

Cleo Stream[®]

Release Notes

Version 7.4.0



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Cleo

4949 Harrison Avenue, Suite 200
Rockford, IL 61108 USA
Phone: +1.815.654.8110
Fax: +1.815.654.8294
Email: sales@cleo.com
www.cleo.com

Support: +1.866.501.2536 (US only), 1.815.282.7894, or support@cleo.com

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Cleo Stream® 7.4.0 Release Notes

Cleo Stream® is a Microsoft Windows-based fax processing platform that provides a complete range of advanced voice/fax capabilities, including fax/email integration, ability to fax messages to multiple destinations in multiple formats, ability to fax from a print driver, and support for faxing from MFPs.

What's new in Cleo Stream 7.4.0

Features

Two-way SMS text message processing

- Added new Conversation Engine Service to handle SMS inbound responses
- Voice and SMS, with or without responses, work together when launched from Stream Notify or CAP
- `Job_alert`, CAP parser, and 5-Page now support per-destination `Ack` messages for SMS
- New `job_alert.ini` settings. The default value is 0.
 - `usesmsprovider=0|1` – enables SMS functionality for use with third-party provider
 - `processinboundsms=0|1` – enables processing of inbound SMS responses
- See the Stream SMS Integration document for more information.

Robust set of Cleo Stream password strength and management capabilities

- Added to Notify for Cleo Stream non-LDAP users to support the following security policies:
 - Password strength
 - Password expiration and reuse
 - Password lock/unlock
- Enabled via new Notify Master Config entry:
 - `PasswordHardening=0|1`; enables password management feature (default:0)
 - See Cleo Stream Administrator Guide for related configuration settings
- Added new table: `SystemUserSecurity`

Stream Print 7.4.0

Initial release of next generation Stream Print client

Fax Routing

A Stream Notify Administrator can now manually move or copy a received fax to another Stream User or Save-to Folder. When enabled, the View Fax link on the Stream Notify Received page will open the respective dialog panel that allows selection of the move or copy destination. The Status column on the Received page will display an indicator for routed faxes that you can hover on to see routing details.

Enabled via a new Stream Notify Master Config option:

```
EnableRouteFax [0|1|2]
```

where

- 0 - Default, no routing
- 1 - Move
- 2 - Copy

Multi Company Administration

Enhanced the Company Administrator role so that Company Administrators can optionally be configured with admin rights for multiple companies

- A Stream Notify Master Config option, `MulltiCompanyAdmin`, enables the new Multi Company Administration feature.
- A new database table, `SystemUserAdmin`, contains the Multi Company Admin configuration settings.
- When `MulltiCompanyAdmin` is enabled and a System Administrator assigns the role of Company Administrator to a User, a new **Companies** drop down field appears on the **Stream Notify Manage Profile Settings** page.
- The new **Companies** field allows the System Administrator to control which companies the Company Administrator is granted admin rights. Company Administrators can view their assigned Companies setting but cannot change it. All applicable Stream Notify pages will automatically include a **Company** drop down selector for Company Administrators that are assigning multiple companies.

Monitoring Service SNMP Notifications

New `monitorsvc.cfg` option: `snmpserver=127.0.0.1`.

When the `monitorsvc.cfg` option, `snmpserver`, is set to the IP address of a configured SNMP manager, the monitoring service will send SNMP notifications for failure conditions.

Enhancements

Cleo Stream MFP Client

Release of the new Cleo Stream MFP Client Setup v1.0.3, a deployment application to facilitate the simultaneous registration of multiple MFP devices. The new app is available for download separate from Cleo Stream

Option to validate/reject inbound calls

If the DID doesn't exist in the `systemuserlist` table, you now have the option to validate and reject inbound calls.

- New `xstream.xml` “`<work-manager>`” configuration options:
 - `inbound-validate-did` – controls whether or not the inbound validation is activated. “1” – activated, “0” – not activated (default).
 - `inbound-log-rejected` – controls whether or not a rejected call is logged to the `inbound_call_distributor` table in the `WorkflowLog2k` database. “1” – log the rejected call, “0” – do not log the rejected call (default).
 - `inbound-log-rejected-queue` – the AMQ queue name to write rejected call info to. Default value: “`xs.result.wfml.inbound`”.
 - Example `xstream.xml` `work-manager` configuration with inbound DID validation and logging enabled:

```
<work-manager>
  <id value="wm1"/>
  <eventhandler value="inbound"/>
  <internal-debug value="1"/>
  <inbound-validate-did value="1"/>
  <inbound-log-rejected value="1"/>
```

```
<inbound-log-rejected-queue value="xs.result.wfm1.inbound"/>
</work-manager>
```

- When a call is rejected and logged, the **Status** field in the `inbound_call_distributor` table will contain: "REJECTED: Invalid DID".

Improved Stroom startup after Windows reboot

This new service dependency and startup configuration imposes order and predictability on Cleo Stroom services and guarantee availability at Windows startup.

- All Stroom services are now set for Manual startup mode, except for Stroom Monitoring Service, which is set for Automatic-Delayed Start.
- Stroom Monitoring Service is now responsible for starting all the other Stroom services on a reboot.
- The order in which Stroom services are now started is coded and documented in `startup_all.cmd`.
- The order in which Stroom services are now stopped is coded and documented in `shutdown_all.cmd`.
- The monitoring service is not included in `startup_all.cmd` or `shutdown_all.cmd`.

Reconfigured dependencies between Stroom services and other services. Removed direct dependency of the work processors on ActiveMQ. It is indirect through the work manager.

Monitoring service checks to see if the `stroomcenter` service is running, and calls `startup_all.cmd` if it is not.

Confirmations

Confirmations now produce a separate CSV file for each response digit with the `-c` option.

- Added new option to `scconfirm.cfg` parameter, `showthumb`. When `showthumb=2`, confirmations will only show a thumbnail if all destinations are successful.
- `ScConfirm` can now archive confirmations for specific MFPs, based on fax number, to folder instead of printing.
 - Works for both Stroom Printers (User type 5) and Xerox Devices (User type 2)

Enable confirmations using the following `scconfirm.cfg` parameters:

- `archivefromfax` – Printer/MFP fax number(s) separated by commas; numbers only, no special characters.
- `archivefromfaxpath path\folder` for archived confirmations.



Note: For Stroom Printers, the optional IP Address field must be populated

CAP

Added RCBC Pre-CAP integration.

Cleo MFP

- Added HTTP/S upload functionality to Cleo Stroom App for Xerox MFP
- Ignored logged-in users, i.e. not in Stroom database, allowed to email confirmations
- Implement EIP SDK 4.0 for Cleo App compatibility with Xerox VersaLink / AltaLink Multifunction printers

Cover Page

CAP now supports the same User, then Department, then Company, cover page logic as when you send a fax from your email client via Desktop faxing.

Possible cover page values:

- None - no cover page
- Default - system default
- Null or blank - uses match from `\stream\coverpages\ in the following order:
 1. <User>.rtf
 2. <Department>.rtf
 3. <Company>.rtf`

Dialogic

Updated Dialogic driver to 6.9.0.

Document Converter

Updated document converted to listen for `global\job_convert win32` events and check the database when fired.

After a conversion is complete, the document converter now sets the `notifyevent`, which allows `flconvengine` to finish faster.

FreeSWITCH

Updated to FreeSWITCH 1.6.19. This requires the `txfax` app to be executed as a part of the connect string. `setFaxInfo()` allows the appropriate fax variables to be set before the connection is established. (This was also the case with v1.6.18.)

Updated `wpfs`.

Jetty

Updated to Jetty Server 9.2.9.

Monitoring Service

- Moved the `service=1` test to always be the first one.
- The `service=1` test now has a check frequency different than the overall test frequency.
- The service check frequency defaults to 300 seconds
- It can be changed by adding a new `monitorsvc.cfg` setting (`options/svccheckfrequency`), but will not be there by default, so we can be involved if there is any reason to change it.
- In debug, we now print not only the status of the service being checked, but also its startup mode. [“StreamCenter – The service is running (Manual)”]
- Changed restart behavior for any service that is stopped because it is disabled. We no longer try to start it now. This was generating an error message and occasionally some other odd behavior.
- The Stream Web Server service is not being excluded from the services restarted by the Monitoring service

Notify


- Updated Status and Sent pages with improved navigation and additional, more useful information at the first level:
 - Popups from per-job drill downs are gone. These pages now have a respective “Back to Status/Sent Results” button.
 - Added Recipients column that shows the total count of recipients.
 - Added an optionally displayed Response column that shows the aggregated counts of different responses.

- Enabled via a new Stroom Notify Master Config option:
ShowResponseOnStatusPage [0|1]
Where;
0 - Default, not displayed
1 - Enable
- The “error” indication (red X) on the first-level Status page now shows up when any single destination has failed. It is a general indication (or invitation) to look into some jobs but not others. When you hover over the red X, we now show an actual count of both failed and total destinations. Thus, a “6 of 10 destination(s) failed” job is a stronger indication (or invitation) for a user to drill down than a “1 of 10 destination(s) failed” one. Note: Voicemail is not considered an error for this purpose.
- The Subject and Response column have new behavior: They display a fixed number of characters to conserve space and layout, but show everything when you hover on them.
- Add/Update pages for Save-to-Folder, Xerox, Printer, FTP user now display a result message, just as the User pages did.

Other

Update to configure/use separate outbound gateways per protocol (voice/fax)

SMS

- Updated sms project to smsserver and removed stroomwpt service
 - SMS work processor, wpsms, is now loaded through Work Manager using class:com.cleo.xstroom.SMSServer.
-  **Note:** This change requires a *manual update* to the <work-manager> section of xstroom.xml. For example,

```
<wp-drivers value="wpfs,class:com.cleo.xstroom.SMSServer"/>
```

- SMS logging is now to \Stroom\Logfiles\wp-sms\wp-sms.log

Startup/Shutdown

Updated shutdown_all and startup_all to include the convengsvc and speech services.

Tools

- Updated xs portmgr app to include additional port commands reset and stat
- Added Setdebug.cmd.

Setdebug can be enabled to keep Stroom processes and services from being started by StartStop or the Monitoring Service to prevent conflict with Stroom processes that are run from command line while debugging.

When enabled the file __debug__.lck is created in C:\Stroom

Usage:

```
Setdebug [on|off]
```

- Added restart_all.cmd.
- Added SetTanukiConf.cmd to update all the taunuki.conf files used by Stroom Center

Usage:


```
SetTanukiConf "[Stroom_Center_Version|help]"
```

where,

- `Stroom_Center_Version`: All `tanuki.conf` files will use this version of Stroom Center JARs. Otherwise, "`%%STROOM_CENTER_VER%%`" is used.
- `help`: Lists this usage information

New tools added to the `Support\bin` folder

- `Emailreport.cmd` – Runs and emails SQL reports that return various Stroom system results.
- `t1.cmd` – Allows you to look at and trace a configurable set of Stroom log files for today. It can optionally take a string argument to restrict the lines traced to those that contain this string for all log files.
- `tracelog.cmd` - Allows you to view and trace a log (or any other) file you specify as an argument. A second argument can be used to display and trace only lines that match a string.

 **Note:** `t1.cmd` is a wrapper for `tracelog.cmd` with all the Stroom Center log files already specified.

- `Trace32.exe` - A GUI version of `tracelog.cmd` but always limited to one file. This tool came with System Center Configuration Manager 2007 Toolkit V2. For more information about how to use it, visit <http://thoughtsonopsmgr.blogspot.com/2011/06/digging-through-log-files-sms-trace-is.html>.

Workflows

New StroomFax-inbound Workflow option to print PDF instead of DAT to Xerox MFPs. This allows support for non-Xerox MFPs.

Usage:

```
MfpPrintPDF[0|1]
```

where,

- 1 - PDF is printed
- 0 or not present - DAT is printed

Work processors

Removed work processor services (`wpfs`, `wpdiallogic`, and `stroomwpt`).

Known issues in 7.4.0

There are no known issues in Cleo Stroom 7.4.0.

Fixed issues in 7.4.0

Fixed issues and updates in version 7.4.0 include the following:

Performance / Stability

- Update to make consuming events (inbound notifications) faster
- FS call collision fixes
- Update to handle no response from work manager for inbound request
- FS updates for no inbound response from work manager
- Startup issue when a large number of jobs in AMQ
- Three Performance/Stability Fix Details:
 1. Job processing slow down over time
 - Cause - jobs added faster than what can be processed/converted by job_prepare
 - Job_prepare reading the database looking for new jobs every “cycle”
 - Outbound jobs still being submitted but only a handful of ports being used
 - Fix - job_prepare now looks for new jobs when there are less than 48 “active” jobs being processed.
 - When more than 48 jobs are being processed, the logic to update the internal active job table is suspended.
 - This allows preparation/conversions to continuously run
 - When more than 48 jobs are active, new jobs are scanned every 10 minutes to handle jobs that come in at a higher priority
 - Configurable options (registry SystemSettings):
 - Active job count - JPMaxActiveJobCount, default 48
 - New job scan time - JPMaxActiveJobScanTime, default 10
 2. Work manager stops processing inbound calls
 - Inbound call notifications sent through AMQ transient event queue
 - Cause - on busy systems the workmanager doesn't receive these messages in time (5 seconds) and the work process disconnects the inbound call.
 - Fix - moved inbound call notifications out of AMQ. Now using TCP/IP.
 - Configurable options (xstream.xml)
 - `<inbound-notify-host value="127.0.0.1"/>`
 - `<inbound-notify-port value="6881"/>`
 3. Slow Confirmations
 - FQM reads completed jobs from AMQ results queue
 - Cause - one result read per “cycle” with 15 seconds delay
 - Check for new jobs
 - Check for canceled jobs
 - Check for results
 - Check for ready dests
 - Fix - result check now “drains” the result queue & cycle logic no longer delays when “any” activity is detected.

CAP

- CAP Parser now writes both the TXT and the WAV file for the Ack message when SMS and voice are included together as destination types.
- Fix for when neither the `<userid>` or `<confirmationemail>` tags are present in the CAP file so it will work with the new cover page logic implemented in 7.3.4; where a user email address is needed to call ScWhichCoverPage.exe.

Now, when neither tag is present, the email address is set to "". Discovered with EPIC CAP files that don't use a confirmation email tag.

- Updated the systemdestlist constraint on duplicate numbers to include address type (allows a phone and sms destination for the same number to be added)
- Fix for the issue where a destination without a per-destination instruction message was playing the instruction message of the last destination, instead of the common instruction message
- Fix for post 7.1 issue where per-destination post messages were ignored
- CAP Parser and JobSubmit are a lot more forgiving of bad date formats.
- If <confirmation> is missing, we replace it with <sent> if available, and we remove "" from error messages being written to the SystemErrorList table.
- Merged uncommitted code in PreCAP to handle NextGen multi and rpt files.

CleoMFP

- Added small splash screen during loading
- Removed unnecessary log statements
- Fix for Xerox EIP confirmation method not getting set when the user does not go to options tab

FreeSWITCH

- Fix for FreeSWITCH returning a 488 (race condition) when a T.38 reinvite is received within ms of the OK SDP
- Added config option to ignore early media "fax-ignore-early-media" (default "1"-enabled).

When ignore early media is enabled, we no longer tell FS to "monitor_early_media_fail" which prevents the sporadic 488 response to a T.38 reinvite (DMG)

- Fixed FreeSWITCH crash when using Dialogic banner in xstream.xml

Installer / Patch

- Updated full installer to check for osql and password requirements for spPassword, sawebPassword, and xeroxPassword
- Updated patch to have osql files
- Installer sets printformat=3 in sconfirm.cfg making PDF the default print format for confirmations. The patch only modifies sconfirm.cfg and sets printformat=3 when printformat=1 (DAT). If printformat=2 (TIFF) which is required for Canon, it will remain unchanged
- Created .bak database files, which will now be used by the Installer instead of .mdf files
- Using tar.gz to install as we can't be assured of an internet connection
- All Python modules needed to install pysnmp are included with the patch, meaning an internet connection is not needed for a successful patch install
- Fixed cover page being overwritten during patch
- Installer / Patch no longer automatically starts services

Job Alert

- Fix to set result queue to 'xs.result.{jid}.voice' for both sms & voice work
- Update to include Ack message if present as 2nd file (101) for SMS message

Job Prepare

- Fixed bug in job_prepare that was causing variance tracking to go below zero

Monitoring Service

- Update servicelist in Monitoring Service Configuration (monitorsvc.cfg) to include the Conversation Engine Service (convengsvc)
- Turn off all tests except services
- Fix to copy main.pdf file to the appropriate directory for Monitoring Service
- Removed "svccheckfrequency" from monitorsvc.cfg (back to adding it when needed).
- Resolved issue where a non-existent service was causing crash and exit in checkServices().
- Removed hardcoded bostservice from default monitorsvc.cfg

Notify

- 5-Step Options page now has Acknowledgements popout when either Voice or SMS is selected (and UseSMSProvider MasterConfig setting is turned on).
- When deleting Users and Xerox Devices, we now update the email address as well as setting the active flag to 0. This will allow faxes to be sent from the deleted User and Xerox Device to be picked up by job_prepare and sent. No changes were required to job_prepare.
- Fixed javascript error generated by **Manage Profile > Save**.
- Fixed Master Config entry typo
- Fixed issue where the Express 'Duplicate' function returned to the login page on a job that was submitted in a session where the user management popup had been used. In this case, this particular SESSION value was set to a string that could not be encoded and decoded on and from disk. Fixed by clearing \$_SESSION['ChildSubHeader'] just before saving the entire session.
- Updated php.ini to fix \$_REQUEST being limited to 1000 variables. This was causing Strem front-end to misbehave when large set of Xerox devices were being saved

Other

- Removed duplicate header setup for "Mime-version" and "Content-Type" that was preventing inbound email delivery with AWS SES.
- Update to differentiate between last attempts that were successful and those that were not
- Removed syntax error/deleted argument from sp_releaseapplock in up_getJobNumber (using 2.sql).

Registry

- Added registry import to update TCP MaxUserPort & TcpTimedWaitDelay entries

SMS

- Added SystemInboundReceivedData DB table
- Upgraded SMS Provider Library from version 7.0.0 to 7.17.0
- Updated job_alert.exe and FaxNormalize.dll to fix SMS number normalization defect

SNMP

- The Monitoring Service can now deliver SNMP traps to multiple SNMP Managers

Strem Print

- Updated Strem Print HTTPS upload logic to send files to VLTrader in one connection instead of multiple connections. VLTrader's multipart content setting must be checked to support this update.

Workflows

- Update folderFileName default in StreamFax-Inbound to have CalledNumber instead of CallingNumber, i.e. Fax-%CalledNumber%-%Instance%

Work Manager

- Update work manager scan to add missed work queues
- Updated work manager queue monitor to init amq/jmx on the thread that is performing the scan
- Updated work manager to remove empty queues if the producer count is zero.
- Updated work manager to scan and clean work idle work queues.

Work processors

- Fix WPFS/FreeSWITCH sometimes returning 488 to DMG T.38 reinvoke
- Fix SystemAttempts NumberDialed and AttemptTime being set to blank
- Added wpfs config "fax-receive-silence" option to control the amount of silence to stream before starting to negotiate an inbound fax. Default is 2000ms. A value of 0 starts negotiating immediately after answering.
- Updated xs_fax_recv script to include "Partial" in instance when a partial fax is received.
- Updated dialogic work processor to be more robust when handling a hard reset.
- Updated to only allow valid digits into the digit buffer. Fixes 7.3.x issue that only occurred in the 1034 environment, where an OnOne voice call answered by a cell phone or voice mail was not waiting for a key press; but instead immediately started to play messages, including the ack message.

xstreem.xml

- Updated freeswitch header from %np to %d
- Updated default secure scan app ftp path
- Added new options to xstreem.xml for SMS including poll timeout, conveng time window len, new inbound assignment value ("MG+>xs_sms_recv>"), and new script-xs_sms_recv tag

Xerox

- Updated all Xerox error templates with new logos for Cleo and Xerox. Restored missing template, ShortFaxNum.rtf. Restored two MasterConfig entries, MinDialLength and ShortFaxTemplate, that were originally added in 6.80.50

Cleo Technical Support

Standard Cleo Technical Support is available from 8am - 5pm 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: <http://www.cleo.com/support/request.php>.
- Call us:
 - 1-815-282-7894
 - US (toll free): 1-866-444-CLEO(2536)
 - UK: 02038653439