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

**Q: - How to deny specific users access to the FTP server ?**  
  
To deny specific users access to the FTP server, add their usernames to the /etc/vsftpd/  
ftpusers file. By default, system users such as root and nobody are included in this list.  
  
  
Q: - Can we create logs for ftp authenticated sessions ?  
  
Yes, If the xferlog\_enable directive in vsftpd.conf is set to YES, file transfers using the FTP protocol are logged to /var/log/xferlog. Information such as a time stamp, IP address of the client, the file being transferred, and the username of the person who authenticated the connection is included in the log entry.  
  
  
**Q: - What is meaning of max\_clients parameter ?**  
  
Maximum number of clients that can connect at one time.  
If set to 0, the number of clients is unlimited.  
  
  
**Q: - On which port VSFTP server works ?**  
  
FTP uses two ports, 20 and 21. By default, the FTP server listens for requests on port 21.  
After a connection is established, the client sends commands to the server on port 21.  
However, port 20 is used when the server sends data back to the client.  
  
  
**Q: - How to restart VSFTP server ?**  
  
service vsftpd restart  
  
  
**Q: - How to allow Anonymous FTP ?**  
  
Anonymous FTP is enabled by default by setting the anonymous\_enable directive in  
/etc/vsftpd/vsftpd.conf to YES.  
  
  
**Q: - What is FTP ?**  
  
FTP stands for File Transfer Protocol. An FTP server allows clients to connect to it either  
anonymously or with a username and password combination. After successful authentication, files can be transferred back and forth between the server and client. The files are neither encrypted nor compressed.

**Q: - For Redhat Linux or Fedora which package is required for FTP service ?**  
  
Red Hat Enterprise Linux 5 or FEDORA includes the vsftpd FTP service.

vsftpd-2.0.5-12.el5 (For Redhat)

**Q: - Important Configuration file for vsftp server ?**  
  
The FTP server uses the /etc/vsftpd/vsftpd.conf configuration file. Using this file, you  
can set options for displaying a custom banner message after users log in, setting the  
default file permissions for uploaded files, and setting the port on which to listen for  
incoming connections.

**Q: - What is FTP ?**  
  
FTP client connects to the FTP server by establishing an FTP control connection to port 21 of the server. Your commands such as 'ls' and 'get' are sent over this connection. Whenever the client requests data over the control connection, the server initiates data transfer connections back to the client. The source port of these data transfer connections is always port 20 on the server, and the destination port is a high port (greater than 1024) on the client.

**Q: - What is Passive mode?**  
Passive mode, like active mode, is initiated by the FTP client application. When requesting data from the server, the FTP client indicates it wants to access the data in passive mode and the server provides the IP address and a random, unprivileged port (greater than 1024) on the server. The client then connects to that port on the server to download the requested information.

**Q: - Explain directive "session\_support”?**  
  
When enabled, vsftpd attempts to maintain login sessions for each user through Pluggable Authentication Modules (PAM).

**Q: - Is there any way to monitor clients connected to vsftpd?**  
  
Yes. We actually have two slightly different methods to monitor vsftpd clients. First, make sure you have enabled the config option, "setproctitle\_enable=YES" like in our example above and restart your vsftpd server. Then run the command "watch ps -Cvsftpd -o user, pid, stime, cmd" to watch the processes including ip, username and actions like idle or data retrieval.

**Q: - I want to copy multiple files with out prompting for any info, how can I do that one?**  
ftp -i ftpserver

**Q: - Local users cannot log in. How to resolve this issue?**  
  
Check "local\_enable=YES" in your /etc/vsftpd/vsftpd. conf to allow local users to log in.

**Q: - How to change vsftpd default port?**  
Set "listen\_port" option in "vsftpd.conf"

**Q: - How to restrict some IP's not use my FTP server?**  
Use TCP\_WRAPPERS

**Q: - Does vsftpd support IPv6?**

Yes

**1)What is the difference between TFTP and FTP servers?  
A)**Both are file transfer servers but slight difference is **TFTP** server uses **UDP** protocol and **FTP** uses **TCP** protocol. **TFTP** is good for slow connection paths.

**2)What is the port no for FTP?**  
**A)20** for Data and **21** for Control(normally when an interviewer ask’s ftp port number just say **21.**  
**3)What is the port no for TFTP?**  
**A)**69.  
  
**4) How to restrict users to their home directories?  
A)**By setting up **“chroot\_local\_user=YES”.**  
  
**5)How to restrict total number of users accessing FTP server?  
A1)** If **Vsftpd** is running under xinted service, then you can use **xineted** to get per-service per **IP** connection limits or  
**A2)** If you run **vsftpd** in **“standalone”** mode with the **“setting listen=YES”**, then  
you can investigate the setting (e.g.) : **“max\_clients=10″**  
  
**6)I want to copy multiple files with out prompting for any info, how can I do that one?  
A)**Simply do **“ftp -i ftpserver”** this command will suppress any info displayed on ftp server.  
or you can just type prompt **ftp** prompt to suppress info messages have a look here.  
  
**7) Some times Local users cannot log in. How to resolve this issue?  
A)** Check **“local\_enable=YES”** in your **/etc/vsftpd/vsftpd**. conf to allow local users to log in.  
  
**8) How do we integrate with LDAP(** [**Lightweight Directory Access Protocol**](http://en.wikipedia.org/wiki/Lightweight_Directory_Access_Protocol) **)users and login?  
A)** Use vsftpd’s( Very Secure FTPD) **PAM(Pluggable Authentication Modules)** integration to do this, and have PAM authenticate against an LDAP repository.  
  
**9) Can we host different ftp sites on single machine, I mean virtual hosting concept like Apache?  
A1)** Yes. If you integrate **vsftpd** with **xinetd**, you can use xinetd to bind to several different IP addresses. For each IP address, get xinetd to launch vsftpd with a different config file. This way, you can get different behavior per virtual address.  
**A2)** Alternatively, run as many copies as vsftpd as necessary, in standalone  
mode. Use **“listen\_address=x.x.x.x”** to set the virtual IP.

**10) How to restrict different users with different permissions in vsftpd  
A)** By setting up **“user\_config\_dir”** entry in **“vsftpd.conf”.**  
  
  
**11)How to change vsftpd default port?  
A)**By setting “**listen\_port”** option in **“vsftpd.conf”**.

**12) Vsftpd is reporting times as GMT times and not local times!. How to resolve this?  
A)** This behavior can be changed with the setting **“use\_localtime=YES”.**  
  
  
**13) How to disable certain FTP commands?**  
**A)** There are some individual settings **(e.g. dirlist\_enable)** or you can specify a complete set of allowed commands with **“cmds\_allowed”.**  
  
**14) How does vsftpd support per-IP limits?  
A1)** If you are running vsftpd standalone, there is a **“max\_per\_ip”** setting.  
**A2)** Yes. If you are running vsftpd via xinetd, there is an xinetd config variable **“per\_source”.**  
  
**15) How Does vsftpd can do bandwidth limiting?  
A)** settings such as **“anon\_max\_rate”** and **“local\_max\_rate”** can be used to set this limits.  
  
**16) How to restrict some IP’s not use my FTP server?  
A1)** vsftpd can integrate with **tcp\_wrappers** (if built with this support). It is enabled with the setting **“tcp\_wrappers=YES”.**

**17) Does vsftpd support IPv6?  
A)** Yes, as of **“version 1.2.0″**.  
  
**18) Help! I’m getting messages along the lines of “500 OOPS: vsf\_sysutil\_bind” when trying to do downloads (particularly lots of small files).  
A) “vsftpd-1.2.1″ strong> should sort this out.  
  
19) Can we use vsftpd to hiding or denying certain files?  
A) Yes. Look at the hide\_file and deny\_file options.**

**20)How you can check if there is any syntax error in vsftpd.conf file?**  
**A)Just type vsftpd with out quoats.**

Q. What is ftp?

ftp is a file transfer protocol, used to share files ,directories.

**Q: How to deny specific users access to the FTP server ?**  
To deny specific users access to the FTP server, add their usernames to the /etc/vsftpd/  
ftpusers file. By default, system users such as root and nobody are included in this list.  
  
**Q: Can we create logs for ftp authenticated sessions ?**  
Yes, If the xferlog\_enable directive in vsftpd.conf is set to YES, file transfers using the FTP protocol are logged to /var/log/xferlog. Information such as a time stamp, IP address of the client, the file being transferred, and the username of the person who authenticated the connection is included in the log entry.

**Q: What is meaning of max\_clients parameter ?**  
Maximum number of clients that can connect at one time.  
If set to 0, the number of clients is unlimited.

**Q: On which port VSFTP server works ?**  
FTP uses two ports, 20 and 21. By default, the FTP server listens for requests on port 21.  
After a connection is established, the client sends commands to the server on port 21.  
However, port 20 is used when the server sends data back to the client.  
**Q: How to restart VSFTP server ?**  
service vsftpd restart  
  
**Q: How to allow Anonymous FTP ?**  
Anonymous FTP is enabled by default by setting the anonymous\_enable directive in  
**/etc/vsftpd/vsftpd.conf** to YES.  
**Q: - For Redhat Linux or Fedora which package is required for FTP service ?**  
  
Red Hat Enterprise Linux 6 or FEDORA includes the vsftpd FTP service.

Rpm -qa | grep vsftpd to chceck before installing

yum install vsftpd\* -y to install vsftpd package

**Q: - Important Configuration file for vsftp server ?**  
  
The FTP server uses the /etc/vsftpd/vsftpd.conf configuration file. Using this file, you  
can set options for displaying a custom banner message after users log in, setting the  
default file permissions for uploaded files, and setting the port on which to listen for  
incoming connections.

**Q: - What is FTP ?**  
  
FTP client connects to the FTP server by establishing an FTP control connection to port 21 of the server. Your commands such as 'ls' and 'get' are sent over this connection. Whenever the client requests data over the control connection, the server initiates data transfer connections back to the client. The source port of these data transfer connections is always port 20 on the server, and the destination port is a high port (greater than 1024) on the client.

**Q: - What is Passive mode?**  
Passive mode, like active mode, is initiated by the FTP client application. When requesting data from the server, the FTP client indicates it wants to access the data in passive mode and the server provides the IP address and a random, unprivileged port (greater than 1024) on the server. The client then connects to that port on the server to download the requested information.

**Q: - Explain directive "session\_support”?**  
  
When enabled, vsftpd attempts to maintain login sessions for each user through Pluggable Authentication Modules (PAM).

**Q: - Is there any way to monitor clients connected to vsftpd?**  
  
Yes. We actually have two slightly different methods to monitor vsftpd clients. First, make sure you have enabled the config option, "setproctitle\_enable=YES" like in our example above and restart your vsftpd server. Then run the command "watch ps -Cvsftpd -o user, pid, stime, cmd" to watch the processes including ip, username and actions like idle or data retrieval.

**Q: - I want to copy multiple files with out prompting for any info, how can I do that one?**  
ftp -i ftpserver

**Q: - Local users cannot log in. How to resolve this issue?**  
  
Check "local\_enable=YES" in your /etc/vsftpd/vsftpd. conf to allow local users to log in.

**Q: - How to change vsftpd default port?**  
Set "listen\_port" option in "vsftpd.conf"

**Q: - How to restrict some IP's not use my FTP server?**  
Use TCP\_WRAPPERS,

go to /etc/hosts.deny

write,

vsftpd: .example.com (or) ip address

save it and do the following

service vsftpd restart

chkconfig vsftpd on

**Q: - Does vsftpd support IPv6?**  
  
Yes

Q. **How to change ftp default port?**

By setting “**listen\_port”** option in **“vsftpd.conf”**

**Q. How much data can be send in a Single FTP session**  
The amount of data which can be send is infinite. FTP uses TCP. The TCP channel can be used until the complete data is transferred. Multiple TCP segments can be used within the same TCP channel.  
  
**Q. Can an IP packet carry FTP data**  
An IP packet is a carrier protocol used for carrying application layer data. The FTP data is packaged in TCP, which is sent to the intended recepient using the IP protocol in an IP based network  
  
**Q. How does Active FTP communication Work**  
When a FTP client initiates a connection with FTP server in Active FTP mode, initially the FTP client initiates tcp 3 way handshake with the FTP server. This is initiated to port 21 on the server and is referred to as the control connection. Once the control connection is successful, the client responds with the port command to the server, which contains the port number to which the server needs to initiate the second TCP connection. The server initiates the connection ( 2ND tcp 3 way handshake) from port 20 on it to the port number provided by the client. This is known as data connection.Once the data connection connection is succesfull, the data transmission can commence.   
  
**Q. How many TCP connections are used by Active and Passive FTP respectively**   
Both Active and Passive FTP uses two TCP connections  
  
**Q. Why does Active FTP not work when a firewall is involved between the client and the server.**   
In Active FTP , once the FTP client establishes the connectivity with the server, the server initiates the data connection to the client. This is a TCP connection which is initiated from a system (FTP Server) which resides outside the network. All traffic initiated from outside is considered as untrusted, and the firewall would drop it by default.   
  
**Q. How does Passive FTP resolve the issue with firewalls**  
In Passive FTP, the FTP client initiates the connection with the server and not the FTP server with the client. Since the client is residing within the network , the connection is considered as trusted by the firewall.   
  
**Q. In Active FTP, which TCP port is used for initiating the control channel**   
Port 21