Accepting 3D Secure payments

Overview

Card payments via the Checkout can also be used with 3D Secure authentications. 3D Secure 1 and 2 are supported, with automatic fallback in case the card is not enrolled for 3D Secure 2.

Customer requirements

To process 3D Secure authentications, it is required to add a customer to the Checkout creation call. Customer records can be created and managed via the Customer APIs**.** The table below details the required fields and their formats for creating a customer record to be compatible with 3D Secure.

> You should make sure that all required fields are provided in their correct formats, else the page would result in a failure once the Customer tries to submit a payment with it. The field requirements below take priority over the API schema described in the Customer API reference.

R = Required,
O = Optional,
C = Conditional

Field name	Description	Status	Observation	Specification
billing.address_1	Customer's billing address information.	R		String (50)
billing.address_2	Customer's billing address information.	C	Required if information is available.	String (50)
billing.address_3	Customer's billing address information.	C	Required if information is available.	String (50)
billing.city	Customer's city on their billing address.	R		String (50)
billing.country_code	Customer's alpha 2-digit ISO 3166 country code. (e.g., United States = US)	R	Customer's alpha 2-digit ISO 3166 country code.	String (2)
billing.first_name	Customer's billing first name.	R		String (50)
billing.last_name	Customer's billing last name.	R		String (50)

Field name	Description	Status	Observation	Specification
billing.phone	Customer's phone number for billing address. This should be unformatted without hyphens. (e.g., 4422345678)	C	Required if information is available. This should be un formatted without hyphens.	String (20)
billing.postal_code	Customer's postal code of their billing address.	C		String (10)
billing.state	Customer's state or province of their billing address. Should be the country subdivision code defined in ISO 3166-2. If this field is not provided, the 3DS service will try to automatically populate it, based on the billing.countryCode and billing.postalCode values.	C	Required if information is available.	String (50)
company_name	Company name.	C	If billing.firstName or billing.lastName are not provided.	String (100)
company_registration_number	Unique identifier of the company, recognized by the government. Known as CoC (Chamber of Commerce) number in some countries.	O		String
date_of_birth	The date of birth of a person, 10 characters, ISO-8601 (YYYY-MM-DD).	O		String (10)
email_address	Customer's email address.	**R**		String (255)

Field name	Description	Status	Observation	Specification
entity_id	The entityId obtained from Verifone Central. The Entity ID can be found in Verifone Central under *Administration → Organisations*. The 'Organisation ID' listed is the Entity ID.	**R**		String
phone_number	Cardholder's mobile phone number.	C		Number (25)
shipping.address_1	Customer's shipping address information.	C	Required if information is available.	String (50)
shipping.address_2	Customer's shipping address information.	C	Required if information is available.	String (50)
shipping.address_3	Customer's shipping address information.	C	Required if information is available.	String (50)
shipping.city	Customer's city of their shipping address.	C	Required if information is available.	String (50)
shipping.first_name	Customer's shipping first name.	O		
shipping.last_name	Customer's shipping first name.	O		
shipping.country_code	Customer's alpha 2-digit ISO 3166 country code. (e.g., United States = US)	C	Required if information is available.	String (2)
shipping.postal_code	Customer's postal code of their shipping address.	C	Required if information is available.	String (10)

Field name	Description	Status	Observation	Specification
`shipping.state`	Customer's state or province of their shipping address. (e.g., Ohio = OH, Texas = TX) Should be the country subdivision code defined in ISO 3166-2. If this field is not provided, the 3DS service will try to automatically populate it, based on the shipping.countryCode and shipping.postalCode values.	C	Required if information is available.	String (3)
`title`	`mr` or `ms`	O		String
`work_phone`	Customer's work phone number.	C	Required if information is available.	Number (25)

Here is an example request with the required fields for creating a customer for 3D Secure:

```
{
"entity_id": "entity_id",
"currency_code": "currency",
"amount": 1000,
"configurations": {
"card": {
"payment_contract_id": "ppc",
"threed_secure": {
"threeds_contract_id": "3ds",
"enabled": true
}
}
},
"customer_details": {
"entity_id": "entity_id",
"company_name": "Test company name",
"billing":
{ "address_1": "123 Main Street", "city": "City", "country_code": "US" }
,
"email_address": "email.address@verifone.com"
}
}
```

The response for creating the customer will look like this:

```
{
"code": 126,
"details":
{ "missing_parameters": [ "customer.billing.firstName", "customer.billing.lastName" ] }
,
"errors": [],
"message": "Missing parameters from required schema",
"name": "MISSING_SCHEMA_PARAMS_ERROR",
"stack": "",
"service": "CO",
"timestamp": 1731876046828,
"traceId": "c69b0bf5-56f8-490c-a07a-1106c0ebc411"
}
```

Required 3D Secure fields

To configure Checkout for accepting 3D Secure card payments, the following fields are required in addition to the fields required for a standard Card payment:

- `configurations.card.threed_secure.threeds_contract_id` - This ID can be found in the portal or given to you by a Verifone employee. This object stores the credentials for connecting to the 3D Secure service.
- `configurations.card.threed_secure.enabled` - Has to be set to `true`.
- `configurations.card.threed_secure.transaction_mode`

The complete list of 3D Secure and other optional fields can be found in the **Create Checkout API**.

Example request:

```
{
"amount": 9998,
"currency_code": "EUR",
"entity_id": "{{entity_id}}",
"customer": "{{customer_id}}",
"configurations": {
"card": {
"payment_contract_id": "{{payment_contract_id}}",
"threed_secure": {
"enabled": true,
"threeds_contract_id": "{{3ds_contract_id}}",
"total_items": "01",
"transaction_mode": "S"
}
}
},
"merchant_reference": "ORDER-1234",
"return_url": "{{merchant_return_url}}"
}
```

Handling responses

Upon completion of a 3DS checkout, a redirection occurs including an additional query parameter `authentication_id` which can be used to retrieve the 3DS complete details from the 3DS service.

See Handling card responses for all possible Checkout outcomes.