



// diconium **RESOURCES**

Marketing Cloud Extension

APPLICATION GUIDE

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1. Overview

With Marketing Cloud Connect, integrated users send Marketing Cloud e-mails through the Sales or Service Cloud. You can send single e-mails to leads, contacts, and person account records, or send them to a list through campaigns and reports.

But Marketing Cloud Connect does not allow sales managers or marketing managers to send Marketing Cloud e-mails from Sales Cloud to multiple leads or contacts without going to the Marketing Cloud application.

diconium MC Extension App offers solutions to tackle this situation. Consider a sales or marketing manager wants to send a quick update about a deal in progress, which is

near to close. They can select leads or contacts in the Sales Cloud and then select an e-mail template created in Marketing Cloud; simply send e-mails in a few minutes.

In the Salesforce CRM system (particularly in e-mail marketing using Marketing Cloud), customer data is stored in Sales Cloud and grouping target audiences requires simple to complex SQL queries along with well-designed Journey automations to send any marketing e-mails. With this **MC Extension App**, which provides Sales–Marketing Cloud customer integration, you can simply select a target audience by selecting them from the list view to send them important e-mail communications using templates designed by a content editor or e-mail designer in Marketing Cloud.

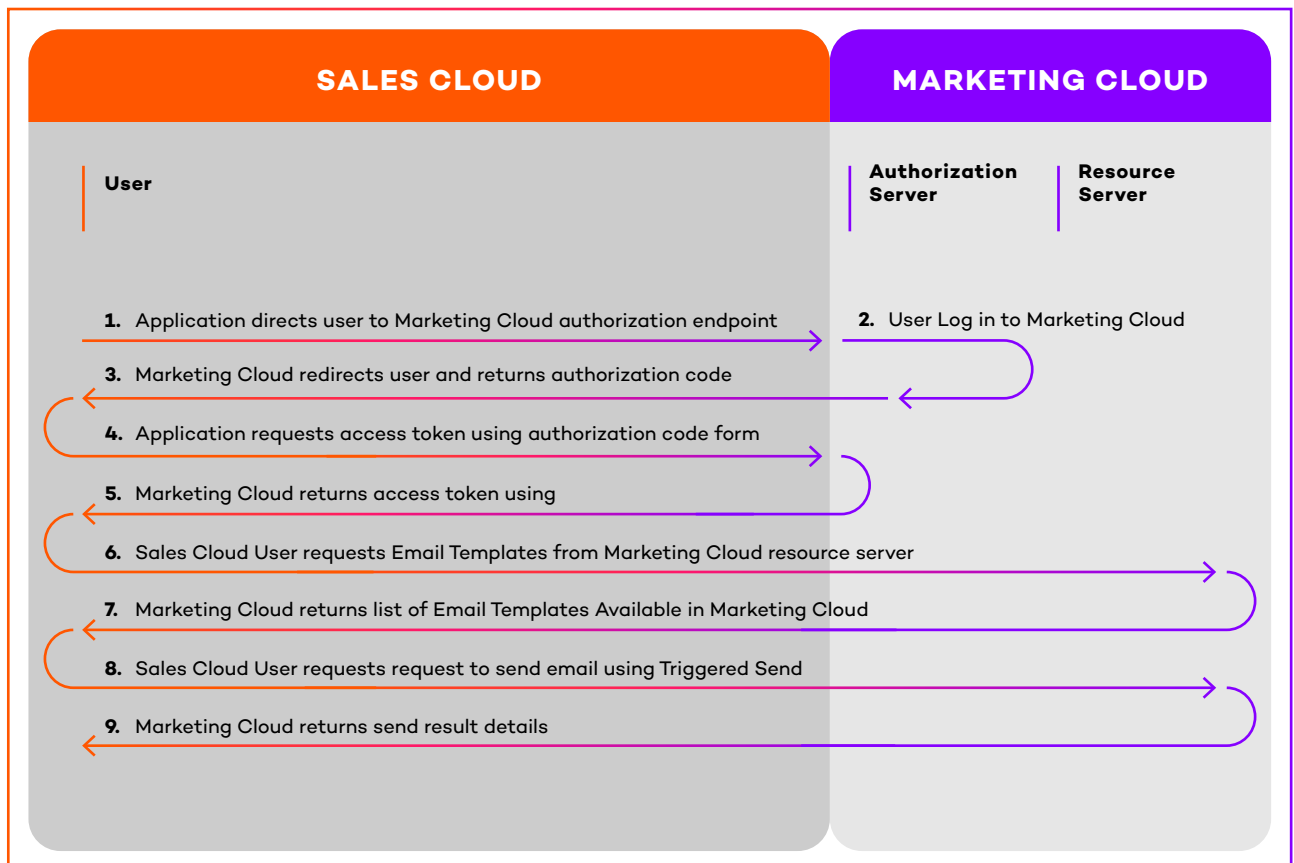


**Help your Sales and
Marketing Managers
save time!**

2. Solution Implemented

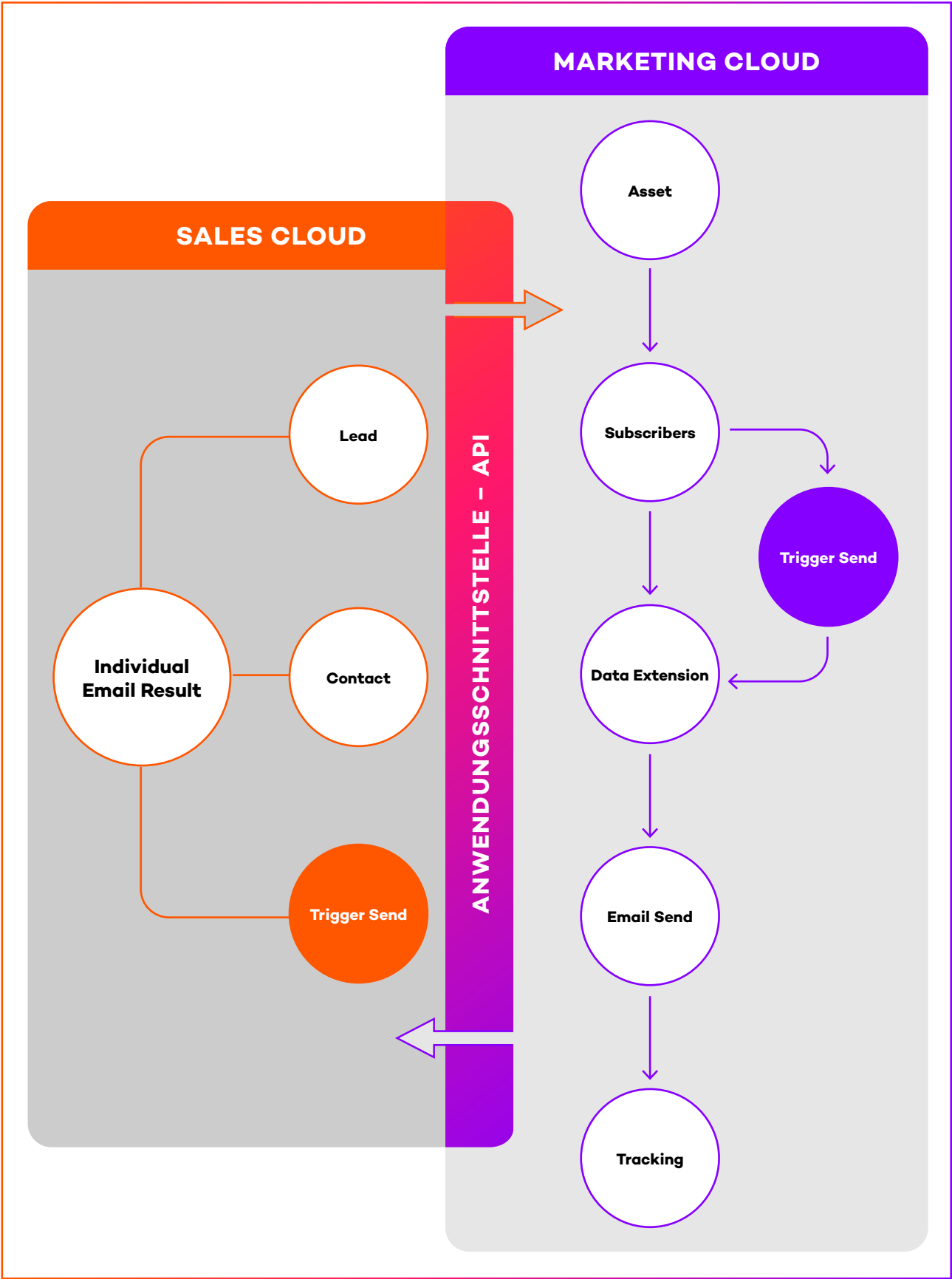
1. **diconium MC Extension App** includes a LWC component which will open when user clicks on the Custom List button on the Lead/Contact mass record update action. .
2. Includes a drop-down field to select E-mail templates that we are displaying from Marketing Cloud to Sales Cloud.
3. Custom button to send an e-mail for selection of Contacts or Leads in the Sales Cloud.
4. Apex classes that execute the below logic:
 - Authenticate to Marketing Cloud Account.
 - Method to Get all e-mail templates available from Marketing Cloud using Rest API call.
 - Method to create trigger send dynamically and request e-mail send using Rest API call.
 - Scheduler to create trigger send and individual e-mail results which will run 2 hrs and 24 hrs later after sending e-mails.

3. Flow Diagram



User Authentication Process

4. Data Diagram



Entity diagram for Marketing Cloud Extension

5. Prerequisites

1. To use this application, please install Marketing Cloud Connect and configure it in Sales Cloud Org.
2. Configure sender profile in Marketing Cloud.
3. Go to Setup ► Platform Tools ► E-mail Studio ► Sender Profile
4. User should have access to Contact, Lead, trigger send and individual e-mail results in Sales Cloud and access to Marketing Cloud.

6. Installation Steps

Click the URL from App Exchange and start the installation by clicking on it.
During the installation, you will be asked to enter which users should have the app installed.
The following options are available:

- For administrators only
- For all users (recommended)
- For specific profiles

The image shows a screenshot of an application installation window. It features three selectable options, each represented by a grey rounded rectangle containing an icon of three people. The first option, 'Install for Admins Only', has a white radio button. The second option, 'Install for All Users', has an orange radio button and is the selected option. The third option, 'Install for Specific Profiles', has a white radio button. Below these options are two buttons: an orange 'Install' button and a grey 'Cancel' button.

Installation Procedure

7. Post-Installation Steps

- Before you can start using this app, you need to set up the connection between your Sales Cloud Org and your Marketing Cloud Org.
- Create web app type Package under Installed Packages in Marketing Cloud.
 - In Marketing Cloud, go to Setup ▶ Click Apps ▶ Click Installed Packages ▶ Click New
 - Give the package a name and description.
 - Create the package with enhanced functionality.
 - Save the package.
 - Under Components, click Add Component and select API Integration.
 - Select an integration type. (web app)
- It will generate client id and secret as shown below.

The screenshot displays the 'DETAILS' tab of a package configuration in Marketing Cloud. The package is named 'MC-ConnectorExt' and is of type 'Custom'. It is currently 'In Development' and associated with the 'diconium digital solutions GmbH' source account. The package ID is 'b7cba497-0dcb-4123-a0b0-1aa0adc9d74c'. Under the 'Components' section, an 'API Integration' component is added. This component is configured as a 'Web App' with a 'Refresh Token Lifetime' of '60 Days'. The 'Client Id' and 'Client Secret' are masked. The 'Authentication Base URI' is 'https://[redacted].auth.marketingcloudapis.com/'. The 'REST Base URI' is 'https://[redacted].rest.marketingcloudapis.com/' and the 'SOAP Base URI' is 'https://[redacted].soap.marketingcloudapis.com/'. A 'Scope' section lists various permissions and their access levels: 'Access' (Offline Access), 'Email' (Read, Write, Send), 'Documents and Images' (Read, Write), 'Saved Content' (Read, Write), 'Automations' (Read, Write, Execute), 'Journeys' (Activate/Stop/Pause/Resume/Send/Schedule, Delete), 'Audiences' (Read, Write), 'Marketing Cloud Connect' (Read, Write, Send), 'Data Extensions' (Read, Write), 'Tracking Events' (Read, Write), 'Callbacks' (Read, Create, Update, Delete), and 'Subscriptions' (Read, Create, Update, Delete).

Summary	
Name	MC-ConnectorExt
Description	
Type	Custom
Status	In Development
Source Account	diconium digital solutions GmbH
Package Id	b7cba497-0dcb-4123-a0b0-1aa0adc9d74c

Components	
API Integration	
Client Id	[Redacted]
Client Secret	[Redacted]
Integration Type	Web App
Refresh Token Lifetime	60 Days
Authentication Base URI	https://[Redacted].auth.marketingcloudapis.com/
REST Base URI	https://[Redacted].rest.marketingcloudapis.com/
SOAP Base URI	https://[Redacted].soap.marketingcloudapis.com/
Scope	
Access:	Offline Access
Email:	Read, Write, Send
Documents and Images:	Read, Write
Saved Content:	Read, Write
Automations:	Read, Write, Execute
Journeys:	Activate/Stop/Pause/Resume/Send/Schedule, Delete
Audiences:	Read, Write
Marketing Cloud Connect:	Read, Write, Send
Data Extensions:	Read, Write
Tracking Events:	Read, Write
Callbacks:	Read, Create, Update, Delete
Subscriptions:	Read, Create, Update, Delete

7. Post Installation Steps

- Create Auth Provider in Sales cloud as below.

The screenshot shows the 'Auth. Provider Edit' form in Salesforce. The form contains the following fields and values:

- Auth. Provider ID: DSO090000119a8
- Provider Type: Open ID Connect
- Name: MC-Connect-Ext-AuthProvider
- URL Suffix: MC_Connect_Ext_AuthProv
- Consumer Key: [Redacted]
- Consumer Secret: [Redacted]
- Authorize Endpoint URL: https://[Redacted].auth.marketingcloudapis.com/v2/authorize
- Token Endpoint URL: https://[Redacted].auth.marketingcloudapis.com/v2/token
- User Info Endpoint URL: [Empty]
- Token Issuer: [Empty]
- Default Scopes: [Empty]
- Send access token in header: ☒
- Send client credentials in header: ☐
- Include Consumer Secret in API Responses: ☒
- Custom Error URL: [Empty]
- Custom Logout URL: [Empty]
- Registration Handler: [Empty]
- Execute Registration As: [Empty]

Buttons at the top: Save, Save & New, Cancel.

- After saving Auth Provider, it will generate callback URL.

The screenshot shows the 'Auth. Providers' list in Salesforce. The provider 'MC-Connect-Ext-AuthProvider' is listed with the following details:

- Name: MC-Connect-Ext-AuthProvider
- URL Suffix: MC_Connect_Ext_AuthProvider
- Consumer Key: xxeb72suzcz9ux0jts0qgjp
- Consumer Secret: Click to reveal
- Authorize Endpoint URL: https://mc0617nvs36xm7l6xv-hfh50bbq.auth.marketingcloudapis.com/v2/authorize
- Token Endpoint URL: https://mc0617nvs36xm7l6xv-hfh50bbq.auth.marketingcloudapis.com/v2/token
- User Info Endpoint URL: [Empty]
- Token Issuer: [Empty]
- Default Scopes: [Empty]
- Send access token in header: ☒
- Send client credentials in header: ☐
- Include Consumer Secret in API Responses: ☒
- Custom Error URL: [Empty]
- Custom Logout URL: [Empty]
- Registration Handler: [Empty]
- Execute Registration As: Portal
- Icon URL: [Empty]

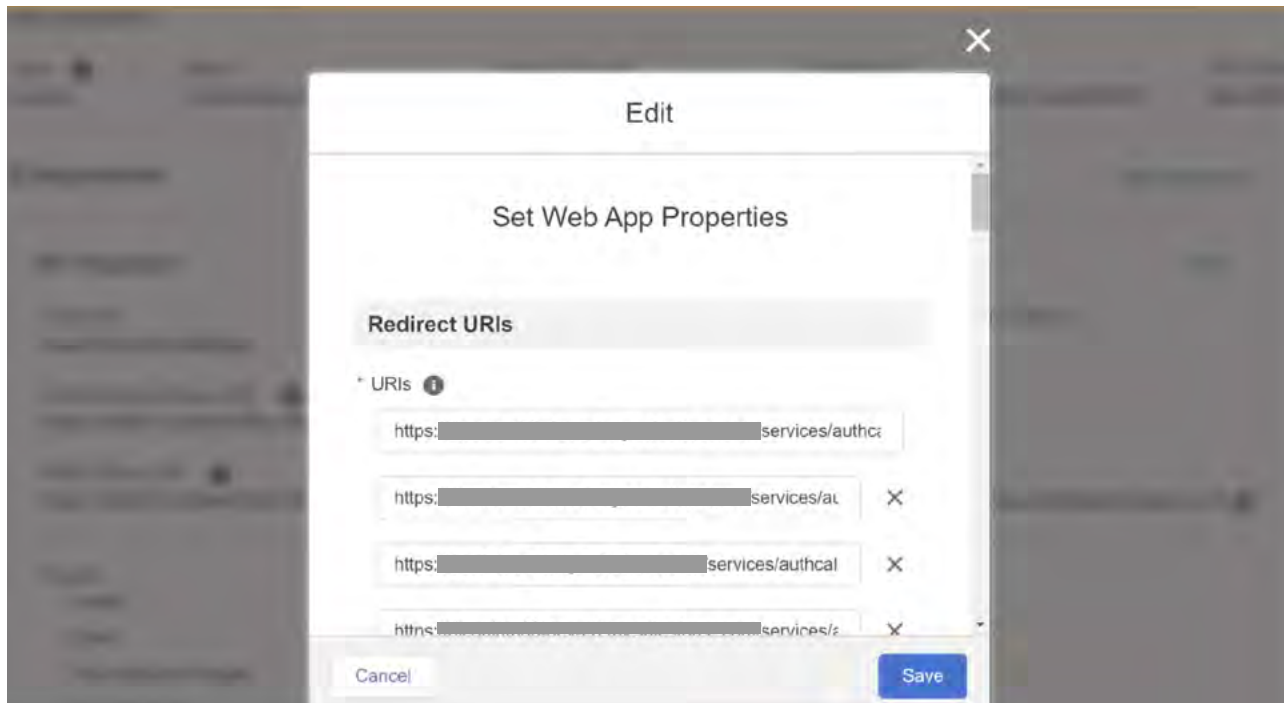
Below the provider details, a 'Salesforce Configuration' section is highlighted with a red box, showing the generated callback URL:

- Test-Only Initialization URL: https://[Redacted].services/auth/test/MC_Connect_Ext_AuthProvider
- OAuth-Only Initialization URL: https://[Redacted].services/auth/oauth/MC_Connect_Ext_AuthProvider
- Callback URL: https://[Redacted].services/auth/callback/MC_Connect_Ext_AuthProvider
- Single Logout URL: https://[Redacted].services/auth/rpoidc/logout

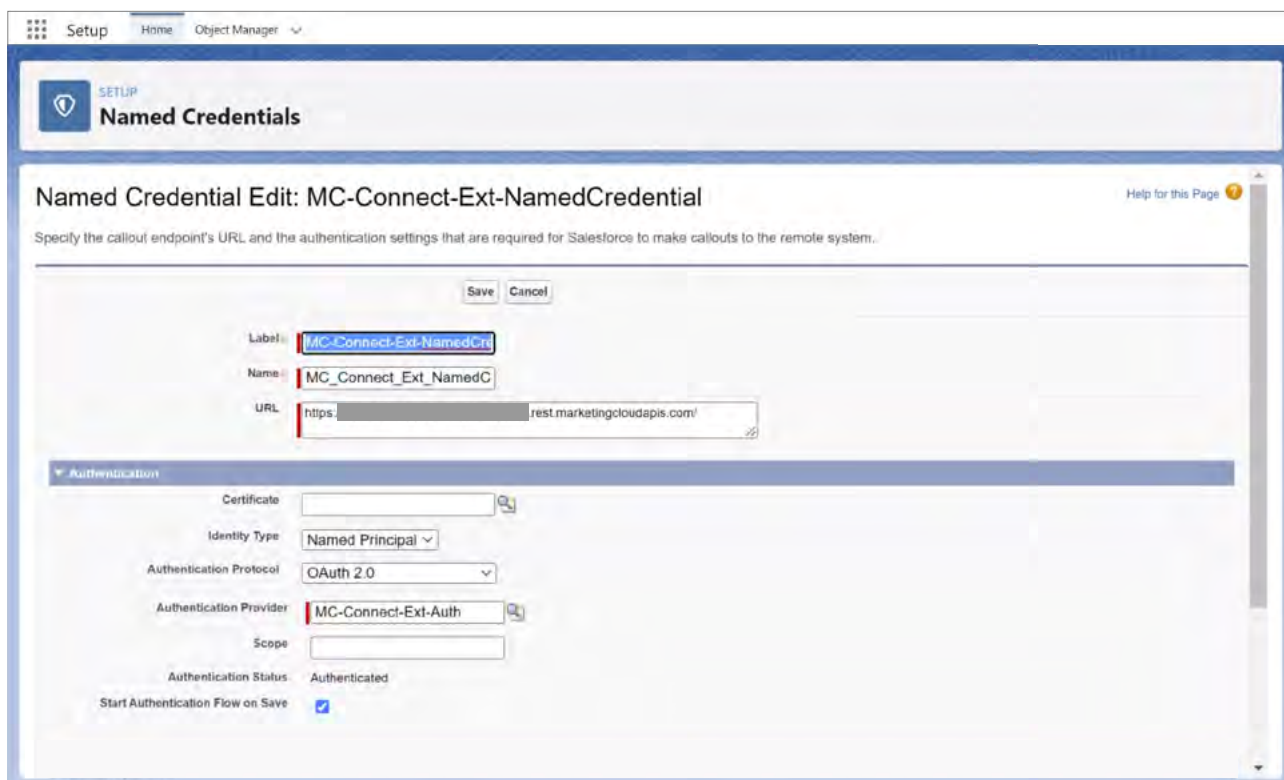
Buttons at the bottom: Edit, Delete, Clone.

7. Post Installation Steps

- Copy this callback URL and add it to the Marketing Cloud Web App Installed Package.
- Click on Edit button of the package in Marketing Cloud and add this callback URL as below.



- Using these create Named Credential in Sales cloud exactly with the same Name: **MC_Connect_Ext_NamedCredential**



7. Post Installation Steps

- Please refer to the below link to create auth provider and named credentials:
https://help.salesforce.com/s/articleView?id=sf.named_credentials_define.htm&type=5
- Create a List and Data Extension (Trigger Send E-mail Template) in Marketing Cloud.
- To Create a List:
 - Go To E-mailStudio ▶ Subscribers ▶ Lists ▶ My Lists ▶ create a new one (if you do not have any) or you can use the existing one under My Lists.
- To Create Data extension:
 - Go To E-mailStudio ▶ Subscribers ▶ Data Extensions ▶ Create
 - ▶ Chose Creation Method as Create From Template ▶ Chose TriggerSendDataExtension (or you can use existing Data Extension with Template as TriggerSendDataExtension)

My Lists > SCList

Available

Properties Subscribers Tracking

EXTERNAL KEY: SCList - 9171 LIST ID: 479

Created Date: Friday, May 21, 2021 1:57 PM Last Modified Date: Friday, May 21, 2021 1:57 PM

LOCATION: My Lists Change

TYPE: Standard ☐ Public

85 Subscribers

Add Subscribers

Salesforce Data Extensions > SalesTSDDataExtension

Available

Properties Records Tracking

EXTERNAL KEY: DDS-MCExtension-2022

Created Date: Tuesday, October 19, 2021 4:43 AM by lakshmi.anandam Last Modified Date: Thursday, March 31, 2022 8:43 AM by lakshmi.anandam

Owner: lakshmi.anandam Edit

LOCATION: Salesforce Data Extensions Change

Type: Standard

USED FOR SENDING: Yes USED FOR TESTING: No Edit

SUBSCRIBER RELATIONSHIP: SubscriberKey relates to Subscribers on Subscriber Key

125 Records

Fields Edit Fields

Name	Data Type	Length	Primary Key	Nullable	Default Value
SubscriberKey	Text	254	☒	☐	
EmailAddress	EmailAddress	254	☐	☐	
FirstName	Text	50	☐	☐	
LastName	Text	50	☐	☐	

7. Post Installation Steps

- Use List External Key and Trigger Send Email Template Data Extension External Key values in Custom Settings MConnectExtension__c in Salescloud.

The screenshot shows the 'Custom Settings' page in Salesforce. The breadcrumb trail is 'Setup > Home > Object Manager'. The page title is 'MConnectExtension Edit'. Below the title, it says 'Provide values for the fields you created. This data is cached with the application.' There are three buttons: 'Save', 'Save & New', and 'Cancel'. The main section is 'MConnectExtension Information'. It has three fields: 'Name' with the value 'MCDataExtension', 'SubscribersList', and 'TSEmailTemplateDataExtension'. A red exclamation mark icon with the text '= Required Information' is on the right.

- Please add List Button Send MC Email on Contact and Lead
 - Go To Object Manager ➤ Contact and Lead ➤ List View Button Layout ➤ Edit add (Send MC Email) Button.

The screenshot shows the 'Object Manager' page in Salesforce. The breadcrumb trail is 'Setup > Object Manager'. The page title is 'Contact'. The left sidebar has a list of options: 'Details', 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', 'Search Layouts', 'List View Button Layout' (which is selected), 'Hierarchy Columns', and 'Triggers'. The main content area is titled 'List View Button Layout' and shows '1 Items, Sorted by Layout'. There is a table with three columns: 'LAYOUT', 'COLUMNS DISPLAYED', and 'BUTTONS DISPLAYED'. The table has one row: 'List View' with 'N/A' in the 'COLUMNS DISPLAYED' column and 'Open in Quip, New From Document, New, Add to Campaign, Clean, Import, Add to Campaign, Add to Call List, Send Message, Printable View, Send MC Email' in the 'BUTTONS DISPLAYED' column.

- After Installation, please make sure Profile level access on Lead, Contact and Individual Email Result objects in sales cloud.

8. Components created for the App

8.1. LWC Components

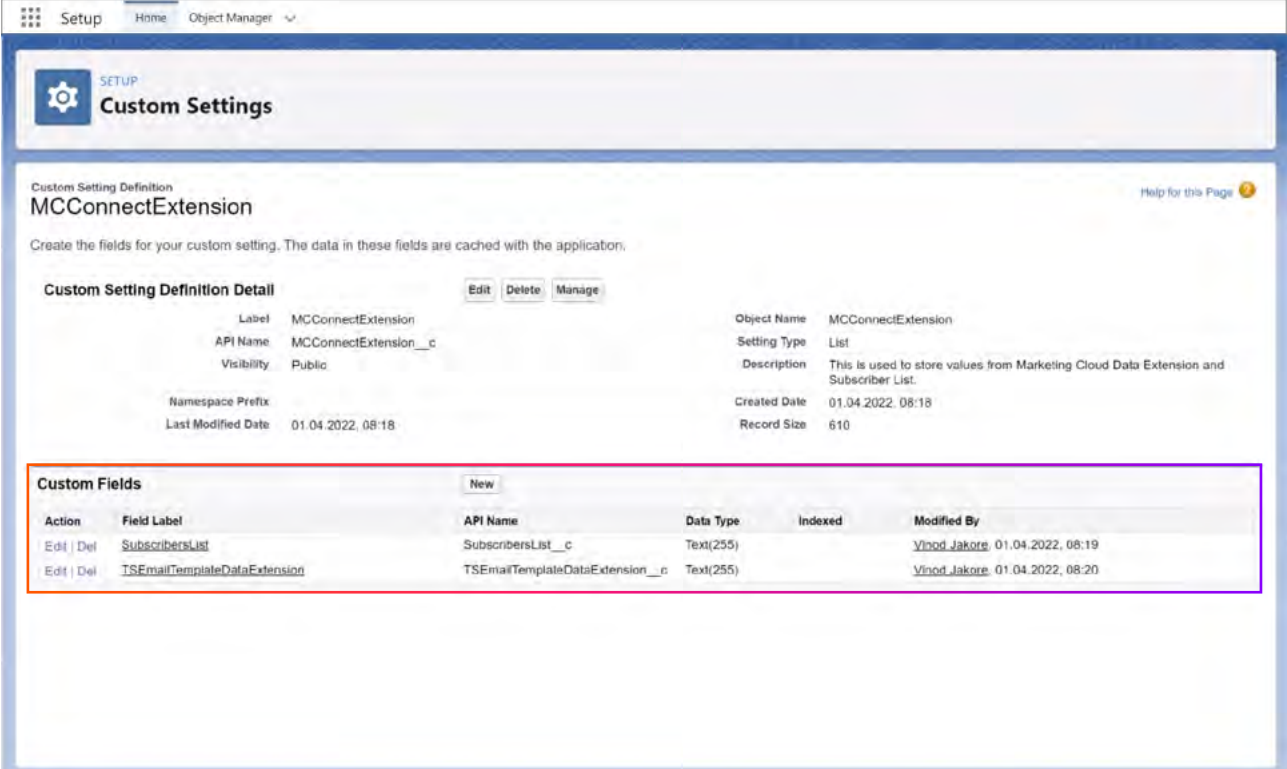
- listViewComponent
- customFlowMessage
- customToast

8.2. Screen Flow

ContactOrLeadIdsfromFlow: This Flow is to hold contact or lead Ids from list view to LWC.

8.3. Custom Settings

MCCConnectExtension__c with below fields and Name as MCDataExtension.



The screenshot shows the Salesforce Setup interface for Custom Settings. The page title is "Custom Settings" with a sub-header "MCCConnectExtension". Below the header, there is a "Custom Setting Definition Detail" section with fields: Label (MCCConnectExtension), API Name (MCCConnectExtension__c), Visibility (Public), Namespace Prefix, and Last Modified Date (01.04.2022, 08:18). To the right, there is a "Custom Fields" table with columns: Action, Field Label, API Name, Data Type, Indexed, and Modified By. The table contains two rows: one for "SubscribersList" (Text(255)) and one for "TSEmailTemplateDataExtension" (Text(255)).

Action	Field Label	API Name	Data Type	Indexed	Modified By
Edit Del	SubscribersList	SubscribersList__c	Text(255)		Vinod Jakore 01.04.2022, 08:19
Edit Del	TSEmailTemplateDataExtension	TSEmailTemplateDataExtension__c	Text(255)		Vinod Jakore 01.04.2022, 08:20

Store values from Marketing cloud List External Key and Trigger Send Email Template Data Extension External Key values in above Custom Settings.

8.4. Fields which are created in Individual Email Result Object

- Email Status - Text
- Send User - Lookup (user)

8.5. Button

- Send_MC_Email on Contact
- Send_MC_Email on Lead

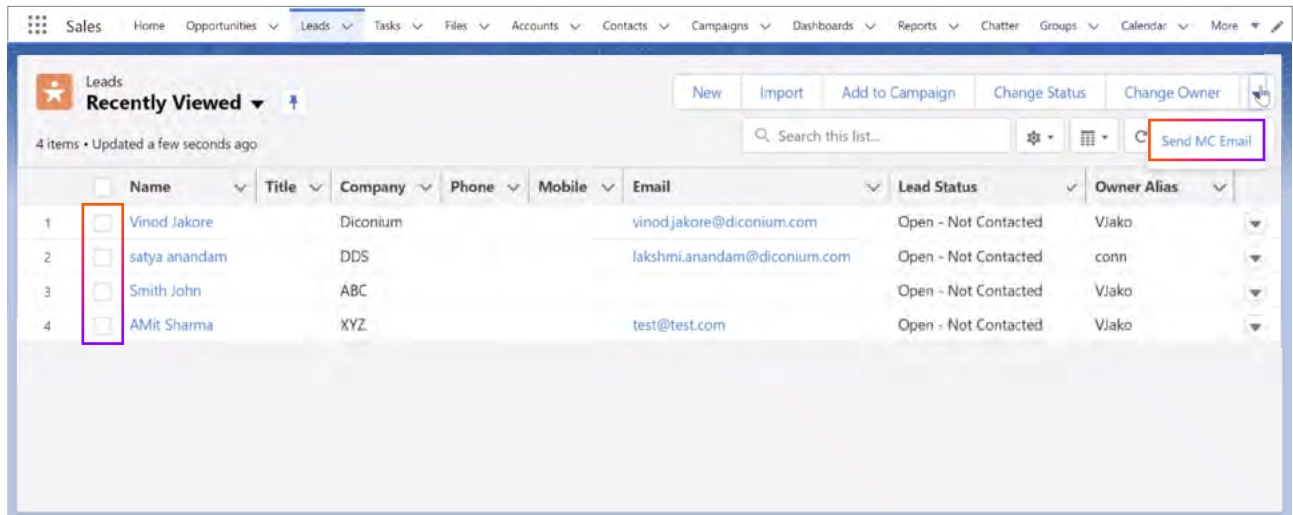
8.6. Apex Classes

- EmailTemplateServiceHelper
 - This class is bringing Email Templates from Marketing cloud to Sales Cloud through Rest API.
- JSONTemplate
 - This class is deserializing the JSON Response.
- TriggerSendEmailHelper
 - This class is creating Trigger Send and send an email to selected contacts or Leads.
- SendEmailToContactsHttpresponseJSON
 - This class is deserializing the JSON Response.
- EmailStatusResponseJSON
 - This class is deserializing the JSON Response.
- RetrieveEmailStatusHandler
 - This class is retrieving email status from Marketing Cloud to Sales cloud.

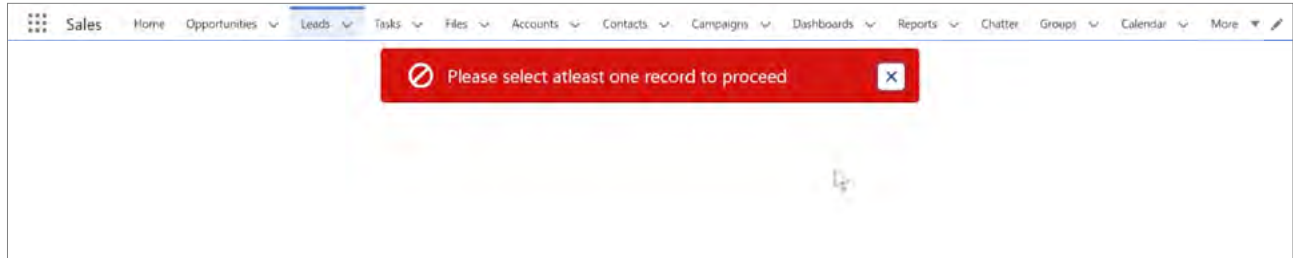
9. Functionality

After installing the App in Sales cloud, Lightning Web Component is available for Flow to hold Contacts/Leads Ids for sending an email.

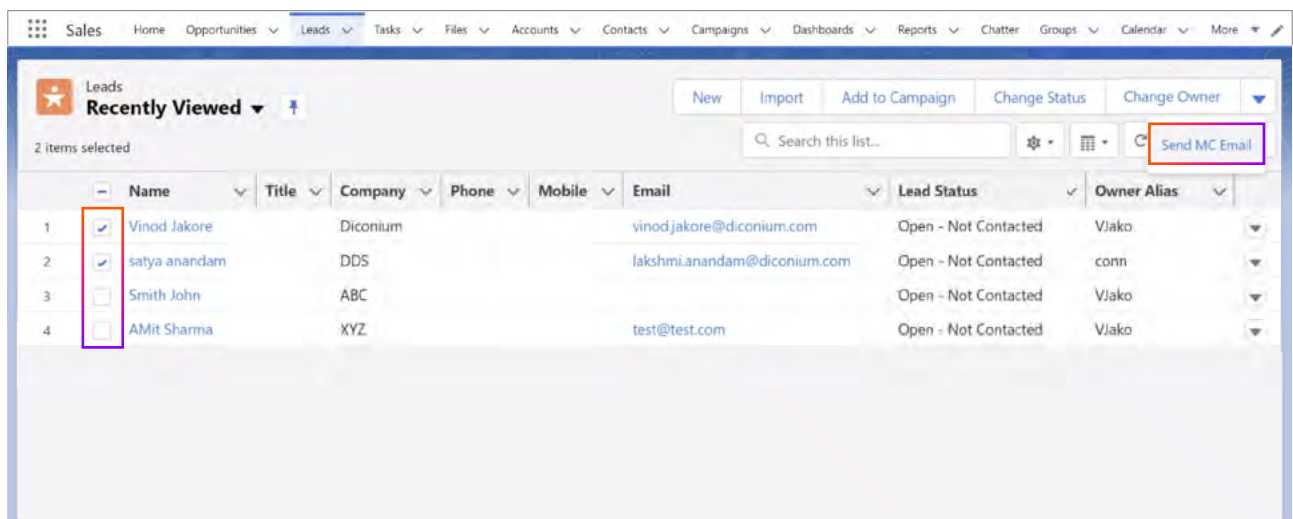
To pass Contact/Lead Ids from list view to Lightning Web component, using a screen flow and assigning this flow as a list view on Contact like below.

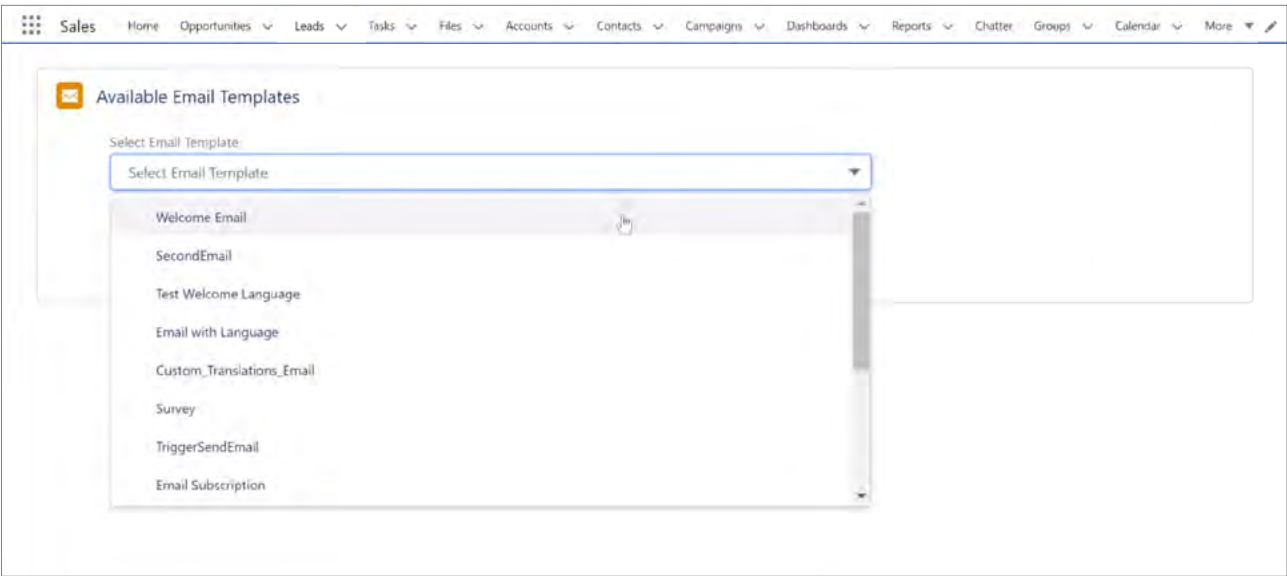
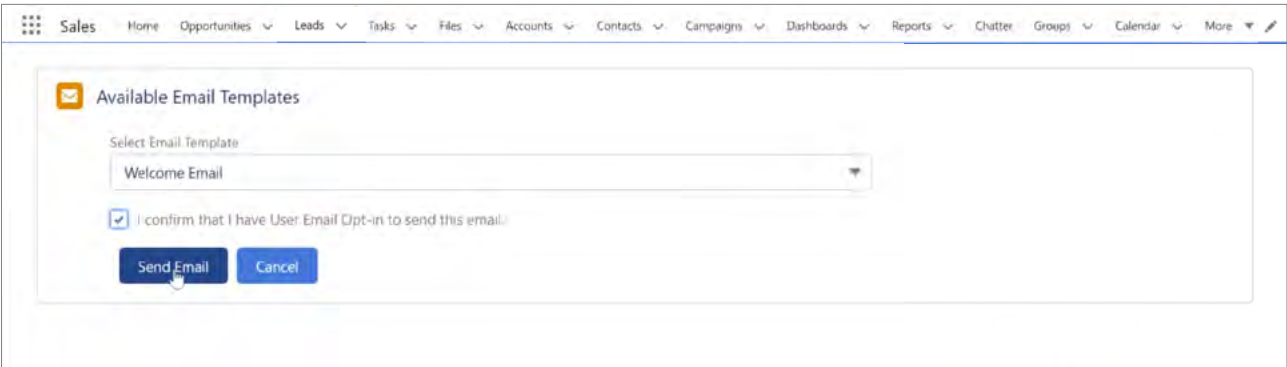


When user clicks on Send MC Email without selecting Contacts or Leads, it will display error as shown below.

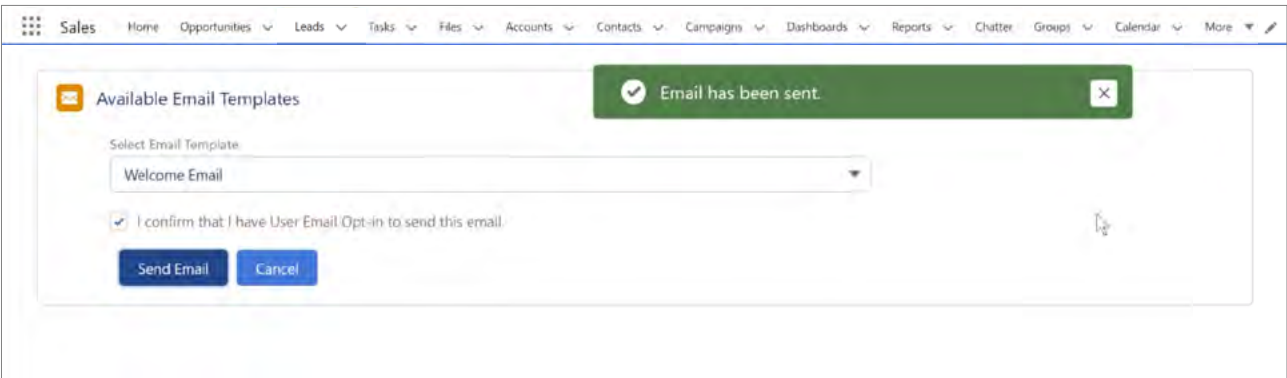


Select contacts and click on Send MC Email button, it will redirect to LWC component where we are displaying all the available templates from marketing cloud as shown below.



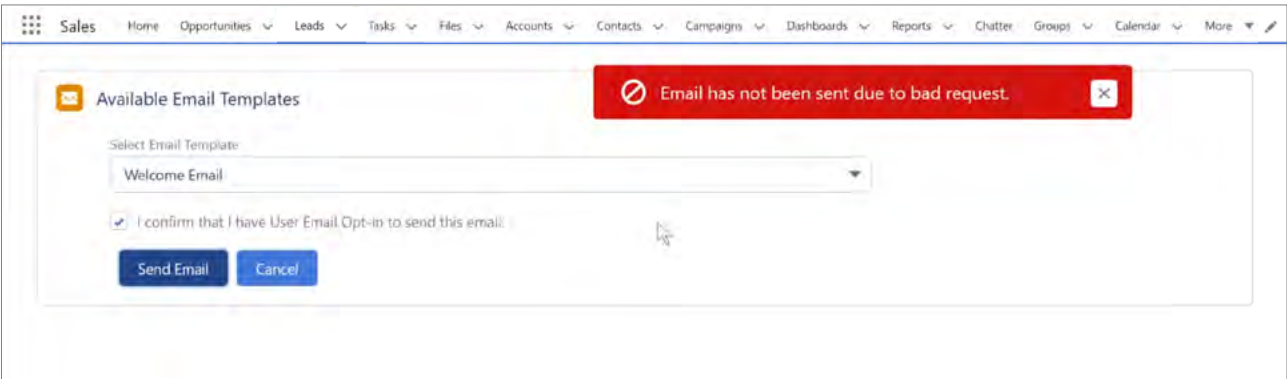


Sales represent can select any of the template and click on send button, it will send an email through marketing cloud. After sending an email it would display success message if email sent is successful.

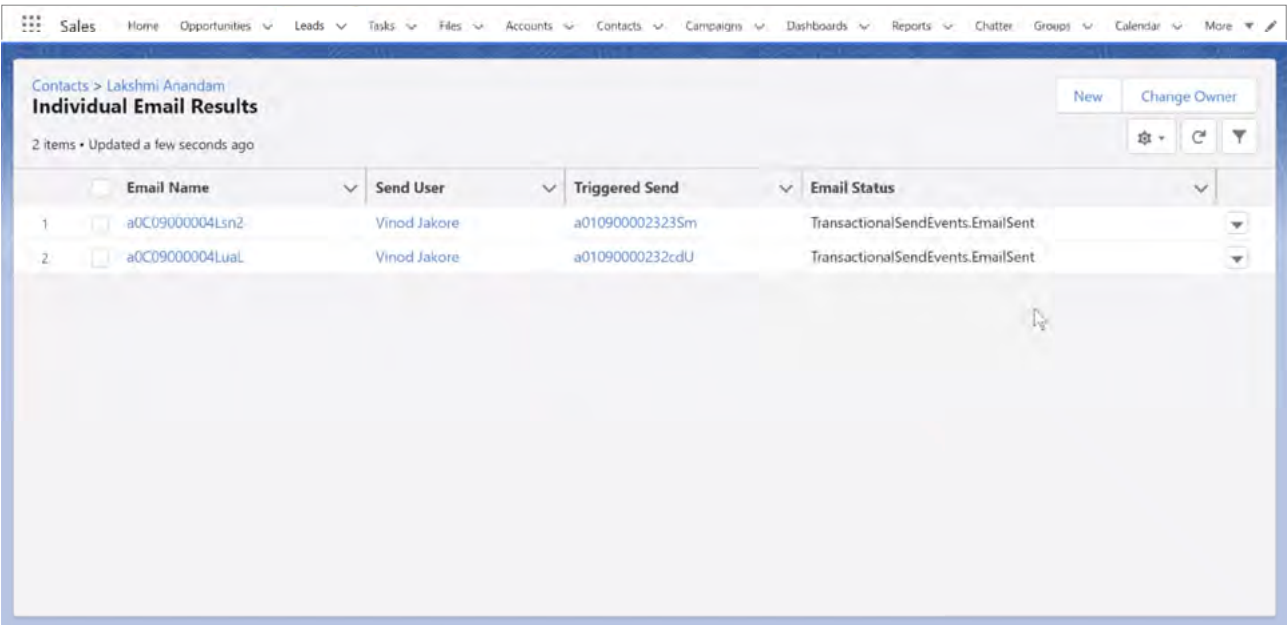


9. Functionality

If it is not successful, it will display error message as shown below.



After email sent, Email status and send User and Date Send details are tracking in Individual Email Result as shown below.



Contact

Since 1995, diconium has been supporting industry leaders such as VW, Mercedes-Benz, Bosch, Allianz, Kodak Alaris or Sick to use the potential of digital transformation and offer millions of customers extraordinary experiences. As a strong partner, diconium accompanies its customers through the entire digitization process: from Innovation & Strategy, UX, Customer Relation Management, Data & AI, Commerce and Technology to the creation of digital units. 2,000 colleagues support customers from thirteen locations worldwide: Stuttgart, Berlin, Hamburg, Munich, Wolfsburg and Karlsruhe as well as Bangalore, Detroit, Beijing, Lisbon, London, San José and VaE. diconium is a 100 percent subsidiary of the Volkswagen Group.

The **diconium Salesforce Competence Center** combines the Salesforce-specific knowledge across all diconium companies and locations.

Get to know diconium: <https://diconium.com>

View our profile on appexchange:

<https://appexchange.salesforce.com/appxConsultingListingDetail?listingId=a0N4V00000GYCeeUAH>

Become a part of our Salesforce Competence Center:

<https://jobs.diconium.com/category/salesforce/7274>

Get in touch with us for MC Extension App technical support:

H-SalesforceCompetenceCenter@diconium.com

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