



Software Product Description

PRODUCT NAME: HP OpenVMS Common Internet File System V1.2

SPD 82.42.04

DESCRIPTION

This software product description explains the HP OpenVMS Common Internet File System (CIFS) for OpenVMS Alpha and OpenVMS Integrity servers.

HP CIFS provides users with seamless file and print interoperability between OpenVMS and Windows-based clients. The OpenVMS file and print services are based on the popular open source product, Samba, from Samba.org. The software runs on OpenVMS Alpha and OpenVMS Integrity server platforms. It is similar to implementations that are in place today supporting Linux and UNIX operating environments.

Use of the HP CIFS requires OpenVMS Version 8.3 or later for AlphaServers and OpenVMS Version 8.3 or later for Integrity server systems. HP CIFS supports Windows 2000, Windows XP, Windows 2003, Windows 2008, Windows Vista, and Windows 7 clients.

FEATURES

Domain Support

HP CIFS can act as a NT4-style Member Server in any domain. From HP CIFS Version 1.2 onwards, it can participate as a member in native mode Active Directory Windows domain that uses Kerberos authentication.

It can act as a NT4-style Primary Domain Controller (PDC), but such a domain may only contain Backup Domain Controllers (BDCs) that run HP CIFS. Similarly, it can function as a NT4-style BDC only if the PDC is also running HP CIFS.

However, unlike HP Advanced Server for OpenVMS and Windows domain controllers, automatic replication of the user accounts database is not possible between HP CIFS PDC and BDCs. To accomplish this HP CIFS requires the assistance of LDAP servers. By configuring the HP CIFS PDC and BDCs to use the LDAP backend, replication of the accounts database is achieved by virtue of the synchronization between LDAP servers. HP CIFS can use the LDAP backend to store and obtain user and group account information in the LDAP directory (such as HP Enterprise Directory or an OpenLDAP server). HP CIFS can also be configured as a member server to a LDAP enabled Samba PDC.

Browser Services

HP CIFS supports traditional Windows browser service functionality. Browser service functionality is responsible for the "Network neighborhood" view provided by Windows.

Cluster Services

HP CIFS can be installed either on a single node in an OpenVMS Cluster or, as a HP CIFS Member Server, on multiple nodes that share the same HP CIFS installation directory. OpenVMS Cluster configurations are fully described in the Software Product Description for HP OpenVMS Cluster Software (SPD 29.78.xx).

Cluster services are supported on OpenVMS Alpha Version 8.3 or later and on OpenVMS Integrity servers Version 8.3 or later. As a single node, HP CIFS can be installed as a distinct entity (for any CIFS server role) on each cluster node with separate installation and configuration and thus each node acts as if on non-clustered OpenVMS system. In this case, each node where HP

CIFS is installed must not share the same installation directory and must not allow access to the same directory or files through multiple cluster members simultaneously.

As a Member server, a common cluster configuration is possible where multiple cluster members can share the same HP CIFS installation and configuration directory and data files. In such an environment, HP CIFS functions as though the cluster is a single domain entity. In a cluster, the nodes that share the same HP installation and configuration directory must also share the same SYSUAF and RIGHTSLIST databases.

File and Print Services

HP CIFS allows users to share files and printers present on OpenVMS system to Windows, Linux, and UNIX clients. These clients see the shared files and printers as being present on a local system. Due to this, users can seamlessly work with shared files and printers using the available interfaces on the client system.

HP CIFS supports files present on ODS-5 and ODS-2 volumes. It can present files with different OpenVMS file formats and file organizations to Windows clients in a Stream format. Thus the files with different formats are made readable to Windows clients. Additionally, HP CIFS allows you to create files from clients in Stream, Stream_LF, Fixed, or Undefined format. By default, HP CIFS supports ASCII character set. Additionally, it supports Extended ASCII character set (CP850/ISO-8859-1) for some European characters and VTF-7 support for Japanese characters and UTF-8 character set.

Using HP CIFS printing services, you can share printers that are connected directly to an OpenVMS system or any printers present on the network. For sharing printers using HP CIFS, print queues must be setup on the OpenVMS system. These print queues can be setup using DCPS, TELNETSYM, LAT, or LPD. HP CIFS supports NT-style printing functionalities such as:

- Printer driver files can be downloaded locally on Windows clients.
- Printer driver files can be uploaded onto HP CIFS Server from the Windows clients using Add Printer wizard.

HP CIFS supports raw, text, NT style and all PostScript (DCPS) printers supported by OpenVMS. Selected PostScript printers may need the HP DECprint Supervisor for OpenVMS (DCPS) software to provide access through the OpenVMS queuing system over TCP/IP or DECnet. The HP DCPS product provides PostScript

and DEC ANSI printing to selected industry standard PostScript printers. See the HP DCPS Software Product Description (SPD 44.15.xx) for a complete list of PostScript printers supported by HP OpenVMS.

Network Transports

HP CIFS supports the TCP/IP network transport software. It utilizes the industry standard TCP/IP protocol running on the host server. This allows an OpenVMS host system to interact with a Microsoft Windows client or server to provide remote file, print, and authentication services. HP CIFS provides remote access to numerous computers at the same time. This Common Internet File System runs over TCP/IP by using the SMB (Server Message Block) protocol found in Microsoft Windows for file and printer access. HP CIFS has been developed and tested with the HP OpenVMS TCP/IP Services product. Third party TCP/IP solutions that interoperate with the OpenVMS Operating system will be supported on a best case basis. Network Basic Input/Output System (NetBIOS) is supported with interface to LMHOSTS file, WINS and DNS NETBIOS name resolution.

Security

HP CIFS security on files is implemented by mapping Windows security to OpenVMS security. Thus, HP CIFS depends upon time proven VMS security mechanism for accessing files. It also provides trust relationship support.

CIFS provides file security to Windows clients using OpenVMS file security alone. That is, it maps Windows security applied on the files and directories to OpenVMS file security. File security can be set for any Windows/CIFS user or group. File and directory access auditing is not provided by CIFS, but standard OpenVMS auditing can be used for this purpose.

HP CIFS supports Access Control Lists (ACLs) on printer objects as well.

INSTALLATION AND CONFIGURATION

HP CIFS is a layered product which is installed on OpenVMS Alpha or Integrity servers platform. For the same, the installation of latest CRTL ECO kits for the respective platforms is required.

On OpenVMS, for the HP CIFS Server to support Kerberos authentication, it is mandatory that the Kerberos Version 3.x for OpenVMS or higher is installed on the system.

HARDWARE REQUIREMENTS**Processors Supported**

All AlphaServer systems supported by OpenVMS Alpha Version 8.3 or later are supported by HP CIFS for OpenVMS Alpha. All Integrity server systems supported by OpenVMS Version 8.3 or later are supported by HP CIFS for OpenVMS Integrity servers.

OPTIONAL HARDWARE**Network Interface Controllers**

For the TCP/IP transport, HP CIFS supports the network hardware devices supported by the specific TCP/IP product. See the Software Product Description for HP TCP/IP Services for OpenVMS (SPD 46.46.xx). For information about what software versions of HP TCP/IP for OpenVMS are supported, see the section SOFTWARE REQUIREMENTS and for other TCP/IP products, contact the vendor.

SOFTWARE REQUIREMENTS**Operating System**

The software requirements for HP CIFS for OpenVMS Integrity servers Version 1.2 are:

- HP OpenVMS Integrity Operating System Version 8.3 or higher

The software requirements for HP CIFS for OpenVMS Alpha Version 1.2 are:

- HP OpenVMS Alpha Operating System Version 8.3 or higher

The software requirements for HP CIFS in support of Microsoft are Windows 2000, Windows XP, Windows 2003, Windows 2008, Windows Vista, and Windows 7 clients. Windows 95, Windows 98 and Windows-NT are *not supported*.

Network Transport Software

HP CIFS is to be used in a TCP/IP environment. HP OpenVMS TCP/IP software is recommended. This software must be purchased separately for OpenVMS Alpha, but is included in the Base Operating Environment (BOE) for HP OpenVMS Integrity servers.

GROWTH CONSIDERATIONS

The minimum hardware and software requirements for any future version of this product may be different from the requirements for the current version.

SOFTWARE LICENSING

HP CIFS is provided at no additional charge for users with a valid license to operate an OpenVMS operating system for an Integrity server or AlphaServer system.

The Samba technology *utilized in CIFS* is bound by an Open Source software license.

License Management Facility Support

HP CIFS may be used without an LMF PAK.

ORDERING INFORMATION

The HP CIFS kits and documentation are available for download free of cost from the following website:

http://h71000.www7.hp.com/network/CIFS_for_Samba.html

SOFTWARE TECHNICAL SUPPORT SERVICE*Alpha*

Please contact your HP Services Sales Representative to purchase HP Software Technical Support (HA158AC) for HP CIFS on OpenVMS Alpha. Software Technical Support is purchased for the quantity of concurrent users, using the product number below:

HP OpenVMS Alpha Product ¹	
HP CIFS VMS Alpha 1 Conc Use	QL-010AA-AB

¹This product number is only required to purchase Software Technical Support Service and is not required to use the HP CIFS product.

Service Migration to HP CIFS from HP Advanced Server*Alpha*

Purchase HP Software Technical Support Service entering a quantity equal to the number of HP Advanced Server licenses being migrated.

Integrity servers

HP CIFS is a component of the Base Operating Environment (BOE). Software Technical Support Service is provided through a support agreement for High Availability Operating Environment (HA-OE).

If you have an existing Support Agreement for your Integrity server BOE or HA-OE License, an additional Support Agreement for HP CIFS is not required.

For the complete list of OpenVMS Operating Environment Licenses, see the OpenVMS Operating Environment SPD, (SPD 82.34.xx) at the following website:

<http://h71000.www7.hp.com/doc/oe8234.pdf>

SOFTWARE PRODUCT SERVICES

A variety of service options are available from HP. For more information, contact your HP account representative or distributor. Information is also available at the following website:

<http://welcome.hp.com/country/us/en/prodserv/software.html>

SOFTWARE WARRANTY

This software is provided by HP with a ninety-day conformance warranty in accordance with the HP warranty terms applicable to a license purchase.

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