Configuring DNS

changing the hostname:

for configuring hostname in the redhat linux 7 we use the **hostnamectl** command for administrating hostname

1)to see the status of the hostname command
=>**hostnamectl status**
2) to change the hostname we use
=>**hostnamectl set-hostname <name>**
3)for removing hostname
=>**hostnamectl set-hostname “”**

on a linux system we use dns to resolve hostname .first we need to know that how to configure the client side .there is a few location where we need to look **/etc/hosts** if we see the file we see something like this

```
[vagrant@linux ~]$ cat /etc/hosts
127.0.0.1   localhost localhost.localdomain
::1         localhost localhost.localdomain
```

if you use the command
=>**ping localhost**

the computer will find from this hosts file its ip address and thats how the computer knows who to talk to.

Lets add
127.0.0.1 to mysite

[vagrant@linux ~]$ cat /etc/hosts
127.0.0.1   localhost localhost.localdomain mysite
::1   localhost localhost.localdomain

then if we ping mysite we can see that

[vagrant@linux ~]$ ping mysite
PING localhost (127.0.0.1) 56(84) bytes of data.
64 bytes from localhost (127.0.0.1): icmp_seq=1 ttl=64 time=0.129 ms
64 bytes from localhost (127.0.0.1): icmp_seq=2 ttl=64 time=0.112 ms

127 ip group is a loopback address

but this method is now very efficient . we can never possibly add thousands of domain and ip manually.it is not posssible.whats why the dns system come.

what dns does is automatically resolve the domain through a server the server is configured in a file in
/etc/resolv.conf

if we go see the file
=>**cat /etc/resolv.conf**

[vagrant@linux ~]$ cat /etc/resolv.conf
 # Generated by NetworkManager
nameserver 10.0.2.3

the nameserver 10.0.2.3 (may be different in your computer).actually in here 10.0.2.3 is the ip of our dns server. we can add some public dns server in the file like

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nameserver 8.8.8.8
nameserver 8.8.4.4

8.8.8.8 is the google name server for public use.
But there is a question arrives that when computer use the **/etc/hosts** file and when the **/etc/resolv.conf**

that decision is stored a file called **/etc/nsswitch.conf** file

if we see the file
=>**cat /etc/nsswitch.conf| grep hosts**
in the file we see the line

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hosts: files dns

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that means It will first look in the hosts file then the dns server.if it wont find it there it will give up.

If you wrote the following in the hosts file

127.0.0.1 www.google.com

after that when you ping **www.google.com** it will ping the localhost address

[vagrant@linux ~]$ ping www.google.com
PING www.google.com (127.0.0.1) 56(84) bytes of data.
64 bytes from www.google.com (127.0.0.1): icmp_seq=1 ttl=64 time=0.087 ms
64 bytes from www.google.com (127.0.0.1): icmp_seq=2 ttl=64 time=0.105 ms
64 bytes from www.google.com (127.0.0.1): icmp_seq=3 ttl=64 time=0.116 ms

it is a very useful technique .lets assume you are developing a website and you don't want to test it into your live site. so you can trick the computer by setting the local address to your live server and after that it exactly just like the production server but it is actually your development server