



Active Circle V6.5.0.6

October 2022



∞drive



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1. Update Process

1.1. 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.

1.2. Version 4.5 up to 4.6

The procedure for updating Active Circle to version 6.5 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 6.5 using the below procedure.

1.3. Version 5.x up to 6.4

The procedure for updating Active Circle to version 6.5 from versions 5.x up to 6.4 is straightforward and requires no special preparation. 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-6.5.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 each node, run the setup program with the command: `./ac-6.5.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. Start the activecircle service on the remaining nodes in the Circle, 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.

1.4. Version 6.5.x

This version is compatible with every 6.5.x, a single node in a 6.5.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-6.5.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-6.5.X.bin -r`
4. Start the activecircle service on the node.
5. Verify that the node has started correctly.

2. Active Circle V6.5.0.6 HOTFIX – October 2022

SHA256 FOOTPRINT

3a2f4b3830ea1a09da5db949d7bb5fecc9fe0415a1798130a0247cad0415beff

AC-4601

Fix hash retrieving with the DCERPC protocol for SMB2 user authentication.

AC-3501

Fix user SPNEGO authentication : Lookup NTLMSSP authentication method in the list offered by the client instead of using the first one of the list.

3. Active Circle V6.5.0.5 HOTFIX – September 2022

SHA256 FOOTPRINT

6dfe5f00d1d7d7463194d5c2ae178a5ecb636678af6d9177b44f6202bedd7c85

AC-4602

Deals with [SK=0x02 , ASC=0x04 , ASCQ=0x02] (INITIALIZING COMMAND REQUIRED) SCSI error during HP LTO8 drive cleaning.

4. Active Circle V6.5.0.4 HOTFIX – August 2022

SHA256 FOOTPRINT

ceb39b3e6dc56ef81a2f6080d9a9cba9ec84efa796472643e073fba57da91e67

AC-4585

Fix power on time retrieval for HP LTO7 and LTO8 drives.

5. Active Circle V6.5.0.3 HOTFIX – July 2022

SHA256 FOOTPRINT

970482b6ea6e62659538d796207140f0a756d54c0fd078c7edcd822b4b7bc23f

AC-4596

Fix HP LTO8 drive detection by setting the vendor ID to HPE

AC-4588

Upgrade OpenJDK 11 license file

6. Active Circle V6.5.0.2 HOTFIX – May 2022

SHA256 FOOTPRINT

20b1f790f7998cb058dc2214fcea427ffe6ce3eb97264768426d64d8320391ff

AC-4576

Fix corruption on node entries indexed by modulo by reintroducing deprecated class with class code 14379

7. Active Circle V6.5.0.1 HOTFIX – May 2022

SHA256 FOOTPRINT

570e4e4624338376e4351edd1dd5429dbfe54b198b401f35fc53bab6bb07375e

AC-4573

Fix forbidden character list for a file or directory name with SMB : /*?<>|. The list can be superset with the system property: **ac.nas.smb2.filename.forbiddenCharacters**

AC-4489

Fix undefined the meta data filesize (<0) of a sealed file after a successful destaging if the system property **activecircle.appli.vfs.data.destaging.fixUndefinedFileSize** has been set to **true** in the **.localvars** file of the node where the destaging occurs.

8. Active Circle V6.5.0.0 – April 2022

This major version of Active Circle provides the final version of our SMB2 server.
This version is now available for RHEL 8 and is still available for Centos 7/RHEL 7.

SHA256 FOOTPRINT

98f22a565df5b94410283d8aed10d86e7fa76e1b505ec330a0ecdda65956d8f2

8.1. Compatibility matrix

This new version of Active Circle 6.5.0.0 is compatible with the following version of the options:

- AMC 6.1
- ADM 1.4.0 in HTTP
- AME 2.3

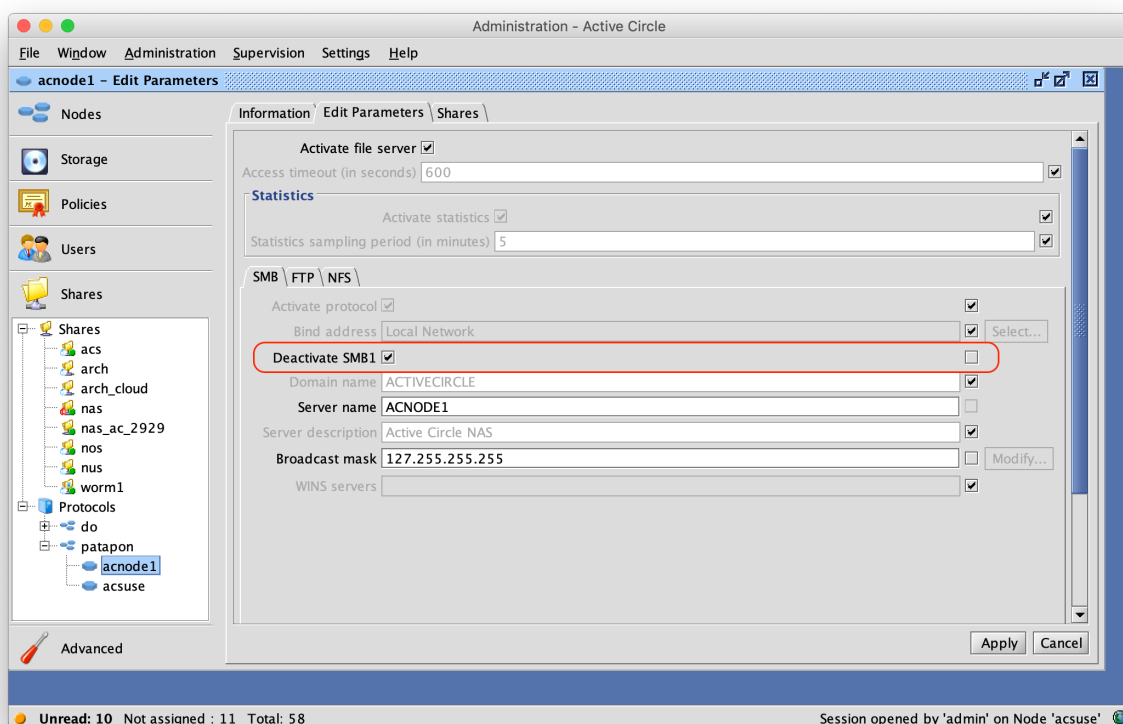
8.2. New features and enhancements

8.2.1. SMB2 Server

This version provides the final version of our SMB2 server. By default, both SMB1 and SMB2 servers are activated. It is possible to deactivate the SMB2 server on a node by setting the system property: **ac.nas.smb2.enable** to false on the node (.localvars)

Only the dialect 2.0.2 is supported.

This new SMB2 server can be run concurrently with the legacy SMB1 server, using the same port TCP/445. But it is possible to deactivate the SMB1 protocol with the administration interface:

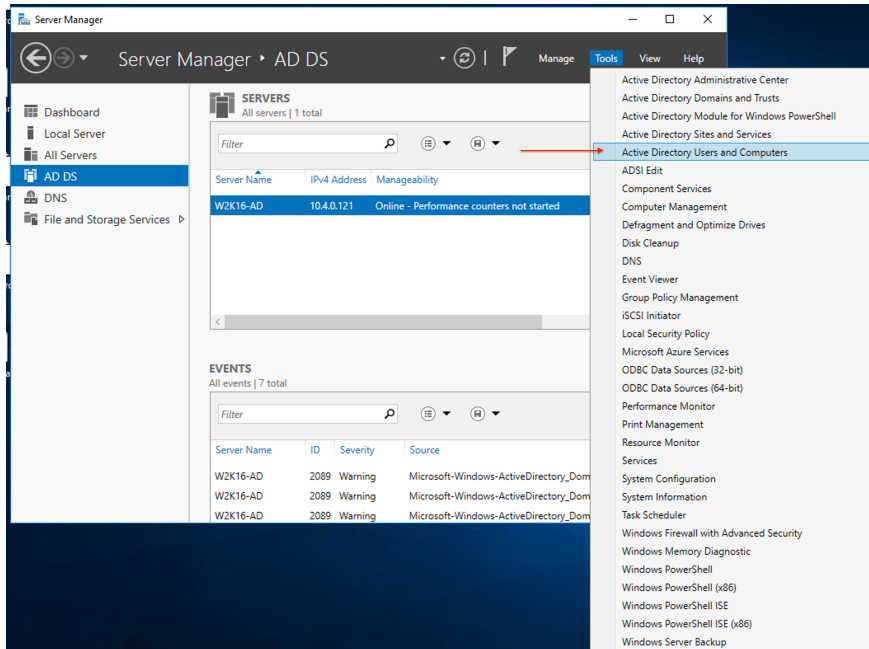


During connection hand check, the lowest version of the server is preferred, i.e. if both SMB1 and SMB2 are activated on the node, and a client supports SMB1 and SMB2, SMB1 will be chosen.

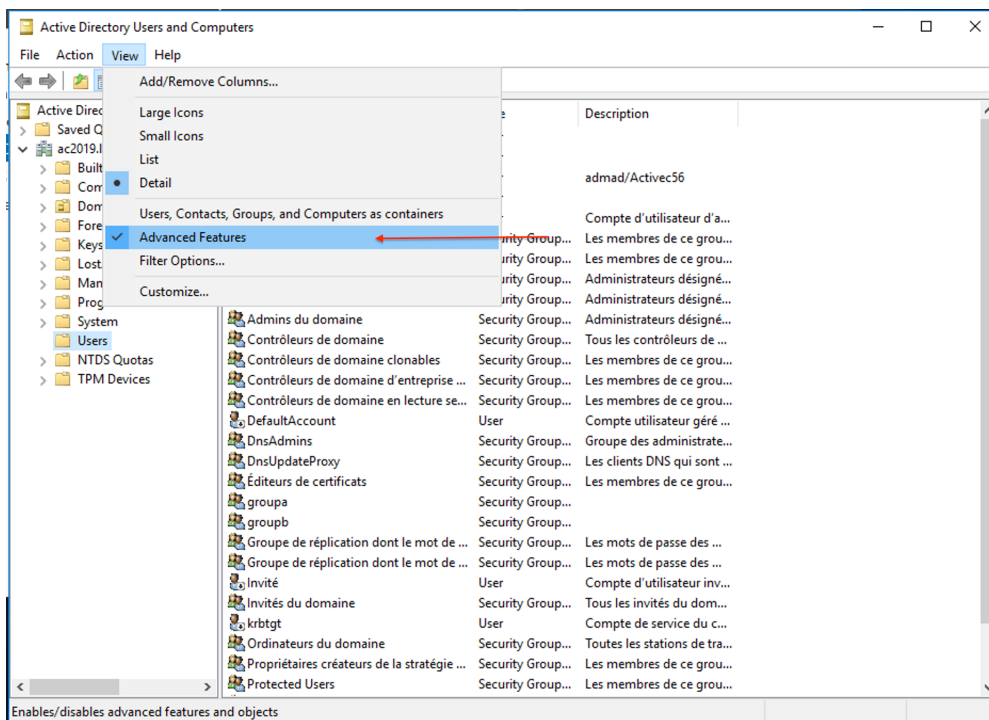
By setting the system property **ac.nas.smb2.signPackets** to **true** (default is **false**), it is possible to force SMB packets signature to enforce security. If it is the case the clients that do not support SMB packet signature will no longer be able to connect to the server. If the property is set to false, but a client enforces the packet signature, the Active Circle SMB2 server will be able to handle packet signatures anyway.

To use this SMB2 server with an AD and Windows 10 or Windows Server 2016 client, or when the SMB packets signature is required, the AD user declared in Active Circle for automatic synchronization must be configured in the AD with specific replication access rights as follow:

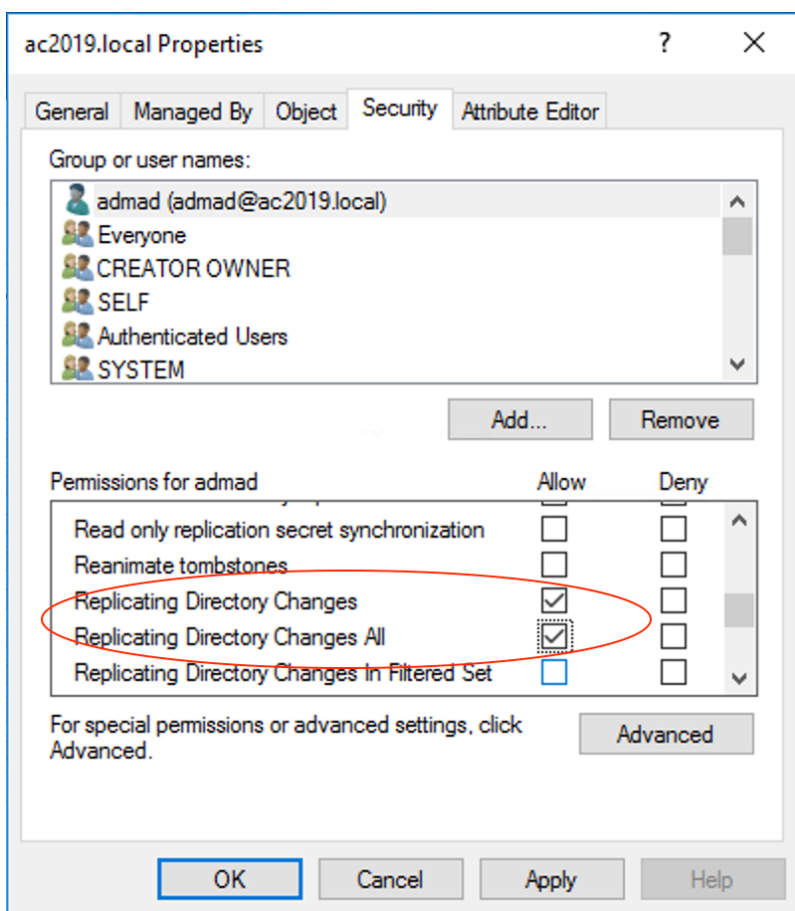
1. On the AD server, launch "Server Manager" tool.
2. Check the "Active Directory Users and Computers" in the "tools".



3. Check that the "Advanced Features" item is checked in the "View" menu of "Active Directory Users and Computers" panel.



4. Select the domain in the left tree of the view" (e.g. ac2019.local), right click then "Properties" and choose the "Security" tab.
5. In the "Security" tab, add the AD user declared in Active Circle (e.g adadm) if it does not already exist.
6. Check the "Allow" column for the following 2 permissions: "Replicating Directory Changes" and "Replicating Directory Changes All".



8.2.2. Keeping a tape closed after duplication/defragmentation

The new circle parameter **media.keepDeframentedTapeClosed** set to true (default value is false) keeps tapes closed at the end of a successful duplication/defragmentation.

The closing cause is **defragmented** and the tape can be “unclosed”

This parameter can be overridden at the node level.

This feature can be used to prevent reusing a just defragmented/duplicated tape.

8.2.3. Increase the maximum file size under NFS

The maximum size allowed for a file under NFS can be now configured in TB with the new system property: **com.starla.oncrpc.maxFileSize**

The property has to be defined in the **.localvars** file of the NFS server, its default value is 2 and should not be greater than 16.

8.2.4. Unreachable Endpoint monitoring

Add the script **/activecircle/.tools/bin/check-ep-unreachable.sh**

It gives the number of time an endpoint has been unreachable per minute from a list of node for a given period (year month).

check-ep-unreachable.sh : Usage

check-ep-unreachable.sh [-n node1,node2,...] [-i ip_regex] [-y YYYY] [-m MM] [-u username]

with :

- node1,node2,... the list of node checked
- ip_regex is a regexp pattern matching the IP addresses to check
- YYYY the year of the period to check. If not set, the current year is checked
- MM the month of the period to check. If not set, the current month is checked
- username the user used to connect to the node, should be root

8.2.5. Unreachable endpoint management enhancements

When an endpoint becomes unreachable, its reachability is tested after 100 ms, then the delay is increased by 10 seconds up to 1 minutes (10 s, 20 s, 30 s ...). After 120 tries, the endpoint is definitely set unreachable.

8.2.6. Support of the ltfsde-2.4.4 IBM LTFS driver

The IBM LTFS driver ltfsde-2.4.4 can be used with Active Circle to perform LTFS archive on both Centos 7 and RHEL 8.

8.2.7. Scheduled archive interruption

It is now possible to interrupt scheduled archives.

8.2.8. Deprecation of the menu Settings->Export

The menu item Setting->Export doesn't exist anymore in the admin GUI.

8.2.9. LTFS tape duplication enhancement

The new system property

activecircle.archive.mediumloadable.duplicateUnknownArchiveSegment set to true allows to duplication of an LTFS archive segment even if the corresponding archive has not been found in the catalog. Meta-data are not updated because they have not been found and duplicate files are no longer reachable from Active Circle on these tapes.

The property must be positioned in the **.localvars** file of the node.s where the pool is enabled.

8.3. Fixes

AC-4533

Prevent from using a closed cleaning tape.

AC-4522

Stops streams browsing task when interrupting a share integrity check.

AC-4508

Shared disk pool relevance management: only the node that actually mounts the shared partitions can set the pool full.

AC-4504

The deletion of a duplicated tapes in forced mode was only possible if the admin GUI was connected to an activation node of the pool. It is now possible in any case.

AC-4502

Some Admin GUI performances enhancement during node restart.

AC-4478

The command `acadmin --tape --delete --force ...` is now able to delete a tape without partition.

AC-4476

Fix computation of on-demand archive names of a share. Prevent from name conflict in case of concurrent archives.

AC-4472

A cartridge mounted in a shared drive can only be labeled if every node accessing the drive are started.

When the new circle parameter **media.noWriteLabelIfAccessNodeNotAvailable** is set to false, the label of the tape will be written even if one of the access node is down.

AC-4467

Close properly files with the session monitoring activated even if the session has been previously closed.

AC-4452

Enhancement of deleted tapes management during library inventory (case of tapes located in a drive/slot in exception)

AC-4447

Enhancement in the LDAP connection management during directory synchronisation, to prevent too early closing of the LDAP connection.

AC-4444

The new system property **activecircle.vfs.uncommittedVersionTimeout** given in second defines a timeout to keep the uncommitted version. This prevents the versioning policy to remove unsealed and uncommitted versions (on-going deposit).

The property is to be set in the **.localvars** file of the share's policy manager node.

AC-4400

The versioning policy always updates the quotas from accounting values, even if there's no constraints in the policy.

AC-4378

It is now possible to reset a pending checksum from any node, if the initiator node (the node that set the pending status) has been restarted in-between.

AC-4314

Fix deletion of archives whose pool has been deleted.

AC-4181

Add a short timeout when pinging a remote service to avoid blocking. This timeout can be set with the system property, **activecircle.service.ping.shortTimeout** given in seconds. The default value is 15.

AC-3401

Fix command `acinfo -archive -P|--pattern`

AC-2825

`acinfo --archive --pool -S <nom_partage> --filePath <nom_fichier>`

displays the keyword `<deleted>` if the archive is located on a deleted pool (previously the command failed).

AC-908

Restart Active Circle Service if recurrent error occurs if the network selection manager thread (SelectLoop).

AC-399

Fix on-demand archive command:

```
acarchive -o -S <nom_partage> --filePath <nom_fichier>
```

is allowed only if the circle parameter **activecircle.archive.enableOnDemand** is set to **true**.