

# HP OpenVMS CIFS Version 1.1

## Release Notes



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# About This Document

This release notes describes the features, problems fixed, known problems, and limitations found in HP CIFS Server.

## Intended Audience

This document is intended for OpenVMS system administrators and network administrators. For more information about the HP CIFS Server, see the HP CIFS Server documentation:

<http://h71000.www7.hp.com/doc/CIFS.html>

## Document Organization

The document is organized as follows:

- |           |  |
|-----------|--|
| Chapter 1 | <a href="#">Introduction</a> Provides information about HP CIFS Server software. |
| Chapter 2 | <a href="#">Features</a> Describes the features.                                 |
| Chapter 3 | <a href="#">Problems Fixed</a> Describes the problems fixed.                     |
| Chapter 4 | <a href="#">Known Problems</a> Describes the known problems.                     |
| Chapter 5 | <a href="#">Limitations</a> Describes the limitations.                           |

## HP Encourages Your Comments

HP encourages your comments and suggestions on this document. Please send comments to: [openvmsdoc@hp.com](mailto:openvmsdoc@hp.com)



# 1 Introduction

## Distribution Kit

The HP CIFS Server software is supported on OpenVMS Alpha and OpenVMS Integrity server systems. The kit names for:

- OpenVMS Alpha Versions 8.2 and 8.3 is:  
HP-AXPVMS-SAMBA-V0101--1.PCSI\$COMPRESSED
- OpenVMS Integrity server Versions 8.2-1, 8.3, and 8.3-1H1 is:  
HP-I64VMS-SAMBA-V0101--1.PCSI\$COMPRESSED

## Disk Space Requirement

Table 1-1 lists the disk space required for installing the software.

**Table 1-1 Disk Space Requirements**

Operating System	Disk Space (approximate block size)
OpenVMS Alpha V8.2 and V8.3	66948
OpenVMS Integrity server V8.2-1, V8.3, and V8.3-1H1	81055

## How to Build HP CIFS Sources on OpenVMS

Following are the steps to build the HP CIFS sources on OpenVMS:

1. Extract the sources provided with the HP CIFS PCSI file from CIFS\_SRC.BCK to a directory on your disk.

To extract the source files after the installation completes, enter the following command:

```
$ PRODUCT EXTRACT FILE SAMBA /SELECT=CIFS_SRC.BCK/SOURCE=[TEST1]
```

The PCSI utility extracts the CIFS\_SRC.BCK file from the kit to the [TEST1] directory, which is the default directory.



**NOTE:** The HP CIFS source can be extracted during installation by using the steps provided in the sample installation log. For more information, see Appendix A in the *HP OpenVMS CIFS Administrator's Guide*.

2. Install the latest HP C compiler to build the sources. Also, you need to install HP Module Management System for OpenVMS.
3. Execute BUILD.COM in source directory.
  - If BUILD.COM is executed with the RELEASE parameter, all the executables are placed in the [.BIN.REL] directory.
  - If BUILD.COM is executed with the DEBUG parameter, all the executables are placed in the [.BIN.DBG] directory.

# General Information

This section describes the information specific to HP CIFS Server.

- Before installing HP CIFS Sever V1.1, ensure that you are not running HP CIFS Server version prior to Version 1.0. If a version prior to HP CIFS V1.0 exists on the system, you must uninstall and then verify the following:
  1. Remove all the files under `SAMBA_ROOT: [000000]`.
  2. Logical names starting with `SAMBA*` must be deassigned.
  3. After installing HP CIFS Server Version 1.1, if you are copying existing `SMB.CONF` file to `SAMBA$ROOT: [LIB]`, you must change the following lines:
    - `SAMBA_ROOT` with `SAMBA$ROOT`
    - `guest account = SAMBA__GUEST` with `guest account = SAMBA$GUEST`
- Users must install the latest C RTL ECO kits before installing the HP CIFS Server software. Please contact HP customer support centers to get the latest C RTL kit.
- Uninstalling the HP CIFS Server software displays a prompt whether to retain the `SMB.CONF` and `TDB` files. Selecting the "No" option removes all the files including the configuration files.
- The default `SYSUAF` account template, `SAMBA$TMPLT` can be used to create new OpenVMS user accounts for HP CIFS Server.

For more information about how to create new OpenVMS user accounts, see the *HP OpenVMS CIFS Administrator's Guide*.

- While adding new users to OpenVMS, ensure that the UIC is unique and use `/ADD_IDENTIFIER` qualifier while creating the user. After the user is created, ensure that the user identifier matches with the user name, and the `DISUSER` flag is not set.
- The installation of HP CIFS Server creates four OpenVMS user accounts, namely, `SAMBA$SMBD`, `SAMBA$NMBD`, `SAMBA$GUEST`, and `SAMBA$TMPLT`. These accounts are internal to HP CIFS Server. You are advised not to modify or change any attributes of `SAMBA$SMBD`, `SAMBA$NMBD`, and `SAMBA$GUEST` accounts.
- Whenever the path for any share is omitted in the `SMB.CONF` file, HP CIFS Server selects `SAMBA$ROOT: [TMP]` as the default path. For example:

```
[test1] comment = Home Directories
browseable = yes
read only = no
create mode = 0750
```

In this case, there is no path defined for `[test1]`, by default HP CIFS Server will point to `SAMBA$ROOT: [TMP]` directory.

- The printer functionality is tested only in the following environments:
  - Windows 2000/XP clients
  - PS/PCL HP drivers
- Executing `SAMBA$SHUTDOWN.COM` terminates all client sessions or processes in addition to stopping the `NMBD` process and must be run during system shutdown.
- HP CIFS Server honors only the default privileges of an OpenVMS user account.
- Migration utility will be provided as a separate kit from HP CIFS Server Version 1.1 onwards. The migration utility can be downloaded from the following web address:

[http://h71000.www7.hp.com/network/CIFS\\_for\\_Samba.html](http://h71000.www7.hp.com/network/CIFS_for_Samba.html)



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## 2 Features

This chapter describes the features of HP CIFS Server. Some of the main features supported by HP CIFS Server include:

- ODS-5 and ODS-2 disks
- Unicode characters or extended characters
- VTF-7 and UTF-8 character encoding
- NFS and DFS mounted disk
- DOS attributes (read only and archive)
- Group functionality similar to UNIX
- Multiple client connections through terminal server
- VAR, Stream and Stream\_LF file formats

### New Features Provided by HP CIFS Server

The section lists the new features provided in this release:

- The code is based on Samba Version 3.0.28a
- Improved performance of HP CIFS Server software
- Improved compatibility with Windows Vista clients
- Supports port 445
- Supports Primary Domain Controller (PDC)
- NTLMv2 support for Windows Vista clients
- VFC file support
- Improved TDB handling

To improve the TBD performance, hashing algorithm used for generating the TDB keys has been changed. Thus, after installing HP CIFS Server Version 1.1 on the existing HP CIFS Server Version 1.0 kit, HP CIFS V1.0 TDB files needs to be migrated to Version 1.1 TDB files. During installation of HP CIFS Version 1.1, a TDB migration utility will automatically migrate HP CIFS Server V1.0 TDB files to HP CIFS Server V1.1 TDB files.

- Inheritance of ACLs set on parent objects to child objects
- "OPTIONS=DEFAULT" and "DEFAULT\_PROTECTION" support in ACEs



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## 3 Problems Fixed

This chapter describes the problems fixed in HP CIFS Server.

### Problem with Oplock Break

With oplocks enabled, if the user tries to open a word document from the second client that is already opened on the first client, it takes lot of time (approximately 60 seconds).

### Problem Logging in to a Trusted Domain Environment

HP CIFS Server is a member server of a domain (for example, say NTDOM) which is trusted by another windows domain (for example, say W2K3DOM). One Windows XP client is configured as workstation in W2K3DOM. User has logged into the Windows XP using the W2K3DOM ADS credentials. From this Windows XP client, trying to login to VMS CIFS server fails. This problem has been fixed.

### Problem with Login Password Expiry

When you login to the domain using an Windows XP client and a HP CIFS Server as a PDC, the following message is displayed:

Your password expires today. Do you want to change it?

This problem has been fixed.

### Permissions Entry Disappears from List of Permissions

While adding an entry to the existing list of permissions on a file using Windows Explorer, existing domain users/group will disappear from the permission entry. This problem has been fixed.

### "OPTIONS=DEFAULT" and "DEFAULT\_PROTECTION" ACE not Inherited

Access Control Entry (ACEs) assigned to OpenVMS shared directory do not inherit correctly.

This problem has been fixed. However, if you need "OPTIONS=DEFAULT" and "DEFAULT\_PROTECTION" support in ACLs you must explicitly set the "inherit acls=yes" for a particular share.

### Creating Postscript Files using Third-Party Applications

While creating postscript files using third-party applications, the client takes more time to write the file.

### Performance Issue While Browsing a Share With VARVFC Files

On ODS-5 disks, if the user tries to access or refresh a share that has VARVFC file, Windows explorer takes longer time to list the files of the directory.

### Wrong Error Message When Accessing a Share

If the user does not have permissions and tries to access the share, a wrong error message is displayed.

### Inheritance of Owner Does Not Work as Expected When the New Directories are Created

When a new directory is created on a share, the owner of the directory is not getting inherited properly.

## Multiple Problems with NMBD Process

Following are the problems with NMBD process:

- The CPU utilization and I/O rates are high while running the NMBD process.  
To workaround this problem, set the `SMB.CONF` parameter "store dgpackets" to No.
- In cluster environment it is unable to identify the node specific log files that NMBD process creates.
- If HP CIFS Server is installed on ODS-2 disk, NMBD process has problems creating temporary browse list files due to ODS-2 restrictions.
- Memory leaks in NMBD processes that causes NMBD process to terminate abnormally.

## HP CIFS Server Does not Honour the Security Settings based on the VMS Resource Identifier

Whenever HP CIFS Server tries to access the files, the VMS resource identifier does not get honoured. Only permission set based on domain users and groups are honoured.

## HP CIFS Server Crashes While Copying Files Continuously using the Batch File

While copying files continuously from three different clients using the batch file, HP CIFS Server results in a crash.

## Incorrect Display of File Timestamps

When a non-text file is created, modified or accessed the file timestamps are not displayed correctly. For example, when you modify a file the creation time and modification time is updated with the modification timestamp.

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## 4 Known Problems

This chapter describes the known problems in HP CIFS Server.

### NET RPC JOIN or NET RPC TESTJOIN Fails with an Error Message

**Problem:**

While configuring HP CIFS Server as member server to a domain with Advanced Server for OpenVMS (ASV) as PDC in a cluster environment, the following error message is displayed:

Error in domain join verification (credential setup failed):

NT\_STATUS\_INVALID\_COMPUTER\_NAME

**Workaround:**

If the cluster alias name exists for ASV, you must specify the ASV cluster alias name when attempting to communicate with the ASV. This can be done using "-S" or "-server" option on the NET commands and in HP CIFS Server utilities.

### Protections and ACLs are not Displayed Correctly

**Problem:**

Protections and ACLs are not displayed correctly on Windows by right-clicking and selecting Properties -> Security option.

**Workaround:**

In order to avoid this problem, click on "Advanced" tab on the Properties dialog box to view the correct values set on a particular file or directory. HP will address this problem in a future release of HP CIFS Server .

### SMBPASSWD Utility Crash

**Problem:**

Unprivileged users attempting to change the password by using the SMBPASSWD utility results in a crash.

**Workaround:**

An administrator can log in to OpenVMS system using a privileged account and use SMBPASSWD utility to modify user passwords.

On a Windows client, user can change the password by pressing Ctrl+Alt+Delete and then clicking the "change password" button.

### "The Network Name cannot be Found" Error Message

"The network name cannot be found" is a common error message and is due to one of the following misconfigurations:

- User trying to access the share does not have sufficient permissions. To access the share, user needs to be granted the Read (r) permission
- User specified a share name that does not exist.

### Unable to Copy Files from a Server

**Problem:**

When a user attempts to copy files from server to a client, the following error message is displayed:

"Cannot copy/read <filename> : The request could not be performed because of an IO device error"

or

```
"Cannot copy <filename> : cannot read from the source file"
```

```
"Cannot copy <filename>: Specified network name is no"
```

This happens if few files in the directory are Variable-length record formatted files, where File's header identification area does not contain the valid "Record Count" and "Data Byte Count" in the file length hints.

**Workaround:**

Update the file length hint region by executing the ANALYZE/RMS/UPDATE command on the directory content.

## File Size Allocated on the Disk is more than the Actual File Size

**Problem:**

When an attempt is made to save a text file using Notepad application, the following error message is displayed:

```
"file already exists, do you want to overwrite"
```

When you overwrite the file, it occupies 10000 blocks (5MB) even though the size of the file is just 1 block.

**Workaround:**

Edit SAMBA\$SMBD\_STARTUP.COM file and change the value for /EXTEND\_QUANTITY as shown:

```
$ SEARCH [BIN] SAMBA$SMBD_STARTUP.COM;1 10000
```

```
$ SET RMS_DEFAULT /EXTEND_QUANTITY=1
```

```
$!
```

## Unable to Create PowerPoint Presentation File on ODS-2 Disks

**Problem:**

On ODS-2 disks, if the user tries to create a new Microsoft PowerPoint presentation file by right-clicking and selecting New -> Microsoft PowerPoint Presentation, HP CIFS Server fails to create the presentation file as the encoded file name exceeds 39 characters.

**Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## HP CIFS Utilities Crash

**Problem:**

Executing HP CIFS Server utilities such as PDBEDIT from a user account that does not match the Rights Identifier results in a crash.

**Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## NET RPC JOIN Command Fails

**Problem:**

When using the "-I" option with the \$ NET RPC JOIN command, it fails with the following error message:

```
$ NET RPC JOIN "-UADMINISTRATOR%IONETADM$1" "-I" 16.113.6.131
```

```
[2007/10/11 17:35:28, 0] SAMBA$SRC:[SOURCE.UTILS]NET_RPC_JOIN.C;1:(349)
```

```
Error in domain join verification (credential setup failed):
```

NT\_STATUS\_INVALID\_COMPUTER\_NAME

Unable to join domain IONETW2K3.

**Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Problem with User Mappings Stored in username map File

**Problem:**

User mappings stored in the username map file do not work if the file format is other than Stream record format.

**Workaround:**

In order to avoid this problem, ensure that you use the `username.map` file located in the directory `SAMBA$ROOT:[LIB]`. If you create a user name map file on OpenVMS system, convert the file to Stream record format by executing the following command:

```
$ SET FILE/ATTRIBUTE=(RFM:STM,MRS:0,LRL:0) SAMBA$ROOT:[LIB] <USERNAME  
MAP FILENAME>
```

## Problem with VFS Sharable on a Share

**Problem:**

On ODS-2 disk, if you specify "VARVFC" VFS sharable on a share, server becomes slow and sometimes operation fails due to large number of files.

**Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Unable to Open MS-Office Documents from the Other Client

**Problem:**

On OpenVMS Alpha V8.2 and OpenVMS Integrity servers V8.2-1, you may fail to open the MS-Office documents from the second client.

**Workaround:**

This is a limitation on OpenVMS Alpha V8.2 and OpenVMS Integrity servers V8.2-1 due to the non-availability of the byte range locking API. HP will address this problem in a future release of HP CIFS Server.

## "net time" Utility Crash

**Problem:**

On OpenVMS Alpha, "net time" utility crashes with "-d2" option.

**Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Telnetsymbion Print Queues Prints Arbitrary Characters

**Problem:**

If HP CIFS Server is configured with Telnetsymbion printer queue and tries to print a text file using the Notepad, an arbitrary character is printed.

**Workaround:**

Use the DCPS or LPD OpenVMS print queue which provides libraries by default. HP will address this problem in a future release of HP CIFS Server.

## Setting Client Capacity with SAMBA\$CONFIG

### **Problem:**

The client capacity is to set to double the number that is specified. Since HP CIFS Server Version 1.1 provides support for connection on TCP port 445 (SMB over TCP/IP) in addition to TCP port 139 (SMB over NetBIOS TCP/IP), the "client capacity" set by SAMBA\$CONFIG.COM is really double what the administrator specifies.

For example, if the admin specifies a value of 50, the SMBD445 service has a limit of 50 and so does the SMBD service.

### **Workaround:**

You can divide the client capacity numbers between the 139 and 445 ports. HP will address this problem in a future release of HP CIFS Server.

## Issues while Adding Advanced Server for OpenVMS as Member Server

### **Problem:**

While adding Advanced Server for OpenVMS as a member server to HP CIFS PDC, there are issues while establishing secure channel with HP CIFS PDC, admin logon and so on.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Using Groups in Username Map File does not work

### **Problem:**

The functionality of using a group name in the username map file does not work.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Issues with NET RPC TRUSTDOM Commands

### **Problem:**

If you are trying to add a trust without a corresponding OpenVMS account (with the name <domain>\$) fails without any error message. The command completes as though it is successful but actually it has failed.

If you are trying to list the trusted domain entries containing the word "none" even when there are valid entries in the list.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## NMBD Process Starts Looping when Configured for WINS Server

### **Problem:**

When HP CIFS Server is configured for WINS server with the following setting in the SMB.CONF file:

```
[global]
wins support = yes
```

NMBD process becomes compute bound.

### **Workaround:**

Currently, HP CIFS does not support WINS server. So, set the `wins support = yes` in the SMB.CONF file. HP will address this problem in a future release of HP CIFS Server.



## Problem Handling StreamLF and Record Formatted Files

### **Problem:**

HP CIFS Server does not support both StreamLF and VARVFC VFS object specification (that is, `vfs objects=varvfc streamLF`) in a share.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## HP CIFS Server does not Support Files with Fixed-Length Record Format

### **Problem:**

Files with a record format of Fixed Length and record attributes of Carriage return carriage control. When you try to view such files using Notepad or Wordpad application, appear with all records run together.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Problems with Share Level Security

### **Problem:**

Share level security does not allow any users to login.

### **Workaround:**

You must have SAMBA\$GUEST account in the `passdb.tdb` database. HP will address this problem in a future release of HP CIFS Server.

## NET RPC FILE CLOSE Command does not work

### **Problem:**

When the user tries to close an open file using `NET RPC CLOSE FILE <fileID>` command, it fails without any error message.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.

## Cannot Login to Windows Vista with Microsoft Signing Enabled

### **Problem:**

Currently, with SMB signing enabled on client ("Microsoft network client: Digitally sign communication (always)") and server, Windows client can be added successfully as a workstation to the domain. But after joining the domain successfully, Windows cannot login using the HP CIFS account and the following error message is displayed:

"The trust relationship between this workstation and the primary domain controller failed."

With "Microsoft network client: Digitally sign communication (if server agrees)" enabled both joining and login works fine.

### **Workaround:**

There is no workaround. HP will address this problem in a future release of HP CIFS Server.



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## 5 Limitations

This chapter describes the limitations in HP CIFS Server. The limitations that are applicable to HP CIFS Server on OpenVMS Integrity servers are also applicable to HP CIFS Server on OpenVMS Alpha.

- On OpenVMS Alpha V8.2 and OpenVMS Integrity servers V8.2-1, there is severe performance degradation as FCNTL API lacks the SETLKI feature required for byte range locking.
- HP CIFS Server does not support External Authentication.
- The SMB . CONF printing parameter is hard-coded to the value "OpenVMS" and cannot be changed.
- The SMB . CONF load printers parameter is hard-coded to the value "NO" and cannot be changed.
- Printcap file is not supported on HP CIFS Server.
- If the file share are present on ODS-2 disk, HP CIFS Server does not support Unicode characters in file names.
- HP CIFS Server does not support Windows Administrative tools such as User Manager.
- HP CIFS Server does not support either LMHOSTS file or Windows Internet Name Service (WINS) server for cluster alias name resolution.
- HP CIFS Server does not support SMB File Systems (SMBFS).
- The Windows 200x or Windows XP Microsoft Management Console (MMC) cannot be used to manage HP CIFS Server.
- While using the VTF modules you cannot create directories with non-ASCII characters on Windows.
- HP CIFS Server does not support SMBPASSWD backend.
- HP CIFS Server does not support "Hidden" file attribute.
- HP CIFS Server does not support "smbcquotas" utility as the quotas are not supported by the VMS server.
- On HP CIFS Server, there is a limit on the maximum number of users that can be created automatically. This restriction is due to the SYSUAF database group on OpenVMS as the UIC value cannot be greater than 37776 (Octal) which equals to 16382 (decimal). If the number of automatically created users exceeds the limit, then HP CIFS Server fails with the following error message in the log file if the log level is set to greater than 5.

```
334598850
```

Which translates to %UAF-E-UICERR, error in UIC specification.

- If the record format is of variable-length or VFC, and the record attributes (RAT) are set to print carriage control (PRN) or Fortran carriage control (FTN), an arbitrary characters is displayed in the text file.
- HP CIFS Server does not support reading RMS Indexed files (FAB\$B\_ORG=FAB\$C\_IDX).
- HP CIFS Server does not support "SECURITY=ADS" mode.
- If HP CIFS Server is configured as PDC, the name of the workstations that are getting added to HP CIFS Server PDC must not exceed 11 characters. This limitation is due to the OpenVMS user name length limited to 12 characters in SYSUAF database.