

» Tech brief

Open APIs & webhooks

Marqeta's modern card issuing platform is built on the core principle of a transparent, open API architecture. While legacy card programs can be difficult to work with and typically offer little visibility into their technology, Marqeta publicly provides in-depth developer documentation, API specifications, and an advanced developer sandbox.



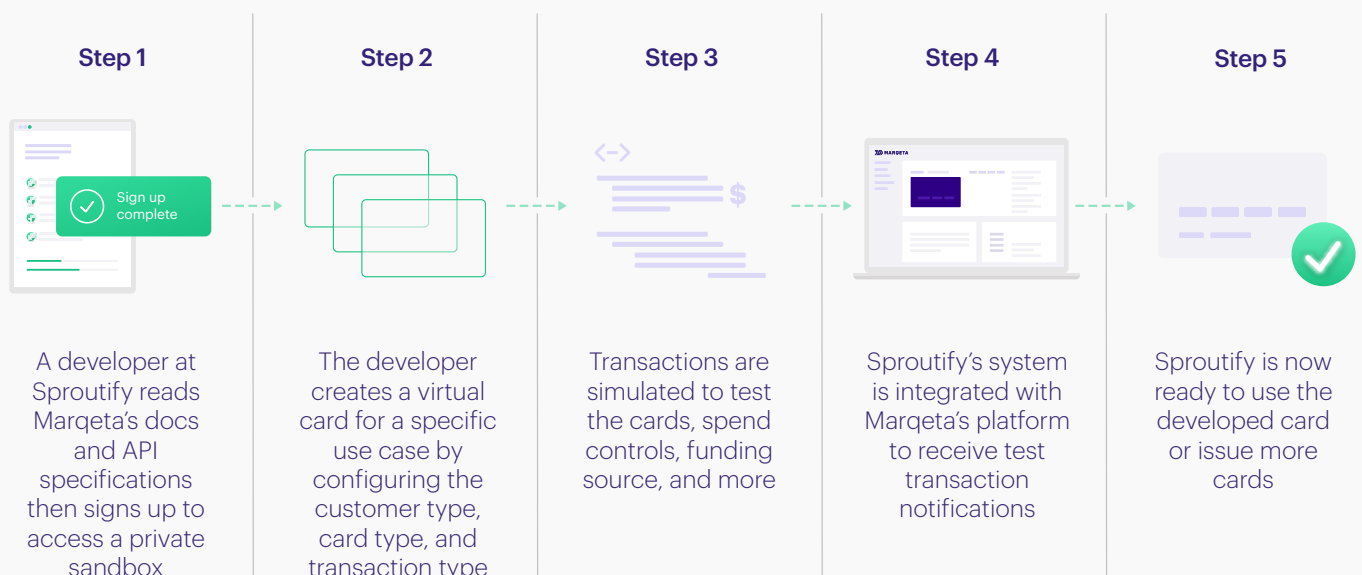
This environment enables developers to quickly test and stand up custom card programs that integrate directly into an endpoint and leverage real time webhook notifications. Marqeta's customizable experiences help our customers tailor card behavior to meet the needs of innovative use cases and card payment needs for today's digital builders.

Open API architecture

Perhaps the most critical part of Marqeta's modern card issuing platform is the open API upon which it is built. Developers can access in-depth documentation, guides, and tutorials that detail specifications and requirements directly from our public website, as well as access to a sandbox to create, test, and issue virtual cards. Easy to use, our developer-centric platform reduces the technological and financial barriers to entry that prospective card issuers often face.

Within our secure sandbox, developers can begin simulating transactions within minutes. Different parameters can be tested on these transactions to customize the card experience — such as authorization controls, spend limits, accepted merchants and countries, and more. Metadata can also be added to these transactions to create easier reconciliation and gateways set up for Just-in-Time (JIT) Funding where transaction approvals can be tested programmatically.

Use developer APIs to design, issue, and test payment cards



*Note: Sproutify is a fictional company used to illustrate this example.

The screenshot shows the 'API keys' section of the Marqeta API Explorer for a 'Scott Ledbetter (sandbox)' environment. The interface includes a sidebar with 'Development' and 'API keys' tabs. The main content area features a 'Set up authentication' section with a fingerprint icon and a link to 'Learn more about authentication'. Below this, there are three sections: 'Application token' with a token value 'dd2efa94-ce72-485d-b2d7-e966c355c4ab' and a 'Copy' button; 'Admin access token' with a masked token and a 'Copy' button; and 'Base URL' with the value 'https://sandbox-api.marqeta.com/v3/' and a 'Copy' button. At the bottom, there is a 'Hello, World!' section with a terminal window containing a curl command to create a user in the sandbox.

```
curl -i \
-X POST \
-H 'Content-type: application/json' \
--user dd2efa94-ce72-485d-b2d7-e966c355c4ab:***** \
-d '{
  "first_name": "Scott",
  "last_name": "Ledbetter",
  "active": true
}' \
https://sandbox-api.marqeta.com/v3/users
```

Marqeta provides integration into more than 270 API endpoints

Marqeta's API includes a wide array of endpoints that enable highly customizable payment card experiences. From Know Your Customer (KYC) to digital wallet tokens, our open API allows for easy, direct integration into your own environment. These endpoints are also available for testing and prototyping within your sandbox through our Core API Explorer.

Our Core API leverages industry-standard RESTful HTTP methods (POST, PUT, GET) to perform functions on objects. Some of these requests include data in their message body, for example, to define the attributes of the object being created or updated. Marqeta uses a JSON format to create easier integration with modern applications.

Here are some examples of these API endpoints and what they provide:



Authorization controls

Create, update, and list all authorization controls and exceptions including merchant codes, transaction amounts, and more.



Funding sources

Register, configure, verify, and list ACH funding sources for specific card programs and gateways.



Card transitions

Create and view all card transitions to follow along the card lifecycle: card creation, suspension, activation, termination, etc.



Merchant category code (MCC) groups

Create groups of merchants aligned to particular merchant category codes and view existing groups.



Cardholder balance

Returns the account balance for a cardholder as well as merchant-specific account balances.



Velocity controls

Create, update, and view velocity controls such as how often, or for how much, a card may be used in a given period of time.



Transactions

View transactions by card program or specific cardholder token.

Benefits of Marqeta's open API

Faster time to market

In-depth documentation and open API architecture enable card programs to onboard quickly and begin issuing cards shortly after partnering with Marqeta.

Integrate directly with your systems

Direct integration into your environment enables superior customization options and an improved cardholder experience.

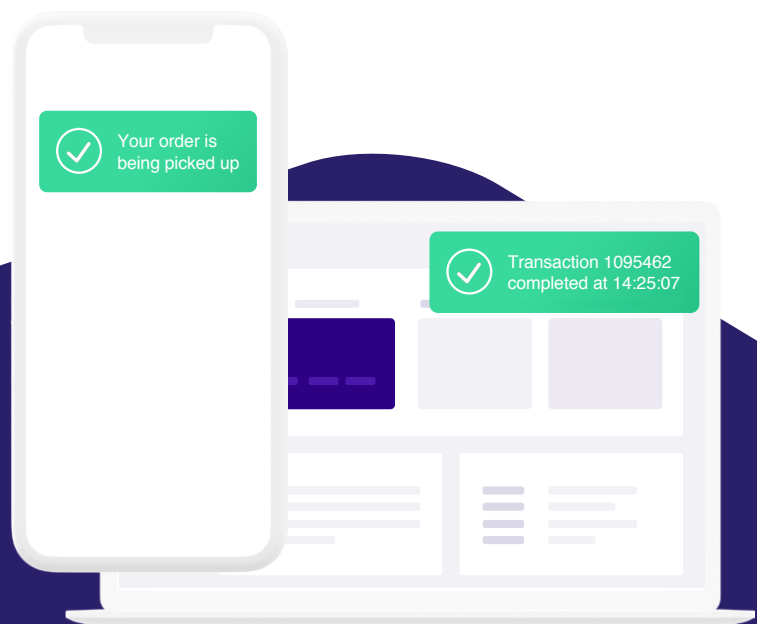
Create a highly configurable card program

Marqeta's open API provides robust spend controls that allow you to build the card program experience that meets your use case.

Webhook events

For an array of use cases, webhooks are delivered with important information about the event in question, such as user/token ID, status, reason code, delivery channel, time stamp, and more. Some of these events include:

- ✓ **Account holder transitions:**
Real time control of each transaction ensures alignment with your approval criteria and helps to control fraud. Individual transaction review provides the transparency and insights to make the decisions to protect your organization.
- ✓ **Card transactions:**
Avoid tying up working capital with prepaid card programs. Marqeta's JIT Funding enables you to only use funds that customers are spending and eases cash requirements for these programs.
- ✓ **Chargeback transitions:**
Tying metadata to transactions can greatly improve reconciliations and systems of record. Each transaction can have an invoice number or system of record appended into the data to make tracking down a payment, or set of payments, considerably faster and easier. (managing balances with general purpose accounts/cardholder account)
- ✓ **Know Your Customer (KYC) results:**
A webhook notification is delivered to provide the result of a KYC verification request as well as the reasons for that outcome.



Real world examples: webhook events

On-demand delivery

Marqeta's webhook notifications are an essential part of the on-demand delivery experience. As the delivery driver completes a card transaction with a merchant, Marqeta sends a notification in real time to the card program provider. This notification then allows the card program provider to send a notification to their end user that the driver has successfully received the order and is on their way.

Marqeta's webhook notifications can also immediately alert the on-demand delivery company if there are any issues at the merchant's point of sale, including if the card gets declined or is charged for a different amount, so they can swiftly take action to correct the situation with minimal delay.

Incentives and rewards

For incentive and reward based programs, time is of the essence. These programs must be able to quickly reach out to their users to extend offers and promotions that increase adoption, loyalty, and usage. A webhook notification allows an incentive program to then add a promotional bonus via their own system or provide an additional offer to improve customer satisfaction. This provides a superior cardholder experience and opens up many opportunities for the incentive program itself.

Benefits of Marqeta's webhooks



Increased transparency

Webhooks provide real-time insight for numerous card and user events, delivering superior and instant operational detail about a card program.



Improved funding control

Through webhook notifications, Just-in-Time Funding can enable card programs to deliver real-time transaction authorizations.



Efficient scalability

With visibility to card activation, transactions, and cardholder activities, webhooks enable card programs to better scale and handle increased volume.

What our customers are saying

YAPEAL

“Our developers looked at Marqeta’s platform and said that’s exactly how they would have built a card issuing and payment processing platform if they were building from the ground up. That’s why we chose to work with Marqeta.”



▲ RAMP

“Marqeta is an incredible partner to Ramp, the first corporate card that actively helps customers spend less. Picking Marqeta as a partner was an easy choice — their modern platform for developers is unparalleled, and alongside the expertise and knowledge they bring to the table, they’ve been the ideal partner to help us get to market and scale quickly.”

Klarna.

“Our developers really like the Marqeta platform, and the reason for that is that the documentation is really well-written. The APIs are very well designed, so it’s easy to understand. It’s built on cutting-edge technology, like SOAP messages, JSON, REST, and this is something that a top modern company like Klarna expects from our partners.”



About Marqeta

Marqeta is the modern card issuing platform empowering builders to bring the most innovative products to the world. Marqeta provides developers advanced infrastructure and tools for building highly configurable payment cards.

With its open APIs, the Marqeta platform is designed for businesses who want to easily build tailored payment solutions to create best-in-class experiences and power new modes of money movement.

Marqeta built its simple, trusted, and scalable platform from the ground up to help companies design seamless payment experiences, streamline purchase flows, and bring products to market faster, while minimizing fraud risk.

Marqeta's payment APIs enable:

- **Card issuing:** Instant issuance of physical, virtual, and tokenized cards with direct provisioning to digital wallets
- **Card processing:** Real-time funding using our Just-in-Time (JIT) Funding feature with dynamic spend controls to reduce fraud
- **Card applications:** A suite of applications and tools that help you build, manage, and run your card program
- **Modern architecture:** Developer-friendly, modern open APIs, cloud infrastructure and webhooks

Marqeta is headquartered in Oakland, California. For more information, visit www.marqeta.com, [Twitter](https://twitter.com/marqeta) and [LinkedIn](https://www.linkedin.com/company/marqeta-inc).

You see a card, we see endless possibilities