Product Sheet

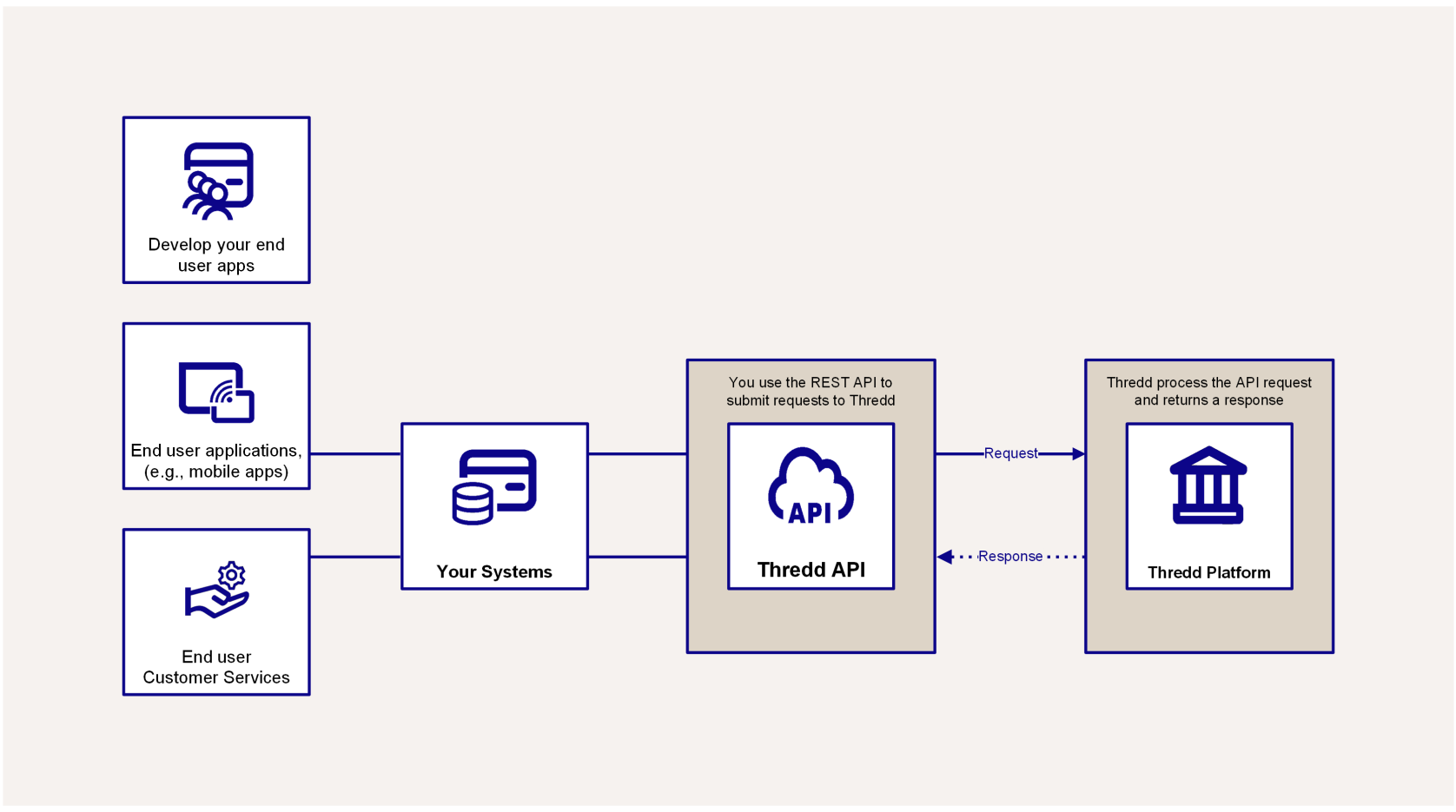
RESTful API

A flexible way to manage your card programme through Thredd

Issue cards and manage the cards in your program using the Thredd RESTful API.

The Thredd Cards API provides a flexible way to manage your card programme through Thredd. Card enrolment in services such as 3D Secure are also managed using the API.

You can develop applications that communicate with the Thredd Platform using our API. See the figure below.



Benefits

Business Facing

- Access to a broad range of flexible APIs
- Test and develop against the APIs
- Create both physical and virtual cards
- Change card status
- View and manage the card balance
- Enrol your cards in 3D Secure

Customer Facing

- Run card enquires
- View details of the balance on their cards
- Activate the card
- Report cards as lost or stolen
- Block and unblock the card
- Reset the card PIN

RESTful API

Below are examples of some of the use cases. For a full list, see the *RESTful API documentation*.

Issue, activate and load cards

- Create a card
- Activate and load a card
- Load and unload a card

Manage the card

- Change a card's status
- Update cardholder details
- Update and set the card's PIN
- Renew a card
- Retrieve and unblock a card's CVV
- Convert a virtual card to a physical card

Card Usage Groups

- List a card's usage group
- Change the usage group assigned to a card

Manage the balance on the card

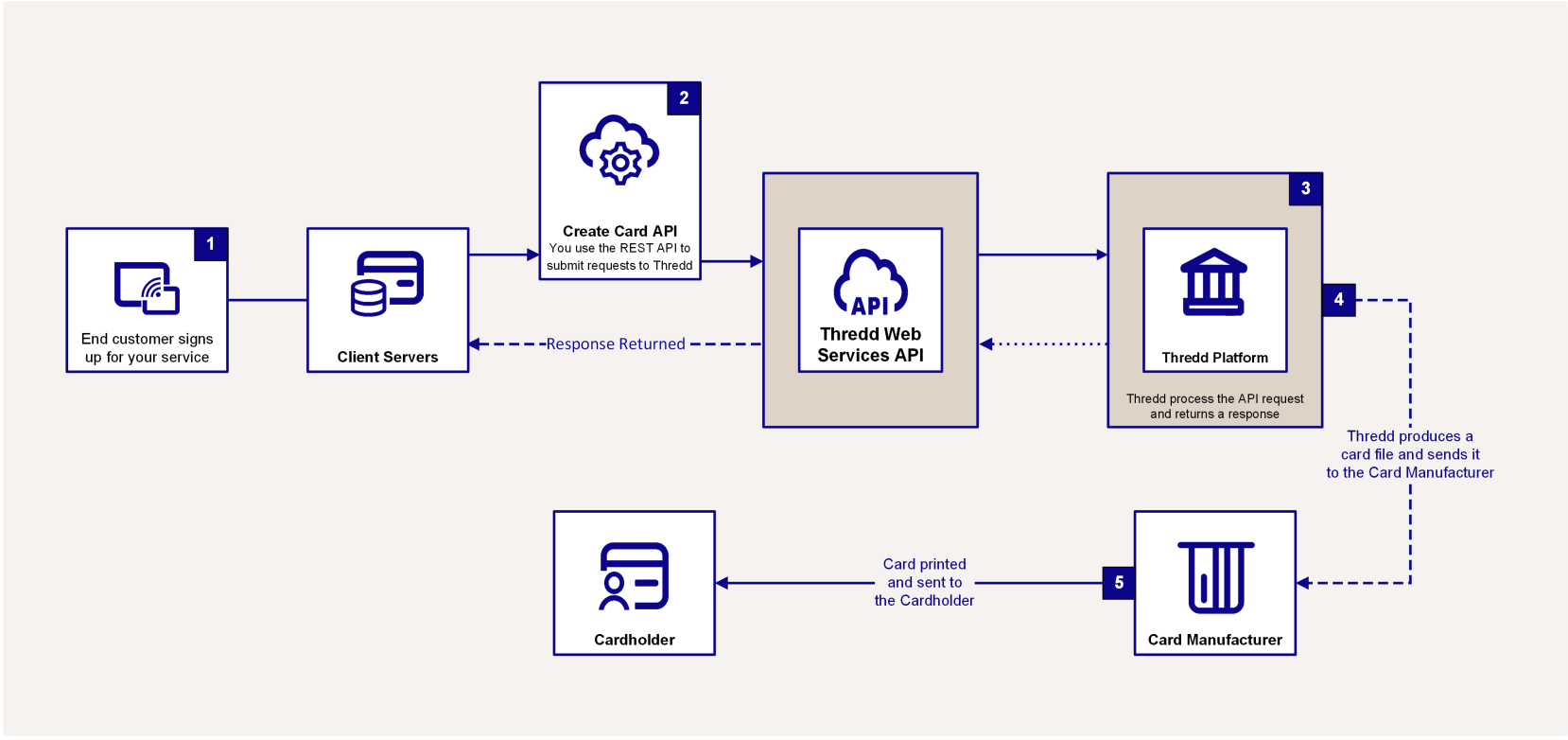
- Inquire on the card balance
- Adjust the balance

3D Secure service

- Enrol cards in 3D Secure
- Create 3D Secure credentials for a card

How it works

The figure below provides an example of how to issue a physical card to give to a customer using the Create Card API.



1. Your customer signs up for your service on your website and via your Customer app.
2. Use the Thredd Cards API to submit a create card request to Thredd.
3. Thredd creates the card record, generates a unique PAN for the card and returns a unique 9-digit Thredd public token in the response. You can use the public token for any future API calls on the card, without needing to use the PAN.
4. Once the card record is created, for a physical card, Thredd produces a card file and sends it to the card manufacturer.
5. The card manufacturer prints the card and sends it to the delivery address configured in the card file (typically the customer's address).

Managing your cards

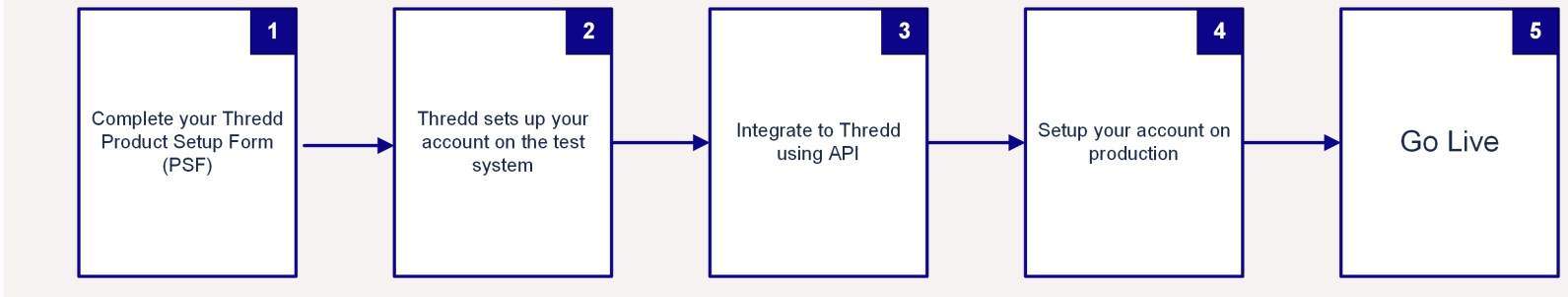
You can use the 9-digit Thredd public token of the card record to perform query and update requests on the card. Examples of typical API activities include: activating the card, loading funds onto the card, changing the card status, updating the PIN, unblocking a PIN, checking the card balance and balance adjustments.

Card usage groups

The card usage groups set up for your card programME determine how and where the card can be used (e.g., controls over daily spending limits, permitted merchants, and use in-store and at ATMs).

Setup At-a-Glance

Below is a high-level view of the setup steps.



Step 1. Complete your PSF

Make sure you have completed your Product Setup Form (PSF), to enable Thredd to configure your program-specific Thredd setup.

Enable exchange of security keys between Thredd and your card manufacturer, so that we can generate the PAN stock in our systems, which is required to create physical cards.

Step 2. Thredd set up your account on the Test System

In parallel with completing the PSF, Thredd will provide you with access to a generic Thredd test product setup, shared by all our clients, where you can start exploring the API.

Thredd provides you with the required user credentials and codes needed to submit API requests. You provide Thredd with a list of IP addresses allowed to use the API. Your will need to be set up with secure access to Thredd systems to use the API.

Step 3. Integrate to Thredd

Submit API calls to the Thredd test system, allowing time to view the results and fix any errors. With the API functionality, you build your front-end user application.

If required, create test card tokens and generate white test plastics. These are generic, non-branded cards with test keys on the card. Your Implementation Manager will work with your card manufacturer to produce test cards.

You can use what you learn from integrating with the Thredd test system to refine your requirements before proceeding to production.

Step 4. Set up on Production

Thredd provides you with production credentials and generates a limited number of PAN stock, as approved by your card issuer. Additional end-to-end transaction testing is required at this stage.

Step 5. Go Live

When ready to go live with your service, check that your Thredd contracts are signed and that payments are up to date.

Thredd pavement testing approval is required in addition to any Issuer sign-off before we can switch your account to *Active*.

FAQs

Q. Where can I view details of your supported API?

For a full description of the available API functionality, see the Thredd Cards API Website

Q. How can I test the API?

You can try out our API in the Thredd Sandbox environment, prior to integrating. You can sign up for an account on the Thredd Developer Portal.

Q. Do I need to be PCI compliant to use the API?

No. When a card record is created, Thredd generates a unique 9-digit number, called the *PublicToken*, which is linked to the card and can be used in all API requests on the card, without needing to provide the full PAN.

Q. Does Thredd charge for using specific API calls?

Some types of calls may incur additional charges when used. Please refer to your contract for details.

Q. What's the difference between a physical and a virtual card?

A virtual card is provided as an image on a smart phone or customer's account and is typically restricted to online or e-commerce usage only. A physical card is printed and can be used online, in a store or for ATM queries and withdrawals.

Thredd offers a service that enables you to convert a virtual card to a physical card, via the API. For more information on setting up a virtual card product, see the Virtual Cards Guide.

Q. How do I set up a card manufacturer to produce my physical cards?

You will need to sign a separate agreement with a card manufacturer. Additional setup and testing steps are required to generate your card plastics. For a list of manufacturers currently supported by Thredd, please contact your Thredd Business Development Manager or Account Manager.

Q. If we are using the API, do we need EHI?

The External Host Interface (EHI) provides a real-time transactional and authorisation data feed to your systems. We strongly recommend that all Thredd customers use EHI, in particular for obtaining and processing details of real-time payment authorisation requests and for maintaining details of the card's available balance. For more information, see the External Host Interface (EHI) Guide.

Contact Us

Please contact us if you have queries relating to this document. Our contact details are provided below.

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Technical Publications

If you want to contact our technical publications team directly, for queries or feedback related to this guide, you can email us at: docs@thredd.com.