NFS, NIS, SAMBA,POSTFIX, SENDMAIL,QMAIL

**Q. What is NFS?**

**Ans:**NFS stands for Network File System. NFS was originally developed by Sun Microsystems in the 1980's. NFS allows remote hosts to mount file systems over a network and interact with those file systems as though they are mounted locally. This enables system administrators to consolidate resources onto centralized servers on the network.

**Q. Which NFS versions are available?**

NFS Version 2

NFS Version 3

NFS Version 4

**Q. What is different between NFS Version 2 & 3 ?**

Ans: NFS 2 default 8kb transfer rate, it did not check the authentication at the time connection. Client wants to access unauthorized file it shows error messages like "write error","read error" nfs 3 32kb transfer rate. It check at the time connection- ACL Support

**Q. What is the role of "all\_squash" option?**

**Ans:**Treat all client users as anonymous users. Map all user and group IDs to the anonymous user and group ID.

**Q. What is the role of "root\_squash" option?**

**Ans:**All requests from the user root are translated or mapped as if they came from the user anonymous (default).

**Q. Explain "exportfs" command?**

**Ans:**The exportfs command is used to maintain the current table of exported file systems for

**Q. Difference between nfs soft and hard mouniting points?**

**Ans**: Hard mount option:- If the client fails to access the server, then connection hang it, after the system up then it access the server. Soft:- If the client failed to connect the  server it Immediately gives the error report, and close the connection.

To retrieve a list of clients connected to the NFS server use show mount command from Shell prompt.

Showmount -a

**Q. Name of the configuration file for NFS server?**

**Ans**: /etc/exports/

**Q. Can we grant access based on user name and password?**

**Ans:**No, access is granted only for IP address

**Q. Explain command "/usr/sbin/exportfs -f" ?**

**Ans:**It will flush everything out of the kernel export tab

**Q. Explain Hard and Soft Mounting in NFS?**

**Ans :**If a file request fail, the NFS client will report an error to the process on the client machine requesting the file access. If it cannot be satisfied the it quite. This is called Soft mounting.

If a file request fails, NFS client will report an error to the process on the client machine requesting the file access. If cannot be satisfied, then it will not quit until the request if satisfied. This is called hard mounting.

**Q. What is portmap?**

**Ans:**The portmapper keeps a list of what services are running on what [ports .The list is used by a connecting machine to see what ports it wants to talk to access certain services.

**Q. Which SELinux ports Samaba server works?**

**Ans**: Samba\_share\_t

**Q. On which Ports SAMBA server works?**

**Ans:**

UDP port 137 for NetBIOS-ns, NETBIOS name Service

UDP port 138 for netbios-dgm, NetBIOS Datagram service

TCP port 139 for netbios-ssn , NETBIOS session service

TCP port 445 for microsoft-d, Microsoft domain service

**Q.What are the Security or Authentication mode for SAMBA server?**

**Ans**:

ADS

DOMAIN

SERVER

USER

SHARE

**Q. What are the SAMBA server types ?**

**Ans:**Primary Doman controller

Backup Domain controller

ADS domain controller

**Q.Which protocol SAMBA Server uses?**

**Ans:**SMB, which stands for server Message block, is a protocol for sharing printers, serial ports and communication abstraction such as named pipes and mail slots between computers.

**Q. How SMP protocol works?**

**Ans:**There will be three stages in creating SM connection between a client and specific shares on the server

The first stage in connecting to an SMB share is to negotiate the SMB protocol dialect to use. IN the request packet the client send a text listing all the SMB dialects that it understands. The server selects the most advanced protocol that it knows and responds to the client specifying the protocol number from the list .At this point the client and server have agreed SMB commands can be used for the remainder of the conversation.

The second stage is to create a session connection between the client and server. To do this the client issues a session setup request .which included a surname and some proof of validity such as password .The server attempts to validate requesting user. IF successful the server then returns a session UID to client .This UID is unique for each session and has no relation to the server internal representation of user.

Third stage before access to file on a remote share is allowed si for the client to make successful tree connection to the shared resource .The client sends to the server a tre connect request, which includes the UID previously issued by the server .At this stage the server verifies that the authenticated user is authorized to access the requested resource. If the user has sufficient privileges to access the share, the client is issued a tree connection ID. The TID is used in all request files contained in the resource to which the TID referees.

**Q. How many Section Samba Configuration File (Smb.conf) contains?**

1. [Global] - Contains Settings that determines samba overall behavior

2. [Homes}- A default share for providing a home directory for all users

3. [Printers] - A default share for Exporting All printer on the host via CIFS.

**Q.What is SWAT?**

**Ans:**Swat is GUI based administration toll for Samba

**Q.What is the roles for NTLM?**

The chanllange/repsonse authentication protocol available to windows clients and server for validating connection request.

**Q. What is nbd daemon?**

**Ans:**This daemon handles all name registration and resolution request .It is the primary vehicle involved in network browsing .It handles all UDP based protocol. The nmbd daemon should be first command to start as a part of the samba start up process.

**Q. What is smdb daemon?**

**Ans:** This daemon handles all TCP/IP based connection services for file and print based operation .It also manages local authentication. It should be started immediately following the start up of nmbd.

**Q. what are the daemons running In NIS? how to do u create NIS users and update Maps?**

**Ans:**Below daemons will run the NIS

         1) ypservd

         2) ypxfrd

         3) yppasswd

        4) ypbind

**Q. What is the difference between TFTP and FTP servers?**

**Ans:** 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.

**Q. What is the port no for FTP?**

**Ans:**20 for Data and 21 for Control(normally when an interviewer ask's ftp port number just say 21.

**Q. What is the port no for TFTP?**

**Ans:**69.

**Q. How to restrict users to their home directories?**

**Ans**: By setting up "chroot\_local\_user=YES".

**Q. How to restrict total number of users accessing FTP server?**

**Ans:** If  Vsftpd is running under xinted service, then you can use xineted to get per-service per IP connection limits or If you run vsftpd in "standalone" mode with the "setting listen=YES", then you can investigate the setting (e.g.) : "max\_clients=10"

**Q.I want to copy multiple files with out prompting for any info, how can I do that one?**

**Ans:** 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.

**Q. Some times Local users cannot log in. How to resolve this issue?**

**Ans:** Check "local\_enable=YES" in your /etc/vsftpd/vsftpd. conf to allow local users to log in.

**Q.In which port telnet is listening?**

**Ans:**23

**Q. How do we integrate with LDAP( Lightweight Directory Access Protocol )users and login?**

**Ans:** Use vsftpd's( Very Secure FTPD) PAM(Pluggable Authentication Modules) integration to do this, and have PAM authenticate against an LDAP repository.

**Q. What is sand witch configuration in qmail?**

**Ans:**Qmail + Clam + Spamassassin- This is normally called Sandwitch configuration in qmail.

**Q. Advantages of Qmail?**

**Ans:**More secure, better designed, modular, faster, more reliable, easier to configure, don’t have to upgrade it every few months or worry about being vulnerable to something due to some obscure feature being enabled qmail supports host and user masquerading, full host hiding, virtual domains, null clients, list-owner rewriting, relay control, double-bounce recording, arbitrary RFC 822 address lists, cross-host mailing list loop detection, per-recipient checkpointing, downed host backoffs, independent message retry schedules, etc. qmail also includes a drop-in “sendmail” wrapper so that it will be used transparently by your current UAs.

**Q.What is the difference between POP3 and IMAP ?**

**Ans:**The Difference POP3 works by reviewing the inbox on the mail server, and downloading the new messages to your computer. IMAP downloads the headers of the new messages on the server, then retrieves the message you want to read when you click on it.

When using POP3, your mail is stored on your PC. When using IMAP, the mail is stored on the mail server. Unless you copy a message to a “Local Folder” the messages are never copied to your PC.

Scenarios of Use

POP3

· You only check e-mail from one computer.

· You want to remove your e-mail from the mail server.

IMAP

· You check e-mail from multiple locations.

· You use Webmail.

**Q. How to block and open relay?**

**Ans:**Open relays are e-mail servers that are configured to accept and transfer e-mail on behalf of any user anywhere, including unrelated third parties. The qmail-smtpd daemon will consult the rcpthosts control file to determine valid destination addresses, and reject anything else.

**Q. Which Groups and Users are required to start QMAIL Server?**

            Groups :- nofiles

            qmail

            Users :- qmaild

            alias

            qmaill

            qmailp

            qmailq

            qmailr

            qmails

**Q.What is the role of "qmail-send" process ?**

**Ans**: qmail-send - deliver mail messages from the queue

**Q. How to check, qmail server is up or down?**

Ans:     We can use qmailctl command to check the status of qmail server.

            # qmailctl stat

            /service/qmail-send: up (pid 30303) 187 seconds

            /service/qmail-send/log: up (pid 30304) 187 seconds

            /service/qmail-smtpd: up (pid 30305) 187 seconds

            /service/qmail-smtpd/log: up (pid 30308) 187 seconds

            messages in queue: 0

            messages in queue but not yet preprocessed: 0

**Q. On which port Send mail and SSL works?**

**Ans:**By default Sendmail uses TCP and UDP port 25 for non encrypted transfers. If the sendmail server is configured to use SLL for encrypting email Send and received it uses port 465.

**Q.Explain use of trusted-user file?**

**Ans:**List of users that can send email as other users with out a warning including system users such as apache for the Apache http server

**Q. Explain the use for “local-host -name" ?**

**Ans:**If the mail server should be known by different hostnames, list the host names in this file, one line per hostname.

**Q. Explain the use of access file?**

**Ans:**Can be used to redirect email from one user to another. By default it included redirects for system accounts to the root user.

**Q. What is the role of MUA?**

**Ans:**An MUA (Mail user agent) with access to the mail box file, directly or through a network file system, can read message form the dist and display them for the user.

**Q. What is the location of postfix mail server queue?**

**Ans:**By Default the post-fix mail ques are /var/spool/postfix directory. Message queue is created as a separate sub directory within this directory .Each message is stored as a separate file in the sub directory, using unique identifier for the file name.

**Q.What is LMTP?**

**Ans:**The local Mail Transport Protocol is different mail transport protocol described in RFC 2033.LMTP utilizes as a set protocol similar to SMTP for delivering messages to  the local host .Postfix can be configured to deliver messages to local users.

**Q.What is canonical Table?**

**Ans:**The clean up program uses the canonical table to rewrite message address contained in the message header .The mail administrator can use one canonical lookup table for both received messages and sent messages or separate tables for each.

**Q. What is the difference between Postfix and Sendmail?**

**Ans:**The mail difference between Postfix and Sendmail is Postfix Modularity .Just as the Unix system broke up email functionality between modules, postfix extends that practice to the MTA program. This allows each modular program to be smaller and quicker than on e large. Postfix is more secure than sendmail.Postfix uses separate userID to be adds to the mail server. Each module runs under this user id.