


Release Notes

Fenoz – 1.2



Version 1.2

ZiuZ Forensics B.V. • Huygensstraat 30 • 2201 DK Noordwijk • Nederland •  +31 88 33 26 707 •

Revision History

Version no.	Version date	Name / Role	Changes	Classification
1.2	2025-05-15	Juned Bagwan Tester	Created Release notes, Added Functional changes, Improvements, Fixes, Test Results, Previous releases	Internal
1.2	2025-05-15	Akshay Bhagat Tester	Vizx License and Sisuilizer change, fixes and improvements	Internal

Reasonable efforts have been made to ensure the accuracy of the information presented in this document. However, ZiuZ makes no representations or warranties in relation to such information. Product and technology information is subject to change without notice. ZIUZ SHALL NOT BE LIABLE TO ANY PERSON FOR ANY DAMAGES RESULTING FROM USE OF OR RELIANCE ON THE INFORMATION PRESENTED.

Table of content

1.	Introduction	4
1.1.	Purpose	4
1.2.	Focus	4
1.3.	User Guides	4
2.	Release Notes	5
2.1.	Functional changes	5
2.2.	Fixes and other improvements in Fenoz	8
2.3.	Fixes and other improvements in Vizx2	18
3.	Test Results	21
4.	Previous Releases	21

1. Introduction

1.1. Purpose

This release document contains a description of new features, changes, improvements and/or bug fixes of this latest release.

Thank you for your interest in the release notes of Fenoz. Should any of the described items be unclear or if you would like to receive more information on a specific update, please contact ZiuZ support on ziuZ.freshdesk.com or via +31 88 33 26 707.

Please also read the release notes from previous versions if these versions were skipped in the upgrade process. These releases also contain new functions and fixes.

1.2. Focus

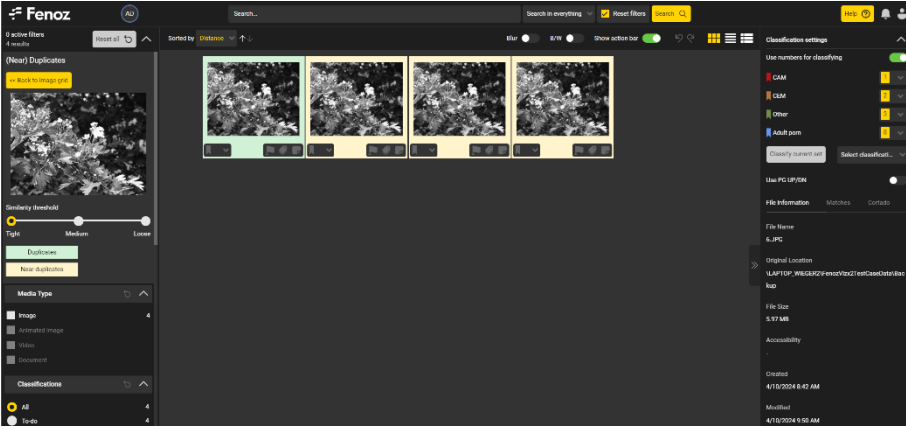
Focus is on the focus of this 1.2.66 release is further functional changes, improvements, fixes, stabilization, simplification and performance improvements. Addition of Image processing in Fenoz, Animated Images works with shots, CLIP processing, CLIP based AI concepts, CLIP based Near duplicates, PhotoDNA base Near duplicates, Ansible is used for entire setup.

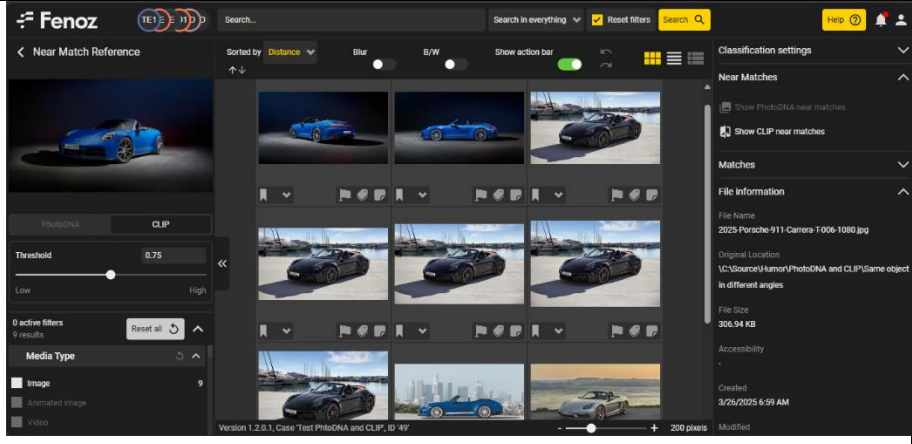
1.3. User Guides

The latest version of the Fenoz User Guide is included in the Fenoz Help: "ZiuZ Fenoz 1.2 - User Guide v1.2"

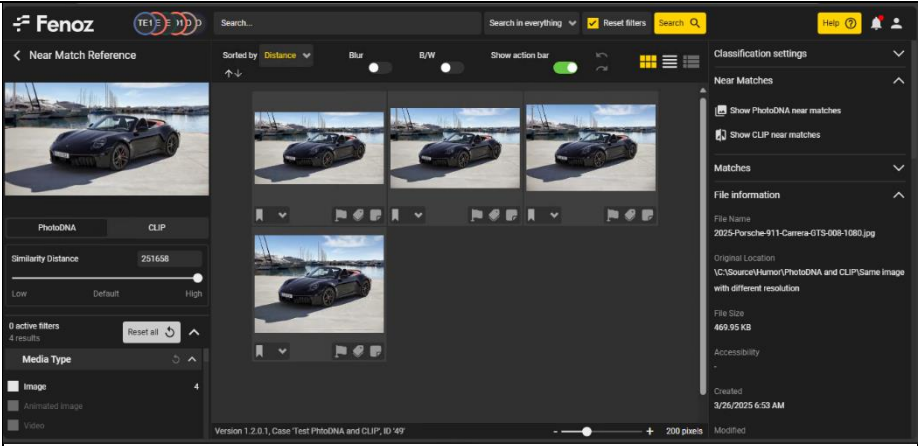
2. Release Notes

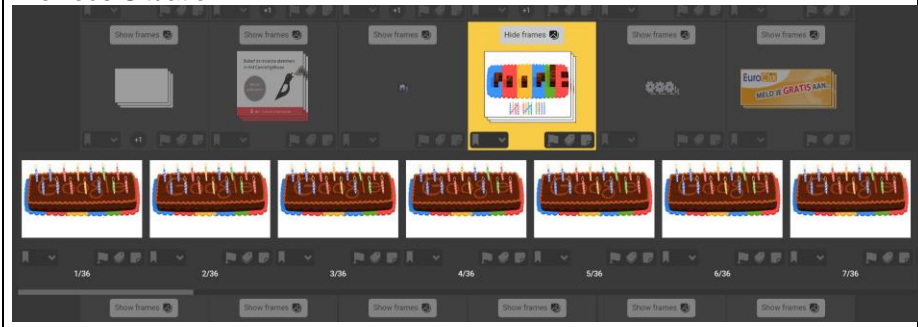
2.1. Functional changes


Feature id: 264235	Image CLIP
Previous situation:	<p>1. Duplicate & Near Duplicate</p> <p>The Action bar displays count of exact (+) and near (~) duplicates below each thumbnail. Clicking these icons opens a dedicated view showing only duplicates and near duplicates, with exact matches in green and near matches in yellow, sorted by similarity. A threshold slider allows dynamic filtering of near duplicates for images, documents, and animations. For videos, a table lists only exact duplicates with detailed metadata differences.</p>
New situation:	<p>1. Fenoz introduces built-in CLIP features to simplify image discovery and organization without coding. Users can access the CLIP tab under Near Matches section to perform semantic searches using natural language and adjust a Threshold slider (0.0–1.0) to control match precision. This enables refined filtering of near matches and powerful text-based image searches within the platform.</p> <p>2. For each image a Clip Feature Vector is calculated</p> <p>3. Based upon the Clip feature vector the following Ai labels are set per image if a configurable threshold is exceeded:</p> <ul style="list-style-type: none">• People• No People• Faces• Nudity• Sexual Activity <p>4. The near match overview is extended with an extra near match option: Clip</p> <p>When the user selects Clip, the matching image based upon Clip vectors are shown, sorted ascending by Cosine similarity</p>
Screenshots:	<p>Previous Situation:</p>  <p>New Situation:</p>

	
Added to build:	1.2.66

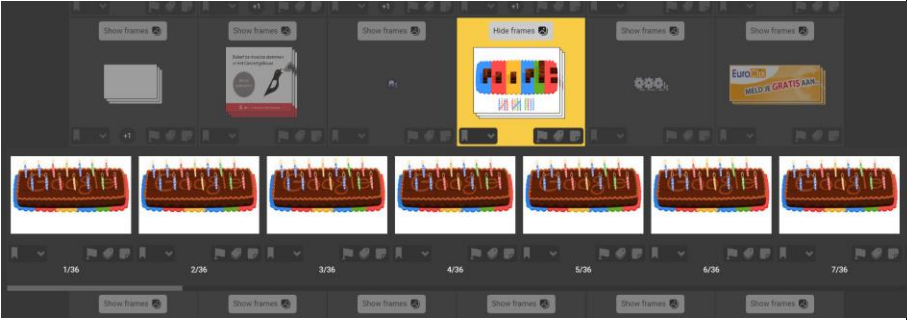
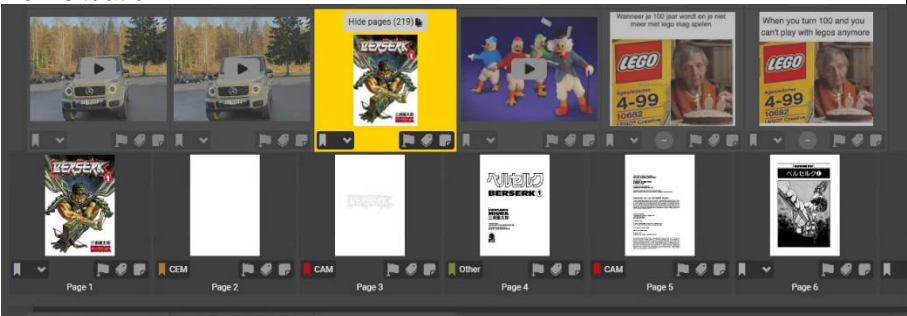
Feature id: 264236	Image PhotoDNA
Previous situation:	<p>1. Earlier we used to have (Near) duplicate section where Exact duplicates and Near duplicates were displayed. This was dedicated view showing only duplicates and near duplicates, with exact matches in green and near matches in yellow, sorted by similarity. A threshold slider allows dynamic filtering of near duplicates for images, documents, and animations. For videos, a table lists only exact duplicates with detailed metadata differences</p>
New situation:	<p>1. Fenoz now supports PhotoDNA-based matching to detect near duplicates with similar content across varying distances. A threshold slider below the original file lets users adjust similarity sensitivity, with a default distance value of 41943 (modifiable). Near duplicates are sorted by closeness to the original, and all file actions remain available. Visual differences between files are highlighted in red when selected.</p> <p>2. For each image the Photo DNA hash is calculated and stored</p> <p>3. For each image a search is done in the case database for near matches using PhotoDNA</p> <p>4. All matching images are flagged with a PhotoDNA NearMatchRecord, i.e., present / non present</p> <p>5. In the near match overview:</p> <ul style="list-style-type: none"> the zz40 matches are replaced by PhotoDNA matches Matching images are sorted descending based upon on Euclidian distance
Screenshots:	New situation:

	
Added to build:	1.2.66

Feature id: 264238	Animated Image basic flow
Previous situation:	<p>1. Fenoz used to supports enhanced handling of multipart files, such as animated GIFs, with a 'Show frames' button above thumbnails to reveal individual frames. Each frame can be viewed, classified, marked, or labelled independently. Classifying a frame automatically applies the classification to the source file, with the highest classification taking precedence. A scrollbar allows easy navigation when multiple frames are displayed.</p> <p>In short, we used to handle Animated images as multipart files, exactly like how we handle documents like PDF's.</p> <p>2. Earlier Animated Image processing was done in VizX2</p>
New situation:	<p>1. Animated images are now handles like videos in Fenoz. The Zoom viewer now supports in-depth analysis of videos and animated images via a popup with advanced playback and review tools. Users can classify, mark, label, or memo files, adjust playback speed (up to 72x in 3x3 panes at 8x speed), and view quick summaries using shot frames. Shot frames highlight scene changes and aid faster, less disturbing evaluations. All video controls are available for animated images, except the audio signal toggle, which remains disabled.</p> <p>2. Now Animated Image processing is done in Fenoz</p> <p>3. Fenoz Creates thumbnail</p> <p>4. Fenoz Creates shots</p> <p>5. Animated Image data is stored in Media Files database</p> <p>6. Frontend get image files from Media Files Manager i.s.o. Image worker</p>
Screenshots:	<p>Previous Situation:</p>  <p>New Situation:</p>

	
Added to build:	1.2.66

Feature id: 264239	PDF basic flow
Previous situation:	<ol style="list-style-type: none"> 1. 'Show frames' and 'Hide frames' buttons show or hide a frame strip below the document thumbnail. 2. Frame count not displayed 3. Frame count displayed as 1/5, 2/5, 3/5 etc. 4. Pdf in Elastic search are synchronized from VizX2 database 5. User actions (i.e. classifying, marking, labelling, and adding memos) are not stored anywhere for documents
New situation:	<ol style="list-style-type: none"> 1. 'Show pages' and 'Hide pages' buttons show or hide a frame strip below the document thumbnail. 2. Now page count is displayed on thumbnail. 3. Page count is displayed as Page 1, Page 2 etc 4. Pdf processing in not done in VizX2 5. Pdf processing is done in Fenoz 6. Pdf Creates thumbnails for all pages 7. Pdf data is stored in Media Files database 8. Frontend gets pdf thumbnails from Media Files Manager i.s.o. Image worker 9. VizX2 T_Images table gets filled from the Fenoz side. 10. PDFs in Elastic search are synchronized from Fenoz database 11. User actions are stored in both the Fenoz SQL database and ES 11. A new settings tab is created for the Pdf settings 12. Images are created for each page

Screenshots:	<p>Previous situation:</p>  <p>New situation:</p> 
Added to build:	1.2.66

Feature id: 264234	Image basic flow
Previous situation:	1. Images in Elastic search are synchronized from VizX2 database
New situation:	<p>1. Image processing is not done in VizX2</p> <p>2. Image processing is done in Fenoz</p> <p>3. Fenoz Creates thumbnail if required</p> <p>4. Fenoz Creates web compatible image if required</p> <p>5. Image data is stored in Media Files database</p> <p>6. Frontend get image files from Media Files Manager i.s.o. Image worker</p> <p>7. Removed filters:</p> <ul style="list-style-type: none"> • Search terms • Faces (will be replaced by Clip concept) • Skin score (will be replaced by Clip concept) • Exif Ai indicator (will be replaced by generic ai labels) • ZZ40 will be replaced by PhotoDNA <p>8. Images in Elastic search are synchronized from Fenoz database as soon as the image is ready to be shown in the UI. Old synchronization code for VizX2 is removed</p>

Screenshots:	
Added to build:	1.2.66

2.2. Fixes and other improvements

PBI id: 268133	List view improvements
Previous situation:	<ol style="list-style-type: none"> 1. FileDate in listview does not explain which of the three fields it is referencing. 2. Accessed in the FileInfo has "-" when no info is known, the Listview doesn't show anything. 3. ListView doesn't allow changing blur/BW options. It does allow the zoomviewer. This means the user is stuck in blurred/BW mode.
New situation:	<ol style="list-style-type: none"> 1. FileDate -> Created Date 2. Accessed in the grid should print "-" if no accessibility is known. 3. Enable the Blur/BW options, the user must be able to toggle them so that the zoomviewer remains usable.
Added to build:	1.2.66

PBI id: 268117	Zoomviewer related improvements
Previous situation:	<ol style="list-style-type: none"> 1. There is a "repeat" button that resets the video to 0:00 2. There is no action bar for Images/Animated, hotkeys do still work. 3. There are no hotkeys for previous/next frame.
New situation:	<ol style="list-style-type: none"> 1. Repeat (current reset button functionally) button should enable/disable repeat of a single video. (also in multipane) <ol style="list-style-type: none"> a. Reset button should be added which should do the current reset to 0:00 2. Add the Action bar for Images/Animated images so it is consistent. 3. When the player is paused the , and . keys should jump to the previous and next frame.
Added to build:	1.2.66

PBI id: 268122	Multi-user related improvements
Previous situation:	Multiselect with ctrl+click or shift select doesn't get reflected on the other user's screen

New situation:	Any form of selection should update on the other user's screen.
Added to build:	1.2.66

PBI id: 278167	Add a filter for non-displayable files
Previous situation:	There is a playable filter.
New situation:	<p>Rename enum EVideoStreamPlayable to EMediaDisplayable</p> <p>Replace Playable filter with 'Displayable' filter. The following options need to be in that filter (as checkboxes):</p> <ol style="list-style-type: none"> 1. Yes 2. Partially 3. No <p>All options needs the numbers behind them as usual and all default filter behavior applies.</p> <p>By default none are selected and everything is visible in the grid.</p> <p>This filter will apply to all media types (images, videos etc.) but for now only on the already supported media types</p> <p>Also fix the enums for video so that we can reuse them for all types of mediafiles.</p>
Added to build:	1.2.66

PBI id: 268181	Gridview related improvements
Previous situation:	When opening a previously closed filter it briefly shows "No results found for this filter"
New situation:	Show a spinner instead of the "no results" texts when it is still loading.
Added to build:	1.2.66

PBI id: 268183	Shotsview related improvements
Previous situation:	<ol style="list-style-type: none"> 1. Disabling the action bar in shots view doesn't provide more room, it simply wastes space. 2. Setting thumbnail size to minimum breaks the screenshots and wastes a lot of space.
New situation:	<ol style="list-style-type: none"> 1. Disabling the action bar in shots view should reduce the amount of used space. 2. Setting thumbnail size to minimum should still show all shot thumbnails. It also should reduce margins according to set thumbnail size.

Added to build:	1.2.66
-----------------	--------

PBI id: 268075	Make "image size" filter also available for Videos
Previous situation:	Only images have an image size filter option.
New situation:	Users must be able to search for video sizes too. Keep in mind that videos have multiple streams with possible multiple sizes. Implement like image: Determine biggest height/width, store that in ES and filter on that value;
Added to build:	1.2.66

PBI id: 268174	[Fenoz Video] Add ability to change volume
Previous situation:	User is only able to mute/unmute video
New situation:	User can change the volume level from 0 to 100% with a slider Keep track until session is over. 0% should toggle mute.
Added to build:	1.2.66

PBI id: 268209	Make video shotframes and screenshots infinitely scalable
Previous situation:	All shotframes and screenshots and their data are kept in memory.
New situation:	The shot grid/view below the zoomviewer should be virtualized. Shots should be lazyloaded like the current implementation of frames.
Added to build:	1.2.66

Bug id: 268153	[Fenoz Image] Missing file formats BMP & RAW after image rework
Previous situation:	BMP & RAW files are not supported file formats
New situation:	The BMP & RAW files are now supported file formats
Added to build:	1.2.66

Bug id: 268111	[Fenoz Image] [NRW] Evidence filter and long path names
Previous situation:	The evidence filter is not very easy to use due to the long path names in evidence.
New situation:	The
Added to build:	1.2.66

Bug id: 267948	[Fenoz Image] [NRW] Missing German translations
Previous situation:	Some German translations in the filters seem to be missing. Accessible (from screen below) is not an issue as that comes from the import.
New situation:	German translation is added for the English values in the filters
Added to build:	1.2.66

Bug id: 267951	[Fenoz Image] [NRW][TB] Help text mouseover in zoomviewer
Previous situation:	when an image is opened (in the zoomviewer) and hover over the action bar below to edit an image the information appears, but as soon as moved the mouse the information disappears. So there is no chance to get to the documentation here.
New situation:	The help text mouseover will stay when moving inside the help text to go to the read more link and the help text will not go below the taskbar
Added to build:	1.2.66

Bug id: 292319	[Fenoz] 'Classification conflict' not classifying unclassified files
Previous situation:	When we select at least one image with classification and one without. And try to classify with different Classification with 'Perform this action on all conflicts' unchecked. Then Classified images are updated as expected but unclassified aren't.
New situation:	Now unclassified files can also classify as expected.
Added to build:	1.2.66

Bug id: 268198	[Fenoz] After deleting a screenshot the next screenshot thumbnail is grayed out
Previous situation:	Have a video with multiple screenshots, remove one of the screenshots (not the last screenshot). The screenshot thumbnail will be grayed out (due to a lowered opacity), however, once the screenshot is removed from the grid, the thumbnails shift to fill the gap and the thumbnail that came after the previously deleted screenshot will now be grayed out, even though it isn't being deleted.
New situation:	The thumbnail that comes after a screenshot that has been deleted will not have its opacity changed.
Added to build:	1.2.66

Bug id: 296961	[Fenoz] Blur option mismatch in list view and Zoom viewer
Previous situation:	There is a mismatch in zoom viewer blur toggle output and list view blur toggle output
New situation:	1.Zoom viewer blur + Grid view blur --> On //Result==> All content will be Blurred in Grid view as well as in zoom view

	2.Zoom viewer blur + Grid view blur --> OFF //Result==> All content will be Visible in Grid view as well as in zoom view 3.Zoom viewer blur --> ON + Grid view blur --> OFF //Result==> All Thumbnail will be visible in grid view, only videos in zoom viewer will be blurred
Added to build:	1.2.66

Bug id: 295670	[Fenoz] Change classification checkbox does not work
Previous situation:	From Luxembourg: If you try to classify an image which has already been classified, there is a warning and request for confirmation if you really want to change the classification. In that dialog there is a checkbox "Diese Aktion bei allen Konflikten ausführen" but Fenoz keeps asking for confirmation each time (the checkbox is ignored).
New situation:	The checkbox will apply to the next cases of classification conflicts and Fenoz will not keep prompting the user.
Added to build:	1.2.66

Bug id: 268082	[Fenoz] Download button of video stream not working anymore. Results in errors in media file manager
Previous situation:	1. Hit Download button of partially or not supported videos 2. Error 500 appears in web browser 3. Media Files container throws errors like shown in System Info Cookie security???
New situation:	Download button of video stream is working now.
Added to build:	1.2.66

Bug id: 286951	[Fenoz] Image flow breaks for exifdata bigger than 256 characters
Previous situation:	<ul style="list-style-type: none"> Insert an image that has a value for one of the relevant exif tags that is more than 256 characters. (Example image is attached to this pbi) SQL will throw an error saying data is too large Other exif data (such as framesize) will not be saved Rest of the flow (such as ai labeling) will not be done/correctly saved
New situation:	Changed the data type of the Data column to VARCHAR (MAX) and catch errors for Data that is bigger (should hardly ever happen)

Added to build:	1.2.66
-----------------	--------

Bug id: 268199	[Fenoz] List view sort button alignment
Previous situation:	The down arrow of "Last Classification Date" is much closer to "Evidence" then the down arrow of "Evidence" (which I would associate with "Accessibility" It's visually unclear which of these arrows belongs to classification date
New situation:	Header will be thicker and row data more subtle
Added to build:	1.2.66

Bug id: 286901	[Fenoz] Longer memo's throw an exception
Previous situation:	Add a new memo to an image. And add longer input is entered in Memo Then press "Add memo" An silent exception will be thrown locally the image still seems to have a memo But after refreshing that is gone.
New situation:	Extended limit to 2048 characters in DB storage Limit characters in web component to 2048 characters
Added to build:	1.2.66

Bug id: 268230	[Fenoz] Second monitor window issues
Previous situation:	Open zoomviewer Click on second monitor Click on previous/next, the view will not update to the new item, the Grid however does. Clicking on the grid does update the second window. Also, the first time this was tested, the wrong item was being shown.
New situation:	The second monitor window is behaving as intended.
Added to build:	1.2.66

Bug id: 286897	[Fenoz] Second screen is not in sync
Previous situation:	<ol style="list-style-type: none"> 1. Double click an image 2. Open details page on second screen 3. Use arrow buttons to select next/previous media file in details page <ol style="list-style-type: none"> a. GOOD: The next/prev image is selected in grid overview b. ERROR The next/prev image is NOT shown in details page

	<p>4. Use arrow keys to select next/previous media file in grid overview</p> <p>a. GOOD: The next/prev image is selected in grid overview</p> <p>b. ERROR The next/prev image is NOT shown in details page</p> <p>See also attached video</p>
New situation:	Use of arrow buttons to select next/previous media file in details page is working as expected
Added to build:	1.2.66

Bug id: 268170	[Fenoz] Set fixed width for opening new help documentation window
Previous situation:	When opening the help documentation by pressing the help button in the top right of your screen it could happen that there is no visible content because the resolution of your screen is too low (1080p is high enough)
New situation:	Adjusted the default width in the openWindow function to have a fixed width high enough for content to be visible when opening the help documentation
Added to build:	1.2.66

Bug id: 285899	[Fenoz] Shots view not behaving correctly when zooming in/out
Previous situation:	Go to animated image / video shotsview. Zoom in/out with the fenoz zoom slider. Observe that margins are getting crazy on zooming in. Observe that the shots are getting cut-out incorrectly.
New situation:	Now Frame will only contain 1 image content
Added to build:	1.2.66

Bug id: 283802	[Fenoz] Undo multi-select remove classification not working properly when files had differing classifications
Previous situation:	Classify some files using some different classifications, now select them all and remove their classifications. Undo this action by clicking the undo button. Now you should see all files getting the same classification which changes multiple times (depending on the amount of different classifications you had).
New situation:	Undoing multi-select, removing classification when files had differing classifications is working as expected now.
Added to build:	1.2.66

Bug id: 288200	[Fenoz] Version & case name in footer is in certain dimensions not displayed well
Previous situation:	Version & case name in footer is in certain dimensions not displayed well
New situation:	The text will stay in the footer bar, also when it cannot be displayed properly. Then it could be stopped with triple points (...) and a hover could resolve it so it can still be shown.
Added to build:	1.2.66

Bug id: 293897	[Fenoz] Video filters can disappear
Previous situation:	Using the humor set when the top video filter is not set, if selecting both options under the 'Video Streams' filter, all video filters disappear from the list. They re-appear when the video filter on the top is reset.
New situation:	When performing these actions, the video filters don't disappear.
Added to build:	1.2.66

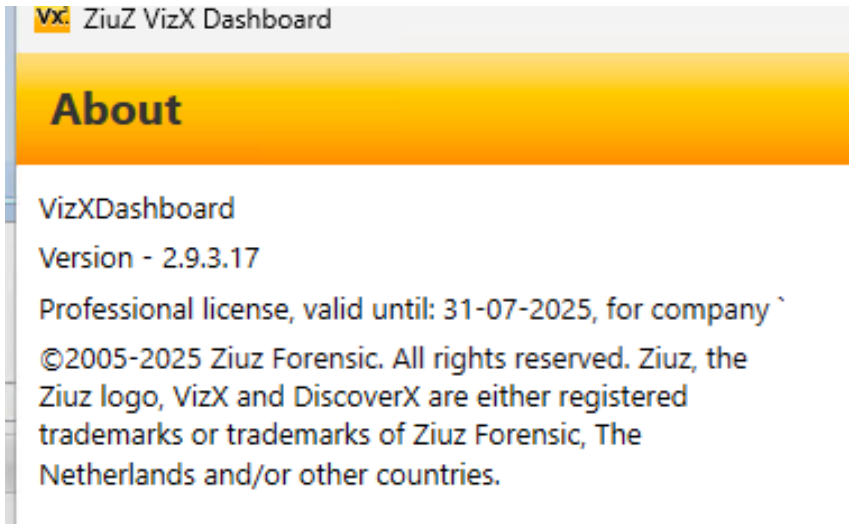
Bug id: 268232	[Fenoz] Video thumbnail not in correct aspect ratio
Previous situation:	The aspect ratio of the video 16/9 is 1.77 whereas the ratio of the thumbnail is 1.73
New situation:	Thumbnail will have the same aspect ratio as the video
Added to build:	1.2.66

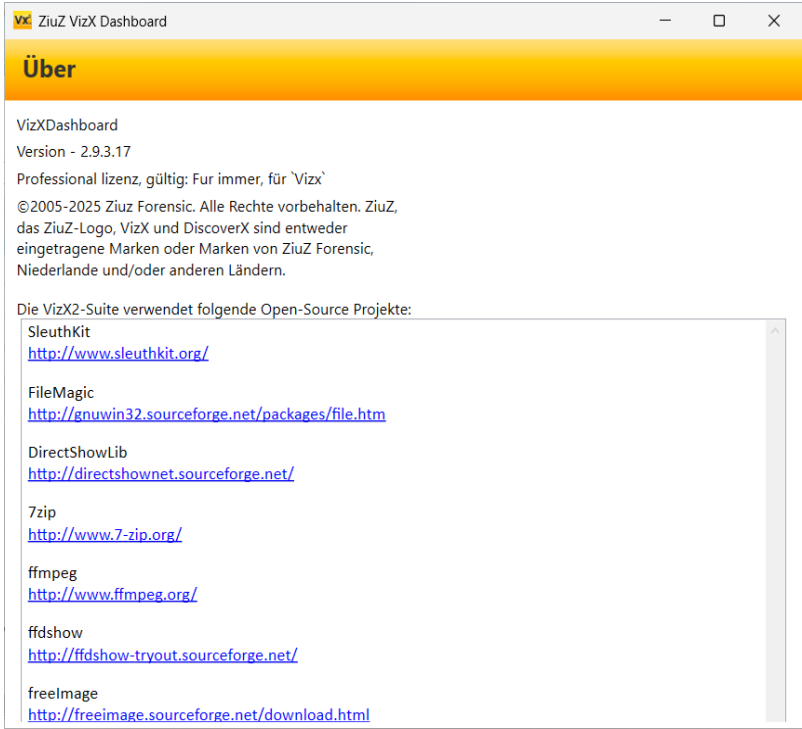
Bug id: 284060	[Fenoz] When loading a GIF file with no duration set, the file never ends up in ES
Previous situation:	When attached .gif file has no duration key in its exif information, and loading this file into Fenoz it is never indexed since the duration is null when it reaches the SetAnimation method of the AnimatedImageAggregate. This causes the file to never be transcoded (if that is even possible), but moreover it never causes the file to be automatically synced to ES, only after a manual resync does it end up in ES as a non-playable file.
New situation:	Animated images with no EXIF will be processed by ffmpeg
Added to build:	1.2.66

Bug id: 268247	[Fenoz][TB] When in "To-do" and undoing a classification, the media file doesn't reappear in the grid
Previous situation:	Select "To-do" filter Classify a media file -> the media file disappears from the grid Click the undo button Nothing happens to the grid
New situation:	After clicking undo the previously classified media file (or files if multiple files were classified at once) will reappear in the grid without a classification. The classifications are removed from the files, they just aren't added back to the grid.
Added to build:	1.2.66

2.3 Fixes and other improvements in VizX2

Compatible VizX2 version 2.9.3 fixes

QA issue id: 330381	[VizX] License not found in VizX 2.9.3 Professional version
Previous situation:	In the VizX 2.9.3 Professional release, the application fails to detect a valid license during startup or runtime. This issue prevents users from accessing the full functionality of the Professional version. .
New situation:	During the installation of the new 2.9.3 version , the application will prompt for a license key . Once a valid license is provided, the license details will be displayed on the About page, and the user will gain access to all available functionalities of the application.
Screenshots:	
Added to build:	2.9.3.17

QA issue: 330429	About page throws error when switching to German
Previous situation:	While switching an application into any other language like German, That time About page was giving page break error
New situation:	In VizX 2.9.3, the About page now functions correctly when switching the application to any supported language.
Screenshots:	 <p>VizXDashboard Version - 2.9.3.17 Professional lizenz, gültig: Für immer, für `Vizx` ©2005-2025 ZiuZ Forensic. Alle Rechte vorbehalten. ZiuZ, das ZiuZ-Logo, VizX und DiscoverX sind entweder eingetragene Marken oder Marken von ZiuZ Forensic, Niederlande und/oder anderen Ländern.</p> <p>Die VizX2-Suite verwendet folgende Open-Source Projekte:</p> <ul style="list-style-type: none"> SleuthKit http://www.sleuthkit.org/ FileMagic http://gnuwin32.sourceforge.net/packages/file.htm DirectShowLib http://directshownet.sourceforge.net/ 7zip http://www.7-zip.org/ ffmpeg http://www.ffmpeg.org/ ffdshow http://ffdshow-tryout.sourceforge.net/ freemage http://freemage.sourceforge.net/download.html
Added to build:	2.9.3.17

QA issue id: 331252	The company name does not appear in the License information section on the About page.
Previous situation:	After entering the company name in license information, Company name was not displayed
New situation:	Now, the company name is displaying in license information
Added to build:	2.9.3.17

Bug id: 332071	VizX Server Center is not able to start
Previous situation:	When launching the application, the Server option under the System tab fails to start as expected.
New situation:	This problem has been solved so no crashes occur when starting the server.
Added to build:	2.9.3.17

Bug id: 298841	VizX Image does not start
Previous situation:	While user try to open the VizX Image, It does not start
New situation:	This problem has been solved so VizX Image is properly started now.
Added to build:	2.9.2.78

Bug id: 292470	Videos sent to Fenoz are treated as images
Previous situation:	When we are providing a Videos as evidence in VizX, it treated as Images
New situation:	It is fixed and not anymore treated as Images
Added to build:	2.9.2.78

PBI id: 268059	Synchronize PDF pages to VizX2
Previous situation:	When the images per page have been created, then the version merger should create an image per page in the vizx2 database
New situation:	Now, It is synchronize with vizx
Added to build:	2.9.3.3

PBI id: 290456	Create additional records for document duplicates in Vizx2
Previous situation:	When Fenoz encounters a duplicate document it adds a file occurrence to that document, this is different from the way Vizx2 deals with duplicates, where a new record is created for each page of the document.
New situation:	Pages of document duplicates should be added to the Vizx2 database as new records, so for each duplicate a new record is created for each page of that document
Added to build:	2.9.3.3

3. Test Results

The ZiuZ engineers have done functional tests according to the ZiuZ test protocols. The setup of the ZiuZ test appliances simulates the environments (both Professional and Teamwork editions) of the customers as much as possible. During the testing no critical issues were found.

4. Previous Releases

[Fenoz 1.1](#)

- Video processing in Fenoz
- Video transcoding
- Shots
- Video Multi Pane
- Video preview on mouse hover/click
- Introduction of Ansible for infrastructure

[Fenoz 1.0](#)

- The base setup of Fenoz
- Image Grid
- Elasticsearch based filtering
- Fenoz user actions like classification / memo / marked / labels.
- Post back to VizX2.

[VizX 2.9.2.78](#)

- Release VizX 2.9.2 Teamwork formally
- Problem with VizXImage
- Problems with the VizX Dashboard for several users.
- current VizX image (loading the layout) problem
- Small tweaks to Aboutbox And sisulizer

[VizX 2.9.2.57](#)

- Send over PDF to Fenoz
- Send over Animated images
- Send over PDF to Fenoz
- Mini escalation: VizX2 doesn't upgrade database when installing
- Implement basic licensing for VizX2