Step-by-step Guide: The Test Builder

A step-by-step guide to getting up and running with the Flood Test Builder

Step 1

Log into Flood. You should see this screen:



Step 2

For Test Type - select the Test Builder, and Click CONTINUE >



Step 3

For Test Name - enter SimpleTest1



Test Name

SimpleTest1

ProTip™ If you end this name with a number, we'll automa

This is where you can name your test. If you end your test name with a number, Flood will automatically increment it if you run more than one test using this Stream.

Click **CONTINUE**

Step 5

For Host - enter our purpose built load test site - https://flooded.io



O Specify the protocol and host of the server you want to send traffic to.

Protocol and Host

https://flooded.io

Click **CONTINUE**

Step 6

For **Test Steps** - this is where we can add steps that will act as requests which will be used against the Host entered in Step 5.

For this step, we just want to add a simple GET request to the base URL so we can hit the front page. This can be done as follows:

Click Add Step...

Headers	URL Params	Body	Response Headers	Response Body
er Name				
d Header				

This will add the first step with a / - signifying you would like to send a request to the base URL. You can ensure that the intended URL will be requested correctly in the URL preview down at the bottom of the Test Builder.

You can also check that the URL is reachable by clicking on the **VERIFY** button on the right hand side.

Click VERIFY

If all goes well, you should see a result of 200 OK as per below. This essentially means we can successfully reach the target URL from the Flood platform.



Step 7

Let's now do a different, slightly more advanced request in the shape of a search query which uses the POST request method.

Using the same method in Step 6 - add a new step to our list.

Click Add Step...

On the method drop down list - Select POST

✓ GET	/		
POST			
PUT			
DELETE			
PATCH	URL Params	Body	Resp
HEAD			

And type in - random?f=test123



Verify the URL to ensure you get another 200 OK response and then press **CONTINUE** to go to the final step of the Test Builder process.

Step 8

So as we now have our test steps defined - we can start setting up the parameters of the scenario itself.

This includes the following:

- Users per region- how many concurrent users we want to simulate for the test.
- AWS Regions the region(s) in AWS we want to simulate our users to originate from.
- Test Duration how long we want our entire test to run for.
- Ramp-up how long we want the ramp-up period at the start of the test to be before we reach the maximum number of users for this test.

5 Configure Load and Launch		Configure r	Configure number of users, AWS regions, and test duration			
For your initial tests, start with a fewer amount of users (1 to 500). Increase the load in subsequent tests.						
1,000 users per region	(
AWS Regions	Asia Pacific (Singapore) ×					
Test Duration	Duration 5 Min	Ramp Up	Minutes			
Summary	You are about to 0.1 Grid Node ho	launch 1,000 us urs will be used	u sers from 1 region for 5 minutes d from your account balance.			

For number of users - select **1,000 users per region** on the slider widget.

For **AWS Regions** - select any region that you wish. The chosen region doesn't really matter for this exercise.

For **Test Duration** - Leave the Duration at **5 minutes** and the Ramp Up time at **0.5 minutes**.

The **Ramp Up** time is the time it will take to start the users from 0 to the target user amount (in this case 1,000) at the beginning of the test.

Click LAUNCH TEST

Step 8

You should now be taken to a small window showing the status of your Grid starting up (in percentage terms), as well as the test files being sent to the nodes and finally waiting for initial data points from your running test.

The following user interface for test execution will be presented to you indicating that the test is running and key metrics are being collated by the Flood platform.

JMeter SimpleTest1 Flood #287 > Timeline				🖍 Timelir	Imeline Logs Asia Pacific (Singapore , scenic fox - 1 node			
0s	15s	30s	45s	1m 0s	1m 15s	1m 30s	1m 45s	2m
Aggregate of all tr	ansactions	1.						
793 users Concurrent Users	1,660 ms Response Time 2,388 Transa	8 rpm action Rate 320kb/s Network Through	put Latency	2,388 rpm Passed Transactions	0 rpm Failed Transactions			
0s 1,000 users a 000 ms	156	30s	458	1m Os	1m 15s	1m 30s	1m 45s	2m
800 users 3.0 1,500 ms 1.500 ms 100 users 2.0 100 users 1.000 ms 100 users 1.0 100 users 1.0 100 users 1.0	0 rpm							
Label		-	↓ Timing			✓ Response Time Requests	per Minute 5. Error Rate	
O POST /rand	3 om?f=test123					3,419 ms	1,313 rpm 0.00 %	>
O GET /						4. 739 ms	1,431 rpm 0.00 %	>

The main components of the execution dashboard are explained below:

- Performance Metrics For every test we focus on 3 main test metrics; (i) Concurrent Users, (ii) Response Time, and (iii) Transaction Rate. These are considered the most important metrics when performing a load test and can help determine if your target system is healthy or struggling.
- 2. Logs Full diagnostics logs are available and often yield helpful information on the state of the scenario. Here errors are aggregated from a load test tool perspective which can aid in diagnosis if the test encounters problems.
- **3. Transactions** These transaction labels were as you might recall, the two requests we setup in the Test Builder in the previous steps. Selecting each one will change the execution graph to display metrics specifically for the selected transaction. This is helpful if you would like to isolate a badly performing transaction during a test.
- Transaction Metrics Response Time and Requests per Minute are displayed here for each transaction. These are both mean averages for the currently viewable timeframe of results.
- 5. Error Rate This area shows the percentage of passed / failed transactions as well as an arrow allowing you to drill-down to a sub page to see what error responses are being observed during the test.

Step 9

Congratulations!

You have just run your first 1,000 user load test using the Flood platform. We hope these steps were easy to follow and you are able to go on and do more advanced load testing scenarios.

As always, we are here to help you every step of the way so please don't hesitate to reach out to one of our knowledgable Customer Success Engineers or visit our <u>Help</u> <u>area</u> for some great guides to running your tests using Flood.

Happy Testing from Team Flood!