

# Sandbox User Guide

Integration testing

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# Table of Contents

Getting Started	3
Test Cards	3
Response Codes	4
AVS	4
CVV	5
Disabling Customer Recovery	6
Advanced Void and Refund Testing	6
Partial Refund	7



# **Getting Started**

FlexPay provides you with access to its production environment. The user is initially set to use the Sandbox to test the new integration. This will be switched to the live mode by the FlexPay support team once your testing is complete. You can access the sandbox environment in your FlexPay account at the top right of the page. Move the toggle in the direction of "sandbox" for sandbox mode as shown in the picture below.



The sandbox environment gives you to access just as in the production environment but allows you to safely simulate different response codes between FlexPay and your billing system without sending transactions to your payment gateway.

The predefined inputs required to validate gateway response codes are listed in tables below

#### **Test Cards**

The test cards provided in the table below can be used to process transactions with a predefined output. Any other card numbers will generate a decline with 30016 as a response code.

Card	Number	Exp. Month	Exp. Year	CVV
Visa	4920201996449560	07	2019	879
MasterCard	5244209084665514	07	2019	010
Amex	341674949684898	07	2019	1000



Diners Club	30349475125576	06	2019	100
JCB	3530111333300000	06	2019	100
Discover	6011885753412897	06	2019	100

### **Response Codes**

The table below charts out exact amounts (in pennies) that will trigger a specific predefined response. A charge with any other value than those listed, will return a successful/approved response; code (10000).

Amount	Response	Description
2005	20000	You need to refer to the Card Issuer
2008	20003	Declined - do not honour
2012	20023	The card has been declined due to insufficient funds.
3016	30011	Invalid transaction
4018	40000	Risk Blocked Transaction refused due to risk model
5023	50000	Validation error

#### AVS

The table below outlines the data to be used to test Address Verification System response codes. Each input item triggers a pre-defined output. Any other value in the address line 1 field will return AVS check 'S' for unsupported.



Address Line 1	AVS Check	Description
Street_A	A	Address matches, but zip code does not.
Street_E	E	AVS not supported for this industry.
Street_N	Ν	No part of the address matches.
Street_S	S	AVS not supported.
Street_X	Х	Exact. Nine-digit zip code and address match.
Street_Y	Y	Yes. Five-digit zip code and address match.

#### CVV

The card verification value can be tested by entering the inputs below. The predefined elements in the description column will be received. Any other CVV will return CVV check M match.

Card CVV	Response Code	CVV Check	Description
201	30049	U	(Unknown) - Issuer is not certified and/or has not provided Visa encryption keys.
202	40006	Ν	(No Match) – The CVD value provided does not match the CVD value associated with the card.
203	10000	Μ	(Match) – The CVD value provided matches the CVD value associated with the card.
204	30049	Q	(Unknown Response) – No results were received concerning the CVD value.



205	30049	Р	(Not Processed) – The CVD value was		
205			not processed.		
	40003	S	(Not Present) – CVD should be on the		
206			card. However, the cardholder		
			indicated it was not present.		

### **Disabling Customer Recovery**

The customer recovery can be disabled by setting the DisableCustomerRecovery field to True. This option is used on a new sale when you are charging the customer for the first time. The two cases are: producing and approved on billing cycle 1 then a declined-on billing cycle 2, the second is, a declined with a disabled recovery to true will generate a do not retry response code.

Amount	Disable Customer Recovery	Response Code	Description
6020	True	10000	Approved
6020	False	20000	You need to refer to the Card Issuer
7029	True	30080	DO NOT RETRY - You need to refer to
7020			the Card Issuer

### Advanced Void and Refund Testing

In the first scenario we can do a Charge approved transaction with the specified amount; If we do a Void on this recently approved Charge transaction, we will have a Decline response code. Now if we do a Refund for the same approved Charge transaction, it will be approved.

In the second scenario we can do a Charge approved transaction for the specified amount and then do a Void for this transaction, the transaction will be approved and we will have the Approved response code.



In the third scenario we can do a Charge approved transaction with the specified amount and then do a Refund for the same approved Charge transaction, the Refund transaction will be approved and we will have the Approved response code

The table below charts out exact amounts (in pennies) that will trigger a specific predefined response.

Scenario	Amount	Transaction Type	Response Code	Description
1	9000	Charge	10000	Approved
		Void	30013	The reversal request
				failed
		Refund	10000	Approved
2	7514	Charge	10000	Approved
		Void	10000	Approved
3	9001	Charge	10000	Approved
		Refund	10000	Approved

# Partial Refund

In the first scenario we can do a Charge approved transaction for the specified amount and then do a Refund for this transaction using '0' as the refund amount, the refund transaction will be approved for the full amount and we will have the Approved response code

In the second scenario we can do a Charge approved transaction with the specified amount; If we do a partial refund on this recently approved Charge transaction, we will have an Approved response code. Now if we do a Partial Refund for the remaining amount of the approved Charge transaction, it will be approved for the refund of remaining amount.

In the third scenario we can do a Charge approved transaction for the specified amount and then do a Refund for this transaction using an amount higher than the Charged amount, the refund transaction will be Declined and we will have the Declined response code along with the Decline message.



The table below charts out exact amounts (in pennies) that will trigger a specific predefined response

Scenario	Amount	Transaction Type	Response Code	Description
	9000	Charge	10000	Approved
1	0	Refund	1000	Approved and Full
I				amount is refunded
	7500	Charge	10000	Approved
	4000	Refund	10000	Approved – Partial
2				Refund
	3500	Refund	10000	Approved – Partial
				Refund
3	5000	Charge	10000	Approved
	5500	Refund	30015	Declined – The external
				gateway has reported
				that you have submitted
				an invalid amount with
				your request.