How to test Stripe 3DS2

This guide is mostly for QE but anyone can benefit from it.

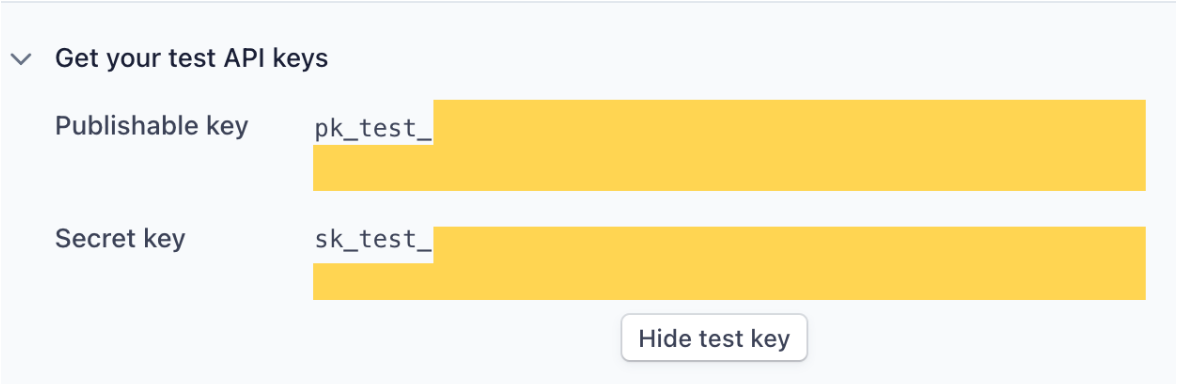
Prerequisites

Have a setup of Porta/System somewhere.
The environment must be either ‘production’ (deployed in an OpenShift cluster somewhere) or ‘development’ (locally). It won’t work in ‘preview’.
If the environment is ‘development’, it is recommended to follow our installation guide, with the instructions given in the description of this PR.

Steps

Setup the provider to be able to accept payments

1. Sign in to the Stripe Dashboard and get your test keys. If you do not have an account, you can create one for free and you do not even need to activate it just to get the test keys. They must look like the following image. It is important to note that they must be the test keys if you do not want to try real money being charged.



Get your test API keys

Publishable key pk_test_[redacted]

Secret key sk_test_[redacted]

2. Configure payment settings in 3scale following this documentation. Alternatively, you can quickly do it in the *rails console* like this:

```
> provider = Account.tenants.last
> provider.payment_gateway_options = {"login" => "sk_test_example",
"publishable_key" => "pk_test_example"}
> provider.payment_gateway_type = :stripe
> provider.save!
> provider.billing_strategy.update(charging_enabled: true)
```

Create the developer account(s) that you will use to test charging them

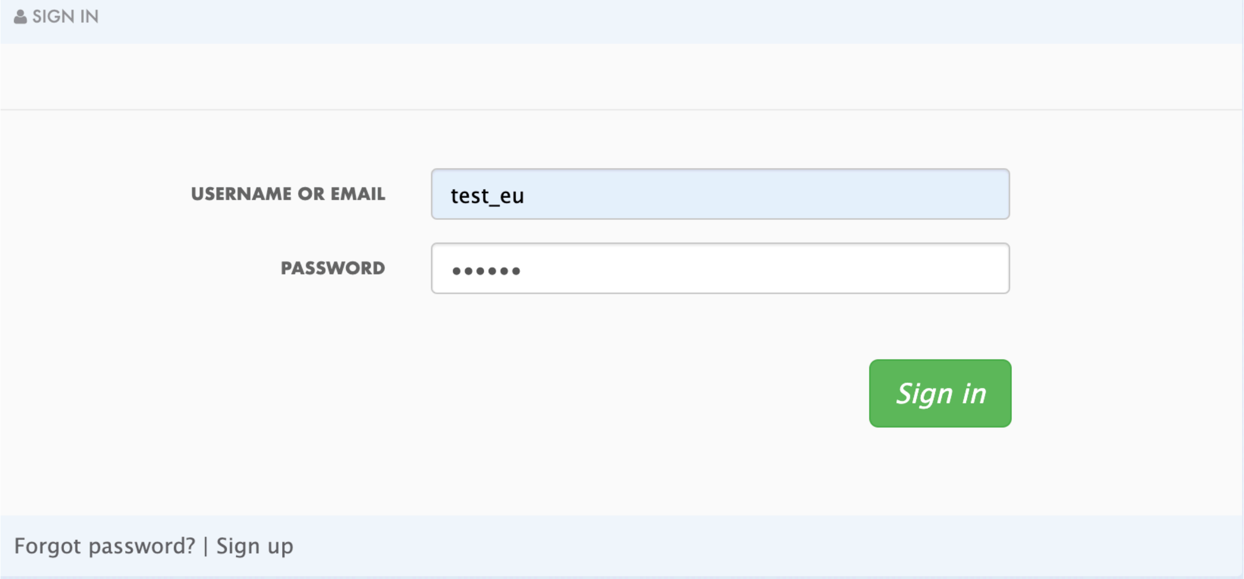
Follow this documentation to create a developer. Alternatively, you can quickly do it in the *rails console* like this:

```
> provider = Account.tenants.last
> signup_params = Signup::SignupParams.new(user_attributes: { email: 'test_eu@example.com', username: 'test_eu', first_name: 'Test', last_name: 'EU', password: '123456' }, account_attributes: { org_name: 'test_eu', vat_rate: 33 })
> Signup::DeveloperAccountManager.new(provider).create(signup_params)
> provider.buyer_accounts.order(id: :asc).last.approve
> provider.buyer_accounts.order(id: :asc).last.admin_user.activate
```

Save the credit card data from the developer portal

This can only be done from the UI because it needs the JavaScript to interact with Stripe. Besides, this is the flow that we actually want to test so better doing it as the customer would.

1. Login to the developer portal with the developer that you have created in the previous step.

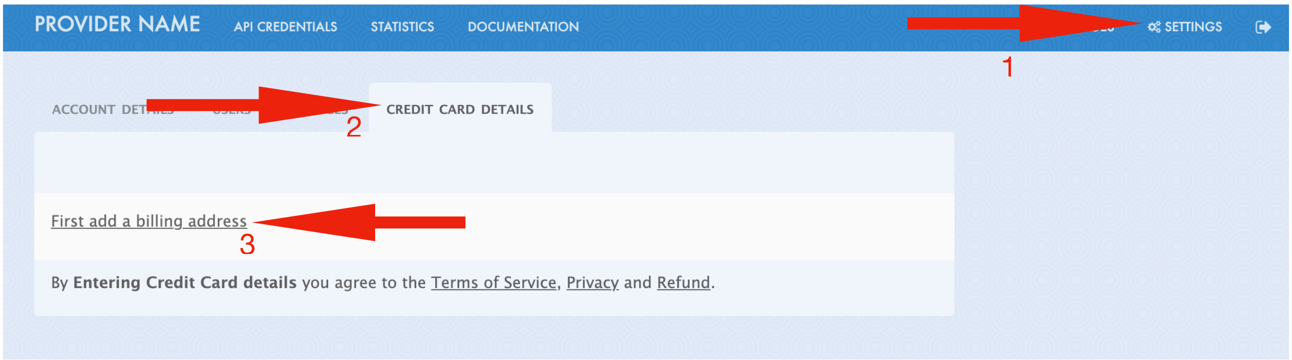


USERNAME OR EMAIL: test_eu

PASSWORD: ••••••

Form in *yourDeveloperPortalUrl*/login

2. Navigate through the menu to insert *Credit Card Details*.

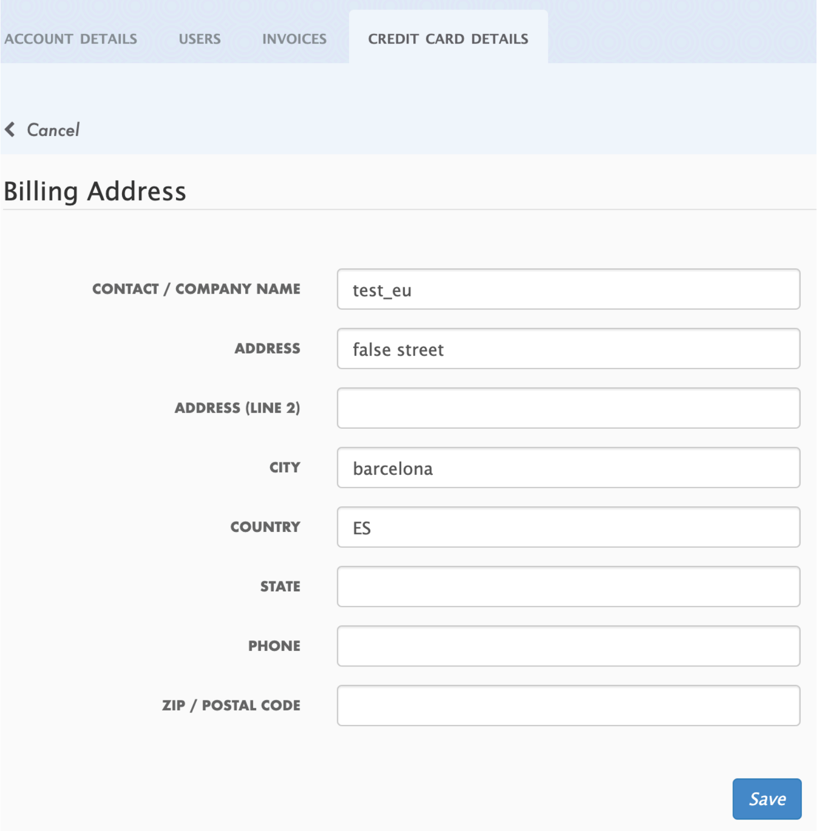


First add a billing address

By **Entering Credit Card details** you agree to the Terms of Service, Privacy and Refund.

In *yourDeveloperPortalUrl*/admin/account/stripe

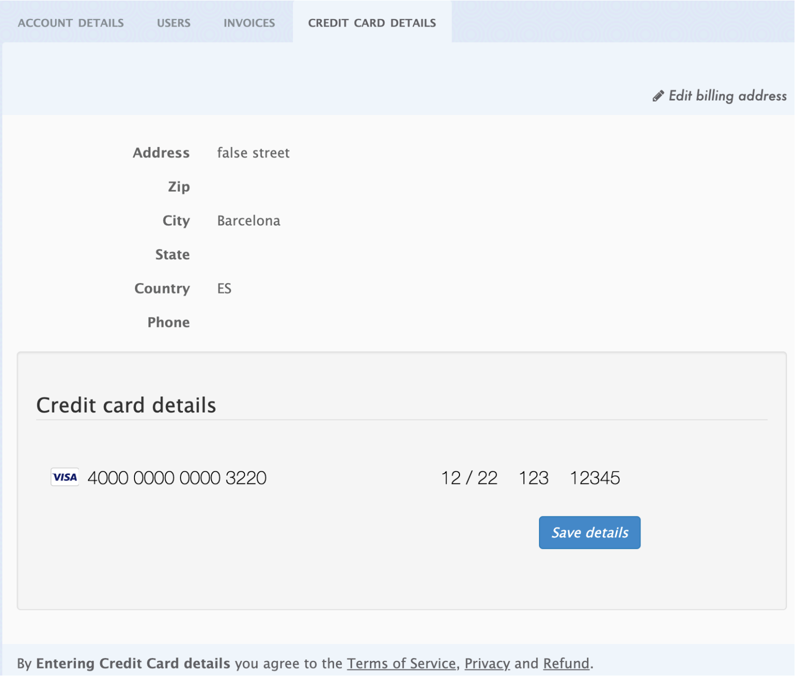
3. Fill the form of billing address and click on ‘save’.
   There has been a change in the API of Stripe that allows countries only as ISO 3166-1 alpha-2 codes, while before we were sending the name of the countries directly. We have not solved this incompatibility issue yet and we will have to implement a fix to be decided yet.



Billing Address

CONTACT / COMPANY NAME	test_eu
ADDRESS	false street
ADDRESS (LINE 2)	
CITY	barcelona
COUNTRY	ES
STATE	
PHONE	
ZIP / POSTAL CODE	

4. Fill the form with the credit card details using a 3DS2 card from the stripe testing documentation. Then, click on ‘Save details”.
   For my test, I am using the first one from the list, with the number *4000 0000 0000 3220*.



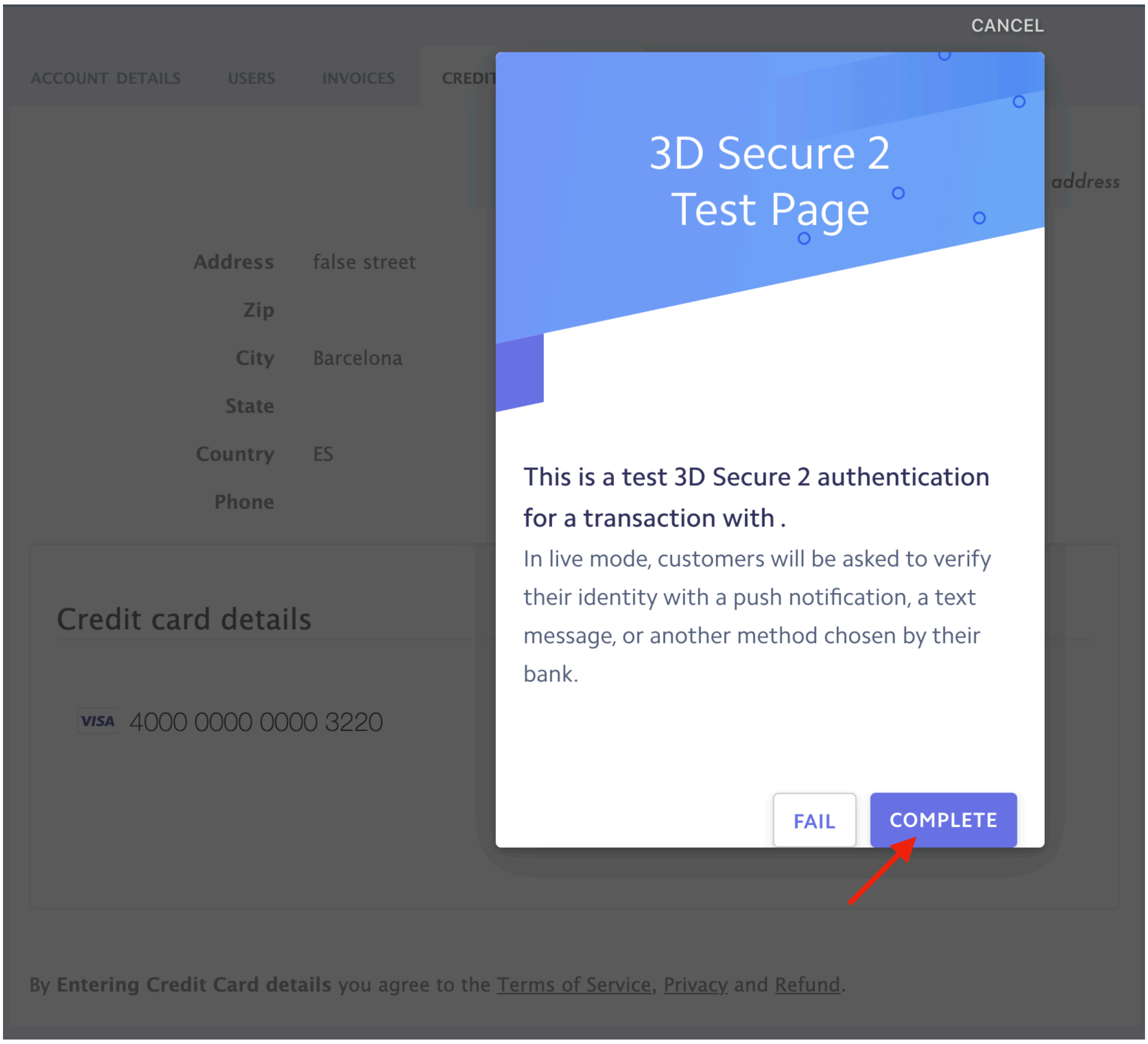
Address	false street
Zip	
City	Barcelona
State	
Country	ES
Phone	

Credit card details

VISA 4000 0000 0000 3220 12 / 22 123 12345

By **Entering Credit Card details** you agree to the Terms of Service, Privacy and Refund.

5. Complete de 3D Secure 2 authentication.



Address	false street
Zip	
City	Barcelona
State	
Country	ES
Phone	

Credit card details

VISA 4000 0000 0000 3220

3D Secure 2 Test Page

This is a test 3D Secure 2 authentication for a transaction with .

In live mode, customers will be asked to verify their identity with a push notification, a text message, or another method chosen by their bank.

By **Entering Credit Card details** you agree to the Terms of Service, Privacy and Refund.

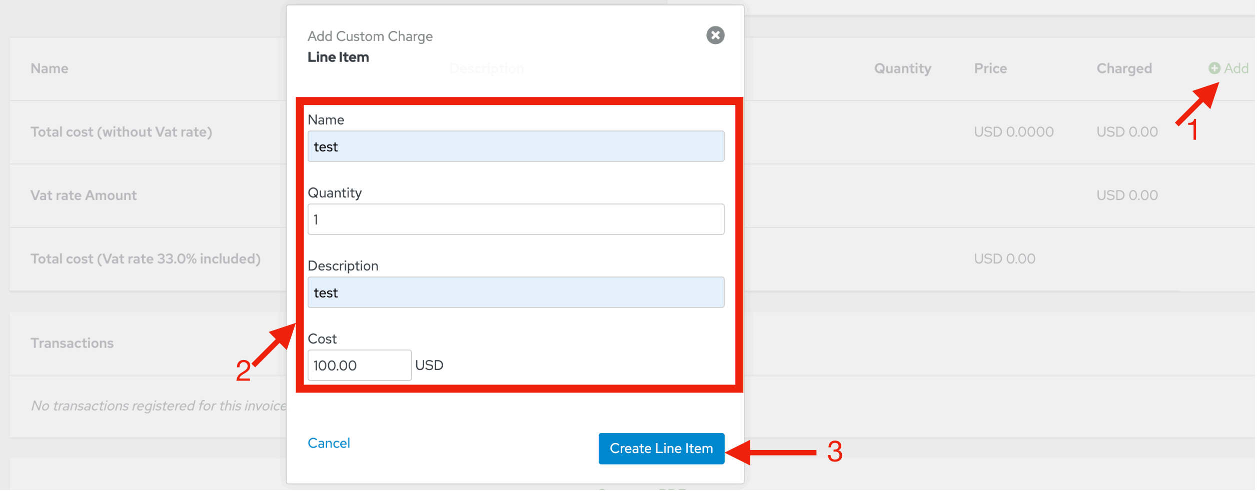
Create & Charge invoice(s)

I recommend doing it with more than 1 invoice for the same provider and buyer, with different amounts, to ensure that it keeps working for more than 1 payment with different amounts.

1. Go to *Audience* -> *Listing* in the Admin Portal and click on the developer account. Then go to *Invoices* (that will take you to *yourAdminPortalUrl*/buyers/accounts/*developerAccountId*/ invoices) and click on 'Create Invoice'.
   That will create an invoice, but you can also do it from the rails console like this:

```
> provider = Account.tenants.last
> developer = provider.buyer_accounts.last
> invoice = Invoice.create!(provider_account: provider, buyer_account:
developer, period: Month.new(2020, 12))
```

2. Create a *line item* for the invoice. With any data you want. In the UI this is done like this:



Add Custom Charge
Line Item

Name	Quantity	Price	Charged
Total cost (without Vat rate)		USD 0.0000	USD 0.00
Vat rate Amount			USD 0.00
Total cost (Vat rate 33.0% included)		USD 0.00	

Transactions

No transactions registered for this invoice

Name: test

Quantity: 1

Description: test

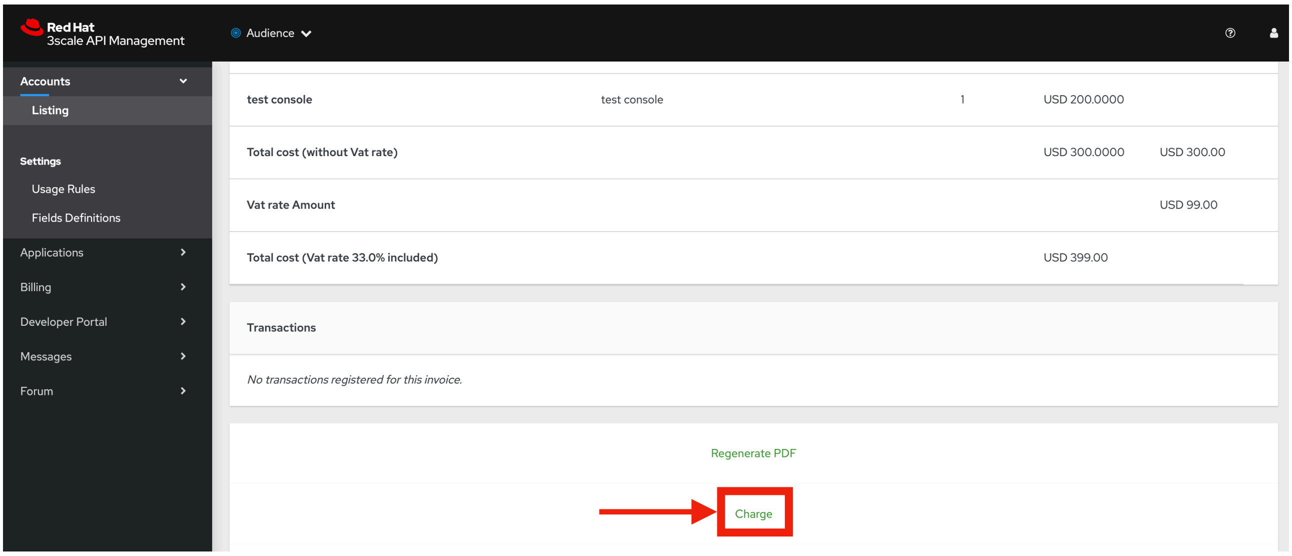
Cost: 100.00 USD

In the *rails console* it is done this way:

```
> invoice = Invoice.last
> invoice.line_items.create!({name: 'test console', quantity: '1', description: 'test
console', cost: '200.00'})
```

3. Change the invoice *state* to 'pending' by issuing it.
   If you are doing it from the UI, click to the 'invoice' that you have created, and inside the show view, click on 'Issue Invoice'. From the *rails console* the command is "*invoice.issue*".

4. Charge invoice. This can be done from the Rails console, but as this is also part of what we actually want to test here, it is better to do it from the UI as the customer would. This is how it is done (confirm any alert that pops up in the browser):



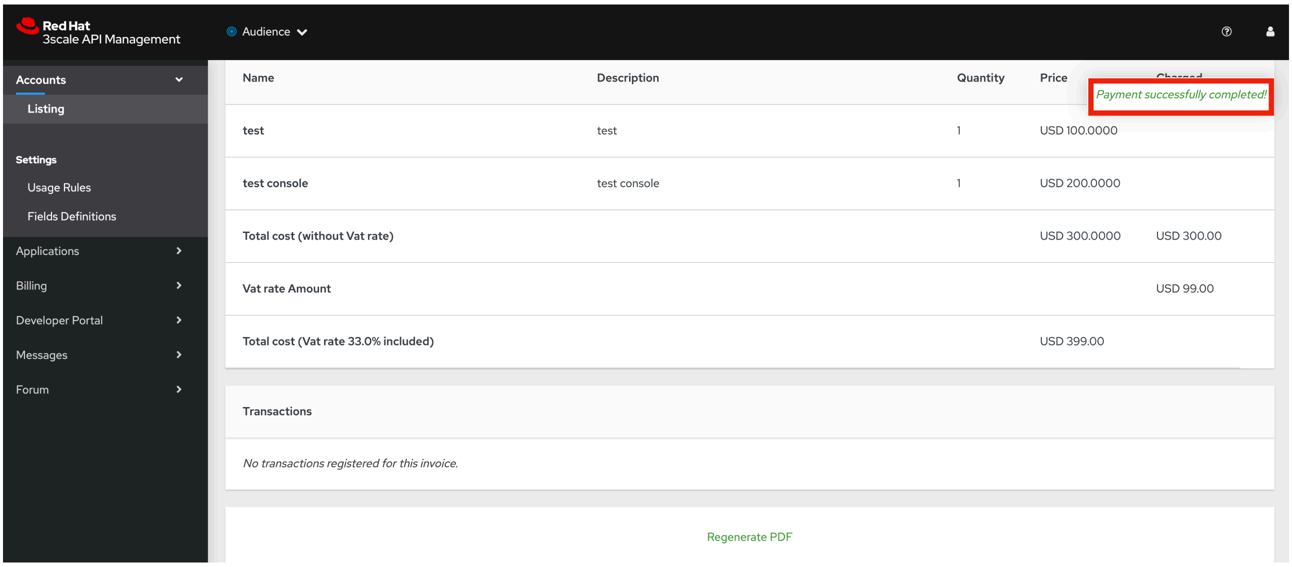
test console	test console	1	USD 200.0000	
Total cost (without Vat rate)			USD 300.0000	USD 300.00
Vat rate Amount				USD 99.00
Total cost (Vat rate 33.0% included)			USD 399.00	

Transactions

No transactions registered for this invoice.

In *yourAdminPortal*/buyers/accounts/*developer_id*/invoices/*invoice_id*

5. The next screenshots are the result you should see. However, this does not mean that the payment is done yet, as you can see in the dashboard of stripe.



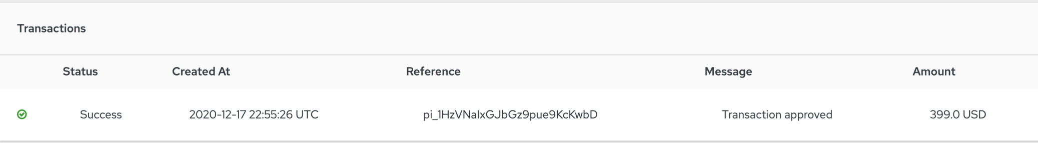
Payment successfully completed!

Name	Description	Quantity	Price	Charged
test	test	1	USD 100.0000	
test console	test console	1	USD 200.0000	
Total cost (without Vat rate)			USD 300.0000	USD 300.00
Vat rate Amount				USD 99.00
Total cost (Vat rate 33.0% included)			USD 399.00	

Transactions

No transactions registered for this invoice.

Instant feedback



Transactions

	Status	Created At	Reference	Message	Amount
✓	Success	2020-12-17 22:55:26 UTC	pi_1HzVNalxGJbGz9pue9KcKwbD	Transaction approved	399.0 USD

Transactions table after reloading the page