Lightspeed Live Capture Release Notes
Capture V2.1 – November 7, 2017

About This Release

These release notes describe the major release of Lightspeed Live Capture v2.1 and can be installed on any Lightspeed Live Capture servers running Live Capture V2.0 or later. This release includes the following new components:

- Vantage v7.1.172.234190 Core
- Vantage_7.1.172.234190_Web_Applications_Setup
- Capture ComponentPac 7.1.0.233919
- LightspeedLiveStream_2.0.3387

If operated as part of a Vantage/Capture domain, Vantage must be at v7.1. Refer to Vantage v7.1 Release Notes located on the [Vantage download page](#).

New Capture Features, Improvements and Fixes in this Release

The following new features and improvements are included in this release:

V2.1

- **New** – Added support for Avid Interplay Advanced Encoder and Notify Service MOB ID generator for direct Interplay check-in workflows. Requires optional purchase and license. Option part code - **LS-LIVE-AVID-OPT**
- **New** – Added support for Complete Tape capture regardless of broken control tracks, missing time code, video hits, and other errors (CAP-1024)
- **Improvement** – Updated and improved the way Timecode override is used. Now allows the user to turn time code override on or off, and set Drop/Non-Drop Frame characteristics directly from the Tape UI (CAP-1502)
- **Improvement** – Add an RS422 frame delay adjustment parameter to the Live Capturer Web API's START command. This parameter can be used to adjust RS422 frame timing when capturing from a VTR. (CAP-1441)
- **Improvement** – RunOn rules now force downstream actions to run local to the capture server when local drive letter output locations are used. (CAP-1386)
- **Fixed** – An issue where the folder output location element in a Web API XML response could contained an illegal character. (CAP-1375)
- **Fixed** – Several issues causing Capture and Tape UI instability when multiple workflows were active and displayed on remotely connected Capture/Tape portal clients. (CAP-1382, CAP-1477, CAP-1481, CAP-1494, CAP-1532, CAP-1555, GIR-13295)
- **Fixed** – An issue causing Capture Portal instability when an input format is switch while a workflow is active and displayed in the UI. (CAP-1529, GIR-13295)
- **Fixed** – An issue causing fatal import errors when editing growing XCDAM HD422 1080i50 files in *Adobe Premiere Pro CC.* (CAP-1526)
- **Fixed** – An issue causing RS422 Status response delays when sending Sony 9-pin commands to a VTR via the Lightspeed Live Capture's Web API. (CAP-1548, CAP-1525)
- **Fixed** – An issue where an Address Book location with overwrite option enabled did not overwrite the existing file. (CAP-1224)
- **Fixed** – An AVC-Intra 100 video artifact issue when capturing certain types of tape based media. (CAP-1320)

- **Fixed** – An issue capturing PAL material from a VTR causing a one frame offset. (CAP-1433)
- **Fixed** – An issue causing workflows to be omitted from the Tape Capture UI when a Live Capture server was removed from the network and restarted. (CAP-1559)

Important Note regarding known Adobe Premiere Pro CC issues
- *Adobe Premiere Pro CC for Mac OSX* has known issues with importing growing MXF OP1a files and with QuickTime Open files containing DNxHD. Fatal import errors can occur. Therefore, these type of media file should not be used until Adobe rectifies these issues.
- *Adobe Premiere Pro CC for Windows* can fail to decode and display Closed Captions contained in an MXF OP1a 436M track. If this behavior is encountered deleting the Media Cache for the edit project can fix this issue.
  - The *Default location of the Media Cache is C:\Users\<username>\AppData\Roaming\Adobe\Common\Media Cache Files on Windows. There should be a .prmdc file associated with the project - close the project, delete .prmdc file, relaunch project, re- import MXF.*

V2.0.3 with Capture ComponentPac 7.0.5
- **New** – Added new and improved file creation method. Files can now be created at the time a workflow's job starts. This allows more flexibility with naming and setting an output location.
- **New** – Added new codecs – XAVC 100 and Uncompressed 10-bit SD/HD
- **Improvement** - Added new Web API START command parameters for passing a Name and Output folder location to a workflow. The Name parameter can be added to the output filename via the Base Name token
- **Improvement** – Schedule Trigger – A calendar's event name can now be added to the filename via the Base Name token.
- **Improvement** – Added DNxHD to QuickTime 'Open' container.
- **Improvement** – Improved menu options and controls within the Tape Capture UI
- **Fixed** – An issue where QuickTime 'Open' captured files intermittently failed to copy in open Copy mode.

V2.0.2 with Capture ComponentPac 7.0.4
- **New** – Adds support for QuickTime 'Open' container with ProRes codec. This new container is available within the Capture Action's Primary output. QuickTime 'Open' files can be opened for playing or editing as they are being captured.
- **New** – Allow QuickTime 'Open' files to be used in Vantage 'Open' Workflow mode. Particularly with the Copy action.
- **New** – Added Timecode override to Tape Action configuration.
- **Improvement** – Improved Tape Capture UI .
- **Improvement** – Modified the performance of MXF OP1a RDD25 Proxy output files allowing immediate playback from within Switch v4.0 and other media players as these files are being captured and are growing.

V2.0 with Capture ComponentPac 7.0.3
- **New** – Added a completely new Tape Capture origin action and HTML5 browser UI for capturing from a VTR under RS422 control. Including:
  - Support for metadata labels and variables
  - Full VTR transport controls with keyboard shortcuts
  - Audio meters with 8 selectable stereo pairs.
  - User accounts with password protection to protect against unauthorized input and application access.

> **Important Note** – The VTR Trigger has been removed from the Capture Action. Tape capture via RS422 control can now be done using the Tape Action and the new Tape Capture UI.

- **New** – Added MPEG2 Transport Stream container with Manzanita multiplexing. Additional licensing required. Live Capture option code - LS-LIVE-TS-OPTION
- **New** – Added MPEG 2 HD and SD codecs
- **New** – Added Audio channel mapping control
- **New** – Added time code override to the Capture Action controls
- **New** – Added support for additional delivery options – S3, FTP, SFTP
- **New** – Added email notification control
- **Improvement** – Added support for Lightspeed Live's RTMP and Transport Stream source inputs for standard frame size and frames rates.
- **Improvement** - Added loss of signal (LOS) indicator into Capture Portal
- **Improvement** – Added additional control to burned-in time code control allowing for control of X and Y coordinates, font size and color, and background color and opacity.
- **Improvement** – Workflows capturing MXF OP1a can now be used in Open Workflow mode.

Requirements
- This update can be installed on any Live Capture v2.0.x systems.
- Requires Nvidia 385.08 driver update.

Updating Lightspeed Live Capture server
Please refer to the update instruction document included with the Live Capture v2.1 Update package. Contact Telestream Technical Support for more details on upgrading a Lightspeed Live Capture server.

Known Issues
The following are known issues in this release.

> **Important Note** – The Windows IIS web server allows for a set limit of connections to applications it is hosting. Over an extended period, if the Capture Web Portal is opened within multiple browsers, the IIS web server may reach the total connection limit resulting in Capture thumbnail(s) not being displayed in the Web Portal. To avoid this situation, close any browser connected to the Live Capture Portal that is no longer being used. (LIVE-2398)

- 608 Closed Captions encoded into a 720p59.94 MXF OP1a 436M do not play correctly in Switch. (CAP-1563)
- Leaving the Filename Pattern Editor blank will result in no output file being produced. (CAP-1512)
- Capturing from the Live Capture advanced record dialog that does not contain a duration or end time code will result in no file being capture. (CAP-1485)
- Modifying the start time in the Live Capture advanced record dialog to a time in the past may result in a 'Pending Record' scheduled for the next day. The workflow can only be stopped by deactivating the workflow. (CAP-1483)
- If you have Tape Action workflows that have had the Timecode override parameter bound to a variable and you wish to use the new Timecode override improvements, then each respective Tape Action will need to be modified to include an additional Timecode Override variable to

allow for this feature to be toggled on or off from the Tape UI. (CAP-1608)

- Switching an input's format when the Capture portal UI has a Preview window open and displaying the input's source can cause the Preview window to close. The Preview window can be re-opened after the respective input has reinitialized to the new format. (CAP-1525)
- A heavy capture load combined with 8 or more workflow thumbnails being displayed on a Capture Portal UI page can cause status responses to be delayed resulting in a workflow data displaying None/None/None instead of the Source Input data (CAP-1382)
- The capture progress indicator does not function when performing a Complete Tape capture since the duration of the capture is unknown. The user can observe the timecode display to confirm the current state however with tapes that have no timecode or are without a control track the true state cannot be known. Direct observation of the VTR may be necessary. (CAP-1527)
- After upgrading to Capture 2.1 the Chrome browser cache on all systems that will be connecting to the Capture/Tape UI page needs to be cleared.
- Direct links to the Tape Capture UI can cause a connection error. If a bookmarked or shared link to the Tape Capture UI is clicked after the browser cache has been cleared or on a system that has never opened the Tape Capture UI, the user may see an error stating "Unable to establish a connection to the Live system". Always open Capture and Tape UI pages by navigating to the main Portal UI page first. The main Portal UI page can be accessed at http://[HOSTName]/Vantage.
- When performing a 'whole tape capture' setting "Abort on Discontinuities" or "Use Duration Over Markout" options within the Tape Action can cause the whole tape capture to abort prematurely and may cause the workflow to become unresponsive. (CAP-1619, CAP-1620)
- From within the Manual control UI if the stop button is clicked and another record is immediately started, before the stop capture's file is completely written to disk, the ingest card can enter an unpredictable state requiring a system re-boot to recover. (GIR-1594, CAP-1473)
- When the Leader and 'Create output file(s) on job start' options are enabled you must set the Capture Action's Time Shift value to be 5 seconds longer than the duration of the Leader media file – (CAP-1401)
- RTMP sources added in Stream UI do not show in Capture Inventory if a File loop source is also present – (CAP-1418)
- Uncompressed outputs are always 10-bit regardless of the source bit depth settings – (CAP-1453)
- 708 captions not being preserved in QuickTime Closed DNxHR/Uncompressed – (CAP-1455)
- Capturing multiple concurrent high frame rate 1080p into uncompressed 10-bit has restrictions depending on the I/O capacity of the output locations drive system. See the *Lightspeed Live Capture Resource Calculator* chapter in the Lightspeed Live User Guide for details.
- Capturing of Uncompressed UHD/4K is currently not supported. (CAP-1417)
- The Tape Capture UI can display incorrect capture state information when the UI is refreshed after a Loss of Signal failure. (CAP-1135)
- 4K/UHD captures using DNxHR 444, HEVC, x265, x264 AVC-Intra at high bit rates and frame rates with multiple audio channels can overload available processing resources causing job failures. Review the Resource Calculator section of the Lightspeed Live User Guide (CAP-536/506).
- Switching an active source input signal from 1080p59.94 8-bit 4:2:2 YUV to 10-bit 4:2:2 YUV will cause your system to lock up (CAP-590)
- The file size of some capture outputs may display 0K until recording is complete (CAP-53).
- Clicking on *Record* within a Manual trigger's *Advanced Record* dialog prior to the current time code being fully populated will cause a recording with a start time code of 00:00:00:00. Always wait until the time code displays the current time code before selecting record. (GIR-14219).
- The Live Capture Portal Web App's Google Chrome browsing data must be cleared (both "Cookies and other site and plugin data" and "Cached images and files") after upgrading. If

browsing data is not cleared, then browsing to the Live Capture Portal Web App may show an all-white page or old data (GIR-14040).

- If a Capture workflow is deactivated while capturing, the job's status will display "Complete". The capture file will remain in the captured folder and will be playable. (CAP-143).
- Only 16 web service jobs can be queued up for any one workflow (CAP-530/CAP-816).
- When a Preview is first opened in the Lightspeed Live Capture Portal Web App, the Time Shift slider can't be moved back in time until the Time Shift buffer has fully loaded (GIR-13259)
- If the Time Shift slider is moved before the current timecode is displayed, the location where the play head is when it loads becomes the current time. (GIR-13351)
- Scheduled events containing the following characters, `*|\:;"'<>?/, will cause a workflow deactivation error (CAP-837) and will cause an exception to be thrown by the CaptureRecord.EXE process. This process remains active and will need to be stopped manually using Task Manager (CAP-838).
- Using an 'Open' Copy with a growing TIFO where the capture is stopped early will result in the copied TIFO file retaining the original duration (CAP-469).
- Deselecting a Capture Action output's video or audio selection box will cause no files to be captured (CAP-848).
- The Capture Web Portal's Preview Panel video display appears to freeze on a single frame. Refreshing the browser window clears this issue. The Capture job's output files are not affected (CAP-842)
- If using the Schedule calendar mode and a Live Service modification is required, always re-start the Service. Simply toggling the Service's Maintenance mode does not re-schedule events on your calendar. (CAP-841).
- Calendar Event names that contain a backslash (\), comma (,) or semicolon (;) will cause a backslash escape to be added to the Event name. Example: *Output, Name* will be changed to Output\Name (CAP-840).
- 4K video captures fail when capturing X264 at 50fps (CAP-512).
- Capture and Tape action inspector will prevent illegal characters (`*|\:;"'<>?/) from being entered into an output's file name. If these characters are passed into a Tape Action's Base Name they will be removed from the file name.
- If a workflow name contains illegal characters (`*|\:;"'?/) it will fail to activate and report an error (CAP-226)
- When capturing from a Schedule trigger the Workflow Designer's Capture Action status can report incorrect values for elapsed time, remaining, total and speed numbers (CAP-930)
- Refreshing the Tape Capture UI will clear any data contained in the Clip Edit panel. All data already logged is preserved. (CAP-994)
- Burn-in timecode with 59.94 sources can display repeats of even frames (CAP-1057)
- When writing an output to a CIFS share the UI will can show the capture as complete if the network connection is lost (CAP-1074)
- Currently unable to capture TIFO or MXF with AVCI codec from RTMP sources (CAP-1096)
- If an EDL is submitted to a Tape Capture that is currently capturing the job/tape entries are not created (CAP-1148)
- Submitting an EDL with clip names using special characters (&"<) causes Tape Capture to fail (CAP-1152)
- If the MARK-OUT timecode is beyond the end of the tape the capture process will remain in recording mode for the duration. (CAP-1156)
- Submitting more than one EDL concurrently causes jobs to fail (CAP-1160)
- The User is not prompted to insert tapes that have no name. (CAP-1164)
- Occasionally the preview and/or RS-422 status will not come back after saving a change in the source settings within the Capture Inventory. (CAP-1257)
- When both "Record Duration" and "Abort on discontinuity" are enabled the duration setting takes precedence. (CAP-1260)

- Preview in Tape Capture portal may intermittently exhibit AV synchronization issues depending on network latencies. (CAP-1323)
- MPEG2-TS time code is stored in SEI User Data. Most media players will not display this time code and will show a timecode starting at 00:00:00:00 that does not advance. (CAP-1324)
- Live Capture Portal Web App: The Stop button of the channel thumbnail previews may not be properly grayed-out when the channel is in the Pending Stop state. (GIR-14124)
- The Live Capture Portal Web App does not allow the user to click the Stop button on the live preview when the channel is in the Pending Record state. The Stop button can be clicked on the thumbnail preview when in this state. (GIR-14212)
- When a cable is not connected to an SDI input (and the source channel shows color bars), recording the channel will display the elapsed time at half speed in the live preview of the Live Capture Portal Web App. (GIR-14196)
- Lightspeed Live Capture does not currently support the AJA Corvid HEVC optional input card (CAP-665).
- Setting a Start time Code that is less than 60 seconds from the current time (in the past) results in a recording starting immediately. Setting a start time code more than 60 seconds from the current time (in the past) results in a job that will be recorded in 24 hours (CAP-429).
  - **For example**:
    - If the current time code is 02:30:00;20 and a start time code of 02:30:00;18 is used within the job, recording will begin immediately at the current time code of 02:30:00;20.
    - If the current time code is 02:30:00;20 and a start time code of 02:29:00;18 is used within the job, recording will begin at the current time code of 02:29:00;18 nearly 24 hours later.
- **Free Run TimeCode behavior**—When the Free Run TimeCode option is enabled, and the desired timecode is not detected or goes away, the timecode will attempt to Free Run from the last timecode received. In the case where the desired time code goes away and then actively returns, time code anomalies may occur for several frames before the time code is re-synced (CAP_604).