Cerify Automated Video Content Verification System
Release Notes for software version 7.8.2
077-0752-05

www.tektronix.com

Contacting Tektronix
  Tektronix, Inc.
  14150 SW Karl Braun Drive
  P.O. Box 500
  Beaverton, OR 97077
  USA

Cerify technical support is available on business days from 6:00 AM to 5:00 PM Pacific Time and from 9:00 AM to 5:00 PM Indian Standard Time at the following numbers:

- US/Canada toll-free   1-844-219-5329
- India toll-free   1800 3000 4835
- Europe* toll-free   00800-22554411
- Russia toll-free   810800-22554411
- United Kingdom   44 1344 39 2541

*Austria, Belgium, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland, and UK.

Alternatively, we can be contacted through email at the following address: cerify-support@tektronix.com.

Release Notes

These release notes provide the following information:

 - List of the new Cerify features available in software version 7.8.2
 - List of important defect fixes that have been made in version 7.8.2
 - List of known Limitations related to Cerify version 7.8.2
 - Change log of the changes from previous releases of Cerify

CAUTION. To prevent loss of data in the unlikely event of the database becoming corrupted, it is strongly recommended that you regularly back up the Cerify database. See the Database Backup section of the Cerify User Manual for details of how to do this.

Related User Documentation

The following user documentation applies to Cerify version 7.8.2:

  - "Cerify Automated Video Content Verification System User Manual"
    (English) Tektronix part number: 077-0352-12
  - "Cerify Automated Video Content Verification System Quick Start User Manual"
    (English) Tektronix part number: 071-2680-08
  - "Cerify Automated Video Content Verification System Software License
    Notices" (English) Tektronix part number: 001-1513-01

No Japanese user documentation is provided with this release.

Cerify version 7.8.2

General notes

This software release includes the following major features:
- Improvements have been made with respect to tests related to the MXF footer
  partition location and the Index tables location in the MXF file.
- MYSQL has been upgraded to version 5.5.39 to address MYSQL security
  vulnerabilities.
- System email notifications were being sent to the sender email address
  configured in Admin page. Now, receiver email address configuration option
  has been provided.
- Enhanced HA cluster stability for large clusters.

License dongles that are currently being used with Cerify version 7.8.1 can
be used with version 7.8.2 without needing an update. License dongles that are
currently being used with all other Cerify versions require an update of the
dongle prior to being able to use the new version. In this case, please make
sure to update your Cerify license dongle before installing v7.8.2 as your
Cerify system will cease to operate on v7.8.2 with the older license dongle
until you get the license dongle updated to v7.8.2.

Also note, all users with a valid Cerify Annual Software Maintenance contract
are eligible to receive the base features included in this version without any
additional cost.

Licensing for the optional HA (Supervisor high availability functionality) is
an additional cost. Please call your Tektronix Sales representative if you
wish to add HA feature to your existing Cerify system.

To obtain the license updates needed by your Cerify system to use this new
version, send the c2v file of your Cerify dongle to the following address:
cerify-asm@tek.com.

Cerify demo dongles need to be updated to version 7.8.2 in order to use the new
features.

Users upgrading from older versions do not need to export and re-import the
Cerify database. The upgrade of the database is performed as part of the
upgrade install except in the case where an existing non-HA version of
Cerify is upgraded to an HA Enterprise cluster option. In this situation,
an in-place upgrade is not available.

Product enhancements

- In the DV video template, the Field Order test now has a selection for
  "desired field order". Earlier. this was always set to BFF.

- MYSQL has been upgraded to version 5.5.39 to address MYSQL security
  vulnerabilities. These security issues were found in MYSQL versions
  5.5.31 and earlier.

- Improvements were made with test with respect to identifying the
  'footer partition' location in mxf file.

- Test enabled to confirm the Index table appears before respective Essence
  container in mxf file.

- Enhanced HA cluster stability for large clusters.

- System email notifications were being sent to the sender email address
  configured in the Admin page. Now, a receiver email address configuration
  option has been provided. This receiver email address is not a mandatory
  field in the Admin page mail settings section. This field also accepts
  multiple email addresses (separated by comma operator). Email address
  format validation will be done for the email address(es) mentioned in this
  field. If the user hasn't configured receiver email address, then these
  emails will be delivered to the sender email address itself.

- Emails are now sent when the standby supervisor goes down.

- Since MYSQL bin files are very large, the log files are now disabled for
  standalone and enterprise cluster installations. Only HA Cluster
  installations will have log files.

- HASP runtime has been upgraded from v6.60 to v6.64 based on a
  recommendation from the Dongle Vendor.

Defect fixes

- Addressed the issue of alerts not being raised for a baseband field order
  test that was expecting bottom-field-first in a DVCPRO video with the
  stream flags indicating bottom-field-first and the estimated baseband
  field order was top-field-first.

- Addressed Cerify Security vulnerabilities.

- Addressed the issue in which Cerify indicated that DPP Compliance failed
  if the secondary and tertiary language ULs were not present.

- Unexpected system fatal error indicated while processing some MP4 files.

- There were differences in the results in Cerify between v7.6 and v7.7
  for "Cross Track R128 Relative Gated Loudness".

- Some MXF files were taking too long to process during ALC and re-wrapping.

- A processing error was seen with some of the SD files with D10 Video and
  AES audio in a MXF file.

- A Shim version mismatch alert was displayed with the alert title as unknown.

- MXF Rewrapping failed when the track ID was not enabled in the multi audio
  streams having AIFF audio.

- Addressed an issue where media test units were not joining reliably after
  fail-over in the case of high available cluster.

- Addressed the issue where UI was not showing correct status of primary
  and backup supervisor immediately after the fail-over.

- Addressed the limitation where "Microsoft .NET Framework 4.0" was required
  to be installed on the Cerify system for the DPP application to work.

General limitations

This software release has the following general limitations. Please check
the Tektronix Web site (www.tek.com/software/downloads) for any updates to
the Cerify software.

Single File Processing
  - When a user tries to process the QT streams through Single file
    processing, cerify will not identify the containing audio and video.
    To work around this issue, a "Preprocess the file to retrieve content
    information" check box was added. If a user disables this check box,
    cerify will allow the user to create his/her templates.

SMB mediaset processing in Service mode
  - To ensure file processing from SMB mediaset works as expected in
    service mode, please make the following changes to Cerify service:
      - From the services panel, right-click on Cerify and select
        properties. In the resulting properties dialog, go to the logon
        tab. Select the "This account" radio button and enter the
        "user name" of the administrative user who installed Cerify
        using the browse button.
      - Enter the "password" in the other two boxes.
      - Click "OK" to save.
      - Stop and start the Cerify service.

Job Processing issue
  - Occasional job processing errors are observed while processing large
    SStP files with Container template, Video template (with all quality
    tests enabled) and Audio template (with loudness correction enabled).
    This issue is especially observed when Audio Loudness Correction (ALC)
    is enabled in the Audio template.

The following types of files will be copied onto the local disk before
being processed if the file resides in a remote location (SMB/FTP location):
  - MXF files with Dolby E interleaved audio tracks or D10 audio tracks.
  - For Selective Processing
  - VC-3/JPEG 2k
  - Rewrapping after ALC

To execute and get alerts of the Guardband test or CC Test, the Syntax test
needs to be checked.

Selective Processing
  - Due to "Selective Processing", the following attributes are not displayed
    for the tracks, which are not selected for processing in the profile.
    Because, these attributes are calculated at end of a stream.
    Audio attributes:
    - Length (play length), Bit rate, Length (bytes)

  - When only a container template is selected and no audio/video templates
    are selected for processing, the length (play length) and bit rate
    attributes will not be available under "Container Info".

  - When only a container template is selected and no audio/video templates
    are selected for processing, the tests related to play length (duration)
    and bit rate (i.e., tests in container templates like Play Time, Bitrate,
    Audio/Video duration and Clip Duration) will not be available, and if
    selected, will result in alerts being raised.

  - If the video template is not available, then teh video time code will
    not be available for use in alerts.

Blockiness Test
  - The test fails to detect blockiness if the video frames contain
    mixed-size blocks and/or "block boundaries are not aligned".

Tape Dropout Artifacts Test
  - The test fails to detect dropout artifacts if the structure of artifacts
    does not fit into the "2-D dot matrix like pattern" or the
    "horizontal/vertical lines pattern".

AES Bit rate
  - The audio bit rate shown under the Audio Info section for AES audio
    tracks is not the bit rate of AES audio data, but is the bit rate of
    WAV audio data (extracted from AES packets).

QuickTime rewrapping after loudness correction
  - Only the RIFF and AIFF audio formats are supported for rewrapping into
    QuickTime files with reference to external essences.

HA Cluster
  - An HA cluster might not work correctly if there is a momentary network
    outage (less than 10 seconds). In such cases, you might need to restart
    the cluster.
  - An HA cluster will not work correctly if the dongle is removed and
    reattached (both on primary and secondary supervisors) or if the dongle
    is missing in any of the supervisor systems.
  - The in-place upgrade of the database will not be performed when an
    existing non-HA version of Cerify is upgraded to an HA Enterprise cluster.
    So while upgrading your Supervisor or standalone Cerify to HA Supervisor,
    please perform the following steps:
      - Make a backup of the database using the database backup option
        in the Admin page.
      - Perform an installation upgrade by executing the Cerify installer.
      - Restore the previously backed up database using the database restore
        option in the Admin page.

MXF rewrapping after loudness correction (Op1A and OPAtom1A streams)
  - Rewrapping is not supported for an MXF file containing mixed
    SMPTE 337M/PCM audio tracks.

Audio loudness correction
    The following limitations are imposed by the Dolby Professional Loudness
    Correction engine:
        - AC3:
            - Sampling rates supported: 48 kHz
            - Number of channels supported: 1 to 6
            - Audio loudness correction library fails when trying to correct a
              silent audio stream
        - WAV (RIFF/ RF64/ BWF) limitations:
            - Sampling rates supported: 32, 44.1, or 48 kHz
            - Bit depth supported: 16, 20, or 24
        - Dolby E limitations:
            - Maximum Dolby E frame rate supported: 30 fps
            - Bit depth supported: 16 or 20
            - Must contain Dolby Digital metadata for each program