

# FileMaker Integration with Mandrill



Revolution11 has had great success incorporating Mandrill, a scalable, secure delivery API for sending transactional emails from websites and applications for clients who need to send email from their FileMaker solution. Mandrill is easy to get to know and once established, works well for targeted e-commerce and personalized one-to-one messages. For our discussion we will explain how the Mandrill Sample File constructs the URL to send to the Mandrill API, which then sends the email.

The benefits of sending email via Mandrill can be seen here: [Mandrill Features](#). We were impressed with the simplicity of the process, but wanted to also add attachments to the emails to cover the many times that would come in handy from a business standpoint.

The screenshot shows the basic email form – the user creates a free account at Mandrill, subscribes to a paid MailChimp account (a fairly recent requirement), then uses the Mandrill Sample File to fill out the To/From information and message (seen on the left) and easily add an attachment, if needed. The right side shows the visual output of the custom functions and calculations that are generated at Mandrill.

The screenshot displays the Mandrill 'Sample File' interface, divided into two main sections:

- Left Section (User Input):** Titled 'Type your email', it contains input fields for 'From Name', 'From Email Address', 'Recipient Name', 'Recipient Email Address', 'Subject', and 'Email Message'. A large green text overlay reads 'User fills out this side of the file'. Below the fields is a 'Drag your attachment here' area and a blue 'Send Email' button.
- Right Section (API URL Construction):** Titled 'API URL Construction (Auto-Filled)', it shows the generated URL components: 'BaseUrl' (https://mandrillapp.com/api/1.0/messages/send.json), 'API Key', and a complex JSON payload. The payload includes fields like 'key', 'message', 'from\_email', 'from\_name', 'to\_email', 'to\_name', 'type', 'async', and 'attachments'. Below the URL is a 'Send Result' area with a large orange text overlay: 'This side is automatically filled in'.

This blog post from Digital Fusion gives great information on how to construct this file: [Sending email from FileMaker using Mandrill](#). Now, on to the fun stuff with the custom functions needed to add the attachments...



### **Custom Function: mandrill\_createRequestInsertURL**

File > Manage > Custom Functions > Edit (to see it).

This function takes in all the parameters (Example: To, From, Subject, API key) and creates the URL Request.

This function also uses a helper function called escapeData that handles any special characters in the email address, subject, etc. (Example: &, %, `, etc.)

### **Custom Function: mandrill\_attachmentCodeInsert**

This function helps handle attaching the file to the email. Read more about the gritty details here: [Sending email from FileMaker using Mandrill](#).

Now that we've used our custom function to create our URL request, it's time to create the "InsertURL Template." This is a calculated field that we use to finalize our URL request to the Mandrill API.

File > Manage > Database > Select the "**Insert From URL Template**" > click on Options (lower right)

As you can see once you're viewing the calculated field, this uses the **mandrill\_createRequestInsertURL** custom function and creates the URL we send to Mandrill.

To sum up, this is the structure of the URL used to build this function. Inputs from these two fields ultimately create the URL to be used.

### **URL to Mandrill API / Insert From URL Results**

URL to Mandrill API is always the same and should be pre-filled into the corresponding field. Insert From URL Results is the result of the custom function, **mandrill\_createRequestInsertURL** and is ultimately a calculated field.

Now that we have our URL, the hard part is done and we just need a simple script to send the email.

## sendEmail Script

Now that we have our URL constructed, the sendEmail script is a simple process. The meat and potatoes of this script is FileMaker's "Insert from URL" function. We just pass in two fields that create this URL. We pass in the "URL to API" which is a constant, and add our calculated "Insert From URL Results" field to the end of the URL, and we're good to go.



```
sendEmail
1
2 # Purpose:          - Attempt to send E-Mail using the Insert from URL Step and return Result
3 # Assumptions:     - User has filled out the email information
4 # History:         - Created by Sean Allen 1/13/2016
5
6 # Clear previous result to make it clear that the new result is set
7 Set Field [ MandrilSampleFile::Send Result ; "" ]
8 Commit Records/Requests [ Skip data entry validation ; No dialog ]
9 Pause/Resume Script [ Duration (seconds): .01 ]
10
11 # Send Email
12 Insert from URL [ Select ; No dialog ; MandrilSampleFile::Send Result ;
MandrilSampleFile::URL to API & "?" & MandrilSampleFile::Insert From URL Results ]
13 Commit Records/Requests [ Skip data entry validation ; No dialog ]
14
15 Exit Script [ ]
16
```

**Clears fields**

**The script "Insert from URL" combines the two fields mentioned above and communicates it to Mandrill's API.**

Attach this script to the "Send Email" button and you're done!

***We would love to get your feedback on this script and learn how it worked for you.***

## Have Questions?

Revolution11 provides a free initial consultation. Contact us and we would be happy to discuss your situation and needs.

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