

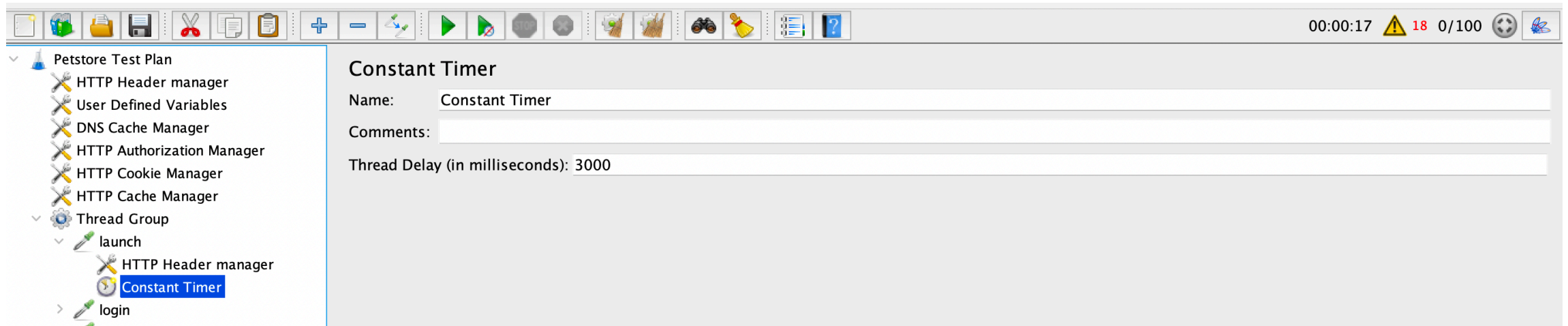
Think Time and Timers

Think Time

- In the real life, the users don't visit the website at the same time and they don't do the actions continuously. They need some time to wait for the page to load, take a look at the page content before going to the next action.
- In order to realistically simulate this behavior, a **Think Time** needs to be added for each request in JMeter.
- JMeter uses **Timers** to add think time between the transactions within an iteration. Timers are used to insert delay in execution.
- An average think time for a user is 3-10 seconds.
- We can use timers such as Constant Time or Uniform Random timer to add think time. There are also timers that we can adjust the overall throughput.

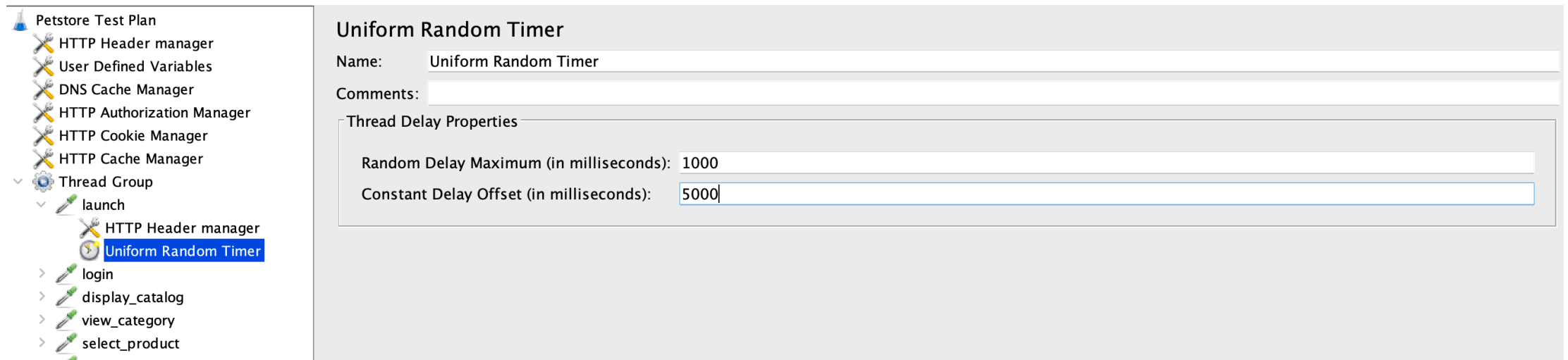
Constant Timer

- Constant Timer adds a same amount of think time in milliseconds for each request.
- It can be added at the scenario level, before or after a request.



Uniform Random Timer

- Uniform Random Timer adds a random time in addition to the constant delay time. If delay is 1 sec and constant delay is 5 sec then the delay will be between 5 to 6 seconds.



The screenshot displays the JMeter GUI. On the left, the 'Petstore Test Plan' tree is visible, with the 'Uniform Random Timer' element selected under the 'launch' thread group. The main panel shows the configuration for the 'Uniform Random Timer'.

Uniform Random Timer

Name:

Comments:

Thread Delay Properties

Random Delay Maximum (in milliseconds):

Constant Delay Offset (in milliseconds):

Execution of Timers

- If there are multiple timers applied for a sampler, then the pausing time for that sampler will be equal to the sum of all timers.
- The total time to execute the Request A is sum of Timer 1, Timer 2, Timer 3 and Timer 4.

