Unit 1 lab assignemnt

Networking DHCP configuration is an important process that any networker should understand. It involves a step by step process (It Essentials: Pc Hardware and Software Companion Guide 34). In this writing, I will go through the objectives of the steps and importance of understanding each step.

Authorizing a DHCP server enables the server to lease IP addresses to clients. Creating a scope sets a range of IP addresses that the DCHP leases to the clients (Bender 27). Creating an exclusion range of IP addresses on the other hand sets a range of IP addresses that one would not like to be offered by the DCHP. To enable a DHCP client to use an address permanently, one creates client reservations.

DHCP options pass additional IP setting to clients. Some of these options include DNS server and Domain name. The design of DHCP options involves definition of settings to establish the boundaries of a given DHCP configuration. Server options apply the options to all scopes defined while scope options apply to a single scope (It Essentials: Pc Hardware and Software Companion Guide 53).

In addition to the DHCP configuration, there exist advanced settings. One can enable the pool configuration or specify additional service availability settings. Configuring a DHCP relay agent involves configuring the relay agent program in a computer allowing messages to be relayed across different subnets (It Essentials: Pc Hardware and Software Companion Guide 76) Setting up a relay agent on a computer on each subnet allows message traffic to be relayed to computers on different subnets (Bender 67). Configuration Protocol for IPv6 can also be configured for DHCP. The use of

IPV6 allows many subnets to be created.

Networking is important in any IT field. Proper understanding of this lab concepts helps prevent network errors that come about from improper configuration. Traffic jam, which is common problem to large networks, can be prevented if one adheres to proper configuration. Network security can also be guaranteed by proper configuration.

Works cited

Bender, Michael. Mcts Guide to Microsoft Windows Server 2008 Network Infrastructure Configuration. Boston, MA: Course Technology, Cengage Learning, 2010. Print.

It Essentials: Pc Hardware and Software Companion Guide. Indianapolis: Cisco Press, 2013. print