

# Http Stress Test

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## Introduction

The engine is capable of performing accurate Http stress tests. This tutorial shows how to achieve this by using the graphical interface. It is also possible to use a command line tool to achieve the same results. Please look at the *“Using the LoadTester.exe command line tool”* tutorial. To create your Http scenario, you can use the Http scenario creation form or you can directly use the captured Http requests and add them in the Http loader.

## Get started with Http Scenario creator

1. Launch the PI Engine
2. Click on the Http loader main tab.
3. Click on the *Create* link button located in the bottom left

[Start](#) [Stop](#) [Create](#) [Open](#) [Save](#)

4. This will open the Http scenario creation form



5. Enter the desired url in the text and press on Enter. You will be prompted if you want to start capturing, click on Yes
6. The icon buttons, from left to right are:
  - a. Refresh the current page
  - b. Start recording
  - c. Stop recording
  - d. Include all recorded requests in the Http loader
  - e. Delete recorded requests
7. Once you start recording, the Http scenario creator will display your page and you can start navigating as if it was your default browser. Every Http request is recorded
8. After you finish your scenario, click on the green arrow icon to include your scenario requests in the Http loader:

HTTP traffic	SQL Server traffic	Oracle traffic	MySQL traffic	Raw traffic	HTTP loader	SQL Server loader	Oracle loader	MySQL loader
Timestamp	Src IP	Src Port	Dst IP	Dst Port	Request			
1	16.10.2016.14.28...	127.0.0.1	56779	www.annemasse-...	80	GET http://www.annemasse-fa.fr/HTTP/1.1Accept: application/x-ms-application, image/jpeg, application/xaml+xml, image/gif, image/png, application/x-ms-xap, */Accept-Lan...		
2	16.10.2016.14.28...	127.0.0.1	56779	www.annemasse-...	80	GET http://www.annemasse-fa.fr/HTTP/1.1Accept: */Accept-Language: fr-CHAccept-Encoding: gzip, deflateUser-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.1; w...		
3	16.10.2016.14.28...	127.0.0.1	56779	www.annemasse-...	80	GET http://www.annemasse-fa.fr/Bea.aspx HTTP/1.1Accept: application/x-ms-application, image/jpeg, application/xaml+xml, image/gif, image/png, application/x-ms-xap, */R...		
4	16.10.2016.14.28...	127.0.0.1	56779	www.annemasse-...	80	GET http://www.annemasse-fa.fr/Bea/2.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
5	16.10.2016.14.28...	127.0.0.1	56782	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
6	16.10.2016.14.28...	127.0.0.1	56783	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
7	16.10.2016.14.28...	127.0.0.1	56784	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
8	16.10.2016.14.28...	127.0.0.1	56779	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
9	16.10.2016.14.28...	127.0.0.1	56779	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
10	16.10.2016.14.28...	127.0.0.1	56783	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
11	16.10.2016.14.28...	127.0.0.1	56782	www.annemasse-...	80	GET http://www.annemasse-fa.fr/img/Bea/3.JPG HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encoding: gzip, deflateUse...		
12	16.10.2016.14.28...	127.0.0.1	56782	www.annemasse-...	80	GET http://www.annemasse-fa.fr/Bea.aspx HTTP/1.1Accept: application/x-ms-application, image/jpeg, application/xaml+xml, image/gif, image/png, application/x-ms-xap, */R...		
13	16.10.2016.14.28...	127.0.0.1	56782	www.annemasse-...	80	GET http://www.annemasse-fa.fr/assets/fonts/aphaellcons.css?m=2 HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encod...		
14	16.10.2016.14.28...	127.0.0.1	56782	www.annemasse-...	80	GET http://www.annemasse-fa.fr/assets/css/styles.min.css?m=2 HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encod...		
15	16.10.2016.14.28...	127.0.0.1	56782	fonts.googleapis...	80	GET http://fonts.googleapis.com/css?family=Open+Sans:400,800 HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encod...		
16	16.10.2016.14.28...	127.0.0.1	56783	fonts.googleapis...	80	GET http://fonts.googleapis.com/css?family=Podkova:400,700 HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encod...		
17	16.10.2016.14.28...	127.0.0.1	56784	www.annemasse-...	80	GET http://www.annemasse-fa.fr/assets/css/normalize.css HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Encod...		
18	16.10.2016.14.28...	127.0.0.1	56784	www.annemasse-...	80	GET http://www.annemasse-fa.fr/assets/js/lib/modernizr-2.5.2.min.js?m=2 HTTP/1.1Accept: */Referer: http://www.annemasse-fa.fr/Bea.aspxAccept-Language: fr-CHAccept-Enr...		

9. Setup the number of users you want to simulate, the number of scenario replays and the delay between requests:

Number of Users:

Delay between requests (ms):

Number of Replay:

Note that if you do not want to setup those values everytime you launch the engine, you can set them up in the configuration dashboard:

10. Before you execute the test, you can edit each request by selecting it and then clicking on the “Edit Request” tab. Once you finish the modification you have to click on the save link button.
11. Once everything is setup all you have to do is to click on the “start” link button. This will start the stress test. The test progress is displayed in the progress bar. Once the test is finished you get the detailed report:

Global Errors	Global MaxResponseTime	Global MinResponseTime	Global AverageResponseTime
0	2199 milliseconds	15 milliseconds	337 milliseconds

  

Error	MaxResponseTime	MinResponseTime	AverageResponseTime	URL
0	1294	239	764	http://www.annemasse-fa.fr/
0	218	187	202	http://www.annemasse-fa.fr/Bea.aspx
0	779	171	475	http://www.annemasse-fa.fr/imgs/Bea/1..
0	1201	171	686	http://www.annemasse-fa.fr/imgs/Bea/2..
0	857	171	514	http://www.annemasse-fa.fr/imgs/Bea/5..
0	561	171	366	http://www.annemasse-fa.fr/imgs/Bea/3..
0	561	171	366	http://www.annemasse-fa.fr/imgs/Bea/6..

12. You can save the report in text format
13. If the report shows any errors, you can find all the details in the “Errors” and “Exceptions” tabs. The errors tab shows the Http errors encountered like 404, 401, etc...The exceptions tab show any error encountered by the engine during the test execution

## Use captured requests to build your Http scenario

You can directly select the captured http requests and add them to the Http loader. Then you just follow the above steps starting at step 8.

To add the selected http requests into the http loader, you have to click with the right button and then click on “Add to Http loader”:

Timestamp	Src IP	Src Port	Dst IP	Dst Port	Request	Status	Duration (ms)	Received (k-b)
11:51:19.649	172.16.12.83	56378	151.101.65.69	80	GET /HTTP/1.1	200	328	41.29
11:51:19.697	172.16.12.83	56365	151.101.193.69	80	GET /Js/stub.en.js?v=1c3c1a72cae4 HTTP/1.1	304	32	0.31
11:51:19.697	172.16.12.83	56367	151.101.193.69	80	GET /Sites/stackoverflow/all.css?v=60H27c57d88 HTTP/1.1	304	32	0.32
11:51:19.700	172.16.12.83	56358	172.217.21.234	80	GET /ajax/libs/jc	304	47	0.18
11:51:19.721	172.16.12.83	56393	104.16.108.18	80	GET /5d55j.png	304	16	0.42
11:51:19.730	172.16.12.83	56393	104.16.108.18	80	GET /KsDb.png	304	0	0.39
11:51:19.740	172.16.12.83	56393	104.16.108.18	80	GET /aABck.png	200	0	0.63
11:51:19.751	172.16.12.83	56393	104.16.108.18	80	GET /6p2yP.png	304	16	0.42
11:51:19.762	172.16.12.83	56393	104.16.108.18	80	GET /xaqql.png	304	16	0.42
11:51:19.768	172.16.12.83	56399	104.16.108.18	80	GET /817gl.png	304	16	0.42
11:51:19.768	172.16.12.83	56395	104.16.108.18	80	GET /KsQb.png	304	16	0.39
11:51:19.768	172.16.12.83	56397	104.16.108.18	80	GET /yw13m.png	304	16	0.42

To select multiple requests in the data grid, you simply have to click on the Ctrl key or the Shift key as if it was a regular Windows selection.