Keen IO + SendGrid Email Analytics

Product Overview & Guide

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Overview

Realizing that some of the most data-savvy and creative accounts wanted more out of their email analytics, SendGrid teamed up with Keen IO to create a new Add-on.

Now email marketers can now create sophisticated segments and campaigns without a data engineering team. The ability to target emails based on who has or has not opened a particular email is now at your fingertips, and you have access to query all of your incoming raw data forever.
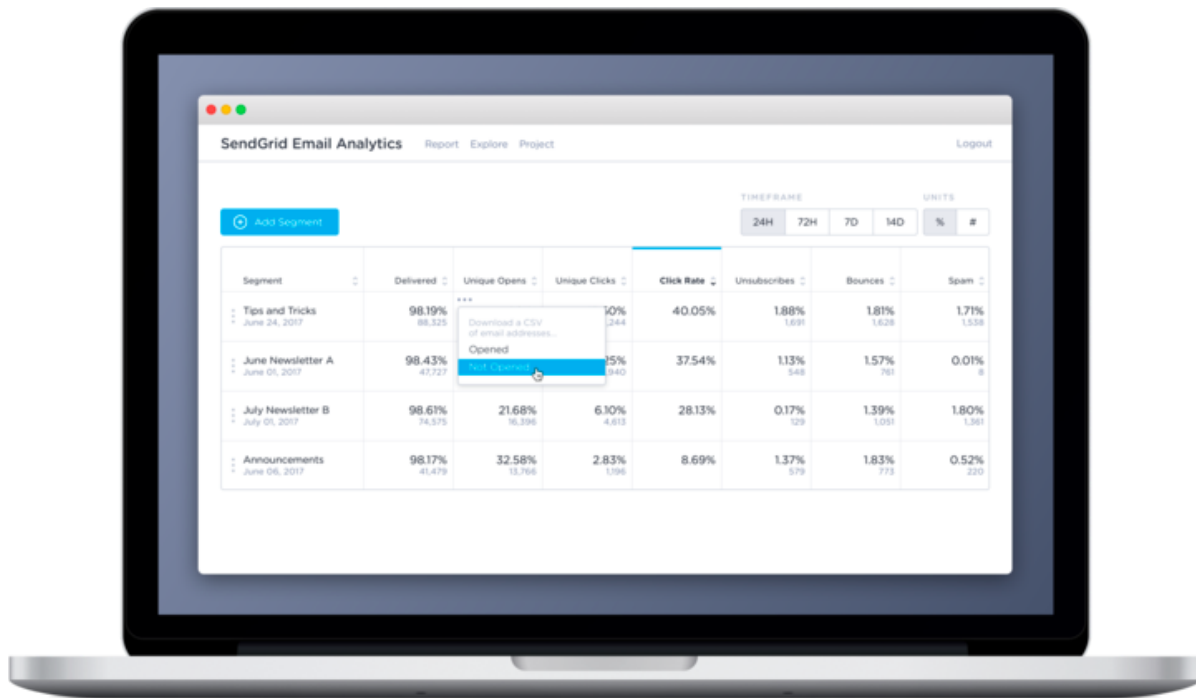
How it Works

The complete integration can be completed in minutes by signing up here. It requires you to have an existing SendGrid account, and you'll make a Keen IO account as part of the process.

The in-app onboarding will walk-you through it, but the process is like this:

1. Sign up on Keen IO's site to begin
2. Start sending email data to Keen by copy and pasting one line into your SendGrid settings
3. Keen processes, indexes, and enriches your incoming email data
4. Use the Keen UI to slice and dice your data
5. Unlock a more clear understanding of your email metrics!

App Usage Guide

Report Tab

Once you have data successfully flowing from SendGrid to Keen, a new application called SendGrid Email Analytics will appear on your Keen project "Apps" tab.

To find it, visit your [Keen home screen](#), select the project you've connected, and click on the "Apps" tab. Find "SendGrid" and select "Launch App".

Once you create a segment, you can see Delivered Rates, Unique Opens, Unique Clicks, Click Rates, Unsubscribe Rates, Bounces, and Number of Emails Marked as Spam.

For each of these metrics, you can download a CSV of the detailed event data. Just click on any cell, and you'll see a menu with the option to download a CSV. Learn who did or did not open an email for example, and with this list of email addresses you can build a more targeted user campaign.

Add a Segment

A segment will allow you to track a specific campaign or filter on a particular field like a customer ID.

To create a custom segment, select "Add Segment" from the top left corner. The following pop-out menu will allow you to define your segment name, the date you'd like to look at, and,

most importantly, select a property by which you'd like to measure the effectiveness of a campaign.

Here's an example of a segment created to look at delivered, open, and click rates for emails sent within the United States.

Your custom segment will appear in the application here:

To edit a segment, click on the segment you newly created: you'll find a menu that allows you to edit it, clone, or remove it.

Custom Attributes

SendGrid gives you the ability to include additional data about your contacts using custom fields. These fields are automatically fully available for segmentation and filtering in this app.

Once you've added an attribute you'd like to use for analysis (for example customer_ID, company_name, or email campaign ID or campaign names), you can use segments to track email performance for these custom attributes. Here's an example:
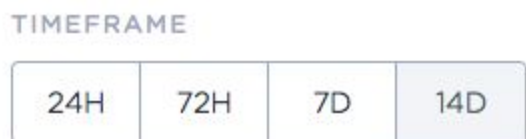
Analyze Email Behavior for Different Periods of Time

You can track your campaign's performance over time by selecting the timeframe for which you'd like to see analyses and metrics. You can change your timeframes to compare campaign performance from the first 24 hours to the first 14 days of the campaign.

The app's dashboard defaults to 72 Hours, so you can compare all of your campaigns and email performance for each segment against that campaign's first 72 hours. Uniform timeframes that compare each campaign to the same period of performance gives you consistent data points that you can measure against.

Your data is stored in Keen and does not expire for as long as your account is active. The SendGrid Email Analytics integration results in a data warehouse or archive of all of your SendGrid email data. This means your user transaction and email behavior data is stored for as long as you need it.

The report has fixed timeframe options, but that doesn't mean that we stop storing your data after 14 days. If you need to access older data, see the section below on [Ad-hoc Querying](#ad-hoc-querying-and-raw-data-access).

Understand User Behavior

Each column in the the Analytics App represents a different user action and each column is a unique step. As we look from left to right, the columns display the number of people that successfully make it through these series of steps. As we get to the right side, the fewest number of users will have successfully been delivered an email, gone ahead and opened it, clicked, and then unsubscribed.

Segment	Delivered	Unique Opens	Unique Clicks	Click Rate	Unsubscribes	Bounces	Spam
All Mail August 17, 2017	98.15% 1170	0.09% 1	0.09% 1	16.49%	0.09% 1	0.08% 1	0.09% 1

The value presented shows the number or percentage of users who completed the action successfully. With the Units option, you can toggle between percentage or raw numbers.

Download Email Addresses to CSV

For each segment in each step, you can download the segment and retrieve a list of all unique email address who successfully completed the user action or the inverse. You can download a CSV for every custom segment that you create. As an example below, you can download a list of all customers who successfully opened and email and clicked on a link, or a list of all the users who opened the email but didn't click.

Ad-Hoc Querying and Raw Data Access

In addition to the data views you see in the Keen SendGrid App, all of your SendGrid data flowing into Keen is also available for raw analysis, programmatic querying via API, and full resolution download.

Use the 'Explorer' tab to create ad-hoc queries and supplemental dashboards.

Your Data: SendGrid Data Models

The data model in this integration has been significantly upgraded from previous versions. A separate Event Collection, aptly named for each type of email event, is created within your Keen

Project. Under SendGrid "Event Notification" Settings, each email event type that is selected will be recorded as a separate Event Collection in Keen. We recommend selecting "All" to access full functionality of the app's reporting.

The email events that can be recorded are:

- `email_bounce`
- `email_click`
- `email_deferred`
- `email_delivered`
- `email_dropped`
- `email_group_resubscribe`
- `email_group_unsubscribe`
- `email_open`
- `email_processed`
- `email_spamreport`
- `email_unsubscribe`

As data streams to Keen default data is ehanced via our [Data Enrichment](#) capabilities. Data models for these email events are enriched with IP to Geo information, DateTime parser, URL parser, and User Agent enrichment.

To explore each data model, Log into your Keen account, select your Project and open the "Streams" tab. In the search bar type in "email" to check out your data collections associated with SendGrid email data.

Tips: Use the property `message_id` contained in each event to track a particular email across all of these possible actions. Similarly, you can follow a particular users' behavior via the `email` property.

How to Use the Data Explorer

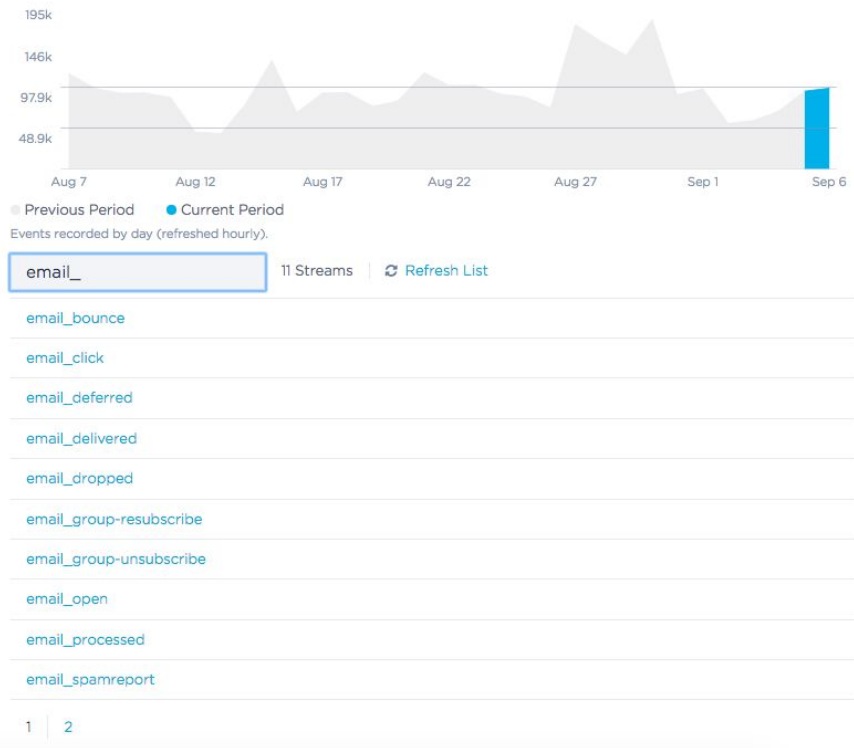Step 1: Log into your Keen account, select your Project

Open the "Streams" tab. In the "Event Streams" search bar type in "email" to check out your data collections associated with SendGrid email data. A separate Event Collection, aptly named for each type of email event, is created within your Keen Project.

Step 2: Run some basic queries

Open the "Explorer" tab and enter `count` as the "Analysis Type", select `email_delivered` as your "Collection Name", and press "Run Query". You ran a query!


The breadth of analysis you can do is pretty vast. Here's a link to read up on the types of queries you can do with Keen. Some example query types are sums, averages, min or max, funnels, and select_unique.

For some extra-pretty graphs and custom analyses here are some tips:

- Adding an "Interval" (e.g. "daily") will give you a *line graph* over time (Ex. Number of emails processed daily for the previous 30 days)
- Include a "Group By" property (e.g. "campaign") to view results categorically
- Use "Filters" to refine the scope of your query
- Use the chart type drop down on the upper right to choose how you view data: as an area graph, bar chart, column chart, table, [or more](https://keen.io/docs/visualize/common-chart-examples/).
- Download a CSV of the data you found by clicking on the "Download CSV" button
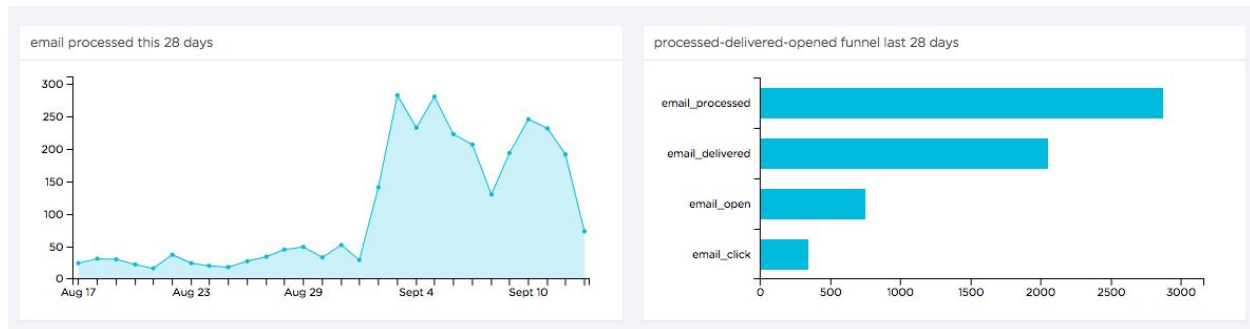
Save a Query & Make a Dashboard

Do you often run the same analysis on a regular basis, or want to be able to save a quick link to your work to revisit again sometime?

Once you've found the query you need, you can either copy the URL right from your browser's address bar and share it with a colleague, or you can save the query and make yourself a dashboard with Keen.

Here's how:

Step 1: Let's save your query. Create your query in the Explorer and click "Run". After running the query, press "Save".
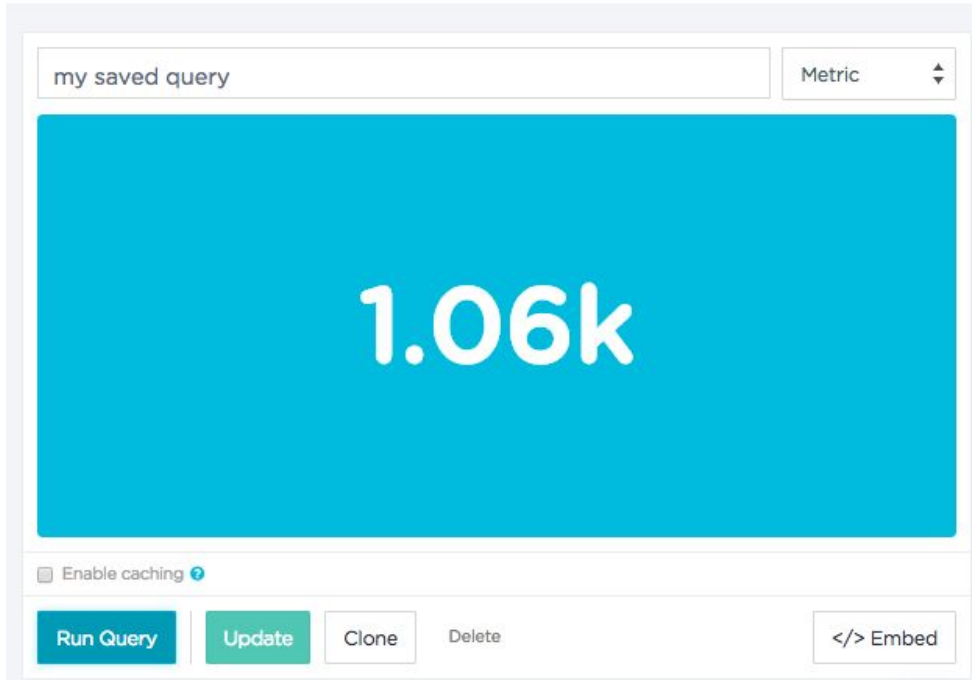
Saved queries are a super user-friendly way to revisit your favorite metrics. Rather than entering the same query parameters over and over again, queries can shared with your teammates. Notice that your saved query can be edited and cloned.

Step 2: Add your graph to a dashboard. Select "Create Dashboard", name your dashboard, and add the query we saved to the first tile. Then click "Save".
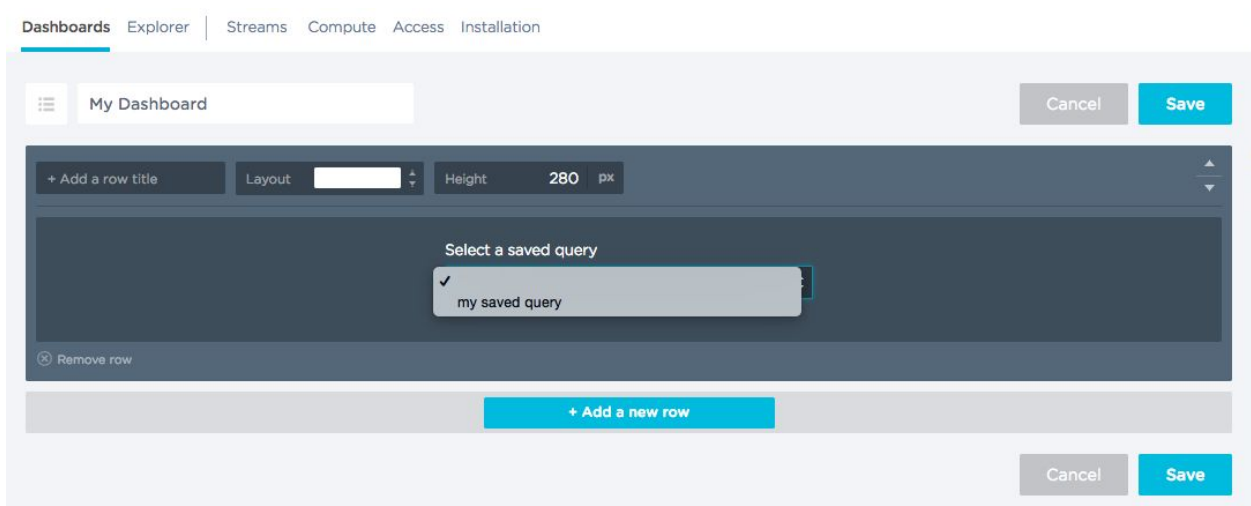
Congratulations! You've created your first dashboard!

Embedding SendGrid Analytics Into Your App

With Keen, you will have access to all of your raw data for as long as you need it. An archive of all of your email data is created, which means you will have access to your historical data and can query for past user behavior.

Just like SendGrid, Keen IO is 100% powered by APIs. This means you can embed rich analytics anywhere you can write code.

Many customers find it useful to embed analytics into their products for their customers or customer success teams. Here's a link to our Native Analytics Guide that will give you step-by-step instructions on how to embed your SendGrid analytics into your product. Some customers take advantage of our S3 Streaming(https://keen.io/docs/streams/amazon-s3/) capabilities to write a copy of all their data to AWS.

Additional Resources

- Use the chat icon in the lower right corner of the app to ask questions anytime
- SendGrid's complete Event Webhooks Documentation is a great resource on SendGrid email events. As you start to do more analysis, it's worth a read. You can even skip a lot of the sections, because we've done much of the work for you.
- Know someone who'd appreciate SendGrid Email Analytics? Share our product briefing with them