

Lecture 15 - Ethernet LANs

Exercise 1: How many possible OUI's are there? How many devices can be manufactured for each OUI?

OUI is 3 bytes = 24 bits

but M.S. 2 bits = 0

22 bits can be changed

$\therefore 2^{22} \approx 2^2 \cdot 2^{20} \approx 4 \times 10^6$ OUIs

for each OUI can have $2^{24} = 2^4 \times 2^{20} = 16 \times 10^6$ addresses/OUI.