A DHCP Server assigns IP addresses to client computers. This is very often used in enterprise networks to reduce configuration efforts. All IP addresses of all computers are stored in a database that resides on a server machine.

Installing DHCP Server is very easy in win server 2003

First you need to go to Start→All Programs→Administrative Tools→Manage Your Server
Here you need to select Add or remove a role

Managing Your Server Roles
Use the tools and information found here to add or remove roles and perform your daily administrative tasks.

Your server has been configured with the following roles:

Verify the following steps click on Next
Select Server Role as DHCP Server option click on Next
Summary selection click on Next
Installing DHCP Server in progress
Now this will prompt new scope welcome scree click next
A scope is a collection of IP addresses for computers on a subnet that use DHCP. Enter the name and description of your scope click next.
Now you need to define the range of addresses that the scope will distribute across the network, the subnet mask for the IP address. Enter the appropriate details and click next.

**New Scope Wizard**

**IP Address Range**
You define the scope address range by identifying a set of consecutive IP addresses.

Enter the range of addresses that the scope distributes:

- **Start IP address:** 10.10.10.1
- **End IP address:** 10.10.10.200

A subnet mask defines how many bits of an IP address to use for the network/subnet IDs and how many bits to use for the host ID. You can specify the subnet mask by length or as an IP address.

- **Length:** 8
- **Subnet mask:** 255.255.255.0

Enter the IP address range that you want to exclude and click on next.
Select lease duration how long a client can use an IP address assigned to it from this scope. It is recommended to add longer leases for a fixed network (in the office for example) and shorter leases for remote connections or laptop computers and click next.
You are given a choice of whether or not you wish to configure the DHCP options for the scope now or later. You can select Yes, I want to… radio button and click next.

Enter the router, or gateway, IP address click next. The client computers will then know which router to use and click next.
Enter the DNS and domain name settings can be entered. The DNS server IP address will be distributed by the DHCP server and given to the client click next.
If you have WINS setup then here is where to enter the IP Address of the WINS server. You can just input the server name into the appropriate box and press Resolve” to allow it to find the IP address itself click next

Now you need to activate this scope now and click next
DHCP Server new scope installation was finished and click finish

Now your server is now a DHCP server message and click finish
Configuring DHCP

Now you need to go to Start—>Administrative Tools—>DHCP
Right Click on your server click on Authorize your DHCP Server
Authorization completed now your DHCP server is up and running
DHCP servers permit you to reserve an IP address for a client. This means that the specific network client will have the same IP for as long as you wanted it to. To do this you will have to know the physical address (MAC) of each network card. Enter the reservation name, desired IP address, MAC address and description - choose whether you want to support DHCP or BOOTP and press add. The new reservation will be added to the list.
That's it it is very easy to configure DHCP server in win server 2003 now you can configure your windows client pc to check your dhcp server is working or not.