

# ARQUITECTURAS DE REDES AVANZADAS

## PRÁCTICA 2

### Balanceo de Carga con SDN

ENERO 2015

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#### Resumen

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## 1. Introducción

## 2. Topología mininet

## 3. Controlador POX con l2\_learning

```
$sudo mn --custom topo.py --topo mytopo --controller remote --test pingall
*** Creating network
*** Adding controller
*** Adding hosts:
cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
*** Adding switches:
s1 s2
*** Adding links:
(cli_1, s1) (cli_2, s1) (cli_3, s1) (cli_4, s1) (cli_5, s1) (cli_6, s1) (s1, s2) (srv_1, s2)
*** Configuring hosts
cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
*** Starting controller
c0
*** Starting 2 switches
s1 s2 ...
*** Waiting for switches to connect
s1 s2
*** Ping: testing ping reachability
cli_1 -> cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
cli_2 -> cli_1 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
cli_3 -> cli_1 cli_2 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
cli_4 -> cli_1 cli_2 cli_3 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
cli_5 -> cli_1 cli_2 cli_3 cli_4 cli_6 srv_1 srv_2 srv_3 srv_4
cli_6 -> cli_1 cli_2 cli_3 cli_4 cli_5 srv_1 srv_2 srv_3 srv_4
srv_1 -> cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_2 srv_3 srv_4
srv_2 -> cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_3 srv_4
srv_3 -> cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_4
srv_4 -> cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3
*** Results: 0% dropped (90/90 received)
*** Stopping 1 controllers
c0
*** Stopping 11 links
.....
*** Stopping 2 switches
s1 s2
*** Stopping 10 hosts
cli_1 cli_2 cli_3 cli_4 cli_5 cli_6 srv_1 srv_2 srv_3 srv_4
*** Done
3
completed in 6.529 seconds
```

## **4. Construcción del balanceador de carga**

### **4.1. Módulo de balanceo en POX**

### **4.2. Modificación topología**

### **4.3. Ejecución y prueba de PING**

### **4.4. Tráfico y flujos**

## **Referencias**