry Sources in Journey Builder.

Populations are used to categorize various distinct audiences in Contact Builder. Think of a population as the subset of the master list of people who could enter a journey.

It's recommended to have no more than three populations. A population should never be sent directly, it is a database and thus not sendable. That means that the data you store in populations cannot be used for sends immediately. Firstly, it needs to be sent to sendable data extensions. For instance, populations are beneficial for a company that has a different model or structure for communicating with customers vs. employees.

Other Marketing Cloud apps, such as Journey Builder, MobileConnect, and MobilePush, can use the populations you create in Contact Builder. For example, in Journey Builder, you can create an abandoned cart journey for a customer. You can use the Customers population as the journey's entry Contacts. Configure the journey to filter Contacts by location.

There is also a notion of populations in Journey Builder, actually unrelated to the populations in Data Designer. When you use a population in Journey Builder, it simply refers to all the people who have entered that journey. Don't be confused by it. :)

Attribute Groups in Contact Builder in Salesforce Marketing Cloud

Attribute Groups are data sources logically grouped together, and they allow you to organize data and configure relationships in Contact Builder. Let's say you're a retailer and you need to build a journey that sends an email to people who haven't made a purchase while they were on a journey. Usually, you'd have two different tables of contact data. You're going to have one table that contains all your customers, and another table that contains all the purchases. An attribute group connects these two tables to each other based on a particular field, such as Customer ID.

Think of an attribute group as a 'mini data model' containing attribute sets (data extensions) and attributes (fields). To most effectively organize your data in an attribute group, link a data extension to the contact record. Then, link all other relevant data extensions to the contact record.

Link Attribute Groups and Populations

Link attribute groups and populations using the Contact Key value. It's a best practice to not link using an email address field when the Contact Key or Subscriber Key value is available. Use populations to create distinct subgroups of your Contacts, then segment contact records from there. For example, a healthcare company can create separate populations for staff, patients, and vendors.

Attributes in Contact Builder in Salesforce Marketing Cloud

Attributes represent a single piece of information about a contact or related information. A good example of an attribute can be an email address or gender. Even the number of email opens can be an attribute. A contact can contain two types of attributes:

- Profile attributes describe who the contact is. Some of this data may be provided by the Subscriber, such as gender, state, or interest (do they like hiking or running?).
- Behavioral attributes describe what the contact has done. For example, a contact indicates some related interests or clicks links when reading a newsletter.

Think of an attribute as a field in a data extension or a table cell.

Data relationships in Data Designer

Data relationships can be created using a Data Designer. There are 4 main ways to define the relationship between data extensions in Contact Builder: 1:1 relationship, population, one-to-many relationship, or many-to-many relationship. They are also referred to as **cardinalities**.

- A 1:1 relationship uses a primary key to map a single record within a data extension, to a Contact or another record. For example, it could be a mobile number or an email address of a Subscriber.
- Populations help to create a master segment of the audience. They represent a set of Contacts that are joined by an overarching theme. For instance, if you work in the education industry you might have a master list of Contacts that include information on alumni and freshmen. You can create two populations based on that with alumni and students separately. We would like to remind you that in the previous section we mentioned that populations aren't used often anymore.
- A one-to-many relationship uses the value of a primary key attribute on the contact record and relates it to one or more instances of that value on another data extension. For example, you can use the email address as the value related to multiple orders contained in a data extension to connect a contact record to the products ordered from a specific retailer.
- A many-to-many relationship can match several different values between two data extensions. For example, you could link one data extension containing multiple instances of customers who completed orders, including repeat values for some customers, with a data extension containing information on those orders.

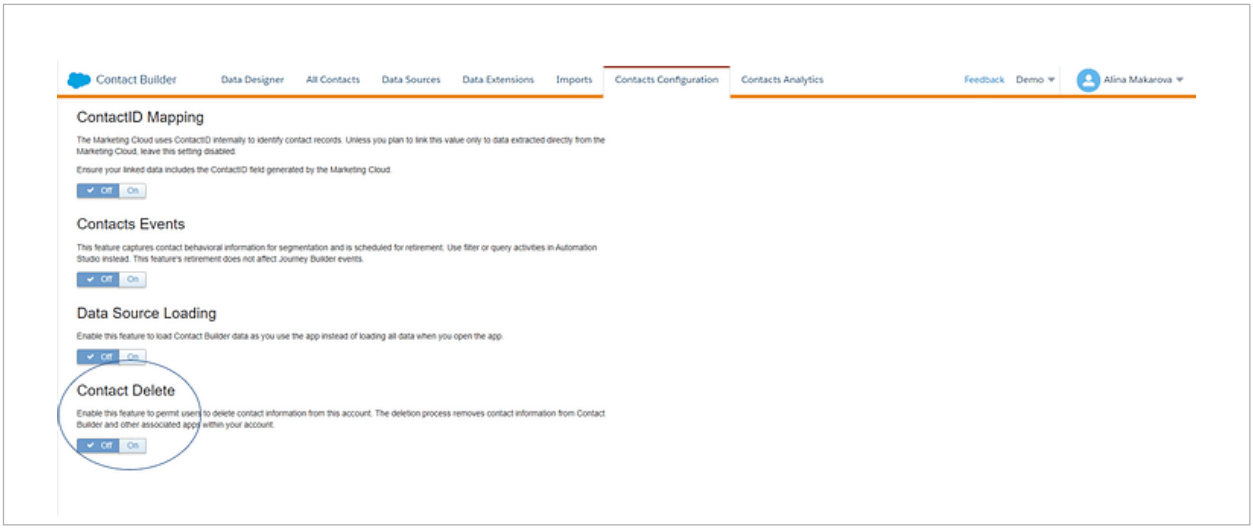
Deleting Contacts in Salesforce Marketing Cloud

Why is contact deletion important?

At some point, your customers may ask you to delete their personal information from your records, which you are obligated to do in order to comply with data privacy regulations such as GDPR or CCPA. Hence you will need to know how to delete the relevant contact information in Marketing Cloud, which also happens in Contact Builder.

How to delete Contacts in Contact Builder?

Firstly, you need to enable the feature of contact deletion in Contact Builder. You can do it by accessing the Contacts Configuration tab.

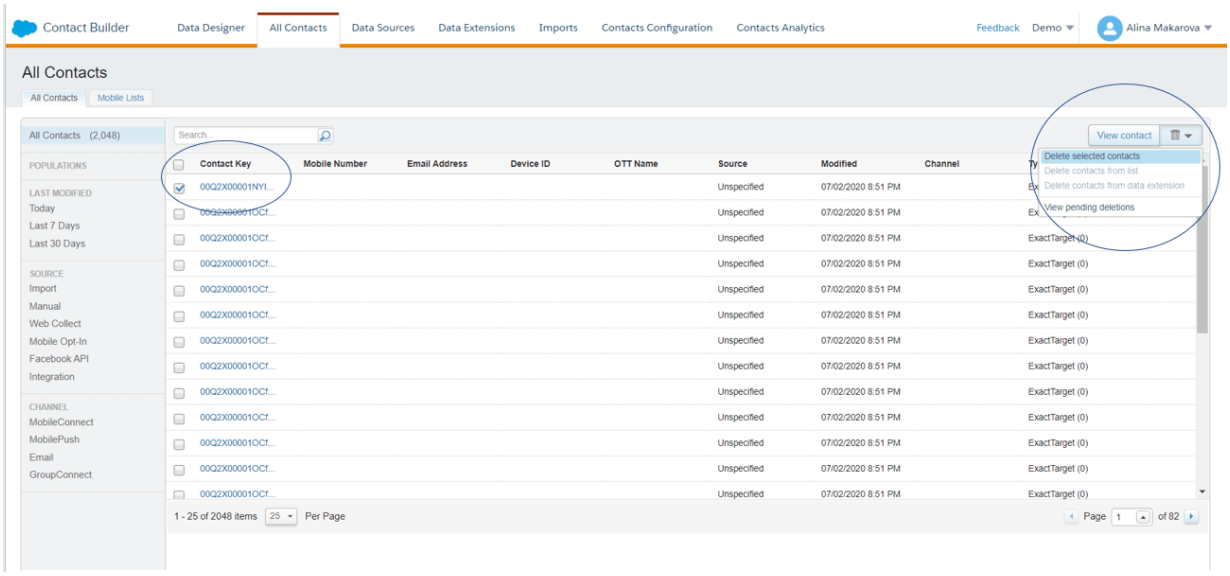


('Contacts Configuration' tab in Contact Builder.)

Different accounts require different approaches for contact deletion. For example, if you have an Enterprise 2.0 account, enablement for the entire organization occurs at the parent account level. It is important to note all contact deletion processes are final, and Marketing Cloud cannot restore deleted contact information.

What are the steps you need to take to delete Contacts in Contact Builder?

- There's a 14-day default suppression period, during which the contact information remains in your account, but cannot be viewed or accessed. You can change the suppression period if you like.
- Then manually delete the Contact. For instance, you can delete a contact from the All Contacts tab.



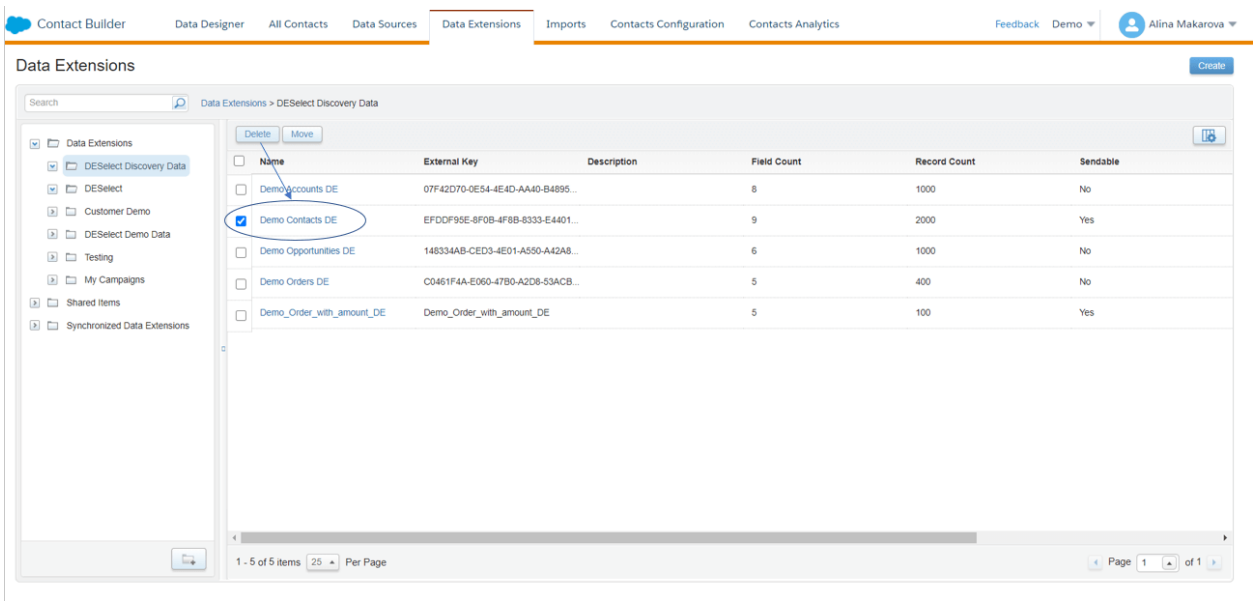
('All Contacts' tab in Contact Builder.)

Then Marketing Cloud will completely remove the contact from your account, which is final. Marketing Cloud deletes contact information from lists and sendable data extensions. You can delete up to one million records. This process does not apply to any non-sendable data extensions not included in a population via Data Designer. You are solely responsible for deleting applicable information from those sources.

As for contact deletion best practices, we suggest using Contact Key or Contact ID values to delete Contacts.

If you linked multiple Subscriber Key or Contact Key values to the same contact, perform the Contact Delete process for all values.

Apart from the individual contact deletion, you can also delete all Contacts in a given data extension. In order to do that, navigate to the data extensions tab and select a data extension containing Contacts you want to delete. Then click delete.



(The 'Data Extensions' tab in Contact Builder.)

Marketing Cloud Connect and Contact Builder

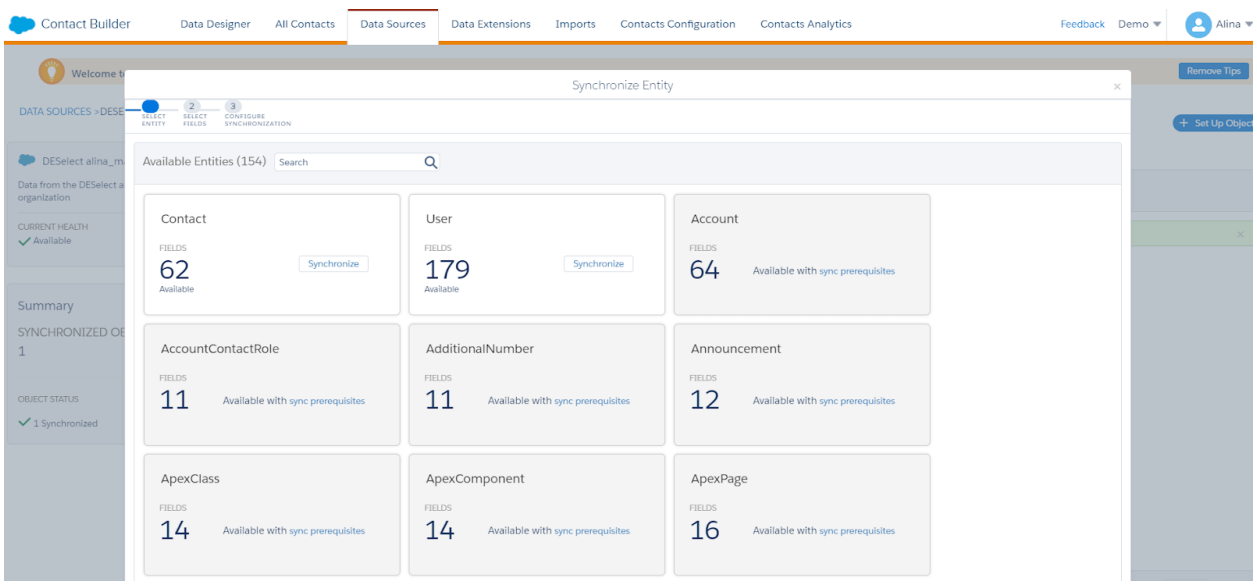
What is Marketing Cloud Connect (MC Connect)? MC Connect helps you synchronize your CRM data from Sales Cloud or Service Cloud to your Marketing Cloud. You do this through synchronized data sources, where you define which CRM 'objects' (accounts, Contacts, etc.) need to sync to Marketing Cloud. These objects will then show as 'synchronized data extensions' in Marketing Cloud. All the CRM's standard and custom data are synchronized with Marketing Cloud. However, the best practice would be to sync only the data you need.

Why? Because if you want to recreate the connection, for instance connect to a new organization, or you'd like to add objects from Salesforce CRM, then your Salesforce data extensions will have a slightly different name. As a result, using these data extensions for queries may not work, so pay attention to the data you sync with Marketing Cloud Connect.

Have a look at this Trailhead on how to implement MC Connect.

Why is it useful for you? This feature allows for creating highly interactive and personalized messages to send to your customers using synchronized data sources from Salesforce CRM.

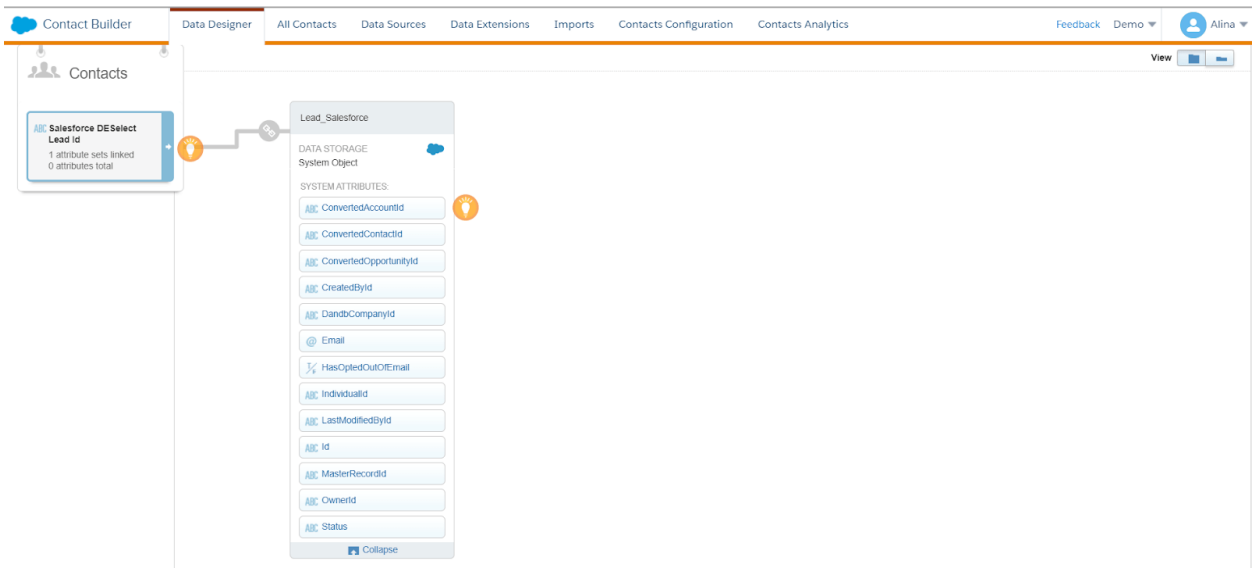
Where can you find the synchronized data in Salesforce Marketing Cloud? In Contact Builder, Under 'Data Sources', you can choose 'Synchronized'. Then, you can choose to 'Set up Object', and choose what data you would like to synchronize with your Marketing Cloud account.



(Here you can choose entities to synchronize with Salesforce Marketing Cloud.)

After you choose CRM objects you would like to synchronize with Marketing Cloud, you will see the CRM data in the Contacts overview.

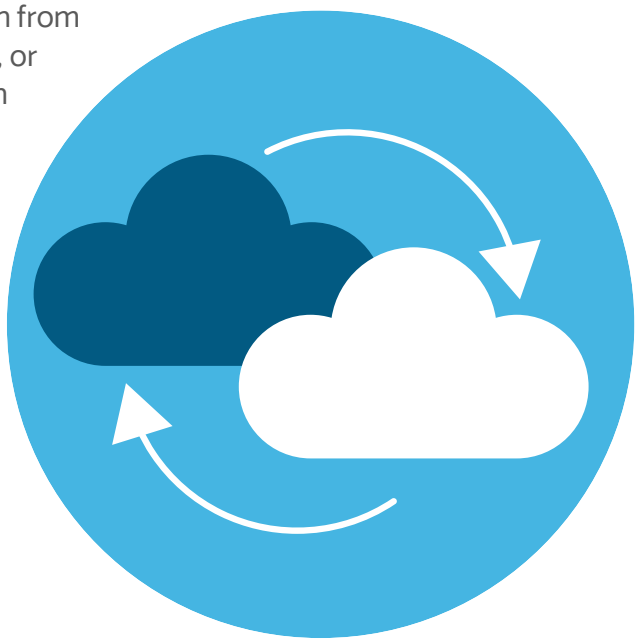
Remember what we mentioned earlier? Marketing Cloud is not a data warehouse. Import only the data you need for the marketing activities, and avoid flooding the platform with data you don't need to use.



(Synchronized Leads in Contact Builder.)

What about deleting synchronized Data Sources?

For Synchronized Data Sources, delete the information from the original data source in Sales Cloud, Service Cloud, or another cloud. This deletes the corresponding record in the Synchronized Data Extension but does not delete the contact record from Marketing Cloud. Marketing Cloud recommends that Marketing Cloud Connect users first delete information from Sales Cloud or Service Cloud, then delete information from Marketing Cloud (we referred to manual deletion earlier in this eBook). To delete contact information from triggered send lists, Salesforce legacy lists, or Microsoft Dynamics CRM lists, use API calls.



How to leverage your synchronized Data Extensions?

The Salesforce CRM objects you sync to Marketing Cloud as synchronized data extensions are not sendable. What this means, is you cannot immediately use them for campaigns. Instead, you must create a new data extension and populate it with data from the synchronized data extension using (for example) a filter, SQL query, or a DESelect selection. The newly populated data extension can then be used for your campaign.

You may also want to use data from synchronized data extensions across business units. Typically, you will have Salesforce CRM data sync with your enterprise business unit (the main business unit in your SFMC account). To also share the data from the synchronized data extensions with child business units, a common approach is to:

1. Set up an automation that queries the synchronized data extensions on a regular basis and populates data extensions that are sendable. We will explain how automations in SFMC work in the next chapter.
2. Share these data extensions across business units.

How can you put your data model to action - with or without Data Designer?

When you receive data from Salesforce CRM or another data source with a normalized data model, you might want to relate it to the SFMC Contact Model, so that for instance, you can use it later in Journey Builder (this functionality will be covered later in the eBook).

This is normally the recommended approach, especially if you want to fully leverage Journey Builder. However, you don't necessarily have to do that. You can also integrate your data independently from Data Designer. In this case, we recommend you follow best practices and apply good governance by documenting tables, fields, and folders, following a certain naming convention.

Taking a step back. This gives you three high-level approaches to define your data model in SFMC:

1. Using Data Designer, you define a normalized data model, typically coming from another normalized database (such as a CRM).
2. Without using Data Designer, you define a normalized data model, which effectively exists out of stand-alone data extensions that refer to one another through unique identifiers.
3. You load flat-files (or even more extreme, single records), directly into SFMC. This tends to be for specific use cases where SFMC is simply used as an email service provider to executive certain communications, and for which the orchestration happens outside of SFMC. Read carefully! :)

Now, for the first and second approach, know that you can leverage a normalized data model by turning it into a flat-file data model (adding the data to data extensions), that can be later used directly for campaigns. After all, to combine many data sources into a single, personalized and targeted communication, it helps to have all the information you need for a single customer on a single row in your table. This will give you a single record that maps perfectly to the different elements of personalized content you want to be part of your communication (email, SMS, MobilePush, etc.). In other words, you'll need to rely less on AMPScript or complex logic for personalized content.

To turn a normalized data model into a flat-file, you can fall back to writing SQL queries to combine and filter the relevant data. However, in order to do that you need to learn SQL or be proficient enough to use its capabilities. Instead, a drag-and-drop, noSQL solution like DESelect can help to manage your data without the need to write the actual queries. By using DESelect, marketers are empowered with segmentation and data management possibilities.

So now we've identified how to store what kinds of data in Marketing Cloud, and how you can organize data using Data Designer. So now it's time to find out how to put that data into action, using SFMC studios and builders. Read the next chapter to find out!

Chapter 4 - How to leverage data in the studios and builders of Salesforce Marketing Cloud

We think that all SFMC users will benefit from the information given in this chapter. From Email Marketers, Marketing Cloud Channel Managers to Marketing Cloud Admins. Since, in this chapter, we discuss the core apps (builders, studios) of Marketing Cloud and how to use them.

Introduction to Email Studio in Salesforce Marketing Cloud

Salesforce Marketing Cloud's Email Studio is one of the most popular email service providers, due to its email deliverability and variety of features. Let's take a look at how to organize your data when using Email Studio for customer communications.

We touched on the subject of Email Studio in our previous chapter, where we elaborated on the concept of Subscribers and discussed the difference between Subscribers and Contacts. Now, we are going to describe how Subscribers' information is stored in Marketing Cloud's Email Studio.

How to organize your Subscribers in Salesforce Marketing Cloud Email Studio

There are three main methods of storing Subscriber data in SFMC's Email Studio; namely lists, data extensions, and groups. Each one has certain advantages depending on the size of your data and how you intend to use it. Here are some important factors to consider when using lists and groups.

Lists in Email Studio

You may be wondering how Subscriber data can be organized in SFMC's Email Studio. One method is by using lists, which are the default method of storing data. You can set different attributes to your Subscribers using lists, which represent a collection of Subscribers and provide a simple method for audience segmentation. These attributes are used to store a Subscriber's subscription status within a given list.

You can only use lists when your Subscriber count is below 500,000. Lists work best to manage a relatively simple Subscriber model, that does not contain other commercial or transactional information. You can also manage personal data in lists.

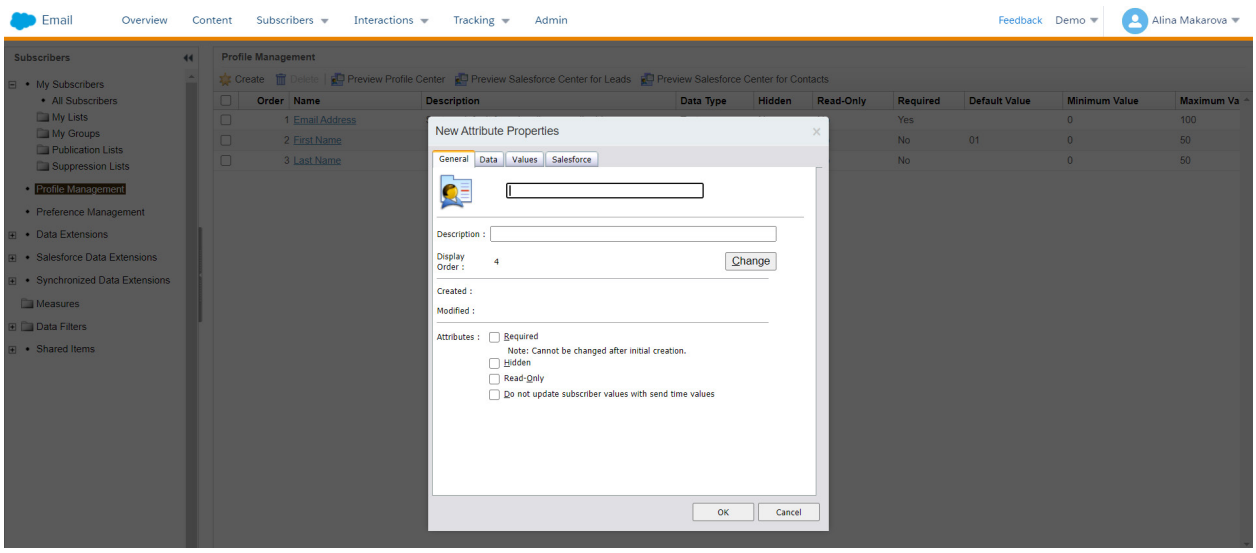
Profile & Preference Attributes

You can store additional information about Subscribers with profile and preference attributes. These attributes must be defined separately from Subscriber Lists. They are defined globally and will apply to all Subscriber lists and business units. They are also used to build groups within Subscriber lists, as well as drive dynamic content.

Profile Attribute refers to information used to characterize a Subscriber. Full Name, Email, and UserDefined exist by default and cannot be modified. Preference Attribute refers to how and what kind of communication a user wants to receive, and are defined as yes or no choices.

Attribute is defined as either optional or required. If it's required, a value must be provided for each Subscriber in the Subscriber List. A default value can be defined to prevent empty values.

Check out this example of adding a Profile Attribute in Marketing Cloud.



(Profile Attribute creation process.)

Suppression Lists

A Suppression List is a Subscriber subset you wish to omit from certain communications. These lists filter out email addresses to prevent them from receiving your communications. They act as a 'do not contact' list for your email campaigns.

Types of suppression lists you may want to maintain could be:

- Contacts with a history of spam complaints
- Unsubscribe lists from previous providers or advertisers
- Addresses of your competitors
- Canceled customers
- Customers you have recently targeted or have already contacted several times

For more information on avoiding unsubscribers and spam complaints in your future email campaigns, check out our article on how to exclude customers who have been targeted recently in Salesforce Marketing Cloud.

Publication Lists

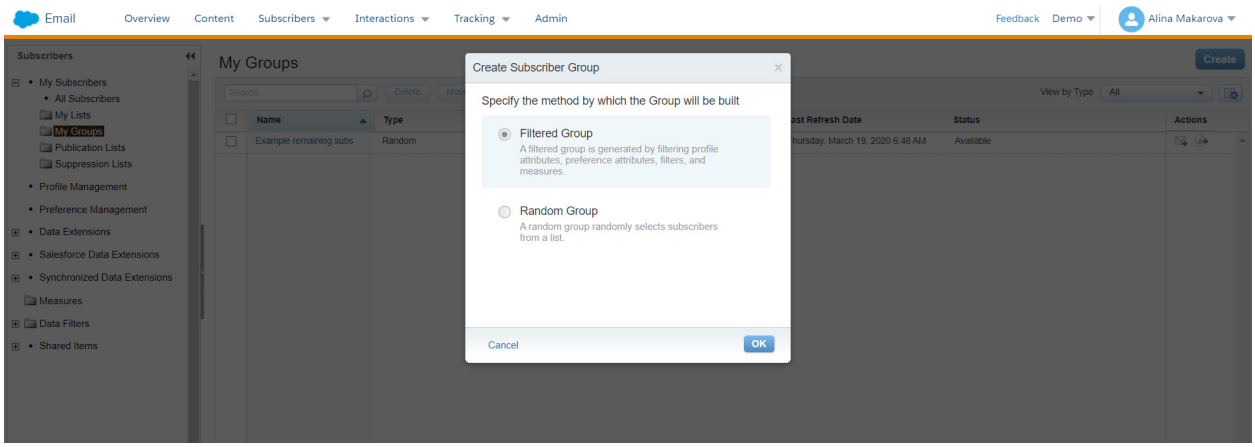
Publication Lists control which emails your Subscribers receive. They allow Subscribers to control what kinds of communications they receive, such as opting out of future sends on a list. If no Publication List is selected at send time, the All Subscriber list is used by default.

If a Publication List is defined as public, it becomes visible in the Subscription Center, which Subscribers can then opt-out of. Subscribers can opt-in to Public Publication Lists, but will only receive emails if they exist in the Sendable Data Extension.

Groups in Email Studio

Whilst no longer commonly used, you can also store data in Email Studio by using groups, which are subsets of list Subscribers. There are a few methods to create groups in Email Studio.

You can build both random and filtered groups in Marketing Cloud. You can do it by accessing My Groups and clicking Create (on the right-hand side).



Filtered groups are basically (simple) segmented lists. Create filtered groups by filtering on 'Profile' 'Attributes', 'Preference Attributes', 'Filters', and 'Measures'. Random groups are compiled from filtered groups. You can create a random group by splitting a Subscriber list or filtered group. These groups can be renamed, moved, refreshed, and more. Groups can be used to create a segmented list of Subscribers.

Best practices in using groups are very similar to lists since groups are essentially segmented lists in SFMC. If you prefer simplicity over performance, then groups can be an easy solution. For instance, groups with random Subscribers can be used when you A/B test new email templates.

Data Extensions in Email Studio

Data Extensions (DEs) are essentially tables containing a variety of data. They're a popular alternative to lists in SFMC due to their features.

There are several instances where data extensions are recommended. If you have more than 500,000 Subscribers, you must use data extensions, since lists will not support this many Subscribers. Also, if you require a fast import, or if you support multiple Subscriber data sets with separate definitions, then Data Extensions are your best option. Data Extensions also support more advanced segmentation.

There are several types of data extensions, including:

- Standard DEs – a relational database table that can be used to store any Subscriber-related data.
- Filtered DEs – used to create a subset/segment from an existing data extension.
- Randomized DEs – Randomly selects Subscribers from a source DE.
- Synchronized DEs – Bringing data from Salesforce Sales Cloud into Marketing Cloud through Marketing Cloud Connect.
- Salesforce DEs – You can import data from SFMC back to Sales or Service Cloud using Salesforce data extensions. Utilize tracking data for emails sent to Salesforce data extensions using SFMC Salesforce Sends to the Salesforce (SF) Contact or Lead record in the connected organization. Through Interactions create import activities with accessible Sales or Service Cloud reports with Salesforce data extensions. Salesforce DEs are not created in the same way as a standard DE. To utilize a Salesforce DE, you have to copy its data to a standard DE using a Query Activity.
- Test DEs – Useful for users who need to send test emails, but who are not allowed to view customer data. Test DEs hide this information for testing purposes.
- Shared DEs – Placed in the shared data extensions folder; accessible by team members working in other SFMC business units. You can set access permissions to decide which information is shared with whom. You can also choose the time frame which defines access to shared DEs.

Data Extensions vs Lists

Lists are a compilation of Subscribers who receive certain communications. They work well when you have a simple data model, basic customer segmentation needs, and a Subscriber list below 500,000. Once your data model becomes more complicated, data extensions (DEs) are preferred to give you better, closer control over your marketing practices.

Data extensions are more often used to import and store data from other systems (manually or through automated integration). These DEs can hold any type of information, such as addresses or purchase histories. It's for this reason that data extensions can also be used for transactional communication as well as commercial communication. In general, you'll have more control over segmentation when using DEs, although they require a bit more time to set up, compared to lists.

Lists allow you to store Subscriber data only, like email address, first name, last name, etc. They use the standard profile and subscription center. However, DEs have minimal rules when it comes to storing the data. You can set them up in a manner that makes sense for your company. For instance, unlike lists, they do not require an email address. DEs can also store product catalog information, abandoned cart information, sales representative information, and more.

For an overview of when to use lists vs. data extensions, refer to this Salesforce guide on the subject.

Data Views

Data views are system-generated tables (or "data extensions, DEs") in Marketing Cloud. They contain different information about the Subscribers and events, such as email/SMS sends, email opens, or links clicked. You can also view behavioral information such as emails forwarded to friends. There are 24 different data views in SFMC that you can check out here.

We also recommend that you check out the articles we have already written on data views in Marketing Cloud:

- **How to use Data Views in SFMC? A guide to select Contacts that are known Subscribers**
- **Top 10 Salesforce Marketing Cloud data views**

Measures

In Email Studio, you can define Subscriber behavior in units known as 'measures'. Once you've created a measure, it can be included as data filter criteria, to segment a Subscriber list.

Examples of measures include:

- Unique unsubscribes in the last 30 days.
- Total opens in the last 30 days
- Hard bounces in the last month
- Total click-throughs in the last 30 days

When working with measures, it helps to understand SQL and relational data structures.

Measures vs Data Views

What is better for behavioral segmentation: Measures or data views?

Since Email Studio only provides a limited view of behavioral information, marketers using SFMC often tend to data views directly, as a simpler alternative.

This approach is useful because:	There are also disadvantages to using data views:
• Data views can be queried;	• SQL knowledge is needed ;
• Data views provide more precise behavioral data.	• The data retention period is limited to 6 months.

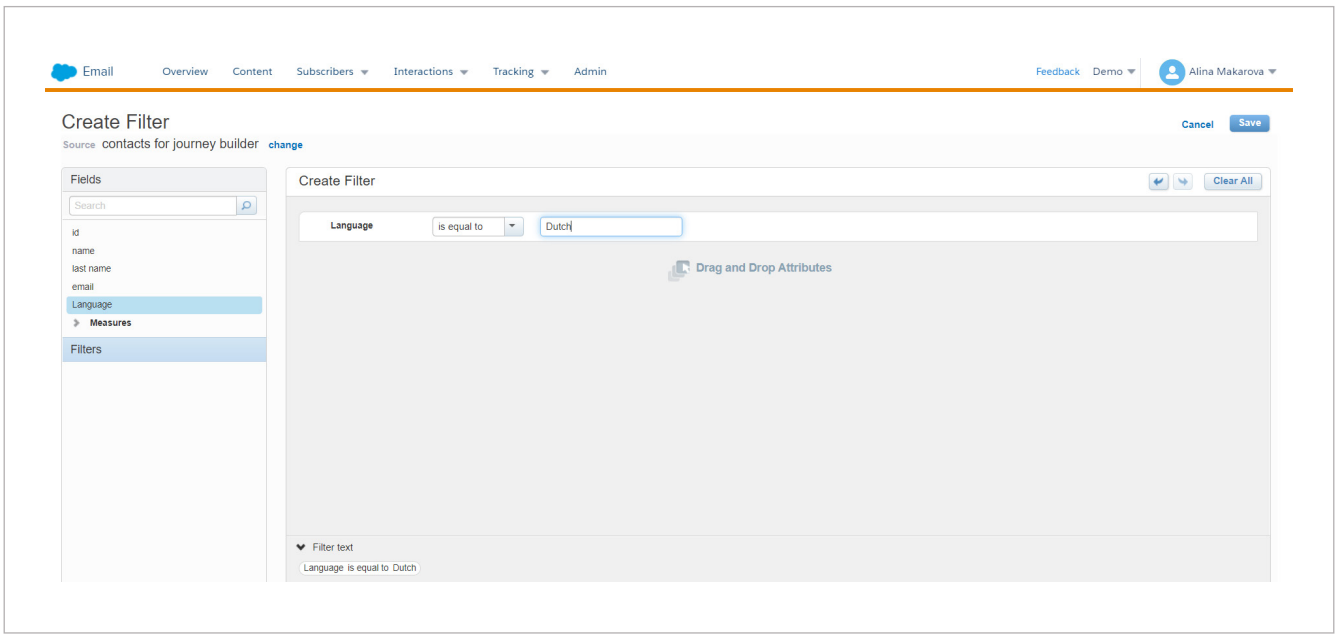
If you prefer to have all your behavioral data in one place, you might find this useful:

- Replicate the data view structure in your data extensions (so-called "archive"). This is especially useful for retaining data for more than 6 months since data extension data won't update automatically as with a data view;
- Create an automation flow to extract and archive data every 6 months, by choosing 'overwrite' as data action;
- For analysis/reports/RFM/behavioral segmentation, etc., use the 'archive' data.

Defining data filters in Salesforce Marketing Cloud Email Studio

You can find data filters under All Subscribers in Email Studio, using it to filter a data extension.

What is a data filter in Marketing Cloud? Data filters are a Marketing Cloud 'no-code' solution to audience segmentation in data extensions (DEs).



As shown in the example above, you can choose a field in a data extension (e.g. language) and filter only those Contacts that speak *Dutch* (as in our example). You can set and save multiple filters on one data extension, from there, creating a filtered DE.

You can also create relationships between two DEs using data relationships and apply cross-filters. However, creating relationships between more than two data extensions is often unreliable. This has been confirmed by our own experience working with data relationships and from communication with Salesforce Support. As such, we don't recommend using data relationships, as discussed in one of our previous blog posts.

Subscriber Status

Subscriber Status refers to the email deliverability for a single Subscriber. There are several statuses available:

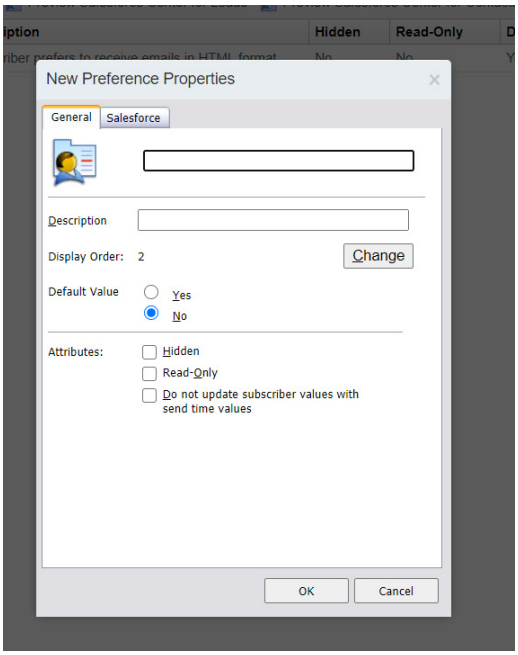
- Active: The Subscriber can receive emails.
- Bounce (Returned): The Subscriber cannot receive emails due to one or two soft bounces, or one hard bounce, and the Subscriber has not opened or clicked through the email.
- Held (Undeliverable): This status occurs after three soft or hard bounces, the Subscriber has not opened or clicked through an email, and at least 15 days have elapsed since the first bounce.
- Unsubscribed: the Subscriber has requested to be removed or was removed from a Subscriber list.
- Deleted: The Subscriber was deleted from a Subscriber list. It's better to change the status to unsubscribed rather than deleting Subscribers, to prevent sending in a future send.

You can check Subscriber Status under All Subscribers, where you'll find the *Status* field.

Profile Center

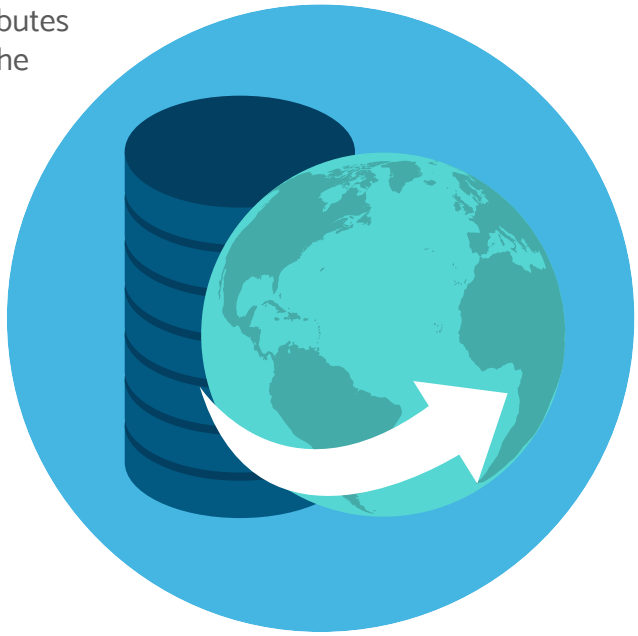
The profile center is a webpage where Subscribers can enter and maintain the personal information you keep about them. When you import a list in Email Studio, you can import attribute values for your Subscribers that appear when a Subscriber visits the profile center. The Subscriber can update and provide additional information on this page. Your Subscribers can view their data and subscriptions to your communications. Every email you send through Email Studio contains a link to the Profile Center, for Subscribers to use. Most Marketing Cloud users build their own profile centers that match their company's specific purposes and goals.

Note that this link is included by default in emails based on standard templates. When building HTML emails, you're prompted to include the link.



(Adding new Preference Properties in Preference Management tab.)

In the Profile Center, Subscribers see all the attributes defined in your account not marked as hidden. If the attribute is set up as read-only, the Subscriber can see his or her value for that attribute, but cannot change it. Every Profile Center page includes a global opt-out option.



That means you have to define options within a subscribe model so that Subscribers can easily unsubscribe from communications.

The Profile Center also works closely with the Subscription Center, which is the menu visible for Subscribers where they can edit their subscription to your communications.

How to set up the Profile Center

The Email application uses the information in the Profile Center to personalize emails sent to Subscribers. The links in each 'email send' connect your Subscribers directly to their Profile Center page, and Subscribers can access their Profile Center page to view and change this information. This link appears in a default footer. To remove the default footer, you must contact your representative.

To help protect the privacy of your Subscribers, be sure that the information you enter in the Profile Center does not include sensitive or personal information about your Subscribers. Include only the information you need, to manage the profile and nothing more. If an email is forwarded to another person via an email client instead of Forward To A Friend, the links contained in the email lead to the original Subscriber's Profile Center page. This also applies to the Subscription Center and Unsubscribe links. Include only the information you need to manage the profile, nothing more.

Okay! So within this guide to Email Studio, we've covered lists, groups, data extensions, and data views. Next up... Automation Studio... You're doing great! :)

Introduction to Automation Studio in Salesforce Marketing Cloud

What is Automation Studio?

Automation Studio is a Marketing Cloud application, used to execute multi-step marketing and data management activities on an immediate, triggered, or scheduled basis. Automation Studio makes email sends, queries, imports, and more, happen automatically. You'll often hear the phrase "ETL" used in reference to Automation Studio, which stands for Extract, Transform, and Load. Spoiler alert: This is exactly what you'll do with your data using Automation Studio!

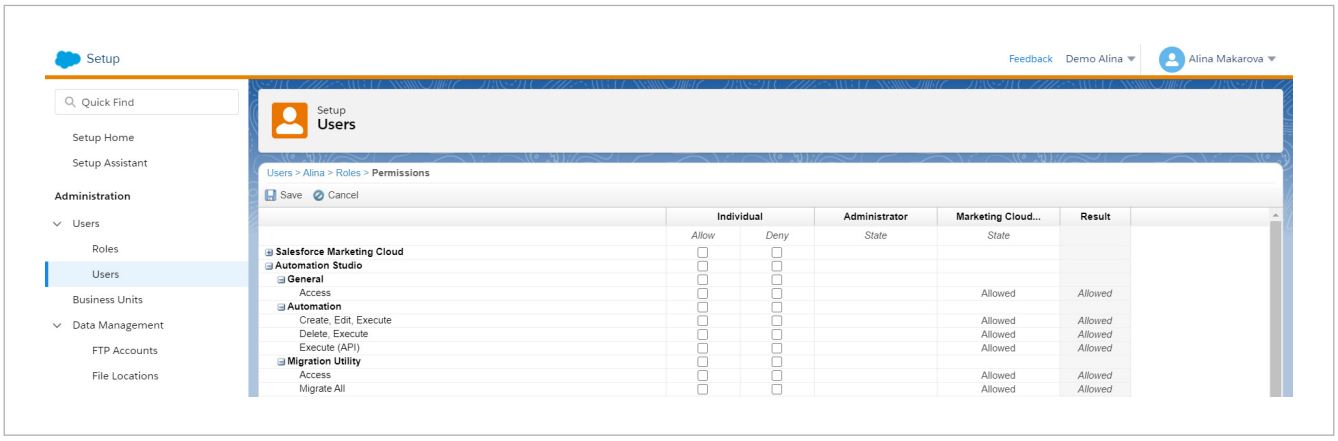
Who needs access to Automation Studio in Salesforce Marketing Cloud?

Firstly, you need to know who typically uses Automaton Studio. Typically the users are Salesforce admins and marketing automation teams, but marketers themselves may also use it if they're able to work with SQL queries.

How to give or restrict access to Automation Studio for Salesforce Marketing Cloud users

You can manage the settings of access to Automation Studio through the setup page. There, under Users, you may choose whom you want to give or restrict access to Automation Studio or some of its functionality.

You'll find Automation Studio under the 'Permissions' tab. Below, you can find an overview of the various permissions available for Automation Studio.



(How to give access to Automation Studio.)

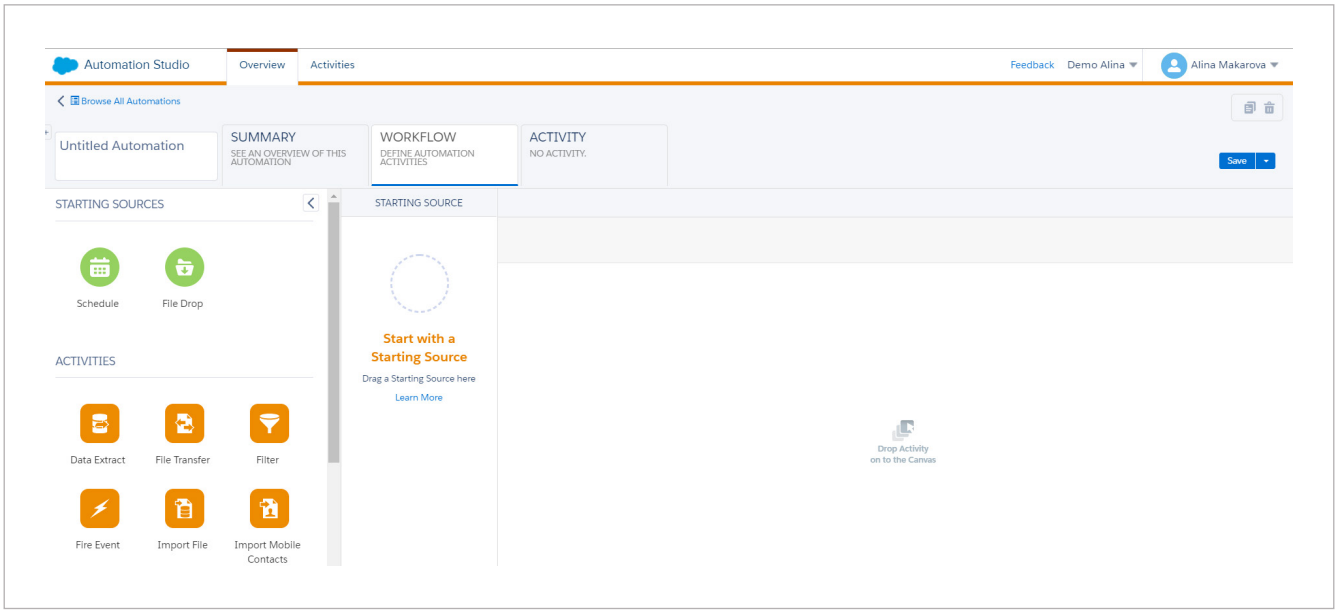
Keep in mind that not all the functionality of Automation Studio in Marketing Cloud is available by default. For instance, you might need to request support from SFMC to gain access to data extract activity.

Same goes for, the data transfer from an Enhanced FTP to the "Safehouse" is not enabled by default. You have to activate it by submitting a case with Salesforce Support.

What is a Safehouse? It's the internal secure storage for Marketing Cloud used for temporary processing, specifically for importing zipped and/or encrypted files from FTP, or for Extracts from Marketing Cloud.

What does Automation Studio in Salesforce Marketing Cloud consist of?

If you click on 'New Automation' you will be redirected to a workflow canvas, where you can create an automation. As you can see on the left side, the workflow is composed of starting sources and activities.



(Automation Studio overview.)

How to create a new automation in Automation Studio in Salesforce Marketing Cloud

Click on a 'New Automation' to choose a starting source. You can choose between a scheduled or a triggered (file drop) automation.

Types of Automations in Marketing Cloud

Triggered automation in Automation Studio
If you add a file to a specified folder in your enhanced FTP location, you'll begin a triggered automation. This brings in external data that isn't being posted on a regular schedule. Alternatively, you may want to update FTP files using other processes and to create an automation that launches whenever there's any activity in the folder. When files are dropped into a designated Enhanced FTP folder, File drop automations begin. With all this in mind, we suggest that you check out Salesforce's Help article on the subject, before running a triggered automation.

Scheduled automation in Automation Studio
You define scheduled automations on a recurring basis, such as weekly or daily (you can also choose to 'Run Once' the automation you create). You can set the time of your automation manually. One example could be using the scheduled automation when importing and refreshing your birthday list daily, then sending an email to all Contacts celebrating their birthday. Scheduled automations are the most commonly used part of Automation Studio. For example, you could use scheduled automations to do data imports in a "batch". Other system data files can be regularly dispatched to your enhanced FTP folder, then picked up by automations that are scheduled to run once a day. Data files are thus in their entirety and at roughly the same time. This is commonly known as a "batch upload".

What is an activity in Automation Studio?

In Automation Studio, activities perform specific actions like transferring or extracting data, or sending an email. Activities are the building blocks of an automation.

What activities can you find in Automation Studio?

Data Extract Activity
Data extracts can be used to export certain events such as key activity metrics like bounces,clicks, and conversations. Data Extract creates a file to use outside of SFMC. You can also use this activity to extract data from data extensions. When creating a data extract activity, remember to fill in an appropriate file naming pattern, where you specify the file type, for instance, '.csv'.

Verification Activity
This allows you to avoid unintentional automation outcomes. This activity lets you select a target data extension in your automation and evaluate target data extensions based on the conditions you've set. Once the conditions are met, the activity will stop the automation, or send a notification. You can also choose to receive an email with more context, to help with troubleshooting.

Email Send Activity
This enables you to select and configure email messages, to send singularly or within a scheduled sequence. You can also create a customized Send Definition to apply to other automations.

Note that Email Sends are more often used via Journey Builder, since it allows more reporting and tracking possibilities.

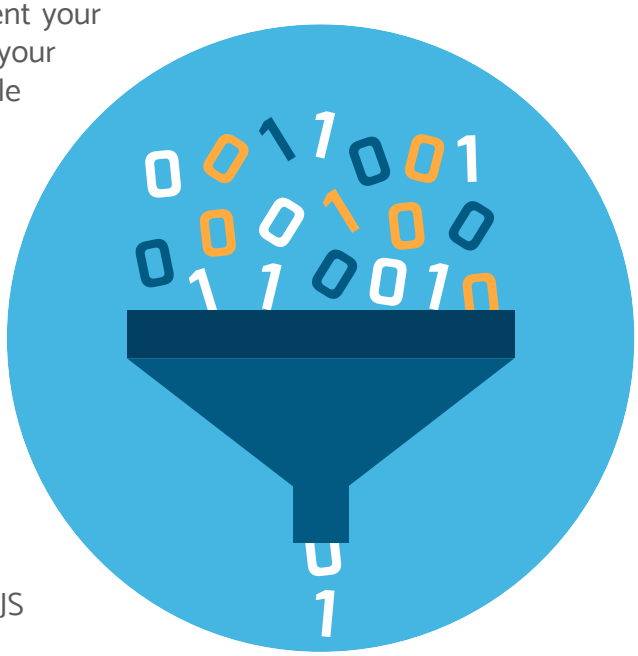
Wait Activity
This pauses automation for a specified time until performing the next step. You can add one, or multiple wait activities in a single automation.

File Transfer Activity
Automation Studio allows users to update Subscriber lists or data extensions using an outside file. You can define import file details and behavior by creating an import definition during the file transfer process. Import definitions are reused each time the activity runs. It's also possible to use FTP to export files from SFMC to your desktop.

SQL Query Activity
A Structured Query Language query retrieves data extension or data view information according to the criteria you set, then includes that data in a data extension.

Use SQL to create the query used in this activity. No more than 20 query activities are permitted in a single automation step. You use SQL queries for advanced segmentation needs, or you can write a query to use for reporting options.

Filter Activity
Use a data filter to create a segmented group or segmented data extension in Automation Studio. You can then filter Subscribers or contacts to target specific Subscribers based on their attributes and other characteristics. Note that to use this, you need to create a filter activity in Email Studio in advance. Also, be informed that using this activity to apply to a data extension already containing certain data will overwrite the existing data in that extension.
The filtering option is a great opportunity to segment your data in a relatively easy 'no-code' manner, however, your options will be limited. For instance, it's not possible to segment more than two data extensions. Nor is it possible to create advanced statements for segmentation such as creating subqueries, or leveraging custom values and picklists. Previously, we covered filters in Marketing Cloud, so read this article to refresh your knowledge.



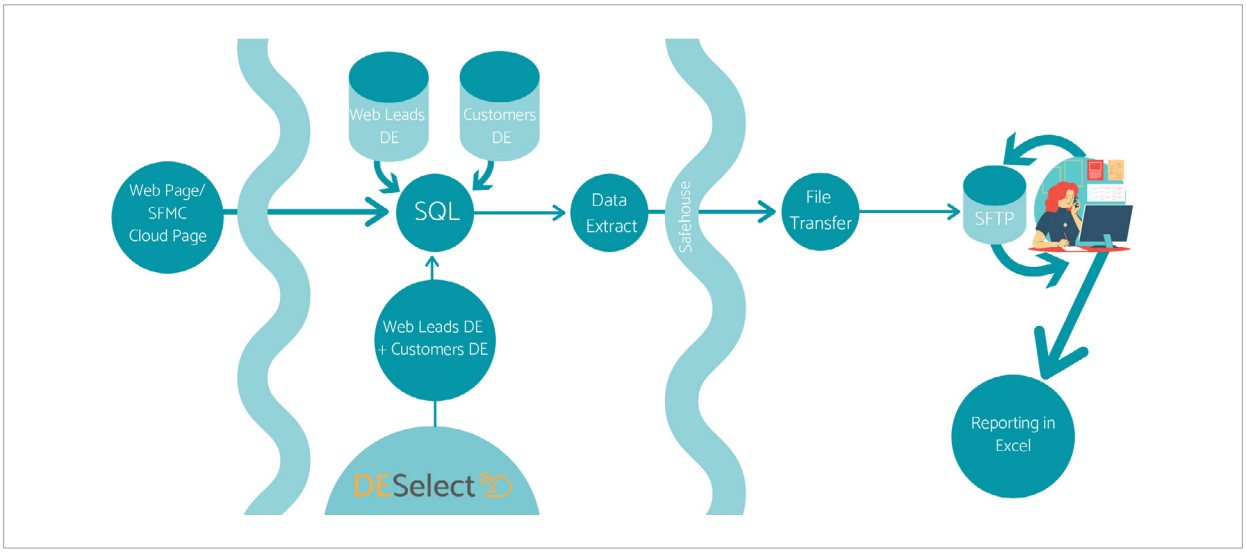
Script Activity
You can use this when you need to write code in Server-Side-JavaScript (SSIS) for multiple multiple marketing automation activities within emails or landing pages. Here, you can find the example of SSJS used in the Marketing Cloud. Also, check this blog if you want to learn more tips and tricks for SSJS in SFMC.

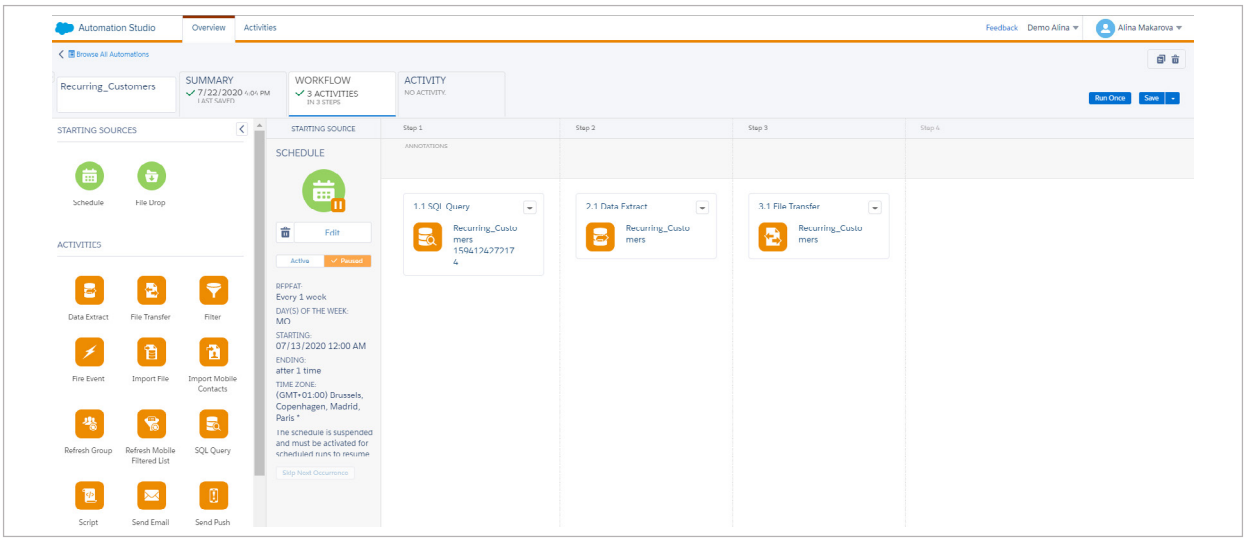
Bonus Automation Studio use case: Analyze recurring customers

In this use case, we'll show you how to analyze your recurring customers for reporting purposes. In order to do that, you have to run a weekly automation, exporting the file from FTP to your desktop.

For instance, let's say you've implemented a web form on a normal page of your website, or a Cloud Page, and you receive the data in a Web Leads data extension (DE). At the same time, you have a DE with your customers. In this scenario, you'd like to identify your recurring customers and export that data to your desktop for further spreadsheet reporting on a weekly basis.

Below is an illustration of the steps you have to take to implement this scenario in Automation Studio.





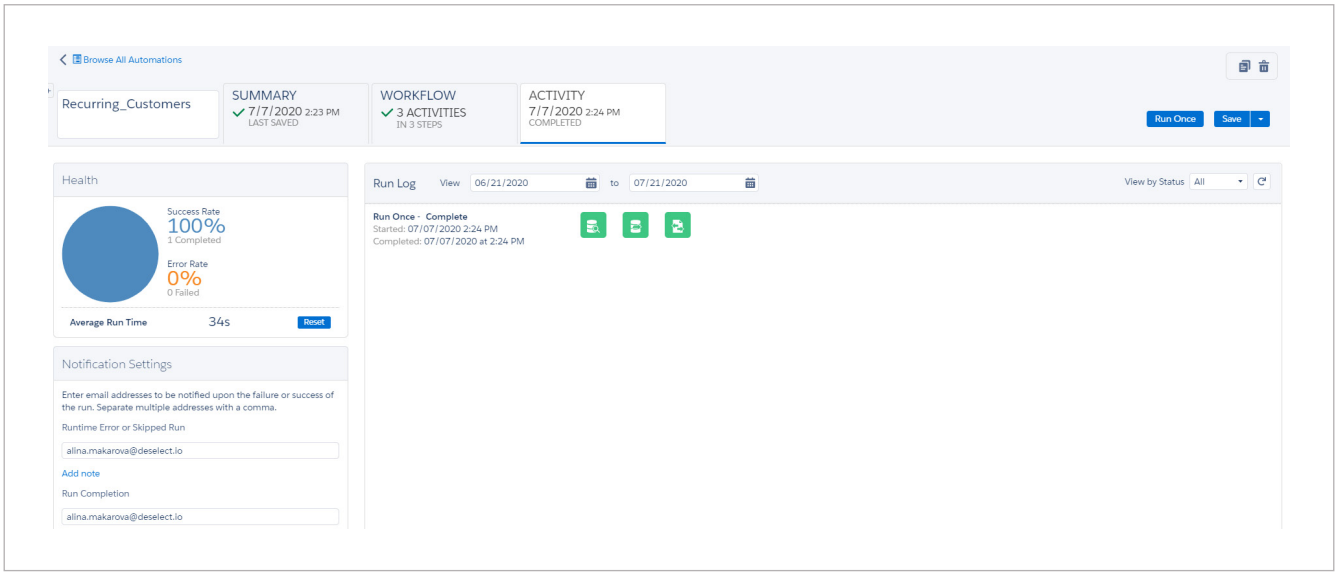
(This is how it looks in the Automation Studio workflow canvas.)

1. The first step is to choose a starting source, and in our example, it's a schedule that you set on a weekly basis.
2. You then add an SQL Query activity. In our example, you need to compare two data extensions, and for that, you create a relationship between them based on the Contact ID. In this case, you're aiming to identify web leads who are also your customers. Alternatively, use DESelect to simply drag-and-drop the data extensions to create the relationship, instead of writing an SQL Query.
3. Later you create a data extract activity where you choose to create a CSV file by following the guidelines for a file naming pattern.
4. Create a File Transfer activity.
5. In order to get the automation on the desktop, open FilzeZilla and connect to the FTP.
6. In the folder 'Import', you can find the ready-to-use CSV file with your recurring customers.

How to run your automation in Salesforce Marketing Cloud

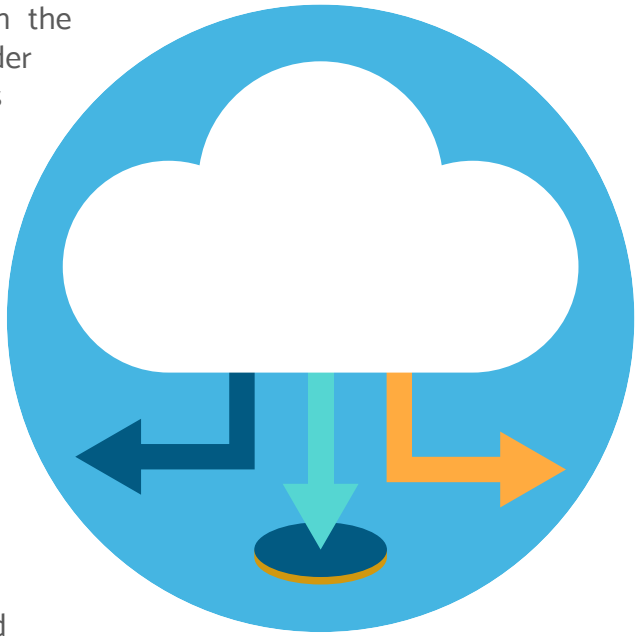
After setting up your automation, you have to actually run it. What you have to consider is the following: Click on 'Run Once' and choose the steps to run. In our example, we select all the steps of the automation to run. You can also choose the option to run just one step of the automation if you want to test a part of it first.

You can choose the option to receive a notification when your automation has finished or an error has occurred. In order to do that, in the 'Activity' tab of your automation under 'Notification Settings', fill in the email address of the person to whom notifications should be sent.



(Notifications in Automation Studio.)

Now you'll receive a file with the information on the web leads who are also existing customers, in order to create a campaign for them. Another option is to use the resulting CSV file for further spreadsheet analysis. You may want a more in-depth look at the data depending on your company and role.



You might have trouble obtaining the resulting CSV file. You might run into several errors, and it's usually difficult to deduct what really caused the error from the short messages outlined in Automation Studio. Check out this doc with the common errors and their more detailed explanation, that you can run into whilst using Automation Studio.

In this section, we explained how you can leverage Automation Studio in Salesforce Marketing Cloud and how to create an Automation yourself. Now, we are going to dive into Journey Builder– usually referred to as the core of Marketing Cloud.

Introduction to Journey Builder in Salesforce Marketing Cloud
What is Salesforce Marketing Cloud Journey Builder?

Journey Builder is a Marketing Cloud feature that allows you to take a customer journey concept, from whiteboard to modeling, using a simple and intuitive drag-and-drop user interface. You can set behavior-based goals while planning multiple individualized interactions, all within the same planning tool.

Journey Builder also integrates with Sales Cloud and Service Cloud, ensuring seamless customer experiences, while sharing the information with all users of all SFMC systems. So you can keep on top of customer situation responses while avoiding any unnecessary duplication of efforts.

So let's continue your journey *(see what we did there?)* and dive into it! :)

Why and when to use Journey Builder

Journey Builder plans the design and automation of your campaigns. It allows you to intuitively guide customers through their interactions with your brand.

It all starts with a blank canvas (or template), whereby you can set activities that tell Journey Builder how to interact with customers along the communications path. Once configured, Journey Builder runs responsive, automatic campaigns, while continuously evaluating your Contacts, and determining when to move them to the next marketing action.

The Journey Builder methodology uses one-to-one (or 1:1) marketing; a CRM strategy emphasizing individualized customer interactions, known to improve customer loyalty while increasing your return on marketing investment. Journey Builder simplifies the development of personalized relationships with a large customer base.

Journey Builder is an easy-to-use visual flow tool, where marketers can design their own automated omni-channel (email, SMS, push, ads) customer journeys. Consider a welcome series or events program for example.

Hovering over the Journey Builder app on the Marketing Cloud panel, you are redirected to the journeys overview page. From there, you can create a new journey; choose an entry source for your journey, look at the journey history, or choose a journey template.

It is also possible to leverage Contact data using Journey Builder. You can use it already in a Journey by choosing a decision split option that will be later discussed in this chapter.

What's the difference between Journey Builder and Automation Studio?

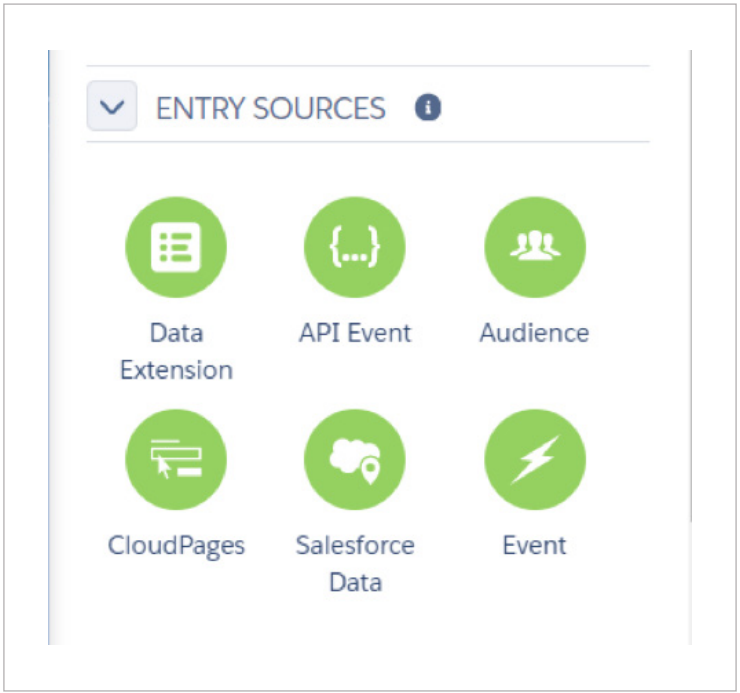
Salesforce Marketing Cloud's Automation Studio allows some simple email automation. However, its main purpose is to automate admin and data management tasks, such as importing files and transferring data.

Automation Studio is used for ETL (Extract, Transform, and Load), whereas Journey Builder's purpose is to create a 1:1 individualized journey for your prospect communications.

How to create a journey in Journey Builder?

Entry sources for a journey

The first thing you consider before starting a journey is the nature of your journey's data. Understanding the audience and the journey goal is paramount. Various entry sources can be used for a journey.



(Entry Sources example.)

Data extensions

You can use data extensions (DEs) as an entry source for your journey. Data extensions are tables that can contain a variety of data. If you want to freshen up your memory, just go back a chapter in this eBook.

You can also filter Contacts you would prefer to restrict from the journey. You can filter their attributes by simply using drag-and-drop. However, this segmentation option is rather limited and does not allow you to leverage advanced segmentation.

API events

You can also choose an API event as an entry source for your journey. When Contacts enter a journey via API, Journey Builder populates a data extension with these Contacts. You can set a filter using Marketing Cloud data attributes, to ensure that only intended customers enter the journey.

This event type requires API configuration. To set up and use an API, you may have to speak to a technician if needed.

Considerations when working with an IT resource:

- Notice where opt-in and customer data is captured.
- Audit your current customer information. For example, web browsing, demographic, and purchase data, and storage.
- Ascertain your customer data needs for personalized or targeted messages and interactions.
- Consider targeting and timing; and which customer behaviors you will act upon.

If you would like to know how to trigger journey API entry events with AMPscript and server-side JavaScript, check out this thorough article.

Cloud Pages

You can use the CloudPages Form Submit Event to admit Marketing Cloud Contacts into a journey.

Before using this entry source, create at least one Smart Capture form in CloudPages.

Audience entry

To admit a list of Contacts into a journey, use an audience. Audience entry is used for mobile studio only. You can create or edit audiences by using Contact Builder. Select from the push, SMS, and Published Audience Builder audiences available in your account.

Any audiences created before the January 2018 release still function, but cannot be edited. To access functionality previously found in Journey Builder Audiences, use the data extension entry source.

You can also schedule an audience to determine how often Journey Builder admits Contacts from an audience.

Salesforce data

Actions in Sales Cloud or Service Cloud are known as Salesforce data events. Creating or updating an object record places a Contact into a journey. Salesforce Flows initiates a Journey Builder event whenever the primary object meets rule and reference object filtering criteria. Configuring Marketing Cloud Connect allows you to take advantage of this.

When you configure the event, define these items:

- Use the Sales Cloud or Service Cloud object as the source of the entry event.
- Who enters the journey (users, leads, or Contacts).
- When a record is created or updated; the user, lead, or Contact, enters the journey.
- Select attributes from object data to filter who enters the journey.
- Select the entry object to use for journey data fields from related objects.

The user ID, lead, or Contact entering the journey, their email address, and the email opt-out flag status, are all included in each record.

Once you've configured the entry source, you cannot edit the object or who enters the journey. Delete and recreate the entry source to choose a different object. Before publishing, you can edit the entry criteria, filters, and event data for a configured entry source. Entry sources are reusable. You can also copy journeys containing Salesforce entry sources.

Google Analytics 360

Journey Builder admits audiences from your Google Analytics 360 account. You can choose an audience from your account, then admit a batch of those audience Contacts into a journey. Then you can choose which Contacts enter the journey, or admit all Contacts, by configuring a filter.

Note that you might have to request a support ticket to enable this feature.

Which SFMC journey will you build?

Multi-step journeys

Multi-step is the reason why marketers love Journey Builder so much. It allows you to build a journey that sends messages across any channel, based on marketing logic and audience behavior. It allows the creation of complex and highly personalized marketing automation campaigns. Leverage Multi-step journeys, from welcome email series, to everyday purchases, or abandoned cart journeys.

Transactional journeys

You can create a transactional journey, for when an event or action occurs, enabling you to immediately send an email. A common use case for transactional journeys is sending a personalized message, which responds to a specific action, such as a purchase. You can also send an event-triggered message, such as a password reset. Another possible use case is sending a message that's triggered by an action taken by your organization. E.g. updating a user's status.

Single Send journeys

Single Sends allow you to quickly create and deliver a personalized message to your audience. You can choose Single Send as an email or as a push notification. The email could be a promotional offer or an event reminder. A common push notification use case could be an alert about a new app feature, or sending a promotional offer. Single Send journeys are exciting! In the past, you had to set email send definition in Email Studio. The idea now is to have single "send definition" or a way of sending emails.

What are Journey Builder activities?

Messages

Messaging activities include email, SMS, LINE messages, push notifications, inbox messages, in-app messages, or any other form of messaging content. To provide a mix of information about your brand or product, vary the message content. Create the content before you build a journey.

You can use any Marketing Cloud data, including journey data, for personalization strings. Make sure the personalization string and dynamic content attribute names exactly match those in the data extension. Define a default value for every attribute so the personalization string is never blank. If you insert a personalization string, but the Subscriber attribute isn't populated, the string will be blank in the email. For example, set the First Name field default to Customer so that 'Dear Customer' appears as default if the field.

Note: Be sure to map personalization, or dynamic content attributes, to the correct data source. When using journey and Contact data, remember that the journey data values are static, while Contact data is variable.

Emails

Journey Builder uses the functionality of Email Studio to send to Marketing Cloud Contacts in a journey. So you can review and arrange statistics from within Journey Builder.

Things to consider:

- Every time a new journey version is activated, a new triggered send is created.
- Triggered send validation compares the email's personalization strings to event data from the journey entry source.
- By editing the email activity, you can update Send Classifications or Publication Lists.
- Pausing, publishing changes, and restarting the triggered send allows the update of images, content, and other Email Studio-related components.
- Delivery profiles.
- Dynamic subject rules.
- Sender profiles.
- Send classifications.

To ensure synchronized updates while in draft mode, implement email changes by updating each email activity, then reactivating the journey. Or you can update the send on the Journey Builder Sends page.

Make sure the email's personalization strings are calling data values included in the entry source data extension. This avoids validation errors. Email validation can fail if personalization includes a field not in the entry source data extension.

In the case of emails using AMPScript, you can use the Data Extension Lookup() function to interact with data extensions in your account.

Emails using AMPscript for personalization are not required to call data values found in the event source data extension.

Mobile messages

When a journey includes sends to mobile devices, Journey Builder includes the SMS, LINE message, push notification, in-app message, and inbox activities. You can add MobilePush inbox messages without leaving the journey. To use messages created in Mobile Studio and Content Builder, you can configure SMS, LINE message, in-app messages, and push notification Journey Builder activities.

SMS

In the case of Marketing Cloud Journey Builder SMS sends to Marketing Cloud Contacts, you can use the SMS activity. Note: To send SMS from a journey, your data extension must include the normalized phone number (country code + phone number (with no dashes or parentheses). You don't need a Locale field to send an SMS from Journey Builder. To learn how to use SMS activity in Journey Builder, check out this Trailhead module.

Carousel LINE activity

For sends to Marketing Cloud Contacts in a journey, you can use a carousel message in a LINE message activity. Carousel messages are LINE messages including up to 10 different messages in one carousel. You'll need to ensure your account has LINE channels enabled. Your Marketing Cloud account manager can give you more information about how to get LINE access and channels.

Push notifications

When using Marketing Cloud Journey Builder push notification sends in a journey, you can of course use the push notification activity.

In-app message

In-app messaging also works through Journey Builder. An in-app message is any kind of message sent to your mobile app users, which they'll usually see during app use. Journey Builder allows for the simple addition of in-app messaging, highlighting surveys, offers, encouraging them to enable push notifications, or location settings in your app.

Inbox push activity

For Marketing Cloud Journey Builder MobilePush inbox message sends, use the inbox activity.

Advertising

In Marketing Cloud Advertising Audiences Administration, you can use the Ad Audience activity and set up Google Adwords, Facebook, LinkedIn, Twitter, or another partner account as destinations. This will only work with Advertising Audiences provisioned accounts.

To use the Ad Audience activity in your journeys, you will have to include email addresses as the attribute in the Entry Event. If your journey Contacts don't have an email address, Advertising Audience won't populate. The Refresh Rate indicates the frequency of data pulls between Journey Builder and Ad Audience. Assuming your account is provisioned appropriately, you can amend this accordingly.

Check out this Salesforce article to find out more about creating an advertising campaign activity.

Flow activities

Flow control activities such as wait activities, decision splits, random splits, and engagement splits, create the Contact journey path.

Wait activities

Wait activities belong to message delivery timing; holding your customers between one activity and the next. Journey Builder continually evaluates customers between activities, ascertaining whether they have engaged with a message, met a goal, or reached the right criteria for a decision split. Wait activities can be used with alternative flow controls. Plan wait timing according to your content, and the rhythmic messaging expectations you have in mind for customers. Consider the optimal wait duration and the time of day to reach your customers.

Apart from journey testing, avoid wait times less than an hour. Also be mindful to avoid any unnecessary waits, especially at the beginning of a journey. Wait By Duration activity, Wait By Attribute or Wait By Until Date, are all available options. Journey Builder's Wait By Duration activity can release Contacts after a specified time has elapsed. This option is useful for marketers keen to create a consistent experience for all Contacts on the journey. If creating a wait ending, based on the value of an attribute in Marketing Cloud Contact Data or Journey Data, you can use Wait By Attribute. Wait Until Date is used when Marketing Cloud Contacts are held in wait mode until a specified date and time.

Note: Contacts reaching the activity after the specified time or date proceed immediately to the next activity.

What are Journey Builder splits?

Salesforce Marketing Cloud Journey Builder allows you to choose several types of splits, including engagement, decision, random, Einstein, or custom splits. In the case of split activities, Contacts are divided into cohorts that follow different paths. This means different subsequent activities can be sent to each cohort.

Einstein split

You can make your Marketing Cloud journeys smarter by leveraging the power of artificial intelligence. Journey Builder's Einstein split activity allows you to segment customers logically, according to prebuilt Einstein splits. Einstein splits allow personalized customer journeys based on the personas, or on engagement levels. Here you can divide your customers based on their likelihood to open, click, covert, or unsubscribe. This is intuitively based on their engagement persona.

Marketing Cloud Journey Builder's Einstein Engagement Scoring segments customers into logical journeys, based on learned engagement data. You have several Einstein split options at your disposal. Access to Einstein functionality depends on your SFMC subscription. If it is a part of your package, you might also need to request a support ticket to enable the functionality for your SFMC instance.

Decision split

Journey Builder's decision split activity evaluates Salesforce Marketing Cloud Contacts reaching a decision. It redirects each Contact down a path according to your chosen filter. Let's say you want to create two Contact groups, separated by age: The first group is under 45, the second are 45+. Placing a decision split post-entry event, or during any activity along the journey, will prompt Journey Builder's evaluation of the Contact's data. Here, Journey Builder is funneling Contacts aged 45+ into one branch, and the younger group into the other branch. Decision splits contain up to 20 paths.

Email open split

Customer engagement linked to how likely they are to open an email.

Custom split

Split activities can also be custom split. Custom split activities using a data decision can allow a Boolean (True or False), or multiple-answer decision. Here, Contacts are re-routed to more than two decision branches. So with a custom split activity, you can segment the audience into two or more paths, depending on the activity's purpose.

Email click split

Based on their likelihood to click on a link.

Conversion split

Engagement linked to how likely they are to download content, complete a form on your website, or purchase/convert.

Persona split

Customer engagement linked to their Einstein Engagement Scoring personas.

Retention split

Engagement linked to their likelihood to maintain a subscription.

Join activity

When bringing Contacts from two (or more) Journey Builder paths into a single path, you use Join activity. This activity redirects Contacts flowing down one or more branches, to an alternative journey branch.

Path Optimizer

Falling between 'Join' and 'Einstein split' activities is Journey Builder's Path Optimizer, only recently introduced with the May 2020 release.

The Path Optimizer activity automatically (or manually) selects a winning branch by helping you identify the best way to reach your customers.

It sends the message to all Contacts entering a specific journey path. If this sounds too much like Black Magic to you, don't worry. You can run tests prior to the final design.

Winning branches can be (automatically or manually) configured with up to 10 paths, with user-defined distributions.

Winners are automatically selected based on email engagement metrics. Manual selection is also an option.

While the winning path receives new Contacts, losing paths shut off Contact flow.

The testable Journey Builder activities are Wait, Sales and Service Cloud activities, Update Contact, Custom activities, and all messaging activities

The historical test context is included in test summary information.

Check out this article, which includes more examples of Path Optimizer in Salesforce Marketing Cloud.

Customer updates

With Journey Builder's Update Contact activity, you can change a Marketing Cloud Contact record on a journey.

This altars Contact attribute values when they reach this activity in a journey. Choose a sendable data extension and set a static overwriting value for each Contact reaching the activity. Date attributes provide the option of Central Standard Time.

Sales and Service Cloud

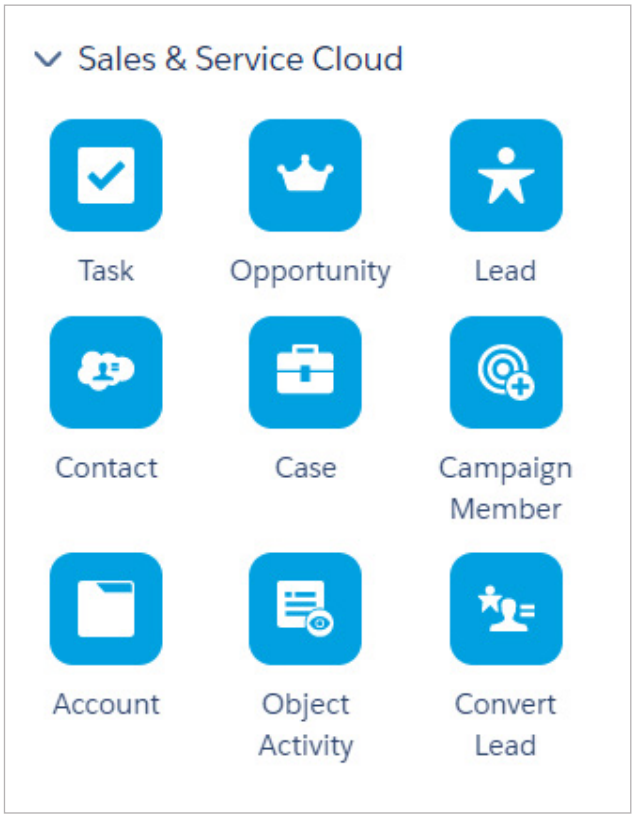
Journey Builder's Sales and Service Cloud canvas activities update or create Sales and Service Cloud object records for connected SFMC Contacts. You need to enable Marketing Cloud Connect with your Salesforce CRM to reap the benefits of this particular functionality. Any users (except Marketing Cloud Administrators) can be granted access to edit Sales and Service Cloud activities.

Sales Cloud activities use the SOAP API to Create, Lookup, and Update.

There are three activity configuration options: Create, Simple Update, and Find and Update. This will store the generated record as output data for the activity, which you can in turn access through Journey Data.

These activities utilize the same Salesforce SOAP API as the Marketing Cloud Connector.

Find out more about Sales and Service Cloud activities here.



Journey settings

For Contacts re-entering the journey.

When creating a journey, you are invited to choose whether you'd like contacts to re-enter the journey at any time, re-enter after exit, or restrict their re-entry. This is an important consideration.

Marketers would recommend contacts to restrict re-entering, to avoid the chance of duplicate content being communicated. Another probability is that your communication might end up in the spam folder.

Check this for best practice on how to avoid users re-entering the journey.

Journey validation

Using Journey Builder's validation option will give added confidence that your journey configuration is error-free. Once you've created your journey, click Validate to check for issues relating to entry source, scheduling, activities, goals, or exit criteria.

You can also use validation to fine-tune your journey, since it confirms all configurations are set up to work as planned.

The journey elements validated are Entry Source, Entry Schedule, Decision Splits, Wait Activities, Update Contact Activities, Email Engagement Splits, Journey Settings, Journey Goals, and Exit Criteria.

Validation results show error messages stemming from configuration.

Note: Validating the journey identifies most errors, but some are shown only after saving, testing, or activating.

Setting Journey Builder journey goals

Journey Builder goals can measure your journey's success. You can monitor contacts' progress during an active journey on the Journey Builder Canvas. Reports also include a review of contacts' message engagement.

Journey goals criteria

If a contact meets set goal criteria, they can exit before the journey's end.

Let's say you have a coupon redemption as a journey's goal. The customer could then exit immediately after redemption, receiving no further messages linked to this journey.

Here, you can also define a target number (or percentage) of people reaching the marketing objective. Evaluation is automatic; every night at midnight Central Time, and each time a wait expires.

Exit activity

An exit is the journey's end and requires no configuration. That said, this might not be the same as meeting a marketing objective. You can use a goal or exit criteria to remove journey contacts before they complete.

If contacts exit using goal functionality, they are tracked and measured against goal performance.

Check out more Journey Builder exit examples here.

Best practices:
Things to consider when creating a journey in Journey Builder

- Do not use the same entry source data extension to power multiple journeys, as this may lead to incorrectly processing the Contacts through your journey. This way you also avoid spamming contacts or duplicating contact communication. Instead, create a pre-filtered copy of the data extension for each journey.
- If you had a Contact in the entry Journey data extension that you have since deleted after setting up the journey, don't worry about Contact deletion. Journey data is cached by Journey Builder and is separated from the data extension used in the entry source. That means the Contact still receives the communication.
- Pre-filter your data before adding it to the journey. Use an ETL tool (like Automation Studio's SQL capabilities) to perform large-scale segmentation before injection into Journey Builder. Alternatively, if you don't know or want to rely on SQL, leverage DESelect's segmentation capability, with which you can easily create advanced audience segments using drag-and-drop, then add to your Journey Builder journeys later.
- Draw the journey you want to build on paper,a whiteboard, or use something like Mural if you need a digital tool to collaborate, before creating it on Journey Builder Canvas. This provides you with a complete picture of the journey you want to build.
- Updating your journey: When copying a journey (for instance, to add an extra email), all contacts already in the journey will remain in the initial version. Only new contacts added to the second journey will receive the updated journey events.
- Leverage 'Journey History'. If you need to audit or bug-fix your journey, use 'Journey History' via a tab in Journey Builder overview.
- Be aware that unlike Email Studio, Journey Builder doesn't offer out-of-the-box A/B testing functionality. The closest workaround can be using a path optimizer functionality. That way you can test the part of the journey, let Journey Builder select a winning path, then send it to the rest of the audience.
- Define the Exit Criteria for the users in the journey in order to make sure they won't reenter, thus receiving the same communication twice.

Check out this article on 5 things to know about creating a Journey in Journey Builder.

Bonus: Let's build a Journey together: Cross-sell Journey Builder journey

We're going to take into consideration the above mentioned best practices, and build a journey in Journey Builder in Salesforce Marketing Cloud. Before adding users to our journey entry source, we'll segment the audience.

Since the purpose of our campaign is to cross-sell to customers, we first need to define who to target with our communication. We'll use a no-code drag-and-drop segmentation solution for Salesforce Marketing Cloud DESelect, to segment our audience.

We'll combine the information from two data extensions: Purchases, and Contacts.

We wish to identify contacts who've made a purchase of the X product in the past month. We need to exclude the audience that bought the Y product so that we can cross-sell the Y product to the initial audience. Then, in DESelect, we'll create a new data extension containing relevant personal information for our campaign, about the target contacts. This will be their ID, first name, last name, and email address.

Then we'll create our journey, by choosing an entry source of the data extension we've just created. This way we've already pre-segmented the audience we'll add to the journey. After that, we're going to send them a series of emails in which we'll include a promo code. This way the contacts who bought the X product would be more inclined to buy the Y product.

Watch the video of the DESelect segmentation process, and how it can be later used in a Journey Builder journey here.

We've covered a lot of ground here, as we dove into Email Studio, Automation, Studio, and Journey Builder.

Note: We haven't included Mobile Studio's potential, though we might well talk about it in the next version of this eBook.

Next up, we'll get into the nitty-gritty of managing data in Salesforce Marketing Cloud. Keep reading! :)

Chapter 5 - How to manage data in Salesforce Marketing Cloud

Having read about how to add data in Marketing Cloud, where to store it, and how to make use of it, you come to a point where you need to understand how to actually manage all that data in Marketing Cloud.

We think that data needs to be accessible and understandable for marketers. That's why we recommend all Salesforce Marketing Cloud users to read this chapter.

Data management best practices

- First and foremost, it is important to remember that Marketing Cloud is not a data warehouse or a data repository. That means you shouldn't use it to store all the data you have, as this makes consistent data management impossible. We already discussed this in the earlier chapter. Ideally, you build your full 360 customer view in a Customer Relationship Management (CRM) system, Data Warehouse (DWH), or – more recently – in a Customer Data Platform (CDP).
  - CRM: Salesforce Sales Cloud and Service Cloud are prime examples
  - DWH: Typically used by business intelligence (BI) specialists, i.e. it's for analysis
  - CDP: Salesforce recently launched its own C360 solution

  Ideally, you are advised to store the data in an outside database and then by leveraging the Automation Studio (for example), you pull the data to Marketing Cloud on a daily basis, use Marketing Cloud Connect, or set up an API integration.

- You can also make an inventory of your data extensions and clean the data that is no longer relevant. You can obtain that by using code. Zuzanna Jarczynska has made an article on how to make an inventory of your data extensions and data sources that you can access here.

- It's important to keep your data consistent with the field format. For instance, make sure that 'Subscriber Key' is selected as a text field. That way when you want to import, merge, or segment data, you'll get the correct result and won't be wondering why you see an error on your screen. In the same manner, make sure you choose the date field format for data (note that by default Marketing Cloud chooses US date format) and the email field for email addresses.

- Leverage your data views. Data views, which can be called native Salesforce data extensions, store relevant information about subscriber activity. You can query that information in order to manage your data. We've already covered data views in this eBook, but can't stress enough the importance of defining which data views will be used by your entire team. We've written a quick introductory guide on how to use data views in Marketing Cloud, that you can read here.

- Figure out timezones in Marketing Cloud. ExactTarget/Marketing Cloud system time is hard-coded to UTC-6 (UTC minus six hours), and the system time does not change with standard versus daylight savings time. Timezone and culture code settings at the user level take priority over account settings. Times that are shown in the journey, and triggered send-tracking information, remain in CST regardless of this setting. Moreover, if you add the data from Salesforce CRM, the timezone rules will not be transferred. This means that once the data is available in Marketing Cloud, it will respect the default Marketing Cloud time settings, or simply UTC -6. There is also a known issue bug where Data Extension Created Date and the Modified Dates are NOT in the local user timezone. So far there's no workaround for this. Normally, you can use SQL to leverage the timezones in Marketing Cloud, or alternatively, you can rely on an intuitive tool like DESelect, which will help you control time zones without the need to write code.

- A part of Marketing Cloud ABC is respecting the folder structure. This has to be defined at the organization-level when you set up Marketing Cloud. At this point, naming conventions should also be defined. These details are sometimes neglected, which often leads to confusion and mistakes. It's also important to keep track of the changes of the names and folder structures in case a new person joins the team, for instance. These are amazing resources that will help you get the idea of how to organize naming conventions for your data. Here is a naming convention help article by Salesforce. Here you can find a short guide on data extensions naming conventions.

- And finally, don't be afraid to admit that you simply do not know what is best for your data. The Salesforce community is a vibrant and helpful space where you can ask for help when stuck or having an unexpected problem in Marketing Cloud. Join Trailblazer groups, Slack channels, and look for the answers on Salesforce StackExchange. There are many amazing people out there who are willing to help you when stuck, and who might well have the answer to your specific questions. We encourage you to never stop learning on the platform, that changes so rapidly Staying in touch with fellow marketers can make your work a lot easier and less stressful.

Tell us what your data management tips and tricks are! Share them by sending us an email at: hello@deselect.io. We will absolutely add your suggestions in our next edition of the eBook, and credit you too. :)

For many marketers, data-related tasks are not the most interesting part of their job. The reasons can be different, but the most popular would be that data management requires a lot of time and is simply too technical. "Data" is often still looked upon as a boring subject. But it doesn't have to be! We believe data is wildly fascinating and can be fun!

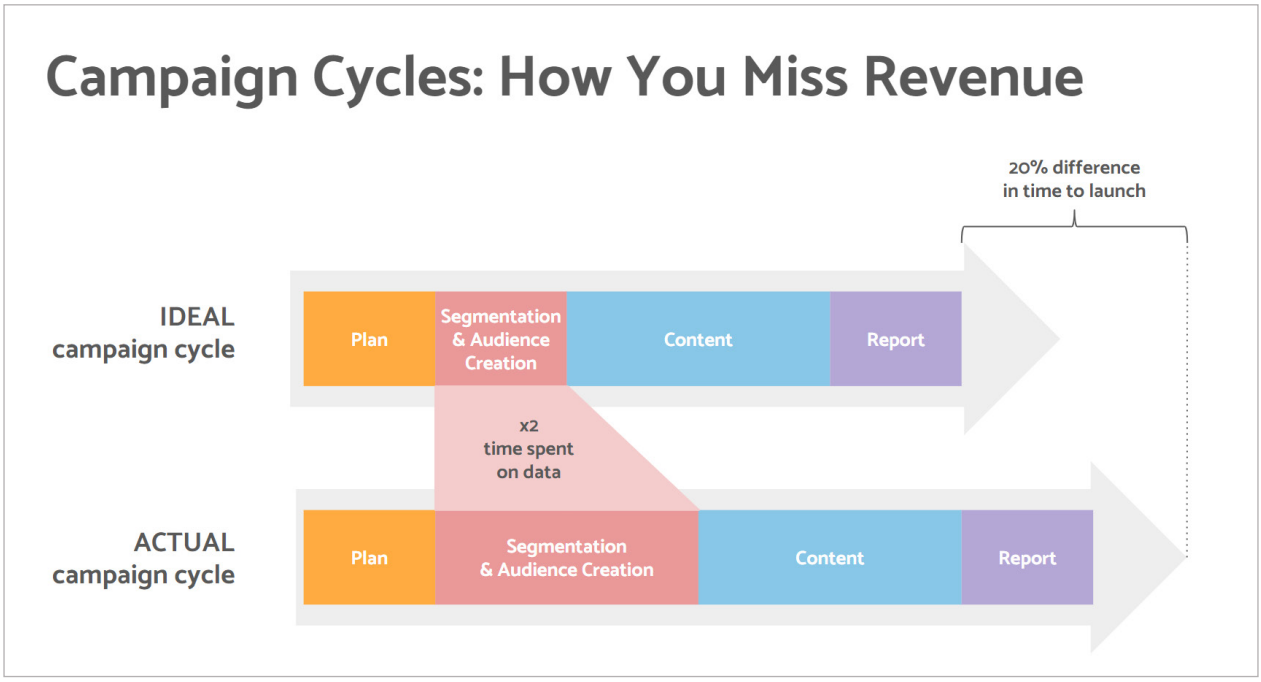
What if we told you it shouldn't be technical, boring, and hard work. **What if 50% of the time you spend on data could be automated?**

When we surveyed marketing organizations across a number of companies and industries, **we were amazed to learn they were spending an average of 40% of their time on data management.**

Consider that percentage for a moment.

On average these teams spend two days a week just managing data in SFMC, while they still need to take care of marketing strategy, content, and reporting.

Through careful analysis, and based on our customer success stories, we demonstrated that DESelect can cut this time in half. Indeed, we can reduce the time you spend on data management in SFMC from 40% to just 20%, as visualized below:



Wondering how to calculate this for your particular needs?

1. Estimate how much time your team spends on data in SFMC (or just ask them).
2. Copy this template and fill in the numbers. For the resource costs, you can use industry averages if you're not sure.
3. Knowing you can halve the time you spend on data management, you'll then have a rough estimate of the added value to be had from efficiently preparing campaign audiences.

That being said, data management should not be a technical activity in Marketing Cloud. With the right tool, it can empower marketers to have a better understanding of the audience, saving time on data preparation and audience creation, thus leaving more time for campaign creation.

Segmentation possibilities in Salesforce Marketing Cloud

What are the tools you need to be aware of when manipulating and controlling data?

There are various options to segment your data that can be later used for marketing campaigns, and they all differ according to their level of complexity.

What are native to Marketing Cloud data segmentation forms?

You could use **filters** in Marketing Cloud. We've covered how they can be used in the chapter where describing the functionality of Email Studio. Despite the fact that filters are rather easy to use and do not require technical skills to leverage them, they also:

- Offer very limited segmentation capabilities;
- Do not allow you to reliably filter across different data extensions.

You could learn how to use **SQL queries** or hire people to write them. When we were describing Automation Studio we explained that SQL queries allow marketers to create advanced segments and, for instance, query on data views. However, this approach also has its disadvantages:

- Hiring external personnel to manage your SQL needs is a costly way of allocating resources and talent.
- It will also leave your marketers dependent on technical expertise.
- Moreover, it's inefficient and creates communication overheads.
- It's also inefficient to invest the marketers' time in learning SQL and how to leverage its full potential functionality.
- Lastly, it distracts marketers from campaign creation activity.

There's an additional method of managing and segmenting the data in Marketing Cloud, which is Salesforce CRM **'reports'** (assuming you have it and it's connected to Salesforce Marketing Cloud).

On the one hand, reports can offer the following:

- More objects can be joined. It's possible to join up to four Objects by creating up to three data relationships. Objects in Salesforce CRM are simply data extensions in Marketing Cloud.
- Picklists. For filters, values can be chosen using picklists. It saves time if there are more than 20 records in a field as there's no need to look into data extension values or examine the existing data beforehand.
- No technical knowledge required. There's no need to write SQL queries to join several Objects, as Salesforce Reports use the 'Lightning' drag-and drop interface.
- No technical limitations. In comparison to SQL queries, there is relatively little risk of reaching SQL query execution timeout while using SF Reports.

This approach has its own disadvantages as well, such as the following:

- Data migration required. To use this approach, you still have to push your data to Salesforce (CRM), and create 'Salesforce data extensions' or Objects. Then, you need to import the outcome back to Marketing Cloud.
- Limited data relationship types. Relationship types are limited to 'with' and 'without' (in SQL, this equals an INNER and OUTER JOIN).
- Additional licenses required. Marketers' access must be provisioned to SFDC and manage separate user accounts there. The latter should be purchased from Salesforce.
- Time-consuming. Typically, it takes more time to process the data and add it to a campaign. For example, adding a report with 10,000 records to a campaign can take more than 20 minutes.
- Access limitation. Only one user at a time can work with reports, adding them to a campaign. Hence, if you try to access a report while another user's working with this report and/or with a record that's present in the report, you'll get an error message.
- Multitasking limitation. You have to wait until all the records are added to the campaign before working with another campaign and/or report.

So this was an overview of the common ways to segment the data in Marketing Cloud using native solutions.

What about the tools outside of Marketing Cloud that can help with segmentation and data management?

You could use an **audience management solution** and integrate it with your Marketing Cloud. However, this approach:

- Comes with a significant implementation cost.
- Can also come with additional license costs.
- Will make you dependent on experts to implement the solution and make modifications later on (additional maintenance costs).
- Typically works with a daily batch, meaning data will often be outdated when you want to segment.

Alternatively, you can use DESelect:

- You'll be able to save an estimated 50% of the time you spend.
- You'll shorten your campaign cycles by at least 20%.
- You'll be able to deliver more high-quality campaigns.
- You won't have to rely on experts to write SQL queries.
- You won't worry about hidden costs, because DESelect's integration requires no maintenance.
- You will note improved user adoption as your marketers get a better user experience.
- And you will be able to start doing all of this virtually immediately, thanks to the full plug-and play integration!

Are you looking for a way to segment in Salesforce Marketing Cloud without SQL queries and save 50% of your time on data management? Then we've got you covered. Check out this extensive guide on segmentation in Marketing Cloud, along with the video presentation to learn all the benefits of a non-SQL segmentation.

In this chapter, we outlined various data management best practices for Salesforce Marketing Cloud and the best ways to segment your data to take full control of it. We hope that you find our insights useful in your daily marketing routine.

So we hope you enjoyed our Salesforce Marketing Cloud manual!

The eBook covered a multitude of topics, from the basics of data models, how to identify and prepare for SMFC, to defining your data model, managing and segmenting data, and leveraging data in the SFMC studios and builders.

Hopefully, this guide has helped you understand the SFMC data model better. That said, please consider this eBook as a work-in-progress since SFMC is such a frequently changing platform. With that in mind, we want to keep up with it, ensuring this eBook is useful for as long as possible.

That's it

Hey!

This is Alina from DESelect - you may know me from articles I've written. Congrats on making it to the end of this extensive eBook! Working on this eBook was a tremendous job and I'm pleased we can call it a real team effort whereby we put our collective knowledge and that of the Ohana together.

Personally, I became involved with Marketing Cloud a little over a year ago. Since then I've received an Email Specialist certificate and can call myself a passionate Trailblazer (moving confidently to become a Ranger soon). My journey of getting to know the SFMC world was rather unexpected, but I can say now that I'm extremely grateful. Learning about this living, breathing platform is exciting and challenging! Working for an awesome company like DESelect is even more exciting.

Here's a small reminder of who we are. DESelect is a segmentation solution for Salesforce Marketing Cloud. We help marketers segment easier, avoiding the need to rely on SQL queries to perform advanced segmentation. Our mission is to become the preferred segmentation solution for Salesforce Marketing Cloud. Stay in the loop with DESelect updates and Marketing Cloud tips and tricks here.

We're a young and vibrant company, consisting of an amazing team. To learn more about our company, culture, and principles, go here.

If you're interested in seeing how DESelect can help your company to save up to 50% on data management, book a demo with us.

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