

ECMP/WCMP of Static Route

Created at 2010/07/17

Introduction

ECMP/WCMP (Equal-Cost Multipath Routing/Weight-Cost Multipath Routing) is a feature where multiple links reach the same destination. ECMP and WCMP can send packets through multiple links at the same time in either evenly or weighed basis. This not only increases bandwidth also provide redundancy.

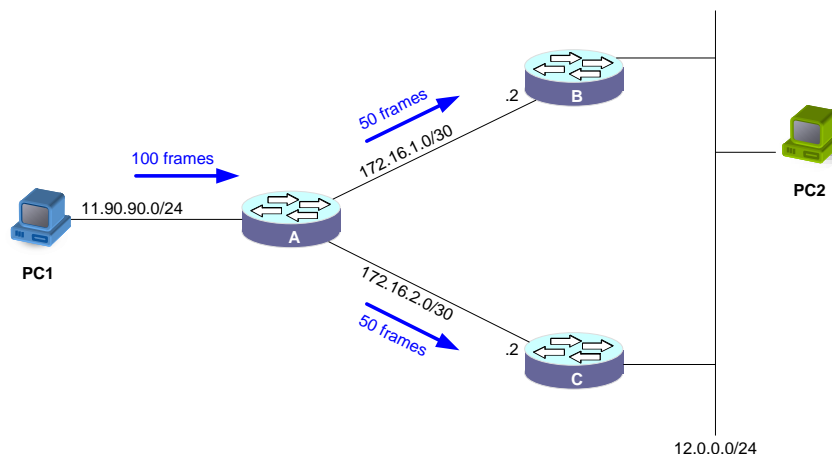
Step-by-Step

I. EMCP

A. [Configuration on Switch A]

```
#create iproute 12.0.0.0/24 172.16.1.0/30 weight 1  
#create iproute 12.0.0.0/24 172.16.2.0/30 weight 1
```

Figure-1



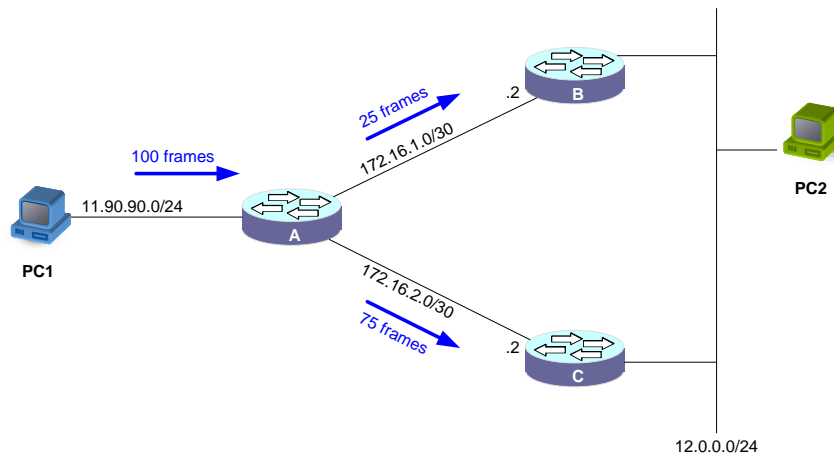
In Figure-1, when send 100 frames from PC1 to PC2. We can see Switch A send through both links evenly. (50 frames each)

II. WCMP

A. [Configuration on Switch A]

```
#create iproute 12.0.0.0/24 172.16.1.2 weight 1
#create iproute 12.0.0.0/24 172.16.2.2 weight 3
```

Figure-2



In Figure-2, When sending 100 frames from PC1 to PC2. We can see Switch A send through both links with weigh as configured (1:3).

Reference

- This example is made by DGS-3600 series in firmware R2.80.B36.