

Archive Management Software

Product Release Notes

Release Details	
Release Name	Archive Management Software (AMS)
Release Note Number	28
Release Version	6.02.11 MD5 File 1f2a10a187437fa4a2a9cb7301cba5aa SNAZ-OS-6.02.11-15745 7d6a691cd79829ccf8293e9a30aba434 flash.img.6.02.11-15745.AA-h16-c400-s32-eS12-400 0130c4e87eba1d073c8daa0646b2d2be flash.img.6.02.11-15745.AA-h16-c400-s32-eS12-500 29084559adfe1324759d0cf61c314a33 flash.img.6.02.11-15745.AA-h16-c400-s32-eS12-600 89170cd44c0dc3d9137f48d45282ab97 flash.img.6.02.11-15745.AA-h16-c400-s32-eS12-600-NAE
Software Release Date	April 4, 2019
License Release Date	January 29, 2019, 12:00:00 UTC
Release Type	Full release
NETArchive S-Series Firmware	v0104 NA-S10 Library v0210 NA-S30 Library v0201 NA-D77U / NA-D77F Drives v0210 NA-D280U / NA-D280F Drives
Documentation Version	AMS Administration Guide - 810-104334-02 NETArchive Service Manual - 800-104335-01
Supported Platforms	NA-R100, A12 (PDSM4, PDSM4+), A12RP, E12

AMS 6.02.11 - Product Enhancements	
New Feature/Enhancement	Description/Benefit
Support for the UDO Archive Appliance platform	AMS now adds support for the Plasmon Archive Appliance hardware platform. Support is included for AA systems running the PDSM4, PDSM4+, E12 and A12RP servers.
Support for all NETArchive products including NA-S10U, NA-S10 thru NA-S535, and NAE (NETArchive Express)	AMS version 6.2 now supports all products in the NETArchive product line.
Support for NETArchive S-Series Generation 2 ODA Libraries and Drives	AMS now supports NETArchive system components, including tightly integrated Sony ODA2 components. These include the ODS-L30M library, and the ODS-D280U and ODS-D280F drives.
Hybrid Cloud Storage support for the Microsoft Azure Cloud (Azure Blob Storage)	AMS now fully supports the Microsoft Azure Cloud as well as Amazon S3 Storage for archiving of data. The user interface has been enhanced to manage Cloud provider accounts, show the cloud status and link a cloud provider to an archive. Each archive can only be linked to one cloud provider. In the case of a recovery, AMS will automatically synchronize with the cloud account.
Support for 6TB SAS RAID drives	AMS now adds support for 6TB SAS RAID drives in 2, 8 and 12 drive RAID configurations, providing up to 72TB RAW RAID Cache.
Support for 10 slot licensing of the ODS-L30M platform	AMS licensing features have been added to limit available nearline cartridge slots to 10, providing an entry level option for the scalable Petasite library configurations.

Upgraded Kernel resolving issues with NFS share hang conditions	The AMS Linux Kernel has been upgraded, resolving issues where a NFS share hang conditions could occur.
SSD utilization improvements for data buffering and backup	The AMS has been updated to recognize SSD failures and subsequent recovery of the SSD(s) where after recovery the SSD(s) will be recognized and reinstated for usage.
MIGCOPY and Replicate Media performance improvements	The AMS will now read multiple migration packages before swapping media to write to the new target media, greatly reducing the number of media swap and drive load and unload operations required.
Replication performance improvements	The AMS will now replicate archives in an ordered process, first migrating all data on the archives RAID cache, then data on nearline media, and finally offline media to minimize media swapping. Additionally, data will be read from media in order to minimize seeking operations.
NETArchive SSD failure and replacement enhancements	The AMS will now detect when SSD's have been replaced and reintroduce these for usage to the system.

AMS 6.02.11 – Changes & Fixes			
	Change ID	Category	Descriptive Notes
1	N/A		Base release

Known issues

1. When installing the 6.02.11 ISO, an issue can be encountered where the size of the ISO image exceeds the maximum allowable size of 500MB.
 - a. If uploading and installing from the maintenance UI in maintenance mode, the size is not validated and therefore no issue should be encountered.
 - b. If uploading and installing from the AMS Web UI in normal mode, the size check will fail the ISO package validation. To circumvent this, either:
 - i. Reboot the system into maintenance mode and update the system from there.
 - ii. Change this max limit by modifying the file `"/opt/jakarta-tomcat/webapps/ROOT/WEB-INF/struts-config.xml"`. Change the below line to set the limit from "500M" to "600M".

```
<controller maxFileSize="500M" inputForward="true" />
```
2. For Archive Appliance systems with 250GB or 500GB drives, after installing the 6.02.11 ISO, in the future point a total rebuild of the system (system volumes) is required and a clean_slate is performed (reformatting drives to build the system volumes), you must edit the following file on the boot image to facilitate a successful rebuild of the system drives.
 - a. Perform the clean_slate
 - b. Once the system re-boots it will come back in MAINTENANCE mode. Using an editor such as "vi" open the file `"/usr/lib/perl5/maintenance_sys.pm"`
 - c. Search for string `"VAR_SIZE] = 200"` and change the value from 200 to 20. Save the file.
 - d. Continue with the ISO installation via System – Software Update

3. For Archive Appliance systems with the A12RP Storage Management Server, after performing a `clean_slate` and having rebooted in maintenance mode, to successfully rebuild the system volume you **MUST** perform the following procedure:
 - a. Select Diagnose – System Volume and select yes to rebuild the system volume. If you skip this step, building of the system volume partitions will fail.
 - b. Now select System Update Software to install the ISO image. To note, you cannot rebuild the system volumes at this time and must first perform the above step to rebuild the system volumes

4. If replicating between an Archive Appliance running the 4.20.31 version of the AMS system to a NETArchive running 6.0.xx or higher, due to SSH (Secure Shell) authentication connection handshake issues, the following commands must be run on the 4.20.31 AMS system. Alternatively, you can upgrade the 4.20.31 system to 5.0.17 or higher where this issue does not exist.
 - Log in on the CLI. You must be in super user mode, such as root.
 - `$ ssh-keygen -t rsa`
=> Here do not set the passphrase, just press enter
 - `$ cat ~/.ssh/id_rsa.pub | ssh admin@PASSIVE_SYSTEM_IP "mkdir -p ~/.ssh && cat >> ~/.ssh/authorized_keys"`

Installation Note

1. For NETArchive users running releases prior to 6.02.11 (6.00.23 or 6.01.07), the technique utilized for determining a files offset within a migration package has been upgraded, allowing for migration packages greater than 4GB in size. For this reason, once an upgrade has been performed, special processing is required. Before proceeding, you must first contact Alliance's Technical Services team for assistance.

Supported Upgrade Paths

Users can upgrade to AMS 6.02.11 from these earlier releases:

- 4.20.31 (All Patches) – will automatically reboot after initial install for second phase
- 5.00.17 (All Patches) – will automatically reboot after initial install for second phase
- 6.00.23 (All Patches)
- 6.01.07 (All Patches)