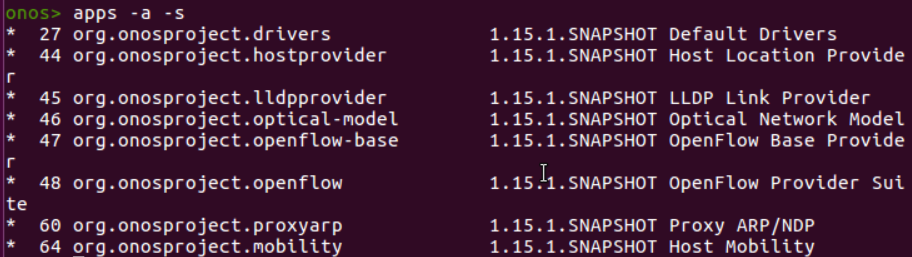
**Group\_Interface**

1. 測試內容：

測試L2 Interface Group Entry with type “INDIRECT”

1. 測試環境組態：

* Switch: DGS-3630
* Hosts:
  + ubuntu 16.04.5 LTS
  + dlinktest1(實體機)
    - IP: 192.168.205.1
    - MAC: 00:ad:24:b1:d5:2c
    - Port: 1
  + dlinktest2(實體機)
    - IP: 192.168.205.1
    - MAC: b0:c5:54:ff:f4:59
    - Port: 2
* Apps:



1. 使用之JSON文件：
   1. Flow Rule: (附檔：groupInterfce.json)

|  |
| --- |
| {  "flows":  [  {  "priority":100,  "timeout":0,  "isPermanent":true,  "deviceId":"of:000078321bdf7600",  "treatment":{  "instructions":[],  "deferred":[  {  "type":"GROUP",  "groupId":65538  }  ]  },  "selector":{  "criteria":[  {  "type":"IN\_PORT",  "port":"1"  }  ]  }  },  {  "priority":101,  "timeout":0,  "isPermanent":true,  "deviceId":"of:000078321bdf7600",  "treatment":{  "instructions":[],  "deferred":[  {  "type":"GROUP",  "groupId":65537  }  ]  },  "selector":{  "criteria":[  {  "type":"IN\_PORT",  "port":"2"  }  ]  }  }  ]  } |

* 1. Group Rule:

附檔：group11.json

|  |
| --- |
| {  "type":"INDIRECT",  "appCookie":"0x123abc",  "groupId":65537,  "buckets":[  {  "treatment":{  "instructions":[  {  "type":"OUTPUT",  "port":1  }  ]  }  }  ]  } |

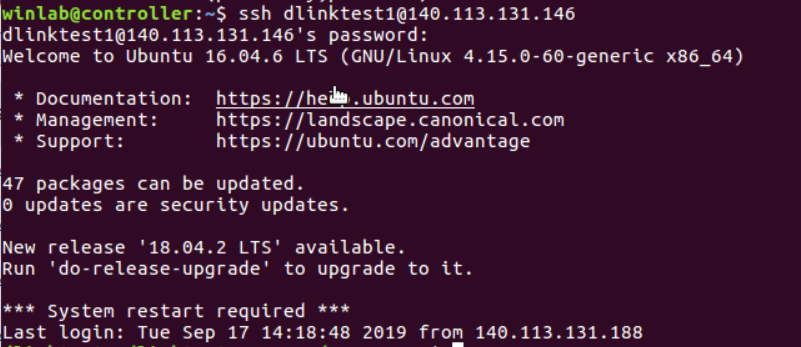
附檔：group12.json

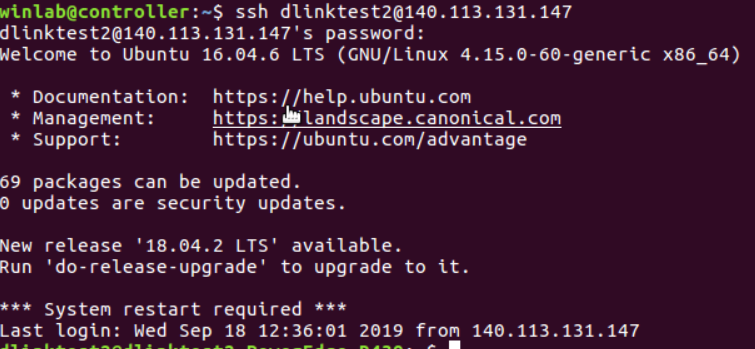
|  |
| --- |
| { {  "type":"INDIRECT",  "appCookie":"0x456def",  "groupId":65538,  "buckets":[  {  "treatment":{  "instructions":[  {  "type":"OUTPUT",  "port":2  }  ]  }  }  ]  } |

1. 測試步驟：

1. 鏈接test1&test2

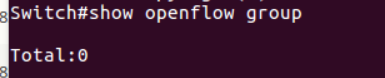
* ssh dlinktest1@140.113.131.146
* ssh dlinktest1@140.113.131.147





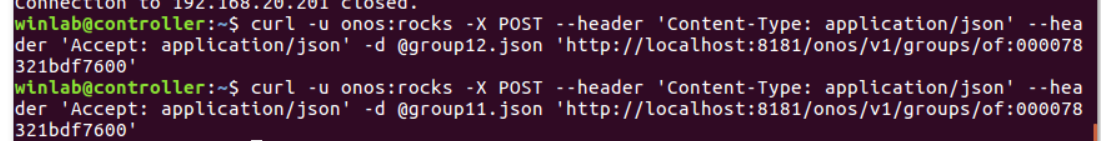
2. 鏈接DGS 3630，並查看group

* ssh admin@192.168.20.201
* show openflow group

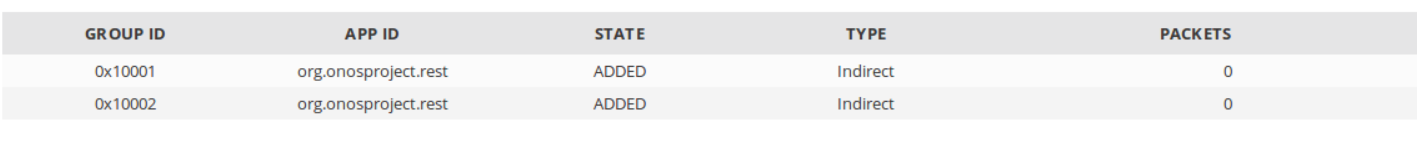


3. 寫入group rule

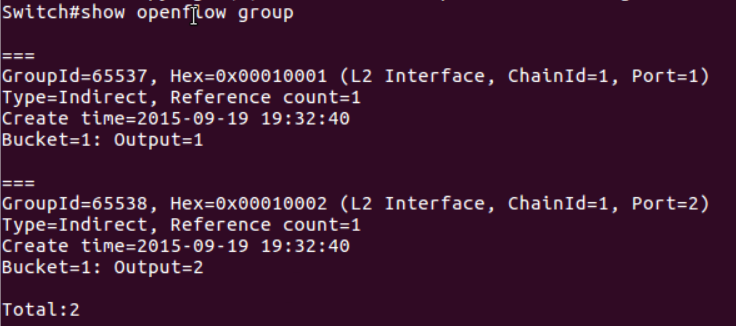
* curl –u onos:rocks –X POST –H “Content-type: application/json” -d @group12.json http://localhost:8181/onos/v1/groups/of:000078321bdf7600
* curl –u onos:rocks –X POST –H “Content-type: application/json” -d @group11.json http://localhost:8181/onos/v1/groups/of:000078321bdf7600



4.在Gui查看是否group安裝成功

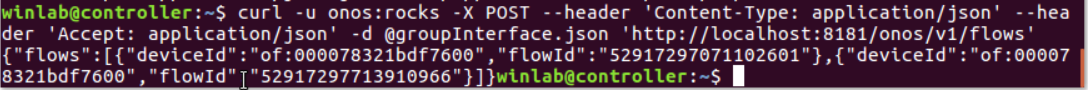


1. 透過switch cli 查看group

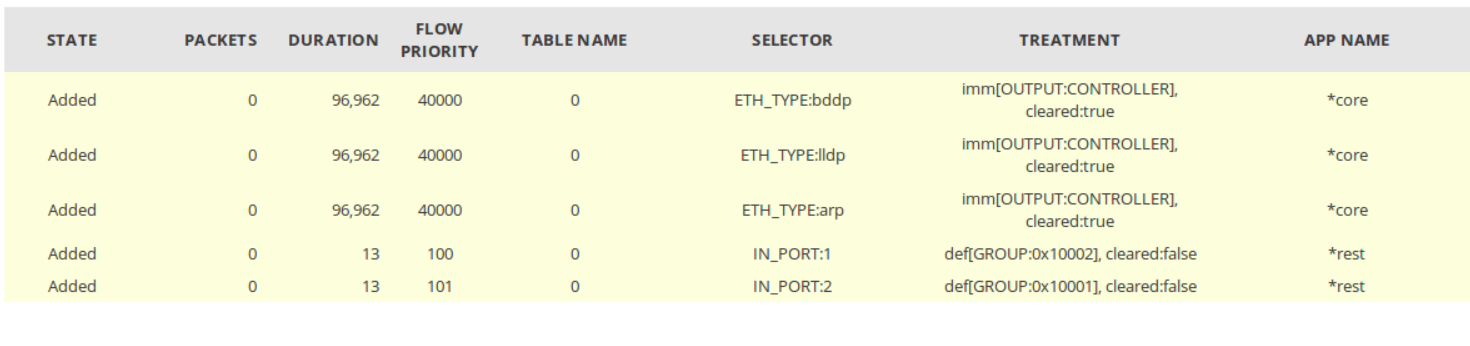


1. 安裝flow rule

* curl -u onos:rocks -X POST -H "Content-type: application/json" -d @groupInterface.json http://localhost:8181/onos/v1/flows

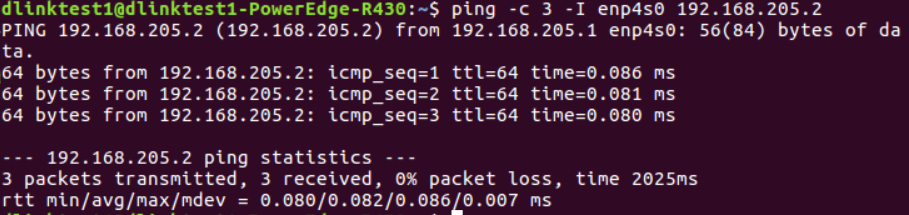


1. 在GUI中查看flow是否安裝成功



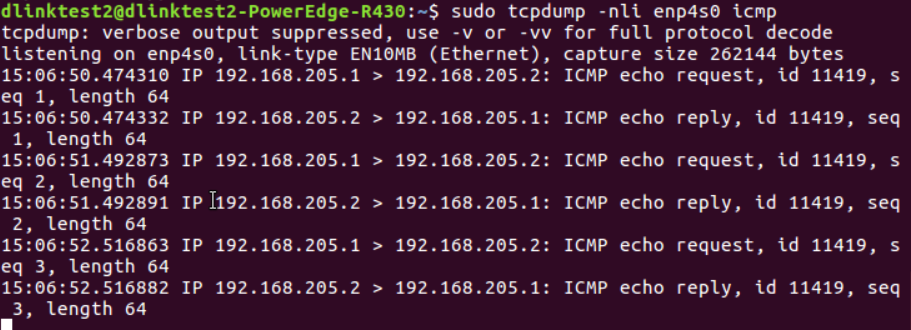
1. test1 ping test2

* ping -c -3 enp4s0 192.168.205.2



1. test2用tcpdump監控

* sudo tcpdump -nli enp4s0 icmp



5.測試結果：

L2 Interface Group Entry with type “INDIRECT”能夠正確安裝