

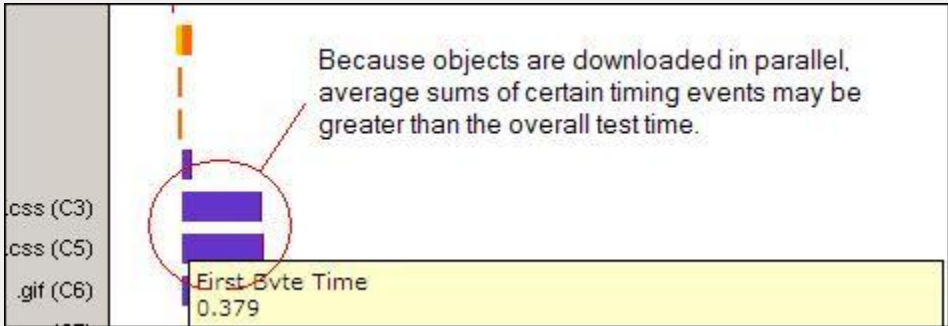
1st Byte Time is longer than Response Time

component timing.JPG

Information:

Environment
<ul style="list-style-type: none">• Dynatrace Classic Portal• Backbone Chart

Symptoms
I created a Performance chart for one of my Backbone tests. When I click the "View components chart" icon to check the components chart, I find that the "1st Byte Time" is longer than the "Response Time". Why?

Solution
<p>First byte time is the time between the completion of the TCP connection with the destination server that will provide the displayed page's objects and the reception of the first packet (first byte) for the objects.</p> <p>In the Components Chart, as there are multiple objects on one page, when you chart the test's 1st byte time, the value is the summary of all first byte time of objects downloaded parallel.</p> <p>While the value of test response time is the end-to-end response time, so times for first byte time may be greater than end-to-end response time.</p> <p>This is because objects are downloaded in parallel (at the same time) during a test execution, which is the standard behavior of a browser. As we can see in the attached screenshot, the waterfall chart from a single test execution shows multiple objects often having a first byte time occurring at the same time during a test. Summing these events leads to a longer time than either of their individual duration and may exceed the overall test time.</p>  <p>Because objects are downloaded in parallel, average sums of certain timing events may be greater than the overall test time.</p> <p>First Byte Time 0.379</p>

Root Cause
The value of 1st byte time in the Components Chart is the summary of all first byte time of objects downloaded parallel.