https://verifone.cloud/docs/online-payments/checkout/card-encryption-verifonejs
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Card encryption - verifone.js

Overview

The verifone.js library is a quick and secure way to collect sensitive credit card data. This allows users full control over the checkout experience while maintaining a minimum SAQ A-EP level. The user receives an encrypted card block, which can be used to process a payment.

Availability

verifone.js is available for all Verifone merchants who use the Payments API of Verifone or process their payments using an external party.

Benefits

The verifone.js solution offers:

- Full ownership over merchant payment flow
- Reduced complexity for PCI DSS compliance
- Seamless integration into an existing checkout page, regardless of the stack used

Supported browsers

- Chrome
- Firefox
- Edge
- Safari
- Opera
- Brave

How it works

workflow

Integration steps

An account is created in Verifone Central by a Verifone employee.

The onboarding is done with a Secure Card Capture Key on Verifone Central.

To integrate verifone.js in your Checkout page, follow these steps:

1. Load verifone.js in the <head> of your Checkout page, where the card form is shown.

   ```
   <script src="https://cst.jsclient.vficloud.net/verifone.js"></script>
   ```

   Sandbox environment:

   - EMEA : https://cst.jsclient.vficloud.net/verifone.js
   - US : https://uscst.jsclient.vficloud.net/verifone.js

   Production environment:

   - EMEA : https://emea.jsclient.verifone.cloud/verifone.js
   - US : https://us.jsclient.verifone.cloud/verifone.js
   - NZ : https://nz.jsclient.verifone.cloud/verifone.js

2. Define the Secure Card Capture Key.

   ```
   var encryptionKey = "SecureCardCaptureKey"
   ```

3. Collect the card data and place it into a JSON object.

   ## Card schema

Parameter name	Type	Required/Optional	Description
cardNumber	String	Required*	Numeric value with no spaces or separators allowed between the digits
expiryMonth	String	Optional	Numeric value with length 2. e.g., March -> 03
expiryYear	String	Optional	Numeric value with length 2, e.g., 2028 -> 28
cvv	String	Optional	Numeric value with length 3 or 4
svcAccessCode	String	Optional	Numeric value with length up to 8 PIN number of non-PCI cards (**e.g.:** Gift Cards)

   *__cardNumber__ is required for getEncryptedCardDetails method and optional for encryptCard

   ```
   var card = {
   "cardNumber": "4000000000001091",
   "expiryMonth": "03",
   "expiryYear": "28",
   "cvv": "123"
   }
   ```

4. Invoke verifone.js to encrypt the card using encryptionKey

```
var encryptedCard = await verifone.encryptCard(card, encryptionkey)
```

verifone.encryptCard returns a Promise. Not all browsers support using async-await. Consider this in your integration.

Alternatively, if you would like to receive additional data regarding the card, such as expiration date and limited card digits use the function below:

```
var encryptedCard = await
 verifone.getEncryptedCardDetails(card, encryptionkey)
```

5. If you are using getEncryptedCardDetails you can use the BIN in a binlookup call to receive the card_brand for grater accuracy in initiating payments.

```
 POST /v2/card/card-details
{
"prefix": "500000"
}
```

If this returns multiple results, you should ask the shopper to select one of the brands, corresponding to their card.


```
{
    "bin_details": [
        {
            "bin": "52",
            "card_brand": "Maestro",
            "issuer_country": null,
            "issuer_name": "Mastercard",
            "type": "DEBIT",
            "funding_source": "DEBIT"
        },
        {
            "bin": "52",
            "card_brand": "MasterCard",
            "issuer_country": null,
            "issuer_name": "Mastercard",
            "type": "CREDIT",
            "funding_source": "CREDIT"
        }
    ]
}
```


6. [Optional] To initiate a payment using the Payments API, use the encryptedCard parameter alongside the public key alias of the encryption key:

```
POST /v2/transactions/card
{
```

```
    "amount": 3252,
    "encrypted_card": "encryptedCard",
//encrypted card value from verifone.js
    "public_key_alias": "K9",
    "card_brand": "MasterCard" //optional
    ...
}
```