Apache

Type:webserver

Version:2.4.x(redhat-7) (2.2-redhat6)

Protocol:http and https and ftp

Port: http=80 and https=443

Vendor: ASF(Apache s/w foundation)

License: opensource

Instlallation ways:-

Yum

Rpm

Source code

Binary

Exe or msi(windows)

Yum installation

Yum install httpd

Installation path

/etc/httpd/

/etc/httpd
/etc/httpd/conf/httpd.conf
/etc/httpd/modules/mod_xxx.so(shared objects)

     Mod_ssl.so

     Mod_rewrite.so

     Mod_proxy.so

     Mod_proxy_ajp.so

     Mod_balancer.so

     Mod_proxy_http.so

     Mod_ldap.so

     Mod_logio.so

     Mod_php.so (to run php code via apache)

     Mod_authz.so

/etc/httpd/logs (symlinks)--/var/log/httpd(original)
/var/log/httpd/access.log
/var/log/httpd/error.log (any issues at apache level ,refer error.log)
/etc/httpd/conf.d/-→virtualhostconf files.

/etc/htppd/run →apache pid file creation location.

To stop and start apache(80—root or sudoer)

Redhat6(httpd as a service)

Service <servicename> stop
Service httpd stop
Service httpd start
Service httpd restart

Redhat7

Systemctl start <servicename>

Systemctl start httpd

Systemctl stop httpd

Systemctl restart httpd

Systemctl enable httpd

Apache running or not to check

ps –ef | grephttpd

netstat –anlp | grep ":80"

protocal://<systename/urlname/dnsname/ip/>:port/contextroot

http://35.182.225.118/

protocol:http

iip:xxx

port:80

httpd.conf

ServerRoot "/etc/httpd"

Listen 80

Include conf.modules.d/*.conf

User apache

Group apache

ServerAdminroot@localhost

ServerName[www.example.com(websitename)](www.example.com)

Used to give permissions to access website files
<Directory <DocumentRootpath>>
Xxxxxxxxxxxx
xxxxxxxxxxxxxx
</Directory>

DocumentRoot "/var/www/html"(websites files location)

DirectoryIndex index.html (this is website homepage)
ErrorLog "logs/error_log" (error log locaton)
LogLevel warn
LogFormat – common,combined,combidio,custom
CustomLog "logs/access_log" combined

Browser--->http://ip

machine-->80--->Apache--->httpd.conf-->DocuemntRoot-->/var/www/html/--->DirectoryIndex--index.html---><directory /var/www/html/>--->index.html--->output-->browser

Host a static website in apache. Access it with ip and dns name
#IPbased VirtualHost-2017-10-11

```
<VirtualHost 54.187.205.147:80>
ServerName www.awsmiddleware.in
DocumentRoot /opt/static/middleware
DirectoryIndex home.html
ErrorLog "/opt/logs/http/awsmiddleware/aws-error_log"
CustomLog "/opt/logs/http/awsmiddleware/aws-access_log" combined
<Directory "/opt/static/middleware">
AllowOverride none
   Require all granted
</Directory>
</VirualHost>
```

```
<VirtualHost *:80>
ServerName www.awsmiddleware.in
DocumentRoot /opt/static/middleware
DirectoryIndex home.html
ErrorLog "/opt/logs/http/awsmiddleware/aws-error_log"
CustomLog "/opt/logs/http/awsmiddleware/aws-access_log" combined
<Directory "/opt/static/middleware">
AllowOverride none
   Require all granted
</Directory>
</VirtualHost>
```

#2nd VirtualHost

```
<VirtualHost *:80>
ServerName www1.awsmiddleware.in
DocumentRoot /opt/static/middleware1
DirectoryIndex login.html
ErrorLog "/opt/logs/http/awsmiddleware1/aws1-error_log"
CustomLog "/opt/logs/http/awsmiddleware1/aws1-access_log" combined
<Directory "/opt/static/middleware1">
AllowOverride none
   Require all granted
```

```
</Directory>
</VirtualHost>
```

LogRotation of logs for 90 days

   ErrorLog "|/usr/sbin/rotatelogs /opt/logs/http/test/error_log.%Y%m%d 7776000"
     CustomLog "|/usr/sbin/rotatelogs /opt/logs/http/test/access_log.%Y%m%d 7776000" common

Based on size
ErrorLog "|"|/usr/sbin/rotatelogs /var/log/errorlog.%Y-%m-%d-%H_%M_%S 5M"

https://httpd.apache.org/docs/2.4/programs/rotatelogs.html

Log format—common,combined and custom.

%h- client ip- host
%s- status codes—200 , 300,404,500,403
%t- time of request
%b- bytes of info.

Can we track how long time taken to process a request in access.log ?

Working on the access.log

http://www.inmotionhosting.com/support/website/server-usage/view-level-of-traffic-with-apache-access-log

```
ab -k -c 350 -n 20000 http://35.182.49.235

No of files opened by user and opened by process
```

Count request per day

[root@ip-172-31-18-157 httpd]# zgrep –i oct access_log-2017-1* |awk '{print $4}' access_log | cut -d: -f1 | uniq -c

   1033 [23/Oct/2017

   2000 [24/Oct/2017

[root@ip-172-31-18-157 httpd]#

```
grep "23/Jan" progolfdeal.com | cut -d[ -f2 | cut -d] -f1 | awk -F:
'{print $2":00"}' | sort -n | uniq -c
```

[root@ip-172-31-18-157 httpd]# awk '{print $1,$9}' access_log | grep -w "304" | wc -l

20

[root@ip-172-31-18-157 httpd]# awk '{print $1,$9}' access_log | grep -w "304" | uniq

183.82.23.105 304

[root@ip-172-31-18-157 httpd]# awk '{print $1,$9}' access_log | grep -w "304" | uniq -c

   20 183.82.23.105 304

[root@ip-172-31-18-157 httpd]#

Log rotating :---

===

ErrorLog "|/usr/sbin/rotatelogs /opt/logs/http/test/error_log.%Y%m%d 7776000"

   CustomLog "|/usr/sbin/rotatelogs /opt/logs/http/test/access_log.%Y%m%d 7776000" common

ab -n 1000 -c 200 http://test.com/

grep "24/Oct" access.log | cut -d[-f2 | cut -d] -f1 | awk -F: '{print $2":00"}' | sort -n | uniq -c

<ip> - - <timee> "GET /text.html" 200 20

grep "23/Jan/2013:06" example.com | cut -d[-f2 | cut -d] -f1 | awk -F: '{print $2":"$3}' | sort -nk1 -nk2 | uniq -c | awk '{ if ($1 > 10) print $0}'