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Linux setup default gateway with route command

Posted by Vivek Gite <vivek@nixcraft.com>

Q. How do I setup default gateway with a route command?

A. route command show and/or manipulate the IP routing table under Linux and UNIX oses.

Route manipulates the kernel's IP routing tables. Its primary use is to set up static routes to specific hosts or networks via an interface after it has been configured with the ifconfig program. When the add or del options are used, route modifies the routing tables. Without these options, route displays the current contents of the routing tables.



[1]

Display default route

Following three-command display the current routing table:

```
# route
```

Output:

Kernel IP routing table								
Desti	nation	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
192.1	68.1.0	*	255.255.255.0	U	0	0	0	ra0
defau	ılt	dsl-router	0.0.0.0	UG	0	0	0	ra0

```
$ /sbin/route
```

Output:

Kernel IP routing table								
	Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
	191.255.255.0	*	255.255.255.0	U	0	0	0	eth0
	169.254.0.0	*	255.255.0.0	U	0	0	0	eth0
	default	191.255.255.1	0.0.0.0	UG	0	0	0	eth0

You can use -n option, to display numerical addresses instead of trying to determine symbolic host names (via dns or /etc/hosts file). This is useful if you are trying to determine why the route to your nameserver has vanished.

```
$ /sbin/route -n
```

Output:

Kernel IP routing table								
	Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
	191.255.255.0	0.0.0.0	255.255.255.0	U	0	0	0	venet0
	169.254.0.0	0.0.0.0	255.255.0.0	U	0	0	0	venet0
	0.0.0.0	191.255.255.1	0.0.0.0	UG	0	0	0	venet0

Please note that a destionation entry 0.0.0.0 (or default) is the default gatway. In above example 191.255.255.1 is a default gatway.

Add / setup a new route

The syntax is as follows:

route add default gw {IP-ADDRESS} {INTERFACE-NAME}

Where,

- IP-ADDRESS: Specify router IP address
- INTERFACE-NAME: Specify interface name such as eth0

For example if your router IP address is 192.168.1.254 type the following command as the root user:

route add default gw 192.168.1.254 eth0

OR use hostname such as dsl-router:

route add default gw dsl-router eth0

Setting route using GUI tools/command under Linux

If you find above command hard to use, consider using GUI tools. If your are using Red Hat/CentOS/Fedora core Linux type following command:

redhat-config-network

OR If you are using other Linux distribution use command:

network-admin

See also

• How to setup static routes under Debian and Fedora/Red Hat Linux [2]

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[1] Image: http://www.cyberciti.biz/faq/faq/category/linux/

[2] How to setup static routes under Debian and Fedora/Red Hat Linux: http://www.cyberciti.biz/tips/configuring-static-routes-in-debian-or-red-hat-linux-systems.html

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