Operating System Release Notes

Version 9.0.0

2021-08-09

Supports:

Azure FXT Edge Filer (all models)

Avere FXT (all models)

Avere vFXT for Azure

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What's new in version 9.0.0

Resolved issues

Filesystem

9356958	Fixed an issue that could cause a filesystem service process restart with associated core file during processing of the XML-RPC method `nfs.listExports`.
9861134, 10246143	Improved failover performance in the directory manager.
10000220	Increased the time between metadata operation retries to avoid overwhelming the NFS server while writing cached information to long-term storage.

General

9493004	Fixed a defect introduced in version 6.0.0 that could prevent NFS and SMB operations from completing in simple namespace vservers (a legacy configuration). **Note:** Any cluster that uses a simple namespace vserver and has SMB shares that use the access control method CIFS ACLs **must replace their simple vserver configuration before upgrading**. If the cluster is upgraded with the simple namespace vserver, access to that SMB share will be unreliable. There are no plans to support this configuration in modern OS versions.
9837732	Added support for resolving Isilon SmartConnect Advanced round-robin DNS names (with dynamic allocation) in the presence of competing DNS queries. A competing DNS query is one from another NFS client that happens while the poller is running. After a new core filer is created, the cluster now tries to determine all of the SmartConnect addresses within one or more DNS poll periods. If the cluster finds new addresses in consecutive DNS poller runs, a poller alert is raised and the DNS poll period is increased for the affected core filer, to a maximum of one hour. The increased DNS poll period resets to normal when the DNS poller alert is no longer raised. Note that setting a long poll period for the affected core filer will delay detection of DNS issues for other core filers. Follow the instructions in the alert to start using the new addresses found by the poller. Alternatively, you could use the XML-RPC method `corefiler.modify` and the `networkName list` setting to set the IP addresses manually. If the rate of competing DNS queries is too high, the cluster OS will be unable to determine all the addresses – in that case, you must use the `corefiler.modify` setting `networkName` list. If the management service process restarts, the DNS poller alert might be raised briefly until the poller resolves all the addresses again.

	This change also increases the limit on the number of NAS core filer addresses from 200 to 1000 by default, and bounds the time for NAS core filer DNS resolution to 9 seconds for `corefiler.create`.
9946312	Fixed an internal process watchdog that failed to trigger when server processes became stuck. When the watchdog failed, operator intervention was needed to restore services.
9990721	A startup error was corrected that could cause the Avere Control Panel web server to fail to start on first boot of a new system.
10024298	Memory settings were changed to reduce the use of swap during some workloads and improve performance in those situations.
10118638, 10228055	Fixed a problem with statistics retrieval that could cause Azure HPC Cache to show incorrect values in the cache metrics charts.

NFS

7244831	In specific situations, a NAS storage export now can be unmounted from the cluster without needing to suspend access to all exports on the same core filer. Two conditions must be met to unmount an export without suspending its core filer: • The last junction to the mounted export has been removed, and the writeback delay time has passed. • Writeback rates for this core filer are within its writeback delay. (That is, if the writeback delay is one hour, no files older than one hour exist in the cache.) This system uses the XML-RPC method `corefiler.setMountExports` to remove the export from the cluster's list of exports. The action might fail if other junctions access the core filer on different exports. In that case, an error message is returned and you must suspend the core filer before removing the export.
10387682	The maximum outstanding ONC RPC request limit per TCP connection was reduced from 256 to 128 for new NFS core filers. Existing NFS core filers continue to use the value 256. This change improves compatibility with NetApp storage systems. • NetApp ONTAP releases earlier than version 9.8 throttle NFS TCP connections when the outstanding request limit of 128 is reached. • NetApp ONTAP releases 9.8 and later throttle NFS TCP connections when the outstanding request limit of 128 is reached, and raise the EMS event named `nblade.execsOverLimit`. Before this change, the FXT operating system allowed up to 256 outstanding requests, which exceeds the NetApp limit. New core filers created after upgrading the FXT operating system to 9.0 have the new limit of 128 outstanding requests, which matches the NetApp limit.

SMB

9546194	Fixed a potential user/group download failure that could occur when NFS Kerberos and SMB are enabled. This change prevents the failure by disabling a feature that is specific to FXT cloud core filers. This change means that UID and GID information must be available to the cluster before any files or directories are created in a cloud ACL share.
10119321	Symbolic links now can be resolved within CIFS ACL junctions when the core filer is not configured to perform a server-side resolve. Restrictions: • Absolute symbolic links are not supported; only relative symbolic links are resolved. • Evaluation of a symbolic link must not exit the root of the "CIFS ACL" junction. • Evaluation of a symbolic link must not exit the root of the core filer SMB share. • Evaluation of a symbolic link must not exit the root of the core filer NFS export. • Evaluation of a symbolic link must not exit the root of the cluster SMB Share. • A path can contain no more than 64 symbolic links (which includes cycles in symbolic links). • Symbolic link resolution is supported only when using SMB2. • Symbolic links created through NFS must use a UTF-8 encoding.

Previous release information

This release builds on the contents of these recent software updates:

- Version 8 – June 2021
- Version 7 – May 2021
- Version 6 – April 2021
- Version 5.3

Older release notes are available from the legacy documentation page.

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