**Clustered Data ONTAP CIFS Expert Recommended articles**

Jan 6, 2017•FAQ

ARTICLE NUMBER

‬ANSWER

This article contains a list of all common CIFS\SMB protocol operational (how-tos) and troubleshooting workflows. The following list contains most of our top KBs; however, it is not a comprehensive list.

This can be used to narrow your search to the more commonly utilized troubleshooting KBs broken down to a specific category:

* Issues Joining Vserver to an Active Directory Domain\Workgroup
* Issues with Basic CIFS Configuration – Basic configuration options
* CIFS Share Setup and Share Permissions
* Problems Accessing CIFS Shares
* Performance Issues
* CIFS Features
  + Vscan
  + Fpolicy
  + Widelinks / Symlinks
  + Autolocation
  + Branchcache
  + CIFS Auditing
  + Copy Offload
  + Homedir\Offline Files\Folders\Roaming Profiles
  + Hyper-V over SMB3 Concepts
  + LDAP\LDAPS\ TLS
  + NDO Operations
  + Remote VSS
  + SMB Encryption and Signing
  + Other

Issues Joining Vserver to an Active Directory Domain\Workgroup

* [1010569](https://kb.netapp.com/support/index?page=content&id=1010569): Data ONTAP 8: How to create a CIFS server on a clustered Data ONTAP storage system
* [2017553](https://kb.netapp.com/support/index?page=content&id=2017553): Troubleshooting Workflow: CIFS Authentication failures
* [2018447](https://kb.netapp.com/support/index?page=content&id=2018447): Troubleshooting Workflow: Most common issues when using the 'vserver active-directory' command
* [2024338](https://kb.netapp.com/support/index?page=content&id=2024338): CIFS server is unable to join domain with SecD error: ou not found
* [2019905](https://kb.netapp.com/support/s/article/cifs-setup-fails-with-ldap-error-as-the-domain-policy-requires-ldap-sealing-and-signing): CIFS setup fails with LDAP error as the domain policy requires LDAP sealing and signing

Issues with Basic CIFS Configuration

* [3012797](https://kb.netapp.com/support/index?page=content&id=3012797): Important considerations when setting up CIFS and name-mapping in clustered Data ONTAP
* [1013831](https://kb.netapp.com/support/s/article/how-to-create-and-understand-vserver-name-mapping-rules-in-clustered-data-ontap): How to create and understand vserver name-mapping rules in clustered Data ONTAP
* [1012935](https://kb.netapp.com/support/index?page=content&id=1012935): How to set up Windows to UNIX user mapping over LDAP
* [1015612](https://kb.netapp.com/support/index?page=content&id=1015612): How to enable or disable automatic advertisements of DFS capabilities in a CIFS server

CIFS Share Setup and Share Permissions

* [2017495](https://kb.netapp.com/support/index?page=content&id=2017495): Troubleshooting Workflow: Unable to set the security by using the Security tab for a file in cDOT volumes
* [1015277](https://kb.netapp.com/support/index?page=content&id=1015277): How to modify permissions on files and folders in clustered Data ONTAP when there is no permission to take ownership
* [2024800](https://kb.netapp.com/support/s/article/internal-definitive-guide-to-setting-ntfs-or-storage-level-access-guard-security-using-sddl-files-and-fsecurity-apply): Definitive guide to setting NTFS or Storage Level Access Guard security using SDDL files and fsecurity apply

Problems Accessing CIFS Shares

* ‬[2028432](https://kb.netapp.com/support/index?page=content&id=2028432): Troubleshooting CIFS Single User Access Denied
* [2017908](https://kb.netapp.com/support/index?page=content&id=2017908): Troubleshooting Workflow: Permission denied (CIFS)
* [1014284](https://kb.netapp.com/support/index?page=content&id=1014284): How to troubleshoot Microsoft client permission issues on a NetApp Vserver running clustered Data ONTAP
* [2016248](https://kb.netapp.com/support/s/article/access-denied-from-windows-clients-on-specific-files-in-clustered-data-ontap): Access denied from Windows clients on specific files in clustered Data ONTAP
* [2017553](https://kb.netapp.com/support/index?page=content&id=2017553): Troubleshooting Workflow: CIFS Authentication failures
* [2018231](https://kb.netapp.com/support/index?page=content&id=2018231): Troubleshooting Workflow: DC not responding (CIFS)
* [2017310](https://kb.netapp.com/support/index?page=content&id=2017310): Troubleshooting Workflow: CIFS: Device attached to the system is not functioning
* [2017820](https://kb.netapp.com/support/index?page=content&id=2017820): Troubleshooting Workflow: Specified network resource or device is no longer available
* [2017486](https://kb.netapp.com/support/index?page=content&id=2017486): Troubleshooting Workflow: Export Policy - Login Failed/Login Prompt
* [1015082](https://kb.netapp.com/support/index?page=content&id=1015082): How to terminate unwanted CIFS sessions in clustered Data ONTAP for specific Windows user

Performance Issues

* [2024144](https://kb.netapp.com/support/index?page=content&id=2024144): Mac client is slow to access the SMB/CIFS share
* [1015815](https://kb.netapp.com/support/s/article/how-to-troubleshoot-performance-issues-in-both-clustered-data-ontap-and-data-ontap-7-mode-systems): How to troubleshoot performance issues in both clustered Data ONTAP and Data ONTAP 7-Mode systems

Vscan

* [2018449](https://kb.netapp.com/support/index?page=content&id=2018449): Troubleshooting Workflow: Clustered Data ONTAP Antivirus Connector (Offbox\Offboard AV)
* [3014901](https://kb.netapp.com/support/index?page=content&id=3014901): FAQ: Common EMS messages for Vscan
* [1015425](https://kb.netapp.com/support/index?page=content&id=1015425): How to upgrade clustered Data ONTAP Antivirus Connector
* [2026354](https://kb.netapp.com/support/s/article/virus-scanning-and-fpolicy-failure-after-upgrade-to-data-ontap-version-8-3-1-or-later): Virus scanning and FPolicy failure after upgrade to Data ONTAP version 8.3.1 or later
* [3014741](https://kb.netapp.com/support/s/article/services-partners-faq-understanding-clustered-data-ontap-offbox-vscan-server-extended-metrics): FAQ: Understanding clustered Data ONTAP Offbox Vscan server extended metrics

Fpolicy

* [3014330](https://kb.netapp.com/support/s/article/what-are-the-fpolicy-partner-solutions-for-clustered-data-ontap): What are the FPolicy partner solutions for clustered Data ONTAP?
* [2024464](https://kb.netapp.com/support/index?page=content&id=2024464): Varonis FPolicy stops working after clustered Data ONTAP 8.3.1 upgrade
* [2026354](https://kb.netapp.com/support/s/article/virus-scanning-and-fpolicy-failure-after-upgrade-to-data-ontap-version-8-3-1-or-later): Virus scanning and FPolicy failure after upgrade to Data ONTAP version 8.3.1 or later

Widelinks/Symlinks

* [1013782](https://kb.netapp.com/support/index?page=content&id=1013782): How to make symbolic links (widelinks) work for CIFS clients in Cluster-Mode
* [1015930](https://kb.netapp.com/support/s/article/clustered-data-ontap-8-3-x-how-to-create-a-symlink-widelink): Clustered Data ONTAP 8.3.x - How to create a Symlink/Widelink
* [3014510](https://kb.netapp.com/support/index?page=content&id=3014510): What is the impact of a share's symlink settings and DFS advertisement in clustered Data ONTAP on SMB2.x/3 client traffic
* [1015368](https://kb.netapp.com/support/index?page=content&id=1015368): How to create a symbolic link in clustered Data ONTAP without the need for NFS

Autolocation

* [1014279](https://kb.netapp.com/support/index?page=content&id=1014279): How to troubleshoot the 'Autolocation' feature in Clustered Data ONTAP

Branchcache

* [8010166](https://kb.netapp.com/support/s/article/is-branchcache-supported): Is BranchCache supported?

CIFS Auditing

* [1015035](https://kb.netapp.com/support/index?page=content&id=1015035): How to set up CIFS auditing with clustered Data ONTAP
* [2026494](https://kb.netapp.com/support/index?page=content&id=2026494): Troubleshooting Workflow: Staging volume full for onbox CIFS auditing

Copy Offload

* [2020472](https://kb.netapp.com/support/s/article/microsoft-offloaded-data-transfer-does-not-work-even-though-it-meets-all-the-netapp-storage-controller-requirements): Microsoft Offloaded Data Transfer does not work even though it meets all the NetApp storage controller requirements

Homedir\Offline Files\Folders\Roaming Profiles

* [1015284](https://kb.netapp.com/support/s/article/how-to-configure-clustered-data-ontap-home-directories): How to configure clustered Data ONTAP home directories

Hyper-V over SMB3 Concepts

* [1015099](https://kb.netapp.com/support/s/article/how-to-set-up-svm-cifs-for-hyper-v-over-smb): How to set up SVM/CIFS for Hyper-V over SMB

LDAP\LDAPS\ TLS

* [1010909](https://kb.netapp.com/support/index?page=content&id=1010909): How to configure LDAP on a filer to connect to Microsoft's Active Directory LDAP implementation
* [1013323](https://kb.netapp.com/support/s/article/how-to-troubleshoot-ldap-issues-in-windows-active-directory): How to troubleshoot LDAP issues in Windows Active Directory
* [2017540](https://kb.netapp.com/support/index?page=content&id=2017540): Troubleshooting Workflow: LDAP configuration is not found
* [2019905](https://kb.netapp.com/support/s/article/cifs-setup-fails-with-ldap-error-as-the-domain-policy-requires-ldap-sealing-and-signing): CIFS setup fails with LDAP error as the domain policy requires LDAP sealing and signing
* [2020114](https://kb.netapp.com/support/s/article/clustered-data-ontap-does-not-support-ldap-signing): Clustered Data ONTAP does not support LDAP signing (earlier than 9.0)
* [1015908](https://kb.netapp.com/support/s/article/how-to-enable-ldap-signing-and-sealing-for-cifs-in-ontap-9-0): How to enable LDAP Signing and Sealing for CIFS in ONTAP 9.0

NDO Operations

* [3014404](https://kb.netapp.com/support/s/article/Does-clustered-Data-ONTAP-support-CIFS-SMB-NDO): Does clustered Data ONTAP support CIFS/SMB NDO?
* [8010137](https://kb.netapp.com/support/s/article/can-cifs-clients-survive-a-lif-migrate): Can CIFS clients survive a LIF migrate?

Remote VSS

* [1015099](https://kb.netapp.com/support/s/article/how-to-set-up-svm-cifs-for-hyper-v-over-smb): How to set up SVM/CIFS for Hyper-V over SMB

SMB Encryption and Signing

* [2024712](https://kb.netapp.com/support/s/article/cifs-poor-smb3-performance-issues-when-using-encryption): CIFS -Poor SMB3 performance issues when using encryption
* [2028165](https://kb.netapp.com/support/s/article/aes-encryption-enabled-leads-to-intermitent-loss-of-share-access): AES Encryption enabled leads to intermitent loss of share access

Other:

* [28417](https://kb.netapp.com/support/s/article/how-to-view-cifs-per-client-statistics-in-clustered-data-ontap-8-3-and-later): How to view CIFS per client statistics in clustered Data ONTAP 8.3 and later

**Clustered Data ONTAP CIFS Technical Reports:**

* [TR-3457 Unified Windows and UNIX Authentication Using Microsoft Active Directory Kerberos](http://www.netapp.com/us/media/tr-3457.pdf)
* [TR-3740 SMB 2.0 Next Generation CIFS protocol in Data ONTAP](http://www.netapp.com/us/media/tr-3740.pdf)
* [TR-3967 Deployment and Best Practices Guide for Clustered Data ONTAP 8.1 Windows File Services](http://www.netapp.com/us/media/tr-3967.pdf)
* [TR-4073 Secure Unified Authentication for NFS Kerberos, NFSv4, and LDAP in Clustered Data ONTAP](http://www.netapp.com/us/media/tr-4073.pdf)
* [TR-4100 Nondisruptive Operations and SMB File Shares for Clustered Data ONTAP](http://www.netapp.com/us/media/tr-4100.pdf)
* [TR-4124 Citrix ShareFile StorageZones on NetApp Solution Guide](http://www.netapp.com/us/media/tr-4124.pdf)
* [TR-4127 On-Demand Virus Scanning for Clustered Data ONTAP](http://www.netapp.com/us/media/tr-4127.pdf)
* [TR-4129 Namespaces in Clustered Data ONTAP](http://www.netapp.com/us/media/tr-4129.pdf)
* [TR-4138 Design Guide for Citrix XenDesktop on NetApp Storage](http://www.netapp.com/us/media/tr-4138.pdf)
* [TR-4172 Microsoft Hyper-V over SMB 3.0 with Clustered Data ONTAP: Best Practices](http://www.netapp.com/us/media/tr-4172.pdf)
* [TR-4175 Microsoft Windows Server 2012 Hyper-V Storage Performance: Measuring SMB 3.0, iSCSI, and FC Protocols](http://www.netapp.com/us/media/tr-4175.pdf)
* [TR-4189 Clustered Data ONTAP CIFS Auditing Quick Start Guide](http://www.netapp.com/us/media/tr-4189.pdf)
* [TR-4191 Windows File Services for Clustered Data ONTAP 8.2.x and 8.3](http://www.netapp.com/us/media/tr-4191.pdf)
* [TR-4211 NetApp Storage Performance Primer Clustered Data ONTAP  8.3](http://www.netapp.com/us/media/tr-4211.pdf)
* [TR-4247 Deploying SQL Server 2012 over SMB3 CA Shares on Clustered Data ONTAP](http://www.netapp.com/us/media/tr-4247.pdf)
* [TR-4336 Enterprise Application Transition to Clustered Data ONTAP 8.3](http://www.netapp.com/us/media/tr-4336.pdf)
* [TR-4349 Windows Server 2012 with Hyper-V over SMB Network Configuration Options and Best Practices](http://www.netapp.com/us/media/tr-4349.pdf)
* [TR-4379 Name Services Best Practices](http://www.netapp.com/us/media/tr-4379.pdf)
* [TR-4523 DNS Load Balancing in ONTAP](http://www.netapp.com/us/media/tr-4523.pdf)
* [TR-4543 SMB Protocol Best Practices ONTAP 9.x](http://www.netapp.com/us/media/tr-4543.pdf)

FPOLICY:

* [TR-4429 FPolicy Solution Guide for Clustered Data ONTAP: Varonis DatAdvantage](http://www.netapp.com/us/media/tr-4429.pdf)
* [TR-4449 FPolicy Solution Guide for Clustered Data ONTAP: Peer Software PeerLink](http://www.netapp.com/us/media/tr-4449.pdf)
* [TR-4453 FPolicy Solution Guide for Clustered Data ONTAP: NTP Software QFS](http://www.netapp.com/us/media/tr-4453.pdf)
* [TR-4465 FPolicy Solution Guide for Clustered Data ONTAP: dg file](http://www.netapp.com/us/media/tr-4465.pdf)
* [TR-4473 FPolicy Solution Guide for Clustered Data ONTAP: Veritas Data Insight](http://www.netapp.com/us/media/tr-4473.pdf)
* [TR-4479 FPolicy Solution Guide for Clustered Data ONTAP: Northern Storage Suite (NSS)](http://www.netapp.com/us/media/tr-4479.pdf)
* [TR-4488 FPolicy Solution Guide for Clustered Data ONTAP: Veritas Enterprise Vault](http://www.netapp.com/us/media/tr-4488.pdf)

ANTIVIRUS:

* [TR-4286 Antivirus Solution Guide for Clustered Data ONTAP 8.2.1: McAfee](http://www.netapp.com/us/media/tr-4286.pdf)
* [TR-4304 Antivirus Solution Guide for Clustered Data ONTAP 8.2.1: Symantec](http://www.netapp.com/us/media/tr-4304.pdf)
* [TR-4309 Antivirus Solution Guide for Clustered Data ONTAP 8.2.1: Sophos](http://www.netapp.com/us/media/tr-4309.pdf)
* [TR-4312 Antivirus Solution Guide for Clustered Data ONTAP 8.2.1: Trend Micro](http://www.netapp.com/us/media/tr-4312.pdf)
* [TR-4445 Antivirus Solution Guide for Clustered Data ONTAP: Kaspersky](http://www.netapp.com/us/media/tr-4445.pdf)

Other articles:

* [Recommended Data ONTAP Releases on the NetApp Support Site](https://kb.netapp.com/support/index?page=content&id=7010240)