

Gabriel Emerson

Due 9/11/06

- P1: a.) False
b.) True
c.) False
d.) False
e.) False

P4: a.) <http://gaia.cs.umass.edu/cs453/index.html>

- b.) version 1.1
c.) Keep-alive means persistent.
d.) There is no IP in the GET message
e.) Mozilla 5.0. It is needed to send different types of same message to different browsers.

- P5: a.) The server did locate successfully. It was found at Tuesday 07 March 2008 12:39:45 GMT.
b.) Saturday 10 Dec 2005 18:27:46 GMT
c.) 3874 bytes returned
d.) <!doc. Keep alive means persistent connection.

Homework 2

pg 2

P9: a.) transmit time = $4/R$

Average time = Avg size / $R = 0.0567$ s

Access delay = $(0.0567) / (1 - .907) = 0.6$ s

Average response = $3 + 0.6 = 3.6$ s

40%

b.) Access delay = $(.0567) / (1 - (.4)(.907)) = 0.089$ s

Average response = $3 + 0.089 = 3.089$ s

$\Rightarrow (.6)(0) + (.4)(3.089) = 1.245$

P14: SMTP uses line containing one period
HTTP uses "Content-Length header field"

No since one period could be binary data for HTTP and SMTP uses 7-bit ASCII

P17: a.) C: dele 1

C: retr 2

S: (blah blah ...

S: blah)

S: .

C: dele 2

C: quit

S: +OK POP3 sign off

P17: b.) C: retr 2

S: blah blkh ...

S: blkh)

S: .

C: quit

S: +OK POP3 sign off

P21: Yes we can use dig to query the web site on local DNS server. Dig returns query time for site and will show when it was last accessed

P26: a.) Yes, as long as there are enough peers in swarm. Bob can receive data through other peers.

b.) Yes, he can run a client on each host, and let them free-ride. then combine chunks into single file.

P27: Peer 3 asks its successor for the identifier of its immediate successor (peer 8). Peer 3 will then make Peer 8 its second successor.

Peer 3 → Peer 4 → Peer 8

P28: Peer 6 asks 15 who its predecessor and Successor will be, then 15 searches until it finds peer 5 who sees peer 6 will be the new predecessor and that its current successor peer 8 will become peer 6 successor. Then peer 6 can join and be set $\text{peer 5} \rightarrow \text{peer 6} \rightarrow \text{peer 8}$

P30: Yes, randomly assigning keys to peers does not consider network, this will likely cause mismatches.

Mismatches could cause search performance to degrade. This is because a short logical path may contain physical mismatch which makes longer physical path.