**http://venkataraoss.blogspot.in/2011/02/apache-server-interview-questions-and.html**

**Apache Server Interview Questions And Answers for linux admin**

Q: - What is location of log files for Apache server ?

/var/log/httpd

Q: - What are the types of virtual hosts ?  
  
name-based and IP-based.  
Name-based virtual host means that multiple names are running on each IP address.  
IP-based virtual host means that a different IP address exists for each website served. Most configurations are named-based because it only requires one IP address.

Q: - How to restart Apache web server ?  
  
service httpd restart

Q: - How to check the version of Apache server ?  
  
rpm -qa |grep httpd

Q: - What is meaning of "Listen" in httpd.conf file ?   
  
Port number on which to listen for nonsecure (http) transfers.

Q: - What is DocumentRoot ?  
  
it is a location of files which are accessible by clients. By default, the Apache HTTP server in RedHat Enterprise Linux is configured to serve files from the /var/www/html/ directory.

Q: - On which port Apache server works ?  
  
http - port 80  
https - port 443

Q: - Tell me name of main configuration file of Apache server ?  
  
httpd.conf

Q: - On which version of apache you have worked ?  
  
httpd-2.2.3

**Q: - What do you mean by a valid ServerName directive?**  
  
The DNS system is used to associate IP addresses with domain names. The value of ServerName is returned when the server generates a URL. If you are using a certain domain name, you must make sure that it is included in your DNS system and will be available to clients visiting your site.

**Q: - What is the main difference between <Location> and <Directory> sections?**  
  
Directory sections refer to file system objects; Location sections refer to elements in the address bar of the Web page

**What is the difference between a restart and a graceful restart of a web server?**  
  
During a normal restart, the server is stopped and then started, causing some requests to be lost. A graceful restart allows Apache children to continue to serve their current requests until they can be replaced with children running the new configuration.

**Q: - What is the use of mod\_perl module?**  
  
*mod\_perl* scripting module to allow better Perl script performance and easy integration with the Web server.

**Q: - If you have added “loglevel Debug” in httpd.conf file, than what will happen?**  
  
It will give you more information in the error log in order to debug a problem.

**Q: - Can you record the MAC (hardware) address of clients that access your server.**  
  
No

**Q: - Can you record all the cookies sent to your server by clients in Web Server logs?**  
  
Yes, add following lines in httpd.conf file.  
  
CustomLog logs/cookies\_in.log "%{UNIQUE\_ID}e %{Cookie}i" CustomLog logs/cookies2\_in.log "%{UNIQUE\_ID}e %{Cookie2}i"

**Q: - Can we do automatically roll over the Apache logs at specific times without having to shut down and restart the server?**  
  
Yes

Use *CustomLog* and the *rotatelogs* programs  
  
Add following line in httpd.conf file. CustomLog "| */path/to*/rotatelogs*/path/to/logs*/access\_log.%Y-%m-%d 86400" combined

**Q: - What we can do to find out how people are reaching your site?**  
  
Add the following effector to your activity log format. %{Referer}

**Q: - If you have only one IP address, but you want to host two web sites on your server. What will you do?**  
In this case I will use Name Based Virtual hosting.

ServerName 10.111.203.25  
NameVirtualHost \*:80

<VirtualHost \*:80>  
ServerName web1.test.com  
DocumentRoot /var/www/html/web1  
</VirtualHost>  
  
<VirtualHost \*:80>  
ServerName web2.test2.com  
DocumentRoot /var/www/html/web2  
</VirtualHost>

**Q: - Can I serve content out of a directory other than the *DocumentRoot*directory?**  
  
Yes, by using “Alias” we can do this.

**Q: - If you have to more than one URL map to the same directory but you don't have multiple *Alias* directives. What you will do?**  
  
In this case I will use “AliasMatch” directives.  
  
The AliasMatch directive allows you to use regular expressions to match arbitrary patterns in URLs and map anything matching the pattern to the desired URL.

**Q: - How you will put a limit on uploads on your web server?**  
  
This can be achieved by LimitRequestBody directive.

<Directory "/var/www/html/data\_uploads">  
LimitRequestBody 100000  
</Directory>

Here I have put limit of 100000 Bytes

**Q: - I want to stop people using my site by Proxy server. Is it possible?**  
  
<Directory proxy:http://www.test.com/myfiles>  
Order Allow,Deny  
Deny from all  
Satisfy All  
</Directory>

**Q: - What is mod\_evasive module?**  
  
mod\_evasive is a third-party module that performs one simple task, and performs it very well. It detects when your site is receiving a Denial of Service (DoS) attack, and it prevents that attack from doing as much damage. mod\_evasive detects when a single client is making multiple requests in a short period of time, and denies further requests from that client. The period for which the ban is in place can be very short, because it just gets renewed the next time a request is detected from that same host.

**Q: - How t to enable PHP scripts on your server?**  
  
If you have *mod\_php* installed, use *AddHandler* to map *.php* and *.phtml* files to the PHP handler. AddHandler application/x-httpd-php .phtml .php

**Q: - Which tool you have used for Apache benchmarking?**  
  
ab (Apache bench)

ab -n 1000 -c 10 http://www.test.com/test.html

**Q: - Can we cache files which are viewed frequently?**  
  
Yes we can do it by using *mod\_file\_cache module.*  
CacheFile /www/htdocs/index.html

**Q: - Can we have two apache servers having diff versions?**

Yes, you can have two different apache servers on one server, but they can't listen to the same port at the same time.Normally apache listens to port 80 which is the default HTTP port. The second apache version should listen to another port with the Listen option in httpd.conf, for example to port 81.

For testing a new apache version before moving your sites from one version to another, this might be a good option.You just type www.example.com:81 in the browser window and you will be connected to the second apache instance.

**How do you check for the httpd.conf consistency and any errors in it?**

**# apachectl configtest**

**# apachectl graceful**

**What is the command to stop Apache?   
kill the specific process that httpd is running under, or killall httpd. If you have apachectl installed, use apachectl stop.   
  
What does apachectl graceful do?   
It sends a SIGUSR1 for a restart, and starts the apache server if it is not running.   
  
When I do ps -aux, why do I have one copy of httpd running as root and the rest as nobody?  
You need to be a root to attach yourself to any Unix port below 1024, and we need 80. "nobody" is an user account which doesn't have root permissions.  
To do network setups, the Apache HTTP server must start with root permissions. Specifically, it needs to bind itself to port 80 so that it can listen for requests and accept connections. Once it does this, Apache can give up its rights and run as nonroot(nobody) user, as specified in its configuration files. By default, this is the user nobody. So when your mysql didn't start, check this folder permission is properly assigned.  
  
But I thought that running apache as a root is a security risk?   
That one root process opens port 80, but never listens to it, so no user will actually enter the site with root rights. If you kill the root process, you will see the other child process disappear as well.   
  
Why do I get the message "...no listening sockets available, shutting down"?  
In Apache 2 you need to have a listen directive. Just put Listen 80 in httpd.conf.   
  
How do you set up a virtual host in Apache?**

**<VirtualHost www.w3calculator.com>**

**ServerAdmin admin@w3calculator.com**

**DocumentRoot /home/apache/share/htdocs/hostw3calculator**

**ServerName www.w3calculator.com**

**ErrorLog /home/apache/logs/error/hostw3calculator/error\_log**

**TransferLog /home/apache/logs/access/hostw3calculator/access\_log**

**</VirtualHost>**

**What is ServerType directive?   
It defines whether Apache should spawn itself as a child process (standalone) or keep everything in a single process (inetd). Keeping it inetd conserves resources. This is deprecated, however.   
  
What is mod\_vhost\_alias?  
It allows hosting multiple sites on the same server via simpler configurations.   
  
What does htpasswd do?  
It creates a new user in a specified group, and asks to specify a password for that user.  
  
If you specify both deny from all and allow from all, what will be the default action of Apache?   
In case of ambiguity deny always takes precedence over allow.  
  
What is DSO stands for?  
Dynamic Shared Object (DSO). DSO support means that modules may be loaded at runtime.  
The ability to dynamically load modules is known as DSO support. DSO allows you to extend the features and capabilities of Apache by adding the specific module you need, when you need it, without recompiling the Web server binary.   
  
Command to list apache modules?**

**# httpd -l**

**Command to list php modules?**

**# php -m**

**What is apache extension?  
In Apache you can load and unload modules as per your need, which is called as Dynamic Shared Objects (DSOs). Apache includes a program called apxs (APache eXtenSion) that automates the process of building DSOs.  
  
How to install apache DSO?**

**# /usr/bin/apache/bin/apxs -cia modesec.c**

**# apxs -i -a -n foo mod\_foo.la**

**where**

**-c : Stands for compile**

**-i : stans for install**

**To compile Apache to use most of the dynamic modules**

**# ./configure -enable-module=most --enable-shared=max**

**Example:  
Here we not not going to discuss about installation steps, we are going to see only the compiling or configuring the php modules statically and dynamically for apache.  
Install php dynamic Module with apache**

**# ./configure --prefix=/www --enable-module=so**

**After configuring, we enable the LoadModule and AddModule**

**# LoadModule php5\_module libexec/libphp5.so**

**# AddModule mod\_php5.c**

**Install php static Module Installation for Apache**

**# gunzip -c apache\_1.3.x.tar.gz | tar xf -**

**# cd apache\_1.3.x**

**# ./configure**

**# cd ..**

**# gunzip -c php-5.x.y.tar.gz | tar xf -**

**# cd php-5.x.y**

**# ./configure --with-mysql --with-apache=../apache\_1.3.x**

**# make**

**# make install**

**# cd ../apache\_1.3.x**

**# ./configure --prefix=/www --activate-module=src/modules/php5/libphp5.a**

**Hope the above example would have given you a better idea.  
  
How to ensure that apache is installe with DSO support?  
To confirm that your apache is compiled with the Dynamic Shared Object run the below command.**

**# httpd -l**

**OUTPUT:**

**Compiled in modules:**

**core.c**

**prefork.c**

**http\_core.c**

**mod\_so.c**

**If mod\_so.c appears in the list of modules, then your Apache server can use dynamic modules. Once the mod\_so module is statically compiled, any other module can be added or dropped using the 'LoadModule' command in the 'httpd.conf' file.  
  
How to load dynamic modules in apache?  
TO load or use a dynamically shared module, that module must have a LoadModule line and an AddModule line in httpd.conf.**

**# Dynamic Shared Object (DSO) Support**

**#**

**# To be able to use the functionality of a module which was built as a DSO you**

**# have to place corresponding `LoadModule' lines at this location so the**

**# directives contained in it are actually available \_before\_ they are used.**

**# Statically compiled modules (those listed by `httpd -l') do not need**

**# to be loaded here.**

**#LoadModule mmap\_static\_module modules/mod\_mmap\_static.so**

**LoadModule vhost\_alias\_module modules/mod\_vhost\_alias.so**

**LoadModule env\_module modules/mod\_env.so**

**LoadModule config\_log\_module modules/mod\_log\_config.so**

**LoadModule access\_module modules/mod\_access.so**

**LoadModule auth\_module modules/mod\_auth.so**

**LoadModule auth\_anon\_module modules/mod\_auth\_anon.so**

**LoadModule auth\_dbm\_module modules/mod\_auth\_dbm.so**

**#LoadModule auth\_digest\_module modules/mod\_auth\_digest.so**

**#LoadModule ldap\_module modules/mod\_ldap.so**

**#LoadModule auth\_ldap\_module modules/mod\_auth\_ldap.so**

**LoadModule include\_module modules/mod\_include.so**

**The modules can be enabled by uncommenting the line in configuration file. Commenting the line will disable the module. Here the first line is commented out, which means that the corresponding module (mmap\_static\_module) was compiled in but not loaded.   
  
Next, you need to uncomment the corresponding line from the AddModule section in httpd.conf. To continue with our previous example, uncomment the mod\_mime\_magic line, which looks as below. Once you have loaded and unloaded apache modules restart the httpd or apache service.**

**#AddModule mod\_mime\_magic.c**

**Apache Static and Dynamic Modules: A quick look.  
  
Static binary is reportedly faster. If you want to squeeze the last bit of performance out of your server then choose static module.  
  
A static binary cannot have a precompiled dynamic module to it.  
  
To add a backdoor to a statically compiled server, the attacker has to recompile the whole server from scratch.  
  
The static modules or the static version use more memory.   
  
Static apache modules are compiled into the httpd or hhtpsd daemon programs, when apache is compiled.  
  
Dynamic is very much easy to install and use.  
  
Dynamic modules are loaded using AddModule and LoadModule.  
  
To enable or get the support of DSO, Apache must be compiled statically with mod\_so.**

**Q: – What is location of log files for Apache server ?**

**Ans- /var/log/httpd**

**Q: – What are the types of virtual hosts ?**

**Ans-**

**a. name-based**

**b. IP-based.**

**Name-based virtual host means that multiple names are running on each IP address.**

**IP-based virtual host means that a different IP address exists for each website served. Most configurations are named-based because it only requires one IP address.**

**Q: – Command to restart/start Apache web server ?**

**Ans- service httpd restart/start**

**Q: – Comamnd to check the version of Apache server ?**

**Ans- rpm -qa |grep httpd**

**Q: – What is meaning of “Listen” in httpd.conf file ?**

**Ans- Port number on which to listen for nonsecure (http) transfers.**

**Q: – What is Document Root ?**

**Ans- It is a location of files which are accessible by clients. By default, the Apache HTTP server in RedHat Enterprise Linux is configured to serve files from the /var/www/html/ directory.**

**Q: – Apache server works on which ports ?**

**Ans-**

**http – port 80**

**https – port 443**

**Q: – Tell me name of main configuration file of Apache server ?**

**Ans- httpd.conf**

**Q: – On which version of apache you have worked ?**

**Ans- httpd-2.2.3**

**Q: – What do you mean by a valid ServerName directive?**

**Ans- The DNS system is used to associate IP addresses with domain names. The value of ServerName is returned when the server generates a URL. If you are using a certain domain name, you must make sure that it is included in your DNS system and will be available to clients visiting your site.**

**Q: – What is the main difference between and sections?**

**Ans- Directory sections refer to file system objects; Location sections refer to elements in the address bar of the Web Page.**

**Q: – What is the difference between a restart and a graceful restart of a web server ?**

**Ans- During a normal restart, the server is stopped and then started, causing some requests to be lost. A graceful restart allows Apache children to continue to serve their current requests until they can be replaced with children running the new configuration.**

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**Ans- mod\_perl scripting module to allow better Perl script performance and easy integration with the web server.**

**Q: – If you have added “loglevel Debug” in httpd.conf file, than what will happen ?**

**Ans- It will give you more information in the error log in order to debug a problem.**

**Q: – Is it possible to record the MAC (hardware) address of clients that access your server ?**

**Ans- No**

**Q: – If there is one IP address, than how to host two web sites on server ?**

**Ans- In this case I will use Name Based Virtual hosting.**

**ServerName 10.111.203.25**

**NameVirtualHost \*:80**

**ServerName web1.test.com**

**DocumentRoot /var/www/html/web1**

**ServerName web2.test2.com**

**DocumentRoot /var/www/html/web2**

**Q: – Can I serve content out of a directory other than the DocumentRoot directory?**

**Ans- Yes. We can do it by using “Alias” command.**

**Q: – If you have to more than one URL map to the same directory but you don’t have multiple Alias directives. What you will do ?**

**Ans- In this case I will use “AliasMatch” directives.**

**The AliasMatch directive allows you to use regular expressions to match arbitrary patterns in URLs and map anything matching the pattern to the desired URL.**

**Q: – Can you record all the cookies sent to your server by clients in Web Server logs?**

**Ans- Yes, add following lines in httpd.conf file.**

**CustomLog logs/cookies\_in.log “%{UNIQUE\_ID}e %{Cookie}i” CustomLog logs/cookies2\_in.log “%{UNIQUE\_ID}e %{Cookie2}i”**

**Q: – Can we do automatically roll over the Apache logs at specific times without having to shut down and restart the server?**

**Ans- Yes**

**Use CustomLog and the rotatelogs programs**

**Add following line in httpd.conf file. CustomLog “| /path/to/rotatelogs /path/to/logs/access\_log.%Y-%m-%d 86400″ combined**

**Q: – What we should do to find out how people are reaching your site ?**

**Ans- Add the following effect or to your activity log format. %{Referer}**

**Q: – How you will put a limit on uploads on your web server ?**

**Ans- This can be achieved by LimitRequestBody directive.**

**LimitRequestBody 100000**

**Here I have put limit of 100000 Bytes**

**Q: – I want to stop people using my site by Proxy server. Is it possible?**

**Ans-**

**Order Allow,Deny**

**Deny from all**

**Satisfy All**

**Q: – What is mod\_evasive module?**

**Ans- mod\_evasive is a third-party module that performs one simple task and performs it very well. It detects when your site is receiving a Denial of Service (DoS) attack and it prevents that attack from doing as much damage. mod\_evasive detects when a single client is making multiple requests in a short period of time and denies further requests from that client. The period for which the ban is in place can be very short, because it just gets renewed the next time a request is detected from that same host.**

**Q: – How t to enable PHP scripts on your server?**

**Ans- If you have mod\_php installed, use AddHandler to map .php and .phtml files to the PHP handler. AddHandler application/x-httpd-php .phtml .php**

**Q: – Which tool you have used for Apache benchmarking?**

**Ans-**

**ab (Apache bench)**

**ab -n 1000 -c 10 http://www.test.com/test.html**

**Q: – Can we cache files which are viewed frequently?**

**Ans- Yes we can do it by using mod\_file\_cache module.**

**CacheFile /www/htdocs/index.html**

**1. How do u force a user to change password on next login in linux?**

A. chage -d 0 "User"

**2.What command can be used to findout server architechure (x86 or x64) apart from**

**uname?**

A. arch

**3. How do u findout the users who are NOT logged in for more than 30 days? which file u**

**will check?**

A. last , lastlog, /var/log/wtmp

**4. whats is called 1.5 stage in boot process of linux?**

A. Which contains extra code to allow cylinders above 1024, or LBA type drives, to be read. The

1.5 boot loader is stored (if needed) in the MBR or the boot partition.The great thing about

GRUB is that it includes knowledge of Linux file systems. Instead of using raw sectors on the

disk, as LILO does, GRUB can load a Linux kernel from an ext2 or ext3 file system. It does this

by making the two-stage boot loader into a three-stage boot loader. Stage 1 (MBR) boots a

stage 1.5 boot loader that understands the particular file system containing the Linux kernel

image. Examples include reiserfs\_stage1\_5 (to load from a Reiser journaling file system) or

e2fs\_stage1\_5 (to load from an ext2 or ext3 file system). When the stage 1.5 boot loader is

loaded and running, the stage 2 boot loader can be loaded."

So Basically,

Stage 1 Boot loader is MBR

Stage 2 Boot loader is GRUB

Stage 1.5 Boot loader is e2fs\_stage1\_5

(Basically this module will load the knowledge of Filesystem to Grub to read the kernel)

**5. When u try to create a file, u got a error that "No space available". But actually space**

**available on volume? How do u resolve this issue?**

A. Try this df -i list inode information instead of block usage [Perhaps are you out of inodes on

this file system.], To "rectify it", remove unwanted files or move them somewhere else.]

1. **On a fresh install, why does Apache have three config files - srm.conf, access.conf and httpd.conf?** - The first two are remnants from the NCSA times, and generally you should be ok if you delete the first two, and stick with httpd.conf.
2. **What’s the command to stop Apache?** - kill the specific process that httpd is running under, or *killall httpd.* If you have apachectl installed, use apachectl stop.
3. **What does *apachectl graceful* do?** - It sends a SIGUSR1 for a restart, and starts the apache server if it’s not running.
4. **How do you check for the httpd.conf consistency and any errors in it?** - apachectl configtest
5. **When I do ps -aux, why do I have one copy of httpd running as root and the rest as nouser?** - You need to be a root to attach yourself to any Unix port below 1024, and we need 80.
6. **But I thought that running apache as a root is a security risk?** - That one root process opens port 80, but never listens to it, so no user will actually enter the site with root rights. If you kill the root process, you will see the other kids disappear as well.
7. **Why do I get the message "… no listening sockets available, shutting down"?** - In Apache 2 you need to have a listen directive. Just put *Listen 80* in httpd.conf.
8. **How do you set up a virtual host in Apache?**   
   <VirtualHost www.techinterviews.com>  
   ServerAdmin admin@techinterviews.com  
   DocumentRoot /home/apache/share/htdocs/hostedsites  
   ServerName [www.techinterviews.com](http://www.techinterviews.com)  
   ErrorLog /home/apache/logs/error/hostedsites/error\_log  
   TransferLog /home/apache/logs/access/hostedsites/access\_log  
   < /VirtualHost>
9. **What is ServerType directive?** - It defines whether Apache should spawn itself as a child process (standalone) or keep everything in a single process (inetd). Keeping it inetd conserves resources. This is deprecated, however.
10. **What is mod\_vhost\_alias?** - It allows hosting multiple sites on the same server via simpler configurations.
11. **What does htpasswd do?** - It creates a new user in a specified group, and asks to specify a password for that user.
12. **If you specify both *deny from all* and *allow from all*, what will be the default action of Apache?** - In case of ambiguity deny always takes precedence over allow.

**EXTRA**

**While restarting the Apache web server, its not working and not throwing any error message but showing that its restarted but still no Apache proc id is created, all the domains are down and not available. In that case check the Apache error logs as well as server disk space but nothing seems to be wrong then refer the following steps and check if any syntax error is present in the server main Apache web service.**

**/etc/init.d/httpd -t**

**or**

**apachectl configtest**

**or**

**/etc/init.d/httpd configtest**

**or**

**httpd -S**

**Above all the commands will show you the following result, if the servers main Apache configuration file syntax is fine and if you receive any error then resolve the error message and restart the Apache web service.**

**Syntax OK**

1: Briefly explain Apache Web Server.

Answer: Apache Web Server is one of the most secure, powerful and popular open source HTTP Servers. It can be used to host anything from personal web sites to corporate domains.

2: You see "connection reset by peer" in error log. What could be the reason for this?

Answer:

If the end user terminates the connection when the server response was being formed or was being transferred, we see "connection reset by peer" in the error log.

3: What type of IP is required for Apache Web Server to host our website?

Answer:

If we have a DSL connection with a static IP then we can use the Apache web server to host our website.

4: While installing Apache HTTP server, do we need SSL and PHP support?

Answer:

Yes, SSL and PHP support is required to install Apache HTTP server.

5: What is virtual hosting?

Answer:

Virtual hosting is a method for hosting multiple domain names on a server using a single IP address. Virtual hosting allows one server to share its resources, such as memory and processor cycles, in order to use its resources more efficiently.

6: Is there any size limit for URL rewriting and aliasing in Apache web server?

Answer:

Apache has no fixed limit on the numbers of Aliases and Redirects which may be declared in the config files.

7: Create a new user file and add a user with username "test" and password "test".

Answer:

htpasswd -c /usr/local/etc/httpd/users test

User will be prompted to provide the password. The -c argument tells htpasswd to create new file for users. To add more users, -c argument can be omitted.

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**[ApacheWeb Server Installation](https://www.smashwords.com/extreader/read/159691/4/apache-web-server-interview-questions-youll-most-likely-be-asked" \l "TOC)**

8: You need to install Apache web server on Ubuntu server. How can you download and install the Apache2 package?

Answer:

sudo apt-get install Apache2

OR

sudo aptitude install Apache2

aptitude is known to sort out program dependencies in a better way.

**9: What are Iptables?**

**Answer:**

Iptables are user space application programs that allow a system administrator to configure the tables provided by the Linux kernel firewall.

**10: Which privilege is required to operate iptables?**

**Answer:**

Iptables require root user privilege for execution, otherwise they fail to function.

**11: What type of ports are 80 and 443?**

**Answer:**

The port 80 is a regular port while port 443 is a secure port.

**12: What is the query to install update package of Apache server?**

**Answer:**

sudo aptitude update

sudo aptitude install Apache2

**13: Towards the end of the install, you may get a warning message during starting of the Apache process because domain name is not configured yet. What could that be?**

**Answer:**

Apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.0.1 for ServerName

**ApacheAdmin**

|  |
| --- |
| Apache HTTP Server Administrator  The Apache HTTP server runs more than 55% of e-commerce sites on the Internet and also on intranet applications, it is the Worlds top one free Web server, and more widely used than all other Web server combined.  After release of Apache 2.0 came into more demand since its inception, and represents a complete change in Apache architecture, IT companies started looking for that administrators and dedicated developers learn new procedures and techniques for configuring and maintaining the Apache web server. Whole world of IT working with new ways of collaboration, contributing and openness, that improves innovative ideas.  [http://ws.assoc-amazon.com/widgets/q?_encoding=UTF8&ASIN=0782141374&Format=_SL160_&ID=AsinImage&MarketPlace=US&ServiceVersion=20070822&WS=1&tag=hmniv-20](http://www.amazon.com/gp/offer-listing/0782141374/ref=as_li_tf_il?ie=UTF8&camp=1789&creative=9325&creativeASIN=0782141374&linkCode=am2&tag=hmniv-20)http://www.assoc-amazon.com/e/ir?t=hmniv-20&l=am2&o=1&a=0782141374  Apache Administrator must have hands-on experiance on the following tasks:   * compile the binaries and installation * build and configure modules * creating virtual host * secure the server * SSL configuration * integration with SSO * setup of log files * performance tuning * administration of the Apache Web server   Apache Administration interview questions  1. How many types of Virtual host can be configured?  There are two basic types of virtual hosts available for Apache HTTP server   1. Name based 2. Address based   There are sub categories allowed as   * Mixed Address-based and Name-based * Port based   2. What is the different between static module and dynamic module?  The Apache HTTP Server is a modular program where the administrator can choose the functionality to include in the server by selecting a set of modules. Modules will be compiled as Dynamic Shared Objects (DSOs) that exist separately from the main httpd binary file. DSO modules may be compiled at the time the server is built, or they may be compiled and added at a later time using the Apache Extension Tool (apxs). Alternatively, the modules can be statically compiled into the httpd binary when the server is built. loading individual Apache httpd modules is based on a module named mod\_so which must be statically compiled into the Apache httpd core. It is the only module besides core which cannot be put into a DSO itself. Practically all other distributed Apache httpd modules will then be placed into a DSO. After a module is compiled into a DSO named mod\_foo.so you can use mod\_so's LoadModule directive in your httpd.conf file to load this module at server startup or restart.  Reference site: <http://httpd.apache.org/docs/current/dso.html>  3. What is MPM module? What MPM does? Why MPM?  Basically Apache HTTP server can be operated with two modules. a) PREFORK b) MPM [http://ws.assoc-amazon.com/widgets/q?_encoding=UTF8&ASIN=0672322749&Format=_SL160_&ID=AsinImage&MarketPlace=US&ServiceVersion=20070822&WS=1&tag=hmniv-20](http://www.amazon.com/gp/offer-listing/0672322749/ref=as_li_tf_il?ie=UTF8&camp=1789&creative=9325&creativeASIN=0672322749&linkCode=am2&tag=hmniv-20)http://www.assoc-amazon.com/e/ir?t=hmniv-20&l=am2&o=1&a=0672322749PREFORK module creates a new process for each request.  Here MPM is multi-processor module is that which accepts the requests and assigned the task to child process to handle them..  Choosing the right MPM (Multi processing modules): The worker MPM uses multiple child processes with many threads each. Each thread handles one connection at a time. Worker generally is a good choice for high-traffic servers because it has a smaller memory footprint than the prefork MPM.  The event MPM is threaded like the Worker MPM, but is designed to allow more requests to be served simultaneously by passing off some processing work to supporting threads, freeing up the main threads to work on new requests.  The prefork MPM uses multiple child processes with one thread each. Each process handles one connection at a time. On many systems, prefork is comparable in speed to worker, but it uses more memory. Prefork's threadless design has advantages over worker in some situations: it can be used with non-thread-safe third-party modules, and it is easier to debug on platforms with poor thread debugging support.  MaxClients, for prefork MPM  MaxClients sets a limit on the number of simultaneous connections/requests that will be served. this directive is a critical factor to a well-functioning server. Set this number too low and resources will go to waste. Set this number too high and an influx of connections will bring the server to a stand still. Set this number just right and your server will fully utilize the available resources. An approximation of this number should be derived by dividing the amount of system memory (physical RAM) available by the maximum size of an apache/httpd process; with a generous amount spared for all other processes.  As per initial analysis on both Worker MPM and legacy Prefork MPM modules sorted into a table with advantages and disadvantages in rows:  [Prefork vs Worker MPM](https://sites.google.com/site/weblogicadminsite/webserver-plugins/apacheadmin/PreforkWorkerMPM.png?attredirects=0)  4. What need to configured to apache where restart of server not required?  Not really sure on this question, I think any change made in the configuration file requires restart to changes to take effect  5. How to start a SSL enabled Apache web server?  The command same as regular webserver command only, that is apachectl. The difference is command line argument passed as startssl  $ apachectl startssl  6. How to enable SSL on Apache web server configuration?  The following configuration directives need to be set  SSLEngine ON SSLOptions +StrictRequire |