Communication Networks

Spring 2021

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http://comm-net.ethz.ch/

ETH Zürich

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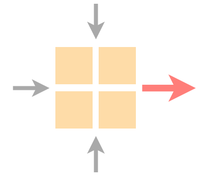


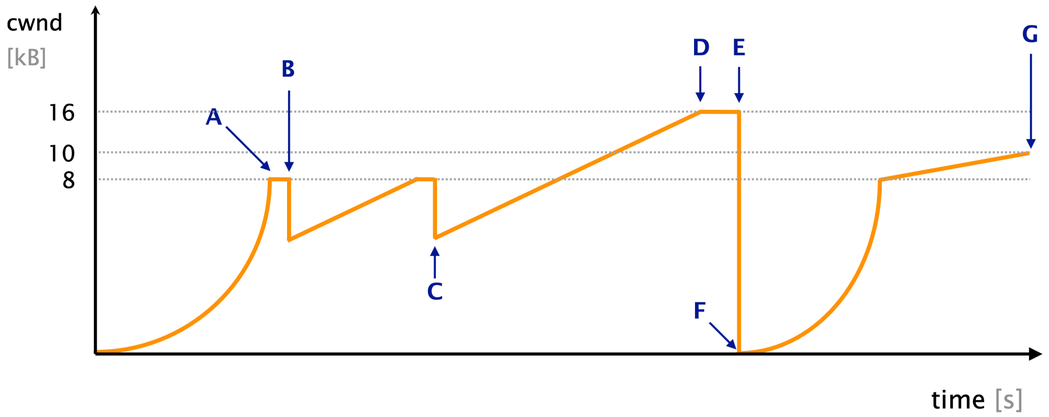
Previous exercise

Exercise overview

Time to solve tasks

Task 3

Congestion Window



a) What happens at point B?

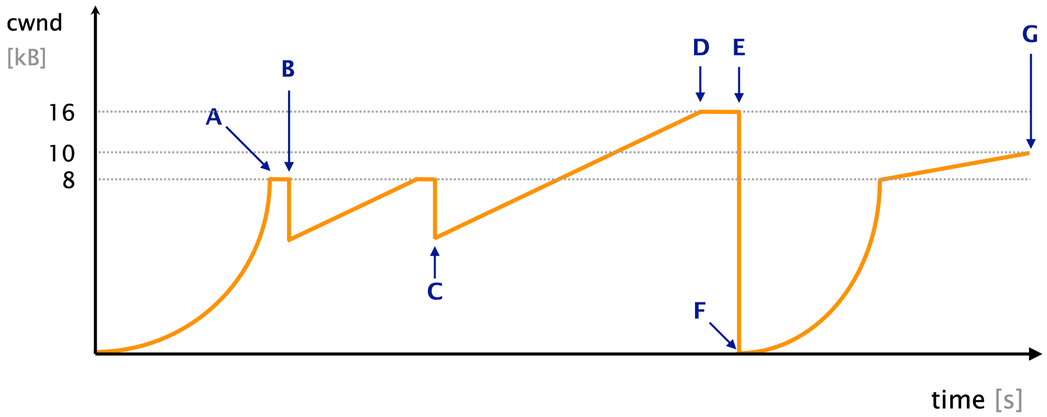
b) Does the event happening at point B require the network to discard packets? Why or why not?

c) What happens at point E?

d) Does the event happening at point E require the network to discard packets? Why or why not?

Task 3

Congestion Window



MSS = 1kB, RTT = 100ms

e) How much time has elapsed at point A?

f) How much time has elapsed *between* point C and D?

g) How much time has elapsed *between* point F and point G?

Briefly explain how come point D is higher than point B. Would you expect this to happen often?

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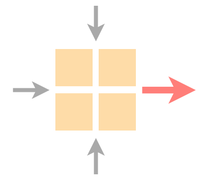

Previous exercise

Exercise overview

Time to solve tasks

Task 1

Local DNS server

see the DNS architecture in action!

```
dig <domain>
```

```
nslookup <domain>
```

Task 2

Name it or Route it: pick one

load-balancing with Anycast or DNS?

DNS can map one name to many IPs

BGP Anycast selects the best route, picking one of several hosts with the same IP

Task 2

Name it or Route it: pick one


```
netflix.com
54.170.196.176
54.246.79.9
52.214.181.141
```

```
netflix.com
54.170.196.176
54.246.79.9
52.214.181.141
```

```
netflix.com
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52.214.181.141
54.170.196.176
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load-balancing with Anycast or DNS?

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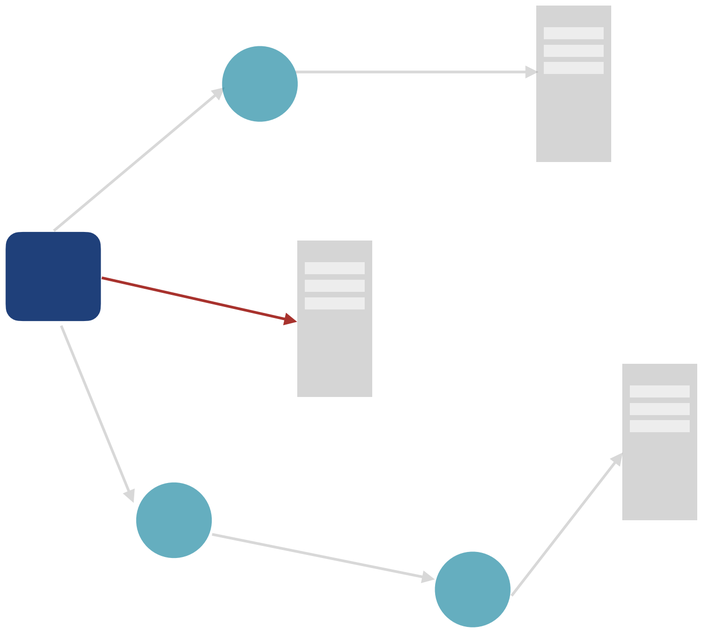
Task 2

Name it or Route it: pick one



load-balancing with Anycast or DNS?

DNS can map one name to many IPs

BGP Anycast selects the best route, picking one of several hosts with the same IP

Task 3, 4, 5
Web & Email

Task 3	see how HTTP host headers work… using NSG websites! :)
Task 4 & 5	exam-like section on Email with warm-up and in-depth question

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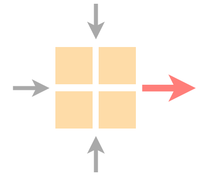

Previous exercise

Exercise overview

Time to solve tasks

You completed the lecture ☺