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- Ciprian Vizitiumailto:CVizitiu@gbif.org (drawings)
- Jelmer R. Vernooijmailto:jelmer@samba.org (drawings)

Stackable VFS modules

- Jelmer R. Vernooijmailto:jelmer@samba.org
- John H. Terpstramailto:jht@samba.org
-

nuggets, and if they helped anyone then that was just wonderful. But the HOWTO documents lacked structure and context. They were isolated snapshots of information that were written to pass information on to someone else who might benefit. They reflected a need to transmit more information that could be conveniently put into manual pages.

The original HOWTO documents were written by different authors. Most HOWTO documents are the result of feedback and

W

```
root# mkdir /export
root# chmod u+rwx,g+rx,o+rx /export
root# chown jackb.users /export
```

3. Copy the files that should be shared to the `/export` directory.
4. Install the Samba configuration file (`/etc/samba/smb.conf`) as shown in Anonymous Read-Only Server Configuration.
5. Test the configuration file by executing the following command:

   ```
   root# testparm
   ```

   Alternatively, where you are operating from a master configuration file called `smb.conf.master`, the following sequence of commands might prove more appropriate:

W

```
MIDEARTH\ameds
...
MIDEARTH\root

root# wbinfo -g
MIDEARTH\Domain Users
MIDEARTH\Domain Admins
MIDEARTH\Domain Guests
...
MIDEARTH\Accounts
```

9. Check that **winbind** is working. The following demonstrates correct username resolution via the **getent** system utility:

```
root# getent passwd maryo
```

Example 2.8 Engineering Office smb.conf (shares and services)

Example 2.9 LDAP backend smb.conf for PDC

Part II

Server Configuration Basics

MS Windows 95 pre-service pack 1 and MS Windows NT versions 3.x and version 4.0 pre-service pack 3 will use either mode of password authentication. All versions of MS Windows that follow these versions no longer support plain-text passwords by default.

MS Windows clients have a habit of dropping network mappings that have been idle for 10 minutes or longer. When the user attempts to use the mapped drive connection that has been dropped, the client re-establishes the connection using a cached copy

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When configuring a master LDAP server that will have slave LDAP servers, do not forget to configure this in the

6.2.4.2 Windows NT4 Client

If the Machine Trust Account was created manually, on the Identification Changes menu enter the domain name, but do not check the box Create a Computer Account in the Domain. In this case, the existing Machine Trust Account is used to join the machine to the domain.

Chapter 7

Standalone Servers

John H. Terpstra Standalone servers are independent of domain controllers on the network. They are not domain members and function more like workgroup servers. In many cases a standalone server is configured with a minimum of security control with the intent that all data served will be readily accessible to all users.

7.1 Features and Benefits

Standalone servers can be as secure or as insecure as needs dictate. They can have simple or complex configurations. Above all, despite the hoopla about domain security, they remain a common installation.

If all that is needed is a server for read-only files, or for printers alone, it may not make sense to effect a complex installation. For example, a drafting office needs to store old drawings and reference standards. Nobody can write files to the server because it is legislatively important that all documents remain unaltered. A share-mode read-only standalone server is an ideal solution.

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2. The Local Area Connection Properties is used to set TCP/IP protocol settings. Click on Internet Protocol (TCP/IP) in the Components checked are used by this connection: box, then clickeen2.

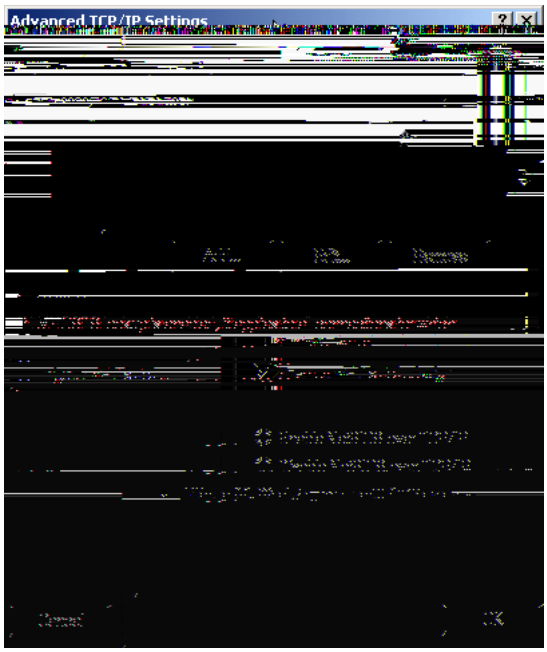


Figure 8.10: WINS Configuration.

(Gateal)-w (tab5(fl8(alloal)-ws5(fl8(additionmba)-38(g)5(ateal)-w)10 -vs5(fl8((router98m38(addresses)98m38(to98m38(be98m38(added5((to98m38(t)2

8.2.2 Joining a Domain: Windows 2000/XP Professional

Microsoft Windows NT/200x/XP Professional platforms can participate in domain security. This section steps through the

- Incorrect or inconsistent netmasks.
- Incorrect router address.
- Incorrect DNS server address.
- Incorrect WINS server address.
- Use of a Network Scope setting — watch out for this one!

The most common reasons for which a Windows NT/200x/XP Professional client cannot join the Samba controlled domain are:

- `smb.conf` does not have correct *add machine script* settings.
- 'root' account is not in password backend database.
- Attempt to use a user account instead of the 'root' account to join a machine to the domain.
- Open connections from the workstation to the server.
- Firewall or filter configurations in place on either the client or the Samba server.

10.4.6 Multiple Interfaces

directly as a unique (the type 0x03) name. It also registers its name if it is running the LanManager-compatible server service

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Figure 11.1: IDMAP: Resolution of SIDs to UIDs.

ReferenceMS

all user access to the UNIX platform to be managed from a central environment and yet distributed to wherever the point of need may be physically located. Applications that benefit from this infrastructure include: UNIX login shells, mail and messaging systems, quota controls, printing systems, DNS servers, DHCP servers, and also Samba.

Many sites are installing LDAP for the first time in order to provide a scalable passdb backend for Samba. Others are faced with the need to adapt an existing LDAP directory to new uses such as for the Samba SAM back the backparticula may blso atenthaa.

smbpasswd is designed to work in the way familiar to UNIX users who use the **passwd** or **yppasswd** commands. While designed for administrative use, this tool provides essential user-level password change capabilities.

For more details on using **smbpasswd**, refer to the man page (the definitive reference).

11.3.2 The pdbedit Tool

pdbedit is a tool that can be used only by root. It is used to manage the passdb backend, as well as domain-wide account policy settings. **pdbedit** can be used to:

- add, remove, or modify user accounts.
- list user accounts.
- migrate user accounts.
- migrate group accounts.
- manage account policies.
- manage domain access policy settings.

Under the terms of the Sarbanes-Oxley Act of 2002, American businesses and organizations are mandated to implement a series of `internal controls`

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- OpenLDAP
- Sun One Directory Server
- Novell eDirectory
- IBM Tivoli Directory Server
- Red Hat Directory Server
- Fedora Directory Server

Two additional Samba resources that may prove to be helpful are:

- The Samba-PDC-LDAP-HOWTO maintained by Ignacio Coupeau.
- The NT migration scripts from IDEALX that are geared to manage users and groups in such a Samba-LDAP domain controller configuration. Idealx also produced the smbldap-tools and the Interactive Console Management tool.

11.4.4.1 Supported LDAP Servers

The LDAP ldapsam code was developed and tested usinP(LD)40(p8ll)-250(eDirectot2ested)5.xer and ibrariesn. The code wrkewitch etscape‘(Directory)-23(SServ)15(er)-234(and)-224climentSDK.tHoevrrect,P pare are to Thsre

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Example 11.2

sambaLMPassword	

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The `ntgroup` value must be in quotes if it contains space characters to prevent the space from being interpreted as a command delimiter.

Be aware that the RID parameter is an unsigned 32-bit integer that should normally start at 1000. However, this RID must not

WORKING PAPER

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Of course it is expected that the administrator will modify this to suit local needs. For information regarding the use of the **net groupmap** tool please refer to the man page.

Note

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```
          SeAddUsersPrivilege  Add users and groups to the domain
    SeRemoteShutdownPrivilege  Force shutdown from a remote system
      SeDiskOperatorPrivilege  Manage disk shares
            SeBackupPrivilege  Back up files and directories
           SeRestorePrivilege  Restore files and directories
```

It is best to let Samba figure out the domain join type from the settings in the `smb.conf` file.

The command to join a Samba server to a Windows ADS domain is shown here:

```
root#  net ads join -UAdministrator%not24get
Using short domain name -- GDANSK
```

W

```
net ads printer publish <printer_name> -Uadministrator%secret
```

This publishes a printer from the local Samba server to ADS.

Removal of a Samba printer from ADS is achieved by executing this command:

13.14 Other Miscellaneous Operations

The following command is useful for obtaining basic statistics regarding a Samba domain. This command does not work with current Windows XP Professional clients.

```
root#  net rpc info
```

14.1.2 Domain Member Server or Domain Member Client

Samba-3 can act as a Windows NT4 PDC or BDC, thereby providing domain control protocols that are compatible with Windows NT4. Samba-3 file and print sharing protocols are compatible with all versions of MS Windows products. Windows NT4, as with MS Active Directory, extensively makes use of Windows SIDs.

Samba-3 domain member servers and clients must interact correctly with MS Windows SIDs. Incoming Windows SIDs must be

Example 14.5 ADS Domain Member Server using RFC2307bis Schema Extension Date via NSS

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Chapter 16

File, Directory, and Share Access Controls

John H. Terpstra Jeremy Allison Jelmer R. Vernooij May 10, 2003 Advanced MS Windows users are frequently perplexed when file, directory, and share manipulation of resources shared via Samba do not behave in the manner they might expect. MS Windows network administrators are often confused regarding network access controls and how to provide users with the access they need while protecting resources from unauthorized access.

Many UNIX administrators are unfamiliar with the MS Windows environment and in particular have difficulty in visualizing what the MS Windows user wishes to achieve in attempts to set file and directory access permissions.

The problem lies in the differences in how file and directory permissions and controls work between the two environments. This difference is one that Samba cannot completely hide, even though it does try to bridge the chasm to a degree.

Control Parameter	Description, Action, Notes
admin users	List of users who will be granted administrative privileges

16.6 Common Errors

File, directory, and share access problems are common topics on the mailing list. The following are examples recently taken

You should see that the file `Afile`

17.3.1 Ex

In the followi

17.3.1.1 Dis

You can disab

```
[ acctdata
  oplo[8 w1
```

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This specifies whether the server allows clients to use oplocks on files. Oplocks are a significant performance enhancement, but have the potential to cause lost cached data on some networks, particularly WANs.

```
MinLinkThroughput   REG_DWORD   0 to infinite bytes per second
Default: 0
```

This specifies the minimum link throughput allowed by the server before it disables raw I/O and oplocks for this connection.

```
MaxLinkDelay   REG_DWORD   0 to 100,000 seconds
Default: 60
```

Chapter 18

Securing Samba

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18.5 Common Errors

Microsoft developed Active Directory Service (ADS), based on Kerberos and LDAP, as a means of circumventing the limitations of the older technologies. Not every organization is ready or willing to embrace ADS. For small companies the older NT4-style

Users on DFS-aware clients can now browse the DFS tree on the Samba server at `\\samba\dfs`. Accessing links linka or linkb (which appear as directories to the client) takes users directly to the appropriate shares on the network.

20.2 Common Errors

- Windows clients need to be rebooted if a previously mounted non-DFS share is made a DFS root, or vice versa. A better way is to introduce a new share and make it the DFS root.
- Currently, there's a restriction that msdfs symlink names should all be lowercase.
- For security purposes, the directory acting as the root of the DFS tree should have ownership and permissions set so only designated users can modify them. Asigna0ta1366R makfyn30(modi99 Td7u955 50(mak)10(e)-25 (e)-25 (e)-25 (e)-25 (e)-25 (e)wutak).8nons set so

```
[printers]
       path = /var/spool/samba
       printable = Yes
```

You can easily verify which settings were implicitly added by Samba's default behavior. *Remember: it may be important in your future dealings with Samba.*

Note
The **testparm** in Samba-3 behaves differently from that in 2.2.x: used without the '-v' switch, it only shows you the settings actually written into! To see the complete configuration used, add the '-v' parameter to testparm.

21.3.2 Rapid Configuration Validation

Should you need to troubleshoot at any stage, please always come back to this point first and verify if **testparm** shows the parameters you expect. To give you a warning from personal experience, try to just comment out the *load printers* parameter. If your 2.2.x system behaves like mine, you'll see this:

```
root# grep "load printers" /etc/samba/smb.samba/smb.confG0.95g0.98J0.3G[(sm56.693723.9cm00510.23610.
```

W

Windows Explorer to poke at it. The Windows 9x/Me driver files will end up in subdirectory `0` of the `WIN40` directory. The full path to access them is `\\WINDOWSHOST\print$\WIN40\0\`.

Note

```
  put Hddm91c1_de.INI; put Hddm91c1KMMin.DLL;      \
  put Hddm91c1_de.dat; put Hddm91c1_de.dat;        \
  put Hddm91c1_de.def; put Hddm91c1_de.hre;        \
  put Hddm91c1_de.vnd; put Hddm91c1_de.hlp;        \
  put Hddm91c1_de_reg.HLP; put HDNIS01Aux.dll;     \
  put HDNIS01_de.NTF'

added interface ip=10.160.51.60 bcast
```

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A. The first ‘wrong’ way:

1. Open the Printers folder.
2. Right-click on the printer (*remoteprinter on cupshost*) and select in context menu Printing Preferences....
3. Look at this dialog closely and remember what it looks like.

B.

W

```
   CNS3G.HLP               A    99948  Thu May 30 02:31:00 2002

CNS3GUI.   CNS3GUI.DLLA    99948 A Thu May 30 02:31:00 2002
```

21.11 The addprinter Command

The **addprinter**

22.2.1 Linking smbd with libcups.so

Samba has a special relationship to CUPS. Samba can be compiled with CUPS library support. Most recent installations have this support enabled. By default, CUPS linking is compiled into smbd and other Samba binaries. Of course, you can use CUPS even if Samba is not linked against `libcups.so` — but there are some differences in required or supported configuration.

When Samba is compiled and linked with `libcups`, *printcap* = cups uses the CUPS API to list printers, submit jobs, query queues, and so on. Otherwise it maps to the System V commands with an additional **-oraw** option for printing. On a Linux system, you can use the **ldd** utility to fiseldd

22.3.2 Raw Print Serving: Vendor Drivers on Windows Clients

Most traditionally configured UNIX print servers acting on behalf of Samba's Windows clients represented a really simple setup. Their only task was to manage the 'raw' spooling of all jobs handed to them by Samba. This approach meant that the Windows clients were expected to prepare the print job file that is ready to be sent to the printing device. In this case, a native (vendor-supplied) Windows printer driver needs to be installed on each and every client for the target device.

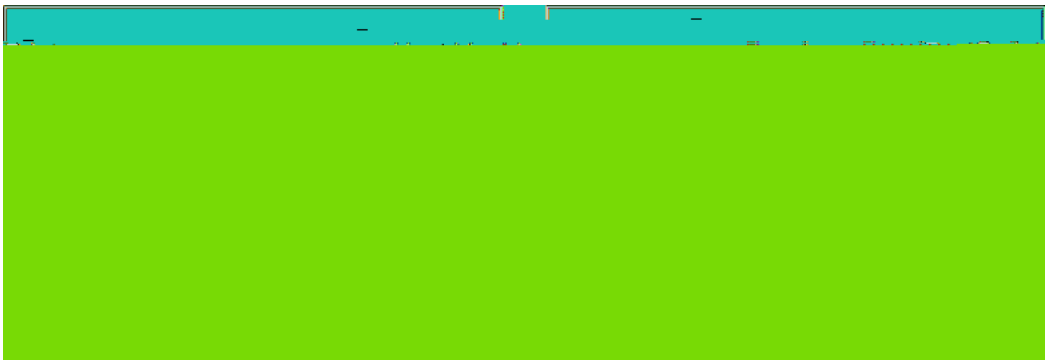


Figure 22.2: Printing to a PostScript Printer.

However, there are other types of printers out there. These do not know how to print PostScript. They use their own PDL, often proprietary. To print to them is much mfDL,to

22.5 The CUPS Filtering Architecture

title The string from the job-name attribute.

copiesconame attribute.

- Selecting the range of pages to be printed (e.g., you can choose to print only pages ‘3, 6, 8-11, 16, and 19-21’, or only odd-numbered pages).
- Putting two or more logical pages on one sheet of paper (the so-called ‘number-up’ function).
- Counting the pages of the job to insert the accounting information into the `/var/log/cups/page_log`.

22.5.6 pstoraster

`pstoraster` is at the core of the CUPSstoras1002cler tsyterm.-3809(Ittoras1s)-247(aresponsible-258(tfr)-257(ahe)-247(C002crs)-248

The Official Samba 3.5.x HOWTO and Reference Guide[(Ref62e76al)-is.2: Rb3al

- Second is the *rasterdriver* step. It uses various device-specific filters; there are several vendors who provide good quality filters for this step. Some are free software, some are shareware, and some are proprietary.

Often this produces better quality (and m869(qnd)-3449.11qualmome adsesOfors;Ofmethods-256023.3n tid mrssTd [(OfinTd [(]TJE

22.5.18 Sources of CUPS Drivers/PPDs

22.6.2 Driver Execution on the Client

In the first case, the print server must spool the file as raw, meaning it shouldn't touch the job file and try to convert it in any way. This is what a traditional UNIX-based print server can do too, and at a better performance and more reliably than an

The CUPS printer driver is available from the CUPS download site. Its package name is `cups-samba-[version].tar.gz`

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Any empty fields should be entered as the string ‘NULL’.

Samba does not need to support the concept of print monitors, since these only apply to local printers whose drivers can use a bidirectional link for communication. This field should be ‘NULL’. On a remote NT print server, the print monitor for a driver

```
        Dependentfiles: []
        Dependentfiles: []
        Dependentfiles: []

        Monitorname: []
        Defaultdatatype: []
```

Some printer drivers list additional files under the label *Dependentfiles*, and these would go into the last field *ListOfFiles,Comma-separated*. For the CUPS PostScript drivers, we do not need any (nor would we for the Adobe PostScript driver); therefore, the field will get a 'NULL' entry.

22.11.4 Requirements for adddriver and setdriver to Succeed

From the man page (and from the quoted output of **cupsaddsmb** above) it becomes clear that you need to have certain conditions in order to make the manual uploading and initializing of the driver files succeed. The two **rpcclient** subcommands (**adddriver** and **setdriver**) need to encounter the following preconditions to complete successfully:

- You are connected as *printer admin* or root (this is *not* the 'Printer Opd [(or)-3214.(6ia [(or)group]TJ/F73n]TJ/F7NT)74nd admin

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Then hit [TAB] five times, [ENTER] twice, [TAB] once, and [ENTER] again, and march to the printer.

14. (RECOMMENDED.) STUDY THE TEST PAGE.l60eHmmm. Just kidding! By now you know everything about printer installation

22.12.2 Binary Format

`*.tdb` files are not human readable. They are written in a binary format. 'Why not ASCII?', you may ask. 'After all, ASCII configuration files are a good and proven tradition on UNIX.' The reason for this design decision by the Samba Team is mainly performance. Samba needs to be fast; it runs a separate

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22.19.9 Can’t Use ‘cupsaddsmb’ on Samba Server, Which Is a PDC

Do you use the ‘naked’ root user name? Try to do it this way: `cupsaddsmb -U` *`DOMAINNAME`*`\\root -v` *`printername`*> (note the two backslashes: the first one is required to ‘escape’ the second one).

22.19.10 Deleted Windows 200x Printer Driver Is Still Shown

Deleting a printer on the client will not delete the driver too (to verify, right-click on the white background of the Printers folder, select Server Properties and click on the Drivers tab). These same old drivers will be re-used when you try to install a printer

(b)

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Chapter 23

Stackable VFS modules

Jelmer R. Vernooij John H. Terpstra Tim Potter Simo Sorce Alexander Bokovoy Stefan Metzmacher Ed Riddle

23.1 Features and Benefits

Stackable VFS (Virtual File System) modules support was new to Samba-3 and has proven quite popular. Samba passes each

Chapter 24

Winbind: Use of Domain Accounts

Tim Potter Andrew Tridgell Naag Mummaneni John Trostel Jelmer R. Vernooij John H. Terpstra June 15, 2005

24.1 Features and Benefits

Integration of UNIX and Microsoft Windows NT through a unified logon has been considered a ‘holy grail’ in heterogeneous

Users on the UNIX machine can then use NT user and group names as they would ‘native’ UNIX names. They can chown files so they are owned by NT domain users or even login to the UNIX machine and run a UNIX X-Window session as a domain user.

The only obvious indication that Winbind is being used is that user and group names take the form `DOMAIN\user` and `DOMAIN\group`

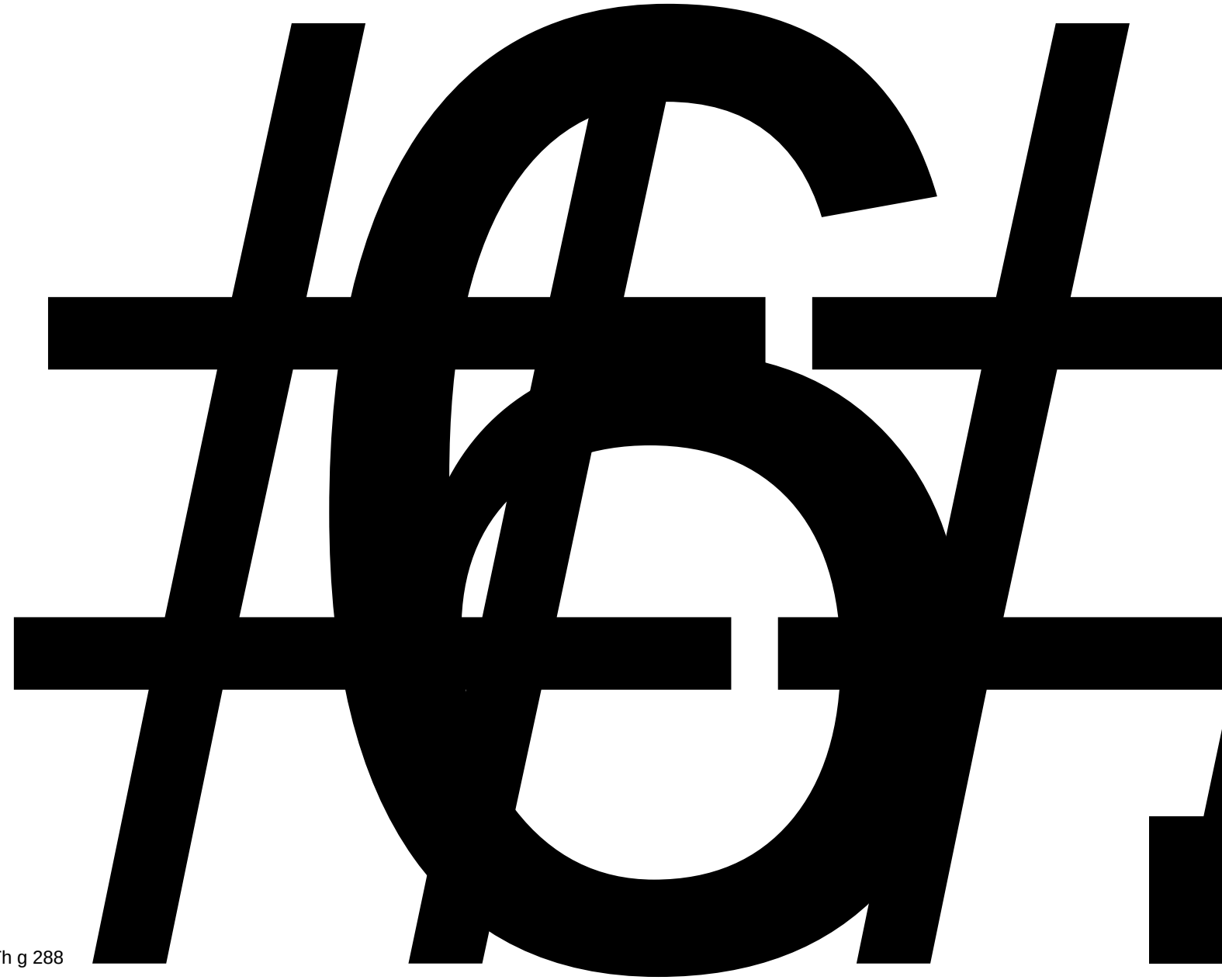
WORKING PAPER

Note

The function **getent** can now be used to get unified lists of both local and PDC users and groups. Try the following command:

```
root# getent passwd
```

You should get a list that looks liku0 g1r 0 Ryourt



Th g 288

```
root# getent groud
```

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Before embarking on the configuration of network and system policies, it is highly advisable to read the documentation available from Microsoft's Web site regarding Implementing Profiles and Policies in Windows NT 4.0. There are a large number of documents in addition to this old one that should also be read and understood. Try searching on the Microsoft Web site for 'Group Policies'.

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1. On the XP workstation, log in with an administrative account.
2. Click on Start -> Run.

501 Type 261 0 Td [3.

Click on

e ppeart.

Click one ->vein ->

ont.

Click on ->

Click on

len

27.3 Mandatory Profiles

There is also an entry called ‘Default’ that has no value set. The default entry is of type REG_SZ; all the others are of type REG_EXPAND_SZ.

It makes a huge difference to the speed of handling roaming user profiles if all the folders are stored on a dedicated location on a network server. This means that it will not be necessary to write the Outlook PST file over the network for every login and logout.

To set this to a network location, you could use the following examples:

```
%LOGONSERVER%\%USERNAME%\Default Folders
```

Chapter 28

PAM-Based Distributed Authentication

John H. Terpstra Stephen Langasek May 31, 2003 This chapter should help you to deploy Winbind-based authentication on

NetWare Bindery The `pam_ncp_auth.so`

29.4.2 The LMHOSTS File

This file is usually located in MS Windows NT 4.0 or Windows 200x/XP in the directory `%SystemRoot%\SYSTEM32\DRIVERS\ETC` and contains the IP address and the machine name in matched pairs. The `LMHOSTS` file performs NetBIOS name to IP address mapping.

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Chapter 30

Unicode/Charsets

Jelmer R. Vernooij John H. Terpstra TAKAHASHI Motonobu 25 March 2003

30.1 Features and Benefits

Every industry eventually matures. One of the great areas of maturation is in the focus that has been given over the past decade

unix charset This is the charset used internally by your operating system. The default is UTF-8, which is fine for most systems and covers all characters in all languages. The default in previous Samba releases was to save filenames in the encoding of the clients — for example, CP850 for Western European countries.

display charset This is the charset Samba uses to print messages on your screen. It should generally be the same as the *unix charset*.

dos charset

Chapter 31

Backup Techniques

John H. Terpstra

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Chapter 33

Handling Large Directories

Jeremy Allison John H. Terpstra March 5, 2005 Samba-3.0.12 and later implements a solution for sites that have experienced performance degradation due to the problem of using Samba-3 with applications that need large numbers of files (100,000 or more) per directory.

The key was fixing the directory handling to read only the current list requested instead of the old (up to samba-3.0.11) behavior of reading the entire directory into memory before doling out names. Normally this would have broken OS/2 applications, which have very strange delete semantics, but by stealing logic from Samba4 (thanks, Tridge), the e esemain7(e)-212 a8ndling86s ha.

35.2.2.3 New Parameters

The following new parameters have been released up to and including Samba 3.0.25 (grouped by function:)

Remote Management

- abort abort5 abort

- abortabortor5 Td [(sync G 0 -25.15 Td1937 425)]TJ0 g 0 G [-500(abort)-25dpassdb Td [((ne)2xp500(abort(ne)2xplici0 G 0 -25.15 T

Chapter 36

Migration from NT4 PDC to Samba-3 PDC

John H. Terpstra April 3, 2003 This is a rough guide to assist those wishing to migrate from NT4 domain control to ng

- Taking sufficient time.
- Avoiding panic.
- Testing all assumptions.
-

- The *username map* facility may be needed.
- Use **net gr 26.0TJ/pp**

Chapter 37

SWAT: The Samba Web Administration Tool

John H. Terpstra April 21, 2003 There are many and varied opinions regarding the usefulness of SWAT. No matter how hard one tries to produce the perfect configuration tool, it remains an object of personal taste. SWAT is a tool that allows Web-based configuration of Samba. It has a wizard that may help to get Samba configured quickly, it has context-sensitive help on each `smb.conf`

When you have confirmed that SWAT is installed, it is necessary to validate that the installation includes the binary **swat** file as

W

- Install the proper **msg** files from the Samba `source/po` directory into $LIBDIR.

Part V

Troubleshooting

Chapter 38

4. Run the command **nmblookup -B BIGSERVER __SAMBA__**. You should get back the IP address of your Samba server.

   If you do not, then nmbd is incorrectly installed. Check your `inetd.conf` if you run it from there, or that the daemon is running and listening to UDP port 137.

   One common problem is that many inetd implementations can't take many parameters on the command line. If this is the case, then create a one-line script that contains the right parameters and run that from inetd.

5. Run the command **nmblookup -B ACLIENT '*'**.

   You should get the PC's IP address back. If you do not, then the client software on the PC isn't installed correctly, or isn't started, or you got the name of the PC wrong.

   If ACLIENT does not resolve via DNS, then use the IP address of the client in the above test.

6. Run the command **nmblookup -d 2 '*'**.

   This time we are trying the same as the previous test but are trying it via a broadcast to the default broadcast address. A number of NetBIOS/TCP/IP hosts on the network should respond, although Samba may not catch all of the responses

W

Part VI

Reference Section

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42.4.1.1 Installing the Required Packages for Debian

On Debian, you need to install the following packages:

- libkrb5-dev
- krb5-user

42.4.1.2 Installing the Required Packages for Red Hat Linux

On Red Hat Linux, this means you should have at least:

- krb5-workstation (for kinit)
- krb5-libs (for linking with)
- krb5-devel (because you are compiling from source)

in addition to the standard development environment.

If these files are not installed on your system, you should check the installation CDs to find which has them and install the files using your tool of choice. If in doubt about what tool to use, refer to the Red Hat Linux documentation.

42.4.1.3 SuSE Linux Package Requirements

SuSE Linux installs Heimdal packages that may be required to allow you to build binary packages. You should verify that the development libraries have been installed on your system.

SuSE Linux Samba RPMs support Kerberos. Please refer to the documentation for your SuSE Linux system for information regarding SuSE Linux specific configuration. Additionally, SuSE is very active in the maintenance of Samba packages that provide the maximum capabilities that are available. You should consider using SuSE-provided packages where they are available.

42.5 Starting the smbd nmbd and winbindd

You must choose to start smbd, winbindd and nmbd either as daemons or from inetd. Don't try to do both! Either you can put them in

Chapter 43

Portability

Jelmer R. Vernooij John H. Terpstra Samba works on a wide range of platforms, but the interface all the platforms provide is not always compatible. This chapter contains platform-specific information about compiling and using Samba.

43.1 HPUX

Hewlett-Packard's implementation of supplementary groups is nonstandard (for historical reasons). There are two group files, `/etc/group` and `/etc/logingroup`CMosadm6(o)e341whoetc/42knowetc/42theosik `/etc/group` Tto]TJ/F71 9.9626 Tf 10.1

W

43.5 AIX: Sequential Read Ahead

Disabling sequential read ahead can improve Samba performance significantly when there is a relatively high level of multi-programming (many smbd processes or mixed with another workload), ad

Chapter 44

Samba and Other CIFS Clients

Jelmer R. Vernooij John H. Terpstra Dan Shearer Jim McDonough 5 Mar 2001 This chapter contains client-specific information.

44.1 Macintosh Clients

Yes. Thursby has a CIFS client/server called DAVE

44.2.2

Following example provides a minimal profile share.

Example 44.1 Minimal Profile Share

```
[profile]
 path = /export/profile
 create mask = 0600
 directory mask = 0700
 nt acl support = no
 read only = no
```

The reason for this bug is that the Windows 200x SP2 client copies the security descriptor for the profile that contains the Samba

45.3 Read Size

The option *read size* affects the overlap of disk reads/writes with network reads/writes. If the amount of data being transferred in several of the SMB commands (currently SMBwrite, SMBwriteX, and SMBreadbraw) is larger than this value, then the server begins writing the data before it has received the whole packet from the network, or in the case of SMBreadbraw, it begins writing to the network before all the data has been read from disk.

This

45.9 Client Tuning

Then, using **ldapsearch**, test an anonymous search with the -ZZ[5] option:

```
root#  ldapsearch -x -b "dc=ldap,dc=abmas,dc=biz" \
        -H 'ldap://ldap.abmas.biz:389' -ZZ
```

Your results should be the same as before you restarted the server, for example:

```
root#  ldapsearch -x -b "dc=ldap,dc=abmas,dc=biz" \
    -H 'ldap://ldap.abmas.biz:389' -ZZ
```

Chapter 48

```
subnet 192.168.1.0 netmask 255.255.255.0 {
  range dynamic-bootp 192.168.1.60 192.168.1.254;
  option subnet-mask 255.255.255.0;
  option routers 192.168.1.2;
  allow unknown-clients;
}
```

In this example, IP addresses between 192.168.1.1 and 192.168.1.59 are reserved for fixed-address (commonly called `hard--wired`) IP addresses. The addresses between 192.168.1.60 and 192.168.1.254 are allocated for dynamic use.

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8. Termination.

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```
(
```

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