

```
joe@www:~$ echo "IPv6 follows a similar pattern of the IPv4 websites, just with a different address and a different DNS record."
```

```
IPv6 follows a similar pattern of the IPv4 websites, just with a different address and a different DNS record.
```

```
joe@www:~$ echo "What is my ipv6 address?"
```

```
What is my ipv6 address?
```

```
joe@www:~$ ip a | grep inet6
```

```
inet6 ::1/128 scope host
```

```
inet6 2001:1948:e10:2002:5054:ff:fe08:2fe/64 scope global dynamic mngtmpaddr noprefixroute
```

```
inet6 fe80::5054:ff:fe08:2fe/64 scope link
```

```
joe@www:~$ echo "It is the one that starts with 2001"
```

```
It is the one that starts with 2001
```

```
joe@www:~$ █
```



joe@www: /etc/apache2/sites-available



```
joe@www:/etc/apache2/sites-available$ sudo vi huey.thegummibear.com.conf
```



```
joe@www:/etc/apache2/sites-available$ echo "Do all the other stuff"
```

Do all the other stuff

```
joe@www:/etc/apache2/sites-available$ sudo a2ensite huey.thegummibear.com.conf
```

Enabling site huey.thegummibear.com.

To activate the new configuration, you need to run:

```
systemctl reload apache2
```

```
joe@www:/etc/apache2/sites-available$ sudo service apache2 reload
```

```
joe@www:/etc/apache2/sites-available$ sudo mkdir /var/www/html/huey.thegummibear.com
```

```
joe@www:/etc/apache2/sites-available$ echo "This is my huey site" | sudo tee /var/www/html/huey.thegummibear.com/index.html
```

This is my huey site

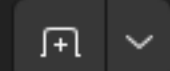
```
joe@www:/etc/apache2/sites-available$ echo "The previous line was just a way to create that index.html page, you certainly could use vi"
```

The previous line was just a way to create that index.html page, you certainly could use vi

```
joe@www:/etc/apache2/sites-available$ cat /var/www/html/huey.thegummibear.com/index.html
```

This is my huey site

```
joe@www:/etc/apache2/sites-available$
```



```
joe@ns1:/etc/bind$ echo "Don't forget the DNS"
```

```
Don't forget the DNS
```

```
joe@ns1:/etc/bind$ sudo vi db.thegummibear.com
```

```
; db file for thegummibear.com
; this is just a comment and is not important
;
;
$TTL      86400
@         IN      SOA      ns1.thegummibear.com. root.ns1.thegummibear.com. (
                    5      ; Serial
                    604800 ; Refresh
                    86400  ; Retry
                    2419200; Expire
                    86400 ) ; Negative Cache TTL
;

@         IN      NS       ns1.thegummibear.com.
@         IN      NS       ns2.thegummibear.com.

ns1      IN      A         144.38.199.36
ns2      IN      A         144.38.199.37
www      IN      A         144.38.199.38
db       IN      A         144.38.199.39
fs       IN      A         144.38.199.35
huey    IN      AAAA      2001:1948:e10:2002:5054:ff:fe08:2fe

squishy IN      CNAME     www
```



```
joe@ns1:/etc/bind$ echo "Don't forget to increment serial"
```

```
Don't forget to increment serial
```

```
joe@ns1:/etc/bind$ sudo service bind9 restart
```

```
joe@ns1:/etc/bind$ ping6 huey.thegummibear.com
```

```
PING huey.thegummibear.com(2001:1948:e10:2002:5054:ff:fe08:2fe (2001:1948:e10:2002:5054:ff:fe08:2fe)) 56 data bytes
```

```
64 bytes from 2001:1948:e10:2002:5054:ff:fe08:2fe (2001:1948:e10:2002:5054:ff:fe08:2fe): icmp_seq=1 ttl=64 time=1.41 ms
```

```
^C64 bytes from 2001:1948:e10:2002:5054:ff:fe08:2fe: icmp_seq=2 ttl=64 time=0.659 ms
```

```
--- huey.thegummibear.com ping statistics ---
```

```
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
```

```
rtt min/avg/max/mdev = 0.659/1.035/1.412/0.376 ms
```

```
joe@ns1:/etc/bind$ echo "I used ping6 since this is an ipv6 address"
```

```
I used ping6 since this is an ipv6 address
```

```
joe@ns1:/etc/bind$ █
```



```
joe@ns1:/etc/bind$ echo "You likely will not be able to test your ipv6 site from a browser since your desktop machine won't have an ipv6 address, but you can test it from any of your other virtual hosts like so:"
```

```
You likely will not be able to test your ipv6 site from a browser since your desktop machine won't have an ipv6 address, but you can test it from any of your other virtual hosts like so:
```

```
joe@ns1:/etc/bind$ curl -6 huey.thegummibear.com
```

```
This is my huey site
```

```
joe@ns1:/etc/bind$ echo "Yay, it worked"
```

```
Yay, it worked
```

```
joe@ns1:/etc/bind$
```




Unable to connect

An error occurred during a connection to huey.thegummibear.com.

- The site could be temporarily unavailable or too busy. Try again in a few moments.
- If you are unable to load any pages, check your computer's network connection.
- If your computer or network is protected by a firewall or proxy, make sure that Firefox is permitted to access the web.

[Try Again](#)



```
joe@ns1:/etc/bind$ echo "Told you. It won't work from a browser. But what if I don't care whether the user is coming from ipv4 or ipv6? Let's make some edits"
Told you. It won't work from a browser. But what if I don't care whether the user is coming from ipv4 or ipv6? Let's make some edits
joe@ns1:/etc/bind$ sudo vi db.thegummibear.com
```

```

; db file for thegummibear.com
; this is just a comment and is not important
;
;
$TTL      86400
@         IN      SOA      ns1.thegummibear.com. root.ns1.thegummibear.com. (
                        5          ; Serial
                        604800     ; Refresh
                        86400      ; Retry
                        2419200    ; Expire
                        86400 )    ; Negative Cache TTL
;

@         IN      NS       ns1.thegummibear.com.
@         IN      NS       ns2.thegummibear.com.

ns1       IN      A        144.38.199.36
ns2       IN      A        144.38.199.37
www       IN      A        144.38.199.38
db        IN      A        144.38.199.39
fs        IN      A        144.38.199.35
; THE AAAA will be used if they are coming from an ipv6 network
huey     IN      AAAA     2001:1948:e10:2002:5054:ff:fe08:2fe
; The A will be used if IPV4
huey     IN      A        144.38.199.38

squishy  IN      CNAME    www

"db.thegummibear.com" 28L, 637B written

```



```
joe@ns1:/etc/bind$ echo "Try dig"
```

```
Try dig
```

```
joe@ns1:/etc/bind$ dig @8.8.8.8 huey.thegummibear.com A
```

```
; <<>> DiG 9.18.12-0ubuntu0.22.04.2-Ubuntu <<>> @8.8.8.8 huey.thegummibear.com A
```

```
; (1 server found)
```

```
;; global options: +cmd
```

```
;; Got answer:
```

```
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 45876
```

```
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1
```

```
;; OPT PSEUDOSECTION:
```

```
; EDNS: version: 0, flags:; udp: 512
```

```
;; QUESTION SECTION:
```

```
;huey.thegummibear.com.      IN      A
```

```
;; ANSWER SECTION:
```

```
huey.thegummibear.com.  21600  IN      A      144.38.199.38
```

```
;; Query time: 47 msec
```

```
;; SERVER: 8.8.8.8#53(8.8.8.8) (UDP)
```

```
;; WHEN: Tue Jul 25 20:41:13 UTC 2023
```

```
;; MSG SIZE rcvd: 66
```

```
joe@ns1:/etc/bind$ █
```

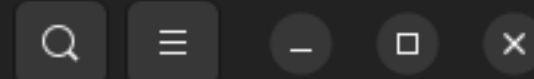
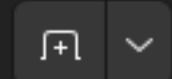
```
joe@ns1: /etc/bind
joe@yavin: ~/f23/it3100-easel x joe@ns1: /etc/bind x joe@corellia: ~/Pictures/Screenshots x
joe@ns1:/etc/bind$ dig @8.8.8.8 huey.thegummibear.com AAAA
; <<>> DiG 9.18.12-0ubuntu0.22.04.2-Ubuntu <<>> @8.8.8.8 huey.thegummibear.com AAAA
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 995
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; QUESTION SECTION:
;huey.thegummibear.com.          IN      AAAA

;; ANSWER SECTION:
huey.thegummibear.com.  21600  IN      AAAA    2001:1948:e10:2002:5054:ff:fe08:2fe

;; Query time: 43 msec
;; SERVER: 8.8.8.8#53(8.8.8.8) (UDP)
;; WHEN: Tue Jul 25 20:41:22 UTC 2023
;; MSG SIZE rcvd: 78

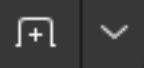
joe@ns1:/etc/bind$ echo "They both work"
They both work
joe@ns1:/etc/bind$
```



```
joe@www:/etc/apache2/sites-available$ echo "Need to make an edit on my webserver"
```

```
Need to make an edit on my webserver
```

```
joe@www:/etc/apache2/sites-available$ sudo vi huey.thegummibear.com.conf
```

```
joe@www:/etc/apache2/sites-available$ sudo service apache2 restart  
joe@www:/etc/apache2/sites-available$ █
```




huey.thegummibear.com/ x +



huey.thegummibear.com



utahtech news cit-proxmox myproxmox security guitar gmail Mail - Joe Francom - O...

This is my huey site

```
joe@www:/etc/apache2/sites-available$ sudo service apache2 restart
joe@www:/etc/apache2/sites-available$ curl -6 huey.thegummibear.com
This is my huey site
joe@www:/etc/apache2/sites-available$ curl -4 huey.thegummibear.com
This is my huey site
joe@www:/etc/apache2/sites-available$ echo "Now it works from ipv6 and ipv4"
Now it works from ipv6 and ipv4
joe@www:/etc/apache2/sites-available$
```