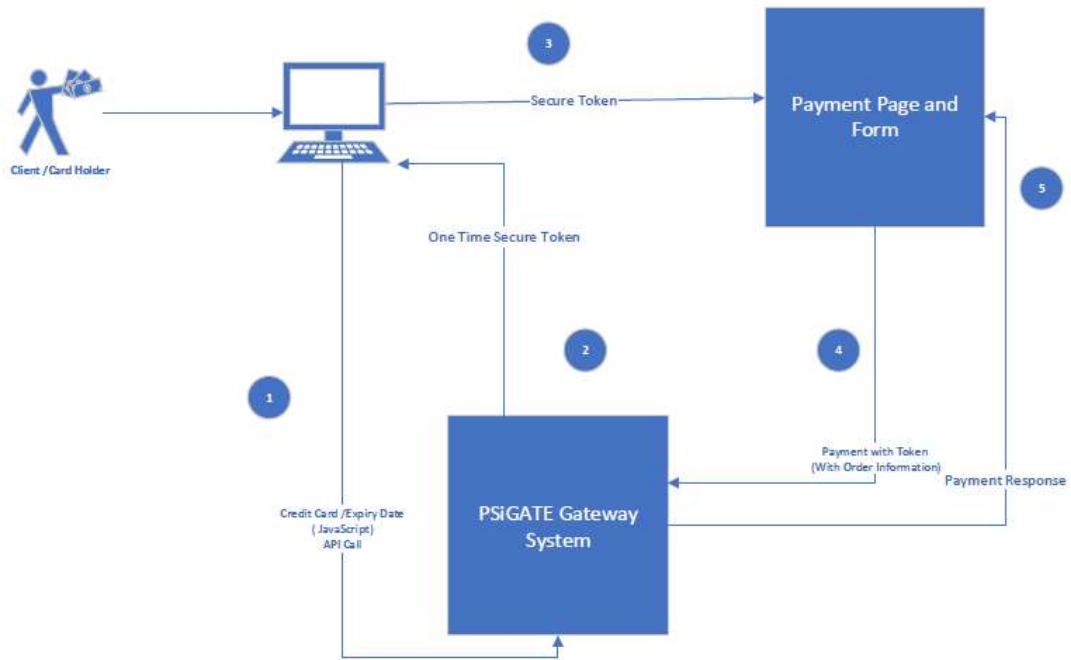# PsiGate Payment Tokenization API Guide 2.0

RESTful Services

1. **Generate Authentication Token API**

Invoke this service to encrypt payment card information using RSA 2048 algorithm and obtain a one-time authentication token from PsiGate.

STAG Endpoint URL: https://apistaging.psigate.com/api/public/paymentAuth
PROD Endpoint URL: https://api.psigate.com/api/public/paymentAuth

JSON format:

```
{ "publicKey": "xxxxxx",
  "encrypted", "xxxxxxxxxxxxxxxxxxxxxxxxxx"
  "billingAddr": "xxxxxxxxxxxxx"
  "billingZip": "xxxxxx"
}
```

Field	Description	Value
publicKey	RSA 2048 public key	MIGfMA0GCSqGSIb3DQEBAQUAA4G NADCBiQKBgQCmIJW2a9XJsJFVek49x VlZbqjjaElD2Ta6nXV550NUiNvZXtf9 WbDOLTA4rB7ms5/xyrT1vIUmlheWa LzI4RYpoLeQQNoOYxLZVyesib3JSsflb 7kixQN3rkfA1yrtuFBU2sKpn0rnyWN hdReP96ZiWK/Z13MjahVp2dBVHQzic QIDAQAB
encrypted	RSA encrypted value for the following JSON message using public key: {"number": "411111111111", "expMon": "12", "expYr": "17", "cvv": "123", }	"encrypted" value
billingAddr	Payment Card Billing Address	127 Yonge Street
billingZip	Payment Card Billing Postal Code	L5R6T4

The public key of each merchant store can be generated from Merchant Tool. Normally **the merchant doesn't need to perform payment card encryption manually** or using other coding libraries. PSiGate provides a javascript library that can be embedded into merchant's webpages.

```
// Put the following two lines of javascript
<script src="
 https://secure.psigate.com:27934/Messenger/content/js/jsencrypt.js"></script>
<script src="
https:// secure.psigate.com:27934 /Messenger/content/js/psigate.js"></script>
```

```
var psigate = new Psigate();
psigate.setEnvironment(Environment.STG);
psigate.setPublicKey("MERCHANT PUBLIC KEY");
psigate.card.genToken($form[0], psiResponseHandler);
```

You need to create your backend application to capture the token in the form and invoke payment API call with this token.

2. Payment using Order API Service

Invoke this service to make a credit card payment with the inclusion of the onetime secure token obtained from last step.

STAG Endpoint URL: https://apistaging.psigate.com/api/secure/orders
PROD Endpoint URL: https://api.psigate.com/api/secure/orders

Note: By using this service, the client needs to call authentication API to get the OAUTH access token. Please refer to https://api.psigate.com/api/swagger.html to get the detail.

```
JSON format:
{
  "secureToken": "The onetime token generated in Step 1",
  "orderId": "Sale01",
  "paymentType":"CC",
  "cardAction": "0",
  "orderChargeInfo": {
        "taxTotal": 0.55,
        "shippingTotal": 5.00,
        "subTotal": 50.00,
        "fullTotal": 55.55
```

```
  }
}
```

Field	Description	Value
secureToken	The generated onetime secure token	"cwf8gaksdfgr81484319"
paymentType	CC: Credit Card; DB: Debit Card	"CC"
orderId	The original order ID or previous order ID for void and refund	"Sale01"
cardAction	0: Sale; 1: PreAuth; 2: Capture; 3: Refund; 8: Pure Credit; 9: Void	"0"
orderChargeInfo	Order pay amount information element wrapper	
taxTotal	Tax amount	0.55
shippingTotal	Shipping cost	5.00
subTotal	Subtotal amount	50.00
fullTotal	Full amount	55.55

3. Payment using Account Manager API Service

Invoke this service to add payment cards in customer's managed account. This service requires OAUTH access token as well.

STAG Endpoint URL: https://apistaging.psigate.com/api/secure/{accountId}/cards
PROD Endpoint URL: https://api.psigate.com/api/secure/{accountId}/cards
'storeId' is required as request parameter

Field	Description	Value
secureToken	The generated onetime secure token	"cwf8gaksdfgr81484319"
cardType	Payment card type	"MC"