NGK 2: DNS

# Øvelse 3



Graphical user interface, application

Description automatically generated

Single t1 : 0.372 ms



Command: ping -c *x* 10.0.0.2

min: 0.231 ms

max: 0.546 ms

avg: 0.368 ms

stdv: 0.101ms

Text

Description automatically generated

3.

32.291 ms

4.

min : 29.925 ms

max: 33.011 ms

avg: 30.978 ms

stdv: 0.995 ms

# TCP: Three way handshake

1. Precondition : The server binds and listens at a port = passive open
2. The client initiates active open (SYN). Segment’s seq number is a random number A
3. SYN-ACK the server replies. SYN-ACK number is A + 1, server chooses a new random seq number B
4. ACK client responds with B + 1

FULL DUPLEX COMM

Undersøg SYN-ACK (Synchronize-Acknowledge)

Graphical user interface, text, application, email

Description automatically generated

10.83.252.23 : www.au.dk

A screenshot of a computer

Description automatically generated

SYN : 2.593734 s

SYN-ACK : 2.597327 s

Response time = 3.593 ms

Først: undersøg ip addressen af ønskede side vha. ping command

[www.sydney.edu.au](http://www.sydney.edu.au) : 23.218.92.144

2. Start wireshark -> connect to site via browser -> stop wireshark

3. Check times between SYN -> SYN-ACK

Graphical user interface, text, application

Description automatically generated

SYN: 9.279668 s

SYN-ACK : 9.2963844 s

tidsforsinkelse: 16.716 ms

Tidsforsinkelsen er ca. 4 gange større. Det kan skyldes det fysiske afstand mellem servere, det kan også skyldes at forbindelsen går igennem mange ”nodes”.

# Opgave 5

Kommandoerne **host** og **nslookup:**

**Text

Description automatically generated**

**host** bruger DNS service til at oversætte domain navn til IP addressen eller omvendt og angive alias for hjemmesiden.

Text

Description automatically generated

**nslookup** gør det samme som host OG giver server addressen, samt IP6 addressen.