

Advanced Server for UNIX

Release Notes

June 2001

Product Version: Advanced Server for UNIX Version 5.1A

Operating System and Version: Tru64 UNIX Version 4.0F or higher

This manual provides important information about the Advanced Server for UNIX software product.

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About This Manual

This manual provides information about the Advanced Server for UNIX (ASU) Version 5.1A software that may not be documented elsewhere.

Audience

This manual is intended for anyone who is responsible for installing, configuring, and administering the ASU software.

Related Documents

The following documents provide more information about the ASU software:

- *Concepts and Planning Guide*—Describes concepts related to planning and administering the ASU software and environment.
- *Installation and Administration Guide*—Describes how to install, configure, and administer the ASU software and environment.

Reader's Comments

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```

Please include the following information along with your comments:

- The full title of the manual and the order number. (The order number appears on the title page of printed and PDF versions of a manual.)
- The section numbers and page numbers of the information on which you are commenting.
- The version of Tru64 UNIX that you are using.
- If known, the type of processor that is running the Tru64 UNIX software.

The Tru64 UNIX Publications group cannot respond to system problems or technical support inquiries. Please address technical questions to your local system vendor or to the appropriate Compaq technical support office. Information provided with the software media explains how to send problem reports to Compaq.

Conventions

The following typographical conventions are used in this manual:

%	
\$	A percent sign represents the C shell system prompt. A dollar sign represents the system prompt for the Bourne, Korn, and POSIX shells.
#	A number sign represents the superuser prompt.
<i>file</i>	Italic (slanted) type indicates variable values, placeholders, and function argument names.
[]	
{ }	In syntax definitions, brackets indicate items that are optional and braces indicate items that are required. Vertical bars separating items inside brackets or braces indicate that you choose one item from among those listed.
...	In syntax definitions, a horizontal ellipsis indicates that the preceding item can be repeated one or more times.
cat(1)	A cross-reference to a reference page includes the appropriate section number in parentheses. For example, <code>cat(1)</code> indicates that you can find information on the <code>cat</code> command in Section 1 of the reference pages.
Return	In an example, a key name enclosed in a box indicates that you press that key.
Ctrl/x	This symbol indicates that you hold down the first named key while pressing the key or mouse button that follows the slash. In examples, this

key combination is enclosed in a box (for example, Ctrl/C).

Advanced Server Version 5.1A New and Improved Features

The Advanced Server for UNIX (ASU) Version 5.1A software kit includes the features and functionality of previous ASU software releases, and provides the new and enhanced features and functionality described in this document.

You use the ASU Version 5.1A software kit to:

- Install the ASU software on a Compaq Tru64™ UNIX system for the first time.
- Upgrade previous versions of the ASU software.

Notes

Because the ASU Version 5.1A ECO1 software was available before the ASU Version 5.1A software shipped with the Tru64 UNIX Version 5.1A operating system software, the ASU Version 5.1A software was replaced with the ASU Version 5.1A ECO1 software. The ASU Version 5.1A documentation applies to the ASU Version 5.1A ECO1 software.

You can no longer directly upgrade PATHWORKS for DIGITAL UNIX (Advanced Server) to ASU. See Section 3.2 for information on how to upgrade PATHWORKS for DIGITAL UNIX (Advanced Server) to ASU.

Upgrading an earlier version of the ASU software to ASU Version 5.1A converts the SAM database, the ACL database, and ASU share file to a new format that is not compatible with previous versions of the ASU software. See Section 3.1 for more information.

The ASU server no longer accepts PATHWORKS licenses. See Section 3.5 for more information.

You install the ASU Version 5.1A software by installing the ASU subsets described in Table 1–1 on a system running the Tru64 UNIX Version 4.0F or higher operating system software.

See the ASU *Installation and Administration Guide* for information on installing the ASU software or upgrading to the ASU software.

Table 1–1: ASU Version 5.1A Subsets

Subset Name	Provides
ASUBASE511	ASU server functions.
ASUTRAN511	The NetBEUI and NetBIOS over TCP/IP transports that the ASU software uses for network communications.
ASUADM511	English language version of the Nexus tools, which are interfaces based on Microsoft Windows that you use to administer the ASU software.
ASUADMJP511	Japanese language version of the Nexus tools, which are interfaces based on Microsoft Windows that you use to administer the ASU software.
ASUMANPAGE511	English language version of the reference pages that describe ASU commands.
ASUMANJP511	Japanese language version of the reference pages that describe ASU commands.
ASUSIA511	A Tru64 UNIX security mechanism that enables the Tru64 UNIX operating system software to use Windows NT authentication information. This subset is available only for systems running the Tru64 UNIX Version 5.0 or higher operating system software.

The following sections describe new and improved features in this release.

1.1 Secondary WINS Support

You can configure a secondary Windows Internet Name Service (WINS). The ASU server uses the primary WINS for name resolution. If the primary WINS is not available, the ASU server uses the secondary WINS.

See the ASU *Installation and Administration Guide* for more information.

1.2 Extra Listen Names

The ASU server supports extra listen names. A listen name is a unique name assigned to the ASU server to which it responds on the network. Users can use any of the assigned listen names when connecting to the ASU server. For example, if an ASU server is assigned a listen name of SERVER1 and the extra listen names of SERVER2 or SERVER3, users can specify \\SERVER1, \\SERVER2, or \\SERVER3 when connecting to its shares.

See the ASU *Installation and Administration Guide* for more information.

1.3 LanManager-Only Security for NFS Shares

The ASU server now allows for LanManger-only security for NFS shares. With LanManager-only security, ASU users are not restricted from accessing files and directories because of Tru64 UNIX permissions. Files and directories created by an ASU user appear as if they were created by a Tru64 UNIX user.

See the ASU *Installation and Administration Guide* for more information.

1.4 Windows 2000 Single Sign-On Support

The ASU server can now use a Windows 2000 Active Directory to resolve Tru64 UNIX user account information. The Windows 2000 Active Directory must be on a system that is running the Windows 2000 operating system software with Compaq Windows 2000 Single Sign-On (SSO) software installed.

See the ASU *Installation and Administration Guide* and the *SSO Installation and Administration Guide* on the Tru64 UNIX Version 5.0A Associated Products Volume 2 CD-ROM for more information.

1.5 Inheriting Tru64 UNIX Permissions

You can configure the ASU server so that files and directories that are created in ASU shares inherit the Tru64 UNIX permissions from the parent directory.

See the ASU *Installation and Administration Guide* for more information.

1.6 Banner Page Identification

Users who do not have a specific associated Tru64 UNIX user account are associated by default to the lmworld Tru64 UNIX user account. In previous releases, lmworld was printed as the Tru64 UNIX user account on the banner pages of their print jobs. This was confusing when many users were identified as lmworld.

Now, the user's Windows NT domain name and username in the format of domain\username is printed on banner pages for users who are associated to the lmworld user account.

1.7 Preserving Case of Tru64 UNIX User Account Names

Previously, by default, when you created a domain user account, the ASU server automatically created a Tru64 UNIX user account (using lowercase

letters) in the local `/etc/passwd` file if an account with the same name did not exist.

There is a new registry value entry called `PreserveCase` that specifies whether or not the ASU server creates Tru64 UNIX user accounts using the same case that you enter when you create domain user accounts.

The `PreserveCase` registry entry is disabled by default. This means that the case that you enter when you create a Tru64 UNIX user account is not preserved and the ASU server creates Tru64 UNIX user accounts using lowercase letters.

The `PreserveCase` registry entry is located in the `SYSTEM\CurrentControlSet\Services\AdvancedServer\UserServiceParameters` registry path.

See the ASU *Installation and Administration Guide* for information about registry entries.

1.8 Longer Disk Share Names

The ASU server now supports disk share names of up to 80 alphanumeric characters. However, you must use the `net` command to create disk shares with long share names. The Server Manager utility and the Microsoft Management Console (MMC) can create disk shares with names of up to 12 alphanumeric characters. You can use the Server Manager utility to view and modify a disk share with a long name.

1.9 Trimming Redundant ACLs

The `acladm` command has a new `-T` option that you can use to trim redundant access control lists (ACLs) from the ACL database.

Enter the following commands to trim redundant ACLs, then compress the ACL database:

```
# acladm -Ty
# blobadm -A -q
```

1.10 Displaying All Advanced Server Registry Keys and Entries

You can enter the following command to display information about all keys, subkeys, and value entries in the Advanced Server registry:

```
# regconfig -l
```

1.11 Faster SAM Database Replication

Large SAM databases are now replicated faster than in previous releases. Testing has shown that databases are replicated in nearly half the time.

1.12 Improved ACL Database Performance

The ACL Manager code now updates the ACL database hash table in shared memory, instead of copying the hash table, updating the copy, and re-copying the hash table back to shared memory. This improves ACL database performance, particularly for sites that have large ACL databases.

If you previously had ACL database performance problems, and worked around the problem by limiting the number of ASU server processes, you no longer need to do so. Edit `lanman.ini` file, delete the line `maxserverprocs=nnn` in the `[server]` section, and restart the ASU server.

1.13 ASU Server Configured in TruCluster Multi Mode Supports Opportunistic Locks

An ASU server configured in TruCluster multi mode supports opportunistic locks. Opportunistic locks can provide a performance improvement.

See the ASU *Installation and Administration Guide* for more information.

Advanced Server Version 5.1A Corrections

The following sections describe ASU software problems that are corrected in this release.

2.1 Deleting the PATHWORKS Admin Account

If you previously upgraded from PATHWORKS for Digital UNIX (Advanced Server), you can now delete the old PATHWORKS Admin account. This account is no longer necessary, and you must delete it before upgrading to a Windows 2000 domain.

2.2 Increasing Password History

The maximum value of the `net accounts /uniquepw:` command has increased from 8 to 24. This value specifies the number of times that users' passwords must be unique before they can reuse a password.

2.3 Case-Sensitive Share Names

Previously, when you created a share using the `net` command the ASU server would create the share name with uppercase letters.

Now, when you create a share using the `net` command the ASU server preserves the case that you enter. However, you cannot create two shares with the same name that differs only in case. For example, you can create a share named `AbCd`, but attempting to create another share named `ABCD` will result in an error stating that the share `ABCD` already exists.

The Server Manager and the `lmshare` command already preserve the case of a share name.

2.4 Checking NIS Before Creating ASU User Accounts and Groups

Previously, the ASU server did not check network information service (NIS) for user accounts (`lanman`, `lmadmin`, `lmguest`, and `lmworld`) and groups (DOS and Other) that were created by ASU, and would create them on the local system.

The ASU server now checks NIS for the user accounts and groups that were created by ASU, and does not create them on the local system if they are already in NIS.

2.5 RAS Users Connecting to ASU Shares

Remote Access Server (RAS) users can now connect to shares on an ASU server that is configured as a PDC.

2.6 TruCluster Server Corrections

The following TruCluster Server problems have been fixed:

- Previously, an ASU server configured in a TruCluster Server environment might crash if it did not get the master node IP address. During that time files could not be opened or closed by the ASU server on any member in the cluster. The ASU server now waits a second and tries to obtain the IP address again.
- An ASU server configured in a TruCluster Server environment now continues to replicate SAM database changes after master node failover.
- A single ASU server configured in a TruCluster Server environment would unnecessarily reset timeout values. The ASU server no longer resets timeout values when there are no other nodes in the TruCluster Server environment.
- The ASU server no longer crashes occasionally when deleting a file in a TruCluster Server environment.
- You can now enter the following commands from any ASU Server configured in multi-instance mode without regard to which member has the session or file open:

```
- net session \\clientname /delete
- net file id
- net file id /close
```

2.7 Clearing Dates When Using Windows 2000 Explorer

The ASU server no longer clears the Creation, Modification, or Last Access date when a file is renamed using the Windows 2000 Explorer.

2.8 Deleting Files By Group Members

Users in a Tru64 UNIX group could not delete a file that was created by the ASU server and owned by another user in the group, even if the Tru64 UNIX directory permissions were set to allow the group to delete the file.

This problem has been fixed by the use of a new parameter, `overrideunixprotection`, in the `[lmxserver]` section of the `lanman.ini` file. By default, the value of the `overrideunixprotection` parameter is set to `no`, which means that only the owner of a file can delete it. Setting the value to `yes` allows users in the same group to delete each other's files if the Tru64 UNIX directory permission allows it. Note: This is an ASU server-wide parameter.

2.9 Updating Roaming Profiles

Windows 2000 clients failed to update roaming profiles in a disk share on a system that was running ASU Version 5.0 ECO1 software.

This problem occurred because Windows 2000 clients set the `ReadOnly` attribute on the `Recent` directory when creating the profile. The `ReadOnly` attribute on a directory is advisory and clients can write to the directory. However, Tru64 UNIX does not treat the `ReadOnly` attribute as advisory and prevents Windows 2000 clients from writing to the directory.

You can now use a new parameter, `readonlydir`, in the `[lmxserver]` section of the `lanman.ini` file to control whether or not Windows 2000 clients can write to a Tru64 UNIX directory when the `ReadOnly` attribute is set. By default, the value of the `readonlydir` parameter is set to `yes`, which enforces the `ReadOnly` attribute on Tru64 UNIX directories. Setting the value to `no` allows Windows 2000 clients to write to Tru64 UNIX directories.

2.10 Configuring Controllers

When configuring a controller for use with the ASU server, NetBIOS over TCP/IP used the first IP address associated with the controller as the controller's IP address. On controllers with multiple IP addresses, this was not always the primary IP address of the controller. NetBIOS over TCP/IP now uses the primary IP address instead of the first IP address found.

It was possible to configure one more controller than the maximum. This caused memory corruption and system panics. This problem has been fixed.

2.11 Alternate Error Code When Creating an Existing Directory

Previously, the ASU server returned an alternate error code when a client attempted to create a directory that existed. Certain applications depend on a particular error code and they do operate correctly with the alternate error code.

This problem has been fixed by assigning values of either 5 or 80 to the new `direxists` parameter in the `[lmxserver]` section of the `lanman.ini` file.

The `direxists` parameter specifies the integer value of the access denied error code that the ASU server returns to a client that attempts to create a directory that already exists. The default value is 5. Older applications might require a value of 80. For example:

```
[ lmxserver ]  
  
direxists=80
```

2.12 No Longer Logging Windows 2000 Security Events With No User Name

Under certain conditions, a Windows 2000 system issues logon requests without a username. The ASU server was logging these requests as security events, which would fill up the security event log.

The ASU server no longer logs these events, as they provide no useful information.

2.13 NetBEUI Error Messages

The ASU server reported error messages in the event log from the browser service about the NetBEUI protocol even when the NetBEUI protocol was disabled.

This problem has been fixed.

2.14 Scanning Files

Norton AntiVirus software can now scan files on ASU shares without updating the Tru64 UNIX time of the last file status change (`st_ctime`). This allows files to be scanned for viruses, but not marked for incremental backup.

2.15 The `acldump` and `aclload` Commands Preserve Generic Access Bits

Previously, the `acldump` and `aclload` commands did not correctly preserve generic access bits. As a result, using these commands to dump and load an Access Control List (ACL) file might have caused some Windows permissions to incorrectly display as `SpecialAccess` for certain directories, instead of the more usual permissions, such as `FullControl` or `Read`.

This problem has been fixed. The `acldump` and `aclload` commands now correctly preserve the generic access bits.

Advanced Server Version 5.1A Changes

The following sections describe changes to the ASU software in this release.

3.1 Upgrading to ASU Version 5.1A

Upgrading an earlier version of the ASU software to ASU Version 5.1A converts the SAM database, the ACL database, and ASU share file to a new format that is not compatible with previous versions of the ASU software. If you deinstall the ASU Version 5.1A software and reinstall an earlier version of the ASU software, you must recreate the shares or restore a back up copy of the SAM database, the ACL database, and ASU share file and reapply any changes that you made since the back up. The ASU files to restore are:

```
/usr/net/servers/lanman/domains/*  
/usr/net/servers/lanman/datafiles/*  
/usr/net/servers/lanman/sharefile
```

3.2 Upgrading From PATHWORKS for DIGITAL UNIX

You can no longer directly upgrade PATHWORKS for DIGITAL UNIX (Advanced Server) to ASU. To upgrade from PATHWORKS for DIGITAL UNIX to ASU you must:

1. Be sure the system is running PATHWORKS for DIGITAL UNIX Version 6.1 ECO1. See your PATHWORKS documentation for more information.
2. Upgrade to ASU Version 5.0.
3. Upgrade to ASU Version 5.1A.

See the ASU *Installation and Administration Guide* for information on upgrading the ASU software.

3.3 Improved Performance and Scalability

There is a new method by which the ASU server stores share file information. This method improves ASU server performance and scalability.

As a result of the new method, the ShareCacheCount registry entry in the ShareParameters subkey of the registry is obsolete.

3.4 Using net Commands in a TruCluster Server Version 5.x Environment

The way in which the ASU server runs when configured in single-instance mode (CAA) in a TruCluster Server Version 5.x environment has changed. Prior to ASU Version 5.0 ECO2, the ASU transports ran on all nodes. Now, the ASU transports will run only on the node on which the ASU server is running. As a result of this change, the `net` commands work only on the node on which the ASU server is running.

3.5 Removed Support for PATHWORKS Licenses

The ASU server no longer accepts PATHWORKS licenses. The ASU server accepts only ASU licenses.

See the ASU *Installation and Administration Guide* or contact your service representative for more information on ASU licenses.

3.6 Removed Support for DECnet

The ASU server no longer supports the DECnet networking transport software. The ASU Server uses the NetBEUI and NetBIOS for TCP/IP networking transport software.

See the ASU *Installation and Administration Guide* for more information.

3.7 Removed DOS and OS2 Administrative Commands

The ASU software does not include the OS2UTIL special disk share that contains OS2 administrative commands. The DOSUTIL special disk share contains only the `clipcache` and `clipspool` administrative commands.

3.8 Removed Support for the `asuinstallupdate` Command

The ASU server no longer supports using the `asuinstallupdate` command to upgrade the ASU software. You must use the `setld` command to upgrade the ASU software.

See the ASU *Installation and Administration Guide* for more information.

3.9 ASU Verison Number

Because the ASU Version 5.1A ECO1 software was available before the ASU Version 5.1A software shipped with the Tru64 UNIX Version 5.1A operating system software, the ASU Version 5.1A software was replaced with the ASU Version 5.1A ECO1 software. The ASU Version 5.1A documentation applies to the ASU Version 5.1A ECO1 software.

Advanced Server Version 5.1A Problems and Restrictions

The following sections describe problems and solutions and restrictions for this release.

4.1 General Problems and Restrictions

The following sections describe general ASU server problems and solutions and restrictions.

4.1.1 Starting an ASU Server with Many Listen Names

If a system has more than twelve listen names, the `net start server` command might return an error message that the ASU server failed to start up. In fact, the ASU server will eventually start, but the `net start server` command times out before all the listen names are posted.

4.1.2 Synchronizing Passwords with NIS and Enhanced Security

The ASU server does not support password synchronization (`SyncUnixPassword` enabled) when using network information service (NIS) and enhanced security.

4.1.3 Ignoring Tru64 UNIX Group and File Permissions

By default, the ASU server first checks Windows NT permissions, then Tru64 UNIX user and group permissions, before a domain user can access an ASU shared resource. You can configure the ASU server to not check Tru64 UNIX user and group permissions by enabling the `IgnoreUnixPermissions` registry value entry. However, if you enable the `UnixQuotas` registry value entry, the ASU server checks Tru64 UNIX user and group permissions even if you enable the `IgnoreUnixPermissions` registry value entry.

4.1.4 Customizing Permissions on NFS Shares

By default, when the ASU server starts, it automatically creates a disk share for each exported network file system (NFS) listed in the `/etc/exports` file. The ASU server does not maintain any last updated information in the `/etc/exports` file. To account for any new access options in the

`/etc/exports` file, the ASU server must reshare the exported entries each time it starts. However, recreating disk shares causes any previously customized disk share permissions to be lost.

To maintain customized disk share permissions for an exported NFS file system, create the share for that directory by using the `net share` command or the server manager.

See the ASU *Installation and Administration Guide* for more information on the `net` commands.

4.1.5 Uppercase File and Directory Names

A file name or directory name created with all uppercase letters in an ASU share is displayed in the Windows Explorer with only an initial uppercase letter.

4.1.6 SIA Subset and User Passwords

By default, when you create a domain user account, the password for the corresponding Tru64 UNIX user account, for example in the `/etc/passwd` file, is set to `Nologin`, which means that the user cannot interactively log in to the Tru64 UNIX system until an administrator sets their password. However, if you install the SIA subset and create a domain user account, the password for the account is still set to `Nologin`, but the user can interactively log in to the Tru64 UNIX system using their domain user name and password.

4.1.7 NFS Mounted Devices Require the `rpc.lockd` and `rpc.statd` Daemons

The ASU software might stall or data might be lost when you access an NFS mounted device if the ASU `UseNfsLocks` registry value entry is enabled (set to 1) and NFS locking is not enabled (the `rpc.lockd` and `rpc.statd` daemons are not started) on the NFS server or on the Tru64 UNIX system on which the ASU software is running. By default, the `UseNfsLocks` registry value entry is enabled.

4.1.8 Replicating Files and Directories

The `replicator` service does not replicate files and directories if:

- The directory name at the top level of the tree contains non-ASCII characters. Only ASCII characters can be used in the top level directory name. However, non-ASCII characters can be used in the names of subdirectories and files within the tree.
- You specify more than one server on the import list.

- You set the `integrity=tree` parameter in the `repl.ini` file.
- The names of files and directories to be replicated do not conform to the MS-DOS 8.3 naming convention.
- You enter a lowercase device name in the replicator export path. The device name is always `C:`, and must be entered in uppercase, for example:

```
ExportPath = "C:\usr\net\servers\lanman\shares\asu\repl\export"
```

4.1.9 Restarting the Browser

You might need to restart the browser process because it runs out of virtual memory.

If `BROWSER` does not display when you enter the `net start` command, you will need to restart the browser process. To restart the browser process, enter:

```
# net start browser
```

4.1.10 Potential ASU Registry Corruption

If the Tru64 UNIX system should suddenly stop, for example because of a power failure, then the ASU registry might become corrupt. The symptom will be that the ASU server cannot start.

To display information about the state of the ASU registry, enter:

```
# regcheck -C
```

To repair a corrupt ASU registry, enter:

```
# regcheck -R
```

4.2 ASU and TruCluster Server Problems and Restrictions

The following sections describe ASU and TruCluster Server problems and solutions and restrictions.

4.2.1 TruCluster Server Version 5.x Error Message

The message `CAA request timeout!` is displayed when you enter the following command to start an ASU server that is configured as a single-instance TruCluster Server Version 5.x application:

```
# caa_startup asu -c servername
```

Ignore the message; the ASU server starts correctly.

4.2.2 TruCluster Rolling Upgrade

To perform a rolling upgrade on a TruCluster Server cluster member running the ASU software and Tru64 UNIX Version 5.0A or Version 5.1 operating system software, you must first upgrade the ASU software to Version 5.0 ECO2 or higher then proceed with the rolling upgrade of the Tru64 UNIX operating system software.

4.2.3 Reconfiguring to None Mode

When reconfiguring an ASU server from single-mode or multi-node to none mode, the `transports.ini` file still contains configuration data for multiple nodes. When the cluster reboots, each booting node finds its corresponding information in the `transports.ini` file, and the ASU server tries to start on all nodes, leaving the transports running on multiple nodes.

To avoid this, use an editor and remove from the `transports.ini` file the entries for all but one host and its corresponding controller information. For example, the following output is from a `transports.ini` file after the ASU server has been reconfigured to none mode. If you want the ASU server to run only on a system named `server2`, remove all the lines that refer to `member_01`, `controller_01`, `member_03`, and `controller_03`. Leave only the lines referring to `member_02` and `controller_02`. In this example, delete lines that are indicated by an asterisk (*).

```
[ member ]
* member_01=server1.compaq.com,server1
member_02=server2.compaq.com,server2
* member_03=server3.compaq.com,server3
[ tcpip ]
* controller_01=tu0
controller_02=tu0
* controller_03=tu0
[ netbeui ]
* controller_01=tu0
controller_02=tu0
* controller_03=tu0
```

4.2.4 Reinstalling ASU in a TruCluster Cluster

When you reinstall the ASU software in a TruCluster Server cluster, the ASU transports might not stop properly.

To fix this problem, you must stop the ASU server and transports on all cluster members before you remove the ASUBASE or ASUTRAN subsets.

Enter the following command on each cluster member to stop the ASU server and transports:

```
# /usr/net/servers/lanman/scripts/asuase_stop
```

4.2.5 Reconfiguring the ASU Server

The following error message might be displayed when using the `asusetup` utility to reconfigure an ASU server PDC from multi-instance mode to single-instance mode:

```
ERROR: An account for this machine cannot be created.
```

Rerun the `asusetup` utility if this message displays.

4.3 ASU Server and Windows 2000 Problems and Restrictions

The following sections describe ASU server and Windows 2000 problems and solutions and restrictions.

4.3.1 Upgrading A Windows NT System That Uses an ASU Replicated Database

Before upgrading a Windows NT system that uses an ASU replicated database to Windows 2000, you must remove the Admin account and Servers group from the Users database.

4.3.2 Managing the ASU Server from the MMC

When you use the Windows 2000 Management Console (MMC) to manage services on the ASU server the following informational message might be displayed:

```
Configuration Manager: The machine selected for remote communication is not available at this time.
```

You can ignore this message.

4.3.3 Administering the ASU Server

You must administer the ASU Server in a Windows 2000 domain by using Windows 2000 interfaces.

4.3.4 Trust Management

If the ASU server is configured as a BDC in a Windows 2000 domain, you must perform all trust management on the Windows 2000 domain controller. When you enter a `net` command on the ASU BDC to manage a trust, the command fails and an error message similar to the following is displayed:

```
# net trust ntdomain password /allow /domain:w2kdomain
```

```
Access Denied
```

```
# net trust ntdomain password /add
```

```
Error 87  
Parameter is incorrect.
```

4.3.5 Windows 2000 Explorer Crashes When Managing ASU Printer Shares

The Windows 2000 Explorer crashes if you attempt to manage an ASU printer share that was not configured with a driver from Windows NT or Windows 2000.

To avoid this problem, create an ASU printer share from Windows NT or Windows 2000 instead of using the ASU `net share` command.

4.3.6 ASU and Windows 2000 Single Sign On Version 2.0 Machine Account Name Conflict

If the Tru64 UNIX system will be running ASU Version 5.1A and Windows 2000 Single Sign On (SSO) Version 2.0, the ASU server name cannot be the same as the host name. While the problem is also true for SSO Version 1.0, the solution for this problem is different with ASU Version 5.1A and SSO Version 2.0.

The SSO software creates a machine account in the Active Directory that matches the host name of the Tru64 UNIX system. If the ASU server also uses the host name as the ASU server name, which it does by default, it will overwrite the account created by the SSO software and will cause SSO functionality to fail. To avoid this failure, run the `asusetup` command and select an ASU server name that is different than the host name and will not conflict with any other server name in the environment. When the `asusetup` command prompts for extra listen names, enter the Tru64 UNIX host name. This allows users to map drives to shares using the host name as a ASU server name, and there is no machine account conflict.

4.3.7 ASU and Windows 2000 Single Sign On Version 1.0 Machine Account Name Conflict

If the Tru64 UNIX system will be running ASU Version 5.1A and Windows 2000 Single Sign On (SSO) Version 1.0, the ASU server name cannot be the same as the host name.

The SSO software creates a machine account in the Active Directory that matches the host name of the Tru64 UNIX system. If the ASU server also uses the host name as the ASU server name, which it does by default, it will overwrite the account created by the SSO software and will cause SSO functionality to fail.

To avoid this problem, do not use the Tru64 UNIX system's host name as the machine account name when you configure the SSO software.

4.4 Network Problems and Restrictions

The following sections describe network problems and solutions and restrictions.

4.4.1 NetBEUI Clients Lose Connections

A problem in the 802.2 service class implementation on most clients causes NetBEUI clients to lose their links to some fast SMP servers. The problem is complicated by the ability of some SMP servers to send out-of-order packets to the client.

If you receive an `Abort, Fail, Retry?` message, click on the retry button to try to reestablish the link. If the problem persists, abort the link and reconfigure the client and server to use TCP/IP.

4.4.2 Transport Startup Error

Reboot the system if the following message is displayed after upgrading the ASU software:

```
Open of knbtcp driver failed: Error in protocol
```

4.4.3 Problems with WINS Servers That Have Large Databases

In very large scale WINS environments, name registrations with the WINS servers can sometimes take a long time. This delay can cause the ASU server to declare contact lost with the WINS server and write the following message in the system log file (`/var/adm/messages`):

```
knb: Contact lost with WINS server nn.nn.nn.nn
```

In this message, `nn.nn.nn.nn` is the TCP/IP address of the WINS sever.

While this problem does not prevent the ASU server from working, it might cause problems with clients attempting to connect to the ASU server if they use only WINS for name resolution. The ASU server attempts to register ASU server NetBIOS names with the WINS server (after a default retry period of 4 minutes) until either all ASU server names are registered or contact is lost (in which case this process is repeated).

If problems persist where contact is constantly lost, you can change the WINS client parameters located in the `/etc/sysconfigtab` file as described in the following table, however Compaq does not recommend changing the default values.

Parameter	Specifies	Default Value
<code>knbretrycontact</code>	The timeout (in ms) between retries to contact the WINS server.	240000 (4 minutes)
<code>knbquerytimeout</code>	The timeout (in ms) allowed for name queries. This parameter affects all name queries using broadcast and WINS.	500 (0.5 seconds)
<code>knbqueryretries</code>	The number of retries.	3
<code>knbwinsquerymult</code>	A multiplier applied to WINS queries for timeouts.	4 With the default query timeout and default multiplier, a WINS query has a 2 second timeout (0.5 seconds x 4).
<code>knbignorewinsavailable</code>	Whether or not to ignore the availability of the WINS server when doing queries.	True (1); allow name queries to be sent to the WINS server even if contact is lost.

Follow these steps to change a WINS client parameter:

1. Stop the ASU server by entering the following command:

```
# net stop server
```
2. Create a stanza format attributes file for the parameter you want to change. For example, to create a stanza format attributes file for the `knbretrycontact` parameter to increase the timeout between retries to contact the WINS server to 300000 (5 minutes), enter:

```
# cat > knbretrycontact.stanza
knbtcp:
knbretrycontact = 300000
^D
```
3. Merge the attributes in to the `/etc/sysconfigtab` file by entering the following command:

```
# sysconfigdb -a -f knbretrycontact.stanza knbtcp
```

If the `knbretrycontact` parameter exists in the `sysconfigtab` file, use the `-u` flag to update the parameter instead of the `-a` flag to add a parameter.
4. Restart the ASU server by entering the following command:

```
# net start server
```

4.5 Command Problems and Restrictions

The following sections describe command problems and solutions and restrictions.

4.5.1 The `passwd` Command

On systems with the ASU SIA subset installed, the Tru64 UNIX `passwd` command does not work reliably and its history function does not work. Use the `net password` command or the Microsoft User Manager to change ASU user account passwords on systems with the ASU SIA subset installed.

4.5.2 The `promote` Command

Do not use the `promote` command to demote a PDC, then enter the `asusetup` command to modify the configuration. Doing so might leave the ASU server in an indeterminate state.

See `promote(8)` for more information on using the `promote` command.

4.5.3 The `net` Commands Are Not Available After Upgrading

When you upgrade the ASU software, the shell path might be modified causing the `/usr/bin` path to disappear. As a result, the `net` commands are not available. Use the `rehash` command to restore the path when using the C shell.

4.5.4 The `asustat -n` Command Reports Incorrect Number of Client Connections

The `asustat -n` command displays an incorrect number of client connections when you enter the `net session` command on a system where the ASDU-MCS-CLIENT product authorization key (PAK) is installed.

Use the `asustat -L` command to view the correct number of client connections.

4.5.5 Do Not Use the `adduser` Command on a BDC

You cannot create a Tru64 UNIX user account with an associated domain user account by using the `adduser` command on a system running the Tru64 UNIX Version 5.0 or higher operating system software and configured as an ASU BDC. You can create the accounts with either the `/usr/bin/X11/dxaccounts` GUI or the `useradd` command with the `-D pc_synchronize=0` option. For example, to use the `useradd` command and default values to create a Tru64 UNIX user account and a domain user account for a user named `peter`, enter the following commands:

```
# useradd -D pc_synchronize=0
```

```
# useradd peter
```

See `useradd(8)` for more information on the `useradd` command.

4.5.6 The `sjistoeuc` and `euctosjis` Commands Incorrectly Convert Some Files

The `sjistoeuc` and `euctosjis` commands incorrectly convert Japanese user-defined characters when converting from MS-DOS to UNIX format.

If the text file you want to convert contains Japanese user-defined characters, use the `ud` and `iconv` commands to convert them. For example, to convert a file from MS-DOS to UNIX format and convert the encoding of the characters from SJIS to EUC, enter:

```
# ud -u sjis.txt | iconv -f SJIS -t eucJP > euc.txt
```

To convert a file from UNIX to MS-DOS format and convert the encoding of the characters from EUC to SJIS, enter:

```
# ud -d euc.txt | iconv -f eucJP -t SJIS > sjis.txt
```

4.5.7 Do Not Run the `asusetup` Command with the `log` Command

If you want to log output from the `asusetup` procedure, use the `script` command rather than the `log` command with the `asusetup` command.

4.5.8 The `net accounts /sync` Command Incorrectly Calculates Domain Entries

The `net accounts /sync` command does not correctly calculate the number of entries when a domain contains many Windows NT workstations. Microsoft Corporation has issued a hot fix (Q182441) in the Windows NT Version 4.0 Service Pack 4 to correct this problem.

4.6 ASU Server and Windows 95 Problems and Restrictions

The following sections describe problems when administering the ASU server from a Windows 95 system, and possible solutions and restrictions.

4.6.1 Setting Up Trust Relationships

You can use the Windows client-based administrative interfaces (Nexus tools) on a system running the Windows 3.x, Windows for Workgroups, or Windows 95 software to set up a trust relationship between an ASU server

and a Windows NT server. However, you cannot use these interfaces to log in to a remote trusted domain or verify a trust relationship.

See the ASU *Installation and Administration Guide* for more information on the Windows client-based administrative tools.

4.6.2 Error Browsing ASU Shares from Windows 95

When you browse ASU shares that have file or directory names that are spelled the same, but one name is uppercase and the other name is lowercase, the Windows 95 software displays the following error message:

```
Drive:\directory is not accessible  
This folder was moved or removed.
```

Rename files or directories if their names differ only in case.

4.6.3 Administering Permissions on Share Names that Contain German Umlauts

You cannot use the Windows Explorer on a system running the Windows 95 software to administer resource permissions on shares that contain German umlauts in their names. To administer permissions on these shares, you must use the Windows Network Neighborhood interface.

Microsoft Corporation acknowledges that the Windows 95 software does not support Unicode and has no plans to provide a solution.

4.6.4 Renaming or Deleting Files and Directories in ASU Shares

If the ASU software is configured for either the English locale for US (en_US.ISO8859-1) or the English locale for Great Britain (en_GB.ISO8859-1), you cannot use the Windows Explorer on a system running the Windows 95 software to rename or delete files and directories in ASU shares that contain lowercase non-English language characters.

To resolve this, set the lang and msdoscodepage parameters in the lanmsrver section of the lanman.ini file as described in the following table:

Locale	lang Parameter	msdoscodepage Parameter
en_US.ISO8859-1 (English for U.S.)	de_DE.ISO8859-1	cp437
en_GB.ISO8859-1 (English for Great Britain)	de_DE.ISO8859-1	cp850

4.7 Printer Problems and Restrictions

The following sections describe printer problems and solutions and restrictions.

4.7.1 Deleting ASU Printer Shares

Do not use the Tru64 UNIX `lprsetup` command or edit the `/etc/printcap` file to delete an ASU printer share. To delete a printer share, use the `clsetup` command, or enter:

```
# net share sharename /delete
```

See the ASU *Installation and Administration Guide* for more information on the `net` commands. See `clsetup(8)` for more information on the `clsetup` command.

4.7.2 Unsupported Windows 2000 Drivers

Some Windows 2000 printer drivers cannot be installed on the ASU server because they take advantage of Windows 2000 server features that the ASU server does not support.

4.7.3 Unsupported HP PCL Drivers

Some Hewlett-Packard (HP) Windows NT and Windows 2000 PCL drivers expect to receive device mode information that the ASU server does not provide.

Use the HP PostScript drivers instead of PCL drivers.

4.7.4 ASU Print Jobs Consuming 100% CPU Time

If information from the `vmstat` command shows that printing is taking up 100% of the CPU time, delete the `/usr/net/servers/lanman/spool/lm-spoolmap.*` files. These files will be recreated when the ASU server needs them.

4.7.5 Performance Problem When Printing from the Internet Explorer

Windows users who are using Internet Explorer Version 4.0 might notice increased network traffic after printing to a down-level printer on a system where the ASU `DisableUpLevelPrinting` value entry is enabled. By default, this entry is disabled. The increased network traffic is a periodic, repeating request by Internet Explorer for information about the print job, which continues until the user stops the Internet Explorer.

Microsoft Corporation has corrected this problem in Internet Explorer Version 4.0 Service Pack 1.

4.7.6 Cannot Display ASU Printer Properties

If, for an ASU printer share, you install a driver from a Windows NT client using Windows NT distribution media, then printer properties that are displayed are Windows NT local properties and not ASU printer properties.

4.7.7 Printer Status Messages in E-mail

Windows 95 system users might receive an e-mail message when they print a job to a DIGITAL or Compaq print server because Windows 95 print drivers include instructions that tell the printer to send a status message.

You can configure the print server software to not send e-mail messages.