

# LPI 300-100

**LPI LPIC-3 300 Certification Questions & Answers** 

Exam Summary – Syllabus –Questions

300-100

**LPIC-3 Mixed Environment** 

60 Questions Exam - 500/800 Cut Score - Duration of 90 minutes



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### Know Your 300-100 Certification Well:

The 300-100 is best suitable for candidates who want to gain knowledge in the LPI Linux System Administration. Before you start your 300-100 preparation you may struggle to get all the crucial LPIC-3 300 materials like 300-100 syllabus, sample questions, study guide.

But don't worry the 300-100 PDF is here to help you prepare in a stress free manner.

The PDF is a combination of all your queries like-

- What is in the 300-100 syllabus?
- How many questions are there in the 300-100 exam?
- Which Practice test would help me to pass the 300-100 exam at the first attempt?

Passing the 300-100 exam makes you LPIC-3 Mixed Environment. Having the LPIC-3 300 certification opens multiple opportunities for you. You can grab a new job, get a higher salary or simply get recognition within your current organization.

## LPI 300-100 LPIC-3 300 Certification Details:

Exam Name	LPIC-3 Mixed Environment
Exam Code	300-100
Exam Price	\$200 (USD)
Duration	90 mins
Number of Questions	60
Passing Score	500 / 800
Schedule Exam	LPI Marketplace
Sample Questions	LPI LPIC-3 Sample Questions
Practice Exam	LPI 300-100 Certification Practice Exam



# 300-100 Syllabus:

Торіс	Details		
	OpenLDAP Configuration		
	Weight: 3		
OpenLDAP Replication	<b>Description:</b> Candidates should be familiar with the server replication available with OpenLDAP.		
	Key Knowledge Areas:  - Replication concepts  - Configure OpenLDAP replication  - Analyze replication log files  - Understand replica hubs  - LDAP referrals  - LDAP sync replication		
	The following is a partial list of the used files, terms and utilities:  - master / slave server  - multi-master replication  - consumer  - replica hub  - one-shot mode  - referral  - syncrepl  - pull-based / push-based synchronization  - refreshOnly and refreshAndPersist  - replog		
	Weight: 3		
Securing the Directory	<b>Description:</b> Candidates should be able to configure encrypted access to the LDAP directory, and restrict access at the firewall level.		
	Key Knowledge Areas: - Securing the directory with SSL and TLS - Firewall considerations - Unauthenticated access methods - User / password authentication methods - Maintanence of SASL user DB - Client / server certificates		
	Terms and Utilities: - SSL / TLS - Security Strength Factors (SSF)		



Topic	Details		
	- SASL - proxy authorization - StartTLS - iptables		
	Weight: 2		
	<b>Description:</b> Candidates should be capable of measuring the performance of an LDAP server, and tuning configuration directives.		
OpenLDAP Server Performance Tuning	Key Knowledge Areas: - Measure OpenLDAP performance - Tune software configuration to increase performance - Understand indexes		
	Terms and Utilities: - index - DB_CONFIG		
Ор	OpenLDAP as an Authentication Backend		
	Weight: 2		
	<b>Description:</b> Candidates should be able to configure PAM and NSS to retrieve information from an LDAP directory.		
LDAP Integration with PAM and NSS	Key Knowledge Areas: - Configure PAM to use LDAP for authentication - Configure NSS to retrieve information from LDAP - Configure PAM modules in various Unix environments		
	Terms and Utilities: - PAM - NSS - /etc/pam.d/ - /etc/nsswitch.conf		
	Weight: 2		
Integrating LDAP with Active Directory and	<b>Description:</b> Candidates should be able to integrate LDAP with Active Directory Services.		
Kerberos	Key Knowledge Areas:  - Kerberos integration with LDAP  - Cross platform authentication  - Single sign-on concepts		



Topic	Details
	- Integration and compatibility limitations between OpenLDAP and Active Directory
	Terms and Utilities: - Kerberos - Active Directory - single sign-on - DNS
	Samba Basics
	Weight: 2
Samba Concepts and Architecture	<b>Description:</b> Candidates should understand the essential concepts of Samba. As well, the major differences between Samba3 and Samba4 should be known.
	Key Knowledge Areas:  - Understand the roles of the Samba daemons and components  - Understand key issues regarding heterogeneous networks  - Identify key TCP/UDP ports used with SMB/CIFS  - Knowledge of Samba3 and Samba4 differences
	The following is a partial list of the used files, terms and utilities: - /etc/services - Samba daemons: smbd, nmbd, samba, winbindd
	Weight: 4
	<b>Description:</b> Candidates should be able to configure the Samba daemons for a wide variety of purposes.
Configure Samba	Key Knowledge Areas:  - Knowledge of Samba server configuration file structure  - Knowledge of Samba variables and configuration parameters  - Troubleshoot and debug configuration problems with Samba
	Terms and Utilities: - smb.conf - smb.conf parameters - smb.conf variables - testparm - secrets.tdb
Regular Samba Maintenance	Weight: 2



Topic	Details
	<b>Description:</b> Candidates should know about the various tools and utilities that are part of a Samba installation.
	Key Knowledge Areas: - Monitor and interact with running Samba daemons - Perform regular backups of Samba configuration and state data
	Terms and Utilities: - smbcontrol - smbstatus - tdbbackup
	Weight: 2
	<b>Description:</b> Candidates should understand the structure of trivial database files and know how troubleshoot problems.
Troubleshooting Samba	Key Knowledge Areas: - Configure Samba logging - Backup TDB files - Restore TDB files - Identify TDB file corruption - Edit / list TDB file content
	Terms and Utilities: - /var/log/samba/ - log level - debuglevel - smbpasswd - pdbedit - secrets.tdb - tdbbackup - tdbdump - tdbrestore - tdbtool
	Weight: 1
	<b>Description:</b> Candidates should be able to work with internationalization character codes and code pages.
Internationalization	Key Knowledge Areas:  - Understand internationalization character codes and code pages  - Understand the difference in the name space between Windows and Linux/Unix with respect to share, file and directory names in a non-English environment



Topic	Details
	- Understand the difference in the name space between Windows and Linux/Unix with respect to user and group naming in a non-English environment - Understand the difference in the name space between Windows and Linux/Unix with respect to computer naming in a non-English environment
	Terms and Utilities: - internationalization - character codes - code pages - smb.conf - dos charset, display charset and unix charset
	Samba Share Configuration
	Weight: 4
	<b>Description:</b> Candidates should be able to create and configure file shares in a mixed environment.
File Services	Key Knowledge Areas:  - Create and configure file sharing  - Plan file service migration  - Limit access to IPC\$  - Create scripts for user and group handling of file shares  - Samba share access configuration parameters
	Terms and Utilities: - smb.conf - [homes] - smbcquotas - smbsh - browseable, writeable, valid users, write list, read list, read only and guest ok - IPC\$ - mount, smbmount
	Weight: 3
Share/Service	<b>Description:</b> Candidates should understand file permissions on a Linux file system in a mixed environment.
Permissions	Key Knowledge Areas: - Knowledge of file / directory permission control - Understand how Samba interacts with Linux file system



Topic	Details	
	permissions and ACLs - Use Samba VFS to store Windows ACLs	
	Terms and Utilities: - smb.conf - chmod, chown - create mask, directory mask, force create mode, force	
	directory mode - smbcacls - getfacl, setfacl - vfs_acl_xattr, vfs_acl_tdb and vfs objects	
	Weight: 2	
	<b>Description:</b> Candidates should be able to create and manage print shares in a mixed environment.	
Print Services	Key Knowledge Areas:  - Create and configure printer sharing  - Configure integration between Samba and CUPS  - Manage Windows print drivers and configure downloading of print drivers  - Configure [print\$]  - Understand security concerns with printer sharing  - Uploading printer drivers for Point'n'Print driver installation using 'Add Print Driver Wizard' in Windows	
	Terms and Utilities: - smb.conf - [print\$] - CUPS - cupsd.conf - /var/spool/samba/ smbspool - rpcclient - net	
Samba User and Group Management		
	Weight: 4	
Managing User Accounts and Groups	<b>Description:</b> Candidates should be able to manage user and group accounts in a mixed environment.	
	Key Knowledge Areas:  - Manager user and group accounts  - Understand user and group mapping	



Topic	Details
	<ul> <li>Knowledge of user account management tools</li> <li>Use of the smbpasswd program</li> <li>Force ownership of file and directory objects</li> </ul>
	Terms and Utilities: - pdbedit - smb.conf - samba-tool user (with subcommands) - samba-tool group (with subcommands) - smbpasswd - /etc/passwd - /etc/group - force user, force group idmap
	Weight: 5
Authentication, Authorization and Winbind	Description: Candidates should understand the various authentication mechanisms and configure access control. Candidates should be able to install and configure the Winbind service.  Key Knowledge Areas: - Setup a local password database - Perform password synchronization - Knowledge of different passdb backends - Convert between Samba passdb backends - Integrate Samba with LDAP - Configure Winbind service - Configure PAM and NSS
	Terms and Utilities: - smb.conf - smbpasswd, tdbsam, Idapsam - passdb backend - libnss_winbind - libpam_winbind - libpam_smbpass - wbinfo - getent - SID and foreign SID - /etc/passwd - /etc/group



Topic	Details		
	Samba Domain Integration		
Samba as a PDC and BDC	Weight: 3  Description: Candidates should be able to setup and maintain primary and backup domain controllers. Candidates should be able to manage Windows/Linux client access to the NT-Style domains.  Key Knowledge Areas: - Understand and configure domain membership and trust relationships - Create and maintain a primary domain controller with Samba3 and Samba4 - Create and maintain a backup domain controller with Samba3 and Samba4		
	- Add computers to an existing domain - Configure logon scripts - Configure roaming profiles - Configure system policies  Terms and Utilities: - smb.conf - security mode - server role - domain logons - domain master - logon script - logon path - NTConfig.pol - net - profiles - add machine script		
Samba4 as an AD compatible Domain Controller	<ul> <li>- profile acls</li> <li>Weight: 3</li> <li>Description: Candidates should be able to configure Samba 4 as an AD Domain Controller.</li> <li>Key Knowledge Areas:</li> <li>- Configure and test Samba 4 as an AD DC</li> <li>- Using smbclient to confirm AD operation</li> <li>- Understand how Samba integrates with AD services: DNS, Kerberos, NTP, LDAP</li> </ul>		



Торіс	Details
	Terms and Utilities: - smb.conf - server role - samba-tool domain (with subcommands) - samba
	Weight: 3
	<b>Description:</b> Candidates should be able to integrate Linux servers into an environment where Active Directory is present.
Configure Samba as a Domain Member Server	Key Knowledge Areas:  - Joining Samba to an existing NT4 domain  - Joining Samba to an existing AD domain  - Ability to obtain a TGT from a KDC
	Terms and Utilities: - smb.conf - server role - server security - net command - kinit, TGT and REALM
	Samba Name Services
	Weight: 3
	<b>Description:</b> Candidates should be familiar with NetBIOS/WINS concepts and understand network browsing.
NetBIOS and WINS	Key Knowledge Areas:  - Understand WINS concepts  - Understand the role of a local master browser  - Understand the role of a domain master browser  - Understand the role of Samba as a WINS server  - Understand name resolution  - Configure Samba as a WINS server  - Configure WINS replication  - Understand NetBIOS browsing and browser elections  - Understand NETBIOS name types
	Terms and Utilities: - smb.conf - nmblookup - smbclient - name resolve order



Topic	Details
	<ul><li>Imhosts</li><li>wins support, wins server, wins proxy, dns proxy</li><li>domain master, os level, preferred master</li></ul>
	Weight: 2
	<b>Description:</b> Candidates should be familiar with the internal DNS server with Samba4.
Active Directory Name	Key Knowledge Areas: - Understand and manage DNS for Samba4 as an AD Domain Controller
Resolution	- DNS forwarding with the internal DNS server of Samba4
	Terms and Utilities: - samba-tool dns (with subcommands) - smb.conf - dns forwarder
	- /etc/resolv.conf - dig, host
Wo	orking with Linux and Windows Clients
	Weight: 3
	<b>Description:</b> Candidates should be comfortable working with CIFS in a mixed environment.
CIFS Integration	Key Knowledge Areas:  - Understand SMB/CIFS concepts  - Access and mount remote CIFS shares from a Linux client  - Securely storing CIFS credentials  - Understand features and benefits of CIFS  - Understand permissions and file ownership of remote CIFS shares
	Terms and Utilities: - SMB/CIFS - mount, mount.cifs - smbclient - smbget - smbtar - smbtree - findsmb - smb.conf



Topic	Details
	- smbcquotas - /etc/fstab
	Weight: 2
Working with Windows Clients	<b>Description:</b> Candidates should be able to interact with remote Windows clients, and configure Windows workstations to access file and print services from Linux servers.
	Key Knowledge Areas:  - Knowledge of Windows clients  - Explore browse lists and SMB clients from Windows  - Share file / print resources from Windows  - Use of the smbclient program  - Use of the Windows net utility
	Terms and Utilities: - Windows net command - smbclient - control panel - rdesktop - workgroup

# LPI 300-100 Sample Questions:

### Question: 1

In order to generate an individual log file for each of the machines connecting to a Samba server, which of the following statements must be used in the Samba configuration file?

- a) log file = /var/log/samba/log.%c
- b) log file = /var/log/samba/log.%M
- c) log file = /var/log/samba/log.%m
- d) log file = /var/log/samba/log.%l

Answer: c



The [homes] section of smb.conf contains the parameter browseable = no. What are the resulting consequences?

(Choose two.)

- a) When browsing the Samba server, there is no visible share called homes.
- b) The homes share can be directly accessed by specifically opening this share by its UNC path.
- c) When browsing the Samba server, users can open the homes share but they cannot see the content of their home directories.
- d) If the Samba server is part of an Active Directory Domain, only users in the group SeBrowsingUsers can browse the homes share.
- e) When browsing the Samba server, there is no visible share named after the current user.

Answer: a, b

#### Question: 3

When upgrading a Samba 3 to a Samba 4 Active Directory domain using samba-tool domain classicupgrade, which of the following statements are true?

(Choose three.)

- a) All machines have to rejoin the new domain.
- b) The profiles of the users remain unchanged.
- Samba configures its internal NTP server to synchronize the systems clocks of all domain members.
- d) The user accounts and machine accounts are migrated into the new database.
- e) A basic set of DNS records required for AD operation are provisioned.

Answer: b, d, e



What is true about the option create mask in smb.conf?

- a) Each permission bit that is set (1) create mask cannot be set on a file created by Samba even if the client requests it to be set.
- b) Each permission bit that is cleared (0) in create mask is only set on a file created by Samba if the client explicitly sets the bit.
- c) Each permission bit that is set (1) in create mask is always set on a file created by Samba regardless of the permissions set by the client.
- d) Each permission bit that is cleared (0) in create mask is always cleared on a file created by Samba even if the client explicitly sets the bit.

Answer: d

#### Question: 5

After configuring a Unix client to authenticate with a Microsoft Active Directory server, login attempts are unsuccessful. Which of the following is most likely the cause?

- a) Unix Client support is disabled in the Active Directory configuration.
- b) The PAM library is searching the directory with the default search filter.
- c) The slapd daemon is not running on the client.
- d) The user account in the Active Directory has the remote login setting disabled.

Answer: b

#### Question: 6

By default, Samba tries to automatically detect the correct character set to use with a connecting client. Which parameter in smb.conf forces Samba to use only ASCII?

- a) global charset = ASCII
- b) unicode = no
- c) ASCII = yes
- d) force charset = ASCII
- e) reduce charset = yes

Answer: c



Which of the following options must be set in smb.conf in order to actively configure Samba as Directory domain controller?

- a) security = adds
- b) ad server mode = domain controller
- c) server role = active directory domain controller
- d) active directory logons = yes

Answer: a

#### Question: 8

Microsoft file system are not case sensitive to file names. Linux file systems are case sensitive to file names.

Which of the following configuration directives defines how Samba handles file name mapping in this situation?

- a) name map
- b) case map
- c) case sensitive
- d) case on

Answer: a

#### Question: 9

What a benefits of using Single Sign-On (SSO)?

(Choose three.)

- a) Reduce IT costs due to lower number of IT help desk about passwords.
- b) Reduce time spent re-entering passwords for the same identity.
- c) Reduce number of passwords to remember.
- d) Reduce password complexity.
- e) Reduce number of services used by users.

Answer: a, b, c



Which of the following ports are open by default on a Samba 4 Active Directory Domain Controller?

(Choose three.)

- a) 443/TCP
- b) 138/TCP
- c) 389/TCP
- d) 445/TCP
- e) 53/TCP

Answer: b, c, d

## Study Guide to Crack LPI LPIC-3 300 300-100 Exam:

- Getting details of the 300-100 syllabus, is the first step of a study plan. This
  pdf is going to be of ultimate help. Completion of the syllabus is must to pass
  the 300-100 exam.
- Making a schedule is vital. A structured method of preparation leads to success. A candidate must plan his schedule and follow it rigorously to attain success.
- Joining the LPI provided training for 300-100 exam could be of much help.
   If there is specific training for the exam, you can discover it from the link above.
- Read from the 300-100 sample questions to gain your idea about the actual exam questions. In this PDF useful sample questions are provided to make your exam preparation easy.
- Practicing on 300-100 practice tests is must. Continuous practice will make you an expert in all syllabus areas.



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