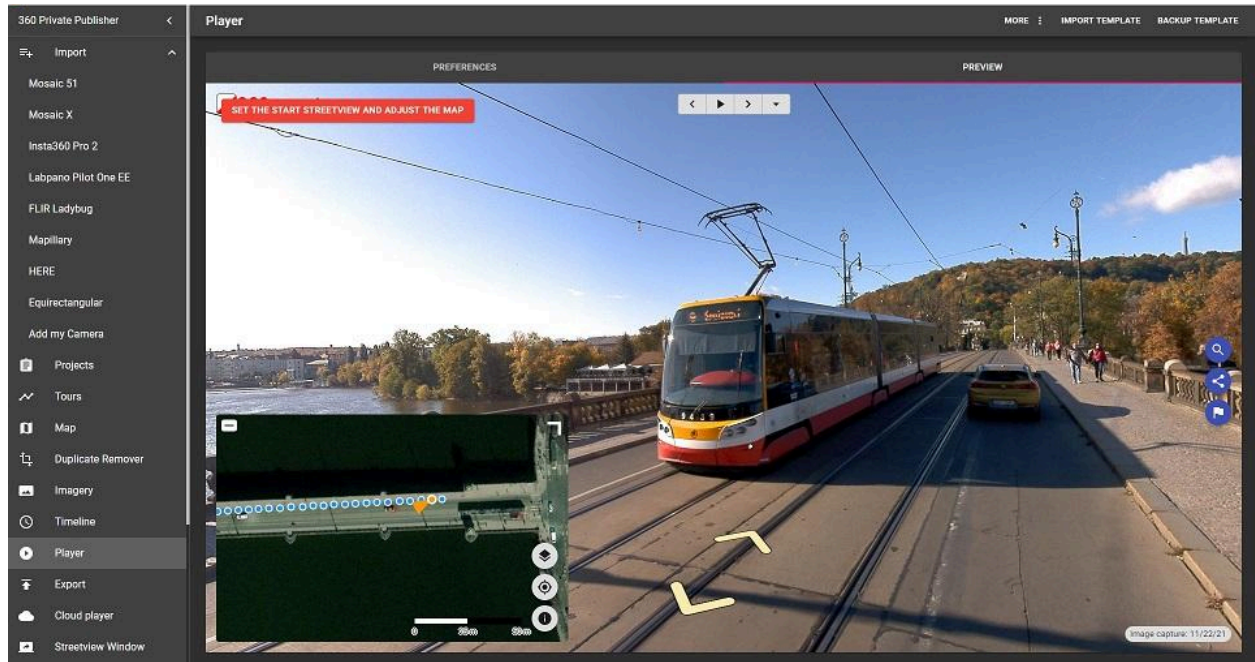




Mosaic X  
Mosaic 51

# 360 Private Publisher

## Manual



# Table of Contents

## [Free Testing](#)

[What's New?](#)

## [Versions](#)

## [Evaluation](#)

[Subscription plans](#)

[One-time payment plans](#)

## [Services](#)

[Consulting, Customisation & Integration](#)

[Data Processing and Data Management](#)

## [Main Features](#)

[Features](#)

[Player Performance](#)

[Cloud](#)

[Cloud Evaluation](#)

[FTP](#)

## [Hardware](#)

[PC](#)

[Cloud](#)

## [Setup](#)

[Folders](#)

[Performance](#)

## [Workflow](#)

[Project size](#)

[Data Management](#)

## [Import](#)

[Supported Cameras](#)

[Mosaix 51 and Mosaic X](#)

[Insta360 PRO 2](#)

[Labpano Pilot One EE](#)

[FLIR Ladybug 5+](#)

[Supported Resolutions](#)

[Supported Data formats](#)

[HERE](#)

[Mapillary](#)

[Equirectangular](#)

[Add my Camera](#)

## [Projects](#)

## **Tours**

[Show on map](#)  
[Import Backup](#)  
[Change Folder](#)  
[Move](#)  
[Copy](#)  
[Backup](#)  
[Delete](#)

## **Map**

[Change map base layer](#)  
    [Custom map tiles](#)  
    [Mapbox](#)  
[Display](#)  
[Tours](#)  
[Timeline](#)  
[Select streetviews](#)  
[Deactivate and Activate](#)  
[Meta Data](#)  
[Road](#)  
[POI](#)  
[Overlay](#)  
[Keyboard shortcuts](#)

## **Duplicate Remover**

### **Imagery**

[Nadir Logo](#)  
    [Add Logo to Mask](#)  
    [Set Transparency](#)  
    [Apply the Mask](#)  
    [Result](#)

### **Timeline**

### **Player**

[Player Keyboard shortcuts](#)  
[Preferences](#)  
    [General](#)  
    [Layout](#)  
    [Logo](#)  
    [Streetview](#)  
    [Map](#)  
    [Mapbox](#)

[Raster data](#)

[Vector data](#)

[Automatic rotation](#)

[Translations](#)

[Preview](#)

[Asset Visualization](#)

## **[Export](#)**

[Process](#)

[Player folders](#)

[Publish](#)

[View the player](#)

[AWS CloudFront \(CDN\)](#)

[Embed the Cloud Player into any webpage](#)

[Cloud Player Management](#)

[Create Amazon Web Services \(AWS\) account](#)

[Request quota increase: Concurrent execution](#)

[Apache, NGINX, IIS, MS Azure and Google Cloud](#)

[Embed the player into any webpage](#)

## **[API](#)**

[Map example](#)

[Asset example](#)

[Timeline example](#)

[Screenshot example](#)

[Data example](#)

## **[Second Monitor](#)**

### **[Tools](#)**

[Skip](#)

[Road names from OpenStreetMap](#)

[Fix Direction](#)

[Fix altitude](#)

[Export Metadata](#)

[Merge Players](#)

### **[Preferences](#)**

[General](#)

[Folders](#)

[Amazon Cloud](#)

## **[Manuals](#)**

## **[License](#)**

## **[Help](#)**

[About](#)

[krpano license](#)

[Logs](#)

[Hardware](#)

## **[Enterprise Version](#)**

[User Interface \(UI\)](#)

[Export Configuration](#)

[Import Configuration](#)

[Full Automation with the command line](#)

[Mass production](#)

[Typical Example](#)

[Configuration export and import](#)

## **[Update Policy](#)**

## **[Good Housekeeping](#)**

[Backup](#)

[Data safety](#)

## **[Download](#)**

## **[Support](#)**

## Free Testing

**360 Private Publisher** is available as a free [download](#) for testing for a week. Test it with your own recordings. Or give the provided [test-data](#) a try.

## What's New?

### Highlights

- Added [support for multi-resolution](#) to combine footage from cameras of different resolution in the same project and player. Ideal to upgrade your 360 camera.
- Added [click anywhere](#) navigation style.

### Fixes

- Player: Keep current streetview viewing direction when clicking a streetview icon on the map.

## Versions

### Evaluation

Free for one week.

[Download](#).

### Evaluation version advantages

- The provided one-click-publishing feature to the Amazon cloud works out-of-the-box. No setup of the Amazon cloud required.

### Limitations

- Watermarks on the streetviews.
- Watermark on the player.
- Amazon cloud: "Frankfurt" AWS region only.

For a most thorough evaluation with all the features enabled get the [30-Days](#) one-time-payment version.

### Subscription plans

Monthly Subscription, Annual Subscription

[Pricing Details](#).

### One-time payment plans

30-Day, 1-Year

[Pricing Details](#).

## Services

Consulting, Customisation & Integration  
Data Processing and Data Management

Streetview Technology GmbH  
Attn. Mr. Jan Martin Mantkowski  
Pittlerstrasse 53  
63225 Langen (Hessen)  
Germany

Phone: +49 (0)6103-3727494  
WhatsApp: [4915124082072](https://wa.me/4915124082072)  
Email: [info@360camsters.com](mailto:info@360camsters.com)  
Website: [www.360camsters.com](http://www.360camsters.com)

Webpage: [Contact](#)



## Main Features

360 Private Publisher is a Mobile Mapping application to manage your 360 recordings and to convert them into a performant street view player capable of displaying millions of street views.

The resulting street view player can be deployed in many ways:

- 360 Private Publisher: Immediate preview.
- 360 Private Publisher: Preview the processed streetviews and the created player
- 360 Private Publisher Use the build-in [Publisher](#) to upload to the Amazon cloud.
- On your Windows 10 or Windows 11 PC by e.g. free krpano testing server.
- Copy the player to your Windows Server.
- By ftp to any webserver. E.g. Apache, NGINX, IIS. Both shared and dedicated hosting works.
- Any cloud. E.g. Amazon AWS, Google Cloud, Microsoft Azure.  
For Amazon AWS there is an easy [one-click-publishing](#) function.

Also the 360 Private Publisher program itself can be installed to a server or a cloud. Then operate it by Remote Desktop Connection (RDP).

## Features

- **Privacy**  
Perfect privacy by local installation, processing and optional publishing.  
Alternatively you have the option to run the program in a cloud.
- **Publishing**  
To your own PC, servers, shared or dedicated hosting, Amazon AWS, Google cloud, Azure cloud, as well as to literally any webserver.  
There is no obligation to publish to the public.
- **Project Size**  
For up to country-size projects with millions of streetviews.
- **Timeline**  
Record the same area again and again. See the changes.
- **Embedding**  
Control the player by its javascript API in any web-page.
- **Versatile**  
Mix recordings from many different recordings. Even by different cameras from different brands.

- **Localisation**  
Add your own translations to the player. Default languages provided: English, Spanish, German, Arabic, Greek.
- **Map**  
Pick one of 30 map-providers or use your own maps or aerial images.
- **Mapbox**  
Use your Mapbox maps for the player.

## Player Performance

The player has been designed for very large projects with millions of streetviews. There are only static files. Not even php. For this there is no need for complicated load balancing etc. Publishing the player to a server or cloud is sufficient.

### Cloud

Publishing to the Amazon cloud is up to 80% cheaper than a player hosted in a conventional datacenter. Also there is virtually no maintenance when publishing to a cloud.

It has never been easier to prepare for your 15 minutes of internet fame. Just add [CloudFront](#) as a CDN to your player. You even can create a custom URL for your own domain.

### Cloud Evaluation

For evaluation [one-click-publishing](#) to the Amazon cloud works out-of-the-box. No setup needed.

Just pick a project and publish your first player right away.

For the Evaluation version the publishing Regions are limited to **EU-Frankfurt**.

After purchase and switching to your own Amazon AWS account all other AWS Regions will be available to you.

Please notice players published to our AWS account during evaluation can not be transferred to your own AWS account later. You have to upload all the data again.

All players from the Evaluation version will be deleted after 4 weeks.

FTP

The built-in one-click publishing feature for AWS is just for your convenience. Of course you can upload the player manually to any cloud or server instead. E.g. by ftp.

## Hardware

360 Private Publisher can be installed to a Windows 10 PC or Windows 11 PC or to the Google Cloud, Amazon Web Services EC2 or Microsoft Azure.

PC

### **Windows 10 PC or Windows 11 PC**

For a local installation the minimum requirement is a Windows 10 or 11 PC with one of the following NVIDIA graphics cards.

### **Recommended NVIDIA graphic cards**

RTX 3050, RTX 3060 Ti, RTX 3060, RTX 3070 Ti, RTX 3070, RTX 3080 Ti, RTX 3080, RTX 3090 Ti, RTX 3090.

Relevant for the performance is the graphic card's amount of VRAM.

The more VRAM, the faster the processing.

Minimum is 4GB of VRAM.

Cards we use ourselves

RTX 3050, 6GB

RTX 2060, 8GB

GTX 1080, 8GB

GTX 1650, 4 GB (Slower. No internal power cable is needed. Great for older PCs.)

Our customers reported this card to work:

RTX 2080

The following cards should work too:

RTX 3050, RTX 3060 Ti, RTX 3060, RTX 3070 Ti, RTX 3070, RTX 3080 Ti, RTX 3080, RTX 3090 Ti, RTX 3090.

RTX 2080 Ti, RTX 2080 Super, RTX 2080  
RTX 2070 Super, RTX 2070  
RTX 2060 Super, RTX 2060  
GTX 1660 Ti, GTX 1660 Super, GTX 1660  
GTX 1650 Super, GTX 1650

All other graphic cards (even “better” ones) are not supported!

## **CUDA**

During the installation NVIDIA CUDA 11 is installed automatically.

## Cloud

The 360 Private Publisher program itself can be installed to a cloud.  
You then can operate it by Remote Desktop Connection (RDP).  
We tested Google Cloud, Amazon Web Services EC2 and Microsoft Azure.

## Setup

### Folders

It is strongly recommended to create the following folders to organize your data.

#### **Mandatory folders**

Manually create these folders: In, Out, Backups.  
Then set the folders up in **Preferences -> Folders**.

#### **Recommended folders**

Manually create these folders to keep your data organized.  
Masks, Logos, Export, Player templates.

## Performance

### **Import**

Insta360 Pro 2:

Approximately 720.000 streetviews/day.

The actual performance depends on your specific hardware and setup.

### **Export**

With a [NVIDIA graphics card](#) with 8 GB VRAM you should get a performance of about  
Approximately 240.000 streetviews and streetview-tiles per day.

The actual performance depends on your hardware and setup.

For best performance we recommend different drives for the **in** and **out** folders.

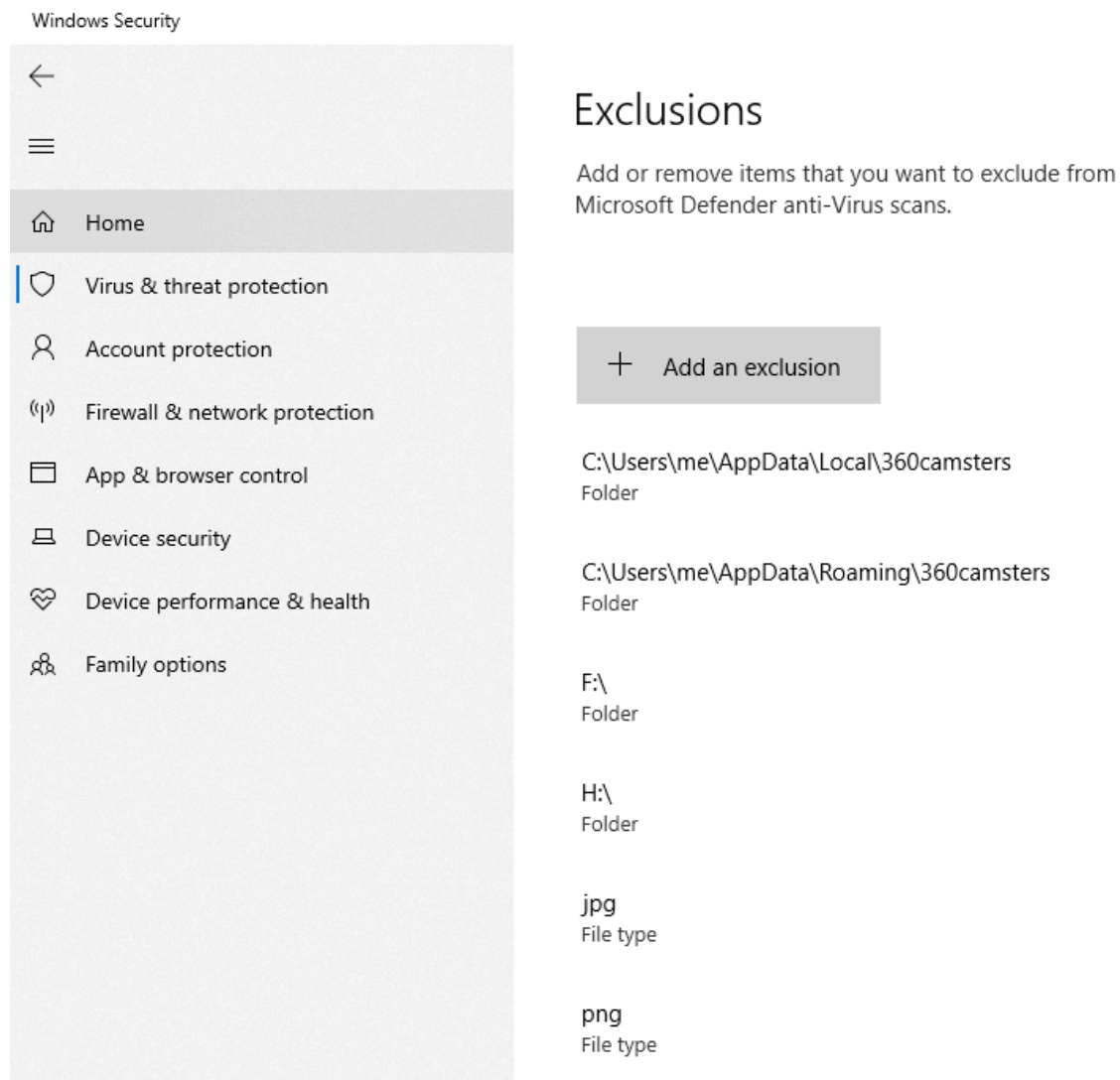
SSDs will be the fastest. Followed by HDDs.

Technically NAS works fine. However, depending on your network, NAS can be very slow.

### Windows Virus and Thread protection

We strongly recommend adding the following exclusions to Microsoft Windows **Virus and Thread protection**.

This can speed up processing by 300%.



Please deactivate any third-party virus scanners.  
Or apply the above settings correspondingly.

## Workflow

Follow the menu from the top to the bottom.

Skip menu items you do not need.

Go back and forth to make adjustments.

## Project size

For quick results start familiarizing yourself with a small project.

This way alterations can be processed real fast.

## Data Management

### **Menu: Import**

New recordings always must be imported first.

For country-size projects we recommend processing the data in smaller, separate projects. Have separate projects for e.g. cities, counties, states, etc.

Process each.

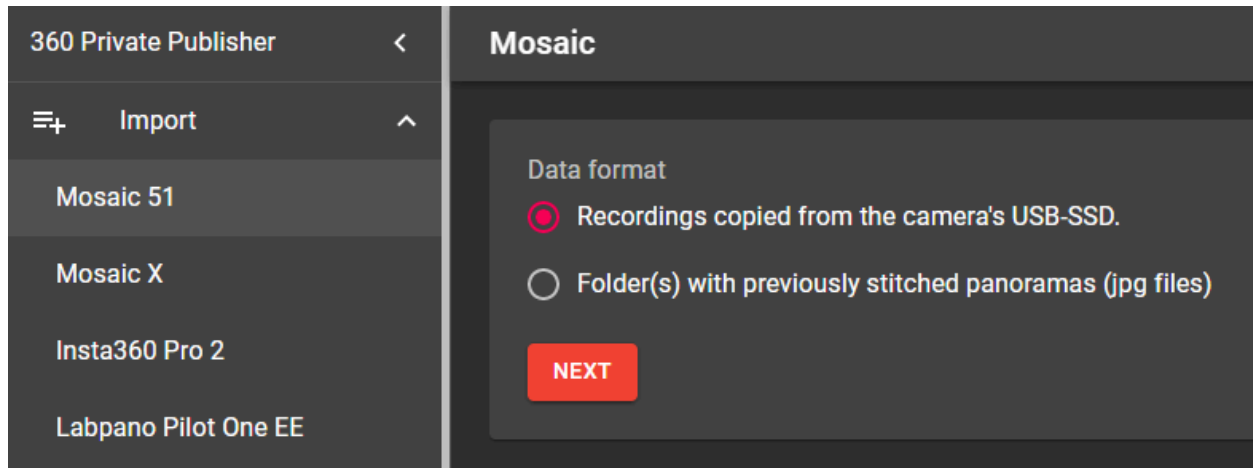
Before publishing combine the resulting players with **Menu: Tools -> Merge Players**.

This does not change the individual projects and their players.

It just creates a new, combined, player with all the data.

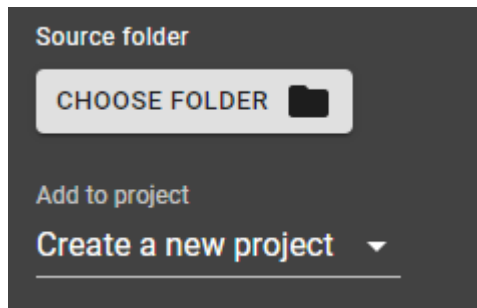
## Import

In **Menu -> Import** pick your camera or data-format and import your footage. Multiple recordings can be imported at once.



In case you have no own recordings yet, try our [test-data](#).

Start a new project, or add the imported recording(s) to an already existing project:



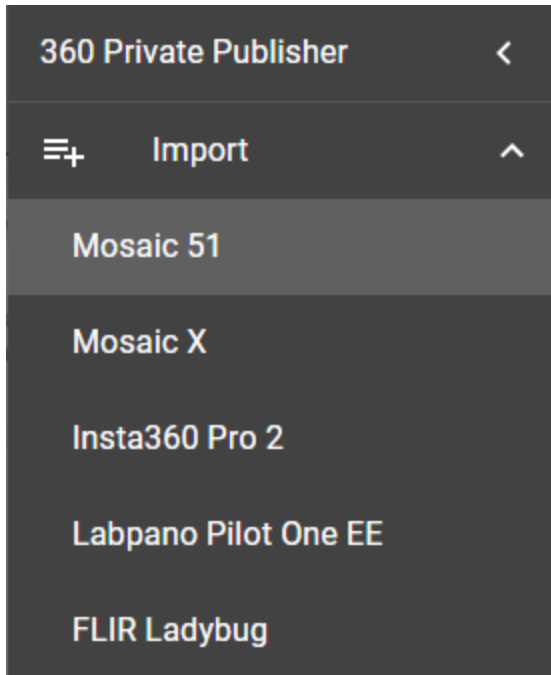
Recordings from many different cameras can be combined into the same project and player.

Even recording from different brand cameras can be combined into the same project and player.

Either when importing or after processing with **Tools -> Merge Players**.



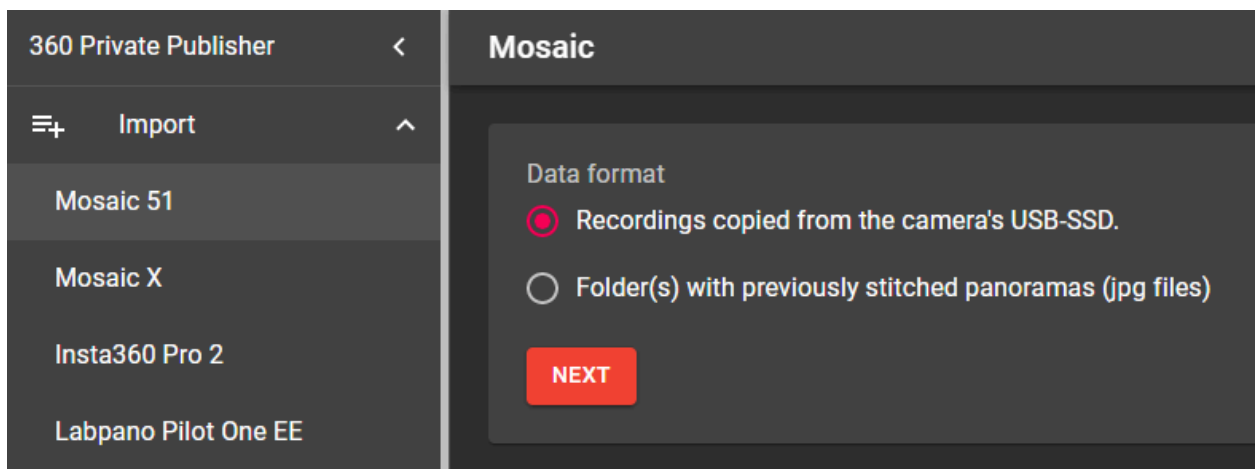
## Supported Cameras



### Mosaix 51 and Mosaic X

Two data formats are supported:

1. One or many "reels" folder(s). Copied from the cameras USB-SSD.
2. A folder (with optional subfolders) of already stitched .jpg panoramas with EXIF metadata.



## Insta360 PRO 2

Expected data format: A single .mp4 video file from the insta360 Stitcher program.

## Labpano Pilot One EE

Expected data format: A single .mp4 video file from the camera.

## FLIR Ladybug 5+

A folder with equirectangular .jpg files with EXIF metadata.

## Applied Streetview Original 360 camera

First process the recorded footage with the Applied Streetview Creator program as usual.

Then import the “player2/panoramas” folder.

## Supported Resolutions

This program supports different resolution footage from different 360 camera brands in the same project and the same player.

This is ideal for when upgrading from a lower resolution 360 camera e.g. the 4k Insta 360 Pro 2 to a higher resolution 360 camera e.g. the 12k Mosaic 51 camera.

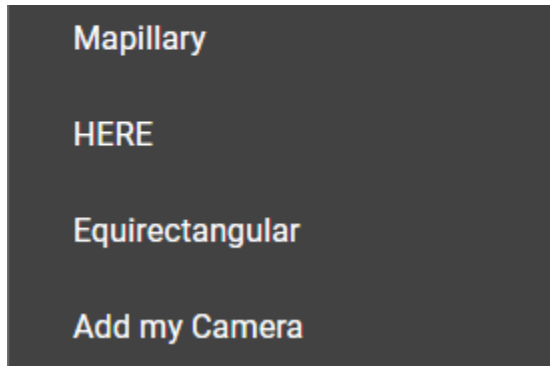
To have both the old and new cameras recordings in the same project and show it in the same player.

When importing 360 recordings the program creates equirectangular panoramas in one of the following sizes:

<b>360 camsters Panorama size</b>	<b>Camera</b>	<b>Camera Resolution</b>
8192 x 4096	Insta 360 Pro Labpano Pilot One EE Applied Streetview Original 360 camera	4k 8k (8192 x 3840) 8k+ (8192 x 4096)
12288 x 6144	Mosaic 51 Mosaic X	12k (12288 x 6144) 13k
16384 x 8192	custom	
20480 x 10240	custom	
24576 x 12288	custom	

When exporting streetviews tiles of a different size (512x512, 768x768, 1024x1024, etc) are created for the player to display.

## Supported Data formats



### HERE

A folder of equirectangular .jpg files with EXIF metadata.

### Mapillary

A folder of equirectangular .jpg files with EXIF metadata.

### Equirectangular

A folder (and optional subfolders) with equirectangular .jpg files with EXIF metadata.

## Add my Camera

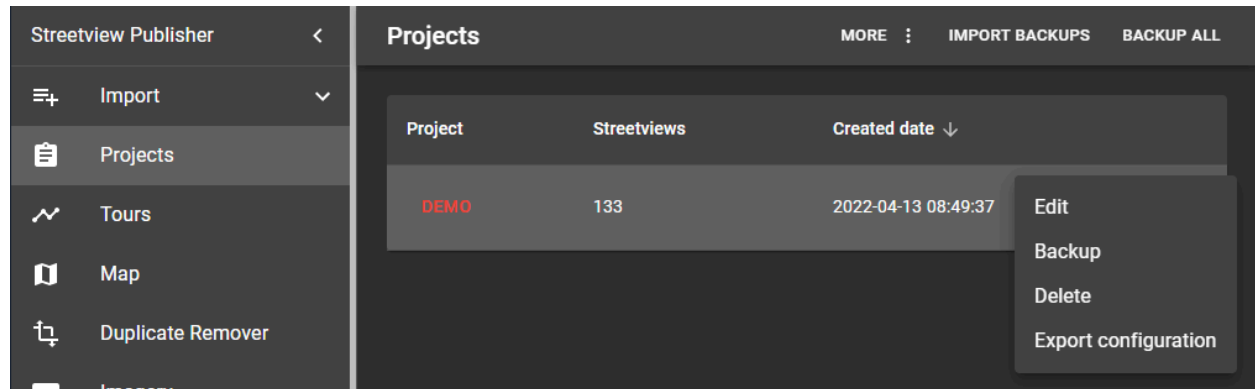
In case your camera is not listed as supported yet:

- 1) Please try all available **Import** options. One might just work for a working data format.
- 2) Please use the **Import -> Add my Camera** form if it does not work.

# Projects

The list of all your projects.

Click a project to open it. The [Tours](#) tab will open.



## Import Backups

Import one or many project backups.

Project backup files to be found in the **/out/Backups** folder.

Or the **/Out/projectname/backups** folder.

This is only for this program's data.

Sources or generated data is never part of a backup.

In case a backup is from another PC, paths then can be adjusted on the [Tours](#) tab.

## Backup All

Backup all your projects with just one mouse click.

This is only for this program's data. Sources or generated data is never part of a backup.

Additionally you can **Edit**, **Backup** or **Delete** a single project.

This is only for this program's data. Sources or generated data is never part of a backup.

**This program can not change or delete your source data.**

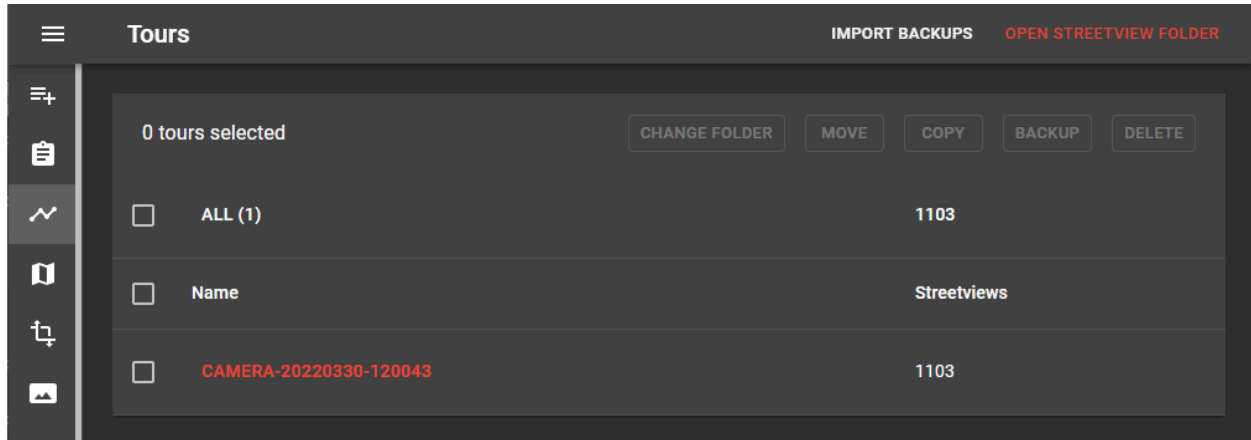
It is best practice to always have an up-to-date backup of your data and the project backups on a disconnected drive.

If the drive is connected to your network and powered up it is just a copy, not a backup.

# Tours

A list of all the tours of a Project.

The project's tours can be from different cameras, even different camera brands.



## Show on map

Click **All** or a tour to open the [Map](#) tab.

## Import Backup

Import a tour backup. One or many tour backups can be imported at the same time.

## Change Folder

When migrating backups from one PC to another or when the project's **in** folder has been moved: Select all the tours and click the **CHANGE FOLDER** button. Then set the path to the new **in** folder.

If the project has e.g. additional tours that have been moved or copied from a different project, then tick those new tours individually and Click **CHANGE FOLDER** button.

## Move

Move selected tours to a different project.

## Copy

Copy selected tours to a different project.

## Backup

Backup selected tours.

**This is only for this program's data only. Sources or generated data are never part of a backup.**

## Delete

Deletes the selected tours from the project in this program.

**This program can not change or delete your source data.**

You should consider doing a backup first. Just in case.

# Map





In order to display a large amount of streetviews on the map, streetviews are clustered together, depending on the map zoom level.

A cluster is basically a collection of streetviews.

Clusters are displayed for zoom levels 0 to 19 only. Zoom levels 20 , 21 etc. always show all streetviews individually.

## Change map base layer

Click the  button in the top left corner to change the map base layer.

**Esri.WorldImagery** is the default. Select a different provider from the list. Or provide your own [custom map tiles](#) by clicking the  button.

## Custom map tiles

The slippy map tiles format is supported with both Google/Bing/OSM tile coordinates and TMS.

Also works with Mapbox.com raster data.

See the [Mapbox](#) chapter for the URL format.

### Label

Your custom tiles provider name

### URL

The URL can point to an online resource:

Change the bold parts of the address.

**http://www.your-company.com/map-tiles/{z}/{x}/{y}.png**

### Local

A local folder or NAS drive:

Change the bold parts of the address.

**file://D:\folder\{z}\{x}\{y}.png**



{z} is the zoom level, and {x} and {y} are the coordinates of the top left corner of the tile in web mercator projection. For the TMS format use the {-y} placeholder.

### Attribution

Copyright information displayed at the bottom of the map.

Mapbox

Check the [Mapbox](#) section for instructions.

### Display

Show or hide icons for active and deactivated streetviews.

Usually more footage than needed is recorded.

The [Duplicate Remover](#) and the [Skip](#) tool as well as manual deactivation on the map page can be used to reduce the number of streetviews to be published.

Activated streetviews have a **white** outline.

Deactivated streetviews have a **gray** outline.



## Tours

Show the selected tours on the map.

Click a tour to zoom to it.

Click **ALL** to center the map on all the tours.

Untick to hide all tours. Then tick selected tours to show only them.

## Timeline

Only available when timelines have been created.

Show the selected timelines on the map.

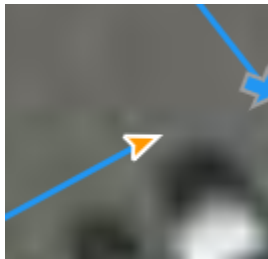
Click **ALL** to center on all the timelines.

Untick to hide all timelines. Then tick selected timelines to show only them.

## Select streetviews

Most of the actions like activate/deactivate, move, rotate, assign a road name or POI are performed on one or many selected streetviews.

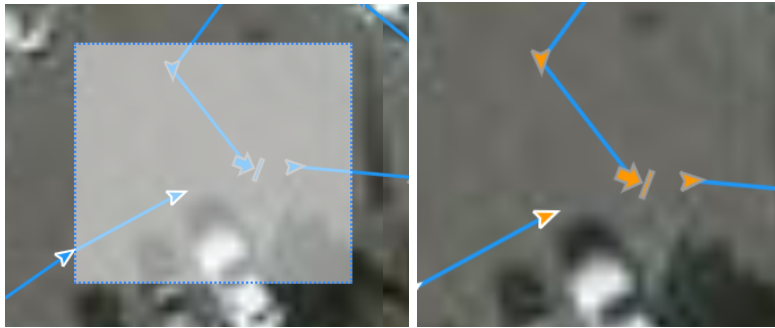
Click a streetview to select it. A selected streetview will change its color to orange.



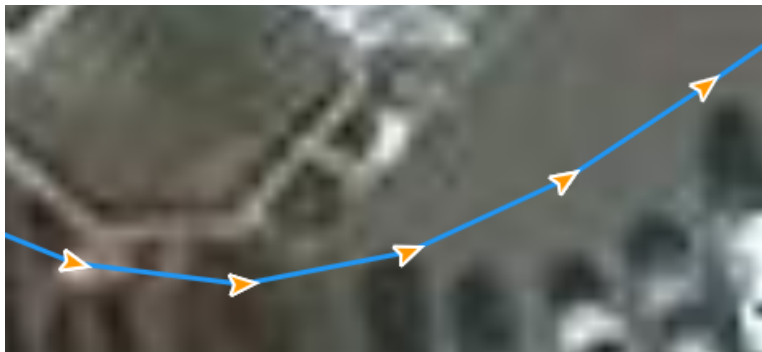
It's possible to select multiple streetviews by holding down the CTRL key when clicking on the streetviews.



Holding down the SHIFT key and then drag the mouse to select all the streetviews in a rectangle.



To select all the streetviews from first to last and everything in between, select the first streetview, then while holding down the ALT key, select the last one streetview.



To deselect click anywhere on the map or press the **ESC** key.

## Deactivate and Activate



Select the streetviews.

To deactivate selected streetviews click the **DEACTIVATE STREETVIEWS** button.

To activate selected streetviews click the **ACTIVATE STREETVIEWS** button.

## Meta Data

Displays the metadata for a selected streetview.

This panel will only be shown if a single streetview is selected.

It is not available for clusters. Zoom in more to see individual streetviews.

Information <span>^</span>	
Tour	camera-20210706-104229
Image Number	6
GPS Date	2021-07-06 07:42:50
Local Date	2021-07-06 10:42:32
Latitude	29.274566 °
Longitude	48.023371 °
Height	26.68 m
GNSS fix	N/A
Heading	90.24 °
Speed	N/A
Release Mode	N/A

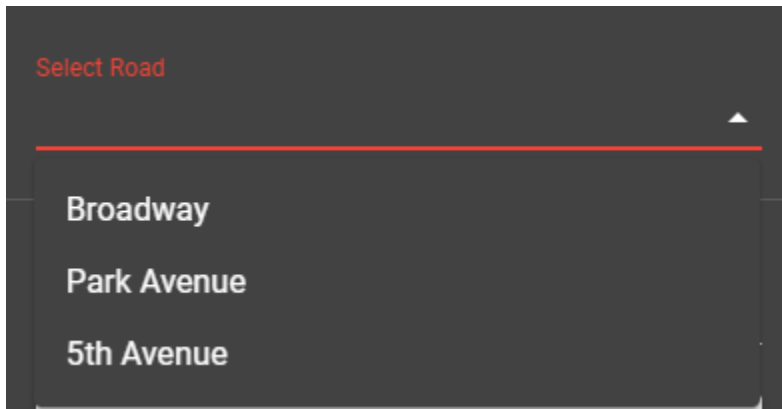
## Road

Enable **Show Road on Map** to display the road name as a label for each streetview.



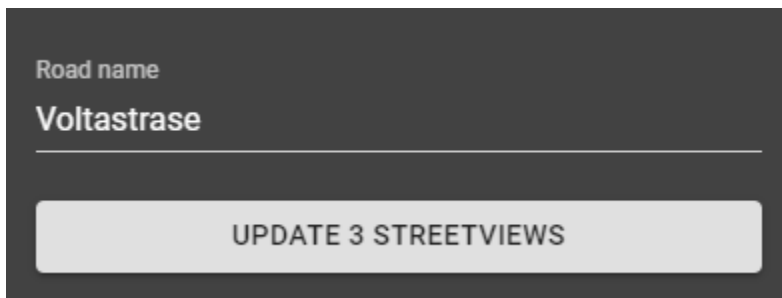
### Select all streetviews with the same road name

Select and zoom to a specific road by selecting it from the list in the panel.



### Assign a road name to a streetview(s)

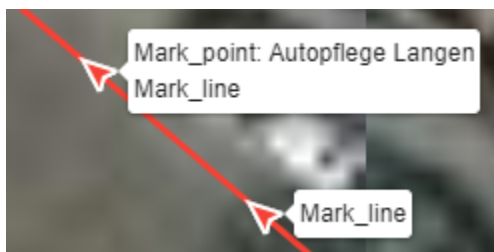
Select streetviews on the map to assign a road name to them.



Type the name of the road in the text box and click the **UPDATE STREETVIEWS** button.

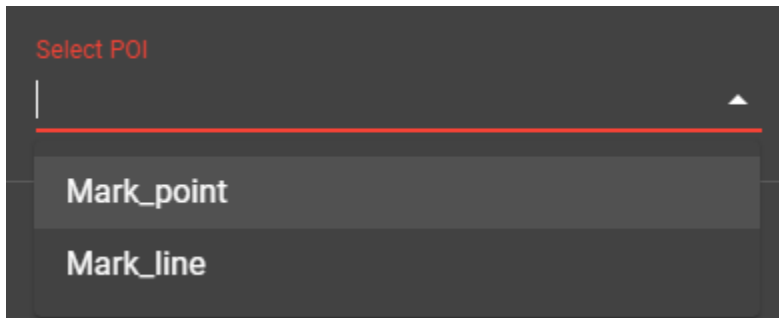
### POI

Enable **Show POI on Map** to display the POI name as a label for each streetview.



### Select all streetviews with the same POI name

Select and zoom to a specific POI by selecting it from the list.



### Assign a POI name to streetview(s)

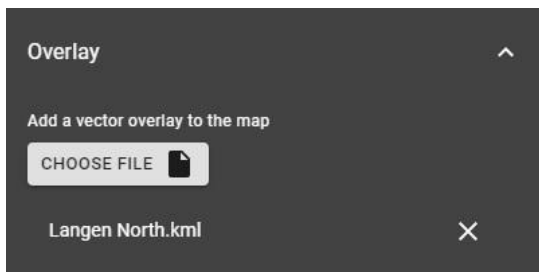
Select streetviews to assign a POI to.

Type the name of the POI in the text box and click the **UPDATE STREETVIEWS** button.

If a single streetview is selected, a POI of type point will be assigned the new name.  
If multiple streetviews are selected, a POI of type line will be assigned the new name.

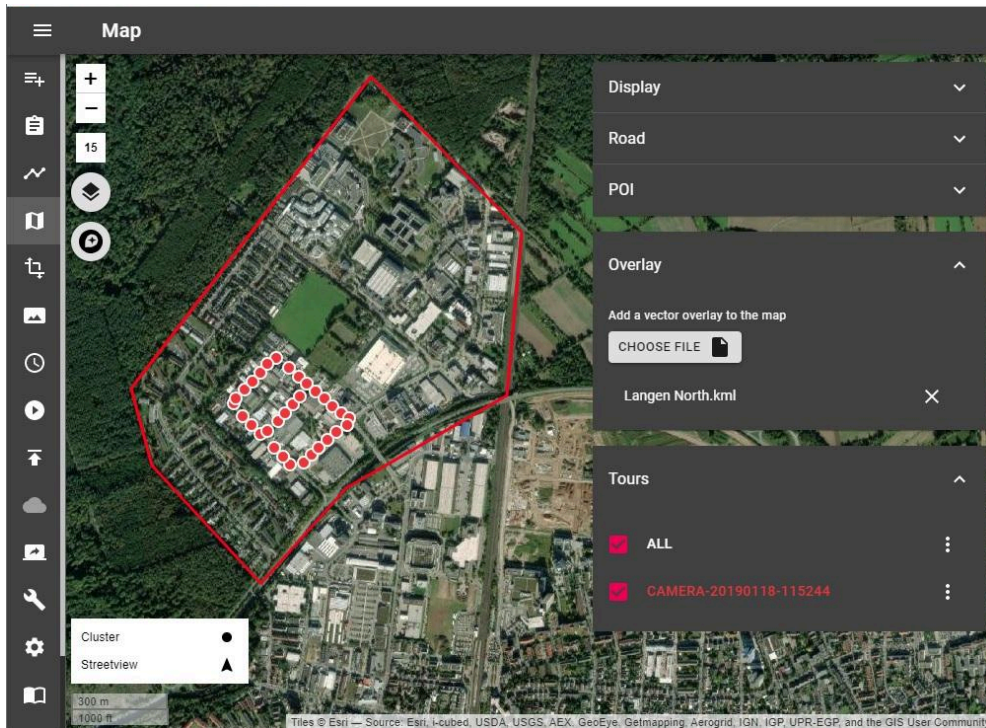
### Overlay

Add a vector overlay to the map. Supported formats: kml.



Click on the **X** button next to the overlay name to remove it from the map.

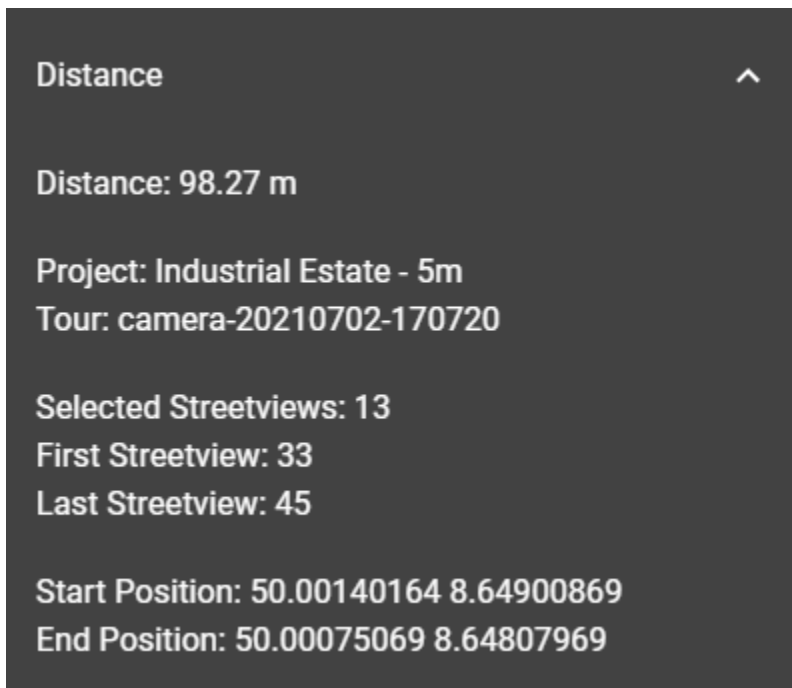
The red line is the overlay



## Distance

Display the distance between the selected streeviews.

Start Position and End Position is in **Latitude Longitude** coordinate format.



## Keyboard shortcuts

[Download as pdf.](#)

Mouse	Move all selected streetviews
ESC	Unselect all selections
CTRL + A	Select all streetviews visible on the map
Click an arrow	Select a streetview
Hold CTRL + click a Streetview	Add a streetview to the current selection
Shift + draw rectangle	Select all the streetviews in the rectangle
Hold CTRL + SHIFT + draw rectangle	Add all the streetviews in the rectangle to the current selection
Hold ALT + click a Streetview	Line selection. Having a streetview selected hold ALT then Click a second streetview to select it and all the streetviews in between.
CTRL + L	Align all selected streetviews in a straight line.
DELETE	Deactivate all selected streetviews
INSERT	Activate all selected streetviews
HOME	Rotate all selected streetviews counterclockwise
END	Rotate all selected streetviews clockwise
PG UP	Go to the next streetview
PG DOWN	Go to the previous streetview
Arrow keys: Up, Down, Left, Right	Scroll the map.

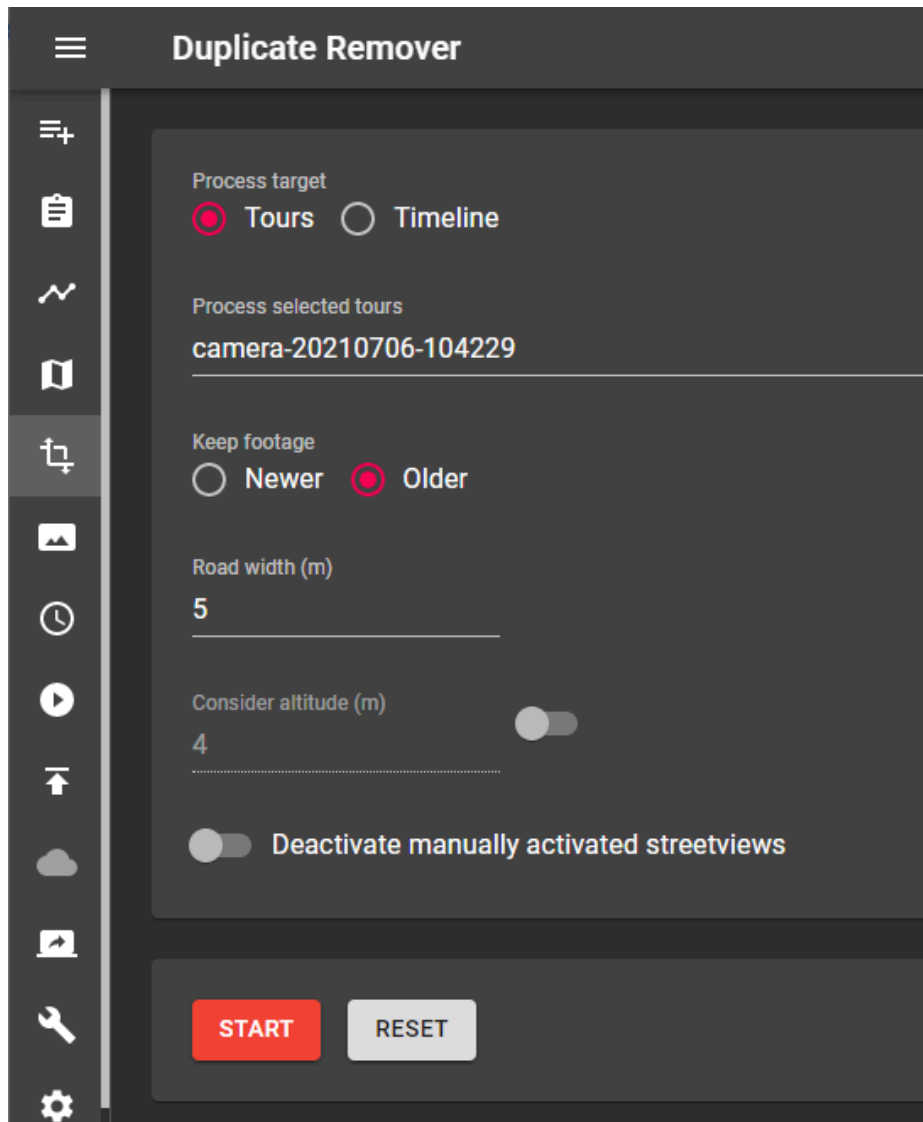


## Duplicate Remover

Removes duplicate recordings from roads recorded more than once.

### Hint:

Additionally you can deactivate excessive footage with the [Skip](#) tool. For best results run the [Skip](#) tool after the Duplicate Remover.



### Process target

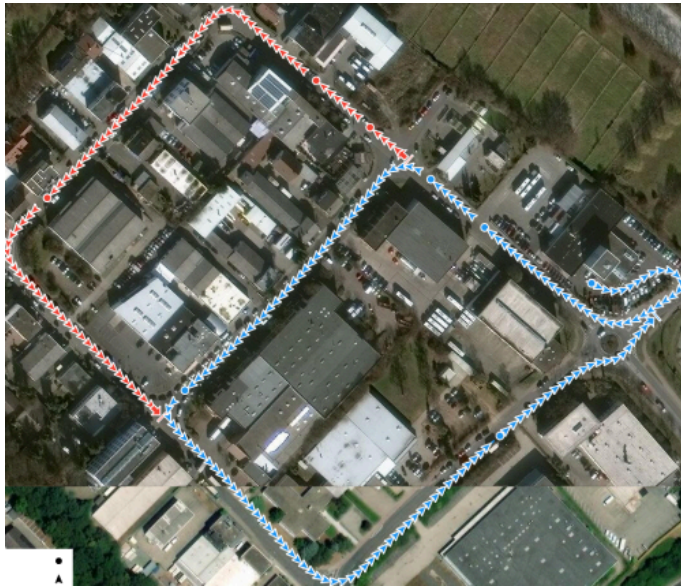
(Visible only when there are timelines)

Process either the selected tours or process the selected timelines.

## Keep footage

**Older** - Provides best results for most situations.

Keeps the existing, older, streetviews (blue), adds new (red) streetviews for newly recorded roads.



**Newer** - Replaces existing streetviews (blue) with newer footage (red).

The overall data will be more up-to-date.

Disadvantage: After driving into a dead-end road, you get the probably worse footage from reversing out of it.



## Road width (m)

Base setting.

### **Consider Altitude (m)**

By default the altitude is ignored when detecting duplicates.

Try it when there are many bridges and tunnels.

### **Deactivate manually activated streetviews**

By default manually activated streetviews are not deactivated by the Duplicate Remover. Enable this option to force them to be deactivated.

### **Start**

Start removing duplicates in streetviews.

### **Reset**

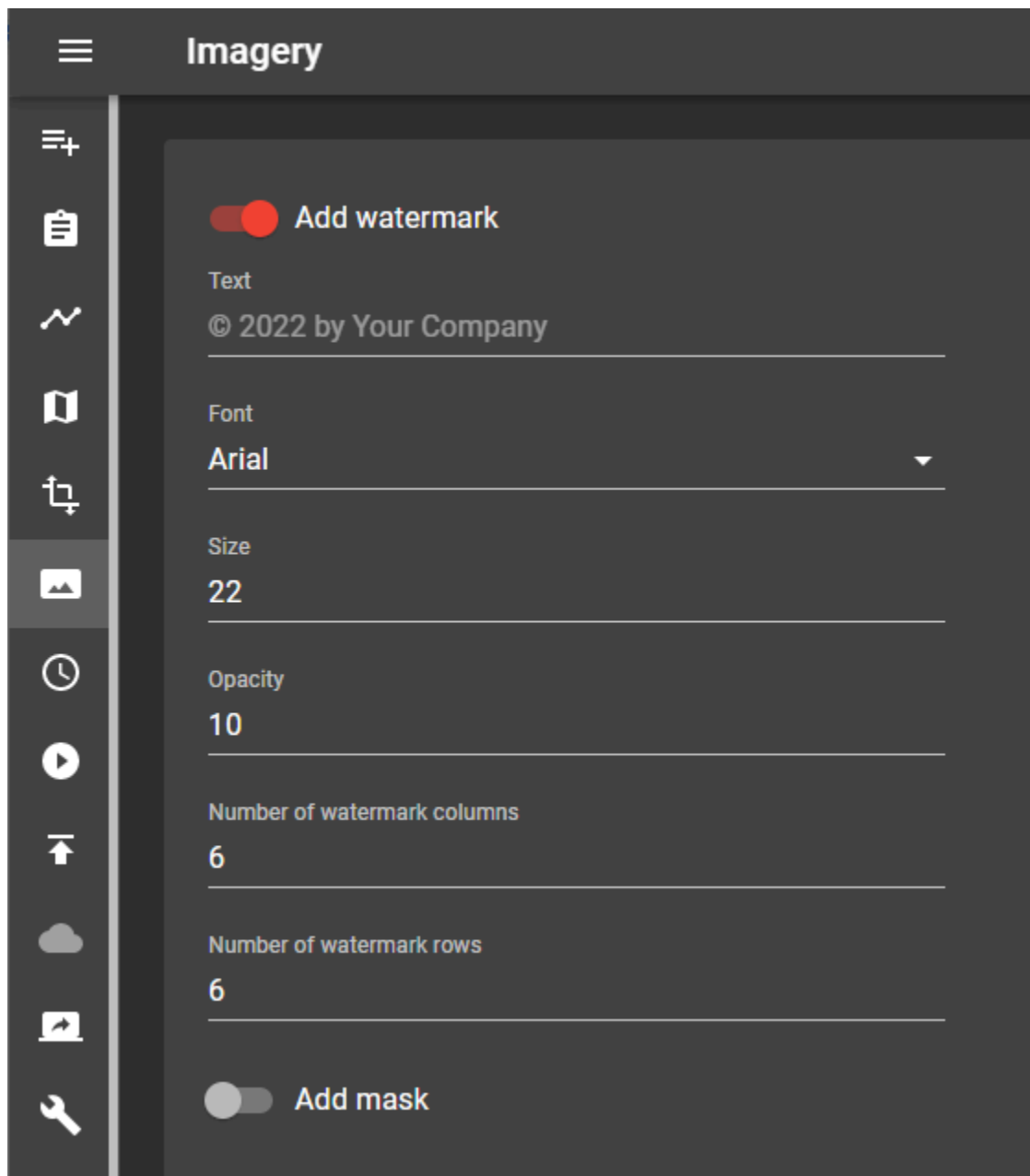
Reset all streetviews deactivated by Duplicate Remover and [Skip](#) tools.

## Imagery

Add watermarks to the streetview. Changes can be previewed in the **Player -> Preview** tab.

### Hint:

For the Free program version the watermark is fixed to **DEMO**. It can not be changed or removed. Consider a paid [version](#) if you need to adjust the watermarks.



## **Add watermark**

Enable watermarks.

### **Text**

Watermark text.

### **Font**

Pick a font for the watermark. The list of fonts is taken from C:\Windows\Fonts.

### **Size**

Watermark text size.

### **Opacity**

Watermark text opacity. (See through.)

### **Number of watermark columns**

How many watermark columns to show. (left-right).

### **Number of watermark rows**

How many watermark rows to show. (up-down).

### **Add mask**

Add a mask to hide the car's rooftop.

Technically it is a transparent PNG image merged to the streetview.

Download an example [mask](#).

### **Mask path**

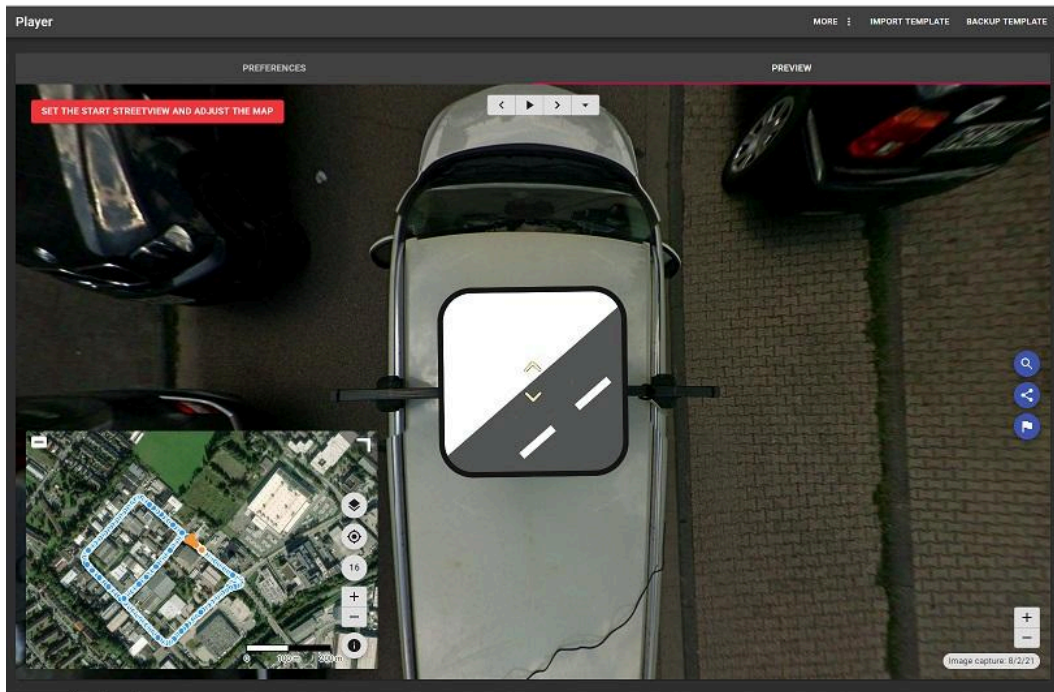
Path to the mask PNG image.

A Nadir logo can be added as a mask.

## Nadir Logo

Add your company's logo to the Nadir (bottom) of your streetviews.

In **Player - Preview** it looks like this:



To see the Nadir logo change Player - Preferences:

- **Look down limit (degrees)** from the default -50 to -90
- **Maximum Zoom Level** from default 120 to **150**.

This way you can see the Nadir logo better.  
Change it back both when done reviewing.

Hint:

Color logos will be automatically made into grayscale logos during processing. This can not be changed.

Add Logo to Mask

Preparations:

Download this [example](#) with all files needed.

Additionally only your own logo is needed.

Recommended minimum size for your logo: 300 px x 300 px.

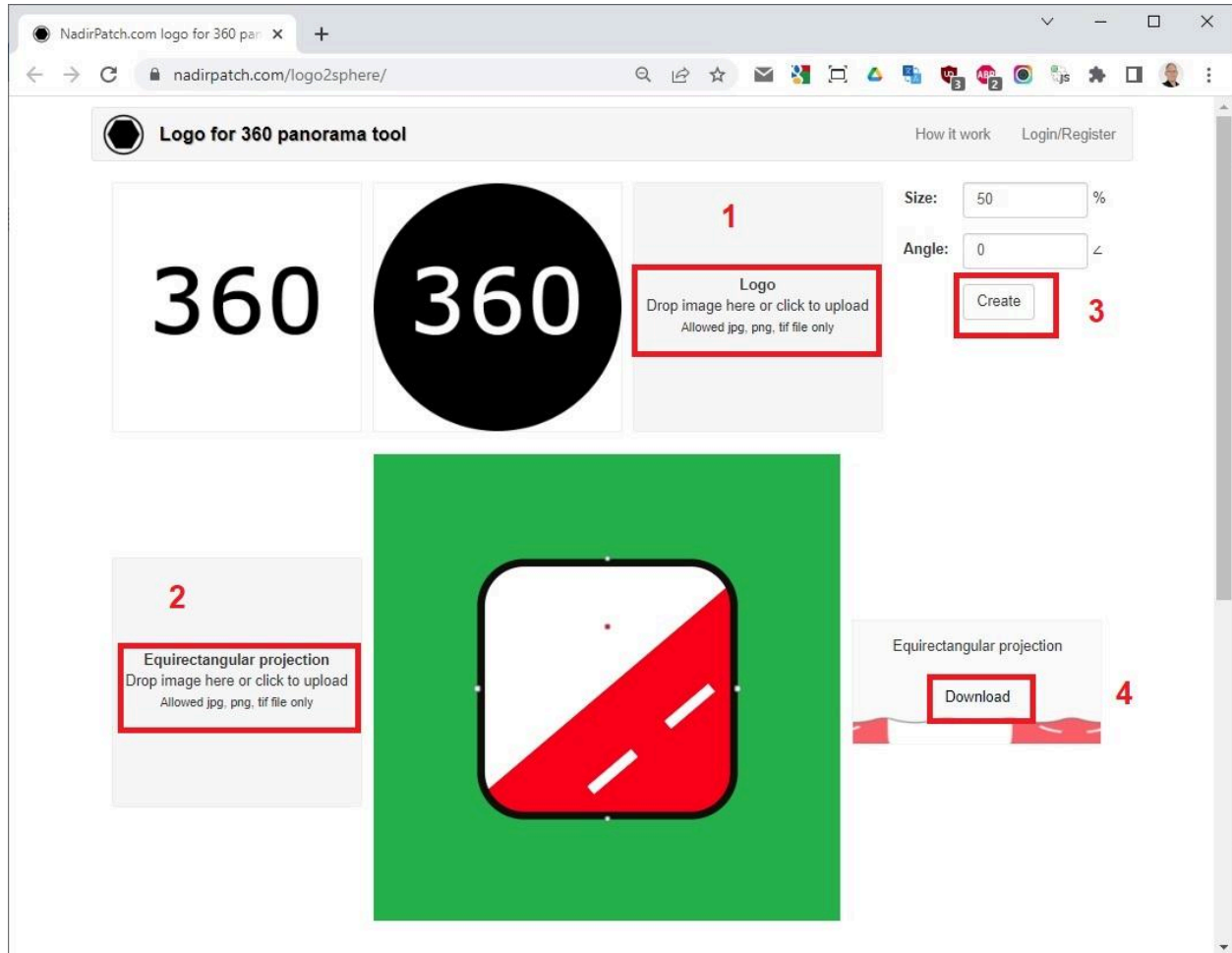
Supported formats: png, jpeg, tif

**Hint**

Color logos will be automatically made into grayscale logos during processing. This can not be changed.

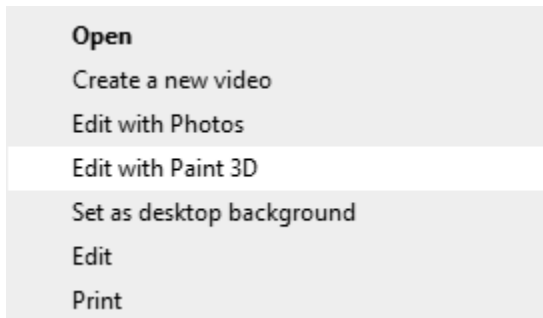
Go to <https://nadirpatch.com/logo2sphere/>

- 1) **Logo:** Drop your own logo onto **Logo** or select it to upload.
- 2) **Equirectangular:** Drop green-screen-template.jpg onto **Equirectangular projection** or select it to upload.
- 3) **Create:** After upload is complete click the **Create** button in the top right corner.
- 4) **Download:** After the image is created click the **Download** button in the bottom right-hand corner. Download and save the **pano.tif** image.

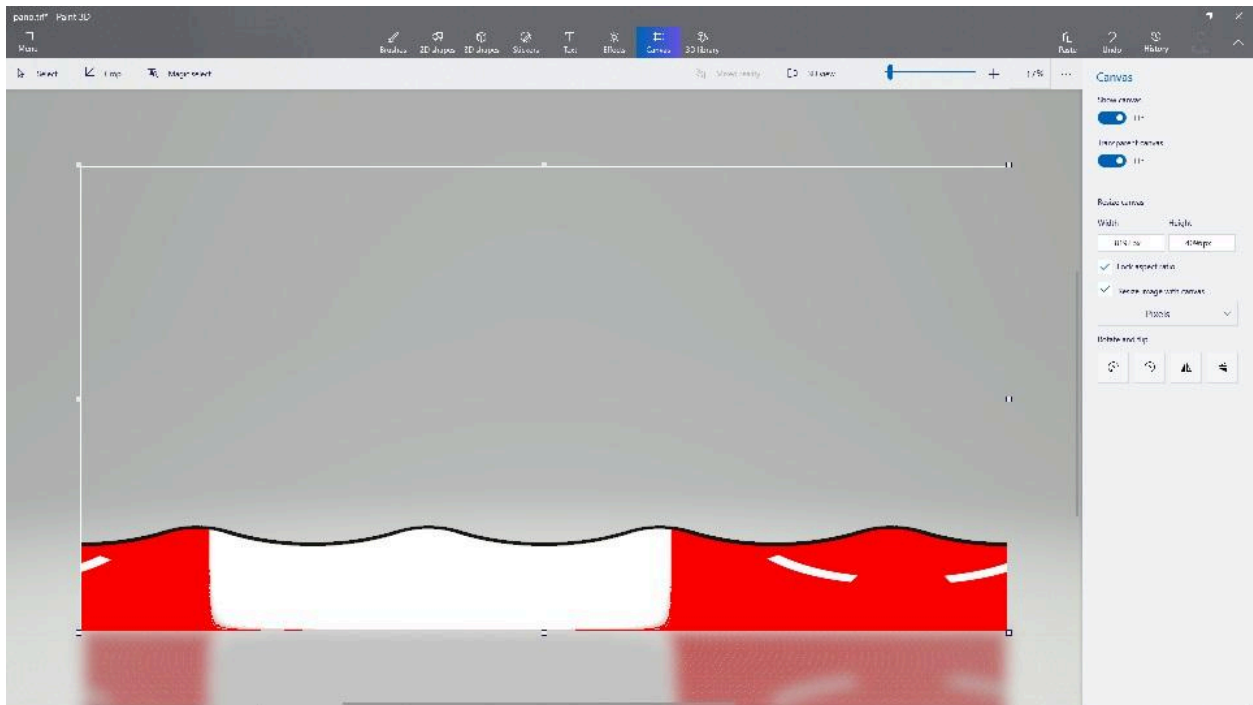


Set Transparency

On your PC: Edit with **Paint 3D**: Right click the **pano.tif** image then select.



In the top navigation bar Click **Canvas** and then enable **Transparent canvas**.



To save press CTRL + S then Click **Image**.  
Change Save as type to **2D PNG** then click **Save**.

**pano.png** is now ready to be used as a Mask for this program.  
Or just download our own [pano.png](#) for a quick test.

Apply the Mask

In your project go to the [Imagery](#) tab and activate the mask and set it to the new **pano.png** file.



Add mask

Mask path

 S:\Downloads\pano.png

## Result

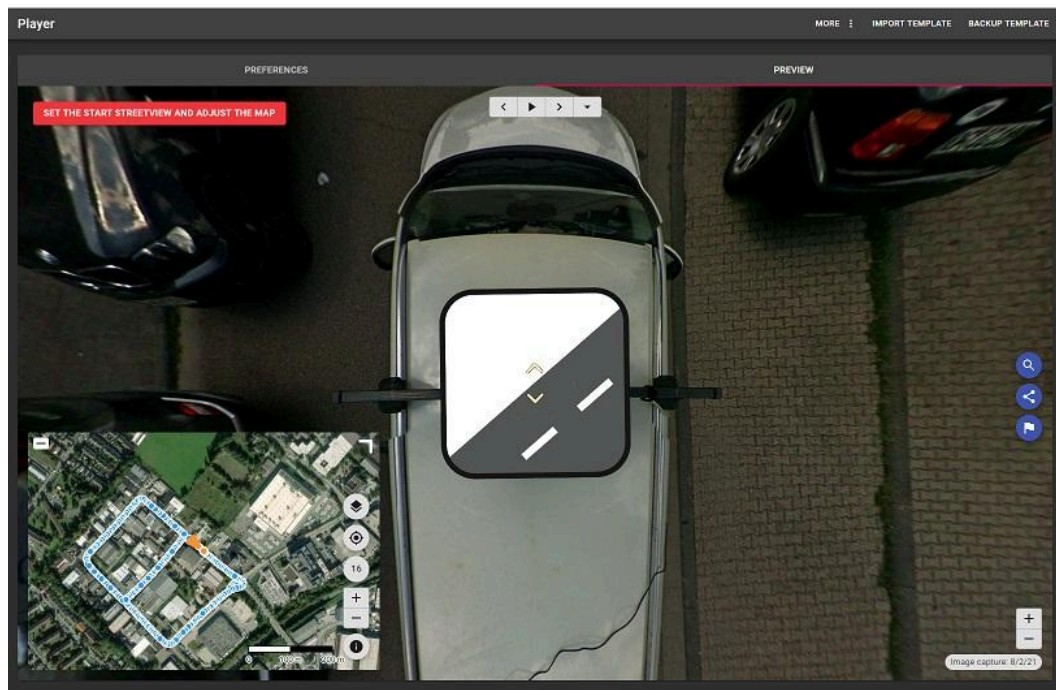
By default all our players are configured to not allow you to look down to see the logo you just added.

To change this, go to Player - Preferences - Streetview

Change **Look Down Limit** from default -50 to **-90**.

For your convenience change Maximum Zoom Level from default 120 to **150**. This way you can see the result better. Change back both when done reviewing.

Check what it looks like in Player - Preview:

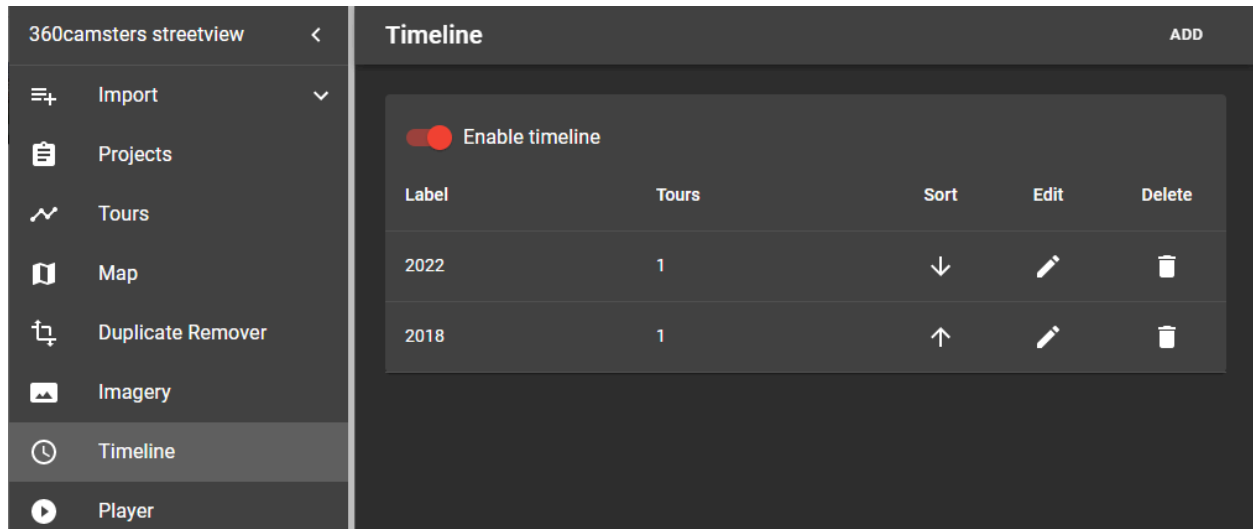


Now process the project as usual.

# Timeline

Record the same road or area multiple times to document change.

Most simple example with two timelines, each with one tour only:



Create a minimum of two timelines. E.g. dates like **2018** and **2022**.

Assign a minimum of one tour (folders) to each timeline.

Whats the player then looks like:

<https://construction-timel-080700b8-0fe4-432f-a1bf-291943c6b7ad.s3.eu-central-1.amazonaws.com/index.html>

## Enable timeline

Enable the timeline feature

## Add


Click the **Add** button in the top right corner.

Set a **Label** for the timeline and which **Tours** belong to this timeline then click the **Save** button in the top right corner.

## Sort


You can sort the timelines as needed.

## Edit

Click the  button next to the timeline.

Modify the **Label** of the timeline and which **Tours** belong to this timeline. Then click the **Save** button in the top right corner.

## Delete

Click the  button next to the timeline then confirm the delete operation.

After assigning all tours to timelines you can use the Duplicate Remover to sort out duplicates in each timeline.

# Player

## Player Keyboard shortcuts

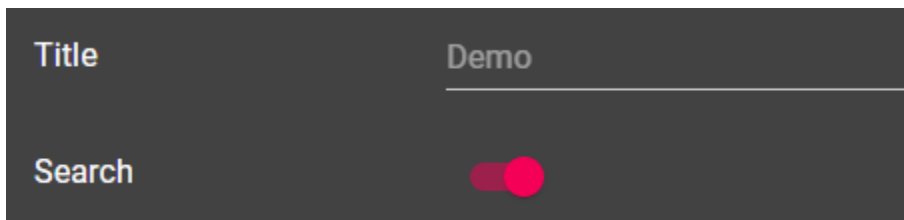
PG UP	Go to the next streetview
PG DOWN	Go to the previous streetview
Arrow keys: Up, Down, Left, Right	Look down, up, left, right.
Ctrl + Shift + h	Screenshot mode: Toggle visibility of hotspot and arrows.

## Preferences

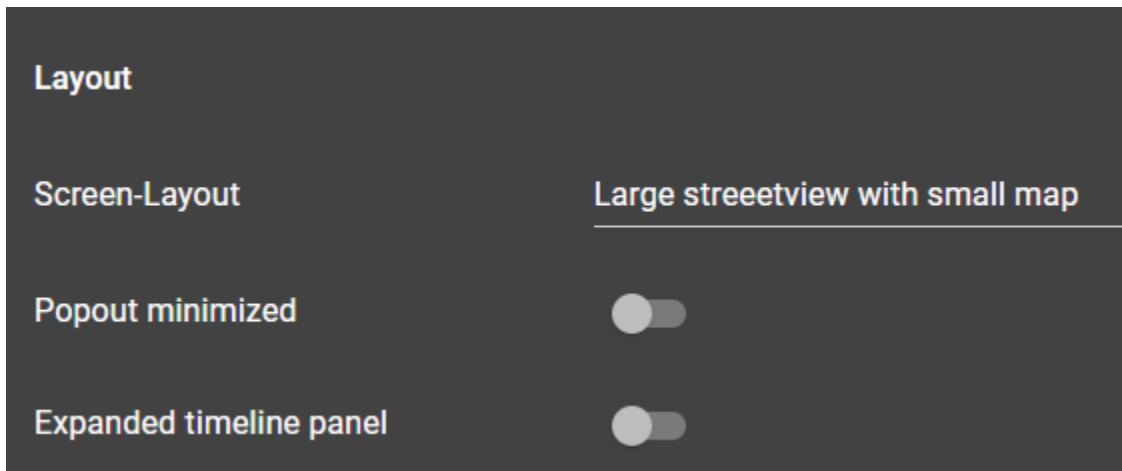
There are many options to configure the player.

Best is to back and forward between the Preferences and the Preview while making adjustments.




### General



### Layout




## Logo

Large logo	<input type="checkbox"/>
Large logo path	<input type="button" value="CHOOSE FILE"/> 
Small logo	<input type="checkbox"/>
Small logo path	<input type="button" value="CHOOSE FILE"/> 
URL	<input type="text"/>
URL target	<input type="text" value="Opens the linked document in a new window or t..."/> 

## Streetview

Navigation panel	<input checked="" type="checkbox"/>
Automatic start	<input type="checkbox"/>
Initial delay (seconds)	<input type="text" value="0"/>
Interval (seconds)	<input type="text" value="1"/>

Hotspots

Hotspot label Auto 

Minimum display distance (m) 0

Maximum display distance (m) 40

Arrows

One streetview per section (degrees) 60

Minimum display distance (m) 0

Maximum display distance (m) 40

Image capture date

Image capture time

Share button

Zoom buttons


Image latitude and longitude

Max Zoom-in (degrees)	50
Max Zoom-out (degrees)	120
Look down limit (degrees)	-50
Look up limit (degrees)	50

## Map

Default Map Provider **ESRI.WORLDDIMAGERY**

---

Streetview Transparency 

Preview streetview on mouse over

Zoom buttons

Scale

Scale units **Metric**



## Mapbox

### Raster data

If you have raster data at mapbox.com, please use [Custom map tiles](#) instead.

The mapbox URL for [Custom map tiles](#) looks like this:

```
https://api.mapbox.com/styles/v1/YOUR_USERNAME/YOUR_STYLE_ID/tiles/256/{z}/{x}/{y}?access_token=YOUR_MAPBOX_ACCESS_TOKEN
```

### Vector data

The following is for vector data only.

If you have your own vector data and would like to add it to the Player.


[Mapbox](#) provides an easy way to do it.

Map provider label	Mapbox streets
Style URL	mapbox://styles/mapbox/bright-v9
Access token	
Map data legal notices	<a href="https://www.mapbox.com/about/maps/" targ


### Map provider label

Name of the map provider shown in the Player - base layer selection panel.

### Style URL

To get the URL of your style, in Mapbox studio click on the  Share button in the top right corner and then copy the value of the **Style URL** field.

### Access token

To get the URL of your style, in Mapbox studio click on the  Share button in the top right corner and then copy the value of **Access token** field.

### Map data legal notices

Custom map data legal notices

## Automatic rotation



The screenshot shows a settings menu for 'Automatic rotation' on a dark background. It contains five items:

- Enabled**: A toggle switch that is currently turned off (grey).
- Direction**: A dropdown menu showing 'Right' with a downward arrow.
- Initial delay (seconds)**: A text input field containing the number '0'.
- Interval (seconds)**: A text input field containing the number '3'.
- Click disables auto rotate**: A toggle switch that is currently turned on (pink).

## Translations

For each language the default translations shown below will be used, unless you enter something else.

The Player will try to match the browser locale with one of the available languages, if that fails the first language will be used as the default.

Enable **Multi language** for a button to allow the user to select the language manually in the Player.

Click on **Add new Language** button  to create a new language.

You can find the 2 letter codes (ISO 639-1) of all the languages here:


[https://en.wikipedia.org/wiki/List\\_of\\_ISO\\_639-1\\_codes](https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes)

## Delete

Consider doing a backup of the player settings and all translations before deleting.

Import a Backup to restore an added language and all other player settings.

You can delete your customisations to the four default languages and additional languages added.

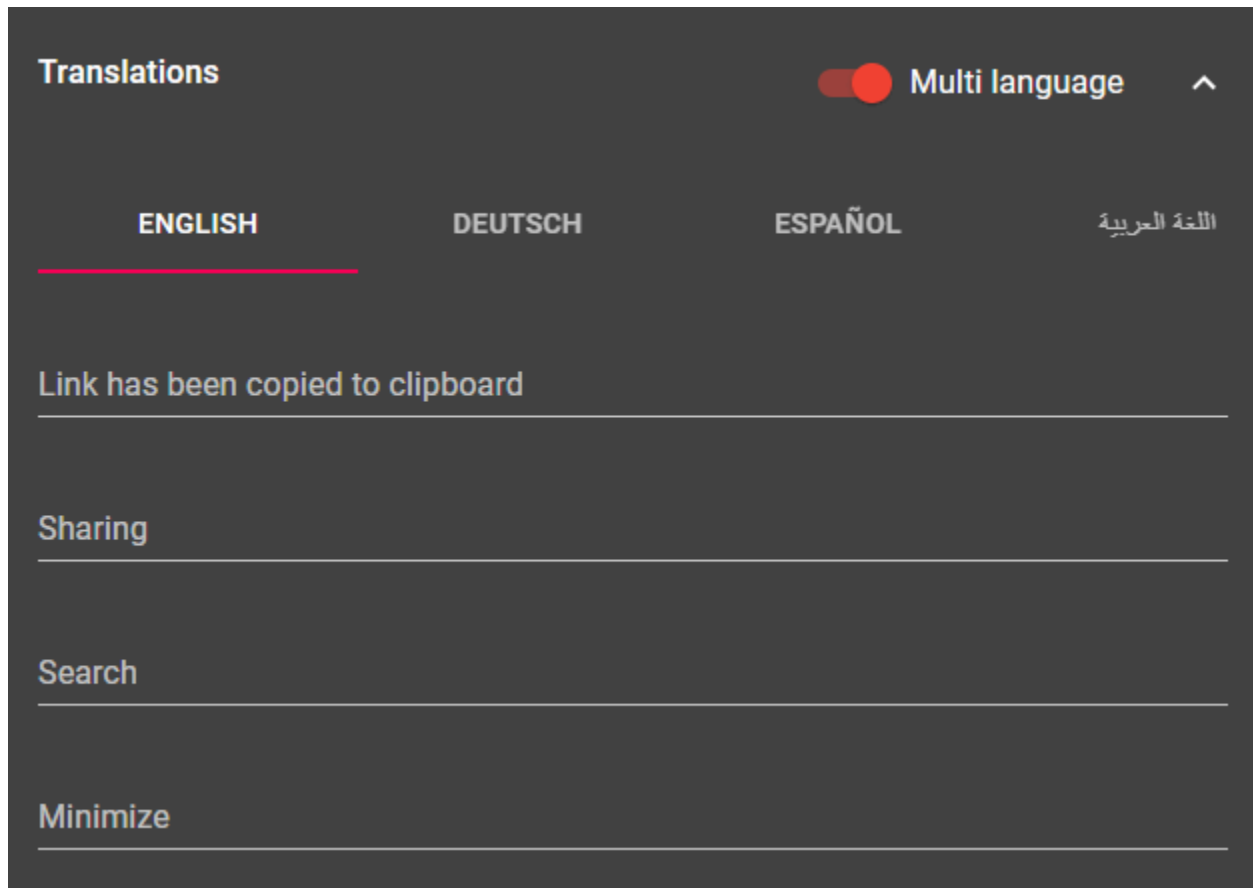
In case one of the four default languages was deleted and you want to bring it back, just add it via the **Add new Language** button  and specify one of default language codes: en, de, es, ar. There is no need to enter all the translations again.

## Default language

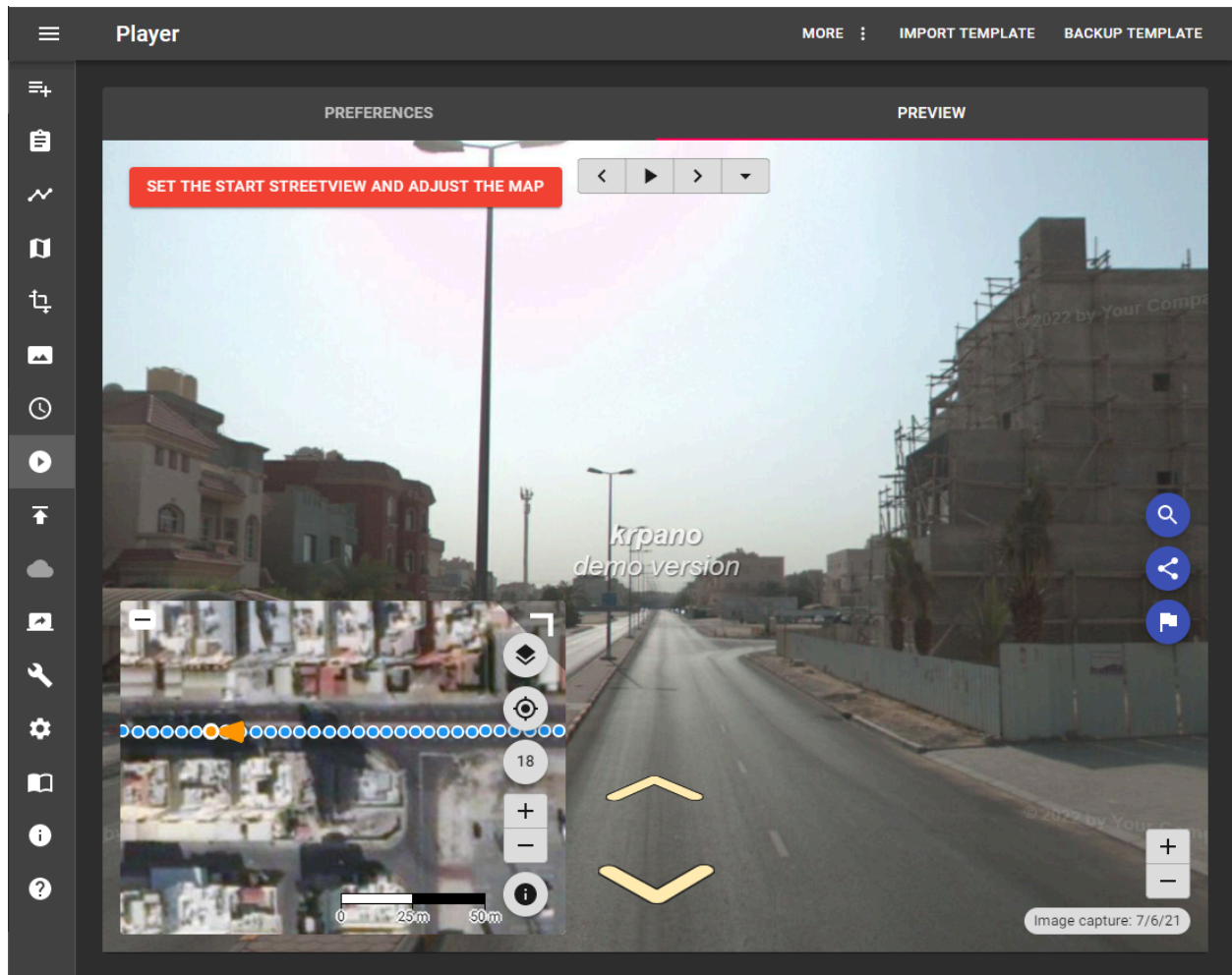
The player will try to match the browser language to one of the available languages. In case no match could be made - the first language will be used (by default English).

To set a different default language, delete all the languages except the desired language to make it the first language.

Then add all other languages again.



# Preview



Press CTRL + SHIFT + H to toggle hotspot visibility. E.g. for screenshots.

## Asset Visualization

Have the player show your assets via the URL. No database is needed.

Let's assume you already have 100000 assets with Latitude and Longitude. How can you link them to the 500 kilometers worth of streetviews you have just recorded?

Simply have your existing system generate a URL for each of your assets.

The player then will automatically open the streetview closest to the asset and look at it. This even works with timelines. Perfect for inspection and documentation of change.

Most simple example:

[https://dhwg78vfdmqzw.cloudfront.net/index.html?v\\_lat=29.274778&v\\_lng=48.023550](https://dhwg78vfdmqzw.cloudfront.net/index.html?v_lat=29.274778&v_lng=48.023550)

You should see a man with a water hose.

Same, but with a label added:

[https://dhwg78vfdmqzw.cloudfront.net/index.html?v\\_lat=29.274778&v\\_lng=48.023550&v\\_alt=128&v\\_label=Man%20with%20%20a%20waterhose](https://dhwg78vfdmqzw.cloudfront.net/index.html?v_lat=29.274778&v_lng=48.023550&v_alt=128&v_label=Man%20with%20%20a%20waterhose)

Minimum requirements:

Latitude and longitude values for your asset specified by URL query parameters:

**v\_lat** - Latitude

**v\_lng** - Longitude

Optional parameters:

**v\_alt** - Altitude

**v\_label** - asset description. It must be url encoded.

**v\_timeline** - The name of an existing timeline. It must be url encoded.

### Layout

**v\_layout** can be one of the following values

map - Map

streetview - Streetview

streetviewBottom - Top Map, Bottom Streetview

streetviewTop - Bottom Map, Top Streetview

### **v\_minimized**

0 bottom left window being maximized

1 bottom left window maximized

**v\_htmlTitle** changes the title of the page. It must be url encoded.

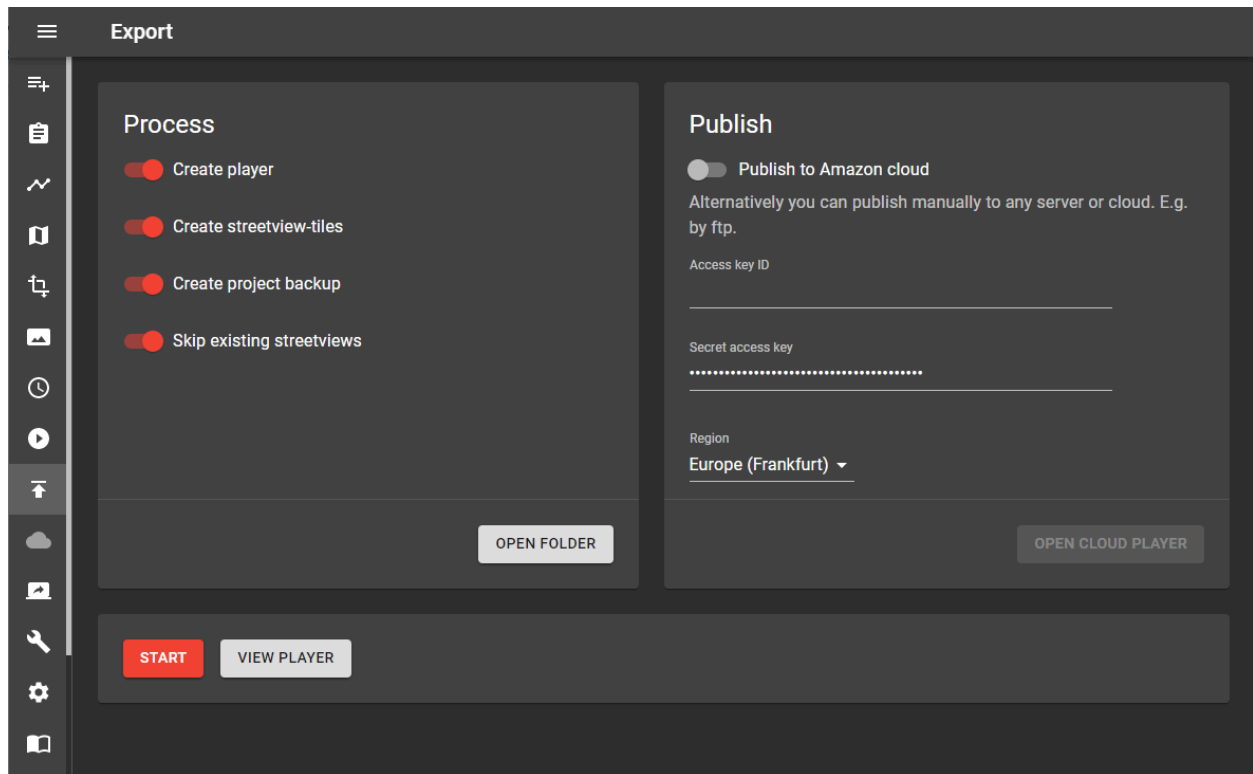
### **Formatting**

**v\_label**, **v\_htmlTitle**, **v\_timeline** must be url encoded.

To encode URLs use <https://www.urlencoder.org/> or similar websites.

# Export

Quick start: Click **Start**, then **View Player**.



## Process

Creates the player and all data for it on your PC.

### Create player

Creates the player in */out/projectname/player2* folder.

### Create streetview-tiles

Creates the streetview-tiles for the player in */out/projectname/panorama-tiles* folder.

### Create project backup

Creates a project backup with a timestamp in the */out/projectname/backups* folder. We strongly suggest keeping the **Create project backup** option activated.

### Skip existing streetviews

In case you are updating a project and reprocessing: If a streetview already exists, do not process it again. This can save a lot of time.

However, if you make changes to the streetviews e.g. by adding or removing a watermark or mask in [Imagery](#) deactivate this option to reprocess the streetviews.

Alternatively you can manually delete the `/out/projectname/panorama-tiles` folder.

Player folders

When processing a folder *projectname* (from the project name) with 4 subfolders is created:

[/out](#)

*/projectname*

        /backup

        /panoramas

        /**panorama-tiles**

        /**player2**

For a working player only the **player2** and **panorama-tiles** subfolders need to be uploaded.



## Publish

One-click upload of the player and the streetview-tiles to your Amazon AWS account.

For the free evaluation period we provide our own Amazon AWS cloud account. Therefore no setup is required.

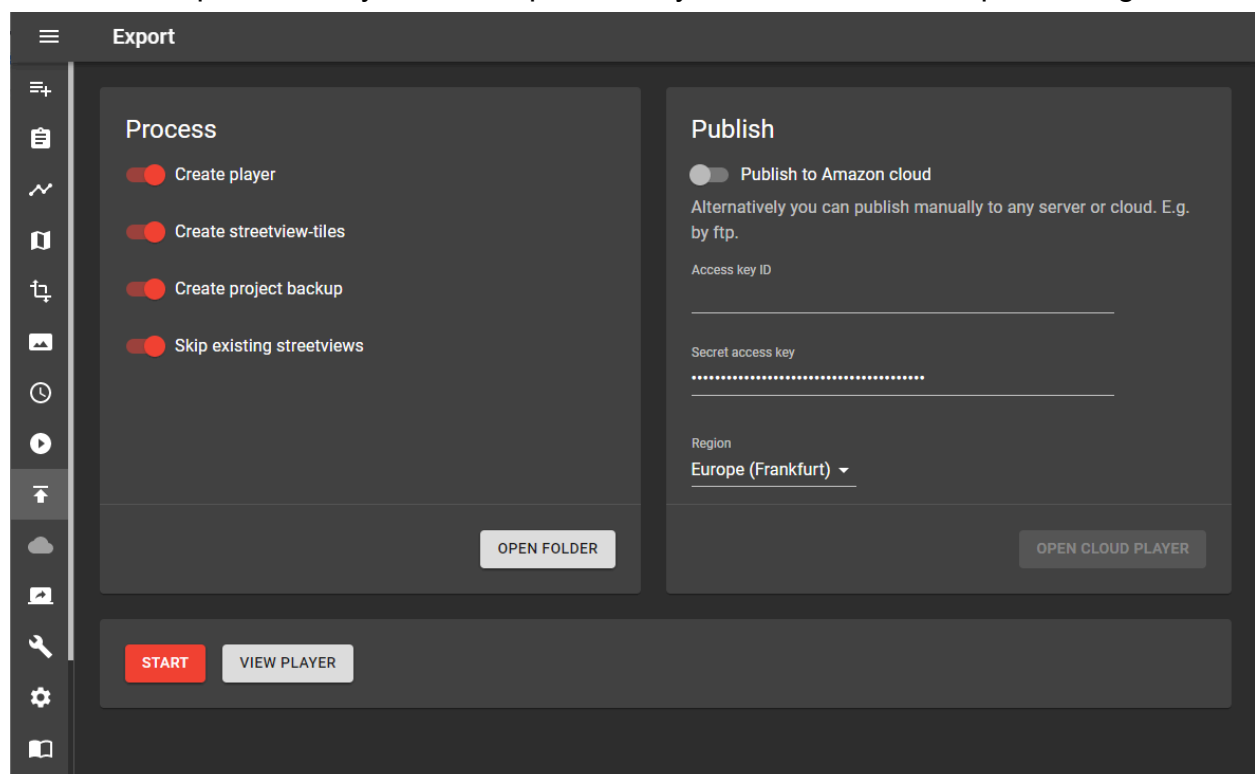
- Free testing with the 360camsters Amazon AWS account.
- Amazon regions are limited to Europe (Frankfurt).

Alternatively you can manually publish to Amazon AWS (S3), Microsoft Azure, Google Cloud, Apache, NGINX, IIS and literally any other web server.

### Publish to Amazon cloud

Process and then publish in one simple step.

You also can process only. And then publish anytime later without re-processing.



### Advantages of the Amazon AWS player

- Easiest player to publish.
- Cheapest player for hosting and data transfer.
- Very versatile. E.g. add a CDN like CloudFront to speed up the loading of the streetviews even more. Or enable for a world-wide audience.

## Details for the player published to Amazon AWS

A unique ID (UUID) is part of the cloud player's URL. It can not be guessed. Only users you tell the URL can access the player.

Consider adding a CDN (**C**ontent **D**elivery **N**etwork) to your player.

For Amazon AWS that is CloudFront. In addition to ensuring a snappy player that way you can remove and then add a different CloudFront URL, without having to upload the player and the streetviews again.

Also you could add a domain or subdomain to the player URL, or the CloudFront URL.

This is the same player, with 3 different URLs:

### Player example (bold: UUID)

<https://fmbeach-0af93b09-d80e-4824-a917-6ee14d5ce5f4.s3.eu-central-1.amazonaws.com/index.html>

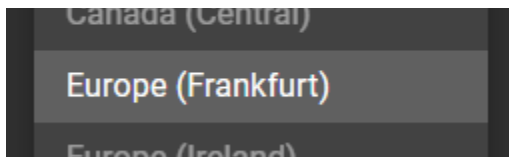
### Player CloudFront example

<https://d1i4vlab4nh63j.cloudfront.net>

### Player subdomain example

<https://ian.360camsters.com>

During the free evaluation period the AWS regions are limited to the **EU (Frankfurt)** location. With the full version all 26 [AWS regions](#) are available to you.



To publish to regions marked as **Opt-in** in the list, you need to activate them first:  
[https://console.aws.amazon.com/iam/home#/account\\_settings](https://console.aws.amazon.com/iam/home#/account_settings)

Africa (Cape Town) Opt-in  
Asia Pacific (Hong Kong) Opt-in  
Asia Pacific (Hyderabad) Opt-in  
Asia Pacific (Jakarta) Opt-in  
Europe (Milan) Opt-in  
Europe (Spain) Opt-in  
Middle East (Bahrain) Opt-in  
Middle East (UAE) Opt-in

After purchasing 360 Private Publisher more options become available:

1. **Access key ID** and **Secret access key**

Follow [Amazon Web Services Cloud](#) on how to get your free AWS credentials.

2. **AWS region for publishing.**

Pick one of the 25 [AWS regions](#) closest to your viewers. This is not necessarily the region closest to you. Each player can have its own region.

US East (Ohio)	Asia Pacific (Tokyo)
US East (N. Virginia)	Canada (Central)
US West (N. California)	Europe (Frankfurt)
US West (Oregon)	Europe (Ireland)
Africa (Cape Town) Opt-in	Europe (London)
Asia Pacific (Hong Kong) Opt-in	Europe (Milan) Opt-in
Asia Pacific (Hyderabad) Opt-in	Europe (Paris)
Asia Pacific (Jakarta) Opt-in	Europe (Spain) Opt-in
Asia Pacific (Mumbai)	Europe (Stockholm)
Asia Pacific (Osaka)	Europe (Zurich)
Asia Pacific (Seoul)	Middle East (Bahrain) Opt-in
Asia Pacific (Singapore)	Middle East (UAE) Opt-in
Asia Pacific (Sydney)	South America (São Paulo)

## View the player

The player can be viewed in many ways:

1. **Player -> Preview:** On-the-fly player.
2. **Export-> View Player** button: View the exported player on your PC.
3. **Export-> Open Cloud Player** button: See the published cloud player.
4. **Manual upload:** Upload the player by e.g. ftp to any cloud or server.  
E.g. Amazon AWS (S3), Microsoft Azure, Google Cloud, Apache, NGINX, IIS and literally any other web server. Both shared and dedicated hosting works.  
No database needed.

### AWS CloudFront (CDN)

If the cloud player is expected to

- Have a custom domain
- Handle high traffic from all over the world

It's recommended to add a CloudFront distribution to the player.

Go to <https://console.aws.amazon.com/cloudfront/home> and click the **Create Distribution** button.

### Origin Domain Name

Select the player in the drop-down field.

Example:

<https://ghost-town-e6a1df59-15f6-45ea-9675-2de94703f92b.s3.eu-central-1.amazonaws.com/index.html>

### Viewer Protocol Policy

Set to **Redirect HTTP to HTTPS**.

### Default root object

Enter **index.html**

Scroll down and click the **Create Distribution** button.

Go to **CloudFront Distributions** list, and wait until the distribution is created (**Status** column changes to **Enabled**). This might need a few minutes.

The complete CloudFront URL for the browser or for embedding:

<https://d2gm8i73pgaxv.cloudfront.net>








**Hint:**

Please notice that it might need up to 24 hours for the new CloudFront Distribution to deploy worldwide to work properly. Up until then it will forward to the S3 domain name.




URL query parameters like v\_lat, v\_lng, etc. will start working only when the CloudFront deployment is completed. This might need up to 24 hours.

## Create Distribution

### Origin Settings

<b>Origin Domain Name</b>	<input type="text" value="bahamas-ab0cb550-585e-4f42-a5e0-827"/>					
<b>Origin Path</b>	<input type="text"/>					
<b>Enable Origin Shield</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No					
<b>Origin ID</b>	<input type="text" value="S3-bahamas-ab0cb550-585e-4f42-a5e0-"/>					
<b>Restrict Bucket Access</b>	<input type="radio"/> Yes <input checked="" type="radio"/> No					
<b>Origin Connection Attempts</b>	<input type="text" value="3"/>					
<b>Origin Connection Timeout</b>	<input type="text" value="10"/>					
<b>Origin Custom Headers</b>	<table><thead><tr><th>Header Name</th><th>Value</th></tr></thead><tbody><tr><td><input type="text"/></td><td><input type="text"/></td></tr></tbody></table>	Header Name	Value	<input type="text"/>	<input type="text"/>	
Header Name	Value					
<input type="text"/>	<input type="text"/>					

### Default Cache Behavior Settings

<b>Path Pattern</b>	Default (*)	
<b>Viewer Protocol Policy</b>	<input type="radio"/> HTTP and HTTPS <input checked="" type="radio"/> Redirect HTTP to HTTPS <input type="radio"/> HTTPS Only	
<b>Allowed HTTP Methods</b>	<input checked="" type="radio"/> GET, HEAD <input type="radio"/> GET, HEAD, OPTIONS <input type="radio"/> GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE	

Embed the Cloud Player into any webpage

What it looks like on our website:

<http://www.360camsters.com>

3 examples for the same player:

Cloud Player URL from this program:

Get the URL from **Publish -> Open Cloud Player**.

```
<iframe  
src="https://fmbeach-0af93b09-d80e-4824-a917-6ee14d5ce5f4.s3.eu-central-1.ama  
zonaws.com/index.html" width="100%" height="600" frameborder="0"  
style="border:0" tabindex="0"></iframe>
```

Same player, with Amazon CloudFront CDN instead:

```
<iframe src="https://d1i4vlab4nh63j.cloudfront.net" width="100%"  
height="600" frameborder="0" style="border:0" tabindex="0"></iframe>
```

Same player, with a custom subdomain for CloudFront:

```
<iframe src="https://ian.360camsters.com" width="100%" height="600"  
frameborder="0" style="border:0" tabindex="0"></iframe>
```

## Cloud Player Management

### **Open Cloud player**

Opens the published Cloud Player URL in the browser.

### **Delete Cloud player**

Deletes the published Cloud Player from the internet and the project.

The same URL can not be re-used.

To only delete the cloud player from the internet, and to keep the URL in the project, use [AWS Account](#) instead.

An updated player can be published with the same URL.



## Create Amazon Web Services (AWS) account

360 Private Publisher has a built-in one-click publishing feature for the Amazon Web Services (AWS) Cloud Computing Services to easily publish the player to the internet.

An **Access key ID** and **Secret access key** is required for publishing.  
(In the free evaluation period it works without.)

This needs to be set up only once.

1. Go to <https://aws.amazon.com/console/> and sign in with an existing Amazon account or create a new account.
2. Log in and continue to [https://console.aws.amazon.com/iam/home?#/users\\$new?step=details](https://console.aws.amazon.com/iam/home?#/users$new?step=details) to add a new **IAM user**
  - a. **User name:** 360camsters
  - b. **Access type:** Programmatic access
  - c. Click **Next: Permissions** button

### Add user



#### Set user details

You can add multiple users at once with the same access type and permissions. [Learn more](#)

User name\*

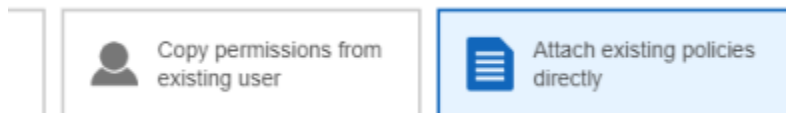
[+ Add another user](#)

#### Select AWS access type

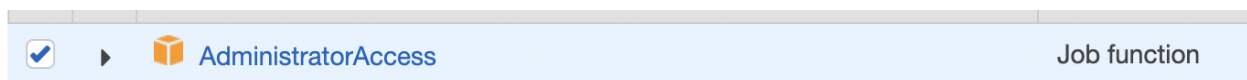
Select how these users will primarily access AWS. If you choose only programmatic access, it does NOT prevent users from accessing the console using an assumed role. Access keys and autogenerated passwords are provided in the last step. [Learn more](#)

- Select AWS credential type\*
- Access key - Programmatic access**  
Enables an **access key ID** and **secret access key** for the AWS API, CLI, SDK, and other development tools.
  - Password - AWS Management Console access**  
Enables a **password** that allows users to sign-in to the AWS Management Console.

### 3. Select **Attach existing policies directly**



### 4. Select **AdministratorAccess** privileges.



### 5. Click the **Next: Tags** button

6. Click the **Next: Review** button. Make sure User details and Permission summary matches the image below.

## Add user

1

2

### Review

Review your choices. After you create the user, you can view and download the autogenerated password and access key.

#### User details

<b>User name</b>	360camsters
<b>AWS access type</b>	Programmatic access - with an access key
<b>Permissions boundary</b>	Permissions boundary is not set

#### Permissions summary

The following policies will be attached to the user shown above.

Type	Name
Managed policy	<a href="#">AdministratorAccess</a>

#### Tags

No tags were added.

7. Click the **Create user** button

8. Regions:

All regions are available to a newly created IAM user by default.

To publish to regions marked as **Opt-in** in the list, you need to activate them first:  
[https://console.aws.amazon.com/iam/home#/account\\_settings](https://console.aws.amazon.com/iam/home#/account_settings)

Then copy the **Access key ID** and **Secret access key** into the appropriate fields on the **360 Private Publisher -> Export: Publish** page.

Or **360 Private Publisher -> Preferences -> Amazon Cloud**.

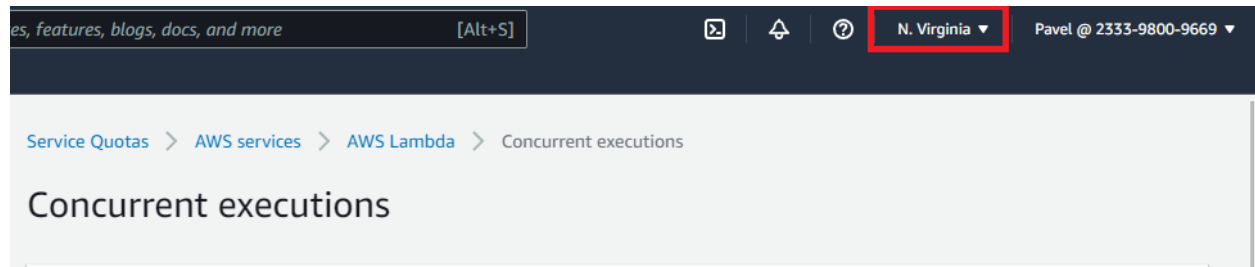
It is recommended to click the **Download .csv** button in order to save the credentials to your PC should you ever need to enter them again.

Request quota increase: Concurrent execution

Go to

<https://console.aws.amazon.com/servicequotas/home/services/lambda/quotas/L-B99A9384>

Switch to the region where the player will be published.



Click on the **Request quota increase** button.

The quota increase is per AWS region. In case you plan to publish different players to different regions, you need to do this for each region you want to publish to.

## Set **Change quota value** to **100**

Click on the **Request** button.

### Request quota increase: Concurrent executions ✕

Quota name  
Concurrent executions

Description  
The maximum number of events that functions can process simultaneously in the current Region.

Utilization  
0

Applied quota value  
1,000

AWS default quota value  
1,000

Region  
Europe (Frankfurt) eu-central-1

Change quota value:  
Enter in the total amount that you want the quota to be. [Learn more](#)

Must be a number greater than your current quota value

While Service Quotas Console is available in many different languages, the AWS Support assistance on cases created via Service Quotas Console and SDK is only offered in English. If you need support in other languages, please create the quota increase request via [Support Center](#) and choose the correct preferred contact language option.

Cancel **Request**

Apache, NGINX, IIS, MS Azure and Google Cloud

The player can be published to literally any web server or cloud. It is a collection of static files (html, js, css, etc.). No database is needed.

Copy both the **player2** and the **panorama-tiles** folders to e.g. the **/players/hometown** folder on your web server. The players URL would then be:

**<https://www.your-server.com/players/hometown/player2/>**

Embed the player into any webpage

First publish the player to a webserver.

Both the **players2** and the **panorama-tiles** folders are published to the **hometown** folder:

**<https://www.your-server.com/players/hometown/player2/>**

**<https://www.your-server.com/players/hometown/panorama-tiles>**

In your page, add this code:

```
<iframe src="https://www.your-server.com/players/hometown/player2/"  
width="100%" height="600" frameborder="0" style="border:0"  
tabindex="0"></iframe>
```

## API

When embedding the player into any html page as an iframe, you now can control it from the html page by javascript.

See the working API examples on our website:

<https://www.360camsters.com/gallery/#api>

For your own development, download the [Javascript API examples](#).

Then develop your own solution. You can combine many examples into one player.

Working examples are also automatically added to each project of yours:  
out/projectname/player2/**examples/**

Or [contact](#) us, we are available for hire for customisation and integration.

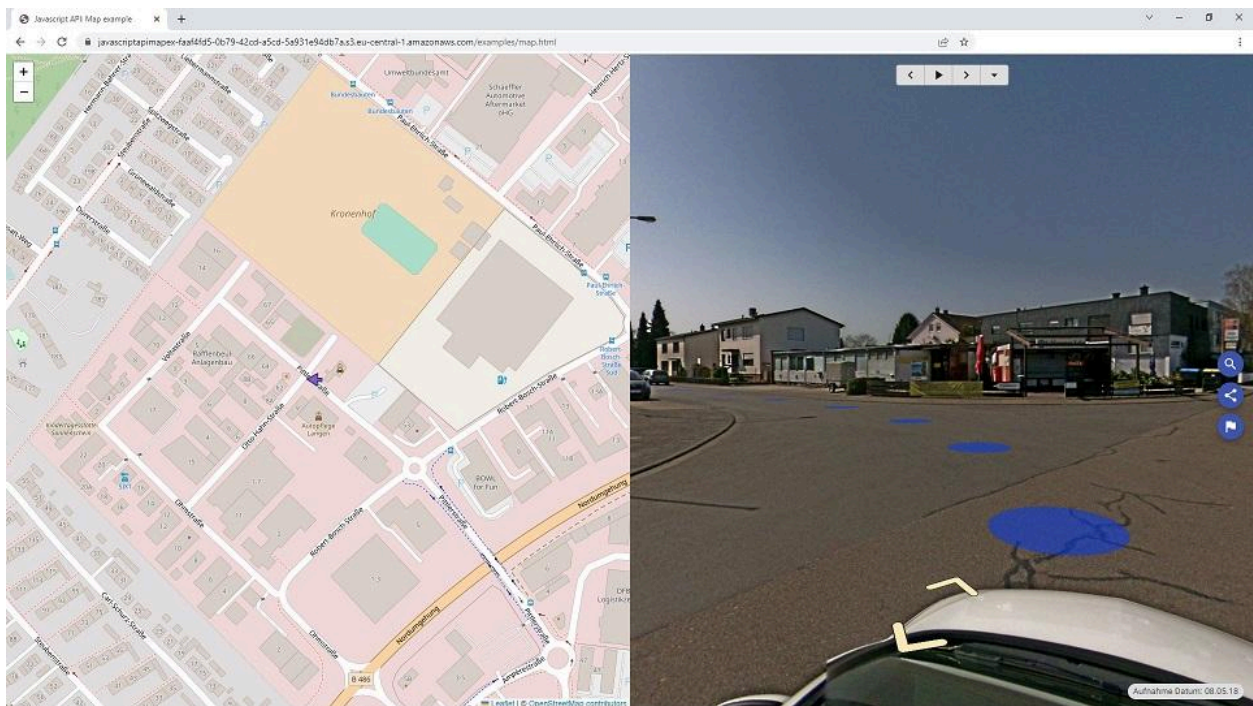
## Map example

Click anywhere on the map, and the player will show you what it looks like.  
Navigate the player, and the map will update.

On the left side it shows an external map. In this case Leaflet.

The map could be any map. E.g. **Leaflet**, **Openlayers** or **Google map**, etc.

On the right side it shows the player in an iframe. With the new Layout **streetview only**.



See the working example on our website:

<https://www.360camsters.com/gallery>

For your own development, download the [Javascript API examples](#).

Then develop your own solution.

Or [contact](#) us, we are available for hire for customisation and integration.

## Asset example

To view an asset by its Latitude and Longitude.



See the working example on our website:

<https://www.360camsters.com/gallery>

For your own development, download the [Javascript API examples](#).

Then develop your own solution.

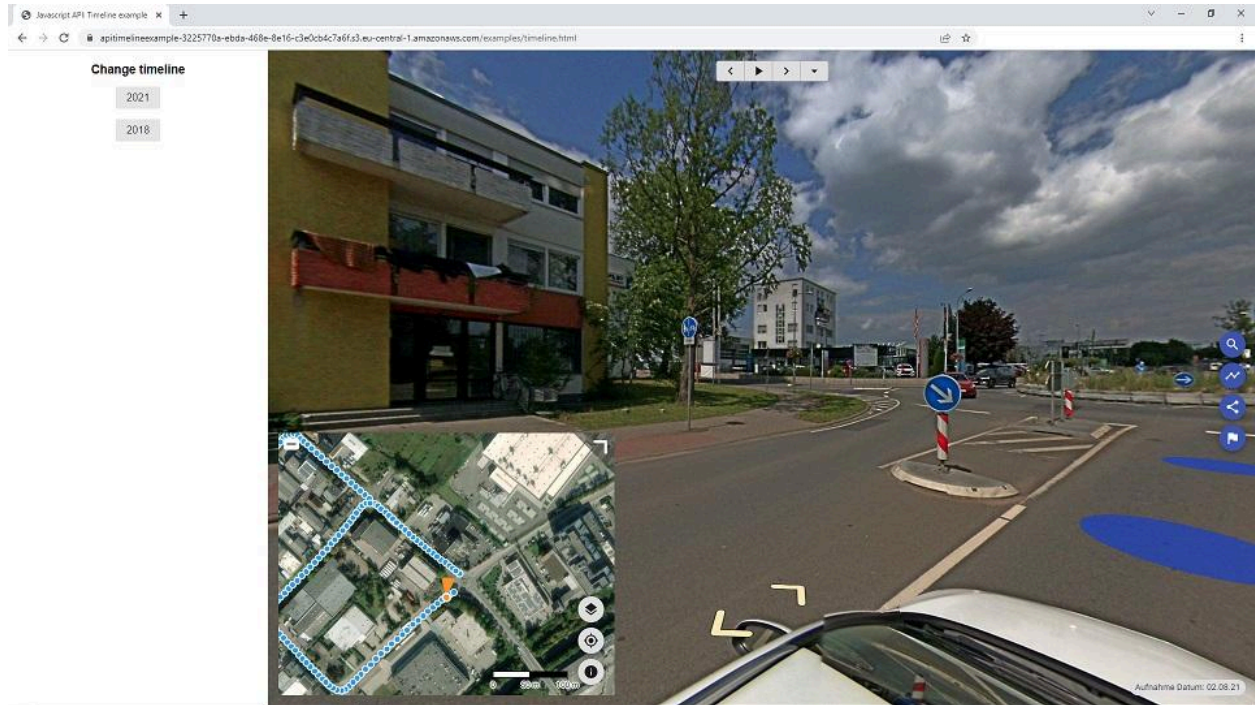
Or [contact](#) us, we are available for hire for customisation and integration.



## Timeline example

Switch the timeline for a “before and after” comparison.

You also can have many timelines. E.g. 2019, 2020, 2021, 2022.



See the working example on our website:

<https://www.360camsters.com/gallery>

For your own development, download the [Javascript API examples](#).

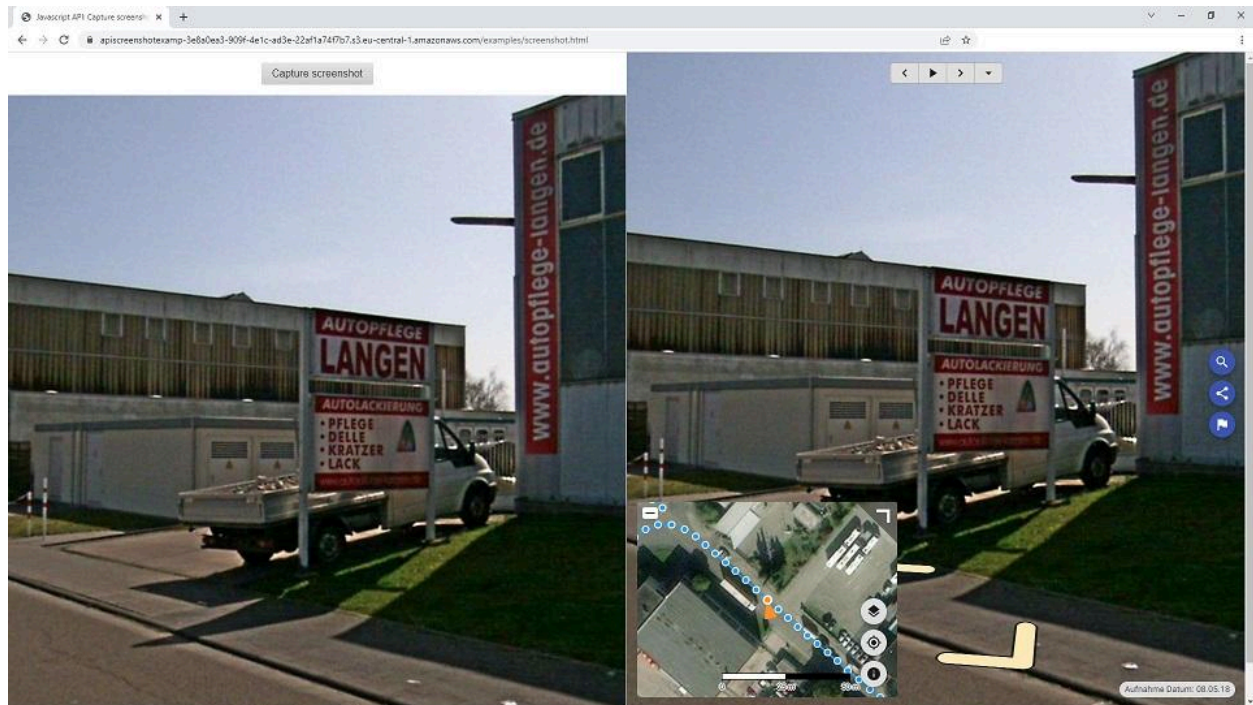
Then develop your own solution.

Or [contact](#) us, we are available for hire for customisation and integration.

## Screenshot example

Take a screenshot of the currently visible part of the streetview. E.g zoom in to show a specific issue.

Ideal to add photos to a pdf file or a database.



See the working example on our website:

<https://www.360camsters.com/gallery>

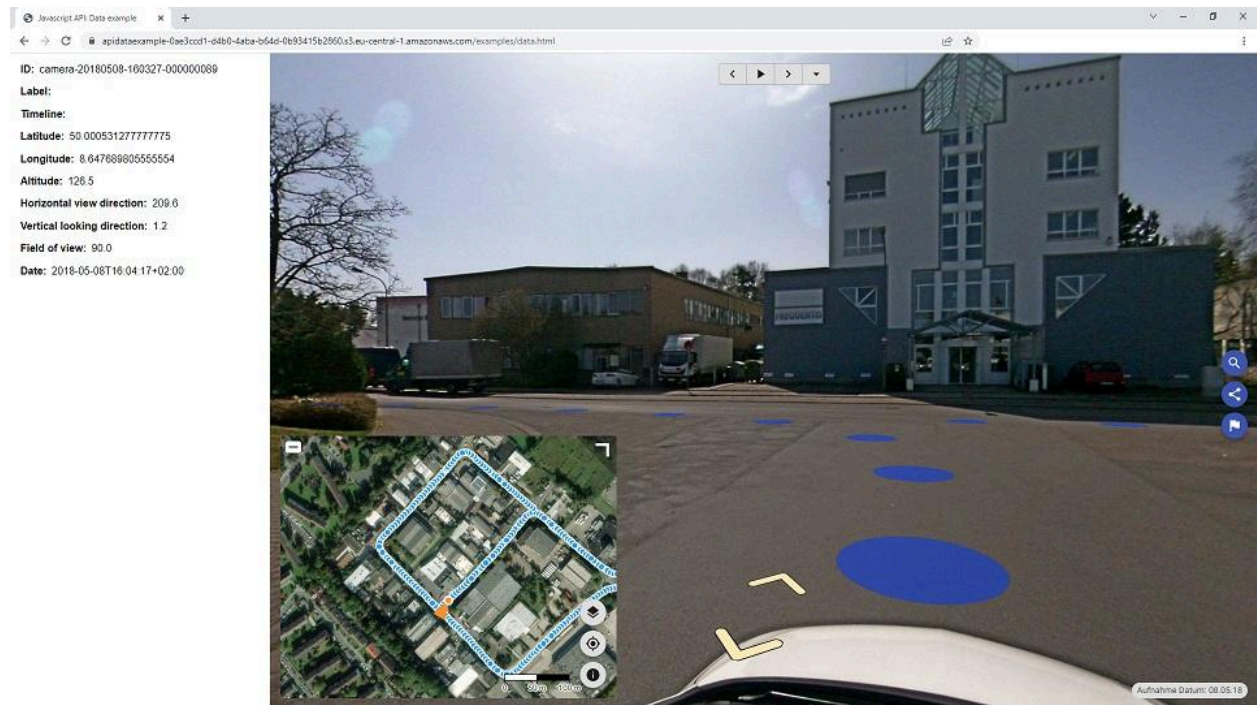
For your own development, download the [Javascript API examples](#).

Then develop your own solution.

Or [contact](#) us, we are available for hire for customisation and integration.

## Data example

Get all the data available for the street view.



Data shown:

- Streetview ID
- Label
- Timeline
- Latitude, Longitude, Altitude
- Viewing direction (0-360 degree like on a compass)
- Vertical viewing direction (up and down)
- Zoom
- Date and time + timezone

See the working example on our website:

<https://www.360camsters.com/gallery>

For your own development, download the [Javascript API examples](#).

Then develop your own solution.

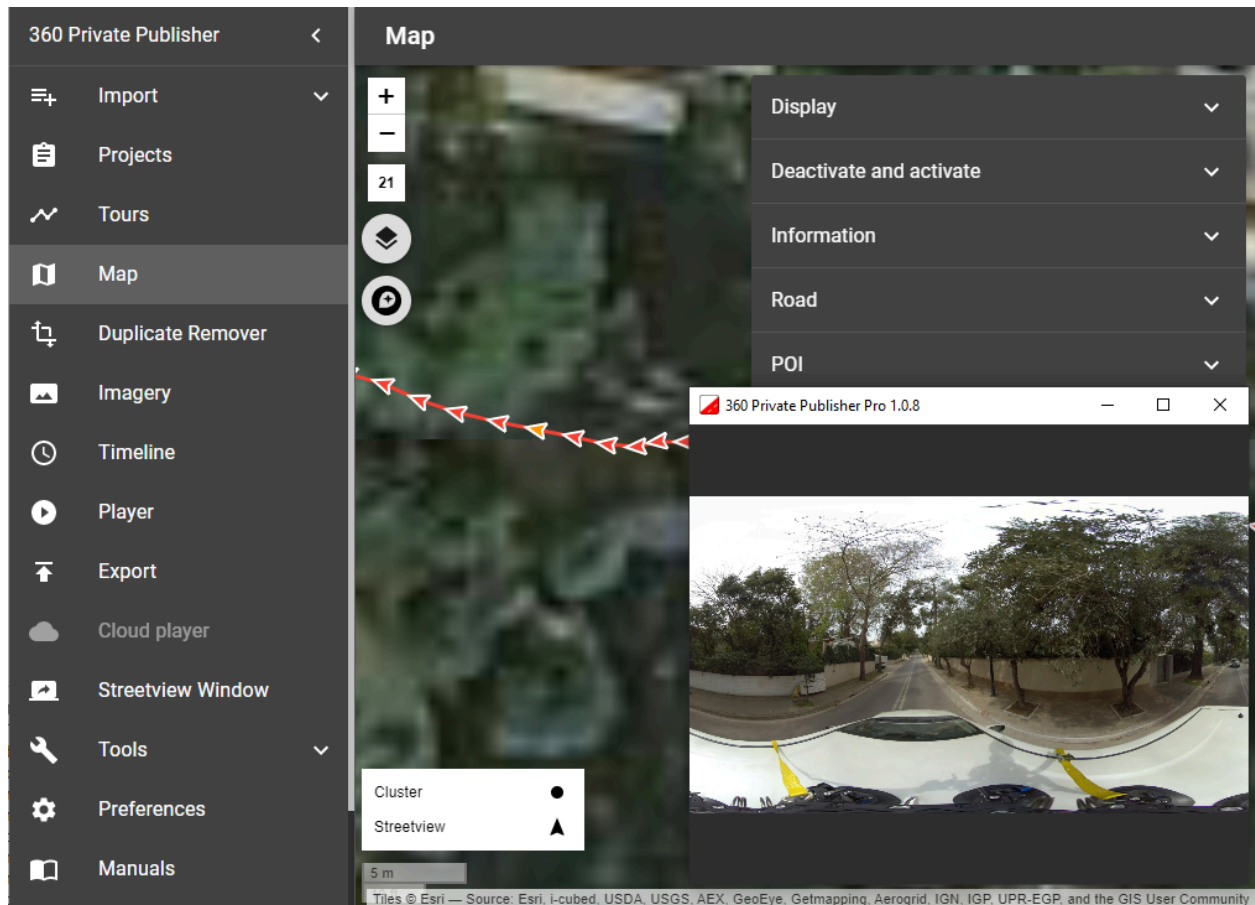
Or [contact](#) us, we are available for hire for customisation and integration.

## Second Monitor

Works with streetviews selected on the **Map** and **Player - Preview**.

By adding a second monitor you can see the program and the **selected streetview in full size**, at the same time. Side by side.

You can test this with a single monitor:



Shows the selected streetview.

You can navigate in **Map** and **Player -> Preview** using the PgUp and PgDown keyboard keys.

You can zoom in and out.

## Tools

Skip

Process target

Tours  Timeline

Tours

camera-20210706-104229

Type

By Distance  By Interval  By Step

Seprate by meters between streetviews

5

Deactivate manually activated streetviews

START RESET

Always to be used after the Duplicate Remover.

To convert tours recorded in **1m** Distance Mode to **5m** Distance Mode.

To convert tours recorded in **Interval Mode** to **Distance Mode**.

Etc.

This greatly reduces the number of streetviews to process.

### **Process target**

(Visible only when there are timelines)

Process either the selected tours or process the selected timelines.

**By Distance**

Separate by meters between streetviews.

**By Interval**

Separate by seconds between streetviews.

**By Step**

Process every x-th streetview.

**Deactivate manually activated streetviews**

By default manually activated streetviews are not deactivated. Enable this option to force them to be deactivated.

**Start**

Start separating the streetviews.

Try a few times to find the optimum settings for your footage.

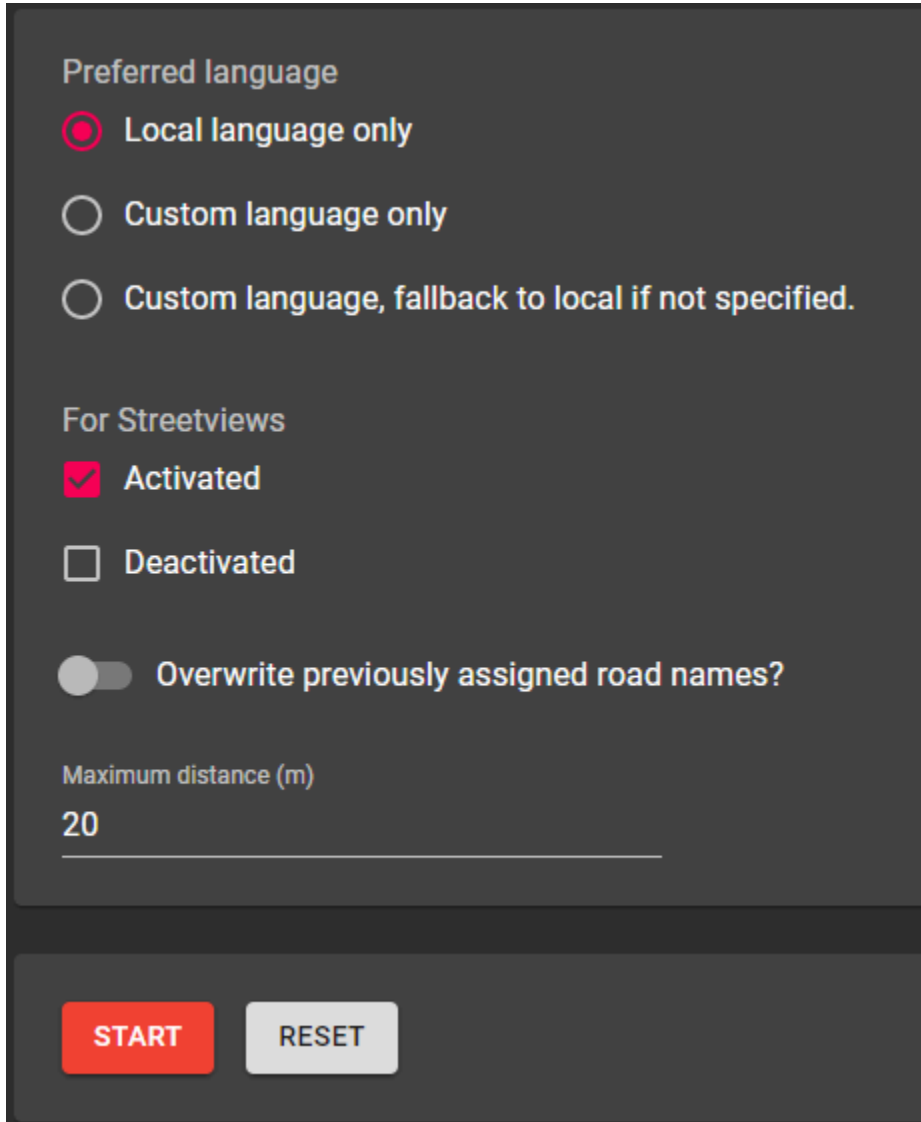
**Reset**

Reset all streetviews deactivated by [Duplicate Remover](#) and Skip tool.

## Road names from OpenStreetMap

If you already have road names, make a project backup first.

This ensures you can restore in case you accidentally change them in an unwanted way.



The screenshot shows a configuration panel with a dark background. At the top, the heading "Preferred language" is followed by three radio button options: "Local language only" (selected), "Custom language only", and "Custom language, fallback to local if not specified." Below this, the section "For Streetviews" contains a checked checkbox for "Activated" and an unchecked checkbox for "Deactivated". A toggle switch for "Overwrite previously assigned road names?" is currently turned off. At the bottom of this section, there is a text input field for "Maximum distance (m)" with the value "20". At the very bottom of the panel are two buttons: a red "START" button and a grey "RESET" button.

### Preferred language

Local language only - "name" value of the OSM road.

Custom language - "name:language" value of the OSM road.

Custom language, fallback to local if not specified - If "name:language" value does not exist use "name".

### For Streetviews

Activated streetviews

Deactivated streetviews

**Overwrite previously assigned road names?**

If enabled streetviews with an existing road name will be skipped.

**Maximum distance (m)**

Maximum distance to the closest road to be considered for geocoding.

**Start**

Geocode streetviews with road names from OSM

**Reset**

Remove all assigned road names, even those assigned manually via the [Map](#) page.



## Fix Direction

If the heading of the majority of the streetviews is not correct it's possible to calculate the heading from the streetviews position.

Click **Start** to calculate the heading from position.

Click **Reset** to revert to original values.

## Fix altitude

If the Altitude (height) of streetviews is not correct or missing it's possible to determine it from the Latitude and Longitude. We are using [NASA Shuttle Radar Topography Mission Global 3 arc second V003](#) dataset for this.

Click **Start** to calculate the height from the digital terrain model.  
Click **Reset** to revert to the original values.

Once **Start** is clicked, 360 Private Publisher will download the digital terrain model for your project's location and cache it.

This tool therefore requires an active internet connection.

The size of the height-data is about 3 MB for a 1x1 degree area.

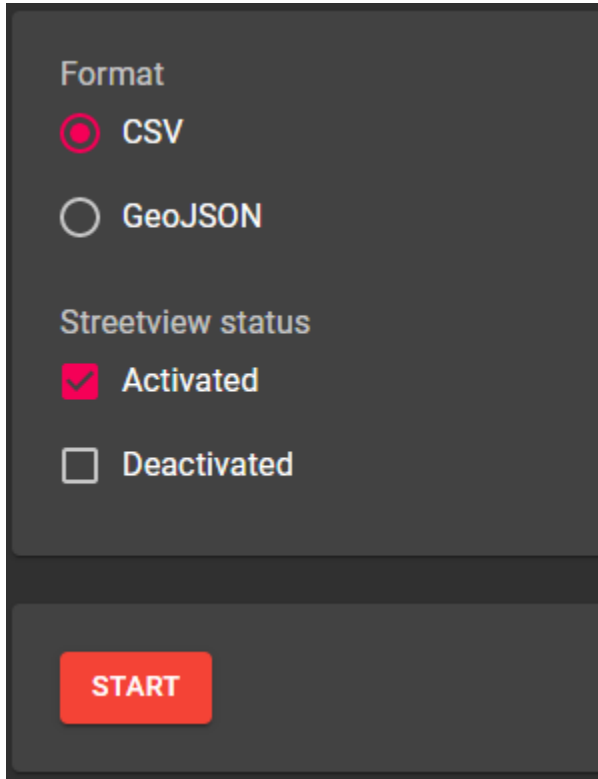
The area is determined by a bounding box for all the streetviews in the Project, both active and deactivated.

### **Hint:**

Streetviews deactivated for wrong positions can present a problem. They still will be considered for the bounding box, even when in the middle of the Atlantic Ocean for both Latitude and Longitude being "0". Please move them closer to the active streetviews.

## Export Metadata

Export streetview metadata.  
E.g. for a 3rd-party program.



The screenshot shows a dark-themed interface for exporting metadata. It features two sections: 'Format' and 'Streetview status'. In the 'Format' section, there are two radio button options: 'CSV' (selected with a red dot) and 'GeoJSON'. In the 'Streetview status' section, there are two checkbox options: 'Activated' (checked with a red checkmark) and 'Deactivated'. At the bottom of the interface is a red button labeled 'START'.

### Streetview status

CSV (comma separated, double quote as as string delimiter),  
GeoJSON

### Streetview status

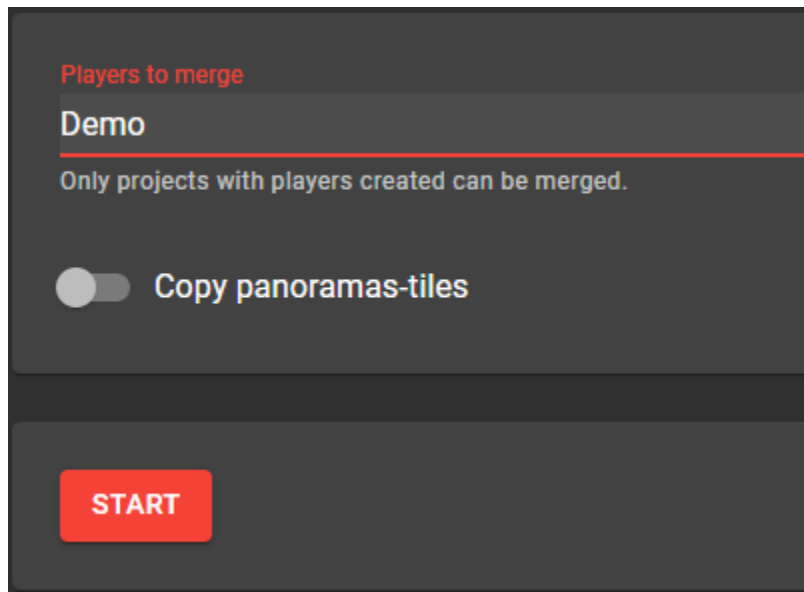
Activated: Metadata for activated streetviews only.

Deactivated: Metadata for deactivated streetviews only.

### Start

Start the export process.

## Merge Players



### Players to merge

List of the available projects.

Only shows processed projects with data in /out.

Process all projects first, then merge.

### Copy panoramas-tiles

Copy the panoramas-tiles folders of all the players into **Output Folder**/panorama-tiles

This might need a while.

### Start

Create the merged player in a new folder.

The projects to be merged are not changed.

### Open Output Folder

Open the output folder of the merged player.

The new folder with the merged player is always saved to the [Out](#) folder.

# Preferences

## General

### Language

Set the program language.

Languages supported: English, Spanish, German.

We are happy to add more languages. Just [contact](#) us.

### **Automatically send usage statistics and crash reports to 360camsters.**

Please help us make this program better.

## Folders

It is strongly recommended to create the following 3 folders to organize your data:

### **In, Out, Backup.**

Set the folders up in Preferences -> Folders.

### **Input folder**

Usually named **in**.

Default location of the project input data. You should place your recorded data here.

### **Output folder**

Usually named **out**.

Default location for publishing.

All the project folders are subfolders of the **out** folder. They are created automatically.

### **Backup folder**

Default location for saving project backups.

Weekly or daily backups are strongly recommended.

This is only for this program's data. Sources or generated data is not included in a Backup.

Manually create additional folders to keep your data organized:

Masks, Logos, Export, Player templates.

## Amazon Cloud

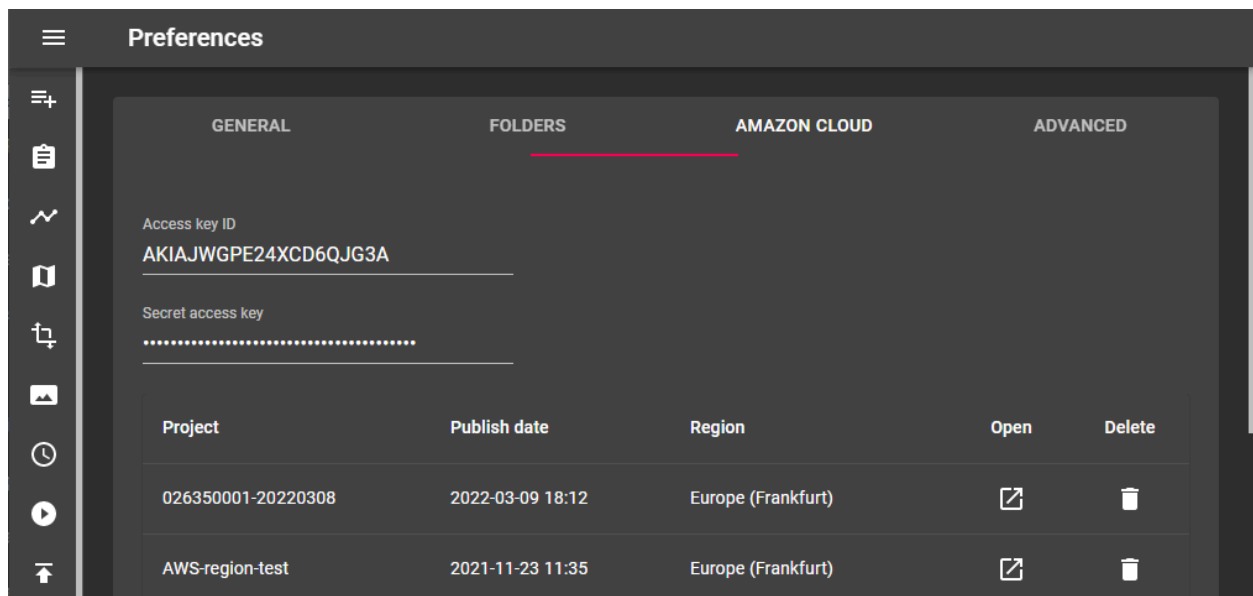
An **Access key ID** and **Secret access key** is required for publishing.

See the [Create Amazon Web Services \(AWS\) account](#) section for how to get your own AWS credentials.

Allows to open or delete players published to your **AWS account**.  
It does not need a project to do so.

If you delete a player from your AWS account, the project still knows the URL the player has been published to. Meaning you can re-publish to the same URL using the project, or a project backup.

To delete a player from both the Internet and a project, use **Cloud Player -> Delete Cloud Player** instead.



### Project

Project name

### Published date

Date and time of the upload.

### Open

Open the player URL in the browser

### **Delete**

Delete player (incl. all streetviews) from the Amazon account.

Local projects will not be changed.

The project still knows the same cloud URL.

## Manuals

Open this manual.

## License

Displays the current license.

Click **Add activation key** to enter your activation key.

Get an activation key [here](#).

View Software License Agreement.

### 360 Private Publisher License

License valid until: November 26, 2022

If you have a subscription, a new activation key will be emailed to you in time.

Check your license status at <https://www.360camsters.com/my-account/>

Type: 30 days

[Add activation key](#)

[View Software License Agreement](#)

# Help

## About

Displays this program's installed version. Check for updates, view the release notes.

## krpano license

A single krpano license is sufficient for all players you create.

For the **Evaluation** version of this program this feature is not available.

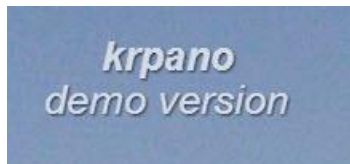
A demo version of krpano is bundled with this program.

Click **Add activation key** to enter your krpano license key. Get a [krpano License](#) if you do not have one already.

Paste your krpano key into the field and click the **OK** button. You should see a confirmation message that the key is registered.

Restart this program and re-create all players to remove the krpano watermarks.

krpano watermarks:



The krpano demo version watermark is visible in the playe:

- Player - Preview
- Player tab
- All generated players

## Logs

Open the newest log file or open the folder with all the log files.



## Hardware

Displays the specifications of the PC.

Device name: WIN11PC

Windows version: Microsoft Windows 11 Pro 64-bit

Processor: 11th Gen Intel(R) Core(TM) i5-11400 @ 2.60GHz

Memory Total: 31.88 GB Available: 20.24 GB

Free disk space: C: 365.67 GB, D: 3.59 TB

Graphics Card: NVIDIA GeForce GTX 1080 (8191.8125 MB)

CUDA versions: 11.6

[Copy to Clipboard](#)

## Enterprise Version


360 Private Publisher **Enterprise** supports (manual) automation and (automatic) scripting.

### Licensing


Automation is available with the **Enterprise** version only.  
Please [contact](#) us for a quote and the details.

### User Interface (UI)

#### Export Configuration

Projects: Click the  button next to the **project name** and then click **Export Configuration** to create and export a configuration file for the selected project.

#### Import Configuration

Projects: More  Add project from configuration  
Click the **Add project from the configuration** menu item to add a project from a configuration file.

#### What is covered by automation?

- Creation of a project.
- Creation of the project's tours.
- Loading of project and tour settings.
- Clicking on "Start" buttons.
- Close the program when processing is finished.
- Option to delete all projects when done.

#### Things not covered

Settings for individual streetviews.

Only settings on the project and tour levels are part of the configuration.

All settings applied to an individual streetview are not part of the configuration for an automation workflow.

#### Examples:

- Position
- Heading

- Status (activated/deactivated)
- Road name

## Full Automation with the command line

This is meant for workflows that need to deal with data from many cameras for many months.

## Licensing

Scripting is a feature of the Enterprise version only.

Please [contact](#) us for a quote and the details.

## Mass production

When running Enterprise from the Windows command line make sure that the **current working directory** is set to the directory of the 360camsters.exe file:

```
cd C:\Users\me\AppData\Local\360camsters
```

## Typical Example

```
cd C:\Users\me\AppData\Local\360camsters
360camsters.exe --actions="ImportConfiguration,DuplicateRemover,Publish,Close"
--importConfiguration="S:\Downloads\Demo-20220421-124812.project-config"
--processSkipTiles=false
```

- **--actions**
  - **ImportConfiguration** - Add a project from a configuration file and open it. --importConfiguration must be set to the path of the configuration file.
  - **DuplicateRemover** - Run Duplicate Remover with current project settings.
  - **Skip** - Run Tools - Skip with current project settings.
  - **RoadNamesFromOsm** - Run Tools - Road names from OSM with current project settings.
  - **DirectionFromPosition** - Run Tools - Direction from position.
  - **CameraMountedBackwards** - Run Tools - Camera mounted backwards.
  - **Publish** - Starts the publishing process with current project settings.
  - **Close** - Closes Creator 7 when finished
  - **DeleteProjectsAndClose** - Delete all projects and close Creator 7 when finished
- **--importConfiguration** - Specify a **.project-config** file created by exporting a project configuration. This field is required for the **ImportConfiguration** action.
- **--processSkipTiles** - Adjusts the value of Preferences - Advanced Skips creating streetview-tiles during Publish. Can be **true** or **false**.

Actions are executed in the sequence they are listed.

If any of the actions trigger an error processing stops and no other actions will be executed.

Each completed action creates an entry in the log.  
Errors triggered by an action are logged too.

Each action logs a start and finish message to stdout.  
This allows for optional progress tracking.

## Configuration export and import

This is the workflow to duplicate your project settings.

This way data is processed identically. You need to press all required “Start” buttons manually.

### Steps

Export a configuration as template: You get a **.project-config** file

Edit it

Import it

Press all the Start buttons needed manually. Make sure not to miss a Start button.

Close 360 Private Publisher

### Export a configuration as template

It is strongly recommended to configure a project as the template in 360camsters 360 Private Publisher first.

Do not try to build a configuration file from scratch with a text editor.

### Suggested workflow

Create the project.

Configure it.

Run it for testing.

Check the result.

Export it:

Projects -> PROJECTNAME -> More (3 dots) -> Export Configuration

Make adjustments manually to the exported configuration file.

Example configuration file:

[Demo-20220421-124812.project-config](#)

## Edit the configuration file

A project can have tours from different cameras (and recording vehicles).  
Minimum change the tours name. If needed the tour path.

....

```
"name": "Demo4-5m",  
"created_at": 1597652281375,  
"tours": {  
  "camera-20181218-104940": {  
    "yaw": "0",  
    "pitch": "0",  
    "roll": "0",  
    "imu": true,  
    "exposure": "0",  
    "brightenEnabled": true,  
    "brightenStrength": "0.8",  
    "brightenThreshold": "0.4",  
    "tourPath": "E:\\2020\\in\\Demo4-5m"  
  },  
}
```

....

## Import the configuration

Projects -> More (3 dots) -> Add project from configuration

## Apply settings

Click the "Start" buttons in the desired sequence.

## Processing

Export-> Start

## Update Policy

As long as you have a valid license (subscription or one-time payment) you automatically get the newest release.

At start the program automatically checks and displays a pop-up that allows you to update.

Additionally you can check yourself anytime at  
**Menu: Help -> About: Check for update.**

## Good Housekeeping

### Backup

Backup often.

This way you can import the last “good” backup anytime to continue.

It is best practice to always have an up-to-date backup of both your data and the project backups on a disconnected drive.

If the drive is connected to your network and powered up it is just a copy, not a backup.

You can back up one or many project(s), tours(s), or just the player configuration(s) incl. the translations.

**Sources or generated data (streetviews and players) are never part of a backup.**

### Data safety

**This program can not edit or delete your recordings.**

## Download

The program, this manual and various 360 recordings for testing.

<https://www.360camsters.com/downloads/>



## Support

Please [update](#) first.

Support is provided for the newest release only.

### **Support Portal**

<https://www.360camsters.com/support/>