DESelect Connect
Security Fact Sheet

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1. What is DESelect Connect?

DESelect Connect is a no-code integration solution for Salesforce Marketing Cloud. It aims to provide drag-and-drop integrations with data sources marketers want to have in Salesforce Marketing Cloud. Common use cases are:

- Form submits or events like page visits from CMS's
- Lead form submits from landing page builders
- Contact form submits from webforms
- Surveys
- Call records from call center systems
- Transactional data from point of sale systems
- Order data from ERPs
- Contact and Lead data from non-Salesforce CRM's.

DESelect Connect functions as an integration layer on which multiple integrations can be plugged-in, without coding. DESelect Connect is a SaaS solution, taking care of hosting, maintenance of API's, security and providing continuous development of the platform.

2. Architecture

1. Installed Packages

DESelect Connect works through 2 Installed Packages in Salesforce Marketing Cloud.

Marketing Cloud App
The first installed package is of component type *Web App*, and makes a Marketing Cloud App available under the AppExchange menu in Marketing Cloud so an admin can configure the integrations.
This installed package only needs the following permissions:
Journeys: Read, Write, Execute, Activate/Stop/Pause/Resume/Send/Schedule → for future developments supporting triggering Journeys based on incoming data
List and Subscribers: read, write → for accessing subscribers, and being able to add data to Subscribers
Data Extensions: read, write → for seeing which data extensions are available, and creating new data extensions

Server-to-server integration
The second installed package is of component type *Server to Server*, and is used to authenticate DESelect Connect to Marketing Cloud to insert data.

This installed package needs the following permissions:
Access: Offline Access → for inserting data independent of user sessions
Journeys: Read, Write, Execute, Activate/Stop/Pause/Resume/Send/Schedule → for future developments supporting triggering Journeys based on incoming data
List and Subscribers: read, write → for accessing subscribers, and being able to add data to Subscribers
Data Extensions: read, write → for seeing which data extensions are available, and creating new data extensions.

2. Flows

A. Setup of a new webhook connection
A diagram of this flow can be found here.

DESELECT

1. *Admin opens DESelect Connect in Marketing Cloud*

DESelect Connect has an admin panel available under the AppExchange menu in SFMC.
Only designated Marketing Cloud admins would have access to this application.
Once DESelect Connect opens, oAuth2 is used to authenticate the user.

2. *Setup api endpoint as webhook uri*

The user clicks on *New Connection* to set up a new connection, and chooses type Webhook.
Next DESelect Connect generates a custom endpoint for this connection, containing a customerkey and customersecret in the url.
The user now sets this url as the url of the webhook in the application (s)he wants to create a connection for.

3. *Send one sample payload*

The user is then asked to trigger the webhook once (by logging a call, creating a form submission,...). DESelect Connect is listening to the data sent to this endpoint, and can then interpret what the payload looks like.

4. *Mapping payload to target data extension*

Once DESelect Connect has received one payload, the user can choose the data extension in which new records need to be inserted. Next, the user can choose how the data passed in the payload maps to the fields in the target data extension. For example, here the user will indicate that the *email* property in the payload maps with the *Email* field in the target data extension.

5. *Test connection*

Now that everything has been set up, the user is asked to re-trigger the webhook to see if the data is received and inserted into the data extension correctly. If so, the connection can be activated and the setup process for this connection is complete.
Should at any point the data from the webhook or the fields in the target data extension change, one can easily change the field mapping.

B. Usage of connection

In the example below the example is giving of a Shopify connection. When an order is created in Shopify, the data is sent to SFMC through DESelect Connect..

A diagram of this flow can be found **here**.

1. Order created in Shopify

When a new order is created in Shopify, the Shopify webhook will be fired, sending a POST call to the custom DESelect Connect Endpoint.

2. DESelect Connect receives message

DESelect Connect will receive this payload and analyse it. If it is a call from a whitelisted origin, it will look at the mapping that is configured between the payload and the target data extension, and prepare the api call(s) to Marketing Cloud.

3. Bulk insert in SFMC

Once the bulk interval has passed (eg. 5 minutes), DESelect Connect will check if in the last interval data has been received. If this is the case, DESelect Connect will login to Salesforce Marketing Cloud and get an access token. This token is then used in the api call in which one or multiple records are created in the target data extension in SFMC.

3. Security Measures

The following security measures are in place in DESelect Connect to assure the safety of your data:

1. Encryption in transit

All communication between the Salesforce Marketing Cloud App and the DESelect Connect API, as well as the communication between the DESelect backend and the Salesforce Marketing Cloud API, happens over HTTPS with an SSL certificate. This means nobody can intercept or modify any messages sent.

2. Encryption at rest

The hard drive on which the customer data is temporarily buffered while the data is waiting to be sent to SFMC is encrypted. Additionally, customer data is encrypted in the database as well.

3. Secure API Endpoints

The DESelect Connect API endpoints for setting up the connections are only accessible for logged-in users of the DESelect Connect Marketing Cloud App. Our endpoints are secured by both HTTP headers and a session token.

4. Safe Hardware

DESelect runs on servers of DigitalOcean, a market leader in infrastructure as a service, with an additional security layer by Cloudflare, which protects it from attacks.
Our servers are in secure data centers in Amsterdam and Frankfurt, managed by DigitalOcean, with ISO-27001:2013, SOC I and II, and PSI-DSS certifications.

5. Salesforce security review

The DESelect hardware and software that runs DESelect Connect has already been security-approved by Salesforce. The DESelect Connect installed packages will also go through the Salesforce security review.

6. Penetration tests

Besides the Salesforce security review, the DESelect platform also undergoes a yearly penetration test done by external experts. DESelect also has a continuous bug bounty program running.

7. ISO-27001 and GDPR compliant ISV

The DESelect platform (with DESelect Segment and DESelect Connect products) are developed by DESelect BV, a company that is GDPR compliant (confirmed by a recent GDPR audit) and is ISO-27001 certified.

8. Perfect uptime

Since DESelect Connect is a hosted solution, a perfect uptime is required. For this we use a load balancer and multiple servers so that outage of one server would not impact the uptime of the whole solution.

9. Whitelisted origins

The endpoint that DESelect Connect makes available for a connection is protected so that not everybody can send data to it. First of all the endpoint needs to be called with the right customerkey and customersecret. Secondly, only whitelisted origins will be able to send data to the endpoint.

4. FAQ

How many Marketing Cloud Api calls will DESelect Connect make?

A connection can be set up to bulk data inserts, meaning that it will continuously listen to data on the webhooks, but only pass them along to Salesforce Marketing Cloud every X minutes, so multiple records can be inserted in one api call.

Example
In case bulking is set to 5 minutes, if webhook posts would be received in minutes 2, 3 and 4, DESelect would wait until minute 5 to send the data of these 3 webhook posts to SFMC in one API call. If in minutes 6-10 no webhook posts are received, no call is made to SFMC.

In case DESelect Connect would be constantly fed with data, and be set up to bulk the API calls every 5 minutes, this would mean that a maximum number of API calls to Marketing Cloud are made of 12 per hour → 288 per day → 105.120 per year.
Note that this is the absolute maximum, eg. in case of a call center in one timezone there are probably no calls at night. For a call center operating from 8am - 8pm during weekdays, the max number of calls would be: 12 per hour → 144 per day → 37.440 per year.
Note that the number of API calls made to SFMC is **in theory** restricted to 2M / year on Pro, 6M on Corporate, and 200M on Enterprise. In practise however, it's not even possible to know how many API calls have been made to SFMC in a year.
However, DESelect Connect makes sure to limit the number of api calls to a predictable number, ensuring no api thresholds are reached.

Does DESelect Connect store any customer data?

Buffering

To make the buffering possible, DESelect Connects needs to temporarily store the body of the payload that was sent until the next interval. For this DESelect Connect will use its own database, where every customer's data is strictly separated and customer data is stored encrypted.

As soon as the interval is passed and the API call to SFMC is made, the data is deleted from the database.

Note: this interval setting in DESelect Connect can be configured by the user, to a maximum of 60 minutes.

Logging

For each insert/update DESelect Connect does, it will temporarily keep logs, depending on the logging settings. The default setting is to keep log details for 7 days, so in case something went wrong, one can see which data was received and how it was sent to SFMC. This will also allow replaying an insert/update action in case of failure.

What happens when something goes wrong?

In case a payload that's received could not be successfully inserted, an email will be sent to the email address(es) configured to be notified in DESelect Connect.

Some reasons for failure could be:
- A field set as *required* in the target data extension is not available in the payload
- The target data extension has been deleted
- A field is missing from the target data extension

Because DESelect Connect stores the payload for the predefined time, it's possible to replay the failed inserts after the problem has been resolved so the data is not lost but can still be successfully inserted.

Example

In case an insert into the target data extension failed because the email field in the data extension was deleted, the insert would fail and DESelect Connect will email the administrator.

(S)he can then recreate the Email field in the target data extension, remap the email property of the payload to this field, and replay the insert action from the logs.

5. Contact

In case you have any additional questions, please reach out to **security@deselect.com**.