


QA Engineer / Technical Challenge

- [Test cases](#)
 - [API](#)
 - [UI](#)
- [Data sets](#)
 - [Regression data](#)
 - [Smoke data](#)
- [Bug reports](#)

Test cases


 **Note**

For each case below need to check:

1. correct HTTP status code


2. response payload

3. response headers

 **Note**

Scopes are smoke and regression.

Priority: P1-P5

Type	Scope	Priority	Test case	Data	Expected result
API	Smoke	P1	Get request with predefined (default) query parameters	form_type=mini instrument=Forex symbol=AUDCADm Lot=0.1 Leverage=200 user_currency=USD	200 OK { <body> }
					<div> Note</div> <div>Placeholders like this <..> in data and/or expected result are used to shorten table view and considered as understandable.</div>
	Smoke	P2	Get request with test params	Smoke data	
	Regression	P1	Get request with test params	Regression data	
	Regression	P2	Get request with test params: check supported values options (data types and lower/upper cases etc)	Example: form_type=mini/MINI/Mini instrument=Forex/FOREX/forex symbol=AUDCADm/AUDCADM/AUDCADM Lot=0.1/'0.1' Leverage=200/'200' user_currency=USD/usd	
					200 OK {<...>}

Regression	P3	Required params validation	No query params	<pre>400 Bad request { "form_type": ["This field is required."], "lot": ["This field is required."], "leverage": ["This field is required."], "instrument": ["This field is required."], "symbol": ["This field is required."], "user_currency": ["This field is required."]}</pre>
			No one of them	<pre>400 Bad request { "<param_name>": ["This field is required."] }</pre>
Regression	P4	Request params validation: not allowed (additional) params	? form_type=mini&instrument=Forex&symbol=AUDCADm&lot=0.11&leverage=200&user_currency=USD&new=test&Currency=EUR&account=Standart'	Extra params are ignored, 200 OK and correct body according to required ones.
Regression	P4	Request params validation: incompatible params	form_type=mini&symbol=AUDCAD form_type=classic&symbol=AUDCADm form_type=cent&user_currency=USD	<pre>400 Bad request { "<param_name>": ["\<param_value>\\" is not a valid choice."] }</pre>
Regression	P5	Request params validation: unexpected (incorrect) values	form_type=mid instrument=NotForex symbol=test user_currency=test	
Regression	P5	Request params validation: < min & > max values	Lot > 999999 Lot < 0.01 Leverage > 2000 Leverage < 2 + 0 values for each	
Regression	P5	Request params validation: < min & > max length	Lot > 6 symbols Leverage > 4 symbols	
Regression	P5	Request params validation: incorrect data type	form_type=digit/bool instrument=digit/bool symbol=digit/bool Lot=string/bool Leverage=string/bool user_currency=digit/bool	

	Regression	P5	Request validation: other request method	POST / PUT etc	<pre> 405 { "detail": "Method \ "<... >\ " not allowed." } </pre>
UI	Smoke	P1	Make calculation with predefined (default) parameters	Account typ: Standart Instrument: AUDCADm Lot=0.1 Leverage=200 user_currency=USD <screenshot>	<screenshot>
		P2	Login and logout from the page	user: <..> password: <...>	User is logged in and redirected to the /calculator/
		P2	Register from the page	user: <..> password: <...>	User is registered, logged in and redirected to the /calculator/
		P2	Make calculation with test params	Smoke data	
	Regression	P1	Make calculation with test params: extended	Regression data	
		P2	Markup checks	Check in the most popular (based on research done previously) browser and OS: <ul style="list-style-type: none"> Active and inactive states of the elements (button especially) Focus and hover Hints and placeholders Resize, rescale browser 	
		P3	Responsive/adaptive design checks	Check smoke cases on desktop, tablet, mobile in the most popular 5 (based on research done previously) browser and OS	
		P4	Links on the page are available and correct		
		P5	Chat work on the page		

Data sets

Regression data





Data sets were chosen by following criterias:

1. Instrument is always one – Forex;
2. form_type: there are 3 options and it's possible to check all of them;
3. symbol: we think that for each form_type symbols are equiv lent. That'st why when we chose value for the form_type according to the user_currency;
4. user_currency values are selected to be the same as 2 currencies from the form_type + 1 in other currency + 1 value of some of the metals (MAUUSD / MAGUSD / MPTUSD /) + each option from the list of metals+currencies;
5. leverage: it's possible to check each one and even more, because we gonna have more cases because of currency_symbol matches than there are lot options;
6. lot: values are selected in the range 0.1 до 999999 (as min and max values that are possible to enter on UI) and allocated in the interim by boundary and equivalent options.

Instrument	form_type	Account (UI)	symbol	user_currency	leverage	lot
Forex	mini	Standard	EURUSDm	EUR	2000	0.01
				USD	1888	0.02
				NZD	1000	0.09
				MAUUSD	888	0.1
				BAUSD - 2 Currency: Euro + US Dollar	600	0.2
				MBBUSD - 4 Metal: Gold + Silver + Platinum + Palladium	500	0.9
				MBCUSD - 4 Currency: EUR + USD + GBP + JPY	400	0.99
				MBDUSD - 4 Currency + 4 Metal	200	1
			NOKJPYm	EUR	100	1.1
				USD	88	1.01
				NOK	50	1.2
				JPY	20	9
				MAGUSD	10	10
				BAUSD - 2 Currency: Euro + US Dollar	2	10.1
				MBBUSD - 4 Metal: Gold + Silver + Platinum + Palladium	2000	10.01
				MBCUSD - 4 Currency: EUR + USD + GBP + JPY	1000	11
				MBDUSD - 4 Currency + 4 Metal	2	99
				classic	Raw Spread	GBPPDKK
	USD	1000	100.1			
	JPY	600	100.01			
	Zero	MPTUSD – Platinum	500		101	
		BAUSD - 2 Currency: Euro + US Dollar	200		999	
		MBBUSD - 4 Metal: Gold + Silver + Platinum + Palladium	100		1000	
	Pro	MBCUSD - 4 Currency: EUR + USD + GBP + JPY	10		1001	
		MBDUSD - 4 Currency + 4 Metal	2		9999	
	cent	Standard cent	AUDCHFc	USC - United States Cent	1000	10000
				EUC - Euro cent	888	10001
				GBC - Great Britain penny	600	99999
				CHC - Swiss rap	500	100000
				AUC - Australian Cent	400	100001
ECN		NZDJPYc	USC - United States Cent	88	100001.1	
			EUC - Euro cent	50	100000.01	
			GBC - Great Britain penny	20	99999.1	
			CHC - Swiss rap	10	999998	
			AUC - Australian Cent	2	999999	

Smoke data

 Smoke data = shorten version of the Regression data.

 For UI cases instrument = symbol, form_type isn't used

Instrument	form_type / account (UI)	symbol	user_currency	leverage	lot
Forex	mini / Standard	EURUSDm	EUR	2000	0.01
		NOKJPYm	USD	600	1.1
	classic / Raw Spead	GBPDKK	MBDUSD - 4 Currency + 4 Metal	100	101
	classic / Pro		MPDUSD - Palladium	88	9999.9
	Classic / Zero		MBCUSD - 4 Currency: EUR + USD + GBP + JPY	50	100000.01
	cent / Standard cent	AUDCHFc	GBC - Great Britain penny	10	99998.99
	cent / ECN		EUC - Euro cent	2	999999

Bug reports

Cannot chose ECN as account option

Priority	High
Severity	High
Steps	
1	Go to the /calculator/
2	Change Account type to the ECN
3	Press "Calculate"
Expected result	Calculation made for specified account
Actual result	Cannot chose ECN as account option, it switches to the Standard

Incorrect status code with error response

Priority	Medium
Severity	Low
Steps	
1	Make get request to the /api/calculator/calculate/ with invalid parameters: for example, without some of the required params
2	Check response
3	Pay attention to the response code
Expected result	400 or 422 status code
Actual result	200 status code

Incorrect status code with error response

Priority	Low
Severity	Low
Steps	
1	Make get request to the /api/calculator/calculate/ with instrument != Forex For example: https://www.exness.com/api/calculator/calculate/?form_type=mini&instrument=Notforex&symbol=AUDCADm&lot=0.1&leverage=200&user_currency=USD
2	Check response
Expected result	Response with an error <pre>{ "instrument": ["\"Notforex\" is not a valid choice."], }</pre>
Actual result	<pre>{ "instrument": ["\"Notforex\" is not a valid choice."], "symbol": ["\"AUDCADm\" is not a valid choice."] }</pre> <p>Where symbol": ["\"AUDCADm\" is not a valid choice."] isn't needed</p>

Need to handle lower & upper case written params

Priority	Low
Severity	Low
Steps	
1	Make get request to the /api/calculator/calculate/ with different way of writing (use upper case when it's in the example lower and vice versa) For example: instrument = forex and/or user_currency = usd and/or symbol = audcad
2	Check response
Expected result	200 OK and expected body

Actual result	<div>Errors in the body</div> <pre> { "instrument": ["\"forex\" is not a valid choice."], "symbol": ["\"audcadm\" is not a valid choice."], "user_currency": ["\"usd\" is not a valid choice."] } </pre>
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500 error with too big value

Priority	Medium
Severity	High
Steps	
1	Make get request to the /api/calculator/calculate/ with lot = 9999999999999999 or 1111111111111111
2	Check response
Expected result	400 and error about limits
Actual result	500 error

No focus on calculation result

Priority	Low
Severity	Low
Steps	
1	Go to the /calculator/
2	Leave chosen parameters as they are or change it
3	Press "Calculate" and pay attention to the page view and where is the focus
Expected result	Auto-focus on the result
Actual result	No auto-focus on the result

Missing processing state

Priority	Low
Severity	Low
Steps	
1	Go to the /calculator/
2	Leave chosen parameters
3	Press "Calculate" and check result
4	Change some of the requested params and recalculate

Expected result	It will be better to show some loader icon after request to show this processing state. Otherwise it could not clear on recalculation if it worked at all.
Actual result	Missing processing state