

***Cleo* Harmony[®]**

Release Notes

Version 5.6.2



October 2020

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Cleo Harmony 5.6.2 Release Notes

Cleo Harmony software provides you with a wide variety and combination of file transfer capabilities that allow you to initiate transfers, control your transfers and environment, monitor your file transfer activities, and take actions as appropriate based on your file transfer activities.

Cleo VersaLex is the platform that powers the Cleo family of Secure Data Integration (SDI) products—The Cleo LexiCom[®] product is a desktop-based client solution for communication with major trading networks. The Cleo VLTrader[®] product is a server-level solution designed to meet the needs of mid-enterprise organizations. The Cleo Harmony[®] product is tailored for large enterprise needs. Enterprise capabilities include system monitoring, enhanced business-level dashboards, VLTracker, SNMP traps, dynamic blacklisting, and whitelisting.

Cleo Technical Support

Standard Cleo Technical Support is available from 7am - 7pm CST, Monday through Friday. Support availability might differ depending on your support package.

Training and a support subscription are required to work with a Cleo technical support analyst for all products, except Cleo LexiCom.

When contacting the Cleo support team, have your contact information, the name of product you are calling about, and your serial number, if available. During the support process we may request additional information (for example, a support bundle) that will vary depending on the type of request or issue.

Requests are handled on a callback basis in the order they are received. The Cleo support answering service or web form will collect your information and your request will be placed in our callback queue.

To contact Cleo Technical Support:

- Use the request form at: <https://support.cleo.com/hc/en-us>.
- Call us:
 - 1-815-282-7894
 - US (toll free): 1-866-444-CLEO(2536)
 - UK: 02038653439

What's new in version 5.6.2

New OS and database support

This release supports Windows server 2019. In addition, Postgres 11.5, 11.6, and 12.1 has been added to the supported databases.

New REST endpoint connections

With this release, you can now create and edit new REST endpoint connections (HTTP, SMTB, ebXML, and RNIF).

AS4 enhancements

Reverse proxy support has been added for AS4 messages.

Future-proofing your Cleo Harmony program

Deprecating features

The following features are being deprecated in future releases. You can future-proof your program by using newer features instead of the deprecating ones. A warning message has been added to each of the deprecated features' panels with a suggestion of a newer feature to use instead:

- **Win Unix/File System > CIFS Directories** – use **SMB** hosts instead
- **Router** – use **Router** hosts instead
- **VLPortal** – use **Portal** instead
- **Options > LDAP / User Management > LDAP Settings** – use **LDAP** hosts instead
- **Local FTP Users** – use **Users** hosts instead
- **Local SSH FTP Users** – use **Users** hosts instead

Upgrading to version 5.6.2

When upgrading to Cleo Harmony version 5.6.2, Cleo recommends the following:

- Back up your configuration using the **Export** functionality. In the Web UI, go to **Administration > System > Export**. In the native UI, go to **File > Export**. Performing an **Export** will save your data in a format that you can import using the Cleo Harmony **Import** functionality should the need arise.
- Make sure your system meets the system requirements for Cleo Harmony version 5.6.2, as it requires greater resources than earlier versions. 64-bit operating systems are strongly recommended. 32-bit operating systems are supported only for existing customers. All new installs must be 64-bit. Visit <https://support.cleo.com/hc/en-us/articles/360042316213> to view the System Requirements for your product.
- **AIX** is no longer supported in versions 5.6.1 and later.
- Run the Cleo Harmony 5.6.2 installer to perform an in-place upgrade. Your data and configuration remain intact from the previous version of the Cleo Harmony software.

Update history

The following sections contain descriptions of issues fixed in Version 5.6.2 and subsequent patch releases:

Fixed issues in version 5.6.2.7

Enhancements - Connector

- Cleo Harmony only: Enhanced the AzureBlob connector so that when a file is moved within the same Azure container, it is done natively so that we don't incur extra costs by leaving the Azure network.
- Cleo Harmony only: Added the ability in the Azure Key Blob Connector to authenticate using a key in the Azure Key Vault. See the Info tab on the connector for more details.

Bug Fixes - Framework

- Cleo Harmony and Cleo VLTrader only: Fixed an issue where accessing the REST endpoint `/api/connections/<connectionId>/transfers` would sometimes return transfers not associated with the `<connectionId>` when used with certain protocols that have asynchronous receipts.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue in the various Users host configuration pages where the ellipsis button `[. . .]` in the Archive Directories section would not display the correct folder.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where result text containing binary characters could overrun the size of the `resultText` field in the VLTransfers database table.

Bug Fixes - OFTP

- Cleo Harmony and Cleo VLTrader only: Fixed an issue where the OFTP inbound transfer report showed the wrong host in the new Web UI.

Bug Fixes - Connector

- Cleo Harmony and Cleo VLTrader only: Fixed an issue where processing a TA1 Acknowledgment document through the Router connector would result in a `NullPointerException`.

Security - Framework

- Cleo Harmony and Cleo VLTrader only: Fixed a security issue where a partial web admin UI could be accessed over HTTP when a secure port is required to access the Web Admin UI. The user will now be redirected to the secure port. Note: VLProxy 3.8.2.2 is required if using VLProxy.

Fixed issues in version 5.6.2.6

Enhancements - S3

- Cleo Harmony only: Added new S3 connector property, 'Enable Path Style Access', which enables path-style S3 URLs instead of virtual hosted-style S3 URLs. Path-style URLs are being deprecated by AWS, so this setting should be configured only for non-standard S3 connections.
- Cleo Harmony only: Because S3 is a flat file system which does however support the concept of folders for grouping objects, the S3 connector now has a 'Pseudo Folders' property. Only when this property is set on (the default) will Harmony create actual folder objects when asked to make a directory and require actual folder objects to exist when asked to list a directory. When 'Pseudo Folders' is turned off, this enhancement only affects using the S3 connector directly (i.e. not via an s3: URI reference) and does not include support for the -REC command option. These further enhancements will be included in a coming release.

Enhancements - JMS

- Cleo Harmony and Cleo VLTrader only: Added support for the TextMessage JMS message type in the jms: URI. TextMessage can be specified by using a msgType=text parameter on the URI. Previously, only BytesMessage was supported.

Bug Fixes - HSP

- Cleo Harmony and Cleo VLTrader only: Fixed an issue where HSP transfers would fail if additional cookies were present.

Fixed issues in version 5.6.2.5

Enhancements - Framework

- Cleo Harmony and Cleo VLTrader only: Updated the static VLTransport database table such that LCOPY commands are considered to be transfers. This allows LCOPY records in the VLTransfers table to be displayed in Cleo Dashboards.

Bug Fixes - Framework

- Fixed an issue where temporary actions were being written to top.xml unnecessarily causing delays in processing.
- Improved possible performance issues when querying Microsoft SQL Server databases through a Microsoft JDBC driver.
- Fixed an issue where certain functions (such as moving a host) would fail when accessing the WebUI through Cleo VLProxy.

Fixed issues in version 5.6.2.4

Bug Fixes - Framework

- Added support for the %transferid% macro in the destination filename field of the PUT and GET commands for FTP and SFTP. Also added support for %transferid% within the destination filename field of LCOPY commands.

Fixed issues in version 5.6.2.3

Enhancements

- Added new local listener `Email And Execute On Unknown Trading Partner Failures` advanced property, which works in conjunction with the existing `Email On Fail` and `Execute On Fail` properties. If this new property is set to `false` (defaults to `true`), only inbound transfer failures associated with a known mailbox result in the configured email and/or execute on fail being invoked. This eliminates unnecessary emails/executions related to cyberattacks, and applies to all the local listener protocols and services.

Bug Fixes - SSH FTP

- Fixed an issue where incorrect permissions were sent when retrieving a file from a SSHFTP server.

Bug Fixes - RNIF

- Fixed an issue where Inactive RNIF Message IDs were unnecessarily written to disk causing performance issues.

Fixed issues in version 5.6.2.2

Enhancements – Portal

- Cleo Harmony and Cleo VLTrader only: Improved performance of Cleo Portal when there is a large number of files in a folder.

Fixed issues in version 5.6.2.1

Bug Fixes – HSP

- Cleo Harmony and Cleo VLTrader only: Fixed an issue with the HSP protocol where the server would not fail a transfer that the client had failed resulting in errors when the client attempted to resend the file.

Fixed issues in version 5.6.2

Security - Framework

- Expired trusted CA certificates will not be installed for new Cleo VersaLex installs. The expired certificates will remain intact for Cleo VersaLex upgrades.

Enhancements - Framework

- Added a monitoring feature that occurs within the scheduler runnability pre-checks where the accessibility of the file system is assessed for possible slowdowns. This monitoring is accomplished by running the pre-checks within threads that are allowed to time out within a reasonable period, thereby preventing the scheduler from blocking on any given pre-check for too long of a period, which could ultimately hinder the overall scheduler performance. To enable this feature, set the `Timeout For File Operations (seconds)` and `Timeout For Directory Operations (seconds)` system-level properties to non-zero values. For further information, refer to the user documentation for a discussion of these two new properties, along with the new `Wait Time For Nonresponsive File Systems (minutes)` property.
- Added the ability to use a connector path as the source for a `SCRIPT` command.
- Changed the behavior of the `Allow Actions to Run Concurrently Host` setting when disabled to only affect the host where the setting was changed, and not the entire Scheduler.
- Added the ability to create and edit HTTP connections via the `/connections` REST endpoints.
- When an OpenPGP key is generated through the Cleo Certificate Manager and an email address has not been specified, an empty email address is no longer included as part of the identity in the generated key ring.
- Added the ability to create and edit SMTP connections via the `/connections` REST endpoints.
- Added the ability to create and edit ebXML connections via the `/connections` REST endpoints.
- Added the ability to create and edit RNIF connections via the `/connections` REST endpoints.

Enhancements - AS2/AS3

- Connectors will now receive the filename for incoming AS2 messages through the metadata. The incoming filename can then be used by Cleo Clarify to make processing decisions.

Enhancements - AS4

- Cleo Harmony only: Added reverse proxy support for AS4 messages. Asynchronous receipts are currently not supported.



Note: VLProxy 3.8.2.0 is required.

Enhancements - Connector

- Cleo Harmony and Cleo VLTrader only: Added KMS encryption to the S3 connector.
- Added an option to treat all files as non-EDI file in the Router connector, allowing for files to be routed based on regex content matching.
- Cleo Harmony only: Added `ATTR` command for Kafka and AMQP Connectors to support inbox configuration.
- Cleo Harmony only: Added ability to use the `-REC` option with the AzureBlob connector.
- Cleo Harmony and Cleo VLTrader only: When wildcards are used in `GET -REC` within a connector action, the wildcard will no longer be applied to the folder names so that all subfolders are searched for files matching the specified wildcard.

Enhancements - EBICS

- Cleo Harmony and Cleo VLTrader only: Added a new host-level Advanced property, `Include X509 Data In Key Uploads`. When this property is selected, the optional X509 certificate data is included in the XML document body for all key uploads that contain an element that extends `<PubKeyInfoType>`. This includes INI, HIA, PUB, HCA, and HCS. For the H3K transaction (version 2.5 only), X509 certificate data is always included, as it is not optional for H3K.

Enhancements - OFTP

- Added `SFIDORIG` and `SFIDEST` into OFTP duplicate message checking. It is now based on the following OFTP fields: `SSIDCODE`, `SFIDSN`, `SFIDATE`, `SFIDTIME`, `SFIDORIG` and `SFIDEST`.

Enhancements - Portal

- Cleo Harmony and Cleo VLTrader only: Added the endpoint `POST /folders/file?path={pathToFolder}`, which allows the user to upload files by specifying the folder path instead of the folder id. Also added the endpoints `GET PUT DELETE /files?path={pathToFile}`, which allow the user to perform basic file operations by specifying the file path instead of the file id.

Enhancements - RNIF

- Added the ability to resend processed RNIF messages without encountering duplicate PIP instance ID errors.

Enhancements - SSH FTP

- Added the ability to preserve the source file timestamp in the inbound and outbound destination files. To enable this feature, set the `Preserve File Timestamps` advanced property in the host.

Bug Fixes - Framework

- Cleo Harmony and Cleo VLTrader only: When using the Web UI right-click Transfer Report feature at the folder, host, and mailbox levels, the software now clears all lower-level filters, preventing any prior filters from blocking expected results.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue with the new Web Admin UI where, after moving an item into an empty folder, the folder incorrectly had the delete option in the right-click menu.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where empty, nested folders were being removed from the host tree after a service restart.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue with the Web Admin UI where hosts selected during export were cached so they were still selected next time the user went to export hosts.
- Cleo Harmony and Cleo VLTrader only: Fixed a problem where, when exporting selected hosts in the Web Admin UI, the ability to also export related configuration (for example, scheduler settings) was not working properly.
- Cleo Harmony and Cleo VLTrader only: Fixed a Web Admin issue in Microsoft Edge where enabling, disabling, and moving a host in the Host Tree would throw an error.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where repeatedly navigating to Transfer Report from a Host would produce different server-side filters.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where movement of a host to a different folder within the Web UI was not being broadcast to all the UI listeners, thereby producing incorrect host tree representation until the service was restarted.
- Cleo Harmony and Cleo VLTrader only: Fixed a minor issue with the new Web Admin UI transfers page where opening the server-side filter modal while another filter existed would cause the 'Nodes' and 'Run Type' fields to change from multi-selects to text inputs.

- Cleo Harmony and Cleo VLTrader only: Prevented the datepicker in the Web UI from expanding to the width of the entire screen in Microsoft Edge.
- Cleo Harmony and Cleo VLTrader only: A Cleo VLNavigator user not connected via a VLNav connector can now access the Portal Users page without error. The /users responses now also return all the user information for these same VLNavigator users.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where an administrator user accessing /users/{userId} could not get a VLNav or LDAP user by their user ID.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where, when using /authentication REST endpoint with LDAP or VLNav connector users, the 'user_id' returned was the ID of the authenticator, not the user.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue on the new Web Admin UI Logs page where, if the user selected a host inside of a folder from the 'sources' drop-down, the logs were not correctly filtered.
- Fixed an issue where a JavaScript action would activate a Security Manager that could cause performance issues or StackOverflowErrors on Cleo Harmony, Cleo VLTrader, and Cleo LexiCom systems running on Windows.
- Fixed a problem where, when 'Email On Repetitive Action Failures' was suppressed and there were multiple commands in the action that used the same command type: when one command succeeded but another failed, the repetitive 'Email on Fail' notifications were not being suppressed.
- Cleo Harmony and Cleo VLTrader only: Fixed a problem where, if more than one Cleo VLProxy is initially configured and added to Cleo Harmony or Cleo VLTrader at the same time, only one of the VLProxies would be able to reverse proxy into the Cleo Harmony or Cleo VLTrader. Previously a restart of Cleo Harmony or Cleo VLTrader would be required to resolve the issue.
- Cleo Harmony and Cleo VLTrader only: Removed the 'System Actions' and 'Script Actions' items from the Synchronization table. Synchronization for these items is included with synchronization of 'Hosts'.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue in the Cleo VLNavigator System Privileges tab (for non-Administrator user groups) where the 'System Actions' and 'Script Actions' row entries were not being set with a default value when the 'Hosts' row entry was enabled as either 'View-only' or 'Editable'. Also addressed an issue where entries in the 'Stop/start' column were not being cleared when the 'No access' field for that row was set.
- Fixed an issue where a database connection leak could occur if the database connection fails.
- Fixed an issue where querying the REST API transfers endpoint with the count and filter parameters could cause the wrong number of results to be returned.
- Fixed an issue where the scheduler could log a NullPointerException or an IndexOutOfBoundsException when processing scheduled actions.
- Fixed an issue where, during the import of a host, an exception would occasionally be thrown, causing the host to be imported incorrectly.
- Cleo Harmony and Cleo VLTrader only: Fixed a problem introduced in 5.6.1.0 where the user would not be able to save Cleo VLNavigator user group changes when using the Applications database.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where a NullPointerException was being logged at startup while processing queued database transfer log entry files containing a .exception extension.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue on the Web Admin Scheduler page where an error would be thrown if an action was scheduled to run in a timezone with a '+' in its name.
- Fixed an issue where, when multiple temporary actions using the %index% macro were created, a NullPointerException could be logged and a subsequent Email on Fail generated.

Bug Fixes - AS2/AS3

- Fixed a problem where, when an MDN containing a 'Warning' disposition did not contain a 'Received-Content-MIC' value, the MDN viewer displayed a status of 'Malformed MDN - missing Data Integrity'. Some vendors may not compute the MIC value when returning a 'Warning' disposition.
- Fixed an issue where, when a message was compressed then signed and the content-type was folded so that the "smime-type=compressed-data" attribute was on the next line, then the content would not be decompressed.

- Fixed an issue where, when an incoming message from an unknown trading partner requested a signed MDN, the received payload file was not being stored in the lostandfound directory.

Bug Fixes - Connector

- Fixed an issue where a connector that points to itself in an action could cause a `StackOverflowError` at startup.
- Cleo Harmony and Cleo VLTrader only: Fixed a problem where, when a connector (such as the Router or Clarify connector) was specified as the inbox in a host with a configured received box and the 'Delete Zero Length Files' advanced property was also set, the received box file was being deleted when a file was being received through the connector.
- Fixed bug for Kafka connector to handle bin file and metadata. Added option `MessageMaxSizeBytes` for Kafka and AMQP connector to limit the file size for sending.
- Fixed a problem where a `NullPointerException` could be thrown when using the Condition field of the Router if `System.err` is set to null.
- Fixed an issue where sizes of files in Google Cloud Storage would be reported incorrectly by the Google Cloud Platform Connector.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue where the destination of a `GET -DIR` command within a connector action would be treated as the source location instead of the destination location.

Bug Fixes - EBICS

- Cleo Harmony and Cleo VLTrader only: Fixed a problem where the User ID was being placed in the Partner ID field for printed initialization letters (HIA and INI).

Bug Fixes - HTTP

- Fixed a problem where HTTPS client connections were failing when the SSL connection was redirected to a secondary server that used different server certificates than the initially connected HTTPS server.
- Fixed an issue where a long HTTP connection could cause Garbage Collection to not run, which could cause an increase in memory usage.

Bug Fixes - Portal

- SSH FTP: Fixed an issue with FTP and SSH FTP where the command `GET -REC` does not honor macros, such as `'%date%'`.
- Cleo Harmony and Cleo VLTrader only: Fixed an issue with Portal where downloading multiple files at once could cause a database exception by attempting to insert a value too large for the 'copypath' column in the 'VLTransfers' table.

Bug Fixes - SSH FTP

- Cleo Harmony and Cleo VLTrader only: Fixed an issue where an SSHFTP rename would fail if the target of the rename is a connector.

Known issues in version 5.6.2

The following are known issues in Cleo Harmony 5.6.2:

- Due to ever-changing security requirements, you might encounter system protection on Windows that refuses to run the installer. Click **Run anyway** to dismiss the notification and continue the installation process.
- When installing on Windows server 2019, due to a Java issue, the installer might display that the OS is server 2016.