Lab 2 worksheet

Configuring DNS and DHCP

**This lab contains the following exercises:**

**Exercise 2.1 Designing a DNS Namespace**

**Exercise 2.2 Creating a Zone**

**Exercise 2.3 Creating Domains**

**Exercise 2.4 Creating Resource Records**

**Exercise 2.5 Creating a Scope**

**Exercise 2.6 Confirming DHCP Server Functionality**

**Exercise 2.7 Configuring DHCP Reservations**

**Workstation Reset: Returning to Baseline**

**Estimated lab time: 100 minutes**

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| Exercise 2.1 | Designing a DNS Namespace |
| Overview | You have been tasked with creating a test DNS namespace structure for your organization. Your first task is to design that namespace by specifying appropriate domain and host names for the computers in the division. |
| Completion time | 15 minutes |

2. In the diagram provided in Figure 2-1, write both the domain names and the fully qualified domain names that you have selected for the computers in the appropriate spaces.

**Figure 2-1**

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| Exercise 2.2 | Creating a Zone |
| Overview | You will now configure the DNS Server Role you installed in lab 1.4 by creating zones. A zone is the administrative division that DNS servers use to administer domains. The first step in implementing the DNS namespace that you designed is to create a zone representing your root domain.  |
| Completion time | 10 minutes |

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| Question 1 | Why is the Store the zone in Active Directory checkbox grayed out? |

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| Question 2 | What resource records appear in the new zone you created by default? |

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| Exercise 2.3 | Creating Domains |
| Overview | A single zone on a DNS server can encompass multiple domains as long as the domains are contiguous. In this exercise, you create the departmental domains you specified in your namespace design. |
| Completion time | 10 minutes |

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| Question 3 | What resource records appear in the new domains you created by default? |

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| Exercise 2.4 | Creating Resource Records |
| Overview | Now that you have created the zones and domains for your namespace, you can begin to populate them with the resource records that the DNS server uses to resolve host names into IP addresses. |
| Completion time | 15 minutes |

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| Question 4 | What must you do before you can select the Create associated pointer (PTR) record checkbox in the New Host dialog box? |

9. Press Ctrl+Prt Scr to take a screen shot of the DNS Manager console, showing the resource records you created in the Human Resources domain, and then press Ctrl+V to paste the resulting image into the lab02\_worksheet file in the page provided.

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| Exercise 2.5 | Creating a Scope |
| Overview | In this exercise you will configure the DHCP Server Role you installed in lab 1.5 by creating a scope. A scope is a range of IP addresses that a DHCP server uses to supply clients on a particular subnet with IP addresses. In this exercise, you create a scope on your DHCP server. |
| Completion time | 15 minutes |

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| Question 5 | Notice that the wizard automatically adds a value to the Subnet mask text box.Where did this value come from? |

1. Press Ctrl+Prt Scr to take a screen shot of the DHCP console, showing the contents of the Address Pool folder, and then press Ctrl+V to paste the resulting image into the lab02\_worksheet file in the page provided.

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| Exercise 2.6 | Confirming DHCP Server Functionality |
| Overview | In this exercise you will test the functionality of your DHCP Server using your Windows 7 virtual machine. |
| Completion time | 10 minutes |

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| Question 6 | What IP addressing settings are currently configured? |

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| Question 7 | Is the computer currently configured for DHCP? How can you tell? |

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| Question 8 | What is the IP address of the DHCP server from which Workstation## has obtained its IP address? |

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| Question 9 | If the answer to #8 was not the IP address of the Server##A computer, why might this have happened? |

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| Question 10 | What DNS Server address was Workstation XX assigned? |

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| Exercise 2.7 | Configuring DHCP Reservations |
| Overview | In this exercise you will configure a DHCP reservation for your Windows 7 virtual machine. A DHCP reservation enables the DHCP server to always assign a specific address to a client machine. You will test the DHCP reservation using your Windows 7 virtual machine.  |
| Completion time | 15 minutes |

1. Press Ctrl+Prt Scr to take a screen shot of the DHCP Server console, showing the reservation you created is active, and then press Ctrl+V to paste the resulting image into the lab02\_worksheet file in the page provided.