Solaris™ PC NetLink 1.2 Release Notes

Send comments about this document to: docfeedback@sun.com

Please
Recycle

Adobe PostScript™

Solaris PC NetLink 1.2 Release Notes

Solaris PC NetLink 1.2 Release Notes is a list of known problems, issues, and workarounds in this release of the Solaris™ PC NetLink product. In most cases, each issue includes one or more tracking numbers. The issues are separated into four categories: installation, miscellaneous, printing, and localization.

List of Issues

The following installation issues are covered in this document:

- Installation of PC NetLink Server Manager fails on Microsoft Windows operating environments if less than 75 Mbytes of free space are available. (See page 4.)
- Installation hangs if NetBIOS is not running, for instance if NetBIOS is misconfigured. (See page 5.)
- Installation fails if `/export/lanman` is a link to another directory. (See page 5.)
- Entering Control-C during installation can cause problems. (See page 6.)
- The *Solaris PC NetLink 1.2 High Availability Guide* is unclear about what server role to specify when installing PC NetLink in a Sun™ Cluster. (See page 6.)
- You cannot restore database backups to PC NetLink 1.2 that were created using data from version 1.0 or 1.1. (See page 7.)
- Upgrading or uninstalling PC NetLink fails if any of certain directories is a symbolic link. (See page 8.)

The following miscellaneous issues are covered in this document:

- PC NetLink software cannot replicate files larger than 2 Gbytes. (See page 10.)

- In some cases, you cannot use an account in a trusted foreign domain to perform an administrative operation, even when that account has the necessary privileges. (See page 10.)

- User logon from Windows NT 4.0, Windows 95, and Windows 98, and the `net logon` command fail when the `RestrictAnonymous` Registry value is set to 1 and the User Manager option "User must change password at next logon" is enabled for the user. (See page 11.)

- When you use Solaris PC NetLink to join a Windows 2000 domain, use of an administrator account and password is required. (See page 12.)

- When a non-administrator deletes all events from the security event log using PC NetLink, the action is not logged. (See page 12.)

- Use of trusts between domains in different subnets requires the use of a WINS server. (See page 13.)

- PC NetLink `net` commands may hang on a system running the 64-bit Solaris operating environment if NetBIOS has not been started. (See page 13.)

- In some situations, PC NetLink does not handle NetBIOS node status queries correctly. (See page 14.)

- The `chacl` command does not accept arbitrary security IDs (SIDs). (See page 15.)

- Drag-and-drop copying of a read-only folder may fail if the `UnixQuotas` Registry parameter is turned on. (See page 15.)

- Under some circumstances a password changed by a user may not work if he uses the `net logon` command at the Solaris operating system prompt. (See page 16.)

- Using the Save Set Recover option in the `nwadmin` utility for Solstice Backup™ 5.1.1 and 5.5.1 software fails for files backed up with the PC NetLink Legato Backup Module. (See page 17.)

- When you use Solaris PC NetLink to join a domain, PC NetLink does not renew accounts automatically. (See page 18.)

- The `joindomain` command does not properly detect a wrong administrator account username or password when run against a primary domain controller (PDC) running Windows 2000. (See page 18.)

- PC NetLink Member Servers do not support NTLM version 2 (NTLMv2) authentication. (See page 19.)

- Using the `net password` command results in password corruption in some cases. (See page 20.)

- Access is denied when importing static mappings from a file. (See page 20.)

- Automounted Solaris home directories are not always automatically available to Windows NT clients. (See page 21.)

- Some `net` commands do not prompt you to log on as an administrator using the `net logon` command before using `net` commands. (See page 22.)

- PC NetLink software uses the Microsoft standard for two-digit dates. (See page 22.)

- Mass-copying utilities such as `SCOPY.EXE` that copy Access Control Lists (ACLs) for each copied file and directory can create very large ACL files and degrade PC NetLink performance. (See page 23.)

- Directory replication incurs undocumented limitations involving Access Control Lists (ACLs). (See page 24.)

- A PC NetLink Member Server cannot interoperate with domain controllers that are configured with the `LMCompatiblityLevel` Registry value greater than 2. (See page 25.)

- PC NetLink services fail to start if a shared memory segment cannot be created. (See page 25.)

- The error message Internal Error 2140 is not informative. (See page 26.)

- The PC NetLink cluster configuration command `haslsconfig` may fail if the directory used for clustered installation information contains any previous PC NetLink configuration files. (See page 27.)

- When uninstalling PC NetLink software in a high availability cluster, running the PC NetLink script `hauninstall` only on the initial master node causes problems. (See page 27.)

- If you configure PC NetLink to use a new WINS server, NetBIOS will not reregister already-known local NetBIOS group names with the new WINS server. This can prevent clients on other subnets from connecting to the PC NetLink server. (See page 28.)

- NetBIOS names entered in the lmhosts or fnbnsusr.info file must be uppercase. (See page 28.)

The following printer issues are covered in this document:

- The Add Printers icon for a server alias does not appear in the Network Neighborhood window. (See page 29.)

- On a PC NetLink server, members of the Power Users local group may not be granted proper access rights for local printers. (See page 29.)

- A special network name procedure is required to install a Xerox printer as a PC NetLink *network* printer. (See page 30.)

- Solaris printer banner pages are used instead of Windows NT printer separator pages in this release. (See page 31.)

- The *Solaris PC NetLink 1.2 High Availability Guide* provides no information about setting up printers in a clustered PC NetLink environment. (See page 33.)

- Windows 2000 clients may print four header pages with each print job. (See page 35.)

The following localization issues are covered in this document:

- All Asian locales: Using PC NetLink Server Manager to change the server role to backup domain controller (BDC) or Member Server fails. (See page 36.)

- All locales other than English: Some information is not displayed in the local language. (See page 36.)

- All European locales: Some command keyboard mnemonics in PC NetLink Server Manager do not work properly. (See page 37.)

- Japanese locale: Some Japanese characters in messages displayed during installation in the Microsoft Windows operating environment by the file setup.exe are rotated 90 degrees. (See page 37.)

- All Asian locales: The *Solaris PC NetLink 1.2 Administration Guide* is not provided in HTML format. (See page 38.)

- Simplified Chinese locale: PC NetLink Server Manager event logs display incomplete date information. (See page 38.)

- All Asian locales: You cannot enter path names that contain non-ASCII characters in Browse dialog boxes. (See page 39.)

- All locales other than en_US: The Solaris installation script displays an unnecessary error message. (See page 39.)

- All locales: APC NetLink server does not automatically change the language that it supports to match Windows clients. (See page 40.)

- Some Asian locales: Multibyte-character identifiers passed from Windows NT clients may cause errors. (See page 41.)

- All Asian locales: The sam2passwd user account management utility does not create account entries that contain non-ASCII characters. (See page 42.)

- All locales other than English: PC NetLink Server Manager does not resize some interface components automatically to display localized text properly. (See page 42.)

Issue

Installation of PC NetLink Server Manager fails on Microsoft Windows operating environments (Intel processors only) if less than 75 Mbytes of free space are available. [4337451]

Description

A system with an Intel processor running one of the Microsoft Windows operating environments requires 75 Mbytes of free space to install the executable file `setup.exe`, which contains the InstallShield installer for PC NetLink Server Manager.

Notes and Workaround

Free up disk space on the target system in order to allocate enough space for the `system` and `temp` directory files that are installed. You can begin by freeing disk space from the *WINSYSDIR*`\temp` directory.

Issue

Installation hangs if NetBIOS is not running, for instance if NetBIOS is misconfigured. [4336456]

Description

If NetBIOS is not running during installation, the `net start` command will fail. This causes the installation script to hang indefinitely. This behavior has been seen in the 64-bit version of NetBIOS only, which is installed on the Solaris 7 and 8 operating environments.

Notes and Workaround

Press Control-C if the script has not progressed for five minutes after all files and packages have been installed or updated. Try to start NetBIOS, or investigate why it is failing. If you are able to start NetBIOS, execute the command `net start server`.

Issue

Installation fails if `/export/lanman` is a link to another directory. [4341545]

Notes and Workaround

Unlink `/export/lanman` before installing PC NetLink, then re-create the link after installation.

Issue

Entering Control-C during installation can cause problems. [4338916, 4337521]

Description

If you enter Control-C during installation of PC NetLink or Java Development Kit (JDK) components, problems may result.

Notes and Workaround

Avoid entering Control-C while running the installation script. If you must enter Control-C, remove the PC NetLink or JDK packages and then reinstall them.

Issue

The *Solaris PC NetLink 1.2 High Availability Guide* is unclear about what server role to specify when installing PC NetLink in a Sun Cluster. [4344269]

Description

If you are installing PC NetLink in a high availability configuration on a cluster, you need to initially install PC NetLink on each node in the cluster. During the initial installation process, you will be asked questions about the machine's role and NetBIOS settings. The configurations you create will be replaced when you run the cluster configuration command `haslsconfig`.

Notes and Workaround

It is easiest to accept the default answers during the initial install on each cluster node. This will configure each machine as a PDC in its own domain, with the domain name derived from the machine name.

When you run the `haslsconfig` command you can specify the desired system name for the High Availability service, along with its server role. The original configurations on all nodes in the cluster will be replaced by this configuration.

Issue

You cannot restore database backups to PC NetLink 1.2 that were created using data from version 1.0 or 1.1. [4343568]

Description

For Solaris PC NetLink 1.2, the file format of the shares database has been changed from the format used in versions 1.0 and 1.1. Therefore, if you have backup copies of version 1.0 or 1.1 databases stored in their 1.0 or 1.1 format, `/var/opt/lanman/datafiles/sharefile`, you cannot restore them to the version 1.2 database format, `/var/opt/lanman/datafiles/share`.

Notes and Workaround

The upgrade process will automatically copy the shares from the version 1.0 and 1.1 sharefile format to the new version 1.2 share format. After upgrading, create new backup files.

Issue

Upgrading or uninstalling PC NetLink fails if any of certain directories is a symbolic link. [4355683, 4358005]

Description

If any of the following directories is a symbolic link, upgrading or uninstalling PC NetLink fails:

- `/opt/lanman`
- `/etc/opt/lanman`
- `/var/opt/lanman`
- `/var/opt/lanman/datafiles`
- `/var/opt/lanman/domains`
- `/etc/opt/SUNWlznb`
- `/var/opt/SUNWlznb`

Notes and Workaround

The following steps use the example linked directory `/var/opt/lanman/datafiles`. Follow similar steps for each symbolic link you need to remove.

1. Determine whether any of the above directories are symbolic links, for example:

```
# ls -l /var/opt/lanman/datafiles
lrwxrwxrwx   1 root     other          35 Jul 27 13:32 /var/opt/
lanman/datafiles -> /lnklanman/var_opt_lanman_datafiles
```

This indicates that `/var/opt/lanman/datafiles` is a symbolic link to `/lnklanman/var_opt_lanman_datafiles`.

2. Use the following commands to stop PC NetLink services:

```
# /etc/init.d/ms_srv stop
# /etc/init.d/netbios stop
# /etc/init.d/slsadmin stop
```

3. **Use commands similar to the following to replace this link with a loopback mount:**

```
# rm /var/opt/lanman/datafiles
# mkdir /var/opt/lanman/datafiles
# mount -F lofs /lnklanman/var_opt_lanman_datafiles /var/opt/
lanman/datafiles
```

Do this for each offending symbolic link.

4. **Rerun the upgrade or uninstall procedure, using the appropriate command:**

```
# ./install
# /opt/lanman/sbin/uninstall
```

Note – Do not reboot the system if requested at this time.

5. *If you are performing an upgrade*, **restore each symbolic link you removed, as follows:**

```
# /etc/init.d/ms_srv stop
# /etc/init.d/netbios stop
# /etc/init.d/slsadmin stop
# umount /var/opt/lanman/datafiles
# rmdir /var/opt/lanman/datafiles
# ln -s /lnklanman/var_opt_lanman_datafiles /var/opt/lanman/
datafiles
```

6. *If you are performing an upgrade*, **after you have restored all the symbolic links restart NetBIOS and PC NetLink, or reboot the system if that was requested.**

Issue

PC NetLink software cannot replicate files larger than 2 Gbytes. [4321837]

Description

PC NetLink software supports large files, but cannot replicate files larger than 2 Gbytes.

Issue

In some cases, you cannot use an account in a trusted foreign domain to perform an administrative operation, even when that account has the necessary privileges. [4336639]

Description

Several PC NetLink administrative operations expect you to explicitly provide an account name and password with which to perform the operation in question. However, they do not allow you to specify the domain name; they assume that the domain name for the account is the same as the domain being administered. This means that an account in a trusted foreign domain cannot be used to perform an administrative operation, even when that account has the necessary privileges. Commands which exhibit this behavior include `joindomain`, `setservername`, `setdomainname`, and the corresponding actions in PC NetLink Server Manager.

Notes and Workaround

Perform the administrative operation using an account in the domain you want to administer.

Issue

User logon from Windows NT 4.0, Windows 95, and Windows 98, and the `net logon` command fail when the `RestrictAnonymous` Registry value is set to 1 and the User Manager option "User must change password at next logon" is enabled for the user. [4317724, 4335606]

Description

When the `RestrictAnonymous` Registry value is set to 1 and the User Manager option "User must change password at next logon" is enabled for the user, he is prompted to change his password when logging on. However, he gets an access denied error message even when giving the correct old password and a new valid password. Because the attempt to change the password is not successful, he cannot logon to the domain until the "User must change password at next logon" option is reset or the `net user` command option `/PASSWORDMUSTCHG` is set to No.

The `RestrictAnonymous` Registry value is:

Key name: `HKEY_LOCAL_MACHINE\System\CurrentControlSet\control\LSA`
Value name: `RestrictAnonymous`

Notes and Workaround

Use one of the following workarounds:

- Avoid using the "User must change password at next logon" option.
- Set a new password for the user. This can be done at the Solaris command prompt or through User Manager.

Issue

When you use Solaris PC NetLink to join a Windows 2000 domain, use of an administrator account and password is required. [4338876]

Description

It is common for an administrator to create a machine account using Server Manager so that a non-administrator user can join a machine to the domain without using an administrator account and password. However, the `joindomain` script that allows PC NetLink machines to join a domain is unable to detect accounts on a Windows 2000 PDC. This means that all attempts for a PC NetLink machine to become a BDC or a Member Server will require an administrator password so that the machine account can be re-created. Further, the `joindomain` script will ask whether the machine account should be renewed after the user enters the administrator password, rather than before.

Notes and Workaround

Ask an administrator to perform the `joindomain` operation.

Issue

When a non-administrator deletes all events from the security event log using PC NetLink, the action is not logged. [4286210]

Description

When an administrator deletes all events from the security event log, an event for this action is reported in the security event log as event ID 517. PC NetLink does not generate this event when non-administrators who have been given the "Manage auditing and security logs" right delete all events from the security event log.

Issue

Use of trusts between domains on different subnets requires the use of a WINS server. [4277106]

Description

If you use the PC NetLink file `fnbnsusr.info` or `lmhosts` to configure static NetBIOS names, trusts do not work if there is no domain controller in the trusted domain on the PC NetLink system's subnet.

Notes and Workaround

Use a WINS server when configuring trusts between PC NetLink domains on different subnets.

Issue

PC NetLink `net` commands may hang on a system running the 64-bit Solaris operating environment if NetBIOS has not been started. [4336460]

Description

The 64-bit NetBIOS driver will not respond to applications that open it if the NetBIOS daemon `nbdaemon` is not running. This issue also can affect operations in PC NetLink Server Manager.

Notes and Workaround

Check for the existence of the `nbdaemon` process to ensure that NetBIOS is running.

Issue

In some situations, PC NetLink does not handle NetBIOS node status queries correctly. [4354457, 4356229]

Description

In the following situations, PC NetLink does not handle NetBIOS node status queries correctly:

- In a network without a WINS server where DNS is used for name resolution across subnets, a PC NetLink server is unable to establish a secure channel to Windows NT servers. The consequence is that a PC NetLink BDC will appear to a Windows NT PDC to be down. It may be possible to complete a `joindomain` operation successfully, but the `netlogon` service will be unable to establish a secure channel to the PDC and domain controller functions will not work.
- The Windows NT `nbtstat` utility will not work correctly with the option `-A` *ip-address*, unless both machines are on the same subnet and can use broadcast mode, or unless a WINS server is in use.

Notes and Workaround

Create static NetBIOS name mappings in the `lmhosts` file of the PC NetLink and Windows NT systems. For PC NetLink systems, the `lmhosts` file is located in the `/var/opt/SUNWlznb` directory.

Issue

The `chacl` command does not accept arbitrary security IDs (SIDs). [4344089]

Description

The `chacl` command should accept any valid SID string in the current domain, and it should accept SIDs having the form S-1-X-XXXX. However, this command accepts only well-known SIDs.

Notes and Workaround

Use the `net perms` command to modify ACL entries that require an arbitrary SID.

Issue

Drag-and-drop copying of a read-only folder may fail if the `UnixQuotas` Registry parameter is turned on. [4311513]

Description

The Solaris operating environment provides a mechanism to enforce quotas on file system use on a per-user basis. PC NetLink allows this mechanism to be used to enforce quotas on Windows NT accounts that are mapped to Solaris accounts. The following Registry parameter controls whether PC NetLink enforces these quotas:

Key name: `HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\`
`AdvancedServer\FileServiceParameters`
Value name: `UnixQuotas`

Drag-and-drop copying of a read-only folder may fail if this parameter is set to a value other than zero. The copy will appear to succeed, but the result is that only the folder is copied. It will be empty.

Notes and Workaround

Copies of individual files or empty directories (folders) will succeed. In the Windows NT operating environment, the read-only attribute is preserved on file or folder copy. This differs from the Solaris operating environment, where the destination copy will have read-write attributes. Turning on the Registry parameter will cause this behavior whether or not the Solaris file system quotas are enabled.

You can avoid this problem as follows:

1. **Copy the folder from the read-only source to a writable disk accessible to the target machine.**

2. **Remove the read-only attribute.**

3. **Copy the folder to the PC NetLink share.**

If you want, you can restore the read-only attribute after completing the copy operation.

Issue

Under some circumstances a password changed by a user may not work if he uses the `net logon` command at the Solaris operating system prompt. [4332072]

Description

This problem may occur if a user is forced to change his password due to password expiration, or if a new account is created with the flag that forces the user to change his password the first time he logs on. After the user changes his password, his next use of the `net logon` command may fail using this password.

This happens only to a user without administrator privileges who uses the `net logon` command at the Solaris operating system prompt. This problem does not occur if the user is logged on to a Microsoft Windows operating environment.

Notes and Workaround

Have a user with administrator privileges change the password using the `net user` or `net password` command.

Issue

Using the Save Set Recover option in the `nwadmin` utility for Solstice Backup™ 5.1.1 and 5.5.1 software fails for files backed up with the PC NetLink Legato Backup Module. [4322023]

Description

After installing the PC NetLink Legato Backup Module (the `SUNWlzlb` package), all files in PC NetLink shares will be backed up in a special way. While there are several ways to recover files after they are backed up, the Save Set Recover option in the `nwadmin` utility fails when trying to recover files that were in PC NetLink shares. This applies only to Solstice Backup versions 5.1.1 and 5.5.1. Save Set Recover fails with the following error:

```
recover: external ASM 'lmasm' not found or not executable
```

Notes and Workaround

Use one of the following workarounds:

- Use the `recover` or `nwrecover` utility to recover files.
- Create a symbolic link from `/usr/bin/nsr/recover` to `/usr/bin/recover` using the following command:

```
# ln -s /usr/bin/nsr/recover /usr/bin/recover
```

After the link is created, the Save Set Recover option should work.

Issue

When you use Solaris PC NetLink to join a domain, PC NetLink does not renew accounts automatically. [4337792]

Description

If the `joindomain` command detects that an account exists on the PDC, it will ask whether the account should be renewed. The proper response differs depending on whether or not the account is new.

Notes and Workaround

- Answer `Yes` to the question about renewing the account, unless an administrator has specifically created a new account for this machine using Server Manager.
- An administrator can use Server Manager to erase accounts that are no longer in use.
- Use PC NetLink Server Manager to join the domain.

Issue

When you use PC NetLink to join a Windows 2000 domain, PC NetLink does not properly detect a wrong administrator account username or password when the server attempting to join the domain was previously registered as a BDC. [4340992]

Description

When a PC NetLink server has been configured as a BDC in a domain that has a PDC running Windows 2000, but moves to another domain and then attempts to rejoin, PC NetLink does not properly detect a wrong administrator account username or password. If you enter an incorrect administrator username or password, you receive an Access Denied error message, but later you receive the message Success. On continuing, the command fails while creating the Security Accounts Manager (SAM) database.

A similar problem occurs when you use PC NetLink Server Manager in these circumstances.

Notes and Workaround

Before using PC NetLink to join a Windows 2000 domain, delete the PC NetLink machine account on the Windows 2000 server using the Active Directory Users and Computer utility.

Issue

PC NetLink Member Servers do not support NTLM version 2 (NTLMv2) authentication. [4325544]

Description

If a PC NetLink Member Server is configured with the `LMCompatibilityLevel` Registry parameter set to any value greater than 2, the server will try to use NTLMv2 and will respond to all client connection requests with an Access Denied error message. The specific parameter is:

Key name: `HKEY_LOCAL_MACHINE\System\CurrentControlSet\control\LSA`
Value name: `LMCompatibilityLevel`

The Registry parameter `LMCompatibilityLevel` is described here:

`http://support.microsoft.com/support/kb/articles/Q147/7/06.asp`

Notes and Workaround

If you need to set the `LMCompatibilityLevel` Registry parameter set to any value greater than 2, configure the server as a BDC.

Issue

Using the `net password` command results in password corruption in some cases. [4342446]

Description

At times, using the `net password` command causes password corruption and the user cannot log on any more. When an administrator creates a user account with null password set initially and later uses the `net password` command to set the password for the user account, some times the new password is corrupted, which does not allow the user to log on. This behavior is seen with certain values of *password*, and may be dependent on the password length or value.

Notes and Workaround

The administrator can avoid creating user accounts with null passwords.

If the user account was created with a null password, then the following command can be used by the administrator or the user:

```
net user account-name password
```

Issue

Access is denied when importing static mappings from a file. [4276723]

Description

The Import Mappings option is available in WINS Manager to import static mapping entries from any file that has the same format as the `lmhosts` file. While importing static mappings from a file, PC NetLink WINS gives an Access Denied error message. However, the same file works correctly using the NT WINS database.

Notes and Workaround

To avoid this problem, set the Registry keyword `IgnoreUnixPermissions` under `FileServiceParameters` to `Yes`. After importing static mappings, you can reset the keyword to its previous value and restart the server.

Issue

Automounted Solaris home directories are not always automatically available to Windows NT clients.

Description

Note – The following description and workaround are intended for experienced Solaris system administrators only.

Solaris home directories that are stored remotely are ordinarily "automounted" when users need to access their accounts. In this release, the PC NetLink program is not able to provide automatic Windows NT client access to Solaris home directories that are not stored on the PC NetLink system. (Home directories that are stored on the same system as the PC NetLink program are available to Windows NT clients, however.)

The reason for this is that the `autofs` file system monitors all attempts to access directories, and if the file system is not accessed within a default period of five minutes, the file system becomes unmounted. Therefore, if a `net share` operation is performed on `/home` and then the share is connected from the client, the access to the home directory will be unmounted. This is because the `autofs` daemon does not detect that the user is accessing this directory from his or her Microsoft Windows client.

Notes and Workaround

Edit the `vfstab` file on the PC NetLink system to "hard" mount each remote Solaris home directory to which you want to provide Windows NT share access. After editing the `vfstab` file, remember to create directories for the users on the PC

NetLink system (`mkdir`), to grant ownership of the directories to the users (`chown`), and to change users' group memberships (`chgrp`), if necessary, before initiating the `net share` operation.

Issue

Some `net` commands do not prompt you to log on as an administrator using the `net logon` command before using `net` commands. [4210403]

Description

A variety of `net` commands require that you are logged on to the system as administrator by way of the `net logon` command. Some of these commands will prompt you for that logon, but others will not. Instead, when you attempt to use a `net` command, the system will return the following error message:

```
Error 5 has occurred.
Access is denied.
```

Notes and Workaround

Before using any `net` command, always explicitly log on with the `net logon` command.

Issue

PC NetLink software uses the Microsoft standard for two-digit dates. [4205069]

Description

The two-digit date displayed in the output of the `net` command, the `elfread` command, and event logging in the PC NetLink Server Manager tool is based upon Microsoft standards. Dates of 80-99 represent the years 1980-1999; dates of 00-79 represent the years 2000-2079.

Issue

Mass-copying utilities such as SCOPY.EXE that copy ACLs for each copied file and directory can create very large ACL files and degrade PC NetLink performance.

Description

PC NetLink software stores the NTFS-style ACLs—which provide access controls for each file and directory—in the /var/opt/lanman/datafiles/acl file. To save disk space and improve the search and update performance on the acl file itself, PC NetLink software does not always store a new file's ACL in this acl file. Instead, by default, if the ACL can be derived from the ACL of the file's parent directory, PC NetLink software will use that ACL and will not store a new one in the acl file.

Of course, if an ACL associated with a file is explicitly changed, PC NetLink software will store the updated ACL in the acl file. By scrupulously differentiating among ACLs in this way, the PC NetLink acl file remains much smaller than it would otherwise be.

However, utilities that do not differentiate, such as SCOPY.EXE in the Windows NT Resource Kit, store an ACL in the acl file for each and every file copied. If you use this utility on a directory with a very large number of files, the acl file will grow very large.

Notes and Workaround

Do not use SCOPY.EXE to copy very large directories to PC NetLink shares.

Issue

Directory replication incurs limitations involving ACLs. [4227423]

Description

Directory replication from a Windows NT NTFS file system to the PC NetLink file system does not also copy the ACLs associated with the replicated files and directories.

When you use the PC NetLink Directory Replicator service to copy files, directories, or both from a Windows NT NTFS file system to the PC NetLink Solaris file system, the ACLs associated with the replicated files and directories are not copied to the PC NetLink system along with the files and directories. Instead, the system derives access control information from the PC NetLink import directories into which you copy the NTFS files and directories. The import directories are subdirectories under the directory that is configured as the PC NetLink `import` directory.

Notes and Workaround

Configure the import directories' ACLs to provide all required access controls to the files and directories that are copied to those directories.

Issue

A PC NetLink Member Server cannot interoperate with domain controllers that are configured with the `LMCompatiblityLevel` Registry value greater than 2. [4334975]

Description

If PC NetLink system and domain controllers are configured with the value of the Registry parameter `LMCompatiblityLevel` greater than 2, client machines may be unable to connect to the PC NetLink system and will report Access Denied. The cause is that PC NetLink cannot connect to the domain controller so that it can authenticate the Server Manager user. The registry parameter is described here:

`http://support.microsoft.com/support/kb/articles/Q147/7/06.asp`

Issue

PC NetLink services fail to start if a shared memory segment cannot be created. [4322931]

Description

The `lmx.ctrl` daemon, which is the first PC NetLink process started, attempts to create a shared memory segment. The size of this segment is derived from configuration parameters in the Registry and the `lanman.ini` file. Some parameter changes may cause `lmx.ctrl` to attempt to allocate a shared memory segment larger than 1 Mbyte. If the default maximum shared memory size has not been increased beyond 1 Mbyte, the attempt to create the shared memory segment will fail and PC NetLink services will not start.

Notes and Workaround

Increase the maximum size of Solaris shared memory segments. Add the following line to the file /etc/system:

```
set shmsys:shminfo_shmmax=10485760
```

After adding this line, reboot the Solaris operating environment.

Issue

The error message Internal Error 2140 is uninformative. [4331652]

Description

The error message Internal Error 2140 often indicates that there was a failure to extend one of the PC NetLink data files in /var/opt/lanman because of insufficient disk space in the /var partition.

Notes and Workaround

Move the /var/opt/lanman directory to a larger partition and create a /var/opt/lanman link to the new location.

Issue

The PC NetLink cluster configuration command `haslsconfig` may fail if the directory used for clustered installation information contains any previous PC NetLink configuration files. [4341497]

Notes and Workaround

Specify a new directory as the directory path when using the `haslsconfig` command. The command will create the directory, ensuring that it does not contain any previous files.

Issue

When uninstalling PC NetLink software in a high availability cluster, running the PC NetLink script `hauninstall` only on the initial master node causes problems.

Description

When uninstalling PC NetLink software in a high availability cluster, running the script `hauninstall` only on the master node preserves the symbolic link `/export/lanman` on cluster nodes. Reinstalling PC NetLink or running the `haslsconfig` command again will fail.

Notes and Workaround

Run the PC NetLink script `hauninstall` on all nodes in the cluster, not on the initial master node only.

Issue

If you configure PC NetLink to use a new WINS server, NetBIOS will not reregister already-known local NetBIOS group names with the new WINS server. This can prevent clients on other subnets from connecting to the PC NetLink server. [4352427]

Notes and Workaround

Stop and restart the NetBIOS driver to ensure that all local names are forgotten and the reconfigured NetBIOS correctly registers names with the new WINS server. Use the following commands, and then restart PC NetLink:

```
# /etc/init.d/netbios stop
# /etc/init.d/netbios start
```

Issue

NetBIOS names entered in the `lmhosts` or `fnbnsusr.info` file must be uppercase. [4354410]

Description

You can enter static mappings for NetBIOS names in the files `/var/opt/SUNWlznb/lmhosts` or `/var/opt/SUNWlznb/fnbnsusr.info`. However, these names must consist of uppercase characters only; names containing lowercase characters will not be recognized.

Issue

The Add Printers icon for a server alias does not appear in the Network Neighborhood window. [4248002]

Description

Additional server names can be assigned to the `aliases` parameter in the `lanman.ini` file. The server will register each of these additional names, and will issue Browser Host Announcements for them. However, the Add Printers icon will be listed in the Network Neighborhood window only for the original server names and not for the aliases.

Notes and Workaround

When connecting to the server to add printers, use the server name as configured by use of the `joindomain` command or by PC NetLink Server Manager.

Issue

On a PC NetLink server, members of the Power Users local group may not be granted proper access rights for local printers. [4319497]

Description

A member of the Power Users local group who is logged in to a Windows NT Workstation system using his domain account should be able to use Network Neighborhood to visit the PC NetLink Member Server's Printers folder, and then use the Add Printers wizard in that folder. However, the wizard is not displayed.

Notes and Workaround

Users with this problem can be added to the local group Administrators. However, this grants them full access to the server.

Issue

A special network name procedure is required to install a Xerox printer as a PC NetLink *network* printer.

Description

Because Xerox printers do not "listen" to the same TCP/IP port as printers from other manufacturers, you must specify a port name or number as part of the printer's *network* name when you set it up as a PC NetLink *network* printer. (You can ignore this note if you are setting up a Xerox printer as a *local* PC NetLink printer.)

Notes and Workaround

Follow the printer setup instructions provided in the *Solaris PC NetLink 1.2 Administration Guide*. When you reach Step 7 of Task 1, substitute the following instructions before continuing to Step 8.

● **Choose a *network* name (not printer name) for the Xerox printer that includes the port name or number, using the following guidelines and examples.**

You must designate the port according to the model number of your Xerox printer:

- DocuPrint 4512: `PORT1`
- DocuPrint 4517: `PASSTHRU`
- DocuPrint C55, 4900, 4915, 4920: `ps`
- DocuPrint N24, N32, N40: `raw`

For example, if you are setting up a Xerox Model 4517 printer, and you want to use `holstein` as its DNS network name, you must add a colon (`:`) and `PASSTHRU` to the name. The printer's full network name becomes:

```
holstein:PASSTHRU
```

As another example, if you are setting up a Xerox Model 4512 printer, and you want to use an IP address, `127.0.0.1`, as its network name, you must add a colon (`:`) and `PORT1` to the name. The printer's full network name becomes:

`127.0.0.1:PORT1`

Issue

Solaris printer banner pages are used instead of Windows NT printer separator pages in this release. [4224561, 4224906]

Description

The Microsoft Windows feature that enables administrators to configure special `.SEP` files to create separator pages for various network printers has been replaced in this release by Solaris printer banner pages. These Solaris banner pages convey both system and user information.

Notes and Workaround

The Solaris printer banner pages that separate print jobs include four lines:

- First line – Solaris host name and root as owner
- Second line – Sender's Windows NT username and client PC's name
- Third line – Date
- Fourth line – Printer job name

If your printing devices furnish their own banner pages in addition to the Solaris banner pages, you can create a custom `lp/model` file to turn off the Solaris banner pages. Use one of the following procedures, depending on whether the printer is *local* (attached directly to a PC NetLink computer) or a *network* printer.

▼ How to Turn Off Banners on a Local PC NetLink Printer

1. **From the PC NetLink Solaris command line, change to the** `/usr/lib/lp/model` **directory.**

   ```
   system% cd /usr/lib/lp/model
   ```

   In that directory are two files, `standard` and `netstandard`. The file named `standard` controls the banner setup on your local printer.

2. **Create a copy of the** `standard` **file under a different name (**`standard-nb` **in the examples that follow) to serve as the foundation for the new custom file.**

   ```
   system% cp standard standard-nb
   ```

3. **Using a text editor, open the** `standard-nb` **file for editing.**

4. **In the** `standard-nb` **file, find the following string:**
   `nobanner="no"`

5. **Edit the** `nobanner="no"` **string to become the following:**
   `nobanner="yes"`

6. **Save the** `standard-nb` **file and quit the text editor.**

7. **Enter the following command, replacing** *printername* **with the actual printer name:**

   ```
   system% lpadmin -p printername -m standard-nb
   ```

▼ How to Turn Off Banners on a Network PC NetLink Printer

1. **From the PC NetLink Solaris command line, change to the** `/usr/lib/lp/model` **directory.**

   ```
   system% cd /usr/lib/lp/model
   ```

   In that directory are two files, `standard` and `netstandard`. The file named `netstandard` controls the banner setup on your network printer.

2. **Create a copy of the** `netstandard` **file under a different name (** `netstandard-nb` **in the examples that follow) to serve as the foundation for the new custom file.**

```
system% cp netstandard netstandard-nb
```

3. **Using a text editor, open the** `netstandard-nb` **file for editing.**

4. **In the** `netstandard-nb` **file, find the following string:**

   `nobanner="no"`

5. **Edit the** `nobanner="no"` **string to become the following:**

   `nobanner="yes"`

6. **Save the** `netstandard-nb` **file and quit the text editor.**

7. **Enter the following command, replacing** *printername* **with the actual printer name:**

```
system% lpadmin -p printername -m netstandard-nb
```

Issue

The *Solaris PC NetLink 1.2 High Availability Guide* provides no information about setting up printers in a clustered PC NetLink environment. [4342918]

Description

The following sections provide information about setting up printers in a clustered PC NetLink environment.

■ See the *Solaris PC NetLink 1.2 Administration Guide* for more information on setting up Solaris printers and Windows NT shares in a PC NetLink environment.

■ See the *Solaris PC NetLink 1.2 Installation Guide* for more information on installing PC NetLink.

Notes and Workaround

PC NetLink software includes a script, `halpsetup`, that transfers Solaris printer and Windows NT share information from a cluster's master node to its backup nodes. If a failover occurs, the backup node will take over print server functions from the failed master. There is currently no way to transfer existing print queues. They are lost during failover.

Before you run the `halpsetup` script, you should ensure that the following conditions are true:

- PC NetLink software is installed on all nodes in the cluster.
- PC NetLink software is configured on the master node in the cluster.
- All Solaris printers served by the cluster have been set up using PC NetLink Server Manager.
- All Windows NT shares for those printers have been set up using NT Server Manager.

▼ How to Configure PC NetLink Printers on a Sun Cluster

This section describes how to perform initial setup of printers on a Sun cluster.

Before You Begin

1. **Install PC NetLink software on every node in the cluster.**

   See the *Solaris PC NetLink 1.2 High Availability Guide*.

2. **Install the** `SUNWlzha` **package on every node in the cluster.**

   See the *Solaris PC NetLink 1.2 High Availability Guide*.

3. **Configure the PC NetLink service by running the** `haslsconfig` **script on the master server.**

   See the *Solaris PC NetLink 1.2 High Availability Guide*.

4. **Set up the printers on the master node using PC NetLink Server Manager.**

   See the *Solaris PC NetLink 1.2 Administration Guide*.

5. **Set up the NT printer shares on the master node using NT Server Manager.**

What to Do

1. **Log on to the master node as root.**

2. **Change directory to** `/opt/lanman/sbin`.

3. **Execute the command** `halpsetup`.

   The script executes without further intervention.

▼ How to Configure a Newly Added PC NetLink Printer on a Sun Cluster

If you add another printer after initial configuration, follow these steps to run the `halpsetup` script:

1. **Log on to the master node as root.**

2. **Change directory to** `/opt/lanman/sbin`.

3. **Execute the command** `halpsetup`.

   The script executes without further intervention.

▼ How to Remove a PC NetLink Printer From a Sun Cluster

If you want to remove a printer that you have set up and shared using PC NetLink Server Manager, follow these steps to do so manually:

1. **Remove the printer's NT share from the master node.**

2. **Remove the Solaris printer from the master node and all backup nodes.**

Issue

Windows 2000 clients may print four header pages with each print job. [4355715]

Description

If a PC NetLink printer queue was configured using the Solaris `net share` command rather than the Microsoft Windows Add Printer wizard, Windows 2000 clients may produce extra header pages with each print job.

Notes and Workaround

Use one of the following workarounds:

- Set up the print queue using the Add Printer wizard, following the instructions in the *Solaris PC NetLink 1.2 Administration Guide.*
- Turn off banner pages, following instructions in the release note for issues 4224561 and 4224906 that begins on page 31.

Issue

All Asian locales: Using PC NetLink Server Manager to change the server role to BDC or Member Server fails. [4344415]

Description

When running in Asian locales, using PC NetLink Server Manager to change the role of a PC NetLink server to either a BDC or Member Server fails with an error message indicating that an authentication error occurred. This is caused by problems checking the PDC name, administrator account name, and account password.

Notes and Workaround

Change the server role using the `joindomain` command or NT Server Manager.

Issue

All locales other than English: Some information is not displayed in the local language. [4342164, 4342928, 4314783]

Description

Some text is displayed in English rather than in the local language, including the following:

- Many messages in the Description field of event logs, such as the system log, when viewed in PC NetLink Server Manager.
- Messages displayed by commands such as `net`, `lmshell`, and `fixmemsrv` in the Solaris operating environment.
- Installation messages displayed by the Solaris installation script and the Windows file `setup.exe`.
- The default notification messages for UPS power failure. (You can change these notification messages using PC NetLink Server Manager.)

Issue

All European locales: Some command keyboard mnemonics in PC NetLink Server Manager do not work properly. [4343310]

Description

In PC NetLink Server Manager, some keyboard mnemonics are duplicated in other windows of the interface, so you cannot use those mnemonics. This issue occurs in both the Solaris and the Windows operating environments.

Notes and Workaround

Use the mouse, rather than keyboard mnemonics, to perform operations.

Issue

Japanese locale: Some Japanese characters in messages displayed during installation in the Windows operating environment by the file `setup.exe` are rotated 90 degrees. [4321761]

Description

This issue affects installation in the Windows operating environment only.

Issue

All Asian locales: The *Solaris PC NetLink 1.2 Administration Guide* is not provided in HTML format. [4323870]

Description

PC NetLink Server Manager Help directs you to the HTML version of this document, which was provided for previous versions of the product. This issue occurs in both the Solaris and Windows operating environments.

Notes and Workaround

Refer to the PDF version of this document.

Issue

Simplified Chinese locale: PC NetLink Server Manager event logs display incomplete date information. [4323855]

Description

In PC NetLink Server Manager, event logs display the year only in the date field. This issue occurs in the Solaris 2.6 operating environment only.

Notes and Workaround

Use the `elfread` command to obtain complete date information.

Issue

All Asian locales: You cannot enter path names that contain non-ASCII characters in Browse dialog boxes. [4342171]

Description

You may see a PC NetLink Server Manager dialog box where you can browse and choose files and directories, but you cannot display or enter file names or directory names that contain non-ASCII characters.

Notes and Workaround

Do not use non-ASCII characters in file names or directory names.

Issue

All locales other than en_US: The Solaris installation script displays an unnecessary error message. [4335590]

Description

If your Solaris system does not have the locale en_US installed, you may see the following error message during installation:

```
ksh: sort: couldn't set locale correctly
```

Notes and Workaround

You can ignore this message.

Issue

All locales: A PC NetLink server does not automatically change the language that it supports to match Windows clients.

Description

A PC NetLink server does not automatically set the language that it supports to match individual Windows clients. You need to run all necessary PC NetLink daemons explicitly in the proper locale. The following table shows the proper combinations of language and locale for Windows clients.

Language	Locale
English	C
Japanese	ja
Korean	ko
Simplified Chinese	zh
Traditional Chinese	zh_TW
German	de
Spanish	es
French	fr
Italian	it
Swedish	sv

No other locales available in the Solaris operating environment are supported by this release of PC NetLink.

Notes and Workaround

If you reboot the PC NetLink server, be sure that the daemons on the PC NetLink server have been also restarted in the proper locale. The easiest way to ensure this is to put the proper locale configuration in `/etc/default/init`, so that all daemons

are started in the proper locale at every reboot of the Solaris system. It is a good idea to do this immediately after installing PC NetLink on the server. See the man page for init(1M).

Issue

Some Asian locales: Multibyte-character identifiers passed from Windows NT clients may cause errors. [4209344]

Description

In some Asian locales, certain multibyte-character identifiers passed from Windows NT clients may cause errors. These identifiers may include:

- File and folder names
- Share names
- Printer names
- Domain names
- Passwords
- User names and all user-related attributes that you can specify using User Manager for Domains

PC NetLink software converts identifiers passed from Windows clients to Solaris encoding (EUC) before using them. If the length of an identifier in the encoding on Solaris is longer than the length of the same identifier in UNICODE (UCS-2), an error may result and the operation may fail. In addition, certain characters may be available only in UNICODE or the code pages native to the Windows 95 or 98 operating environment, but not in the corresponding EUC-based encoding for the Solaris operating environment. In this case, an error may occur, or the character may be mapped to a default character, depending on the operation.

Notes and Workaround

Be careful of such encoding differences, especially the following:

- Japanese – You cannot use characters that are mapped only in Japanese Shift-JIS or UNICODE but not mapped in Japanese EUC, or characters that occupy more than 2 bytes in Japanese EUC (Code set 3 or JIS X 0212-1990). You can check these characters using the kanji command in the Japanese Solaris operating environment.

- Traditional Chinese – You cannot use characters that occupy more than 2 bytes in CNS 11643-1992 (Codeset 2), or that are mapped only in Big-5 or UNICODE but not mapped in CNS 11643-1992).

Issue

All Asian locales: The sam2passwd user account management utility does not create account entries that contain non-ASCII characters.

Description

To avoid possible problems with user management in the Solaris operating environment, the sam2passwd user account management utility does not convert user accounts with non-ASCII characters in their account names or passwords.

Notes and Workaround

If you want to export accounts using the sam2passwd utility, do not create Windows NT account names or passwords that include non-ASCII characters.

Issue

All locales other than English: PC NetLink Server Manager does not display some localized text properly. [4343565]

Description

Some localized text in buttons and message labels may be truncated. This issue occurs in both the Solaris and Windows operating environments.

Notes and Workaround

Resize the window or dialog box to make it larger.