

Курбатов Ярослав, РПО ПКН

Лабораторная 11

Ruby MRI 3.0.0

Задание 1

[sudo] ruby task-1/tracert.rb <host:string> <probes:int>

```
vitalpraxis@primary:~/Documents/spbu/2023-spring/networks/spbu-masters-compnet/homeworks/11$ sudo ruby task-1/tracert.rb google.com 3
traceroute to google.com (142.250.74.78)
 1) 192.168.1.1 (192.168.1.1) min 1.57ms, max 3.28ms, avg 2.2ms
 2) ip.178-70-210-1.avangardssl.ru (178.70.210.1) min 18.35ms, max 36.24ms, avg 27.62ms
 3) so-2-1-0-s16.M120-1-PSKV.nwtelecom.ru (212.48.194.38) min 3.58ms, max 7.43ms, avg 4.91ms
 4) 185.140.148.31 (185.140.148.31) min 5.22ms, max 20.06ms, avg 10.25ms
 * * *
 6) 72.14.209.89 (72.14.209.89) min 16.22ms, max 18.6ms, avg 17.34ms
 7) 108.170.250.33 (108.170.250.33) min 17.2ms, max 21.08ms, avg 19.22ms
 8) 108.170.250.51 (108.170.250.51) min 20.98ms, max 24.98ms, avg 22.59ms
 9) 142.250.238.12 (142.250.238.12) min 24.29ms, max 39.8ms, avg 30.85ms
10) 209.85.246.60 (209.85.246.60) min 23.91ms, max 24.26ms, avg 24.11ms
11) 108.170.253.161 (108.170.253.161) min 24.89ms, max 38.11ms, avg 29.32ms
12) 142.251.65.81 (142.251.65.81) min 24.03ms, max 26.12ms, avg 24.76ms
13) arn09s23-in-f14.1e100.net (142.250.74.78) min 25.67ms, max 28.42ms, avg 26.67ms
vitalpraxis@primary:~/Documents/spbu/2023-spring/networks/spbu-masters-compnet/homeworks/11$
```

Задание 2

Каждый процесс представлен отдельным потоком.

Класс DVG::Process – собственно сам процесс

Класс DVG::Bus – эмуляция сети

Класс DVG::Runtime – запуск эмуляции DVG в сети

Запуск: ruby task-2/dvg/runtime.rb

Запустим алгоритм с заданной конфигурацией:

```
viralpraxis@primary:~/Documents/spbu/2023-spring/networks/spbu-masters-compnet/homeworks/11$ ruby task-2/dvr/runtime.rb
```

[illegible]

Видно, что в результат корректный (см. Итоговую таблицу в “results”)

Затем поменям стоимость пути между узлами node-0 и node-3:

```

--- results:
["node-0", {"node-1"=>1, "node-2"=>2, "node-3"=>3, "node-0"=>0}]
["node-1", {"node-0"=>1, "node-2"=>1, "node-1"=>0, "node-3"=>3}]
["node-2", {"node-0"=>2, "node-1"=>1, "node-3"=>2, "node-2"=>0}]
["node-3", {"node-0"=>3, "node-2"=>2, "node-3"=>0, "node-1"=>3}]

```

Задание 3

клиент: ruby task-3/ipv6_client.rb

[illegible]

```
viralpraxis@primary:~/Documents/spbu/2023-spring/networks/spbu-masters-compnet/homeworks/11$ sudo lsof -i -P -n | grep LISTEN | grep 8088
ruby      26162    viralpraxis    5u IPv6 183143      0t0  TCP :::8088 (LISTEN)
```

asd

