RELEASE NOTES

Dell EMC® Unity™ Family, Dell EMC Unity™ Hybrid, Dell EMC Unity™ All Flash, Dell EMC UnityVSA™

Version 5.0.0.0.5.116

Release Notes

These release notes contain supplemental information about this Unity release.

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Revision history

Table 1 Unity Family release notes revision history

Revision	Date	Description
26	June 2019	Release 5.0.0.0.5.116
25	March 2019	Release 4.5.1.0.5.001
24	January 2019	Release 4.5.0.0.5.096
23	October 2018	Release 4.4.1.1539309879
22	August 2018	Release 4.4.0.1534750794
21	May 2018	Release 4.3.1.1525703027
20	April 2018	Addition of Proxy NAS server under New Features section.
19	March 2018	Release 4.3.0.1522077968
18	March 2018	Release 4.2.3.9670635
17	January 2018	Release 4.2.2.9632250
16	October 2017	Release 4.2.1.9535982
15	October 2017	Release 4.2.0.9476662 with new features included from 4.2.0.9392909.
14	August 2017	Release 4.2.0.9476662
13	July 2017	Release 4.2.0.9392909
12	April 2017	Release 4.1.2.9257522
11	February 2017	Release 4.1.1.9138882
10	January 2017	Release 4.1.0.9058043
09	December 2016	Release 4.1.0.8959731 (upgrade only) Release 4.1.0.8940590
08	November 2016	Release 4.0.2.8627717
07	October 2016	Documentation update only - ESRS Requirements.
06	September 2016	Release 4.0.1.8404134
05	September 2016	Release 4.0.1.8320161
04	August 2016	Release 4.0.1.8194551
03	July 2016	Documentation update only
02	June 2016	Localization information
01	May 2016	Initial release, 4.0.0.7329527

Product description

Dell EMC Unity™ is targeted for midsized deployments, remote or branch offices, and cost-sensitive mixed workloads. Unity systems are designed for all-Flash, deliver the best value in the market, and are available in purpose-built (all Flash or hybrid Flash), converged deployment options (through VxBlock), and a software-defined virtual edition.

The Dell EMC Unity™ Family consists of:

- Unity (purpose built): A modern midrange storage solution, engineered from the ground-up to meet market demands for Flash, affordability and incredible simplicity. The Unity Family is available in 12 All Flash models and 12 Hybrid models.

- VxBlock (converged): Unity storage options are also available in Dell EMC VxBlock System 1000.

- UnityVSA (virtual): The Unity Virtual Storage Appliance (VSA) allows the advanced unified storage and data management features of the Unity family to be easily deployed on VMware ESXi servers, for a 'software defined' approach. UnityVSA is available in two editions:

  - Community Edition is a free downloadable 4 TB solution recommended for non-production use.

  - Professional Edition is a licensed subscription-based offering available at capacity levels of 10 TB, 25 TB, and 50 TB. The subscription includes access to online support resources, EMC Secure Remote Services (ESRS), and on-call software- and systems-related support.

All three deployment options, i.e. Unity, UnityVSA, and Unity-based VxBlock, enjoy one architecture, one interface with consistent features and rich data services.

Unity is Redefining Storage Simplicity and Value

Here are some of the features and supporting statements that allows Unity to redefine midrange storage:

- Simple: Simplified ordering, all-inclusive software, rack-and-stack in less than 2 minutes, customer installable, a new slick HTML5 user interface, proactive assist, and CloudIQ internet-enabled monitoring.

- Modern: Unity is designed to support the latest dense Flash drives such as 3D TLC NAND with a Linux-based architecture, new Intel Haswell, Broadwell, and Skylake multicore processors, up to 440K IOPS, 2U dense configurations, scalable 64bit file system & file system shrink, unified snapshots & replication, Data-at-Rest-Encryption (D@RE), support for public and private cloud access, deep ecosystem integration with VMware (native VVols) and Microsoft, and much more.

- Affordable: Unity delivers the best midrange Flash economics with a great entry price and overall TCO. Unity All Flash configurations start under $15K and Unity Hybrid Flash configurations start under $10K. UnityVSA allows anyone to get started for free and upgrade into the supported virtual edition, a purpose-built hybrid or all-Flash system, or into converged infrastructure.

- Flexible: You can meet any storage deployment requirement with Unity from virtual to purpose-built to converged infrastructure. All deployment options support the same data unified data services (SAN/NAS and VVols) to support any workload with traditional file (file consolidation, VDI user data, home directories) as well as transactional workloads for both file and block on both all Flash and hybrid configurations (Oracle, Exchange, SQL Server, SharePoint, SAP, VMware and Microsoft Hyper-V).

Unity XT Platform Refresh (380/F, 480/F, 680/F, 880/F series)

The Unity Next Generation Platform refresh, also known as the Unity XT Series, consists of 8 new hardware models, including 4 Hybrid Flash and 4 All Flash configurations—the Dell EMC Unity 380, 380F, 480, 480F, 680, 680F, 880, and 880F. The XT series increases performance of I/O, maximizes storage efficiency features like Advanced Data Reduction with inline deduplication, and supports a 25Gb interface card.

The Unity 380(F) is based on the existing platform today for the 350F model, but with additional memory (64GBs per SP).

The Unity 480/F, 680/F, and 880/F are built on an Intel Skylake platform. For more information, see the *Unity 480/F, 680/F, and 880/F Hardware Information Guide*.

The Unity XT series supports Advanced Data Reduction in both dynamic and traditional pools in All Flash (F) models, and All Flash pools in Hybrid models.

Unity software OE version 5.x supports the new x80 series models, in addition to all existing x00 and x50 series models. Refer to the New Features section for more details on all software features introduced with Operating Environment 5.0.

New features

Introduction of the new Unity XT series

This release features eight new Unity models: Unity 380, 380F, 480, 480F, 680, 680F, 880 and 880F. The Unity XT series supports Advanced Data Reduction in both dynamic and traditional pools in All Flash (F) models, and All Flash pools in Hybrid models.

The Unity 380/F models are built on the existing Unity models, but with increased memory and support for a 25Gb interface card. The 480/F, 680/F, and 880/F models are built on an Intel Skylake platform.

Additionally, the Unity XT series offers:

- A dual-CPU motherboard per SP

- Higher scaling of CPU, memory, and drive count (up to 16-core @ 2.1GHz, up to 768GB per system, up to 1500 drives)

- A completely tool-less installation

The Unity XT 480/F, 680/F, and 880/F models have the following notable physical differences from the other Unity platform models:

- Electrical specifications:
    - Unity XT 480/F, 680/F, and 880/F DPE power figures range between 100 to 240 VAC ± 10%, single phase, 47 to 63 Hz representing a product configuration with max normal values operating in an ambient temperature environment of 20°C to 25°C.
    - The chassis power numbers may increase when operating in a higher ambient temperature environment.

      Refer to the Dell EMC Unity XT Series data specification sheet for your system for additional details on power requirements.
- Rack depth and enclosure weight:
    - The new DPE is 31.2 inches (79.55 cm) deep, requiring an additional seven inches of rack depth compared to existing 25-drive DPE Unity models and the Unity 380/F, which are 24 inches (60.96 cm) deep.

New features

- o The new DPE (unpopulated) is a base weight of 54 pounds (25.9 kg), compared to the existing 25-drive DPEs and the Unity 380/F DPE, which have a base weight of 44 pounds (20 kgs).

- DAE addressing:

  - o The bus number of the new DPE is separate from the DAE address labeling, meaning the DPE itself is not labeled as bus 0, but is bus 99. Connecting the first DAE to expansion port 1 of the DPE creates back-end bus 1. The enclosure address of the first DAE is 1_0.

  - o Connecting a second DAE to DPE expansion port 0 to extend back-end bus 0 (BE0) designates the DAE as enclosure 0 of bus 0, and its enclosure address is BE0 EA0 (0_0) For all other Unity models, this DAE is enclosure 1 of the bus, and its enclosure address is BE0 EA1 (0_1).

Drive compatibility

Moving drives from existing Dell EMC Unity models to Dell EMC Unity XT x80/F models, or moving drives from Dell EMC Unity XT x80/F models to existing Dell EMC Unity system models, is not supported. This is to ensure the new Unity XT arrays are configured with drives qualified with its new platform, and ensures optimal performance, longevity, and Support response with planned spares infrastructure.

Refer to the *Dell EMC Unity XT* or *Dell EMC Unity Drive Support Matrix* for your model for addition details on which specific drives are supported on your system.

New drive support

With this release, all Unity Hybrid models now support 12 TB nearline SAS drives.

Automatic clean-up of resolved Health Alerts

In previous releases, the **Alerts** page showed all alerts for the system. With this release, the default view will show only active alerts that have not yet been resolved. There are four new alert states:

- `Active_Automatic:` Active alerts that will be automatically cleared once the underlying issue is resolved.
- `Active_Manual:` Active alerts that you must manually clear once you confirm the issue is resolved.
- `Updating:` Brief status when the alert is transitioning between the other states.
- `Inactive:` Alerts that are no longer active after the issue has been resolved and automatically cleared or manually cleared.

You can change the column view at any time to show the alert **State** column and to hide/show alerts with each of the above alert states. You can also **Deactivate** any alerts that are in the `Active_Manual` state that you believe to be resolved.

In addition, the **System Health** view now shows not just health of system hardware components, but also of storage resources such as LUNs, NAS servers, file systems, hosts, and datastores based on their active alert statues. This allows a more centralized view of system health.

Drive firmware update after OE upgrade

After you successfully upgrade the software Operating Environment (OE), and whenever new drive firmware is available and applicable to your system, you will see the option to automatically launch the **Upgrade Drive Firmware** wizard. This includes the case when there is updated drive firmware bundled with your software OE. It is highly recommended that you always update your drive firmware to the latest version for optimal system performance.

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Deployment of ESRS using RSA credentials

Service personnel can now use their RSA credentials to help configure either Centralized or Integrated ESRS. This is especially helpful in the case where your support account may not be set up completely or correctly. Service personnel can enter their RSA credentials instead of customer Support Account credentials on the required steps during ESRS setup, or for some configuration changes.

ESRS Virtual Edition High Availability cluster support

With this release, Unity now supports ESRS clusters for high availability with Centralized ESRS. Unity now supports a secondary gateway in the same ESRS VE cluster as the primary gateway that Unity can switch to if the primary ESRS VE server fails over due to a connection or network issue.

Enhanced data reduction

The data reduction feature has been enhanced to:

- Add support for NFS and VMFS datastores.
- Deduplicate uncompressed blocks for new writes or overwrites. Existing data does not change.
- Support the following models:
    - Dynamic or Traditional pools in Unity 380F, 480F, 680F, and 880F systems
    - Dynamic pools in Unity All-Flash 450F, 550F, and 650F systems
    - All-Flash pools in Unity Hybrid 380, 480, 680, and 880 systems

Modify access for multiple hosts

You can now modify or delete access for multiple hosts simultaneously for a LUN or VMware datastore. To do this, use the new "Modify Host Access" menu item that was added to the More Actions menu for LUNs and VMware datastores. This "Modify Host Access" menu item replaces the "Remove Host Access" menu item.

If the selected LUNs or VMware datastores have different host accesses, a **Merge Host Access** window opens that merges host access for all the selected LUNs or VMware datastores. For example, if some LUNs use Host1 and Host2, and others use Host5 and Host6, the **Modify Host Access** window will list all the hosts (Host1, Host2, Host5, and Host6) after the merge operation completes.

Capacity alarm thresholds have been added

Within a file system's properties, you can now set capacity alarm thresholds for when Info, Warning, and Error alert messages are generated. The thresholds take effect after you click "Apply" in the File System Properties window.

The range for all three alert thresholds is from 0 to 99, where 0 disables the alert. The Info Threshold value (default of 0%) must be set to a value less than the Warning Threshold value. The Warning Threshold value (default of 75%) must be set to a value less than the Error Threshold value (default of 95%).

Drive enhancements

We have enhanced wear leveling and load balancing for dynamic pools in solid state drives to improve performance.

Advanced replication topologies for asynchronous file

Unity supports advanced replication topologies, that is, fan-out (1 to many) replication and cascading (multi-hop) replication for asynchronous file replication only. Fan-out supports a maximum of four asynchronous replication sessions on the same file storage. Cascaded replication replicates to another tier or level from an already replicated resource. Each cascade

level can use fan-out replication for up to three additional sites. Each replication session has an independent Recovery Point Objective (RPO).

The existing replication operations are supported with some restrictions:

- This feature only supports file storage objects using asynchronous replication and does not support block storage objects.
- All systems joining the multiple sessions, either in fan-out (star) or cascaded mode, must be running OE version 5.x.
- Snapshot replication can only be supported for one asynchronous session among all the sessions associated with the same storage object.
- Only one loopback asynchronous session is supported per storage object

Cascade mode for third site asynchronous replication

When one synchronous replication session is created for MetroSync for Unity, a cascade replication session cannot be created from the destination side and only one remote asynchronous session should be created from the source. When a storage object is created as the destination mode and one asynchronous session is created on it as the destination, that storage object can be used to create another asynchronous session when it acts as the source.

Changed features

Windows installation path for Unity utilities

The Windows default installation path for some Unity 5.x utilities, such as the UEMCLI package, Connection Utility, and Unity VSS plug-in, has changed to include "Dell EMC" and "Unity" in the subdirectory folders rather than the previous "EMC" folder in the 4.x versions of these utilities.

For example:

4.x UEMCLI Windows paths:

- C:\Program Files (x86)\EMC\Unisphere CLI (64-bit)

- C:\Program Files\EMC\Unisphere CLI (32-bit)

5.x UEMCLI Windows paths:

- C:\Program Files (x86)**Dell** EMC**Unity**\Unisphere CLI (64-bit)

- C:\Program Files **Dell** EMC**Unity**\Unisphere CLI (32-bit)

Fixed Issues

Issue number	Problem description	Description of fix	Found in version	Fixed in version
981015/ 981302	When deploying a TBN, if binding the same vmnic to the 2 uplinks, the deployment tool will give a warning about this. If the user ignores the warning and continues to deploy, the TBN VM will still be deployed successfully. However, it will not be able to be detected by the	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	UnityVSA, and the TBN function cannot be enabled in Unisphere.			
953946/ 999523	When deleting a VMFS or LUN group synchronous replication session, the delete task may hang.	Fixed in code.	4.0.0.7329527 and later	5.0.0.0.5.116

984109/ 984872	Using uemcli to show the session, the session state is Failed, the Progress is 90% and the Health state is OK.
	Example:
	`ID           = move_44635`
	`Source resource   = res_6`
	`Source member LUN  = sv_42`
	`Destination pool   = pool_1`
	`State         = Failed`
	`Progress       = 90%`
	`Health state    = OK (5)`
	`Health details   = "The`
	`specified storage resource`
	`move session is operating`
	`normally."`
		Fixed in code.	4.1.0.8959731	5.0.0.0.5.116

982819/ 998593	On Unisphere GUI for a FS that has a sync session, when delete a sync session it will have a small chance to encounter "Failed: An unknown error occurred. (Error Code:0x809f)" when there is an ongoing snapshot operation.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
981543/ 982483	During CIFS import session cutover, user will see an alert in Unisphere: "Import session import_x failed and paused importing data during initial/incremental copy due to source IO failure."	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
981079/ 982378	Resources such as file system and LUN cannot be deleted because resource has replication backup system snapshot (snapshot name with postfix .999) and resource has no replication session.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
980136/ 982723	When user runs concurrent fs/nasserver recovery within a pool (start fs/nasserver -poolid <pool id>), some of the UFS64/NasServers recoveries may fail with error code 0xc1728007 (MLU_REPL_MGR_RECOVER_ERROR_FS_IN_USE_BY_REPLICATION).	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
987334/ 987693	This issue happens during a CIFS migration with a FLR file system. After cutover, when the user tries to create an append only FLR file with an RP (Retention Period) longer than the file system's maximum RP, this file will fail to become append-only on both the source and destination. Instead, this file is read-only on the source side and writeable on the destination side. It	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	is possible that some data written to the file cannot be synchronized to the source side during the migration process. From the file import session health state, the user may see that the session is in critical failure due to source I/O failure.			
921270	The reported health status of a file system in the REST API was not consistent with the Unisphere UI or CLI. For example, the CLI reported the following status: `Health details = "The NAS server used by this file system is either restarting, is degraded, or is not accessing an external server. Check the NAS server health status and logs. If needed, check the external server status and login information."` The REST API reported the following status: `health":{"value":10,"descriptionIds":["ALRT_NAS_FILEDNSSERVER_NOT_CONNECTED"],"descriptions":["DNS servers configured for the DNS client of the NAS server are not reachable. Check network connectivity. Ensure that at least one DNS server is running and the storage system can access it."]}}}`	Fixed in code.	4.2.0.9392909	5.0.0.0.5.116
990828/12980528	Multiple LUNS were offline. In ktrace logs, there was one exception showing that some valid elements could not be deactivated on a flash device.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
944986	When doing the Async Replication VDM group resume/failback/planned failover, especially when there is a large number (256+) of File Systems in that VDM, user may see error message mentioning at least one replication in the group failed in the group operation. For example: `"Group resume operation failed. At least one replication session in the group, for either a NAS server or file system, failed. To view more details, access the audit log on the 'Logs' page in Unisphere, or use`	Fixed in code.	4.3.0.1522077968	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	the CLI '/event/log' show command." The audit log also showed the operation for some individual sessions failed.			
945747	1. If user snaps were created on the async replication source, and replication sessions were created with "replicateExistingSnaps"=Yes, pause and resume replication happens during initial sync. The snaps that have been transferred to the destination will be created on the destination again after the resume operation completes. 2. If a delete replication session operation occurs when syncing data, the user snaps that haven't been transferred to destination will show that they are in a "Pending" state (if they were marked to be replicated). If the user tries to create the replication again with "replicateExistingSnaps"=No, those snaps will be also transferred to destination. 3. If user snaps were created on the async replication source, and replication is created with "replicateExistingSnaps"=Yes, and unplanned failover replication during initial sync occurs, then the session is resumed on original destination. The user snaps that have not been transferred to original destination will be created on original source again after the resume operation completes.	Fixed in code.	4.3.0.1522077968	5.0.0.0.5.116
959090/10837431	If cache was lost on both SPs, the system entered service mode.	Fixed in code.	4.2.3.9670635	5.0.0.0.5.116
963620	During replication, the CPU Utilization was higher than expected.	Fixed in code.	4.4.0.1525775707	5.0.0.0.5.116
965350/11086566	A block import session was stuck in the initialized state if the SANCopy session count exceeded the limit.	Fixed in code.	4.2.3.9670635	5.0.0.0.5.116
968963/11193485	When the CEPP server on the destination side had an access issue, the NAS server was shown as degraded on the destination side. In addition, if the replication of the array failed over several times, the NAS servers on both sides were shown as degraded, even after the CEPP server returned to normal.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
972898/11781222	After a drive replacement, drive 0.0.0 was reported as "Removed" with RAID groups bound on it in a "Degraded" state as the drive rebuild did not complete.	Fixed in code.	4.2.0.9476662	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
973429/11919276	An unexpected single SP reboot occurred when processing a response message from the saspmc driver after interrupt was disabled (the corresponding request message had been released). This was due to the SPCv controller's error handling not working correctly.		4.3.1.1525703027	5.0.0.0.5.116
975542/11672281	1. When a VMFS sync replication session encountered a planned failover, the underlying Consistency Group (CG) was put into a "waiting on sync" state (the data was no longer synchronized). When trying the next planed failover, the operation would always wait for the CG to become "in-sync" again and would hang indefinitely. 2. When the first issue occurred, running the `uemcli /prot/rep/session show` command still showed the operational status of the session as "Active", even though the data was not synchronized.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
975783/11390101	When the management port of the array was down or had a disconnected cable, there was no alert reported for the issue.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
976531/12231292	If the domain in the LDAP configuration was not the same (case sensitive) as the domain on the LDAP Server - for example, "acme.com" vs. "ACME.com", deleting the role mapping for one LDAP user or group also deleted the role mapping of all local and LDAP users and groups with the same role. Authentication would succeed for other user accounts, then access was denied because the account did not have a role assigned.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
976729	The application running on a Windows client displayed a PATH_NOT_FOUND error when attempting to create a file or directory on an SMB share. This issue occurred especially when multiple applications accessed a directory tree when this tree was deleted.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
980295	When multiple LUN migration cancellation operations were in progress, some failed due to timeout.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
981469/12502037	LDAP user authentication on the array failed if the LDAP server did not respond to requests within 2 seconds.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
982829/12758085	When a user enabled CAVA, intermittent SP panics occurred during I/O.	Fixed in code.	4.2.3.9670635	5.0.0.0.5.116
982904/12620567	In the Unisphere UI, when the user selected existing LUNs to create a LUN group, the existing host access for member LUNs was overridden by the host access configured for the LUN group when: 1. The selected LUNs had existing host access. 2. Host access to the LUN group was configured after the LUN group was created and the selected LUNs became members of the LUN group.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
983117/12347310	Response time for an asynchronous NFS mount operation was abnormally high when writing large files (over 10 GBs). The response time could take up to 30 milliseconds.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
983173/ 973281/ 11890163	If auto-tiering was enabled, any failures of underlying slice-relocation could cause the following slice relocation error: `Slice relocations failing with reason 0xc12d8416 = MLU_FSMGR_ERROR_RELOCATE _SLICEINFO_MISMATCH.` run SATCheck on pool, get following result: `A-R slice without associated relocation obj in ODB FSID:1073741829, POS: 0x2cc0000,Index: 4, Offset:3227648(0x314000) ,Flu Device:CLARiiONdisk0 SAT Block 0 Index 4 failed validation.`	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
983664/12713609	SMB 3.1.1 capable clients and users with large KRB tokens could not log in.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
983893/12512598	A deadlock occurred when performing a migration. The migration was always in the MIS_EXECUTING state.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
983965/12331740	When the user tried to rename the CIFS computer name during a migration cut-over, some valid computer names were considered as already existing in the domain. The user was asked to change to a new computer name. For example, if a computer name of "abc\def" already existed in the domain, computer name "abc" was	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	considered as pre-existing in the domain and could not be reused.			
983973/12739819	If a user selected one or more hosts in NFS Share host access list in the Unisphere UI, the host access list would show invalid data after adding more hosts.	Fixed in code.	4.2.0.9476662	5.0.0.0.5.116
984501/12858970	A memory leak in the Mountd program of the NFSv3 protocol could have led to gradual memory exhaustion. This could have led to SP reboot situations when enough memory was not available.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
984730/12754426	When a Domain Controller had been removed from the environment and one week passed, it was removed from the Unity NAS server's DC list. During the process it was possible that a null pointer was encountered, and a SAFE dump occurred. After the reboot, the old DC was no longer referenced, and the issue did not recur.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
985238	LDAP may have appeared disabled after migration from VNX to Unity as was seen in the Unisphere UI.	Fixed in code.	4.5.0.1.3.078	5.0.0.0.5.116
985281	When creating a CG sync session, `Replication Internal Error (Error Code:0x9881` was returned.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
985390/12970303	When the user wanted to replace or update a read-only file with new data during a CIFS migration, an `ACCESS_DENIED` error occurred.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
985588/12465043	When a file system root directory became an ADS (alternate data stream) directory, running FS recovery on it created a new root directory and made all the user data on it inaccessible.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
986240	An offline source NAS server and storage pool failed over replication sessions to the destination. Then, the source NAS server and storage pool came back online. Before the source NAS server returned to a ready state, failback was initiated on the destination and failed. The replication sessions could not fail back.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
986815	NFS migration failed because of an SP reboot. This could have been triggered by a bad network status, heavy IO traffic, and so on.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
986837	When a user preserved async replication sessions on multiple NAS	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	Servers simultaneously, the management software rebooted.			
986855	In large scale environments, snap operations against a sync replication source could have been suspended, failed, or completed with errors if replication group operations on the NAS server were being run in parallel.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
986917/13109916	When the destination array has 2000 or more LUNs, consistency group replication failed with the error "Source size does not match destination.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
987045/183824940	There can be gaps in the CloudIQ data due to timing issues.	The timing issues have been fixed in the code, preventing the gaps in the CloudIQ data. Knowledge Base Id (Primus ID) 531045	4.2.1.9535982	5.0.0.0.5.116
987250	If a user locked a file in a migrated FLR-enabled file system between the cutover and commitment completion during a CIFS migration, that file's retention period was set to year 2106 instead of the time input by the user.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
987389	If file migration/import encountered an unrecoverable error during commit, the commitment of the migration failed, and the session state remained "Committing". However, the error message in the health details suggested to cancel the session, even though this operation is not allowed during the "Committing" state. If user tried to cancel the migration session, the following error was displayed: `Cancel failed with Error:  Operation failed. Error code: 0x9000109  Import session must be in 'Initialized', 'Initial Copy', 'Ready to Cutover', 'Incremental Copy', 'Ready to Commit', or 'Cancelling' (with failures) states before it can be cancelled. (Error Code:0x9000109)`	Error message was corrected in code.	4.5.0.0.5.096	5.0.0.0.5.116
987597	If a file system synchronous replication session count reached the maximum replication session limit or maximum sync replication session limit, the sessions were not displayed after an SP reboot.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
988070	The import target file system was not data reduction-enabled, even though the file import migration session was created with data reduction enabled.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
988353	When a user had a file system with a size that was not 256MB-aligned and tried to synchronize the async replication session, the following false warning may have displayed, even though there was enough space in the destination pool: `cannot update destination because destination pool is full`	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
988683/11591899	The system rebooted with the message `VFS_Vnode::release – releasing pinned node`	Fixed in code.	4.3.1.1526970693	5.0.0.0.5.116
988900/12937743	An issue with some drives caused a small number of cells to get a high Program Erase (PE) count while most of the cells have low PE count. This resulted in the array interpreting this max PE count as the whole drive being worn. This caused a false report of a shortened drive life span of 180 days or less remaining and set the drives to end of life (EOL) at zero days remaining for Proactive Copy (PACO) to run.	This code has been correct to use "AVERAGE PE cycle count" instead of "MAX PE cycle count" to determine the wear level, which is indicative of the entire drive's wear status and the industry standard. This change corrects this condition as seen for alerts: 14:60349, 14:60340, 14:60341, 14:60282 Refer to Knowledgebase articles 500120, 491444, 491445, or 491447 for more detail.	4.4.0.1534750794	5.0.0.0.5.116
988975/96286700	When an array with IPv6 configured failed over from one SP to another SP and then failed back, the IPv6 address of management port was lost.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
988991/13273676	When the `showChildFsRoot` flag was set on VNX, NFS import to Unity failed because .ckpt directories were not filtered properly.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
990009	If a support contract was renewed, two entries appeared in the **System → Service → Overview → Support Contracts** page. One was **Active**, while the other was is **Expired**. This did not have any functional impact on the system and was only a display issue in Unisphere. .	Fixed in code.	All previous versions.	5.0.0.0.5.116
991237/10188100	If a user had a special character in the proxy password on an integrated ESRS-enabled system, or tried to enable integrated ESRS, an error message immediately appeared:	Fixed in code.	4.2.2.9632250	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	`There was an error when applying current proxy to integrated ESRS. Please check your proxy setting and retry. (Error Code:0x6400bd6)`			
991723/13379186	A supernet route could not be added to a NAS server.	Fixed in code.	4.4.0.1534750794	5.0.0.0.5.116
991851/13475567	The user was notable to change the group of a file from an NFS share when the user of the file had used more than 50% user quota hard limit. This occurred when the user: 1. Created and enabled user quotas. 2. Modified user quota configuration settings with a 1MB soft limit and 5MB hard limit. 3. Wrote a file with 3MB as a specific user, which exceeded the size of 50% hard limit of the user quota. 4. Changed the group of the 3 MB file to another group. An error such as the following displayed: `chgrp: changing group of 'libjxbrowser-chromium-lib.so': Disk quota exceeded.`	Fixed in code.	4.4.1.1543301759	5.0.0.0.5.116
991934/13822054	When a replication session started to sync, the file system on the destination was locked and unlocked. If the statMonitor service tried to fetch some IO stats from that file system just as it was being unlocked, this sometimes caused an SP reboot.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
992156/12748637	A database table used too much space, which prevented the database cleaning mechanism from working. This sometimes caused an SP reboot as the database was full and data could not be written to it.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
992232/13499313	When a user removed host access for a VMFS datastore and vSphere was too busy to respond in a reasonable amount of time, the corresponding job in Unity took about one hour to complete or would timeout.	Fixed In code.	4.4.1.1539309879	5.0.0.0.5.116
992843/12590530	A user could create a hard link to an ADS-named streamer on a CIFS shared file system using a Linux client when this functionality should not have been available.	Code has been fixed to return an error if this is attempted.	4.4.1.1539309879	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
992872	When multiple NAS servers were running with CAVA enabled, disabling virus checking on one NAS server unexpectedly disabled virus checking on all other NAS servers running CAVA.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
993309/12758699	After an import cut-over, some folders were inaccessible.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
993365/13561263	A Unity upgrade to 4.5.x failed during the DB schema upgrade. On the SP that was in service mode, in \mnt\ssdroot\EMC\CEM\log\uem_db_install.log, there was the following error: `DBINFRA:dbschema install: INFO: run_sqlscript(): "/EMC/CEM/db/install/../upgrade/schemas/unirest/4.5.0/batch_job_delta.sql" psql:/EMC/CEM/db/install/../upgrade/schemas/unirest/4.5.0/batch_job_delta.sql:4: ERROR: could not create unique index "batch_step_ext_pk" DETAIL: Key (job_execution_id, step_name)=(21, CreateReplication) is duplicated. CONTEXT: SQL statement "ALTER TABLE ONLY batch_step_ext ADD CONSTRAINT batch_step_ext_pk PRIMARY KEY (job_execution_id, step_name)"`	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
993540/13537849	Sometimes, with a Host OS/software upgrade (such as PowerPath or HostAgent), the UUID of that host could have changed. The new UUID conflicted with the old one and an alert was displayed.	Code was fixed to automatically update the UUID of the host in Unity.	4.5.0.0.5.096	5.0.0.0.5.116
993710/13635369	When snap creation failed, there was logging lock leak. If the customer had written IO on the primary file, the IO was stuck on logging lock. After four minutes, the IO timed out, and the system rebooted.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
995095/13566751	The NFS Share host access list filter was not working in the Unisphere UI.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
995842/13538924	When doing local move, the following error displayed, even if no sessions were paused or there were no replication sessions: `Cannot modify the NAS server's SP when there are non-paused`	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	`replication sessions on the NAS server`			
996003	The FLR_Logs directory of the source VNX system was excluded during VDM import. The FLR activity log was not migrated to the destination.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
996227/13580384	When the file system was shrunk manually, or auto-shrink occurred in the background, the file system went offline.	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
996429/13863319	For a consistency group replication session, when data was synced to the destination, it triggered a rolling reboot on the destination. The dump trace showed that the issue occurred on DP_RepSecondary::sendPreEventToVer	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116
996737/12590530	An unexpected SP reboot occurred after: 1. Mounting a CIFS shared FS to `dirA` in a Linux client. 2. Creating a stream named `dirA/container:s1.` 3. Creating a hard link: ln `dirA/container:s1 dirA/c1s1` 4. Adding tail `-f dirA/c1s1 &` 5. Running `rm dirA/container` Reading `dirA/c1s1` through `fileInfo` caused the SP to reboot.	Avoid accessing null pointer	4.4.1.1539309879	5.0.0.0.5.116
997504/13951587	In a coexisting sessions scenario, such as a source A to destination B synchronous session (A-B) and a coexisting source A to destination C asynchronous session (A-C), synchronizing the A-C asynchronous session caused the A-C asynchronous session to break when the related pool was in degraded state.	Fixed in code.	4.5.1.0.5.001	5.0.0.0.5.116
998498/10188100	If a user only modified the proxy password on an integrated ESRS-enabled system, the ESRS state changed to **Missing** after the change.	Fixed in code.	4.2.2.9632250	5.0.0.0.5.116
999774/12980528	Disabling dynamic overprovisioning reverted to using static overprovisioning where the FAST Cache utilized only half the size of the flash drives. This did not disable overprovisioning at all.	Fixed in code.	4.3.1.1525703027	5.0.0.0.5.116
999264	In previous releases, the Unity UEMCLI client on Windows depended on VC++ 2005 redistributable package, which had	The updated Unity 5.x UEMCLI client depends on the VC++ 2010 redistributable package and	All previous versions.	5.0.0.0.5.116

Issue number	Problem description	Description of fix	Found in version	Fixed in version
	security vulnerability and is no longer supported by Microsoft. It supported Windows Server 2003 and later.	now supports only Windows Sever 2008 and above.		
988938/13936747	For a non-thin LUN, when the user tried to extend it, if the pool available space is smaller than LUN's new size, the following error might have been returned: `The system could not modify the LUN because the storage pool does not have enough space for the LUN and its associated metadata. (Error Code:0x670100b) The system could not modify the LUN because the storage pool does not have enough space for the LUN and its associated metadata. (Error Code:0x670100b)`	Fixed in code.	4.5.0.0.5.096	5.0.0.0.5.116
1000220/12811463	Non-root users from AIX were unable to access Secure NFS mounts from Unity. A `permission denied` error was displayed. The following error message was displayed in the ktrace log: `sade:RPC: 3:[clxvnxv01.bde.es] RpcGssClient::accept: gss_accept_sec_context failed  sade:RPC: 3:[clxvnxv01.bde.es] GSS-API major error: Miscellaneous failure sade:RPC: 3:[clxvnxv01.bde.es] GSS-API minor error: ASN.1 identifier doesn't match expected value`	Fixed in code.	4.4.1.1550742939	5.0.0.0.5.116
1000304/14022866	The active directory groups specified in the restricted group GPO were not getting included in the local group.	Fixed in code.	4.4.1.1539309879	5.0.0.0.5.116

Fixed in previous releases

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
938431/ 940675	When write cache is disabled and one SP goes into Service Mode while the other power cycling, the latter may not reach a system_complete state due to slow backend LUN performance and would eventually enter Service Mode as well.	Fixed in code.	4.3.0.1522077968	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
945447	In rare cases, when configuring LUN group or VMFS sync replication sessions, if the sync replication session is paused, the SP of the source may reboot.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
994477/ 13587129 (physical deployments only)	The array may experience a single unplanned storage processor reboot without creating a dump file or any other noticeable impact due to Unity's high availability features. Refer to Dell EMC Knowledgebase article 531208 for more information.	Fixed in code.	4.5.0.0.5.096	4.5.1.0.5.001
901631	The replication service may stop short running port and cause a remote system verification failure.	Fixed in code to return the correct error message which indicates to reboot the system.	All versions	4.5.0.0.5.096
906141/ 07015523	If the LUN owner SP reboots after the progress of the copy session reaches 90%, the LUN may have gone offline.	Fixed in code so that LUN is not offline after SP reboots.	4.1.1.9138882 and later	4.5.0.0.5.096
907918/ 07350692	On UnityVSA, if a user has a large file system, and creates several file system checkpoints (or snapshots), and accesses all of them from the client side, Unity may encounter an out of memory safe panic.	Fixed in code to avoid safe panic.	4.1.0.9058043 and later	4.5.0.0.5.096
918040/ 07557687	When NIS is used to resolve users and groups, and DNS for hosts, NIS queries for hosts time out due to a firewall issue and cause NFS mount timeouts. DNS is needed as the sole resolver for hosts.	Fixed in code. A new NAS server parameter : ns.switch has been added.	4.1.2.9257522 and later	4.5.0.0.5.096
924299/ 08269531	Receiving Root partition has crossed 80% utilization alerts every day, such as: [WARN] User: UDoctor alert: Root partition crossed 80% space utilization. Remove unwanted files.	Fixed in code.	4.1.2.9257522 and later	4.5.0.0.5.096
929023/ 08222324	On STORAGE>Block>LUNs tab, when multiple LUNs are selected and deleted, users see inconsistency on "EVENTS" - "Jobs" page: 1. If selected LUNs have no configured host access, the multiple LUNs deletion job shows job description "Delete LUNs" If selected LUNs have configured host access, the multiple LUNs deletion job shows job description "Delete LUNs <name of one selected LUN>"	Fixed in code. The multiple LUNs deletion job shows job description "Delete LUNs".	4.1.2.9257522 and later	4.5.0.0.5.096
929409/ 08594960	When accessing the mount point vnode to get the user file system information which has been unmounted, the SP reboots.	Fixed in code.	4.1.2.9257522 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
931302/ 08686912	SP rebooted. After rebooting, the SP returns to service. This issue only impacts the single SP where the issue occurred.	Fixed in code to avoid SP reboot.	4.2.0.9476662 and later	4.5.0.0.5.096
931852/ 08750602	When the inode usage becomes 100% or close to being full, no alerts are received in the system log or GUI.	Fixed in code to send alert. When inode usage crosses over the threshold, alert will be sent to notify the user to allocate more storage space for inode.	4.2.0.9476662 and later	4.5.0.0.5.096
932944/ 08782403	On Integrated ESRS-enabled systems, users sometimes can see the alarm "ESRS is enabled but is not able to connect to EMC" and, while in that state, some call home files could not be sent.	Fixed in code.	4.1.2.9257522 and later	4.5.0.0.5.096
933270/ 08868282	User sees an error when trying to add more LUNs in the host access when adding many LUNs (for example, 400 LUNs) to one host.	Fixed in code.	4.2.0.9392909 and later	4.5.0.0.5.096
933307/ 08848687	In certain situations, the limit of the number of replication sessions on the storage system was being incorrectly enforced, such that fewer sessions were allowed than the documented limits.	Fixed in code to correct enforcement of replication session limits.	4.2.0.9476662 and later	4.5.0.0.5.096
934729/ 08903997	When a replication session is deleted unexpectedly but the BLO information remains in CmdQueueDb, this record is stale. This will cause an unexpected reboot to occur.	Fixed in code to not recover the stale record.	4.2.0.9476662 and later	4.5.0.0.5.096
936003/ 77609246	NFS/CIFS getAttr for a file could return the same ctime/mtime even when the size of the file has changed.	Fixed in code.	All versions	4.5.0.0.5.096
936043/ 81398618	A compatibility issue exists between Unity and Windows 2012 server when using SMB1. This only happens when copying files on a common share for the source and destination. The user copy will not fail with a pop up error message when the quota is full.	Fixed in code to take into account the allocation size specified and pop up the error message if the quota is full.	All versions	4.5.0.0.5.096
936440/ 08956392	Adding a DNS server may fail due to a slow response from the DNS server.	Fixed in code. The timeout value when waiting for a response from a DNS server has been increased from 3 seconds to 6 seconds.	4.1.2.9257522 and later	4.5.0.0.5.096
937023/ 09070293	In a multiprotocol environment, setting a default UNIX user which resolves to 0 gives root access to any non-mapped users. This action will bypass the permissions set for any non-mapped windows users.	An explanation of this setting has been added to the Unisphere online help.	4.2.0.9476662 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
939516/ 09213943	When the user changes the customized name of the system and after a DIP successful conversion, for example from a Unity 300F to a Unity 650F, the system still appears as 300F in Unisphere and the service command interface.	Fixed in code.	4.3.0.1508045697 and later	4.5.0.0.5.096
940224/ 09420594	Two threads may change BMD's iCRC at the same time due to conflicting locks, which will cause a corruption, causing the file system to be offline.	Fixed in code.	4.1.2.9257522 and later	4.5.0.0.5.096
940568/ 09378183	User may observe a long time delay when adding a LUN to the host. The time delay depends on how many initiators that the host is using. The more initiators that are used, the longer the time delay.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
940712/ 09249807	The default snaplen of svc_tcpdump displayed in the help text is inconsistent with the real value and it does not support 0 as the default value.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
943114/ 11691639	Sometimes when upgrading CDES firmware, an unexpected SP reboot may occur due to the OS being unavailable.	Fixed in code	4.3.1.1525703027 and later	4.5.0.0.5.096
943526/ 10266617	Async replication destination file system goes offline. After transferring a smaller size snapshot, it starts to shrink the FS which will change the size in its VU. Then when transferring the next snapshot, if the common base snapshot has a log that exceeds the shrunken size, it will fail when validating IO due to exceeding the VU size, so that the FS goes offline.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
943552/ 12018381	In some cases, if a user reboots one SP while a data collection is still in progress, the peer SP may reboot unexpectedly as well.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
943804/ 91632486	This issue occurs only when the NAS server is configured for an SMB server and shares a file system with the Continuous Availability (CA) share option enabled. The SMB server hangs after a NAS server failover or failback event because all of the SMB server threads may get blocked.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
944346/ 06274930	A single SP reboot occurs without data loss because an assertion in cache module becomes false when there is a rare race condition between two SPs for the same cache page reference.	Fixed in code.	4.1.0.9058043 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
944457/ 09381694	When multiprotocol access is enabled and the access policy is set to Windows, file and directories created using NFS may have incorrect UNIX permissions in the following circumstances: 1. If the file or directory is created in NFS non-EXCLUSIVE mode (for example, from a UNIX "touch" command) the permissions requested by the NFS client will be set instead of the correct Windows policy permissions. If the file or directory is created in NFS EXCLUSIVE mode (for example, from a UNIX "cp" command) the permissions will be set to 000 (no access) instead of the correct Windows policy permissions.	Fixed in code so that a copied file will have the requested mode bits generated from the default share umask at the time it is copied.	4.2.1.9535982 and later	4.5.0.0.5.096
945120/ 944984/ 05838020	After restoring a file system with a snapshot, some quota data cannot be listed by GUI or UEMCLI.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
945316	If the quantity of file systems in the array is large, there may be too many quota log messages.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
945414/ 09830516	Customer cannot access CIFS/NFS.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
945570/ 09822862	Unable to create storage pool with available drives.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
946955/ 11384796	Safe dump generated on SPA.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
947021/ 09532908	Offline attribute for a file cannot be set if file system has DHSM in enabled state.	Fixed in code.	All versions	4.5.0.0.5.096
947258/ 09968818	User could not scroll down the VVol properties host page in the GUI when many hosts were configured.	The code was fixed to add the scroll bar in VVol properties host page.	4.2.1.9535982 and later	4.5.0.0.5.096
947266/ 09898769	Unity experienced an unexpected reboot during file system recovery.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
947984/ 09938029	During online DIP, when going to change SP (cmi speed will be set as non-zero), but if one SP unexpectedly reboote (fastboot), cmi link speed would mismatch between these 2 SPs, and one SP will go into service mode.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
948032/ 09518382	Unexpected reboot on read only file system and the file system is not accessible.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
948310/ 10003413	When customer tries to use UEMCLI commands to query for start and end times for replication	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	sessions, using different values for intervals and such, the same error returns: Operation failed. Error code: 0x7d14022 Error encountered in real-time subscription. (Error Code:0x7d14022)			
948348/ 09835164	Data Collect and Config Capture information was likely to be incomplete and hence not sent back to CloudIQ in certain cases.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
949515/ 10473990	When using UEMCLI to display replication session information, the system panic'd caused by threading race condition inside replication session.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
950474/ 09961978	Call home was not triggered for SP panic event.	Fixed in code to be able to handle call home after startup.	4.2.1.9535982 and later	4.5.0.0.5.096
950500/ 09938029	If last failed upgrade session left a state file /var/tmp/ptm/.role which indicated that the peer SP was the primary SP in the last session, the newly started upgrade must fail since both SPs would be recognized as the primary SP in this situation.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
950537/ 91043934	User saw unexpected system reboot when serial cable was connected to the array.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
950760/ 08868282	Unisphere users receive the error message: "An unexpected error has occurred. Refresh your browser to reload Unisphre UI" when they try to add a large quantity of LUNs to one host in the Host tab. For example, a user wants to add 400 LUNs to one host. - An error appears when a user tries to add more LUNs in the host access. (Unisphere path: Hosts tab -> select one Host -> open LUNs tab -> click '+' button to add LUNs -> click '+' button to add existing LUNs to host) - User can add the first set of 100 LUNs successfully, but receive the error when trying to add another 100 LUNs.	Fixed in code so that users can add more LUNs to the host in Unisphere.	4.2.0.9433914 and later	4.5.0.0.5.096
951682/ 10322410	A LDAP user with two mapped roles failed to perform LUN Move operation.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
952051/ 10286028	Under specific circumstances, server might unexpectedly reboot with Page Fault when GPO gPLink entries almost reach the 8KB limit.	Fixed in code.	All versions	4.5.0.0.5.096
952101/ 10122152	If the HOME feature is disabled on the VNX system, the HOME feature will be disabled on the Unity system	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	after the migration. If there is a general share named HOME on the VNX, it will be migrated as a generic share on the Unity side.			
952557	On a single SP UnityVSA, the user is able to change the size of a vdisk. However, UnityVSA will not recognize the change even after a disk rescan. If the user reboots UnityVSA after changing the size of a vdisk, UnityVSA will enter service mode.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
952687/ 10348411	HP printers may not be able to log on to CIFS server using Kerberos authentication.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
952753/ 10308174	User may see array unexpectedly reboot but not have a safe dump file generated.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
954584/ 10194969	FTP group access control does not work as expected for CIFS users. Access control is done only using UDS, which makes use of UID/GID, but CIFS users do not have a UID/GID.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
954886/ 10551463	Several months after array boot up, the obs_collector could be killed by Linux OOM killer, and the primary SP could reboot unexpectly.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
956226/ 10263200	Users cannot logout of Unisphere GUI if the space is filled up in the /nbsnas partition, which is used to store GUI login information (this causes zero length GUI login information files). If the user tries to logout of Unisphere, they will get looped back into Unisphere and the logout never happens.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
956618/ 10633211	If the QOS license is not installed, a User cannot create LUN/VMFS datastore by Unisphere GUI and the create wizard page will be redirected.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
958244/ 05919663	User wrongly receives the alert "Storage Processor is Shutting down" while the SP is actually working normally.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
958253/ 10370246	It took an unusually long time to add host access for multiple hosts to LUNs.	Fixed in code.	4.3.0.1518099738 and later	4.5.0.0.5.096
958280/ 10531637	Storage processors unexpectedly rebooted.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
959172	When user has the sync relpication feature configured but has additional array(s) mis-configured into the same FC zone, an unexpected SP reboot could occur.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
959263/ 10551463	After several months since the array boot up, the primary SP could reboot unexpectedly.	Fixed in code.	4.2.0.9476662 and later	4.5.0.0.5.096
959545	Config capture values for LUN shifted one field to the left causing a mismatch in field and value.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
960001/ 10320238	When user deletes data on async replication source LUN, the consumed space on the source is reduced. However, after data syncing completes (triggered by RPO or manually), the consumed space is not reduced on the destination LUN.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
960766/ 11780609	If hole is misaligned at beginning & end and length = 8KB, MLU may assert and cause single SP crash.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
961488/ 11037541	When a race condition between SPCv fatal error recovery and port offline operation occurs, an SP will unexpectedly reboot. Afterward, it will come back to normal again.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
964150/ 10986759	When TLS 1.0 is enabled or disabled, several processes are automatically restarted. One of those processes clears and repopulates the database used to provide query results. If the UEMCLI command is used to query the security settings while the database is being updated, a null response may be returned, which will result in a Storage Processor to reboot unexpectedly.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
964180/ 10864634	SMI-S KBWritten metrics do not appear in kilobyte units.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
964213/ 11099507	When trying to mount a file system with quota enabled, and there are concurrent quota refresh and IO requests which need to access the same uninitialized QuotaDB, each of them will create a QuotaDB and the last one will replace the previous QuotaDB	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
964219/ 10815104	If two parity drives of RAID6 are taken offline one by one and then returned back in the previous order, after the RAID group rebuild completes, if one of the RAID6 drives is offline, data lost would occur the in RAID6 due to the inconsistency RAID stripe metadata.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
964840/ 11097866	System upgrade might fail with the following error even if there is no active job in the system: --------------------------------------Errors------------------------------------ Platform: Check	Fixed in code..	4.3.0.1522077968 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	suspended job The CLI command, uemcli -noHeader -sslPolicy accept /sys/task/job show failed Action : Escalate this issue through your support organization. Provide this output with the escalation. ERROR_CODE=platform::check_suspended_job_1|Error|uemcli -noHeader -sslPolicy accept /sys/task/job show|Operation failed. Error code: 0x100e000 The system encountered an unexpected error. Search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x100e000) |1			
965041/ 11126696	Users could create VMware NFS datastore with NAS Server having tenant, but they could not add the VMware hosts with tenant to the datastore. This issue always occurs in this case.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
965092/ 10003413	CLI real-time query of "sp.*.replication.session.*.transfer.*.endTime" failed, error code is 0x7d14022	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
965415/ 10777718	VNX to Unity Import fails with "#ERROR 1: the DC or REALM could not be set from CIFS output". Need to support special character symbols ' and " for domain password.	Fixed in code to support special character symbols ' and " for domain password.	4.3.0.1522077968 and later	4.5.0.0.5.096
965598/ 10315520	File locking issues when using NFSv4.1. When the server recalls a file delegation, the client replies "NFS4ERR_REP_TOO_BIG_TO_CACHE to the CB_SEQUENCE operation".	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
965670/ 10832465	"domain controller not reachable" errors appear even though the nas_server contacts the domain controller.	Fixed in code so that these messages do not appear.	4.2.2.9632250 and later	4.5.0.0.5.096
965959/ 11188699	In the following circumstances an ACL update from an SMB client could unexpectedly change the UNIX mode bits of a file or directory and cause access issues for NFS clients: 1. Multiprotocol access is enabled. 2. The file system access policy is NATIVE. 3. The ACL inherits an ACE using one or both of the well known SIDs CREATOR_GROUP or CREATOR_OWNER	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	4. For the file or directory on which the ACL is being changed, one or both of these well known SIDs refer/expand to an automatically assigned user ID or group ID, which indicates that the user or group is UNIX only (that is, has no equivalent Windows mapping). In these circumstances the DACL which is being set is treated as having UNIX ACEs and causes the UNIX mode bits to be regenerated.			
966024/ 11258471	Given the language pack is installed to the array, when the CLI is used to delete a Job by ID, for example: uemcli /sys/task/job -id N-2366 delete the user receives an that ID is not unique. For example: Operation failed. Error code: 0x7d13158 The system found multiple objects using the specified parameters [id:N-2366]. (Error Code:0x7d13158)	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
966272/ 11248502	If array's system time was changed to a future time (for example, April 6, 2130), then changed back to the correct time, the /nbsnas partition runs out of inodes filling with cookie/session files.	Fixed in code.	4.2.3.9670635 and later	4.5.0.0.5.096
966820/ 11261863	In some cases, the swapped disk cannot be kept in the same factor and speed as the existing one in RAID group.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
966902/ 11327522	The System Capacity widget shows different used size with and without storage resource view.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
967009/ 11436487	The pool has free space, but fails to take snapshots of VVol with this message: There was no available storage in the specified Storage Pool to complete the operation. Please add available storage to the Pool and retry the operation.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
967348/ 10550090	When running recovery after FS offline, the recovery may abort due to some special corruption which could not be handled correctly. This problem only occurs on the FS which enables CIFS and uses the ADS feature. The following is an example of the ktrace: 2018/06/29-09:44:38.682912 6255 7FE2E694D709 sade:FSRECOVERY: 6:[core] FSID=536870969: Phase 1M: started Multiple Stream Check	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	totalObjects 2307429:2307430 2018/06/29-09:44:43.225690 15K 7FE2AC576701 sade:FSRECOVERY: 3:[core] FSID=536870969: getinode: Ino 0 out of range 2018/06/29-09:44:43.225700 10 7FE2AC576701 sade:FSRECOVERY: 3:[core] FSID=536870969: validatePinoCookieWithHLDB:4905 : Unable to get inode 0. Status InternalError 2018/06/29-09:44:43.291632 4636 7FE2E694D705 sade:FSRECOVERY: 6:[core] FSID=536870969: Phase 1M ended Multiple Stream Check time taken 04s.607ms			
967479/ 11193542	Third party tool is not able to make a TCP connection to Unity TCP port 135.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
967623	The SP is unexpectedly rebooted.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
967655/ 10835662	File system status for file systems mounted on the same VDM after cut-over is not the same, some show as green, some have a warning. Occurs infrequently under a specific set of circumstances.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
967988/ 2235786	NAS server import can hang if there is a shrink operation on a target file system that requires a file to be relocated. The hang occurs because an import lock is acquired on the file being relocated but it is not always released.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
968037/ 11391334	HTTPD core dumps are generated due to segmentation fault if a CAS cookie is received as NULL.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
968057/ 11478786	Intensive UEMCLI requests querying HLU information causes ECOM to exceed virtual memory limit and to be killed by memory guard.	Fix in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
968095/ 11342539	When refreshing an attached snap/snapset, the attach operation could fail.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
968338/ 982687/ 10800714	The NAS import session remains in the Incremental Copy state due to some minor errors with the underlying FS import session.	User can use the -skipIncompleteCheck option to force commit the NAS import session when the user does not want to cancel the whole migration session when there are some minor errors with some FS migration sessions.	4.3.1.1525703027 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
		Where: [Optional] - skipIncompleteCheck <<<<<< Specifies to skip the incomplete file system import sessions and to force commit the sessions.		
968384/ 11549514	Source VDM attached with a large quantity of checkpoints. When user tries to create an import session, it fails.	Fixed in code.	4.3.1.1527731778 and later	4.5.0.0.5.096
969033/ 11590369	As the nas_server will try to update the GPO cache periodically or when the nas_server starts, SPA will unexpectedly reboot immediately under such GPO settings.	Fixed in code.	4.3.1.1526970693 and later	4.5.0.0.5.096
969619/ 11662165	SMB NAS Server import was not possible if the credentials check failed due to NT_UNSUPPORTED_AUTHN_LE VEL when attempting to log on using NTLMv1. In this case no attempt was made using NTLMv2. The following GPO settings triggered this problem: LAN Manager Auth Level: Send NTLMv2 response only, refuse LM and NTLM NTLM SSP Minimum Client Security: Require NTLMv2 session security NTLM SSP Minimum Server Security: Require NTLMv2 session security	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
969675/ 93646368	GUI log in failed when STIG is enabled with –noSessionIdleTimeout.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
969769/ 11723904	User creates a pool using large disks (~>3TB) then destroys the pool while background verify is running on one or more of the supporting RAID groups. The I/Os needed for large drives to clear the needs verify bits in the PVD (Provisioned Virtual Drive) meta-data prevents a RAID group from getting destroyed in a timely manner. The PVD is still consumed by the RAID group and not cleaned up leaving the PVD type in the wrong state. The customer creates a new pool using some or all of the drives that were previously part of the destroyed pool. This action generates new keys that are pushed down by MCR (Multi-core RAID) to the controller. Since one or more PVDs are part of a supporting RAID group and are in the wrong state, the new keys are not applied. Drives with the old keys are incorporated into the pool and I/Os accepted under the old keys. If an SP reboots, new keys are	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	applied to the controller creating a mismatch which results in DL.			
970319/ 06663024	After other containers like obs_collector exited unexpectedly (such as killed by oom-killer), user might see unexpected reboot with the backtrace having CSX_P_INT_RDEVICE_ALLOC_BUFFER which is led by an invalid device reference.	Fixed in code.	All versions	4.5.0.0.5.096
970693/ 11029380	ADS files inodes that located in lost+found directory will be removed after a FS recovery.	Fixed in code.	4.2.1.9535982 and later	4.5.0.0.5.096
970960	In Async Replication Session's Resume dialog, the warning message is incorrect and does not reflect the real behavior of Async replication. The current warning message is: After a failover, resuming replication sessions on the NAS Server and its associated file systems causes replication to resume in the reverse direction. All sessions will start a full synchronization to the original source storage resource.	Fixed in code.	4.4.0.1528950819	4.5.0.0.5.096
970961	In the Failback Dialog of the Sync Replication Session, the following wrong message would be shown: Failback will synchronize the destination storage resource to the source storage resource, block access to the destination storage resource to allow it to be used for replication, and change the source storage resource access to read/write mode. Replication will then resume. This operation will be lengthy due to the full synchronization during failback. When the failback operation is complete, you can then connect your hosts to the source storage resource. Before you begin, you should block writes to the destination storage resource because it will be placed in read-only mode. Do you want to failback the replication session?	Fixed in code.	4.4.0.1528950819	4.5.0.0.5.096
971520/ 11862561	1. Control path failover, and previous master SP does not reboot during the failover. A known case is management eth port link down on master SP. 2. A few days later, an unexpected reboot occurs on the previous master SP.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
971930/ 11838275	Unable to make modifications to NAS Server. When creating/modifying shares, the following error is reported. Failed: The system could not find the specified path. Please use an existing path or create one with an external host. When creating/modifying interface, the following is error reported. Failed: The specified Network interface could not be modified. A shutdown may have been in progress causing the failure. There are also data unavailability problems reported such as unable to find an existing share. In the c4_safe_ktrace.log, corruption is detected in the local group database (LGDB). sade:LGDB: 3:[vdm1] Database corrupted, try to use backup instead till fixed sade:LGDB: 6:[vdm1] Database frozen	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
972667/ 11143302	Array unexpectedly reboots for not getting free pages. Rarely occurs during a specific event.	Fixed in code.	All versions	4.5.0.0.5.096
972742/ 11958954	Array will have rolling unexpected reboots, finally getting into service mode	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
973185/ 11568165	FS remote async replication cannot be configured for newly created FS in a replicated NAS Server by Unisphere GUI. (a). During new FS create, configure FS Replication by "Create a File System > Replicaton wizard. [FAIL] "Replicate To" combox shown as "Local" (b). After new FS has been created, then configure FS Replication by "Create a Session > Replicaton Settings wizard. [FAIL] "Replicate To" combox shown as "Local" The issue occurs in the following cases. 1> the remote mgmt IP is a sub-string of the local mgmt IP on the source. (for example, 10.1.21.1, 10.1.21.11) 2> one async type remote sys id is a sub-string of another on the source. (for example, RS_1, RS_11)	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
973527/ 10140323	Customer cannot access the shares because nas_server could not get the KRB tickets.	Fixed in code.	All versions	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
974911/ 11457053	User is unable to create snapshot for VVol based Virtual Machine when hard disk of the VM is shared between several Virtual Machines. (It is possible to share hard drives with adding "Existing Hard Drive" in VM hardware modification wizard in vCenter UI.)	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
975066/ 11710002	VDM import session creation will fail with a parse error 0x4 when the source VNX file systems are created using MVM.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
975602	After source array recovers from disaster, sync replication session may synchronize data at the wrong position, which could result in data corruption at destination.	Fixed in code.	4.4.0.1525703027	4.5.0.0.5.096
975786/ 12173823	When the sync replication session of a NAS server is paused and then resumed, if the snapshot of the configuration file system is taken when the NAS server session is still in syncing, the destination NAS server will run into faulted status.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
976192/ 12297267	The "Collecting Service Information" task in System->Service->Service Task generates a tar file sometimes that contains the contents of just one SP when some special characters exist in some file path.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
976902/ 10631832	System may reboot with safe dump. In the backtrace of the dump, there may be one frame as follows: insert_after (..)	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
976917/ 12186354	There can be gaps in the CloudIQ data due to a low level timeout value that is not always long enough. Occurs infrequently under a rare set of circumstances.	Fixed in code.	4.2.3.9670635 and later	4.5.0.0.5.096
977061/ 11803254	User received alerts about failed snapshot creation by snap schedule because of snapshot name conflict.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
977067/ 12281912	The recommended names of LUNs when cloning CG with multiple LUNs were mixed up. Always occurs under a rare set of circumstances.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
977396/ 12422982	When a Unity has DNS problems, "Collection Service Information" at "System > Service > Service Task" may time out and cannot generate a full tar file.	Fixed in code.	4.3.1.1527731778 and later	4.5.0.0.5.096
977686/ 12026164	Array panics after disabling DCSSPI. Rarely occurs during a specific event.	Fixed in code.	4.3.1.1527731778 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
978696/ 11228871	In some circumstances, during a NAS server import, a directory or file that has been renamed into (or within) an actively importing directory may not be fully imported (for example, the file contains no data).	Fixed in code..	4.3.1.1537818142 and later	4.5.0.0.5.096
979458/ 12171413	Error messages are unhelpful when incorrect password is attempted with sudo command.	Fixed in code	All versions	4.5.0.0.5.096
979989/ 12544079	Array will panic if user dump FSCK statistics when it just finish 0%(less than 1%) with command "printFsckStats64".	Fix source code to handle 0 percentage correctly.	4.4.0.1534750794	4.5.0.0.5.096
980100/ 12564445	If user applies density base QoS policy to a VM which is of non-interger-GB size based on VVol datastore, an exception will occur when opening the Virtual Volumes tab in the Unisphere GUI.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
980614/ 09875284	service_shell prompt for root credential would be "# " now instead of "> ".	Fixed in code so that the service shell prompt for root credential is "# ".	4.2.1.9535982 and later	4.5.0.0.5.096
980714/ 12508518	When a BBU self-test fails, the user is not notified by an alert that the BBU self-test failed.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
980813/ 12233173	File system recovery failed with status code 0xc12d8c1b.	Fixed in code.	4.3.1.1533576276 and later	4.5.0.0.5.096
980831/ 12606788	When configuring replication using the Consistency Group wizard, the target LUN(s) failed to enable Data Reduction	Fixed in code so that the target LUN(s) have the requested Data Reduction setting.	4.4.0.1534750794	4.5.0.0.5.096
982995/ 12590530	Many SMB threads were blocked for a long time during IMT migration from VNXe to Unity.	Fixed in code.	4.3.1.1525703027 and later	4.5.0.0.5.096
983027/ 12675759	UDoctor scheduled job (svc_dc, svc_arrayconfig, daily_triage, and such) as real-time process, which causes a significant performance impact for SYSAPI Admin poll.	Fixed in code.	4.3.0.1523104042	4.5.0.0.5.096
984119/ 95891156	If customer cancels the migration session during an initial copy in a migration from a VNX to a Unity, SP could panic.	Fixed in code.	4.4.1.1539309879	4.5.0.0.5.096
951705	When enabling a user quota, if the DP quota check times out after three minutes, the following error message is displayed: The result of the user quota creation operation could not be reported because the operation is still running. Please view the user quotas later to see whether the operation has completed. (Error Code:0x9000234)	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	The quota configuration may display out-of-date information and appear disabled from CP DB.			
955071	Authorization of an LDAP user that belongs to an LDAP group which exists in Unisphere can fail if the case for the name of the LDAP group is different between Unisphere and the LDAP server. The error seen in the Unisphere UI is: The logged in user is not authorized to access Unisphere. The error seen in the UEMCLI is: You are not authorized to perform the requested operation. Access is denied. (Error Code:0x6000002).	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
956084	If a user restarts the SP while a move session is running, the move session may fail.	Fixed in code.	4.1.0.8959731 and later	4.5.0.0.5.096
956286	When configuring a large number of concurrent replication sessions (for example, 200 sessions each for sync and async replication), and a failover is forced while the session link is up, the force failover will complete without error. However, on the async destination site, async sessions with auto sync configured lost communication and should have paused on the sync source site, and sync sessions are still active, which should be failed over.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
956976	The LUN move session is in failed state and one SP rebooted. After the reboot, the system recovered.	Fixed in code.	4.1.0.8959731 and later	4.5.0.0.5.096
957546	Setting up a custom MTU value fails with the following error message: The system was unable to change the port's MTU setting. This may have occurred because of memory fragmentation. Consider rebooting the relevant SP. (Error Code:0x6000dfd)	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
957614	The speed of LUN migrations is between 10 – 20 MB/s, and can take hours to finish.	Fixed in code.	4.1.0.8959731 and later	4.5.0.0.5.096
957667	When executing uemcli /net/nas/nfs set or delete command with -skipUnjoin attribute, the command fails with the following error message: One or more specified parameters are invalid. (Error Code:0x5)	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
957799	The CIFS migration session failed with the following error message: Cannot rename source CIFS server with specified parameters The CIFS share also becomes inaccessible.	Fixed in code.	4.2.0.9392909 and later	4.5.0.0.5.096
957972	When deleting an asynchronous replication session while a synchronous replication session is not in an active state, the system snapshot on the synchronous session is not automatically destroyed.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
958576	If you run more than 50 CLI commands while simultaneously running more than 4,700 jobs, the commands fail. Unisphere, REST API and CLI commands are unavailable for a few minutes. In a few instances, the SP may also reboot.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
958860	After creating an interface on an sync replication management port where asynchronous replication exists and some NAS servers are misconfigured, the following generic error message appears: Returned general error: Operation failed. Error code: 0x6000003	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
959675	The file system goes offline.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
960767	When an asynchronous replication session is in "full copy", the status of the session appeared as "syncing".	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
960872	After removing host access for a LUN, the Delete button will continue to be disabled, and the tooltip indicates that host access must be removed before the LUN can be deleted.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
964805	The Gateway interface property cannot be set to an empty value by using the Unisphere UI.	Fixed in code.	All versions	4.5.0.0.5.096
964846	The status of an asynchronous file replication session appeared as "non-recoverable" in the Unisphere UI or CLI.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
964932	If the number of replication sessions has reached the maximum, any jobs to create new replication sessions do not complete.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
964948	Resuming a remote failed-over replication session failed with the following error: Operation failed. Error code: 0x9880	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	Inconsistent arguments in context (Error Code:0x9880)			
965089	A VNX-to-Unity block import session does not transition to another state but remains in either the 'Initialized' or 'Cutting Over' state.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
965258	When creating a snapshot by using the Unisphere UI, there is not an option to replicate it in the same Create dialog.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
965526	After attempting to preserve a session immediately after a successful failover or failback, the following error message appears: One or more hibernated asynchronous replication sessions cannot be preserved, because they were deleted either from destination side or from the synchronous replication remote system when they were non-hibernated asynchronous replication sessions. Please delete these remaining hibernated asynchronous replication sessions. To view more details, access the audit log on the 'Logs' page in the Unisphere GUI, or use the CLI '/event/log' show command.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
965926	When resuming replication sessions for either a NAS server or file system, some sessions in the group display the error 0x650024e.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
966052	When the FC connection between the primary array and secondary array in a replication configuration change from a cross configuration (for example, SP A to SP B, SP B to SP A) to the correct one (SP A to SP A, SP B to SP B), all existing sessions change to Lost Sync Communication operational status, and source file system is not protected.	Fixed in documentation.	4.4.0.1534750794	4.5.0.0.5.096
966097	If you modify the QOS policy for a LUN while it is running a move session, the change to the QOS policy will not take effect until the underlying move session for the LUN is finished.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
966098	If the XCOPY Enhancement feature of vSphere 6.7 (ESXi 6.7) is used, then the vmkernel.log will show many 0x83 errors. This error indicates that XCOPY is not being used.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
966538/ 969822	User tries to add a synchronous snapshot schedule to a file system that has existing sync replication sessions, but the operation fails with the following error: The system could not synchronize assignment of the protection schedule to the storage resource on the remote system due to a management connection failure. (Error Code:0x6000bd2) The connection is alive, but the CLI ID of the destination file system is a sub-string of the CLI ID of the source file system.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
966550	If a file system size is extended on the File System Properties dialog, and then, on the same dialog the **Replication** tab is opened and **Configure replication** is clicked to create a replication session for it, the following error will be reported because the latest file system extended size is not captured by the Unisphere UI and the original size is sent to the destination side to provision the destination file system: Source size does not match destination size. If the shrink or extend operation on the source storage resource is in progress, wait for it to complete and then try again. (Error Code:0x6500104)	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
967075	For thick file systems in synchronous replication environments only, a failover is hung and cannot continue.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
967688	When creating a file synchronous replication session, in some rare situations, if a remote file system already has the same sync replicated schedule configured, because no change is needed at the remote site, the job will fail with Error code 0x6000bd2.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
967998	When a file synchronous replication destination NAS server is under failover or failback, and the destination SPs are also in failover or failback, if a user-defined file system snapshot is refreshing at the same time, the Synchronous replication session may experience a non-recoverable error due to an internal deadlock.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
968536	During upgrade of a system with File sync replication, the warning message "one or more replication sessions are configured to be auto-	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	synchronized" may appear. The message may mislead a user to consider only the Async replication session. Actually, this message means there is either non-paused Async or File Sync replication on the system.			
968591	A user snapshot will fail to replicate if the retention duration on the destination is set to 5 years. The longest retention currently supported is 5 years minus 1 day.	Fixed in code.	All versions	4.5.0.0.5.096
968788	While setting up a file system synchronous replication session, if snapshot schedule operations (such as creating a synced schedule or assigning a synced schedule to a file system) are run almost at the same time on the local site and then the remote site, an error will occur. Even though the two scheduled operations are different, the operations will lock locally, and then try to lock remotely during the remote REST API call. As a result, a dead lock occurs, and each of the two operations will timeout and fail.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
969022	A failback operation may fail when both the source and destination SPs reach a deadlock during processing of a consistency group session.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
969413	If a .gpg file contains Linux Shell reserved special characters, an upload of the drive firmware will fail with the following misleading error message: The system could not find the candidate software during software upgrade. Reboot your Primary storage processor and try upgrading again. (Error Code:0x6000cb6)	Fixed in code.	All versions	4.5.0.0.5.096
969901	Thin clone asynchronous replication cannot replicate a user snapshot to a remote site during a synchronizing operation.	Fixed in code.	4.2.0.9392909 and later	4.5.0.0.5.096
970960	In an asynchronous replication session's Resume dialog, the warning message shown does not correctly reflect the behavior of an asynchronous replication failover session. The current warning message is: After a failover, resuming replication sessions on the NAS Server and its	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	associated file systems causes replication to resume in the reverse direction. All sessions will start a full synchronization to the original source storage resource.			
970961	In a synchronous replication session's Failback dialog, the warning message shown does not correctly reflect the behavior of a synchronous replication failback operation. The current warning message is: Failback will synchronize the destination storage resource to the source storage resource, block access to the destination storage resource to allow it to be used for replication, and change the source storage resource access to read/write mode. Replication will then resume. This operation will be lengthy due to the full synchronization during failback. When the failback operation is complete, you can then connect your hosts to the source storage resource. Before you begin, you should block writes to the destination storage resource because it will be placed in read-only mode. Do you want to failback the replication session?	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
971071	The tape information (product ID and vendor ID) is not displayed after running the svc_nas ALL -devconfig -probe -scsi -nondisk service command. The info= parameter in the command output is empty.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
971205	If you change the Data Reduction status when creating asynchronous replication sessions on a system that does not have a FAST VP license installed, Unisphere will display a blank page for the replication creation summary page. Clicking the "Back" button does not reload the text into the window. You must refresh the browser to reload the page.	Fixed in code.	4.4.0.1534750794	4.5.0.0.5.096
948833	The NAS server health status will be **Degraded** in the Unisphere UI after LDAP is disabled using the CLI and then re-enabled from either the Unisphere UI or CLI. The following message displayed: The LDAP client configured for the NAS server has faulted. Contact your service provider.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
949323	NAS server and File System health can blink when the ESRS service is starting on the SP due to impact of outgoing UDP traffic for DNS	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
949482	A disk group recommendation by profile fails with the following error when running the uemcli / stor/config/dg rcom -profile profile_30 -output csv command: Operation failed. Error code: 0x6000003 The system encountered an unexpected error. Try again and if that attempt fails then search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x6000003)	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
951162	After replacing a drive, the Unisphere UI will show metrics data only for the time period prior to drive replacement.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
950008	When a system restart occurs, the quota data is cleared and rebuilt. During the rebuild, no quota-related operations can be performed in either the Unisphere CLI or UI. When attempting to create a quota during this time, the following error may display The user quota object cannot be found. For tree quotas, the following response may display The first quota update isn't finished. Please try later.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
947271	A replication sync fails when trying to delete the replication session with the error There is a replication process in progress on the destination. Please retry later. (Error Code:0x9f04)	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
947000	A file system may go offline when there is a recovery procedure run on it as soon as a snapshot is deleted (within the 2 minute refresh cycle window).	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
947558	If a snapshot is deleted accidentally before a snap restore operation with the same backup snap name completes, there is a chance management software will crash due to an empty pointer. The Unisphere UI and CLI will be disconnected for a while.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
947676	A configured support proxy server port is wrongly displayed as default port 3128 for HTTP, 1080 for	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	SOCKS, when a different port is configured.			
947720	Cannot upgrade one-way ESRS to two-way ESRS after configuring policy manager. Failure will occur if the following steps are taken: 1. Enable one-way ESRS. 2. Configure policy manager through the CLI. Upgrade to two-way ESRS, then re-enable ESRS. This operation will fail, and the ESRS state will turn to 400unknownafter several minutes.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
935971	User may see a LUN move session stay at a certain percent (xx%, where xx is in between 1%-99%) and never progresses.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
936263	Changing the MTU size or speed using the CLI is not successful, and returns errors such as the following: Error code: 0x6000b88 The system could not find the Ethernet port. (Error Code: 0x6000b88)	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
937683	The call home suppression state in the Unisphere UI shows as disabled, but actually in backend it is still activated. This occurs when: 1. An ECOSYSTEM license is available and ESRS is enabled. 2. Call home suppression is enabled. The ECOSYSTEM license is disabled or expires.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
937827	In Unisphere, when a grid table has group columns and a user tries to resize the subcolumn, and then the parent group column, the group columns may become stretched to an unreasonably long width while other columns are minimized to the point where they are unreadable.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
943932	In the NAS server wizard, the **Next** button becomes disabled/greyed out when the following steps are taken in sequence: 1. Create a new NAS Server. 2. Enable the NFS protocol. On the NIS/LDAP page, note that the **Next** button is clickable. 3. Check the box to use NIS/LDAP. 4. Change the dropdown from NIS to LDAP. Uncheck the NIS/LDAP box.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
943967	One of the following circumstances can occur: 1. An import session fails. If a new VDM was created on the source storage system or an existing one was renamed, the migration of this VDM will fail with the following error: The system encountered an unexpected error. Try again and if that attempt fails then search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code: 0x6000003). An import session is not visible. If a source VDM is renamed or deleted during the migration process (the import session is paused), the import session disappears from the Unisphere UI.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
944601	When there are more than 80 concurrent REST composite requests, the system may reboot.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
944755	SMB/Windows client access to an SMB share may result in an access denied error if all of the following conditions are met: 1. Multiprotocol access is enabled. 2. The access policy is set to UNIX. 3. Automatic UID mapping for unmapped Windows accounts is enabled. 4. A Windows user without a mapping in the UNIX Directory Service attempts to connect to the share.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
944784	IO could not be written to a file system and a no spaceerror appears, even though the file system has free space.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
944843	For a drive firmware upgrade, if the firmware image was uploaded onto the system using the Automated Software Download feature, it will remain visible in the Drive Firmware upgrade wizard even after installation is complete.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
944983	If a LUN or file system is in a pool that ran out of free space, and a Snap destroy was ongoing, the snap destroy/delete operation may not finish completely and thus hang.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
945225	A replication session state changed to unknown, and pause and resume could not be used to recover the session.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
945302	An ethernet port object appeared to be lost for several seconds right after its properties were changed (enslaved into FSN or Link Aggregation, or change Link up / Link Down status). If an automated script was used to create/delete Link Aggregations or FSNs often (every 30 seconds) the following error sometimes displayed The system could not find the Ethernet port. (Error Code: 0x6000b88).	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
946177	LUN, file system, or VDM recovery might hang after aborting an in-process recovery operation.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
946182	Modifying the compression property for a file system may fail with the error The file system was not found or is in an invalid state. (Error Code: 0x6701512)	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
946229	Earlier snapshots cannot be restored to a file system because the snapshot restore operation hangs, and the file system could not be deleted.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
946552	A pool with RAID6 6+2 could not be created in the Unisphere UI on systems with small capacity (for example, with only eight drives). Unisphere shows an empty page on the "selecting drives" step in the wizard.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
946660	In the GUI, in the NAS server/FTP panel, it is not possible to add an SMB user name (which includes a @ or a \, like in user@domain or domain\user) into an allowed or denied users list. Same for the allowed or denied group. If a @ or a \ is entered, the editbox becomes red and the 'add' button becomes disabled.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
947124	If the Management Interface IPv4 address is not available when the SP reboots into service mode, the SP will try to generate a new key and certificate for the management interface. When the SP is in service mode the key generation will succeed, but the certificate generation will fail. This will result in the SP having a mismatched key and certificate for the management interface.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
945910	A cutover could not be completed after a data import due to an error in the share migration process. All shares were migrated, but **Deny**	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	rights were not applied on one share.			
946045	After an upgrade from 4.1.2 to 4.2.2, the following message may be displayed in the alerts: Performance metrics are unavailable.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
946060	After an upgrade from 4.1.2 to 4.2.2, the following error message appeared as a pop up, even after closing and reopening Unisphere: There is less than 10% drive space left in the system drive of the current system.The percentage space left on the drive was actually much higher.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
946128	The Unity Connection Utility Online Help has incorrect information regarding the Unity system name. It states underscores can be part of the system name, but they are not accepted.	Fixed in code.	4.2.2.9632250 and later	4.5.0.0.5.096
905659	Integrated ESRS cannot be enabled successfully when a credentials-required SOCKS proxy server is set up in **Support Configuration**> **Proxy Server**, unless the proxy server can provide service when credentials are not provided.	Fixed in code.	4.2.0.9392909 and later	4.5.0.0.5.096
949769	UnityVSA Efficiency widgets display Data Reduction null:1.	Fixed in code.	4.3.0.1522077968 and later	4.5.0.0.5.096
959825	When you create or expand one dynamic pool with more than 15 large SSD drives (must be over 15TB), the corresponding JOB will hit timeout error.	Fixed in code.	4.3.0.1522077968 and later	4.4.0.1539309879
925225/ 08425489	An SP rebooted unexpectedly when system drives were unavailable for 30 seconds. This issue may only happen on one SP, but it can also occur on both SPs, resulting in data being unavailable.		4.2.0.9392909 and later	4.3.1.1525703027
950113 / 869123	A mount failure on any NFS clients could occur when: 1. An NIS server is configured in the NAS server 2. An NFS share is configured with at least one host or one Netgroup with customized access 3. The NIS server runs on a legacy SunOS. When the SunOS receives a YP MATCH request, the NIS server may return a UDP response on an undetermined port, which is blocked by the firewall of the	Fixed in code.	4.0.1.8194551 and later.	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	Unity. The Linux client is not registered into the ipnodes.byaddr map of the NIS server.			
933222	The license state will change from Expired to Disabled when the license expired if ECOM restarted during the expiration period. In this license disabled state, some configurations may not display in Unisphere.	Fixed in code.	4.3.0.1522077968 and later	4.4.0.1534750794
937878	A CIFS server is not visible on SCVMM when its NAS server is part of a replication session. This issue occurs when 1. SMB is enabled on NAS server 2. NAS server is part of a replication session 3. The replication session is synced and failed- over This issue doesn't affect other CIFS servers not part of the replicated NAS servers, and the I/O accessed on these CIFS servers is not affected.	Fixed in code.	4.3.0.1522077968 and later	4.3.1.1525703027
945664	For paused replication session, if replication source resource goes offline and is brought back online later, the session's health state will report "Ok", although it should be "Degraded/Warning" because session's operational status is Paused. The session health details will be "This replication session is operating normally", although it should be "This replication session has been paused." All other attributes of this paused session appear normally. The session is a normal paused session, and can accept commands such as Resume. However, it will reject commands like failover, failover with sync, pause, refresh, as would any paused session. All commands issued to this session will work as expected.	Fixed in code.	4.3.0.1522077968 and later	4.4.0.1534750794
946289	If storage administrator creates VMFS datastore, providing access to vSphere 6.5 cluster containing several ESXi host, the operation will complete successfully on the storage system side, but on vSphere side it is possible that datastore will not be accessible from all ESXi hosts.	Fixed in code.	4.3.0.1522077968 and later	4.4.0.1534750794
947287	After creation a thin-clone of VMFS Datastore on Unity side with access	Fixed in code.	4.3.0.1522077968 and later	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	to ESXi hosts version 6.5, it is possible that created datastore on vSphere will have a name different to created thin clone name (snap-xxxxxxxxxx-<parent datastore name>).			
945910	A cutover could not be completed after a data import due to an error in the share migration process. All shares were migrated, but **Deny** rights were not applied on one share.	Fixed in code.	4.2.2.9632250 and later	4.3.0.1522077968
946080	On the main Unisphere dashboard, the **SP Utilization Average** percentage exceeded 100%, especially when many jobs are running concurrently.	Fixed in code.	4.2.2.9632250 and later	4.3.0.1522077968
937771	An unnecessary error message The storage server detected an internal failure in the VMware hypervisor. Please review the event logs on the VMware hypervisor side. is displayed after setting the **Ignore** flag on initiator of VMware host when the ESXi host is disconnected from the vSphere cluster.	Fixed in code.	All versions	4.4.0.1534750794
926382	After you perform the initial license installation process on a new Unity system, and you have completed all of the necessary steps in the Initial Configuration Wizard, Unisphere may not show all of the licensed features as enabled.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
925993	When using a UEMCLI command to modify multiple VDM import session settings, Unity returns the following syntax error: Operation failed. Error code: 0x1000017 Command line parsing failed near "-targetResPool" token. There is a syntax error in the command. Please recheck the command syntax. (Error Code:0x1000017) For example: > uemcli -noHeader /import/ session/nas -id import_181 set -productionIfPortPairs client_interface:spb_eth2 -targetResPool pool_136 -name rename_6629 -targetImportIf if_198	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
925993	When using a UEMCLI command to modify multiple VDM import session settings, Unity returns the following syntax error: Operation failed. Error code: 0x1000017 Command line parsing failed near "-targetResPool" token. There is a syntax error in the command.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	Please recheck the command syntax. (Error Code:0x1000017) For example: > uemcli -noHeader /import/ session/nas -id import_181 set - productionIfPortPairs client_interface:spb_eth2 - targetResPool pool_136 -name rename_6629 -targetImportIf if_198			
922568	During a SMB migration from a VNX system to a Unity system, the cut-over step in migration can fail if the HomeDirectory feature is enabled on source system.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
921214	Unity indicates that quota usage is larger than the specified limit.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
920498	When file system and its associated Unity storage pool is full, it appears as if only read-only access is allowed to the file system. The file system is actually in a "full" state, and clients can transact I/O with the file system data.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
920219	When trying to remove or export a share that is on the destination side of an active replication session (this is prohibited), Unity returns the following message: The specified operation could not be completed. Search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x4)	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
915550	When either Unity Storage Processor (SP) is in Service Mode, CloudIQ is unable to obtain metrics data for the Unity system.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
920691	When a Unity storage processor reboot occurs while an asynchronous replication session is being deleted, the deletion job can hang even though the replication session is actually deleted.	Fixed in code.	4.2.1.9535982 and later	4.4.0.1534750794
922018	Under particular conditions, Unisphere does not show (or allow you to expand) a Unity storage pool when a pool is out of space.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
925555	When using the UEMCLI to view file import status information with the /import/session show function, the indicated Source resource and Targetvalues are blank.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
926506	A file system recovery process is interrupted and Unity generates the following log information: begin_fs_recovery_internal:insert apiobj into Recovery list failed.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
904748	When there are a lot of NFSv4.1 clients (~50,000), the response time of the NFS server may be very slow.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
906665	When a quota thread is updating the quota data and the tree quota is deleted using the CLI command before the update is finished, sometimes the delete tree quota operation fails with the error The tree quota object cannot be found.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
906767	If the peer SP reboots right at the end of an otherwise successful upgrade, commands may fail with the following error The system is upgrading and is momentarily not available. Please try again later. (Error Code:0x600000e)	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
906892	A replication session creation for a file system at source array to destination array in the Unisphere GUI is successful. Then, deleting that replication session is also successful. However, when trying to create a new replication session for the same file system on the source array (of the previous replication session) to the destination array, the operation will fail with the error Replication Internal Error and rollback the creation. The new replication session creation failure is expected because the system does not allow two replicated file systems (one by the previous replication, the other by new replication) of the same source file system in the same destination VDM. The error message is not clear.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
907141	A dynamic pool shows that it is in degraded state for several hours while the rebuilding of related mapped RAID has already completed. There is a low probability that this issue will occur when Mapped RAID goes from a BROKEN state to a READY state after removing and reinserting drives (two or more for RAID1 and RAID5, or three or more for RAID6), or if the enclosure goes offline and online.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
907186	If there is a checkpoint snapshot and it is created before the last system reboot, and you want to back up the snapshot with NDMP, the backup will fail.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
909109	A failover with sync operation on a NAS server replication session may	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	cause data to be unavailable for a long period when NAS server has a file system replication session whose remaining size is larger than 100MB.			
909258	If the file system name and the VDM mount point name are not the same, the name listed for the **Target File System** during import session creation is not correct.	Fixed in code.	4.2.0.9392909 and later	4.2.0……….
883848	During certain read operations when the pool is full, reads may hang causing timeout issue to occur on the SP. If a pool is out of space and a LUN enters ReadOnly mode, it is possible for the SP to panic in some rare instances.	Fixed in code.	4.1.1.9138882 and later	4.3.0.1522077968
895535	When adding an IO limit policy to a LUN and pausing the IO limit policy at the same time, the IO limit policy is not added to the conflicting operations.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
896350	In CloudIQ, the System metrics chart (like IOPS, Bandwidth, etc.) has missing values when VVol objects are unbound and then re-bound. On the Unity Unisphere performance page, the datastore metrics also have incorrect values when VVol objects are unbound and re-bound.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
902479	A file system or LUN goes offline and remains offline for sometime when the pool becomes 100% full instead of going to read-only even after space is available in the pool.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
903888	Occasionally, a communication error dialog will pop up during an upgrade while one SP is rebooting.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
904176	When modifying a CEPA Pool, the error message The specified Events Pool is currently locked by another request appears.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
904242	When expanding a dynamic pool by a drive count that is less than the RAID width + 1, the progress indicator in the Unisphere GUI does not update properly to show incremental progress. The progress indicator will then show 100% when the expansion is complete.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
904746	A replication session with snapshot replication enabled will go into an error state at the start of a sync (manual/auto) operation.	Fixed in code.	4.2.0.9392909 and later	4.3.0.1522077968
895621	After an import session is cut over, the file import process does not appear to complete and remains in a	Fixed in code.	4.1.0.8940590 and later	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	ready to commit state. The session cannot be cancelled.			
974730/ 929409/ 929361	An SP reboot occurred due to a race condition when accessing the mount point vnode to get user file system information if the file system had been unmounted.	Fixed in code.	4.1.2.9257522	4.4.1.1539309879
967410/ 975038	During initial copy or data re-syncing after the synchronous replication FC link recovers from a disconnection, user may see the session status change to non-recoverable error and cannot be recovered by a pause or resume operation.	Fixed in code.	4.4.0.1534750794	4.4.1.1539309879
974990	If KMIP servers are reconfigured, but the KMIP configuration settings on the storage system are not also updated, a dual-SP reboot will result in both SPs going into Service Mode.	Fixed in code.	4.3.0.1522077968 and later.	4.4.1.1539309879
974689	Some UEMCLI operations, such as LUN creation, can take an extended time to complete (such as up to 100 seconds).	Fixed code to improve performance.	4.3.0.1522077968	4.4.1.1539309879
974701/ 965071/ 964140	When many files were being created and deleted at the same time, autoshrink was triggered and tried to reclaim space, and the file system sometimes went offline.	Fixed in code.	4.3.0.1522077968	4.4.1.1539309879
974702/ 951194/ 966354	Service command svc_dataprotection delete operations sometimes failed.	Fixed in code.	4.3.1.1525703027	4.4.1.1539309879
974708/ 950969/ 949947	An SP reboot occurred during an upgrade.	Fixed in code. .	4.3.1.1525703027	4.4.1.1539309879
974710/ 967747/ 967740	An SP reboot occurred when it did not receive a MAC address from the SSH client while deciphering an SSH packet.	Fixed in code.	4.3.0.1522077968	4.4.1.1539309879
974711/ 969270/ 969262	On a NAS server configured with multiple network interfaces, there was a condition that caused the SP to reboot when the NAS server was being shut down. This led to SPA rebooting when it tried to come back online if SPB was already in Service Mode.	Fixed in code.	4.3.0.1522077968	4.4.1.1539309879
974717/ 959575	High latency was seen on VMWare datastores during XCopy clone operations. VMs on ESXi hosts with PowerPath installed also sometimes temporarily lost access to LUNs.	Fixed in code.	4.3.0.1522077968	4.4.1.1539309879
974724	A single SP reboot occurred during an NFS IMT migration when there was some instability in the network.	Fixed in code.	4.3.0.1522077968	4.4.1.1539309879

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
975862	Data Reduction was not enabled after a NAS server import session was created, even if during the session creation **Data Reduction** was selected.	Fixed in code.	4.4.0.1534750794	4.4.1.1539309879
974679/ 951291/ 950649	On D@RE-enabled systems, refer to DTA 525499 before upgrading or installing any new software on your storage system. If a traditional pool has been created, and later destroyed, then another traditional pool created on the same drives, a data loss may occur the next time a storage processor is rebooted for any reason. This situation can be avoided by following the guidance in DTA 525499.	Fixed in code.	4.2.1.9535982	4.4.1.1539309879
974671/ 958300/ 956930	When trying to remove all LDAP servers not returned by DNS, an SP reboot occurred.	Fixed in code.	4.3.0.1522077968	4.4.1.1539309879
974683/ 968981/ 967533/ 10633296	While running an NDMP backup for an asynchronous replication destination, the following could have occurred: • A non-failover/failback destination: The VDM replication session refreshed while the backup was running, causing the backup to fail. A failover/failback destination: The NDMP backup session failed over and resumed, then the NDMP backup was run on the original destination and failed back and the VDM session refreshed, causing the NDMP backup on the source to fail.	Fixed in code.	4.3.1.1525703027	4.4.1.1539309879
975368/ 970690	A file system went offline when a normal empty file changed into a directory file after FSCK implementation. The following error was reported: Unexpected state VNON in lookupComp.	Fixed in code.	4.3.1.1525703027	4.4.1.1539309879
975749	After an NFS or CIFS import session was cutover, if the import session was canceled and there were network connectivity issues between VNX and Unity systems, the cancel operation stopped responding.	Fixed in code.	4.2.2.9632250	4.4.1.1539309879
975370/ 966530	Hundreds of file synchronous replication sessions were running from Site A to Site B, and asynchronous file replication sessions were running from Site A to Site C. Site A went down, and a	Fixed in code.	4.2.0.9392909 and later	4.4.1.1539309879

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	user cabinet failover was performed to Site B for the synchronous replication sessions. When Site A recovered, the replication connection with Site B could have been disconnected. Validating the Site A-to-Site B connection failed. A reboot of Site A recovered the connection.			
977418/ 965341/ 964936	After a CIFS import session cut over, shares were inaccessible.	Fixed in code.	4.3.1.1525703027	4.4.1.1539309879
931257/ 08458939	IOTimeCounter & IdleTimeCounter values decreased over time, instead of displaying cumulative values.	Fixed in code.	4.1.2.9257522	4.4.0.1534750794
935271/ 8995191	VDM unmount operation could not complete under NFS stress. The log contained the following error: Cannot close nfs streams after 100 tries	The code was updated to stop blocked NFS requests gracefully on VDM unmount operation.	4.2.0.9476662	4.4.0.1534750794
935950	An operation to expand a VMFS datastore with ESXi v.6.5 in the host access list may have failed with a Completed with problems message. The datastore on the Unity side was successfully resized, but the datastore in vSphere was shown with the old size. No errors were reported in vSphere.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
937418/ 7247407	The Unity VSS provider restricted taking multiple snapshots and attaching to hosts. Note: Refer to the *Unity VSS Release Notes* for more information.	The VSS provider was updated concurrent with this release to also use Rest API calls to manage snapshots.	4.1.0.8959731	4.4.0.1534750794
937431/ 9196041	User could perform LUN operations after upgrading to OE version 4.2.1 if there were hosts with invalid source initiator types attached to the LUN.	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
938015/ 9246131	Users were unable to log in to Unisphere with AD LDAP users that started with a dash (-).	The code was updated to allow dashes in AD LDAP usernames.	4.2.1.9535982	4.4.0.1534750794
938138/ 9119965/8635547	Domain Controller alerts occurred every 10 hours when the Kerberos ticket expired. The NAS server <yourNasServer> in the domain <your.domain> can't reach any Domain Controller.	The code was updated to handle ticket expiration gracefully to avoid alerts.	4.1.2.9257522	4.4.0.1534750794
938330/ 9222088	A NAS server became inaccessible during a time of high network traffic.	Fixed in code.	4.2.0.9476662	4.4.0.1534750794
938359/ 08481893	System hung due to blocked threads when opening a file.	Fixed in code.	4.2.0.9476662	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
940786	Resumption of a file replication session failed when: 1. The file replication session was hung/stopped responding, and a Resume operation was started. A NAS server group planned failover was issued, but failed to failover within the file system replication due to the resume operation being in process.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
942317/ 9470348	After failover with a sync NAS replication session to a destination array with different ports configured (for instance, without Link Aggregation or FSN), users were unable to modify the NAS server interface. The following error message appeared: The specified Network interface could not be modified. A shutdown may have been in progress causing the failure.	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
942495/ 9588306	Alerts did not appear when a pool was offline, because the DAE cable was not plugged back in after reallocation.	Fixed in code.	4.2.0.9476662	4.4.0.1534750794
943693	The uemcli /net/nas/cifs show command would incorrectly show an abandoned CIFS server that could not be deleted. The CIFS server actually did not exist and was not present. This did not appear in the Unisphere UI.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
943707	Failover could occur when many NAS servers were configured on the system. For example: • When more than 49 IPs of the same family (IPv4, IPv6) were configured on a single SP. This meant about 40 NAS or more on a single SP LDAP, DNS, NIS or other external services were configured on the array. When more than 49 IPs of the same family (IPv4, IPv6) were configured total on both SPs. This meant about 40 NAS or more on an array - LDAP, DNS, NIS or other external services were configured on the array.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
945457	During creation of a replication session for an existing NAS server, LUN, or Consistency Group, the Destination System in the Destination step was not updated after being returned to the Replication Settings step, and a different replication destination	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	system than the first one was selected.			
946176/ 9820928	CBR backup left a temporary archive file on a VDM root filesystem when it failed to archive the .cepp and .cepp.bak files.	Fixed in code.	4.2.0.9476662	4.4.0.1534750794
946235/ 9820928	Under degraded circumstances, CEPP filled the VDM root File System with events and caused the SPs to go into Service Mode.	The CEPP events maximum file size was reduced to 100 MB instead of 500 MB to avoid the root file system becoming full.	4.2.0.9476662	4.4.0.1534750794
946418/ 09841907	A server may have panicked on unsupported MS-RPC authentications requests, such as MS-RPC bind requests with NTLMSSP and SPNEGO.	The code was fixed to gracefully handle unsupported MS-RPC authentication requests.	4.2.1.9535982	4.4.0.1534750794
946502/ 9362228	2. The storage processor sometimes rebooted when SMB clients connected to an SMB share.	Fixed in code.	All previous versions	4.4.0.1534750794
946604/ 08481893	When an inode link count was corrupted for any reason, FSCK could not fix the inode link count under particular conditions. This may have led to file loss.	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
947028/ 9597265	An SMB VDM import session became stuck in an error state after cutover if a file or directory was deleted before cutover, but after it had been copied during initial copy.	The SMB VDM import session now always removes the stale file or directory after cutover.	4.2.1.9535982	4.4.0.1534750794
947152	While running an NDMP backup for an async replication destination, the backup may have failed in the following scenarios: • Case #1: Non-failover/failback async replication destination. 　1. NDMP backup was executed for the source. 　2. The VDM replication session refreshed. 　3. Running the backup on the destination failed if the VDM replication session refreshed while the backup was still running. • Case #2: Failover/failback async replication destination: 　1. Only NDMP was configured for backup for a destination. 　2. NDMP was run on the destination. 　3. The session failed over and resumed. 　4. NDMP was run on the original destination.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	5. The session failed back. Running the backup on the original destination failed if the VDM replication session refreshed while the backup was running.			
947382/ 5386967	• A NAS server panicked when attempting to handle a long message that was transmitted from a DNS server in multiple chunks.	The code was fixed to resolve this issue.	All previous versions	4.4.0.1534750794
947909/ 10002544	Under some circumstances, increased latency occurred on LUNs while a storage processor was shutting down (for example, during an upgrade).	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
949740/ 9813345	NAS server imports failed due to NotFound, NoPermission and EndOfFile errors from a destination file system.	Fixed in code.	4.2.0.9392909	4.4.0.1534750794
949997/ 09470348	When ports were selected to create an FSN (fail-safe network) with NAS interfaces already assigned to the ports, the selected interfaces were moved automatically to the new FSN.	A confirmation now appears during FSN and LA (link aggregation) creation and removal in Unisphere for the following actions: • LA creation wizard • LA confirmation dialog during delete operation • FSN creation dialog • FSN confirmation dialog during delete operation The following message now displays: The file interfaces of the selected ports will be reassigned to the FSN. During this operation access to client data through these interfaces will be unavailable.	4.2.1.9535982	4.4.0.1534750794
950006/ 9980474	When some heavy asynchronous replication sessions occurred, the replication destination resource was rebooted.	Fixed in code.	4.1.0.8940590	4.4.0.1534750794
950563	The Unisphere UI should have listed all the hardware health issues on the **System View** page **Summary** tab, but some health issues might have been hidden if the issues list was too long.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
951371/ 8436331	A dual SP reboot occurred due to an incorrect buildType being read from the wrong crawl bit.	Fixed in code.	4.2.0.9433914	4.4.0.1534750794
951868/ 10303673	A CIFS VDM import paused indefinitely if the svc_nas -restart command was issued on the destination NAS server.	The code was updated to handle this condition.	4.2.1.9535982	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
951950/ 955284/ 9809669	During import from VNX systems, if quota items were present which had hard/soft limits set to zero, those quota items were not migrated to Unity.	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
952576/ 9378183	A delay occurred when adding a LUN to a host. This delay was longer for hosts that had multiple initiators.	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
953178/ 10603527	A single Storage Processor rebooted.	Fixed a rare race condition between two SP's for the same cache page reference.	4.2.0.9392909	4.4.0.1534750794
953800	In some cases, if a source I/O error was encountered during migration, the error detail could not be cleared which caused mis-reporting of session failure. Also, this error state could not be cleared through pause and resume operations. However, when the underlying file system session completed, the error was cleared and the session returned to the normal state.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
953838	After a NAS Server was created and local replication was enabled on it, replication could not be enabled during subsequent file system creations on that NAS server. The file system creation was successful, however, no replication session was configured.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
954042/ 09925995	A single iSCSI miniport driver rebooted when multiple ISCSI initiators logged in.	Fixed in code.	4.2.1.9535982	4.4.0.1534750794
954138/ 10122152	If the home directory was disabled on Unity before cutting over a CIFS VDM import, the system went into a rolling reboot.	Fixed in code.	4.3.0.1520304912	4.4.0.1534750794
954246/ 10290554	When importing from VNX to Unity, if the import interface of the VNX system had a different VLAN ID than the import interface of the Unity system, the creation failed. An error message appeared: The source and target import interfaces are in different VLANs. (Error Code:0x9000182)	The code was enhanced to remove this limitation. You can now import using VLANs with different IDs on the VNX source and Unity destination.	4.3.0.1518099738	4.4.0.1534750794
955076/ 10441444	SP rebooted unexpectedly.	Fixed a race condition that existed between threads of multiple modules.	4.2.2.9632250	4.4.0.1534750794
955574/ 10266243	An export of the secmap file contained XML artifacts.	Fixed in code.	4.3.0.1518099738	4.4.0.1534750794
956543/ 10598977	Powering on an SP with a FC port failed. The log files showed a CDX loading time-out event.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
956611/ 09885947	The system could become unresponsive during a NAS server import incremental copy.	Fixed in code.	4.2.0.9392909	4.4.0.1534750794
957177/ 10642655	Running UEMCLI scripts for multiple days could result in creating a large amount of user and audit logs. If the script continued to run after more than 298,000 user and audit logs were created, both SPs could have entered service mode with an APPINIT error.	Fixed in code	4.2.1.9535982	4.4.0.1534750794
958622/ 10745667	After upgrading to 4.3.0, if TLS v1.0 was disabled and Directory Services were configured to use LDAP S, LDAP users were unable to log into Unisphere with the following error message: The logged in user is not authorized to access Unisphere	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
959061	The SP rebooted when an SMB client accessed a share that included symbolic link objects. This was due to a file system unmount timeout.	The code was updated to properly handle the race condition between an SMB thread opening a symbolic link and the file system unmount event processing.	4.3.0.1522077968	4.4.0.1534750794
960081/ 91238202	While importing from a VNX system, the import session reported a critical failure. The following error appeared: The import session failed due to unrecoverable failure. Cancel the import for data integrity consideration.	Some migration settings were not saved during the migration session creation, and were lost after a reboot of the SP. With this fix, all migration settings are saved during the initial synchronization. A reboot of the SP during the sync now causes no failure.	4.2.0.9392909	4.4.0.1534750794
960481/ 10983478	The system failed to access DNS servers (and to resolve domain names) for connectivity through the management port.	The code was modified to avoid SM restarts and to not reset DNS settings during management interface configuration.	4.3.0.1522077968	4.4.0.1534750794
964368/ 11170480	In rare cases, deleting a replication session left a cruft delete command in the NAS server command database. During a software upgrade to OE version 4.3.0.1522077968, the system entered Service Mode.	Fixed in code.	4.3.0.1522077968	4.4.0.1534750794
964866/ 10917579	During an SMB NAS server import incremental copy, a deadlock could occur between a rename and a proxied readdir. This deadlock caused the affected file system to become inaccessible.	The code was updated to resolve the deadlock.	4.2.0.9392909	4.4.0.1534750794
965361/ 10324791	When the parent directory of an ADS file was corrupted, the unnamed stream inode was the only item in the lost and found after an FSCK.	Fixed in code.	4.3.0.1518099738	4.4.0.1534750794

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
968426	Only the last issued svc_nas – param command was saved, overwriting all previous parameters.	The code was updated to persistently save all user-defined parameters.	4.3.1.1525703027	4.4.0.1534750794
956540 / 10598977	NAS services component (cdx.so) loading will time-out during software upgrade when there is RecoverPoint activity and FC network has some issues (cause a lot of IO abort) at the same time.	Fixed in code.	4.3.0.1522077968	4.3.1.1525703027
956596 / 09255966	Solaris client fails to mount an NFS export with NFSv3 on UDP.	The code has been updated to register NFSv3 on UDP in the RPC port mapper.	4.2.0.9476662	4.3.1.1525703027
956597 / 08712936	The SP may reboot during the unmount of a file system. It may happen if the SFTP server of the related NAS server is started, and an SFTP client is connected to this server. If an SFTP client is connected and remains connected a long time, especially during the unmount of the file system, the SP may reboot.	Fixed in code.	4.2.0.9433914	4.3.1.1525703027
956598	Unexpected SP reboot while using Microsoft Hyper-V.	Fixed a memory corruption caused by a rare event.	4.2.1.9535982	4.3.1.1525703027
956599 / 07537656	An unexpected panic of overloaded array (network and/or CPU) has been fixed.	Fixed in code.	4.1.2.9257522	4.3.1.1525703027
956600 / 09378183	When assigning LUNs to a Host, it will take more time depending on the number of initiators on that Host. The more initiators there are attached on the host, the more time consuming the operation will be (each initiator costing about 2~3 seconds).	Fixed in code.	4.2.1.9535982	4.3.1.1525703027
956601 / 09980474	When the user runs many async replication session transferring with a little RPO (about 5 minutes), there is less chance that the replication destination side will reboot.	Fixed in code.	4.2.1.9535982	4.3.1.1525703027
956606 / 09861509	SPA lost communication with SPB (SPB was in a hung state) and rebooted 3 times, as it was going into service mode SPB rebooted and came up in a good state. All hosts recovered and were able to access LUNs via SPB. Replication for SPA owned LUNs did not resume as RecoverPoint were unable to communicate with user or journal LUNs via SPB.	Fixed in code.	4.1.2.9257522	4.3.1.1525703027
956712 / 09809669	If user configured root quota on File Import source side or if the quota configuration for a quota tree can't finish migrating before the associated FS migration session completes (usually this could be	Fixed in code.	4.2.0.9392909	4.3.1.1525703027

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	that most of the dir under root directory are quota tree), then this quota configuration may fail to be migrated from source VNX to Unity after File Import session completes.			
956750	While running and NDMP backup for async replication destination, the backup may fail for below 2 scenarios: Case #1: Non-FO/FB async replication destination 1. User executed NDMP backup for source 2. The VDM replication session refreshed 3. Run backup on destination will fail if VDM replication session refreshes while the backup is running Case #2: FO/FB async replication destination 1. User configured only NDMP backup for destination 2. User run NDMP on destination 3. The session failed over and resumed 4. User run NDMP on original destination 5. The session failed back 6. Run backup on original destination will fail if VDM replication session refreshes while the backup is running.	Fixed in code.	All previous versions	4.3.1.1525703027
956851 / 951953 / 10257282	Using Inband Mobility Tool for file system migration may lead to file systems going offline after cut-over and just before commit.	The code has been updated to fix the object reference counting logic to prevent the bad memory reference.	4.3.0.1522077968	4.3.1.1525703027
956966 / 08858228	Customer was unable to install Latest Version of VSS - 3.0.0.0.090-1 on Windows Server 2016.	Multiple language check was blocking executable from installing in Windows Server 2016 core version. Fixed issue by removing multiple language check.	All previous versions	4.3.1.1525703027
951815	Renaming software upgrade image files can cause upgrades to fail.	Fixed in code.	4.3.0.1518099738	4.3.1.1525703027
956990 / 09823022	When FSCK was run on a file system with dense files that were transferred to CTA, the files were treated as sparse. As the dense bit was still set, this caused FSCK to reserve space for these files and the Used Size of the file system grew.	FSCK will skip the PBR counter check for offline files and won't reserve space for these files any more.	4.2.0.9476662	4.3.1.1525703027
957102 / 957105 / 956434 / 09925995 / 957187 / 09331417	Single reboot when there are a lot of iSCSI logins and login failure from host to the same array's iSCSI CNA port or SLIC ports.	Fixed in code.	4.2.1.9535982	4.3.1.1525703027
945310 / 90461130	An unexpected SP reboot occurs while using Microsoft Hyper-V.	Fixed in code.	4.0.0.7329527 and later	4.3.1.1525703027
943006 / 08712936	The SP may reboot during the unmount of a file system. This may happen if the SFTP server of the related NAS server is started and	Fixed in code.	4.2.0.9392909 and later	4.3.1.1525703027

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	an SFTP client is connected to this server. If an SFTP client is connected and remains connected a long time, especially during the unmount of the file system, the SP may reboot.			
942040	A Solaris client fails to mount an NFS export with NFSv3 on UDP.	Fixed in code.	4.0.0.7329527 and later	4.3.1.1525703027
959694 / 09813345	One or more file systems in a CIFS VDM import session could go offline and report ACL database corruption when placed under heavy load after cutover. In addition to heavy load, the same issue could also be triggered by manually running an aclchk command after cutover on a file system which was still being imported.	Fixed in code.	4.2.0.9392909	4.3.1.1525703027
959651 / 10490455 957077 / 10490455	Systems that use file systems of 64TB or greater may experience memory corruption followed by storage processor reboot when attempting to shrink file systems automatically or manually.	The shrink object support the max size file system 256T.	4.2.1.9535982	4.3.1.1525703027
930810	Solid state drives with part number 005052112 and EQHA firmware may experience a 04/29-04 internal reset and cache data that was not committed may get lost resulting in a data loss or coherency situation.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
951970	For a CIFS VDM import, there was a race condition during directory resync that caused tasks associated with the descendants of a directory that is being resynced to fail with CannotProxyerrors. If the resync of the ancestor is successful, the affected descendant tasks will succeed when they themselves are resynced. However, this race condition means that some parts of the destination file system are transiently considered failed when they did not fail.	Fixed the code to avoid the race condition by forcing the node state to be written before the descendant tasks are scheduled.	4.2.1.9535982	4.3.0.1522077968
951975	A race condition sometimes caused CIFS VDM imports to panic when building a path for remote access. The panic was triggered if the path build passed through a node at the same moment its last open is dropped.	Fixed the code to remove the race condition.	4.2.2.9632250	4.3.0.1522077968
951976	VDM import could have failed due to an inconsistent node state when a new directory/file was created during an incremental copy. The inconsistent node state was caused by the cleanup thread erroneously deleting the final reference to a	Cleanup thread was modified so that the final reference to a moved directory/file will not be removed from the tmpdir.	4.2.2.9632250.1.18.0 01	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	moved directory/ file from the tmpdir on the destination file system. The inconsistency occurred when the inode number of the deleted directory/file was reused by a subsequent create operation.			
951977	CIFS VDM import paused after cutover due to Not found errors from the source VNX system. When this happened, the server log of the source VNX contained many instances of the following error System runs out of vnode.	The migration engine has been updated to aggressively drop open cache entries it no longer needs (rather than relying on them to expire through the LRU).	4.2.1.9535982	4.3.0.1522077968
951978	CIFS VDM import paused after cutover due to Not found errors from the source VNX system. When this happened, the server log of the source VNX contained many instances of the following error System runs out of vnode.	It is not clear why the source VNX system reaches the vnode limit before the SMB1 open file limit is reached. However, to avoid the problem the open cache now runs periodic time-based garbage collection of the open cache entries (rather than relying on them to expire via the LRU).	4.2.1.9535982	4.3.0.1522077968
952203	If the CIFS file migration connection between Unity and VNX was broke, when cutover completed, the CIFS migration health state was not okay. The progress was slow because the underlying issue may have continuously resynced some failed nodes.	Fixed in code by not allowing any tasks to run if the connection was not restored.	4.2.1.9535982	4.3.0.1522077968
952204	After a file import session cut over, there was a window during which the user's application read pass EOF of a file. This caused one of the SPs to reboot before the incremental copy finished.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
952205	A File Import session in an incremental copy state will never go into a "Ready to commit" state if there is a file import destination file system offline.	Fixed in code.	4.2.2.9632250 and later	4.3.0.1522077968
952206	The system was unable to connect an SMB share after a NAS server failover if the NAS server was in a replication session with different IP addresses (override) configured for the destination NAS server. After a NAS server failover, the source NAS server IP addresses were not removed from the DNS server, which confused the SMB clients that reconnected to the same NAS server reachable only from the destination override IP addresses.	Fixed in code.	4.2.0.9217060	4.3.0.1522077968
947696 / 06643167 / 06643167	After both SPs rebooted, the LUN went offline or became permanently degraded. For the degraded case,	The code has been updated to prevent the LUN from going offline or getting degraded after both SPs	All previous versions	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	the rebuild never completed.	reboot.		
936499 / 09849174	File System went offline due to a metadata corruption. Usually this happened when the pool was near full or when replication was turned On. Only half (4K) of the metadata block got corrupted. A message displayed for a back trace indicating metadata corruption.	Fixed in code.	4.1.0.8959731 and later	4.3.0.1522077968
778326 (virtual deployments only)	When creating a pool using virtual disks, the **Next** button remains dimmed after selecting a tier for a virtual disk.	Click elsewhere within the wizard window to trigger selection validation.	All previous versions	UnityVSA OE 4.3.0.1218191253
896446 / 902679	When using SMB to import a VDM from a remote system, SMB2 clients may not be able to create symlinks (a failure error of INVALID_PARAMETER displays).	After import completion, SMB2 client symlink creation works as normal.	4.2.0.9392909 and later	4.3.0.1522077968
892673 / 838496 / 895056	When the user changes the name of a LUN which is involved in a remote replication session, the replication screens incorrectly display the old name when the session is viewed from the remote system. The new name is correctly displayed for local replication sessions and in the replication screens of the sessions from the array that hosts the renamed LUN.	The incorrect name does not impact the replication session. Viewing the session from the remote system where the renamed LUN resides displays the correct name. Unisphere CLI can also be used to locate the friendly ID of the source and destination and then it can be mapped to renamed LUN.	4.0.1.8194551 and later	4.3.0.1522077968
905705 / 913568	The /net/nas/is set command fails with the following error message when -port is the only argument: A required parameter is missing from the CLI command. (Error Code: 0x1000019) Otherwise, the command completes successfully, but port is not modified.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
910376	Pools and LUNs went offline momentarily when a health check was running on two drives in the same RAID group.	Fixed in code.	All previous versions	4.3.0.1522077968
922294	Cannot delete a UFS64 file system.	Fixed in code.	4.2.1.9535982 and later	4.3.0.1522077968
944004	If one link to a file with two links was removed at the same time that another new link to the same file was created, the SP sometimes went into an invalid state and rebooted with a bad pointer fault.	The code was update to serialize removing the next-to-last link of a file and creating a new second link, to prevent the invalid state from occurring.	4.2.0.9392909	4.3.0.1522077968
933628	A debug trace log (ktrace) was flooded by drive zeroing when the extent pool is shuffling.	The code was updated to change the drive zeroing trace into high-speed IO trace log (ktraceio).	4.2.0.9392909	4.3.0.1522077968
904343	LDAP alerts were too numerous due to the number of checks of the	LDAP service will send Health & Alert only for "User" container, all others	4.2.0.9392909	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	Unity LDAP service.	warnings are recorded inside Unity logs.		
910020	When doing a failover with sync, a data unavailability situation may have occurred.	Fixed in code.	4.2.0.9343338	4.3.0.1522077968
935464	In certain cases when asynchronous replication was configured, after several sync operations of the sessions, an SP of a source NAS server could have rebooted or the NAS server connectivity to the source system was lost, and restored only after the SP reboot.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
859471 / 82036302	When there was a large number of initiators, opening the GUI initiator / initiator Path Page caused the page to refresh continuously.	Fixed in code.	4.0.1.8194551	4.3.0.1522077968
885276 / 933103 / 83997130	In some special circumstances, changing the NetBIOS name of a NAS server may fail and result in a unrecoverable error.	The code has been updated so that changing the NetBIOS name of a NAS server is now safe.	4.0.0.7329527	4.3.0.1522077968
890176	When one SP hit an unexpected reboot due to a Linux reboot or safe core dump, one unexpected reboot alert was shown in the Unisphere UI, without detailed information on why the reboot occurred.	The code has been updated to display a detailed message in this case, such as: For safe dump, the Alert message is: A Unity I/O stack dump file was detected on Storage Processor %2., or A Unity operating system dump file was detected on Storage Processor %2.	4.1.0.9058043	4.3.0.1522077968
900400 / 85103080	A RAID group could not be rebuilt and PACO could not abort.	Fixed in code.	All previous versions	4.3.0.1522077968
903662 / 84758074	In a UNIX access policy, when a file has a NFS ACL granting access to some users, a user who should have no access was allowed to access the object.	Fixed in code.	4.1.0.9058043	4.3.0.1522077968
904503 / 7117960	If a LUN internally trespassed and needed a recovery procedure to be run, the LUN did not come back online after running recovery and bringing it back online. It shows as Online in the Unisphere UI, but cannot perform IO.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
911316	A snapshot could not be deleted from the snap host access on Host Properties page. If a snap host access item was selected to be deleted, it appeared to delete the LUN host access, but nothing happened on the backend.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
912581	A deletion operation of a replication session stopped responding.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
914191 / 915104 / 7800693	A storage processor reboot occurred at start up time when	Fixed in code.	4.1.1.9138882	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	using multiple tenants.			
916860/916861/ 7268346	A cutover operation of a block import session was stuck for hours.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
917041 /7891756	A sudden reboot occurred on one SP.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
917736 / 8045828	One SP was upgraded successfully, but the other failed when attempting to upgrade from earlier release to 4.2.x on a Unity 300 system.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
918157 / 07968030	Datastore WWN information was missing from the Unisphere UI.	The code was fixed to add the datastore WWN information.	4.2.0.9392909	4.3.0.1522077968
920503	The Unisphere UI sometimes displayed a very large value for increased space when trying to expand a 32-drive dynamic pool.	The code has been fixed so that zero size will be displayed if more spare space will be allocated when trying to expand a 32-drive dynamic pool.	4.2.0.9392909	4.3.0.1522077968
920992 / 8159254	The customer could not create a directory name with tailing space from CIFS.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
921205 /8221126	The creation or removal of an I/O limit for a storage volume where other storage volume tasks were executed in parallel led to an ECOM restart and SP reboot.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
921253 / 7463249	An SP reboot occurred due to an unmount time out.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
922715	An extra space was displayed after 'Replicated' field, and filters may fail when showing snapshots through the CLI.	The extra space has been removed in the code.	4.2.0.9392909	4.3.0.1522077968
923487	Following a SMB server rename, the DFS links hosted by this server no longer worked.	Fixed in code.	4.1.0.9058043	4.3.0.1522077968
925682 / 8414969	Snap refresh did not update the snap size from a base LUN after the base LUN was resized if the following steps were taken: 1. Create a snapshot. 2. Expand the base LUN to a new size. Refresh the snapshot.	The code has been updated to set the new size of a snap during refresh.	4.1.1.9138882	4.3.0.1522077968
926551/930144/ 8418991	The auto-tiering analysis phase took over eight hours. As a result the ECOM timeout occurred, which after some number of retries lead to SP reboot.	The lock scope was reduced to the initial phase, which is a number of seconds. The commands are processed from ECOM and there is no time-outs.	4.2.0.9476662	4.3.0.1522077968
926918 /8513631	Creation of a LUN or Consistency Group import session failed with the following error when there was	1. Delete the import connection with remote VNX system, which will delete the	4.1.2.9257522	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	block import session in Completed state. Operation failed. Error code: 0x6000003 The system encountered an unexpected error. Try again and if that attempt fails then search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x6000003)	completed import session. 2. Re- create the import connection. 3. Create LUN/CG import session can succeed.		
927535	Windows users were unable to rename files on an NFS mounted share after the system was rebooted or a NAS server was restarted. The NFS share was mounted using an alias.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
928081 / 8513596	An unexpected single SP reboot may have occurred during the process of gracefully shutting down that same SP. The SP automatically recovered and no user action was required.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
928419	An unexpected reboot occurred under a rare peer-to-peer communication timeout.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
929032 / 8599237	In some cases, removing a file failed, and a quota check task stopped responding. Unmounting the file system would also timeout. The system would reboot after the unmount operation timeout on this file system.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
929225 / 918458 /7701215	If the NisDomainObject was configured with the LDAP directory within the baseDN, the NAS server LDAP connection failed. An alert or poor health state message for the NAS server sometimes displayed. The svc_nas -ldap service command could be run to diagnose if there were issues with the NisDomainObject.	The code has been updated so the check of the NisDomainObject has been removed so the NAS server LDAP client can connect.	All previous versions	4.3.0.1522077968
929608	During a CIFS server migration from VNX1/VNX2 to Unity, if the CIFS server has Alias(es), the cutover operation failed.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
930002 / 8685570	3. Service script svc_initial_configdid not update the system friendly name correctly.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
930230 / 8465746	FSCK reported the wrong file usage after changing mode 2 to mode 1.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
930373	When an FSN was deleted, alert 14:60edb, One of the system's storage processors cannot communicate with FSN port %2 was generated, and this alert was shown in Unity UI Alert page.	The code has been updated to prevent this unnecessary alert.	4.2.1.9535982	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	However, FSN behaved normally in this case and this alert was a false alert.			
931129 / 8633578	When running an svc_perfcheck --ktrace command that needed to be stopped before it completed (for example, if it started with incorrect arguments), attempting to stop it with CTRL- C commands could leave some of the background processes still running that prevented it from running properly, until they either timed out or were manually cleaned up.	The svc_perfcheck command was fixed to correctly handle the CTRL-C commands and stop all of its background processes before exiting.	4.2.0.9433914	4.3.0.1522077968
932027 / 8584747	There was an issue with the SFTP server of a NAS server when configured with an IP with a VLAN and within an IP namespace (tenant) different than the default. TCP port 22 was not seen as opened by the client. A connection refused message was displayed on the client.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
932437 / 8734311	Under particular conditions involving a stuck attach operation of a snapset followed by an ECOM restart, both Storage Processors would reboot.	Fixed in code.	4.2.0.9433914	4.3.0.1522077968
933512	If there were eight or more NDMP sessions running at the same time, in some cases, this caused an unmount timeout.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
934988 / 9012099	On an idle system with LUNs/file systems based on hybrid pools, there was significant CPU consumption due to a background space maker activity that attempted to create contiguous free space in the file systems.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
935145 / 8754729	An internal periodic process caused unexpected Secure Channel disconnections. This can lead to false Domain Controller unavailablealerts.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
936060	Client access to the destination file systems of a VDM import session which was marked as Failed due to an unrecoverable error could trigger a reboot.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
936103	If a NAS Server already had LDAP configuration (with Authentication type=Simple) with the corresponding IPs of LDAP Servers for the NAS Server, but an LDAP Server was added or removed using the Unisphere UI (**NAS Server** > **Properties** > **Naming Services** > **LDAP**, the password	Fixed in code.	4.2.0.9476662	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	field did not appear to be empty (contained ******). If **Apply** was selected because a password was not configured (after appearing to already be present), the added LDAP Server did not work due to the password not being provided.			
936373 / 9000860	NFS exports that used different kinds of IPv4 addresses like "10.20.30.40" and "123.123.123.123" might lead to system reboots.	The code has been updated to ensure string copy for NFS exports are safe.	4.2.0.9476662	4.3.0.1522077968
936811 / 8715851	A NAS Server shutdown took a long time when there were NDMP sessions running on file systems within the NAS server.	Fixed in code.	4.2.0.9433914	4.3.0.1522077968
937370 / 9082055	A VDM import session could have become stuck in a fault state if a file or directory on the source had too many alternate data streams to query using SMB1.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
938245 / 9274225	A VDM import session could become stuck in a fault state if a hard link was deleted after it had been copied by the initial copy phase, but before cutover had been completed.	The code has been updated so the VDM import now carries out additional checks to detect deleted hard links.	4.2.1.9535982	4.3.0.1522077968
938552 / 9177721	The Unity Operator role was unable to query VVols objects using the uemcli /stor/ prov/vmware/vvol objects CLI command.	The code has been updated to add the operator role to the list of allowed roles to list VVols.	4.2.0.9476662	4.3.0.1522077968
938785 / 9209417	An attempt to remove a host with a hostname or an IP address from NFS share host access sometimes failed if this was the last host of this type in the host access. For example, if the NFS share host access contained two hosts--one with a hostname and one with an IP address--an attempt to remove only one of these hosts failed.	Fixed in code.	4.2.0.9433914	4.3.0.1522077968
940992 / 8683024	An implementation issue sometimes caused the SP to go down.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
942230 / 8651638	If a VVol was provisioned without specifying the auto- tiering policy value in vSphere Storage Policy, or using the "No Requirement" vSphere policy, the tier preference was not set, and the VVol data was equally distributed between tiers. This was different from the traditional LUN default, which sets preference to highest tier.	The code has been updated so the default auto-tiering policy for VVols is aligned with traditional LUNs, so now tier preference is set to highest tier in both cases.	4.2.0.9433914	4.3.0.1522077968
942339 / 9443124	If a directory with no named streams contained a file with multiple links, and later named streams were added to the directory, the internal database of	Fixed in code.	4.2.0.9476662	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	information relating to the file with links can contain invalid information, potentially leading to the file system being taken offline with an error message such as: Panic Avoidance found <fsid> corrupted (removeHLDBRecord: record missing from HLDB file)			
889923	An SP could have rebooted during specific operations. The IO could appear slowed or stalled.	Fixed in code.	4.1.0.8959731	4.3.0.1522077968
898859 / 6890046	A delete file system job never completed, and the file system could not be deleted.	The code has been updated to disallow the deletion operation of a file system with snapshots, and appropriate messaging will be displayed.	4.1.1.9138882	4.3.0.1522077968
906931 / 908592 / 7483146	I/O latency occurred in systems during Compress Now or migration operations due to internal resources conflicts.	Fixed in code.	4.1.0.8959731	4.3.0.1522077968
905757	The VSS shadow import on a system with a lot of devices (approximately 35) might stop responding. Any devices above this is overflowing a 4KB buffer. The Unity VSS Hardware provider log will show the wmic command hanging.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
908689 / 7314967	When the contact refresh flag was not specified, the Automatic support contracts update enabled value in /sys/support/ config UEMCLI show" command output incorrectly showed "no" when it was enabled by default.	The code has been updated to set the correct default state in the CLI command output.	4.1.1.9138882	4.3.0.1522077968
909477	Management operations applied to the system using UEMCLI or the Unisphere UI always failed. Or, when some operations returned a successful status, no visible effects could be seen from UEMCLI or GUI.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
909652 / 7160811	vSphere integration functionality did not work with non-default ports (433).	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
909942	A VDM or File system offline situation caused a pool problem. After the pool problem was resolved, the VDM and file system could still be offline.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
910241 / 7553452	In very rare cases during SP booting up, an issue occurred that caused another unexpected reboot. The system would start up successfully after the second reboot.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
911075 / 06986328	In rare instances, a file system went offline due to some errors, such as metadata corruption.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
912578	The replication group failover reported as failed, but actually succeeded.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
913315	When a snapshot creation operation stopped responding on a replicated file system, then ECOM failed over to another SP, the snap creation job would fail and try to rollback. The snap creation rollback function could not get the snap ID from the job, which left a failed snap in the system.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
913548 / 7718953	Running SFTP using Linux Java SSH client SSH-2.0-JSCH-0.1.50 could sometimes cause a system reboot.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
913738 / 07126355	When a CIFS user without backup privileges tried to access a directory of the root file system through c$, this holds references on this directory. If the directory is a mount-point, the file-system could not be mounted.	Fixed in code.	All previous versions	4.3.0.1522077968
916420	An "Out of Memory" situation may have occurred in rare circumstances that caused the SP to reboot.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
917349 / 7654344	When some components on one SP were disabled for recovery purposes and they were not later re-enabled, a subsequent software upgrade would fail due to the disabled component.	Fixed in code. The Health Check now reports when this case prevents an upgrade.	4.1.1.9138882	4.3.0.1522077968
917993 / 8058265	After an upgrade was paused, if it was resumed quickly, the upgrade progress in Unisphere sometimes got stuck at 93%.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
919183 / 7917025	High CPU utilization occurred when running the svc_arrayconfig command.	The code has been fixed to run this command with a lower priority.	4.1.2.9257522	4.3.0.1522077968
919304 / 8022942	The array sometimes entered 'Service mode' when enabling CEPP after setting an invalid password in the local /.etc/ passwd file. User password has to be less than 15 characters, else the problem might trigger.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
919327	If multiple LUN move sessions were created in parallel and then canceled in batch, the cancel operation might fail (in CLI) or not execute (in the UI or REST API). And all future move session operations failed to execute in	Fixed in code.	4.2.1.9535982	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	extreme cases.			
919372 / 8048788	The SP rebooted when the system was observed by an OpenVSA vulnerability scanner.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
920013 / 08201437	A slow migration rate and/or single SP reboot occurred during LUN migration.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
920406	If the FC zone where the system FC port was connected had a special target logged in, a safe core file might be visible.	Fixed in code	4.2.1.9431428	4.3.0.1522077968
920928 / 8058265	Sometimes the data collection process started by an upgrade terminated unexpectedly and did not fully collect logs and other materials.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
921084 / 8175018	When running the svc_cifssupport service command with the -setspn option, the arguments of -compname and -domain were case sensitive. This could have been confusing as these arguments are Windows settings, which are usually case insensitive.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
921221	If when issuing a command to expand, shrink or delete the FAST Cache, the following error appeared and an outstanding FAST Cache active job could not be found. Operation failed. Error code: 0x6700165 FAST Cache is currently busy with another operation. Please wait for all jobs to complete before attempting any additional operations on FAST Cache. (Error Code:0x6700165)	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
922500 / 8285430	An inodes error still occurred after the file system was increased to a larger size.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
922668 / 7923713	An SP experienced unexpected reboot while refreshing the Real-time performance chart for CPU Utilization, and the following error was displayed: Error: Failed to setup the real time query collection for System - CPU Utilization: Unable to connect to the metrics engine. (Error Code: 0x7d14011)	Fixed in code.	4.2.0.9433914	4.3.0.1522077968
923250 / 8253866	The system restarts three times due to an internal admin timeout that inadvertently triggers a shutdown, and then finally enters into service mode.	Fixed in code.	4.1.1.9138882	4.3.0.1522077968
927519 / 8045270	Under certain unknown circumstances (third-party product), the system sometimes rebooted	Fixed in code.	All previous versions	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	when accessing the server registry with an unusual request.			
927998 /8522123	The SP could unexpectedly reboot when a file is being renamed.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
928954	After an SP failover or software upgrade, users could not log in to the Unisphere UI or CLI using the initially configured account. They could only log in with the default administrator credentials.	Fixed in code.	4.1.0.8940590	4.3.0.1522077968
929125	When creating remote system between Unity 4.2 and 4.3 systems, if TLS 1.0 was disabled on the Unity 4.3 system, the creation will fail with errors such as the following: Failed to get remote connection ID from (Error Code: 0x89e7) or Failed to register the local system on the remote side. One of the reasons could be authentication failure, please check local admin credentials passed in the request. Also verify that the https port(443) between the two systems is open for the connection to be established and not blocked by a firewall. (Error Code:0x6500176). If the 4.3 system was upgraded from a previous release, verifying an existing remote system or creating replication sessions, which in turn call verifying remote system operations, will fail with similar errors.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
929678	A LUN sometimes went offline after a trespass.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
930525	When a replication failback operation was triggered (after a manual reboot, system upgrade, or a VDM local move), the system may reboot and go into Service Mode.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
930612 / 8695480	Both SPs rebooted unexpectedly when a number of users were reading and writing IO to one file rapidly.	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
931482 / 931519	Replication system snapshot refresh sometimes failed due to new snapshot file creation failure.	Fixed in code.	4.1.2.9257522	4.3.0.1522077968
932400	The system sometimes entered Service Mode if one of the four system drives faulted.	Fixed in code.	All previous versions	4.3.0.1522077968
933014	A transient NoSpace error sometimes occurred when there was space in the pool where LUN resides. However, if the client retried IO, it succeeded.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
934712 /8513596	When connecting to the NAS server using SFTP, we may fall in a race condition during the disconnection.	Fixed in code.	4.2.0.9433914	4.3.0.1522077968
935863 / 05347223	Midrange array products have historically reported values for the "maximum transfer length" and "optimal transfer length" reported in response to inquiry commands on vital product data pages as 65535 blocks. This value is 1 block less than 32MB. Unity now reports the SCSI protocol support level as revision 4. This means that some host operating systems now interpret these values as alignment hints as allowed in the SPC-4 protocol specifications. Disk labeling, file system creation and volume management utilities that used these values would create labels, file systems or LVM volumes that were misaligned when using the default settings derived from these values.	To address these issues the value of the "maximum transfer length" was changed to 32768 blocks (16MB) and "optimal transfer length" was changed to 8192 blocks (4MB). These values will result in labels, file system and LVM layouts that are on correct alignment boundaries.	All previous versions	4.3.0.1522077968
936001 / 868878 / 82756790	PEService core dump was generated after a system clock change (locally or by the NTP server).	Fixed in code.	4.0.1.8404134	4.3.0.1522077968
936083	Possible slow performance occurred on UnityVSA. Even when using FAST and "Extreme Performance" or "Performance" tiers.	Fixed in code.	4.1.0.8940590	4.3.0.1522077968
936345 /8930811	If a dynamic pool was created on system drive and there was no spare drive available in system, and a system drive was set with the EOL (End of Life) fault and later replaced with a good drive, the data was still unavailable for the moment when one SP was rebooted. After being rebooted, the dynamic pool on the reboot side failed to get the consistent state because the EOL fault has was not cleared on link to that system drive. As a result, the LUNs created on this dynamic pool may have been unavailable.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
937257 / 8720793	When creating a VNX type remote system from a Block- only VNX system to a Unity system, there were errors such as the following Internal error: VNX command parser failed (Error code: 0x900010b)	Fixed in code.	4.2.0.9476662	4.3.0.1522077968
937751	When STIG was enabled, the service account can be locked out by three consecutive failed login attempts. The service account	The uemcli /user/ account command was updated to allow an administrator to manually unlock the service	4.2.1.9535982	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	remained locked out, even after STIG was later disabled.	account. For example: uemcli -u admin / user/account -id service set -locked no		
939566	In the Unisphere UI, when expanding pool with more drives, the expansion sometimes lasted for a long time (up to several hours). For example, if the current pool width was 60, then the pool is expanded with 10 drives, the expansion will last for a very long time.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
941790 / 939569 / 9364183	A NULL pointer reference of the MigrationSession object could eventually cause the system to reboot. However, this only happened in a rare scenario: 1. Create a NAS import session from VNX to Unity and wait for it to complete. 2. Create another NAS import session with another VDM. 3. Delete the VDM from the source which created it in Step 1. Run the discover import objects operation in the Unisphere UI.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
942915	In some concern cases, after disabling integrated ESRS, integrated ESRS was still enabled and the status was "Not connected". Retrying disabling integrated ESRS still failed.	Fixed in code.	All previous versions	4.3.0.1522077968
916893	File interface turn offline when FSN created. Unclear reason for "Major Issue" for NAS server status, error message is shown when tried to remove nas server: "The specified Network Interface is currently used by NAS server services".	Reboot the system or don't delete FSN if it is used by file interfaces	4.2.1.9535982	4.3.0.1522077968
922039	Queued jobs can freeze when deleting Non-Recoverable Error LUN remote sessions.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
922448	In SMB file systems, when files are opened and read indicated access time does not change.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
924945	When the Consistency Group properties page is selected for a specific consistency group, it displays incorrect values for the Snapshot Used Space for each LUN in the consistency group under the Snapshot(GB) column.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
927075	When running UEMCLI commands, Unity systems can return error messages such as Internal Error or Storage server unavailable.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
927381	When a storage pool is low on space, creating a new snap on a LUN (for instance, though a snapshot schedule or replication operation), then create snap may fail and host may fail to access LUN.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
928824	After an unexpected power interruption, LUNs may not come back online automatically.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
929099	4. Snapshot restore operations can fail if the associated storage pool is out of space.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
929343	Users cannot access files or directories associated with a ACL IDs with bad reference counts. When this occurs: Clicking on the file/directory produces the error message xxx is not accessible, one internal error". Right clicking file, and selecting Properties > Security produces the error message The requested security information is either unavailable or can't be displayed. Using the Windows command line icacls.exe to set the ACL data produces the error message XX : An internal error occurred.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
929442	If a Unity storage processor (SP) reboots while a NAS Server is being moved, Unity returns the following error message: Failed to initialize NAS server replication service in target SP. (Error Code:0x6720667). Job ID %3D N%2D78469]	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
929455	When using Unisphere with Google Chrome, after upgrading the Unity OS from 4.2.0 to 4.2.1.9505708, when choosing Settings > Access, the High Availability page does not appear.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
929658	Under unusual conditions, when you create a snapshot or when a scheduled snapshot operation occurs during a Unity space reclaim operation, Unity can perform an unexpected storage processor (SP) reboot.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
930319	Snap restore operations can fail when the associated storage pool resources are out of space.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
899530	An NFS-only NAS server cannot be created; Unisphere uploads a fake keytab file.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
906699	When four or more drives from the same drive partner group (DPG) associated with a Unity storage pool go end-of-life in less than 30 days, all of the drives are copied to spare drives at the same time.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
910538	If the user creates a user Quota and tree Quota at the same time, sometimes the user Quota creation fails. This happens in rare conditions, such as when trying to create a user quota and tree quota concurrently and iteratively hundreds of times.	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
911403	A VDM from VNX was migrated to Unity 4.1.2.x using IMT. When trying to configure replication for this VDM from the Unity 4.1.2 source to a Unity 4.2 destination, the replication configuration fails. An error message such as the following appears: Create replication session after provisioning destination Failed Unsupported argument is detected for this task or operation (Error Code:0x9908)	Fixed in code.	4.2.0.9392909	4.3.0.1522077968
913014	Unity can temporally return NoSpace errors when there is I/O to a LUN, even when there is still space remaining in the associated Storage Pool.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
916645	When FASTCache transitions to any state other than OK, when the issue is resolved Unity does not return a message indicating that FASTCache is operating normally again (even when the FASTCache health state returns to OK).	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
917502	The UEMCLI /stor/config/ pool/fastvp start command does not run successfully and returns the following error message (the relocation task is actually not running): Exit code: 1Output: Operation failed. Error code: 0x670016dThe relocation task is already running for the storage pool. Retry after the current task is complete. (Error Code:0x670016d)	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
918130	When configuring a new SMB server on a NAS server, if you use any organization unit (OU) other than the default, clients cannot join to the domain, and Unity returns the following message: The system encountered an unexpected error.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
919539	Thin-clone refresh operations can fail when a Unity system is under a heavy I/O or management load, or when slow NL-SAS vault drives are used.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
920076	If you enable replication on a NAS Server whose IP interface is associated with a Fail Safe Network (FSN) port, a destination NAS server is automatically created. However if there is no matching FSN port on the destination system, the IP interface will not work after failover.	Fixed in code.	4.2.1.9535982	4.3.0.1522077968
952117 (All Flash arrays)	In x50F (All Flash) series systems, both SPs went into rescue mode due to the power supply leaving power on to the drives when in a power-off state.	Firmware fix in code. Refer to Dell EMC Technical Advisory (ETA) 518863 for more information.	4.2.0.9392909 and later	4.2.3.9670635
944926 / 932143	SP rebooted due to a race condition between multiple threads due to a missing lock protection in ACL Storage code area.	Fixed in code.	4.1.2.9257522	4.2.2.9632250
921817 / 944532 / 8712659 / 8972672	When a file system auto shrink was aborted by a later auto extend operation, the LUN Size became inconsistent. This caused the replication session for the file system or NAS server to fail.	Fixed in code.	4.2.1.9535982	4.2.2.9632250
925928 / 944557 / 935074 8445378	In rare cases, if a file contains a hard link and both the link and file were deletedsimultaneously, the SP may have rebooted with a bad pointer fault.	Fixed in code.	4.2.0.9392909	4.2.2.9632250
926416 / 944550 / 9013962	User could not create new real time metrics charts in GUI/CLI/ REST, and CloudIQ could not retrieve array performance data.	Fixed in code.	4.2.1.9535982	4.2.2.9632250
931442 / 944548 / 8649395	An SP reboot after a file system unmount operation sometimes occurred if the file system was created by a VDM import session that failed due to a datastore inconsistency.	Fixed in code.	4.2.0.9476662	4.2.2.9632250
934332 / 944559	When STIG was enabled, the service account was locked out after three failed login attempts.	• If STIG is enabled after the system is upgrade to this release (4.2.2.9632250), the account will automatically unlock after one hour and no action is required. If STIG was enabled before the system is upgraded to this release (4.2.2.9632250), the service account can be unlocked by an administrator	4.2.1.9535982	4.2.2.9632250

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
		by using the uemcli /user/account command. For example, uemcli-u admin /user/account -id service set -locked no.		
934809 / 935568 / 944536 / 9042738	The SSD tier capacity utilization was less than it should have been. For example, the tier included two RAID groups and only 90% of a single RAID group capacity was used. The reported tier capacity was less than it actually was and sometimes caused a memory leak, which caused the SP to reboot.	Fixed in code.	4.2.1.9535982	4.2.2.9632250
936339/937317/ 944549 / 8649395 / 8953389	In some circumstances, a NAS Server import session could not be cut over or completed due to persistent failures. Rather than retrying the import, some users prefer to continue or complete the cutover with known differences. However, previously no mechanism was available to force import cutover or completion.	Contact your service provider for a workaround to continue with an import cutover that experienced known differences. Reference Knowledgebase article 000514065.	4.2.1.9535982	4.2.2.9632250
936455 / 944551 /9166317	An SP reboot occurred due to a lack of memory issue caused by a memory leak when accessing SMB-encrypted shares on a NAS server.	Fixed in code.	All previous versions	4.2.2.9632250
937960 / 944561 / 9026594	If an array was placed in FIPS mode, it was unable to establish a replication connection with a remote replication partner. The issue was found while both arrays were in FIPS mode, which is typical in a FIPS-compliant customer environment. The replication connection creation error was: Although the remote system is registered, the connectivity validation has failed. Check for any network connectivity issues, and also ensure that the time skew between the systems is less than 10 minutes. Once fixed, run the verify operation on the remote system to resolve this issue. View alerts related to the remote system connections for more information.(Error Code:0x6500128)	Fixed in code.	4.2.1.9535982	4.2.2.9632250
938209 / 944540 / 8649395	Source file corruption sometimes occurred duringVDM import incremental copies when an SMB client performed many small writes (less than block size) to consecutive blocks.	The code was enhanced to update the SMB proxy to ensure only complete intermediate blocks are optimized into a single write request.	4.2.1.9535982	4.2.2.9632250
940199 / 944533 /9411285	A file system sometimes went offline after a user deleted a file with more than 1000 file data streams. This usually happened on	Fixed in code.	4.2.0.9476662	4.2.2.9632250

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	CIFS, but NFSv4 also supports data streams. The exact number of data streams that caused this issue also depended on the file name length of these file data streams. The file system did not go offline immediately after the deletion, but entered an unhealthy status and would go offline some time later.			
940959 / 944534 / 8360812 / 8664973	LUNs provisioning access to multiple hosts sometimes took a long time, approximately 3-5 minutes per LUN.	Fixed in code.	All previous versions	4.2.2.9632250
917733/944538/ 7911265	When VAAI was enabled and RecoverPoint sync replication was set up on VMFS datastores, there was a race condition during handling VAAI IO in RPSplitter that caused the system to reboot.	The issue has been fixed by removing race condition in VAAI zero fill.	4.1.2.9257522	4.2.2.9632250
919767 / 944553 / 7917025	When relatively heavy read/write IOs occurred on a file system through the SMB protocol, the response time increased more rapidly than normal.	• Fixed in code.	4.1.2.9257522	4.2.2.9632250
927185 / 944535 / 8631035 / 8548150	When a large dynamic pool expansion operation was executed, the expansion job sometimes failed and the expansion rollback job stopped responding.	Fixed in code.	4.2.0.9392909	4.2.2.9632250
927535 / 944558 / 7274603	Windows users were unable to rename directories on an NFS-mounted share after the system was rebooted or the NAS server was restarted.	Fixed in code.	4.1.2.9257522	4.2.2.9632250
931572 / 944556 / 8613366	Users experienced a rolling reboot when the Active Directory Domain Security Policy contained objects with a large ACL (greater than 16 Kbytes).	Fixed in code.	4.2.0.9476662	4.2.2.9632250
934988 / 944539 / 9012099	On an idle system with LUNs/file systems based on hybrid pools, a user may have noticed significant CPU consumption due to background space maker activity that attempted to create contiguous free space in the file systems.	This fix dampens the background space maker activity so that the CPU consumption remains low.	4.2.1.9535982	4.2.2.9632250
936049 / 944546 / 9115456	A reboot might have occurred when the Viruscheck configuration exclusion mask is modified and an unexpected space after the equal sign was added, such as "excl= *.doc". The system sometimes went into Service Mode after several rolling reboots.	The code has been fixed to handle wrong settings gracefully.	4.2.1.9535982	4.2.2.9632250
936051 / 944547 / 9117539	Creating a snap of a migration destination file system when the migration session was in cutover state (incremental copy) sometimes	Fixed in code.	4.2.1.9535982	4.2.2.9632250

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	caused the SP to reboot.			
936751 / 944544 / 8953389	The system was intermittently logging that all Domain Controllers were down, even though it was not attempting to contact them all.	The code has been enhanced to contact all the Domain Controllers before reporting them as down.	4.2.0.9476662	4.2.2.9632250
938945 / 944537 / 9060860	When performing a Recover Point operation such as a bulk data copy, a race condition occurred which caused SP reboot.	Fixed in code.	4.2.1.9535982	4.2.2.9632250
940840 / 944541 / 8649395	When migrating a VDM to Unity using the file Data Import tool, some file data corruption issues may have been seen if, after a cutover, writes continued to a file. The issue could occur when an incremental copy was still ongoing, or when the session entered the **ReadytoCommit** state. This issue occurred only in rare cases of NFS File Import. The interface in File Import assumed that the blocks in the message chain before the last block were always fully filled with data. This was not the case in rare instances, which resulted in this issue.	The code has been fixed to check if the block is a partial block or a full block. If partial, then the write is issued regardless and writes continue to the rest of the block in another subsequent write request.	4.2.1.9535982	4.2.2.9632250
914537	Consistency group back up operations to CTA are supported only if all the member LUNs are of the same size. Member LUNs with different sizes will be supported in a future Unity release.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
912115	For a NAS Server with multiprotocol enabled, when making changes on the NFS tab, applying changes will fail with an error if disabling/enabling Secure NFS. Other property changes will not be saved.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
911997	SMB and NFS share information may not be available in GUI or UEMCLI for a certain NAS server when this NAS server is in a faulted state as Unisphere management services were starting up.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
911592	On the Unisphere **Advance SMB share property** tab, it is specified in help the UMASK property can be modified only in Unix access right mode, but in fact it could also be used in Native mode.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
911502	When using AppSync, if I/O is not stopped and while snap restore is in progress, the snap restore operation will fail. Another snap operation cannot be started before resetting the previous snap restore	Fixed in code.	4.2.0.9392909	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	object after stopping I/O.			
910856	Files and directories on sources system with no Security Descriptors (SD) or SD no DACL are migrated with an empty DACL instead of no SD. Since an empty DACL means no access, the end user will experience access denied errors.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
909842	A CIFS Migration session cannot be cut over if a NAS server exists on the destination with the same name as migrated VDM.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
907269	Thin-cloned LUNs do not report LBPU, LBPWS capabilities and reject associated commands. Thin-cloned LUNs report provisioning type zero (neither reserved nor thin in SCSI sense) in the same VPD regardless of the fact volume is thin by definition.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
905905	An error message appears when trying to modify an IP interface on production side after failover when the underlying destination Ethernet port for IP interface does not exist. The specified Network interface could not be modified. A shutdown may have been in progress causing the failure. (Error Code: 0x67020f0)".	Fixed in code.	4.2.0.9392909	4.2.1.9535982
904946	While starting a LUN Move session on a LUN with snapshot mount points (such as a LUN with a populated **Snap Hosts** list), the following error may display: Storage resource move session move_XYZ encountered an internal error. Please see the status of LUN sv_123. After this occurs, the LUN that was being migrated may no longer be able to process IO requests.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
902538	When trying to create a thin clone in Unisphere where there is no parent storage resource snapshots created, in the first step of the **Create Thin Clone** wizard the system suggests to create a clone using an existing snapshot (but the existing snapshot list is empty). Proceeding through the wizard by clicking **Next** results in the error To clone using existing eligible snapshot, select snapshot.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
897788	A failed snap restore operation error message displays, and other snap operations cannot be	Fixed in code.	4.2.0.9392909	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	performed before reset the previous snap restore object after stopping IO.			
892953	If a Flash drive is in a faulted state, it can potentially produce invalid control information, which sometimes hits user interface and causes it to malfunctioning.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
892514 / 911959	An asynchronous replication session or NDMP session stopped progressing.	Fixed in code.	4.1.1.9138882 and later	4.2.1.9535982
892354	When FAST Cache is enabled on the storage pool for a long time and the storage resources allocated on the pool had been exposed to host I/O for a long time and then FAST Cache is disabled on the pool, the operation completed successfully, but FAST Cache still appears as enabled on the pool. This is because the system is in the process of flushing data from FAST Cache to the drives, which can take time. When all data from FAST Cache is moved to HDD media, FAST Cache will appear as disabled on that pool.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
888936	When deleting a host-configuration, Unisphere did not make it clear that host resources need to be disconnected before the host configuration could be deleted.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
899530	When enabling secure NFS through the Unity NAS Server creation wizard, the necessary (Kerberos) keytab files were not uploaded.	Fixed in code.	4.2.0.9200824	4.2.1.9535982
890307	When running the MluCli startfsrecovery required command, if the user entered a lower deck file system ID where the MluCli command expected a UFS64 ID, the lower deck file system would go offline.	Fixed in code.	4.0.1.8404134	4.2.1.9535982
891311	AIX hosts could not boot when their boot LUN is on Unity system.	Fixed in code.	4.1.0.9058043	4.2.1.9535982
892354	When disabling FAST Cache on a pool exposed to heavy I/O, FAST Cache was disabled but Unity indicated it was still enabled on the pool.	Fixed in code.	4.2.0.9101276	4.2.1.9535982
892953	When a Flash drive went into a faulted state, instead of displaying the drive's fault state and recommending to remove the drive, Unisphere returned an Unexpected error with error code 0x7d13001.	Fixed in code.	4.2.0.9180216	4.2.1.9535982
894964	When using NAS Server replication, destination system	Destination replication systems do not report	4.0.1.8404134	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	sometimes inaccurately reported that DNS, NIS or LDAP services were not accessible.	access issues with DNS/NIS/LDAP.		
895860	Illegal Fiber Channel commands received by Unity storage processor (SP) sometimes caused unexpected reboots.	Fixed in code.	4.1.0.9058043	4.2.1.9535982
897452	Unity pools reported significantly more consumed space than was actually consumed.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
897656	In some Unity CIFS configurations, quota usage figures did not change even when files were duplicated/ copied or deleted.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
902846	When an invalid route 0.0.0.0 was configured on a NAS Server, the system incorrectly alerted that the NAS Server file interface was offline.	Fixed so that invalid route configurations are not allowed.	4.1.1.9138882	4.2.1.9535982
904084	When a Unity IO module commit failed due to a hardware configuration issue, Unity returned the following message: Commit failed Error code: 0x9000002 Cannot commit the configuration because it is invalid.	Unity preforms a hardware setup check to provide more detailed information about the I/O module commit status.	4.1.1.9138882	4.2.1.9535982
904644	In Unisphere, when the number of Unity traditional spares became depleted, no inline information indicated that the Hot Spare Available count was negative.	Fixed in code.	4.2.0.9174228	4.2.1.9535982
904927	When performing snapshot restore operations, occasionally a primary LUN would fail, and the snapshot operation on that resource was interrupted.	Fixed in code.	4.2.0.9228083	4.2.1.9535982
905147/910214	When network environment issues occurred, asynchronous replication sessions or NDMP backup operations could hang.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
905179	After disabling the Unisphere Virus Checker feature, Unisphere did not immediately show the setting was disabled.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
905341	During Unity OE software upgrades or online hardware upgrades, active asynchronous replication sessions were interrupted until the upgrade completed with the warning condition: Lost Communication. The sessions were restored after the upgrade process completed.	Fixed in code.	4.2.0.9293280	4.2.1.9535982
905988	If a Fibre Channel connection used for synchronous replication was interrupted because of a network issue while synchronization	Fixed in code.	4.2.0.9313057	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	between the source and destination was active, the replication session connection would not recover automatically. Unity generated a Lost Sync Communication warning message.			
906281	Under stressful conditions, modifying a virus checking configuration (or disabling the feature), could take a long time to complete.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
907120	When many clients accessed a Unity NAS server on which *IP-reflect* was enabled, a Unity storage processor reboot could occur and interrupt SMB/CIFS data I/O to the server.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
907282	A deadlock occurred in a file system and the associated NAS server appeared to hang.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
908352	NDMP backup sessions hang because of issues with the scheduling algorithm within the transport transmit code.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
908967	When a replication destination system rebooted during a replication switchover process, Unity temporarily displayed the replication destination file system size as 0.	Fixed in code.	4.2.0.9333652	4.2.1.9535982
908768/929343	Under particular conditions users cannot access files or directories associated with ACL IDs that have bad reference counts. Symptoms can include: • Clicking on an affected file/ directory, an error message indicates that there is an internal error and the file is not accessible. • Attempting configure ACL data by clicking File > Properties > Security, displayed message text indicates that the requested security information is either unavailable or can't be displayed. Attempting to configure ACL data using the Windows icacls.exe command line tool, returns a message indicates that an internal error occurred.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
909769	After a destination replication file system went offline, the file system recovery failed.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
909842	When migrating data from a VNX (source) system to a Unity	Fixed in code.	4.2.1.9346469	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	(destination) system, the process did not complete if a NAS Server name on the Unity system matched a VDM name on the VNX system.			
910034	During an NDMP restore operation, a Unity Storage Processor reboot could occur if a restore file or directory had a Security Descriptor (SD) with an empty Discretionary ACL (DACL).	Fixed in code.	4.1.2.9257522	4.2.1.9535982
910192	When a Unity file system configured within a quota was close to full, it would occasionally go offline and the file system recovery would be blocked because the quota check process thought that there was no remaining space on the file system.	Fixed in code.	4.2.0.9322169	4.2.1.9535982
910856	During migration, files and directories on source systems that did not contain Security Descriptors (SDs) or Discretionary Access Control Lists (DACLs) were migrated with empty DACLs rather than no SDs. This prevented access to files and directories on the destination system.	Fixed in code.	4.2.0.9357089	4.2.1.9535982
911070	During asynchronous replication, after a snapshot was replicated from a source system to destination system, the snapshot could not be deleted on the destination system.	Fixed in code.	4.2.0.9357089	4.2.1.9535982
911139	Under certain conditions, because of improper setup of network sockets, the TCP received window auto-tuning was disabled. This resulted in reduced network throughput.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
911219	When the Unity Virus Checker feature was set to Scan On Read, occasionally file creation failed while returning a Name Collision error.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
911390	• When viewing file systems with Unisphere, the Quota tab did not appear.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
911502	If a Unity system experienced heavy I/O during a snapshot restore operation, the snapshot restore operation could fail. Under some circumstances, users could not perform any other snapshot operations until interrupting the I/O through the system and resetting the snapshot restore operation.	Fixed in code.	4.2.0.9361957	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
911592	The Unisphere Advanced SMB Properties tab indicated that UMASK is only used when the access policy is Unix, even though Unity supports UMASK for both Unix and Native access policies.	Updated text on Unisphere Advanced SMB Properties tab (online help will be revised in next release).	4.2.0.9368748	4.2.1.9535982
911959	Under some circumstances, Unity asynchronous replication operations were interrupted because of a network issue and the system failed to update the replication last sync time.	Fixed in code.	4.2.0.9371476	4.2.1.9535982
911997	If a NAS server was in a faulted state when the Unisphere management services started, SMB and NFS share information for the NAS server would unavailable through Unisphere and the UEMCLI.	Fixed in code.	4.2.0.9368748	4.2.1.9535982
912021	If I/O reached media error on a disk in a dynamic pool and the I/O goes through zero on demand path, a Unity single storage processor reboot could occur while mapped RAID handled the media error reported by the disk.	Fixed in code.	4.2.0.9377468	4.2.1.9535982
912115	When using Unisphere to configure an NFS NAS Server with multiprotocol enabled, enabling or disabling the **Secure NFS (with Kerberos)** option generated an error and lost the associated NAS server setting changes.	Fixed in code.	4.2.0.9368748	4.2.1.9535982
912419	Using the UEMCLI to query complex historical metrics in large configurations could exceed the system's memory capability, leading to a Storage Processor reboot and interrupting access to Unisphere.	Fixed in code.	4.2.0.9361957	4.2.1.9535982
912583	When uploading a Unity upgrade image larger than 2GB, the system sometimes experienced a Storage Processor reboot, because there was not enough space on the Storage Processor for the image.	Fixed in code.	4.2.0.9368748	4.2.1.9535982
912590	When using Unisphere to expand a dynamic pool, the available drive count for expanding the pool showed as "0", even though drives were available for the expansion.	Fixed in code.	4.2.1.9381621	4.2.1.9535982
912730	When a storage processor (SP) rebooted on a Unity system used as a replication destination, the replication session could not be managed through Unisphere and (from replication source side) the session appeared to be in a non-	The time out duration for a replication session loading during an SP reboot was increased to allow replication sessions to load properly.	4.2.0.9361957	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	recoverable error condition.			
912885	Running SFTP while using a Linux Java SSH client can cause an unexpected storage processor reboot.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
913250	When snapshot replication was enabled, Unity replication sessions entered an error state when replication synchronization began. This occurred whether the process was initiated manually or as part of a scheduled process.	Fixed in code.	4.2.0.9388690	4.2.1.9535982
913316	When viewing performance metrics with Unisphere, high CPU utilization could lead to gaps in the displayed performance information.	Fixed in code.	4.2.0.9289601	4.2.1.9535982
913802	Storage processor rebooted due to inter communication issue between storage processors.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
913890	During the Unity initial configuration process, clicking on **Next** before the licensing process completed would result in Pools and Fast Cache appearing as unlicensed features.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
914537	When performing a snapshot diff using the REST API, occasionally a failure would occur if a consistency group contained different-sized LUNs and the first LUN was not the largest.	Fixed in code.	4.2.0.9382708	4.2.1.9535982
914565	A high concentration of messages (for example, I/O errors) from NAS servers or file systems could interrupt Unity storage pool operation, and cause the pools to reset. After the storage pools recovered, the NAS servers and file systems would remain offline.	Fixed in code.	4.2.1.9391129	4.2.1.9535982
914755	NAS file systems occasionally went offline when users attempted to write I/O to the file system after an auto-extend operation occurred.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
915354	When using REST API commands to change sensitive parameters (for example, passwords), querying the request displayed the sensitive information in plain text in the query response.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
915504	A Unity storage processor reboot occurred when the code attempted to read or write a bad block.	Unity returns an error instead of performing a reboot.	4.1.2.9257522	4.2.1.9535982
916228	The number of hosts defined for NFS exports was limited to approximately 20, when it should	Fixed in code.	4.2.1.9535982	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	have allowed up to 256 entries.			
916389	Under particular conditions, the Unity OE upgrade failed and one Storage Processor remained in Service mode.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
916420/919978/ 912393	Under particular conditions, if heavy I/O occurred during a Unity OE upgrade, this caused LUNs to go offline.	Fixed in code.	4.2.1.9391129	4.2.1.95359
916879	When a Unity NAS server or file system went offline, this caused a temporary Unity storage pool problem. After the storage pool issue was resolved, sometimes the NAS server and file system remained offline.	Fixed in code.	4.2.1.9391129	4.2.1.9535982
917068	During a file server or NAS server replication refresh operations, occasionally the destination NAS server briefly became unmounted and an unexpected storage processor reboot would occur.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
917271	A Unity Storage Processor could go into service mode if the reverse password encoding set in local file for CEPP was longer than 15 characters.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
917983	An unexpected Unity storage processor (SP) reboot occurred because of a race between multiple threads to write to same area.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
918221	CIFS migration occasionally caused a memory leak during the access control list (ACL) preservation process that would lead to unexpected storage processor reboots.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
918298	CIFS clients experienced I/O errors and lost access to certain files when there was concurrent access to files with alternate data streams.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
919039	Unexpected storage processor reboots occurred when both LDAP servers associated with a Unity NAS server went offline.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
919468/916340	When a Unity system was subject to heavy I/O traffic during a Unity OS upgrade process, then LUNs could go offline.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
919474	When attempting to uninstall root access using with the Unity Service command svc_inject, the following error appeared : ERROR [spa]: Uninstallation of OEM pack is not allowed	Fixed in code.	4.2.0.9392909	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
920028	When using NFSV4.0, if the NAS server was not correctly configured to access NFS V4 hosts with delegation callback path verification, delays could occur in failover and failback operations. Log messages would indicate that the delegation path was invalid and that the callback path could not be verified.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
920740	When configuring or unmounting a file system on Unity, occasionally unexpected storage processor reboot would occur and the file system would be temporarily inaccessible.	Fixed in code.	4.2.0.9392909	4.2.1.9535982
923256	Installing Unity OE 4.2 software caused high Storage Processor CPU utilization and I/O latencies after snapshot deletions. This could last for an extended period until space was reclaimed from the LUN or File System to the storage pool.	Fixed in code.	4.2.0.9433914	4.2.1.9535982
923258/928363	Using the service command svc_purge_logs --clear --force on a Unity storage processor (SP) incorrectly removed a local metadata file which triggered a rolling storage processor reboot.	Fixed in code.	4.0.0.7329627 and later	4.2.1.9535982
925134/927564	After using a VVol Datastore to create a virtual machine (VM), if you created a base VVol, bound a base VVol, created a VVol Snap, or bound a VVol snap, then the VM could not be removed.	Fixed in code.	4.2.0.9433914	4.2.1.9535982
925175	Incorrect version handling in the replication database caused a Unity storage processor reboot when upgrading from earlier software revisions to 4.2.0.9476662.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
926964	When using Unisphere to delete a file system, the deletion process hangs and the file systems persist.	Fixed in code.	4.1.1.9138882	4.2.1.9535982
926984	Toshiba PM3/PM4 or Samsung REXa drives failed with hardware errors.	Fixed in code.	4.1.2.9257522	4.2.1.9535982
927473 /910384	When an LACP bond was used for Qlogic devices, onboard CNA and Maelstrom SLIC port I/O could become interrupted, requiring an Ethernet device reset or storage processor reboot to resolve the issue.	Fixed in code.	4.2.0.9357089	4.2.1.9535982
927511	A combination of high Unity metrics usage and high NAS file system	Fixed in code.	4.2.0.9433914	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	activity caused Unity storage processor reboots.			
927564	Customers running VVols on Unity systems with OE version 4.0.x/4.1.x who upgraded the Unity OS (to 4.2.0.9392909, 4.2.0.9433914, 4.2.0.9476662) experienced storage access problems if they had unbound a (previously bound) VVol with bound snaps, or if there they still had a VVol snap that was not unbound.	Fixed in code.	4.2.0.9433914	4.2.1.9535982
927617/928135	Improper error handling when a NAS server failed to ping its DNS or NIS Server triggered a Unity storage processor reboot.	Fixed in code.	4.0.0.7329627 and later	4.2.1.9535982
928707	Migrating data from VNX systems to Unity systems failed when the source file system contained files or directories with the names ending with "." (dot) or " " (space)."	Unity now supports file/directory CIFS names with trailing dots or spaces. If Replication is used in these environments, both source and destination systems must be upgraded to 4.2.x to ensure correct operation.	4.2.0.9433914	4.2.1.9535982
929139	Replication system snapshot refresh operations would fail because the snapshot file creation process failed in CBFS.	Fixed in code.	4.2.1.9505708	4.2.1.9535982
929507	Unity storage processors SPA and SPB concurrently rebooted and Toshiba drives reported errors.	Fixed in code.	4.2.0.9433914	4.2.1.9535982
929521	On Unity systems with large amounts of allocated storage (greater than 500 TB), multiple storage processor reboots could occur when manual or scheduled re-balancing was initiated.	Fixed in code.	4.2.0.9433914	4.2.1.9535982
930652	After installing the initial license on a new Unity system, occasionally specific features did not appear to be enabled in Unisphere, even then they had been configured using the Initial Configuration Wizard.	Fixed in code.	4.2.1.9528967	4.2.1.9535982
930937	When configuring the Unity Density Based Limit setting, the following issues sometimes occurred: • If LUN size was an even number of TB (for example, 2TB, 4TB, or 8TB), the host IO limit did not take effect resulting in a 0x9009ffe error message. If the LUN size was greater than 2TB and an odd number of TB, the host IO limit change was accepted, but the applied IO limit was less then requested.	Fixed in code.	4.2.1.9528967	4.2.1.9535982

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
931006	If you try to use the UEMCLI to add one or more ESXi host object addresses to the ignore list (using the -ignoredAddr parameter), Unity returns an error message.	Fixed in code.	4.2.1.9535982	4.2.1.9535982
931100	Memory leaks occurred in the FAST VP policy engine service, eventually causing the storage processor to run out of memory and reboot.	Fixed in code.	4.2.1.9505708	4.2.1.9535982
918298	Under particular conditions CIFS clients may experience I/O errors and loss of access to certain files after an OE upgrade.	Fixed in code.	4.2.0.9392909	4.2.0.9476662
923256	Installing Unity OE 4.2 software caused high Storage Processor CPU utilization and IO latencies after snapshot deletions. Under certain conditions, this could last for an extended period while space was reclaimed from the LUN or File System to the storage pool.	Fixed in code.	4.2.0.9392909	4.2.0.9476662
916340	Under particular conditions, if IO occurred during a Unity OE upgrade, this caused LUNs to go offline.	Fixed in code.	4.2.0.9392909	4.2.0.9476662
916389	Under particular conditions, the Unity OE upgrade failed and one Storage Processor remained in Service mode.	Fixed in code.	4.2.0.9392909	4.2.0.9476662
850971	On the **Host I/O Limit** tab of the LUN properties window where one system Host I/O limit is applied to the LUN, the most recent polled times always equal 0, even when switching the view, and after leaving the page and coming back in.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
903660	On the Consistency Groups page under **Access tab** > **Access details**, hosts are displayed with their respective LUNS and associated HLUs. However, on the LUN page under host access, all of the HLUs are shown as zero.	Fixed in code.	4.1.1.9.9138882	4.2.0.9392909
896300	• In Unisphere, deleting multiple replication sessions at same time can cause the Storage Processor to reboot.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
895276	Under particular conditions, users cannot assign RecoverPoint host access to a LUN/CG using Unisphere. When a remote that LUN/CG is involved in a asynchronous replication process has same friendly ID as a local LUN/CG (that is not part of the	Fixed in code.	All previous versions.	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	replication process), Unisphere does not allow RecoverPoint host access to the local LUN/ CG.			
871149/ 887563	Under certain circumstances in a pool full condition, a shared folder in that pool could go offline. As the pool approaches full, shared folders will move to a read-only mode and move back to read/write mode once the pool full condition is cleared. This happens when the poolFullPolicy is failWrites. File system snap objects may also go offline in the pool full condition when the poolFullPolicy is deleteAllSnaps. When the file system or snap goes offline, it does not automatically go back online once the pool full condition is cleared.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
879477	Upon starting a migration session, the storage processor rebooted. The migration health was in a failed state and migration could not recover automatically.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
05748033/ 882346	When a primary storage processor entered service mode, the real-time performance charts in Unisphere displayed the following error message: Unknown internal metrics error has occurred (0x7d14013). When a secondary storage processor entered service mode, the real-time performance charts in Unisphere displayed the following error message: Query ID not found (0x7d1400c). After logging out of Unisphere and then logging back in, the real-time performance charts displayed the following error message: Unknown internal metrics error has occurred (0x7d14013).	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
883270	When using the CLI for an import session, the imported destination LUN resource was created with a name that did not match the source LUN resource.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
875348	When viewing the **System** > **Service** > **Overview** page in Unisphere, the **Support Credentials** and **EMC Secure RemoteServices** sections did not refresh after the Initial Configuration Wizard was relaunched and the support credentials were modified.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
875394	A create replication operation failed with the following error code: 0x9881. This was due to duplicate	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	internal requests issued from the primary array.			
877646 /871640	An error was returned during an attempt to enable Secure NFS. This happened when local files were enabled as Unix Directory Services.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
879943	The **CompressNow** option in the Consistency Group Member LUNs table is sometimes disabled when it should be enabled.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
881402	When share was created from a NAS Server whose SP is different from the management SP, the system returns an operation due to a timeout.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
888423	When upgrading from a Unity 4.0 to a Unity 4.1 software version: • If an asynchronous remote connection exists prior to the upgrade, the upgrade will be successful, but the remote connection may not be updated. If a synchronous remote connection exists prior to the upgrade, the upgrade will be successful, but the synchronous FC port information may no longer be visible for the remote connection through Unisphere or the CLI.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
871640	When using local files as Unix Directory Service (UDS), a multiprotocol NAS server cannot be configured using the Unisphere UI: • NIS/LDAP cannot be disabled on an existing multiprotocol NAS server with UDS. A new multiprotocol NAS server using UDS cannot be created.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
865863	When creating new LUNs in the **Create a Consistency Group** wizard, creation of LUNs smaller than 1.0 GB were allowed on the **Configure LUNs** dialog.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
872071	In **System** > **System View** > **Enclosures**, the **Replication Capability** displayed for an FC management port indicates that this port can be used for **Sync Replication** management. Management ports cannot be used for I/O.	Fixed in code.	All versions	4.2.0.9392909
871647	After the port commit process finishes successfully, there is a possibility that only the alerts for	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	ports on current primary SP will be generated.			
862827	After failover from one storage processor to another, the management interface entries are displayed as duplicated in Unisphere CLI and REST API for several minutes.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
866518	Cancelling a migration fails with unexpected error Operation failed. Error code: 0x6000003 The system encountered an unexpected error. Try again and if that attempt fails then search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code: 0x6000003). Retrying the cancellation also fails with same error message.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
857825/ 862480	For a job status of **Completed with problems**, the **Completed with problems** link does not work and will not go to the detailed error message.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
860824	When the route type is changed from **default** to **net** or **host**, the route disappears. The system erroneously deletes the route rather than changing the configuration.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
863762	• After upgrading from Unity 4.0.x to 4.1.x, the **Configure** button for legacy historical metrics chart does not work.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
863871	• When running Unisphere with Chrome on a Windows 10 with Touch OS system, the widgets on the dashboard screen cannot be moved.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
864228	After a Data-in-place Conversion, the time on one or both SPs was not set correctly, even with an NTP server configured.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
852455 / 81596330	When the primary file system had quotas enabled and a read- only snap was created, the show command to view files belonging to a quota on a read-only snap failed.	Fixed in code.	4.0.0.7329527 and later	4.2.0.9392909
865403 / 82485742	Using C$, access to .etc directory was rejected, even if the user role was administrator. File extension filtering behavior could not be configured.	Fixed in code.	4.0.0.7329527 and later	4.2.0.9392909
866566 /5241101	Aborting an UFS64 recovery failed with an invalid process handle error.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
868396 / 5168225	After failback, some file systems were no longer accessible. The file	Fixed in code.	4.0.1.8194551 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	systems could not be remounted and following error was in the ktrace: sade:CBFS: 3:[core] mount fs fails for fsid 536870964, File_Status Busy . The issue occurred when C$ was used at time of the failover, with access to the FS which could not be remounted.			
871679 / 5209943	Common Anti-Virus Agent (CAVA) cannot be restarted by the Microsoft Management Console (MMC) after it had been automatically stopped (per policy) when all virus checkers went offline.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
871696 / 5378990	The mode bits generated on file/dir creation were unexpectedly set to 777 when the owner was a Group (for example, Domain Admins).	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
872109 / 5252987	An unexpected NFSv4 session error occurred on the client side when the same client was working with two different NAS server on the same SP. It was highly visible on the ESX host when an ESX server was working on two NAS servers located on two SPs, but once a failover occurred, the ESX host seemed to have lost access to the NAS servers.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
879133 / 82489490	When using RVSS to create snapshots on a share from the Microsoft Windows API, share names greater than 80 characters could not be displayed in the MMC.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
881080 / 83467828	A single SP panic occurred during LUN migration.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
881386 / 5378990	When using EMCopy to transfer files, files owned by Unix SID owner/group had the group owner changed to "nobody".	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
883644 / 5784193	In a rare cases when creating a replication session with a LUN that is in the process of being deleted, the storage system failed and transitioned to a rolling SP reboot loop.	Fixed in code.	4.0.2.8627717 and later	4.2.0.9392909
883730 / 83860616	VMware hosts appeared in Unisphere with a warning sign due to duplicate IP used for vShield 169.254.1.1 (or other products which created identical internal IP addresses on different ESXi hosts within a cluster).	The false positive health degradation was fixed for such ESXi hosts.	4.1.0.8959731 and later	4.2.0.9392909
884076 / 84114380	When a non-disruptive upgrade (NDU) occurred, performance archive files may have been created as empty files without any	Fixed in code.	4.1.0.8959731 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	metric data every hour. This happened when the metrics collector lost connection with the metrics producer and that connection could not be reconnected successfully. Refer to KB article 000496872 for more details.			
885028 / 5286633 886045 / 6197446	UFS64 recovery failed on an UFS64 with a specific DUCH corruption issues.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
885281 / 6085603	Integrated ESRS could not be configured successfully in a proxy-only environment.	Fixed in code.	4.1.0.9058043 and later	4.2.0.9392909
885499 / 5748033	The Real-time metrics chart on the Unisphere Performance Dashboard page could not be created when one of SPs was in service mode.	Fixed in code.	4.1.0.8770695 and later	4.2.0.9392909
888429 / 84555868	A **Compress Now** cancellation operation on a LUN stopped progressing at the 50% complete mark.	Fixed in code.	4.1.0.9058043 and later	4.2.0.9392909
888467 / 83742634	A NAS server got stuck failing back to its parent SP when the parent SP came online after a failure. This occurred when the CIFS clients with open files and oplocks didn't respond to the oplock break request from the NAS Server during shutdown.	Fixed in code.	4.1.0.8959731 and later	4.2.0.9392909
889347 / 6383016	A LUN was inaccessible, even though it appeared online.	Fixed in code.	4.1.0.8959731 and later	4.2.0.9392909
889744/6222835	Fast cache creation was incorrectly disabled when no spare drives were available.	Fixed in code.	4.1.0.8959731 and later	4.2.0.9392909
889944 / 5920468	A Windows user with user quotas configured saw the full file system size instead of the specific user quota hard limit size.	Fixed in code.	4.1.0.8959731 and later	4.2.0.9392909
890499 / 84630172	An Excel file could not be saved using Mac Operating System El Capitan with MS Office for Apple. An error was returned.	Fixed in code.	4.1.0.9058043 and later	4.2.0.9392909
890658 / 84114380	If an archive file was created successfully by using metrics_cli tool, sometimes system did not close the socket, which resulted in a memory leak in the system. The observability-collector restarted after a few days.	The observability- collector has been fixed to make sure the socket is closed before destroying the thread.	4.1.0.8959731 and later	4.2.0.9392909
891401 / 6489073	Lower system performance was seen during a LUN migration.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
892794/ 6548072	When the **Support Credentials** password contained some special characters, the validation sometimes failed. Refer to KB article 000496776 for more	The code has been undated to handle special characters.	4.0.1.8320161 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	information.			
893547 / 85020034	When a file system was running out of space, it requested adding slices from a pool LUN. This request could be denied for reasons such as the pool being full. If the initial requested slice was a data slice, but a shadow slice was needed to cover that data slice, the thread was blocked by the data slice request condition.	Fixed in code.	4.0.0.7329527 and later	4.2.0.9392909
894314 / 6297038	In certain cases, with Windows 7, get FileProperties from explorer had a 10 second delay.	Fixed in code.	4.0.2.8627717 and later	4.2.0.9392909
894559	An 0x100000aerror occurred if there was any special unicode character in a UEMCLI input command.	The code has been updated to support special unicode characters for CLI.	4.1.0.9058043 and later	4.2.0.9392909
887115/895104/ 6141059	An SP rebooted due to memory issue. A 552 byte memory leak occurred when due to a SCSI-3 persistent reservation SCSI command. This leak occurs when the internal database is being updated to keep the two SPs in sync with respect to persistent reservations.	Fixed in code.	All previous versions	4.2.0.9392909
896169	When the verification of a remote system fails, a 100b (task not started) error code was displayed.	Fixed in code.	4.1.2.9257522 and later	4.2.0.9392909
896942 / 85342914	After a successful file system recovery, accessing a certain directory in the file system caused a panic.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
897239 / 6674487	The NFS migration commitment stalled after system reboot.	Fixed in code.	4.1.0.9058043 and later	4.2.0.9392909
899304 / 6845371	An EMCopy or NDMP movement of DHSM stub files from VNX to Unity that uses HTTP connections will result in unreadable stub files on the target Unity NAS file system. If the copy operation pulls data rather than attempts to preserve the stub files, there is no issue with this operation.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
899770 / 85672764	A single SP panic occurred during LUN migration.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
899860 / 6954348	After a successful file system recovery, opening a directory in the file system will cause file system to go offline again.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
900642 / 84251316 909437 / 07504276	The system panics.	Fixed in code.	4.1.0.9058043 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
901262 / 6536673	The CPU utilization does not decrease significantly when system is idle because of background activity on an All-flash pool.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
902578 / 85569294	When drive in a pool reached end of life and the Unity system completed a proactive copy, the drive was replaced with the spare and taken offline. It could sometimes take up to 10 hours for an alert to be sent (with call home or ESRS).	The call home alert will be sent immediately after the proactive copy is completed and the disk is taken offline.	4.1.1.9138882 and later	4.2.0.9392909
902923 / 85658194	When an operator user account was created in Unisphere, the user was able to change tree quotas values.	The code has been fixed to correctly only users with the administrator role to modify tree quotas.	4.1.1.9138882 and later	4.2.0.9392909
905575 / 7060779	In rare cases, if there were NDMP backup jobs running while browse NDMP client or configure NDMP client operations were also ongoing from DMA, at the stage of listing the file systems of the client the NDMP client on Unity could panic.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
905819 / 85491292	In the Consistency Group properties under the **Access** > **Access details**, the hosts are displayed with their respective LUNs and associated host LUNs. However, on the LUN page under host access all the host LUNs are shown as a same value, which is not consistent with the above-mentioned host LUNs.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
906607 / 7340137	When creating a replication session, an error occurred during the snapshot phase, preventing successful creation of that session.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
906856 / 7302240	Intermittent access issue occurred for SMB host access.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
908011 / 82219888	Several alerts displayed, incorrectly indicating an Ethernet port SP IO module port or FC port fault.	Fixed in code.	4.0.1.8404134 and later	4.2.0.9392909
908705	If there was a replication session where the source was a Unity 4.1.1 system, and the source file system used a legacy exported file system ID (originally migrated from VNX), after replication session was created, the wrong file system ID was configured on the destination file system. Then, after a replication failover, the wrong exported file system ID was exposed to client and caused data to become available. If the source file system had a UUID exported file system ID, this issue did not occur. If the replication session has not yet failed over, the wrong exported file	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	system ID will not be exposed to clients, even though it is configured on the destination file system.			
909045	When using CAVA over multiple NAS servers, there were noticeable delays, especially during low checking activity period (problem was not visible when many files have to be checked).	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
817119	When the pool threshold was met, the VDM could not be created.	The issue has been fixed to allow VDM creation when there is enough space on the pool.	4.1.1.9138882 4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.2.0.9392909
851191 /883307	There is no **Configure** button for the metrics charts generated using the **Top contributor** dialog.	A Configure button in the metrics charts generated with a Top contributor dialog is now available. More objects can now be added by using this button.	All previous versions	4.2.0.9392909
851877	Write performance to the share had poorer performance when protocol encryption was enabled.	CPU performance has been improved when accessing an encrypted share.	All previous versions	4.2.0.9392909
864762	A panic occurred during a backup restore operation.	Fixed in code.	All previous versions	4.2.0.9392909
866518	When a user tries to cancel a migration operation, it failed with unexpected error, code 0x6000003. Attempting to cancel again also failed with the same error message.	Fixed in code.	4.1.0.8959731 and later	4.2.0.9392909
860892	When importing from a VNX where STIG is configured, an SSH command will fail and cause the import from VNX to Unity to fail. This is because STIG has a policy which requires the user to change the password regularly.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
866647	In Unisphere, the file system size shown during the **Create Import Session** wizard is different than the file system size shown in **Properties** for that file system.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
867076	CIFS shares were unaccessible. The server didn't respond to any server commands and reports Input/output error.	Fixed in code.	All previous versions	4.2.0.9392909
867616	When cancelling a NDMP backup process from NDMP DMA application, the operation hung with the status Cancel in Progress on the NDMP DMA application.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
867919	The cpu.uptimemetric was missing from the archive file.	Fixed in code.	All previous versions	4.2.0.9392909
867920	In the **Create Pool** wizard **Select Amount of Storage** step, if drives are selected which include system	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	drives, the warning message (This selection includes the system drives. Please refer to the Best Practices Guide on the Unity Support page for details about using them.) will display under the drive selection combination box. After changing the selection to not include any system drives, this warning message persists.			
868072	If a file system deletion operation happens during trespass time, the operation may fail and the file system may go offline.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
868181	A VMware VVol datastore with a capability profile allocation more than 16TB in size cannot be created in Unisphere.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
868626	Unity indicates that a LUN migration session has stalled at 90% progress and will not allow you to cancel it, even though the session actually completed successfully.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
869374	Historical data was missing in **Performance** > **Performance Dashboard** > **Historical charts**.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
869465	The SP reboots due to NAS failure with an error code of 0xFC0D6003 due to slow failover of a system VDM.	Fixed in code. The issue resolves itself after the SP reboot completes.	4.1.0.8940590 and later	4.2.0.9392909
870021	When the lsUnix command is issued on a not-yet-migrated directory, a permission denied or Input/output error might be returned.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
870155	In the migration summary report, **Average data transfer speed (KB/sec)** is incorrect. It should be **Average data transfer speed (MB/sec)**.	The correct speed units now display.	4.1.0.8940590 and later	4.2.0.9392909
870283	When doing a data-in-place conversion and a problem exists on the system, a general Internal error message displays, rather than a health check error or health check warning.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
870868	When there are multiple remote system connections to VNX systems, if one or more remote systems loses connectivity to the VNX system, the Unity system will not be able to connect to any of the other VNX systems. This shows a non-recoverable error when import sessions are created on the healthy, connected remote systems.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
871106	NFS 4.1 client loses access to the NFS exports if the client mounts file system from more than one NAS server running on the same SP. This could also happen when one SP reboots and all the NAS servers on that SP fail over to the secondary SP.	Fixed in code. The client is now able to maintain more than one NFSv4.1 session to multiple NAS servers on the same SP.	4.0.1.8404134 and later	4.2.0.9392909
871127	Access to multiple LUNs for a single host could not be modified at one time. This had to be changed in the properties for each LUN.	The Unisphere CLI now allows modification of host access for multiple LUN in a single command. For example: /remote/ host set -addLuns A,B,C -removeLuns X,Y,Z.	4.0.2.8627717 and later	4.2.0.9392909
871149 / 887563	Under certain circumstances in a pool full condition, a shared folder in that pool could go offline. As the pool approaches full, shared folders will move to a read-only mode and move back to read/write mode once the pool full condition is cleared. This happens when the poolFullPolicy is failWrites. File system snap objects may also go offline in the pool full condition when the poolFullPolicy is deleteAllSnaps. When the file system or snap goes offline, it does not automatically go back online once the pool full condition is cleared.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
871620	The Unisphere CLI command /event/alert/hist show will incorrectly show the alerts in ascending order chronologically, displaying the oldest first. When there are more than 100 alerts, only the oldest 100 alerts will be shown in the Unisphere CLI output due to the default maximum limit.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
871647	After the port commit process finishes successfully, there is a possibility that only the alerts for ports on current primary SP will be generated.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
872287 / 885943	Some running LUN move sessions stalled or stopped making progress when an Idle priority session was created.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
879662	By default, a GPO in a Windows domain affects all users and computers that are contained in the linked site, domain, or organizational unit. The administrator can further specify the computers that are affected by GPO by using membership in	Fixed in code. If the CIFS server of a NAS server does not belong to a security group of a GPO with an 'Allow' permission of "Apply Group Policy", then the GPO is not applied to that CIFS server. This is the	All previous versions	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	security groups in the Access Control List (ACL) editor. According Microsoft, to apply a GPO to a specific group, the "Apply Group Policy" ACE is required. By default, all Authenticated Users have this permissions set to 'Allow'. The issue is the GPO is applied to the CIFS server of the NAS server with any ACL. The ACL of the GPO is not checked.	Microsoft specification.		
880620 / 870763 /874416	The Unisphere UI and CLI displayed all VMs from polled ESXi hosts, even if those VMs were deployed on other storage systems.	Fixed in code.	All previous versions	4.2.0.9392909
882223	Unable to access NAS server over SFTP if LACP is configured	Code is fixed to allow access to the NAS server over SFTP if LACP is configured.	4.1.0.8940590 and later	4.2.0.9392909
884116 / 06047315	If three DNS server addresses were entered into the text box under **ConfigureDNSserver address manually**, the **Add** button became disabled. Even if all the IP addresses in the text box were then selected and deleted, the **Add** button remained disabled.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
888654	Changing the property of a SMB server (for example, renaming it or changing between stand alone and domain server options), sometimes caused a file system reference leak when on a loaded system. This occurred when there were opened files with durable handles waiting to be reconnected at the time of the property change.	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
894894	Creating quota tree on a reused tree ID will fail with an error message similar to the following: Operation failed. Error code: 0x900021f Specified file system, tree path, user, or parameters are invalid. (Error Code:0x900021f)	Fixed in code.	4.1.1.9138882 and later	4.2.0.9392909
896169	When verification of the remote system fails, the following error message appeared: 100b error code (task not started).	Fixed in code.	4.1.2.9257522	4.2.0.9392909
897498	In replication configurations of two or more source arrays to one destination array, the name of the replication source resource displayed in the replication session pages in the Unisphere GUI may be incorrect on the destination. The names of the resources are correct on the source arrays. A similar name issue with the destination resource names can be seen when there is one source array and two	Fixed in code.	4.1.2.9257522	4.2.0.9392909

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	or more destination arrays.			
899969	On the Unisphere dashboard, clicking the critical/error/ warning icons on the **System Alerts** widget would not navigate to the main **System Alerts** page.	Fixed in code.	4.1.2.9257522	4.2.0.9392909
865060	When the storage system failed to connect to EMC web services due to a timeout, the management service was interrupted for a while and an ECOM dump would be generated.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
877937	When using svc_banner service script to set the Unisphere login banner, if a Windows format file was used, only the first line of the banner was shown.	Fixed in code.	4.1.0.8940590 and later	4.2.0.9392909
889243/06383016 894517/066775767 899617/85705870	After system reboot, a LUN was found offline and required recovery.	Fixed in code.	All previous versions	4.1.2.9257522
884837/06078875 888243/06163749 888793/06058875 889403/84242308 891929/891929	Initiators associated with ESXi hosts configured on the Unity system were deleted if the ESXi hosts became inaccessible (for example, due to network outages).	Storage system no longer removes IP addresses and initiators when a polled ESXi host is not in a connected state.	4.1.0.8940590 and later	4.1.2.9257522
885897/06147613 896082/85342914	Under particular conditions, a file system could go offline if a sparse file in a CIFS share was truncated to zero.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
886933/06183101	With SMB1 signing disabled, older clients using the SMB1 protocol were unable to logon server using NTLM authentication (that is, Kerberos log in was successful).	Removed unexpected SMB1 signing enforcement during NTLM SSP authentication.	All previous versions	4.1.2.9257522
888673	When mounting a CIFS share using -t cifs on a Linux client, Unity returned incorrect quota usage information and failed write requests.	Actual file size used to calculate the quota usage.	4.1.1.9138882	4.1.2.9257522
888131/84514514	NAS server failover processes were interrupted when a UFS was undergoing a shrink operation.	Fixed in code.	4.1.0.8959731 and later	4.1.2.9257522
889870/83307948	Concurrent rename operations on file systems with many directories led to an increase in latency.	Fixed in code.	All previous versions	4.1.2.9257522
889998 887426/82090440 893733/06329201	The system could reboot or transition into service mode if the management cable was pulled or if there was a bad network connection.	Fixed in code.	All previous versions	4.1.2.9257522
890218 880117/05787892	Jobs related to replication might not complete and could not be disabled when multiple replication commands were issued together.	Code updated to remove replication command conflicts.	All previous versions	4.1.2.9257522

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
890221 879529/05787892	When multiple snapshots were deleted, a conflict between space reclaim and expansion could create IO time out conditions.	Fixed in code.	All previous versions	4.1.2.9257522
890222 889200/06383016 890563/84654700 891416/84654700	Under particular conditions, related to handling IO cancellations a Storage Processor can unexpectedly reboot.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
890223/05497977	On NFSv4 file systems, the modification time was not updated when a file was modified.	Fixed in code.	4.0.2.8627717 and later	4.1.2.9257522
890224/83714310	Jobs on block VMware datastores failed with completed with problems" messages and reported Error Code: 0x5c0000c if ESXi hosts registered on the Unity system used only FCoE adapters.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
890225 886749/06168750	Attempting to change a remote system username and password with the Unity CLI remote/sys set command without specifying the -connectionType option failed and temporarily interrupted management access to the Unity system.	Fixed so that Unity CLI command does not fail when changing remote username and password.	All previous versions	4.1.2.9257522
890226 867418/82714822	If CIFS server properties were changed while files were opened on a Continuous Availability share, NAS servers got stuck while failing back to their native Storage Processor, or when a file system was unmounted from the NAS server.	Fixed in code.	All previous versions	4.1.2.9257522
890228	SMB share names were limited to 40 alphanumeric characters rather allowing 80 characters.	SMB share names of 80 characters is now allowed.	All previous versions	4.1.2.9257522
890233 884218/05890978	If a vCenter cluster included a disconnected ESXi host (that is, a host whose status appeared as Disconnected or Not responding in vSphere), attempts to add the cluster as a Unity VMware host failed.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
890234/05952835	When a null sized file handle was returned in response to a NFSV3 request, the NFS service became blocked.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
890236/05605390	When configuring the LDAP naming service with simple authentication, if a base distinguish name contained the asterisk (*) character, a Name is not valid error was reported.	Asterisk character recognized in LDAP names.	All previous versions	4.1.2.9257522
890551/05830682 884360/06008397	Canceling a LUN Move operation sometimes would not cancel the operation or would cause a Storage Processor reboot.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
890859 893778/05811148 896087/05811148	After a Unity software OE upgrade, Replication remote system entries were not visible in Unisphere or the Unity CLI.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
890986/06475300	Unable to connect an SSH session to the Unity system after a Unity OE software upgrade.	Fixed in code.	4.1.1.9138882	4.1.2.9257522
891084/84848062 892375/84964500 893307/850829248 94159/06652318 896986/06537033 897329/06767223 898189/06876045 898598/06851583	The SMB server can become blocked if the connection with its remote Domain Controller is interrupted.	Fixed in code.	4.1.1.9138882	4.1.2.9257522
891137 883659/06004154 885120/84164804 886006/06187857 890542/06427457 892511/06539832 895173/06710745	An unexpected Storage Processor reboot occurred when storage resources were not balanced across the Storage Processors.	Fixed in code.	All previous releases	4.1.2.9257522
891182 06314414 895407/85198956	After enabling a tree quota on an existing directory, the time fields were modified for the directory and all of its subdirectories and files.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
891198/81804340	NAS LDAP authorization settings (bind dn) were lost when adding a second LDAP server to a NAS server.	Fixed in code.	4.0.0.7329527	4.1.2.9257522
891201/83346816	Naming for manual and scheduled snapshots use inconsistent time stamps in the names.	UTC time is now used consistently.	4.1.0.8959731 and later	4.1.2.9257522
891203/05986678	A Unity OE software upgrade was interrupted in the middle of the process, and one Storage Processor would reboot repeatedly.	Fixed in code.	4.1.0.8959731 and later	4.1.2.9257522
891583 891583/84774634 892206/06523428	Storage Pool Create/Expand job fails due to the following error: 0x6700136.	Fixed in code.	4.1.0.9058043 and later	4.1.2.9257522
891813/82728840	A Storage Processor reboot occurred when closing directories triggered by an SMB change notification and handling TCP disconnections.	Fixed in code.	All previous releases.	4.1.2.9257522
891869/82728840	Enabling SMB Protocol Encryption could cause a performance degradation accessing the encrypted share.	Code enhanced improve performance when accessing an encrypted share.	4.0.0.7329527 and later	4.1.2.9257522
892183/06311742 889240/06311742	The following Unity warning message was generated on a daily basis: UDoctoralert: Root partition crossed 80% space utilization.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
892205 885248/84232094	Storage Processor could go to service mode with reason code	Fixed in code.	All previous releases	4.1.2.9257522

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	0x1200.			
892281 895079/06677748	Storage Processor can reboot while reclaiming available space over one Terabyte.	Fixed in code.	All previous releases	4.1.2.9257522
892283 888896/84636356 893572/84979828	Under particular conditions, deleting snapshots caused a Storage Processor reboot and caused Unity to transition to Service Mode.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
892284/05952835	File system became inaccessible until access was restored by a Storage Processor reboot.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
892528/05784193 893354/85089930	Deleting a VMFS datastore and creating a remote replication session to restore it before the delete has completed sometimes caused unexpected Storage Processor reboots to occur.	Fixed in code.	4.0.2.8627717 and later	4.1.2.9257522
892555 884649/06079536 894042/84201760 897080/06818437 898790/85466114	If a snapshot on a NAS server was in the process of being deleted while the associated NAS server was failing back, occasionally the NAS server did not re-start.	NAS server restarts without waiting for the snapshot deletion process to complete.	All previous releases	4.1.2.9257522
892632/06085603 884903/05934582 887300/84168974 887638/06060451 898624/06779094	After upgrading to Unity OE 4.1.0, Unity reported unknown ESRS status messages in proxy- only environments.	Fixed in code.	4.1.0.9058043 and later	4.1.2.9257522
892647/84374956	The system cannot communicate with outbound services in the 172.17.0.xsubnet, including the centralized ESRS server.	Fixed in code.	4.1.1.9138882	4.1.2.9257522
892828/05841478 887881/06285078 890728/06306990	A Storage Processor rebooted unexpectedly while cancelling a datastore migration.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
893748/84848062	An SMB server became blocked unexpectedly when the connection between Unity and a remote Domain Controller was interrupted.	Fixed in code.	4.1.1.9138882	4.1.2.9257522
893849/ 5027422 895549/85144502	A Storage Processor experienced an unexpected reboot when the SP was trying to reclaim space and a background operation failed.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
893866/06555924	When performing Compress Now operation to a LUN with active I/O delays in the I/O response times may occur.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
894609/85097434	Attempts to delete a consistency group that was used as replication destination failed. In addition, attempts to rename it caused unexpected Storage Processor reboots.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
894645/ 06566672	Under particular conditions, when ILC was enabled on a Unity LUN but	Fixed in code.	4.1.1.9138882	4.1.2.9257522

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
892540/06566672	no data was written, or when incompressible data was written, the system could experience an unexpected Storage Processor reboot.			
895579/ 896049/06566914	Under particular conditions with a random NFSV4.1 IO load, a Storage Processor reboots could occur leaving and associate file systems would be reported as offline.	Fixed in code.	All previous releases	4.1.2.9257522
895715/85324384	After upgrading to the Unity OE software, if the Active Directory domain name did not contain a dot character CIFS clients could not access the SMB storage because directory services were not available through the Domain Controller.	Active Directory domains not containing dot characters accepted as valid domains.	4.1.1.9138882	4.1.2.9257522
895766/06703340 895301/06703340	Under particular conditions when internal activity was triggered on an unmounted file system, an unexpected Storage Processor reboot could occur.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
895986/06489073	Under particular conditions, migration performance would be negatively affected due to excessive logging of internal messages.	Logging enhanced to negate any performance impact.	4.1.1.9138882	4.1.2.9257522
878528/83553316	NAS Servers and file system shares sometimes became inaccessible during restore operations to DHSM stub files created with Cloud Tiering Appliance software. The Storage Processor then rebooted to reestablish access.	Fixed in code.	All previous versions	4.1.2.9257522
880055/05787892 879581/05787892 883116/05792298 895541/06733676	Thick LUNs with snapshots sometimes went offline if a race condition occurred met when IO was directed at a region where space was being reclaimed.	Fixed in code.	4.0.2.8627717 and later	4.1.2.9257522
884169/05849405 889194/06384087 889352/06393738 890091/84805504	File systems can become inaccessible after a Storage Processor reboot.	Fixed in code.	4.1.0.8940590 and later	4.1.2.9257522
857622	When importing an NFS configuration from VNX to a Unity VMware NFS datastore, the job fails as expected. However, the failure error message is inaccurate: Failed: Create session fails with {0} error(s). Please check message by scp {1}@{2}: {3}/.migration/	The error message should actually say that the job fails with at least 1 error.	4.1.0.8940590 and later	4.1.1.9138882

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	precheck_vdm_{4}.log. (Error Code:0x9000194)" - This error message is not filled with parameter value in.			
866692	When running the CLI /stor/ prov/vmware/vmfs show - detail command, the Compression percent reported is less than the actual compression savings and is inaccurate.	The correct value for compression percent displays in the Unisphere UI.	4.1.0.8940590 and later	4.1.1.9138882
84365598/ 888130	A user experienced a system bug check with a buffer cache free issue or file system corrupted due to an incorrect metadata error.	The code has been updated to bypass the I/O performance optimization for avoiding data copy to avoid this issue.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551	4.1.1.9138882
84070110/ 886390	A hot fix became inactive and needed to be reinstalled. This happened when the hot fix was applied to a system and then a re-image operation was performed on the system.	The code has been updated to allow an existing hot fix to be restored during a re-image operation.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
84260722/ 886018	A replication session was not able to use its full bandwidth. The replication session had low throughput, despite there being no congestion or other issue in the network. This is due to the restrictions by the sender to transmit more data and receiver to receive more.	The replication high watermark and low watermark settings have been removed. The code has been updated to remove the restrictions that caused this issue.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
05894988/ 06216865/ 06197446/ 06171008/ 886462	This issue presented itself in several ways: • A user was unable to access file shares. • Storage processors entered a bug check phase after an upgrade. Slow I/O response time was experienced on an all flash array.	The code has been updated to fix an issue related to the reservation of system resources used for I/O processing.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
883786	An import session entered a lost communication status when a network disruption occurred. The session was stuck in that state. The only option for the user was to cancel that import session and start it again.	The code has been updated to avoid this issue.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
05462668/ 883124	A user experienced the inability to read and/or write recently expanded regions of bound block (SCSI) VVols.	The code has been updated so that block VVols that are newly bound after an upgrade can be read and/or written immediately after expansion through vSphere. Pre-existing bindings from before an upgrade will need manual purging, which is normally achieved by	4.0.1.8404134 4.0.1.8320161 4.0.1.8194551	4.1.1.9138882

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
		shutting down the virtual machine.		
05894988/ 882436	While moving an existing uncompressed LUN to a compressed LUN, an application using that LUN experienced an unexpectedly large increase in response time for small or unaligned writes.	The code has been updated and now the library used to move the LUN has been modified to avoid long response times for small or unaligned writes.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
83953636/ 882328	An export became inaccessible for the clients belonging to that subnet after the specific access for a subnet was modified. The mask of the subnet became 255.255.255.255.	The code has been updated to that the subnet mask is now correctly preserved.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
05830682/ 881448	A storage processor unexpectedly re-booted while writing I/O to inline-compression enabled LUNS.	The code has been updated to fix the issue that triggered the unexpected reboot.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
05785720/ 879344	A storage processor unexpectedly re-booted during an internal space recovery operation.	The code has been updated to fix the issue that resulted in the unexpected re-boot.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
82779744/ 873301	After a failover, an NFS client took a unexpectedly long time before restoring access to its exports.	The code has been updated to reduce the time to restore access to exports after a failover.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134	4.1.1.9138882
74599468/ 881706	In a configuration with RecoverPoint the storage processor rebooted with error code: E117B264.	The code has been updated to handle the condition that triggered the storage processor to reboot.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
77632114/ 878057	• The RecoverPoint splitter on the storage processor became unresponsive and did not recover automatically. A reboot of the storage processor was required to restart the splitter.	The code for the restart was updated to fix the issue that made the reboot necessary.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
81914690/ 872873	When a user executed an sz command in svc_service_shellto retrieve a file from the storage processor, the file will be logged into svc_service_shell.out.	The code has been updated to disallow szin svc_service_shell. Now a warning is issued, The sz command is disabled in svc_service_shell. If you need to use sz, exit svc_service_shell and retry sz. Or use WinSCP or a similar utility to get files off the system.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
5252987/ 882108	An NFS 4.1 client lost access to the NFS exports if the client mounts file systems from another NAS server and both NAS servers resided on	The code has been updated so that the client is able to maintain more than one session to multiple NAS servers on the same storage	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134	4.1.1.9138882

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	the same storage processor.	processor.		
5745989/ 881720	The RecoverPoint splitter on the storage processor repeatedly restarted unexpectedly.	The code has been updated to gracefully handle the conditions triggering the repeated restarts.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134	4.1.1.9138882
5894841/ 881370	During an upgrade or a reboot, the ESXi hosts lost access to the storage system if the storage system poll the vCenter of the hosts fails.	The code has been fixed to ensure the storage system will no longer update ESXi host initiators for which the storage system is unable to poll vCenter.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
5784193/ 879921	Unisphere defaulted to automatically select the first row in a table. This design led to confusion and unintended objects being selected for operations.	Unisphere has been updated so that first row is no longer automatically selected. This change affects pages that show a grid on the left and a details panel on the right. For some pages that have no details panel, the first row may still be pre-selected.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551	4.1.1.9138882
5734785/ 879152	ECOM stopped working and failed to restart.	New checks have been added to the code to prevent the ECOM failure.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134	4.1.1.9138882
81540922/ 876801	From a Windows host, Quota displayed a greater used capacity than was actually being used.	The code has been updated to accurately calculate the Quota usage for a Windows host.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
5586609/ 874220	A NAS server was in need of recovery.	The code has been updated to address the issue triggering the need for recovery.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
873870	A user was unable to create a VMware VVol data store with a capability profile allocation greater than 16Tb.	The code has been updated to remove this limitation.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
82334668/ 873402	CIFS shares were unaccessible. The server didn't respond to server commands and reported Input/output error.	The code has been updated to detect and resolve a conflict between an offload read and a conflict triggering the error.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
5378990/ 871277	The mode bits generated from the ACL was wrong when the file owner was a group, such as domain administrators.	The code has been updated so that the mode bits are generated using the SID of the connected user when a	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717	4.1.1.9138882

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
		file is created by SMB.	4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	
5336141/ 868106	A file system went offline with the following message: Unmounting fs 536870965: Reason: removeHLDBRecord: record missing from HLDB file.	The code has been updated to fix an issue which was preventing the update of the HLDB record for a file when being moved from one directory to another.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134	4.1.1.9138882
82044704/ 867789	A suspended job related to a VVol operation was erroneously retained in the system job database. This prevented the user from starting a system software upgrade.	The code has been updated to fix this problem.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
5168225/ 865970	During the initialization phase of a NAS server, a user was able to access a CIFS server using the share c$ and access file-system mountpoint.	The code has been updated to deny access to the share c$ during the initialization phase of a NAS server.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8404134 4.0.1.8320161 4.0.1.8194551 4.0.0.7329527	4.1.1.9138882
867616	When cancelling an NDMP backup process from an NDMP Direct Memory Access (DMA) application, the operation hangs with the status Cancel in Progress on the NDMP DMA application.	Restart the NDMP DMA application to discard the cancel operation, then continue with any further NDMP operations.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.1.9138882
794943 / 807302	While accessing Unisphere, users can expect up to two pop- ups or warning screens. One is for accepting the server certificate, and the other is for providing a client certificate (instead of credentials) to connect to Unisphere. While the server certificate warning should be accepted, users should click **Cancel** in the pop-up that suggests connecting to Unisphere using a client certificate.	Fixed in code.	All previous versions	4.1.0.8959731
866056 / 865456	The user is no longer able to set the consistency group access (either add a new host or remove a host) at the consistency group level if they have set individual member LUN access.	Fixed in code.	4.1.0.9058043 4.1.0.8959731 4.1.0.8940590	4.1.0.8959731
881934	During a software upgrade from 4.0.x to 4.1.0.x, the upgrade fails (usually at 62% complete) and may have difficulty automatically recovering due to a database schema mismatch. Although the system can still be pinged, Unisphere and the CLI are unresponsive.	This issue has been resolved in the code.	4.1.0.8959731 4.1.0.8940590 4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134 4.0.0.7329527	4.1.0.9058043

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
881933	During software upgrade, the upgrade fails (usually at 62% complete) when a process times out when trying to access an EMC catalog server.	This issue has been resolved in the code.	4.1.0.8959731 4.1.0.8940590	4.1.0.9058043
881932	When moving a LUN, the operation could hang. Refer to Knowledgebase article 000492043 for details.	This issue has been resolved in the code.	4.1.0.8959731 4.1.0.8940590	4.1.0.9058043
877558	Some storage processors have been seen to have reboot events, resulting in a full reboot of the storage processor without a fault.	This issue has been resolved in the code.	4.1.0.8940590 4.0.2.8627717	4.1.0.8959731
851739 83426854/875596 05557939/873175	A LUN or file system may go offline.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
841151 /841149	The service command svc_initial_config script failed when attempting to setup an IPv6 address with zeroes in the hex numbers for a mgmt_vdev interface. For example: svc_initial_config -6 "2a00:0da9:ff03:030f: 0:2139:3853:0101 64 2a00:0da9:ff03:030f:ff2e::1would fail.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
810489	When provisioning a replication destination, the **No Data Movement** tiering policy can be selected, although it is not supported.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
850281	The file system went offline and a message similar to the following appeared in the logs: :UFS: 3:[fs-name] Panic Avoidance found <fsid> corrupted (metadataDupReadBlock failed: non-recoverable fault) sade:UFS: 3:[fs-name] metadataDupReadBlock: fsid:<fsid> non-recoverable fault bn <block number> [DIRECTORY_IO]	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
833537/ 832571	The "from" email address from which system alerts are sent could not be modified.	The From Email Addresscan now be customized in Settings > Alerts > Email and SMTP.	All previous versions	4.1.0.8940590
832808	When an IPv4 management address was set to **Obtain an IPv4 addressautomatically** and ECOM failed over to the secondary storage processor, an SMTP server configuration failed with the error: Cannot configure an IPv4 SMTP server without first configuring a management port IPv4 address.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
833479	If a user uploaded a password-protected certificate using the Service command svc_custom_cert, the system went into a rolling reboot and then went into service mode. This caused user data to become unavailable.	This issue has been resolved in the code. The code now rejects the upload of a password-protected certificate and returns a message indicating that a certificate that is not pass phrase-protected must be used.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
833887	Win10 and Win12 introduced new special SIDs, which are part of the Kerberos credentials. As these aren't recognized by the system, they're sent to the Domain Controller (DC). This overwhelmed the system and no communication with DC could take place with Kerberos authentication.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
834461	After installing the first release of badlock patches on Samba, running smbclient -lagainst the DM failed with output : ntlmssp_handle_neg_flags: Got Challenge flags [0x60898201] - possible downgrade detected! missing_flags [0x00000010] - NT code 0x80090302 NTLMSSP_NEGOTIATE_SIGN SPNEGO (ntlmssp) login failed: NT code 0x80090302 session setup failed: NT code 0x80090302 Error with Signing enabled: NTLMSSP NTLM2 packet check failed due to invalid signature! session setup failed: NT_STATUS_ACCESS_DENIED	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
835206/ 832078	The power supply firmware upgrade failed.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
838729	ESXi hosts with FCoE adapters connected to a zoned FC switch were displayed in both the **Hosts** page and the **VMware** hosts page in Unisphere.	The code has been updated to enable matching VMware hosts with FCoE initiators and automatically connected Hosts.	All previous versions	4.1.0.8940590
841873	When the 16G Fibre Channel HBA port was attached to a switch as a "Public Loop", the storage processor bug checked with the following error: FC_API_INVALID_TOPOLOGY 0x03b03076.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
842169	Centralized ESRS could not be enabled because support credentials cannot be validated on a private LAN without external connectivity.	The code has been updated to allow support credentials to be saved, although they cannot be validated in a private LAN/before a connection is established to the centralized ESRS server. These credentials can then be saved for when the IP	All previous versions	4.1.0.8940590

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
		address of the centralized server is entered by the user. Fully enabling ESRS requires that the centralized ESRS server has external network access to EMC.		
842366	If a Unity system's site information contained non- English characters, a Failed to valid OTPerror appeared when configuring integrated ESRS.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
847401	A software issue could potentially prevent a failed over VDM from returning to its default storage processor when that storage processor came back online.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
849334	Both storage processors entered Service Mode due to a large number of snapshots.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
851033	A software upgrade session was incorrectly labeled as **In- progress** when it actually had failed. This occurred when the primary storage processor was rebooted and coming back online.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
855255	Access to the LUN was lost during a storage processor reboot.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
855964	In Japanese, the test alert email subject line used the wrong parameters and was incorrect.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
856071	A host lost connectivity with the Unity system after a host panic and could not access Unity LUNs. The host status in Unisphereappeared asdegraded with no associated initiators.	This issue has been resolved in the code by preserving host access to Unity even after a host is disconnected and degraded.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
857748	A filename with an invalid UTF-8 string was mistaken for a valid UTF-8 string and was saved as unicode. The list of thefilenames shows the UTF-8 encoding of the stored name, not the original name.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
858490	CIFS share could not be mounted from a Linux client using the Samba mount command if NFSV2 by NTLMV2 authentication is enforced.	The code has been updated to accept and handle NTLMv2 authentication for client using old SMB1 authentication requests.	All previous versions	4.1.0.8940590
859146 /862102	After a short-duration power outage, the storage processor hung instead of rebooting with a CPU IERRerror.	This issue has been resolved in the latest firmware in the code.	All previous versions	4.1.0.8940590
802882	There is an extra **Configure** step when installing a hotfix with the **Software Upgrades Wizard.** The **Configure** step does not apply to hotfixes.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
804943 (physical deployments only)	After replacing or upgrading the firmware on a four-port 10-Gb/s optical I/O module, the system indicates that the I/O module is faulted in the Unisphere CLI and Unisphere. The storage processor enters service mode as a result.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
805069	When multiple back-to-back requests to change host access are sent to the same consistency group, the results are a mix of the requests.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
808848	If an object has existed for less time than the interval displayed in the performance over time charts in **System** > **Performance**, no data will be displayed.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
809674	Batch jobs that are deleted using the Unisphere UI may contain jobs that remain visible in the Unisphere CLI.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
811803	When creating a snapshot while a file system expansion is taking place, the following error appears: Operation failed. Error code: 0x6000bbc The system was not able to create a snapshot. Please check that the storage pool is not faulted or out of space, or that the source is not in an invalid, offline, or destroying state, and retry. Otherwise see the logs for details then search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x6000bbc)	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
816362	After creating a thick file system with a size of several TBs, there is a period of time where a file system snapshot cannot be taken.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
817768	After removing ESXi host access, the host reports a major issue in Unisphere.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
818677	A pool may report degraded status for exceeding capacity threshold, when the allocated space is not at the threshold.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
821276	Using the same snap schedule on many resources may slow completion of other commands executing at the same time as the schedule.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
821411	In Unisphere, the **Base Port and Management Port** details dialog box does not report the IP Address, Gateway Netmask, or VLAN ID values	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
827788	An upload initiated from Unisphere or using the REST API that takes more than 10 minutes to complete fails. An error message similar to the following displays: {"error": {"errorCode": 131149826,"httpStatusCode":503," messages":[{"en-US":"The system is busy. Try again later. If the problem persists, search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code: 0x7d13002)"}],"created": "2016-05-24T19:46:13.121 Z"}}'	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
836269	Saving the system configuration while an upgrade is in progress is not supported. The Unisphere CLI command /service/system collect – config may incorrectly report success.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
841739	If a storage resource previously had a replication session configured and destroyed, an attempt to create a replication session on the storage resource may fail with an internal error.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
855190	An existing ESXi host configuration can be overwritten when a ESXi host is added as an existing host, if the added host has a vmKernel IP that is already in use. This occurs even if the vmKernel IPs are on private vSwitches. Unisphere displays the following message when adding a standalone ESXi host: Matches some network address of hostxxx. Importing this will replace existing configuration. Unisphere displays the following message when adding ESXi hosts from a vCenter: Conflicts with one or more ip addresses of other potential host. It is recommended to resolve these conflicts before importing to avoid misconfiguring the hosts. If the attempt to add the host is not cancelled and the operation completes, the original host (*hostxxx*) will lose access and the new host will assume its identity.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
793285	When a consistency group is created as a replication source and destination, creating a replication	This issue has been resolved in the code.	All previous versions	4.1.0.8940590

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	session may fail with the following message: Operation failed. Error code: 0x6000003 The system encoutered an unexpected error. Try again and if that attempt fails then search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code: 0x6000003)			
814766	Certain user operations on a deduplicated file incorrectly caused auto-extension enabled file system to extend to the maximum size. The extension size can be max_size, space available in the pool, or 16TB (whichever is lower). Messages similar to the following may be seen when the problem is triggered. /nas/log/webui/ apl_tm.log: ------------------------ ------------------ webui-N: [root@localhost]: 0:3681:S:1926601-Execute legacy command [/nas/ sbin/fs_extend_handler Sep 25 11:18:39 2013 DART:CFS:4:6 Slot 2: 1380125919: FsId: 2957 MaxSize: 5242880 MB HWM: 95%. Forced Extension Size=35232152 MB] sys_log: ------------ fs auto extension forced ext start: [data03_home] max_size:5242880 hwm:95 (Slot2:1380125919:) server_log: ---------------- DHSM: 3: getOnline: Couldn't reserve -1 blocks for inode 3976589. Error encoutered - NoSpace	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
816346	The Data Mover (DM) was not responding to SMB/CIFS or NFS clients. SMB threads on the DM were blocked. DHSM was in use on the system and a DHSM connection was being modified.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
817848	For Pools with associated VVols, storage that is taken up by VVols is incorrectly displayed in Unisphere under the **Snapshot Used** column in **Pools**.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
819524	When ESRS is enabled, it may take up to one minute for users to see some support links the first time they access the **Support** page.	This issue has been resolved in the code and performance is now improved.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
823778	An IO module could not be reconfigured.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
828444	The Create Pool operation timed out when system drives were selected for the pool creation. A message similar to the following was displayed: The system failed to create the RAID group. The disks might still be initializing. Try again after few minutes. If the operation continues to fail, search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x6700135)"	Starting in Unity Operating Environment 4.1.x, system drives can be used to create pools.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
836555	When using both VMFS and Block VVol datastores over iSCSI, errors have been reported when creating swap VVols during VM power-on. This was caused by incorrect removal of the iSCSI target discovery IP addresses for the software iSCSI adapter on the ESXi host.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
836955	The file system may have gone offline when the last snapshot is deleted for that file system.	This issue has been resolved in the code.	All previous versions	4.1.0.8940590
840320/ 844001	The System Limits page under Settings did not include VMFS datastore limits.	These limits now display in this release.	All previous versions	4.1.0.8940590
841011/ 849251	After a snapshot session was deleted, it still displayed in Unisphere.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
842096	A NAS server had NIS server network connectivity issues when both the NAS server and NIS server were configured with IPv6.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
843845	On a Unity 300 system, the progress percentage % for a replication session for consistency groups may have been inaccurate when there were eight or more LUNs in a consistency group.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
844099	Some virtual machines (VMs) stored on VVol datastores became inaccessible after a software upgrade from Unity 4.0.0.x to 4.0.1.x.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
853379	iSCSI protocol endpoints appeared in Unisphere as assigned to a host, but did not appear in vSphere after an ESXi host HBA rescan.	This issue has been resolved in the code.	4.0.2.8627717 4.0.1.8194551 4.0.1.8320161 4.0.1.8404134	4.1.0.8940590
863861	If a storage processor was shut down incorrectly or power was lost while shutting down, it restarted with a hard reset. The	This issue has been resolved in code.	4.0.1.8404134	4.0.2.8627717

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	issue may manifest as a storage processor that does not start up normally.			
814463	The FAST Cache shrink operation failed with the following error: FAST Cache is currently busy with another operation. Please wait for all jobs to complete before attempting any additional operations on FAST Cache. (Error Code: 0x6700165)	This issue has been resolved in the code.	4.0.0.7329527	4.0.1.8194551
821738 (virtual deployments only)	When a user opens the **Performance** dashboard in Unisphere and adds a **Cache Dirty Size** chart, the values in the chart are all zero.	This issue has been resolved in the code.	4.0.0.7329527	4.0.1.8194551
810049 (physical deployments only)	Starting a FAST Cache operation immediately after starting a pool modification operation may result in the following error message: Operation failed. Error code: 0x6700165 Please wait for all jobs to complete before attempting any additional operations on FAST Cache. (Error Code:0x6700165)	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
789487 / 823304	Hosts connected to iSCSI CNA and two-port 10Gb/s optical I/O module ports experienced 30–40 seconds of connectivity loss due to a firmware issue that caused the device to become unresponsive. The internal driver software automatically recovered the device by beginning a device reset. During this time, the physical link bounced on both CNA ports and two-port 10Gb/s optical I/O module ports.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
794675 (physical deployments only)	The following critical alert for the DPE was generated during the SLIC commit process: The Disk Processor Enclosure (DPE) has faulted. This may have occurred because of a faulted subcomponent. Identify and fix the issue with the subcomponent. If the problem persists, contact your service provider.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
801562 / 812461	After configuring LDAP on a NAS server, the server health error LDAP not connected appeared.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
804317 (physical deployments only)	The help link for the disk tab of the **Create Pool Wizard** opened the **Welcome** help screen instead of the **Disk Types** help screen.	The link now opens the correct help screen.	4.0.0.7329527	4.0.1.8194551

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
809346	When changing the Secure NFS setting from Use SMB server account to Use custom realm on a Master User Profile (MUP) NAS server, a dialog box confirming deletion of an SMB server from the Active Directory domain appeared.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
809332 /810799	Users could not delete snapshots with an in-band request through the snapshot SMP.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
810159 /811562 (physical deployments only)	Trying to create a pool immediately after starting a FAST Cache create operation resulted in the following error message in Unisphere: System encountered unexpected error..... (Error Code: 0x7d13001)	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
810919 / 812459	The jobs list showed blank rows.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
811216 /812250	Users may not have been able to destroy a file system that was previously in use by replication.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
811237	If the replication interface IP address was the same as the broadcast or subnet address for the network, the replication session failed.	The system no longer allows the broadcast or subnet address to be used as the interface IP address.	4.0.0.7329527	4.0.1.8194551
811413 /812762	The replication session failed with the status Destination Extend Failed Not Syncing, indicating a failure while expanding the destination file system.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
811509 / 814045	The preferred IP interface setting on the replication destination was out of sync with source, resulting in an issue on the destination if a failover occurred before resynchronization.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
811856 (physical deployments only)	After an AC power failure of less than a few seconds, a good power supply was incorrectly marked as faulted.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
811890	A user pool creation operation may fail with the error code 0x670150b.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
812022	Creating a share or export fails with the error code:0x900a117	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
812052	When creating a host from Unisphere an error with code 0x7d13001 is reported.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
812091	When a LUN was added to a Consistency Group, the job details were not displayed on the **Job Properties** or **Result** pages.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
812703	The **Acknowledged** column in the **Alerts** table was blank.	The Acknowledged column in the Alerts table will display	4.0.0.7329527	4.0.1.8194551

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
		the correct values.		
813509 (physical deployments only)	In Unisphere the Support page may have taken up to a minute to load.	The Support page now loads without delay.	4.0.0.7329527	4.0.1.8194551
813659 (physical deployments only)	If FAST Cache was deleted with the REST API URL /api/instances/fastCache/0/action/disable and a timeout parameter value was either not specified or was set to -1, the job stopped responding and never deleted the FAST Cache.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
813764 (physical deployments only)	The user is sometimes allowed to create a pool that included faulted drives.	The system will prevent the pool from being created with faulted drives.	4.0.0.7329527	4.0.1.8194551
813867	When file systems are defined in a different pool than their NAS server, if the pool for the file systems becomes degraded, once the pool is recovered, the NAS server state may stay in degraded mode.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
814001	The Unisphere CLI command /event/alert/hist show incorrectly displayed the ID attribute as "Id."	The output text has been corrected.	4.0.0.7329527	4.0.1.8194551
814113	Setting a value for the Maximum Transmission Unit (MTU) on an iSCSI-configured port did not take effect until the storage processor was restarted.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
814562	When ESRS was enabled, audit logs indicated that a service user ran the command svc_udoctor -jobs -xx, but the system automatically launched this command.	The audit logs report the correct action.	4.0.0.7329527	4.0.1.8194551
814724	Support contract information did not automatically refresh.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
814932	Creation of a replication session may have failed with error code 0x650015d. This was an infrequent error.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
815374 (physical deployments only)	The ESRS integrated wizard failed with the error message: 0x6400ba4, Failed to validate site id for Remote Support.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
815447	If a client application was expecting to use File Delegation with the NFSv4 protocol, there were performance issues. File Delegation was not granted when needed.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
816272	After switching the Management IP from Automatic to Manual without changing the IP address, the following error message appeared: The specified IP address is	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	already in use (Error Code: 0x716e00a)			
817541 (physical deployments only)	The number of LUNs that could be protected by RecoverPoint was below the expected limit.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
817971	When enabling or disabling the SSH on the system using the service command svc_ssh, the SSH status was displayed incorrectly in Unisphere.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
818420	In the service mode, Unisphere only displayed English after login.	In the service mode, Unisphere now displays the correct locale.	4.0.0.7329527	4.0.1.8194551
818701	Running the service command svc_smtpcheckdid not work.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
819461	When the management IP address was changed, the IP address was not updated in ESRS. After changing the IP address, ESRS was unable to connect.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
819852	In the Spanish language, some objects in Unisphere are displayed as English, including system limitations, log messages, and links on the **Support** page.	These resources are now correctly localized.	4.0.0.7329527	4.0.1.8194551
821064	Asynchronous replication of block devices between a Unity system and a VNXe3200 did not work.	VNXe3200 required the application of VNXe3200 3.1.5.6801782 service pack or higher on the VNXe system.	4.0.0.7329527	4.0.1.8194551
822799	The **Online Training** link in the **Support** page of Unisphere did not always load.	The link has been updated.	4.0.0.7329527	4.0.1.8194551
823446 (physical deployments only)	The storage processor's mode took several minutes to update after a secondary storage processor was placed into or recovered from service mode.	The storage processor mode should update when it is available.	4.0.0.7329527	4.0.1.8194551
825944 (physical deployments only)	After a primary storage processor was placed into service mode or failed over, the ESRS connection status was "Unknown."	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
826226 (physical deployments only)	An incorrect 503: Service Unavailableerror message was displayed when trying to configure integrated ESRS.	The error message has been corrected.	4.0.0.7329527	4.0.1.8194551
829164	A block VMware datastore could not be created from Unisphere if it was larger than 16TB.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
832178	Execution of svc_drive_stats command was limited to the root user.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
835464	While provisioning embedded ESRS, if the download step was not successful, it was unable to be	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551

Issue number	Problem summary	Description of fix	Found in version	Fixed in version
	retried.			
836866 / 836068 / 836924 / 80291634	The **Support** page in Unisphere showed "No License Installed" after license installation, when all licenses are permanent and have no expiration date.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
838740	When multiple paths were configured to each storage processor in conjunction with the ESXi MPIO driver, failover times may have been extended.	Failover times in this situation have been reduced. Note Systems with this configuration may experience this issue during the failover induced during upgrade until the new OE with the fix is running on the system.	4.0.0.7329527	4.0.1.8194551
845581	Configuring an SMTP server via Unisphere or Unisphere CLI may have failed.	This issue has been resolved in code.	4.0.0.7329527	4.0.1.8194551
849738 / 849946	Statically configured DNS settings were removed for the management network after upgrading to 4.0.1.8194551.	Statically configured DNS settings for the management network remain configured after upgrade.	4.0.1.8194551	4.0.1.8320161
851317	The file /nas/http/logs/ mod_jk.log was not rotated, and may have resulted in the /nas file system on the storage processor becoming full.	The file /nas/http/ logs/mod_jk.logis now rotated.	4.0.1.8194551	4.0.1.8320161
854248	During an upgrade not all log files were properly rotated or truncated prior to the upgrade starting, and caused file system utilization to reach 100%.	This issue has been resolved in code.	4.0.1.8320161	4.0.1.8404134
854537	After upgrading, access to Integrated ESRS was lost.	This issue has been resolved in code.	4.0.1.8320161	4.0.1.8404134

Known Issues

Issue number	Problem description	Workaround / Resolution	Exists in version
1002899	In Unity 480/F, 680/F, and 880/F systems, the maximum number of VLANs per port is 32, but failure messages are returned when adding the 9th VLAN. Only 8 VLANs can be added to a port.	No workaround.	5.0.0.0.5.116
1001756	After a software upgrade, the replication service might be corrupted if the Unisphere UI shows error messages such as: "The connection with this remote replication host has been lost" or "One or more replication interface pairs are experiencing network connectivity issues between the local and remote systems" and at	To recover the issue, select the broken replication connection under **Replication-→ Connections** tab in Unisphere, click the **Edit** icon, input the correct username and password for the remote system and click **OK** button to save the credentials, then click **Verify and Update** button.	5.0.0.0.5.116

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	the same time if there are log messages such as "The lockbox is invalid and lastCLBErrorCode error code is: -60" or "Failed to open/create the lockbox with clb error code: -39" in the cemtracer log files.		
1001831	When CAVA is enabled on the McAfee version VSE 8.8 patch 12, I/O operations are running on file system, and the owner SP is changed, the file system goes offline due to a mount failure.	If you have upgraded your McAfee version to VSE 8/8 patch 12 and have CAVA enabled, disable SP auto-failback.	All versions
1001574	Windows 10 update 1903 is not able to access shares from Unity. The negotiate protocol request fails with a STATUS_INVALID_PARAMETER error.	Windows 10 update 1903 uses new negotiation contexts. Ignore the contexts which are not applicable for Unity. Refer to Knowledgebase article 534173 for a detailed workaround.	4.2.0.9392909 and later
996067	When using file MetroSync, the user may experience non-transparent planned failover if trying to execute planned failover on too many NAS servers simultaneously.	It is recommended to execute planned failover for NAS servers one by one. Do not start a new failover operation until the previous is finished.	4.4.0.1534750794 and later
989789	When a VM migration in VMware vSphere is in progress, a planned failover of the underlying synchronous replication file system on Unity at the same time may cause VM migration failure on vSphere.	Do not perform a synchronous replication planned failover on Unity while migrating a VM on VMware vSphere at the same time. If the error occurs, wait until planned failover completes and retry the VM migration in VMware vSphere.	4.4.0.1534750794 and later
995434	If a NAS server destination site becomes the source site, the "modify DNS" operation for this NAS server will fail.	Remove the DNS configuration before modifying it.	5.0.0.0.5.116
995936	Incorrect disk health information may display in the Unisphere UI if switching a SAS cable from an onboard SAS port to backend SLIC port. FBE show these disks as **OK** while Unisphere shows these disks as faulted. For example, if switching the SAS cable from SAS port 0 to backend SLIC port 0, then DAE 0_0 becomes DAE 2_0, and the related disks change from Disk 0_0_X to Disk 2_0_X . Unisphere will display these disks as faulted.	1. Identify the primary SP in Unisphere under **Service → Service tasks.** 2. Reboot the primary SP using the svc_shutdown -r service command.	5.0.0.0.5.116
996157/ 11755552	If vMotion operations are in progress, a user may see alarm messages on the corresponding VVol datastore in vCenter.	This is a false alarm and will disappear automatically in a short time.	4.3.1.1525703027 and later
996161	When a user tries to create many (100) loopback/local CG replication sessions, and each CG contains 20 LUNs on the same array with IO on the source CG, the CG replication session will go into a "Lost Communication" state during session RPO data syncing.	Avoid setting up many simultaneous CG loopback/local replication. If the issue occurs, reboot the owner SP to resume the replication session temporarily.	All versions
996825	When there is a large number of LUNs and file systems with snapshots, (6000 LUNs/4000 file systems), occasionally the Unisphere UI becomes inaccessible during a non-disruptive upgrade. UEMCLI commands fail with the message 'cannot connect storage server'. The inaccessible period may last around 1 minute. After that, the UI will be restored and ready for user.	Wait a few minutes for the system to become accessible again.	5.0.0.0.5.116
997336	When the pool space is full, an operation to enable or disable LUN data reduction may be suspended. The job will suspend with this message	Release some pool space or expand the pool, then either resume the job using CLI, or cancel and retry the job using either the CLI or in Unisphere.	4.5.0.0.5.096 and later

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	`Job failed, and its roll back failed.`
	`Check job details for error statuses.`
	`(Error Code:0x6000dfa)`		

997463	A share becomes inaccessible, but this is not shown in the UI or CLI, if the following steps were performed: 1) Create a replication session. 2) Create a snapshot of a file system and create a share of the snapshot FS. 3) Fail over the NAS server. 4) Delete the snapshot FS on destination NAS server. 5) Failback. 6) Recreate the snap FS with the same name as the one deleted previously.	No workaround.	5.0.0.0.5.116
998221	When trying to resume a group of sessions on an async replication destination after a group planned failover operation at the NAS server-level, the direction of individual file system replication sessions may be different from NAS server replication session. This occurs if the resume operation is started before the previous planned failover ends. This usually happens when a large volume of data needs to be synced from source to the destination during planned failover.	Resume the NAS server replication session after the group planned failover is complete and the NAS server and related FS replication session are all in the "Failed Over" state. If the issue does occur, do one of the following: 1: Run the Resume command against the individual FS session again after it is in a "Failed over" state. 2: Delete the problematic FS replication session and change the FS Replication Destination flag to "no" using the UEMCLI command. `uemcli /stor/prov/fs { -id` `<value>	-name <value> } set -` `replDest no`	All versions.
998582	When there are many storage resources configured on the array, (for example, 6000 LUNs and 2000 file systems), filtering the LUNs using a keyword for the LUN name in the Unisphere UI may take over five minutes, and then show an error message if there are multiple matches (1500+ matches).	Reload the Unisphere UI, then choose a more specific keyword that matches fewer LUNs, or do not use keyword filter on large configurations.	5.0.0.0.5.116
998786	When there are many NAS servers and/or many file systems within a NAS server, creating async replication sessions in parallel from the Unisphere UI could result in the failure of some creation jobs.	Create group replication for each NAS server. Do not create sessions on the next NAS server until the previous NAS server group session creation completes. If the issue does occur, select the failed NAS server/FS and retry the replication session creation at a later time.	5.0.0.0.5.116
998839	If a user configures host access for file storage using a string format (i.e. specifies hosts without first registering them) instead of selecting the registered hosts, the "Hosts" column of the **NFS Shares** page always displays "0", no matter how many hosts the user configures access for.	Select the NFS share to view the host count number, which is displayed on the right-hand NFS share summary panel.	5.0.0.0.5.116
999112	The health description for Ethernet port is incorrect; it shows that this port was not in used, but in fact it was used for some file interfaces.	Bring up the ethernet port and then the health status and description will be updated.	All versions.
999144	After cutover of an import session, the session may appear in a "Major failure" state when using the `uemcli /import/session -id import_24 show -detail` command. A message similar to the following	Check whether the NAS server port that the production network interface was created on is down. Attempt to fix the connection. The session will return to a healthy state after about 10 - 15 minutes.	4.2.0.9392909 and later

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	appears:
	`Health state    = Major failure (20)`
	`Health details  = "The import session`
	`failed importing data during`
	`initial/incremental copy due to target IO`
	`failure.`		

999301	When there is a planned/scheduled SNAP operation running in the background (or other operation in the background, removing multiple LUNS (60 LUNs) for host access through **Host → Delete** will cause a timeout with a message such as the following:
	`Timeout Occurred: An unexpected timeout`
	`has occurred, Refresh your browser to`
	`reload Unisphere UI.`
		Use the REST API to remove multiple LUNs from the host at once. After reattempting to remove host LUN access, all the LUNs attached to that host will finally be removed.	5.0.0.0.5.116

996478	Resuming a CIFS import session fails with the error:
	`Checking CIFS username/password operation`
	`failed. (Error Code:0x900a31d)`
		Check if the CIFS username and password provided are correct. If the CIFS username and password provided are correct, check if the CIFS shares of this VDM are accessible on VNX. If the shares are not accessible, re-create the CIFS share on VNX, then retry the resume CIFS migration operation.	4.2.0.9392909 and later

967312	If a LUN migration session is in the complete phase, but the peer SP is rebooting, the session may go into a failure state.	1. Reboot current SP. 2. Delete and recreate the LUN migration session.	4.4.0.1534750794
997010	When deleting a folder with command "`rmdir /S /Q`" on a share which is currently undergoing a migration (and the migration session is in the incremental copy stage), a user may see failure message of "`Folder Not empty`".	Use Windows Explorer to remove that folder, or write a script to delete the folders one by one by enumerating the folder and deleting the folder after all the children have been deleted.	4.2.0.9392909 and later
999314	During the incremental copy phase of an NFS migration, creation of a file failed with error code 22 if there is another host deleting other files in the same File System.	Wait for several seconds and then check if the file is accessible. No other action is needed.	4.1.0.8940590 and later
1000185	A block sync sessions status frequently switches between "lost sync communication" and "syncing" in the Unisphere UI or UEMCLI.	Pause the problematic block sync sessions and then resume them to recover them to Active state. Alternatively, wait for the problematic block sync sessions to automatically recover to the Active state when the data sync process completes.	All versions.
1001250	After creating a NAS Server replication session from the NAS Server properties dialog **Replication** tab, the newly created session is not displayed on NAS Server properties dialog Replication tab until after clicking the "Refresh" button.	Click the "Refresh" button to display the newly created session.	5.0.0.0.5.116

999164	When a LUN move session fails due to the pool being offline caused by disk failure or fault., if the user tries to delete that failed LUN move session before the pool is online, the following error is displayed.
	`Operation failed. Error code: 0x7d1315d`
	`The request has not been completed within`
	`7,200 seconds. (Error Code:0x7d1315d)`
	The failed session cannot be deleted until both SPs are rebooted
		Avoid deleting a failed LUN move session until the pool is back online.	All versions.

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1000114	When using the LUN migration feature, a user may see a "LUN offline" alert, and a few seconds later user will receive "LUN is operating normally" message.	Ignore the false LUN offline alert.	5.0.0.0.5.116
1001453	In a replication session, if one resource has two or more sessions and one session is in the process of being deleted while other sessions are also executing operations (create/pause/resume/failover/failback), the replication operation can stop responding.	Avoid replication operations on different sessions involving the same resource simultaneously. If the issue does occur, use the `svc_shutdown` service command to reboot the resource owner SP.	5.0.0.0.5.116
1001739	If one SP (for example, SPA) failed over to the other SP (for example, SPB) and SPB rebooted before SPA failed back, the reboot of SPB may fail.	Avoid rebooting the SP before the failback has completed successfully.	5.0.0.0.5.116
1001765	SFTP group authorization will not work for CIFS users in an SMB-only NAS server.	Make the NAS server a multiprotocol NAS server, or configure LDAP on the NAS server which has the mapping of Domain Controller User/Groups Or, use FS permissions (windows ACL for NFS mode bits) to restrict access.	4.2.1.9535982 and later
998814	Replication sessions went into a "lost communication" status.	Verify the replication session connection by using the following CLI command: `uemcli /remote/sys -id <remote system> verify`	5.0.0.0.5.116
999780	Replication of an IPv6 connection lost communication after upgrading with the following error: `One or more replication interface pairs are experiencing network connectivity issues between the local and remote systems`" on the Unisphere UI replication connection tab.	Reassign IPv6 address to the replication interfaces, then reboot the SP.	5.0.0.0.5.116
1000736	After a non-disruptive upgrade from Unity release 4.2.0 or later, the certificates associated with KMIP will not appear in the UI, REST API, or UEMCLI.	To restore the certificates so they are visible in the GUI display and in REST API and UEMCLI queries: 1. If KMIP is disabled, re-enable KMIP. 2. Restart the Management Software, under **Service -> Service Tasks -> Storage System** in the UI.	4.2.0.9392909 and later
1000877	When upgrading to an array with an ongoing VDM local move operation, an upgrade failure message displayed. The VDM local move operation failed as well.	Avoid upgrading when there is a VDM local move ongoing. If the issue does occur, wait for 30 minutes and resume the upgrade.	All versions.
998960/ 999192	The LDAP state was **Failed** when running the following Service command: `svc_nas <NAS_SERVER> -ldap` LDAP queries were not successful, even though the actual LDAP state was **Connected**.	Manually reconfigure LDAP in Unisphere.	5.0.0.0.5.116
999664	While the FLR file system was migrating using CIFS Migration, after cutover, if user didn't use the FLR Toolkit or Windows to lock a file, and if the Retention Period set for that file is newer than Max RP (max retention period of the FS), user might fail to lock the file. In these cases when the lock operation fails, the user sees an error code indicating "Access Denied" or "No Permission".	There are three possible workarounds: • The user can use the FLR Toolkit to lock the file and set the Retention Period less than Max Retention Period. For example, at least 1 hour less than Max RP. • Or, the user can use Windows explorer to lock the file	4.5.0.0.5.096 and later

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		• Lastly, the user can use the default RP or set an RP which is at least 1 hour older than the max RP.	
1000816	The Sync Replication IP connection lost communication after upgrading with the following error on the Replication Connection tab in Unisphere. " `One or more replication interface pairs are experiencing network connectivity issues between the local and remote systems.`	Reassign the IP address to the Sync Replication Management Port and then reboot the SP.	5.0.0.0.5.116
988933	When using Dell EMC Virtual Storage Integrator (VSI), VMware datastore creation fails on Unity All Flash and UnityVSA systems.	Create the datastore in Unity Unisphere rather than the VSI. Refer to the following Knowledgebase articles for details: • UnityVSA: KB# 529580 • Unity All Flash: KB# 529700	All versions supported on Unity All Flash systems. For UnityVSA systems, 4.3 and later.
988648	User is not able to create VMFS datastore on UnityVSA using VMware VSI plugin.	Create VMFS datastore from Unisphere GUI or UEMCLI.	4.5.0.0.5.096 and later
988203	Creating replication from OE version 4.4 to OE version 4.5 in GUI fails.	Use UEMCLI to create replication from OE version 4.4 to OE version 4.5.	4.4.1.1539309879 and later
987324	With multiple VM clones from the same source VM, part of clone could fail. vCenter Server reports events similar to: `Unable to access file xxx.vmdk since it is locked.`	To work around the issue in ESXi 5.0 or later, increase the number of times to retry opening the disk: 1. Log in to the ESXi host with root credentials. 2. Open the /etc/vmware/config file using a text editor. 3. Add this line to the end of the file: `diskLib.openRetries=xx` Where xx depends on the number of virtual machines being deployed in the vAPP. VMware recommends a value between 20 and 50. 4. Save and close the file. 5. Reboot the host for the changes to take effect.	4.5.0.0.5.096 and later
987834	1. The atime (Retention Period) of some append-only files may change to the current time after migration. This effects only the append-only files that still have I/O. Append-only files that do not have I/O during migration are not affected. 2 If, auto lock is enabled on the source side and the auto lock policy interval is short (that is shorter than the whole migration lifecycle), it is possible that some files will fail to migrate.	For 1. This atime change may not have any effect unless the user is trying to lock the file. When locking the append-only file, just determine whether the atime is correct. If is not correct, manually modify it to be correct, then continue to lock the file. For 2: Choose either to disable the auto lock option on the source side if the file system is FLR FS, or set the "auto lock policy interval" of the FLR FS on the source side to a large enough value, for example, two months.	4.5.0.0.5.096 and later
965283	When sync file replication is configured between primary and secondary site, and a filesystem being replicated has an NFSv4 datastore exposed to a vSphere environment (which vSphere is accessing through the NFSv4 protocol), the NFSv4 datastore and VMs provisioned and running on this datastore can become inaccessible after a planned sync replication failover.	This is a vSphere issue which has the following workaround to recover the failed VMs: 1. Unregister all VMs on the datastore. 2. Umount datastore.	4.4.0.1527000377 and later

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		3. If step 2 was successful, re-register VMs back; otherwise, reboot ESXi.	
965969	When deleting sync replication sessions and the sessions are in inconsistent state, that includes sessions in intial syncing state, delta syncing state, or the session was being paused/resumed and the session is still syncing, it is possible that the FS will go offline. In this case an error message, such as `Failed:Destination is in offline state(Error Code:0x9ef6)`, will appear.	The error just means the FS is corrupted and the user needs to delete the offline FS manually.	4.4.0.1528441058 and later
966784	Schedule would not work properly under extreme case. For example, thousands of storage resources are configured with schedule and with heavy IO, un-assigned schedule would still create snapshot.	Restart the Management software from the GUI to fix it: Select **System > Service Tasks > Restart** the management software.	4.4.0.1528441058 and later
967792	During a CIFS import cutover and cancel, the CIFS server on the source VNX needs to be renamed. In the case when it is joined in an AD domain, the new name is getting registered in Dynamic DNS. In some cases, the rename operation exceeds the timeout and an error is generated and automatically handled. The CIFS session cutover fails and the import operation attempts to recover from the error by re-creating the original CIFS server. So two CIFS servers may appear on the source VNX after cutover, one with the original name, the other with the new source name. Subsequent attempt to CANCEL the session fails with error: Error Code:0x90001f0 "Source VDM configured with multiple CIFS servers is not supported".	If you want to retry CANCEL, first you need to get out of the state that reports "Error Code:0x90001f0 Source VDM configured with multiple CIFS servers is not supported". In order to do this, on the source VNX VDM, make sure there are two CIFS servers. Remove the CIFS server with new name. This will put the system into a consistent state when cutover import session failed and the original CIFS server stays on the source VNX. Then you can retry to CANCEL the import session and then delete it.	4.4.0.1528441058 and later
968469	The CIFS migration process fails when the CIFS Server local user is created using a password with a preceding or trailing space.	Do not use a whitespace in the password for a CIFS server's local user account.	All versions
968535	Before reaching the hard limit of quota, an "out of space" error could be reported.	Be aware of the available space of the file system. The file system could reach the space boundary first, rather than the hard limit of quota, in the case of the available space being smaller than the hard limit.	4.1.0.8959731 and later
970078	SPA (LUN owner SP) unexpectedly reboots and there is a sync session with a source LUN owned by SPA created on SPB, and the session fails with "Replication Internal Error (Error Code:0x9881)" error.	Wait for SPA (owner SP) reboot to finish and then create sync session or with I/O to create session (this will trigger trespass).	4.4.0.1534750794 and later
972002	When a security hardened (STIG-enabled) array is reinitialized using a USB stick, STIG will be enabled during the re-initialization processing. The expected behavior is that STIG would no longer be enabled after the re-initialization.	Workaround: To insure STIG is disabled after the USB re-initialization, disable STIG prior to running the re-initialization.	4.4.0.1528950819 and later
973979	When you create a file system named \"\', the SMB share page in the GUI does not display the proper description for the shares associated with file system named \"\' and the UEMCLI does not display the proper values for the shares associated with file system named \"\'.	Do not name file system \"\".	All versions
974999	When opening or deleting a locked file from an FLR-enabled file system on a Windows client, sometimes there are several additional log events generated in the FLR activity log.	This issue will not happen on NFS client, and it just generates some additional log events, which can be seen by administrator. Ignore these log events.	4.5.0.0.5.096 and later

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975192	When automatic file locking is enabled on an FLR-enabled file system, the file on the SMB share can be locked automatically, that is, the customer can find the file's state is locked by the FLR Toolkit. However, the file's mode property is not READ-ONLY though it is locked.	Use the FLR Toolkit to determine whether the file is automatically locked or not on the SMB client. Do not rely on the file's READ-ONLY mode.	4.5.0.0.5.096 and later
976994	Root FS of NAS server is inaccessible with CIFS user, leading to unsuccessful FTP login.	As a workaround, set the default home directory to root of a NAS server file system in FTP settings.	All versions
977423	The modification of NAS server DNS list requires a time window (about 5 seconds) to take effect.	Wait for 5 seconds and refresh GUI DNS page again.	4.5.0.0.5.096 and later
979348	User failback many VDM replication sessions and associated file system replication sessions in parallel, sometimes some VDM sessions' failback operation will be rejected with the following error message: "Failed: Operation failed to validate the remote system connection. The time skew between the local and remote systems may be more than 10 minutes, or there is a network communication issue. (Error Code:0x650013e)"	Retry to failback the VDM session after other failback operations are completed. Please do not failback more than 64 sessions in parallel.	4.4.0.1528950819 and later
980000	The service account can be locked after three failed login attempts when the array is security hardened; that is, STIG is enabled. If the service account is locked when the NMI button is pressed, the service account password will not be reset to the default password.	Unlock the service account using the `uemcli /user/account` command before resetting the password.	4.2.2.9632250 and later
980005	SRM user will see 'reprotect' failure and underlying VMFS unprotected.	Workaround is to reboot array.	4.5.0.0.5.096 and later
980007	On Unisphere GUI performance dashboard, when adding real-time performance charts for synchronous replication session destination file systems, error "Failed to setup the real time query collection for : Unknown internal metrics error has occurred. (Error Code:0x7d14013)" is displayed.	Don't add real-time performance charts for synchronous replication session destination file systems.	4.5.0.0.5.096 and later
980928	After making the changes in LDAP configuration, the custom schema file ldap.conf gets regenerated with modified values but the file must not be modified.	There is no fix in this release. After changing the configuration the user needs to upload the custom schema file again so that the correct schema configuration is retained	4.5.0.0.5.096 and later
980931	There may be a userName delay shown in the following scenario: 1. When customer enables quota, then does IO operation with dedicated account (defined in AD server) among CIFS environment. 2. Query user quota information, and finds above #1. user account has no userName/SID. 3. Waiting for 24 hours at most, or manually triggering UEMCLI refresh will load winNames & SID > uemcli -no /quota/user -fsName flrfs01 refresh -updateNames	There are two methods for loading all userName & SID: • Actively trigger loading via UEMCLI with updateNames option: `uemcli -no /quota/user -fsName flrfs01 refresh -updateNames` • Wait for the system schedule updating and loading of these userName & SID, normally once per day.	4.5.0.0.5.096 and later
981344	There are Three Arrays: A, B, C. A-B set up synchronous replication sessions. A-C set up asynchronous replication sessions. Shut down A and do a cabinet failover on B. Do preserve all asynchronous replication sessions immediately on B. Some asynchronous replication sessions are not preserved. (No Error message in Site B. The asynchronous	1. If you wait two minutes after failover, then run the preserve operation, this issue will not happen. 2. If this issue occurs, rerun the preserve operation.	4.4.0.1534750794 and later

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	replication sessions which are not preserved will be "Lost Communication" in Site C.)		
982323	After resetting the admin and service account passwords to their default values using the NMI button, the admin will be prompted to update their password on the next GUI login. If they check the option to also update the service password, the password update operation will fail if the peer SP is not available, or is in service mode. Specifically, the admin password will be updated, but the service password update will fail.	Use the `svc_service_password --set` command to update the service password.	All versions
982690	When migration is in ready to commit state, when running continuous remove/create /link operation in a NFS share, user may see some operation failed with error, for example: invalid mode ('wb+') or filename: u'/mnt/1388_nfs_1/data11/uATNNUFn' The error message depends on the tool/application user was using.	When this happens, user can double check File Import session state, if the Health state is still "Okay", user can check the file which report error, usually the file is actually in good state (because the IMT engine has moved that file from source again to fix the issue already). User just need to retry user's application operation, for example, if create file fail, user just retry the recreate or check whether the file already existing or not. When a file node state is MNS_FAILED (temporarily or persistent), access to the node will see error. Usually the auto-retry will fix the problematic node so retry the operation will see no error.	4.1.0.8959731 and later
983842	During CIFS import incremental copy phase, host IO may fail occasionally to set access time for softlinks.	Retry can succeed.	4.2.0.9392909 and later
983899	For sync replication, if FC port 0/4 (used by sync replication) of SPA/SPB of source array is connected (zoning is not configured incorrectly) to multiple FC ports of Unity arrays, there might be some undefined errors for sync replication functionality. For example, sync replication session creation may fail, or data cannot be synchronized from source array to destination array.	Check the FC zoning configuration, and ensure FC port 0/4 of SPA of source array is only connected to FC port 0/4 of SPA of remote array, and FC port 0/4 of SPB of source array is only connected to FC port 0/4 of SPB of remote array. If the FC configuration changes, reboot both SPs of both source and destination arrays to make the FC change take effect.	All versions
984059	If user migrates VM on vSphere when Unity file sync replication is ongoing, vSphere may fail with error: "A general system error occurred...".	Retry to migrate VM on vsphere after array failover finishes.	4.4.0.1534750794 and later
984860	If the source VNX system has a large number (hundreds) of CIFS shares configured, there is a chance that a very small amount of CIFS shares might not be migrated to Unity during IMT because of a known VNX system bug. The exact missing CIFS share numbers may vary depending on the total number of the CIFS shares and the size of each share, which may also different for the length of the share name and the used IP type (IPv4 or IPv6).	To check whether user hit the issue, user can compare the number of share on source and destination side before cutover. After cutover, user can manually create the lost CIFS share in unity.	4.2.0.9392909 and later
985555	The SP may unexpectedly reboot when creating a file system sync replication over an import session destination, and the import session is in initial copying state or delta copying state.	Workaround: When creating a sync replication over to an import session destination do the following: 1. Pause the import session. 2. Create the sync replication on it. 3. Resume the original import	4.4.0.1534750794 and later

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		session.	
986557	If the source VNX has a very large FLR file system, and the VNX is busy, there is a small chance that the file migration cancel operation may fail due to thaw FLR file system timeout. This is a known VNX system bug.	Try "nas_fs -modify <fs name> -worm -auto_lock disable " and "nas_fs -modify <fs name> -worm -auto_delete disable", and stop other usage tasks on the VNX, then retry the cancel operation. If cancel still fails, try CLI command: "uemcli /import/session/nas -id <value> cancel -skipSourceRestore" .Then bring up product interfaces from the VNX side. If for cifs interface cancel failure, need to Join domain again manually.	4.5.0.0.5.096 and later
974675	The creation jobs of async replication sessions for consistency groups (CGs) and LUN jobs get stuck when the number of replication sessions reached the maximum limitation of 1000. No error message is reported.	Reboot the SP for the storage resource for which the job hangs.	4.4.0.1534750794 and later
929420	The originally-configured IP address of the NAS server appears after a replication session failover, even though the IP address of the NAS server was changed on the source before the failover.	1. Modify the IP address from the original IP address to the new IP address on the destination (site B). 　a. Observe on the source system (site A) that the IP address Replication Policy is "Overridden", and Source IP = IP2, IP = IP1. 　b. Modify the Replication Policy from "Overridden" to "Auto" on the source (site A), after that Source IP = IP2, IP = IP2 on site A. 2. Failover from site B to site A. 3. The IP address on site A is still the new IP address (IP2).	4.4.0.1534750794 and later
933822	During synchronous replication, the file system used capacity is not replicated from the source to the destination. After failing over, the file system on the destination becomes the active file system, and updates the used capacity to the correct value.	No workaround. Dynamic data is not reflected in Unisphere until after the replication session completes.	4.4.0.1534750794 and later
934875	After failing over a synchronous replication session in a LUN group that is in either an "in sync" or "consistent" state, the sync status may incorrectly display as "out of sync."	The session sync state correctly displays when the LUN group is failed back or resumed.	4.4.0.1534750794 and later
934958	For SANCopy Pull for third-party migrations, if both FC and iSCSI connectivity are available and properly configured, iSCSI will be used by default for third-party LUN migrations with no option to switch to FC.	To use FC for third-party migrations, delete the iSCSI path and connection using the following commands: `/remote/iscsi/connection/path` and `/remote/iscsi/connection`.	4.4.0.1534750794 and later
948601	The Unisphere UI displays the incorrect size on asynchronously replicated NFS datastores.	No workaround.	4.4.0.1534750794 and later
948664/ 10076508	There were issues accessing NFS shares.	1. Enable paused frames on network equipment. 2. When designing networks using	4.2.0.9392909 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
		VLAN, take into account the bandwidth of channels.	
948700	Renaming a user in NIS is not immediately reflected in the quota report.	Renaming the user takes some time to reflect in the quota report. Wait for a few minutes for the username to be updated.	4.4.0.1534750794 and later
949119	If an NDMP restore restores a file which exceeds a quota hard limitation, the file will be restored as owned by the root user.	Have the administrator manually change the quota limitation and the `chown` for this file.	All versions.
952267	Creating an asynchronous replication session for a NAS server with a single SP as the destination system fails.	If the destination is single-SP, ensure that the destination system is set to SP A instead of SP B, then retry the operation.	4.4.0.1534750794 and later
956014	After attempts to recover from failure of a deleted replication session between two NAS Servers with AD-joined SMB, the session is removed and both NAS servers are taken into production mode. As a result, each NAS server becomes a unique, valid AD-joined SMB server to the same AD domain. The NAS servers report AD or DNS failures with the following message: `Domain controller servers configured for the SMB server are not reachable. Check network connectivity. Ensure that at least one domain controller is running and the storage system can access it.`	Manually select which of the two copies of the NAS server is the production NAS server. Delete the other NAS server using the `-skipUnjoin` option.	4.4.0.1534750794 and later
956703	On a NAS server with both synchronous and asynchronous replication sessions, it may take a few minutes to failover the session at the source array.	Perform a planned failover in the CLI by adding the `-force` option to the failover command.	4.4.0.1534750794 and later
957092	The snapshot schedule is delayed on a system with high CPU utilization and a snapshot schedule frequently used by many filesystems.	Reduce processing operations and try again.	4.4.0.1534750794 and later
958081	When the MTU on the NIC was changed multiple times in a short period, a kernel panic occurred and the SP rebooted.	No workaround.	4.4.0.1534750794 and later
958139	If a quota tree is created before creating a CIFS share, the CIFS user is denied access to the quota tree.	Create the Quota tree after creating the CIFS share.	4.4.0.1534750794 and later
958911	When resuming a paused sync replication session, the operational status of the session stays in "Syncing".	Reboot the SP where the source resource is located.	4.4.0.1534750794 and later
959208	If an LDAP user is configured before Directory Services (LDAP) is configured, and a local user account with the same name exists, the array will report that the LDAP user already exists, instead of 'not found in the LDAP database'.	Configure LDAP and reboot the SP Then, add the LDAP user (role) again. This will be allowed even if a local user with the same account name exists.	4.4.0.1534750794 and later
959392	A checkpoint snapshot filesystem will not be fully mounted after a system reboot.	Fail over the sync replication session. Then destination file system will be remounted, and recheck the ckpt directory under filesystem for ckpt snap data.	4.4.0.1534750794 and later
959883	The software upgrade process fails on the last step of the Upgrade wizard.	Wait for a while and click **Retry** on the upgrade dialog.	4.4.0.1534750794 and later
960763	When the replication source system has an additional IO module that the replication destination does not have, and the NAS Server is using an IP address on that IO	Override the Ethernet port for IP addresses on the destination NAS server.	4.4.0.1534750794 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
	module, IP addresses will not be available on the destination side. The destination NAS Server health reports display the following message: `The system is unable to detect an Ethernet port or link aggregation on which the NAS server network interface was configured. Switch the interface to use another Ethernet port or link aggregation. If this does not help, restart the management software. If the problem persists, contact your service provider.`	Use matching device configuration on the source and destination systems.	
965537	During a full-copy migration, the following error message appears: `The import session failed importing data during initial/incremental copy due to target IO failure`	Check whether there is enough space on destination resource. If not, expand the destination resource to ensure there is enough space to hold the imported data.	4.4.0.1534750794 and later
965654	After cutover, the file import session does not change to "Ready to Commit". In the summary report, one of the file system migration sessions is not visible.	Use the following command to restart the NAS server: `svc_nas <nas server name> -restart`	4.4.0.1534750794 and later
966903	For an NFS datastore, even if `esxMountProtocol` for the resource created on the source is NFSv4, the destination will still be NFSv3.	Run the command on the destination site to modify this parameter: `uemcli -sslPolicy accept -noHeader -u admin -p Password123! /stor/prov/vmware/nfs -id res_5 set -esxMountProtocol NFSv4` where "`res_5`" is the NFS datastore's ID.	All versions
967435	When testing the replication preserve feature, rebooting both SPs of site A could generate a core dump. However, this core dump is harmless.	Rebooting the system again will perform a system auto-recovery.	4.4.0.1534750794 and later
968227	In rare circumstances, when a user creates a snapshot by using the Unisphere UI, an unexpected error may occur. However, the actual snapshot creation completed successfully. The newly created snapshot will display immediately. The unexpected error occurs because the REST API failed to fetch the snapshot ID.	Ignore the error if the newly created snapshot appears.	4.4.0.1534750794 and later
969495	If a pool out-of-space event occurs on a destination Unity array after a file migration session cutover from VNX to Unity, it is possible that some folders and files are lost on the Unity array. Although the migration session can resume and complete after expanding the destination pool, no warning or error message will occur mentioning that data may be missing.	1. Always plan to have enough space on the destination pool before starting a migration. Extra buffer space may be needed if there might be continuous large I/O during the migration. 2. If a pool out-of-space event does occur after cutover, cancel the migration session and start again by creating a new session.	4.4.0.1534750794 and later
953776	The NAS import session type can be evaluated incorrectly in some situations (when configuration of a source or destination system changes), and CIFS sessions are displayed as NFS sessions. This does not affect the migration behavior.	To determine the exact session type, check if a CIFS server exists on the source or destination VDMs.	4.3.0.1522077968 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
953268	Only 1 CIFS server per VDM is allowed for successful migration. The pre-checks assess this, but they are executed only on the session creation. So if the user creates another CIFS server between the session creation (/import/ session/nas create) and start (/import/ session/nas set -paused no), the session will fail with an unexpected error.	Check the configuration of the source VDM. If there are 2 CIFS servers, remove one, then resume the import session.	4.3.0.1522077968 and later
952772	A misleading alert `Unable to detect Ethernet port or link aggregation for the network interface N/A configured on NAS server %1.` displays during NAS server deletion, even though it completes successfully.	Ignore the erroneous alert.	4.3.0.1522077968 and later
949211	A NAS server with NFSv4 and Kerberos enabled could not be deleted. The initial delete operation failed at 50% progress. After retrying the operation, the deletion hung at 0% progress, and eventually shows as **Failed**.	No workaround.	4.3.0.1522077968 and later
948312	A local replication session cannot communicate with its remote session, and cannot recover automatically. The only allowable operation is **Sync** for the replication session. When the button was clicked, it shows `Do you want to begin synchronization of the replication session?`, but it always fails with `Session must be in start or ok state before it can be synced. (Error Code:0x650010a).`	Workaround: 1. Reboot the system. 2. If SPA went into Service Mode, exit Service Mode. 3. System should failover to SPB and all replication sessions should be okay.	4.3.0.1522077968 and later
948331	During a non-disruptive upgrade (NDU), an `Internal Error` or `Storage server unavailable` message may be returned in response to any CLI commands. The issue is experienced only when two conditions are met: 1. An upgrade is paused when SPs have different software revisions (for example, during an upgrade when one SP has been upgraded and the other has not). 2. The SP rebooted during the upgrade.	Avoid pausing the upgrade, if possible.	4.3.0.1522077968 and later

948529	A replication session could be in `Non- Recoverable Error` status under various circumstances:
	 • If a replication session refresh occurs when the VDM pauses and restarts.
	 • During VDM startup, the root UFS is not ready
	 • The replication session name DB is not accessible.
	 • A stale file handler error occurs
	 `Health state = Critical failure (25)`
	 `Health details = "This replication session has encountered an error`
		Follow the health details instruction: Try pausing, and then resuming the replication session. If the problem persists, delete and then create the replication session again.	4.3.0.1522077968 and later

948827	When STIG is enabled, a banner page is displayed when logging into the Unisphere UI. This banner page may not always be displayed on login.	This does not impact UI login; it may be ignored.	4.2.0.9476662 and later.
949784	When the user has their mouse focus within the vSphere or vCenter console for the VSA node and they hit ctrl-alt-delete the VSA node will reboot immediately by rebooting Linux. This will have the appearance that the VSA did a sudden reboot. If performed enough times close together the VSA could enter service mode. And	Ctrl-alt-delete should be avoided since that triggers a reboot of the Linux operating system and not a reboot of the Unity SW stack. To regain mouse focus within a VMWare console the user is	4.3.0.1522077968 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
	for the single SP VSA, this key sequence will create a DU of the system.	supposed to just hit Crtl-Alt and no other key sequence.	
948375	When LDAP is disabled on NAS server by a Unix Directory Service property modification, its settings are not deleted, and LDAP can be re- enabled later without the need to specify the settings again.	The service script `svc_nas` can use the remaining LDAP configuration to resolve users, even when LDAP resolving for the NAS server is disabled.	4.3.0.1522077968 and later
917298	NAS_A or NAS_B and related user VDMs failed to recover due to error occurs in the system VDM NAS_A or NAS_B, as seen in the Unisphere CLI or UI. After following the recommended resolution steps in the health details, the NAS servers are recovered and go into a ready state. However, the replication sessions on these system VDMs and related user VDMs will no longer be visible.	After recovery, reboot the primary SP. After the SP reboot, system NAS servers can be recovered successfully, allowing replication sessions to be recovered.	4.3.0.1522077968 and later
938651	A delete Replication Session job failed with 0% complete, but the session is not listed on the replication session page after the deletion with the following error: `Failed: Only the destination side of the replication session was deleted. For remote replication, this may have occurred because the replication session was deleted from the destination system or the source storage resource was offline. In this scenario, try deleting the replication session from the source system. For local replication, this may have occurred because the source storage resource is offline. Once the storage resource is accessible, try deleting the replication session again. This will delete the source side of the replication session. (Error Code:0x6500052)` This issue occurs when: 1. The first time a user deletes a replication session and the remote side either cannot be connected, or remote storage resource is offline, only the source side of the replication session is deleted. 2. After the destination side is recovered, when user deletes this replication session again, it fails with error message that only the destination side is deleted. However, both source and destination were successfully deleted.	Although the delete replication job failed with this error message, the session was actually deleted without errors.	4.3.0.1522077968 and later
938798	When importing a large NAS server (using NFS or SMB) the import can appear to be stuck (because the reported percentage progress changes very slowly).	Contact your service provider for a workaround. Reference Knowledgebase article 000514065. Support can help check whether or not there are problems with any of the underlying file system imports using the `svc_imt <nas_server> --show-imports --failed` service command.	4.3.0.1522077968 and later
938977	When creating a remote system for file import, when the SANCopy connection is created and the remote system is verified prior to starting a block import, the SANCopy host is not created, so user cannot create block import session.	Delete and recreate the remote system. After re-creating the remote system, the SANCopy host can be created successfully.	4.3.0.1522077968 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
940223 / 945505	A VM migration (using vMotion) to or from NFS3-NFS4 datastore sporadically fails when an SP is rebooted during migration.	Manually restart the vMotion migration when the SP is back online.	All versions.
943734	"Last sync time" of a replication session is updated, but "transfer remaining size" is not zero.	Wait about 2 minutes later to show replication session again.	4.3.0.1522077968 and later
914073	Export of csv files that contain Chinese, Japanese, or Korean characters are not properly displayed if the file is opened directly in Excel.	Perform the following steps to import the csv file into Excel. 1. Open Excel. 2. Go to **Data-- > Import ExternalData > Import Data**. 3. Select the file type of "csv" and browse to your file. 4. In the import wizard, change the File_Origin to "65001 UTF" (or choose correct language character identifier). 5. Change the Delimiter to comma. 6. Select where to import the file to and click **Finish**.	4.3.0.1522077968 and later
931145	When using DR (Disaster Recovery) Proxy (a NAS server designed to access a snapshot of a replicated file system) to access another DR NAS server, a "permission denied" message appears on sync replicated file systems when the async replicated file system is accessible. This occurs because sync replication file systems are not mounted on DR NAS servers, as the file system is changing in real time due to active replication. For async, it is also not recommended to access the file system directly, but rather a snapshot, to avoid file system instability due to unexpected update from the replication source.	It is highly recommended not to access directly replicated file systems, but rather a snapshot of the file system.	4.3.0.1522077968 and later

943527	When the source has many sparse files or version files, file import session may show "Major failure", for example:
	 `uemcli /import/session show -detail`
	 `Storage system address: 127.0.0.1 Storage system port: 443`
	 `HTTPS connection 1: ID = import_74 Name = vdm_session_4`
	 `Session type = nas`
	 `Health state = Major failure (x) Health details = "Target I/O failure" State = Incremental Copy Progress = 99% Source system = RS_65546`
	 `Source resource = vdm_nfs Target resource = nas_45`
	 The destination file system detail shows a status similar to the following:
	 `uemcli -u xxx -p xxxx /stor/prov/fs -name nfsMig_93 show -detail`
	 `Storage system address: 127.0.0.1 Storage system port: 443`
	 `HTTPS connection 1: ID = res_9880 Name = nfsMig_93`
		Extend the file size of the destination file system that has a status of out of space. For example: `uemcli -u admin -p Password123! /stor/ prov/fs -name nfsMig_62 set -size 12G`	4.3.0.1522077968 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
	Description = Health state = Degraded/Warning (10) Health details = "The file system has run out of space. Allocate more storage space to the storage resource." File system = fs_9880		
888441	When a VMware NFS datastore NFS server fails, the IO on this datastore will pause and the system will reboot.	No workaround.	4.2.0.9392909 and later
932347	Immediately upon creation, the Fail-Safe Network (FSN) appears in a "Link Down" state. An alert similar to the following is displayed. System XXX has experienced one or more problems that have had a minor impact With a detailed description of The system has experienced one or more minor failures. Check related alerts and fix the underlying problems.	If all Ethernet ports participating in this FSN port, either directly or using Link Aggregation(s), are connected properly, the FSN port will automatically recover from "Link Down" state within 30 seconds or less. It is also possible that FSN port recovery goes through "Degraded" state, for approximately 60 seconds from FSN creation. This alert be ignored, unless FSN port fails to enter "Link Up" and "Health OK" state within approximately 60 seconds from creation.	4.3.0.1522077968 and later
942923	If you have set different user quotas on a non-multiprotocol SMB file system that you are changing to a multiprotocol file system, the Remapping File Owner process will not preserve the specific user quotas you had set previously. If the user quotas are all the same or (have default value), this issue does not occur.	After remapping users to their Unix user counter part, re-issue the specific User Quota settings.	All versions.
944587	Before a single SP reboot, a move session may stay at 1%~90% indefinitely and never progress. After the single SP panic, the session can run on the peer SP.	To prevent the panic: 1. Cancel the session and recreate the move session to move the LUN. 2. Reboot the current SP where the move session is running.	4.3.0.1522077968 and later
945511	The following error appeared when verifying a remote system. The system encountered a REST connection failure. (Error Code:0x102) When the operation lasted more than seven minutes, this was most likely a timeout issue.	Retry the operation.	4.3.0.1522077968 and later
945991	The syntax of /stor/prov/fs is correct, but one of the -type values (nfs) is separated from other two by a group of attributes that are applicable only to CIFS or CIFs and Multiprotocol types. -type { { cifs | multiprotocol [-accessPolicy { native | Windows | Unix }] [-folderRenamePolicy { allowedAll | forbiddenSmb | forbiddenAll }] [-lockingPolicy { advisory | mandatory }] } [-cifsSyncWrites { yes | no }] [-cifsOpLocks { yes | no }] [-cifsNotifyOnWrite { yes | no }] [-cifsNotifyOnAccess { yes | no }] [-cifsNotifyDirDepth <value>] | nfs } For example: CIFS: -type cifs -cifsSyncWrites yes -cifsOpLocks yes -cifsNotifyOnWrite yes -	The syntax bracket order specifies which options are for CIFS and Multiprotocol, and which are for NFS. The options before | nfs are for CIFS and Multiprotocol types only.	4.3.0.1522077968 and later

Issue number	Problem description	Workaround / Resolution	Exists in version

	`cifsNotifyOnAccess no - cifsNotifyDirDepth 128`
	
	Multiprotocol :
	`-type multiprotocol -accessPolicy native -folderRenamePolicy allowedAll`
	
	`-lockingPolicy advisory - cifsSyncWrites yes -cifsOpLocks yes - cifsNotifyOnWrite yes - cifsNotifyOnAccess no - cifsNotifyDirDepth 128`
	
	NFS :
	`-type nfs`		

946287	When logging into Unisphere as one user and then trying to log in as another user without restarting the browser, some login information is cached by the browser and this will result in a failure.	Restart the browser to log in successfully.	4.3.0.1522077968 and later
947072	When user is trying to assign Host access to LUNs and delete the LUNs concurrently, the LUN deletion job may fail and go into suspended state. One or more LUNs may show up as blank entries in GUI and CLI.	Start a new request to delete the LUNs that were attempted to be deleted in the previous request and are not showing up as blank entries. That request will complete successfully. Now resume the previous suspended job through CLI - [Resume] /sys/ task/job -id <value> resume	4.3.0.1522077968 and later
947496	During creation of an IP address for iSCSI, the system was shut down. This caused the Create job to be suspended. The specified IP interface was reserved so that the job can proceed after reboot. Attempting to create this IP again completed with error: `The specified IP address is already in use (Error Code: 0x716e00a)`	Cancel the suspended job from the Unisphere **Jobs** page and retry the create operation.	4.3.0.1522077968 and later
930868	When using Unisphere to delete snapshots, the Unit deletes the user snapshots but not the system snapshots. This is expected behavior. However, Unisphere may indicate that the snapshot deletion process failed.	Ignore the messages indicating the snapshot deletion jobs have failed.	4.2.1.9535982 and later
930652/ 930654	After you perform the initial license installation process on a new Unity system, and you have completed all of the necessary steps in the Initial Configuration Wizard, Unisphere may not show all of the licensed features as enabled.	Refresh the browser window that you are using to access Unisphere.	4.2.1.9535982 and later
929676	When LUN migration is taking place and the destination storage pool is full, the LUN migration process can hang (for up to two hours). During that period, you cannot pause or delete the migration session.	Wait until the session enters a failed state, and then delete the migration session and re-migrate the source LUN.	4.2.1.9535982 and later
928421	Under unusual conditions, pool creation time may take up to ten minutes.	Wait for the pool creation to complete.	4.2.1.9535982 and later
927349	Under some conditions, cannot delete asynchronous replication sessions (the delete operation hangs).	Perform a storage processor reboot and attempt the deletion again.	4.2.1.9535982 and later
919378	After re-installing VSS hardware provider, the VSS fails to create snaps or import snaps. This problem is found only during a re-install (uninstall and reinstall). Either the `HwProvider.log` file missing from `C:\Program Files\EMC\Unity\VSS Hardware Provider\log` or the `HwProvider.log` file doesn't get updated during	Uninstall the Unity VSS provider, restart the Volume Shadow Service and then re-install. Make sure that the UnitySnapshotProvider service is successfully installed.	4.2.1.9535982 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
	the shadow operations. In addition, the UnitySnapshotProvider service could also be missing in services. During the re-install, the "Create Windows service running as Local System" step fails with error that can be found in: `C:\Program Files\EMC\Unity\VSS Hardware Provider\log\installlog.txt.`		
900886	After resetting the Unity system name, file replication session system names are not updated on Unisphere.	Revert the system name to the previous name until the replication session completes.	4.2.1.9535982 and later
925452	When the HOME directory feature is enabled on a NAS file system (where clients connect to the file system using a HOME share name), clients can receive errors if they open multiple sessions from the same host using different user names. Some applications cache information based on share name.	Clients should the user name instead of the HOME share name when connecting to file systems that use the HOME directory feature.	4.2.1.9535982 and later
923420	When configuring VMFS synchronous replication sessions, if the Unity Storage Processor associated with the VMFS operation reboots, Unity returns I/O errors.	Wait 1-2 minutes, then resume I/O.	4.2.1.9535982 and later
922673	When performing an Online Data-in-place hardware conversion, under rare circumstances, the Unisphere wizard message text incorrectly advises to replace the incorrect Storage Processor (SP) during the second SP swap. For example, if you replace SPA first, when it is time to replace SPB, Unisphere may incorrectly advise to replace SPA.	Do not replace an SP that has already been replaced - even if the migration wizard message advises to do so.	4.2.1.9535982 and later
916949	Attempts to create a CIFS import session fail with error message: `Connection to a source CIFS server was lost(Error Code: 0x900a324).`	Verify that the source VNX import interface and the destination Unity import interface are configured with different IP addresses.	4.2.1.9535982 and later
915804	Because snapshots created with snapcli cannot be accessed through Unisphere, the UEMCLI, or Unity REST API, Cloud Tier Appliances (CTA) cannot archive these snapshots.	No workaround.	4.2.1.9535982 and later
921511	Unisphere returns the following message: `Your security session has expired. You will be redirected to the login page.`	Confirm that the Unisphere login account in use is still active has Storage Admin privileges. Be sure to close the active browser session before logging with another account.	4.2.1.9535982 and later
924719	A Unity OS upgrade process is interrupted, the Unity health check process indicates that there are suspended jobs, and Unisphere/UEMCLI shows inconsistent information (Start/Finish times) about active jobs.	View Unity jobs with Unisphere/ UEMCLI, and delete any processes where the indicated `Finished` time precedes the `Started` time.	4.2.1.9535982 and later
913512	In very rare cases, after trying to cancel an SMB data import/migration session from VNX to Unity, the **Cancel** procedure fails, resulting in the VDM becoming inactive on the source VNX system.	Reboot the Data Mover on the VNX source system, or issue the following command : `.server_config server_X - v "vdm add id=YY fs=ZZ name=VDM_Name"` Where *server_X* is the faulted Data Mover, YY is the VDM ID, and ZZ is the file system ID where the VDM is mounted. This variable information can be found in `/NAS/server/ slot_x/vdm file.`	4.2.0.9392909 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
911386	A second attempt to cutover an import session of a VDM with a standalone CIFS server failed. At first and second attempts user provided same new source CIFS servers NETBIOS name. The audit log contains messages similar to the following: `Audit log: Error 13157007777: VDM_Cifs_Jes1012 : Renaming Local Groups database from COMPMIGJES1012 to COMPMIGJES_10 failed with status 'DuplicateEntry'.`	Cleanup the source VNX with that local group, retry the cutover, then manually restore the ACLs at the destination. Alternatively, manually restore share ACLs on the source before second cutover attempt. (Remove an ACE which denies the host access to prevent accessing the source share after cutover).	4.2.0.9392909 and later
908756	Ongoing vMotion with a VMware NFS4 datastore can fail after a storage processor reboot. This is a known vSphere problem described in KB: https://kb.vmware.com/kb/2089321	No workaround.	4.2.0.9392909 and later
911329	The file system size on a host decreased to 11G from 19G after an asynchronous file replication session (where the source is a Thin file system in Unity 4.1.2 and the destination was a Thick file system in Unity 4.2).	Starting with the 4.2.x release, you cannot convert a file system from thin to thick or thick to thin. Use the replication feature in the CLI to migrate a thick file system to a thin file system or a thin file system to thick file system.	4.2.0.9392909 and later
904622	If both SPs are abruptly shutdown/rebooted after integrated ESRS is configured, it is possible that integrated ESRS cannot be automatically re- enabled after an upgrade, and integrated ESRS status may become "unknown".	Using SSH, log in to the system and run the following two commands consecutively: 1. `svc_esrs_ve -r` 2. `svc_esrs_ve --reenable`	4.2.0.9392909 and later
906192	A file system appears offline and in an error state during incremental copy state. Import session remains in a healthy state, but the import progress stops.	Try to bring the file system back online, or cancel the migration.	4.2.0.9392909 and later
906249	A request to create a replication session for VMware NFS datastore which resides in a multiprotocol NAS server will fail until the first synchronization of the associated NAS server replication session.	Synchronize the NAS server replication session at least once prior to creating a replication session for a VMware NFS datastore residing in the multiprotocol NAS server.	4.2.0.9392909 and later
906702	If a replication session name is modified, it appears to complete successfully. However, the session name is not changed.	Wait for a while, the refresh the page until the name appears as modified.	4.2.0.9392909 and later
907158	After an upgrade to Unity 4.2, the ability to change the SP owner is not available in Unisphere for NAS servers.	Clear browser cookies to and refresh Unisphere.	4.2.0.9392909 and later
907311	On Window 7, a fully sparse file is always shown by Windows Explorer as a 1 KB file size on the disk.	This is a Win7 behavior, the 1KB is representing the minimum cluster size. With Win10/W2K12, the file on disk is now seen as 0.	4.2.0.9392909 and later
907314	When trying to create replication from Unity to a VNXe1600 in Unity Unisphere, no pool is recommended on destination storage resource wizard page.	Use the CLI to create a replication session from Unity to a VNXe1600.	4.2.0.9392909 and later
908047	**Time of last sync** of the replication session becomes "N/A" and the delta data is not transferred from source side to destination side.	Pause and resume that replication session	4.2.0.9392909 and later
908180	A NAS server creation operation takes a long time during a dynamic pool expansion operation.	Avoid creating a NAS server when the pool is being expanded.	4.2.0.9392909 and later
908749	If the system is powered off (both SPs are powered off at the same time) while a VDM local move operation is ongoing, after array boots up the VDM Local Move job may still not exit.	Workaround to this issue: 1) Use MluCli.exe poll -proc to find the VDM Local Move Object (start with 0x2a) 2) Use MluCli.exe objectops -b_careful -	4.2.0.9392909 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
		activate - oid <vdm local move oid> 3) The job will complete automatically once the proc finishes.	
908930	Even when snap auto delete is disabled on the storage pool, the storage pool may still show a degraded state indicating it could not reach low water mark.	Use the CLI to increase the pool space low water mark in order to bring the pool back to normal state. For example: `uemcli -u xxx -p xxx / stor/config/pool —id pool_97 set - snapPoolFullLWM 40`	4.2.0.9392909 and later
875485	The following error could be returned when multiple snap diff REST API requests were sent in parallel. { `"error": { "created": "2016-12-05T17:34:36.533Z", "errorCode": 131149826, "httpStatusCode": 503, "messages": [{ "en-US": "The system is busy. Try again later. If the problem persists, search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code: 0x7d13002)" }] } }`	Reduce the number of parallel operations, and try again.	All versions
894343	Changing the system name is not reflected on the remote systems.	No workaround.	4.2.0.9392909 and later
896339	When a replication source NAS Server has a Production Network Interface on a port (or link aggregation) which does not exist on the destination, the IP will not be brought up after session failover unless the Network Interface Port is overridden on destination, since the system cannot find a port with the specified name.	Before setting up replication session, pre-configure the destination system to have a matching port name. Create a link aggregation or insert matching SLIC.	4.2.0.9392909 and later
900541	When deleting many async replication sessions in one job, some sessions may fail to be deleted.	No workaround.	4.2.0.9392909 and later
900792	LUN Move hangs.	The session can still be cancelled successfully or restarted after a single reboot.	4.2.0.9392909 and later
901617	The LUN Move will fail.	Restart the LUN Move operation.	4.2.0.9392909 and later
903607	A bind VVol operation fails. Errors similar to the following may display: `The system encountered an unexpected error.` `Search for the error code on the support website or product forums, or contact your service provider, if available. (Error Code:0x6702026)`	Retry the bind VVol command.	4.1.2.9257522 and later
904512	After migrating one VDM from VNX2 to Unity successfully, another VDM could not be migrated. An error message similar to the following may display: `HTTPS connection Operation failed. Error code: 0x9000194 Create session fails with 1 error(s). Please check message by scp sysadmin@storageDomain@10.109.226.252`	Rename the migration interface to a name not starting with nas_mig.	4.2.0.9392909 and later

Issue number	Problem description	Workaround / Resolution	Exists in version

	`:/home/sysadmin1/.migration/`
	`precheck_vdm_VDM_Cherry22.log. (Error`
	`Code:0x9000194) Job ID = N-5515`
	`09:44:47 root@OB-d1234-spa spa:~> cat`
	`log3 Error: VDM_Cherry22: DNS server(s)`
	`of ncc2k8.usd.lab.emc.com is(are) not`
	`reachable through the network`
	`interface(s) not attached to the VDM.`
	`After migration to Unity, the network`
	`interfaces attached to the VDM will also`
	`get migrated. Other clients of the Data`
	`Mover cannot connect to the DNS`
	`server(s). Create another network`
	`interface on the Data Mover, and if`
	`applicable, correct routes and VLAN`
	`functions, to make sure it can connect to`
	`the DNS server(s). Warning:`
	`Cherry_move_FS2: Mount options: smbca`
	`will not be migrated Warning:`
	`VDM_Cherry22: Domain Controller(s) of`
	`ncc2k8.usd.lab.emc.com is(are) not`
	`reachable through the network`
	`interface(s) not attached to the VDM.`
	`After migration to Unity, the network`
	`interfaces attached to the VDM will also`
	`get migrated. Other clients of the Data`
	`Mover cannot connect to the Domain`
	`Controller(s). Create another network`
	`interface on the Data Mover to make sure`
	`it can connect to the Domain`
	`Controller(s).09:44:50`
	`root@OB-d1234-spa spa:`		

895052	SSH is disabled after a single-Storage Processor VSA upgrade.	After performing a Unity OE upgrade, re-enable SSH using Unisphere or the following Unisphere service command: svc_ssh -e.	All versions
896002	If a Unity system uses NTP for synchronization, when the time is adjusted backwards, real-time system metrics do not appear and the system generates `Query ID not found (0x7d1400c)"` errors.	In Unisphere, navigate to another page and then return to the metrics page, or log out of Unisphere and log in again.	4.1.0.8940590 and later
855767	When you customize a list of CIFS Shares Access Control Entries (ACEs) by either making a REST API call, editing the share permission using the Windows MMC console, or by using SMI-S API, `isACEEnabled` might erroneously indicate `false`.	Ignore the value `isACEEnabled=false` in this case. When ACEs are properly set, they are always enabled, despite this value in the REST API attribute. A REST API request for list of ACEs will return the correct list of custom ACEs for the share, and those ACEs will all apply. Alternatively, force a reload of the management model for the share by changing the share description, or for the whole system by restarting the management software.	4.1.0.8940590 and later
792840 (physical deployments only)	RecoverPoint and the native replication feature on the storage system cannot simultaneously operate on the same volume or Fibre Channel (FC) port of the storage system. There is no such restriction on Ethernet ports.	Run the `/remote/sys show - detail` command in the CLI console of the storage system. Do not connect any RecoverPoint appliances to the synchronous FC ports on the storage system. The ports can also be viewed in	All versions

Issue number	Problem description	Workaround / Resolution	Exists in version
		Unisphere by going to **Unisphere** > **System** > **System View** > **Enclosures**.	
867849	Registering the Unity system with a second vCenter with a different root certificate will disable the registration with the first vCenter, making any virtual machines on the first vCenter inaccessible.	Unity only supports one vCenter connection at a time. To change vCenters, unmount all data stores and unregister the VASA provider from the original vCenter before registering the system as a VASA provider for the new vCenter.	All versions
863422	16Gb FC ports can have performance problems when using direct attach to certain 16Gb HBAs.	1. Connect using a 16Gb FC switch. 2. Use Microsoft Windows direct attach.	All versions
869166	When a host is configured to use CAVA for the CEPA server, there is a host IO error on SMB protocol with the following message in the logs: `Too many access from CAVA server xx.xx.xx.xx without the EMC VirusChecking privilege:>>> User credential (xx.xx.xx.xx address of the host).`	Do not use CAVA/CEPA NAS servers for regular host IO.	4.1.0.8940590 and later
864889	If an inter-version (4.0.x to 4.1.x) remote replication session is created using Unisphere CLI and a NAS server owned by custom tenant is chosen as destination resource, the failover might lead to loss of NAS connectivity.	When creating a remote replication session, override the NAS server interface settings on the destination array in order to bring VLAN ID assignment into compliance with tenant settings.	4.1.0.8940590 and later
865864	A replication session may fail with a status code of `Critical Failure` and health details indicating `This replication session has encountered an error. Try pausing, and then resuming the replication session. If the problem persists, delete, and then create the replication session again.` This issue can occur when an array acting as a replication destination with NL-SAS drives in the first four slots of enclosure 0 / bus 0 is under heavy load during a replication session update.	Try pausing, and then resuming the replication session. If the problem persists, delete, and then recreate the replication session.	4.1.0.8940590 and later
849914	The **Job Details** page in Unisphere does not display the name of a LUN group after it failed to be deleted.	There is no workaround for this issue.	4.1.0.8940590 and later
862912 / 834714	When changing the storage policy of a VVol datastore, the operation may fail in vCenter.	Retry the operation.	4.0.1.8194551 and later
864758	A local replication session that is currently in a syncing state may not progress.	Pause, then resume the replication session. If the issue persists, reboot the system.	4.1.0.8940590 and later
864932	The LUN ID column was blank in the **Host Access** table on the **Properties** window of a VMware datastore.	Navigate to **Access** > **Hosts**. Select the host and view the **LUNs** tab of the **Properties** window.	4.1.0.8940590 and later
862736	A VM running on a File VVol datastore may intermittently go offline during VDM failback.	Restart the problematic VM in vSphere/vCenter.	4.1.0.8940590 and later
784827	Some file system statistics may display very a large value (for example, over 100,000,000,000,000 KB/s of file system bandwidth) after a file system is internally remounted.	There is no workaround for this issue. The very large value is only for a single point. The values before and after are correct.	All versions
785823	When deploying a new virtual machine on a NAS datastore that was exported over NFSv4.1 with Kerberos Security, the operation will fail with an `Access Denied` message for the target data store.	Disable Secure NFS for the NAS server.	4.1.0.8940590 and later

Issue number	Problem description	Workaround / Resolution	Exists in version
802295 / 830747	When a replication session is in an error state, pausing and resuming the session usually fixes the problem. However, when the replication destination resource requires recovery, but the replication source resource does not, pausing and resuming does not resolve the issue. The session will still be in an error state and the destination file system will be offline.	Contact your service provider.	All versions
811020	When there are no datastores enabled for access to a target ESXi host during replication, the storage system iSCSI targets are not registered on the target ESXi server. When the Storage Replication Adapter (SRA) requests that the storage system enable Snaps-Only access to the target ESXi server, the operation succeeds, but rescan does not discover the snapshots.	Manually configure iSCSI target discovery of the storage systems iSCSI addresses on the ESXi hosts.	All versions
811431	The replication session state may be reported as unknown after performing a failback operation.	Pause and resume the replication operation to recover the session.	All versions
817821	If a dashboard is created and a language pack is applied, the titles for the widgets are not translated.	Re-create the dashboard after the language pack is applied.	4.1.0.8940590 and later
821501	When a user runs a token-based incremental backup using Networker, a full backup is performed instead.	Add `ATTEMPT_TBB=Y` to `Application Information` while configuring the NDMP client, or change the value in the NDMP client properties.	4.0.1.8194551 and later
835021	Recovery using Site Recovery Manager (SRM) fails intermittently. After session failover, the datastore is eventually mounted correctly, even if a failure is reported.	Wait some time and retry the operation.	4.0.1.8194551 and later

UnityVSA-only known issues

The following issues affect only the UnityVSA (virtual deployments). Issues affecting all Unity systems are in Table 4.

Table 5 UnityVSA-only known issues

Issue number	Problem description	Workaround /Resolution	Exists in version
945773	The following error displays on the UnityVSA: `Error : <CPU of the physical server hosting UnityVSA does not meet the CPU instruction set minimum requirement (SSE4.2 or greater) for upgrading to this release or later.> Action: Migrate the UnityVSA to a server with a CPU that supports SSE4.2 or greater, or deploy a new UnityVSA on a CPU that supports SSE4.2 or greater. Then retry the upgrade.`	When upgrading the UnityVSA to Unity 4.3 or deploying a new 4.3 UnityVSA on an older server that does not support CPU instruction set SSE4.2, migrate the VSA offline to another VMware ESXi server or cluster. If the upgrade fails on the ESXi cluster and that cluster contains any servers that do not support CPU instruction set SSE4.2, modify the Enhanced vMotion Capability (EVC) settings within the VMware cluster to disallow vMotion from the newer servers that support SSE4.2 to the older servers. Remove the older servers from their cluster. Power cycle the UnityVSA and retry the upgrade.	4.3.0.1522077968 and later

Issue number	Problem description	Workaround /Resolution	Exists in version
933016	The system reports an alert that the network heartbeat is questionable on the peer when the local physical network cable is broken. The scenario is: 1. UnityVSA SPA runs in the physical server #1, UnityVSA SPB runs in the physical server #2. 2. The physical network cable #1 connects the uplink #1 of server #1 and physical switch. 3. The physical network cable #2 connects the uplink #2 of server #2 and physical switch. 4. The physical network cable #3 connects the uplink #1 of server #1 and physical switch. 5. The physical network cable #4 connects the uplink #2 of server #2 and physical switch. 6. When one of the physical network cable #1 and cable #2 is broken or pulled out, the system would report alert. But if you pull out cable #1, the alert would be reported on SPB. If you pull out the cable #2, the alert would be reported on SPA. 7. When one of the physical network cable #3 and cable #4 is broken or pulled out, the system would report alert. But if you pull out cable #3, the alert would be reported on SPB. If you pull out cable #4, the alert would be reported on SPA. This happens because UnityVSA's vNIC #1 is connected to the port group #1 and NIC #2 to the port group #2. Also, by VMware's teaming function, port group #1 has been bound to the uplink #1 and port group #2 to the uplink #2. It is expected that after pulling out cable #1, that is, the physical uplink #1 is down, the traffic going through the NIC #1, port group #1, uplink #1 should be cut off. However, because of a VMware limitation, the teaming only controls the egress, but not the ingress. The traffic sending from NIC#1 is truly cut off, but the traffic from the peer's port group #1 still comes through the physical uplink #2 and is routed to the port group #1.	No workaround.	
932365	When Deployment Tool fails to power on VM and reports "Failed to power on VM: The operation is not allowed in the current state of the host", check the health of vCenter and EXSI host first. For more details, refer to the following instructions: ESXi: The operation is not allowed in the current state http://hostilecoding.blogspot.com/2013/07/esxi-operation-is-not-allowed-in.html Snapshot using a Snapshot Manager fails with the error: Operation not allowed in current state (1027707) https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1027707	No workaround.	4.5.0.0.5.096
801368 / 802226	The storage system restarts unexpectedly with a monitor timeout or software watchdog timeout. This occurs when the system and user data share the same datastores (physical disks) and the system is overloaded with aggressive I/O workloads. For example, a system can become overloaded when the workload includes heavy sequential write block I/O mixed with random file read and write I/O.	It is recommended that user storage be on a separate data store than the system data store where UnityVSA is deployed. If that is not possible, ensure that there are no more than four virtual disks on the system data store. If user data is allocated on the system data store, it can be migrated to a different data store. See the vSphere documentation for details. For	All versions

Issue number	Problem description	Workaround /Resolution	Exists in version
		UnityVSA deployment considerations, see the *UnityVSA Installation Guide*.	
809371	When configuring a NAS server for replication from a Unity system to a UnityVSA system, the user can choose a storage processor on the destination, although a single-SP UnityVSA has only one storage processor (SP A). Choosing SP B and continuing to create the session results in an error.	Choose SP A when replicating to a single-SP UnityVSA.	All versions
830522	When a virtual disk is added or removed while a pool is simultaneously being destroyed, one or more virtual disks that had been part of that pool may report: This virtual disk failed due to a system or IO error.	Start a rescan using Unisphere CLI command uemcli /env/ disk rescan, REST API, or Unisphere.	4.0.1.8194551 and later

Limitations

Learn about limitations in Unity.

Limitation	First affected release	Limitation lifted
When replicating VMware VMFS datastores, they are treated like Consistency Groups in that they are subject to the same replication limits as CGs (for example, the maximum number of replication sessions for CGs is 64, which also applies to VMFS datastores).	All versions	Still in effect.
Using VSI 7.4 or VSI 8.0 to create a VMFS Datastore on a Unity all Flash array or UnityVSA will fail. It is recommended to always provision VMFS Datastores and VVOLs through the Unisphere UI or CLI.	All versions	Still in effect.
VMware vSphere 6.5 is not currently supported on the UnityVSA.	4.1.0.8940590	4.2.0.9392909
When setting I/O limit policies, observe the following restrictions: • For a shared KBPS I/O limit policy, set the limit to be at least 2048 KBPS. • For a non-shared KBPS I/O limit policy, set the limit to be at least 1024 KBPS. • The IOPS I/O limit policy's minimum is 100 IOPS.	4.0.0.7329527	Still in effect.
The current Unity VVol implementation has not yet been fully certified for use with VMware Horizon View. Although it may work, it is recommended that you do not deploy VDI desktops using Unity VVol datastores. Support and issue resolution will not be available for this integration.	4.0.0.7329527	Still in effect.

Environment and system requirements

In order for your Unity Family system to function properly, ensure that your environment meets these minimal requirements.

Support matrix

Refer to the Unity Support Matrix on the support website for compatibility and interoperability information.

Screen size

The minimum resolution for using the Unisphere GUI is 1024 x 768 pixels. Smaller screens may be able to display the GUI in full screen mode.

ESRS VE and DHCP

Dynamic IP addresses (DHCP) cannot be used for any EMC Secure Remote Services Virtual Edition (ESRS VE) component (ESRS VE servers, Policy Manager, or managed devices). You must assign static IP addresses to those devices that you plan to have managed by ESRS VE.

Unity Hybrid and All Flash support both the Centralized and Integrated versions of ESRS VE. UnityVSA supports the Centralized version of ESRS VE only. More information about the ESRS VE is available in the *EMC Unity Secure Remote Services Requirements and Configuration* document.

Note:	If the system automatically assigns a dynamic IP address to any ESRS VE component, you must change it to a static IP address. Also, leases for the IP addresses that Dell EMC devices use cannot be set to expire.

Software media, organization, and files

Learn about software media, organization, and files required for the Unity Family.

Required update

It is recommended that you keep your Unity Family system up to date by upgrading to the latest software version at your earliest opportunity.

Problems downloading this release

If you have difficulty downloading this release using Microsoft Internet Explorer version 7, try using a newer version of Microsoft Internet Explorer, Google Chrome, or Mozilla Firefox version 4 or greater.

Obtain and install product licenses

> **Note:** This process is different for UnityVSA Community Edition systems. For instructions on how to obtain and activate a license for your UnityVSA Community Edition system, see the *Obtaining a License for UnityVSA Community Edition* post on the EMC Community Network at: https://community.emc.com/community/products/unity.

Before you begin:

- Register your product. This provides you instant access to easy-to-use tools to plan, install, maintain, and service your product. It also entitles you to software updates, installation tools, and more.

- Ensure that you have the following:

    3. License authorization code (LAC)—The LAC is sent by email from EMC.

    4. The system serial number (physical systems) or the system UUID (virtual systems).

Before you can create storage, you must install product and feature licenses on your system.

Initial configuration

1. On the **Unisphere Licenses** page of the Initial Configuration wizard, select **Get License Online**.

2. Follow the instructions on the licensing website and download the license file locally.

   > **Note:** Do not change the name of the license file.

3. Select **Install License** and use **Chose File** to browse to the license file you downloaded locally.

4. Select **Open**.

   The **Results** page will confirm the license was successfully installed.

Obtaining and installing additional licenses after initial configuration

1. In Unisphere, select the **Settings** icon, and then select **Software and Licenses** > **License Information**.

2. Select a product license from the list to display a description of that license.

3. To obtain a product license, select **Get License Online**.

        a. Use the link provided in the LAC email or access the product page on the support website, and download the license file locally.

> **Note:** Do not change the name of the license file.

        b. Transfer the license file to a computer that has access to the storage system, or connect the computer you used to obtain the license file to the same subnet of the storage system.

   4. To upload a product license, select **Install License**.

        a. Review the Software License and Maintenance Agreement and select **Accept license agreement**.

        b. Locate the license file, select it, and select **Open** to install the license file on the storage system.

The license file is installed on the storage system.

For sites with restricted internet access, or for more information on obtaining your license, go to the Unity Info Hub at http://bit.ly/unityinfohub.

Firmware

The following firmware variants are included with this release:

- If a lower revision is installed, the firmware is automatically upgraded to the revision contained in this version.

- If a higher revision is running, the firmware is not downgraded to the revision contained in this version.

Enclosure type	Firmware
3U, 15-drive DAE	2.26.1
2U, 25-drive DAE	2.26.1
3U, 80-drive DAE	2.26.1

Platform type	BIOS	BMC Firmware	POST
2U, 25-drive DPE	55.10	24.00	33.50
2U, 12-drive DPE	55.10	24.00	33.50
2U, 25-drive DPE Unity XT 480/F, 680/F, and 880/F	51.11	12.67	49.04

Unique identifier for UnityVSA

For UnityVSA, use the License Activation Key instead of the serial number or UUID as the unique identifier for setting up EMC Secure Remote Services (ESRS) and for obtaining customer support (professional editions).

Installing and enabling language packs

To install a language pack:

   1. Review the considerations included in the Software Media, Organization, and Files section.

2. In Unisphere, select the **Settings** icon, and then select **Software and Licenses** > **Language Packs**.

3. Select **Obtain Language Pack Online** and enter your EMC Support credentials when prompted.

4. Download the appropriate language pack file to your local system.

5. Return to Unisphere and select **Install Language Pack** to launch the Install Language Pack wizard.

6. Select the language pack file you want to upload.

7. Select **Upload**. The language pack is uploaded and installed on the system.

8. View the results and close.

To enable a language pack on your system:

1. In Unisphere, select the **My Account** icon and select **Preferences**.

2. Select the preferred language from the **Language** list.

3. Select **OK**.

Documentation

Unisphere Command Line Interface User Guide

The Unity Family Unisphere Command Line Interface User Guide has an incorrect example for the /stor/prov/fs/cifs create command. The -path switch input should not contain a full path, as seen in the incorrect example below.

Incorrect example:

```
uemcli -d 10.0.0.1 -u Local/joe -p MyPassword456! /stor/prov/fs/cifs
create -name CIFSshare -descr "My share" -fs fs1 -path "/cifsshare" -
enableContinuousAvailability yes -enableCIFSEncryption yes

Storage system address: 10.0.0.1
Storage system port: 443
HTTPS connection
ID = CIFS_1

Operation completed successfully.
```

Corrected example:

```
uemcli -d 10.0.0.1 -u Local/joe -p MyPassword456! /stor/prov/fs/cifs
create -name CIFsShare -descr "CIFs Share" -fs res_35 -path "/" -
enableContinuousAvailability yes -enableCIFSEncryption yes

Storage system address: 10.0.0.1
Storage system port: 443
HTTPS connection
ID = CIFS_1

Operation completed successfully.
```

Unisphere Management REST API documentation

There are two documents that describe how to use the Unisphere Management REST API:

- *Unisphere Management REST API Programmer's Guide* introduces the API and describes the headers, parameters, and URI patterns used to make requests. This guide is available on the Info Hub at http://bit.ly/unityinfohub and on the storage system at https://<mgmtIP>/apidocs/index.html.

- *Unisphere Management REST API Reference Guide* describes all of the resource types, attributes, and arguments in the API. This guide is available on the storage system at https://<mgmtIP>/apidocs/index.html.

The *Unisphere Management REST API Programmer's Guide* lists es-MX as a supported language code for Spanish. However, this code is not supported in Unity. Instead, you can use es-AR for Spanish, but this code is only partially supported in the REST API.

Unity Family Info Hubs

Additional relevant documentation can be obtained from the Unity Family Info Hubs. Visit the Info Hub for your Unity Family product to access helpful utilities, videos, and other guides.

- Unity All-Flash and Hybrid Info Hub

  http://bit.ly/unityinfohub

- UnityVSA Info Hub

  http://bit.ly/unityvsainfohub

Additional resources

As part of an effort to improve its product lines, EMC periodically releases revisions of its software and hardware. Therefore, some functions described in this document might not be supported by all versions of the software or hardware currently in use. The product release notes provide the most up-to-date information on product features. Contact your EMC technical support professional if a product does not function properly or does not function as described in this document.

Where to find product documentation

For the most up-to-date documentation and help go to EMC Online Support at https://Support.EMC.com.

Where to get help

Support, product, and licensing information can be obtained as follows:

Product information

For product and feature documentation or release notes, go to Unity Technical Documentation at: www.emc.com/en-us/documentation/unity-family/index.htm. You can also access this page from the Unity product family page at: www.emc.com/en-us/storage/unity.htm.

Advisories

For information on an individual technical or security advisory, go to the EMC Online Support website and search using the ESA number or "EMC Security Advisories" as the keyword. For a list of EMC security advisories in the current year, refer to EMC Security Advisories – All EMC Products – Current Year. For a list of older ESAs, refer to EMC Security Advisories All EMC Products – Archive.

1. Set up the "My Advisory Alerts" option to receive alerts for Dell EMC Technical Advisories (DTAs) and Dell EMC Security Advisories (DSAs) to stay informed of critical issues and prevent potential impact to your environment. Go to **Account Settings and Preferences > Subscriptions and Alerts > Product Advisories**.

2. Type the name of an individual product, click to select it from the list, and then click **Add Alert**.

3. For the individual product or **All EMC Products**, select the checkboxes for **ETA's** and/or **ESA's**.

Troubleshooting

For information about Dell EMC products, software updates, licensing, and service, go to EMC Online Support (registration required) at: https://Support.EMC.com. After logging in, locate the appropriate **Support by Product** page.

Technical support

For technical support and service requests, go to EMC Online Support at: https://Support.EMC.com. After logging in, locate **Create a service request**. To open a service request, you must have a valid support agreement. Contact your EMC Sales Representative for details about obtaining a valid support agreement or to answer any questions about your account.

UnityVSA community support

Users of the UnityVSA Community Edition can find community-provided support resources at the Unity product community on the EMC Community Network at: https://community.emc.com/community/products/unity.