Bilgisayar Ağları

Sorularla Tekrar II

Which network topology design has a centralized switch connecting all of the devices?

A. Star topology
B. Full mesh topology
C. Partial mesh topology
D. Hybrid topology

Which is a direct benefit of a full mesh topology?

A. Increased bandwidth
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Where is the full mesh topology commonly seen in the three-tier design model?

A. Core layer

B. Distribution layer

C. Access layer

D. Routing layer

Where is the star topology most commonly seen in the three-tier design model?

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You are looking to create a fault tolerant colocation site for your servers at a cloud provider. Which type of cloud provider would you be searching for?

A. PaaS

B. IaaS

C. SaaS

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A hosted medical records service is an example of which cloud model?

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Which cable type would you use to connect a switch to a switch?

A. Straight-through cable

B. Crossover cable

C. Rolled cable

D. Shielded cable

Flow control can be found at which layer of the OSI

A. Transport layer

B. Network layer

C. Data Link layer

D. Session layer

Which is a correct statement about the Transmission Control Protocol (TCP)?

A. TCP is a connectionless protocol.

B. TCP allows for error correction.

C. TCP is faster than UDP.

D. TCP allows for retransmission of lost segments.

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A. Via the destination port

B. TCP checksums

C. Window size

D. Sequence and acknowledgment numbers

When a programmer decides to use UDP as a transport protocol, what is a decision factor?

A. Redundancy of acknowledgment is not needed.

B. Guaranteed delivery of segments is required.

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Which is a correct statement about sliding windows used with TCP?

A. The window size is established during the three-way handshake.

B. Sliding windows allow for data of different lengths to be padded.

C. It allows TCP to indicate which upper-layer protocol created the request.

D. It allows the router to see the segment as urgent data.

Why does DNS use UDP for queries?

A. DNS requires acknowledgment of the request for auditing.

B. The requests require flow control of UDP.

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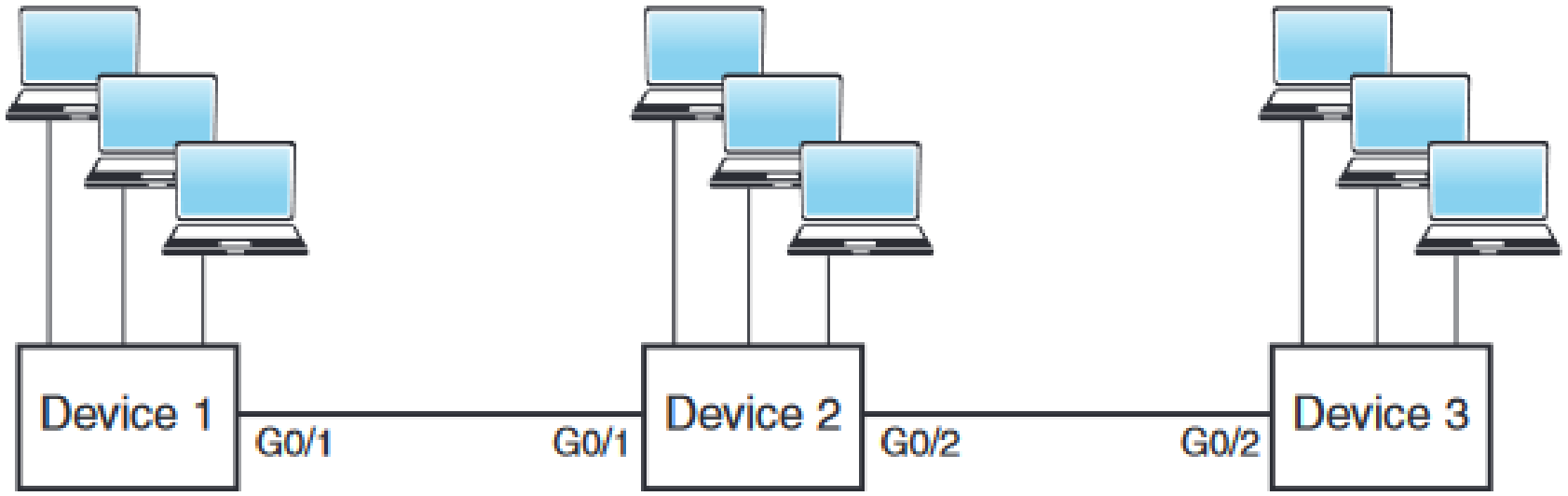
What transport layer protocol features the use of sequencing and synchronization methods?

- ○ **A.** ICMP
- ○ **B.** TCP
- ○ **C.** UDP
- ○ **D.** ARP

Examine the figure. If devices 1, 2, and 3 are all Cisco Layer 2 switches in their default configurations, how many collision domains exist in this network?



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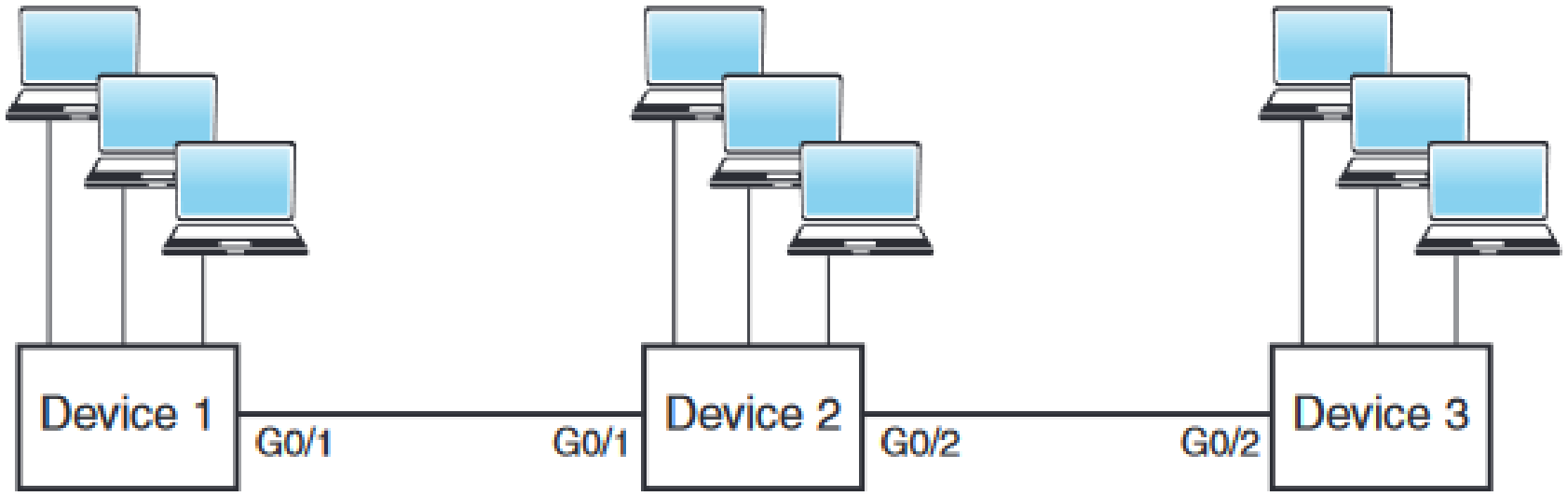

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You decided to reduce the size of your existing Layer 2 broadcast domains by creating new VLANs. What network device that forwards packets between those VLANs would be operating (at a minimum), and at which OSI layer?

- ○ **A.** A switch at Layer 1
- ○ **B.** A switch at Layer 2
- ○ **C.** A router at Layer 2
- ○ **D.** A router at Layer 3

What information for a wireless network can you choose not to broadcast?

- ○ **A.** SSID
- ○ **B.** The AP's MAC address
- ○ **C.** Type
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802.11 Wireless Standards

IEEE Standard	802.11a	802.11b	802.11g	802.11n	802.11ac
Year Adopted	1999	1999	2003	2009	2014
Frequency	5 GHz	2.4 GHz	2.4 GHz	2.4/5 GHz	5 GHz
Max. Data Rate	54 Mbps	11 Mbps	54 Mbps	600 Mbps	1 Gbps
Typical Range Indoors*	100 ft.	100 ft.	125 ft.	225 ft.	90 ft.
Typical Range Outdoors*	400 ft.	450 ft.	450 ft.	825 ft.	1,000 ft.

*Range estimates are typical and require line of sight. Basically that means you will need a clear unobstructed view of
walls and obstacles will limit your operating range and could even prevent you from establishing a link. Signals generall
obstructions to 802.11 frequencies so they will partially or entirely block the signal.

Other factors that will reduce range and affect coverage area include metal studs in walls, concrete fiberboard walls, alum
pipes and electrical wiring, furniture and sources of interference. The primary source of interference in the home will be the
cordless phones, radio transmitters and other electrical equipment.

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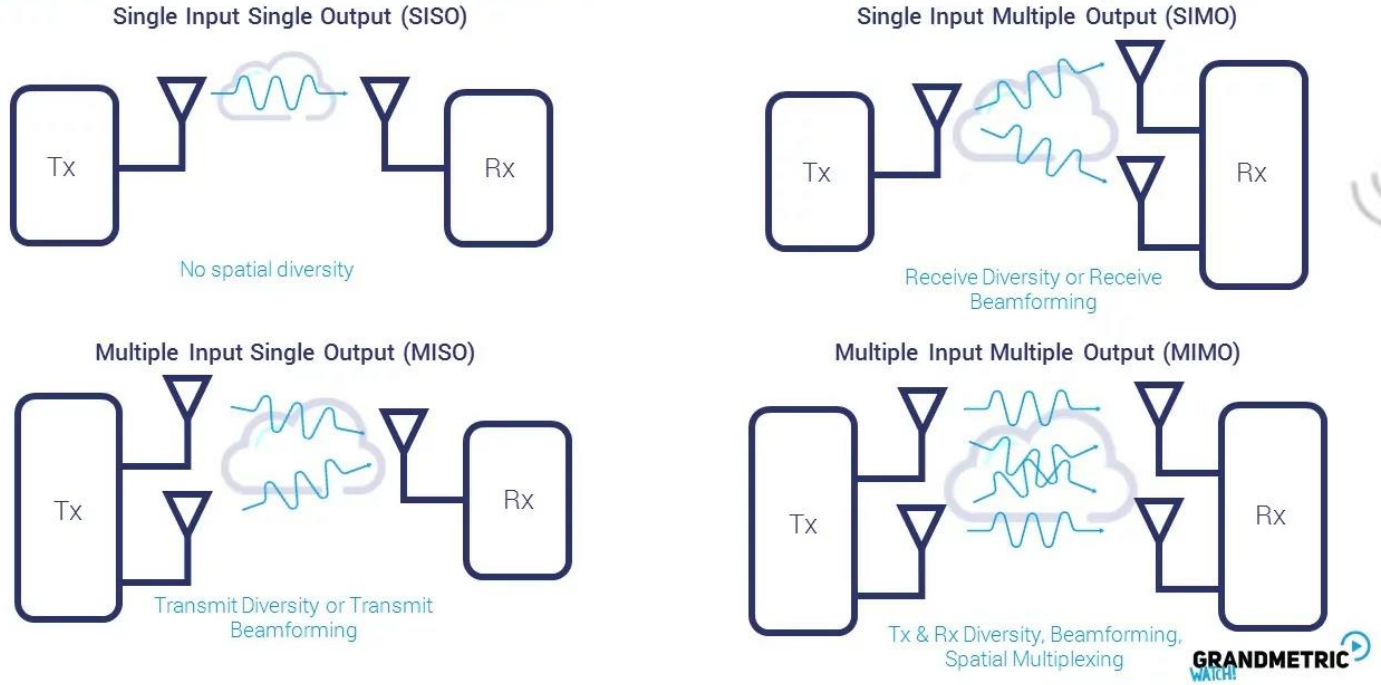
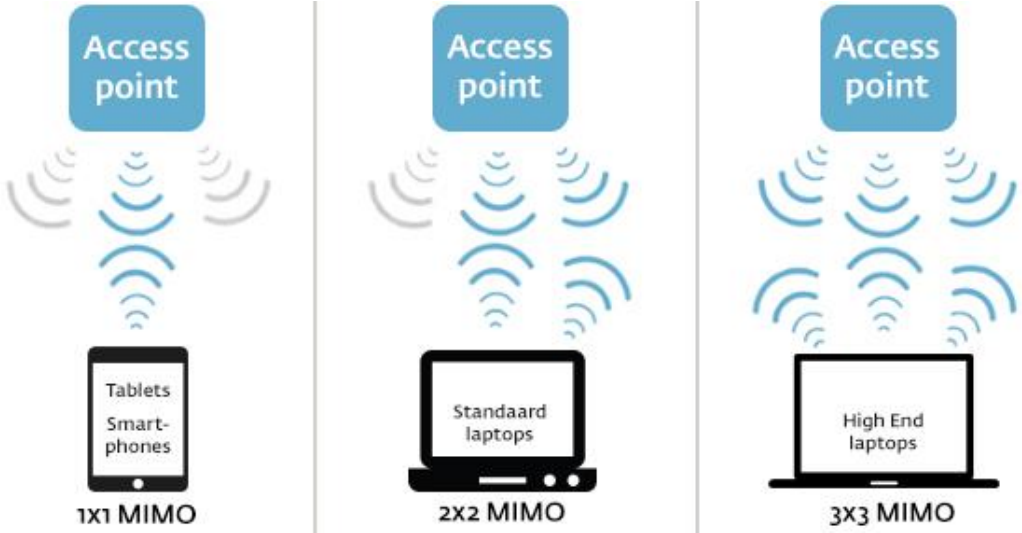
	802.11n	802.11ac	802.11ad
Throughput	600 Mbps	3.2 Gbps	Up to 7 Gbps
Coverage	Home, 70 m	Home, 30 m	Room, <5m
Freq. Band	2.4/5 GHz	5 GHz	2.4/5/60 GHz
Antennas	4 x 4 MIMO	8 x 8 MIMO	>10 x 10 MIMO
Applications	Data, Video	Video	Uncompressed Video

- MIMO is an important technique in the LTE system. MIMO means use of multiple antennas at both the transmitter and receiver. MIMO can better utilize the spatial resource and increase spectral efficiency, achieving array gain, diversity gain, multiplexing gain, and interference rejection gain, providing higher system capacity, wider coverage, and higher user rate.

Multiple Antennas and MIMO – Antenna Configurations





Which term describes what it is called when more than one wireless access point (WAP) covers the same SSID?

A. Broadcast domain

B. Basic service set

C. Extended server set

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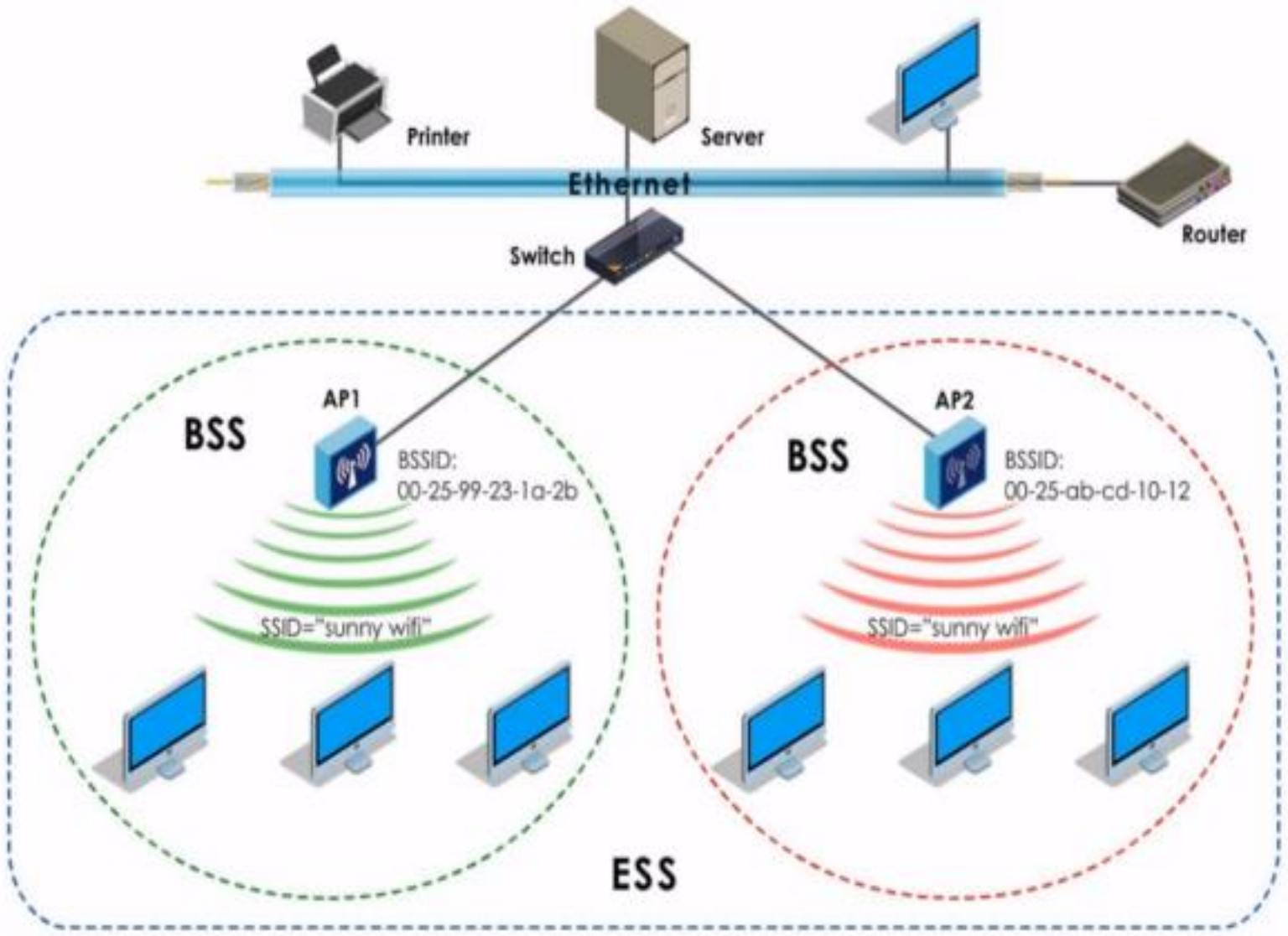


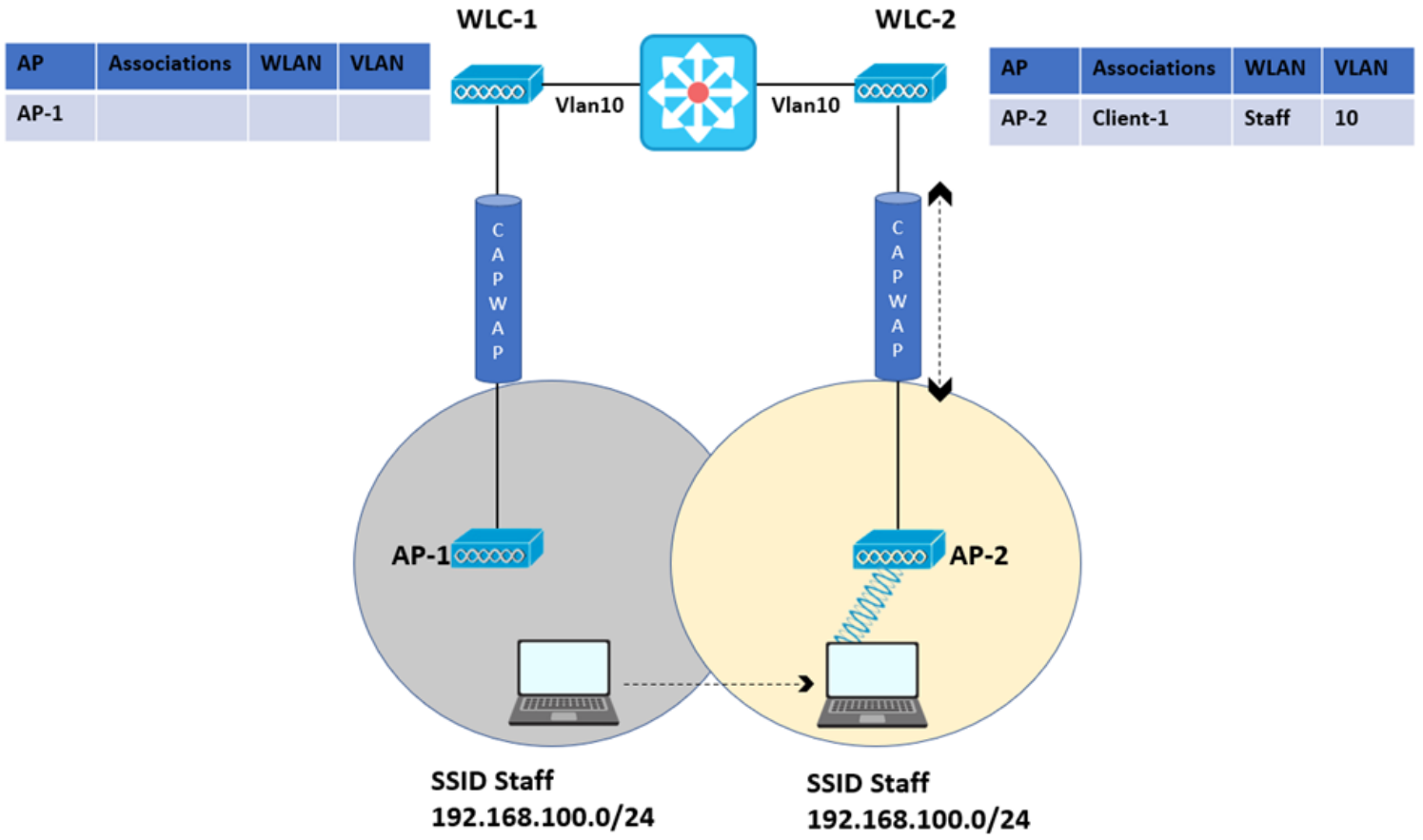
Which component allows wireless clients to roam between access points and maintain authentication?

A. Basic service set

B. Extended service set

C. Wireless LAN controller

D. Service set ID



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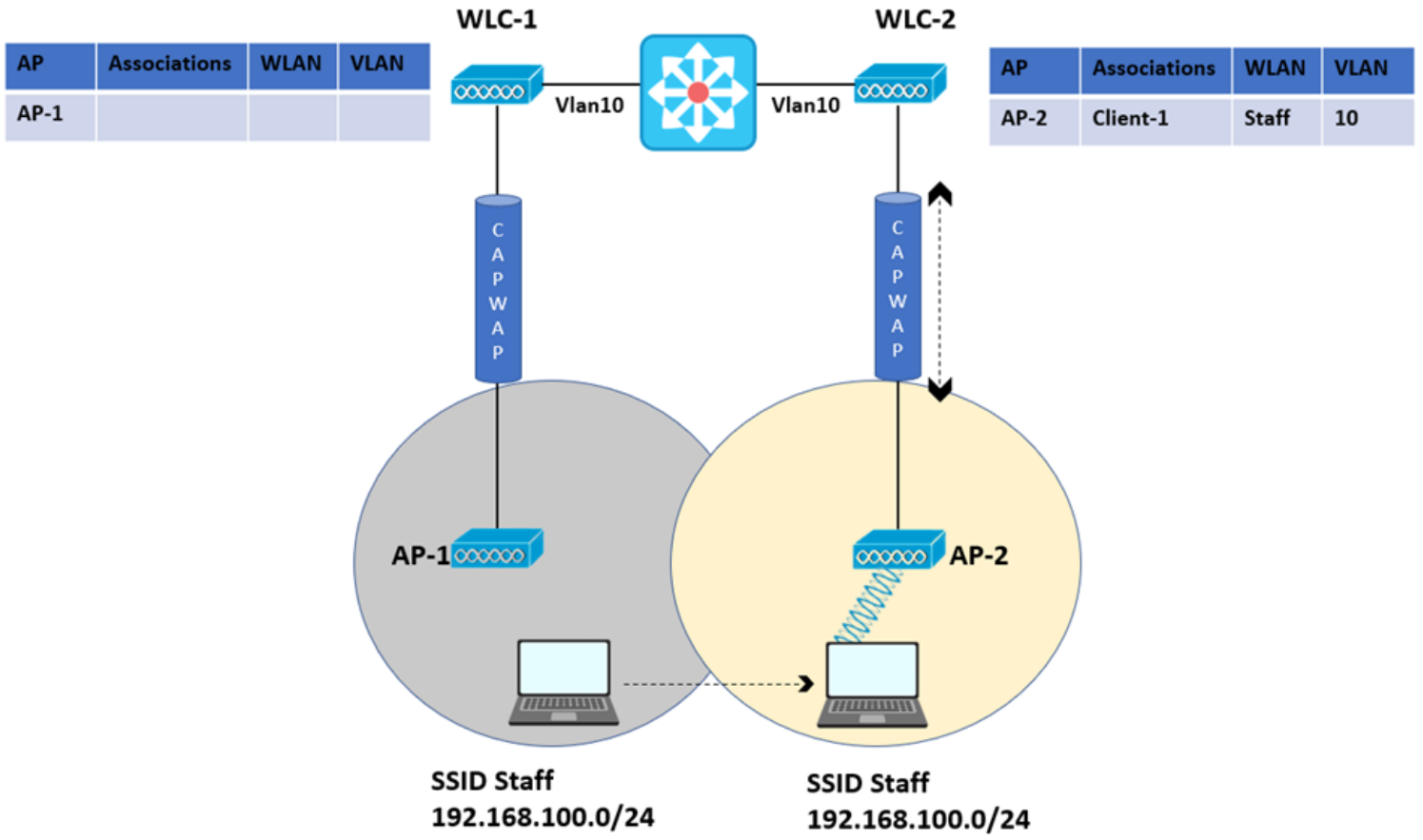

Given the following address and mask 172.16.10.1 255.255.248.0, what is the broadcast address for the subnet?

- ○ **A.** 172.16.15.255
- ○ **B.** 172.16.8.0
- ○ **C.** 172.16.16.255
- ○ **D.** 172.16.255.255
- ○ **E.** 172.16.10.255

A host runs the command **ipconfig** on the local system. The output is as follows:

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Ethernet adapter:
 Connection-specific DNS Suffix . :
 IPv4 Address. . . . . . . . . . . : 172.18.62.255
 Subnet Mask . . . . . . . . . . . : 255.255.248.0
 Default Gateway . . . . . . . . . : 172.18.63.254
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Which of the following are true? (Choose two.)

- ○ **A.** The broadcast address for the host's subnet is 172.18.71.255.
- ○ **B.** The host is attached to a subnet of a Class B private network.
- ○ **C.** The subnet the host is connected to can support up to 2048 hosts.
- ○ **D.** The host with IP address 172.18.64.5 would be on the same network as the host in the question.
- ○ **E.** The host address is on the 172.18.56.0/21 network.

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