

## Configuration DHCP local server in router 7750SR

In global router configuration, we create DHCP local server as shown below.

```
LAB_3>config>router>dhcp# info
-----
local-dhcp-server "inny" create
  use-gi-address
  force-renews
  pool "test1" create
    options
      dns-server 102.96.128.86 102.96.128.166
      domain-name "lab3.local"
    exit
  subnet 161.145.30.0/24 create
    options
      default-router 161.145.30.1
    exit
  address-range 161.145.30.2 161.145.30.25
  exit
  exit
  no shutdown
exit
```

Fig 1. Creation DHCP local server

Next, we create IES Client service. In this service, we create two interfaces. One is loopback combine to DHCP local server.

Second is the subscriber for Client with SAP connected to Client.

```
LAB_3>config>service>ies# info
-----
interface "server" create
  address 10.0.0.1/32
  local-dhcp-server "inny"
  loopback
exit
subscriber-interface "dhcp" create
  address 161.145.30.1/24
  group-interface "touser" create
    dhcp
      server 10.0.0.1
      gi-address 161.145.30.1
      no shutdown
    exit
  sap 2/1/3:112 create
  exit
  exit
  no shutdown
-----
```

Fig 2. Client IES service

The client is connected on SAP in VPLS with run split-horizon.

```
upls 400112 customer 100 create
split-horizon-group "dpi" create
exit
stp
    shutdown
exit
sap 1/1/6:112 create
    dhcp
        snoop
        no shutdown
    exit
exit
sap 1/1/7 split-horizon-group "dpi" create
    dhcp
        snoop
        no shutdown
    exit
exit
no shutdown
exit
```

Fig 3. Client VPLS service

Necessary is allowed for address 0.0.0.0 to go through CPM filter to can Client device take assigned address by DHCP local server. Policy example entry is shown below.

```
entry 70 create
    action accept
    match
        src-ip 0.0.0.0/32
    exit
exit
no shutdown
```

Fig 4. Allow address 0.0.0.0 to access the DHCP server

Necessary is allowing for the subnet supported by DHCP server to go through CPM IP filter. Policy example entry is shown below.

```
-----
    action accept
    match
        src-ip 161.145.30.0/24
    exit
-----
```

Fig 5. Allow entry from network supported by DHCP server