



# **vSafe™ v3.3.1 vGuaranteed™ API Specification**

June 22, 2016

Document Version: 1.5

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# Release History

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1.1	December 11, 2015	Vesta Market Solutions	Updated Appendix A to include vGuaranteed™ Risk Information document.
1.2	January 29, 2016	Vesta Market Solutions	Updated content for vSafe™ v3.3 vGuaranteed™ production release.
1.3	February 17, 2016	Vesta Market Solutions	Updated content for vSafe™ v3.3 push to production.
1.3.1	March 16, 2016	Vesta Market Solutions	Updated content for vSafe™ v3.3.1 push to production.
1.4	April 5, 2016	Vesta Market Solutions	Updated content to include parameters for iovation® and ThreatMetrix® fingerprint solutions.
1.5	June 22, 2016	Vesta Market Solutions Vesta Project Management	Added response value 4096 to the ChargeSale and ChargeAuthorize AVSResultCode response parameters and increased the max length from 2 to 4.

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# Introduction

The purpose of this document is to provide Vesta's partners with the vSafe™ v3.3.1 vGuaranteed™ API calls and associated request parameters, response parameters, and response code messages for card-not-present (CNP) transactions.

The vGuaranteed™ API calls are designed for managing charge and reversal transactions, authenticating cardholders' identities, creating temporary and permanent tokens, and monitoring system and transaction status for CNP transactions involving credit cards and debit cards. vGuaranteed™ documentation does not include card-present transactions, ACH check transactions, or API calls for creating and managing wallets and wallet devices.

Each vSafe™ API call includes parameters that are either required, optional, or conditional. Required (R) parameters must be included with an API call. Optional (O) parameters are not required but should be included with API calls when the data are available. Conditional (C) parameters must be included with an API call if the appropriate condition exists. For example, the ChargeCVN parameter is not required when ChargeSource=PPD, but it is required when ChargeSource=WEB.

Table 1 describes the three ChargeSource request parameters:

**Table 1. ChargeSource Request Parameter Definitions**

Parameter	Definition
PPD	Used to specify that the payment has been prearranged. This is used when the payment device has been validated or has already had a successful charge against it.
TEL	Used to specify that the payment has been taken over the telephone through a call center or IVR.
WEB	Used to specify that the payment has been taken over the Web, a mobile Web, a native mobile application, a hybrid mobile application, or any other Internet payment method.



# vGuaranteed™ API Overview

Vesta's vSafe™ v3.3.1 vGuaranteed™ API includes calls for charge and reversal transactions, knowledge-based authentication (KBA), creating temporary and permanent tokens, and monitoring system and transaction status.

## Charge and Reversal API Calls

The following vSafe™ API calls are designed to validate a cardholder's identity prior to a charge transaction and to manage charge and debit transactions and transaction reversals:

- ChargeAuthorize authorizes a two-step payment transaction (see page 4).
- ChargeConfirm confirms a payment authorization and completes a transaction that was initiated with ChargeAuthorize (see page 15).
- ChargeSale authorizes and confirms a credit card transaction in one step (see page 19).
- DebitSale authorizes and confirms a PIN-less debit transaction (see page 31).
- GetSessionTags creates an ID for use in device fingerprinting, which is required for vGuaranteed services with specific payment channels (see page 41).
- ReversePayment refunds or voids an authorized or completed payment (see page 41).

## Knowledge-Based Authentication API Calls

The following vSafe™ calls use knowledge-based authentication (KBA) to verify a cardholder's identity.

- ChallengeQuestionAnswer validates responses to the KBA questions (see page 48).
- ChallengeQuestionBegin initiates KBA questions for a transaction pended during the order process (see page 52).

## Token API Calls

The following vSafe™ API calls create temporary and permanent tokens and validate payment devices:

- ChargeAccountToTemporaryToken exchanges a payment card payment account number (PAN) for a temporary token for channels that cannot accommodate the PCI JavaScript library method for tokenization, such as interactive voice response (IVR) systems, call centers, or native mobile applications (see page 56).
- ValidateChargeAccount validates a payment device prior to a financial transaction and supports converting a temporary token to a permanent token (see page 59).

## Status API Calls

The following vSafe™ API calls provide details about a payment device, status of payments, and vSafe™ API service availability:

- ChargeGetPaymentDeviceInfo returns metadata on a payment device (see page 68).
- GetPaymentStatus returns the status of any payment (see page 72).
- HeartBeat returns availability of the vSafe™ API service (see page 76).

## API Call Parameters

Each vSafe™ API call includes parameters that are either required, optional, or conditional.

Required (R) parameters must be included with an API call.

Optional (O) parameters are not required but should be included with API calls when the data are available. Although many elements are marked as optional, Vesta strongly encourages vSafe™ partners to provide as much information as possible to drive higher acceptance rates and lower fraud loss.

Conditional (C) parameters must be included with an API call if the appropriate condition exists. For example, the ChargeCVN parameter is not required when ChargeSource=PPD, but it is required when ChargeSource=WEB.

# Charge and Reversal API Calls

The vSafe™ charge and reversal API calls are designed to validate a cardholder's identity prior to a charge transaction and to manage charge and debit transactions and transaction reversals.

## ChargeAuthorize

This API call authorizes a payment in the amount of the sale but does not charge the customer's payment device. Although the customer's online statement will show an authorized transaction, the sale is not completed until the ChargeConfirm API is called after the ChargeAuthorize API call. To authorize a transaction and charge the payment device together in one step, use the ChargeSale API call (see ChargeSale on page 19).

## Request Parameters

Table 2 includes the vGuaranteed™ ChargeAuthorize API request parameters.

**Table 2. ChargeAuthorize API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition	
AccountName	String	R	32	API username used to authenticate with vSafe.	
AdditionalAmounts	Complex	O	12	Any additional amounts, such as surcharges, are specified here.	
	Amount	Currency	O	The additional amount.	
	Type	String	O	12	Type of the additional amount.
					<b>Value</b>
Surchrgr					Surcharge
Tax	Tax				
CardHolderAddressLine1	String	C	30	Cardholder's address, line 1. Required for vGuaranteed services.	
CardHolderAddressLine2	String	O	30	Cardholder's address, line 2.	
CardHolderCity	String	C	30	Cardholder's city. Required for vGuaranteed services.	

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
CardHolderCountryCode	String	C	2	Cardholder's two-character country code. Use ISO-3166 official country codes. Required for vGuaranteed services.								
CardHolderFirstName	String	C	20	Cardholder's first name. Required for vGuaranteed services.								
CardHolderLastName	String	C	20	Cardholder's last name. Required for vGuaranteed services.								
CardHolderPostalCode	String	C	12	Cardholder's ZIP or postal code. Required for vGuaranteed services.								
CardHolderRegion	String	C	30	Cardholder's region name. For U.S. addresses, use the two-character state code. Required for vGuaranteed services.								
ChargeAccountNumber	String	R	19	Payment account number (PAN) or token of the payment device to be authorized.								
ChargeAccountNumberIndicator	Integer	R	1	Type of device being passed to the API. Possible values: <table border="1" data-bbox="1032 1157 1425 1362"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Credit card number</td> </tr> <tr> <td>2</td> <td>Temporary token</td> </tr> <tr> <td>3</td> <td>Permanent token</td> </tr> </tbody> </table>	Value	Definition	1	Credit card number	2	Temporary token	3	Permanent token
Value	Definition											
1	Credit card number											
2	Temporary token											
3	Permanent token											
ChargeAmount	Currency	R	12	Amount of funds to be authorized.								
ChargeCVN	Numeric	C	4	Payment device security code (e.g., CVV2 for MC and Visa, or CID for American Express). If ChargeSource is set to PPD, this field is not required.								
ChargeExpirationMMYY	Numeric	C	4	Payment device expiration date. The format is MMYY. Required for vGuaranteed services.								

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
ChargeSource	String	R	3	<p>Specifies the source of the payment. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>PPD</td> <td>Use this to specify that the payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, the ChargeCVN is not required.</td> </tr> <tr> <td>TEL</td> <td>Use this to specify that the payment has been taken over the telephone through a call center or interactive voice response (IVR) system.</td> </tr> <tr> <td>WEB</td> <td>Use this to specify that the payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.</td> </tr> </tbody> </table>	Value	Definition	PPD	Use this to specify that the payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, the ChargeCVN is not required.	TEL	Use this to specify that the payment has been taken over the telephone through a call center or interactive voice response (IVR) system.	WEB	Use this to specify that the payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.
Value	Definition											
PPD	Use this to specify that the payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, the ChargeCVN is not required.											
TEL	Use this to specify that the payment has been taken over the telephone through a call center or interactive voice response (IVR) system.											
WEB	Use this to specify that the payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.											
Fingerprint	String	C	4000	<p>Black box generated using the fingerprint solution as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use iovation® fingerprint solution.</p> <p><b>Note:</b> Although the maximum length is 4000 characters for Fingerprint, the average length is less than 1000 characters.</p>								

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
MerchantRoutingID	String	C	20	Key used to determine which merchant account to use. This field is required for partners with more than one active merchant routing configuration. It is optional for partners with one active merchant routing configuration.
PartnerCustomerKey	String	O	64	Any unique data element used for identifying customers (e.g., billing account number).
Password	String	R	64	API password used to authenticate with vSafe.
PaymentDescriptor	String	O	128	Text description of the payment for tracking purposes. It is used to identify the transaction when contacting vSafe support.
ReportingInformation	String	O	N/A	Attribute-based XML blob that contains information that the partner wishes to report on for the specific payment. The information is passed through for reporting and PRT search functionality and does not affect payment processing. This field is not supported for vGuaranteed services.
RiskInformation	String	C	N/A	Required for vGuaranteed services and optional for non-vGuaranteed services. This is an XML string that contains risk-related data. Contact your onboarding manager for details.
ShipToZip	String	O	12	Shipping code for the payment. This field is not supported for vGuaranteed services.
StoreCard	Boolean	O	1	Set to true if vSafe should store the payment account number (PAN) and return a permanent token. False is the default value.
TransactionID	String	R	36	Partner-generated ID used to track the status of this request.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
WebSessionID	String	C	128	WebSessionID generated for device fingerprinting as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use ThreatMetrix® fingerprint solution. Use GetSessionTags to generate the WebSessionID for the current transaction.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 3 includes the vGuaranteed™ ChargeAuthorize API response parameters.

**Table 3. ChargeAuthorize API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AcquirerApprovalCode	String	C	50	Unique approval code returned by the acquirer on approved transactions. This field is not returned for vGuaranteed services.
AcquirerAVSResponseCode	String	C	6	Address verification response code returned from acquirer. This field is not returned for vGuaranteed services.
AcquirerCVNResponseCode	String	C	6	CVN response code returned from acquirer. This field is not returned for vGuaranteed services.
AcquirerResponseCode	String	C	50	Acquirer response code if available. This field is not returned for vGuaranteed services.
AcquirerResponseCodeText	String	C	255	Description of acquirer response code, if available. This field is not returned for vGuaranteed services.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
AdditionalAmounts	Complex	C	12	Any additional amounts, such as surcharges, returned from the acquirer.						
	Amount	Currency	C	12	The additional amount.					
	Type	String	C	12	Type of the additional amount. <table border="1" data-bbox="980 520 1421 672"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Surchrgr</td> <td>Surcharge</td> </tr> <tr> <td>Tax</td> <td>Tax</td> </tr> </tbody> </table>	Value	Definition	Surchrgr	Surcharge	Tax
Value	Definition									
Surchrgr	Surcharge									
Tax	Tax									
AuthorizedAmount	Currency	C	12	The amount authorized by the acquirer. This amount may be less than the original requested amount. This field is not returned for vGuaranteed services.						
AuthResultCode	Integer	C	1	Indicates decline reason. Only returned for non-sufficient funds (NSF). Possible value: <table border="1" data-bbox="980 991 1421 1087"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Non-sufficient funds.</td> </tr> </tbody> </table>	Value	Definition	1	Non-sufficient funds.		
Value	Definition									
1	Non-sufficient funds.									



Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																														
AVSResultCode	Integer	C	4	<p>vSafe-translated response from the acquirer Address Verification Service (AVS). This field is not returned with the vGuaranteed services. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>AVS not performed.</td> </tr> <tr> <td>6</td> <td>No address supplied.</td> </tr> <tr> <td>7</td> <td>AVS data invalid.</td> </tr> <tr> <td>8</td> <td>Foreign address match.</td> </tr> <tr> <td>9</td> <td>Foreign address mismatch.</td> </tr> <tr> <td>10</td> <td>AVS not available.</td> </tr> <tr> <td>11</td> <td>AVS postal code and locale match.</td> </tr> <tr> <td>12</td> <td>AVS locale match.</td> </tr> <tr> <td>13</td> <td>AVS postal code match.</td> </tr> <tr> <td>14</td> <td>AVS not matched.</td> </tr> <tr> <td>16</td> <td>Foreign issuer AVS not available.</td> </tr> <tr> <td>24</td> <td>AVS system unavailable.</td> </tr> <tr> <td>39</td> <td>AVS partial match.</td> </tr> <tr> <td>4096</td> <td>Name, address, and postal code match.</td> </tr> </tbody> </table>	Value	Definition	5	AVS not performed.	6	No address supplied.	7	AVS data invalid.	8	Foreign address match.	9	Foreign address mismatch.	10	AVS not available.	11	AVS postal code and locale match.	12	AVS locale match.	13	AVS postal code match.	14	AVS not matched.	16	Foreign issuer AVS not available.	24	AVS system unavailable.	39	AVS partial match.	4096	Name, address, and postal code match.
Value	Definition																																	
5	AVS not performed.																																	
6	No address supplied.																																	
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10	AVS not available.																																	
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12	AVS locale match.																																	
13	AVS postal code match.																																	
14	AVS not matched.																																	
16	Foreign issuer AVS not available.																																	
24	AVS system unavailable.																																	
39	AVS partial match.																																	
4096	Name, address, and postal code match.																																	
ChargeAccountFirst6	Numeric	R	6	First six digits of the payment device used to process the transaction.																														
ChargeAccountLast4	Numeric	R	4	Last four digits of the payment device used to process the transaction.																														
ChargePermanentToken	String	C	19	If StoreCard flag is set to true, ChargePermanentToken contains the permanent token.																														

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																
CVNResultCode	Integer	C	2	<p>vSafe-translated response from the acquirer on the card verification number (CVN) response. This field is not returned with vGuaranteed services. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>CVN invalid.</td> </tr> <tr> <td>17</td> <td>CVN match.</td> </tr> <tr> <td>19</td> <td>CVN not matched.</td> </tr> <tr> <td>20</td> <td>CVN check not processed.</td> </tr> <tr> <td>22</td> <td>CVN should be available (was not supplied).</td> </tr> <tr> <td>23</td> <td>CVN not supported by issuer.</td> </tr> <tr> <td>45</td> <td>CVN not sent.</td> </tr> </tbody> </table>	Value	Definition	15	CVN invalid.	17	CVN match.	19	CVN not matched.	20	CVN check not processed.	22	CVN should be available (was not supplied).	23	CVN not supported by issuer.	45	CVN not sent.
Value	Definition																			
15	CVN invalid.																			
17	CVN match.																			
19	CVN not matched.																			
20	CVN check not processed.																			
22	CVN should be available (was not supplied).																			
23	CVN not supported by issuer.																			
45	CVN not sent.																			
PartnerCustomerKey	String	C	64	Any unique data element used to identify customers (e.g., billing account number).																
PartnerDenialReasonCode	Integer	C	4	Fraud-returned business rule reason code that denied the transaction. This field is not returned for vGuaranteed services.																
PaymentAcquirerName	String	R	64	Name of the acquirer that processed the payment.																

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
PaymentDeviceTypeCD	Integer	R	2	<p>Indicates whether the charge card is a signature card (known signature type) or a non-signature card. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>American Express</td> </tr> <tr> <td>4</td> <td>Visa</td> </tr> <tr> <td>5</td> <td>MasterCard</td> </tr> <tr> <td>6</td> <td>Discover</td> </tr> <tr> <td>7</td> <td>Diners Club</td> </tr> <tr> <td>98</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Definition	3	American Express	4	Visa	5	MasterCard	6	Discover	7	Diners Club	98	Unknown
Value	Definition																	
3	American Express																	
4	Visa																	
5	MasterCard																	
6	Discover																	
7	Diners Club																	
98	Unknown																	
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.														
PaymentStatus	Integer	R	3	<p>Result of the authorization request. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bank denied.</td> </tr> <tr> <td>2</td> <td>vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin .</td> </tr> <tr> <td>3</td> <td>vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.</td> </tr> <tr> <td>5</td> <td>Authorized.</td> </tr> <tr> <td>6</td> <td>Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact</td> </tr> </tbody> </table>	Value	Definition	1	Bank denied.	2	vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin .	3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.	5	Authorized.	6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact		
Value	Definition																	
1	Bank denied.																	
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Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
				<table border="1"> <tr> <td></td> <td>vSafe support.</td> </tr> <tr> <td>13</td> <td>Business rules denied. This value is not returned for vGuaranteed services.</td> </tr> </table>		vSafe support.	13	Business rules denied. This value is not returned for vGuaranteed services.		
	vSafe support.									
13	Business rules denied. This value is not returned for vGuaranteed services.									
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 4 provides a list of response codes and suggested error messages.

**Table 4. ChargeAuthorize API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.

Response Code	Response Text	Suggested Customer Message	Notes
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	N/A	Caused by an empty required field. Check the integration parameters that fill these fields.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	A general type-mismatch error. Check the required fields to be sure they are being populated correctly.
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty field. Check the integration parameters that fill these fields.
514	Parameter [name] is invalid. Valid values are [valid values].	N/A	Caused by passing an invalid value for an API with an enumerated set of values.
521	Parameter [name] is not a valid credit card number.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Invalid credit card length.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1003	Credit card fails Mod-10 check.	Please check your credit card information.	Mod-10 is a basic payment account number (PAN) numeric check to see if it meets the minimum rules for being a valid number. Occurs when the PAN has been mistyped.
1004	No acquirer available.	N/A	An acquirer is required to complete this transaction. If the problem persists, contact vSafe support.

Response Code	Response Text	Suggested Customer Message	Notes
1005	Partner not active.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.
1006	Invalid charge account number token.	N/A	Caused by passing an invalid token to the API.
1014	Account only eligible for signature debit transactions.	We cannot process this type of card. Please select a credit or debit card with a Visa, Discover, American Express, or MasterCard logo.	N/A
1016	Provide cardholder name and complete address.	N/A	N/A

## ChargeConfirm

This API call completes a transaction that was authorized using the ChargeAuthorize API call. If ChargeConfirm is not called within the time frame established by the issuing bank, the transaction automatically expires, and the transaction is cancelled.

**Note:** To authorize a transaction and charge the payment device simultaneously, call the ChargeSale API (see ChargeSale on page 19).

It is important to keep the following in mind before calling the ChargeConfirm API:

- An authorized payment may be confirmed only once.
- The ChargeAmount parameter must be equal to or less than the authorized amount.
- If the final purchase amount is larger than the authorized amount, reverse the existing authorization and then authorize a new transaction for the purchase amount.

## Request Parameters

Table 5 includes the vGuaranteed™ ChargeConfirm API request parameters.

**Table 5. ChargeConfirm API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
ChargeAmount	Currency	R	12	The final purchase amount must be less than or equal to the authorized amount.
Password	String	R	64	API password used to authenticate with vSafe.
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.
TransactionID	String	R	36	Partner-generated ID used to track the status of this request.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 6 includes the vGuaranteed™ ChargeConfirm API response parameters.

**Table 6. ChargeConfirm API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
PaymentStatus	Integer	R	3	This value indicates the result of the authorization request. Possible values: <table border="1" data-bbox="852 1297 1422 1482"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>Authorization communication failure.</td> </tr> <tr> <td>10</td> <td>Complete.</td> </tr> </tbody> </table>	Value	Definition	6	Authorization communication failure.	10	Complete.
Value	Definition									
6	Authorization communication failure.									
10	Complete.									
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="852 1640 1422 1789"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 7 provides a list of response codes and suggested error messages.

**Table 7. ChargeConfirm API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	N/A	Caused by an empty required field. Check the integration parameters that fill these fields.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	A general type-mismatch error. Check the required fields to be sure they are being populated correctly.



Response Code	Response Text	Suggested Customer Message	Notes
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty field. Check the integration parameters that fill these fields.
514	Parameter [name] is invalid. Valid values are [valid values].	N/A	Caused by passing an invalid value for an API with an enumerated set of values.
521	Parameter [name] is not a valid credit card number.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Payment not found.	N/A	Indicates a problem in the PaymentID field. Validate that the correct PaymentID has been submitted.
1003	Payment already confirmed.	N/A	This response can occur if ChargeConfirm is used more than once on a payment. Consider using GetPaymentStatus.
1004	Payment not authorized.	N/A	This could be a corrupted type field or some other integration issue. If the problem persists, contact vSafe support.
1005	Partner not active.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.
1006	Amount larger than original authorization.	N/A	The confirmation amount must be less than or equal to the corresponding authorization amount.
1007	Authorization is already expired.	Please provide your payment information again.	An authorization usually expires after a predetermined period of time. If this occurs, you will need to re-authorize and confirm the transaction.
1008	Original transaction was from a different interface.	Please try again later.	This is an API library version conflict. Contact vSafe support.
1013	Card validation transaction cannot be confirmed.	N/A	You cannot attempt to confirm a PaymentID that was generated from the ValidateChargeAccount API.

# ChargeSale

This API call authorizes and completes a transaction in one step.

**Note:** If a ChargeSale API call results in a pended transaction, you must call ChallengeQuestionBegin to authorize and complete the transaction (see ChallengeQuestionBegin on page 52).

To authorize a transaction but delay charging the payment device, use the ChargeAuthorize and ChargeConfirm APIs (see ChargeAuthorize on page 4 and ChargeConfirm on page 15).

## Request Parameters

Table 8 includes the vGuaranteed™ ChargeSale API request parameters.

**Table 8. ChargeSale API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
AccountName	String	R	32	API username used to authenticate with vSafe.						
AdditionalAmounts	Complex	O	12	Any additional amounts, such as surcharges, are specified here.						
	Amount	Currency	O	12	The additional amount (e.g., 1.23).					
	Type	String	O	12	The type of the additional amount. Possible values: <table border="1" data-bbox="1015 1176 1421 1333"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Surchrg</td> <td>Surcharge</td> </tr> <tr> <td>Tax</td> <td>Tax</td> </tr> </tbody> </table>	Value	Definition	Surchrg	Surcharge	Tax
Value	Definition									
Surchrg	Surcharge									
Tax	Tax									
CardHolderAddressLine1	String	C	30	Cardholder's address, line 1. Required for vGuaranteed services.						
CardHolderAddressLine2	String	O	30	Cardholder's address, line 2.						
CardHolderCity	String	C	30	Cardholder's city. Required for vGuaranteed services.						
CardHolderCountryCode	String	C	2	Cardholder's two-character country code. Use ISO-3166 official country codes. Required for vGuaranteed services.						
CardHolderFirstName	String	C	20	Cardholder's first name. Required for vGuaranteed services.						

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
CardHolderLastName	String	C	20	Cardholder's last name. Required for vGuaranteed services.								
CardHolderPostalCode	String	C	12	Cardholder's ZIP or postal code.								
CardHolderRegion	String	C	30	Cardholder's region name. For U.S. addresses, use the two-character state code. Required for vGuaranteed services.								
ChargeAccountNumber	String	R	19	Payment account number (PAN) or token of the payment device to be authorized.								
ChargeAccountNumberIndicator	Integer	R	1	Type of device being passed to the API. Possible values: <table border="1" data-bbox="1015 793 1421 997"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Credit card number</td> </tr> <tr> <td>2</td> <td>Temporary token</td> </tr> <tr> <td>3</td> <td>Permanent token</td> </tr> </tbody> </table>	Value	Definition	1	Credit card number	2	Temporary token	3	Permanent token
Value	Definition											
1	Credit card number											
2	Temporary token											
3	Permanent token											
ChargeAmount	Currency	R	12	Amount of funds to be authorized.								
ChargeCVN	Numeric	C	4	Payment device security code (e.g., CVV2 for MC and Visa or CID for American Express). If ChargeSource is set to PPD, this field is not required.								
ChargeExpirationMMYY	Numeric	O	4	Payment device expiration date. The format is MMYY.								

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition	
ChargeSource	String	R	3	Specifies the source of the payment. Possible values:	
				<b>Value</b>	<b>Definition</b>
				PPD	Payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, the ChargeCVN is not required.
				TEL	Use this to specify that the payment has been taken over the telephone through a call center or interactive voice response (IVR) system.
WEB	Use this to specify that the payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.				
CreatedByUser	String	O	128	Fraud or Revenue Assurance (RA) gateway user account name.	
Fingerprint	String	C	4000	Black box generated using the fingerprint solution as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use iovation® fingerprint solution. <b>Note:</b> Although the maximum length is 4000 characters for Fingerprint, the average length is less than 1000 characters.	

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
MerchantRoutingID	String	C	20	Key used to determine which merchant account to use. This field is required for partners with more than one active merchant routing configuration. It is optional for partners with one active merchant routing configuration.
PartnerCustomerKey	String	O	64	Any unique data element used for identifying customers (e.g., billing account number).
Password	String	R	64	API password used to authenticate with vSafe.
PaymentDescriptor	String	O	128	Text description of the payment for tracking purposes. Used to identify the transaction when contacting vSafe support.
ReportingInformation	String	O	N/A	Attribute-based XML blob that contains information that the partner wishes to report on for the specific payment. The information is passed through for reporting and PRT search functionality and does not affect payment processing. This field is not supported for vGuaranteed services.
RiskInformation	String	C	N/A	Required for vGuaranteed services and optional for non-vGuaranteed services. This is an XML string that describes risk-related information.
ShipToZip	String	O	12	Shipping code for the payment. This field is not supported for vGuaranteed services.
StoreCard	Boolean	O	1	Set to true if vSafe should store the payment account number (PAN) and return a permanent token. False is the default value.
TransactionID	String	R	36	Partner-generated ID used to track the status of the request.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
WebSessionID	String	C	128	WebSessionID generated for device fingerprinting as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use ThreatMetrix® fingerprint solution. Use GetSessionTags to generate the WebSessionID for the current transaction.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 9 includes the vGuaranteed™ ChargeSale API response parameters.

**Table 9. ChargeSale API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition					
AdditionalAmounts	Complex	C	12	Any additional amounts, such as surcharges, returned from the acquirer.					
	Amount	Currency	12	The additional amount.					
	Type	String	12	Type of the additional amount. <table border="1" data-bbox="980 1171 1419 1325"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Surchrg</td> <td>Surcharge</td> </tr> <tr> <td>Tax</td> <td>Tax</td> </tr> </tbody> </table>	Value	Definition	Surchrg	Surcharge	Tax
Value	Definition								
Surchrg	Surcharge								
Tax	Tax								
AcquirerApprovalCode	String	C	50	Unique approval code returned by the acquirer on approved transactions. This field is not returned for vGuaranteed services.					
AcquirerAVSResponseCode	String	C	6	Address verification response code returned from acquirer. This field is not returned for vGuaranteed services.					
AcquirerCVNResponseCode	String	C	6	CVN response code returned from acquirer. This field is not returned for vGuaranteed services.					
AcquirerResponseCode	String	C	3	Acquirer response code if available. This field is not returned for vGuaranteed services.					

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition				
AcquirerResponseCodeText	String	C	255	Description of acquirer response code, if available. This field is not returned for vGuaranteed services.				
AuthorizedAmount	Currency	C	12	The amount authorized by the acquirer. This amount may be less than the original requested amount. This field is not returned for vGuaranteed services.				
AuthResultCode	Integer	C	1	Additional detail about a decline. Only returned for non-sufficient funds (NSF). Possible value: <table border="1" data-bbox="980 722 1421 819"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Non-sufficient funds.</td> </tr> </tbody> </table>	Value	Definition	1	Non-sufficient funds.
Value	Definition							
1	Non-sufficient funds.							

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																														
AVSResultCode	Integer	C	4	<p>vSafe-translated response from the acquirer Address Verification Service (AVS). This response is not returned with the vGuaranteed services. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>AVS not performed.</td> </tr> <tr> <td>6</td> <td>No address supplied.</td> </tr> <tr> <td>7</td> <td>AVS data invalid.</td> </tr> <tr> <td>8</td> <td>Foreign address match.</td> </tr> <tr> <td>9</td> <td>Foreign address mismatch.</td> </tr> <tr> <td>10</td> <td>AVS not available.</td> </tr> <tr> <td>11</td> <td>AVS postal code and locale match.</td> </tr> <tr> <td>12</td> <td>AVS locale match.</td> </tr> <tr> <td>13</td> <td>AVS postal code match.</td> </tr> <tr> <td>14</td> <td>AVS not matched.</td> </tr> <tr> <td>16</td> <td>Foreign issuer AVS not available.</td> </tr> <tr> <td>24</td> <td>AVS system unavailable.</td> </tr> <tr> <td>39</td> <td>AVS partial match.</td> </tr> <tr> <td>4096</td> <td>Name, address, and postal code match.</td> </tr> </tbody> </table>	Value	Definition	5	AVS not performed.	6	No address supplied.	7	AVS data invalid.	8	Foreign address match.	9	Foreign address mismatch.	10	AVS not available.	11	AVS postal code and locale match.	12	AVS locale match.	13	AVS postal code match.	14	AVS not matched.	16	Foreign issuer AVS not available.	24	AVS system unavailable.	39	AVS partial match.	4096	Name, address, and postal code match.
Value	Definition																																	
5	AVS not performed.																																	
6	No address supplied.																																	
7	AVS data invalid.																																	
8	Foreign address match.																																	
9	Foreign address mismatch.																																	
10	AVS not available.																																	
11	AVS postal code and locale match.																																	
12	AVS locale match.																																	
13	AVS postal code match.																																	
14	AVS not matched.																																	
16	Foreign issuer AVS not available.																																	
24	AVS system unavailable.																																	
39	AVS partial match.																																	
4096	Name, address, and postal code match.																																	
ChargeAccountFirst6	Numeric	R	6	First six digits of the payment device used to process the transaction.																														
ChargeAccountLast4	Numeric	R	4	Last four digits of the payment device used to process the transaction.																														
ChargePermanentToken	String	C	19	Contains the permanent token if StoreCard flag is set to true.																														



Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																
CVNResultCode	Integer	C	2	<p>vSafe-translated response from the acquirer on the card verification number (CVN) response. This response is not returned with the vGuaranteed services. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>CVN invalid.</td> </tr> <tr> <td>17</td> <td>CVN match.</td> </tr> <tr> <td>19</td> <td>CVN not matched.</td> </tr> <tr> <td>20</td> <td>CVN check not processed.</td> </tr> <tr> <td>22</td> <td>CVN should be available (was not supplied).</td> </tr> <tr> <td>23</td> <td>CVN not supported by issuer.</td> </tr> <tr> <td>45</td> <td>CVN not sent.</td> </tr> </tbody> </table>	Value	Definition	15	CVN invalid.	17	CVN match.	19	CVN not matched.	20	CVN check not processed.	22	CVN should be available (was not supplied).	23	CVN not supported by issuer.	45	CVN not sent.
Value	Definition																			
15	CVN invalid.																			
17	CVN match.																			
19	CVN not matched.																			
20	CVN check not processed.																			
22	CVN should be available (was not supplied).																			
23	CVN not supported by issuer.																			
45	CVN not sent.																			
PartnerCustomerKey	String	O	64	Any unique data element used for identifying customers (e.g., billing account number).																
PartnerDenialReasonCode	Integer	C	4	Fraud-returned business rule reason code that denied the transaction. This field is not returned for vGuaranteed services.																
PaymentAcquirerName	String	R	64	Name of the acquirer that took the payment.																

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
PaymentDeviceTypeCD	Integer	R	2	<p>Indicates whether the charge card is a signature card (known signature type) or a non-signature card. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>American Express</td> </tr> <tr> <td>4</td> <td>Visa</td> </tr> <tr> <td>5</td> <td>MasterCard</td> </tr> <tr> <td>6</td> <td>Discover</td> </tr> <tr> <td>7</td> <td>Diners Club</td> </tr> <tr> <td>98</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Definition	3	American Express	4	Visa	5	MasterCard	6	Discover	7	Diners Club	98	Unknown
Value	Definition																	
3	American Express																	
4	Visa																	
5	MasterCard																	
6	Discover																	
7	Diners Club																	
98	Unknown																	
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.														

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
PaymentStatus	Integer	R	3	<p>Result of the authorization request. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bank denied.</td> </tr> <tr> <td>2</td> <td>vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin.</td> </tr> <tr> <td>3</td> <td>vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable. This will occur if fraud activity was detected.</td> </tr> <tr> <td>6</td> <td>Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.</td> </tr> <tr> <td>10</td> <td>Successful payment.</td> </tr> <tr> <td>13</td> <td>Business rules denied. This value is not returned for vGuaranteed services.</td> </tr> </tbody> </table>	Value	Definition	1	Bank denied.	2	vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin.	3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable. This will occur if fraud activity was detected.	6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.	10	Successful payment.	13	Business rules denied. This value is not returned for vGuaranteed services.
Value	Definition																	
1	Bank denied.																	
2	vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin.																	
3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable. This will occur if fraud activity was detected.																	
6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.																	
10	Successful payment.																	
13	Business rules denied. This value is not returned for vGuaranteed services.																	
ProxiedMessageName	String	R	255	Name of the API call.														
ResponseCode	Integer	R	4	<p>Indicates success or failure in processing the API call. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> <p>See Response Code Messages for non-zero values.</p>	Value	Definition	0	Success	Non-zero	Failure								
Value	Definition																	
0	Success																	
Non-zero	Failure																	

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 10 provides a list of response codes and suggested error messages.

**Table 10. ChargeSale API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	N/A	Caused by an empty required field. Check the integration parameters that fill these fields.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	A general type-mismatch error. Check the required fields to be sure they are being populated correctly.

Response Code	Response Text	Suggested Customer Message	Notes
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty field. Check the integration parameters that fill these fields.
514	Parameter [name] is invalid. Valid values are [valid values].	N/A	Caused by passing an invalid value for an API with an enumerated set of values.
521	Parameter [name] is not a valid credit card number.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Invalid credit card length.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1003	Credit card fails Mod-10 check.	Please re-type the credit card number.	Mod-10 is a basic payment account number (PAN) numeric check to see if it meets the minimum rules for being a valid number. Occurs when the PAN has been mistyped.
1004	No acquirer available.	N/A	Acquirer is required to complete this transaction. If the problem persists, contact vSafe support.
1005	Partner not active.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.
1006	Invalid charge account number token.	N/A	Caused by passing an invalid token to the API.
1014	Account only eligible for signature debit transactions.	We cannot process this type of card. Please select a debit card with a Visa, Discover, or MasterCard logo.	N/A
1016	Provide cardholder name and complete address.	N/A	N/A

# DebitSale

This API call authorizes and completes a debit transaction in one step. A debit sale may result in a pended transaction with vGuaranteed™ services.

**Note:** If a DebitSale API call results in a pended transaction, you must call ChallengeQuestionBegin to authorize and complete the transaction (see ChallengeQuestionBegin on page 52).

## Request Parameters

Table 11 includes the vGuaranteed™ DebitSale API request parameters.

**Table 11. DebitSale API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
CardHolderAddressLine1	String	C	30	Debit account owner's address, line 1. When transaction is vGuaranteed, parameter is required.
CardHolderAddressLine2	String	O	30	Debit account owner's address, line 2.
CardHolderCity	String	C	30	Debit account owner's city. When transaction is vGuaranteed, parameter is required.
CardHolderCountryCode	String	C	2	Debit account owner's two-character country code. Use ISO-3166 official country codes. When transaction is vGuaranteed, parameter is required.
CardHolderFirstName	String	C	20	Debit account owner's first name. When transaction is vGuaranteed, parameter is required.
CardHolderLastName	String	C	20	Debit account owner's last name. When transaction is vGuaranteed, parameter is required.
CardHolderPostalCode	String	C	12	Debit account owner's ZIP or postal code. When transaction is vGuaranteed, parameter is required.
CardHolderRegion	String	R	30	Debit account owner's region name. For U.S. addresses, use the two-character state code. When transaction is vGuaranteed, parameter is required.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
CreatedByUser	String	O	128	Fraud or Revenue Assurance (RA) gateway user account name.								
DebitAccountNumber	String	R	19	Debit account or token to be processed.								
DebitAccountNumberIndicator	String	R	1	Source of the payment. Possible values: <table border="1" data-bbox="987 554 1419 758"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Debit card number</td> </tr> <tr> <td>2</td> <td>Temporary token</td> </tr> <tr> <td>3</td> <td>Permanent token</td> </tr> </tbody> </table>	Value	Definition	1	Debit card number	2	Temporary token	3	Permanent token
Value	Definition											
1	Debit card number											
2	Temporary token											
3	Permanent token											
DebitAmount	Currency	R	12	Amount of funds to be authorized (e.g., 12.34).								
DebitCVN	Numeric	C	4	Payment device security code (e.g., CVV2 for MC and Visa or CID for American Express). If DebitSource is set to PPD, this field is not required.								
DebitExpirationMMYY	Numeric	O	4	Payment device expiration date. The format is MMYY. This field is required in most payment situations.								

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
DebitSource	String	R	3	Possible values: <table border="1" data-bbox="984 352 1421 1129"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>PPD</td> <td>Payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, ChargeCVN is not required.</td> </tr> <tr> <td>TEL</td> <td>Payment has been taken over the telephone through a call center or interactive voice response (IVR) system.</td> </tr> <tr> <td>WEB</td> <td>Payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.</td> </tr> </tbody> </table>	Value	Definition	PPD	Payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, ChargeCVN is not required.	TEL	Payment has been taken over the telephone through a call center or interactive voice response (IVR) system.	WEB	Payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.
Value	Definition											
PPD	Payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, ChargeCVN is not required.											
TEL	Payment has been taken over the telephone through a call center or interactive voice response (IVR) system.											
WEB	Payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.											
Fingerprint	String	C	4000	Black box generated using the fingerprint solution as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use iovation® fingerprint solution. <b>Note:</b> Although the maximum length is 4000 characters for Fingerprint, the average length is less than 1000 characters.								
MerchantRoutingID	String	R	30	Key used to determine which merchant account to use.								
PartnerCustomerKey	String	O	64	Any unique data element used to identify the customer (e.g., billing account number).								
Password	String	R	64	API password used to authenticate with vSafe.								



Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
PaymentDescriptor	String	O	128	Text description of the payment for tracking purposes. It is used to identify the transaction when contacting vSafe support.
ReportingInformation	String	O	N/A	Attribute-based XML blob that contains information that the partner wishes to report on for the specific payment. The information is passed through for reporting and PRT search functionality and does not affect payment processing. This field is not supported for vGuaranteed services.
RiskInformation	String	C	N/A	XML string that describes risk-related information. Required for vGuaranteed services; optional for non-vGuaranteed services.
StoreCard	Boolean	O	1	Set to true if vSafe should store the payment account number (PAN) and return a permanent token. False is the default value.
TransactionID	String	R	36	A partner-generated ID used to track the status of this request.
WebSessionID	String	C	128	WebSessionID generated for device fingerprinting as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use ThreatMetrix® fingerprint solution. Use GetSessionTags to generate the WebSessionID for the current transaction.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 12 includes the vGuaranteed™ DebitSale API response parameters.

**Table 12. DebitSale API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition				
AcquirerApprovalCode	String	C	50	Unique approval code returned by the acquirer on approved transactions. This field is not returned for vGuaranteed services.				
AcquirerAVSResponseCode	String	C	6	Address verification response code returned from acquirer. This field is not returned for vGuaranteed services.				
AcquirerCVNResponseCode	String	C	6	CVN response code returned from acquirer. This field is not returned for vGuaranteed services.				
AcquirerResponseCode	String	C	3	Acquirer response code if available. This field is not returned for vGuaranteed services.				
AcquirerResponseCodeText	String	C	255	Description of acquirer response code, if available. This field is not returned for vGuaranteed services.				
AuthResultCode	Integer	C	1	Specifies additional detail about a decline. Only returned for non-sufficient funds (NSF). Possible value: <table border="1" data-bbox="950 1199 1421 1291"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Non-sufficient funds.</td> </tr> </tbody> </table>	Value	Definition	1	Non-sufficient funds.
Value	Definition							
1	Non-sufficient funds.							

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																												
AVSResultCode	Integer	C	2	<p>vSafe-translated response from the acquirer Address Verification Service (AVS). This response is not returned with the vGuaranteed services. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>AVS not performed.</td> </tr> <tr> <td>6</td> <td>No address supplied.</td> </tr> <tr> <td>7</td> <td>AVS data invalid.</td> </tr> <tr> <td>8</td> <td>Foreign address match.</td> </tr> <tr> <td>9</td> <td>Foreign address mismatch.</td> </tr> <tr> <td>10</td> <td>AVS not available.</td> </tr> <tr> <td>11</td> <td>AVS postal code and locale match.</td> </tr> <tr> <td>12</td> <td>AVS locale match.</td> </tr> <tr> <td>13</td> <td>AVS postal code match.</td> </tr> <tr> <td>14</td> <td>AVS not matched.</td> </tr> <tr> <td>16</td> <td>Foreign issuer AVS not available.</td> </tr> <tr> <td>24</td> <td>AVS system unavailable.</td> </tr> <tr> <td>39</td> <td>AVS partial match.</td> </tr> </tbody> </table>	Value	Definition	5	AVS not performed.	6	No address supplied.	7	AVS data invalid.	8	Foreign address match.	9	Foreign address mismatch.	10	AVS not available.	11	AVS postal code and locale match.	12	AVS locale match.	13	AVS postal code match.	14	AVS not matched.	16	Foreign issuer AVS not available.	24	AVS system unavailable.	39	AVS partial match.
Value	Definition																															
5	AVS not performed.																															
6	No address supplied.																															
7	AVS data invalid.																															
8	Foreign address match.																															
9	Foreign address mismatch.																															
10	AVS not available.																															
11	AVS postal code and locale match.																															
12	AVS locale match.																															
13	AVS postal code match.																															
14	AVS not matched.																															
16	Foreign issuer AVS not available.																															
24	AVS system unavailable.																															
39	AVS partial match.																															

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																
CVNResultCode	Integer	C	2	<p>vSafe-translated response from the acquirer on the card verification number (CVN) response. This response is not returned with vGuaranteed services. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>CVN invalid.</td> </tr> <tr> <td>17</td> <td>CVN match.</td> </tr> <tr> <td>19</td> <td>CVN not matched.</td> </tr> <tr> <td>20</td> <td>CVN check not processed.</td> </tr> <tr> <td>22</td> <td>CVN should be available (was not supplied).</td> </tr> <tr> <td>23</td> <td>CVN not supported by issuer.</td> </tr> <tr> <td>45</td> <td>CVN not sent.</td> </tr> </tbody> </table>	Value	Definition	15	CVN invalid.	17	CVN match.	19	CVN not matched.	20	CVN check not processed.	22	CVN should be available (was not supplied).	23	CVN not supported by issuer.	45	CVN not sent.
Value	Definition																			
15	CVN invalid.																			
17	CVN match.																			
19	CVN not matched.																			
20	CVN check not processed.																			
22	CVN should be available (was not supplied).																			
23	CVN not supported by issuer.																			
45	CVN not sent.																			
DebitAccountFirst6	Integer	R	6	First six digits of the payment device used to process the transaction.																
DebitAccountLast4	Integer	R	4	Last four digits of the payment device used to process the transaction.																
DebitPermanentToken	String	C	19	Contains the permanent token if StoreCard flag is set to true.																
PartnerCustomerKey	String	O	64	Any unique data element used to identify the customer (e.g., billing account number).																
PartnerDenialReasonCode	Integer	C	4	Fraud-returned business rule reason code that denied the transaction. This field is not returned for vGuaranteed services.																
PaymentAcquirerName	String	R	64	Name of the acquirer that took the payment.																

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
PaymentDeviceTypeCD	Integer	R	2	<p>Indicates whether the charge card is a signature card (known signature type) or a non-signature card. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>American Express</td> </tr> <tr> <td>4</td> <td>Visa</td> </tr> <tr> <td>5</td> <td>MasterCard</td> </tr> <tr> <td>6</td> <td>Discover</td> </tr> <tr> <td>7</td> <td>Diners Club</td> </tr> <tr> <td>98</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Definition	3	American Express	4	Visa	5	MasterCard	6	Discover	7	Diners Club	98	Unknown
Value	Definition																	
3	American Express																	
4	Visa																	
5	MasterCard																	
6	Discover																	
7	Diners Club																	
98	Unknown																	
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.														
PaymentStatus	Integer	R	3	<p>Indicates the result of the authorization request. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bank denied.</td> </tr> <tr> <td>3</td> <td>vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.</td> </tr> <tr> <td>6</td> <td>Authorization communication failure. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.</td> </tr> <tr> <td>10</td> <td>Successful payment.</td> </tr> <tr> <td>13</td> <td>Business rules denied. This value is not returned for vGuaranteed services.</td> </tr> </tbody> </table>	Value	Definition	1	Bank denied.	3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.	6	Authorization communication failure. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.	10	Successful payment.	13	Business rules denied. This value is not returned for vGuaranteed services.		
Value	Definition																	
1	Bank denied.																	
3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.																	
6	Authorization communication failure. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.																	
10	Successful payment.																	
13	Business rules denied. This value is not returned for vGuaranteed services.																	

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. <table border="1" data-bbox="950 436 1425 583"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Error</td> </tr> </tbody> </table> Possible values: See Response Code Messages.	Value	Definition	0	Success	Non-zero	Error
Value	Definition									
0	Success									
Non-zero	Error									
ResponseText	String	C	1024	For non-zero ResponseCode, this will be a description of the error that occurred. See Response Code Messages.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 13 provides a list of response codes and suggested error messages.

**Table 13. DebitSale API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message, which could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.

Response Code	Response Text	Suggested Customer Message	Notes
510	Parameter [name] is required.	N/A	Caused by an empty required field. Check your integration parameters that fill these fields.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	General type-mismatch error. Check your required fields to be sure they are being populated correctly.
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty field. Check the integration parameters that fill these fields.
514	Parameter [name] is invalid. Valid values are [valid values].	Please select a correct value.	Input value must match one of the multiple-choice values indicated.
521	Parameter [name] is not a valid credit card number.	Please check your card information.	Occurs when the payment account number (PAN) has a typographical error or is not on the approved issuer list.
1001	Login failed.	System not available. Please try again later.	This indicates that your authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Invalid credit card length.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1003	Credit card fails Mod-10 check.	Please re-type the credit card number.	Mod-10 is a basic payment account number (PAN) numeric check to see if it meets the minimum rules for being a valid number. Occurs when the PAN has been mistyped.
1004	No acquirer available.	N/A	An acquirer is required to complete this transaction. If the problem persists, contact vSafe support.
1005	Partner not active.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.
1006	Invalid charge account number token.	N/A	Caused by passing an invalid token to the API.

Response Code	Response Text	Suggested Customer Message	Notes
1012	Invalid debit amount. Must be greater than zero.	N/A	Negative and zero values are not allowed.
1015	Debit account not debit network routable.	N/A	The card account number is not routable down the debit network. Try calling the ChargeSale API to process the payment or ChargeGetPaymentDeviceInfo API to check routing options.
1016	Provide card holder name and complete address.	N/A	The full customer information and address must be provided.

## GetSessionTags

This API call returns the WebSessionID and OrgID from the vSafe™ service as part of the fingerprint requirements for processing Web transactions, and it returns the customer's Web fingerprint metadata for use in fraud detection. This is accomplished through a JavaScript library that runs in the customer's Web browser.

## Request Parameters

Table 14 includes the vGuaranteed™ GetSessionTags API request parameters.

**Table 14. GetSessionTags API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
Password	String	R	64	API password used to authenticate with vSafe.
TransactionID	String	R	36	Partner-generated ID used to track the status of this request.

<sup>1</sup>R/O/C: Required/Optional/Conditional



## Response Parameters

Table 15 includes the vGuaranteed™ GetSessionTags API response parameters.

**Table 15. GetSessionTags API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
OrgID	String	R	32	Value must be embedded in the HTML tags with the WebSessionID.						
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="885 674 1421 842"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table>	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.						
WebSessionID	String	R	128	Value must be embedded in the HTML tags with the OrgID.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

## ReversePayment

This API call refunds a specified amount to the payment device. A reversed payment occurs if the transaction has been transmitted to the issuing bank for settlement.

## Request Parameters

Table 16 includes the vGuaranteed™ ReversePayment API request parameters.

**Table 16. ReversePayment API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
ChargeAccountNumber	String	C	19	Payment account number (PAN) or token of the payment device to be authorized. Either the ChargeAccountNumber and the ChargeAccountNumberIndicator or the PaymentID must be

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
				included in the request.								
ChargeAccountNumberIndicator	Integer	C	1	Type of device being passed to the API. Possible values: <table border="1" data-bbox="1015 430 1421 640"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Credit card number</td> </tr> <tr> <td>2</td> <td>Temporary token</td> </tr> <tr> <td>3</td> <td>Permanent token</td> </tr> </tbody> </table>	Value	Definition	1	Credit card number	2	Temporary token	3	Permanent token
Value	Definition											
1	Credit card number											
2	Temporary token											
3	Permanent token											
ChargeExpirationMMYY	Numeric	C	4	Payment device expiration date. The format is MMYYY. This field is required if the ChargeAccountNumber is provided.								
MerchantRoutingID	String	C	20	Key used to determine which merchant account to use.								
PartnerCustomerKey	String	O	64	Any unique data element used for identifying customers (e.g., billing account number).								
Password	String	R	64	API password used to authenticate with vSafe.								
PaymentID	String	C	12	vSafe-generated ID used to track the transaction. Either the ChargeAccountNumber and the ChargeAccountNumberIndicator or the PaymentID must be included in the request.								
RefundAmount	Currency	R	12	Amount to be authorized for refund.								
ReportingInformation	String	O	N/A	Attribute-based XML blob that contains information that the partner wishes to report on for the specific payment. The information is passed through for reporting and PRT search functionality and does not affect payment processing. This field is not supported for vGuaranteed services.								
TransactionID	String	R	36	Partner-generated ID used to track the status of this request.								

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 17 includes the vGuaranteed™ ReversePayment API response parameters.

**Table 17. ReversePayment API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition										
AvailableRefundAmount	Currency	C	12	Remaining amount available for refund after this call has successfully completed. This field will not be presented for a non-Vesta refund.										
PartnerCustomerKey	String	C	64	Any unique data element used for identifying customers (e.g., billing account number).										
PaymentAcquirerName	String	C	64	Name of the acquirer that took the payment.										
PaymentID	String	C	12	vSafe-generated ID used to track the transaction.										
PaymentStatus	Integer	R	3	Indicates the success of a void attempt. Possible values: <table border="1" data-bbox="922 978 1421 1373"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Void or refund was rejected by the acquirer.</td> </tr> <tr> <td>4</td> <td>Authorization was successfully voided.</td> </tr> <tr> <td>6</td> <td>Authorization communication failure.</td> </tr> <tr> <td>10</td> <td>Void was successfully processed.</td> </tr> </tbody> </table>	Value	Definition	1	Void or refund was rejected by the acquirer.	4	Authorization was successfully voided.	6	Authorization communication failure.	10	Void was successfully processed.
Value	Definition													
1	Void or refund was rejected by the acquirer.													
4	Authorization was successfully voided.													
6	Authorization communication failure.													
10	Void was successfully processed.													
ProxiedMessageName	String	R	255	Name of the API call.										
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="922 1526 1421 1677"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure				
Value	Definition													
0	Success													
Non-zero	Failure													
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.										

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
ReversalAction	Integer	R	1	Indicates the action that occurred on the reversal. <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Void</td> </tr> <tr> <td>2</td> <td>Refund</td> </tr> <tr> <td>3</td> <td>Auth hold reversal</td> </tr> </tbody> </table>	Value	Definition	1	Void	2	Refund	3	Auth hold reversal
Value	Definition											
1	Void											
2	Refund											
3	Auth hold reversal											

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 18 provides a list of response codes and suggested error messages.

**Table 18. ReversePayment API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	Please enter your card information.	Caused by an empty required field. Check the integration parameters.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.

Response Code	Response Text	Suggested Customer Message	Notes
1002	Payment not found.	N/A	Indicates a problem in the PaymentID field. Validate that the correct PaymentID has been submitted.
1003	Refunds are not allowed for this partner.	We were unable to process this transaction. Please contact customer service.	Partner may not be authorized to perform reversals or refunds. If the problem persists, contact vSafe support.
1004	Payment already voided.	The payment has been voided in a previous transaction.	A previously voided transaction cannot be reversed or voided again.
1005	Partner not active.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.
1009	No acquirer available.	We are unable to process this transaction. Please try again later.	Contact vSafe support.
1011	Refund amount exceeds the amount of the original transaction that is available for refund.	N/A	Indicates an implementation issue. A reversal, can only be applied against the original transaction amount.
1012	Invalid refund amount. Must be greater than zero.	N/A	Negative and zero values are not allowed.
1014	Cannot reverse a card validation transaction.	N/A	Reversals are not allowed on transactions placed using ValidateChargeAccount.
1015	Unable to refund an incomplete payment.	N/A	Reversals are not allowed on transactions in a pending status.
1016	Unable to refund a non-charge transaction. (e.g., refunds, chargebacks, voids, validations).	N/A	Partner must reverse against the original PaymentID.
1017	Cannot use both charge account number and payment ID to process refund.	N/A	Both charge account number and payment ID were provided. When providing reference to previous payment, supply either charge account number or payment device ID.

Response Code	Response Text	Suggested Customer Message	Notes
1018	Partner not configured to process non-Vesta payments.	N/A	Partner not configured to process non-Vesta payments.
1019	Need charge account number or payment ID to process refund.	N/A	Neither charge account number nor payment ID were provided. When providing reference to previous payment, supply either charge account number or payment device ID.
1020	Invalid credit card length.	N/A	When providing the account number, provide the correct length for the card type. Do not provide the payment ID in the Account Number field.
1021	Credit card failed Mod-10 check.	N/A	An invalid account number was passed. Check the account number, and call ReversePayment API again. Do not provide the payment ID in the Account Number field.

# Knowledge-Based Authentication API Calls

The following vSafe™ API calls use knowledge-based authentication (KBA) to verify a cardholder's identity.

## ChallengeQuestionAnswer

This API call submits a cardholder's answer after calling the ChallengeQuestionBegin API or the ChallengeQuestionAnswer API. ChallengeQuestionAnswer is intended for repeated use on a single transaction.

Each time ChallengeQuestionAnswer is called, vSafe™ collects the answer from the previous question and provides another challenge question with multiple-choice answers. When the response contains a PaymentStatus code, the challenge session has completed, and the response code specifies the outcome. If the cardholder successfully completes the challenge, the transaction is either authorized (if it was pended from ChargeAuthorize) or processed (if it was pended from ChargeSale).

## Request Parameters

Table 19 includes the vGuaranteed™ ChallengeQuestionAnswer API request parameters.

**Table 19. ChallengeQuestionAnswer API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
AnswerNumber	Integer	R	2	The answer number chosen by the customer for the previous challenge question. For Answer1, use 1; for Answer2, use 2; etc.
Password	String	R	64	API password used to authenticate with vSafe.
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.
Type	String	R	40	The identifier of the type of question being asked (e.g., street number). This identifier is used in ChallengeQuestionAnswer to track the question that was asked and the answer selected by the customer.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 20 includes the vGuaranteed™ ChallengeQuestionAnswer API response parameters.

**Table 20. ChallengeQuestionAnswer API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
ActionCode	Integer	C	1	Indicates the next action to take. Returned only after completion of KBA. Possible values: <table border="1" data-bbox="878 575 1419 1026"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Continue with challenge questions.</td> </tr> <tr> <td>2</td> <td>The challenge session has unexpectedly quit, and the payment state has changed from pending to cancelled. This is an unusual condition that can occur due to communications issues. When this happens, run a new transaction using ChargeSale or ChargeAuthorize.</td> </tr> </tbody> </table>	Value	Definition	0	Continue with challenge questions.	2	The challenge session has unexpectedly quit, and the payment state has changed from pending to cancelled. This is an unusual condition that can occur due to communications issues. When this happens, run a new transaction using ChargeSale or ChargeAuthorize.
Value	Definition									
0	Continue with challenge questions.									
2	The challenge session has unexpectedly quit, and the payment state has changed from pending to cancelled. This is an unusual condition that can occur due to communications issues. When this happens, run a new transaction using ChargeSale or ChargeAuthorize.									
Answer1	String	C	40	One of the multiple choice answers for the question in the Prompt field.						
Answer2	String	C	40	One of the multiple choice answers for the question in the Prompt field.						
Answer3	String	C	40	One of the multiple choice answers for the question in the Prompt field.						
Answer4	String	C	40	One of the multiple choice answers for the question in the Prompt field.						
Answer5	String	C	40	One of the multiple choice answers for the question in the Prompt field.						
PaymentID	String	C	12	vSafe-generated ID used to track the transaction after completing KBA.						



Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition										
PaymentStatus	Integer	C	3	<p>Indicates that the challenge session has ended and provides the outcome status. This value is returned when a payment decision has been determined. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>vSafe denied. This can occur if vSafe has determined that this transaction is too risky to process, or the customer is not reliable.</td> </tr> <tr> <td>4</td> <td>The challenge session has unexpectedly quit. This is an unusual condition that can occur due to communications issues. The payment state has been cancelled.</td> </tr> <tr> <td>5</td> <td>Authorized. This occurs if the transaction was pended from ChargeAuthorize.</td> </tr> <tr> <td>10</td> <td>Successful payment. This occurs if the transaction was pended from ChargeSale.</td> </tr> </tbody> </table>	Value	Definition	3	vSafe denied. This can occur if vSafe has determined that this transaction is too risky to process, or the customer is not reliable.	4	The challenge session has unexpectedly quit. This is an unusual condition that can occur due to communications issues. The payment state has been cancelled.	5	Authorized. This occurs if the transaction was pended from ChargeAuthorize.	10	Successful payment. This occurs if the transaction was pended from ChargeSale.
Value	Definition													
3	vSafe denied. This can occur if vSafe has determined that this transaction is too risky to process, or the customer is not reliable.													
4	The challenge session has unexpectedly quit. This is an unusual condition that can occur due to communications issues. The payment state has been cancelled.													
5	Authorized. This occurs if the transaction was pended from ChargeAuthorize.													
10	Successful payment. This occurs if the transaction was pended from ChargeSale.													
Prompt	String	C	255	The challenge question associated with the multiple choice answers.										
ProxiedMessageName	String	R	255	Name of the API call.										
ResponseCode	Integer	R	4	<p>Indicates success or failure in processing the API call. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> <p>See Response Code Messages for non-zero values.</p>	Value	Definition	0	Success	Non-zero	Failure				
Value	Definition													
0	Success													
Non-zero	Failure													
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.										

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
Type	String	C	40	The identifier of the type of question being asked (e.g., street number). This identifier is used in ChallengeQuestionAnswer to track the question that was asked and the answer selected by the customer.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the PaymentStatus response parameter does not exist, verify the ActionCode response value and perform the appropriate action. If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 21 provides a list of response codes and suggested error messages.

**Table 21. ChallengeQuestionAnswer API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Payment not found.	N/A	Indicates a problem in the PaymentID field. Validate that the correct PaymentID has been submitted.

Response Code	Response Text	Suggested Customer Message	Notes
1003	Payment is not in a pended state.	N/A	Check the PaymentID being sent or if the pended state was resolved in a previous transaction.
1004	Type not valid for this PaymentID.	N/A	Check the PaymentID being sent or if the pended state was resolved in a previous transaction.
1005	Unable to confirm payment.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.

## ChallengeQuestionBegin

This API call collects additional information from the customer for identification. After it has been called, this API will return either the first question to ask the customer or a request for more information because the customer could not be located. When you receive PaymentStatus of 2, the transaction has been pended for more information. If the customer cannot be found, the transaction will be declined. If the customer is found, present the first question, capture the response, and then respond with ChallengeQuestionAnswer.

## Request Parameters

Table 22 includes the vGuaranteed™ ChallengeQuestionBegin API request parameters.

Table 22. ChallengeQuestionBegin API Request Parameters

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
DayOfBirth	String	O	2	The customer's birthday day-of-the-month in DD format.
Last4SSN	String	O	4	Last four digits of the customer's Social Security number.
MonthOfBirth	String	O	2	Customer's birthday month in MM format.
Password	String	R	64	API password used to authenticate with vSafe.
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.
YearOfBirth	String	O	4	Customer's birthday year in YYYY format.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 23 includes the vGuaranteed™ ChallengeQuestionBegin API response parameters.

**Table 23. ChallengeQuestionBegin API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition												
ActionCode	Integer	R	1	Indicates the next action to take. Possible values: <table border="1" data-bbox="885 550 1409 1165"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Customer found. Begin KBA questions.</td> </tr> <tr> <td>1</td> <td>Please answer current question.</td> </tr> <tr> <td>2</td> <td>Customer not found after final attempt.</td> </tr> <tr> <td>3</td> <td>No exact customer match found. Please try again, and include the customer's birthday (birth date).</td> </tr> <tr> <td>4</td> <td>No exact customer match found. Please try again, and include the last four digits of the customer's Social Security number.</td> </tr> </tbody> </table>	Value	Definition	0	Customer found. Begin KBA questions.	1	Please answer current question.	2	Customer not found after final attempt.	3	No exact customer match found. Please try again, and include the customer's birthday (birth date).	4	No exact customer match found. Please try again, and include the last four digits of the customer's Social Security number.
Value	Definition															
0	Customer found. Begin KBA questions.															
1	Please answer current question.															
2	Customer not found after final attempt.															
3	No exact customer match found. Please try again, and include the customer's birthday (birth date).															
4	No exact customer match found. Please try again, and include the last four digits of the customer's Social Security number.															
Answer1	String	C	40	One of the multiple choice answers for the question in the Prompt field.												
Answer2	String	C	40	One of the multiple choice answers for the question in the Prompt field.												
Answer3	String	C	40	One of the multiple choice answers for the question in the Prompt field.												
Answer4	String	C	40	One of the multiple choice answers for the question in the Prompt field.												
Answer5	String	C	40	One of the multiple choice answers for the question in the Prompt field.												
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.												

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
PaymentStatus	Integer	C	3	If the service is unavailable, the following status will be returned: <table border="1" data-bbox="885 388 1409 583"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>System is unavailable. The transaction has been cancelled. Resubmit the transaction.</td> </tr> </tbody> </table>	Value	Definition	4	System is unavailable. The transaction has been cancelled. Resubmit the transaction.		
Value	Definition									
4	System is unavailable. The transaction has been cancelled. Resubmit the transaction.									
Prompt	String	C	255	The challenge question associated with the multiple choice answers.						
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="885 814 1409 966"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.						
Type	String	C	40	The identifier of the type of question being asked (e.g., street number). This identifier is used in ChallengeQuestionAnswer to track the question that was asked and the answer selected by the customer.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the PaymentStatus response parameter does not exist, verify theActionCode response value and preform the appropriate action. If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 24 provides a list of response codes and suggested error messages.

**Table 24. ChallengeQuestionBegin API Response Codes**

<b>Response Code</b>	<b>Response Text</b>	<b>Suggested Customer Message</b>	<b>Notes</b>
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Payment not found.	N/A	Indicates a problem in the PaymentID field. Validate that the correct PaymentID has been submitted.
1003	Payment is not in a pended state.	N/A	Check the PaymentID being sent or if the pended state was resolved in a previous transaction.

# Token API Calls

Token API calls create tokens from payment account numbers (PANs) and validate payment devices.

## ChargeAccountToTemporaryToken

This API call exchanges a payment card PAN for a temporary token. This API call is only used the vSafe™ PCI JavaScript library is not available to intercept the PAN and provide a temporary token or when you intend to manage PAN data collection.

**Note:** Handling credit card numbers affects your PCI scope.

A temporary token expires after a predetermined period of time. The expiration time is configured in the partner onboarding process and can be set for a maximum of seven days.

### Request Parameters

Table 25 includes the vGuaranteed™ ChargeAccountToTemporaryToken API request parameters.

**Table 25. ChargeAccountToTemporaryToken API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe. No API password is required for this call.
ChargeAccountNumber	Mod-10	R	19	Payment device payment account number (PAN) used to generate a temporary token.

<sup>1</sup>R/O/C: Required/Optional/Conditional

### Response Parameters

Table 26 includes the vGuaranteed™ ChargeAccountToTemporaryToken API response parameters.

**Table 26. ChargeAccountToTemporaryToken API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
ChargeAccountNumberToken	String	R	19	The token for the given credit card or debit card number. The token will match the length of the initial card passed.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
PaymentDeviceLast4	String	R	4	Last four digits of the payment account number (PAN). This helps to identify the payment card without affecting the partner's PCI scope.														
PaymentDeviceTypeCD	Integer	R	2	Indicates whether the charge card is a signature card (known signature type) or a non-signature card. Possible values: <table border="1" data-bbox="980 604 1409 974"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>American Express</td> </tr> <tr> <td>4</td> <td>Visa</td> </tr> <tr> <td>5</td> <td>MasterCard</td> </tr> <tr> <td>6</td> <td>Discover</td> </tr> <tr> <td>7</td> <td>Diners Club</td> </tr> <tr> <td>98</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Definition	3	American Express	4	Visa	5	MasterCard	6	Discover	7	Diners Club	98	Unknown
Value	Definition																	
3	American Express																	
4	Visa																	
5	MasterCard																	
6	Discover																	
7	Diners Club																	
98	Unknown																	
ProxiedMessageName	String	R	255	Name of the API call.														
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. <table border="1" data-bbox="980 1121 1409 1272"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure								
Value	Definition																	
0	Success																	
Non-zero	Failure																	
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.														

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors. Verify that the ChargeAccountNumberToken response parameter is returned. If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a



system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 27 provides a list of response codes and suggested error messages.

**Table 27. ChargeAccountToTemporaryToken API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	N/A	Caused by an empty required field. Check the integration parameters that fill these fields.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	A general type-mismatch error. Check the required fields to be sure they are being populated correctly.
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty field. Check the integration parameters that fill these fields.
514	Parameter [name] is invalid. Valid values are [valid values].	N/A	Caused by passing an invalid value for an API with an enumerated set of values.
521	Parameter [name] is not a valid credit card number.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Invalid credit card length.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.

Response Code	Response Text	Suggested Customer Message	Notes
1003	Credit card fails Mod-10 check.	Please re-type the credit card number.	Mod-10 is a basic card number check to see if it meets the minimum rules for being a valid number. Occurs when the credit card number has been mistyped.
1004	Partner [PartnerCD] is not set up.	N/A	Partner code has not been set up. Contact vSafe support.

## ValidateChargeAccount

This API call is used to verify that a payment card is valid and to obtain a permanent token. To create a permanent token for recurring charges or future use, call ValidateChargeAccount and set the StoreCard flag to true.

### Request Parameters

Table 28 includes the vGuaranteed™ ValidateChargeAccount API request parameters.

**Table 28. ValidateChargeAccount API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
CardHolderAddressLine1	String	C	30	Cardholder's address, line 1. Required for vGuaranteed services.
CardHolderAddressLine2	String	O	30	Cardholder's address, line 2.
CardHolderCity	String	C	30	Cardholder's city. Required for vGuaranteed services.
CardHolderCountryCode	String	C	2	Cardholder's two-character country code. Use ISO-3166 official country codes. Required for vGuaranteed services.
CardHolderFirstName	String	C	20	Cardholder's first name. Required for vGuaranteed services.
CardHolderLastName	String	C	20	Cardholder's last name.
CardHolderPostalCode	String	C	12	Cardholder's ZIP or postal code. Required for vGuaranteed services.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
CardHolderRegion	String	C	30	Cardholder's region name. For U.S. addresses, use the two-character state code. Required for vGuaranteed services.								
ChargeAccountNumber	String	O	19	Payment account number (PAN) or token of the payment device to be authorized.								
ChargeAccountNumberIndicator	Integer	O	1	Type of device being passed to the API. Possible values: <table border="1" data-bbox="1003 655 1409 861"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Credit card number</td> </tr> <tr> <td>2</td> <td>Temporary token</td> </tr> <tr> <td>3</td> <td>Permanent token</td> </tr> </tbody> </table>	Value	Definition	1	Credit card number	2	Temporary token	3	Permanent token
Value	Definition											
1	Credit card number											
2	Temporary token											
3	Permanent token											
ChargeCVN	Numeric	C	4	Payment device security code (e.g., CVV2 for MC and Visa or CID for American Express). If ChargeSource is set to PPD, this field is not required.								
ChargeExpirationMMYY	Numeric	C	4	Payment device expiration date. The format is MMYY. Required for vGuaranteed services.								

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition	
ChargeSource	String	R	3	Specifies the source of the payment. Possible values:	
				<b>Value</b>	<b>Definition</b>
				PPD	Use this to specify that the payment has been prearranged. This is used when the payment device has been validated or already had a successful charge against it. When this option is used, the ChargeCVN is not required.
				TEL	Use this to specify that the payment has been taken over the telephone through a call center or interactive voice response (IVR) system.
WEB	Use this to specify that the payment has been taken over the Web, mobile Web, native mobile application, or hybrid-mobile application.				
Fingerprint	String	C	4000	<p>Black box generated using the fingerprint solution as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use iovation® fingerprint solution.</p> <p><b>Note:</b> Although the maximum length is 4000 characters for Fingerprint, the average length is less than 1000 characters.</p>	

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
MerchantRoutingID	String	C	20	Key used to determine which merchant account to use. This field is required for partners with more than one active merchant routing configuration. It is optional for partners with one active merchant routing configuration.
PartnerCustomerKey	String	O	64	Any unique data element used for identifying customers (e.g., billing account number).
Password	String	R	64	API password used to authenticate with vSafe.
PaymentDescriptor	String	O	128	Text description of the payment for tracking purposes. It is used to identify the transaction when contacting vSafe support.
RiskInformation	String	C	N/A	Required for vGuaranteed services and optional for non-vGuaranteed services. This is an XML string that contains risk-related data. Contact your onboarding manager for details.
StoreCard	Boolean	O	1	Set to true if vSafe should store the payment account number (PAN) and return a permanent token. False is the default value.
TransactionID	String	R	36	Partner-generated ID used to track the status for this request.
WebSessionID	String	C	128	WebSessionID generated for device fingerprinting as part of ChargeSource=WEB transactions. Required for vGuaranteed services that use ThreatMetrix fingerprint solution. Use GetSessionTags to generate the WebSessionID for the current transaction.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 29 includes the vGuaranteed™ ValidateChargeAccount API response parameters.

**Table 29. ValidateChargeAccount API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition				
AcquirerAVSResponseCode	String	C	6	Unique approval code returned by the acquirer on approved transactions. This field is not returned for vGuaranteed services.				
AcquirerCVNResponseCode	String	C	6	Address verification response code returned from acquirer. This field is not returned for vGuaranteed services.				
AcquirerResponseCode	String	C	3	CVN response code returned from acquirer. This field is not returned for vGuaranteed services.				
AcquirerResponseCodeText	String	C	255	Acquirer response code if available. This field is not returned for vGuaranteed services.				
AuthResultCode	Integer	C	2	Only returned for non-sufficient funds (NSF). Occasionally, a bank will return a decline code for a zero-dollar transaction. Possible value: <table border="1" data-bbox="967 1115 1421 1377"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Non-sufficient funds (NSF). This may occur on a zero-dollar validation, depending on the bank's accounting rules.</td> </tr> </tbody> </table>	Value	Definition	1	Non-sufficient funds (NSF). This may occur on a zero-dollar validation, depending on the bank's accounting rules.
Value	Definition							
1	Non-sufficient funds (NSF). This may occur on a zero-dollar validation, depending on the bank's accounting rules.							
ChargeAccountFirst6	Numeric	R	6	First six digits of the payment device used to process the transaction.				
ChargeAccountLast4	Numeric	R	4	Last four digits of the payment device used to process the transaction.				
ChargePermanentToken	String	C	19	If StoreCard flag is set, this contains the permanent token.				
PartnerDenialReasonCode	Integer	C	4	Fraud-returned business rule reason code that denied the transaction. This field is not returned for vGuaranteed services.				

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
PartnerCustomerKey	String	O	64	Any unique data element used for identifying customers (e.g., billing account number).														
PaymentAcquirerName	String	R	64	Name of the acquirer that took the payment.														
PaymentDeviceTypeCD	Integer	R	2	Indicates whether the charge card is a signature card (known signature type) or a non-signature card. Possible values: <table border="1" data-bbox="967 655 1421 1024"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>American Express</td> </tr> <tr> <td>4</td> <td>Visa</td> </tr> <tr> <td>5</td> <td>MasterCard</td> </tr> <tr> <td>6</td> <td>Discover</td> </tr> <tr> <td>7</td> <td>Diners Club</td> </tr> <tr> <td>98</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Definition	3	American Express	4	Visa	5	MasterCard	6	Discover	7	Diners Club	98	Unknown
Value	Definition																	
3	American Express																	
4	Visa																	
5	MasterCard																	
6	Discover																	
7	Diners Club																	
98	Unknown																	
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.														

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition												
PaymentStatus	Integer	R	3	Result of the authorization request. Possible values: <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bank denied.</td> </tr> <tr> <td>3</td> <td>vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable. This will occur if fraud activity was detected.</td> </tr> <tr> <td>6</td> <td>Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.</td> </tr> <tr> <td>10</td> <td>Successful validation.</td> </tr> <tr> <td>13</td> <td>Business rules denied. This value is not returned for vGuaranteed services.</td> </tr> </tbody> </table>	Value	Definition	1	Bank denied.	3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable. This will occur if fraud activity was detected.	6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.	10	Successful validation.	13	Business rules denied. This value is not returned for vGuaranteed services.
Value	Definition															
1	Bank denied.															
3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable. This will occur if fraud activity was detected.															
6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.															
10	Successful validation.															
13	Business rules denied. This value is not returned for vGuaranteed services.															
ProxiedMessageName	String	R	255	Name of the API call.												
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure						
Value	Definition															
0	Success															
Non-zero	Failure															
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.												

<sup>1</sup>R/O/C: Required/Optional/Conditional



## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the validation may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 30 provides a list of response codes and suggested error messages.

**Table 30. ValidateChargeAccount API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	N/A	Caused by an empty required field.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	A general type-mismatch error. Check the required fields to be sure they are being populated correctly.
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty field. Check the integration parameters that fill these fields.
514	Parameter [name] is invalid. Valid values are [valid values].	N/A	Caused by passing an invalid value for an API with an enumerated set of values.

Response Code	Response Text	Suggested Customer Message	Notes
521	Parameter [name] is not a valid credit card number.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Invalid credit card length.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1003	Credit card fails Mod-10 check.	Please re-type the credit card number.	Mod-10 is a basic card number check to see if it meets the minimum rules for being a valid number. Occurs when the credit card number has been mistyped.
1004	No acquirer available.	N/A	An acquirer is required to complete this transaction. If the problem persists, contact vSafe support.
1005	Partner not active.	System not available. Please try again later.	Indicates a problem with the partner's vSafe account. Contact vSafe support.
1006	Invalid charge account number token.	N/A	Caused by passing an invalid token to the API.
1014	Account only eligible for signature debit transactions.	N/A	N/A
1016	Provide card holder name and complete address.	N/A	N/A

# Status API Calls

These API calls provide information about payment devices, transactions, and vSafe™ system availability.

## ChargeGetPaymentDeviceInfo

This API call takes a temporary token, a permanent token, the card number, or encrypted track data from a point-of-sale (POS) system and returns the following information about a payment device:

- Routability through the credit card networks
- Type of payment device
- CVN length

## Request Parameters

Table 31 includes the vGuaranteed™ ChargeGetPaymentDeviceInfo API request parameters.

**Table 31. ChargeGetPaymentDeviceInfo API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
AccountName	String	R	32	API username used to authenticate with vSafe.								
ChargeAccountNumber	String	C	19	Payment account number (PAN) or token of the payment device to be authorized. Provide either ChargeAccountNumber and ChargeAccountNumberIndicator or EncryptedPaymentData, EncryptionBlock, and EncryptionTarget.								
ChargeAccountNumberIndicator	Integer	C	1	Type of device being passed to the API. Possible values: <table border="1" data-bbox="1026 1560 1419 1764"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Credit card number</td> </tr> <tr> <td>2</td> <td>Temporary token</td> </tr> <tr> <td>3</td> <td>Permanent token</td> </tr> </tbody> </table>	Value	Definition	1	Credit card number	2	Temporary token	3	Permanent token
Value	Definition											
1	Credit card number											
2	Temporary token											
3	Permanent token											

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition								
EncryptedPaymentData	Complex	C	N/A	Dataset that holds encrypted payment data, such as payment account number (PAN), Track1, or Track2. Provide either ChargeAccountNumber and ChargeAccountNumberIndicator or EncryptedPaymentData, EncryptionBlock, and EncryptionTarget.								
	EncryptionBlock	String	C	999	This is the encrypted card data. String representation of the binary data.							
	EncryptionTarget	String	C	6	The type of data contained in the EncryptionBlock. <table border="1" data-bbox="1026 823 1421 1026"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Track1</td> <td>Track 1 data</td> </tr> <tr> <td>Track2</td> <td>Track 2 data</td> </tr> <tr> <td>PAN</td> <td>Card number</td> </tr> </tbody> </table>	Value	Definition	Track1	Track 1 data	Track2	Track 2 data	PAN
Value	Definition											
Track1	Track 1 data											
Track2	Track 2 data											
PAN	Card number											
MerchantRoutingID	String	R	30	Key used to determine which merchant account to use. This field is required for partners with more than one active merchant routing configuration. It is optional for partners with one active merchant routing configuration.								
Password	String	R	64	API password used to authenticate with vSafe.								

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 32 includes the vGuaranteed™ ChargeGetPaymentDeviceInfo API response parameters.

**Table 32. ChargeGetPaymentDeviceInfo API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
ChargeAccountFirst6	Integer	R	6	First six digits of the payment device used to process the transaction.

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition														
ChargeAccountLast4	Integer	R	4	Last four digits of the payment device used to process the transaction.														
IsCreditRoutable	Boolean	R	1	Indicates if the card can be processed through the credit card networks.														
IsDebitRoutable	Boolean	R	1	Indicates if the card can be processed through the debit card networks.														
IsNonSignatureDebit	Boolean	R	1	Indicates if the card is a non-signature debit card.														
IsPrepaidCard	Boolean	R	1	Indicates if the card is prepaid.														
IsSignatureDebit	Boolean	R	1	Indicates if the card is a signature debit card.														
PaymentDeviceCVNLength	Integer	R	4	Payment device CVN length (e.g., a four-digit length indicates an American Express card).														
PaymentDeviceTypeCD	Integer	R	2	Indicates whether the charge card is a signature card (known signature type) or a non-signature card. Possible values: <table border="1" data-bbox="979 1075 1421 1444"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>American Express</td> </tr> <tr> <td>4</td> <td>Visa</td> </tr> <tr> <td>5</td> <td>MasterCard</td> </tr> <tr> <td>6</td> <td>Discover</td> </tr> <tr> <td>7</td> <td>Diners Club</td> </tr> <tr> <td>98</td> <td>Unknown</td> </tr> </tbody> </table>	Value	Definition	3	American Express	4	Visa	5	MasterCard	6	Discover	7	Diners Club	98	Unknown
Value	Definition																	
3	American Express																	
4	Visa																	
5	MasterCard																	
6	Discover																	
7	Diners Club																	
98	Unknown																	
PaymentDeviceTypeName	String	R	30	Payment device type name.														
ProxiedMessageName	String	R	255	Name of the API call.														

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="980 422 1421 569"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors. If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 33 provides a list of response codes and suggested error messages.

**Table 33. ChargeGetPaymentDeviceInfo API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.

Response Code	Response Text	Suggested Customer Message	Notes
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Invalid credit card length.	Please check your credit card information.	Credit card numbers must contain 13 to 19 digits.
1003	Credit card fails Mod-10 check.	Please check your credit card information.	The credit card number provided does not pass basic length and format validation.
1004	No acquirer available.	N/A	An acquirer is required to complete this transaction. If the problem persists, contact vSafe support.
1006	Invalid charge account number token.	N/A	Caused by passing an invalid token to the API.

## GetPaymentStatus

This API call provides the status of a vSafe™ transaction. Payment status can be obtained using the PartnerTransactionID or PaymentID parameter.

### Request Parameters

Table 34 includes the vGuaranteed™ GetPaymentStatus API request parameters.

**Table 34. GetPaymentStatus API Request Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition
AccountName	String	R	32	API username used to authenticate with vSafe.
PartnerTransactionID	String	C	36	The partner-generated ID used to track the transaction. Provide either the PaymentID or the PartnerTransactionID in the request.
Password	String	R	64	API password used to authenticate with vSafe.
PaymentID	String	C	12	vSafe-generated ID used to track the transaction. Provide either the PaymentID or the PartnerTransactionID in the request.

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Parameters

Table 35 includes the vGuaranteed™ GetPaymentStatus API response parameters.

**Table 35. GetPaymentStatus API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition																				
Amount	String	R	12	The amount of the transaction.																				
PaymentID	String	R	12	vSafe-generated ID used to track the transaction.																				
PaymentStatus	Integer	R	3	<p>The result of the payment. Possible values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bank denied.</td> </tr> <tr> <td>2</td> <td>vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin.</td> </tr> <tr> <td>3</td> <td>vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.</td> </tr> <tr> <td>4</td> <td>Transaction cancelled. This can occur if a KBA session (from ChallengeQuestionBegin or ChallengeQuestionAnswer) was cancelled before it was completed.</td> </tr> <tr> <td>5</td> <td>Authorized.</td> </tr> <tr> <td>6</td> <td>Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.</td> </tr> <tr> <td>10</td> <td>Successful.</td> </tr> <tr> <td>13</td> <td>Business rules denied. This value is not returned for vGuaranteed services.</td> </tr> <tr> <td>16</td> <td>Transaction expired. This can occur when the authorization on a payment has expired. An authorization expires after a predetermined period of time. If this occurs, you can</td> </tr> </tbody> </table>	Value	Definition	1	Bank denied.	2	vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin.	3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.	4	Transaction cancelled. This can occur if a KBA session (from ChallengeQuestionBegin or ChallengeQuestionAnswer) was cancelled before it was completed.	5	Authorized.	6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.	10	Successful.	13	Business rules denied. This value is not returned for vGuaranteed services.	16	Transaction expired. This can occur when the authorization on a payment has expired. An authorization expires after a predetermined period of time. If this occurs, you can
Value	Definition																							
1	Bank denied.																							
2	vSafe pended. This can occur with vGuaranteed services. Authorize the transaction using ChallengeQuestionBegin.																							
3	vSafe denied. This can occur with vGuaranteed services. In this case, vSafe has determined that this transaction is too risky to process, or the customer is not reliable.																							
4	Transaction cancelled. This can occur if a KBA session (from ChallengeQuestionBegin or ChallengeQuestionAnswer) was cancelled before it was completed.																							
5	Authorized.																							
6	Authorization communication error. The transaction did not complete. Re-run the transaction. If the problem persists, contact vSafe support.																							
10	Successful.																							
13	Business rules denied. This value is not returned for vGuaranteed services.																							
16	Transaction expired. This can occur when the authorization on a payment has expired. An authorization expires after a predetermined period of time. If this occurs, you can																							



Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
				re-authorize the payment using ChargeAuthorize, or use ChargeSale to complete the transaction.						
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	4	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="857 575 1419 726"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table> See Response Code Messages for non-zero values.	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.						
TransactionID	String	R	36	The partner-generated ID.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

## Response Code Messages

Each API call returns a numeric response code. If the response code is zero, the API transaction completed successfully without errors; however, the status of the payment may not be complete (see PaymentStatus response parameter). If the response code is non-zero, an error message will be included with the response code.

**Note:** When non-zero response codes are returned, the response fields might not be returned correctly. Review the error messages associated with non-zero response codes and take appropriate steps to resolve the error conditions. Most of non-zero response codes indicate a system configuration or integration issue. Before production deployment, you should resolve these issues during the testing phase.

Table 36 provides a list of response codes and suggested error messages.

**Table 36. GetPaymentStatus API Response Codes**

Response Code	Response Text	Suggested Customer Message	Notes
0	Success.	Transaction completed.	Not an error condition.

Response Code	Response Text	Suggested Customer Message	Notes
1	General system failure.	System not available. Please try again later.	A low-level error message that could indicate a communication problem, a timing problem, an intermittent failure to contact an acquirer, or other condition not captured by the other response codes. If this response code is returned after repeated attempts, contact vSafe support.
510	Parameter [name] is required.	N/A	Caused by an empty required field. Check the integration parameters that fill these fields.
511	Parameter [name] exceeds max length of [value].	N/A	Required field has too many characters. Check that the input field length is less than or equal to the maximum length value specified for the parameter.
512	Parameter [name] is not a valid [value].	N/A	A general type-mismatch error. Check the required fields to be sure they are being populated correctly.
513	Parameter [name] cannot be undefined/null.	N/A	Caused by an empty required field. Check the integration parameters that fill these fields.
1001	Login failed.	N/A	Authentication with vSafe failed. Check your login credentials and try again, or contact vSafe support.
1002	Payment not found.	N/A	Indicates a problem in the PaymentID field. Validate that the correct PaymentID has been submitted.
1017	Provide value for either PaymentID or PartnerTransactionID.	N/A	Provide either the PaymentID or the PartnerTransactionID to retrieve a payment status.

# HeartBeat

This API call indicates whether or not the vSafe™ API is available. The HeartBeat API call does not require request parameters.

## Response Parameters

Table 37 includes the vGuaranteed™ Heartbeat API response parameters.

**Table 37. HeartBeat API Response Parameters**

Parameter	Type	R/O/C <sup>1</sup>	Max Length	Definition						
ProxiedMessageName	String	R	255	Name of the API call.						
ResponseCode	Integer	R	N/A	Indicates success or failure in processing the API call. Possible values: <table border="1" data-bbox="878 793 1421 940"> <thead> <tr> <th>Value</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Success</td> </tr> <tr> <td>Non-zero</td> <td>Failure</td> </tr> </tbody> </table>	Value	Definition	0	Success	Non-zero	Failure
Value	Definition									
0	Success									
Non-zero	Failure									
ResponseText	String	C	1024	Description of the error for non-zero response codes. See Response Code Messages for non-zero values.						

<sup>1</sup>R/O/C: Required/Optional/Conditional

# Appendix A: Related Documents

The following documents should be used in conjunction with the vSafe™ vGuaranteed™ API Specification document:

- vSafe™ v3.x vGuaranteed™ Integration Guide
- vSafe™ v3.x vGuaranteed™ API Use Cases
- vSafe™ v3.x vGuaranteed™ Risk Information
- vSafe™ v3.x vGuaranteed™ Fingerprint Solution