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# Detyrë – Afati dorëzimit: 2 Dhjetor 2020, Ora 23:59

Referencë. Kjo detyrë është në kuadër të adresimit me maskë që ka gjatësi të ndryshueshme (VLSM – Variable Length Subnet Mask). Disa shembuj ilustrimi mund ti gjeni tek ushtrimet tash vec se të ngarkuara në Moodle.

Detyrë:

Nëse kemi një rrjet sipas adresave të klasës B 180.42.203.0 /24, përcakto maskën (subnet mask), IP adresën e rrjetit, IP adresën Broadcast dhe rangun e IP adresave të përdorshme sipas kërkesave që I keni më poshtë :

Shënim: Të zgjedhen subnetet(departamentet) me kerkesa më të larta se pari gjerë tek ato me kërkesa te vogla.

* 31 hosts (Subnet 1) = 26-2 = 62 valid IP for Hosts , **Subnet Mask: (/26)**
* 15 hosts (Subnet 2) = 25-2 = 30 valid IP for Hosts , **Subnet Mask: (/27)**
* 65 hosts (Subnet 3) = 27-2 = 126 valid IP for Hosts , **Subnet Mask: (/25)**
* 7 hosts (Subnet 4) = 24-2 = 14 valid IP for Hosts , **Subnet Mask: (/28)**

Shënim: Të përdoret formati I tabelës së mëposhtme për zgjidhje të detyrës.

Subneti 3 :

|  |  |  |
| --- | --- | --- |
|  | Network bits | Host bits |
| IP Address: | 180.42.203.0 |  |
| Subnet Mask: | **255.255.255.128 (/25)** |
| IP Address (binary): | 10110100.00101010.11001011.0 | 0000000 |
| Subnet Mask (binary): | 11111111.11111111.11111111.1 | 0000000 |
| Network Address (binary):  Network Address (decimal): | 10110100.00101010.11001011.0  180.42.203.0 | 0000000 |
| Broadcast Address (binary):  Broadcast Address (decimal): | 10110100.00101010.11001011.0  180.42.203.127 | 1111111 |
| Host IP address Range: | 180.42.203.1  .  .  180.42.203.126 |  |

Subneti 1 :

|  |  |  |
| --- | --- | --- |
|  | Network bits | Host bits |
| IP Address: | 180.42.203.128 |  |
| Subnet Mask: | **255.255.255.192 (/26)** |
| IP Address (binary): | 10110100.00101010.11001011.10 | 000000 |
| Subnet Mask (binary): | 11111111.11111111.11111111.11 | 000000 |
| Network Address (binary):  Network Address (decimal): | 180.42.203.128  10110100.00101010.11001011.10 | 000000 |
| Broadcast Address (binary):  Broadcast Address (decimal): | 10110100.00101010.11001011.10  180.42.203.191 | 111111 |
| Host IP address Range: | 180.42.203.129  .  .  180.42.203.190 |  |

Subneti 2 :

|  |  |  |
| --- | --- | --- |
|  | Network bits | Host bits |
| IP Address: | 180.42.203.192 |  |
| Subnet Mask: | **255.255.255.224 (/25)** |
| IP Address (binary): | 10110100.00101010.11001011.110 | 00000 |
| Subnet Mask (binary): | 11111111.11111111.11111111.111 | 00000 |
| Network Address (binary):  Network Address (decimal): | 10110100.00101010.11001011.110  180.42.203.192 | 00000 |
| Broadcast Address (binary):  Broadcast Address (decimal): | 10110100.00101010.11001011.110  180.42.203.223 | 11111 |
| Host IP address Range: | 180.42.203.193  .  .  180.42.203.222 |  |

Subneti 4 :

|  |  |  |
| --- | --- | --- |
|  | Network bits | Host bits |
| IP Address: | 180.42.203.224 |  |
| Subnet Mask: | **255.255.255.224 (/28)** |
| IP Address (binary): | 10110100.00101010.11001011.1110 | 0000 |
| Subnet Mask (binary): | 11111111.11111111.11111111.1111 | 0000 |
| Network Address (binary):  Network Address (decimal): | 10110100.00101010.11001011.1110  180.42.203.224 | 0000 |
| Broadcast Address (binary):  Broadcast Address (decimal): | 10110100.00101010.11001011.1110  180.42.203.239 | 1111 |
| Host IP address Range: | 180.42.203.225  .  .  180.42.203.238 |  |