

Universidad de Costa Rica

Escuela de Ciencias de la Computación e
Informática

CI-1320 Redes de Computadoras
Grupo 1

Prof. Gabriela Barrantes

Fase 3 del proyecto (Parte 3)

BackNet Boys:

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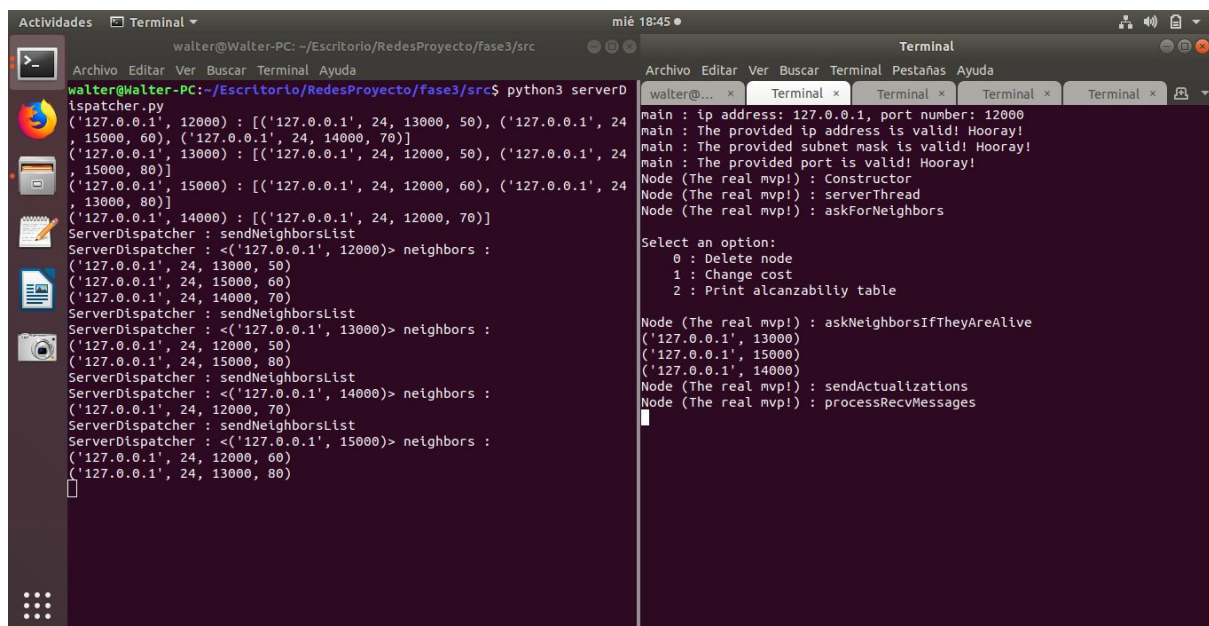
II Semestre 2018

Cómo ejecutar el programa:

- Para ejecutar el Servidor (nodo Central):
 - `python3 serverDispatcher.py`
- Para levantar los nodos del archivo CSV:
 - `python3 nodesDispatcher.py`
- Para levantar solo un nodo:
 - `python3 main.py [ip] [mask] [port]`

Casos de prueba:

Iniciar Nodos:



```
walter@Walter-PC: ~/Escritorio/RedesProyecto/fase3/src
python3 serverDispatcher.py
('127.0.0.1', 12000) : [('127.0.0.1', 24, 13000, 50), ('127.0.0.1', 24, 15000, 60), ('127.0.0.1', 24, 14000, 70)]
('127.0.0.1', 13000) : [('127.0.0.1', 24, 12000, 50), ('127.0.0.1', 24, 15000, 80)]
('127.0.0.1', 15000) : [('127.0.0.1', 24, 12000, 60), ('127.0.0.1', 24, 13000, 80)]
('127.0.0.1', 14000) : [('127.0.0.1', 24, 12000, 70)]
ServerDispatcher : sendNeighborsList
ServerDispatcher : <('127.0.0.1', 12000)> neighbors :
('127.0.0.1', 24, 13000, 50)
('127.0.0.1', 24, 15000, 60)
('127.0.0.1', 24, 14000, 70)
ServerDispatcher : sendNeighborsList
ServerDispatcher : <('127.0.0.1', 13000)> neighbors :
('127.0.0.1', 24, 12000, 50)
('127.0.0.1', 24, 15000, 80)
ServerDispatcher : sendNeighborsList
ServerDispatcher : <('127.0.0.1', 14000)> neighbors :
('127.0.0.1', 24, 12000, 70)
ServerDispatcher : sendNeighborsList
ServerDispatcher : <('127.0.0.1', 15000)> neighbors :
('127.0.0.1', 24, 12000, 60)
('127.0.0.1', 24, 13000, 80)

python3 nodesDispatcher.py
main : ip address: 127.0.0.1, port number: 12000
main : The provided ip address is valid! Hooray!
main : The provided subnet mask is valid! Hooray!
main : The provided port is valid! Hooray!
Node (The real mvp!) : Constructor
Node (The real mvp!) : serverThread
Node (The real mvp!) : askForNeighbors

Select an option:
0 : Delete node
1 : Change cost
2 : Print alcanzability table

Node (The real mvp!) : askNeighborsIfTheyAreAlive
('127.0.0.1', 13000)
('127.0.0.1', 15000)
('127.0.0.1', 14000)
Node (The real mvp!) : sendActualizations
Node (The real mvp!) : processRecvMessages
```

Imprimir tabla de alcanzabilidad:

```
18:46 ●
Terminal
Archivo Editar Ver Buscar Terminal Pestañas Ayuda
walter@Walt... x Terminal x Terminal x Terminal x Terminal x
main : ip address: 127.0.0.1, port number: 14000
main : The provided ip address is valid! Hooray!
main : The provided subnet mask is valid! Hooray!
main : The provided port is valid! Hooray!
Node (The real mvp!) : Constructor
Node (The real mvp!) : serverThread
Node (The real mvp!) : askForNeighbors

Select an option:
  0 : Delete node
  1 : Change cost
  2 : Print alcanzabiliy table

Node (The real mvp!) : askNeighborsIfTheyAreAlive
('127.0.0.1', 12000)
Node (The real mvp!) : sendActualizations
Node (The real mvp!) : processRecvMessages
2
Alcanzability table : ['Who' : 'Through' : 'Cost']
(127.0.0.1, 24, 12000) : None : 70
(127.0.0.1, 24, 13000) : ('127.0.0.1', 24, 12000) : 120
(127.0.0.1, 24, 15000) : ('127.0.0.1', 24, 12000) : 130

Select an option:
  0 : Delete node
  1 : Change cost
  2 : Print alcanzabiliy table
```

Vecino recibe mensaje de muerte:

```
18:46 ●
Terminal
Archivo Editar Ver Buscar Terminal Pestañas Ayuda
walter@Walt... x Terminal x Terminal x Terminal x Terminal x
Alcanzability table : ['Who' : 'Through' : 'Cost']
(127.0.0.1, 24, 13000) : None : 50
(127.0.0.1, 24, 14000) : None : 70
(127.0.0.1, 24, 15000) : None : 60

Select an option:
  0 : Delete node
  1 : Change cost
  2 : Print alcanzabiliy table

('127.0.0.1', 13000)
('127.0.0.1', 15000)
('127.0.0.1', 14000)
*****DEAD MESSAGE*****
Node (The real mvp!) : startBroadcast
Node (The real mvp!) : deleteNodeToAlcanzabilityTable

Broadcast!4

Node (The real mvp!) : talkToTheHand
Node (The real mvp!) : startBroadcast

Broadcast!4

Node (The real mvp!) : talkToTheHand
```

Inundación:

```
18:47 ●
Terminal
Archivo Editar Ver Buscar Terminal Pestañas Ayuda
walter@Walter-PC:~.... x Terminal x Terminal x

Node (The real mvp!) : talkToTheHand
Node (The real mvp!) : startBroadcast

Broadcast!2

Node (The real mvp!) : talkToTheHand
Node (The real mvp!) : startBroadcast

Broadcast!1

Node (The real mvp!) : talkToTheHand
Node (The real mvp!) : startBroadcast
2
Alcanzability table : ['Who' : 'Through' : 'Cost']
Select an option:
  0 : Delete node
  1 : Change cost
  2 : Print alcanzabiliy table
('127.0.0.1', 12000)
('127.0.0.1', 15000)
```