

## About this Release

- Stanza 3.0.3065 (Windows) / Stanza 3.0.1910 (Mac ARM)

## Installation Instructions

### *If you do not currently have a Stanza license key:*

- In a browser, navigate to the [Telestream Stanza product page](#).
- Click the Request Trial, fill out the Stanza trial request form.  
*Telestream will email you a link to a web page for the Stanza installer application, and an activation key for Stanza.*
- Or contact our Sales department at (877) 681-2088 or email: insidesales@telestream.net

### *Once you have obtained a Stanza license key:*

- Navigate to the Stanza Support webpage and download the Stanza installer.
- Click Run to start the Stanza Installer.
- Check the acceptance box and click Install. Stanza displays a progress bar, and then a completion dialog.
- Wait for the installation to complete successfully. (Note: The Mac installer has some additional steps you must follow if this is the first time you're installing Stanza.)
- Open <http://localhost:7000> in your Web browser.
- Click the red license key button toward the top-right of the screen, near the License, and enter your activation key.  
See the License button on the screenshot in Project Layout.  
When Stanza is activated, Stanza changes the color of the key icon to green and displays the word Valid under the icon.
- After Stanza is activated, clicking on the license dialog displays the license activation state and expiration date. You can deactivate Stanza from this window when you want to transport your license to another computer.

## **!!! IMPORTANT !!! Nvidia Driver Upgrade**

- We recommend Nvidia driver version 553.09 or 573.73 to support Stanza AI and all GPU features. Blackwell (RTX 5000 gaming series or RTX Pro Blackwell) cards must use the 573.73 driver. These two versions are also recommended for use with Vantage 8.2 and 8.3 respectively. If you are running older drivers, you will experience issues with Stanza AI features after updating to Stanza 3.0.

## **!!! IMPORTANT !!! Database Version Upgrade**

- If you're upgrading an existing Stanza installation older than version 2.3, on the first startup Stanza 2.3 or later will upgrade your database schema. A backup copy will be saved before the upgrade. For most users, this upgrade should take at most a few minutes, however it may take longer if your database is multiple GB in size and/or contains thousands of projects. During this upgrade it may appear that the Stanza web service is not responding, this is normal. **Do not**

**restart or shut down the server until the Stanza UI can be accessed successfully via a web browser.**

- If you later need to downgrade back to a version older than 2.3, you will first need to run a command to downgrade the database schema BEFORE uninstalling 2.3 or later, otherwise the database won't work correctly in older versions. See **Database Downgrade** section below for details.

***Installation Note for using Speech to Text transcription or Translation features on Air Gapped servers:***

These feature require several files which will automatically download on first use. If your Stanza installation has internet access, no special action is needed. However, if your Stanza system is not connected to the internet or is behind a restricted firewall, you must manually copy these files before you can use these feature. Please refer to the "Speech to Text / Translation Additional File Downloads" section at the end of this document, or the User Manual, for more details.

***!!! IMPORTANT !!! Mac users***

The minimum Mac OS version for Stanza 3.0 is Mac OS 15 (Sequoia).

Intel CPUs are not supported in Stanza 3.0.



***Windows Single User:***

- Windows 11 or Windows Server 2016/2019/2022
- Minimum: 4 core CPU (2019 or later model) / 16 GB RAM required  
Recommended: 8 core CPU (2019 or later model) / 16+ GB RAM required

For GPU accelerated video encoding and AI processing:

NVIDIA RTX 3000/4000 series GPU w/8GB VRAM (see “GPU Acceleration” section for details)

Nvidia driver version 553.09 or later

***Mac User:***

- macOS Sequoia (15) or Tahoe (26)
- Minimum: M-series Apple Silicon CPU with 8GB RAM (Intel CPU not supported)
- Recommended: 16+ GB RAM  
Hardware accelerated video encoding and AI processing on Apple Silicon

***Windows Multi-User Server:***

- Windows Server 2016/2019/2022
- Minimum: 12 core CPU (2019 or later model) / 24 GB RAM  
Recommended: 24+ core CPU (2019 or later model) / 32+ GB RAM (DDR4 or higher)
- For GPU accelerated video encoding and AI processing:  
NVIDIA RTX 3000/4000 series GPU w/8GB VRAM (see “GPU Acceleration” section for details)  
Nvidia driver version 553.09 or later  
(2) or more GPUs recommended for simultaneous playback and AI processing
- Recommended: Telestream Stanza appliance with dual CPU / dual GPU
- High performance access to storage required (1+Gbps)
- HTTP or HTTPS ingress traffic
- Connect multiple servers in load balancing setup for more sessions

***Clients:***

- HTTP/HTTPS connectivity (route-ability) to Stanza server (Locally, or via VPN)
- Chrome version 120 or later recommended

**API additions**

- Added API endpoint to move captions to a specific 608/708 line number 1-15, top, or bottom. (STANZA-1429)

**Fixed in Version 3.0.1**

- Fixed an issue with translation results becoming out of sync over time on longer videos when running AI translation on Windows. (STANZA-1511, STANZA-1501)  
Note: AI Translate is designed to adjust times slightly from the original times to improve reading speed and cadence when the translated text is longer or shorter than the original, so it's expected that timing will be slightly different from the original. This issue addresses a major out-of-sync bug which was clearly not intended.
- Fixed issues where Stanza 3.0 speech-to-text was outputting increased hallucinations in some languages (e.g. Italian), or in specific customer files, compared to Stanza 2.6. (STANZA-1499)
- Fixed issues with speech-to-text failing with "SttRunner abnormal exit code" when running on systems with multiple GPUs of mixed types or on certain driver revisions. (STANZA-1500)

**New Features in Version 3.0****Language Translation**

- Automatically translate captions and transcripts into multiple languages for global content delivery.

**Dual Program Comparison View (Split Screen View)**

- Compare two programs or caption files side by side for faster QC and editing.

**Single Sign On (SSO) via Keycloak / OpenID**

- Simplified and secure user access through enterprise authentication integration.

**Fixed in Version 3.0**

- Fixed an issue when importing then exporting italicized, right positioned 608 captions, sometimes the column position was off by 1 and as a result the 2<sup>nd</sup> to last character was cut off in the exported file. (STANZA-1472)
- Fixed "No workers available" error when using Built-in authentication and setting RequireHttps mode to true. (STANZA-1452)
- Fixed worker process expiring prematurely after jobs had been waiting in the queue for a long time. (STANZA-1481)



- Fix missing time codes when importing TTML where each <p> element was wrapped in a <div> and the begin/end attributes were on the <div> (STANZA-1484)

### **Known Issues in Version 3.0**

- When setting a User Defined Timecode with no video loaded in the project, please select the frame rate before entering the time code. If you try to set the time code before setting the frame rate, you may see the time code display "NaN". This will be fixed in a future release. (STANZA-1493)

## Fixed in Version 2.6.1

- Fixed an issue with video playback from cloud storage. (STANZA-1450)
- Fixed a UI license status issue after activating new license types. (STANZA-1447)

## New Features in Version 2.6

### *Improved Stanza AI Speech to Text Models and Features*

- Added new models for UK/British/Global English and Canadian English for higher accuracy and correct regional spelling. (STANZA-1425)
- Added settings to standardize the formatting of music and non-verbal cues to your preferred format, or to omit them entirely. (STANZA-1302)
- Improved timing model fills small time gaps between captions for better continuous flow. (STANZA-1390)
- Fixed using a long Special Vocabulary (initial prompt) text could cause increased hallucinations or missing text in Stanza 2.5 compared to the results from version 2.4 or earlier. (STANZA-1432)
- Fixed improved hallucination detection was sometimes too aggressive and deleted actual spoken dialogue. (STANZA-1389)
- Captions that fit on one line will no longer sometimes be word wrapped across two lines. (STANZA-1390)

### *UI Enhancements / Quality of life improvements:*

- Added keyboard shortcut to insert music note at cursor position when editing text, or surrounding music notes when a row is selected (default is Ctrl-M, can be modified). (STANZA-1371)
- Audio playback during single frame stepping is now disabled by default but can be re-enabled under Preferences. (STANZA-1407)

### *Imports*

- Added ability to import TTML wrapped in op1a MXF such as IMF or DCP containers. (STANZA-1409)

### *Exports*

- Added new DVB Teletext export, which supports multiple tracks/languages. (STANZA-1424)

### *API Additions*

- POST /api/projects/{projectId}/update-project now allows you to only specify the fields you want to update (rather than all fields), and additionally allows you to update some fields that previously couldn't be modified, including: selected timecode track, user-defined starting timecode, etc. (STANZA-1426)

- POST /api/projects/add-project now allows you specify a selected timecode track and user-defined starting timecode (STANZA-1439)

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**Stanza**

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- POST /api/projects/add-project now allows you specify a selected timecode track and user-defined starting timecode (STANZA-1439)

- Fixed decoding only the top left quarter frame of some ProRes videos on Windows. (STANZA-1407)
- Improved reliability of single frame stepping. (STANZA-1407)
- Using Reformat Rows, then using Undo followed by a Redo, could result in the text rows being out of order. (STANZA-1325)
- Fixed TTML language set in the Program settings was not being passed through to the exports. (STANZA-1328)
- Fixed being unable to select or change timecode track settings until the page was refreshed. (STANZA-1421)
- Fixed User Defined Timecode Track start offset not being used for speech to text or auto time stamp. (STANZA-1435)
- Fixed closing or navigating away from a project was causing the selected timecode track to be forgotten. (STANZA-1440)
- Fixed exporting to a network location could fail with an Unauthorized Access Exception. (STANZA-1434)

### **Known Issues in Version 2.6**

- In Stanza 2.5, using a long text for the Special Vocabulary (initial prompt) in speech to text settings had been observed to cause increased hallucinations or skipped/dropped text in the results, compared to using the same prompt in Stanza 2.4 or older versions. Stanza 2.6 includes fixes which improve the results. However, if you find that you are still getting hallucinations or missing text in your speech-to-text results and you are using a long text for your Special Vocabulary, try running it again with no Special Vocabulary (or the shortest possible text needed to recognize specific words) and see if that improves the results. (STANZA-1432)

## Fixed in Version 2.5.1

- Fixed an issue that inadvertently changed the default database location when upgrading from an older version on Mac. (STANZA-1396)
- Fixed a performance optimization build setting on Windows. (STANZA-1396)

## New Features in Version 2.5

### *Improved Stanza AI Speech to Text Models and Features*

- Updated local Stanza AI speech-to-text engine now has improved accuracy, performance, and reduced chance of hallucinations or dropouts occurring after music or silent sections of the video, such as commercial breaks. (STANZA-1349, 1350)
- When the project is in CEA-608 mode, any non-608 compatible characters output by the speech-to-text engine will be automatically converted to a supported 608 equivalent or removed if no equivalent is available in CEA-608. (STANZA-1348)
- Improved reliability of the Suggested Vocabulary (Initial Prompt) feature, for example, adding a prompt without punctuation will no longer increase the chance of the output lacking punctuation. (STANZA-1356)
- Local speech-to-text will now honor a project setting of 1 line per caption row. (STANZA-1355)

### *UI Enhancements / Quality of life improvements:*

- J-K-L scrubbing now supports reverse video playback (without audio) and generally behaves more like other NLE systems. Spacebar toggles playback without resetting speed, while K toggles playback and resets speed to 1x. To play at slower than 1x speed, press L to start forward playback, then J to reduce speed. (STANZA-1106)
- Left/Right arrow to single frame step now plays 1 frame of audio while stepping. (STANZA-1106)

### *Exports*

- The export dialog will now select only the current Program by default, instead of all Programs from the project. (STANZA-1363)
- The subtitle burn-in converter is now significantly faster and takes advantage of Nvidia GPU NVENC or Apple Silicon hardware accelerated compression where available. (STANZA-1370)
- Export file name templates containing illegal characters will now automatically convert them to \_ (underscore) instead of truncating the filename or failing to export. (STANZA-1357)
- The TTML export now has a user-selectable file extension setting, and the frame rate settings have been enabled for all TTML profiles. (STANZA-422, 1377)

### *API Additions*

- POST /api/captions/{projectId}/{programId}/legalize to Legalize all the captions in a Program to conform to the project settings (e.g. CEA-608). This performs a combination of Convert Illegal

Characters, followed by a limited type of Reformat Rows, which only reformats rows which are too long for the selected project configuration. Unlike the normal Reformat Rows API, which reflows text across all caption rows, the Legalize API will only modify the rows which require adjustment and leaves the rest unmodified. (STANZA-1375)

- POST /api/projects/{projectId}/add-program to add new Program to existing project. The parameter is JSON with fields “name” (program name) and “ttml” (ttml document contents). If blank, the ttml document will be populated with a default template document. (STANZA-1330)
- POST /api/projects/{projectId}/update-project to update any/all fields of a project (except for the ID). See ProjectFullDto type in Swagger/OpenAPI for type details. (STANZA-1330)
- POST /api/projects/{projectId}/{programId}/update-program to update any/all fields of a program (except for the ID). See ProgramDto type in Swagger/OpenAPI for type details. (STANZA-1330)

## Fixed in Version 2.5

- Fixed SCC export could rarely include lines with duplicate timecode when exporting at 23.976fps, and a frame with two field 1 data packets included a 608 clear command in the first packet, and a start of caption command in the second packet. (STANZA-1365)
- Fixed missing subtitle text when importing TTML that included Metadata elements within the text of a <p> paragraph element. (STANZA-1369)
- Fixed an issue that could cause burn-in subtitle export subtitles to go out of sync with the video/audio for videos with an integer frame rate (e.g. PAL 25.0fps). (STANZA-1370)

***Convert Illegal Characters for 608:***

- Added new UI & API feature to convert characters that aren't supported by 608 into supported equivalents or a substitute character when no equivalent is available. (STANZA-1320)

***Integrations:***

- Enabled Speechmatics 3<sup>rd</sup> party speech to text service (STANZA-1212)

**Fixed in Version 2.4**

- Fixed Speech to Text resubmitting contents of a program when returning the first results, preventing it from working on a program with captions already present (Stanza-1326)

**Fixed in Version 2.3.1**

- Fixed speech to text results not appearing when using certain load balancing configurations (STANZA-1323)
- (Really) fixed "Path should start with alias indicator (::)" error when exporting burn-in subtitles with media stored on S3 (STANZA-1290, STANZA-1324)
- Fixed extraneous errors about redirecting index.html from filling the worker node log files when a browser window was left open and pointing to a worker node. (STANZA-1252)

### ***Improved Stanza AI Speech to Text Models and Features***

- Updated speech to text AI models with higher accuracy and much lower rates of hallucinations.
- You can now Mark In/Out a section of the video for Stanza AI speech to text. This is especially helpful for transcribing content with mixed languages or mixed spoken & music content. A future version will add this capability for Auto Time Stamp and cloud speech to text. (STANZA-788)
- Separate CUDA driver installation is no longer required for GPU acceleration on Windows. (STANZA-1304)

### ***Exports***

- Export SMPTE 428-7 Digital Cinema Distribution Master (DCDM) and DCP Interop (TI DLP Cinema) XML files for DCP packages (STANZA-982)
- TTML IMSC export now allows exporting paragraphs with overlapping times, if enabled. (STANZA-1294)

### ***UI Enhancements / Quality of life improvements:***

- Keyboard shortcuts for video playback controls, caption editing, and positioning now function when the cursor is in a caption text editor, provided the shortcut doesn't conflict with certain built-in text editing commands. This includes customized keyboard shortcuts. See Keyboard Shortcut Limitations section (below) for more details. (STANZA-1263, 1265)
- Added new vertical/horizontal positioning UI for placing captions on an exact row 1-15 and for more easily visualizing exactly which row and horizontal alignment each caption is assigned to. When using vertical rows 1-7 (top half of the screen), the row sets the top row of the caption, from which the lines grow down. When using vertical rows 8-15 (bottom half of the screen), the row sets the bottom row of the caption, from which the lines grow up. E.g. a 2-line caption positioned on row 2 will occupy rows 2-3, while a 2-line caption positioned on row 14 will occupy rows 13-14. This makes it easy to dodge a graphic that blocks rows 13-15 by setting the caption row to 12, and then it is guaranteed to not encroach on rows 13-15 regardless of how many lines of text are in the caption. (STANZA-998)
- The video playback controls for jump forward/backward (keyboard shortcuts and buttons under the video) can now have the jump time amounts customized in the Preferences menu. (STANZA-1111, 1266)
- Added optional reading speed (CPS) column (toggle under Preferences menu). The text color will be red when the reading speed is over the maximum set in the project settings, yellow if over 90% of the maximum, otherwise white. (STANZA-1105)
- Video time code tracks will automatically be selected/enabled by default (STANZA-1273)

- Added keyboard shortcuts for text Italics/Bold/Underline (Meta-I/B/U) and for text foreground colors (Ctrl-Shift-1 through 7) (STANZA-1108)
- Push/pull word will now adjust the caption times of the relevant captions proportionally based on the length of the captions. (STANZA-1050)
- TTML export dialog remembers previously used settings (STANZA-1294)
- GPU information is now logged on startup and when running GPU jobs (STANZA-1282, 1292)

#### **API Additions:**

- Added new APIs for changing the caption display mode (pop-on, roll-up, paint-on), setting the caption position (horizontal/vertical), and clearing text formatting (color, etc.) (STANZA-1239)

### **Fixed in Version 2.3**

- Fixed “Path should start with alias indicator (::)” error when exporting burn-in subtitles (STANZA-1290)
- Fixed “Path should start with alias indicator (::)” error when exporting to Vantage workflow with video stored on a network drive (STANZA-1281)
- Speech-to-text results are now saved to the project as they appear, so you can start to edit them immediately, even before the job is finished. Partial results are saved even if you cancel the job before it is complete. (STANZA-1120)
- Pasting multiple lines of plain text from programs such as Notepad will no longer delete lines of text after the first (STANZA-1258)
- Fixed “Disconnected” screen on initial connection when using user authentication (STANZA-1296)
- Unloading a video and then loading a new video will no longer cause the timecode to be stuck until the page is refreshed (STANZA-1273)

### **Known Limitations in Version 2.3**

- Importing 608/708 caption files does not map existing vertical rows to the new Row 1-15 UI, they are still mapped to custom regions as with previous versions. The imported positioning will be correct and match the CEA-608/708 spec, it just won't indicate the row number using the new UI. This will be addressed in a future update.

### **Keyboard Shortcut Limitations**

- Keyboard shortcuts which interfere with text entry or editing functions can't be used within text editors. For example, if you're using the default J-K-L keys for video scrubbing, those keys are needed for typing text in the text editors and thus can't be used for video playback controls when the cursor is inside a text editor. However, if you change your video scrubbing shortcuts to Ctrl-J/K/L instead, then you can use them both inside and outside of a text editor.

Keys that can't be used inside text editors include:

- Alphabet, number, or symbol keys (Unmodified or with Shift) – needed for typing text
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- Enter or Escape – needed to enter and exit the text editor respectively
- Shortcuts reserved by the browser or OS can't be assigned to any Stanza function.

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- Enter or Escape – needed to enter and exit the text editor respectively
- Shortcuts reserved by the browser or OS can't be assigned to any Stanza function.

### ***Export – Submit to Vantage Workflow***

- Added Vantage Workflows as an Export destination type. Configure Vantage workflows as export locations under Settings (requires admin access), then you can select them as a destination when exporting. Vantage workflows which require a media input will default to selecting the video file that is loaded in your Stanza project, and the attachment or secondary media input will default to your Stanza output file. Workflows which require additional metadata (variables, labels, etc.) will prompt you for the required fields in the Stanza UI when submitting. (STANZA-1159)

### ***Import – Faster Extract CC from Video***

- Added option “Skip reading video data” when extracting CC from video files. This will speed up the import of CC contained in a separate data track, such as a QuickTime CC track or MXF SMPTE 436m VANC data track. When this option is enabled, it will not extract CC data contained in the video data essence, such as MPEG-2 A/53 user data or H.264 A/72 SEI data.

### ***Import – TDS Caption files***

- Added import for TDS Caption file format (STANZA-954)

### ***UI Enhancements / Quality of life improvements:***

- The Projects list page now displays all queued/waiting jobs, not just running ones, and queued jobs can be cancelled before they start. (STANZA-1195)
- The default duration of a new caption is now configurable under Preferences (STANZA-1185)
- Pressing the Enter key will activate the text editor field on a selected caption row (and pressing Escape will exit the text editor) (STANZA-1219)
- The undo/redo history of projects will now persist after a server restart. (STANZA-508)
- The text editors will no longer word wrap caption/subtitle text when the browser window is resized to be too small, which gave a false impression of where the captions would be word wrapped. (STANZA-786)
- Changed the default project list sort to Updated date – most recent first (STANZA-1208)

### ***API Additions:***

- Added API to change text case (upper/lower) (STANZA-1197)
- Added API to get export location IDs (STANZA-1198)
- Speech to text and Auto time stamp APIs now automatically select a default audio track (same as when using the UI) and audio channels if they are not specified
- Get operation API returns operation progress and full export file path
- Improved return type details and required flags on several APIs in OpenAPI / Swagger

## Fixed in Version 2.2

- Fixed regression causing V-chip/XDS settings to not be applied to Embed 608/708 Captions export (STANZA-1201)
- Fixed regression importing SCC files with non-default frame rate had incorrect timing (STANZA-1209)
- Fixed regression importing EBU-STL files was not keeping the original hour offset (STANZA-1221)
- Fixed regression exporting EBU-STL files was not preserving colors and other styles because the intended DSC code was not being set. (STANZA-1226)
- Fixed timecode calculation when importing TTML files with frame-based timing and non-integer frame rate multiplier (STANZA-1205)
- Fixed inability to import most sidecar files when the Stanza service user account's Region / Language setting was set to format decimal numbers with a comma instead of a period for the decimal point (STANZA-1251)
- Fixed inability to assign keyboard shortcuts to Alt/Option + key combinations (STANZA-1250)
- Fixed watermark overlay not displaying the logged in user's name when using user authentication and the video encode was occurring on a worker node (STANZA-1215)
- Fixed Set Start Time button not taking the offset from the selected time code track (STANZA-1213)
- Fixed running speech to text on a MOV located in S3 with a QuickTime time code track selected (STANZA-1220)
- Fixed cancelling a running operation from the projects page would cancel the job, but it still appeared on the page until the page was refreshed. (STANZA-1181)
- Fixed MCC export was outputting to a folder named "filename/mcc" instead of "filename.mcc" (STANZA-1222)
- Fixed drag & drop of caption position in the UI was sometimes not working for certain captions, or not behaving consistently. (STANZA-1227)
- When user authentication is enabled and your session times out, you will now be redirected to the login page instead of a Disconnected screen (STANZA-1202)

## Known Issues in Version 2.2

- Avid AAF export is supported in the Windows and Mac Arm backends, but is currently not working in the Mac Intel x64 backend. (STANZA-1147)
- When using speech-to-text (local or cloud), if you cancel the job after some results have appeared, the partial results will appear in your project but they are not saved in the database. If you exit the project and come back later, the partial results won't reappear. If you cancel the



operation, refresh the page to clear the results. If you want the results to be saved, allow the job to run to completion. (STANZA-1135)

- When using speech-to-text (local) on the Windows backend, some languages may output incorrect Unicode sequences resulting in broken characters in the output. This will be addressed in a future update. (STANZA-1135)
- If you create a Physical media alias starting with a lower case drive letter (e.g. d:\Media ) as opposed to an upper case drive letter ( D:\Media ), then some tasks will fail with an error message "Alias path must start with ::". The workaround is to edit your location settings and change the path to start with a upper case drive letter. (STANZA-1193)



### ***Core architecture improvements for performance and reliability***

- Stanza now uses enhanced process isolation technology similar to Telestream Vantage to ensure long term reliability of the service and greatly improved resilience against malformed media files. Many improvements were made to the core architecture to improve system performance in video encoding and database access when under heavy load.
- The load balancing setup process has been made easier and more robust (see Load Balancing section below for setup instructions if upgrading from a previous version)

### ***GPU Accelerated AI Processing for Speech to Text and Video Encoding***

- In prior releases, GPU acceleration was only supported on the Telestream appliance server, and only video encoding was GPU accelerated. All users can now enable GPU acceleration for video encoding and/or AI processing for the new local speech to text feature. See “GPU Acceleration” section for details on hardware requirements and installation instructions. The officially tested and recommended hardware configuration is the Telestream Stanza Appliance server with dual professional GPUs.

### ***UI Quality of Life Improvements***

- The Export Results window now lists exports by their file name instead of by the export type.
- Many dialog boxes, such as the Import & Export dialogs, Reformat Rows, Speech to Text, etc. will now remember the last primary settings you used (unless you cancel).
- All buttons on the Formatting, Content, Timing, and QC toolbars now have tooltips.

### ***Move One Word Up/Down Shortcut***

- A new keyboard shortcut Ctrl-Comma and Ctrl-Period (Ctrl-< and Ctrl->) was added to move where the line break occurs one word at a time within the current text editor, while observing your maximum line length and maximum number of line rules.

### ***Toggle Capitalization Button***

- A new button was added to change selected caption rows or highlighted text between upper and lower case.

### ***WebVTT export settings***

- The WebVTT export now has all the same configuration options as Vantage and CaptionMaker, such as: Omit Cue Settings, Omit Style Tags, Merge Cues (merge split captions), Use Line Numbers, etc.

### ***API improvements***

- Added new API endpoints to make it easier to get the status of a single project or a single operation.
- The GET project(s) APIs now include the video file name/path in the results.
- The Add Project API now accepts all types of alias paths for subtitle files.



- Using Reformat Rows on a selected subset of rows will no longer move the selected rows to the end of the project. You'll no longer need to use Sort by Time to sort them back to the correct order. (STANZA-1122)
- Fixed cases where local speech to text could output negative duration short utterances which would prevent you from exporting until these were adjusted or deleted. (STANZA-1153)
- Fixed cases where Auto Time Stamp could output zero duration rows. (STANZA-1182)

## New Features in Version 2.0

### ***Speech-to-Text automatic transcription with local processing (no cloud subscription required)***

- Stanza now has built-in speech-to-text transcription feature that runs on your computer (no internet access required) and uses Machine Learning (ML) for state-of-the-art accuracy, supports most global languages, and features punctuation and smart text breaking and formatting. There are no extra fees or subscriptions required beyond the standard Stanza license. (STANZA-717)

As with any automatic transcription system, check the results and correct any mistakes before exporting or delivering the captions.

### ***Customizable Keyboard Shortcuts***

- You can now customize your keyboard shortcuts via the shortcuts dialog (press ? key). Customizations are saved into your local browser settings, so they are specific to that computer and browser login. A future Stanza update will support saving your shortcuts in your Stanza user account on the server. (STANZA-855)

### ***Adaptive Quality Video Playback***

- The quality and bitrate used for the video preview playback is now adaptive and will scale up and down on demand based on network conditions and server load. (STANZA-1064)

### ***Avid DS Subtitle Export***

- You can now import and export Avid DS subtitle files for use with the SubCap effect in Media Composer. (STANZA-1013)

### ***Stretch/Shrink Timecode by Last Caption Time***

- In addition to Stretch/Shrink by setting a Rate %, you can now apply a stretch/shrink (speed change) by lining up the first caption to the correct time, then finding the correct time for the last caption to start, then applying this new function. (STANZA-955)

### ***Mark In/Out Improvements***

- If you press Escape to clear the current caption selection (the bright blue highlighted row), you can now apply Mark In/Out to the caption for the current video time (the darker blue highlighted row) while the video is playing. Note that if you do not press Escape first, the Mark In/Out will apply to the selected (bright blue highlighted) row. (STANZA-1076)
- When applying Mark In/Out in a way that would cause an overlap with the previous or next caption row, the other caption will now be automatically trimmed to prevent an overlap. (STANZA-934)

## Fixed in Version 2.0

- Captions and timecodes not updating in the preview player until the web page was refreshed after unloading a video and then loading a different video. (STANZA-1091)
- The caption list was not automatically scrolling to follow with the video after starting video playback via a keyboard shortcut. (STANZA-1114)
- When switching between different Programs, captions from the previous program were sometimes still being displayed on the preview window. (STANZA-1102)
- Using Shift-Click to select a range of caption rows when the cursor was in the text editor of a different row could delete the text from that row. (STANZA-1121)
- Using Replace All when the cursor was in the text editor of a caption row could replace the text of that row with the text of a different row. (STANZA-1115)
- Importing EBU-STL files was always adjusting to a zero-based start time instead of using the original document time codes (STANZA-1096)
- Applying a font size change in % together with other style attributes was sometimes not applying the correct font size to the final output. (STANZA-832)
- Keyboard shortcut for Merge Caption on Mac browsers. (STANZA-1097)
- Playback of audio-only files (e.g. WAV files) on Mac arm64 backend. (STANZA-1140)
- Crash when opening a video from a network location or mounted drive that is no longer accessible on Mac arm64 backend. (STANZA-1133)

## Known Issues in Version 2.0

- Avid AAF export is supported in the Windows x64 and Mac arm64 backends but is currently not working in the Mac Intel x64 backend. (STANZA-1147)
- When using speech-to-text (local), if you cancel the job after some results have appeared, the partial results will appear in your project but they are not saved in the database. If you exit the project and come back later, the partial results won't reappear. If you want the results to be saved, allow the job to run to completion. (STANZA-1135)
- When using speech-to-text (local) on the Windows backend, some languages may output incorrect Unicode sequences resulting in broken characters in the output. This will be addressed in a future update. (STANZA-1135)

### ***Set Gap Times***

- Added a new feature in the Timing menu to set the minimum or desired gap time (frames) between subtitles. This can eliminate or expand gaps between subtitles to achieve your delivery requirements (e.g. minimum of 2 blank frames between subtitles, or 0 blank frames between subtitles, etc.)

### ***Export MCC files with multiple caption tracks and V-chip/XDS***

- When exporting MCC, you can now include multiple programs and map them to different caption channels as well as include V-chip and XDS data.

### ***Import MCC files with multiple caption tracks***

- When importing MCC, you can now select which 608 channel or 708 service to import.

### ***Export SCC files with captions in CC2/CC3/CC4***

### ***Auto Time Stamp now supports German language***

### ***Move End Time button***

- Similar to Move Start Time, you can now move all selected captions so that the primary selection (highlighted caption) ends at a specified time.

### ***Sort By Times for selected rows***

- The Sort By Times button now allows you to sort only the selected rows instead of the whole project.

## **Fixed in Version 1.7**

- Fixed several issues causing deleted or changed captions to still be displayed in the preview player during video playback due to stale old versions being present in the cache. (STANZA-1072, STANZA-1069, STANZA-1067)
- Improved performance when using Select All on large projects. (STANZA-1066)
- Fixed issues with importing very long source files. (STANZA-1071, STANZA-1065)
- Fixed issues with applying formatting changes on large projects. (STANZA-1070, STANZA-1061)
- Fixed missing timecode and user defined timecode options when no video file is loaded. (STANZA-1057)
- Fixed stutter in video playback when using CPU encoding on Windows (STANZA-1053)
- Fixed issues with using Cut & Paste keyboard shortcuts in various text fields other than captions, such as the file browser, export window, etc. (STANZA-1047)
- Fixed an issue that could clear the text from a caption cell if the cell was open for editing and your session experienced a disconnection from the server due to a network issue. (STANZA-1023)

- Audio track playback selections are now saved in your browser local data on a per-project basis so they are restored when reopening the project or refreshing the page. (STANZA-1016)
- Find/Replace now allows the replace field to be blank, so you can delete all occurrences of a word. (STANZA-1014)
- The password field is Add Network Alias is now hidden by default. (STANZA-1011)
- Fixed import and preview of some roll-up captions. You may need to re-import the caption source to see the improvements. (STANZA-1010)
- Improved translation of WebVTT positioning when importing WebVTT files. (STANZA-120)
- Fixed issues with Reformat Rows not inserting line breaks in the correct places. (STANZA-1077)

## Known Issues in Version 1.7

- Leaving a client browser tab open for a long time can lead to the tab to crash, run out of memory, or slower performance in the client over time. This can manifest in captions rendering late in the preview window during playback, choppy scrolling of the audio waveform, or general sluggishness of the UI. Refreshing the page temporarily fixes this issue. We will continue to work on client-side optimizations, but this appears to be at least partly a browser issue. (STANZA-771)

## New Features in Version 1.6

### ***Final Check***

- When exporting, a Final Check review will be automatically performed, which will alert the user about any unfixed errors in the project and allow you to abort or continue to export.

### ***Change to Caption Timing and Sorting***

- Stanza will no longer automatically sort captions by their timecodes. This was causing captions to jump around within the project when editing the timing, and caused untimed captions to always jump to the end of the project, which was undesired behavior.

Instead, captions will remain in their current order even after changing the timing. Note that this can result in your captions being out of sequence. You can re-sort the captions via the Sort By Times button in the Timing toolbar.

### ***Easily see and modify caption display modes (pop-on / paint-on / roll-up)***

- A new button was added to the Content toolbar to let you easily see and modify the display mode of selected caption(s)

### ***Insert New Caption with Blank Timecode***

- You can now insert a new row with blank timecode above the currently selected row by Shift-Click on the Add Caption button, or keyboard shortcut Shift-I.

### ***Auto word wrap when using compress/expand, push/pull, merge, etc.***

- Editing functions that move text around or lengthen a line will now respect your project settings for maximum number of characters per line and number of lines per caption, and will automatically word wrap the edited caption.

### ***SCC Import – Select frame rate and caption channel***

- When importing SCC files, the user will be prompted to select a frame rate (default Auto) and caption channel (default CC1)

### ***Save project state when reloading/refreshing the page***

- When returning to a project or refreshing the page in the browser, the video time, selected program, and selected caption will be restored. These are stored in your browser cache, so they are specific to that browser. (They will not be restored if you open the same project in a different browser.)

### ***Load Balancing – Worker Node Status***

- When using Load Balancing, the status of worker nodes is now shown in the top status bar.

### ***Download Log Files***

- A new menu item was added to download log files and settings files for support.

### ***Username in Watermark Overlay***

- When configuring a SVG watermark overlay, the username of the currently logged in user can now be added to the watermark.

## **Fixed in Version 1.6**

- Fixed several issues causing performance degradation when the Stanza server was accessed repeatedly by multiple clients over a long period of time (STANZA-923)
- Fixed extracting CC from large media files was slow and consumed too much RAM (STANZA-953)
- Fixed numerous issues with text formatting after using reduce or expand line length, push or pull word, square up, or split or merge caption. (STANZA-981, STANZA-1004)
- Fixed an error importing WebVTT files containing certain CSS styling information within a STYLE block (STANZA-995)
- Fixed the user being able to delete regions that were still in use, which could create invalid TTML exports (STANZA-952)
- Fixed pressing Page Up in a text editor would shift the whole web page up (STANZA-950)
- Fixed downloading exported files via the UI sometimes took a long time to start (STANZA-914)

- Fixed issues with playback of files when using SSL and load balancing (STANZA-879)
- Fixed installer failing to overwrite log files created by a previous version (STANZA-983)
- Fixed issues reconnecting to the server when changing the URL between the IP address, DNS short name, or FQDN (STANZA-978)
- Fixed an issue that could delete text in the currently selected cell when the client disconnected and reconnected to the server (STANZA-1023)

## Known Issues in Version 1.6

- Leaving a client browser tab open for a long time can lead to slower performance in the client over time. This can manifest in captions rendering late in the preview window during playback, choppy scrolling of the audio waveform, or general sluggishness of the UI. Refreshing the page temporarily fixes this issue. We will continue to work on client-side optimizations, but this appears to be at least partly a browser issue. (STANZA-771)
- Roll-up captions which are positioned in the middle of the screen do not always display correctly in the preview window. This will be fixed in the next release. (STANZA-1010)
- Find/Replace is unable to replace words with blank (nothing) because the replace button is disabled. This will be fixed in the next release. (STANZA-1014)
- Avid AAF export is not available in the Mac ARM version of Stanza. Workaround: You can install the Intel x64 version of Stanza on an ARM-based Mac using Rosetta 2.

## New Features in Version 1.5

### ***Multi-Program Export - Automatically Fill Program languages***

- Each defined program language will now be automatically filled out during export between the specified project language and the language selection in the export dialog

### ***Export XDS/V-Chip Metadata information***

- V-chip and XDS Metadata can now be applied to AAF and Embed Captions exports

### ***Avid AAF export allows for multiplexing of multiple caption programs***

- Stanza can now generate AAF exports with multiple caption channels and services

### ***Ability to play Audio Only source files***

- Added the ability to import Audio Only source files into the Video pane of Stanza

### ***Added UNC paths for Export locations***

- Stanza now allows for authenticated UNC Path export locations

### ***Differentiate validation errors as warnings vs. fatal errors***

- Fatal errors (likely to cause export failure) will show in RED:
  - More than 32 characters per line, or more than 4 lines when in CEA-608 mode
  - Unsupported characters when in CEA-608 mode
- Non-fatal warnings (won't cause export failure) will show in ORANGE:
  - More characters or lines than specified in the project settings (but less than the CEA-608 hard limit of 32/4)
  - Caption duration less than or greater than expected
  - Reading speed more than expected

### ***Default export filename Patterns with Variable options***

- File exports now can be set and defined with Filename patterns and variables which can be configured in the UI for export locations.
  - location export contains a new field “Default Filename” where a User can use variables like
    - {ProjectName}
    - {ProjectId}
    - {ProgramName}
    - {MediaFileName}
    - {DateTime}
    - {UserName}
    - {OperationType}

### **Fixed in Version 1.5**

Stanza-947: Incorrect warning message when switching to BuiltIn Authentication, warning now correctly states “Administrator” instead of “admin”

Stanza-946: Issue where scrubbing video rapidly on a Mac Server would cause a session drop

Stanza-943: Corrected a timecode shift when loading SCC source files with 23.976 framerate media

Stanza-924: Inconsistency with the Find & Replace tool in certain scenarios

Stanza-923: Made improvements to performance degradation / video buffering issues on Stanza Appliance servers

Stanza-916: AAF exports now support multiple captioning programs

Stanza-912: Add Processing Node Info to Export Results Dialog in a Load Balance setup

Stanza-911: Issue when using the Push Last Word shortcut cuts off the last letter on the word prior to the shifted word

Stanza-905: Issue when scrubbing within the waveform monitor past the cached section of video in certain cases

Stanza-902: Issue with Clients being unable to Drag and Drop to reposition captions

Stanza-900: Issue when Splitting a caption to a new line was causing the first character of the following word to be deleted

Stanza-895: Issue when creating a new Project would open in a new tab even when the control key is not held.

Stanza-891: Issue when using Keyboard shortcuts from the content tab didn't work until you selected the Content Tab at least once

Stanza-889: Added the ability to load Audio Only files into the Video pane

Stanza-883: Timing issue with TTML exports if project Timecode is 23.976 or 29.97 non-drop frame mode.

Stanza-880: Improved the Informational dialogs when creating a new project via the keyboard shortcut.

Stanza-879: Issue with Playback issues on certain Media files with SSL enabled

Stanza-874: Issue with Manual Time Stamping cannot set Out Time for Last Caption

Stanza-865: Added the ability to cancel Speech to Text operation

Stanza-847: Added a single API call to extract captions to SCC/MCC/TTML and return results file

Stanza-829: Issue with TTML source files with a timebase="smpte" will now import into Stanza with correct timings

Stanza-823: Added the ability to Allow UNC paths for Export locations

Stanza-774: Added the ability to Differentiate validation errors as warnings vs. fatal errors

Stanza-769: Ability to set a Default export filename pattern with variables for each export location

Stanza-734: Allow for Negative values for drop shadow horizontal/vertical offset(s)

Stanza-689: Added a New UI/API tool Fix Line Length

Stanza-626: Issue were Find/Replace sometimes obscures result or doesn't scroll to result

Stanza-390: Added the ability to insert XDS/V-Chip Metadata information to exports

## **New Features in Version 1.4**

### ***User Management***

- New within Stanza 1.4 you'll be able to create, set, and modify Users and Roles to adhere to your Captioning environment.

You'll have the preset roles of Admin, Captioner and Reviewer to select from. The Admin will also be able to Create, Modify and customize permissions for newly created roles as well.

Some examples of the preset Users and the Permissions that are preassigned to them:

Roles	Admin	Captioner	Reviewer
Add/Edit Users	Yes	No	No
Modify Project settings	Yes	Yes	No
Run STT/ATS	Yes	Yes	No
Create Project	Yes	Yes	No
Change project Status	Yes	Yes	Yes
Edit Captions	Yes	Yes	Yes
Export files	Yes	Yes	No

### **Project Statuses**

- Stanza 1.4 now includes Project Statuses to allow for tracking project(s) to show the current status of your Captioning Project within Stanza.

You'll be able to choose from a list of preset Statuses built into Stanza, as well as create your own *Custom* Statuses of your choosing to fit your workflow(s).

Some of the preset Statuses you can choose from are:

- *New*
- *Captioning In Progress*
- *Ready for Review*
- *Review in Progress*
- *Ready to Export*
- *Complete*
- *Archived*

### **Enhanced Load Balancing**

- Stanza 1.4 has easier configuration for load balancing. Worker nodes are now used to load balance both export processing and video encoding. Media location aliases are automatically propagated from the main node to the worker nodes.

***Added the ability to add Custom Timecode Track/Video Start TC option.***

- Added the option to create a “User-Defined Timecode” within the dropdown option on the Video pane’s selectable Timecode Tracks. You’ll be able to select You’ll be able to select and set your desired starting timecode

**\*Note\*** If a video is loaded, you will not be able to change the framerate of the custom timecode track; it must match the frame rate of the source video.

### ***Reformat Rows Command***

- Stanza Users can reformat text paragraphs by selecting a range of captions and specifying the desired character width & height of new rows and how punctuation is handled, similar to importing a plain text file.

### ***Exporting Plain Text Document***

- Stanza will now allow you to select Export Plain Text Documents as an option, you’ll be able to select an export with or without caption timings.

### ***Clearing current Timecode box***

- Stanza Added a new way to clear any timecode currently within your Captioning Project in case you need to re-time your captions from a fresh start.

### ***Validation warning on overlapping Timed Captions***

- Stanza will now give you a warning prompt as to when two or more captioning rows are overlapping.

### ***Clicking Stanza logo will bring you back to main index***

- Now when clicking on the “Stanza” logo at the top left corner this will return you to the main index.

### ***Drag & Drop sidecar caption file for importing into Captioning Pane***

- Stanza will now allow for client side dragging and dropping of a sidecar captioning file into the Captioning Pane.

### ***Ability to Select Caption Row(s) without affecting current video time***

- Added keyboard modifier Alt/Option + Click (Alt on Windows, Option on Mac). This will select a caption row without changing the video time. After doing this, you can Shift-Click to select a range of captions, and this also will not change the current video time.

### ***Ability to select rows from current row to end***

- Added the ability to easily select from a specific row down to the end of the project, or up to the start of the project by Shift+Alt+Click (For Windows) or Shift+ Option+Click (for MacOS) below the current cell will select all cells to the end of the project. Conversely, doing a Shift+Alt+Click (for Windows) or Shift+ Option+Click (for MacOS) above the currently selected cell will select all cells to the start of the project

**Added Keyboard shortcuts for Jump Back/Forward 5 & 10 seconds**

- To jump back or forward 5 seconds: for Windows hit the F2 or F4 keys, for MacOS hit Function(Fn)+F2 or Function(Fn)+F4.  
To jump back or forward 10 seconds: for Windows hit Shift+F2 or Shift+F4 keys, for MacOS hit Function(Fn)+Shift+F2 or Function(Fn)+Shift+F4.

**Added the ability to Ctrl+Click on a Project to open in a new browser tab**

- To hold Ctrl+Click when creating a new Project will allow the user to open said new project inside a new Browser tab.

**Added preset shortcuts for Stretch/Shrink time within the Drop-Down**

- Added commonly used presets for Stretch/Shrink time convert within the Drop-Down UI, this allows users to select presets instead of typing in manual percentages.

**Fixed in Version 1.4**

Stanza-827: fixed an issue where Seek and then frame stepping back could result in frame step no longer working

Stanza-814: Updated tool tip about Mac Installer text on where to find AirPlay Receiver to disable it.

Stanza-811: Updated wording on Cancelling Speech to Text Operation to reflect what the options will represent upon selecting

Stanza-806: Stanza Exports are delegated between the Main Node and Worker Nodes, allowing export concurrency of 1 per available node.

Stanza-805: Fixed an issue when cancelling an export, the UI would not clear the cancelled export.

Stanza-783: Fixed an issue with not displaying the correct caption text positioning when importing SMPTE-TT source files.

Stanza-710: Fixed an issue where the Video will not play past pre-buffered point

Stanza-705: Added a way to sort by A->Z or Z->A within the File browser

Stanza-669: Avid AAF outputs will now export default filename if a filename is not specified

Stanza-650: Video Pane would show last loaded video's Timecode when no video was loaded yet.

Stanza-649: Fixed an issue where Video Controls were still Visible when Resizing Video pane to the far left

Stanza-648: Fixed an issue with the Audio Waveform's scroll bar not being accessible when dragging with mouse pointer

Stanza-607: Grid view does not update when selecting captions via clicking in the waveform

## Known Issues in Version 1.4

Stanza-883: TTML export has incorrect timing if Project Timecode is in 23.976 or 29.97 non-drop frame mode

Stanza-829: If importing a source TTML file that has `*timeBase="smpte"` the captions will not appear at the correct times.

## New Features in Version 1.3

### ***Drag & Drop Subtitle position***

- Captioners will be able to visually drag & drop subtitles in a desired location outside of using the default 9 anchor positions or creating custom regions.

### ***User Specified Fonts***

- Stanza will make available all compatible fonts that are installed on the server in the system fonts folder (`C:\Windows\Fonts` on Windows or `/Library/Fonts` on Mac). This will allow captioners to add Fonts of their choosing outside of the current font selections

### ***Stanza Server Load Balancing***

- Stanza now allows for connecting multiple Stanza Servers by connecting Stanza Worker nodes via the Stanza UI and enabling "Load Balancing". Adding Stanza Worker Nodes will allow you to extend out your Stanza Sessions past 5 concurrent sessions per server or past 15 concurrent sessions per Stanza appliance.

### ***Offline Activation UI***

- Added Offline Activation within the Stanza UI

### ***Spell Check button***

- Added the option to perform Spell Check on Subtitles

### ***File Browser now shows File extensions***

- Add the file extension under the file icon and a tooltip showing the full filename when browsing for Media or Caption files.

### ***Added ability to deselect all subtitles using 'Esc' Key***

- Add the ability to deselect all subtitles/captions by simply hitting the 'Esc' keyboard shortcut

### ***Added ability to set EBU-STL metadata when exporting***

- Add the ability to set all EBU-STL header metadata such as program/episode title, translator's name, country of origin, start timecode, etc.

## Fixed in Version 1.3

Stanza – 679: Fixed cancelling a long running export would appear to cancel it, but the export still ran to completion in the background

Stanza – 656: Caption rows with 4 lines of text would sometimes overlap

Stanza – 386: Zero KB files appear as folders within Media Browser

Stanza – 698: Mac Clients: Undo shortcut key required CTRL+Z key instead of CMD+Z when cursor is in the text field

Stanza – 675: Fixed an issue where you could not navigate back to the Projects page after going into the Settings page

Stanza – 665: Fixed an issue where MXF Timecode and SMPTE Timecode were not being preserved when Exporting Embedded Closed Captions/Teletext

Stanza – 290: Time on shuttle bar not updating when quickly dragging through the Timecode

## New Features in Version 1.2

### ***MacOS Stanza Installer***

- **NEW!!** With the release of STANZA 1.2 now has an option to install on macOS so you can host Stanza on your Mac

### ***Glimpse/Stanza Appliance Server***

- Standalone appliance which supports 15 simultaneous Stanza or Glimpse clients

### ***Multi-row Alignment/Text Justification***

- Text justification is similar to text alignment, but it controls how multiple lines of text align to each other as opposed to how the overall text block aligns to the region. (See Q&A below for instructions.)

### ***Avid AAF Export Option***

- STANZA 1.2 adds the option to export Avid AAF data track files

### ***MOV Export preserve existing timecode track***

- MOV exports will now preserve existing timecode tracks from the source

### ***UI Quality of life updates***

- The UI panes can be independently resized and have improved scaling behavior

- The waveform timeline has been moved under the video preview
- The tasks pane (which showed the status of STT and ATS for example) is now a small button at the bottom of the screen, which, when clicked, will show a list of all the active background tasks.

### ***Time Code display improvements in the Video Player (including mouseover).***

- Time Code will now display when mousing over and scrubbing through the video player.

### ***Clear formatting button***

- New optional button to clear out any and all types of Style or Formatting after importing embedded Closed Caption or importing from a Subtitle file.

### ***File browser improvements***

- File Browser windows have been updated and improved upon for opening media or captioning sources from all alias types like (physical, network, s3, etc...)

### ***Other improvements***

- Stanza-592: Added TTS project as an optional parameter on the Speech-to-text API endpoint
- Stanza-557: Added the ability to Customize the exported file name
- Stanza-556: Added the ability to configure multiple Export locations, and allowing the user to select one when exporting.
- Stanza-519: Improved UI responsiveness and client-server communication by moving some operations to the server-side.

## **Fixed in Version 1.2**

- Stanza – 646: Caption Timing is off after MOV embed export
- Stanza – 645: Timecode Track missing after exporting an MOV file
- Stanza – 644: some API calls for Extracting and Exporting were not correctly hooked up
- Stanza – 637: fixed an issue where exported files with the same filename were getting overwritten
- Stanza – 623: Fixed an issue where you were unable to embed Closed Captions or Burn-in Captions into video on an S3 location if the video file name contained spaces or special characters.
- Stanza – 621: fixed an issue where disabling “Enable Confidence Warnings” in preferences didn’t disable Speech-to-Text confidence errors
- Stanza – 617: Fixed an issue when embedding Closed Captions into video on a Generic S3 alias
- Stanza – 582: Fixed an issue with Stanza Project creation settings not retaining what was selected after leaving Project page.

## Known Issues in Version 1.2

- Stanza – 679: Cancelling a long running export will appear to cancel it, but the export still runs to completion in the background

## New Features in Version 1.1

### **Play Media & Import Files from Network & Cloud storage:**

*The Stanza UI now allows you to configure aliases, which are shortcuts to local, network, or cloud storage locations such as UNC paths, S3 / Google / Azure buckets, etc. Administrators can configure storage locations and permissions without having to share credentials with the clients. Clients can play videos and import all types of caption files directly from your assigned storage locations without needing to download them locally first.*

**\*\*Note\*\* You'll need to have Localhost access to the Stanza server to setup Location Path Aliases**

### **Ability to select and send individual Channels of Audio to Timed Text Speech and Auto Time Stamp:**

*Stanza now allows you select the individual track or the individual channel from All Channels in the media pane, which will allow you to send specific audio channels to be auto-transcribed with the Speech to Text service.*

### **Added the ability to load caption sidecar files from Server-side storage:**

*Sidecar files could only be imported from the client's local storage, while video files can only be opened from the server's storage. We've changed this to allow either destination within the caption import options.*

- Stanza – 583 – Updated Audio Channel selector to be more fluid
- Stanza – 565 – Ability to upload a Channel of Audio from a different track for Speech-to-Text submissions
- Stanza – 564 – Ability to commit to a Field Path using the 'Enter' hotkey
- Stanza – 555 – Added more comprehensive error information within Export list when exports fail
- Stanza – 549 – Improved Speech-to-Text upload to match selected Timecode of media file
- Stanza – 546 – Improved Auto scrolling while Manually Time Stamping captions
- Stanza – 553 – Mac Clients can now use CMD-A/Z/Y/F for keyboard shortcuts
- Stanza – 324 – Added ability to force remove consumed sessions

- Stanza – 499 – Added UI settings to allow for creating and managing location Aliases
- Stanza – 426 – Extended the Character Sets within the Embed Teletext export option
- Stanza – 406 – Video player will now display the Media Frame Rate of the source video
- Stanza – 398 – Added the ability to specify the Page number, Character Set, and National option when exporting Embed Teletext formats
- Stanza – 389 – clicking on a caption in the waveform timeline now makes that caption the primary selection
- Stanza – 331 – Added the ability to export “Same as Source Format” in Embed Captions
- Stanza – 266 – Implemented the ability to load sidecar files from Server-side storage

### **Fixed in Version 1.1**

- Stanza – 596 – Fixed an issue where video exports were not working with Cloud Storage locations
- Stanza – 576 – Fixed an issue where Fullscreen video controls stopped working correctly
- Stanza – 577 – Fixed an issue where Captions were not scaling correctly in preview window
- Stanza – 572 – Fixed an issue where the Video play button would get stuck in a paused state when returning to the Project list during playback
- Stanza – 562 – Fixed an issue in the UI with long language names not being truncated in Embed Captions export
- Stanza – 560 – Fixed a problem when previewing media with a 9x16 Aspect Ratio

### **Known Issues in Version 1.1**

- Stanza – 547 – Users should be cautious of Manually Time Stamping over already existing Timed Captions, as it may lead to bad captioning results (e.g., overlapping captions, re-ordered captions, nonsensical time codes).
- Stanza – 617 – Cannot embed Closed Captions into video when the media is on Generic S3 alias

- Stanza – 623 – Cannot Export Embed CC/Burn-in Subs into Video on S3 if video file name contains spaces or special characters

## Known Issues in Version 1.0

*The following are known issues that may be addressed in a future version.*

- Stanza – 550 – ATS Results are returned from Zero Based Timecode instead of the selected timecode track in video player
- Stanza – 538 - Users can invoke a ‘locked out’ state if they click outside of the import dialog window, rather than clicking the ‘Cancel’ button.  
*\*\*Note: refreshing the webpage will workaround this\*\**
- Stanza - 527 - Cannot Perform ATS on Plain Text Import when selecting Western European (windows) option while importing. Stanza will pop up the error "Error processing text paragraphs" when running the Auto Time Stamp function on Plain Text files  
*\*\*Note: changing to UTF-8 will allow ATS to work\*\**
- Stanza - 523- Square Up Text Clears Formatting  
When inserting a new caption and typing into the caption editor, then Change font formatting (e.g., Bold, Italic, Font Color) On the Content tab click ‘Square Up’ Font Formatting Is Cleared
- Stanza - 487- Grid Scrolling pauses if user provides rapid mouse-wheel input  
If the user scrolls through the document too quickly using the mouse wheel, the grid scrolling action pauses intermittently. Slowing down the scroll-wheel input or moving the mouse cursor in conjunction with rapid mouse wheel usage scrolls the grid normally.  
*\*\*Note: updating to Chrome version 103 will resolve this\*\**
- Stanza - 532- Merge Rows Button  
When selecting Rows of Captions starting from the bottom row and going upwards, hitting Merge Rows will sometime have unexpected behavior with the order of rows that are merged.
- Stanza - 78- If you have a split caption or rows with same or overlapping time codes, each row is measured independently.

## Speech to Text / Translation Additional File Downloads

If the Stanza server has internet access, the speech to text models will be automatically downloaded on first use. The Large models are about 3GB so this may take some time depending on your internet speed, but once downloaded the models are saved for future use and won't need to download again.

If your Stanza server is behind a firewall, please add <https://www.telestream.net> to your allow list, or see below to download the files offline before first use.

If the Stanza server is on an offline system with no internet access, you must manually download the model files and copy them to the Stanza server before using the local speech to text feature. Download one or more of these files, depending on which model(s) you will use in Stanza. ("Base" and "Large V2" being the most commonly used.)

Speech to text files:

<https://www.telestream.net/download-files/ggml/ggml-tiny.bin>  
<https://www.telestream.net/download-files/ggml/ggml-base.bin>  
<https://www.telestream.net/download-files/ggml/ggml-small.bin>  
<https://www.telestream.net/download-files/ggml/ggml-medium.bin>  
<https://www.telestream.net/download-files/ggml/ggml-large.bin>  
<https://www.telestream.net/download-files/ggml/ggml-largev2.bin>  
<https://www.telestream.net/download-files/ggml/ggml-largev3.bin>

Translation files:

For Fast & Medium (3 files):

[https://www.telestream.net/download-files/ggml/ggml-trg3\\_fast.bin](https://www.telestream.net/download-files/ggml/ggml-trg3_fast.bin)  
[https://www.telestream.net/download-files/ggml/ggml-trg3\\_med.bin](https://www.telestream.net/download-files/ggml/ggml-trg3_med.bin)  
[https://www.telestream.net/download-files/ggml/ggml-mmproj-trg3\\_fast.bin](https://www.telestream.net/download-files/ggml/ggml-mmproj-trg3_fast.bin)

For Large & Large Plus (3 files):

[https://www.telestream.net/download-files/ggml/ggml-trg3\\_large.bin](https://www.telestream.net/download-files/ggml/ggml-trg3_large.bin)  
[https://www.telestream.net/download-files/ggml/ggml-trg3\\_largeplus.bin](https://www.telestream.net/download-files/ggml/ggml-trg3_largeplus.bin)  
[https://www.telestream.net/download-files/ggml/ggml-mmproj-trg3\\_large.bin](https://www.telestream.net/download-files/ggml/ggml-mmproj-trg3_large.bin)

For Huge (2 files):

[https://www.telestream.net/download-files/ggml/ggml-trg3\\_huge.bin](https://www.telestream.net/download-files/ggml/ggml-trg3_huge.bin)  
[https://www.telestream.net/download-files/ggml/ggml-mmproj-trg3\\_huge.bin](https://www.telestream.net/download-files/ggml/ggml-mmproj-trg3_huge.bin)

These model files need to be copied to:

Windows: C:\ProgramData\Telestream\Stanza\Whisper\

Mac: /Library/Application Support/net.telestream.stanza/Whisper/

Note: If you are using load balancing, these files must be installed on each node.



**Stanza**

If you need to downgrade from Stanza 2.3 back to 2.2 or earlier, you'll need to run a manual command to downgrade the database schema BEFORE uninstalling 2.3, otherwise the database won't work correctly in older versions. It is not possible to complete this downgrade process using Stanza 2.2 or older versions. If you've already uninstalled Stanza 2.3, you'll need to first re-install it and complete these steps in Stanza 2.3 before installing the older version.

These steps must be run on the Stanza server and require administrator access.

1. With Stanza 2.3 installed, stop the Stanza Service.
  - a. Windows: Go to Services, right click on Telestream Stanza Service, click Stop
  - b. Mac: Open a terminal and type: `/opt/Telestream/Stanza/stop.sh`

You'll need to enter a local administrator password. If you see the message "Unload failed: 5: Input/output error" then this may be that the Stanza service was already stopped and this error can be ignored.
2. Open an Administrator command prompt / powershell / terminal and change directory to where Stanza is installed.
  - a. Windows default: `cd C:\Program Files\Telestream\Stanza`
  - b. Mac default: `cd /opt/Telestream/Stanza/StanzaService.app/Contents/MacOS`
3. Enter this command:
  - a. Windows: `StanzaService.exe --migrate-db down`
  - b. Mac: `sudo ./StanzaService --migrate-db down`

You'll need to enter a local administrator password.
4. A backup copy of your database will automatically be saved at the start of the process. If your database is large, expect this process may take some time.
5. At the end of the downgrade, you should see the message: Database down migrated.
6. Note: If you restart the computer or the Stanza service while Stanza 2.3 is still installed, the database upgrade process will automatically run again and the database will be upgraded back to the 2.3 schema. In that case you'd need to repeat these steps before the database can be used in older versions of Stanza.
7. Uninstall Stanza 2.3:



**Stanza**

- a. Windows: Go to Control Panel > Apps, find Telestream Stanza 2.3 > Uninstall.
  - b. Mac: No uninstallation step is required, however if desired, you can delete the /opt/Telestream/Stanza folder.
8. You can now install the older version of Stanza. Try opening a few projects and confirm that you can see the expected caption text inside. If all caption projects appear to be empty, then the downgrade did not complete successfully.

The only tested & officially supported configurations are the Telestream Stanza VLS-200 and G7 appliances with dual RTX 4000 ADA (VLS-200) or dual Quadro RTX 4000 (G7) cards. On single GPU systems, if the same GPU is utilized for both video encoding and AI acceleration at the same time, there may be a noticeable performance impact in video playback. You may need to disable GPU acceleration for speech to text, video encoding, or both, if you find the performance or stability is not acceptable on your hardware. Other Nvidia GPUs will likely work, however, we are not able to provide support for hardware compatibility issues with untested configurations.

## GPU Acceleration for Video Encoding:

GPUs with NVENC video encoding capability:

<https://developer.nvidia.com/video-encode-and-decode-gpu-support-matrix-new>

To enable GPU accelerated video encoding you must edit the config file:

C:\ProgramData\Telestream\Stanza\appSettings.glim.json

Add the following lines inside the “Encode” section:

```
"Gpu": 1,  
"MaxGpuSessions": 5,  
"GpuDecode": true,  
"GpuPreset": "medium"
```

Gpu: The number of physical GPUs installed to be used for video encoding.

MaxGpuSessions: The maximum number of simultaneous video encoding sessions to use the GPU. Sessions beyond this limit will fall back to CPU encoding. Note that Nvidia’s GeForce line of consumer GPUs are software limited in how many video encoding sessions they can run at a time. As of this writing, most GeForce 3000/4000 series cards are limited to 8 encoding sessions. The professional cards (Quadro RTX and A series) do not have this limitation. If you encounter video encoding errors you may need to lower this number.

GpuDecode: Set true to use the GPU to accelerate video decoding tasks.

GpuPreset: “medium” is the recommended default setting.

After saving the file, restart the Stanza service.

Note: If you are using load balancing, these settings must be set on every node that has a GPU.

## GPU Acceleration for Stanza AI Speech to Text and Translation:

As of Stanza version 2.3 or later, separate CUDA software installation is no longer required. Stanza AI requires a minimum hardware [Compute Capability](#) of 7.5, a minimum of 8GB VRAM, minimum driver version of 553.09, and GPU acceleration is enabled by default. During startup, information about detected GPUs will be logged to the Stanza log files for troubleshooting.

If you run into any problems with GPU accelerated speech to text and you want to disable it to go back to CPU-only mode, you can edit the file:

C:\ProgramData\Telestream\appSettings.general.json

Find the section:

```
"SpeechToText": {  
  "UseGpu": true  
},
```

Change true to false, save, then restart the Stanza service.

Note: If you are using load balancing, these settings must be set on every node that has a GPU.

Speech to text jobs are always limited to 1 job at a time per host machine for performance reasons. Jobs will be queued and will start automatically as soon as the previous job finishes. To run multiple concurrent jobs, you must have multiple hosts running in a load balancing setup.

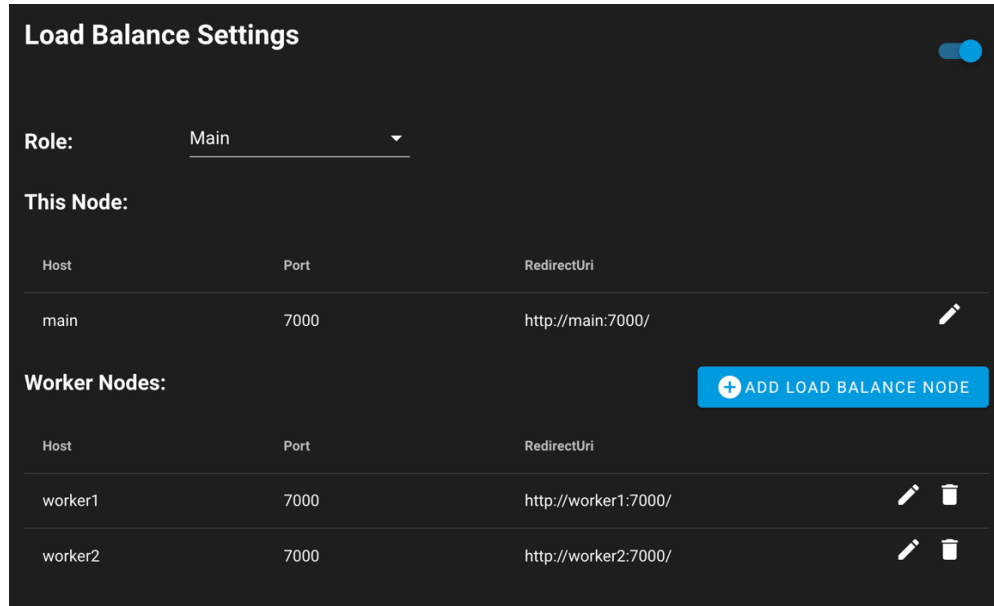
A load balancing array allows you to support more simultaneous sessions of video playback and more concurrent background operations (speech to text, exports, etc.) compared to hosting everything on one server.

The array must have 1 main node. The main node hosts the web service, database, and API (and by default can also perform some video encoding and run some background operations). Clients (captioners) always access the main node; they do not connect to the worker nodes.

Worker nodes only perform video encoding and run background operations. Each worker node adds the ability for the array to run 1 concurrent resource-intensive operation (speech-to-text, and certain exports which are CPU or GPU intensive).

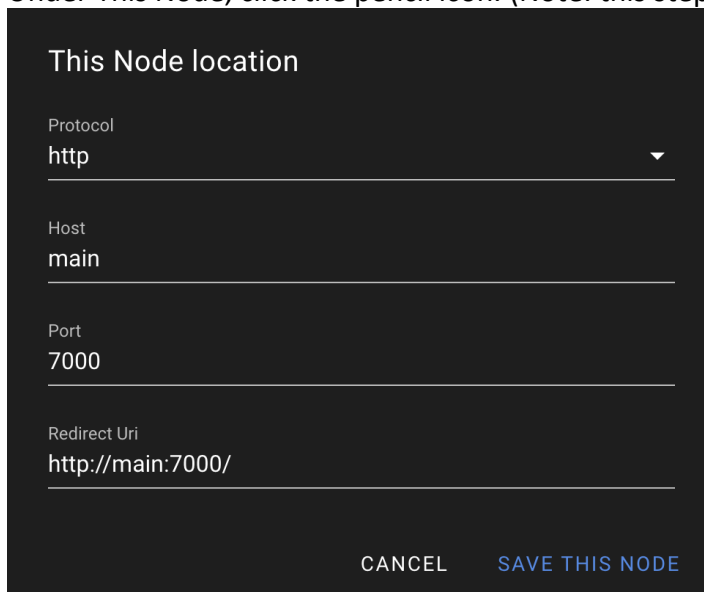
#### General Setup:

- Install the same version of Stanza on the main node and the worker node(s). When upgrading, all nodes must be upgraded to the same version together.
- The Stanza license is only activated on the main node. Worker nodes don't require licenses.
- All video media should be located on network or cloud storage so that all nodes are able to access it. Physical storage attached to the main node can only be accessed by the main node, so projects/jobs that reference media on the main node's physical storage will be limited to running on the main node only.
- Clients only connect their web browser to the main node, never to a worker node. The main node must be exposed to the clients through the firewall.
- The worker nodes can be protected behind the firewall and do not need to be visible to the clients; they only need to communicate with the main node.



Main node setup:

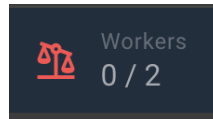
1. Using a browser running on the main node (via remote desktop, etc.), access the main node by opening the browser to `http://localhost:7000` (or another port if you have changed it)
2. Click on three dots at top right > Settings
3. Scroll to Load Balance Settings section and toggle it to on
4. Ensure Role is set to Main
5. Under This Node, click the pencil icon. (Note: this step is new in Stanza 2.1)



6. Edit the network settings for This Node to match the host name or IP address via which clients and worker nodes can connect to this main node. Then, click Save.
7. Under Worker Nodes, click Add Load Balance Node. Then, click the pencil icon.



8. Edit the network settings for the worker node and set the host name or IP address for the first worker node, then click Save.
9. If you have additional worker nodes, click Add Load Balance Node, then edit the settings for the additional node(s).
10. When finished, you must restart the Stanza service for the changes to take effect.
11. After restarting the service, this icon in the upper right of the status bar will indicate how many workers are successfully connected vs. how many are configured. If the icon is red or yellow, then not all of the workers are connected, and the performance of the array may be degraded.



Advanced main node configuration (Optional):

You can disable all video encoding and background operations (exports, speech-to-text, etc.) on the main node, which will free up main node CPU resources for the web server, database, etc., by editing `appSettings.general.json` under "Workers" and setting the `MinCount` and `MaxCount` to 0:

```
"Workers": {  
  "UseReverseProxy": true,  
  "MinCount": 0,  
  "MaxCount": 0,  
  "MaxLifetime": 14400  
}
```

With this configuration, video playback requests and background operations will always be performed on worker nodes. The only exception would be requests for physical media located on the main node, which requires the main node to process them.

## Worker Node Setup

### Load Balance Settings 🔴

**Role:** Worker ▼

**This Node:**

Host	Port	RedirectUri	✎
worker1	7000	http://worker1:7000/	✎

**Main node:**

Host	Port	RedirectUri	✎
main	7000	http://main:7000/	✎

### Worker node setup:

1. Using a browser running on the main node (via remote desktop, etc.), access the main node by opening the browser to <http://localhost:7000> (or another port if you have changed it)
2. Click on three dots at top right > Settings
3. At the top, ensure User Authentication is set to None. (Authentication is set on the main node only.)
4. Scroll to Load Balance section and toggle it to on
5. Change Role to Worker
6. Under This Node, click the pencil icon. (Note: this step is new in Stanza 2.1)
7. Edit the settings for This Node to match the host name or IP address at which the main node can connect to this worker node.
8. Under Main Nodes, click the pencil icon.
9. Edit the settings for the main node and enter the host name or IP address for the main node.
10. You must restart the Stanza service for the changes to take effect.

After restarting the worker node, the only settings page you can edit on the worker node is the worker settings page at: <http://localhost:7000/worker/settings>

To restore access to other settings on this node, you must disable load balancing via the toggle switch, or change the role setting back to Main.

Stanza 3.0 adds the ability to integrate with an OpenID (OIDC) identity provider such as Keycloak for Single-Sign On (SSO). Keycloak can then connect to other identity brokers such as Okta, LDAP / Active Directory, or social login such as Google, Meta, etc. Keycloak can also be used as a standalone identity provider. Keycloak is Telestream's designated SSO solution, and while other OIDC providers may work, our documentation and testing is specifically targeted at using Keycloak.

These instructions are based on Keycloak version 26.3.2.

The following instructions assume that:

- Keycloak will be running on <https://1.2.3.4:8443>
- Stanza will be running on <https://5.6.7.8:7001>

You can run both Stanza and Keycloak on the same server, in which case the addresses will be the same, except for the port number.

Please substitute these values with your actual hostnames or IP addresses.

## **Keycloak development/test setup**

---

These instructions will install a development Keycloak system and generate self-signed SSL certificates suitable for testing and experimentation. For production use, it is recommended to follow the guide at: <https://www.keycloak.org/server/configuration-production>

## **Prerequisites for Keycloak host**

- Package manager
  - winget (pre-installed on Windows 11 & Server 2025), or
  - choco ( <https://chocolatey.org/> all Windows versions)
  - brew Homebrew for MacOS
- Java runtime environment (e.g. OpenJDK)
  - Windows Java install options:
    - winget install Microsoft.OpenJDK.21
    - choco install openjdk
  - Mac:
    - brew install openjdk
- OpenSSL
  - openssl On Windows, install openssl by running one of the following:
    - winget install -e --id ShiningLight.OpenSSL
    - choco install openssl
    - If stanza is already installed, openssl will be installed at: C:\Program Files\Telestream\Stanza\certificate\openssl\openssl.exe
    - If git is installed, openssl will already be installed at: C:\Program Files\Git\usr\bin\openssl.exe

## Keycloak installation

1. Download Keycloak "Distribution powered by Quarkus" from:  
<https://www.keycloak.org/downloads>
2. Unzip to a folder
3. Open a terminal/powershell/etc. and cd to that unzipped folder
4. Create (or copy) a self-signed SSL certificate into the conf directory:
  - a. In the keycloak directory, run the command below:
    - i. Replace 1.2.3.4 with your Keycloak server IP
    - ii. If using a FQDN, replace example.com with your domain name, otherwise leave it as-is

```
openssl req -x509 -newkey rsa:4096 -sha512 -days 825 -noenc -keyout conf/key.pem -out
conf/cert.pem -subj "/CN=example.com" -addext
"subjectAltName=DNS:example.com,DNS:*.example.com,IP:1.2.3.4"
```

5. Start Keycloak by running:
  - a. Windows: bin/kc.bat start-dev --https-certificate-file=conf/cert.pem --https-certificate-key-file=conf/key.pem
  - b. Mac/Linux: bin/kc.sh start-dev --https-certificate-file=conf/cert.pem --https-certificate-key-file=conf/key.pem

## Configure Keycloak

---

1. Browse to the address of your Keycloak server e.g. <https://1.2.3.4:8443> (the IP/hostname of the machine running Keycloak). **Don't use localhost or 127.0.0.1, it must be the real IP address or hostname and must be HTTPS.**
  - a. If using a properly CA-signed or already trusted SSL certificate, you can proceed to Step 2.
  - b. If using a self-signed SSL certificate as generated above, **you must install this certificate via the OS on the Stanza server, so that Stanza recognizes it as valid when connecting to Keycloak.** On Windows, follow these steps. (For Mac/Linux, search online for "install self-signed certificate on Mac")
    - i. Use remote desktop to log in to your Stanza server.
    - ii. Open Chrome (on the Stanza server, not on your local machine)
    - iii. Visit the Keycloak page e.g. <https://1.2.3.4:8443>
    - iv. Click the "Not secure" button to the left of the URL in your browser
    - v. Click "Certificate details"
    - vi. Select the "Details" tab, then click Export button
    - vii. Save the .crt file e.g. example.com.crt to your Downloads
    - viii. Go to your Downloads folder and double-click the .crt file you just downloaded.
    - ix. Click "Install Certificate..." button
    - x. When prompted for "Store location", switch to Local Machine and click Next
    - xi. When prompted to select Certificate Store, switch to Place all certificates in the following store. Click Browse..., then select Trusted Root Certification Authorities.

- xii. Continue clicking Next or Finish until the certificate is installed. You should get a dialog box "The import was successful"
    - xiii. Please also follow the steps in the section "Trust a self-signed certificate in your browser" below. This should be repeated on each client browser that will access Stanza.
  2. Login to Keycloak as admin / admin. It is recommended to change your admin password.
  3. Go to Manage realms and create a new realm named "stanza"
  4. Ensure that at the top left, it says "stanza" next to Current realm. (if not, click Manage realms -> stanza)
  5. Click Clients -> Create client
    - a. Client type: OpenID Connect, Client ID: "stanza"
    - b. **!** Enable "Client authentication" (**note: disabled by default**)
    - c. Ensure "Standard flow" is checked (should be checked by default)
  6. Login settings page:
    - a. Root URL: <https://5.6.7.8:7001> <- your Stanza hostname/IP address with no trailing slash (**note: this MUST be the IP address or public hostname of Stanza, must not be localhost or 127.0.0.1, and MUST be HTTPS**)
    - b. Home URL: <https://5.6.7.8:7001> (same as Root URL)
    - c. Valid redirect URIs: /signin-oidc (**note: with leading slash, but without trailing slash**)
    - d. Valid post logout redirect URIs: /signout-callback-oidc
    - e. Web origins: + ( **!** just type a plus sign with nothing else into the box. Don't click the "(+) Add web origins" button)
    - f. Admin URL: (blank, not needed)
    - g. Click Save
  7. Click Credentials tab:
    - a. Next to Client Secret, click Copy to clipboard
    - b. You'll later need to paste this in the Stanza JSON file for ClientSecret (see below)
  8. Click Roles tab:
    - a. Click Create role
    - b. Role name: Administrator
    - c. Click Save
    - d. Click Client details at top to go back to previous page
    - e. Repeat Create role steps for roles "Captioner" and "Reviewer" (assuming you want to use these roles) and any other Stanza roles in use. Only the Administrator role is strictly required.
  9. Click Client scopes
    - a. Find and click on the "roles" scope (may be on page 2)
    - b. Select Mappers tab
    - c. Click on "client roles"
    - d. **!** Token Claim Name: delete the existing text and change to role
    - e. **!** Enable "Add to ID token" (**note: disabled by default**)
    - f. Leave "Add to access token" enabled (default)
    - g. Click Save

## 10. Click Users

- a. Click Create new user
  - i. **!** Email verified: Toggle to ON (this will avoid uses needing to verify by email, which requires a mail server set up)
  - ii. Enter user details. Username is required. Email and First/Last name are optional and can be set by the user when they log in.
  - iii. Click Create
- b. Click Credentials tab for the user you just created
  - i. Click Set password.
  - ii. Enter a temporary password for the user. User will be required to change their password (unless you toggle Temporary to OFF)
  - iii. Click save, then Save password at the confirmation
- c. Select Role mapping tab
  - i. Click Assign role > Client roles
  - ii. Select Administrator role where Client ID = stanza (may be on page 2)
  - iii. **! You must assign exactly 1, and only 1, Stanza role for each user.**
  - iv. Click Assign
- d. Repeat above steps for additional users

## Configure Stanza

---

1. Edit appsettings.general.json in your Stanza data folder, e.g.  
C:\ProgramData\Telestream\Stanza
2. Find the "Authentication" section, and change the Type to: OpenIdConnect
3. Add a new section at the bottom of the JSON: "OpenIdConnect": {
 

```
"Authority": "https://1.2.3.4:8443/realms/stanza/",
"ClientId": "stanza",
"ClientSecret": "abcd1234ffff"
}
```

  - a. Edit "Authority" value to the IP address / public hostname and port of your Keycloak server. **Note: don't use localhost or 127.0.0.1, it must be a reachable address, and it must be HTTPS.**
  - b. ClientId: stanza (default)
  - c. Paste your ClientSecret from Keycloak
4. Recommended: Set Stanza to require https (it is needed for OpenID to work).
  - a. Edit appSettings.websserver.json
  - b. Add "RequireHttps": true as a top-level key, e.g.:

```
{
  "Kestrel": {
    "Endpoints": {
      "HttpsInlineCertFile": {
        "Url": "https://*:7001",
        "Certificate": {
          "Path": "certificate\\certificate.pfx",
```

```
    "Password": "stanza"
  }
}
},
"RequireHttps": true
}
```

5. Note: If you first installed Stanza over 1 year ago and this is the first time you're enabling HTTPS, it's likely that your self-signed certificate has expired and needs to be re-generated. The easiest way to do this is to uninstall Stanza (this won't erase your database or settings), delete the certificate files in `c:\Program Files\Telestream\Stanza\certificate\` or `/Library/Application Support/net.telestream.stanza/certificate/` (Mac), and then re-install Stanza to automatically generate a new self-signed certificate.
6. Restart Stanza service
7. Visit Stanza in your browser via HTTPS (e.g. <https://5.6.7.8:7001>). If you're using a self-signed certificate and you get a certificate error, follow the steps in "Install and trust a self-signed certificate in your browser" below. This step must be repeated on each client that will access Stanza. If you still get a certificate error after installing it, it is likely expired (see note above).

## Using Stanza

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Use <https://5.6.7.8:7001> (real IP address or hostname) to access Stanza in your browser. **Don't use localhost or 127.0.0.1, and don't use HTTP.** The address must match the Root/Home URL set in the Keycloak client settings. You should get redirected to the Keycloak login form.

When a Keycloak user logs in to Stanza for the first time, a Stanza account will be automatically created and assigned the same Stanza role that was previously set in Keycloak. You'll get a login error if the username doesn't exist or the Stanza role wasn't assigned correctly.

To access the Settings page in Stanza, you need the Administrator role. Administrators should be able to configure all settings, except for managing user accounts (which are now managed in Keycloak).

To log out, go to the upper right three dots menu > Account > Log out.

## User management

Adding, deleting, and changing the roles of users should be done in Keycloak (or the identity provider connected to Keycloak).

## Troubleshooting

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**Stanza shows "Disconnected" or page won't load, and this error appears in the Stanza log file:**

System.InvalidOperationException: IDX20803: Unable to obtain configuration from:  
'<https://1.2.3.4:8443/realms/stanza/.well-known/openid-configuration>'.

---> System.Net.Http.HttpRequestException: The SSL connection could not be established, see inner exception.

---> System.Security.Authentication.AuthenticationException: The remote certificate is invalid because of errors in the certificate chain: UntrustedRoot

This indicates you either you didn't correctly install the Keycloak SSL certificate on the Stanza server machine, or there is a problem with the Keycloak certificate's settings (e.g. IP address doesn't match, or certificate expired). See section above Configuring Keycloak -> Step 1 -> Follow all sub-steps under If using a self-signed SSL certificate...

## Stanza login page shows "Invalid parameter: redirect\_uri"

Double check the Keycloak stanza client settings match your Stanza server. Refer to section: Configuring Keycloak > Step 6

## Other troubleshooting steps to try

- Delete cookies for the Stanza server in your browser. Click the button to the left of the URL location bar, then Cookies and Site Data > Manage on-device site data > Click the trash icon next to the Stanza server address.

## Trust a self-signed certificate in your browser

---

The following instructions assume Chrome browser. For other browsers, search for "install self-signed certificate" for instructions.

### Chrome (any OS)

1. In Chrome, browse to the server you want to trust. It should come up with a certificate error page, unless you already told Chrome to trust this server.
2. Click the "Not secure" button to the left of the URL in the location bar
3. Click "Certificate details"
4. Select the "Details" tab, then click Export button
5. Save the .crt file e.g. example.com.crt to your Downloads
6. In a new Chrome tab, open `chrome://certificate-manager/` (or go to Settings > Privacy and security > Security > Manage certificates)
7. Click Installed by you (under Custom)
8. Click Trusted Certificates > Import
9. Browse to your Downloads and select the .crt file downloaded above
10. Now if you reload the Stanza page, it should load the site and you should NOT see a Not secure warning in the browser location bar.

If you continue to get a certificate error or see Not secure in the browser after following these steps, it is possible that the self-signed certificate has expired and needs to be re-generated, or the hostname / IP address in the certificate don't match the server address.

## **Trust a self-signed certificate on Mac (System-wide / All users)**

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The following instructions assume Chrome browser.

1. In Chrome, browse to the server you want to trust. It should come up with a certificate error page, unless you already told Chrome to trust this server.
2. Click the "Not secure" button to the left of the URL in the location bar
3. Click "Certificate details"
4. Select the "Details" tab, then click Export button
5. Save the .crt file e.g. example.com.crt to your Downloads
6. Open Keychain Access application
7. Select the 'System' category on the left-hand side.
8. Go to File > Import Items.
9. Select the certificate file you downloaded, and click Open.
10. Authenticate as a system administrator user to allow the import.
11. Double-click the localhost certificate to open its settings.
12. Click the greater than sign next to 'Trust' to display those settings.
13. Click the drop-down list named "When using this certificate" and select "Always Trust".
14. Close the settings window and authenticate to confirm the change.



- Question: How do I access the User Management & Project Statuses Features in the 1.4 Stanza release?

A: Within the Stanza Client webpage, hit the Three Dots (Kebab) button at the top Right corner for the dropdown option "Settings".

Within Settings you have the options for setting up **User Management, Roles and Project Statuses**.

**User Management:** This allows you to setup specific users for your Stanza environment ranging from the pre-build options of Admin, Captioner and Reviewer. Or setting up your own Custom users with Roles you can define in the Roles Option

**Roles:** This will allow you to Add/Delete/Modify what specific Users will be allowed to do in your Stanza environment. This can range from Adding/Deleting users, to editing Captions on a project to Exproting a Captioning output

**Project Statuses:** allow for tracking project(s) to show the current status of your Captioning Project within Stanza.

You'll be able to choose from a list of preset Statuses built into Stanza, as well as create your own Custom Statuses of your choosing to fit your workflow(s).

An example of some of these preset statuses are "New, Captioning in Progress, Ready for Review and Complete

- Question: How to install new fonts and have them show up in Stanza?

A: Fonts must be installed on the server where Stanza is running, not on the clients, and they must be installed in the system level Fonts folder (**C:\Windows\Fonts** on Windows or **/Library/Fonts** on Mac), not the user fonts folder (e.g. **/Users/username/Library/Fonts** on Mac).

This usually requires administrator permission. On Windows, right click on the font and select "Install for all users". After installing the font, you'll need to restart the Stanza service for it to show up.

- **Question:** How to change the Playback Resolution and Bitrate settings in Stanza

**A:** Location: C:\ProgramData\Telestream\Stanza\appSettings.glim.json

*Note: This file must be opened using an elevated text editor. Right click 'Notepad' from the start menu and select 'Run as Administrator' in order to make these changes.*

Sample:

```
"EncodeSettings": {
  "Levels": [
    {
      "Width": 640,
      "Bitrate": 1000000
    }
  ]
}
```

- **Question:** How to Add a Network Alias manually

**A:** Stanza now has an alias management UI built-in. Users who want to pre-configure aliases via a json config file can use the below:

The file is in c:\ProgramData\Telestream\Stanza\appsettings.general.json

Add a section like the below:

```
"LocationAliases": [
  {
    "PhysicalAlias": {
      "Id": "b4a2f6c0-19bd-469f-9c31-72e83c43fb32",
      "Type": "Physical",
      "Name": "Local Media",
      "Path": "C:\\Media",
      "Open": false
    }
  },
  {
    "NetworkAlias": {
      "Id": "3adfadcfc69f-4f3c-8291-d94a1838e2cb",
      "Type": "Network",
      "Name": "Name Path - Greyscale",
      "Path": "\\networkpathfolder\Test Videos",
      "Open": false
    }
  },
  {
    "NetworkAlias": {
      "Id": "91db803b-719e-49fb-a5ae-2a3701ced420",
      "Type": "Network",
      "Name": "Name Path - Telestream Demo Videos",
      "Path": "\\networkpathfolder\Telestream Demo Videos",
      "Open": false
    }
  }
],
```

- **Question:** My subtitles in the preview window look like CEA-608 captions (monospace, black background), but when I export a Subtitle Overlay or Burn-in Subtitles, they look different.



**A:** When the project is in CEA-608 mode, the preview will always be styled to look like CEA-608 captions, even if your text doesn't have this style applied. If you want a WYSIWYG preview of your export, change your project to a subtitle mode (Free Form or Custom).

If you want your subtitle exports to look like CEA-608 captions, you must apply the style manually: Select All captions and set monospace font, 80% font size, black background.

- **Question:** How do I change text justification (multi-row alignment)?

**A:** Select the row and use the following keyboard shortcuts:

- Ctrl-Shift-A: Auto (default) - Justification will match the text alignment (I.e. Left alignment = Left justification, Center alignment = center justification, etc.)
- Ctrl-Shift-L: Left Justify
- Ctrl-Shift-E: Center Justify
- Ctrl-Shift-R: Right Justify