Class Subnet

Responsibilities

Has a single network address

Collaborators

Connects to the router inside

Connects to other subnets outside

Class Router

Responsibilities

Keeps track of networks it is connected to, using a routing table.

Internal address – private subnet External address – public address

Collaborators

Connects to the switch

Connects to other subnets

Class Switch

Responsibilities

Registers MAC addresses for all devices on the network.

Allows traffic between devices

Collaborators

Connects to WAPs, router, servers, and PCs

Class Wireless Access Point (Superclass)

Responsibilities

Each WAP has a MAC and static IP address.

Holds a list of the MAC addresses of the devices connected.

Collaborators

Must be connected to a switch.

Class Host (Superclass)

Responsibilities

Has a MAC address, IP address and a name.

Collaborators

Connects PCs and servers to the switch

Connects laptops & mobiles to WAPs

Class PC (Subclass)

Responsibilities

Has a dynamic IP address

Collaborators

Connects to the switch

Class Laptop & Mobile (Subclass)

Responsibilities

Has a dynamic IP address

Collaborators

Connects to a WAP

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Class Server (Subclass)

Responsibilities

Has a static IP address

Open port numbers

Collaborators

Connects to the switch