

## Creating Virtual Host In Apache2 Under Windows

The **VirtualHost** directive in the **httpd.conf** configuration file is used to set the values of **ServerName**, **DocumentRoot**, **ErrorLog** and **TransferLog** or **CustomLog** configuration directives to different values for each virtual host.

Multiple websites can be served from one computer, when they have **different** hostnames. Each host name that is served from the single computer (that hosts them **all**) is referred to as a **virtual host**. There are **two** ways provided by Apache for setting up virtual hosts on a single computer, **IP based** and **Name based**.

IP based virtual hosts use the IP address of the connection to determine the correct virtual host. Hence, a **unique** IP address is required for each host.

With **name based** virtual hosting, Apache Web server relies on the client to deliver the hostname as part of the HTTP headers sent to Apache. Using this technique, many different virtual hosts can share the **same IP address**. Apache will do its own name resolution from the HTTP headers sent by the client's Browser.



Older browsers do not support delivering a hostname with their HTTP headers. This is not part of their **HTTP 1.1** header encoding. Hence these browsers will only work with IP based virtual hosts.

Apache can be configured to support multiple virtual hosts either by running a **separate httpd** daemon for each hostname, or by running a **single httpd** daemon, which supports all the virtual hosts.

If separate httpd daemons must be run for each host, separate installations of Apache for each virtual host have to be created. For each installation, use the **Listen directive** in the **httpd.conf** configuration file to select which IP address **or** virtual host that daemon services

For example, Listen 192.168.0.1:80.

A single http daemon can also be used to service to the main server and **all** its virtual hosts.

### **Name Based Virtual Hosts**

Using the new name based virtual hosts is quite easy, and superficially looks like the old method. The notable difference between IP-based and Name-based virtual host configuration is the **NameVirtualHost** directive, which specifies a single IP address that should be used as a target for name-based virtual hosts.

For example, suppose that both `www.sharanam.com` and `www.ivan.com` point to the IP address `172.16.9.66`. Then simply add the following to the Apache's `httpd.conf`:

```
ServerName 172.16.9.66
NameVirtualHost 172.16.9.66
<VirtualHost 172.16.9.66>
    DocumentRoot c:\sharanam
    ServerName www.sharanam.com
</VirtualHost>

<VirtualHost 172.16.9.66>
    DocumentRoot c:\ivan
    ServerName www.ivan.com
</VirtualHost>
```

The Following entries should be appended to the **hosts** file available under `C:\WINDOWS\system32\drivers\etc` directory:

```
172.16.9.66    www.sharanam.com
172.16.9.66    www.ivan.com
```

After making any changes to the **httpd.conf** ensure that Apache is restarted to apply the new changes.

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