

Naxsi performance measurement

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Outline

- 1 Naxsi
- 2 Research questions



What is a WAF?

- Web Application Firewall
-

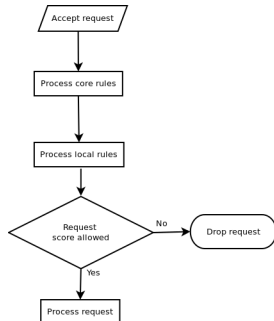


What is a naxsi?

- It's a WAF for nginx
- Nginx Anti Xss & Sql Injection
-



Naxsi request flow

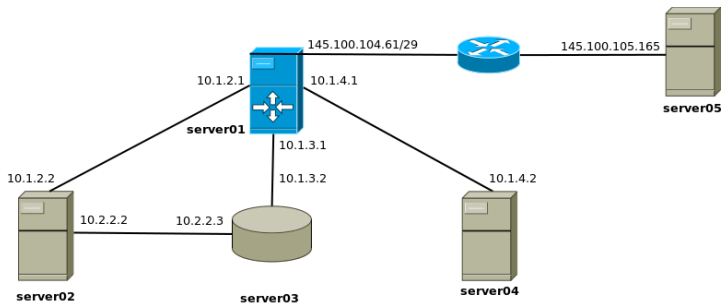


- Oui!
- Sis is mooi sjrafiek

Whitelist processing



Experimental setup



Research Question(s)

"How does a webserver perform with the use of Naxsi as the front-end firewall compared to a webserver without a Naxsi firewall?"



Research Question(s)

"What is the baseline performance of the Nginx firewall without the usage of Naxsi?"

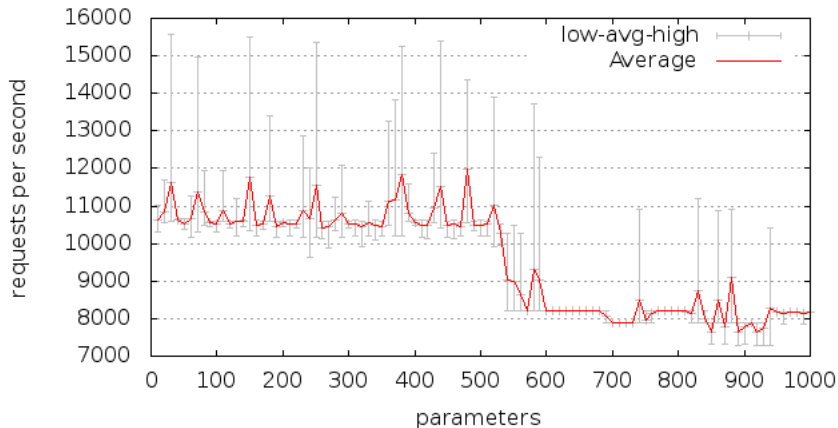


Approach

- Naxsi isolation
 - Baseline performance measurement (HTTP 200 OK)
 - URL parameter increments
- Real-life scenario
 - Baseline performance measurement
 - Normal usage case



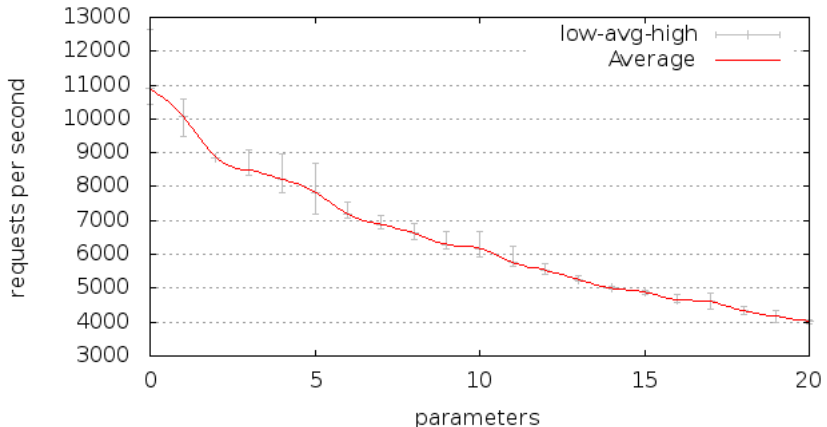
HTTP 200 OK: baseline performance measurement



HTTP 200 OK: Incrementing allowed URL parameters

`http://example.com/?foo1=bar1`

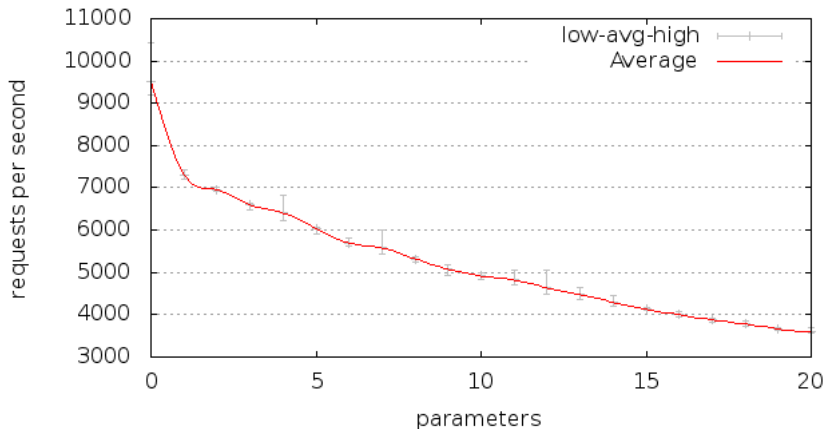
`http://example.com/?foo1=bar1&foo2=bar2`



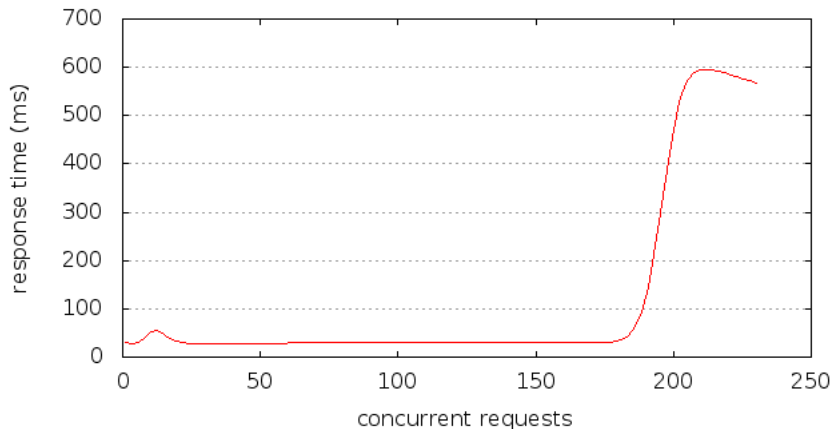
HTTP 200 OK: Incrementing disallowed URL paramters

`http://examble.com/?../`

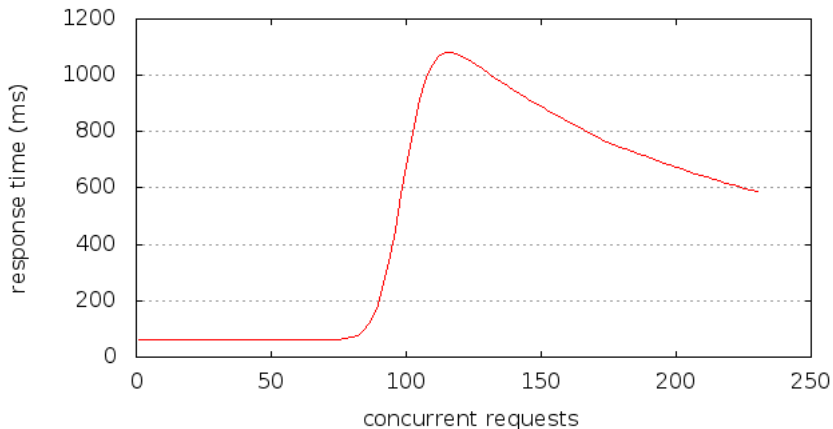
`http://examble.com/?foo1=bar1&../`



Wordpress baseline performance measurement



Wordpress with Naxsi



Conclusion

- Naxsi has a low overhead

