



Creator 3

Manual
for version 3.3.4

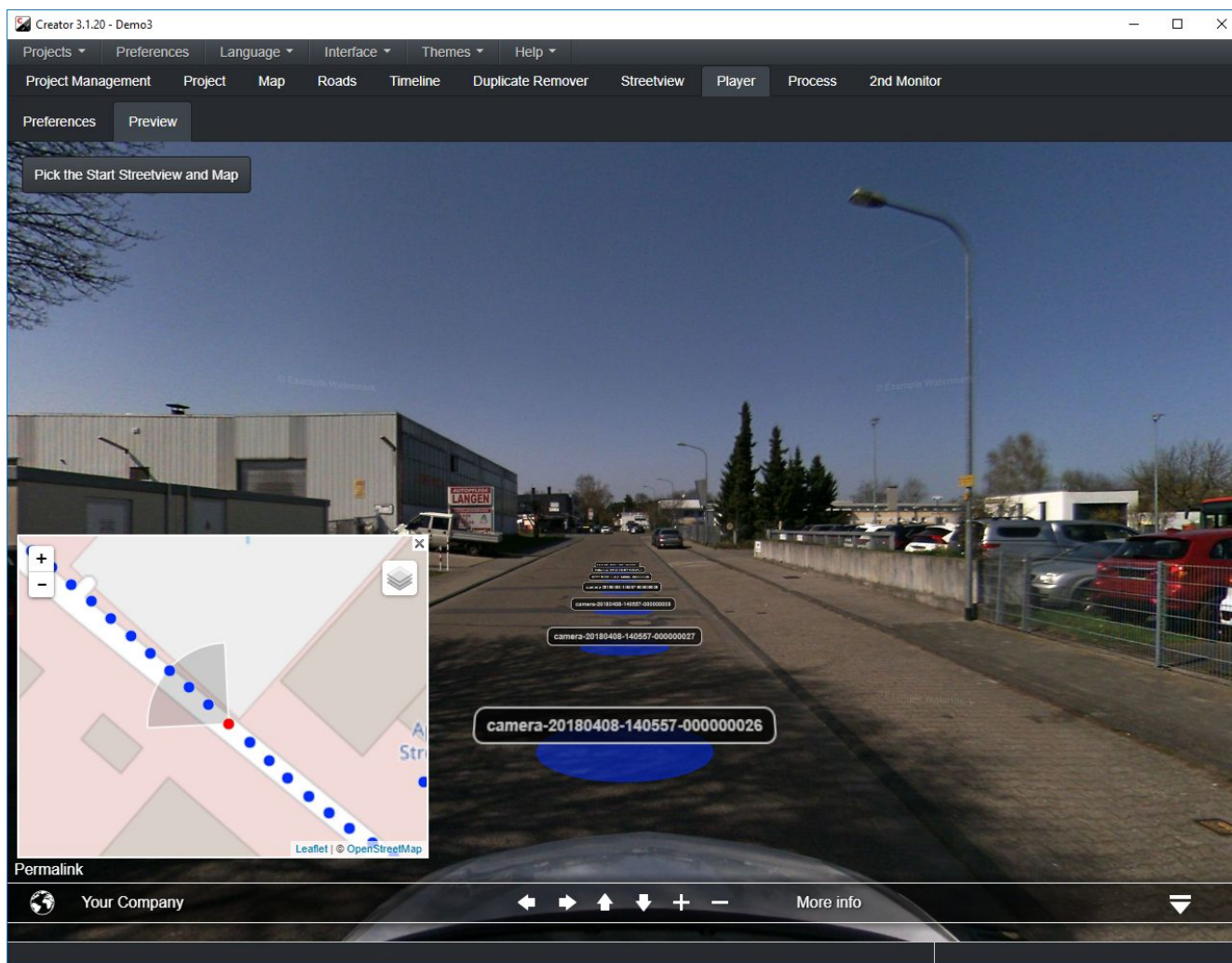


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Introduction

The **Creator 3** Windows program processes footage recorded by Applied Streetview's **Original 360 Camera** into streetviews and datasets for four players, Google Streetview and Google Earth Pro. It has been introduced in July 2018 to succeed the previous Creator 2 program.

Creator 3 installs in parallel to an existing Creator 2.

Creator 2 data and installation is not touched. Transferring a project from Creator 2 to 3 is a one-button operation.

Creator 3 can be tested with all its features for 14 days for free.

Creator 3 main features

New stitcher. Twice as fast as Creator 2.

Brighten Shadows. To improve dark image parts for better visibility.

Instant Player (option). No lengthy processing, just a quick project configuration.

Many improvements. To make Creator 3 work better, faster and more robust.

Update from Creator 2 to Creator 3

Creator 3 installs **in parallel** to an existing Creator 2.

Creator 2 data is **not touched**.

You can continue using Creator 2 while testing Creator 3. Just not at the same time please.

How to copy your projects from Creator 2 to Creator 3:

Open **Creator 2**.

Open the **Project Management** page.

Click the **Backup all projects** button. This might need some time. Wait.

Close Creator 2.

Open **Creator 3**.

Open the **Project Management** page.

Click the **Restore from backup file(s)** button. Pick the file(s) just created.

This might need some time. Wait.

Continue working with Creator 3.

Creator 3 backup files do not work with Creator 2.

What about previous Creator 2?

All customers that purchased a camera or a Creator 2 licence in May 2018 or later already should have received free Creator 3 licence(s).

The latest Creator 2 release is 2.1.0. It continues to receive bug fixes.

Downloads: [Creator 2 Manual](#), [Creator 2 program](#)

Output

Players:

Web Player

Project processed for the included, krpano-based streetview player.
For the Internet or Intranet.
Needs a LAMP server and a MySQL database.

Data-sets for optional players:

Android Player

Project processed for the optional [Android Player](#).
Android Player works 100% offline, without Internet.
Ideal for presentations, demos and tactical teams.
Needs an Android tablet. 10" recommended.

NEW Instant Player

Project configured for the [Instant Player](#).
The Instant Player processes footage on-the-fly when requested.
No processing by Creator at all, just a quick configuration.
Needs a Windows 10 PC or Server with NVIDIA RTX 2060 graphics card and CUDA 10.0

NEW G-Publisher

Upload your streetviews to **Google streetview** with [G-Publisher](#).

NEW Google Earth Pro

See your project in **Google Earth Pro**.

Streetviews

A folder with leveled, watermarked, masked, geo-referenced, equirectangular, 8192 x 4096 pixel streteviews.
For custom workflows.

Installation

PC

First download and install the CUDA 10.0 drivers.

<https://developer.nvidia.com/cuda-10.0-download-archive>

Do not use CUDA 8.

Then download and install the newest Creator 3 program:

<http://updates.applied-streetview.com/creator3/newest.php?file=program>

Virtual Machines: Google Cloud, Amazon EC2, Microsoft Azure

The steps required to install Creator to Google Cloud, Amazon EC2 or Microsoft Azure are described in a separate manual that can be downloaded [here](#).

Speed it up

Virus Scanners

Deactivate any 3rd-party Virus-Scanner you might have installed for the **Creator** program, all folders it uses (including **in** and **out**) and the **.jpg** file format.

Windows Defender

Go to Start > Settings > Updates & Security > **Windows** Security > Virus & threat protection > Virus & threat protection settings > Add or remove exclusions.

Exclude the Creator **installation folder**:

C:\Program Files (x86)\Creator 3

Also the **in** and **out** folders for the data.

Example:

F:\in


F:\out


And the **temporary data** folder:

C:\Users\USERNAME\AppData\Local\creator3\tmp

Add an exclusion

Files and folders

 Exclude a file

 Exclude a folder

C:\Program Files (x86)\Creator 2


C:\Users\ADMIN\AppData\Local\creator2\tmp

F:\in

F:\out

Exclude .jpg files and the Creator programs:

File types

 Exclude a file extension

.jpg

Processes

When you exclude a process, any file associated with it will also be excluded.

 Exclude a .exe, .com or .scr process

creator2.exe

as-stitcher8.exe

as-tiler8.exe

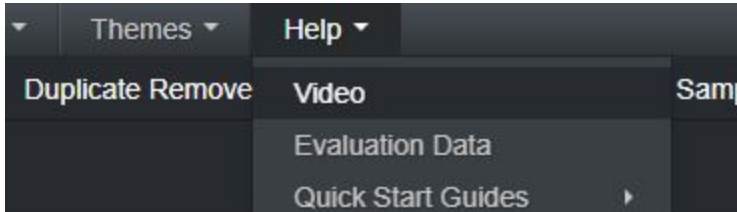
Additional Manuals

Additional manuals are available at our website:

<http://www.applied-streetview.com/support/>

HOW-TO video

Shown automatically when you first open Creator. To be found in **Help -> Video**



Licensing

Creator will work for 14 days as a trial with all the features available.

There are no limitations at all.

A screenshot of a 'Register' dialog box. At the top, there's a title bar with 'Register' and a close button. Below it, an 'Activation key' field is shown. The main area is divided into two columns: 'Contact Information' and 'Company Information'. The 'Contact Information' column has fields for 'Contact person', 'Title', 'Phone', 'Fax', 'E-mail', and 'Skype'. The 'Company Information' column has fields for 'Company', 'Address', 'City', 'Province', 'ZIP/Postal code', and 'Country' (a dropdown menu). A 'Register' button is located at the bottom right of the dialog box.

When starting Creator for the first time, the **Register** popup will be displayed.
Fill in your details and click the **Register** button. Creator will work for 2 weeks.

Permanent activation key

With the purchase of a camera you will get a permanent activation key for Creator.

In the menu click **Help -> Add activation key**.

Paste in the activation key and click the **Register** button.

Additional activation keys are available. [Contact us](#).

Offline registration

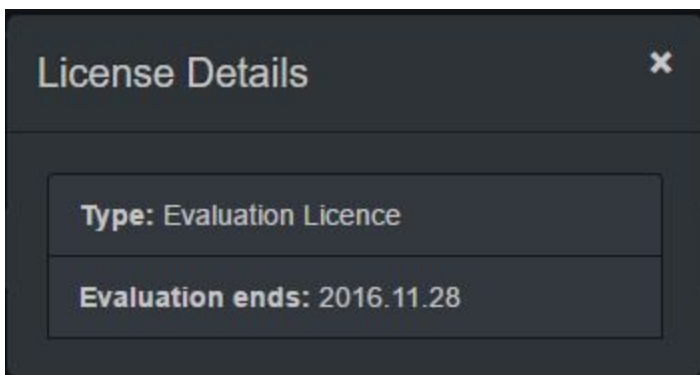
If your PC has no internet connection, instead of the Register button you will see a **Register Offline** button.

Click the **Register Offline** button and follow the on-screen instructions.

Menu - Help - License Details

Shows the type of the licence or the end of the trial period.

Evaluation Licence:



Paid licence:

A purchased Creator licence never expires.

It is valid for the current main version of Creator.

Example:

Creator version number: 3.x.x.

"3" is the main version.

Changes to x are covered by your licence.

You licence continues to work indefinitely after a new main version has been released.

Bug fixes are provided for one year after the release of a new main version.

Menu - Help - Add activation key

Opens the license Register popup.

Use this to update your evaluation license to a purchased license or to replace a license.

User Interface

Language

English, French, Spanish, German, Arabic, Russian, Chinese, Romanian and Czech are available.

Interface

Standard

Everything it needs to process a project.

Advanced

For more complex projects and experienced users.

Menu entries for Advanced Features have a **bold** font.

Main Window

Tools

Menu

Timeline

Reduce

Individual Optimizing

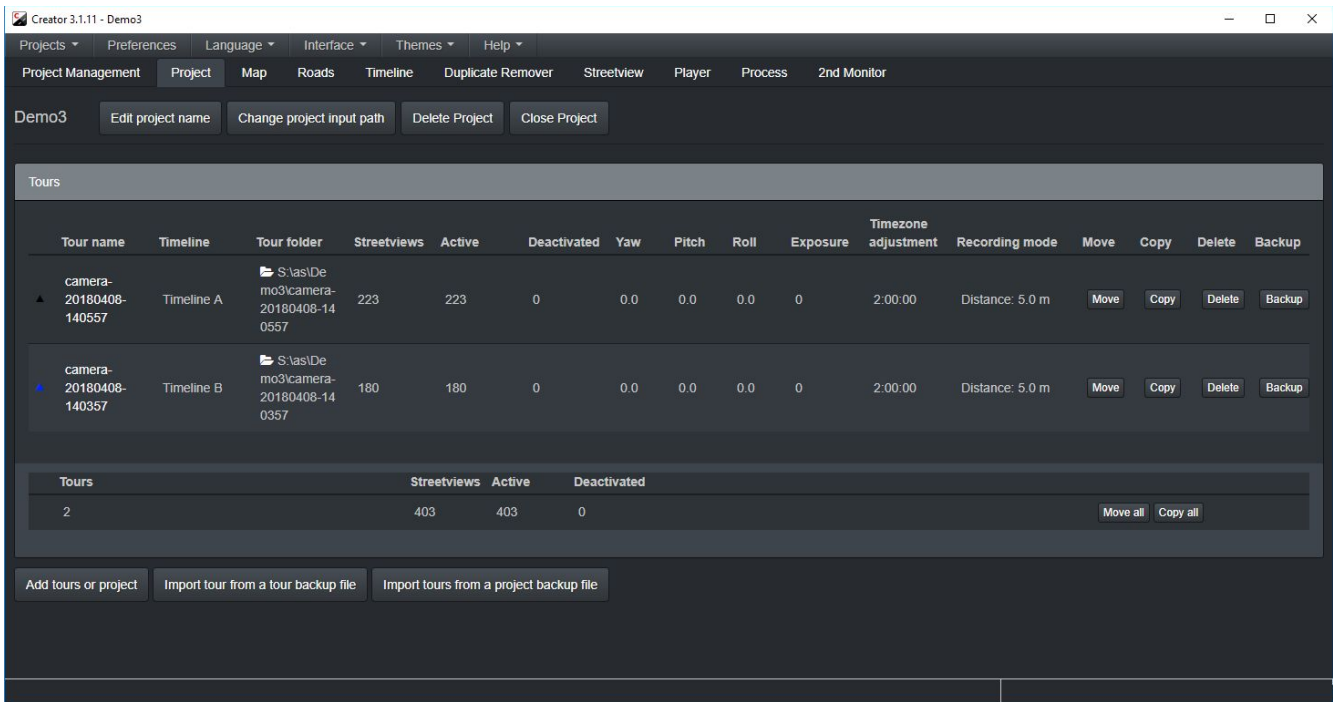
Preferences

For all projects -> Expert Mode

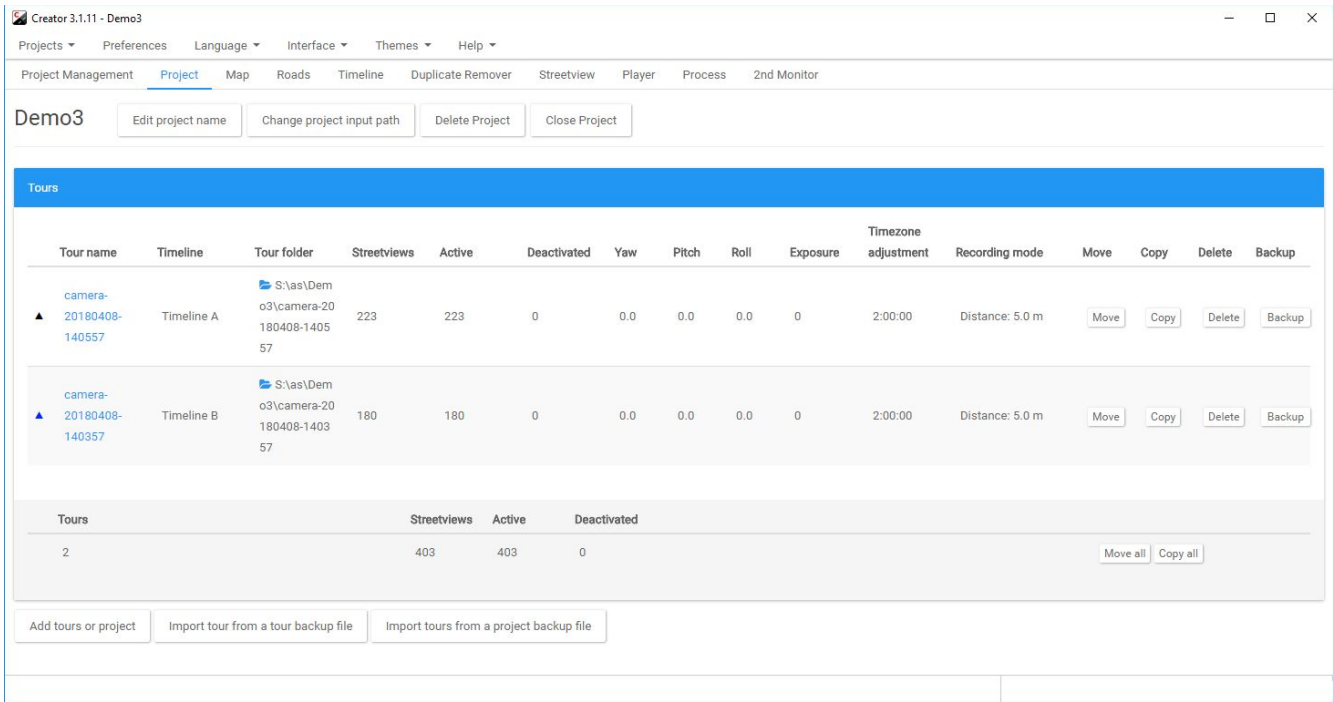
For all projects -> Troubleshooting

Themes

Dark



Light



Recommended Operating System

Windows 10.

64-bit, any language.

32-bit Windows is not supported and will not work.

Recommended Hardware

NVIDIA RTX 2060 graphics card with 8GB VRAM.

About 300.000 datasets can be processed within 24 hours.

Minimum graphics card requirement:

Compute capability of 5.2 and 4 GB VRAM.

See: <https://en.wikipedia.org/wiki/CUDA>

Other components:

CPU with 4 cores and 8 threads, minimum 3.4 GHz.

16 GB RAM

250 GB SSD, or larger. For the Windows 10 operating system.

Two 2 TB SSDs or HDDs for small data-sets.

Network drives (NAS) are recommended for larger data-sets.

Testing

You can try Creator with any 64-bit Windows 10 PC with at least 4 GB RAM.

But processing will be very slow.

Example Data

Download and unzip the Example Data footage to process it:

<http://aplsv-new.s3.amazonaws.com/Demo3/in/Demo3.zip>

Check out the Creator Video, Manual and Quick Starter Guide:

<http://applied-streetview.com/programs/creator>

Projects & Tours

What is a Project?

To do any recording you first need to enter a **Project** name into the camera's Remote Control. The Remote Control creates a **Project folder** on the SSD.

What is a tour?

When you press the **Start** button on the camera's Remote Control a new **Tour folder** is created as a subfolder of the **Project folder**.

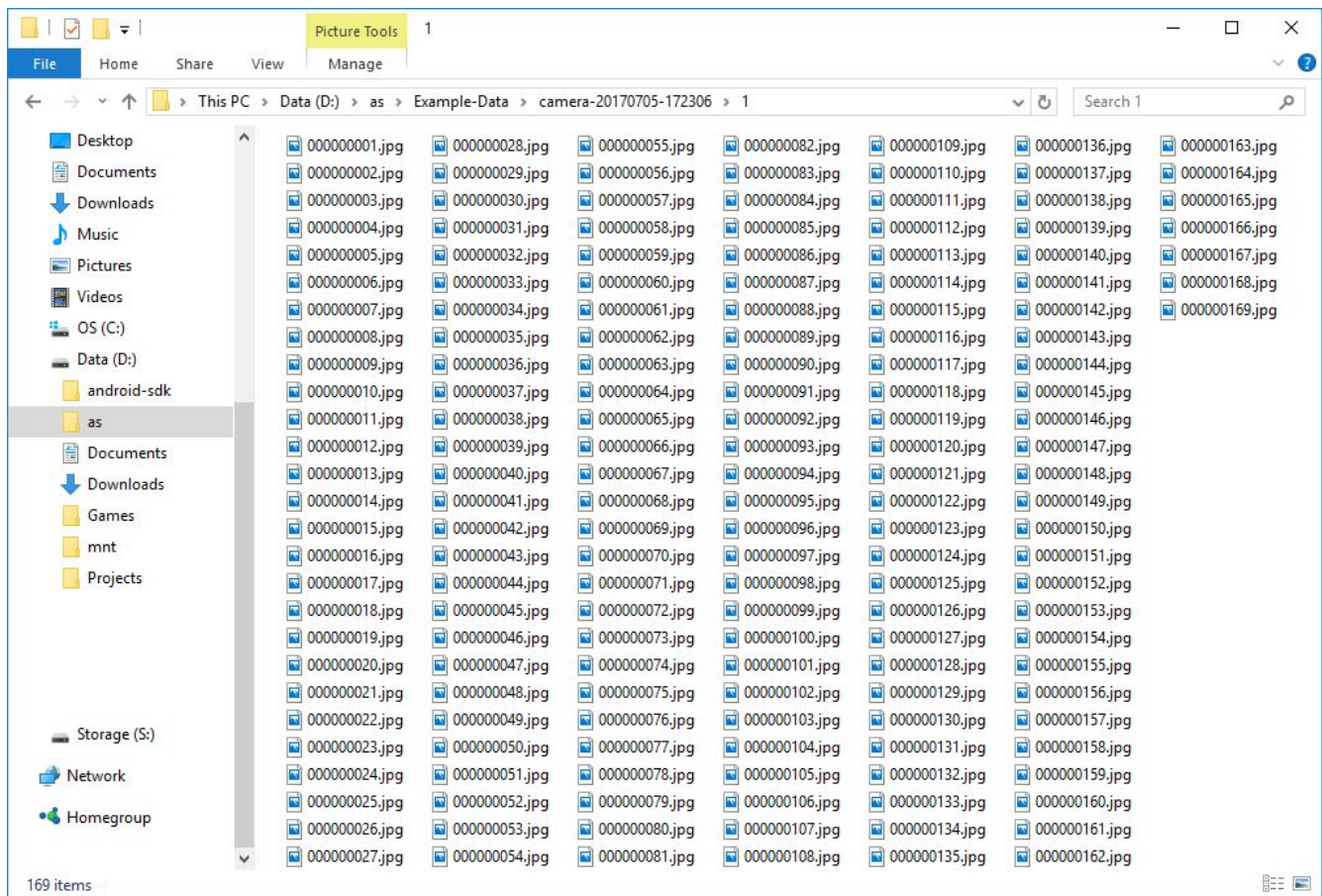
Here you see the **Example-Data** Project folder.

It has three Tour folders.

The screenshot shows Tour folder **camera-20170705-172306**.

Each Tour folder then has 7 sub-folders:

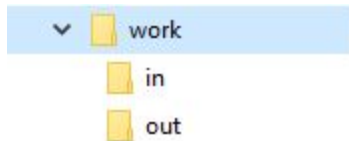
1 to 6 for the images and **7** for the log data.



Folder Structure

The Creator needs the following Folder Structure on the processing PC to work:

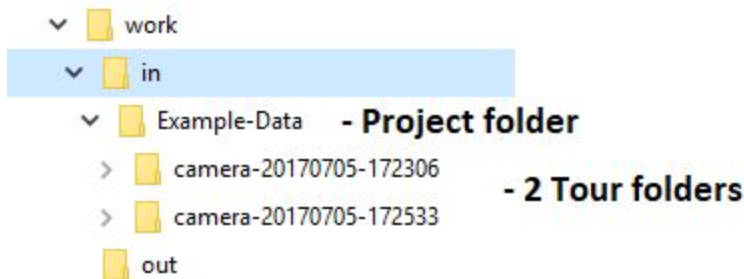
Create an empty **in** and **out** folder. **Work** is just an example parent folder, this could be any folder on any drive or NAS.



Do not process directly from the SSD. Always copy the data to a PC first. Disconnect the SSD before starting processing. It will act as your backup copy.

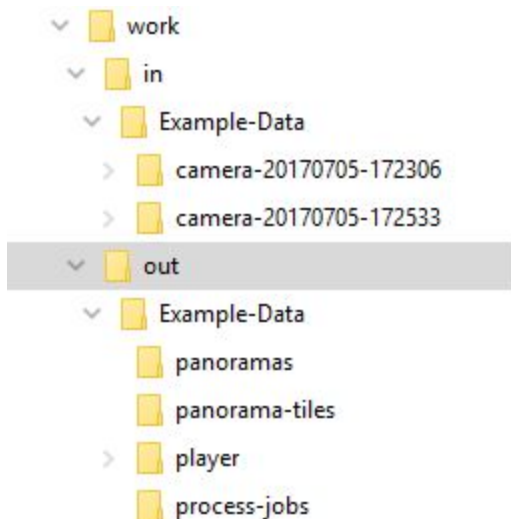
Make a backup copy of the recorded data for safekeeping.

Copy the Project folder from the **cameras SSD** to the **in** folder.



Creator saves its output to the **out** folder.

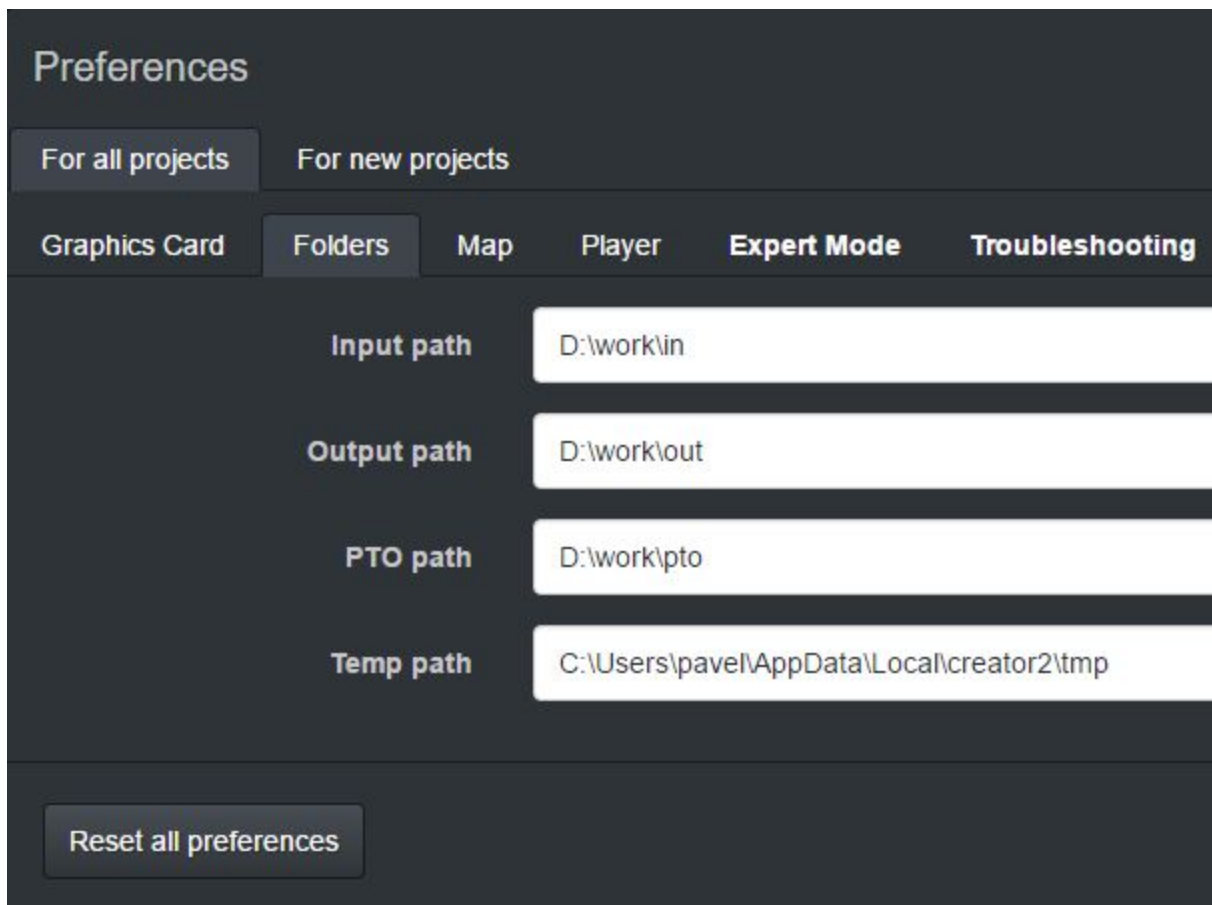
It automatically creates the Project name (Example-Data) in the out folder.



You can have the **in** and **out** folder on the same HDD or SSD.
Or on different drives.
Or on network drives.
Or mixed.

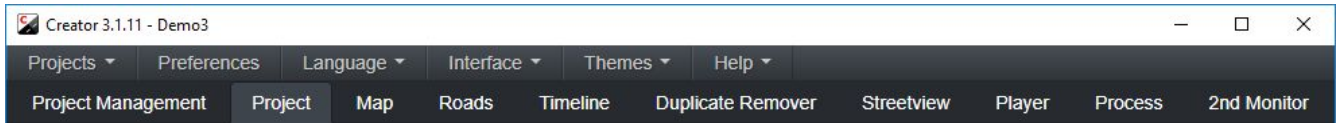
The **out** folder should be a local drive for speed reasons.

You need to set the **in** and **out** folders in Creator.
Creator will ask you for the folders when necessary.



Workflow

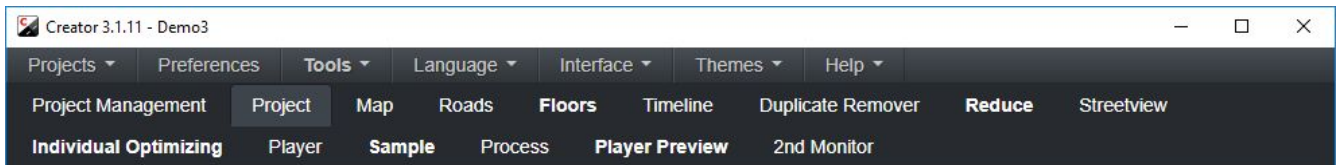
Just work through the tabs from left to right:



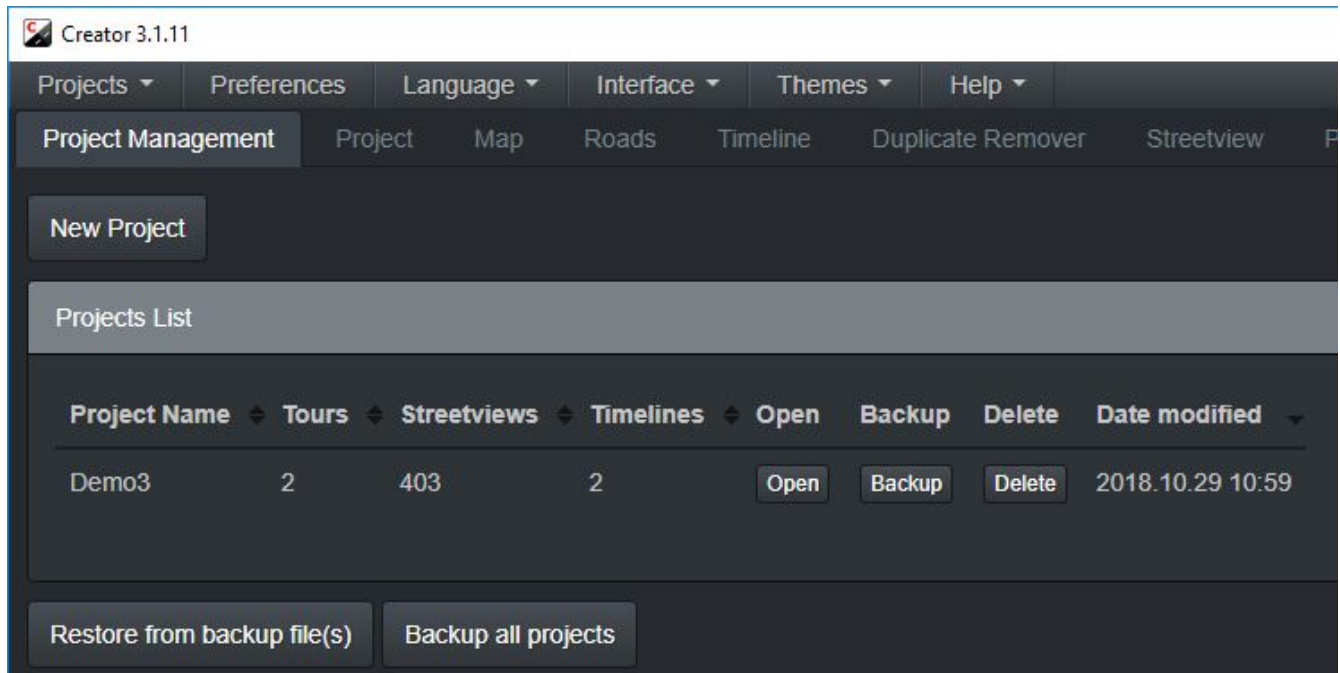
Of course, at any time you can go back to a previous tab and apply changes.

To enable additional tabs go to **Menu - Interface** and click **Advanced**.

Advanced tabs appear as **bold**.



Project Management



New project button

Open a project folder with at least one tour folder to add.
You can select and deselect tours in the pop-up.

The Projects List

For each project Creator shows:

- Project name
- Number of tours
- Number of streetviews
- Number of timelines

Open button: Open the project.

Backup button: Backup the project. The source photos are **not included** in the backup.

Delete button: Delete the project from the Creator program. Photos are **not deleted**.

Date modified

The date of the last edit made to the project.

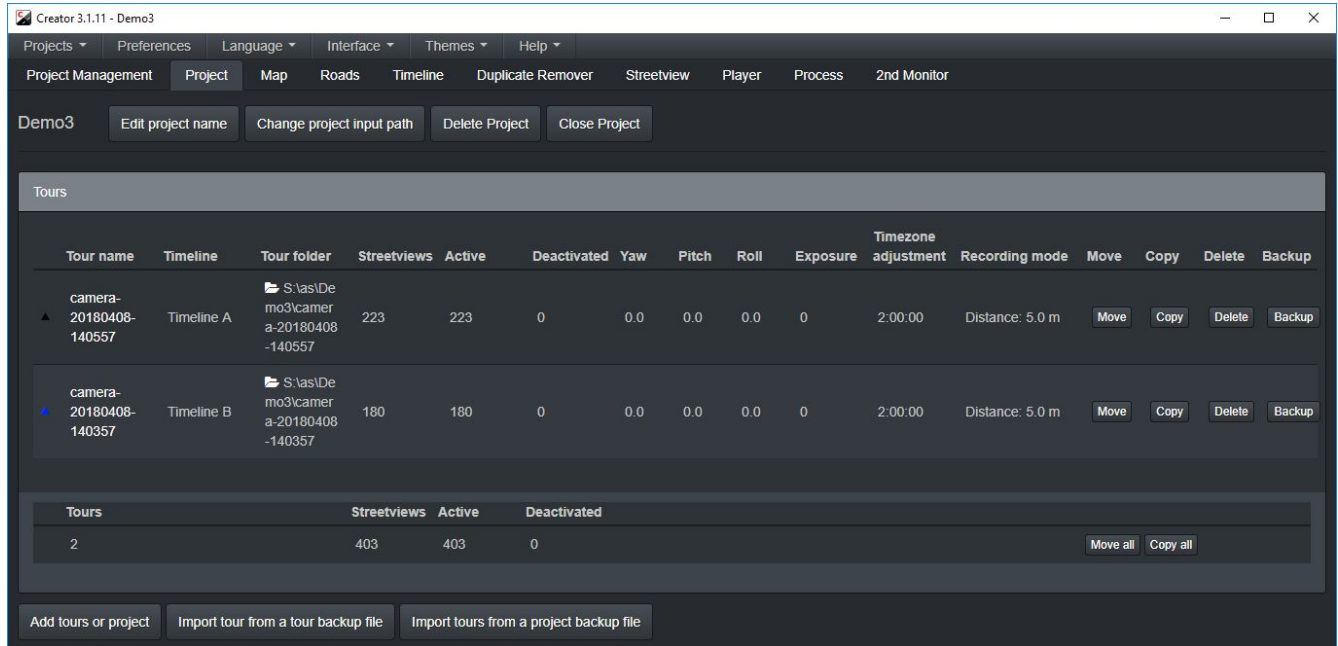
Restore from a backup file button

Restore a project from the project's backup file.

Backup all projects

Backup **all** projects. The source photos are **not included** in the backup.

Project



Edit project name

Change the project name.

Change project input path button

Change the project's input path, for when a projects folder has been moved on the HDD.

Delete project button

Delete the project from the Creator program.
The source photos will **not** be deleted.

Close project button

To open another project or before shutting down the Creator program.

The Tours list

For each project Creator shows:

Tour name

Click a tour name to open it on the Map. The map will zoom in on the tour.
Good to find a tour quickly on the map.

Tour folder

Where the tour's source-data is.

Edit icon: The tour folder can be changed individually.

Timeline

Timeline name.

This column is visible only if a timeline has been assigned to a tour in the Timeline tab.

Streetviews

Number of recorded data-sets.

Active

Number of active streetviews.

Deactivated

Number of deactivated streetviews. On the map tab you can deactivate streetviews to not process them. For example when a road has been recorded twice.

Yaw, Pitch, Roll

Settings from the Streetview -> Leveling tab.

Exposure

Setting from the Streetview -> Imagery tab.

Timezone adjustment

Setting from the Streetview -> General tab.

To fix the local recording date and time in case the tablet was not set to the local time.

Unnecessary if the **tablet was set to the local time**.

Recording mode

Recording Mode used when recording the streetviews. Either **Interval**, **Distance** or **Manual**.

Move button

Move the tour to a different project.

Copy button

Copy the tour to a different project.

Delete button

Deletes the tour from the project.

The source photos are **not** deleted.

Backup button

Backup the tour.

The source photos will **not** be backed up.

Move All button

Moves all tours to a different project.

Copy All button

Copies all tours to a different project.

Add tours or project button

Add one or multiple tour folders to this project.
E.g. when additional footage has been recorded months later.

Import tour from tour backup file button

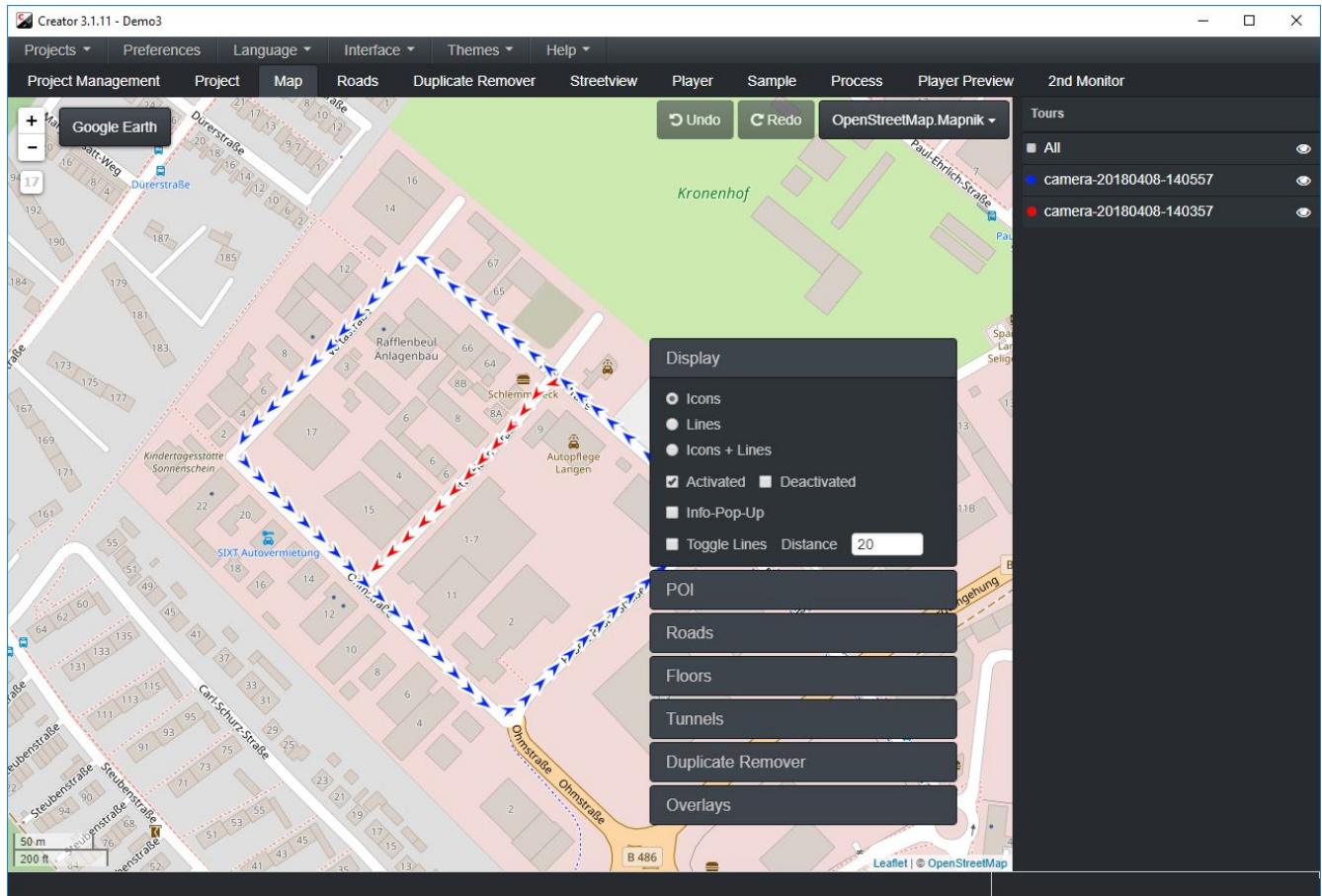
Add a single tour from a tour's backup file

Import tours from a project backup files button

Add one or more tours from a project's backup file.

Map

Right click on the Map for the context menu:



Maps

The Screenshot shows the **OpenStreetMap.Mapnik** map.
Select any online map provider from the dropdown list, or use your own custom set of map-tiles.

Maps - Custom map tiles

To select your own custom map-tiles click on the first item in the list:
Your Company's map tiles. This opens the **Custom map tiles** popup.

Label, **Url** and **Attribution** properties can be adjusted in this popup.

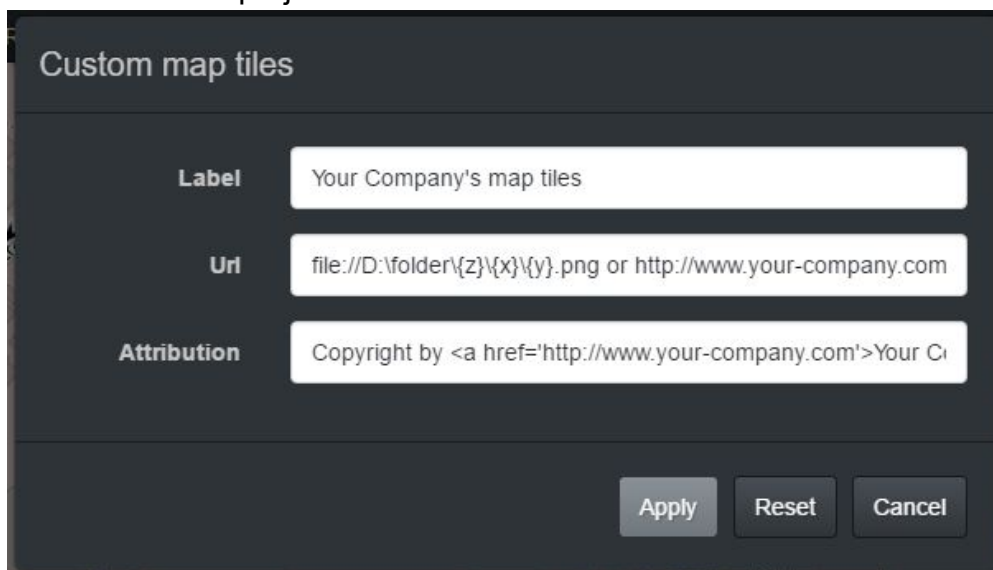
The Url can point to either an online resource like:

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

or a local folder or NAS drive:

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

where {z} is the zoom level, and {x} and {y} are the coordinates of the top left corner of the tile in web mercator projection.



The screenshot shows a dark-themed popup window titled "Custom map tiles". It contains three input fields with labels to their left: "Label", "Url", and "Attribution". The "Label" field contains the text "Your Company's map tiles". The "Url" field contains the text "file://D:\folder\{z}\{x}\{y}.png or http://www.your-company.com". The "Attribution" field contains the text "Copyright by Your Ci". At the bottom right of the popup are three buttons: "Apply", "Reset", and "Cancel".

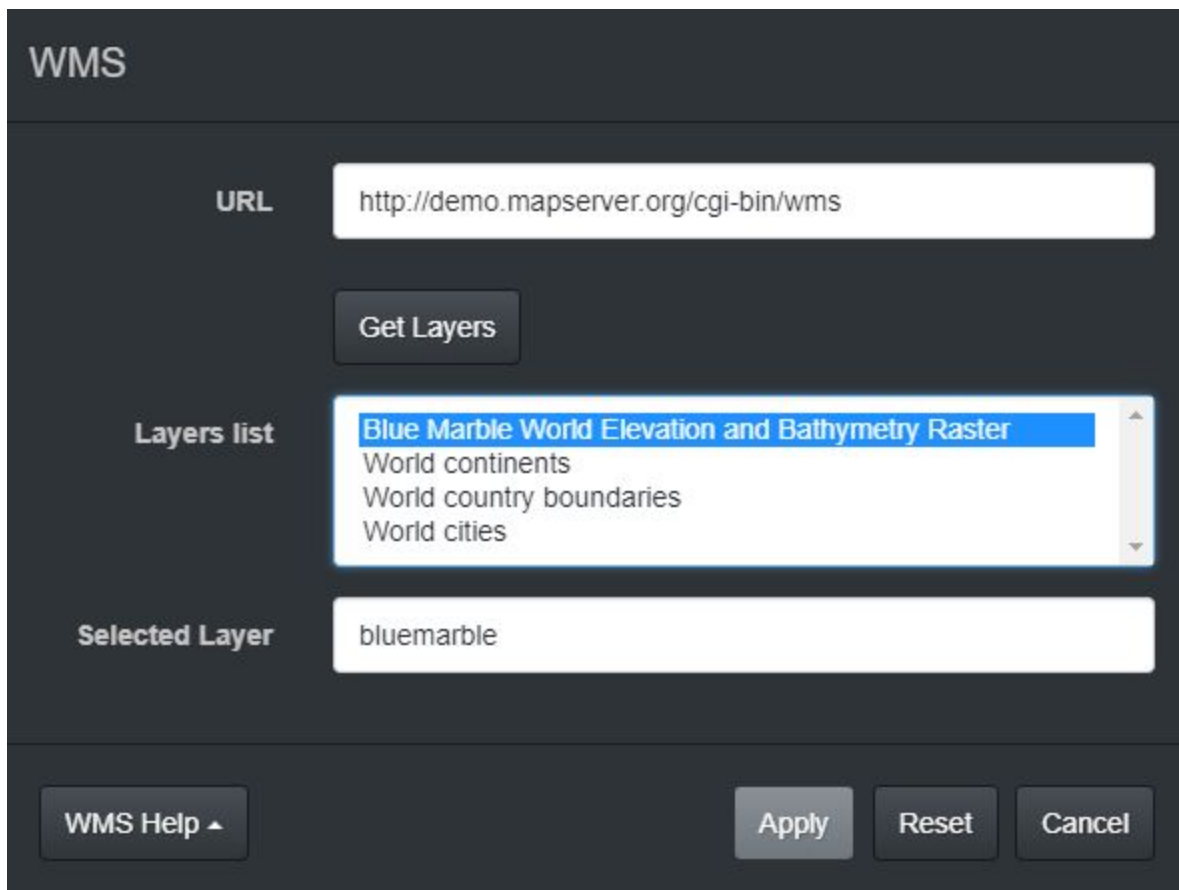
Maps - WMS

Add your own WMS layer.

Web Mercator projection (3857, 900913, 3785) are supported. Other projections will not work.

For easy testing the **WMS Help** button lists a few public WMS servers.
Click them to load into the URL field. Then click the **Get Layers** button.

Paste your WMS URL into the **URL** field and click on the **Get Layers** button.
A list of all the available layers will appear in the **Layers list** section.
Select a layer from the **Layers list** and click **Apply**.



The screenshot shows a dark-themed interface for configuring a WMS layer. At the top, the title 'WMS' is displayed. Below it, there is a 'URL' field containing the text 'http://demo.mapserver.org/cgi-bin/wms'. To the right of the URL field is a 'Get Layers' button. Below the URL field is a 'Layers list' section, which is a scrollable list box containing four items: 'Blue Marble World Elevation and Bathymetry Raster' (which is highlighted in blue), 'World continents', 'World country boundaries', and 'World cities'. Below the 'Layers list' is a 'Selected Layer' field containing the text 'bluemarble'. At the bottom of the interface, there are four buttons: 'WMS Help' with a downward arrow, 'Apply', 'Reset', and 'Cancel'.

Main Map menu

Right-click on the map to access it.

Move the mouse outside the menu to close it.

Display

☒ Icons

☐ Lines

☐ Icons + Lines

☒ Activated ☐ Deactivated

☐ Info-Pop-Up

☐ Toggle Lines Distance

POI

Roads

Floors

Tunnels

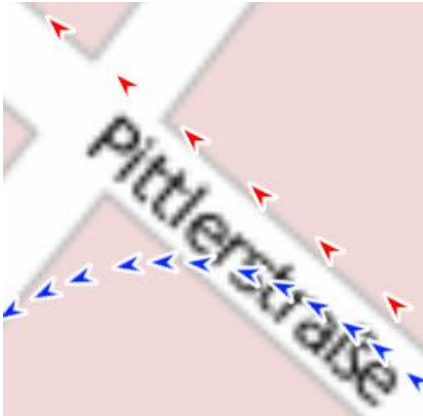
Duplicate Remover

Overlays

Display

- ☒ Icons
- ☐ Lines
- ☐ Icons + Lines

Icons



Lines



Both



- ☒ Activated
- ☐ Deactivated

Show or hide active and deactivated streetview icons.

Usually more footage than needed is recorded.

Using the [Duplicate Remover](#), [Reduce](#) (Interface -> Advanced), as well as manual deactivation on the map tab this can be reduced.

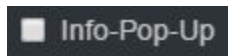
The Map tab is where you can see what streetviews are active for processing.



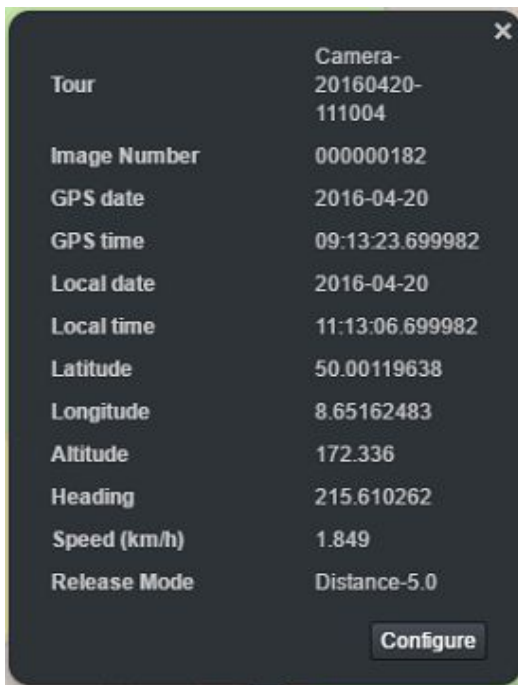
Deactivated streetviews are shown in a different color.

For this tour it is dark blue.

Info-Pop-Up

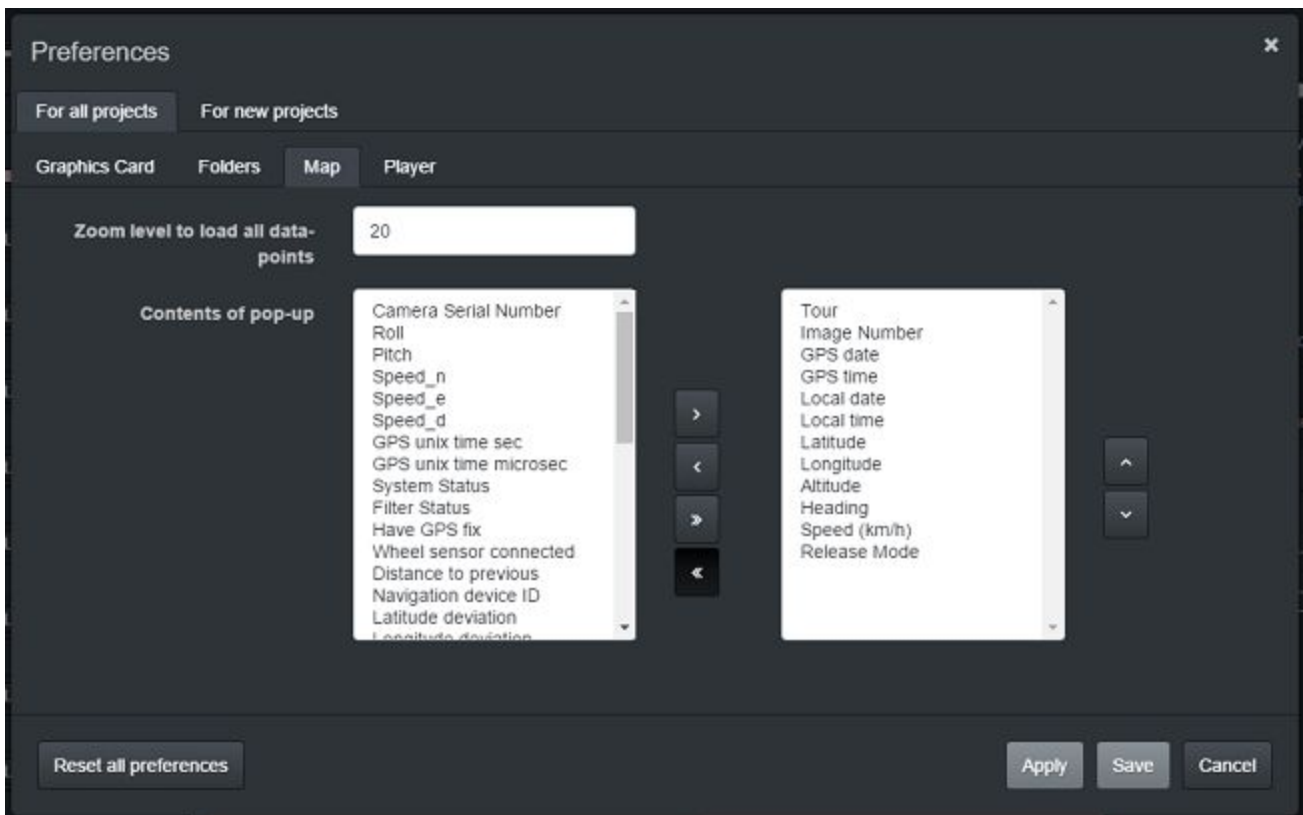


See the data for that streetview. See the default selection in the image below.

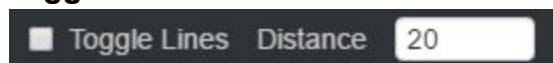


Configure button

Customize what data to display using the pop-up



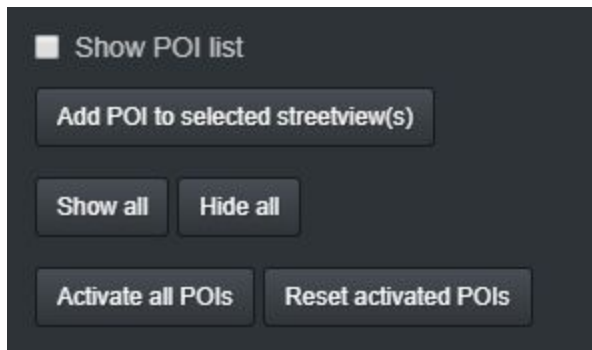
Toggle Lines

A dark grey rectangular control bar. On the left, there is a small white square checkbox followed by the text "Toggle Lines" in white. To the right of this, the word "Distance" is written in white. Further right is a white rectangular input field containing the number "20".

☐ Toggle Lines Distance

When displaying streetviews as lines, do not draw a line between streetviews if distance between them is more than the set **Distance**.

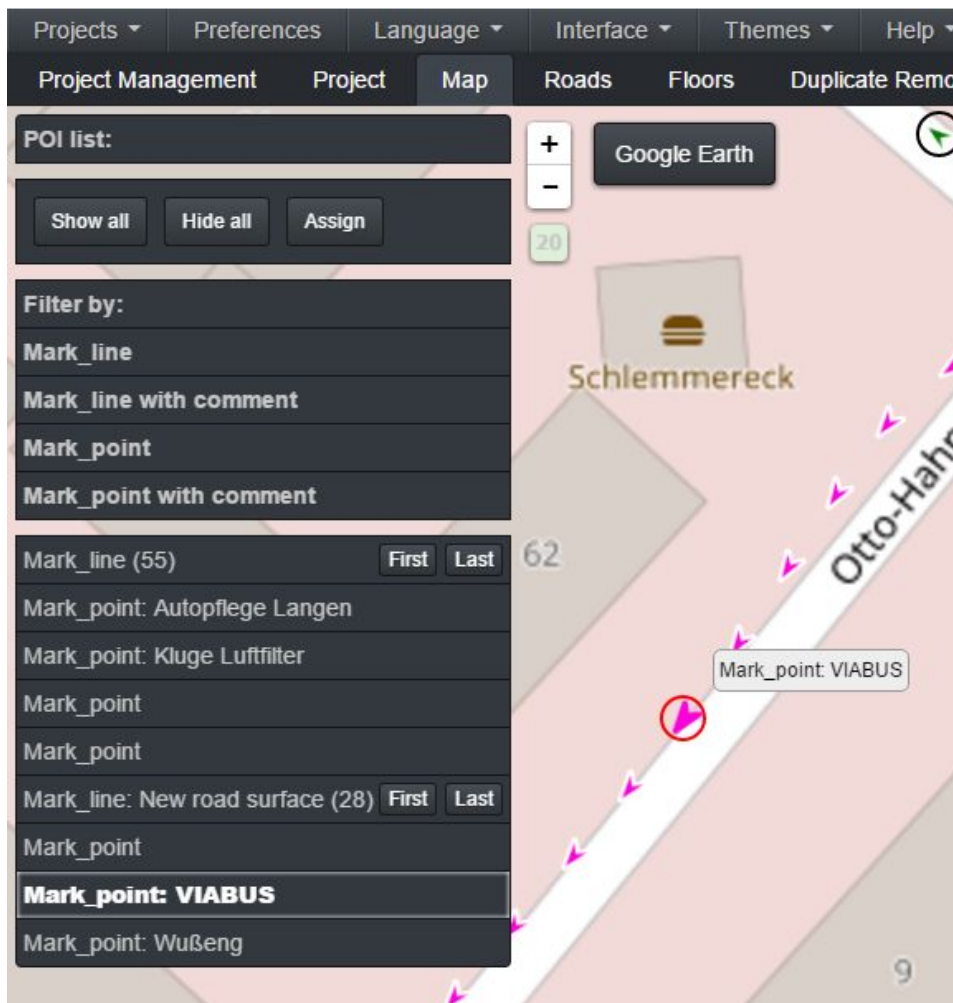
POI



Display **Points Of Interest** recorded using the POI tab in Remote Control. Black circles around a streetview icon indicate that it's a POI. A label with the POI name is displayed to the right of the streetview icon.

Additional POIs can be added to one or many selected streetviews icons using the **Add POI to selected streetview(s)** button or **Ctrl+P**.

Ctrl+U unassigns (deletes) POI(s) for the selected streteviews(s).



Show POI left panel top section (**Filter By**):

In this list all unique POI names are displayed. By default all POI are activated. Click on a POI name to deactivate it. Click again to activate. Multiple POI names can be deactivated at the same time.

Show POI left panel bottom section (**POI list**):

Click on a POI name to zoom into it on the map. The selected POI will have a red outline. If the POI was recorded in sticky mode, only 1 entry will be displayed in the list with the ability to zoom into the first and last streetviews of the sticky sequence by clicking on the **First** and **Last** buttons.

Show all - Check all **Filter by** items.

Hide all - Uncheck all **Filter by** items.

Activate all POIs - Reset all automatically deactivated streetviews (this includes Duplicate Remover and Reduce),

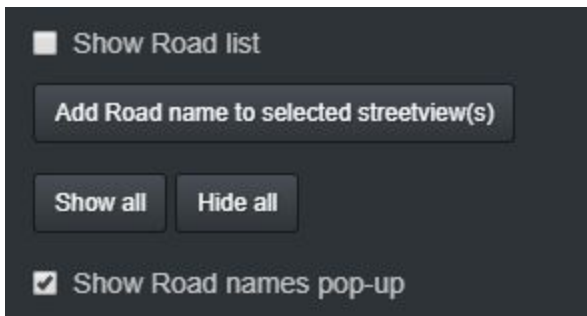
then deactivate all streetviews and activate only the streetviews containing a POI.

This action will not overwrite manually activated or deactivated streetviews.

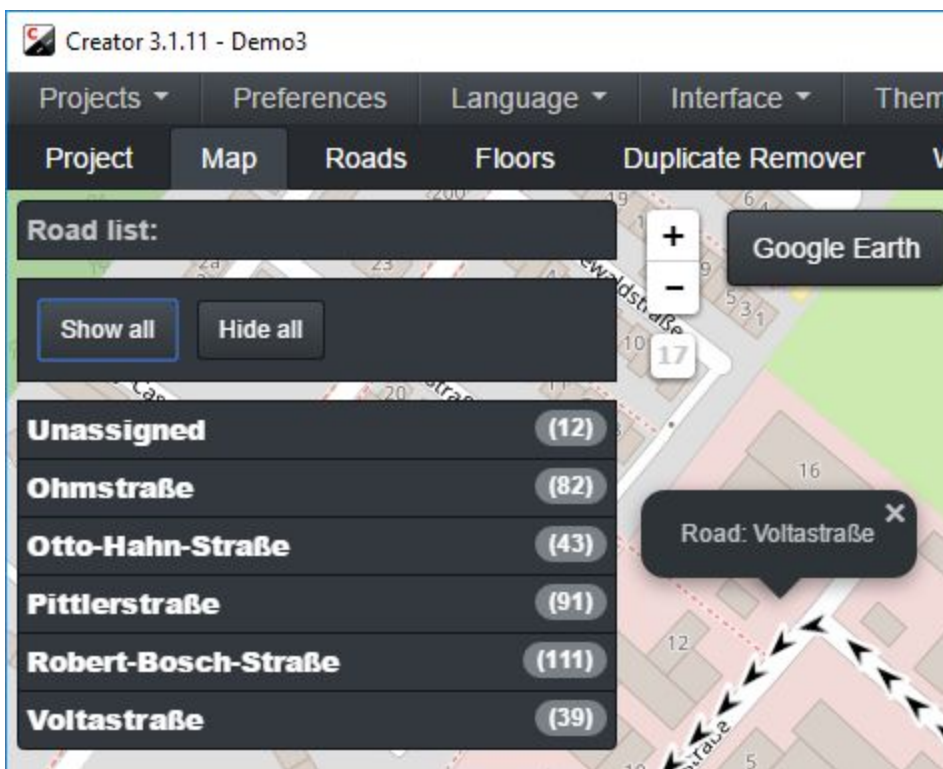
Reset activated POIs - Reset all automatically deactivated streetviews (this includes Duplicate Remover and Reduce).

This action will not overwrite manually activated or deactivated streetviews.

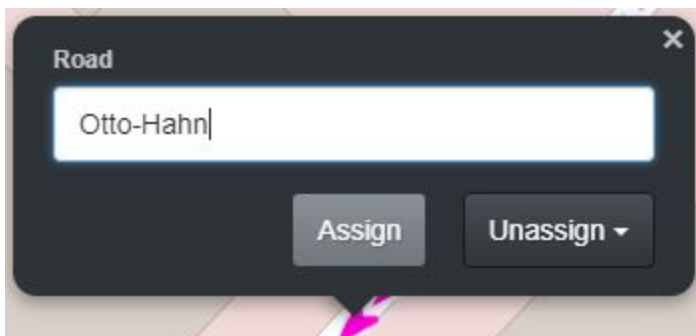
Roads



Show Road list - Show Roads assigned in the Roads tab.



Add Road name to selected streetview(s) - Select one or several streetviews on the map then click on this button (or CTRL+R) to assign a Road name.

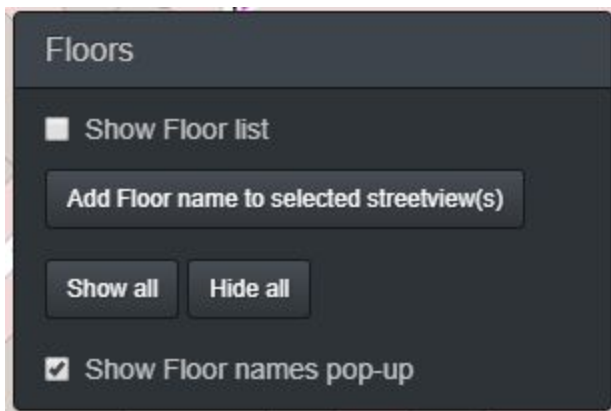


Show all - Check all **Road list** items.

Hide all - Uncheck all **Road list** items.

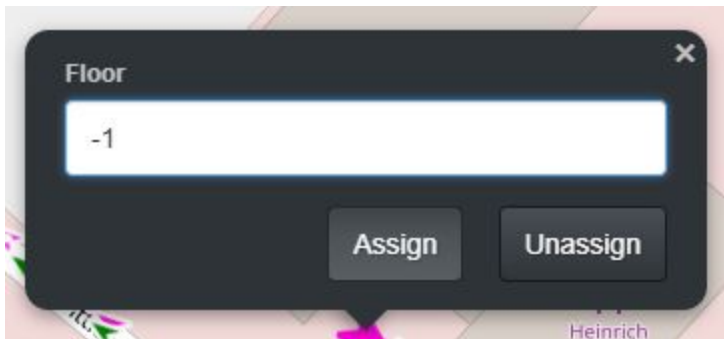
Show Road names pop-up - Moving the mouse over a streetview will display the Road name instead of the Info-Pop-Up.

Floors



Show Floor list - Show Floors assigned in the Floors tab.

Add Floor name to selected streetview(s) - Select one or several streetviews on the map then click on this button (or CTRL+F) to assign a Floor name.



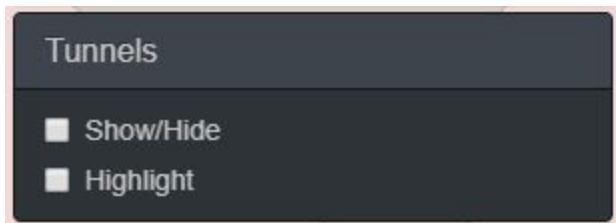
Show all - Check all **Floor list** items.

Hide all - Uncheck all **Floor list** items.

Show Floor names pop-up - Moving the mouse over a streetview will display the Floor name instead of the Info-Pop-Up.

Tunnels

Tunnels are automatically detected by no GPS satellites visible.

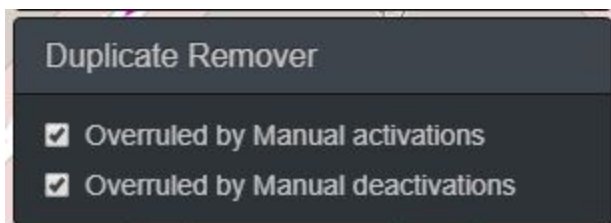


Show/Hide - Only show streetviews that were automatically marked as tunnels.

Highlight - Highlight streetviews that were automatically marked as tunnels.



Duplicate Remover



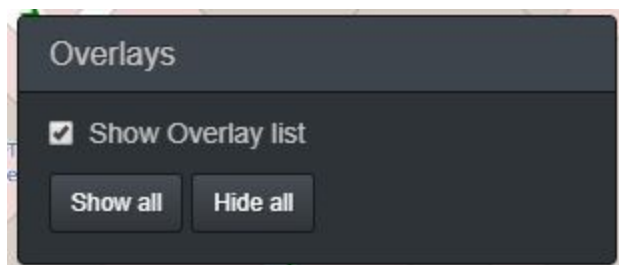
Overruled by Manual activations - Manual activations take priority and will overwrite any status set by Duplicate Remover.

Overruled by Manual deactivations - Manual activations take priority and will overwrite any status set by Duplicate Remover.

Overlays

Add KML or KMZ Overlays to the Map.

These can be the same files defining a recording area for the Remote Control.



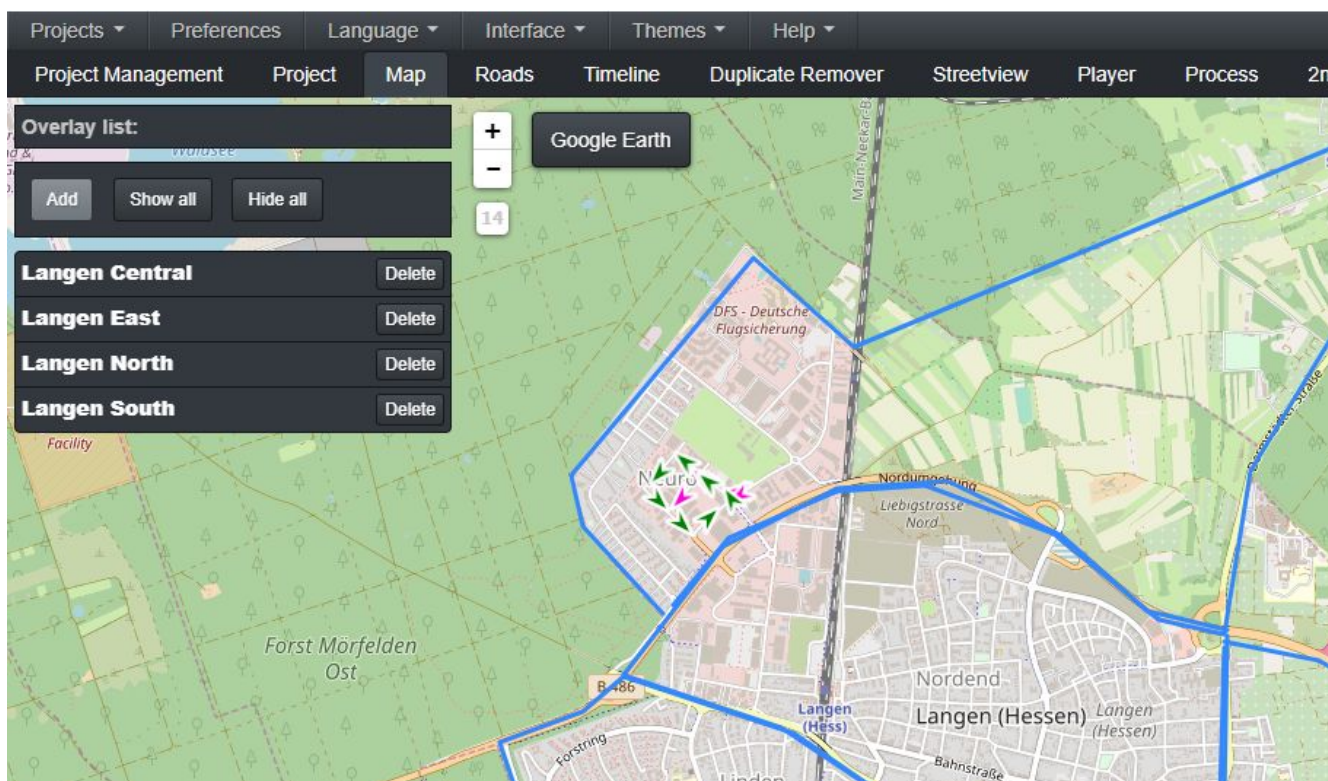
Show Overlay list - Show overlays in the Overlays panel.

Add - Pick a new KML or KMZ file.

Show all - Show all Overlays.

Hide all - Hide all Overlays.

Delete - Removed the Overlay from the map. The file is not deleted.



Keyboard Shortcuts

For the Map tab.

Icons

Key	Function
Ctrl + z	Undo
Ctrl + y	Redo
Ctrl + a	Select all visible icons (even outside the map)
Ctrl + q	Deselect all visible icons (even outside the map)
Delete	Deactivate selected icons
Insert	Activate selected icons
Home	Rotate selected icons right
End	Rotate selected icons left
Page-Up	Go to the next streetview
Page-Down	Go to the previous streetview
Ctrl + l	Line-up selected icons. From first to last selected icon.
Ctrl + P	Assign a POI name to selected Streetview(s)
Ctrl + U	Unassign a POI name of the selected Streetview(s)
Ctrl + R	Assign a Road name to selected Streetview(s)
Ctrl + F	Assign a Floor name to selected Streetview(s)

Map

Key	Function
4 arrows	Move map up, down, left, right. Additional you can left-click with the mouse, then hold and move the map.
Mouse-wheel	Zoom in and out
+	Zoom in
-	Zoom out

Select single icon

Click it with the mouse.

Select many icons

Select first icon with the mouse. Press and hold the **Shift** key.

Select last icon with the mouse.

Move one or many icons

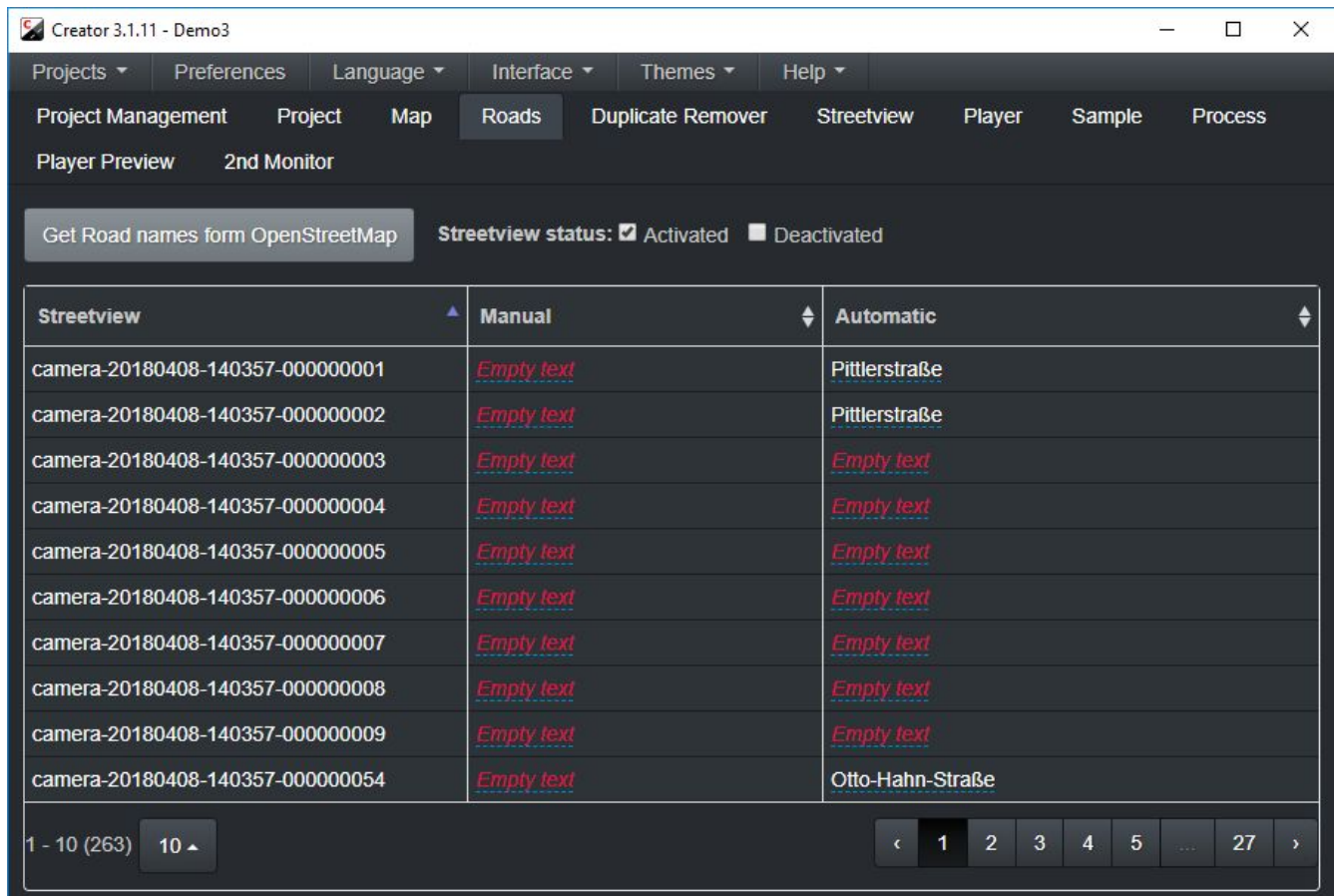
Select, then move with the mouse.

Road Names

Automatic

The **Get Road names from OpenStreetMap** button assigns road names automatically from OpenStreetMap.

Toggle **Streetview status** to display activated or deactivated streetviews.



The screenshot shows the 'Creator 3.1.11 - Demo3' application window. The 'Roads' tab is selected in the top menu. Below the menu, there is a 'Get Road names form OpenStreetMap' button and a 'Streetview status' toggle set to 'Activated'. A table displays streetview data with columns for 'Streetview', 'Manual', and 'Automatic'. The table contains 10 rows of data. The 'Manual' column contains 'Empty text' for most rows, while the 'Automatic' column contains street names like 'Pittlerstraße' and 'Otto-Hahn-Straße'. A pagination bar at the bottom shows '1 - 10 (263)' and a list of page numbers from 1 to 27.

Streetview	Manual	Automatic
camera-20180408-140357-000000001	Empty text	Pittlerstraße
camera-20180408-140357-000000002	Empty text	Pittlerstraße
camera-20180408-140357-000000003	Empty text	Empty text
camera-20180408-140357-000000004	Empty text	Empty text
camera-20180408-140357-000000005	Empty text	Empty text
camera-20180408-140357-000000006	Empty text	Empty text
camera-20180408-140357-000000007	Empty text	Empty text
camera-20180408-140357-000000008	Empty text	Empty text
camera-20180408-140357-000000009	Empty text	Empty text
camera-20180408-140357-000000054	Empty text	Otto-Hahn-Straße

Manually

Click on a cell in the **Manual** or **Automatic** column to edit its content.

Manually assigned Road names will always overwrite automatically assigned Road names.

Map tab:

Select one or multiple streetviews on the map.

Click CTRL+R, enter the Road name and click **Save**.

Creator 3.1.11 - Demo3

Get Road names form OpenStreetMap

Preferred language

- ☒ Local language only
- ☐ Custom language only
- ☐ Custom language, fallback to local if not specified.

For

- ☒ Activated
- ☒ Deactivated

Mode

- ☐ Fill in
- ☐ Overwrite

Maximum distance (m)

Get Road names form OpenStreetMap **Reset all automatically assigned values**

Manually assigned values will not be overwritten by this action.

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

- Activated streetviews
- Deactivated streetviews

Mode

- Fill in - Only update empty values in streetviews
- Overwrite - Overwrite all existing geocoded values in streetviews

Maximum distance (m)

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

Get Road names from OpenStreetMap

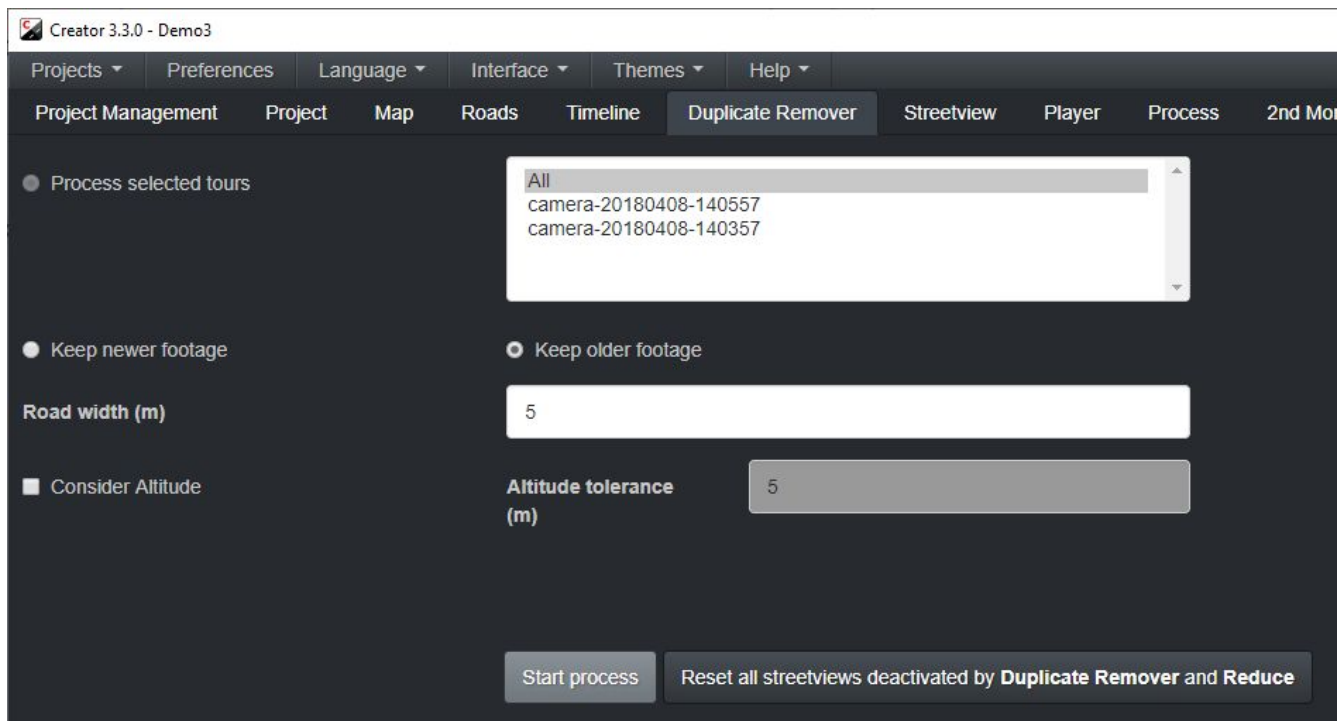
Reset all automatically assigned values

Duplicate Remover

Removes duplicate recordings from roads recorded more than once.

We recommend to record with the **Distance Mode** set to **5m** or less. E.g. **1m**.

You can always deactivate excessive footage with [Reduce](#) after applying the Duplicate Remover.



Options:

Process selected timelines:

(Visible only when there are timelines)

Process only selected timelines.

Press **CTRL** and then click timelines to select multiple timelines.

Process selected tours:

Process only tours selected from the list.

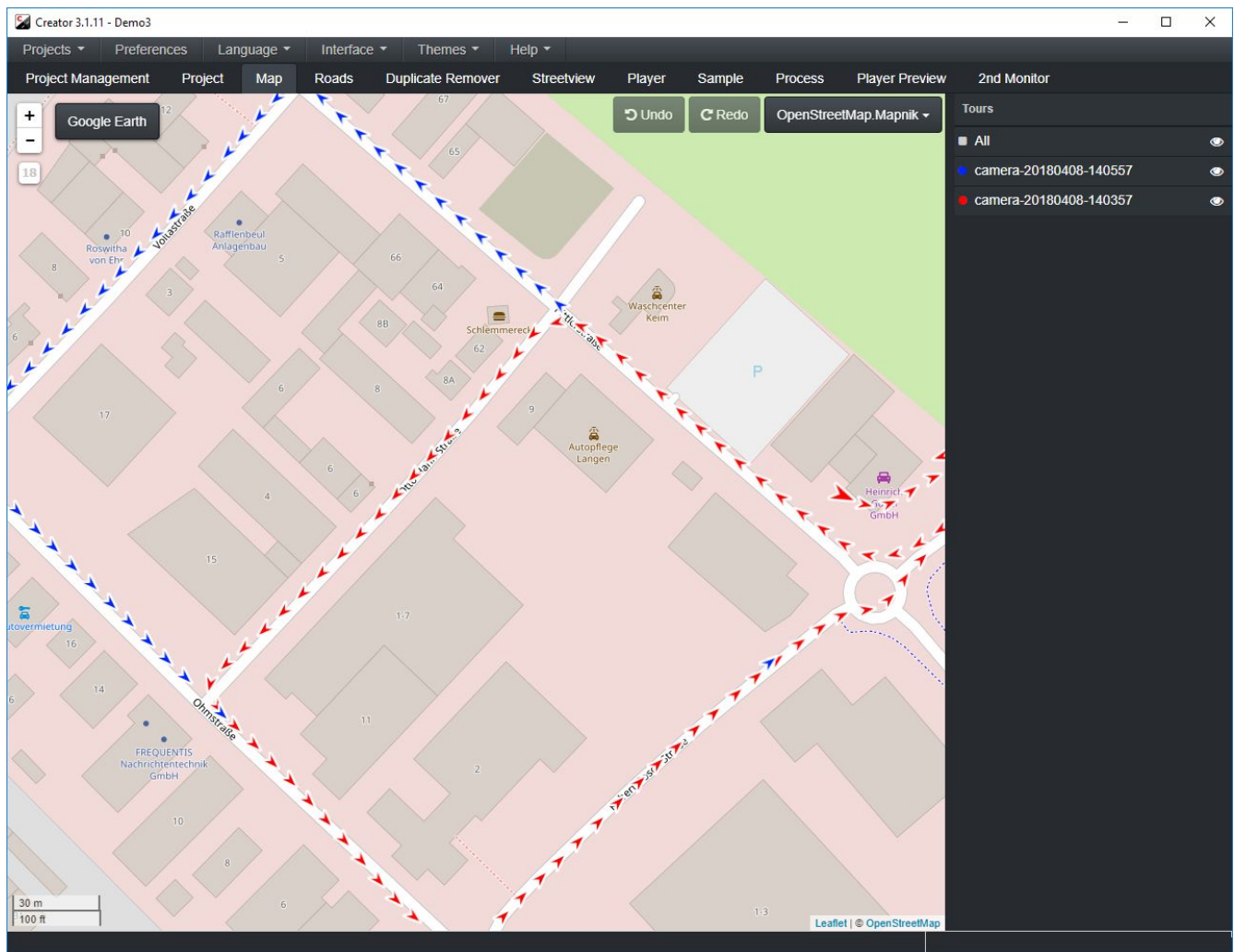
Press **CTRL** and then click timelines to select multiple timelines

Favor existing footage:

The default.

Provides best results for most situations.

Keeps exiting streetviews, add streetviews for newly recorded roads.

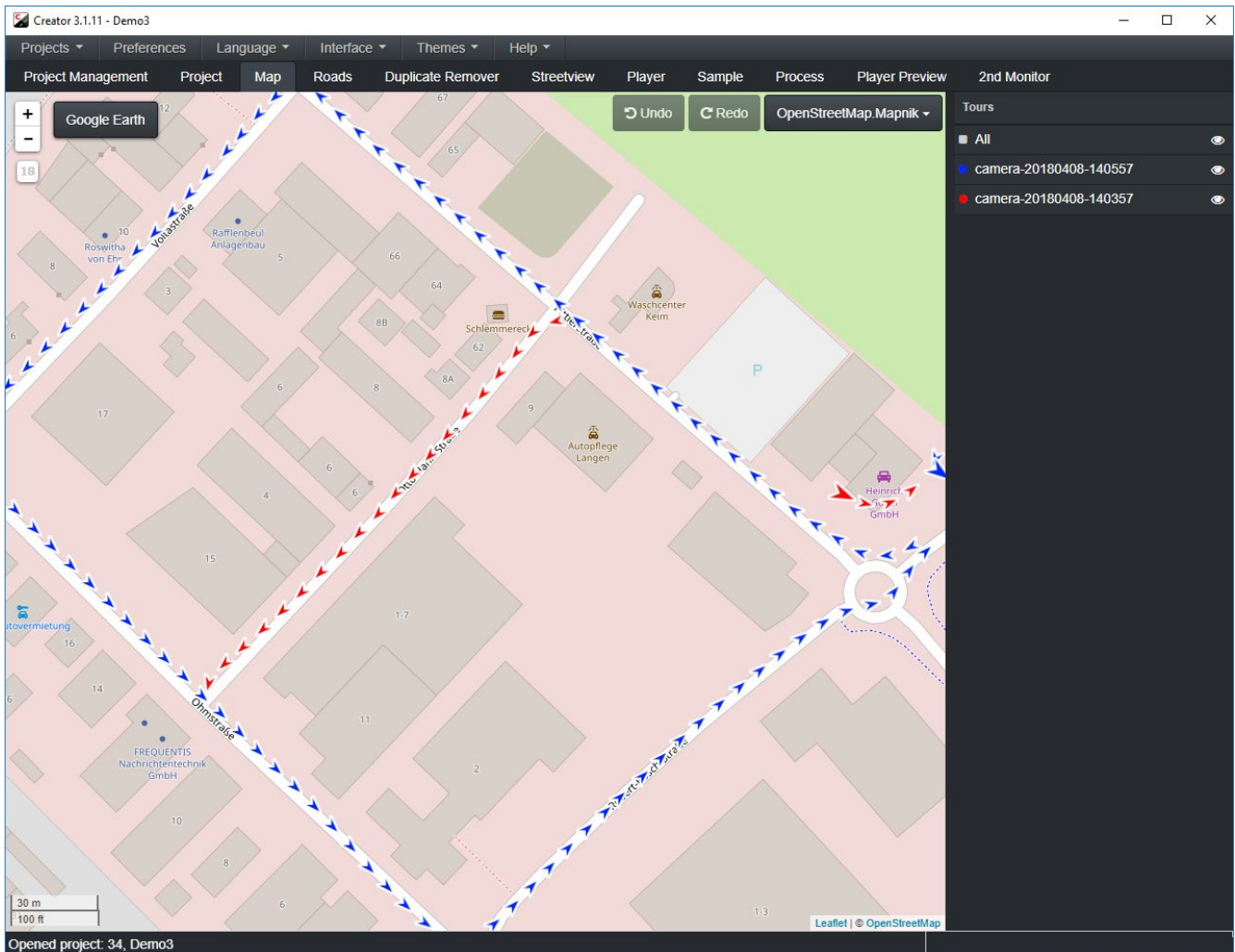


Favor newer footage:

Replace existing streetviews with newer footage.

Disadvantage:

When driving into a dead-end road, you get the bad footage from reversing out of it.



Remove by radius

Remove all streetviews within x meters of this streetview.

Consider Altitude

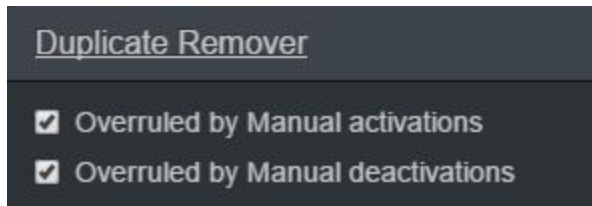
By default the altitude is not used to determine what is or is not a duplicate.

You will have to try a few times to find the optimum settings for your footage.

These three options allow you to try again and again:

Reset all streetviews

Reset all streetviews deactivated by **Duplicate Remover** and **Reduce**.



Check the Duplicate Remover results on the Map tab.

You then can fine-tune this by manually activating or deactivating streetviews.

Manual changes will be kept when running the Duplicate Remover again.

By default, manual edits are set to overrule results from the Duplicate Remover.

Streetview - General

Copyright

This is written into the EXIF metadata of the equirectangular .jpg streetviews that have been created.

Leveling

Always Global leveling - Use values set in the **Leveling** tab

Individual Optimizing (when available) - Use values set in the **Individual Optimizing tab**, when available.

Project's input path

Path to this project's source folder.

Project's output path

Path to this project's output folder.

Streetview-tiles output path

Path to the streetview-tiles output folder.

Allows you to save tiles directly to a USB-HDD for shipping to, for example, a datacenter.

Timezone adjustment

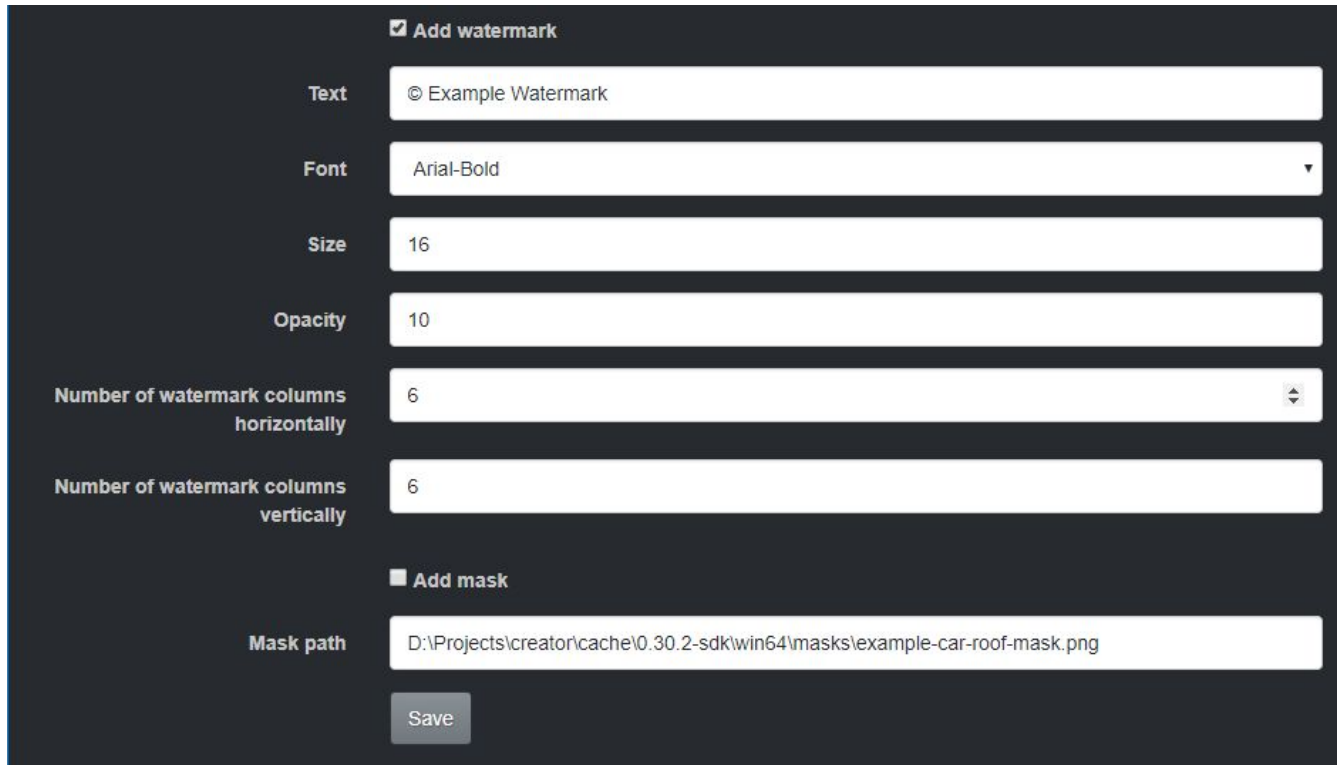
Creator automatically calculates the local time from

- the tour name, which includes the tablets time
- the camera's log data, which has the GPS time.

In case the tablet time was not set to local time, you can adjust it here.

Streetview - Watermark

Add watermarks to the streetview. The changes in this tab can be previewed in the **Leveling** tab.



The screenshot shows a configuration panel for adding watermarks to a streetview. It features a dark background with white text and input fields. At the top, there is a checkbox labeled 'Add watermark' which is checked. Below this, there are five rows of configuration options: 'Text' with a text input field containing '© Example Watermark'; 'Font' with a dropdown menu showing 'Arial-Bold'; 'Size' with a text input field containing '16'; 'Opacity' with a text input field containing '10'; and 'Number of watermark columns horizontally' with a text input field containing '6'. Below these, there is another row for 'Number of watermark columns vertically' with a text input field containing '6'. Further down, there is a checkbox labeled 'Add mask' which is unchecked. Below this, there is a 'Mask path' label and a text input field containing the file path 'D:\Projects\creator\cache\0.30.2-sdk\win64\masks\example-car-roof-mask.png'. At the bottom of the panel is a 'Save' button.

	<input checked="" type="checkbox"/> Add watermark
Text	<input type="text" value="© Example Watermark"/>
Font	<input type="text" value="Arial-Bold"/>
Size	<input type="text" value="16"/>
Opacity	<input type="text" value="10"/>
Number of watermark columns horizontally	<input type="text" value="6"/>
Number of watermark columns vertically	<input type="text" value="6"/>
	<input type="checkbox"/> Add mask
Mask path	<input type="text" value="D:\Projects\creator\cache\0.30.2-sdk\win64\masks\example-car-roof-mask.png"/>
<input type="button" value="Save"/>	

Add watermark

Add watermarks to the resulting streetview.

Text

Watermark text.

Font

Watermark font name, font list is taken from C:\Windows\Fonts.

Size

Watermark text size.

Opacity

Watermark text opacity.

Number of watermarks horizontally

How many watermarks to place horizontally (left-right).

Number of watermarks vertically

How many watermarks to place vertically (up-down).

Add mask

A mask will cover the car's rooftop.

It is a transparent PNG image overlaid on top of the streetview.

A sample mask can be found in

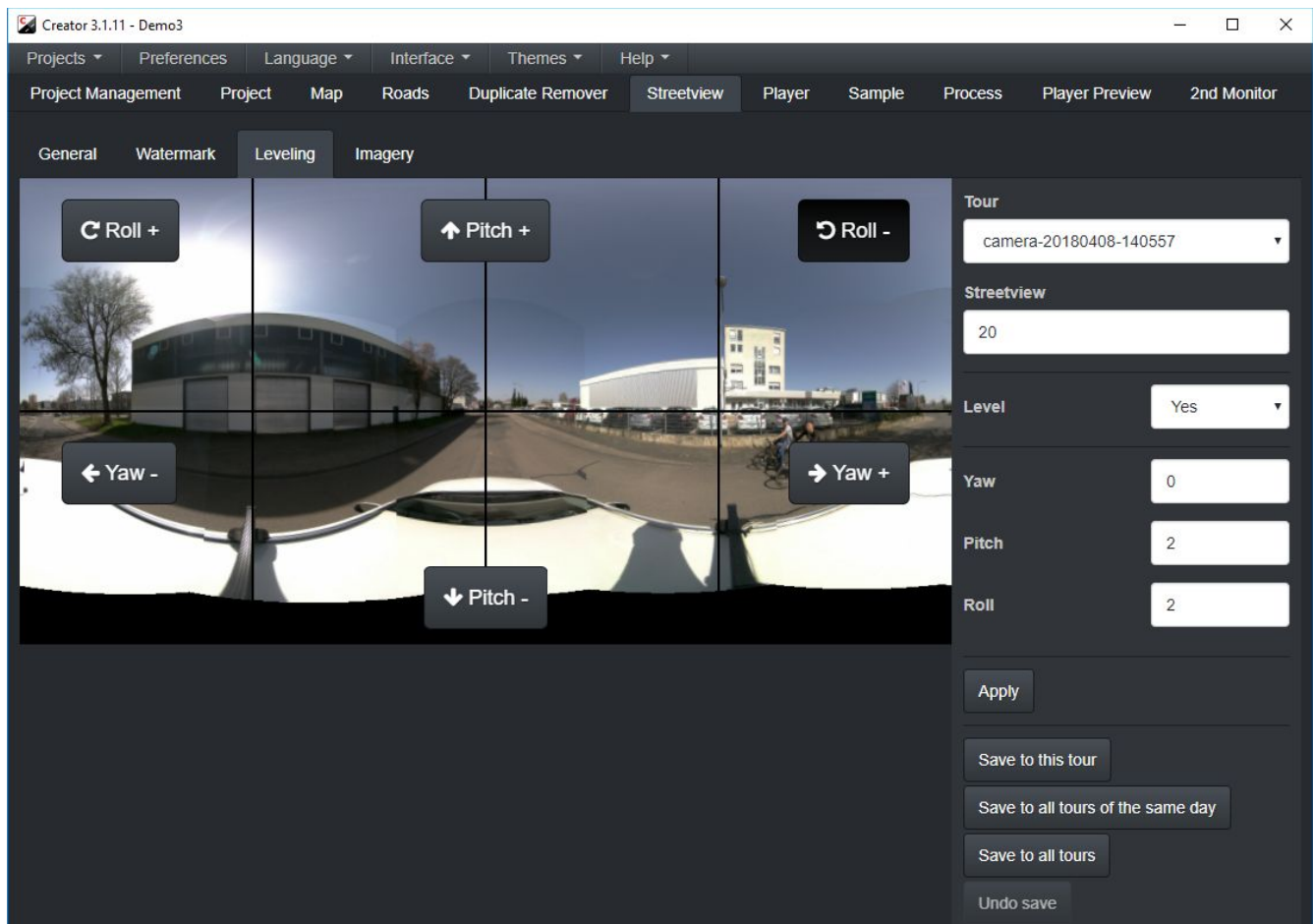
C:\Program Files (x86)\Creator\masks\example-car-roof-mask.png

Mask path

Path to the mask PNG image. Create your own mask file.

Streetview - Leveling

Adjust for the angle between the camera on the cars rooftop and the leveling sensor inside the car.



In a perfect world

- the camera would be mounted 100% vertical.
- the leveling sensor would be mounted 100% horizontal.
- both would look forward, in the exact same direction.

In the real world this does not happen.

Because of this you need to adjust for the three angles between the camera and the sensor. Use the **Pitch+**, **Pitch-** and **Roll+**, **Roll-** buttons to adjust until the streetview looks leveled. Alternatively you can directly enter numerical values into the fields on the right.

Check your findings with a few other streetviews of the same tour by entering a different number into the **Streetview** field.

Click the **Save to this tour** button to save the values to this tour only.

Click the **Save to all tours of the same day** button to save the values to all tours recorded the same day as the current tour.

Click the **Save to all tours of the same timeline** button to save the values to all the tours that have the same timeline as the current tour. (Not shown in the screenshot.)

If the camera mount and the leveling device mount have not been removed from the car in between recordings, you can use the same settings for all tours from many different recording days.

Click the **Save to all tours of this project** button to save the values to all tours of the project.

You can see the **Yaw**, **Pitch** and **Roll** values of all tours at once on the Projects tab.

It's possible to undo any saved values by clicking on the **Undo save** button

Level

Yes:

Level with the log values **and** the values from the Leveling tab.

The most commonly used setting for straight streetviews.

No:

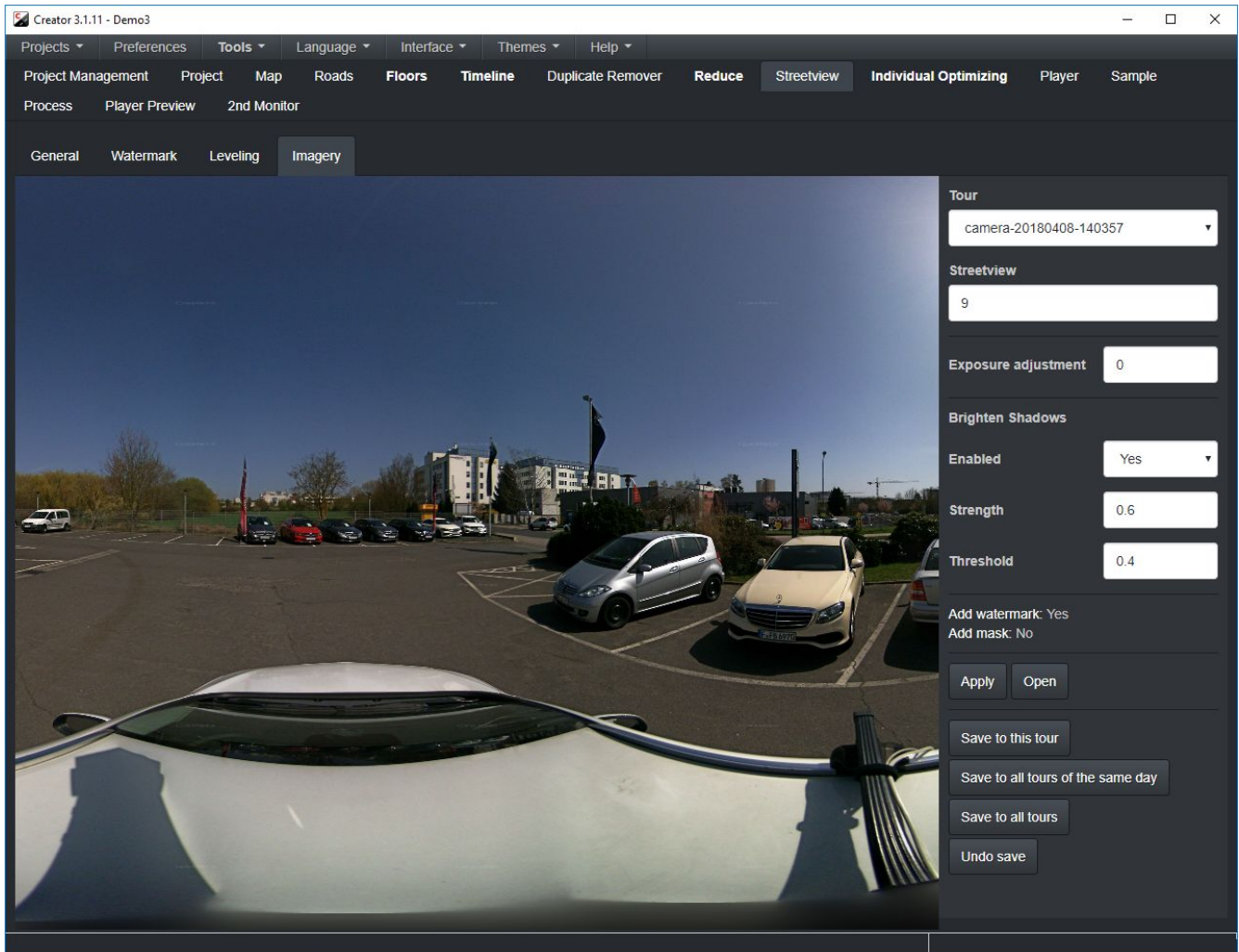
No leveling at all.

Adjust:

Use values from the Leveling tab only. Ignore the log data.

Streetview - Imagery

Preview how the processed streetviews would look like exactly.
Adjust the exposure and brighten shadows.



Exposure adjustment

Adjust image exposure. 0 do nothing, 5 maximum exposure. Default is 0.

Brighten Shadows - Enabled

Enabled automatic brightness adjustment for shadows.

Brighten Shadows - Strength

Amplifies dark pixels to the threshold level. Value between 0.1 and 1. Default is 0.6.

Brighten Shadows - Threshold

The automatic brightness adjustment will be applied to areas where average brightness is less than the **threshold**. Value between 0.1 and 1. Default is 0.4.

Apply

Update the image using the new values.

Open

Open the image with the default image viewer of your operating system.

Click the **Save to this tour** button to save the values to this tour only.

Click the **Save to all tours of the same day** button to save the values to all tours recorded the same day as the current tour.

Click the **Save to all tours of the same timeline** button to save the values to all the tours that have the same timeline as the current tour. (Not shown in the screenshot.)

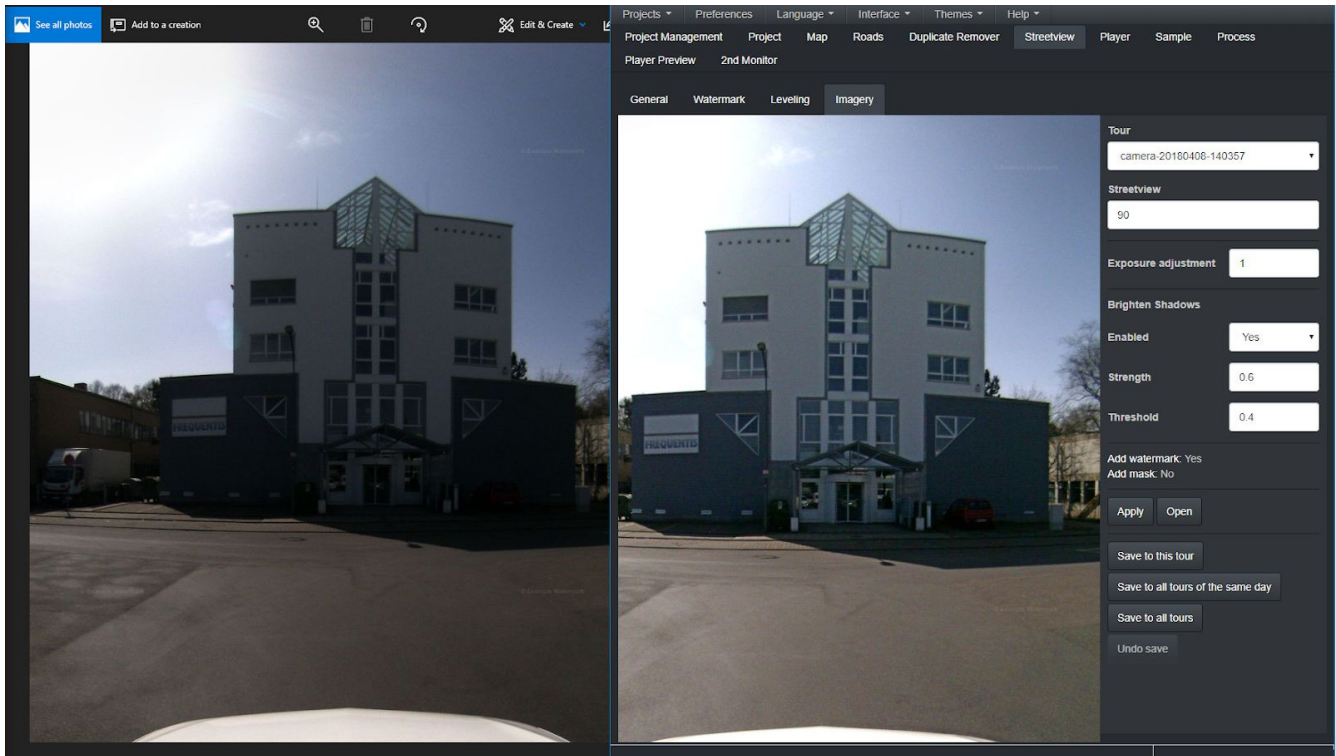
If the camera mount and the leveling device mount have not been removed from the car in between recordings, you can use the same settings for all tours from many different recording days.

Click the **Save to all tours of this project** button to save the values to all tours of the project.

Compare

An easy way to compare what two different sets of settings look like:

1. Set the initial values of **Exposure** and **Brighten Shadows**
2. Click **Apply**
3. Click **Open**. Do not close the **Image Viewer**.
4. Change the values in Creator.
5. Click **Apply**
6. Compare the **Image Viewer** window and **Creator** window side by side



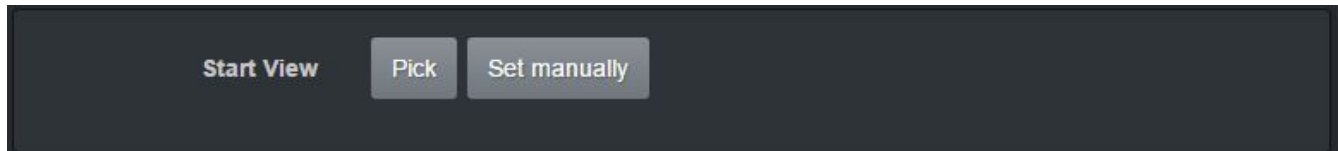
Player

Preferences sub-tab

Set all the player preferences for the player.xml configuration file.

Alternatively you can change this by editing the **player.xml** file in the player folder.
Manual edits made to the player.xml file will not be shown here.

Basic



Pick

Pick the start view from the **Player** sub-tab.

Set manually

Start Tour	<input type="text" value="Camera-20160420-111004"/>
Start Panorama	<input type="text" value="000000020"/>
Start Viewing Direction left-right (degree)	<input type="text" value="237.9"/>
Start Viewing Direction up-down (degree)	<input type="text" value="0"/>
Start Zoom (degree)	<input type="text" value="90"/>
<input type="button" value="Reset"/>	

Start Tour

Start Streetview

Start Viewing Direction left-right (degree)

Start Viewing Direction up-down (degree)

Start Zoom (degree)

Title	<input type="text" value="Demo2"/>
Left Menu text	<input type="text" value="Your Company"/>
Left Menu URL	<input type="text" value="http://www.yourcompany.com"/>
Left Menu URL target	<input type="text" value="Opens the linked document in a new window or tab. Value: _blank"/>
Right Menu text	<input type="text" value="More info"/>
Right Menu URL	<input type="text" value="http://www.yourcompany.com/example-project"/>
Right Menu URL target	<input type="text" value="Opens the linked document in a new window or tab. Value: _blank"/>
Permalink Text	<input type="text" value="Permalink"/>
Timeline label	<input type="text" value="Timeline"/>
<input type="button" value="Reset"/>	

Title

The project name will be suggested by default. You can overwrite it.

Left Menu text

Left Menu URL

Left Menu URL target

Right Menu text

Right Menu URL

Right Menu URL target

Permalink Text

Timeline label

Logo

Logo

Enabled

No

Image path

C:\Program Files (x86)\Creator 3\logos\example-logo.png

Click URL

http://www.your-company.com

Click URL target

Opens the linked document in a new window or tab. Value: _blank

Reset

Enabled

Show/Hide logo

Image path

Path to a logo image in PNG format to be displayed in the top right corner of the player.

Click URL

Clicking on the logo will open the specified URL.

Click URL target

Report a problem

Report a problem

Enabled

No

Support e-mail

support@yourcompany.com

Label

Report a problem

E-mail subject

Report a problem

E-mail content

Thank you for helping us by reporting content which may be in violation of our standards.

Why are you reporting this streetview:

Streetview permalink: {{permalink}}

Reset

Enabled

Show/Hide Report a problem link in the bottom right corner of the Player

Support e-mail

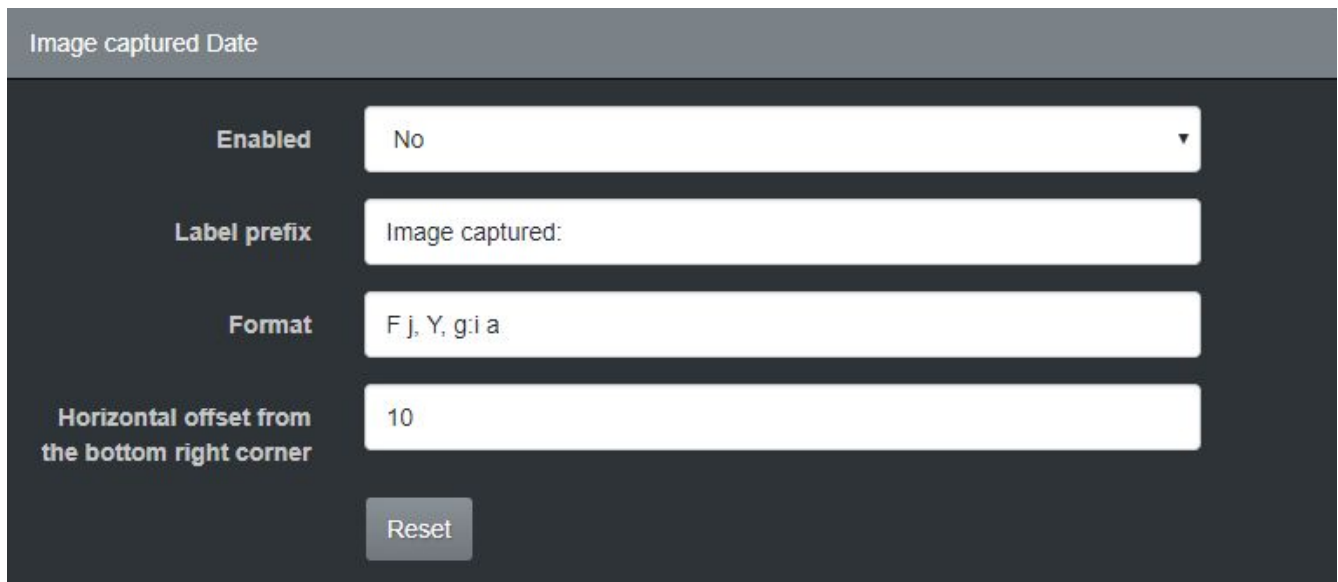
When the user clicks on the **Label** link open a new e-mail with the user's default e-mail client with the specified **E-mail subject** and **E-mail content**

Label

E-mail subject

E-mail content

Image captured Date



Enabled	No ▼
Label prefix	Image captured:
Format	F j, Y, g:i a
Horizontal offset from the bottom right corner	10

Reset

Enabled

Show/Hide Image captured Date link in the bottom right corner of the Player

Label prefix

Display text before the date

Format

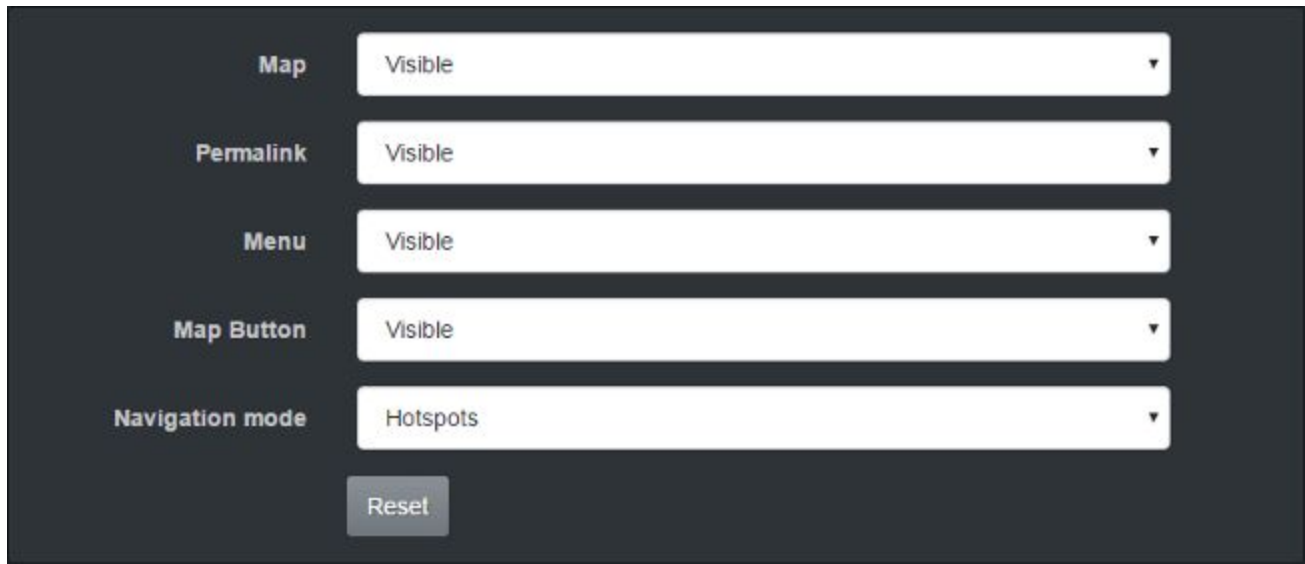
Formatted according to the given format string.

See the formatting options at:

<http://php.net/manual/en/function.date.php#refsect1-function.date-parameters>

Horizontal offset from the bottom right corner

Layout



The screenshot shows a dark-themed settings panel with the following elements:

- Map**: A dropdown menu with the value "Visible" selected.
- Permalink**: A dropdown menu with the value "Visible" selected.
- Menu**: A dropdown menu with the value "Visible" selected.
- Map Button**: A dropdown menu with the value "Visible" selected.
- Navigation mode**: A dropdown menu with the value "Hotspots" selected.
- Reset**: A button located below the dropdown menus.

Map

Show/Hide Map

Permalink

Show/Hide Permalink

Menu

Show/Hide the Menu

Map Button

Show/Hide the Map button

Navigation mode

Arrows/Hotspots/Arrows and Hotspots

Streetview

View	Relative to Car ▼
Mouse Control	Streetview style (recommended) ▼
Minimum zoom limit (degree)	50
Maximum zoom limit (degree)	120
Look down limit (degree)	-50
Look up limit (degree)	50

View

Relative to Car/Forward

Mouse Control

Streetview style (recommended) / Old-school streetview style

Minimum zoom limit (degree)

Maximum zoom limit (degree)

Look down limit (degree)

Look up limit (degree)

Show Arrow label	Mouse ▼
Clickable Arrow labels	Yes ▼
Arrow labels from this column of the Streetview table	Streetview ▼
Show Hotspot label	Always ▼
Clickable Hotspot labels	Yes ▼
Hotspot label from this column of the Streetview table	Streetview ▼
<input type="button" value="Reset"/>	

Show Arrow label

Mouse/None/Always

Clickable Arrow labels

Arrow labels from this column of the Streetview table

Road/Streetview/Description

Show Hotspot label

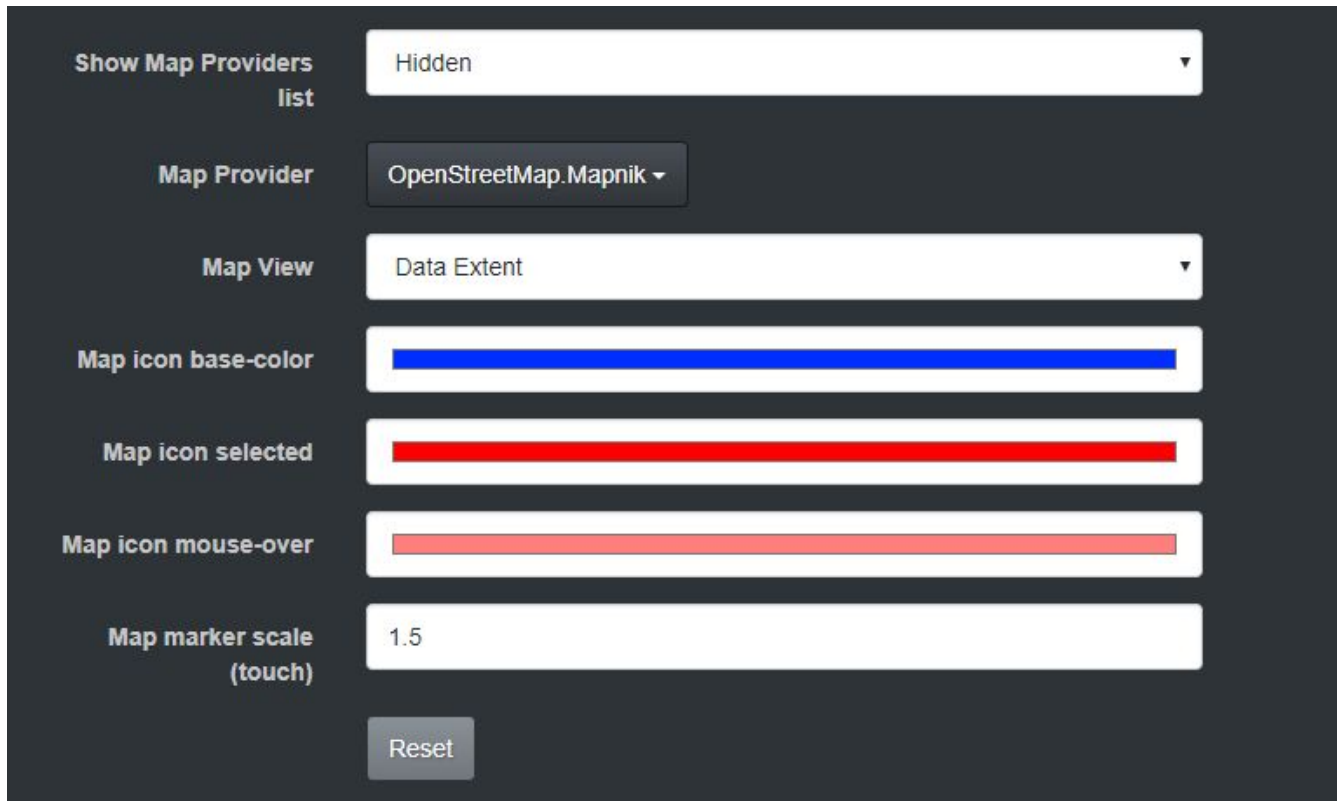
Mouse/None/Always

Clickable Hotspot labels

Hotspot label from this column of the Streetview table

Road/Streetview/Description

Map



The screenshot displays a configuration panel for a map application. It features several settings:

- Show Map Providers list:** A dropdown menu currently set to "Hidden".
- Map Provider:** A dropdown menu currently set to "OpenStreetMap.Mapnik".
- Map View:** A dropdown menu currently set to "Data Extent".
- Map icon base-color:** A color selection bar currently showing blue.
- Map icon selected:** A color selection bar currently showing red.
- Map icon mouse-over:** A color selection bar currently showing a light red/pink.
- Map marker scale (touch):** A text input field currently containing the value "1.5".

A "Reset" button is located at the bottom of the configuration panel.

Show Map Providers list

Display a button in the top-right corner of the map. The viewer can switch to any of the map providers listed. The list can be edited manually in the **/player/player.xml** file.

Map Provider

Select any online base layer from the dropdown menu or define your own custom map tile set.

Map View

Start Streetview/Data Extent/Lat,Lon

Map icon base-color

Color of the default map icon

Map icon selected

Color of the selected map icon

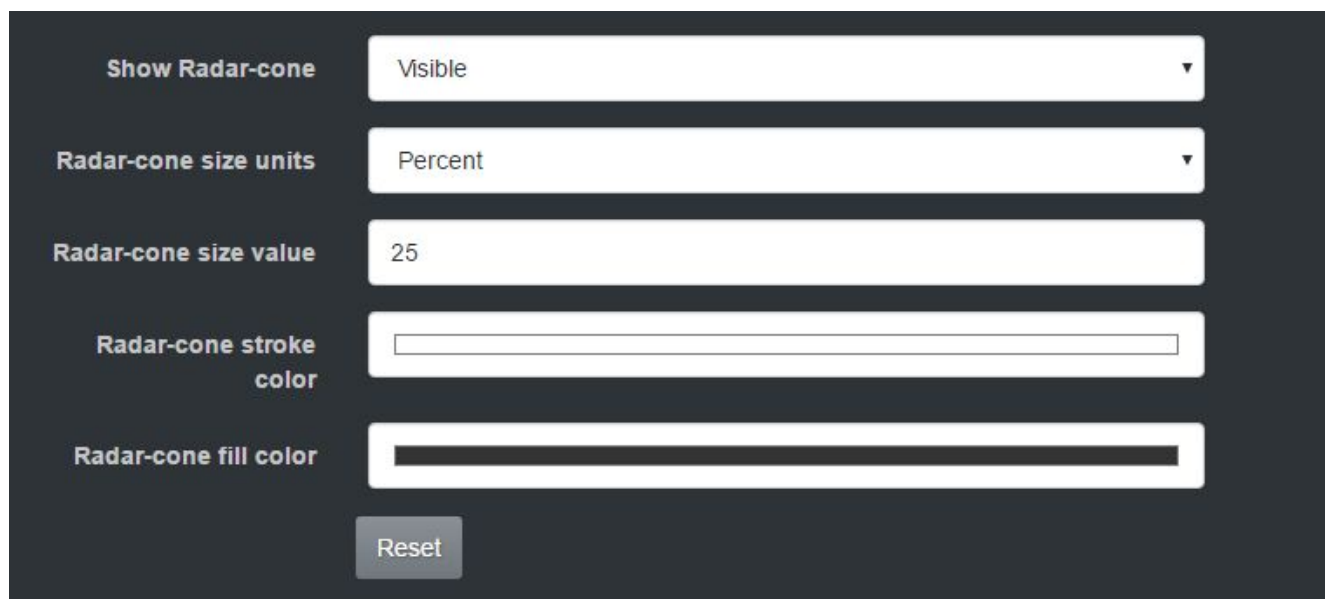
Map icon mouse-over

Color of the map icon when the mouse cursor is on it

Map marker scale (touch)

Adjust marker scale on touchscreen devices

Radar-cone

A configuration panel for the Radar-cone feature. It has a dark grey background. The controls are arranged vertically. Each control has a label on the left and a corresponding input field on the right. The labels are: 'Show Radar-cone', 'Radar-cone size units', 'Radar-cone size value', 'Radar-cone stroke color', and 'Radar-cone fill color'. The input fields are: a dropdown menu showing 'Visible', a dropdown menu showing 'Percent', a text input field containing '25', a color picker showing a light grey color, and a color picker showing a dark grey color. At the bottom of the panel is a 'Reset' button.

Show Radar-cone	Visible ▼
Radar-cone size units	Percent ▼
Radar-cone size value	25
Radar-cone stroke color	<input type="color" value="#cccccc"/>
Radar-cone fill color	<input type="color" value="#333333"/>
<input type="button" value="Reset"/>	

Show Radar-cone

Show/Hide Radar-cone

Radar-cone size units

Units used to resize the Radar-cone. If percentage option is selected, the percentage refers to the total map height.

Radar-cone size value

Radar-cone size value

Radar-cone stroke color

Color of the Radar-cone border

Radar-cone fill color

Color of the Radar-cone

Points of Interest (POI)

Display POI list	<input type="text" value="No"/>
Create poi-list.php file in the 'player' folder	<input type="text" value="No"/>
Show label for a POI	<input type="text" value="Streetview"/>
Show POI name	<input type="text" value="Yes"/>
Dropdown label	<input type="text" value="POI list"/>
Dropdown select POI label	<input type="text" value="Select POI"/>
<input type="button" value="Reset"/>	

Display POI list

Show/hide POI list

Create a **poi-list.php** file in the **player** folder

Show label for a POI

None	Do not display a label for the POI
Streetview	Use the streetview name as the label for the POI
Road	Use the road name as the label for the POI

Show POI name

Comment only	Display the POI comment only
Yes	Display the POI name and the comment
No	Do not display the POI name

Dropdown label

Dropdown select POI label

In case you need to create a more advanced POIs file, set **Interface** to **Advanced**, then use **Tools -> Export**, for example in .csv format.

You can then construct any kind of links easily with free [Libre Office Calc](#) or with MS Excel by chaining the desired values together.

Floors

Show floors	<input type="text" value="Hidden"/>
Start floor	<input type="text"/>
Floor label	<input type="text" value="Floor"/>
Next and previous Floors color	<input type="text" value=""/>
Floor does not exist in timeline message	<input type="text" value="Floor \$1 does not exist in timeline \$2"/>
<input type="button" value="Reset"/>	

Show floors

Show floors arrows and hotspots

Start floor

Default floor to start the Player with

Floor label

Next and previous Floors color

Floor does not exist in timeline message

Automatic rotation

Enabled	Enabled ▼
Wait time	0
Speed	3
Direction	Left ▼
Horizon	0
Zoom to FOV	120
Click disables auto rotate	Enabled ▼

Enabled

Wait time

Time in seconds before the rotation starts

Speed

Rotation speed

Direction

Automatically pan streetview either to the right or left

Horizon

Automatically pan streetview to match a specific horizon

Zoom to FOV

Click disables auto rotate

Autoplay

Enabled	Disabled ▼
Wait time	3
Loop	Enabled ▼
Direction	Forward ▼

Enabled

Wait time

Time in seconds between changing streetviews

Loop

When reaching the last streetview if direction is Forward, or reaching first streetview if direction is Backward go to the **Start** streetview and continue.

Direction

Direction of movement either **Forward** or **Backward**.

Expert

Arrows

Show Arrows for nearby streetviews	<input type="text" value="Yes"/>
Display nearby Arrows within this distance (meters)	<input type="text" value="20"/>
Maximum number of nearby Arrows	<input type="text" value="10"/>
Arrow image scale (mouse)	<input type="text" value="0.5"/>
Arrow image scale (touch)	<input type="text" value="1"/>
Next and previous Streetviews color	<input type="text" value=""/>
Nearby Streetviews color	<input type="text" value=""/>
<input type="button" value="Reset"/>	

Show Arrows for nearby streetviews

Display nearby Arrows within this distance (meters)

Maximum number of nearby Arrows

Arrow image scale (mouse)

Arrow image scale (touch)

Next and previous Streetviews color

Nearby Streetviews color

Hotspots

Camera height offset from ground level (meters)	<input type="text" value="1.95"/>
Show nearby Hotspots	<input type="text" value="Yes"/>
Display nearby Hotspots within this distance (meters)	<input type="text" value="40"/>
Maximum number of nearby Hotspots	<input type="text" value="20"/>
Hotspot width (pixels)	<input type="text" value="150"/> <small>0 to 1000</small>
Hotspot color	<input type="color" value="#0000FF"/>
Hotspot opacity	<input type="text" value="0.5"/>
<input type="button" value="Reset"/>	

Camera height offset from ground level (meters)

Show nearby Hotspots

Display nearby Hotspots within this distance (meters)

Maximum number of nearby Hotspots

Hotspot width (pixels)

Hotspot color

Hotspot opacity

Arrow label style

Font	<input type="text" value="Arial, Helvetica, sans-serif"/>
Font size	<input type="text" value="14"/>
Bold	<input type="text" value="Yes"/>
Show Background	<input type="text" value="Yes"/>
Background color	<input type="color" value="#000000"/>
Background alpha	<input type="text" value="0.667"/>
Show Border	<input type="text" value="Yes"/>
Border width	<input type="text" value="2"/>
Border color	<input type="color" value="#FFFFFF"/>
Round edge radius	<input type="text" value="10"/>
Text color	<input type="color" value="#CCCCCC"/>
Padding (Top Right Bottom Left)	<input type="text" value="6 10 6 10"/>
Text align	<input type="text" value="Center"/>
Y offset	<input type="text" value="-5"/>
<input type="button" value="Reset"/>	

Font

Font size

Bold

Show Background

Background color

Background alpha

Show Border

Border width

Border color

Round edge radius

Text color

Padding (Top Right Bottom Left)

Text align

Y offset

Hotspot label style

Hotspot label style

Font	Arial, Helvetica, sans-serif ▼
Font size	14
Bold	Yes ▼
Show Background	Yes ▼
Background color	<div></div>
Background alpha	0.667
Show Border	Yes ▼
Border width	2
Border color	<div></div>
Round edge radius	10
Text color	<div></div>
Padding (Top Right Bottom Left)	6 10 6 10
Text align	Center ▼
Y offset	-5

Reset

Font

Font size

Bold

Show Background

Background color

Background alpha

Show Border

Border width

Border color

Round edge radius

Text color

Padding (Top Right Bottom Left)

Text align

Y offset

Default start zoom (degree)	<input type="text" value="90"/>
Tiles path	<input type="text" value="http://www.yourcompany.com/panorama-tiles"/>
Maximum map zoom	<input type="text" value="25"/>
Panorama map icon width	<input type="text" value="12"/>
Panorama map icon height	<input type="text" value="12"/>
Timeline error message	<input type="text" value="Misconfiguration in player.xml: Start panorama \$1 must belong to start tin"/>
<input type="button" value="Reset"/>	

Default start zoom (degree)

Tiles path

The tiles-path URL should point to the panorama-tiles folder uploaded to a web-server.
No \ at the end of the URL.

Maximum map zoom

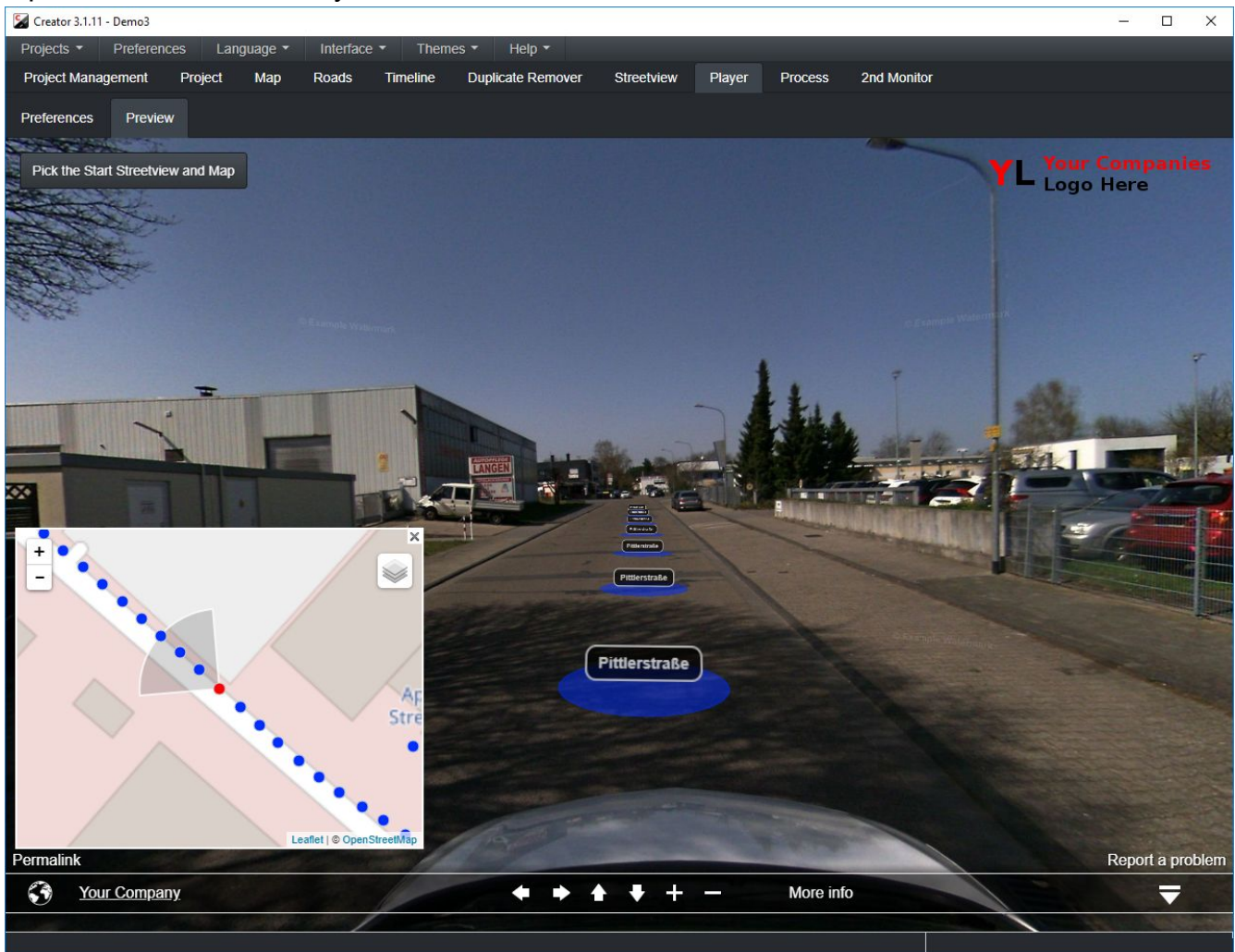
Streetview map icon width

Streetview map icon height

Timeline error message

Preview sub-tab

A preview of what the Player and the Streetview will look like.



Adjust the direction and zoom of the streetview and the area and zoom of the map. Then click the **Pick the Start Streetview and Map** button to save the settings as the start-view for the player.

You can go back and forth between **Preferences** and **Preview** until you are happy with the resulting player.

Sample

Tour initial: camera-20181118-153256

Débuter streetview: 78 (Premier actif)

Procesus tout les x temps streetviem: 1

Tour de fin: camera-20181118-153735

Arrêter streetview: 822 (Premier actif)

Nombre de sets de données: 884

Sauvegarder

Sample tab allows for temporary adjustments without changing the project.
Very useful to create a project overview quickly.

Start tour

Start processing with this tour.

Start streetview

Start processing with this streetview.

Step. Process every x-th data-set

If the total number of active streetviews is 100.000 then:

Step 1	will process all	of the active streetviews:	100.000 streetviews.
Step 10	will process 10%	of the active streetviews only:	10.000 streetviews.
Step 100	will process 1%	of the active streetviews only:	1.000 streetviews.
Step 1000	will process 0.1%	of the active streetviews only:	100 streetviews.
Step 10000	will process 0.01%	of the active streetviews only:	10 streetviews.

End tour

End processing with this tour.

End streetview

End processing with this streetview of the tour.

Number of data sets

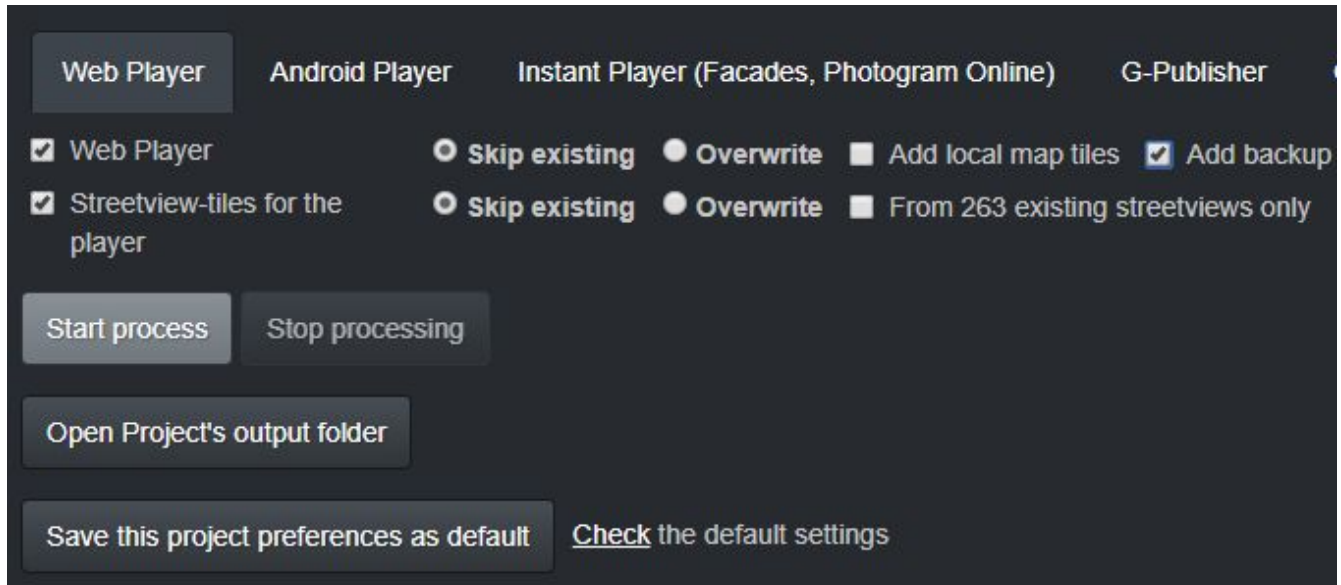
Calculated based on Start, Step, End and the streetviews active on the map tab only.

Already existing output and eventual skip settings on the Process tab will **not** be considered.

Process

Web-Player

Creates a working web-player that you can install to a web-server.



The screenshot shows a dark-themed settings window for the 'Web-Player'. At the top, there are four tabs: 'Web Player' (selected), 'Android Player', 'Instant Player (Facades, Photogram Online)', and 'G-Publisher'. Below the tabs, there are two rows of settings. The first row has a checked checkbox for 'Web Player', a radio button for 'Skip existing' (selected), a radio button for 'Overwrite', a checkbox for 'Add local map tiles' (unchecked), and a checked checkbox for 'Add backup'. The second row has a checked checkbox for 'Streetview-tiles for the player', a radio button for 'Skip existing' (selected), a radio button for 'Overwrite', and a checkbox for 'From 263 existing streetviews only' (unchecked). Below these settings are three buttons: 'Start process', 'Stop processing', and 'Open Project's output folder'. At the bottom, there is a button 'Save this project preferences as default' and a link 'Check the default settings'.

From X existing streetviews only:

Do not create new streetviews. Create tiles from already existing streetviews only.

Add local map tiles:

If **custom map tiles** are set up in the map tab.

Add backup

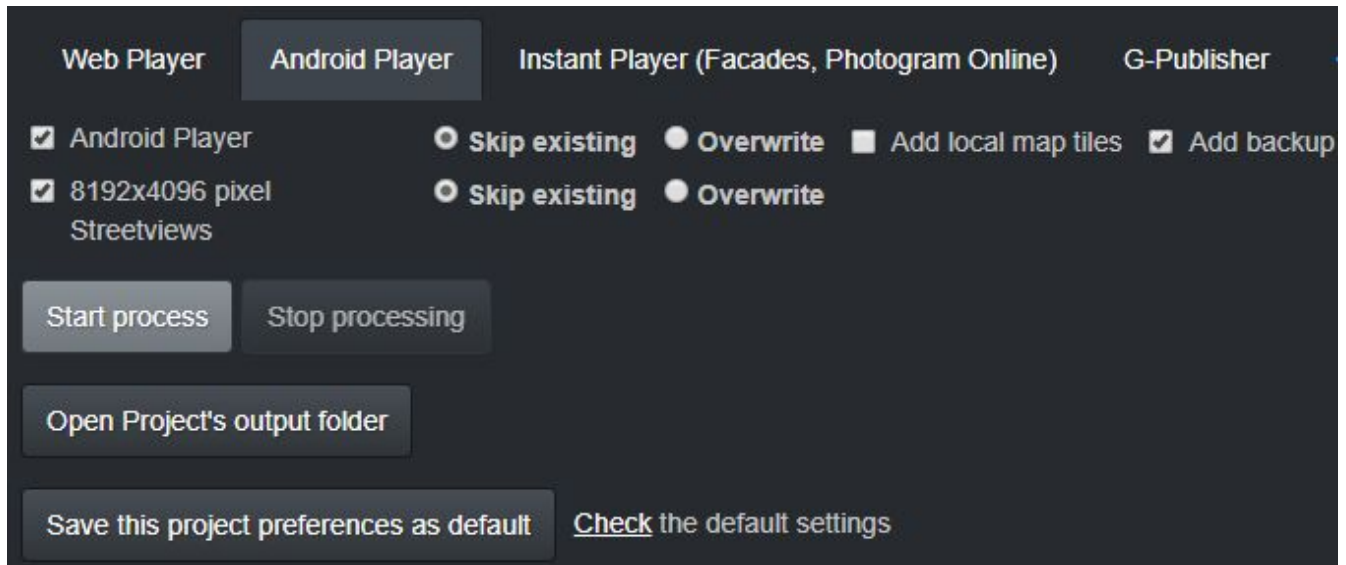
If checked create a new project backup in **player/backups** folder.

You also can create 8192 x 4096 pixel streetviews at the same time.

Set **Interface -> Advanced**. Then tick the new option **8192 x 4096 pixel streetviews**.

Android-Player

Generate a ZIP archive that can be opened with the Android Player App.
It works offline, without an Internet connection.



The screenshot shows the 'Android Player' tab selected in a configuration window. At the top, there are four tabs: 'Web Player', 'Android Player' (selected), 'Instant Player (Facades, Photogram Online)', and 'G-Publisher'. Below the tabs, there are two rows of settings. The first row has a checked checkbox for 'Android Player', a radio button for 'Skip existing' (selected), a radio button for 'Overwrite', a unchecked checkbox for 'Add local map tiles', and a checked checkbox for 'Add backup'. The second row has a checked checkbox for '8192x4096 pixel Streetviews', a radio button for 'Skip existing' (selected), and a radio button for 'Overwrite'. Below these settings are three buttons: 'Start process', 'Stop processing', and 'Open Project's output folder'. At the bottom, there is a button 'Save this project preferences as default' and a link '[Check the default settings](#)'.

Add local map tiles:

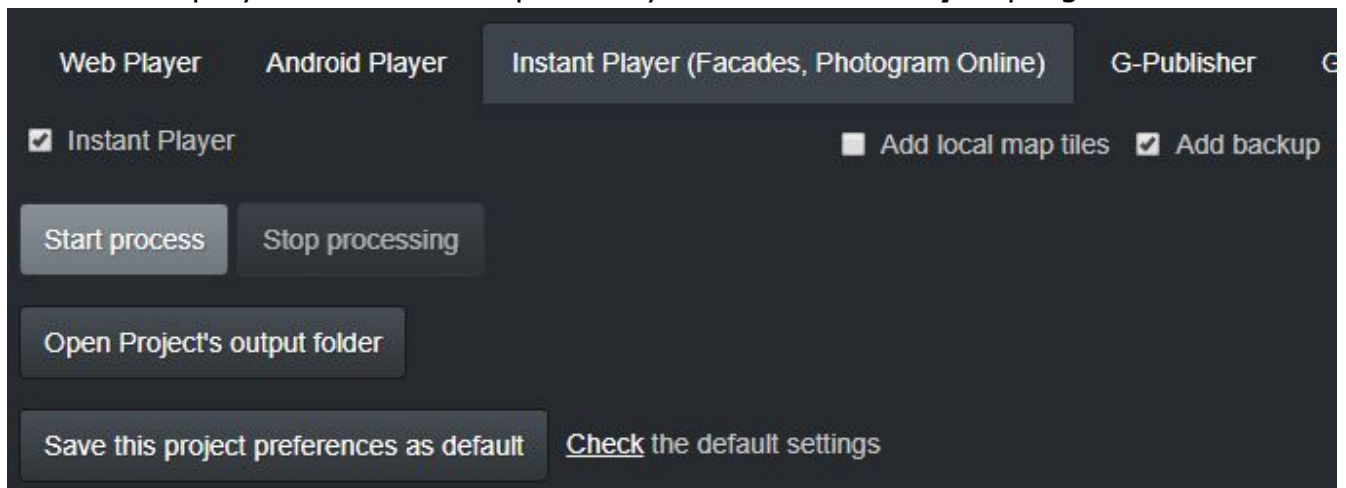
If **custom map tiles** are set up in the map tab.

Add backup

If checked create a new project backup in **player/backups** folder.

Instant Player

Generate a player that can be opened by the **Instant Player** program.



The screenshot shows the 'Instant Player (Facades, Photogram Online)' tab selected in a configuration window. At the top, there are four tabs: 'Web Player', 'Android Player', 'Instant Player (Facades, Photogram Online)' (selected), and 'G-Publisher'. Below the tabs, there are two rows of settings. The first row has a checked checkbox for 'Instant Player', a unchecked checkbox for 'Add local map tiles', and a checked checkbox for 'Add backup'. Below these settings are three buttons: 'Start process', 'Stop processing', and 'Open Project's output folder'. At the bottom, there is a button 'Save this project preferences as default' and a link '[Check the default settings](#)'.

Add local map tiles:

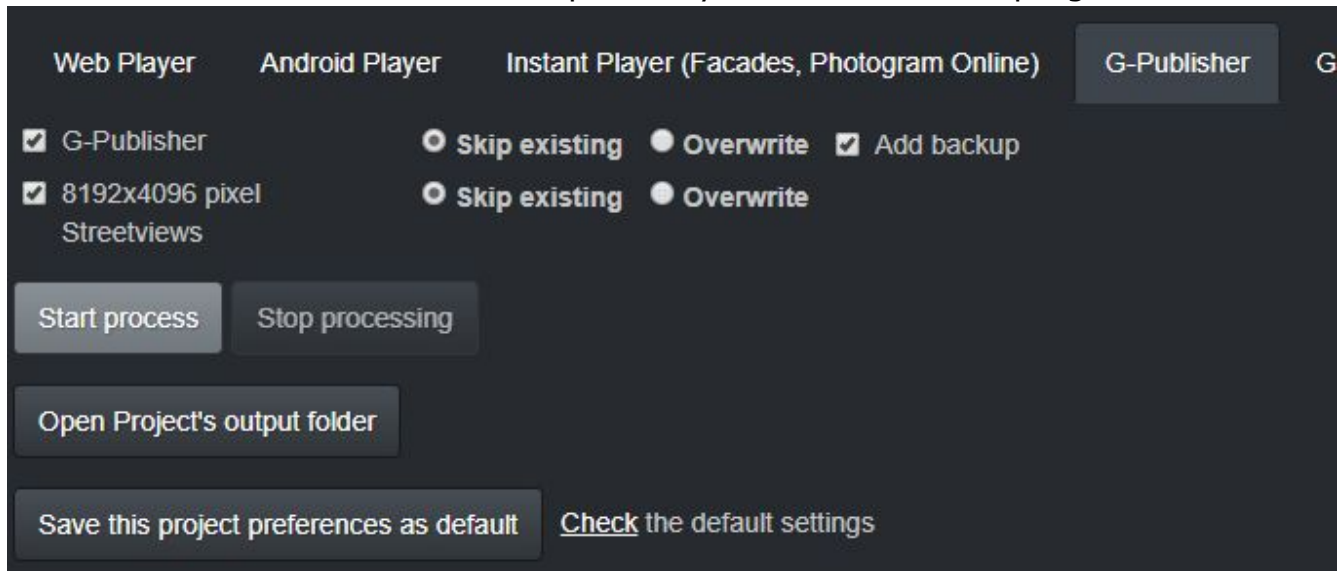
If **custom map tiles** are set up in the map tab.

Add backup

If checked create a new project backup in **instant-player/backups** folder.

G-Publisher

Generate streetviews that can be opened by the **G-Publisher** program.



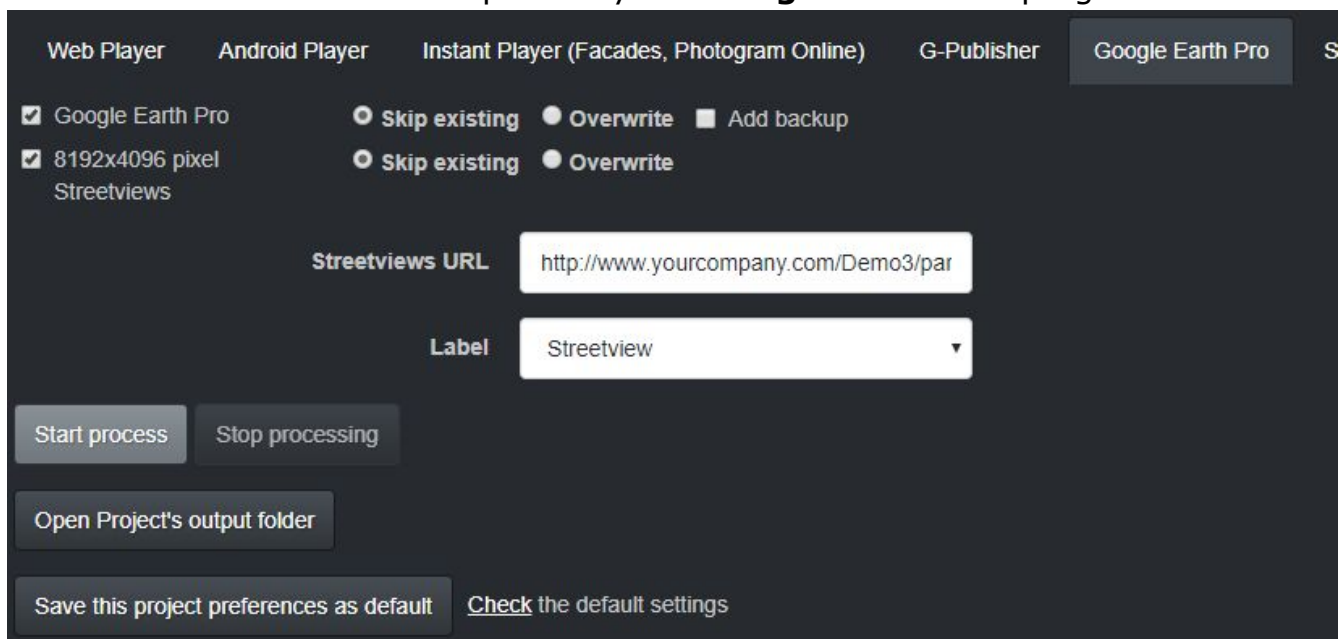
The screenshot shows the 'G-Publisher' tab selected in a software interface. At the top, there are tabs for 'Web Player', 'Android Player', 'Instant Player (Facades, Photogram Online)', and 'G-Publisher'. Below the tabs, there are two rows of settings. The first row has a checked checkbox for 'G-Publisher', radio buttons for 'Skip existing' and 'Overwrite', and a checked checkbox for 'Add backup'. The second row has a checked checkbox for '8192x4096 pixel Streetviews', radio buttons for 'Skip existing' and 'Overwrite', and a checked checkbox for 'Add backup'. Below these settings are two buttons: 'Start process' and 'Stop processing'. Further down is a button labeled 'Open Project's output folder'. At the bottom, there are two buttons: 'Save this project preferences as default' and 'Check the default settings'.

Add backup

If checked create a new project backup in **g-publisher/backups** folder.

Google Earth Pro

Generate a KML that can be opened by the **Google Earth Pro** program.



The screenshot shows the 'Google Earth Pro' tab selected in a software interface. At the top, there are tabs for 'Web Player', 'Android Player', 'Instant Player (Facades, Photogram Online)', 'G-Publisher', and 'Google Earth Pro'. Below the tabs, there are two rows of settings. The first row has a checked checkbox for 'Google Earth Pro', radio buttons for 'Skip existing' and 'Overwrite', and a checked checkbox for 'Add backup'. The second row has a checked checkbox for '8192x4096 pixel Streetviews', radio buttons for 'Skip existing' and 'Overwrite', and a checked checkbox for 'Add backup'. Below these settings are two buttons: 'Start process' and 'Stop processing'. Further down is a button labeled 'Open Project's output folder'. At the bottom, there are two buttons: 'Save this project preferences as default' and 'Check the default settings'. In the center of the interface, there is a text input field labeled 'Streetviews URL' with the value 'http://www.yourcompany.com/Demo3/par'. Below it is a dropdown menu labeled 'Label' with the value 'Streetview'.

To view the streetviews locally run http-server.exe, which will start a http server to serve the streetviews and open http-server.kml in Google Earth.

The http-server is configured to look for streetviews in the "../panoramas" folder.

Streetviews URL

The URL of the panoramas folder uploaded to a web-server. This will not work with local file paths.

Label

Display either the streetview name or the road name as a label

Add backup

If checked create a new project backup in **google-earth/backups** folder.

Streetviews Only

Generate 8192 x 4096 pixel Streetviews only.

Use this mode for generating streeviews for our Photogram program or your own workflow.



Process

When starting to process, a pop-up appears that summarizes the settings.

Click **Start process** or **Cancel** to make adjustments.

Open Project's output folder

Opens the generated project's output folder in the Windows Explorer.

Save this project preferences as default

Save these project preferences as the default for new projects. No need to enter the same settings again and again.

Click **Check** to open the **Preferences - For new projects** window.

Process Summary

Please deactivate the virus scanner.

An active Virus scanner slows down the creation of streetview-tiles by up to 50%.

Processing Web player

Number of equirectangular streetview data-sets: 0

Number of streetview-tiles data-sets: 263

Create

Streetview-tiles for the player, skip existing

Player, skip existing

Folders

Input path: S:\as\Demo3

Output path: S:\as\out\Demo3

Streetview-tiles output path: S:\as\out\Demo3\panorama-tiles

Temp path: C:\Users\pavel\AppData\Local\creator3\tmp

Imaging

Exposure adjustment: Same for all tours: 0

Brighten Shadows - Enabled: Same for all tours: Yes

Level: Same for all tours: yes

Leveling method: Individual Optimizing (when available)

Add watermark: Yes

Add mask: No

Calibration files:

S:\as\pto\220003131.pto

Using AS-Processor v0.5.3.

Time adjustment: individual for tours.

Leap seconds: Automatic.

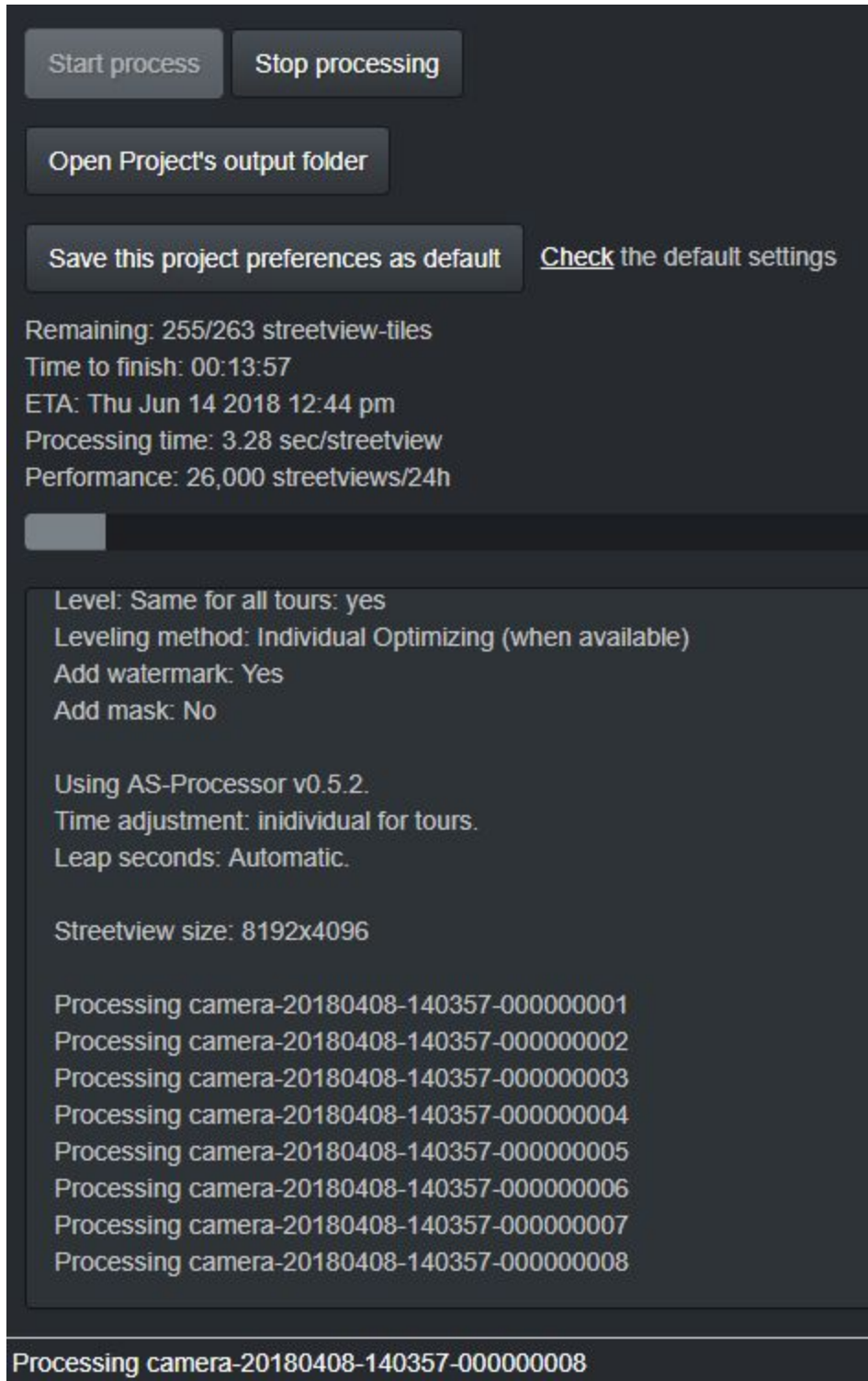
Streetview size: 8192x4096

Start process

Cancel

During processing you can click the **Stop processing** button at any time.
It might take a short time for the processing to stop, as the processing is done in batches.

See the log displayed below.



The screenshot shows a dark-themed software interface. At the top, there are two buttons: 'Start process' and 'Stop processing'. Below them is a button labeled 'Open Project's output folder'. Further down, there is a button 'Save this project preferences as default' and a link 'Check the default settings'. A status section displays the following information: 'Remaining: 255/263 streetview-tiles', 'Time to finish: 00:13:57', 'ETA: Thu Jun 14 2018 12:44 pm', 'Processing time: 3.28 sec/streetview', and 'Performance: 26,000 streetviews/24h'. Below this is a progress bar. A scrollable log area contains the following text: 'Level: Same for all tours: yes', 'Leveling method: Individual Optimizing (when available)', 'Add watermark: Yes', 'Add mask: No', 'Using AS-Processor v0.5.2.', 'Time adjustment: individual for tours.', 'Leap seconds: Automatic.', 'Streetview size: 8192x4096', and a list of eight 'Processing camera' entries with unique IDs. At the bottom, a separate line shows 'Processing camera-20180408-140357-000000008'.

Start process Stop processing

Open Project's output folder

Save this project preferences as default [Check the default settings](#)

Remaining: 255/263 streetview-tiles
Time to finish: 00:13:57
ETA: Thu Jun 14 2018 12:44 pm
Processing time: 3.28 sec/streetview
Performance: 26,000 streetviews/24h

Level: Same for all tours: yes
Leveling method: Individual Optimizing (when available)
Add watermark: Yes
Add mask: No

Using AS-Processor v0.5.2.
Time adjustment: individual for tours.
Leap seconds: Automatic.

Streetview size: 8192x4096

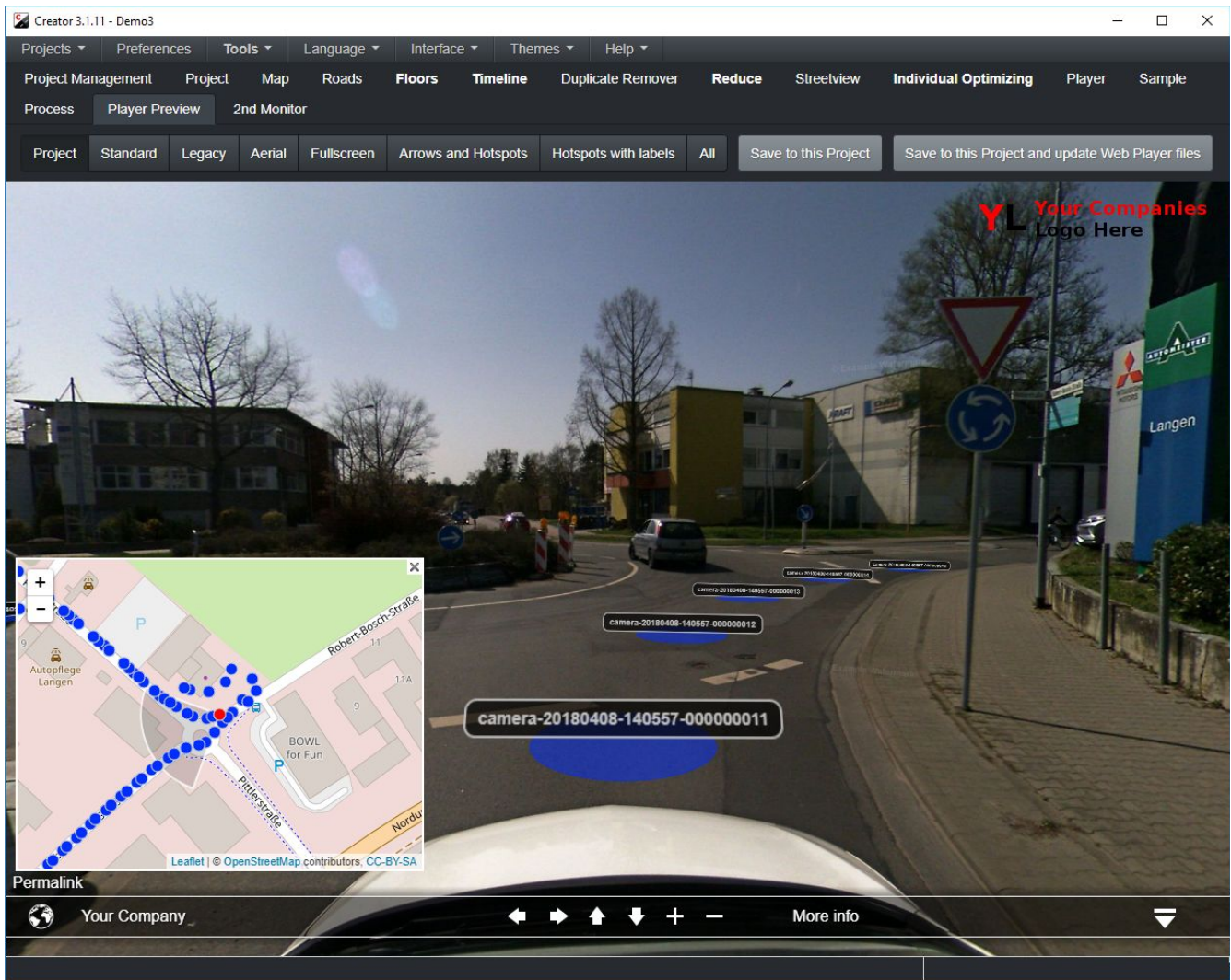
Processing camera-20180408-140357-000000001
Processing camera-20180408-140357-000000002
Processing camera-20180408-140357-000000003
Processing camera-20180408-140357-000000004
Processing camera-20180408-140357-000000005
Processing camera-20180408-140357-000000006
Processing camera-20180408-140357-000000007
Processing camera-20180408-140357-000000008

Processing camera-20180408-140357-000000008

Player Preview

With **Interface** set to **Advanced**:

When the processing has finished, open the **Player Preview** tab to try the fully functioning player:



You can easily check alternative layouts using the **Standard**, **Legacy**, **Aerial**, **Fullscreen**, **Arrows and Hotspots**, **Hotspots with labels**, **All** buttons.

Click **Save to this Project** to save the current Layout to your project.

Please note that you will then need to re-create the Web Player on the **Process** tab.

Make sure to set **Web Player** to **Overwrite**.

Standard Layouts:

Project

Shows the player according to the settings from the **Player** tab.

Legacy

Navigation mode - Arrows

Base Layer - OpenStreetMap.Mapnik

Map - Visible

Permalink - Visible

Menu - Visible

Show Arrow label - Mouse

Show Hotspot label - None

Standard

Navigation mode - Hotspots

Base Layer - OpenStreetMap.Mapnik

Map - Visible

Permalink - Visible

Menu - Visible

Show Arrow label - Mouse

Show Hotspot label - None

Aerial

Navigation mode - Hotspots

Base Layer - HERE.satelliteDay

Map - Visible

Permalink - Visible

Menu - Visible

Show Arrow label - Mouse

Show Hotspot label - None

Fullscreen

Navigation mode - Hotspots

Base Layer - OpenStreetMap.Mapnik

Map - Hidden

Permalink - Hidden

Menu - Hidden

Show Arrow label - Mouse

Show Hotspot label - None

Arrows and Hotspots

Navigation mode - Arrows and Hotspots

Base Layer - OpenStreetMap.Mapnik

Map - Visible

Permalink - Visible

Menu - Visible

Show Arrow label - Mouse

Show Hotspot label - None

Hotspots with labels

Navigation mode - Arrows and Hotspots

Base Layer - OpenStreetMap.Mapnik

Map - Visible

Permalink - Visible

Menu - Visible

Show Arrow label - Mouse

Show Hotspot label - Always

All

Navigation mode - Arrows and Hotspots

Base Layer - HERE.satelliteDay

Map - Visible

Permalink - Visible

Menu - Visible

Show Arrow label - Mouse

Show Hotspot label - Always

Save to this Project

Save the current Layout as the Web Player preferences for this project.

2nd Monitor

A second monitor is recommended for this feature.



Shows the streetviews. You can zoom in and out.

Great when moving streetviews manually on the Map tab.

If the streetview has already been processed, it will be displayed right away.
If not, it will be processed and displayed.

Advanced Features

Only visible with **Interface** set to **Advanced**.

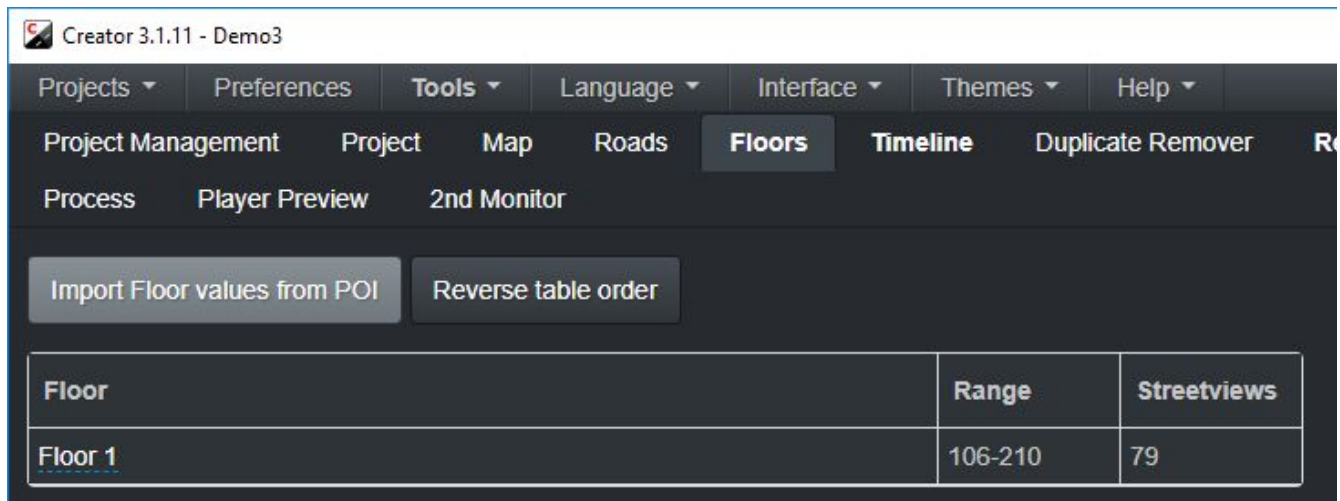
Floors

Only visible with **Interface** set to **Advanced**.

Floor names are created from **POIs**

Click on the **Import Floor values from POI** button to get the Floor names.

For this feature to work, you need to assign Floor names as **POIs** while recording., using the **Mark point with comment** or **Mark line with comment** action in the Remote Control's **POI** tab. Set the comment as the name of the Floor.



Manually

Click on a cell in the **Floor** column to edit its content.

To assign a Floor name to a streetview from the Map tab: Select one or multiple streetviews, click **CTRL+F**, enter the Floor name and then **Save**.

The order of the floors is important and should follow the original layout. An example of a valid order would be: -1, Ground floor, 1, 2, 3, 4, 5.

Click on the **Reverse table order** to sort the table **upside down**.

Drag and drop rows in the table to reorder.

Timeline

Only visible with **Interface** set to **Advanced**.

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

It looks like this:

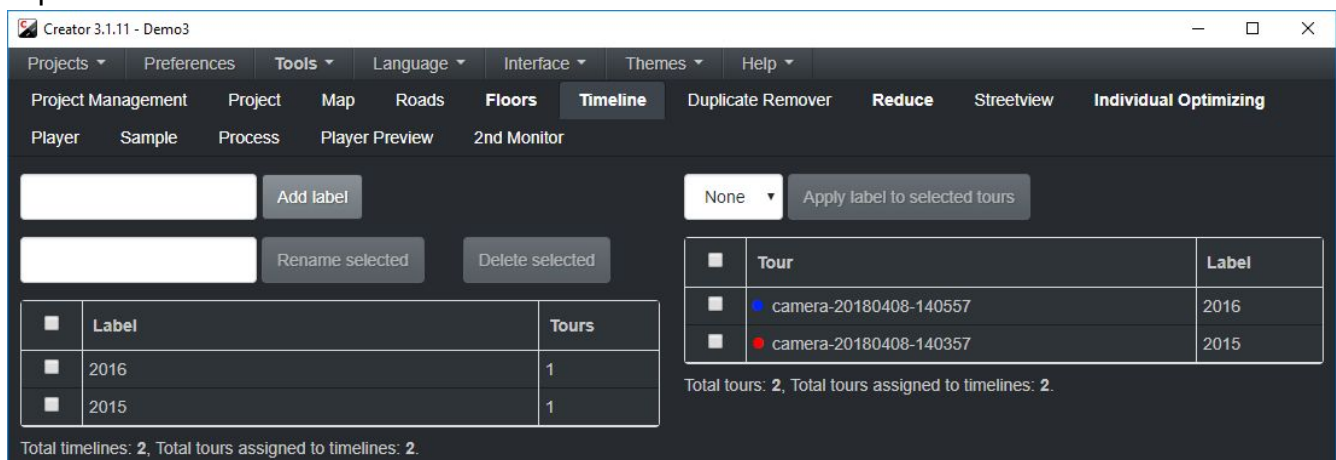
<http://players.applied-streetview.com/Timeline/>

Create a few timeline labels, such as **Before** and **After** or dates like **2015** or **2016**. Assign one or many tours to each timeline label.

The user will then be able to pick the labels in the player.

Example: <http://players.applied-streetview.com/Timeline/>

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



Labels table

Add label button

Enter the timeline label into the text box to the left of the button, then click the button.

Rename selected button

Click on the checkbox next to the timeline that needs to be renamed, then enter the new timeline label into the text box to the left of the button and click the button.

Delete selected button

Click on the checkbox next to the timeline that needs to be deleted, then click the button. Note that multiple timelines can be selected at once.




Tours table

Apply label to selected tours button

In the drop down list to the left of the button, select the timeline to which the tours will be assigned to, select the tours by clicking on the checkboxes next to them, then click the button to assign them tours to the selected timeline.

To remove a tour from a timeline label select **None** in the drop down list.

Timeline list (Map tab)

Timeline label	
All	
2015	
2016	

Click a timeline label to zoom in on it.

Click a timeline eye icon to toggle visibility.

In this example, the 2016 timeline has been hidden.

Hiding timelines is great when used with the **Ctrl+A** key-combination that selects streetviews in all visible timelines.

Note that this list is displayed only when at least one tour is assigned to a timeline.

Reduce

Only visible with the **Interface** set to **Advanced**.

Always to be used **after** the Duplicate Remover.

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

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

Etc.

This greatly reduces the number of streetviews to process.

By Distance

Separate by meters between streetviews.

By Interval

Separate by seconds between streetviews.

By Step

Process every x-th streetview.

Process selected timelines:

Visible only when there are timelines.

Process only selected timelines.

Press **CTRL** and then click on timelines one-by-one to select multiple timelines.

Process selected tours:

Process only tours selected from the list.

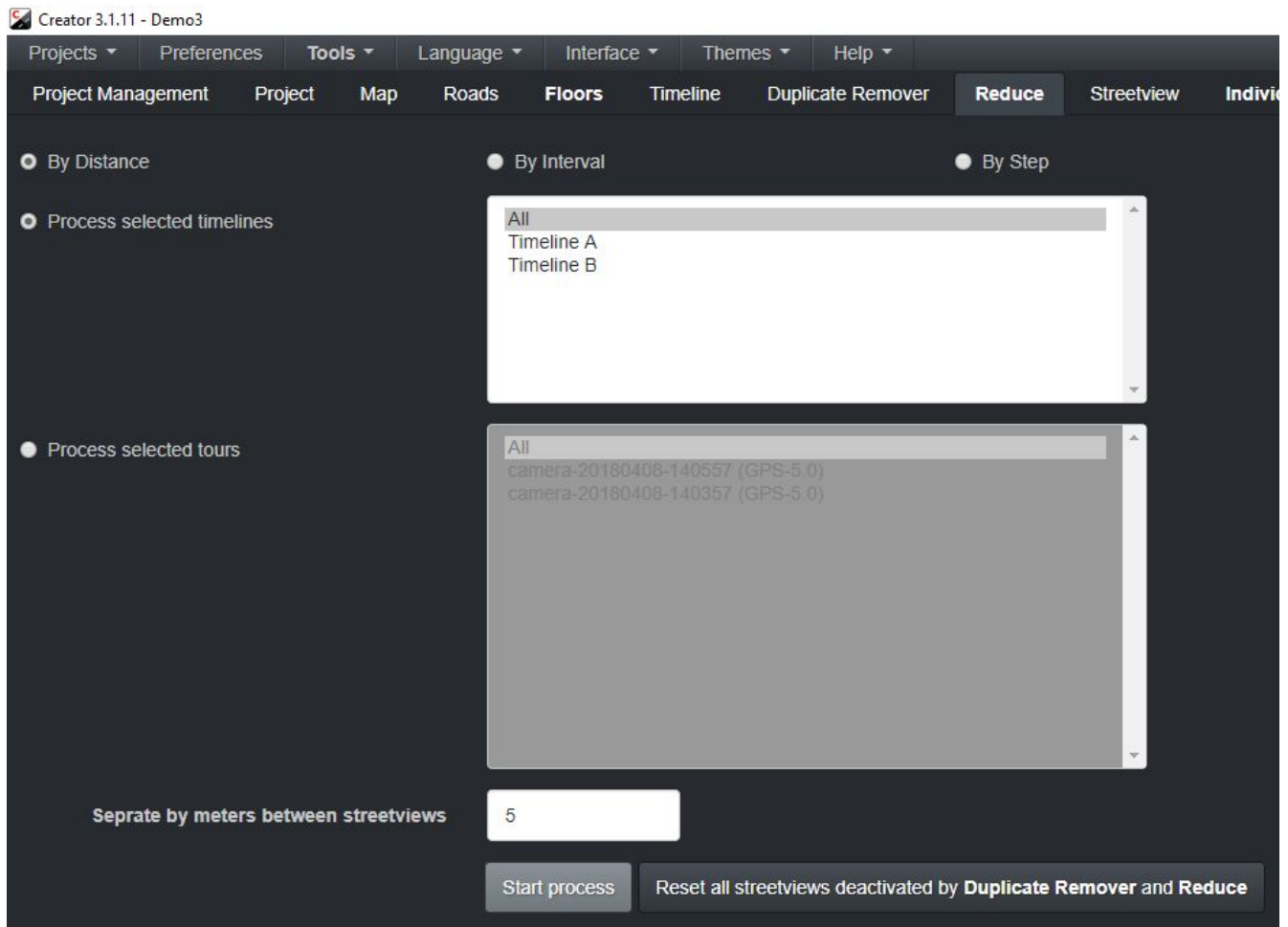
Press **CTRL** and then click on a tour to select multiple tours.

Start process

Start processing

Reset all streetviews

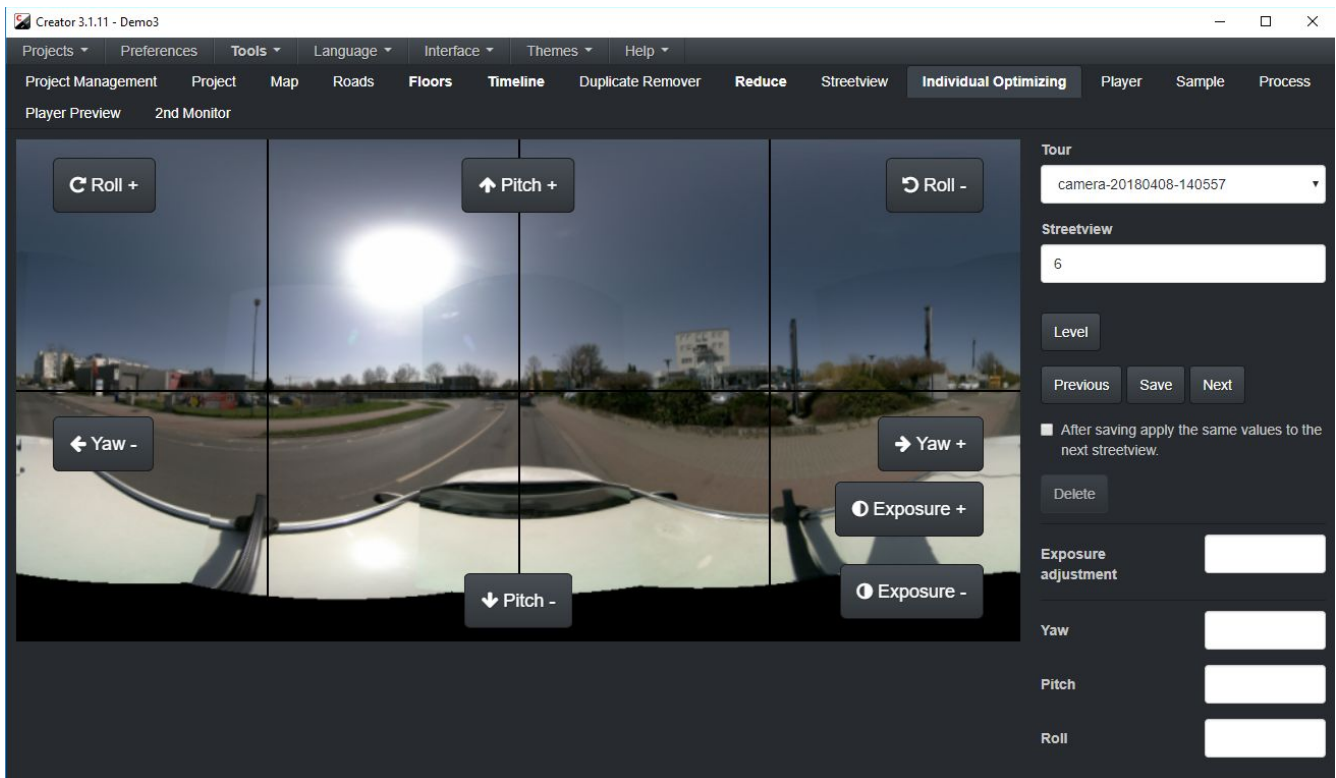
Reset all streetviews deactivated by **Duplicate Remover** and **Reduce**.



Individual Optimizing

Only visible with **Interface** set to **Advanced**.

The same as the [Leveling tab](#), just different for individual streetviews.



Previous button: Go to the previous streetview. Does **not** save anything.

Save button

Save the individual adjustment options (Exposure Adjustment, Yaw, Pitch, Roll) to the current streetview. Load the next streetview and apply the same values.

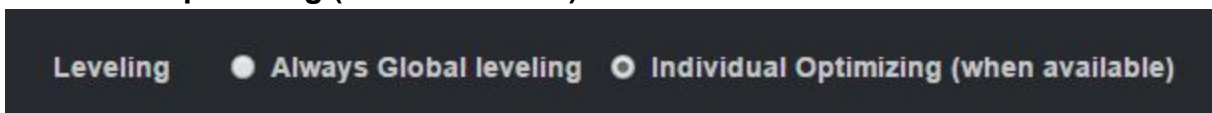
Next button: Go to the next streetview. Does **not** save anything.

After saving, apply the same values to the next streetview.

Delete

Deletes the individual adjustment options (Exposure Adjustment, Yaw, Pitch, Roll) for the current streetview.

To apply these individual settings, on the **Streetview - General** tab, **Leveling** must be set to **Individual Optimizing (when available)**.



Map-tiles

There are many ways to get map-tiles suitable for the Creator program.
As an example for the format we provide the “Langen2” map tiles as a .zip file to you:
<http://updates.applied-streetview.com/Remote-Control/Langen-OSM.zip> (1.1 MB)

Map tiles format info:

http://wiki.openstreetmap.org/wiki/Slippy_map_tilenames

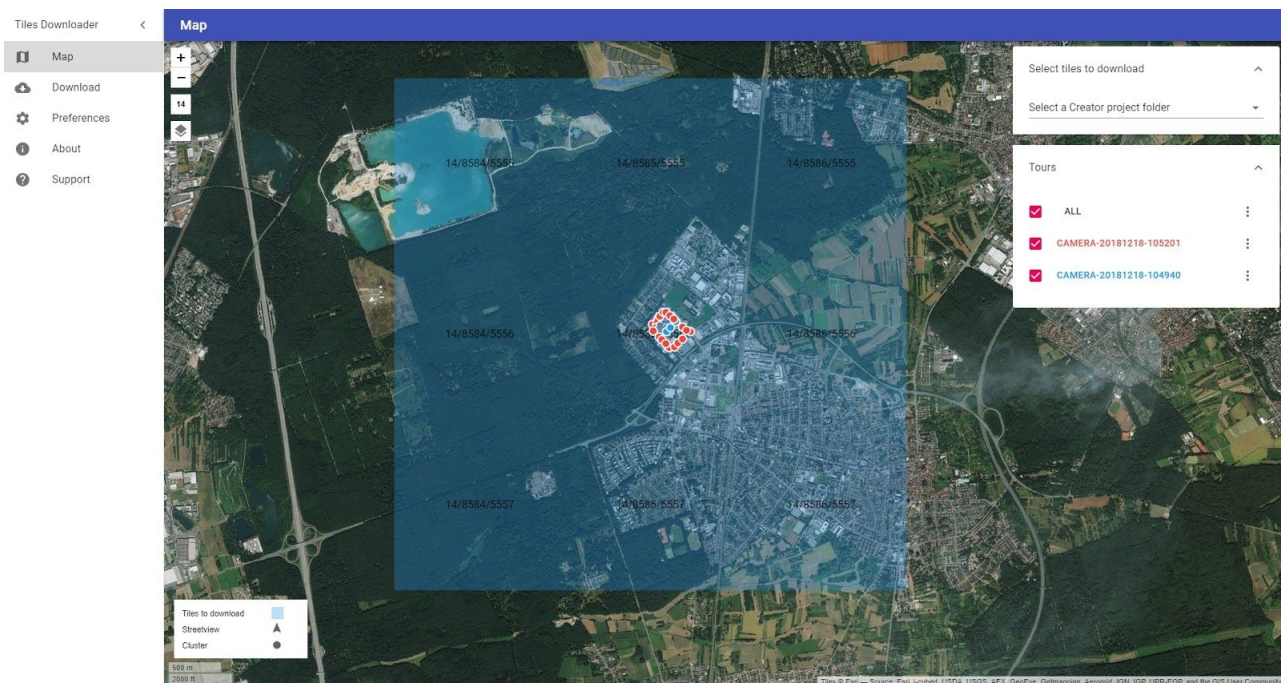
Tiles Downloader

Our [Tiles Downloader](#) program makes is very easy to download both map-tiles and aerial images from about 40 providers.

They work with all our programs: Remote Control, Creator 3, all players.

You can test [Tiles Downloader](#) for free for 2 weeks!

Check out the [Tiles Downloader Manual](#).



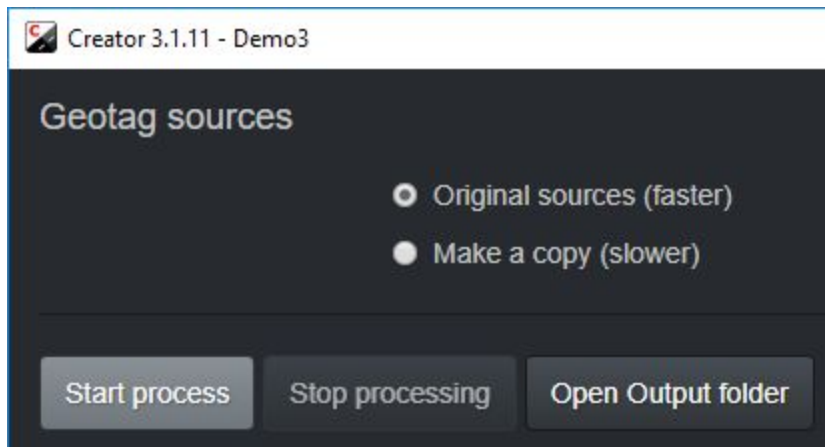
Tools

In the **Main menu**.

Geotag sources

Geotag source images.

In case you want to process the source images with a totally different software.



Original sources (faster)

Modify EXIF data of the original images

Make a copy (slower)

Copy images to **Output folder** and then modify EXIF data of the original images

Output folder

Set the output folder.

Click the **Start process** button.

The current project source images will be copied to output folder.

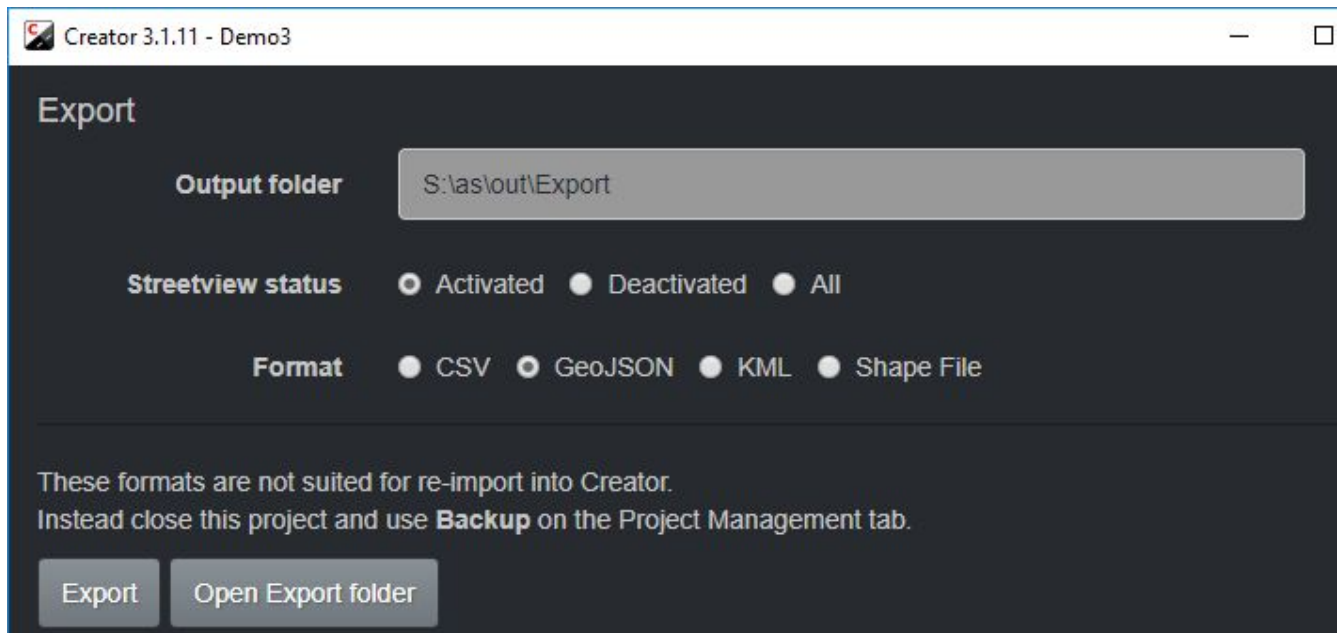
The following EXIF data will be added:

- Orientation
- DateTimeOriginal
- GPS:GPSTimeStamp
- GPS:GPSLatitude
- GPS:GPSLatitudeRef
- GPS:GPSLongitude
- GPS:GPSLongitudeRef
- GPS:GPSAltitude
- GPS:GPSAltitudeRef
- GPS:GPSImgDirection
- GPS:GPSImgDirectionRef

- Orientation
- FocalLength
- FNumber
- Make
- Model
- SerialNumber
- FocalPlaneXResolution
- FocalPlaneYResolution
- FocalPlaneResolutionUnit

Export

Export the Creator data to use with a 3rd-party program.



Output folder

Where to save the exported data to.

Streetview status

Choose the status of exported streetviews: Activated (Default), Deactivated, All.

Format

Choose export format: CSV, GeoJSON, KML, Shape File.

Click **Export** button to export the data.

Click **Open Export folder** to open the **Output Folder** in Explorer.

WARNING:

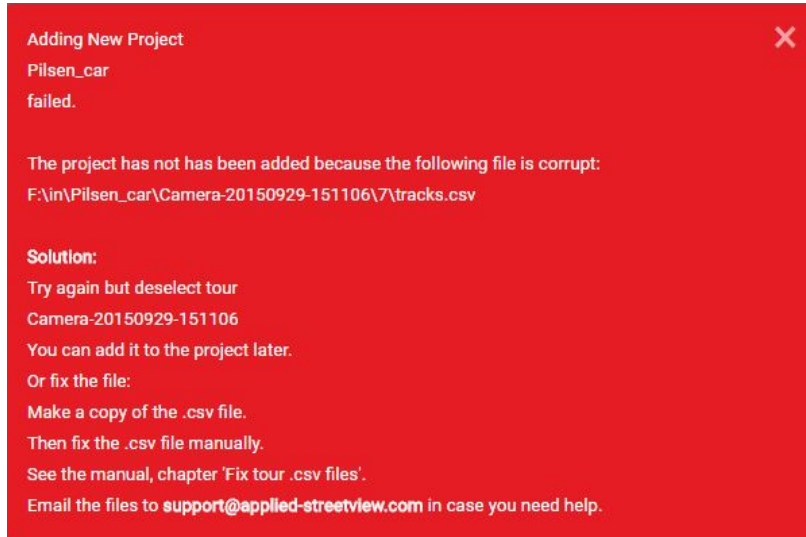
These formats are NOT suited for re-import into Creator.

Instead, close the project and use the Backup option on the Project Management tab.

Fix a Tours .csv files

Tour log-data is saved to the panoramas.csv and tracks.csv files in folder 7.
In case these files are corrupt, Creator will refuse to add the project.

Instead this pop-up will be displayed:



Simply add the Project again, but this time **deselect the corrupt tour**.

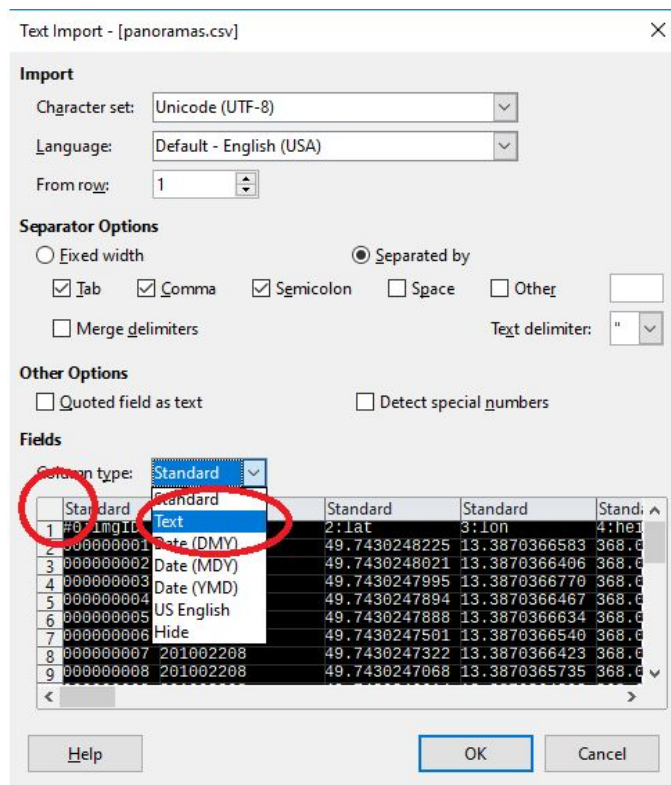
This allows you to continue your work with the remaining tours of the project.
The missing tour can be added to the project after it has been fixed.

After manually fixing the corrupted .csv file(s) you can add the skipped tour.

We recommend the free [Libre Office](#) Calc program for this.

First make a backup copy of the file you are going to edit.

When opening the .csv file with Libre Office Calc make sure to select all columns and set them to **Text**. This ensures no automatic formatting changes the values.



Afterwards scroll through the data, find the problem line and edit it to look like all other lines.

A few hints

In **panoramas.csv** the numbers in the **#0:imgID** column must be in sequence.

Duplicate entries in column **#0:imgID** are not allowed.

Empty lines are not allowed.

Save the file and add the tour to your project:

Open the project in Creator.

On the **Project** page press the **Add tours to project** button to add the fixed tour.

Install the player to a web-server

There are 3 components:

The player, the MySQL database and the streetview tiles folder.

For production, you should install the player and the MySQL database to the same server, and the streetview tiles to a different server, or a cloud.

For testing you can install all three to the same server.

MySQL database

Create a new MySQL database.

Import the **projectname/player/demo3.sql.zip** file to it.

Streetview Tiles

Copy the **projectname/streetview-tiles** folder to the web-server or a cloud.

Player

Adjust the

projectname\player\plugins\streetview\ajax\db.php

file for the database access.

Adjust the

projectname/player/player.xml

file for the streetview tiles.

Edit the **tilespath** variable to point to the streetview-tiles folders URL.

Example

tilespath="http://www.yourcompany.com/projectname/streetview-tiles"

Copy the **projectname/player** folder to the Apache web-server.

More Info on the Player:

http://updates.applied-streetview.com/player/Player_Quick_Installation_Manual.pdf

Embed the player into any page

It looks like on our website:

<http://www.applied-streetview.com>

First install the player as usual.

For this example, the player is installed to the “Demo” folder:

<http://www.your-server.com/players/Demo/>

In your page, add this code:

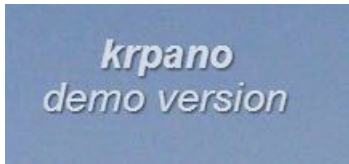
```
<div id="demo"></div>
<script src="//www.your-server.com/players/Demo/player.js"></script>
<div id="player" style="width: 100%; height: 700px;">
<script>
var settings = {};
settings.files_path = "//www.your-server.com/players/Demo3/";
settings.auth_enabled = +"0";
settings.permalink_anchor = "demo";
embedpano({swf: settings.files_path + "player.swf", xml: settings.files_path + "player.xml", target:"player",
html5:"prefer", vars: settings, passQueryParameters:true});
</script>
</div>
```

Adjust the URL.

Remove the line breaks from the code above for it to work.

Remove the 'krpano demo version' logo

What it looks like:



The **krpano demo version** watermark is visible in the:

- Player -> Preview sub-tab
- Player tab
- All generated players

Get a krpano license for 129 Euro from <http://www.krpano.com/buy>

Then go to the menu **Help -> krpano -> Add activation key**.

Paste your key into the field and click **Add**. If the key is valid you should see a confirmation message that the key is registered. **Restart Creator**.

In **Menu - krpano - License details** you can check your krpano activation key details:

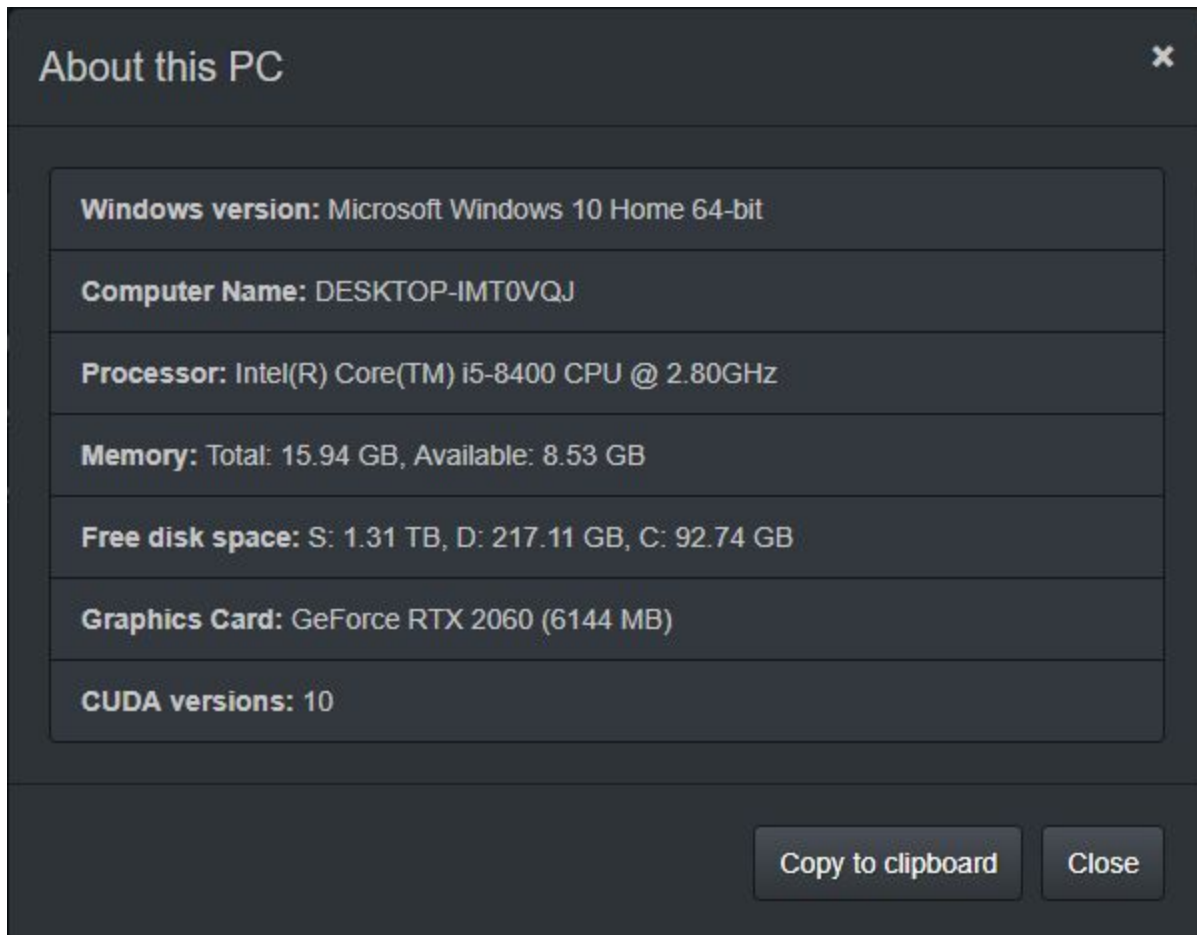
krpano - License details

Name: Applied Streetview
Email: jan.mantkowski@streetview-technology.de
Order date: 2015-02-19
Contact: Jan Mantkowski
Address: Pittlerstraße 53, 63225 Langen, Germany

Obviously you will see your own license information, the above is just an example.

Help

Help - About this PC



Click on **Menu - Help - About this PC** to display helpful information like Windows version, Computer Name, Processor, Memory, Free disk space, Graphics Card, CUDA versions, etc.

Click on **Copy to clipboard** to copy the information about this PC to the clipboard, then paste and save it elsewhere.

Preferences

Menu - Preferences

- For all projects

Graphics Card

Folders

Map

Expert Mode

Troubleshooting

- For new projects

Map

Duplicate Remover

Watermark

Leveling

Player

Imaging

Process

New projects get their default values from the **For new projects** preferences. You can then make project-specific changes in the project tabs.

Reset all preferences button

Resets all preferences for new and all projects to their defaults.

Menu - Preferences - For all projects - Graphics Card

Graphics Card found

Graphics cards installed to this PC.

Default Processor

A NVIDIA graphics card with a minimum compute capability of **5.2** and 4GB VRAM is required. More info at <https://en.wikipedia.org/wiki/CUDA>.

We recommend a NVIDIA RTX 2060.

Legacy Mode

Works with and without a graphics card, many graphics cards should be supported.

The Legacy Mode for streetview-tiles creation needs a krpano licence.

Enable graphics card

Speed up the processing of the **Legacy Mode** by enabling the graphics card, many graphics cards should be supported.

Parallel processes

How many datasets to be processed in parallel by the **Legacy Mode**.

By default set to 1. You can manually increase up to the number of threads available.

Menu - Preferences - For all projects - Folders

Input path

At this location the Creator looks for the project source folder, when creating a new project. You can switch it to any other location.

Output path

At this location the Creator automatically creates a project folder with the same name as the project.

Then the sub-folders for the data are created: streetviews, streetview-tiles, player, map-tiles.

PTO path

All of the cameras **.pto** files should be copied to this location.

Temp path

For temporary files. To improve speed in legacy mode the path should be on a SSD or even a RAM-disk.

Menu - Preferences - For all projects - Map

Zoom level to load all data-points

At this level all the data-sets are displayed on the map.

Contents of pop-up

Left list contains all the available fields, the list to the right contains the list of fields that are displayed in the popup.

To add a value from the left list to the right list, click on an item in the left list then click > button. To remove a value from the left list, click on an item in the right list then click < button. Click on >> button to move all the items from the left list to the right list. Click on << button to move all the items from the right list to the left list. Click the **Up** or **Down** buttons to change the order of items displayed in the pop-up.

Menu - Preferences - For all projects - Expert Mode

Only use these options when the Applied Streetview support asks you to.

Do not delete temporary files

Skip vig_optimize program and exposure adjustment

In legacy mode skip the vig_optimize and exposure adjustment steps.

Log command lines of external programs

Log terminal output of external programs

Log process time information

In Legacy Mode log information about each processing step.

Menu - Preferences - For all projects - Troubleshooting

Fix Camera accidentally mounted looking backwards. Click again to undo.

☐ **Show Tracks in the Map tab. Enabling this feature may slow down or crash Creator.**

Show Tracks in the Map tab. Enabling this feature may slow down or crash Creator.

☐ **When moving panoramas on the map, do not move Tracks data. This stops the Duplicate Remover from working properly later.**

When moving streetviews on the map, do not move Tracks data. This will stop the Duplicate Remover from working properly later on.

After this feature is enabled, in the Map tab the tours list will have an additional column “tracks” to control track visibility. It is recommended to enable this feature on a larger zoom level, 16 and up.

☐ **Check and deactivate all data-sets with missing .jpg files when processing**

Check ALL data-sets now This might take a while.

Check and deactivate all data-sets with missing .jpg files when processing.

Click on **Check ALL data-sets now** to check now.

If images are missing for any reason, this will deactivate the affected data-sets to insure the remaining data processes well.

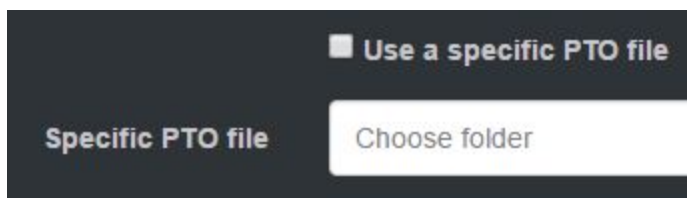
☐ **Check and rotate all the data-sets with incorrect rotation when processing**

Check ALL data-sets now This might take a while.

Check and rotate all the data-sets with incorrect rotation when processing.

Click on **Check ALL data-sets now** to check now.

Sometimes users have a look at the source images and rotate them upright for a better view. Unfortunately some programs save these rotated source images without warning. This feature rotates the source images back to ensure that the data processes well.



Use a specific PTO file

By default, the .pto files name is taken from streetviews.csv 1:CamSN field.

This option allows you to override this functionality and always use a specific .pto file.

Menu - Preferences - For new projects - Map

Duplicate Remover overruled by

- Manual activations - streetviews activated manually will override values set by duplicate remover.
- Manual deactivations - streetviews deactivated manually will override values set by duplicate remover.

Default Base Layer

Menu - Preferences - For new projects - Duplicate Remover

Default preferences for the [Duplicate Remover](#) tab.

Menu - Preferences - For new projects - Watermark

Default preferences for the [Watermark](#) tab.

Menu - Preferences - For new projects - Leveling

Default start streetview

Exposure adjustment

Default is 1.5. This makes all the images a bit brighter than the source images.
If you want no change, set it to 0.

Level

Yes: The most commonly used set-up.

Level with the log value and the values entered in the Levelling tab.

No: No leveling at all.

Adjust: Use values from the Levelling tab only. Ignore the log data.

Menu - Preferences - For new projects - Player

Default preferences for the [Player Preferences](#) tab.

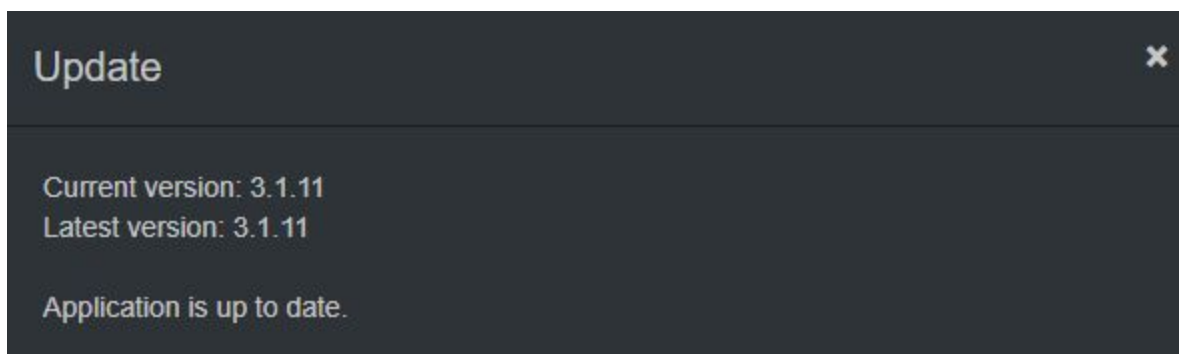
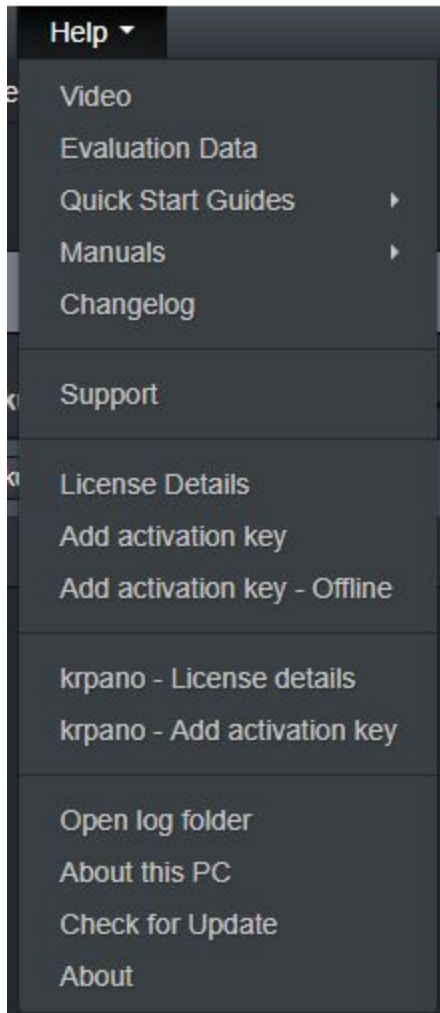
Menu - Preferences - For new projects - Process

Default preferences for the [Process Preferences](#) tab.

Support

Please check for a new Creator version first:

Menu -> Help -> Check for Update.



Support is provided for the newest Creator version only.

Support is available in **English language** only.

To report an error, please use this form:

Menu → Help → Support

You can **enter text** and **attach files**. E.g. additional screenshots.

The last three log-files are automatically attached.

Contact

Helpdesk: support.applied-streetview.com

E-Mail: support@applied-streetview.com

Skype ID: applied-streetview

Phone: +49 6103 - 37 27 494

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