

∞drive Active Circle

Release Notes

January 2025

Active Circle V6.8.0.1



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Update Process

From version 4.0.2pX



A specific procedure is implemented to update 4.0.2 versions to version 4.6. This is available on the Active Circle help site: <https://activecircle-help.com>.

Since the VFS catalog format has changed, **all** VFS catalog objects must be upgraded before proceeding to upgrade the next node.

From version 4.5 up to 4.6

The procedure for updating Active Circle to version 6.8 from versions 4.5 up to 4.6, is first to upgrade to version 5.5 using the procedure for a major update and then to upgrade to Active Circle 6.8 using the below procedure.

From version 5.x up to 6.7

The procedure for updating Active Circle to version 6.8 from versions 5.x up to 6.7 is straightforward and requires no special preparation, but it requires to stop the service on every node in the circle. It involves updating the binary files on all the nodes in your Circle and restarting the updated nodes.

The procedure is as follows:

1. Copy the **ac-6.8.X.bin** binary file for the new version to all the nodes in the Circle (X is the patch number).
2. Stop the activecircle service on all the nodes in the Circle.
3. On a first node, ideally a consolidation node, run the setup program with the command: `./ac-6.8.X.bin -r`
4. Start the activecircle service on the first node (the necessary updates are applied during the start-up).
5. Verify that the first node has started correctly.
6. On each remaining node, run the setup program with the command: `./ac-6.8.X.bin -r` and start the activecircle service, one at a time. Verify that the node has started correctly before proceeding to the next one. Synchronization will update the metadata for all the nodes.

From version 6.8.x

This version is compatible with every 6.8.x, a single node in a 6.8.x circle can be upgraded without stopping all the nodes of the circle.

On the node to upgrade the procedure is the following:

1. Copy the **ac-6.8.X.bin** binary file for the new version to the node to upgrade (X is the patch number).
2. Stop the activecircle service on the node.
3. Run the setup program with the command: `./ac-6.8.X.bin -r`
4. Start the activecircle service on the node.
5. Verify that the node has started correctly.

Active Circle V6.8.0.1 HOTFIX – January 2025

SHA256 footprint

d82efea0fb8c446e888ae2befb2cc9d82835b00c44306fe238340e06587bfecce

Fixes

AC-4825

Clear condition instead of waiting the device to get ready when unloading a drive, as under certain circumstances the drive never gets ready (cleaning drive for instance).

See [Fix AC-4780](#)

Active Circle V6.8.0.0 – September 2024

This major version of Active Circle provides, amongst others, the support of the HPE StoreEver MSL 3040 tape library, enhancements of the `accksum` command to reach the behavior of the “compute checksum after deposit” feature, new performance enhancement of the copy to the cache and many other fixes.

This version is available for RHEL 8/ AlmaLinux 8 and is still available for Centos 7/RHEL 7.

SHA256 footprint

9407d73e779511aefc9260e25ce2f70e45da3d672fb8a87ff285cf07ac4b0e5f

Compatibility matrix

This new version of Active Circle 6.8.0.0 is compatible with the following version of the options:

- AMC 6.2
- ADM 1.4.0 in HTTP
- AME 2.3

New features and enhancements

`accksum` command enhancements

The following new features of the checksum computing have been integrated in the `accksum` command. On top of this, “the command considers the constraints of the “Compute the checksum after deposit” if it has been enabled on the share.

- The `*` wildcard is allowed to define the signature reference file name.
`accksum --sumFile *.md5` uses every file with md5 extension as a signature reference file.
- The signature reference file is now recursively upward looked for according to the value of the `--sumFile` option value.
- When a share has the option “Compute the checksum after deposit” enabled, then `accksum` behaves like the signature calculation after deposit. i.e. only the chosen algorithm is available for signature calculation. The `--sumFile` and `--noSum` if set overwrite the value of the value of the circle parameter **`vfs.depositChecksumReferenceFile`** and **`vfs.depositChecksumNoReferenceMode`**.
- The `--check` option is no more required to check the checksum toward a value as one of the option `--sum` or `--sumFile` is required.

- The following table sums up the behavior of `accksum` in several cases:

	Checksum on deposit enabled			Checksum on deposit disabled		
	No option	--sum	--sumFile	No option	--sum	--sumFile
No hash recorded ⁽¹⁾ No reference file	Circle reference file pattern ⁽²⁾ Apply the no reference action ⁽³⁾ or the noSum action ⁽⁴⁾	Record the sum Compute Validate	SumFile reference file pattern ⁽⁵⁾ "provide a sum" error or apply the noSum action	Compute Record the result Validate	Record the sum Compute Validate	SumFile reference file pattern "provide a sum" error or apply the noSum action
No hash recorded Reference file No reference hash	Circle reference file pattern Apply the no reference action or the noSum action	Record the sum Compute Validate	SumFile reference file pattern "provide a sum" error or apply the the noSum action	Compute Record the result Validate	Record the sum Compute Validate	SumFile reference file pattern "provide a sum" error or apply the noSum action
No hash recorded Reference file Wrong reference hash	Circle reference file pattern Record the reference hash Compute Invalidate	Record the sum Compute Invalidate	SumFile reference file pattern Record the reference hash Compute Invalidate	Compute Record the result Validate	Record the sum Compute Invalidate Invalid error	SumFile reference file pattern Record the reference hash Compute Invalidate
No hash recorded Reference file Right reference hash	Circle reference file pattern Record the reference hash Compute Validate	Record the sum Compute Validate	SumFile reference file pattern Record the reference hash Compute Validate	Compute Record the result Validate	Record the sum Compute Validate	SumFile reference file pattern Record the reference hash Compute validate
Hash recorded	Compute Validate	Compute Validate Compare bad checksum error if they differ	SumFile reference file pattern Get the sum : "provide a sum" error if not found Compute Validate Compare bad checksum error if they differ	Compute Validate	Compute Validate Compare bad checksum error if they differ	SumFile reference file pattern Get the sum : "provide a sum" error if not found Compute Validate Compare bad checksum error if they differ
Wrong Hash recorded	Compute Invalidate	Compute Invalidate Compare Invalid error bad checksum error if they differ	SumFile reference file pattern Get the sum : "provide a sum" error if not found Compute Invalidate Compare Invalid error bad checksum error if they differ	Compute Invalidate	Compute Invalidate Compare Invalid error bad checksum error if they differ	SumFile reference file pattern Get the sum : "provide a sum" error if not found Compute Invalidate Compare Invalid error bad checksum error if they differ

(1) **No hash recorded** : The hash is not set in the meta data of the file.

(2) **Circle reference file pattern**: The file pattern defined by the circle parameter `vfs.depositChecksumReferenceFile`

(3) **no reference Action** : The action defined in the "Deposited file without reference checksum" field in view of the share in the admin GUI.

Compute the checksum after file deposit

MD5

Deposited file without reference checksum

Compute the reference checksum and validate the file

(4) **noSum Action** : The action defined by the `--noSum` option if set

(5) **sumFile reference file pattern**: The file pattern defined by the `--sumFile` option if set

HPE StoreEver MSL3040 support

Active Circle now supports the HPE StoreEver MSL3040 tape library.

Management of the append only mode on tape

The new circle parameter **media.useAppendOnlyMode** (default value **true**), if set to **false**, prevents from setting the “Append only mode” when loading a tar tape. In any case the “write-anywhere” mode is reset when unloading the tape.

The parameter can be used to reuse tapes closed due to override attempt if they have junk data after the last recorded position.

the former system property

activecircle.system.device.sub.scsi.types.drive.sub.tape.manageWriteMode is still used to avoid managing the writing modes for the drives that do not support the Device Configuration Extension mode page (10h[01h]).

Fixes

AC-4780

Fix the failure of the LOAD/UNLOAD SCSI command due to a UNIT ATTENTION received when unmounting an unused tape by waiting for the device to get ready before issuing the LOAD/UNLOAD SCSI command.

AC-4765

Allow more than 25 concurrent NETLOGON authentication requests.

AC-4758

To avoid erroneous invalidation of deposit job when trying to read the newly created disk copy while the storage policy is being processed for the very same disk copy, postpone the storage policy processing of the newly created disk copies after they have been checked (read).

AC-4755

Prevent from launching several duplications on the same tape from the same node.

AC-4754

Fix performance issue when copying files to the cache (destaging) or recreating the disk copies of files in case of concurrent processes retrieving files from the same tape in any case, local and remote resource manager.

AC-4709

Reset the “Aborted” state of a share integrity check before launching a new check.

Version history

AC 6.8.0.0	27/09/2024	Major version : Support of HPE StoreEver MSL 3040 tape library
AC 6.7.2.2	29/08/2024	Hot fix
AC 6.7.2.1	15/07/2024	Hot fix
AC 6.7.2.0	01/07/2024	Patch
AC 6.7.1.0	17/05/2024	Patch
AC 6.6.0.10	15/03/2024	Hot fix
AC 6.7.0.3	28/02/2024	Hot fix
AC 6.7.0.2	22/02/2024	Hot fix
AC 6.7.0.1	15/02/2024	Hot fix : LTO9 calibration enhancement
AC 6.7.0.0	26/12/2023	Major version : Checksum enhancement
AC 6.6.0.9	28/12/2023	Hot fix : fix NPE in acarhive
AC 6.6.0.8	10/10/2023	Hot fix : Fix renaming file with SMB2.
AC 6.6.0.7	07/09/2023	Hot fix : Add destaging timeout
AC 6.6.0.6	31/07/2023	Hot fix : fix pending cloud archive file list
AC 6.6.0.5	04/07/2023	Hot fix : fix file closing with NFS
AC 6.6.0.4	16/06/2023	Hot fix : memory leaks with NFS
AC 6.6.0.3	10/05/2023	Hot fix : NTLM authentication
AC 6.6.0.2	04/04/2023	Hot fix : NTLM authentication
AC 6.6.0.1	03/03/2023	Hot fix : NTLM authentication
AC 6.6.0.0	16/01/2023	Major version : LTO9 support
AC 6.5.0.6	14/10/2022	Hot fix : SMB authentication
AC 6.5.0.5	23/09/2022	Hot fix : Tape drive cleaning
AC 6.5.0.4	11/08/2022	Hot fix : polluting log with HP LTO7 drive
AC 6.5.0.3	27/07/2022	Hot fix : HTP LTO8 drive detection
AC 6.5.0.2	30/05/2022	Hot fix : Fix catalog corruption
AC 6.5.0.1	05/05/2022	Hot fix : Fix file data size
AC 6.5.0.0	29/04/2022	Major version : SMB2, RHEL 8
AC 6.4.0.3	22/02/2022	Hot fix : compatibility with acapi
AC 6.4.0.2	27/01/2022	Hot fix : deadlock
AC 6.4.0.1	06/12/2021	Hot Fix : cloud license checker
AC 6.4.0.0	10/11/2021	Major version : Cloud Filesystem
AC 6.2.0.7	22/02/2022	Hot fix : compatibility with acapi
AC 6.2.0.6	26/10/2021	Hot fix : NPE
AC 6.2.0.5	15/10/2021	Hot fix : deadlocks and others
AC 6.2.0.4	17/06/2021	Hot fix : fix missing pack management for shared disk pool
AC 6.2.0.3	25/05/2021	Major version : miscellaneous enhancements
AC 6.1.0.1	09/06/2021	Hot fix : FTP fix "Too many open files"
AC 6.1.0.0	22/12/2020	Major version : s3 support for cloud provider

AC 6.0.0.1	26/11/2020	Hot fix : temporary fix for AD authentication with SMB2
AC 6.0.0.0	16/11/2020	Major version : Variable pack size

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