Lesson 12

Configuring Name Resolution and Additional Services

Knowledge Assessment

Matching

1. AAAA f. Recursive query
2. Account organization g. Resource record
3. CNAME h. Start of Authority (SOA)
4. in-addr.arpa i. Stub zone
5. NetBIOS j. Windows Internet Naming Service (WINS)

1. \_\_h\_\_ This DNS record identifies which name server is the authoritative source of information for data within a domain. P249

2. \_\_a\_\_ This DNS record type identifies an IPv6 DNS host. P249

3. \_\_f\_\_ This type of DNS query is sent to DNS servers by a DNS client resolver. P252

4. \_\_i\_\_ This DNS zone contains only SOA and NS resource records, plus host resource records that identify the authoritative servers for a zone. P257

5. \_\_b\_\_ These contain the user accounts in an ADFS federated relationship. P263

6. \_\_j\_\_ This service is used to provide a centralized mechanism for managing NetBIOS name resolution on a Windows network. P246

7. \_\_d\_\_ This DNS zone is designed specifically to support IPv4 reverse name resolution. P254

8. \_\_g\_\_ This refers to all DNS record types that can be stored in a DNS zone. P248

9. \_\_c\_\_ This DNS record type provides an alias for a given host, such that a host called server1.adatum.com can be accessed at the same IP address using [www.adatum.com](http://www.adatum.com). P250

10. \_\_e\_\_ This was the default name resolution protocol used by Windows operating systems prior to the introduction of Windows 2000 and Active Directory. P246

Multiple Choice

1. Which DNS server configuration does not host any zones locally?

a. caching-only server

b. conditional forwarder

c. secondary zone

d. conditional secondary zone

A caching-only server contains no DNS zones and hosts no DNS domains. It is used only to cache the results of client Internet queries to improve the speed of subsequent queries for the same resources. P255

2. What is the DNS query type most commonly sent between DNS servers?

a. forwarding query

b. conditional forwarding query

c. iterative query

d. recursive query

In an iterative query, the DNS resolver follows a string of referrals until it locates the authoritative name server for the requested resource. P252

3. Which AD FS component enables a claims-based application to query AD FS security claims?

a. AD FS Federation Services Proxy

b. claims-aware agent

c. Windows token-based agent

d. NTLM claims-based agent

The claims-based agent is a component that can be installed on a Windows Server 2008 computer when you add the AD FS role. P264

4. Which MX record attribute indicates a relative priority to determine the MX record that will be used if multiple records are configured for a particular domain?

a. Weight

b. Priority

c. Preference

d. Exchange

The Preference field contains an integer value that indicates the record’s relative priority; the lower the number, the more likely it will be selected. P250

5. Which DNS zone type is read-only, contained in a text file on the computer hosting the zone?

a. standard secondary zone

b. Active Directory-integrated secondary zone

c. standard primary zone

d. Active Directory-integrated primary zone

Secondary zones are read-only and cannot be Active Directory−integrated. P257

6. Which DNS record type is required by Active Directory to allow clients to locate AD resources?

a. NS record

b. A record

c. MX record

d. SRV record

Active Directory domain controllers use SRV records to allow clients to locate domain controllers, global catalog servers, and other Active Directory resources. P250

7. Which Active Directory application partition will replicate DNS data to all domain controllers within an Active Directory domain that have been configured to run the DNS server role?

a. DomainDNSZones

b. Domain NC

c. Configuration NC

d. ForestDNSZones

The DomainDNSZones application directory partition is only available at a domain functional level of Windows Server 2003 or higher. P260

8. What is configured on a primary name server so it can inform its secondary servers that changes are available in the primary zone?

a. Active Directory replication list

b. Active Directory replication partner

c. notify list

d. change notification list

When changes are made to a primary server configured with a notify list, a zone transfer will be automatically initiated. P259

9. Which program generates requests for DNS information and sends them to DNS name servers to be resolved?

a. iterative queries

b. recursive queries

c. resolvers

d. notify list

 Each Windows computer, both client and server operating systems, possess a DNS resolver to submit DNS queries to their configured DNS servers. P248

10. Which DNS servers are at the highest level of the DNS namespace?

a. root name servers

b. .com name servers

c. cache.dns name servers

d. forwarding name servers

Root name servers maintain information about the top-level DNS domains such as .com, .net, .org, and so on. P250

CASE SCENARIO

Scenario 12-1: Consulting for Margie's Travel

You are a computer consultant for Margie Shoop, the owner of Margie's Travel. Margie has a single Active Directory domain structure with the domain ad.margiestravel.com. The domain controllers and DNS servers for ad.margiestravel.com are housed on an internal network; **Margie's Travel has also deployed several Windows Server 2008 servers on its DMZ to provide the Internet presence for Margie's Travel.** Margie has partnerships with numerous cruise lines and tour companies that provide excursions for Margie's customers on their travels. To promote these companies, some of which are one-man or family owned operations, Margie has begun to leverage her company's Active Directory and network infrastructure to enable her partners to maintain a World Wide Web presence using the Margie's Travel network. **Margie's Travel has entered into an agreement to provide name resolution for the Website of a small company** that provides dolphin-watching excursions in the Bahamas. **This consists of providing name resolution for external customers to a server called SERVER1**. Because most customers have trouble remembering to type SERVER1 in front of the company's domain name, the dolphin-watching tour company wants people to be able to access the server using the more well-known WWW alias.

Given this information about Margie's Travel, answer the following questions:

1. What does Margie's Travel need to do to provide name resolution for its partner company?

Create a standard primary zone on a DNS server in the DMZ corresponding to the name of the partner company. Configure the SOA and Name Server records so that the partner company's domain name is accessible via the Internet.

2. What does Margie's Travel need to do to allow SERVER1 to be accessible using the name WWW when accessing the partner company's Website?

Create a CNAME alias record for WWW, corresponding to the SERVER1 A record.

3. The server hosting the primary DNS zone created in Question 1 was offline for several hours due to a hardware failure. How can Margie's Travel provide fault tolerance for standard DNS zones in the DMZ in case this happens again?

Create a secondary DNS zone on another server that can respond to queries in the event that the server hosting the primary zone is offline or unavailable.