

Keep Server Response Times Low

Overview

Users dislike when pages take a long time to load. Slow server response times are one possible cause for long page loads.

When users navigate to a URL in their web browser, the browser makes a network request to fetch that content. Your server receives the request and returns the page content. The server may need to do a lot of work in order to return a page with all of the content that users want. For example, if users are looking at their order history, the server needs to fetch each user's history from a database, and then insert that content into the page. Optimizing the server to do work like this as quickly as possible is one way to reduce the time that users spend waiting for pages to load.

Recommendations

The first step to improving server response times is to identify the core conceptual tasks that your server must complete in order to return page content, and then measure how long each of these tasks takes. Once you've identified the longest tasks, search for ways to speed them up.


There are many possible causes of slow server responses, and therefore many possible ways to improve:

- Optimize the server's application logic to prepare pages faster. If you use a server framework, the framework may have recommendations on how to do this.
- Optimize how your server queries databases, or migrate to faster database systems.
- Upgrade your server hardware to have more memory or CPU.

More information

This audit fails when the browser waits more than 600ms for the server to respond to the main document request.

This audit is also referred to as "Time To First Byte", which represents the time that it takes for a user's browser to receive the first byte of page content.

[Audit source](#) 

Feedback

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NO

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