

## Release Notes: IBM Aspera Sync 3.7.3 for Windows and Linux

Product Release: April 21, 2017

Release Notes Updated: April 21, 2017

This release of IBM Aspera Sync provides the new features, fixes, and other changes listed below. Additional sections cover system requirements and known problems.

### NEW FEATURES

- On Windows machines, synced files inherit the ACLs of the destination folder.
- Sync now has a two-minute timeout, enabling it to exit gracefully in the rare cases when under high network impairment conditions Sync does not receive a proper shutdown sequence.
- The `asynadmin` tool can now output file and session status when Sync is using a database with LMS (`<async_db_spec>` is set to `sqlite:ms`). When reporting data on a specific source-destination pair by name (using the `-N pair_name` option), if Sync is running then the output reflects the final state of the last `async` run and does not reflect any changes in the active sync.
- Sync run in bidirectional mode with modification times preserved no longer reports conflicts due to directory modification times. However, when the source and destination directory times are both modified between sync sessions, directory modification times might not be preserved.
- On machines with Unix-based operating systems, a new value, `inode`, is available for the `--dedup` option. In this mode, when two or more source files have matching inodes, a hardlink is created between them on the target and the target files have matching inodes.
- Faster Snap database loading on subsequent syncs when many (100s) of filters are specified.
- Faster execution of `--dedup=copy` on Windows machines that support Offloaded Data Transfers (ODX).
- Sync with S3 is now fully supported and documented.
- Improved Sync shut down process when a Sync session is stopped.
- Bidirectional syncs between S3 buckets are now supported.
- A new option, `--cooloff-maxtime`, can be specified so that a one-time Sync waits for a file to stop changing within the cooloff interval before it synchronizes the file. With this option, the file is skipped after the `cooloff-maxtime`.
- Sync sessions can now be filtered by setting the `<filter>` configuration in `aspera.conf`. Command-line filters are applied after `aspera.conf` settings. If filtering is not always wanted, then configure filters for one user. Sync sessions that are run by that user are filtered while sync sessions run by other users are not.

### ISSUES FIXED IN THIS RELEASE

**Note: This release contains tickets that were created from different issue-tracking systems. For this reason, the list below uses two different formats for issue numbers.**

ES-238, WAT-520 - When a client-side `asynsession` is forced to quit, in rare cases the server-side `async` process may not stop. (CIM-364)

WAT-538 - [Windows, Linux] Renaming a folder during a continuous, bidirectional Sync session with `scaninterval` enabled can cause a conflict with the folder.

WAT-512 (#29038) - The `--overwrite` option of Sync does not recognize modified files if the size has not changed and they are in storage that does not support sparse checksums, such as Azure cloud storage, or when `async` is run with the `--checksum none` option.

WAT-502 - [Windows] Sync cannot compress non-ASCII characters and hangs if the option `--compression=zip` is used on files with non-ASCII characters in the file names or paths. (CIM-465)

WAT-453 - Watchd is unable to read folders on a machine running Windows 2003. **Note:** Windows 2003 support was discontinued in 2015. (CIM-361)

WAT-449 - Sync does not respect the cooloff option.

WAT-442 - Sync does not stop if filters have been configured in `aspera.conf` and one or more files in the sync session match a filter.

WAT-430 - When `async` is run with the option `--symbolic-links=skip`, errors are logged for each symbolic link encountered.

## SYSTEM REQUIREMENTS

- **Windows:** Windows 7, 8, 10, or Windows Server 2008 R2, 2012 R2, 2016
- **Linux 64-bit and 32-bit:** Ubuntu 12-15, RHEL 6-7, CentOS 6-7, SLES 11-12, Debian 6-7, Fedora 16-20; Kernel 2.4 or higher and Glibc 2.5+

## KNOWN ISSUES

**Note: This release contains tickets that were created from different issue-tracking systems. For this reason, the list below uses two different formats for issue numbers.**

ES-92 - Sync reports incorrect counts for 'deleted\_paths', 'deleted\_bytes', and 'cumulative\_deleted\_bytes'.

ES-50 - When using local storage for Sync with Files on Unix-based systems, Sync fails if the access key storage does not start with "/". For example, `datastorage` fails but `/datastorage` is successful.

WAT-523 - Meta-attributes are not preserved in sync sessions that use the `--dedup=copy` option.

WAT-465 - Sync hangs following a TCP impairment that produces a `libssh2` timeout or error.

WAT-377 (#27391) - [Linux] A continuous `async` session that is configured to follow symlinks does not sync a symlink file after it is modified.

WAT-362 (#24812) - [Windows, Linux] If a file's size decreases during a continuous Sync push, the file remains pending and is never synced.

WAT-355 (#34793) - [Windows] Hard-linked files are not resynchronized. A file that is a hard link to another file is kept in sync until the original file is modified, then only the original file is synced.

WAT-288 (#27311) - An `--apply-local-docroot` pull copies the local docroot path into the same path. For example, `/home/user1/sync` is copied into `/home/user1/sync`.

WAT-287 (#32064,#32883) - [Windows, Linux] When syncing a directory in continuous, bidi mode, Sync keeps running with one pending file rather than complete and go idle.

WAT-9 - When the `scan-file-rename` option is used with `asperawatchd`, moved files should be detected and renamed at the destination, not deleted and replaced by a transferred, renamed file.

#29038 - Using `overwrite=all` ways when syncing with cloud storage does not overwrite the file. The default checksum behavior with S3 (as with any cloud storage) is "none". An existing file on S3 is considered identical to the local file when their sizes are equal. Therefore the file on S3 is not overwritten, even when the content of S3 differs from the content of the local file.

#28817 - The Sync log entry for `SYNCERROR_DELAY` does not include information that describes the file name and path.

#27621 - Sync reports conflicts due to the presences of hidden, temporary, or transient files (such as temporary files created by Microsoft Office products).

#25915 - [Linux] If a source file is overwritten during a continuous Sync in push mode, the corresponding file on the destination might be deleted. **Workaround:** Run a one-time push Sync of the overwritten file to restore it on the destination.

#25631 - When transferring from Windows to Mac using `preserve-acls=native` and `remote-preserve-acls=native`, ACL data are saved as `xattr`. **Workaround:** Do not use the `native` setting when transferring or syncing across platforms.

#24805 - ACL data are preserved at the destination for all files and subdirectories in the source folder, but ACL data for the source folder itself are preserved at the destination.

#23954 - When the `--preserve-acls` or `--preserve-xattrs` option is used, `async` does not preserve the `acl` or `xattr` when either file `acl` or `xattr` is modified and (a) file content is unmodified or (b) file content is unmodified and the file is renamed.

#23400 - [Linux] As of Sync version 1.5+ the user is permitted to sync to the root directory.

#23004 - Aspera Console does not draw a line between the involved nodes for an `asynctransfer`. This issue occurs when two managed nodes are used with two interfaces on two different networks.

#22633 - Sync does not support large `xattr/ResourceForks`.

#22044 - `asynccadmin` reports all sessions are locked after the last actual running session.

#21014 - When creating a file with `vi` during a sync, the swap file is in conflict.

#20906 - `async` cannot create a watch on an unreadable directory; therefore, it does not get notified when permissions change. In addition, `async` treats an unreadable directory as "skip" rather than reporting an error or conflict.

#20767 - `-R log dir` creation from Linux to Windows with spaces in the path will only get as far as the first space in the path.

#20347 - `Async` reports errors and conflicts for deep directory depth when the sync is from Linux to Windows.

#19945 - `asynccadmin` creates SHM and WAL files for read-only operations. Once `asynccadmin` is run as the root, `async` run by the user does not have permission to access the existing SHM and WAL files and thus `async` fails. This is due to a bug in SQLite.

#18780 - [Linux] An `async` push conflict occurs when a new file is renamed quickly.

#16911 - Characters in the `async` session option that are not preceded by a "-" or "--" are ignored, therefore failing to trigger an error message. Any session options specified (such as `-lor -a`) after the string of characters not preceded by a "-" or "--" are also ignored. The session still runs using the default values, but does not notify the user that the command line settings have not been applied.

#13826, #13827, #13833 - [Windows] Limited support for Unicode file names on Windows: The user creates a directory with a name containing Unicode characters (for example, Japanese), and then creates a file in that directory. The following errors may occur:

1. Running with an `-N` set to a string with non-English characters (such as Japanese) causes an error message.
2. After a sync, the UI displays an inaccurate directory name and path separator.

3. After syncing, using the `asynccadmin -M` option does not allow the user to delete the file from the database.

#13761 - If file names contain "\" or new line, async will try to transfer but fail, causing the internal transfer queue to become full and the synchronization to stall (or hang after all the other files have completed).

#13645 - When a directory is renamed during transfer, Sync continues running and never completes.

## **PRODUCT SUPPORT**

For online support resources for Aspera products, including raising new support tickets, please visit the [Aspera Support Portal](#). Note that you may have an existing account if you contacted the Aspera support team in the past. Before creating a new account, first try setting a password for the email that you use to interact with us. You may also call one of our regional [support centers](#).