Biblioteca Centrală Universitară 'M.Eminescu' **Iași**

1 The subnetworks analyses

* Number of the subnetworks:6
* Future subnetworks : 7
* Today’s subneteork will have a maximum of 25 hosts
* The future subnetwork will have a number of 25 hosts

2 Subnetworks

* Video cameras: 16
* Ground floor computers: 6
* Second floor computers: 18
* Wi-fi routers : 4
* Camera surveillance computer :1

3 Subnetwork address

Type C class network 215.82.46.0

2^S>=6 -> S=3

2^H-2>=25 -> H=5

8 subnetworks with 30 hosts /network

4 Subnetwork mask

Subnetwork adress: 215.82.46.0 – C class

Subnetwork mask: 255.255.255.224/27 (24+3)

Binary: 11111111.11111111.11111111.11100000

CDIR : 27

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subnetwork #** | **Subnetwork ID** | **IP adress of subnetwork** | **Interval host** | **Broadcast adress** |
| **#0** | **000** | **215.82.46.0** | **215.82.46.1 - 215.82.46.30** | **215.82.46.31** |
| **#1** | **001** | **215.82.46.32** | **215.82.46.33 - 215.82.46.62** | **215.82.46.63** |
| **#2** | **010** | **215.82.46.64** | **215.82.46.65 – 215.82.46.94** | **215.82.46.95** |
| **#3** | **011** | **215.82.46.96** | **215.82.46.97 – 215.82.46.126** | **215.82.46.127** |
| **#4** | **100** | **215.82.46.128** | **215.82.46.129 – 215.82.46.158** | **215.82.46.159** |
| **#5** | **101** | **215.82.46.160** | **215.82.46.151 – 215.82.46.180** | **215.82.46.191** |
| **#6** | **110** | **215.82.46.192** | **215.82.46.193 - 215.82.46.222** | **215.82.46.223** |