



Avere OS 5.3.6.5 Release Notes

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New in Avere OS 5.3.6.5

This release includes several fixes for problems related to management service startup and link aggregation.

Resolved Issues

- 6014464 Fixed a locking issue within the link aggregation driver. This problem could occasionally cause the system to crash when configuring a link aggregate.
- 7824839 Enabled Server Name Indication (SNI) in TLS connections to back-end object storage. This change prevents connection failures when communicating with services that require SNI information from systems that support SNI. This change affects Azure and other object store providers.
- 8087992 The memory available to the main software process in FXT 6000 series nodes has been increased by 25GB. This change significantly reduces swap space usage.
- 8657279 Fixed a bug that could cause the management service (mgmtd) to crash at startup when network connectivity issues prevented it from communicating with other nodes. When network link aggregation was in use, bug 8675331 could cause this crash.
- 8675331 Fixed a bug that caused the management service (mgmtd) to write an erroneous temporary network configuration at process startup that caused network link aggregates to be torn down. On some hardware platforms, this teardown process could take a long period of time, causing a loss of network connectivity and leading to a mgmtd crash (bug 8657279) and/or a kernel core (bug 6014464).
- 8690658 The network manager process has been changed to disable the link aggregate interface instead of destroying it. The interface is left unused. This change mitigates other issues related to destroying a link aggregate interface.

New in Avere OS 5.3.6.4

Resolved Issues

Filesystem

- 8126540 Additional work was done to fix issues with group IDs outside the first 16 in the groups list. This issue affected customers who use extended groups. The symptom of this problem was that a file's group ID (GID) could not be changed if the GID was not one of the first 16 groups listed for the account.

General

- 6885031 Fixed an incorrect path that could cause the system to fail to find CA certificates in a custom certificate bundle. Before this change, the problem could result in broken symbolic links in the Avere OS certificates directory.

New in Avere OS 5.3.6.3

Resolved Issues

Filesystem

- 8126540 Fixed an issue that could prevent a file owner from changing a file's group ID if the GID was not one of the first 16 in the groups list.

General

- 8035682, 8050881 Improved failover for sending secure email notifications from the cluster. Now, if TLS negotiation fails, connections are restarted without encryption. Emails are sent in plain text until the next email notification job starts.

To avoid TLS negotiation failures, make sure that your SMTP server uses [cipher suites](#) that are compatible with Avere OS.

This change also fixes a system restart that was associated with a problem in the email utility.

New in Avere OS 5.3.6.2

- 7630081 This release corrects a problem introduced in the previous version, which could lead to excessive numbers of DNS queries for cloud core filers in AWS and GCE cloud environments.

This fix avoids the problem by restricting the number of cloud core filer addresses used for certain tasks, and by setting a default maximum of NAS core filer addresses to avoid generating excess DNS queries.

New in Avere OS 5.3.6.1

Resolved Issues

Filesystem

- 7081961 Fixed a problem with space calculations for caches located in the cloud. In some situations, the problem could cause the cache to stop performing operations.

General

- 6518120 The control panel alert history now lists cleared conditions as well as showing alerts.
- 7227579 Added a new support information upload type, `securitylogs`, which captures audit-related log files. This type of data can be uploaded more frequently than full support bundle uploads.
- 7238654 Added support for sending support uploads to Azure blob storage with immutability policies configured. Immutability is required in some cases for long-term security audits.
- Read more about [immutability policies for Blob storage](https://docs.microsoft.com/azure/storage/blobs/storage-blob-immutability-policies-manage) (<https://docs.microsoft.com/azure/storage/blobs/storage-blob-immutability-policies-manage>)
- 6600899 When users upload support-related cluster information from the control panel, they are notified that Microsoft's handling of the data is subject to the EULA and privacy policy.

NFS

- 5411717 Updated the XML-RPC method `corefiler.modify()` so that it now can be used to change NAS core filer IP addresses without changing DNS names.
- Before this change, the `corefiler.modify()` method would not start the transition if the old and new DNS name were the same.
- 6529386 Namespace changes now complete more quickly. Specifically, the XML-RPC methods `vserver.addJunction()`, `vserver.modifyJunction()`, and `vserver.removeJunction()` were updated to take less time.
- 6529374 Improved the amount of time it takes to show exports for a newly created core filer that does not use the local directories feature in its cache policy.
- This change affects the amount of time between the start of the XML-RPC method `corefiler.create()` and the completion of to the `nfs.listExports()`.
- 6529372 Decreased the execution time for the XML-RPC methods `nfs.modify()`, `vserver.addJunction()`, `vserver.modifyJunction()`, and `vserver.removeJunction()`.
- 6529373 Reduced the amount of time needed to create a NAS core filer. This change modified the XML-RPC `corefiler.create()` method so that it resolves NAS core filer DNS addresses 20 to 30 seconds sooner.
- 7054774 Added support for resolving Isilon SmartConnect round-robin DNS names. Other Isilon SmartConnect modes are not supported.

5416783 An alert was added to detect address changes in a NAS core filer's DNS entry. The alert is raised if the addresses returned do not match the addresses in use.

Avere OS does not automatically switch to using new addresses. To start using the new addresses, use `corefiler.modify()` or follow the instructions in the alert. An administrator also can resolve the alert by restoring the previous addresses.

SMB/CIFS

7227579 Fixed a defect that prevented the SMB process from restarting after certain types of memory allocation failures. In general, the Avere OS SMB/CIFS process is configured to restart and write a core file if there are memory allocation failures.

New in Avere OS 5.3.5.1

Resolved Issues

Filesystem

- 2765262 Fixed a defect that caused the cache to fail to complete flushing data to back-end storage. Additional improvements were made to improve error detection.
- 5132942 Fixed a problem in the HA module that could prevent cluster creation from completing.
- 5239663 Enhanced filesystem access speed while the cache is being populated in the background.
- 5727571 Fixed an out-of-memory condition that occurred when the cluster file system recovery tool encountered very large directories. (This situation involved dozens of directories with more than a million entries each.)
- 5816179 Eliminated a waiting period before starting failover if the filesystem process is failing with a core file.
- 5865574 Disabled bloom filters for directories with names that can cause a rare type of hash collision. This change prevents a possible system restart.
- 6017076 Addressed a defect that prevented the cache from synchronizing with the back-end data structure after back-end directory entries were removed by writing around the cache cluster.
- 6031250 Improved accuracy in directory flushing.
- 6055784 Fixed a problem that could cause a restart during initialization or HA setup if statistics are being collected.
- 6113410 Fixed a crash caused by uninitialized memory.
- 6254713 Fixed a problem that could cause the link count to be off by one if a directory was renamed to the same name as an existing directory that was empty. (The existing empty directory would be overwritten but still appeared in the count.)
- 6278225 Fixed initialization processes to prevent a possible core loop.
- 6290767 Addressed an issue that could cause a filesystem restart if connection requests to a cloud core filer timed out.

- 6416424 Added internal settings that treat all Azure HPC Cache storage targets as WAN connected storage.
- 6446744 Fixed an issue that could cause TLS connections to be opened too frequently to cloud back-end storage, resulting in peer resets.
- 6515235 Added more debugging information to print XML string to log messages in case of error.
- 6528488 Fixed an issue that caused problems upgrading software when cluster nodes had different software versions.
- 7046266 Fixed an issue where the XML parser failed to parse an empty token in a REST response.
- 7119939 Fixed a bug in read-only caching code that could cause nodes to restart.

General

- 2682245 Updated code to ensure that the correct HTTP proxy configuration is always used when attempting to connect to Azure endpoints.
- 5374631 Fixed username/password-authenticated proxy handling when downloading an upgrade package for Avere OS.
- 5877092 Added cluster proxy configuration into requests for the Azure endpoints API when standing up an Avere vFXT for Azure service.
- 6037898 Increased the page pool size for vFXT extra large instances to reflect the correct memory size.
- 6122754 Patched a resource leak in a third-party PHP module that could cause Apache to become unresponsive to requests.
- 7087347 Updated the XML-RPC API code for creating Azure Blob core filers on cloud-based clusters. After this change, the system attempts to detect the blob storage hostname if not supplied, instead of assuming that it is blob.microsoft.net.
- 7112400 Changed software to prevent a node management system crash if a user-configured management address was removed or became unavailable. This problem did not affect management IP addresses assigned by the cluster.

NFS

- 5865686 Fixed a problem that could cause cluster nodes to go into a pending state after connectivity problems with NAS core filers.
- 6008216 Corrected a problem that could cause communication issues with a cluster node. The root cause was a defect that allowed an IP address from an NFS client performing NLM lock operations to be reassigned as a cluster address.
- 6213517 Fixed an error that caused the XML-RPC method `nfs.listExports()` to repeat export discovery even when configured to not retry.

SMB/CIFS

- 5997035 Removed a defect that could cause the CIFS logon service process to enter a bad state after an unrelated core file was generated in a different CIFS logon service process. This situation could cause symptoms that included high CPU utilization and excessive log messages (which could lead to system instability if the log partition became full). After this change, the remaining CIFS logon service process restarts gracefully.

- 6056374 Replaced an internal utility used to download netgroup, username, and username map URIs after a FreeBSD upgrade caused it to stop working. The new utility supports both http and https.
- 6214156 Help for the XML-RPC method `corefiler.create()` has been updated to indicate that NetApp Cluster-mode core filers require the `filerClass` attribute to be set only if CIFS ACL junctions exist.

Contact Microsoft Customer Service and Support

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