

**Microsoft 70-291**

**Implementing, Managing, and Maintaining a Microsoft  
Windows Server 2003 Network Infrastructure  
Version: 41.2**

**Topic 1, Volume A****QUESTION NO: 1**

You are a network administrator for your company. A Windows Server 2003 computer named Server1 is exhibiting connectivity problems. You monitor Server1 by using System Monitor and Network Monitor. While monitoring, you notice that Server1 has approximately 4 MB of available memory, and the average CPU utilization is running at 95 percent. When you investigate the Network Monitor capture, you notice that some network packets sent to Server1 during the capture have not been captured. You need to ensure that the impact of monitoring on Server1 is reduced and that all packets sent to the computer are captured. What should you do?

- A. From a command prompt, run the diskperf command.
- B. Run Network Monitor in dedicated capture mode.
- C. Configure a Network Monitor capture filter.
- D. Increase the buffer size in Network Monitor.

**Answer: B**

**Explanation:** The CPU of SERVER1 runs on 95%, which indicates that there is not enough resources to the network Monitor. Running Network Monitor in dedicated capture mode frees resources on the computer for capturing data. This results in fewer frames being dropped. The capture statistics are not displayed or refreshed because the frames are copied to the capture buffer.

**Reference:**

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd and Laura Hunter, Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing Inc., Rockland, 2003, p. 841

**QUESTION NO: 2**

You are the administrator of a Windows Server 2003 computer named Server1. Server1 is a domain member server that has the DNS service installed. Server1 is configured with two network interfaces named NIC1 and NIC2. Routing is not enabled between the two network interfaces. NIC1 and NIC2 are configured as shown in the following table.

Network interface	IP address	Subnet mask	Preferred DNS server	Purpose
NIC1	192.168.2.10	255.255.255.0	192.168.2.10	Connect to production network
NIC2	192.168.3.10	255.255.255.0	192.168.3.2	Connect to isolated preproduction network segment

Resources on the preproduction network segment use the same fully qualified domain names (FQDNs) as resources in the production network. The TCP/IP properties on client computers in the preproduction environment are controlled by individual testers. You need to ensure that the users in the preproduction environment cannot resolve FQDNs from the production network. You want to accomplish this goal by using the DNS console on Server1. What should you do?

- A. Configure Server1 to disable round robin.
- B. Configure the forwarders on Server1 to refer requests to 192.168.3.2.
- C. Configure Server1 to disable recursion.
- D. Configure the interfaces properties on Server1 to listen on 192.168.2.10 only.

**Answer: D**

**Explanation:** When configuring Your DNS Server, the first tab, Interfaces, is used to tell your DNS server on which Network Interface Cards (NIC), and IP addresses attached those cards, it will listen for DNS queries. The default is to pick up all IP addresses assigned to the DNS server during installation. To limit the IP addresses on which your DNS server will listen, only the following IP addresses, type the IP addresses you want in the IP Address field, and click the Add button.

Thus configuring the SERVER1 interfaces properties to listen to 192.168.2.10 only will result in the preproduction segment not being able to resolve FQDNs from the production network.

Reference:

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd & Laura Hunter, MCSA/MCSE Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing, Rockland, 2003, pp. 492-497

### QUESTION NO: 3

You are the network administrator for Fabrikam, Inc. The network contains a DNS server named Server1. Server1 is configured to resolve queries for external internet resources. Server1 also hosts the fabrikam.com internal zone for Active Directory. Users report that they are directed to the wrong Web site when browsing for well-known Internet Web sites. You need to minimize the occurrence of unexpected results when users browse the Internet in the future. You also need to minimize disruption to users. What should you do?

- A. Enable the Disable recursion setting in the advanced properties of Server1.
- B. Enable Fail on load if bad zone data setting in the advanced properties of Server1.
- C. Enable the Enable automatic scavenging of stale resource records setting in the advanced properties of Server1 and set it to 7 days.
- D. Enable the Secure cache against pollution setting in the advanced properties of Server1.

**Answer: D**

**Explanation:** When the **Secure cache against pollution** setting is disabled, all records received in response to DNS queries are cached. This is true even when the records do not match to a queried domain name. Enabling the Secure cache against pollution setting disables the ability to pollute the DNS cache with incorrect information, and spoof DNS queries. With Windows Server 2003 the default setting is that caches are secured against pollution. This will then prevent users that browse the Internet from being directed to the wrong websites.

**Reference:**

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd and Laura Hunter, MCSA/MCSE:Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing Inc., Rockland, 2003, pp. 496-497

J. C. Mackin, Ian McLean, MCSA/MCSE Self-Paced Training Kit (exam 70-291): Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 network Infrastructure, Microsoft Press, Redmond, 2003, Part 1, Chapter 3, pp. 285, 291

#### **QUESTION NO: 4**

You are the network administrator for your company. The network consists of a single Active Directory domain. All servers run Windows Server 2003. All client computers run Windows XP Professional. You install Windows Server Update Services (WSUS) on a network server named Server1. When you attempt to synchronize Server1 with the Windows Update servers, you receive an error message. You open Internet Explorer and verify that you can communicate with an external Web site by using the proxy server. You need to ensure that Server1 can communicate with the Windows Update servers. What should you do on Server1?

- A. Restart the IIS administration tool.
- B. In the WSUS options, configure authentication to the proxy server.
- C. Configure the Internet Explorer settings to bypass the proxy server.
- D. Install the ISA Firewall Client.

**Answer: B**

**Explanation:**

In the Software Update Services administration console, there is an option to configure your internet connection settings. These settings include proxy server settings. If you have a proxy server between the SUS server and the internet, you need to configure the proxy server settings in

the SUS options.

### QUESTION NO: 5

You are the network administrator for Fabrikam, Inc. The network consists of a single Active Directory domain named fabrikam.com. A Windows Server 2003 computer named Server1 functions as the DNS server for the domain. Wingtip Toys is a division of Fabrikam, Inc. The Wingtip Toys network consists of a single Active Directory domain named wingtiptoys.com. Server1 is a secondary zone server for wingtiptoys.com. You are monitoring notification traffic between the two domains. You need to keep a record of when the primary DNS server for wingtiptoys.com informs Server1 of available changes in the wingtiptoys.com zone. What should you do?

- A. Enable debug logging on Server1. Configure the log to record Notification events.
- B. Use the Performance console to create a log of the DNS performance counter Notification Received on Server1.
- C. Run the replmon command to monitor replication events on Server1.
- D. Run the dcdiag command to check DNS registration on Server1.

**Answer: A**

#### **Explanation:**

Debug logging is disabled by default and has to be enabled on SERVER1. Select the **Log packets for debugging** check box to configure Debug Logging. To receive useful debug logging information, you should select a Packet direction, a Transport protocol, and at least one more option. You can also specify the file path and name, and the maximum size for the log file. Enabling Debug Logging slows DNS server performance.

#### **Reference:**

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd and Laura Hunter, MCSA/MCSE : Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing Inc., Rockland, 2003, p. 551

### QUESTION NO: 6

You are the administrator of a Windows Server 2003 computer named Server1. Server1 is an FTP server located in the company's internal network. Administrators report an increased amount of FTP traffic to Server1.

You need to configure Server1 to achieve the following goals:

Identify the media access control (MAC) address of any computer that is performing FTP transfers from Server1.

Find out the exact FTP commands that were executed.

Ensure that you do not disrupt the operation of Server1.

What should you do?

- A. Run the arp command on Server1 to identify the source of the FTP requests.
- B. Configure a performance alert to write an event to the application event log whenever the number of established FTP connections exceeds 1.
- C. Run the finger command on Server1 to identify the source of the FTP requests.
- D. Use a Network Monitor filter to capture IP traffic from any computer to Server1.

**Answer: D**

**Explanation:** Network Monitor tool allows you to capture data. The tool also allows you to identify its source from where it came from. The Network Monitor tool also allows you to analyze the content of the message. Use a Network Monitor capture filter to capture IP traffic from any computer to SERVER1, and apply the capture filter before capturing the data.

**Reference:**

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd and Laura Hunter, MCSA/MCSE:Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing Inc., Rockland, 2003, pp. 198, 543

J. C. Mackin, Ian McLean, MCSA/MCSE Self-Paced Training Kit (exam 70-291): Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 network Infrastructure, Microsoft Press, Redmond, 2003, Part 1, Chapter 3, pp. 140, 144, 145.

## QUESTION NO: 7

You are the network administrator for Fabrikam, Inc. The network consists of a single Active Directory domain named fabrikam.com. A Windows Server 2003 computer named Server1 is the only DNS server in the domain. It hosts no other zones. Users report that connecting to computers within the fabrikam.com domain is slow. You need to find out whether DNS client traffic on Server1 is causing this problem. What should you do?

- A. Enable debug logging on Server1. Configure the log to capture Notification events.
- B. Use System Monitor to create a log of the NetworkInterface counter Total bytes/sec.
- C. Enable debug logging on Server1. Configure the log to capture Update events.
- D. Use System Monitor to create a log of the DNS counters Dynamic updates/sec and Total queries/sec.

**Answer: D**

**Explanation: Explanation:** The System Monitor utility is used to collect and measure the real-time performance data for a local or remote computer on the network. Through System Monitor, you can view current data or data from a log file. When you view current data, you are monitoring real-time activity. When you view data from a log file, you are importing a log file from a previous session.

Using the System Monitor, you can generate statistics on the following types of information regarding DNS services:

AXFR requests (all-zone transfer requests), IXFR requests (incremental zone transfer requests), DNS server memory usage, Dynamic updates, DNS Notify events, Recursive queries, TCP and UDP statistics, WINS statistics and Zone transfer issues. Thus to find out where DNS client traffic is responsible for the slow speed at which computers connect within the fabrikam.com domain, then you should create a log of the Dynamic Updated/sec and the Total queries/sec given the fact that SERVER1 is the only DNS server in the domain.

**Reference:**

James Chellis, Paul Robichaux and Matthew Sheltz, MCSA/MCSE:Windows Server 2003 Network Infrastructure Implementation, Management, and Maintenance Study Guide, Sybex Inc. Alameda, 2003, pp. 70-73, 304

## QUESTION NO: 8

You are the network administrator for your company. All servers run Windows Server 2003. All servers are configured with static IP addresses. All client computers run Windows XP Professional. All client computers are configured as DHCP clients. The company has a main office and one branch office. The offices are separated by a router. A DHCP server is deployed in each office. One of the DHCP servers shuts down unexpectedly. It takes four hours to repair the server. During that time, several mobile users connect their portable computers to the network and report that they cannot connect to shared resources on the network. After the server is repaired, you create a new scope on each DHCP server that includes IP addresses for the other office. You activate the scopes. You test the new DHCP configuration by shutting down the DHCP server in the main office. You find out that the client computers in the main office are not receiving IP addresses from the DHCP server in the branch office. You need to ensure that when the DHCP server in one office fails, the client computers will receive a correct IP address configuration from

the DHCP server in the other office. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

- A. Configure the DHCP server in each office with an additional network adapter. Connect each new network adapter to the local network. Assign an IP address from the other office's network to each new network adapter.
- B. Configure the router between the offices to forward BOOTP broadcasts.
- C. Configure the DHCP server in each office with a DHCP scope that includes the same IP addresses as the DHCP server in the other office. Activate the scope.
- D. Install and configure a DHCP relay agent in each office.

**Answer: B,D**

**Explanation:**

**Explanation:** In a subnetted environment, routers and remote computers can be configured to be DHCP Relay Agents, which forward DHCP information between subnets. The router forwards requests for IP address configuration assignments to the remote DHCP Server. The DHCP Relay Agent is typically configured on a network segment where there is no DHCP server. The network segments are normally on the other end of a non 2131 compliant router from a DHCP server. The DHCP Relay Agent assists in passing on DHCP and BOOTP broadcast messages over routers which do not support the passing on of these messages. The DHCP server configured in the DHCP Relay Agent's properties through the DHCP Relay Agent performs the DHCP lease process. The server specified apply to each network interface that the relay agent is attached to. Instead of using the approach just outlined, you can configure the router between the offices to forward BOOTP broadcasts.

**Reference:**

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd and Laura Hunter, Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, p. 142

J. C. Mackin, Ian McLean, MCSA/MCSE Self-Paced Training Kit (exam 70-291): Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 network Infrastructure, Part 1, Chapter, pp. 537 – 540

**QUESTION NO: 9**

You are the network administrator for your company. All servers run Windows Server 2003. You configure a server named Server2 as a Network Address Translation (NAT) server. Server2 has a single network adapter and a modem. Server2 connects to the Internet through a demand-dial connection. Users report that when they attempt to connect to Internet Web sites, they



intermittently receive the following error message: "Page not found." After waiting for several minutes, they can connect to the Web sites. These errors occur throughout the day. You need to configure Server2 to allow users to always connect to Internet Web sites. What should you do?

- A. Set the dial-out hours on the demand-dial connection to any day and any time.
- B. Set a demand-dial filter. Configure the filter for Only allow the following traffic. Specify a new filter for outbound port 80.
- C. Set the demand-dial connection to Persistent.
- D. Configure the demand-dial interface as the private interface.

**Answer: C**

**Explanation:**

Demand-dial connection is a connection, typically using a circuit-switched wide area network (WAN) link that is initiated when data needs to be forwarded. The demand-dial connection is typically terminated when there is no traffic. To allow users to *always* successfully connect to the Internet you need to configure the demand-dial connection as persistent as this will prevent the problem they are currently experiencing.

**Reference:**

Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd and Laura Hunter, MCSA/MCSE : Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing Inc., Rockland, 2003, pp. 651-652

Diana Huggins, Windows Server 2003 Network Infrastructure Exam Cram 2 (Exam 70-291), Chapter 5

**QUESTION NO: 10**

You are a network administrator for Alpine Ski House. The network consists of a single Active Directory domain named alpineskihouse.com. Your company acquires a company named Adventure Works. The Adventure Works network consists of a single Active Directory domain named adventure-works.com. A server named Server32 is a network-management application server in the adventure-works.com domain. Server32 accesses all of the desktop client computers to perform automated software upgrades and hardware inventory. The network-management software on Server32 references desktop computers by unqualified host names, which are resolved to clientname.adventure-works.com by using a DNS server. You join Server32 to your domain to become server32.alpineskihouse.com. The Server32 IP address is 10.10.10.90. You are gradually migrating all adventure-works.com desktop client computers to your domain to become clientname.alpineskihouse.com. You do not have access to the adventure-works.com DNS server. When Server32 attempts to apply an update to the client computers, the network-

management software returns many alerts that say that desktop computers cannot be found. You want to allow the network-management software on Server32 to resolve unqualified client computer host names in adventure-works.com or alpineskihouse.com, and you want to use the minimum amount of administrative effort. What should you do?

- A. On Server32, in Advanced TCP/IP Settings, add adventure-works.com and alpineskihouse.com to the Append these DNS suffixes (in order) setting.
- B. On Server32, in System Properties, type adventure-works.com in the Primary DNS suffix of this computer field in the DNS Suffix and Netbios Computer Name setting.
- C. On the DNS server for alpineskihouse.com, add a zone for adventure-works.com. Create a host (A) record for server32.adventure-works.com that points to 10.10.10.90.
- D. On Server32, configure a Hosts file that contains the name and IP address of every network computer.

**Answer: A**

**Explanation: Explanation:** If you choose Append the DNS suffixes (in order), only domain names listed in that window will be tried for resolution purposes. Both the connection-specific and primary DNS suffix are ignored. This is exactly what is necessary if you want to allow the network management software on SERVER32 to resolve unqualified client host name in alpineskihouse.com or adventure-works.com with the least amount of administrative effort. You should thus add the alpineskihouse.com and adventure-works.com names in that setting.

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Deborah Littlejohn Shinder, Dr. Thomas W. Shinder, Chad Todd & Laura Hunter, MCSA/MCSE Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure Guide & DVD Training System, Syngress Publishing, Rockland, 2003, pp. 69, 515

#### QUESTION NO: 11

You are a network administrator for your company's main office in Chicago. The main office contains 3,000 desktop computers. A Windows Server 2003 computer named Server14 is the DHCP server for the network. The hardware configuration of Server14 is shown in the following table.