

NET3900: Assignment 6

These questions are based on Module 6. Submit your answers via Bb by 4 pm Friday October 21, 2016. Always show your calculations or provide explanation for your answers. The marks value for each question follows the question number.

1/2. Does Guest Captive Portal use Source or Destination NAT and for what purpose?

Dest NAT: To redirect the unauthenticated user to the captive portal page

2/3. Briefly explain the Guest Portal redirection process on slide 9.

1. client association, assigned captive portal logon role
2. client gets IP address
3. client requests web page but first does DNS lookup
4. controller redirect to captive portal
5. client get authenticated with guest user database and assigned post logon role
6. client redirected to user requested web page

3/2. Identify and briefly explain two methods that are used to securely bring guest user packets to the Firewall? (ref slide 10)

1. Tunnel: guest traffic is tunneled to the DMZ firewall

2. Non Routable VLAN: the guest vlan extends to the DMZ fireless. It is non routable which means the following. a) There are no SVIs on the VLAN path until the termination point (Firewall). The user gateway is on the DMZ firewall. Firewall policy is here applied to guest traffic.

4/2. Briefly explain two applications for Remote Access Points?

1. Work at home: An employee will have to the corporate SSIDs from their place of residence. Local traffic can be routed locally using src-nat.

2. Travelling for Work: A travelling employee can connect a RAP in their hotel room and get instant, secure access to their corporate network.

3. Small Branch Office: Companies that have small branch offices can securely extend corporate access using a RAP.

5/3. Briefly describe Split Tunnel Mode (slide 17) operation in terms of packet flow, encryption and policy decision points.

- New user associates to SSID
- User get split tunnel role which runs on the RAP. Therefore RAP is a policy enforcement point.
- user gets IP from corporate DHCP
- A user sends a packet.
- The packet is unencrypted at the RAP.
- Role Policy is applied at the RAP.
- If the packet is destined for the corp network it is re-encrypted and placed on the tunnel.

- If the packet is destined for the local network, src nat is applied and the packet is sent locally.