

Category			Http Status Response		Response Operation element					Log	
Action	Test #	Result	Code	Reason Phrase	Response Body contains	result	error.code	error.message	error.field	Type	Message
API REST Framework											
Find URL	ENV	Any of the following conditions: <ul style="list-style-type: none">API Context not foundAPI Context version not foundResource not found	404	Not Found	{ "timestamp": 1450289685875, "status": 404, "error": "Not Found", "message": "No message available", "path": "/user/2/accountholders/2/cards" }	N/A	N/A	N/A	N/A		
API metadata validation	11	"Content Type" is defined in an invalid value format	415	Unsupported Media Type	N/A	N/A	N/A	N/A	N/A		
	12	"Accept" is defined in an invalid value format	406	Not Acceptable	N/A	N/A	N/A	N/A	N/A		
	13	HTTP Method does not exist for Resource <ul style="list-style-type: none">applies to [GET, POST, PUT, PATCH, DELETE]	405	Method Not Allowed	Method Not Allowed	N/A	N/A	N/A	N/A		
	14	"Content Type" is in valid format but value is not application/json	415	Unsupported Media Type	N/A	N/A	N/A	N/A	N/A		
	15	"Accept" is in valid format but value is not application/json	406	Not Acceptable	N/A	N/A	N/A	N/A	N/A		
Exception Handling											
Any unhandled/unexpected error condition	NOT	This line item represents a catch-all error scenario for any condition that we did not plan for.	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1000	An unidentified exception has occurred.	(empty)		<i>*Should always be reported to development.</i>
	NOT	This line item represents the catching for any zuul exceptions that are created	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1025	An unidentified exception has occurred.	(empty)		<i>*Should always be reported to development.</i>
Required Service or data persistance unavailable	ENV	Database: dvh is unavailable or creates an unhandled exception condition	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1001	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	Service: userassociations is unavailable	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1010	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	Service: user-accounts is unavailable	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1005	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	OOS	Service: accountholder-features is unavailable	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1013	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	Internal API: /cs/api/paymentmethods/creditdebitcards is [communication exception, 5xx]	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1020	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	Internal API: /cs/api/accountloadorders/creditdebitcards is [communication exception, 5xx]	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1022	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	Cloudinary service is unavailable	500	Internal Server Error	<ul style="list-style-type: none">Operation - ResultOperation - ErrorsOperation with timestamps	ERROR	1023	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>

Required service is available but not producing expected result	ENV	Internal API: /cs/api/paymentmethods/creditdebitcards is returning 4xx series responses we did not explicitly handle or any other unexpected format in responses	500	Internal Server Error	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1019	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	Internal API: /cs/api/accountloadorders/creditdebitcards is 4xx series responses we did not explicitly handle or any other unexpected format in responses	500	Internal Server Error	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1021	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
	ENV	ICP services are failing to upload/request images from cloudinary even though service is available	500	Internal Server Error	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1024	An unidentified exception has occurred.	(empty)		<i>*DevOps should be monitoring for.</i>
Header requirements met and resolution where required											
Accept-Language	31	Accept-Language header is optional, but if included must meet valid format: <ul style="list-style-type: none">• invalid format for Language Tag {either region or sub-region}• invalid length for Language Tag {either region or sub-region(8chars)}• invalid format for "qvalue"	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1004	Request header Accept-Language is not in the expected format.	(empty)		
Request - Properly formatted											
URI parameter validation	41	A URI parameter is of an invalid data validation type <i>*Note: the purpose of this is to only validate that the data will not cause exceptions to additional data requests from services or data persistence</i>	404	Not Found	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1002	Resource URI parameter is unable to be processed.	(empty)		
Request Body malformed	42	Request Content Body malformed and does not represent proper JSON (specified Content Type); also includes <ul style="list-style-type: none">• Field value is not of the type assigned (ex. "numberField": abc)	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1018	Request body is malformed or value for a field is of the wrong data type.	(empty)		
URL Resolution for dynamic parts											
API Context Header fields do not resolve to known values	OOS	API Context Header value is of proper form but does not resolve; examples are: <ul style="list-style-type: none">- useContextId does not exist	404	Not Found	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	(See "Validation Error Codes" Request Header section)	(See "Validation Error Codes" Request Header section)	NULL		
URL Query Parameters support	51	Query parameters are included when URL does not support them for the selected action.	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1011	URL does not support query parameters.	NULL		
	52	Query Parameter Key is unidentifiable or unknown; this could be from <ul style="list-style-type: none">• Query parameter resolves to an unknown parameter• This would include query keys that have incorrect casing	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1006	URL query parameter(s) are not able to be identified.	NULL		

URL Query Parameters validation	53	Query Parameter Key is identifiable but the value assigned to the parameter is empty.	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1012	URL Query parameter is empty.	NULL		
	54	Query Parameter Key is identifiable but the value assigned to the parameter is not of the proper datatype; this could be from <ul style="list-style-type: none">• Query parameter is equates to a numerical value but alpha characters are passed or any equivalent as specified by the Query Parameter Key Type Validation	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	(See "Validation Error Codes" Non-Body Validation section)	(See "Validation Error Codes" Non-Body Validation section)	{parameter key name}		
	55	Query Parameter Key is identifiable but the value assigned does not have a match in the specified enumeration list <ul style="list-style-type: none">• This error is expected to only apply to parameter key tuypes that are validated as enum_*	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	2000	URL query parameter value does not match specified enumeration values.	{parameter key name}		
	56	Query Parameter Key is identifiable but is being used in conjunction with another query parameter key that is not allowed; this could be from <ul style="list-style-type: none">• example using a field defined as 'match_Date8601' in combination with a field defined as 'minRange_Date8601'	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1008	URL query parameter combination is not allowed.	{parameter key name #1}, {parameter key name #2}		
	57	Query Parameter Key is identifiable but it is used in the query parameters more times than we allow <ul style="list-style-type: none">• this would also include situations where 'match_Date8601' was used with another 'match_Date8601', unless explicitly stated that this parameter can be used multiple times	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1007	URL query parameter is included more times than is allowed.	{parameter key name}		
	58	Query Parameter Key is identifiable but is missing another dependent query parameter key; this could be from <ul style="list-style-type: none">• example: requesting a 'page' with including a 'pageSize'	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1009	URL query parameter is missing required accompanying parameter.	{parameter key name}		
Authorizations											
user associations	61	Required userAssociation does not exist in user_association table	404	Not Found	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1014	The required association between the user and the account holder is missing.	NULL		
	62	Required userAssociationStatus is not ACTIVE	403	Forbidden	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1015	The required association between the user and account holder must have a userAssociationStatus of ACTIVE.	NULL		
	63	Required accountHolderAssociationStatus is not ACTIVE	403	Forbidden	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1017	The required association between the user and account holder must have an accountHolderAssociationStatus of ACTIVE.	NULL		
feature state check	OOS	Feature is not enabled for URL and REST action	403	Forbidden	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1016	A feature for the request must be enabled.	NULL		
Request Body Validations											

Request Body	71	Request fails Data Validations (3xxx) <i>*Note: this includes situations where a required field was not included in the request.</i>	400	Bad Request	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps <i>*Note: possibility for multiple errors to be returned</i>	ERROR	(See "Validation Error Codes" Request Body section)	(See "Validation Error Codes" Request Body section)	{member field name that failed validation in a.b.c notation}		
	72	Request fails Business Rule validations (4xxx)	422	Unprocessable Entity	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	(See "Validation Error Codes" Business Rules section)	(See "Validation Error Codes" Business Rules section)	{member field name that failed validation in a.b.c notation}		
Find Resource											
URI Parameters Resolution	81	Specified resource parameter cannot be found within the specified API context. <i>*Note: this is intentionally listed after API context because that helps determine if the resource value is found</i>	404	Not Found	<ul style="list-style-type: none">• Operation - Result• Operation - Errors• Operation with timestamps	ERROR	1003	The requested resouce was not found.	{value}		
Process request to results											
Action Result	91	POST - successful Additions Error Matrix Test Notes: <ul style="list-style-type: none">• Request body contains extra fields	201	OK	<ul style="list-style-type: none">• Noun body• Operation - Result• Operation - Errors• Operation with timestamps	OK	0	OK	(empty)		
	92	[GET, PUT, PATCH, DELETE] - successful Additions Error Matrix Test Notes: <ul style="list-style-type: none">• [GET, DELETE] No "Content Type" is provided it will default to application/json• [PUT, PATCH] Request body contains extra fields <i>*Note: this also includes the scenario where my resulting collection is empty, in that case the outer array should exist as an empty array</i>	200	OK	<ul style="list-style-type: none">• Noun body• Operation - Result• Operation - Errors• Operation with timestamps	OK	0	OK	(empty)		
Action Result (alternatives)	93	PATCH only - Request body is empty <i>*Note: this will succeed but not changes will occur</i>	200	OK	<ul style="list-style-type: none">• Noun body• Operation - Result• Operation - Errors• Operation with timestamps	OK	0	OK	(empty)		
FUTURE {not used}											

Non-Body Validation			
Response Operation element		References	Log
Error Code	Error Message	Data Validation Types	Message
2000	(already used in api workflow errors)		
2001	URL Query Parameter is not a valid ISO 8601 date value.	Date8601	
2002	URL Query Parameter is not a valid number within the allowed range of [{minValue}..{maxValue}].	Number_MinInc1MaxInc200 Number_MinInc1MaxInc99999	
Request Body Validation			
Response Operation element		References	Log
Error Code	Error Message	Data Validation Types	Message
3000	A required request member field is improperly named, missing, or the field value is null.	(all fields)	
3001	Enumeration value is not found.	String#_Enumeration	
3002	String value has an allowed maximum length of {maxLength}.	String# Pattern#_Numeric	
3003	String value has an allowed minimum length of {minLength}.	Pattern#Min#_Numeric	
3004	String value only allows characters [0,1,2,3,4,5,6,7,8,9].	Pattern#_Numeric	
3005	ID string is invalid.	String#ForInteger#_*	
3006	Number value is not within allowed range [{minValue}..{maxValue}].	Currency* Number_Min*#Max*#	
3007	String field cannot be empty.	String#_Trim_Nonempty	
3008	Image field cannot be empty.		
3009	Image field does not allow this file format.		
3010	Image field size has exceeded maximum {maxSize}		
Cross-field validation errors			
3501	Money minor unit has exceeded allowed digits after separator {maxDigits}.	Currency	
3502	Enumeration value is not value for parent entity.	String#_Trim_Nonempty	
Business Rule Validation			
Response Operation element		References	Log
Error Code	Error Message	Data Validation Types	Message
4000	Reference ID value is not found.	*_SytemId	
4001	Uniqueness rule violation occurred.		
4002	Account configuration does not allow this type of transaction.		
4003	Source and destination for transaction must have the same currency.		
4004	Transaction amount outside allowed range [{minValue}..{maxValue}].		
4005	Value is an invalid credit/debit card number.		
4006	Value is an invalid credit/debit card expiration date.		
4007	POST failed maximum member count {maxMembers}		
4008	Value is an invalid credit/debit card security code.		
Transaction Error codes			
Response Operation element		References	Log
Error Code	Error Message	Data Validation Types	Message
5200	Declined Credit/Debit card	*_SytemId	

Test # Codes	Description
OOF	Out of Scope
ENV	Environment Test - not run for build
NOT	Not testable without developer intervention

Noun Code	Noun
AH	acountholders{id}
AHAC	acountholders{id}-accounts acountholders{id}-accounts{id}
AHCD	acountholders{id}-cards acountholders{id}-cards{id}
AHFT	acountholders{id}-features acountholders{id}-features{code}
AHIM	acountholders{id}-images acountholders{id}-images{id}
AHTN	acountholders{id}-transactions acountholders{id}-accounts{id}transactions
BE	beneficiarys{id}
BEAC	beneficiarys{id}-accounts beneficiarys{id}-accounts{id}
BEIM	beneficiarys{id}-images beneficiarys{id}-images{id}
BETN	beneficiarys{id}-transactions beneficiarys{id}-accounts{id}transactions
IM	Images Images{id}
IS	issuers issuers{id}
PM	paymentmethods
PMCC	paymentmethods-creditDebitCard paymentmethods-creditDebitCard{id}
USAS	userassociations userassociations{id}