



VRMETA

Instruction Manual

Version 1.8

Microstockolutions LLC

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VRmeta

Description

VRmeta is the world's first video metadata hub. VRmeta allows users to apply in-frame, time-based descriptive metadata, as well as IPTC keyword and caption metadata to every popular video asset type, and to export and share both the videos and their corresponding metadata with every known DAM and MAM

Benefits and Value

- VRmeta is designed from the ground up as the world's smartest video MAM
- VRmeta applies universally legible ISO (Adobe) flavored .xmp descriptive metadata. VRmeta fully complies with IPTC Video Metadata Hub - Recommendation 1.2
- VRmeta provides users the ability to simultaneously add in-frame and time-based descriptive metadata, as well as IPTC (keywords and description field) to a video
- VRmeta employs a patent-pending, unique, intuitive pointing tool that allows for a high degree of identification granularity to be reached
- VRmeta is Adobe Premiere Pro CC compliant, and can both export its results and as well as accept all inbound content containing markers, allowing users to add further descriptive meta-tagging to their content before transmission onto any outside DAM/ MAM
- VRmeta gives users seamless metadata exchange with Edius, Avid Media Composer and Final Cut Pro X; allowing users to add descriptive meta-tagging to their content before transmission onto any outside DAM/ MAM
- VRmeta offers users the ability both to manually tag their clips or have its AI bot auto-tag their content
- VRmeta acts as a video MAM, allowing users to search and retrieve (down the frame or in-frame level) their content
- VRmeta allows users to add, modify and amend their metadata in a simple, intuitive editing environment
- VRmeta applies a “*bounding*” box onto every person, object or event that has been meta-tagged and this box (activated in the editing process) provides all stakeholders with visual reference to the tagged item
- VRmeta is designed as an AI training tool, and provides data scientists the means to create training data sets from video inputs with both accuracy and speed. VRmeta puts this ability into the hands of all of its users, and allows stakeholders to leverage this metadata in ways that speed up the AI training process

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REGISTRATION AND SIGN IN

Registration

- Fill out the registration form on VRmeta.net.
- Create password.
- Choose Pricing Plan after submitting Registration
- Sign in
- You will then be on the VRmeta VM Hub Dashboard where you can begin uploading your videos for tagging.

Sign In

- Enter User Email and Password on VRmeta.net by clicking on the login button

RECOMMENDED BROWSER

VRmeta recommends **Mozilla Firefox** for the best tagging and viewing experience. Both Google Chrome and Microsoft Edge have in the past exhibited issues which might effect your VRmeta experience.

VIDEO UPLOADING

Upload New Videos By HTTP

- Click Upload New Video button
 - Drag and Drop video file
 - Or hit Click Here button to upload from folder
 - Upload single file or multiple files

FTP Upload (not available for users registered for the lowest tier of service)

- Download FTP client such as Filezilla or Cyberduck.
- Create your FTP upload credentials
- Configure your FTP software to work with VRmeta's servers
- Once configured click the quick connect button. You should now be connected to VRmeta's FTP server.
- To upload your files. You have two options:
 - You can open your browser and drag and drop them into the lower right-hand window within your FTP window.

- You can also use the left-hand side window from within your FTP window to browse files on your computer.
- Quick start reference guide: https://vrmeta.io/pages/ftp_instructions
- If you need to delete a video once up-loaded, click **Trash Can icon**

UPLOADING VIDEO WITH AN .XMP SIDECAR CONTAINING META-TAGS

VRmeta allows users to upload videos already keyworded with .xmp metadata. VRmeta will read any IPTC/ Dublin Core keywords and caption information, as well as any markers generated by Adobe Premiere Pro, or any other NLE which generates .xmp markers "flavored" with ISO standard .xmp.

Users should upload the video that will be matched to an accompanying .xmp sidecar by either HTTP or FTP.

Once the video is visible on the dashboard (you should refresh your browser after the upload completes), please then choose IMPORT .xmp and upload the sidecar to inject the already existent meta-tags into the video.

All keywords and caption metadata will now be injected into the video, and can be further edited by choosing the MORE button to the right of the video.

If you wish to modify, amend or add keywords, please choose the IPTC KEYWORDS button. If you wish to modify, amend or add to the caption, please choose the IPTC CAPTION button.

CODECS, CONTAINERS AND FORMAT SUPPORT

- VRmeta supports the following codecs, containers and formats:
 - .MOV
 - .MP4
 - .AVI
 - Apple ProRes
 - .MXF
 - .R3D (up to version 3)

VIDEO VIEWING

- Once a video appears in the dashboard simply click **Tag Video** button and you will move to a screen with controls to view video and options to tag and edit the video.
- The view and pause button can move the video forward and backward in specific increments:
 - 1 Frame
 - 1 Second
 - 10 Seconds
- Video Viewing Options:
 - The **Grid** button helps your navigation on the video display to target a specific point
 - If required, adjust the native frame rate with the fps button (the default is 30 fps)
- On screen viewing data:
 - CURSOR POSITION: X: 157.500 Y:10.742
 - CURRENT TAG: X: 000:000 Y: -000.000 T: 00:00:00.00
 - VIDEO DURATION: 00:00:00.00
 - CURRENT TIME: 00:00:00.00

META TAGGING

Options for Meta Tagging

- Ultra-precise in-frame object and time based meta tagging.
 - Procedure:
 - While viewing a video pause and then move cursor target to the point in the video frame to tag. Then left click to bring up text entry box in the lower right corner of the screen.
 - Enter tag with as many words as you choose.
 - Then click 'in point' to record tag.
 - You can continue to view the video and if you determine an out point for any previous tag, pause video place green target and click. When tag box comes up simply enter a previous tag (which will auto-fill) and hit out point.
- Quick Tag: If you don't need to tie a tag to an in-frame location, the **Quick Tag** function will easily apply your time-based descriptive metadata to your video and leave out references to either a X or Y coordinate
- Caption: Access the **Caption** Button through the **More** drop-down button. That allows users to add a 2000-character long caption or summary into a universally legible Dublin Core Metadata Initiative/ IPTC™ core description field. Both Dublin Core and IPTC™ metadata standards enjoy universal acceptance among content creatives, distributors, news organizations, archivists, and developers. The two schemas define metadata structure, properties, and fields, so that whatever media it's applied to is optimally described and easily accessed later

- **Keywords:** Access the **Keywords** Button through the **More** drop-down button. This allows users to add unlimited numbers of comma separated keywords. This is ideal for stock video shooters, hobbyists or anyone storing their content on a DAM. Both IPTC™ and Dublin Core metadata standards enjoy universal acceptance. The two schemas define metadata structure, properties, and fields, so that whatever media it's applied to is optimally described and easily accessed later
- **Keyboard Shortcuts:** VRmeta uses keyboard shortcuts to save you mouse clicks. VRmeta users can navigate their videos by using the following shortcuts:
 - J - 1 frame back
 - K - play & pause
 - L - 1 frame forward
 - Left arrow - 1 second back
 - Right arrow - 1 second forward
 - V - view tags & close tags
 - C - Add caption (save with Enter, close/ reset with Esc)
 - W - Add IPTC/ DC keywords (save with Enter, close/ reset with Esc)
 - Q - Add quick tag (save with Enter, close/ reset with Esc, if an IN-point already exists, Down arrow key to select it)

TAG EDITING

- The **View Tags** button opens a tagging drawer on the left side of the screen, where you can check the meta tags you added to your video allowing:
 - Delete and edit tags
 - Delete a tag by clicking the **Trash** icon
 - **Edit Tag** icon allows for editing a specific tag:
 - When **Edit Tag** icon is clicked a bound box appears on the frame for the in point.
 - Edit Tag Name text
 - Reset in and out points
 - Reset time and coordinates
 - Edit Quick Tags
 - A Caption can be edited by re-clicking the **Caption** button

EXPORT

Export Modes

- Modes:
 - Embeds Adobe “flavored” .xmp metadata
 - .xmp sidecar (Adobe Premiere Pro)
 - .xml sidecar (Edius)
 - .xml sidecar (Final Cut Pro X)
 - .txt sidecar (Avid Media Composer)
 - metric-rich .csv file
 - metric-rich .csv Pro file (containing a selection of camera EXIF data)
- VRmeta currently embeds Adobe® “flavored” .xmp metadata into your clips. This means that users of VRmeta can export their work into Premiere® Pro CC, After Effects® and Prelude®, and view the meta-tags as clip markers on the time line
- VRmeta can embed both time-based descriptive meta-tags as well as IPTC keywords and captions into your video

Exporting

- By clicking the **Export Tags** drop down button, you then choose and export output:
 - Embedded XMP
 - Lite CSV file: Includes X and Y coordinates for every in-frame tagged person, object or event, descriptive metadata tags, IN and OUT points and duration.
 - Pro CSV file: Includes Lite CSV plus video time given in frames, any IPTC metadata added through the Quick Tag function, along with EXIF data extracted from the video such as resolution, frame rate, file size, video duration and bit rate
 - .xmp Sidecar
 - .xml Sidecar

Bulk Download (of user library video)

- By clicking the **Bulk Download** option located on the upper-most toolbar, you can then choose to download singularly or in bulk all of your videos. That download can happen in one of two ways:
 - By HTTP (in .zip format). This option will allow you to download your selected videos to any local drive on your PC/ Mac.

- By FTP (in .zip format). This option will transfer your selected videos into your FTP folder for download.

SHARING

Vrmeta allows users to share their video files directly from the dashboard using either **Dropbox** or **Google Drive**. A “share” icon is located just below the thumbnail preview of each video on the dashboard. To begin sharing, just click on the “share” icon and choose the service you'd like to use to distribute your content. You will then be prompted to enter your user details for the individual service to activate your request.

SEARCH

- Search capability exists:
 - Within a video when clicking on a tag in or out point.
 - Within the videos on a Client's Dashboard with the **Search Tags** box
 - When you search with a term it pulls up every video that contains that term and specifies if it is an in-point or an in and out point
 - Clicking on the in or out point a bound box will appear around the tag in the frame of video.

ENVIRONMENT

Dashboard

- The Dashboard allows:
 - Monitor total tags, videos and storage required
 - Account Profile
- Account profile allows for Group creation within a corporate account.
- Many existing features of VMH like tagging, descriptive metadata support and in-archive search and discovery make VRmeta a highly responsive video MAM.

AWS

- All storage and activity take place within an AWS environment.
- A minimum of 250 GB of storage is included with the base subscription price. Additional monthly charges might exist when those numbers are exceeded. For further details please consult the options available for your pricing tier, and or contact VRmeta for further details.
- The existence of a client's S3 bucket will facilitate upload and transfer.

VIDEO EDITING PLATFORM (NLE) INTEGRATION

Adobe Premiere Pro

- VRmeta currently embeds Adobe® “flavored” .xmp metadata into your clips. This means that users of VRmeta can export their work into Premiere® Pro CC, After Effects® and Prelude®, and view the meta-tags as clip markers on the time line
- A VRmeta/ Premiere Pro plugin is available. **Users can:**
 - Browse and import files from any PC/ Mac
 - Get and set all .xmp metadata (including Premiere Pro's private project metadata) for any project.
 - Import files via drag and drop, from a panel into Premiere Pro (Project panel, or directly onto a timeline).
 - Preview any supported media in the Source monitor (without requiring that it be imported into the project).
 - Access and modify clip markers, and sequence markers.
 - Create new sequences either from a preset, or with user interaction.
 - Open different projects (while the panel remains active; this behavior is new as of Premiere Pro 10.3).
 - Render a sequence to any destination(s), based on any preset(s), including ftp upload, and controlling metadata output.
 - Export either a given sequence or the entire project as Final Cut Pro 7 .xml
 - Save as a new project, or create a new project containing only a specified sequence and its constituent media.

Grass Valley Edius Pro

- VRmeta currently generates a .xml file that can be exported to the Edius Pro non-linear platform. That .xml sidecar contains all time-based descriptive metadata markers applied during a tagging session.

Avid Media Composer

- VRmeta currently generates a .txt file that can be exported to Avid Media Composer. That .txt sidecar contains all time-based descriptive metadata markers applied during a tagging session.

Apple Final Cut Pro X

- VRmeta currently generates a .xml file that can be exported to Final Cut Pro. That .xml sidecar contains all time-based descriptive metadata markers applied during a tagging session.

Other Editing Platform Integration

- Development is in process for VRmeta to work with Sony Vegas™

AI-POWERED AUTO-TAGGING

- AI-powered Auto-Tagging is currently available for users of the SaaS and enterprise workflow. VRmeta currently works with AWS Rekognition.*

* Additional charges may be associated with the use of either AI option. Please consult with VRmeta directly about these charges. Thank you.

VRMETA FUNCTIONALITY CHART

Vrmeta Functionality Chart			
Function	Android App	SaaS Solution	Enterprise Workflow
In-frame and time-based descriptive metadata	Yes	Yes	Yes
Tactile screen input	Yes	No	No
Mouse and keyboard entry	No*	Yes	Yes
Metadata input:			
<i>Time-based descriptive meta-tags with unlimited text</i>	Yes	Yes	Yes
<i>Quick tag</i>	No	Yes	Yes
<i>Caption</i>	No	Yes	Yes
<i>IPTC Keywords</i>	No	Yes	Yes
Edit tags	Yes	Yes	Yes
Grid overlay for precise tagging	No	Yes	Yes
Frame-by-frame video player	No	Yes	Yes
In-frame level search and discovery	No	Yes	Yes
Identify tagged object with bounding box	No	Yes	Yes
Transfer to cloud storage (Dropbox/ Google Drive)	Yes	Yes	Yes
Cloud based import/export of content on AWS	Yes	Yes	Yes
AWS storage of video assets	Yes	Yes	Yes
MAM functionality	No	Yes	No
Metadata Export:			
<i>Embeds Adobe "flavored" .xmp metadata</i>	Yes	Yes	Yes
<i>.xmp sidecar</i>	Yes	Yes	Yes
<i>metric-rich Lite and Pro .csv file</i>	Yes	Yes	Yes
<i>'Quick Tag' IPTC descriptive field function (2,000 character)</i>	No	Yes	Yes
<i>Adobe Premiere Pro XMP sidecar</i>	No	Yes	Yes
<i>Edius XML sidecar</i>	No	Yes	Yes
<i>Avid TXT sidecar</i>	No	Yes	Yes
<i>Final Cut Pro XML sidecar</i>	No	Yes	Yes
Export without mapping to most MAM/ DAM platforms	Yes	Yes	Yes
Adobe Plugin	No	Yes	N/A
AI Auto Tagging	Pending	Yes	Yes
Meta Tag still photos (jpg)	No	No	No

* Android emulator on PC

** With Adobe 'flavored' .xmp