



## Exercise 7.2: Create a new virtual network interface and serve a different document root from the new interface

**NOTE:** The original html document should also be accessible from the original IP address.

1. Create an IP alias in the network 192.168.153.0/24.
2. Serve a file indicating this is an IP based virtual machine. The file should be `/ipvhost/index.html` and **only** available on the newly defined IP address:

### Solution 7.2

1. Create a temporary IP alias for your main Ethernet address:

```
# ip addr add 192.168.153.X/24 dev eth0
```

Where X is a number no one else in the same LAN is using. Add this new address to `/etc/hosts` with the host name of `ipvhost.example.com` for ease of use later.

2. Create a new directory `/ipvhost/`

```
# mkdir /ipvhost/
```

3. Create an `/ipvhost/index.html` file.

```
# vi /ipvhost/index.html
```

The file should contain following:

```
<html>
<head>
  <title>This is the IP vhost</title>
</head>
<body>
  <h1>This is my IP vhost</h1>
</body>
</html>
```

4. Verify that **SELinux** permissions (if enabled) are correct.

```
# chcon -R --reference=<YOUR-DOCUMENT-ROOT> /ipvhost/
```

5. Create a new IP based virtual host definition. Add this stanza to the suggested file as listed below:

```
<VirtualHost 192.168.153.X:80>
  DocumentRoot /ipvhost/
  ServerName ipvhost.example.com
  <Directory /ipvhost/>
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
  </Directory>
</VirtualHost>
```

- On **CentOS** use the file  
`/etc/httpd/conf.d/ipvhost.conf`
- On **OpenSUSE** use the file  
`/etc/apache2/vhosts.d/ipvhost.conf`
- On **Ubuntu** use the file  
`/etc/apache2/sites-enabled/ipvhost.conf`

## 6. Restart apache

```
# systemctl restart httpd
```

NOTE: On **Ubuntu** and **OpenSUSE** the service name is `apache2`.

## 7. Test your new IP vhost as well as the original host.