**Samba Server**

**http://computernetworkingnotes.com/network-administrations/samba-server.html**

Q: - ****When I click on my Samba server in the network neighborhood, I am continually prompted for a password to the IPC$ share no matter what I enter.****

The Windows client is attempting to use encrypted passwords. However, the Samba server is configured to support only clear-text passwords. You should either enable encrypted passwords on the server or enable clear-text passwords on the Windows client.

**Q: - Which SELinux security context used for SAMBA ?**

samba\_share\_t

**Q: - On which ports SAMBA server works ?**  
  
- UDP port 137 for netbios-ns, the NETBIOS Name Service  
- UDP port 138 for netbios-dgm, the NETBIOS Datagram Service  
- TCP port 139 for netbios-ssn, the NETBIOS session service  
- TCP port 445 for microsoft-ds, the Microsoft Domain Service

**Q: - What are the Secrity or Authentication Mode for SAMBA server?**  
  
ADS  
DOMAIN  
SERVER  
USER  
SHARE

**Q: - How to Manually Create Machine Trust Accounts ?**  
/usr/sbin/useradd -g machines -d /var/lib/nobody -c "machine nickname" -s /bin/false machine\_name$

passwd -l machine\_name$

**Q: - What are the SAMBA server Types ?**  
  
- Primary Domain Controller (PDC)  
- Backup Domain Controller (BDC)  
- ADS Domain Controller

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SMB, which stands for Server Message Block, is a protocol for sharing files, printers, serial ports, and communications abstractions such as named pipes and mail slots between computers.

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There are two different mechanisms to locate a domain controller: one  
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No. The native NT4 SAM replication protocols have not yet been fully implemented.

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Replication of the smbpasswd file is sensitive. It has to be done whenever  
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the smbpasswd file and has to be replicated to the BDC. So replicating the  
smbpasswd file very often is necessary.As the smbpasswd file contains plaintext password equivalents, it must not be sent unencrypted over the wire. The best way to set up smbpasswd replication from the PDC to the BDC is to use the utility rsync. rsync can use ssh as a transport. ssh itself can be set up to accept only rsync transfer without requiring the user to type a password.As said a few times before, use of this method is broken and awed. Machine trust accounts will go out of sync, resulting in a broken domain. This method is not recommended. Try using LDAP instead.

**Q: - Can Samba fully replace my Windows NT server that is not a Primary Domain Controller (PDC)?**

Samba can completely serve files and printers to Windows, just as a Windows NT server would.

**Q2 Can Samba replaces my Windows NT PDC?**

Not completely. Samba domain control capabilities for a Windows 9x client are  
solid and complete, and so these clients would probably never know the difference. The domain control support for Windows NT/2000 clients is still being developed. Currently, enough has been implemented to allow a Windows NT client to join a Samba-controlled domain, but there is more to domain control than that. The most conspicuous absence is the lack of support for Windows NT trust relationships and the SAM replication protocol used between NT PDCs and Backup Domain Controllers (BDCs).

**Q3 What TCP and UDP ports required for NetBIOS over TCP/IP use?**

The NBT name service uses port 137/udp, the NBT session service uses port  
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There will be three stages in creating an SMB connection between a client and a specific share on a 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 sends a text listing of 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 that SMB commands can be used for the remainder of the conversation.

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The third stage before access to files on a remote share is allowed is for the client to make a successful tree connection to the shared resource. The client sends to the server a tree 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 (TID). The TID is used in all requests to access files contained in the resource to which the TID refers.  
  
In this way SMB protocol works.

**Q: - How man sections samba configuration file (smb.conf) contains?**

smb.conf file contains three sections.

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2. [homes] A default share for providing a home directory for all users.  
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**Q: - If a netbios name is not defined in smb.conf, than what will be netbios name?**

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security = user

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"testparm " tool that verifies the syntax of a configuration file(smb.conf).

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"smbclient" is used to display the list of shares on your server. This verifies that smbd is running and functioning correctly. The -L option instructs smbclient to enumerate the shares on the server rather than actually connecting to one. The -N switch instructs smbclient to use an anonymous login rather than the login name of the current user.

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Antother use of "smbclient" command to connect the samba share.

smbclient //<server>/<share> -U <username>

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The smbstatus utility displays information about connected users and currently locked files.

**Q: - Is it possible for Samba to share file systems that have been mounted using NFS?**

Yes. However, this can be problematic if the NFS server that provides the file system fails, causing the Samba server to hang. It is always safer to use Samba to share a local file system.

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In theory, there is no limit. In practice, the limit is determined by the server’s hardware, specifically the total amount of available RAM and the CPU power. It might also depend on the amount of activity from the smbd processes.

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No, Samba can be a member of only one workgroup.

**Q: - What is SWAT?**

SWAT is GUI Based administration tool for samba server.

**Q: - I am trying to use SWAT, but I keep getting the message There was no response. The server could be down or not responding. What is the problem?**

The most likely cause is that SWAT is not listening to connections, or you have used the wrong URL in trying to connect to SWAT. SWAT usually lives behind port 901, so the URL you should use is http://ID\_ADDRESS\_OF\_SERVER:901/

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Note: - if you have edited the smbpasswd file by hand, make sure that the LAN Manager and NT password fields contain exactly 32 characters, no more and no fewer. If these fields do not have exactly 32 characters, Samba will not be able to correctly read the entry.

or You can modify by "smbpasswd" command.

smbpasswd -n USER\_NAME

Also you have to set the null passwords parameter to yes in the [global] section of smb.conf:

null passwords = yes

**Q: - Does Samba support PAM?**

Yes

**Q: - What is role of "NTLM"?**

The challenge/response authentication protocol available to Windows clients and servers for validating connection requests.

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A list of users and/or groups that should be given write access even if the read only parameter has been enabled.

**Q: - My clients are getting the error message that the Disk is Full when trying to print to my Samba server, but there is plenty of space. What is the problem?**

If smbd is unable to write the spooled file to the directory defined by the path parameter for a printer if the write permission were denied, for example it would respond to the client with the message, Disk is Full. Samba will also return this error message if the amount of free disk space in the spool directory has fallen below the value specified by the min print space parameter.

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**Q: - Why is security = domain better than security = server?**

There are three reasons why security = domain is better. The first is because this method enables the Samba server to participate in domain trust relationships. This is impossible with server-level security. The second reason is that, under server-level security, each smbd process must keep an open connection with the authentication server. This can drain a Windows NT PDC quickly. Under domain-level security, this connection is maintained only long enough to perform the validation, thus conserving valuable resources. The final reason is that, as a domain member, the Samba server has access to much more information about user accounts, which can be used to automate the creation and deletion of user accounts upon demand.

**Q: - what is nmbd daemon?**

This daemon handles all name registration and resolution requests. It is the primary vehicle involved in network browsing. It handles all UDP-based protocols. The nmbd daemon should be the first command started as part of the Samba startup process.

**Q: - What is smdb daemon?**

This daemon handles all TCP/IP-based connection services for file- and print-based operations. It also manages local authentication. It should be started immediately following the startup of nmbd.

**Q: - What is winbindd daemon?**

This daemon should be started when Samba is a member of a Windows NT4 or ADS domain. It is also needed when Samba has trust relationships with another domain. The winbindd daemon will check the smb.conf file for the presence of the idmap uid and idmap gid parameters. If they are found, winbindd will use the values specified for UID and GID allocation. If these parameters are not specified, winbindd will start but it will not be able to allocate UIDs or GIDs.

**Q: - Explain the parameter "wins support = Yes" used in smb.conf?**

If the Samba server was configured to provide WINS support ("wins support = Yes"), then the WINS server is able to provide name resolution for all of the hosts that are not listed in the /etc/hosts file or within the DNS. Making this adjustment in the Name Service Switch configuration file (/etc/nsswitch.conf) allows the Linux system to query the WINS server for local name resolution. This saves manual adjustments to host files.

**Q: - How to automate SMB share mounting during system startup?**

Add smb share entry in /etc/fstab file.

//IP\_ADDRESS\_OF\_SERVER/Shared /shared smbfs noauto,defaults 0 0

**Q: - how to start and stop samba server?**

/etc/init.d/smb restart

The difference between Samba and NFS is primarily that Samba

uses the SMB (aka Lanmanager) protocol which is considered

"standard" for PCs (Windows and OS/2 both have built in

support for it, a free client is also available for DOS, I'm

not sure about MacOS), whereas NFS uses its own protocol

(usually just called "NFS") which is not commonly available

for PCs (NFS clients do exist for operating systems other

than UNIX/Linux, but they're

usually neither free or easy to setup).

Samba's SMB protocol allows the server machine to handle

authentication, so it can decide what files the client has

access to based on the particular machine and user

connecting. NFS by default trusts all client machines

completely (it's really not intended to share files to

unsecured workstations) and lets the client machines handle

authentication all on their own (once an NFS server has been

told to accept connections from a client machine the client

does not require any further server-side authentication, and

can do anything it wants with the filesystem NFS gives it

access to).

SMB does not (directly) support UNIX style file permissions,

so it is probably a bad idea to routinely use it to map

filesystems between machines which expect this information

to be present and mutable, NFS of course supports all

standard UNIX file information (this also means that SMB is

fine for accessing a UNIX filesystem from a Windows machine,

but not so hot the other way around).

Network File System (also known as NFS) is a protocol

developed by Sun Microsystems. It allows a user on a

computer to access files that are sent across a network –

similar to the way one accesses local storage. It is most

common in systems with a similar composition to the UNIX system

Samba is a re-implementation of SMB/CIFS networking protocol

(meaning a re-imaging of Server Message Block – or Common

Internet File System). As with the NFS, Samba runs most

naturally on a system with qualities not unlike those of the

UNIX systems. It comes standard with almost every

distribution of Linux, and is used as a basic system service

on all other UNIX-based systems.

a. NFS is a protocol that allows a user to access files over

a network; Samba is essentially a re-imaging of the Common

Internet File System.

b. NFS has four versions, the newest of which includes a

stateful protocol; Samba has multiple versions, the latest

of which allows file and print sharing between multiple

computers.

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| --- | --- | --- |
| what is the difference between samba and ftp server in linux? please mention as many as differneces? | | |
| **Answer** # [1](http://www.allinterview.com/viewpost/257098.html) | SAMBA SERVER :-samba is an application is used to integrate  Linux system into windows it mostly commonly used in file  server for windows machines.  ex:- we can share a directory or file from Linux machine to  windows machine or you can share same directory from Linux  machine to Linux machine.  FTP SERVER :-ftp server is used to share a directory in a  network of Linux machine only |  |

|  |  |  |
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| **Answer** # [2](http://www.allinterview.com/viewpost/257860.html) | Using samba server we can upload,download and view a files.  where as FTP server we can only upload and download a file.  In samba server we have a printer sharing, but where as in  ftp we don't have such option.  In samba we need to authentication like we give a username  and password., In ftp we can acess as anonumous user and  athentication.  Practically ftp server is fast downloading and uploading  where as samba is comparetively less. |  |

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