**Chapter 16: Network Access Control and Cloud Security**

**TRUE OR FALSE**

T F 1. Network access control authenticates users logging into the

network and determines what data they can access and actions

they can perform.

T F 2. Access requestors are also referred to as clients.

T F 3. A network access server does not include its own authentication

services.

T F 4. VLANs are common NAC enforcement methods.

T F 5. The Extensible Authentication Protocol supports multiple

authentication methods.

T F 6. EAPOL operates at the network layers and makes use of an IEEE

802 LAN, such as Ethernet or Wi-Fi, at the link level.

T F 7. There is a decreasing trend in organizations to move information

technology operations to a cloud computing infrastructure.

T F 8. Cloud computing gives you the ability to expand and reduce

resources according to your specific service requirement.

T F 9. The cloud provider in a private cloud infrastructure is responsible

for both the infrastructure and the control.

T F 10. The NIST cloud computing reference architecture focuses on the

requirements of “what” cloud services provide, not a “how to”

design solution and implementation.

T F 11. A cloud broker is useful when cloud services are too complex for a

cloud consumer to easily manage.

T F 12. For many clients, the most devastating impact from a security

breach is the loss or leakage of data.

T F 13. In using cloud infrastructures, the client necessarily cedes control

to the CP on a number of issues that may affect security.

T F 14. The threat of data compromise decreases in the cloud.

T F 15. Data must be secured while at rest, in transit, and in use, and

access to the data must be controlled.

**MULTIPLE CHOICE**

1. \_\_\_\_\_\_\_\_\_\_\_ is an umbrella term for managing access to a network.

A. NAS B. ARC

C. NAC D. RAS

1. The \_\_\_\_\_\_\_\_\_ is the node that is attempting to access the network and may be any device that is managed by the network access control system.

A. AR B. RAS

C. IP D. PS

1. The \_\_\_\_\_\_\_\_\_\_ determines what access should be granted.

A. authentication server B. policy server

C. supplicant D. access requestor

1. The \_\_\_\_\_\_\_\_\_\_ is an Internet protocol that enables dynamic allocation of IP addresses to hosts.

A. VLAN B. IEEE 802.1X

C. EAPS D. DHCP

1. \_\_\_\_\_\_\_\_\_ is a client computer that is attempting to access a network.

A. EAP peer B. PSK

C. NAC D. RAS

1. Broad network access, measured service, resource pooling, and rapid elasticity are essential characteristics of \_\_\_\_\_\_\_\_\_\_\_.

A. PaaS B. network access control

C. cloud computing D. EAP-TLS

1. \_\_\_\_\_\_\_\_\_ saves the complexity of software installation, maintenance, upgrades, and patches.

A. IaaS B. SaaS

C. EAP D. DHCP

1. In effect, \_\_\_\_\_\_\_\_ is an operating system in the cloud.

A. IEEE 802.1X B. PaaS

C. IaaS D. DHCP

1. \_\_\_\_\_\_\_\_\_ enables customers to combine basic computing services, such as number crunching and data storage, to build highly adaptable computer systems.

A. IaaS B. EAP peer

C. CP D. SaaS

1. With a \_\_\_\_\_\_\_\_\_ infrastructure, the cloud infrastructure is made available to the general public or a large industry group and is owned by an organization selling cloud services.

A. hybrid cloud B. private cloud

C public cloud D. community cloud

1. With a \_\_\_\_\_\_\_\_\_ infrastructure, the cloud infrastructure is shared by several organizations and supports a specific community that has shared concerns.

A. community cloud B. public cloud

C. private cloud D. hybrid cloud

1. A \_\_\_\_\_\_\_\_\_ is a person or organization that maintains a business relationship with, and uses service from, cloud providers.

A. cloud auditor B. cloud broker

C. cloud carrier D. cloud consumer

1. A \_\_\_\_\_\_\_\_ is a person, organization, or entity responsible for making a service available to interested parties.

A. cloud broker B. cloud auditor

C. cloud provider D. cloud carrier

1. A \_\_\_\_\_\_\_\_ is a party that can conduct independent assessment of cloud service, information sytem operations, performance, and security of the cloud implementation.

A. cloud auditor B. cloud carrier

C. cloud broker D. all of the above

1. \_\_\_\_\_\_\_\_\_ is the provision of security applications and services via the cloud either to cloud-based infrastructure and software or from the cloud to the customers’ on-premise systems.

A. IaaS B. PaaS

C. SaaS D. SecaaS

**SHORT ANSWER**

1. The \_\_\_\_\_\_\_\_\_\_\_ functions as an access control point for users in remote locations connecting to an enterprise’s internal network.
2. \_\_\_\_\_\_\_\_\_\_ methods are the actions that are applied to ARs to regulate access to the enterprise network.
3. A \_\_\_\_\_\_\_\_\_\_ provides a form of NAC by allowing or denying network traffic between an enterprise host and an external user.
4. An \_\_\_\_\_\_\_\_\_\_ is a server computer that negotiates the use of a specific EAP method with an EAP peer, validates the EAP peer’s credentials, and authorizes access to the network.
5. A \_\_\_\_\_\_\_\_\_ is an entity at one end of a point-to-point LAN segment that seeks to be authenticated by an autheticator attached to the other end of that link.
6. \_\_\_\_\_\_\_\_\_ is a model for enabling ubiquitous, convenient, on-demand network

access to a shared pool of configurable computing resources that can be

rapidly provisioned and released with minimal management effort or service

provider interaction.

1. NIST defines three service models, which can be viewed as nested service alternatives: software as a service, platform as a service, and \_\_\_\_\_\_\_\_\_ as a service.
2. With a \_\_\_\_\_\_\_\_ infrastructure, the cloud infrastructure is a composition of two or more clouds that remain unique entities but are bound together by standardized or proprietary technology that enables data and application portability.
3. A \_\_\_\_\_\_\_\_\_ in an intermediary that provides connectivity and transport of cloud services from CP’s to cloud consumers.
4. \_\_\_\_\_\_\_\_\_\_\_ includes people, processes, and systems that are used to manage access to enterprise resources by assuring that the identity of an entity is verified, and then granting the correct level of access based on this assured identity.
5. \_\_\_\_\_\_\_\_\_\_ are third party audits of cloud services.
6. \_\_\_\_\_\_\_\_\_ defines how the TLS protocol can be encapsulated in EAP messages.
7. \_\_\_\_\_\_\_\_\_\_\_\_ is an EAP method for mutual authentication and session key derivation using a Pre-Shared Key.
8. An \_\_\_\_\_\_\_\_\_ is an access point or NAS that requires EAP authentication prior to granting access to a network.
9. The Cloud Security Alliance defines \_\_\_\_\_\_\_ as the provision of security applications and services via the cloud either to cloud-based infrastructure and software or from the cloud to the customers’ on-premise systems.