
10 methods to prevent webserver overload

Causes of overload are various. At any time, web servers can be overloaded due to reasons like:

1. Web server's incomplete availability- This can happen because of expected or necessary support or update, hardware or software crashes, back-end malfunctions, etc. In these circumstances, the rest of the web servers get too much traffic and grow overloaded.
2. Surplus logical web traffic - numerous clients which are connecting to the website within a brief interval may cause an overload in the web server.
3. Computer worms and XSS viruses that will cause irregular traffic due to millions of infected computers, browsers or web servers.
4. Distributed Denial of Service attacks (DoS attack, DDoS attack). A denial-of-service attack or distributed denial-of-service attack is an effort to make a computer or network device unavailable to its proposed users.
5. Network slowdowns so that client requests are completed more slowly and the number of connections increases so much that server limits are approached.

The implications of an overloaded web server are:

1. Overload results in a delayed serving of requests from 1 second to a few hundred seconds.
2. All are familiar with the 404-error code just like that the web server returns an HTTP error code, such as 500, 502, 503, 504, 408, etc which are inappropriate overload condition.
3. The web server denies or resets TCP connections before it returns any content.
4. Sometimes the web server delivers only a part of the requested content. This can be studied as a bug, even if it normally occurs as a symptom of overload.

How to prevent overload of web servers

To partly master above average load limits and to prevent overload, several big websites practice standard techniques like for instance:

1. Controlling network traffic, by using Firewalls to block undesired traffic coming from poor IP sources or having inadequate patterns. HTTP traffic managers can be placed to drop, redirect or rewrite requests which have poor HTTP patterns. To smooth the peaks in the

Need help with the assignment?

Our professionals are ready to assist with any writing!

GET HELP

network usage bandwidth management and traffic shaping can be done

2. Expanding web cache methods
3. Implementing different domain names to subserve different content by separate web servers.
4. Employing different domain names or computers to separate big files from small and medium-sized files. The idea is to be able to fully cache small and medium-sized files and sufficiently serve big or huge files by using different settings
5. Using many internet servers or programs per computer, each one connected to its own network card and IP address
6. Using many computers that are arranged together behind a load balancer so that they perform or seen as one large web server
7. Combining more hardware devices to each computer.
8. Tuning OS parameters for hardware capacities and usage
9. Adopting more efficient computer programs for web servers, etc.
10. Practicing other workarounds, particularly if dynamic content is included.

gradesfixer.com

Need help with the assignment?

Our professionals are ready to assist with any writing!

[GET HELP](#)