POINTLY

Pointly

User Guide

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POINTLY

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1. Getting started with Pointly

Pointly is a cloud-based SaaS solution allowing to manage and classify 3D point clouds. It enables an accelerated manual classification of data points within point clouds using innovative artificial intelligence (AI) techniques.

1.1. System requirements

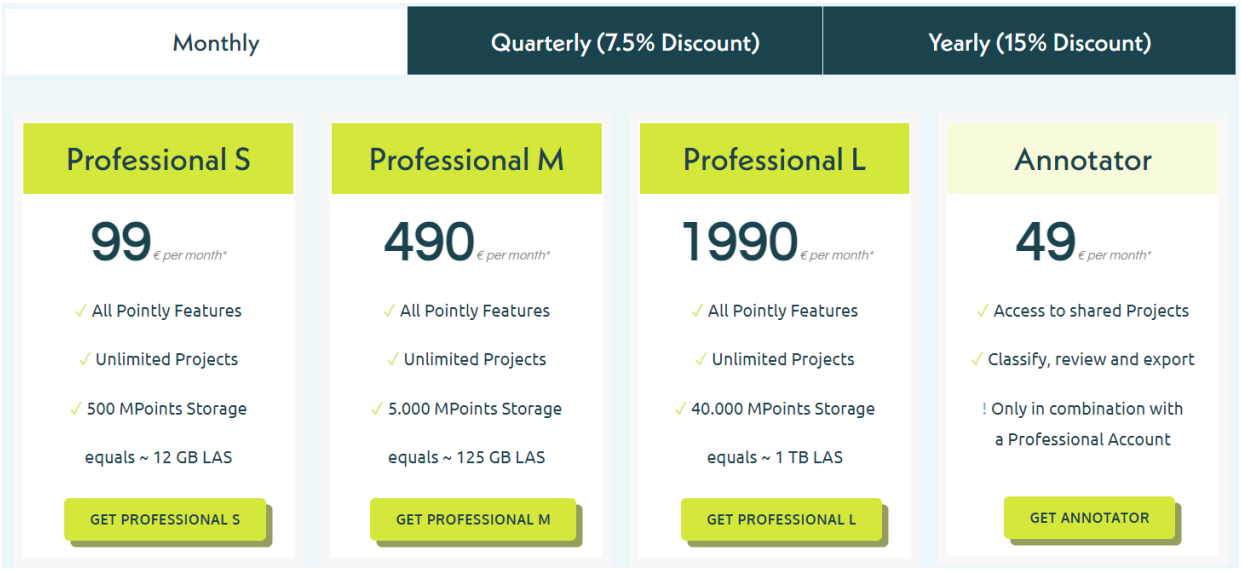
To use Pointly, all you need is an internet access and a browser. To upload large point clouds, a fast upload link is beneficial. Dynamic point loading ensures seamless visualization even for very large point clouds.

- Pointly is using the open source Potree Viewer (https://potree.github.io/) to visualize point clouds efficiently in the web browser. For a smooth experience while working with big files we recommend a device with a GPU.
- Even though other browsers are supported, we recommend using Google Chrome.
- You can simply create a Free Account to test performance on your system.
- In case the performance is not as expected, try lowering the point budget in the viewer settings, as described in Viewer Settings in Pointly.

1.2. Account types

Pointly offers you two types of accounts – Free and Professional. The Free Account allows the user to upload 3 point clouds with max. 15 MPoints, whereas exports are disabled. The Professional Account offers access to all Pointly Features and enables creating an unlimited number of projects. The storage capacity depends on the type of the Professional Account (S, M, L). You can also choose between a monthly, a quarterly and a yearly payment plan and receive attractive discounts on quarterly and yearly payment. The Annotator Account only has access to shared Projects by a Professional Account. Within a shared project an Annotator can classify

point clouds, add Tags and create exports but can't upload or delete any point clouds.



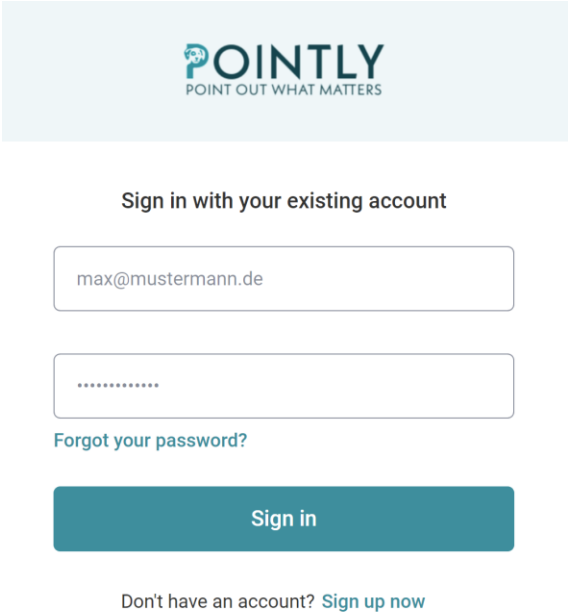
1.2.1. Project sharing and collaboration with multiple users

Applies to:
Professional + Annotator Account

With the Multi-User functionalities in Pointly, you can work together with multiple users and simultaneously on projects and contained point clouds. By working in parallel within a Multi-User project, you can manage the classification process and introduce quality assurance workflows. To ensure that no one is working on the same point cloud at the same time, you'll find an Editor Mode. For more details about project sharing see section 10.

1.3. Sign-Up

In order to create a Free Account, you can either visit the website https://pointly.ai/#freeaccount or click on the button „Log In" placed on the right side of the horizontal navigation bar. After being redirected to the sign-in website, choose the option „Sign up now" and fill out all the mandatory fields. If you're interested in the Professional Account, you need to visit https://pointly.ai/pricing/. There you can check out the possible payment plans. An upgrade to a Professional Account requires contacting us via sales@pointly.ai



1.4. Payment and Account Limits

The Free Account is free of charge.

For the Professional Account subscription, we will send you an invoice including a PayPal payment link. Via this link payments can be done either by credit card or bank transfer. We are currently working on a credit card subscription which will be available soon.

Payment is due at the same date every month. If you complete your monthly subscription on August 25, the next payment is due on September 25. Once the access to your Professional Account expires, the account will be downgraded to the free version. If you do not extend your access within 30 days after your Professional Account expires, please be aware that your point clouds may be deleted from Pointly.

If your subscription runs out, you will automatically be downgraded to a Free Account. After the downgrade you will not be able to create new exports of your classified point clouds, so please make sure to do so beforehand. We will store your data for one month in case you want to renew your subscription. After that time all files exceeding the free user limitations might be deleted automatically.

You can delete files and upload new ones up to the maximum storage capacity of your Professional Account. Every month a maximum number of new files equal to the storage size can be uploaded. This means for a Professional M Account with 5,000 MPoints of Storage, up to 5,000 MPoints of new files can be uploaded every month. You will be notified via email once you get close to this limit.

1.5. Security

Pointly is hosted on Microsoft Azure which encrypts storage containers by default with 256-bit AES encryption. It is one of the safest encryption standards and meets the FIPS 140-2 standard for US-Governmental data. All your point clouds and associated data is secured with this encryption. Additionally, our user management builds on Azure Key Vault and ensures that you have complete control over who can access your point clouds. While using Pointly, all communication is run through an encrypted https connection.

2. Point cloud preparation before uploading to Pointly

2.1. Supported formats

Pointly supports point clouds with the LAS and LAZ format. For faster uploads we recommend using the LAZ format because of its better compression.
Furthermore, we recommend LAS version 1.2 with point format ID 3.

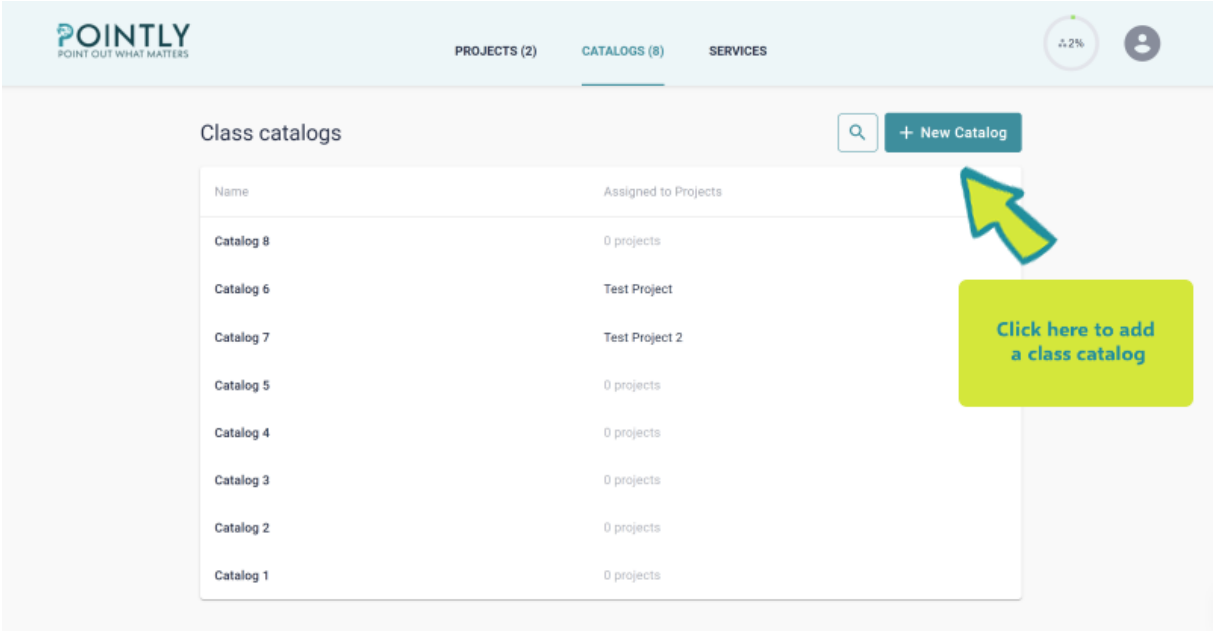
2.2. Conversion to las/laz from other formats

If you want to know how to convert your point clouds to las. or laz. format, check out our blog article or download our infographic.

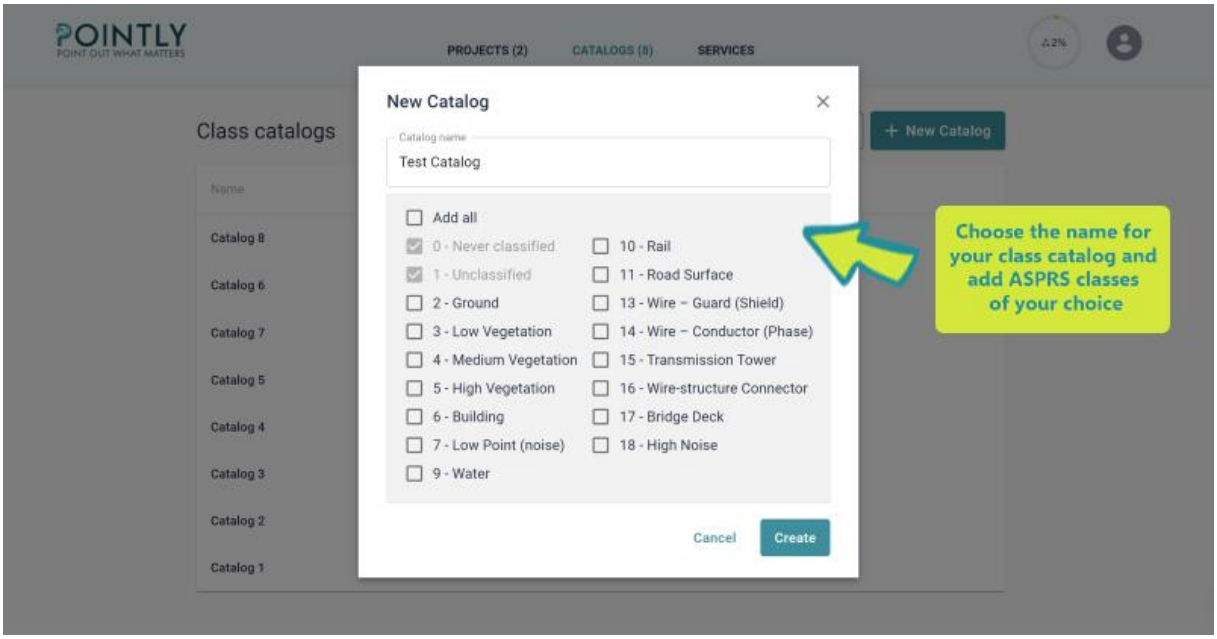
3. Creating class catalogs and projects

A class catalog is a collection of all the classes (labels) you need for your classification project and are attached to your project. For instance, every lidar point can have a label assigned to it that defines the type of object that has reflected the laser pulse.

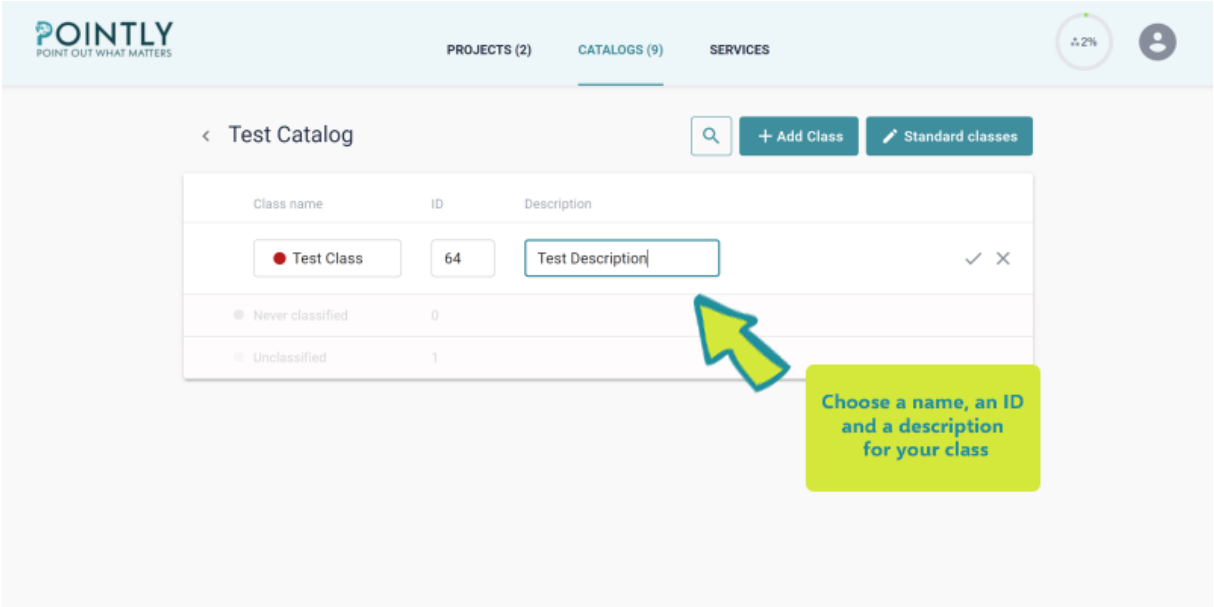
In Pointly, you can customize these catalogs and classes. To **create a class catalog**, go to „catalogs“ and choose the green button „+ New Catalog“.



You can name your class catalog and add [ASPRS classes] of your choice.

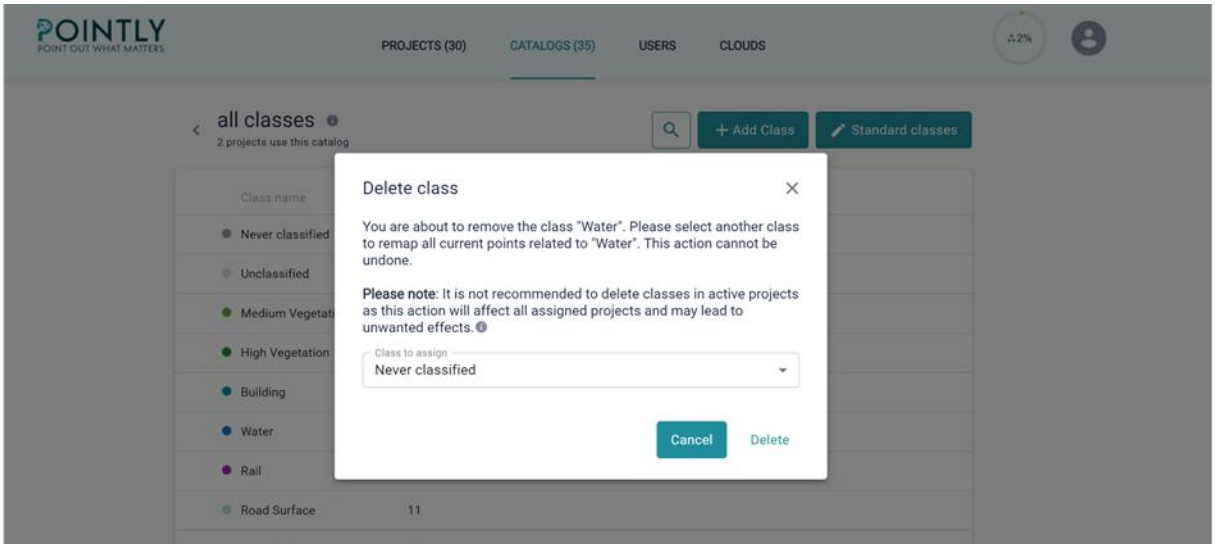


Afterwards, you can click on the catalog if you want to **add other classes** that matter for your Use Case. For example, you can create classes like vehicle or roof. You can choose a name, an ID and a description for your class.

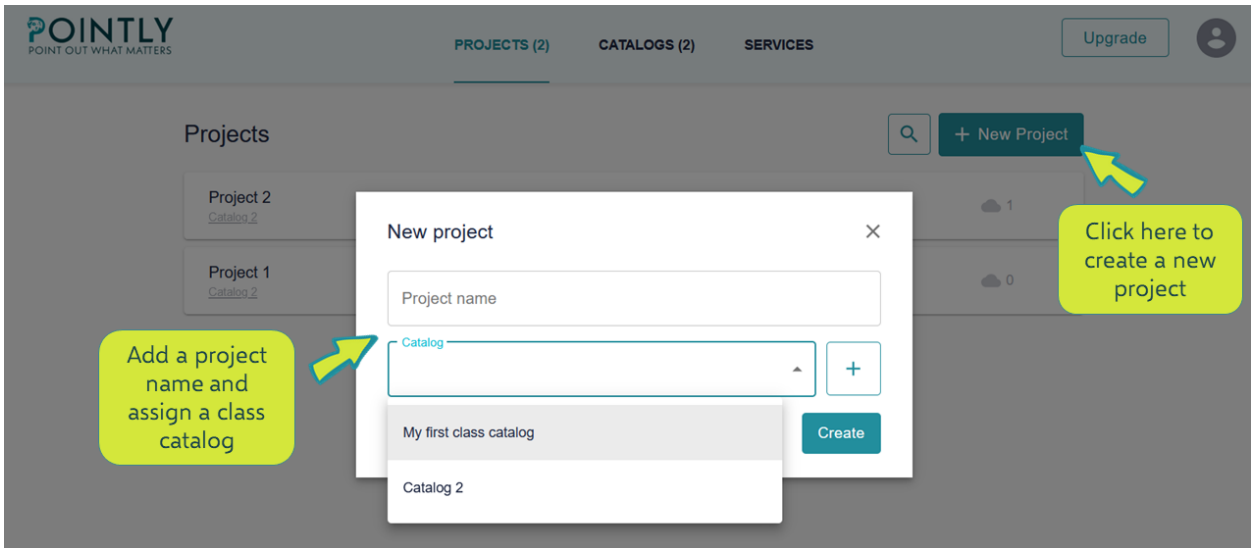


Even though some IDs are reserved for standard classes, you can edit these standard classes once they were added: change their names, colors, and descriptions.

In case, the class was added by mistake or not needed anymore, you can simply delete it again. You will be suggested to select another class from the same catalog to remap current points related to this class. Keep in mind, that this action can't be undone, and we highly encourage you not to delete classes in active projects.



In order to **create a project**, go to "projects" and click on the button "+ New Project". Add a project name and choose the class catalog of your choice.

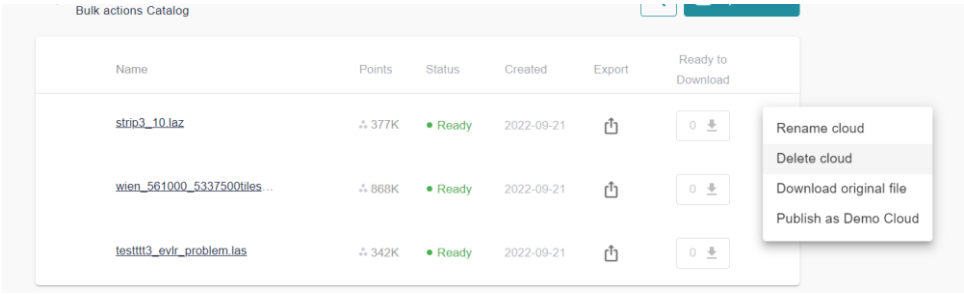


You can only assign one class catalog for each project, but you can assign the same class catalog to several different projects. The projects will contain all the point clouds you will upload, so it's a best practice to know beforehand what kind of point clouds you will upload to which project in order to create a suitable class catalog.

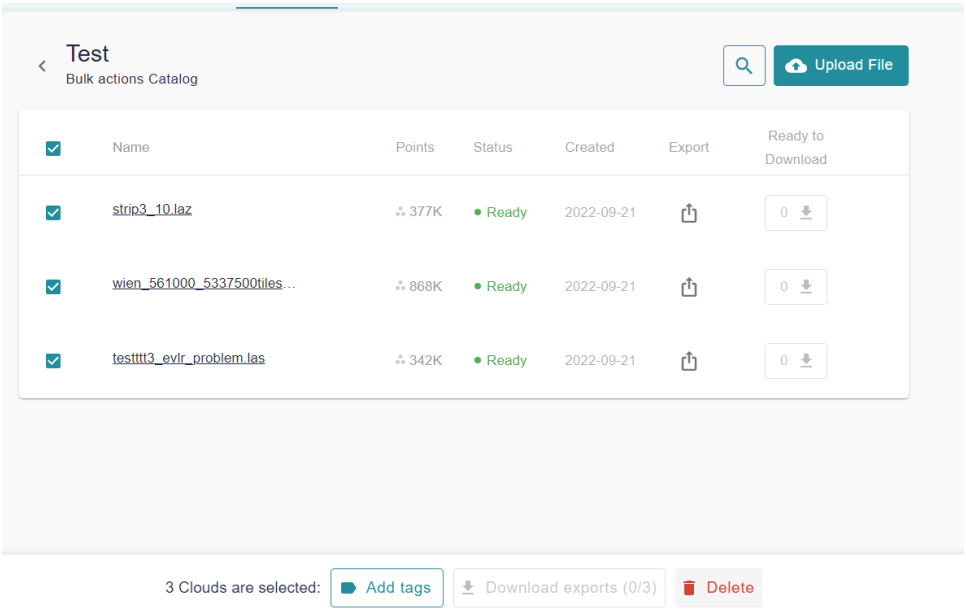
3.1. Deleting your clouds

You can always delete your clouds if you want to free up storage or if you don't need them in the platform anymore. You can do it either for a single file or for multiple.

To delete a single cloud just choose the wanted action from the list and confirm your choice.



Bulk deletion gives you a chance to remove multiple clouds simultaneously. To proceed, just select the wanted clouds and press **Delete** button in the very bottom of the page.



Keep in mind there is no way to retrieve deleted clouds. That's why we encourage you to double check your choice and be careful.

4. The upload process

When you already have your point clouds in .las/.laz format, it's time to **upload them**. Click on the name of the project you want to have your point clouds in and then click on the button "Upload File". A window should pop up – that is the Upload Dialog.

Upload Dialog

In the upload dialog you can see your storage usage indicated by the bar on the top left. Keep in mind, the maximum point count is 150 MPoints per file with a Professional Account.

The Upload Process has 3 steps:

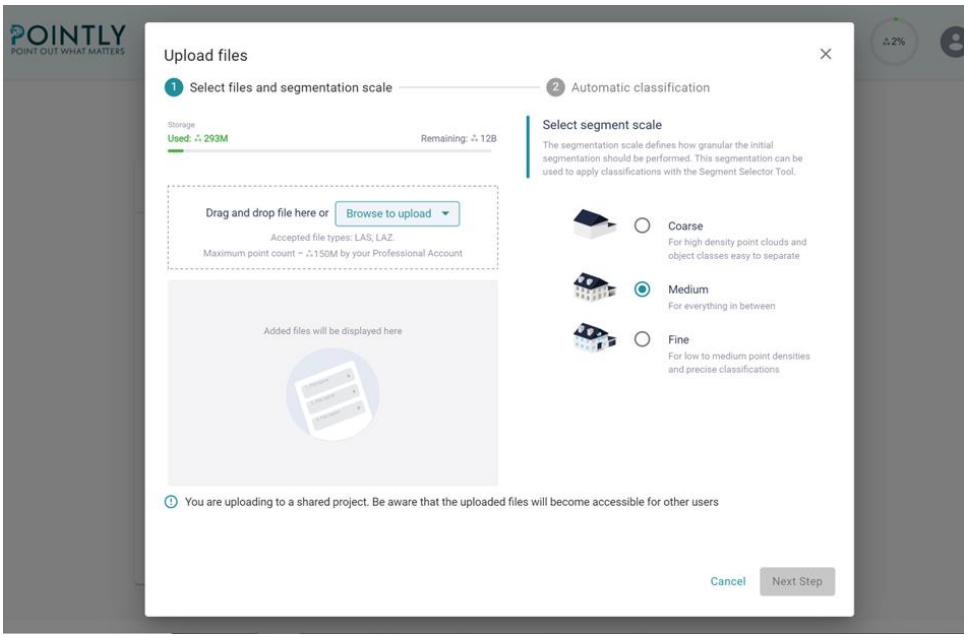
1) **Select files or folders for upload via drag and drop or browse from your computer**

   The added files will be displayed below the upload window.

2) **Select the segment scale for your point clouds.**

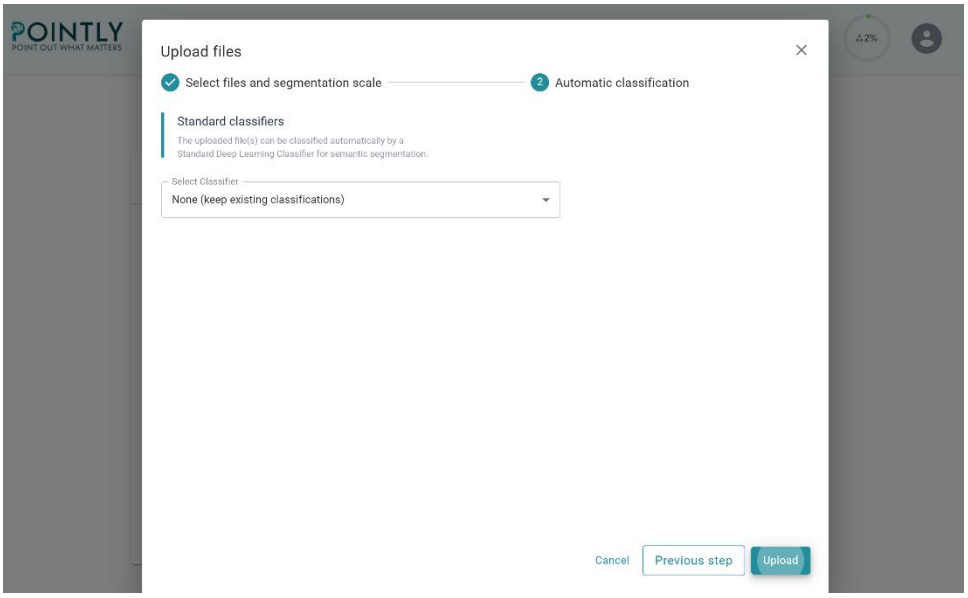
   The segment scale describes how Pointly recognizes related point segments which will help you to classify the files. The finer the segment scale, the more segments will be

created in the pre-processing step.



3) Choose a classification model

"None" is the default choice. Standard classifiers will classify the point clouds according to the applied trained model. When a Classifier is selected, any existing classification in the point clouds will be overwritten.

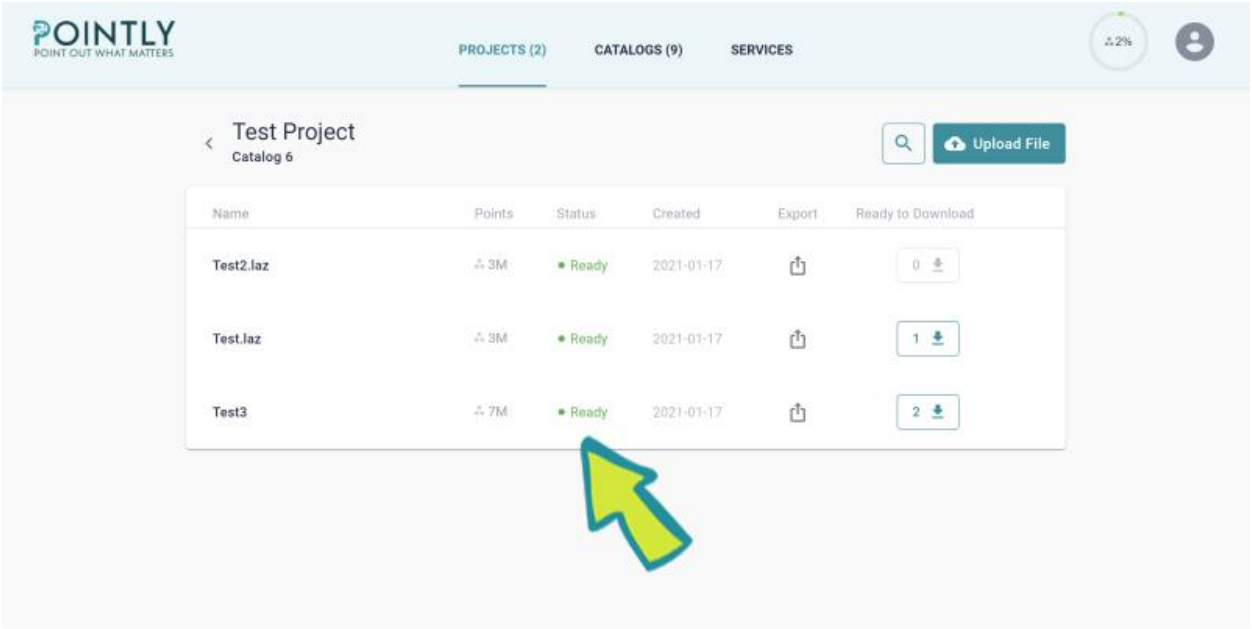


You can switch between the 2 pages in the Upload Dialog using the Next Step and Previous Step buttons. Kindly notice that you should select at least one cloud to jump to the second step. Press Upload to proceed and start uploading files to the system.

Good to know: your point clouds will be available in their full resolution without compression.

After the upload of your file, it needs to be processed by Pointly before you can view and edit your point cloud. The processing itself is directly dependent on the size of the point cloud. This process normally takes between 5 and 30 minutes but should not exceed the 2-hour mark.

You can **check the upload status**. When the status shows "**ready**", your point cloud is ready to be classified in Pointly! Just click on it and you will be redirected to the live viewer.



If the point cloud status is **queued**, our servers are busy and will be scaled up after a while. Thus, you might just wait until there is free capacity for your point cloud.

5. Standard Classifiers

Standard classifiers are trained models can be used to classify point clouds automatically on upload. Each model is trained for a specific data type and set of objects (dedicated class catalog) which will be merged into current project catalog if used. Standard Classifiers can only be used during the upload process and not afterwards.

Like the standard classifiers, Pointly offers you the option to get your own custom classifiers. This is a model which is trained accordingly to your requirements and available solely for you and your organization. Feel free to contact us to get more details on this.

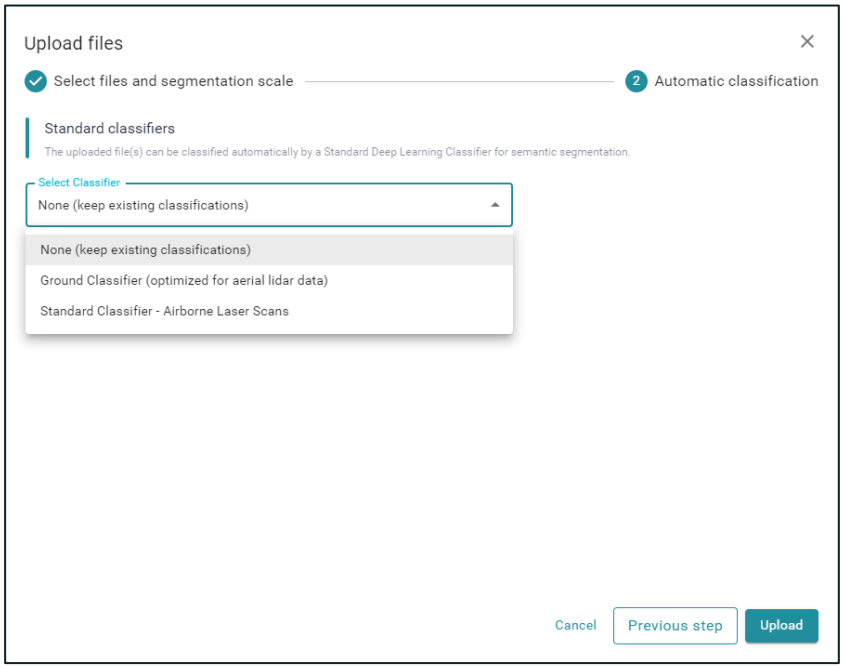
5.1. Applying Standard Classifiers

To apply any of available standard classifiers, open a project and press the Upload File button, then select a file and segment scale and proceed to the second step of the upload process. There you will see a dropdown where you can check the list of standard classifiers and choose one. Each standard classifier has its own catalog, which is displayed below the dropdown. If

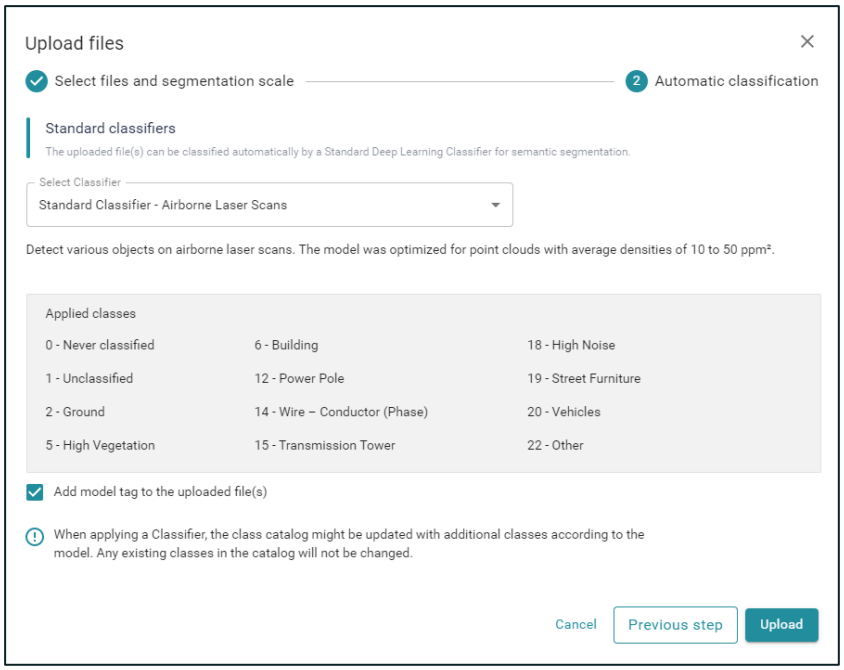
some of the catalog IDs are already present in the current project, they will be highlighted in this dialog but not overwritten by the classifier. That is why we would recommend creating a separate project with a clean catalog to use a Standard Classifier and to use different projects when using several Standard Classifiers.

You can also check the option to add a tag with the model's name to each uploaded file.

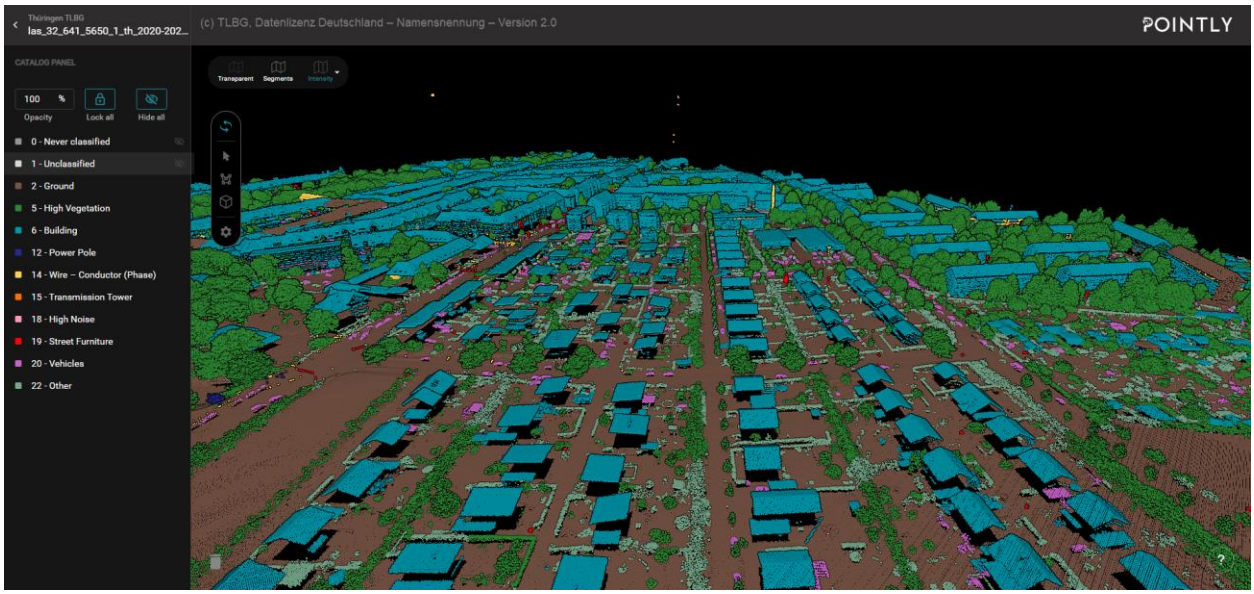
After clouds are selected and model is chosen, press Upload and let the magic happen. Once clouds are processed, you can open them and see the classification results in the Viewer. If some objects are not classified well, you can now correct that manually.



Dropdown to select a Standard Classifier



Standard Classifier selected and preview of applied class catalog

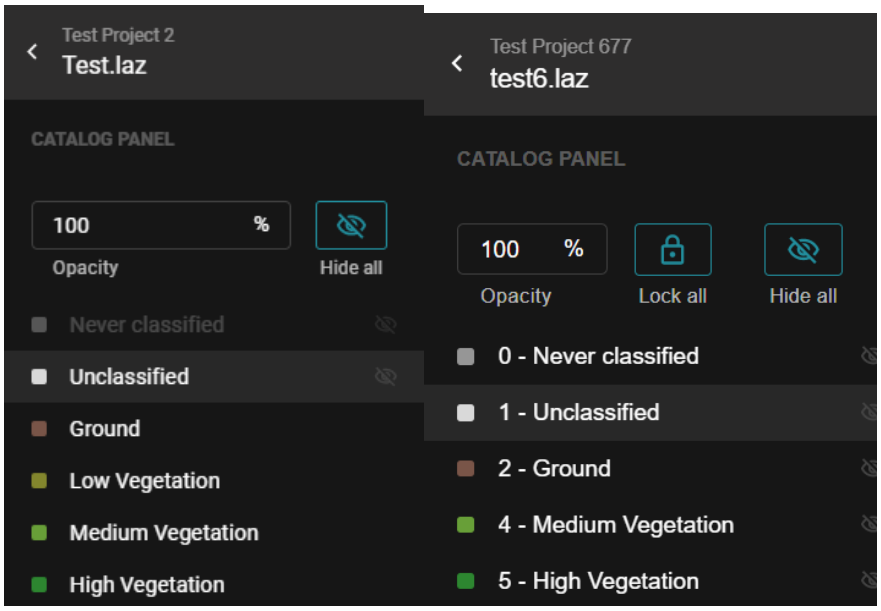


Results of the Standard Classifier for Airborne Laser Scans

6. Exploring the live viewer

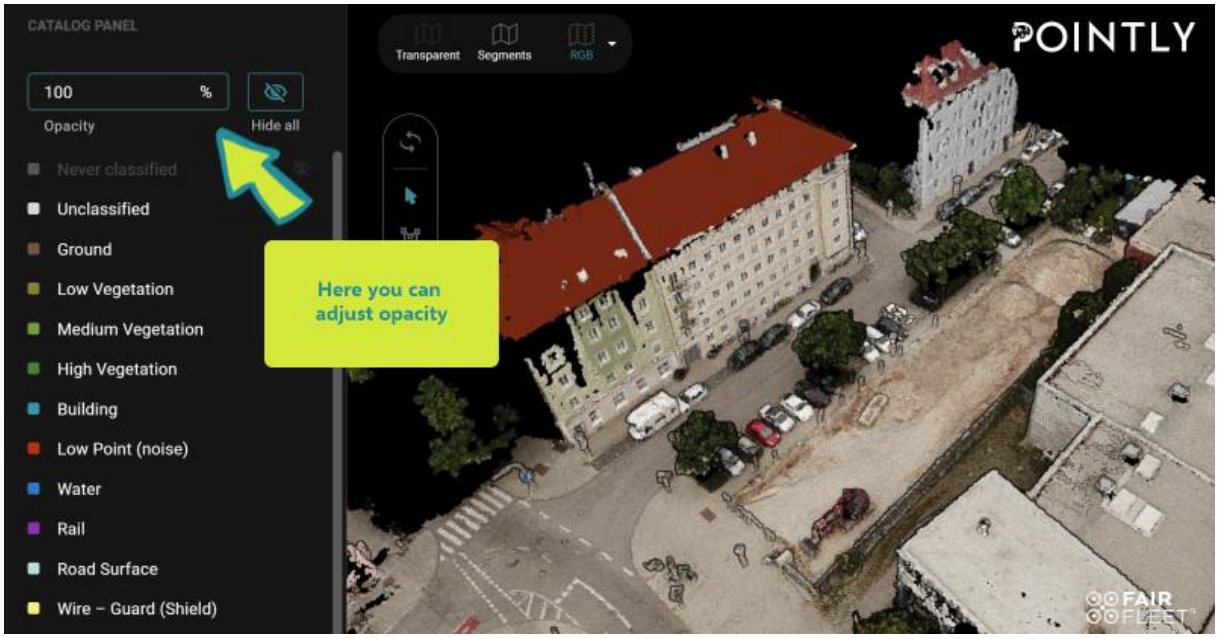
6.1. Catalog panel

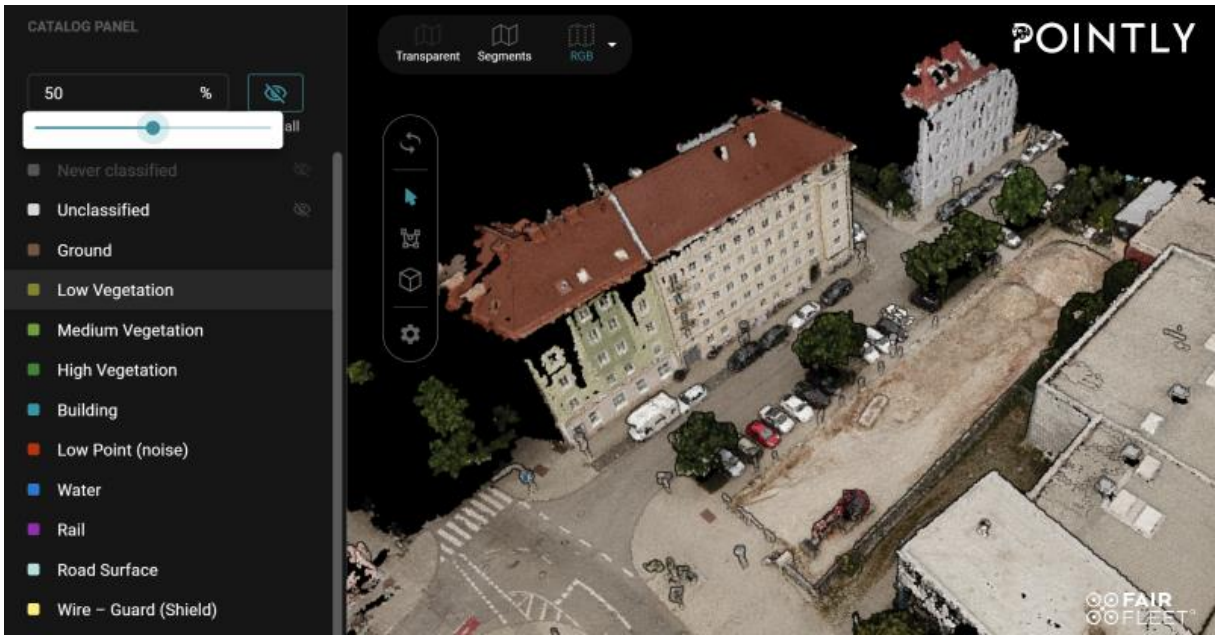
On the left side of the live viewer, you can **see the catalog panel with the class catalog** of your project. You can adjust the opacity of different classes and hide and unhide classes of your choice as well as the “never classified” and the “unclassified” ones by **clicking on the eye symbol**.



6.2. Opacity adjustment

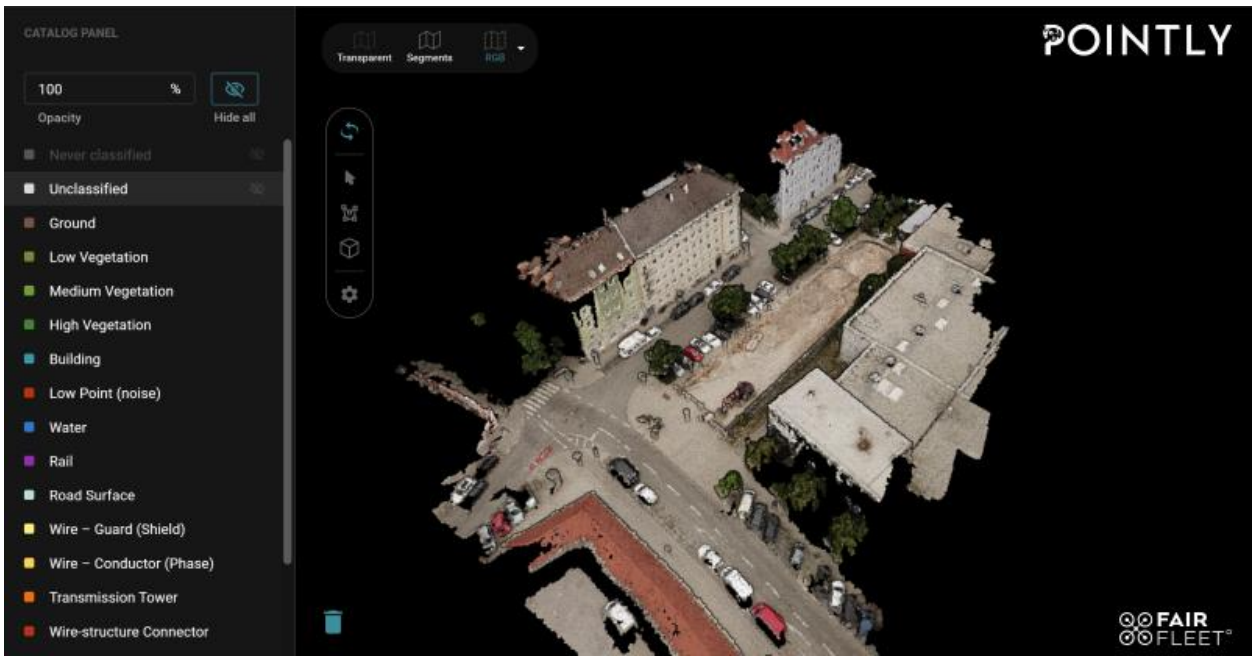
Next to the eye symbol there is the opacity adjuster. Just **drag the bar to adjust the opacity** of classified objects (below you can see an example with classified rooftops).





6.3. Hiding Classes

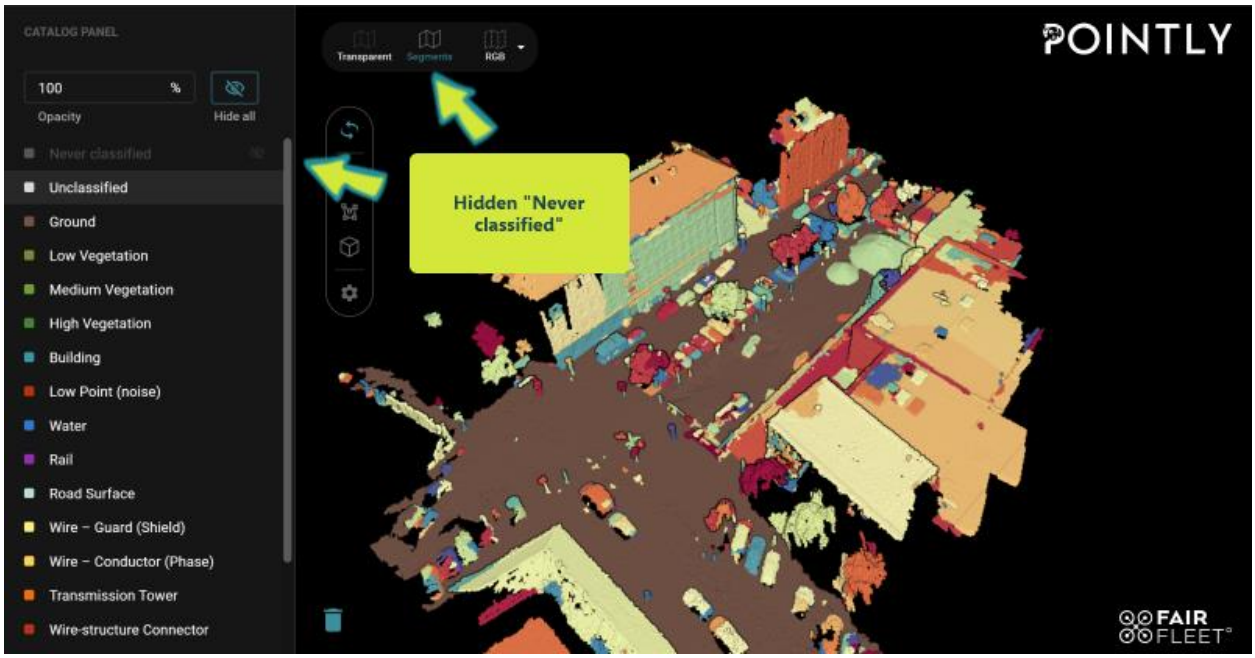
Working with the eye symbol lets you see different results of your labeling work. The **standard view** which you will see in Pointly is the RGB view with 2 hidden classes – "Never classified" and "Unclassified". You can see the standard view in the picture down below.



If you **click on the eye symbol "Hide all" to unhide all classes**, you will see this view:

After labeling some of the objects, you can play with the eye symbol to find your way to work with it. You can also **hide or unhide only one specific class or several ones**. If a class is hidden the eye symbol is crossed out and appears on the right side next to the class. If a class is unhidden, you will not see the eye symbol next to it.

It can be useful to hide the classes “Unclassified” / “Never Classified” and using RGB / Intensity or Segments view to classify. These views give good visibility to what you are about to classify:



6.4. Different views

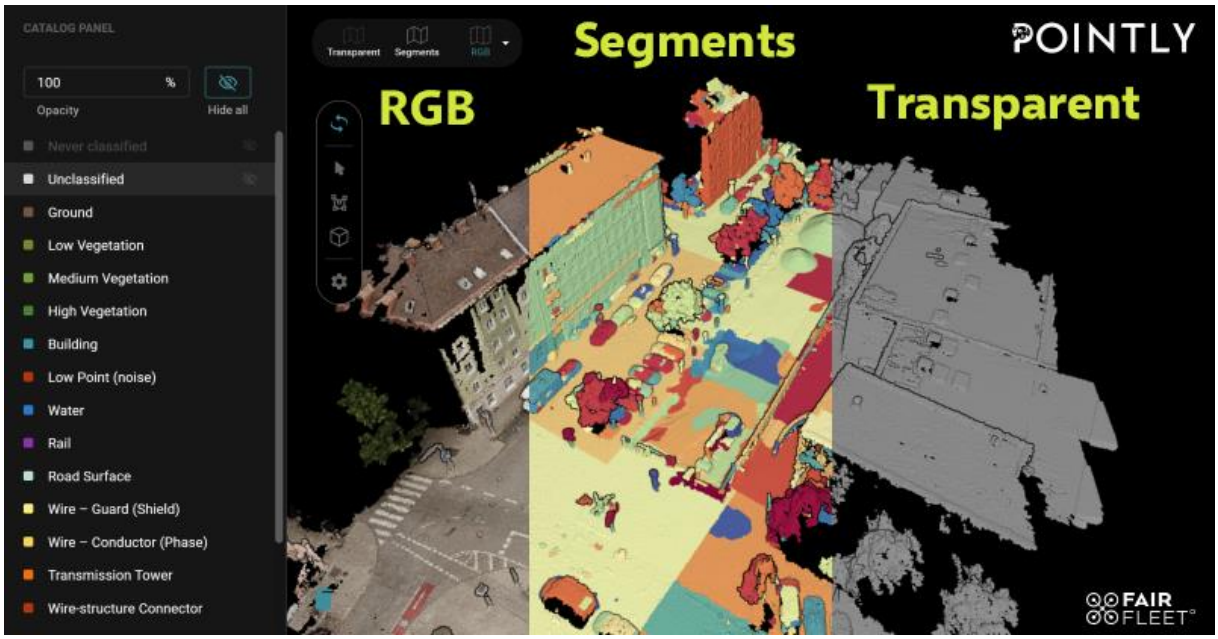
The different types of views help you to classify your point clouds more effectively.

The standard views are:

RGB – allows you to display the RGB information of the point cloud (if it's present).

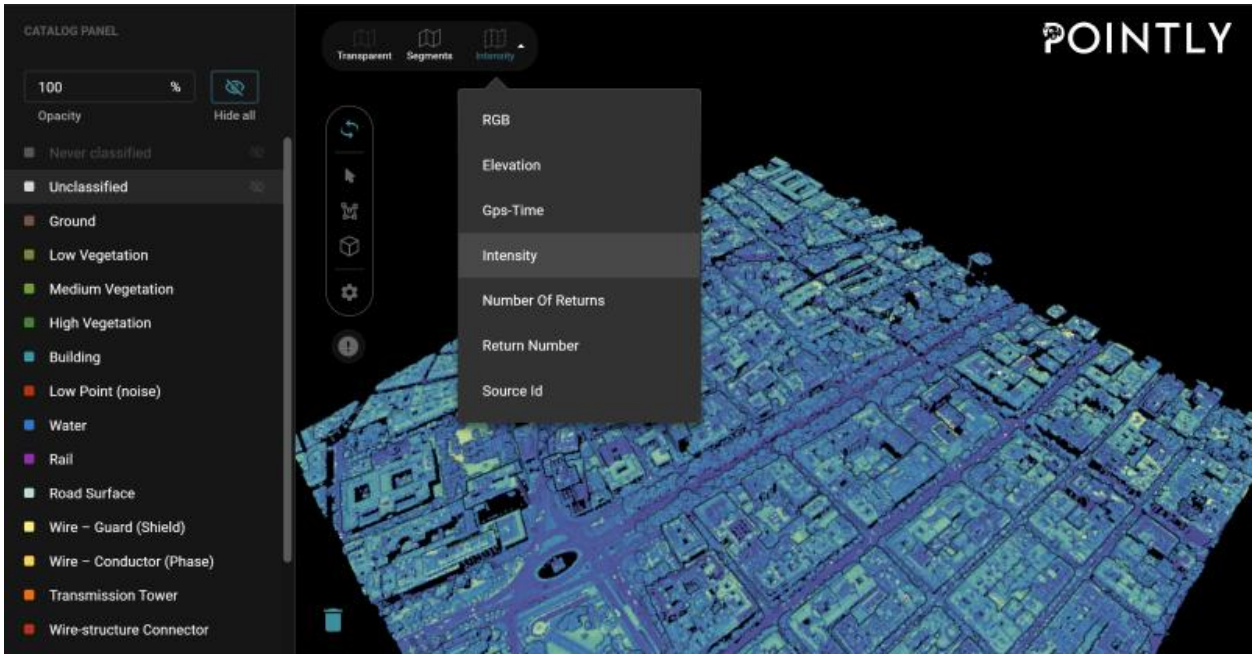
Segments – shows you the pre-processed segments generated by Pointly.

Transparent – can be used to hide or highlight selected classes and gives you the possibility to focus on the objects which matter for your use case.



6.5. Dimensions available on point clouds

Apart from the standard views, you can **make use of different dimensions.** You can find them by clicking on the "RGB" view. The number of dimensions displayed there depends on your point cloud type. Some of the possible views are for example "Elevation", "Number of returns" or "Intensity". They all can help you to see different parameters in your point cloud. Following is an example of a point cloud where you can see 7 dimensions:



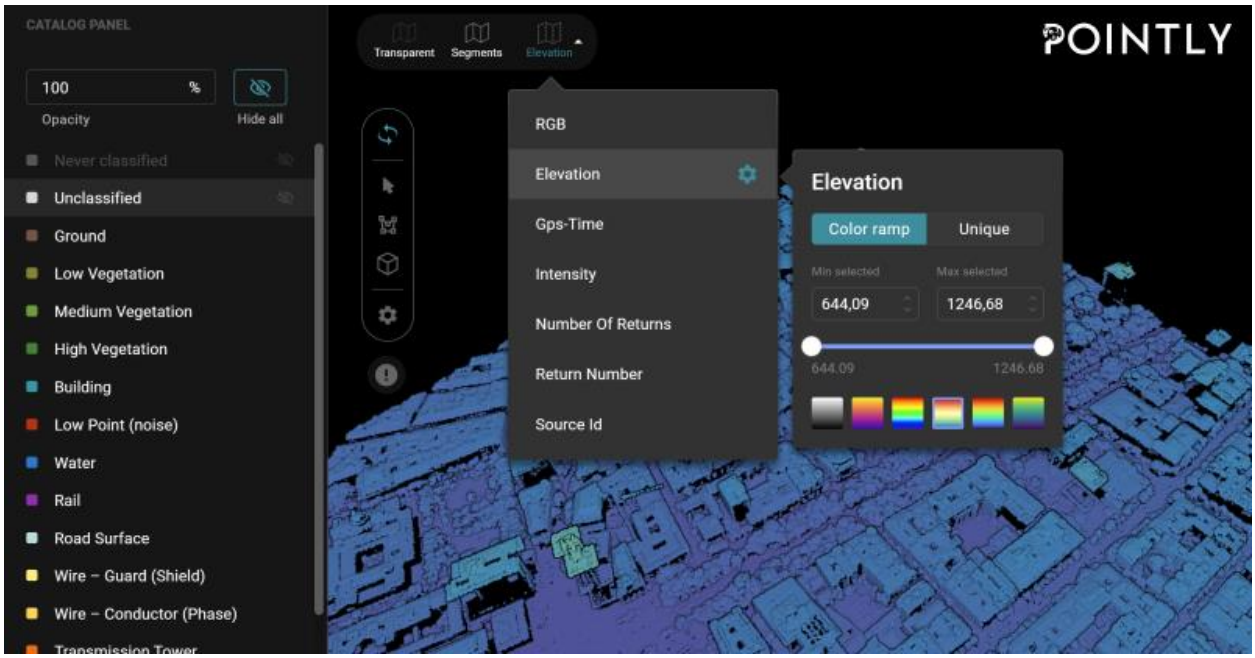
Work derived from LiDAR-PNOA 2016 CC-BY 4.0 scne.es

1) **RGB** – as mentioned before, this view allows you to display the RGB information in the point cloud if it's present. If it's not present, it won't be shown.
2) **Elevation** – it is the simplest form of coloring and applies a color spread to the range of LIDAR point elevations. It might be very helpful for orientation if there is no intensity or RGB available.
3) **GPS time** - for every laser shot fired there are discrete LiDAR returns. Each of these is then given the exact same GPS time stamp that corresponds to the moment in time the laser pulse was fired. So, GPS Time is the double floating point time tag value at which the point was acquired.
4) **Intensity** – the integer representation of the pulse return magnitude. This value is optional and system specific.
5) **Number of Returns** - the total number of returns for a given pulse. For example, a laser data point may be return two (Return Number) within a total number of five returns.
6) **Return Number** - the pulse return number for a given output pulse. A given output laser pulse can have many returns, and they must be marked in sequence of return.
7) **Source Id** - This value indicates the file from which this point originated.

Source: https://www.asprs.org/a/society/committees/standards/asprs_las_format_v12.pdf

When you place your cursor on the right side of the bar with a chosen dimension, you will see the gear symbol where you can **change settings for this dimension**.

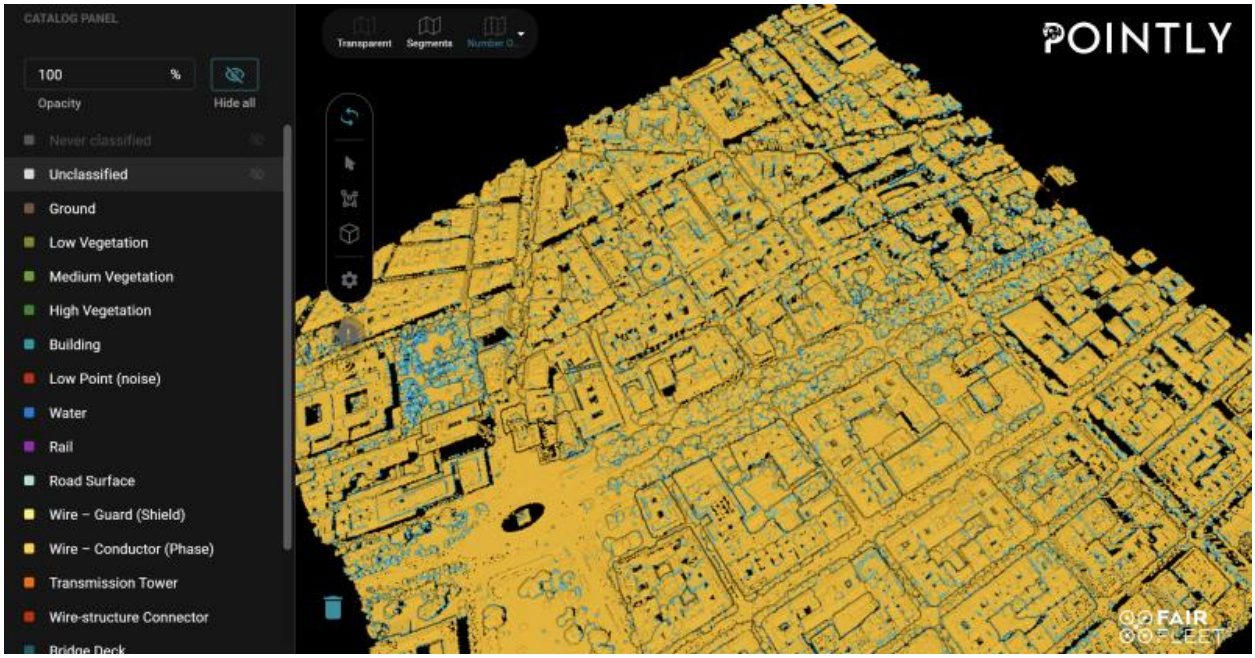
An important hint: clicking on the gear symbol doesn't automatically change the dimension. Make sure to click on the dimension name first and then edit the settings.



Work derived from LiDAR-PNOA 2016 CC-BY 4.0 scne.es

You can **choose between the color ramp and unique** which means that you can choose the color gradient type:

Here you can see an example of the dimension with the unique gradient type:



Work derived from LiDAR-PNOA 2016 CC-BY 4.0 scne.es

You can also change the color palettes which are displayed at the bottom of the box.

6.6. Selection tools

As some shapes like trees or wires might be tricky to classify, we adjusted our selection tools to provide you smooth and precise object classification.

Right now, you can use following tools:

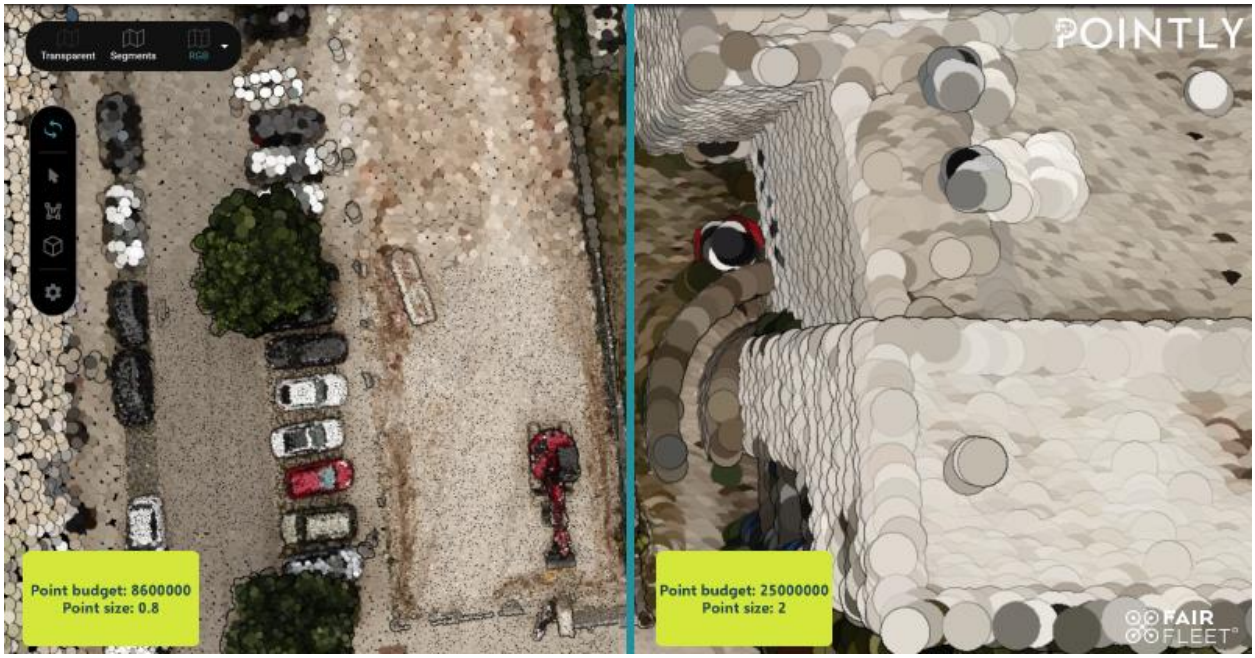
- Free View
- Segments Selector
- Polygon Lasso Tool
- 3D Bounding Box
- Viewer Settings

Let's start with the explanation of Viewer Settings as it's important to adjust the settings before you start your classification work. Other tools will be explained in the next chapter with a detailed description of how to work with them.

7. Viewer Settings in Pointly

The Viewer Settings let you **adjust the point budget and point size** as well as choose the point quality. Simply drag the bar to find the optimal view of your point cloud.

Here's a small comparison of how adjusting the settings can change the look of your point cloud:



8. Classification

8.1. Locking and Unlocking Classes

Applies to:
To all accounts

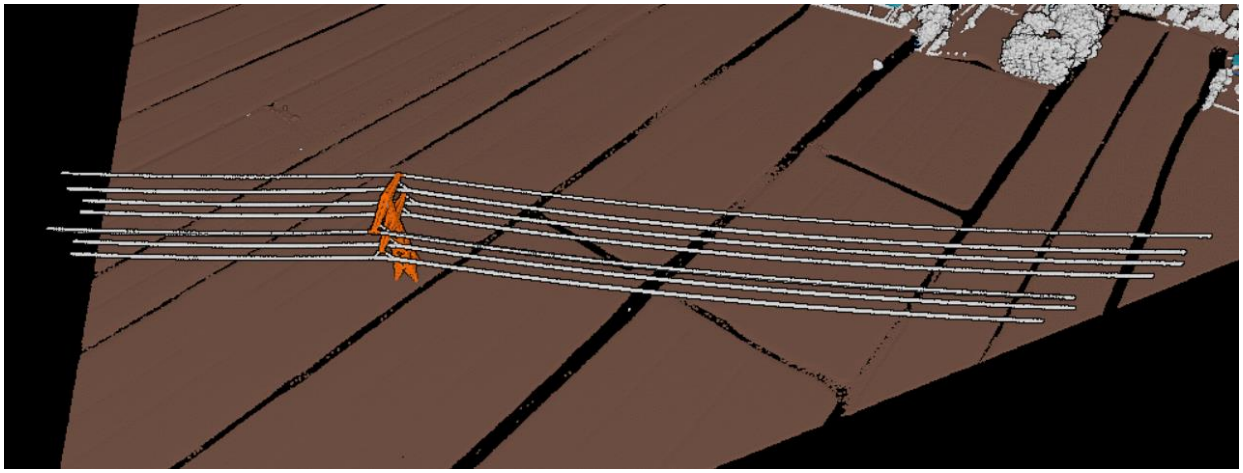
8.1.1. Locking and Unlocking Single Classes

The Locking classes feature can make the classification process more efficient. If point clouds were uploaded pre-classified, the existing classification can be locked to not overwrite them. During the classification process, it can be very helpful to lock the classification progress while doing new classification commands.

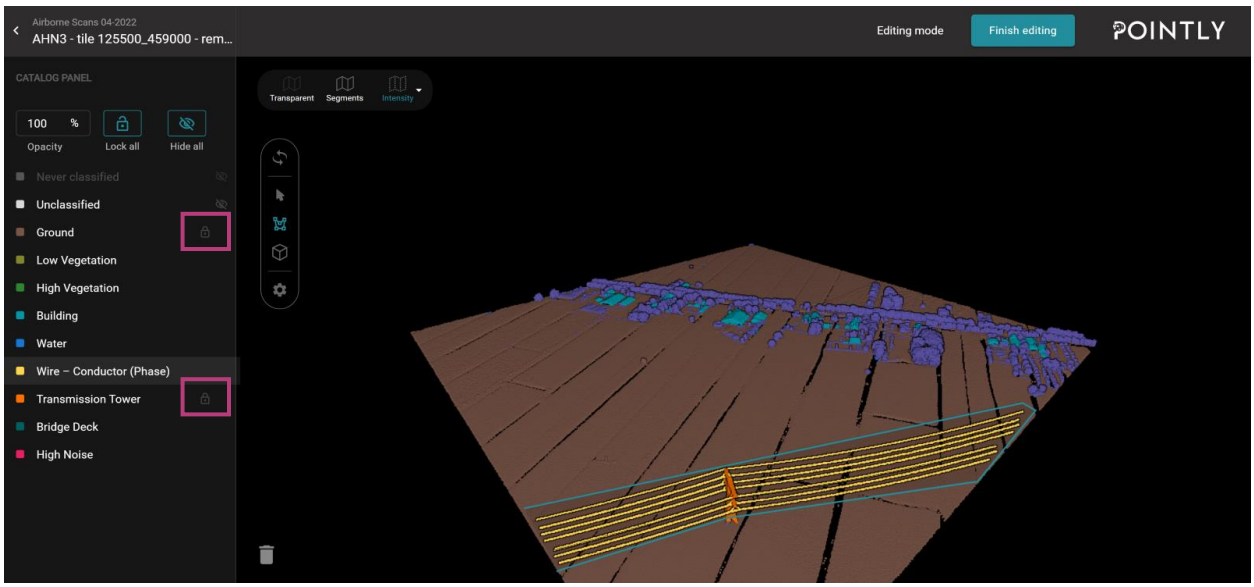
For example, once the Ground was classified in a point cloud, it can be locked to quickly classify vegetation with the polygon tool.

Locking classes option is available for every user and can be used in combination with the 3 classification tools (Segment Selector, Polygon Lasse, 3D Bounding Box). Just open any cloud in the Viewer and start labeling it. Then click the **Lock symbol** nearby the classes that you'd like to lock, then choose another class and start labeling the objects without overwriting already made classifications.

In the example below Ground and Transmission Tower were already classified and class locking can be used to easily classify the Power Wires.



On the second screenshot you can see the classification process. The classes Ground and Transmission Tower are locked, and Wires can be classified with the polygon tool



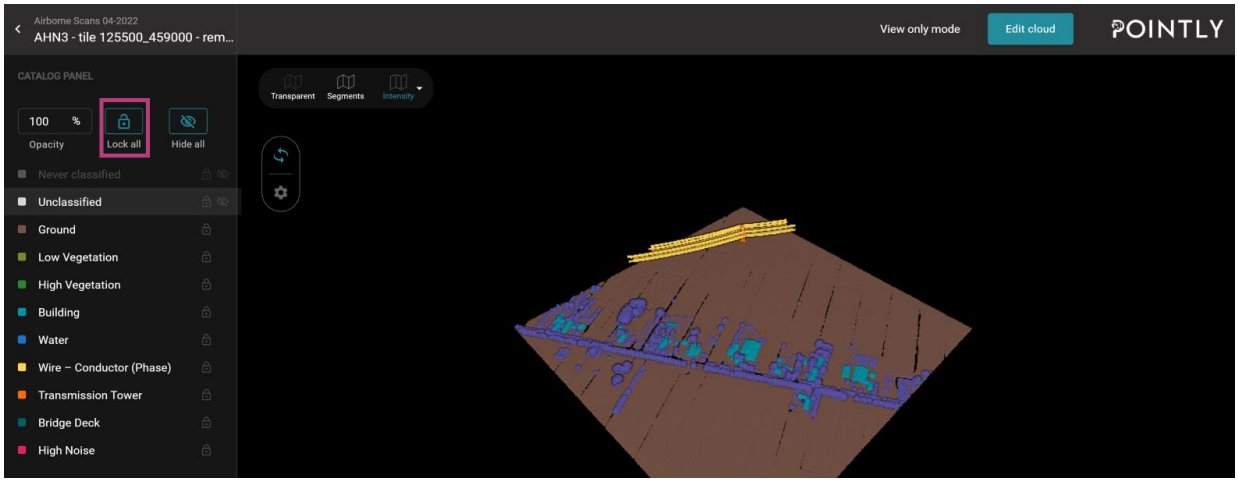
As a result, Wires are successfully labeled, while the Transmission Tower and Ground remain untouched.

To unlock the class click the same **Lock symbol**.

Good to know: You can still classify with a locked class.

8.1.2. Locking All Classes

Also, there is an option to lock all classes at once. You can do it by pressing **Lock all** button which is placed between **Opacity** and **Hide all**.

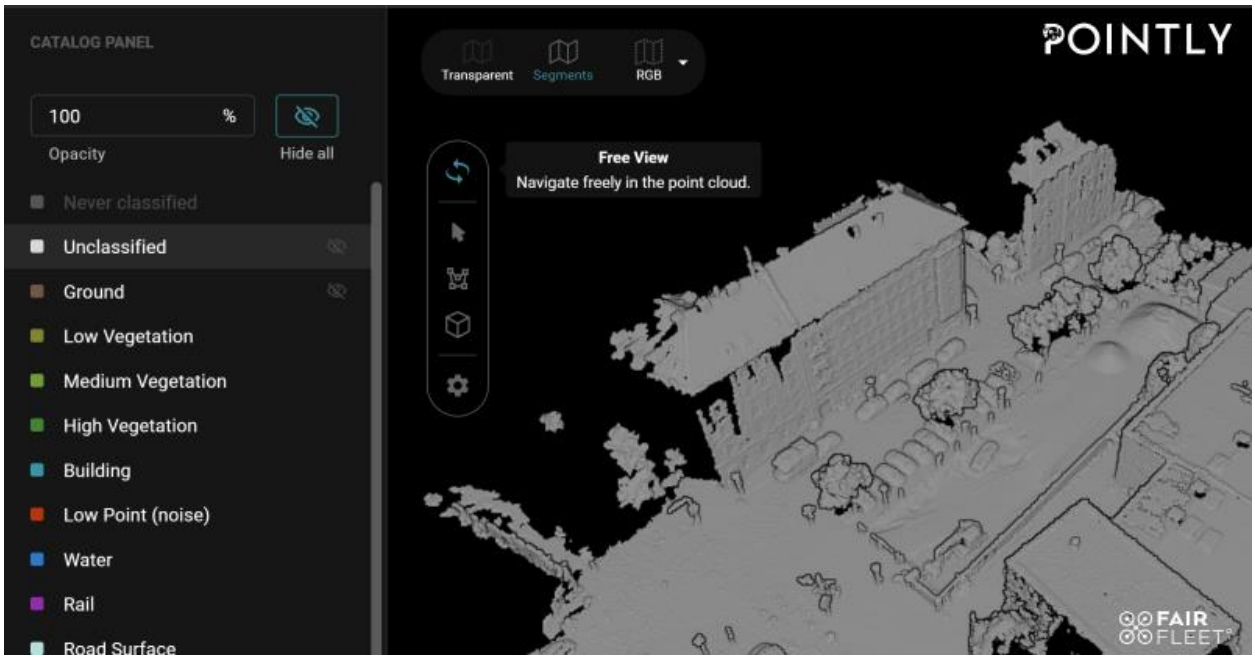


This feature can be used when you want to lock all classes and only unlock one. This can be useful to do specific corrections or to reclassify a complete class.

You can also lock all classes except Unclassified to fix all previous classifications.

Keep in mind that classes become unlocked after the page is reloaded, so be careful when you start to classify the cloud again.

8.2. Adjusting the view

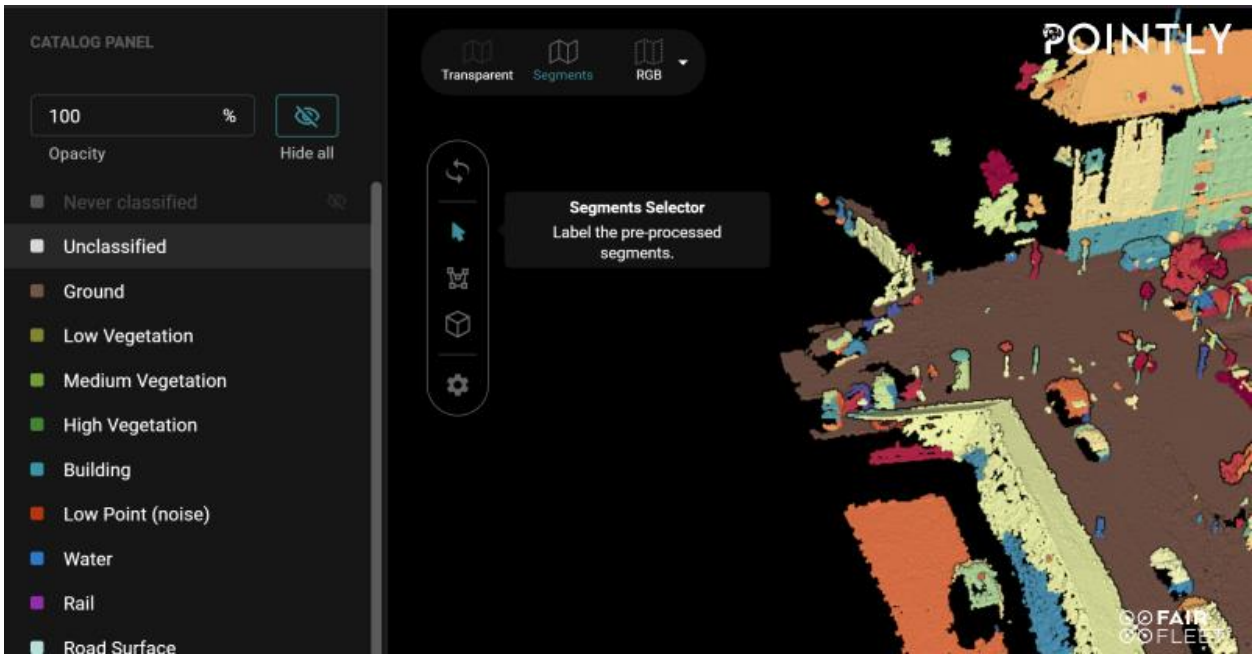


The first tool, Free View, lets you navigate freely in the point cloud. You can **rotate your point cloud** in different directions by clicking and dragging (place the mouse cursor on the point cloud, press and hold down the **left mouse button**, then move the mouse while still holding down the left mouse button). Moreover, if you press and hold down the **right mouse button** you can move within you point clouds, e.g. from the right side to the left side. You can also zoom in using your touchpad (place two fingers on the touchpad and move them) or scroll wheel on your mouse.

8.3. Using the Segments Selector

Pointly's Segments selector tool will do most of the heavy lifting when it's come to fast and efficient labeling. You just need to select it and click on the objects you want to label.

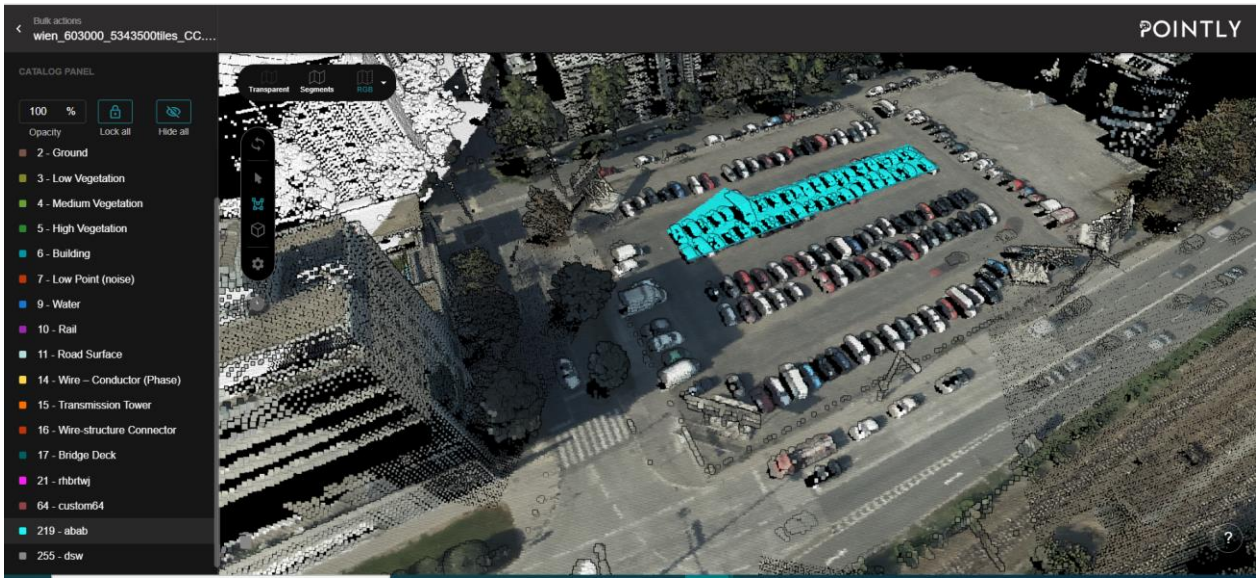
Quick tip: We recommend working with "Segments" view while using the Segments Selector as it will classify the objects based on the pre-processed segments.



8.4. Selecting objects with the Polygon Lasso Tool

As an alternative to the Segments Selector, you can use the Polygon Lasso Tool wherever you wish to adapt the segments.

Quick tip: after selecting the area with the Polygon Lasso Tool, you need to click with the right mouse button in order to finish your selection.



8.5. Working with the 3D Bounding Box

If you want to classify more tricky objects like trees, try using the 3D Bounding Box. With this versatile tool you can control the selection depth. Thus, you'll be able to classify objects which are really close to other objects or which need to be separated in space.

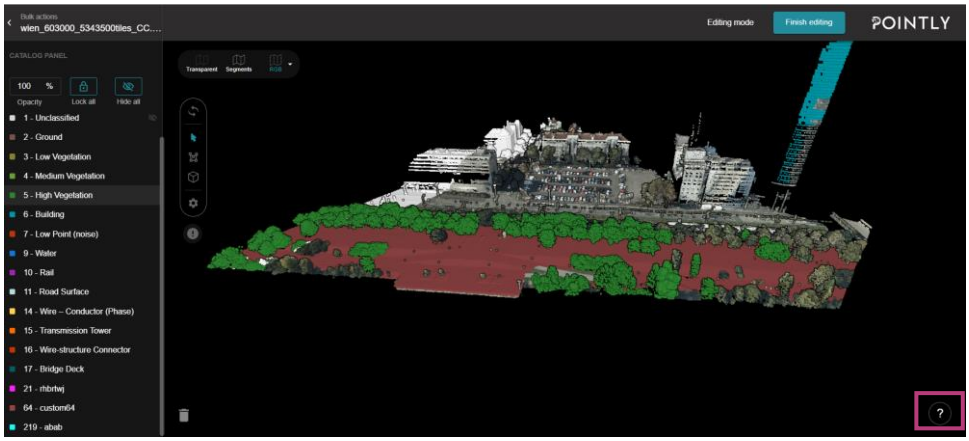
Place the box on the object you want to classify. You can rotate and move the box using dragging points so that you precise the area you want to classify. For that, you can also make use of the eye symbol on the 3D Bounding Box to change the view.

Quick tip: Finish your selection by clicking on the right mouse button.

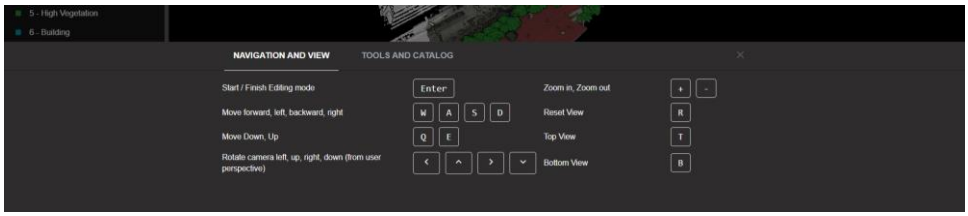
9. Keyboard Shortcuts in the Viewer

Keyboard shortcuts were developed to improve classification in the Viewer experience easier by making this process easier. They allow you to rotate the cloud, move through it, change the angle of the view, switch between different tools and classes etc. You can still use your mouse as it's not blocked.

To recall hotkeys the Viewer just press **?** in the left corner.



You will see the full list of available keyboard shortcuts.



9.1. Navigation shortcuts

Navigation hotkeys help you to move and rotate the cloud so that you can carefully check and label all the details from different angles.

Hotkeys	Description
W, A, S, D	Move forward, back, left, right
Q, E	Move Down, Up
←, ↑, →, ↓	Rotate view left, up, right, down
+, -	Zoom in, zoom out
R	Reset View
T	Top View
B	Bottom View

Some of these shortcuts can be used simultaneously. For example, you can combine **W** and →, **S** and **+**, **W** and **D** etc.

A good point is that you could move through the cloud and rotate the camera from the user perspective.

Keep in mind, that navigation shortcuts listed in the previous section are disabled when you are labeling with Polygon Lasso or 3D Box. You need to cancel the process or complete that action to continue moving the cloud.

9.2. Tools Management

Tools management keyboard shortcuts allow you to change tools while you're labeling.

Hotkeys	Description
Enter	Start/ Finish Editing mode
Tab	Switch between labeling tools (Segments Selector, Polygon Lasso, 3D Box)
Esc	Cancel in progress action (Polygon lasso, 3D Box)
L	Lock/ Unlock all classes

H	Hide/ Show all classes

9.3. Catalog Management

These hotkeys help you to switch between classes quickly.

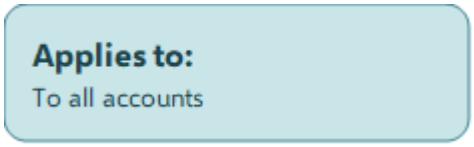
Hotkeys	Description
0,1, ..., 255	Switch between classes
U, I	Previous class, Next Class

Keys **U** and **I** switch you to the previous or next class accordingly.

Another option to change the class is simply typing its ID using keyboard digits. Good to know that in this case the class is switching on the fly as the user is typing. For example, you would like to choose class with ID 34: first you're typing 3 - class with ID 3 is immediately chosen, then 4 - class 34 is chosen. Please note that your class will remain as it was before the change if you type an incorrect number.

10.Custom tags for point clouds

Custom tags for point clouds are free text fields, to tag the point cloud and/or comment on the point clouds to categorize them. For example, you could tag all point clous that have the same characteristic with the same tag, like “LiDAR”.



For single or several point clouds at once, freely defined Tags can be added. They can be used to assign tasks to persons, to document a status or to add other meta data to the file.

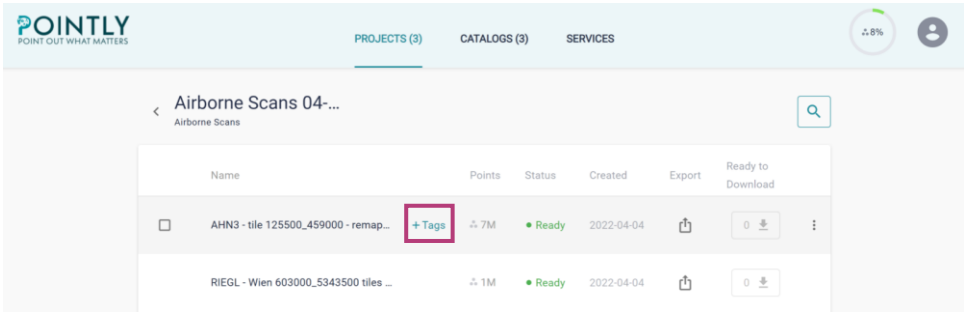
Tags are searchable, so you can filter the list of point clouds for a specific person, status etc.

10.1. Add and remove custom tags

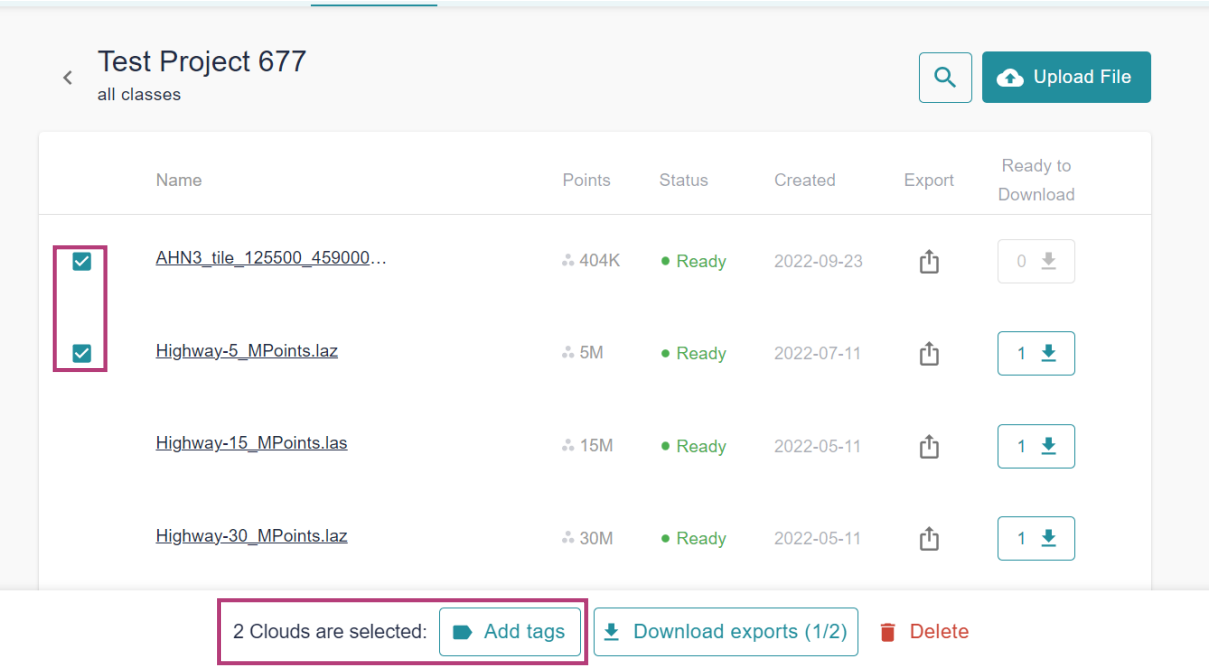
Tags are available both for Free and Professional Accounts. For now, adding tags is possible on point cloud level only.

10.1.1. Add Tags

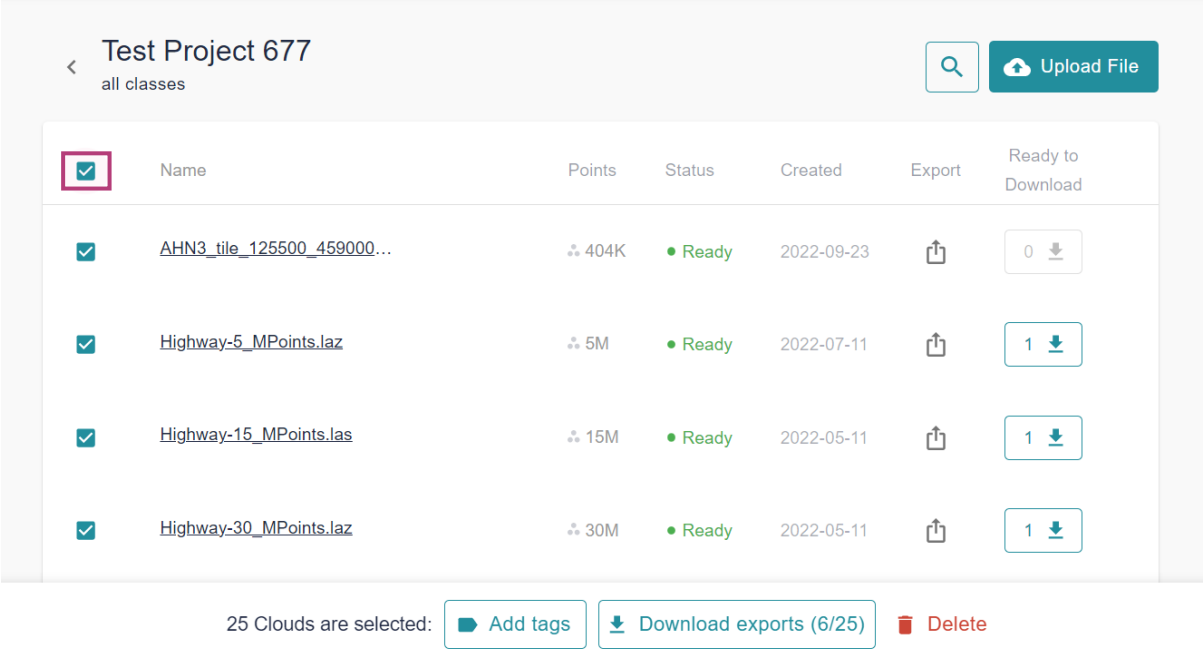
For your convenience we implemented a few ways to add tags. The first one is for a single cloud. Just hover the cursor over the cloud and then click **+Tags** to open the pop-up to add tags.



The second option enables adding tags to multiple clouds. For that you have to click the checkboxes for the desired files and then click button **+ Add tags** to open the pop-up. You can always see the number of selected clouds right near this button.

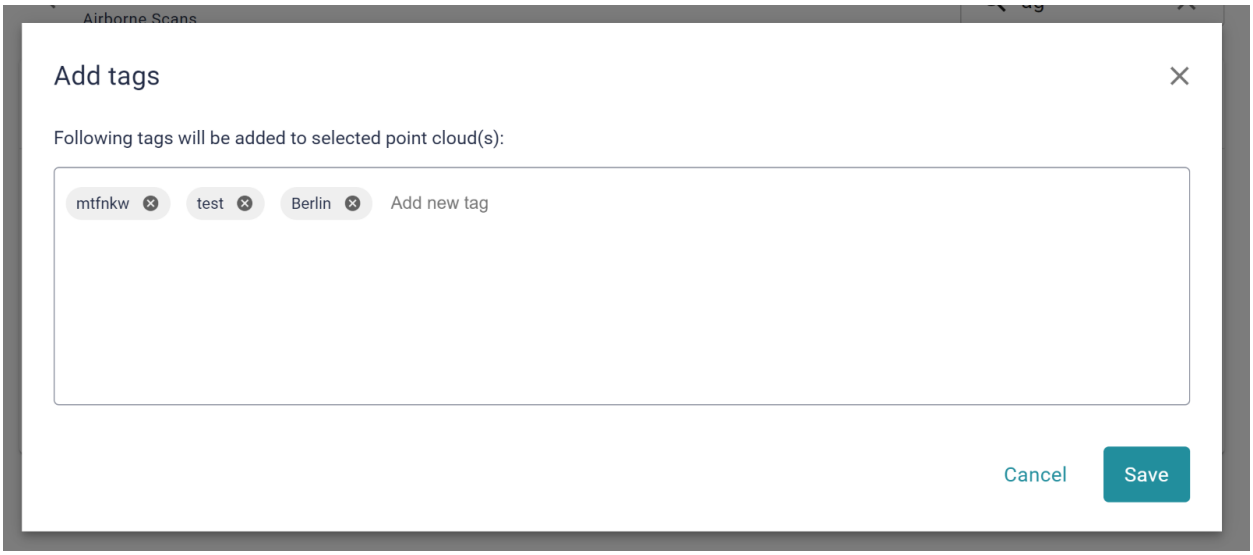


To select all clouds in the project simply check the checkbox in the header. By unchecking it you would unselect the clouds.



10.1.2. Add Tags pop-up

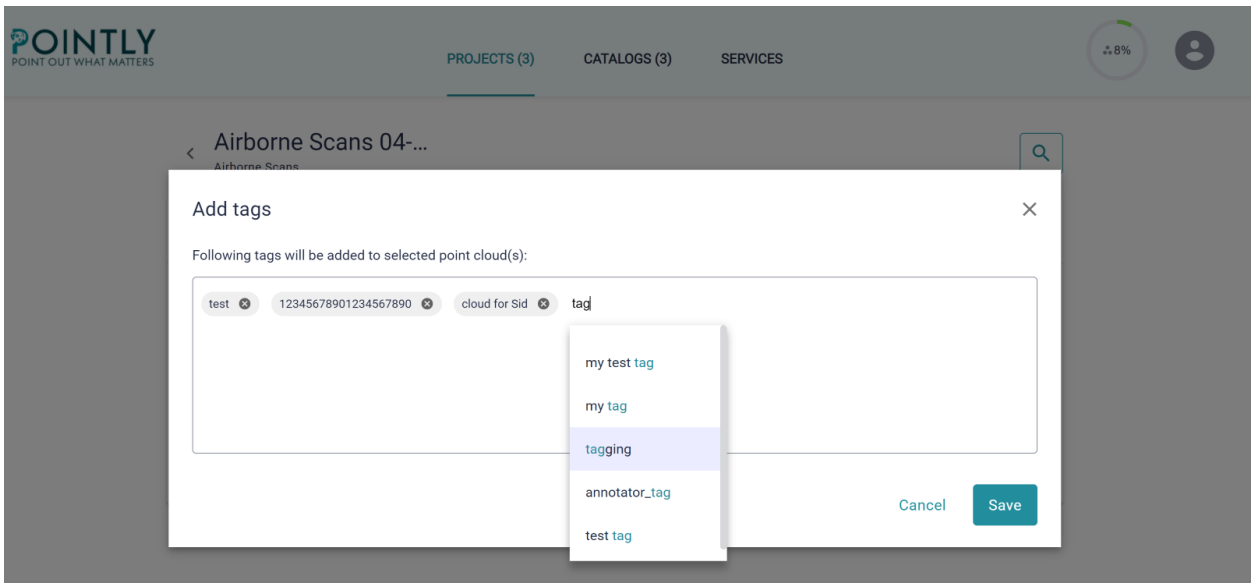
To open the popup, use one of the options described above. When the pop-up is open, start typing a tag and use Enter or Tab buttons to confirm it. Keep in mind that you can add up to 50 tags for a cloud. The length of a tag is limited to 20 symbols. Then press the Save button to add the tags to the point clouds.



Please notice that copy paste option is not working. In case, you paste a few different words, it will be counted as one tag. If the length is longer than allowed, the text will be trimmed.

There is no need to care about duplicated tags because the system checks it for you.

Additionally, the autofill option will suggest tags in case there are tags with matching text.



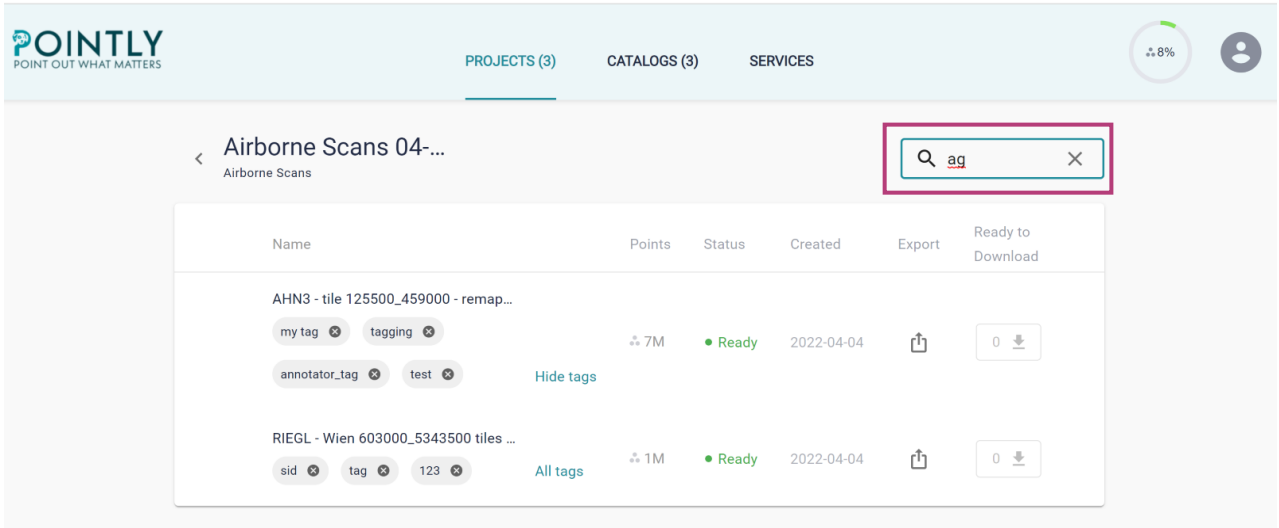
10.1.3. Remove tags

To remove tags just click “X” sign behind a tag. It’s as simple as that!

10.2. Search by tags

We enabled the option to search by tags. For now, Search includes Names, Tags, Dates, characters.

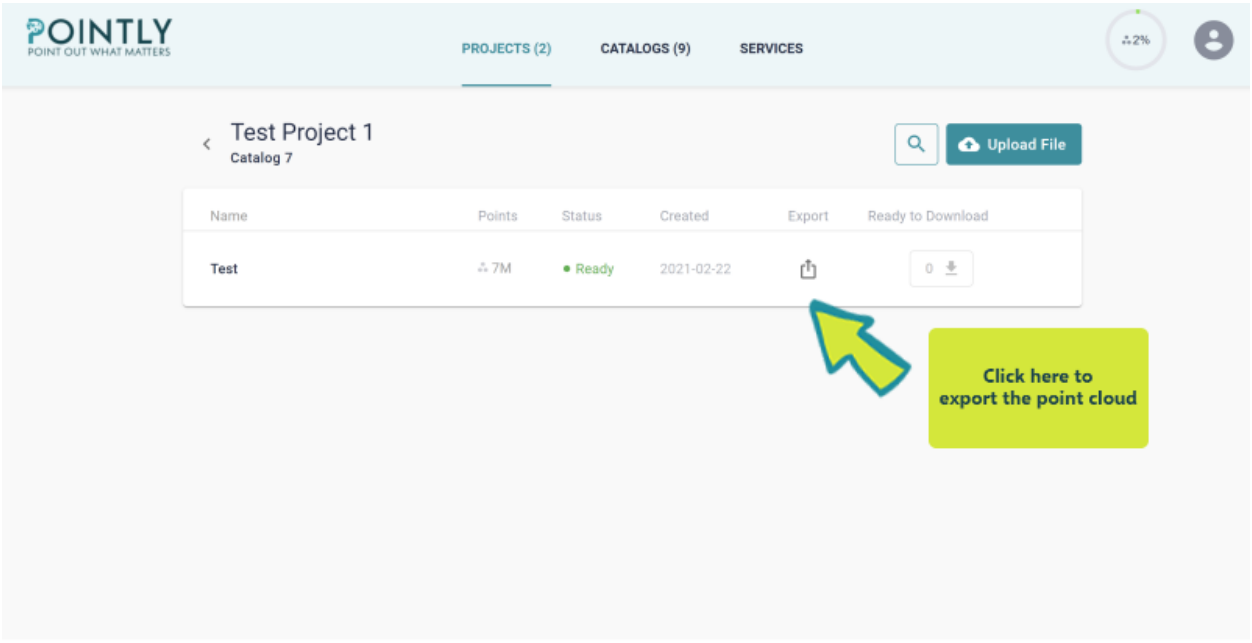
Just click the search icon and enter the tag or a part of it. You will be shown all the matches for your request.



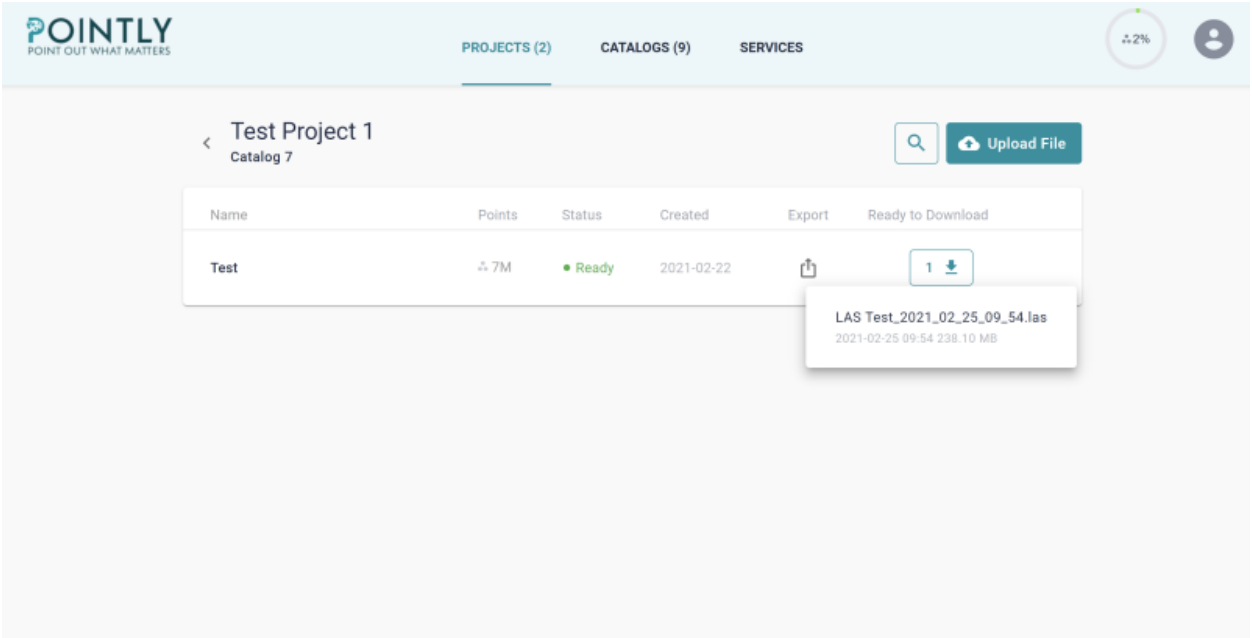
11.Downloading point clouds

Applies to:
Professional + Annotator Account

To download your point clouds, leave the Live Viewer by clicking the arrow on the upper left side of the page. You will be redirected to “Projects” where you need to click on the symbol below “Export” and choose the format you want to export your point clouds in (.LAZ or .LAS).



After exporting the file, it will be ready to download and you will see this:

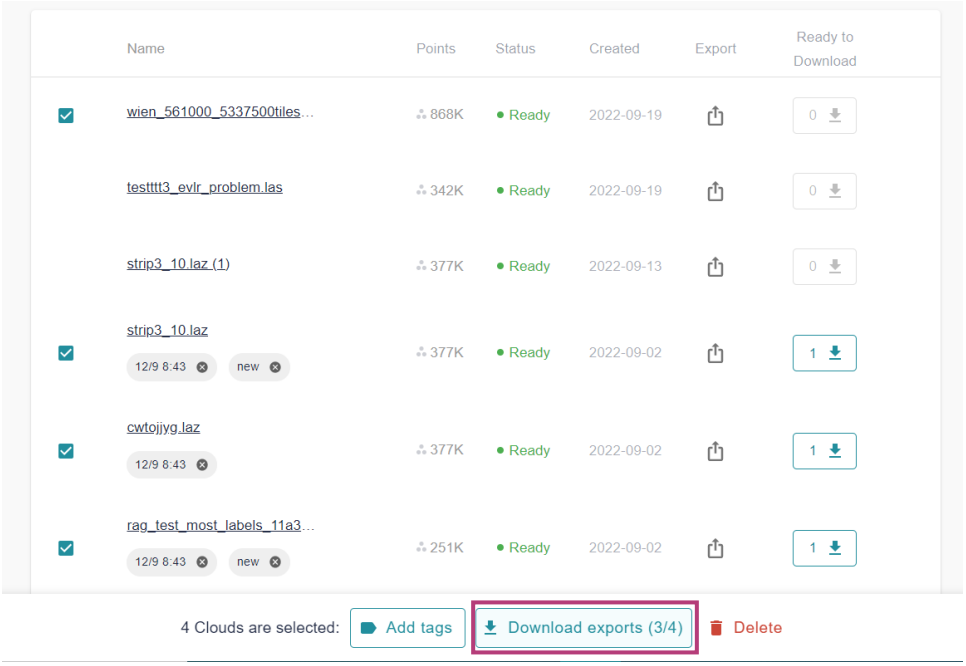


Now you can download the file by clicking on the link.

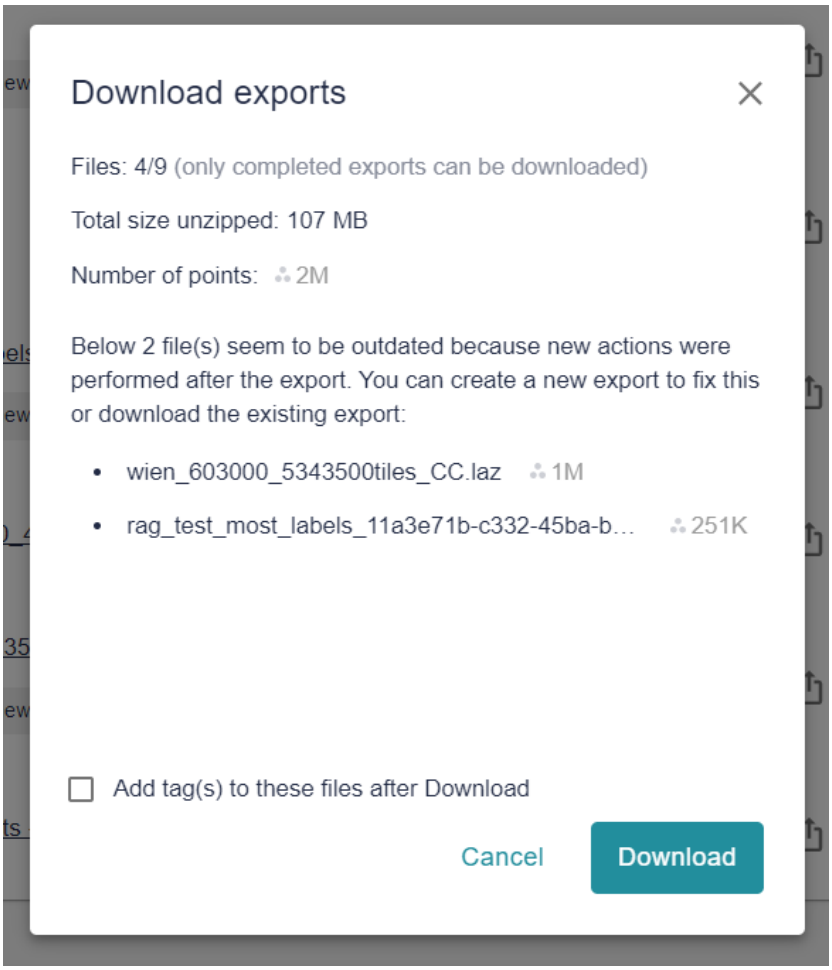
11.1. Bulk Download

This feature allows you to download multiple successfully generated exports files from the same project as one ZIP file.

To download multiple exports simultaneously, you should select the clouds and press **Download Exports** button.



You would notice a separate counter n/N on the button which shows you the number of available exports for download from the chosen list. Only successfully generated export snapshots could be downloaded, exports with statuses *Failed* or *Processing* would be skipped.



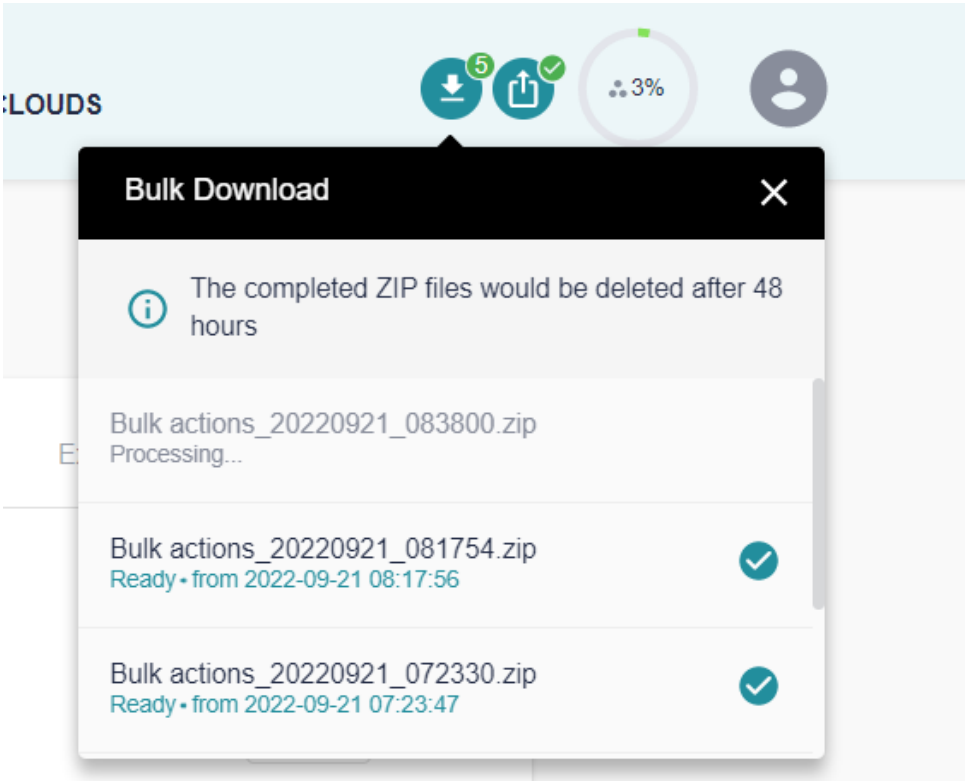
Once Download Exports is pressed, you would see a pop-up with general information about your download: number of files, total size of unzipped files, total number of points, the list of outdated snapshots (if there are any). Export file is considered outdated if:

- the catalog was reassigned
- a class was deleted
- a class ID was updated
- at least one labeling command was canceled or added
- all classifications were deleted

Please note that this list is just to warn you that classification for some export files might not be as expected. You can also uncheck these files in the clouds list to exclude them from the ZIP. Otherwise, the ZIP would contain all successfully generated exports including outdated ones.

Also, you can always tag these clouds to easily identify them later in the project. Just check the checkbox **Add tags** and an appropriate field will appear after you press Download button.

It is important to notice that downloading doesn't start immediately, as first ZIP file should be generated. The processing time depends on the number of clouds and their total size. You can always check the progress in the Download Manager.



The ZIP creation process is independent, so you can close the tab or even the browser, though ZIP generating will still be continued. Once the ZIP file is ready, you can download it by pressing the link which is valid for 48 hours.

12. Multi-User / Project Sharing

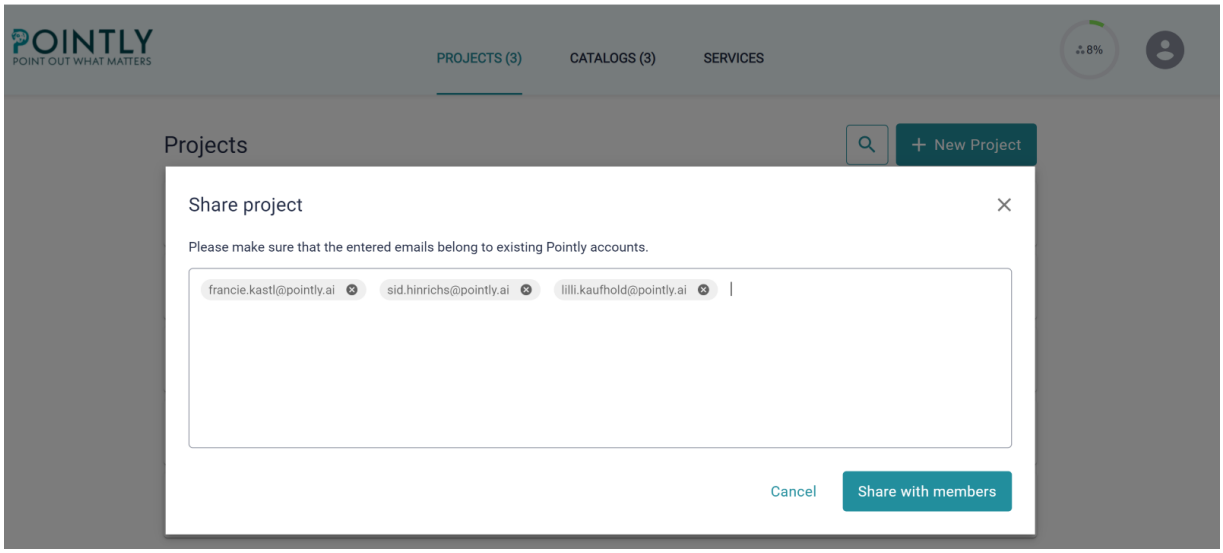
12.1. What can I do with the Professional Account?

With a Professional Account you can share projects with Annotator Accounts or other Professional Accounts.

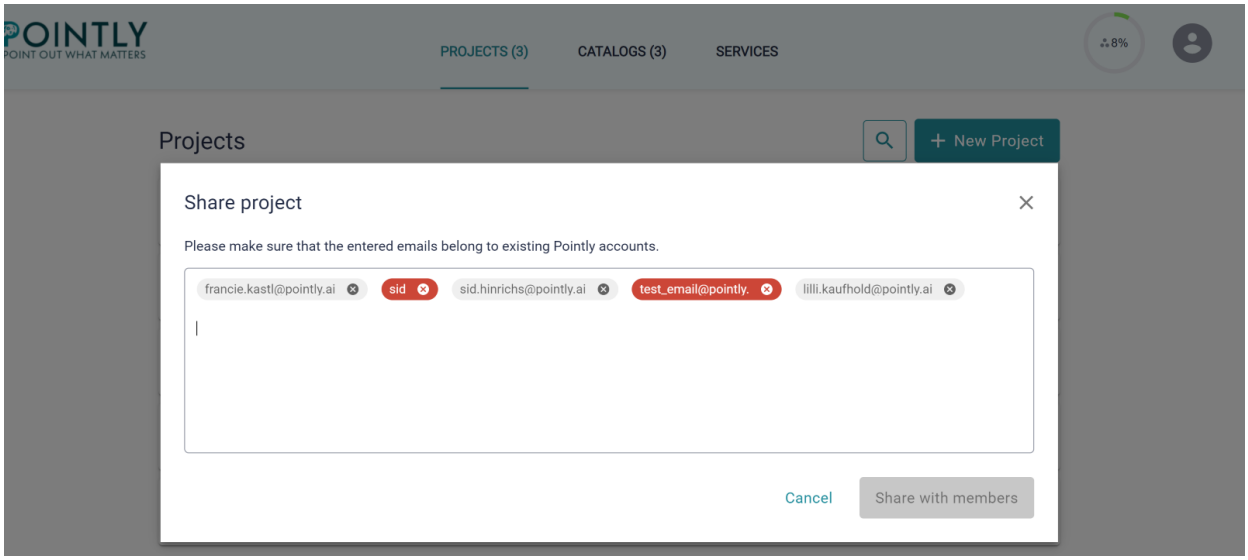
Being a project owner (the person who shares the project) gives you a possibility to manage the project. Keep in mind that only the project owner can rename and delete the project and its clouds, upload new clouds and edit or change the project catalog (label catalog).

12.1.1. Share the project

To share the project simply click the three dots button to open the menu and then click on **Share project**. A pop-up will appear where you can enter or paste emails of the users that you'd like to grant access.

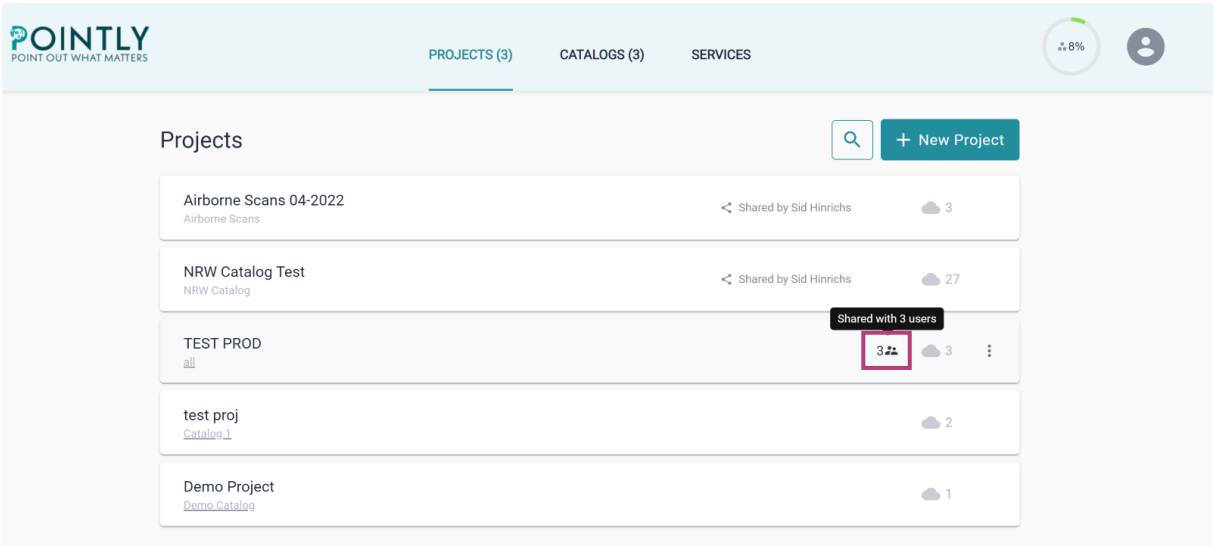


In case there's an incorrect email, it will be highlighted. You need to remove the incorrect email to be able to proceed and share the project. Otherwise, the **Share with members** button will be unavailable.



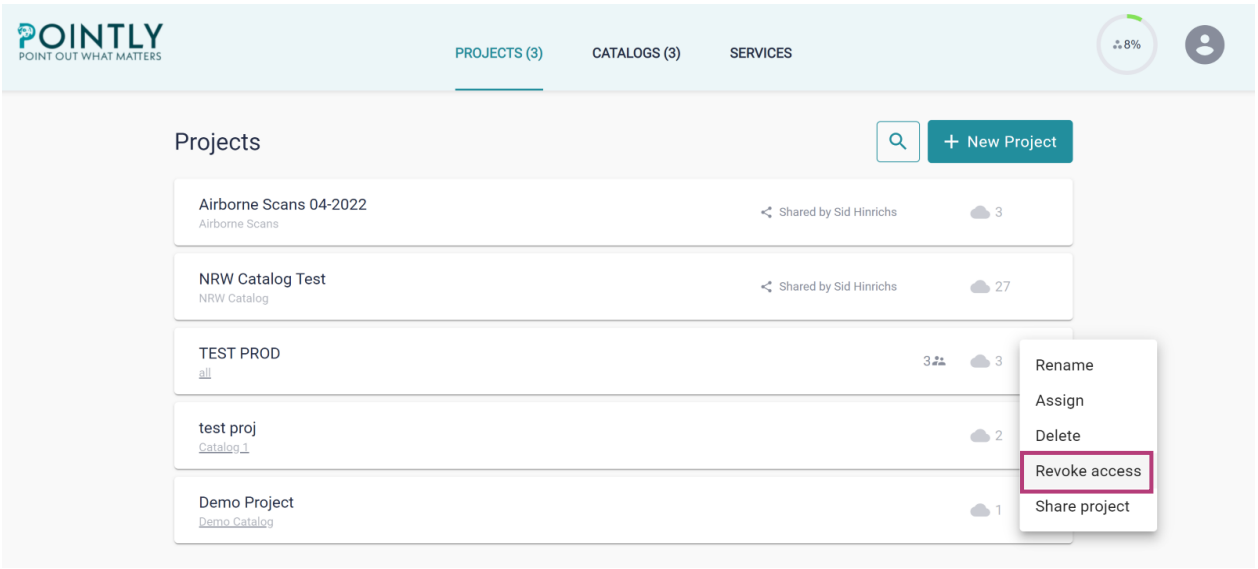
It's worth to mention that the project can only be shared with already registered users. When the project is shared, a new icon will appear that shows the number of shared users. You can click this icon to see the list of accounts that have access to the project. If an email is missing in

the list, make sure that the corresponding Pointly account was already created and that the email was spelled correctly while sharing the project.



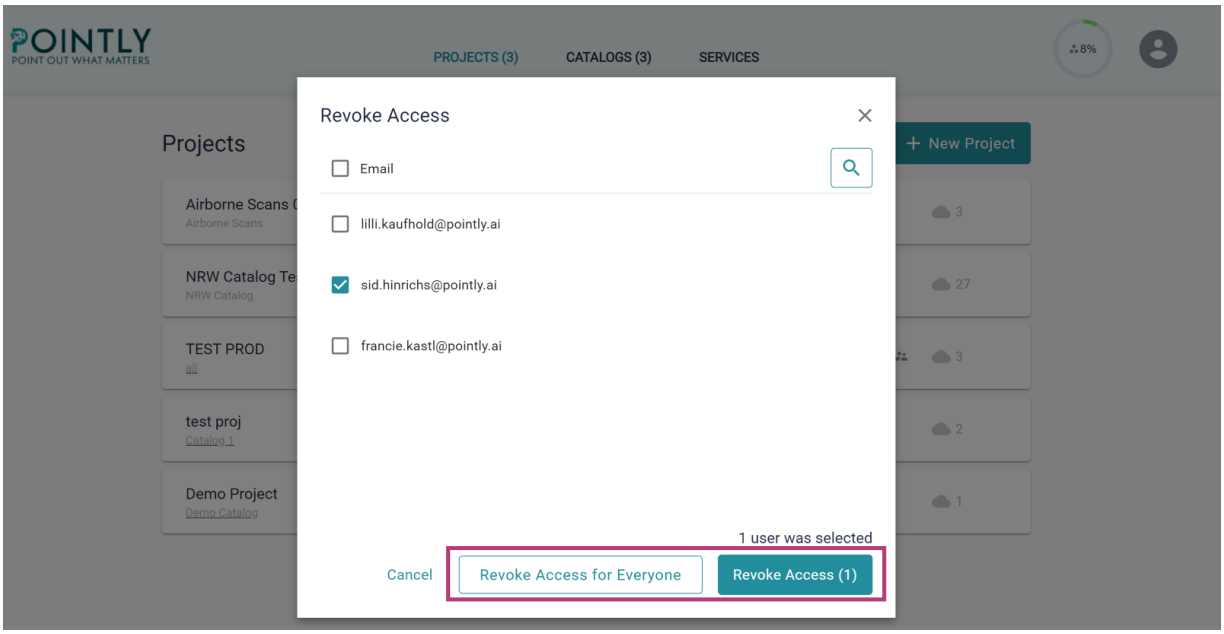
12.1.2. Revoke access

You can easily revoke access for a single or multiple users. To open **Revoke access** pop-up, you can click on three dots and then select the needed option in the menu or simply click on the icon that shows you the number of shared users.

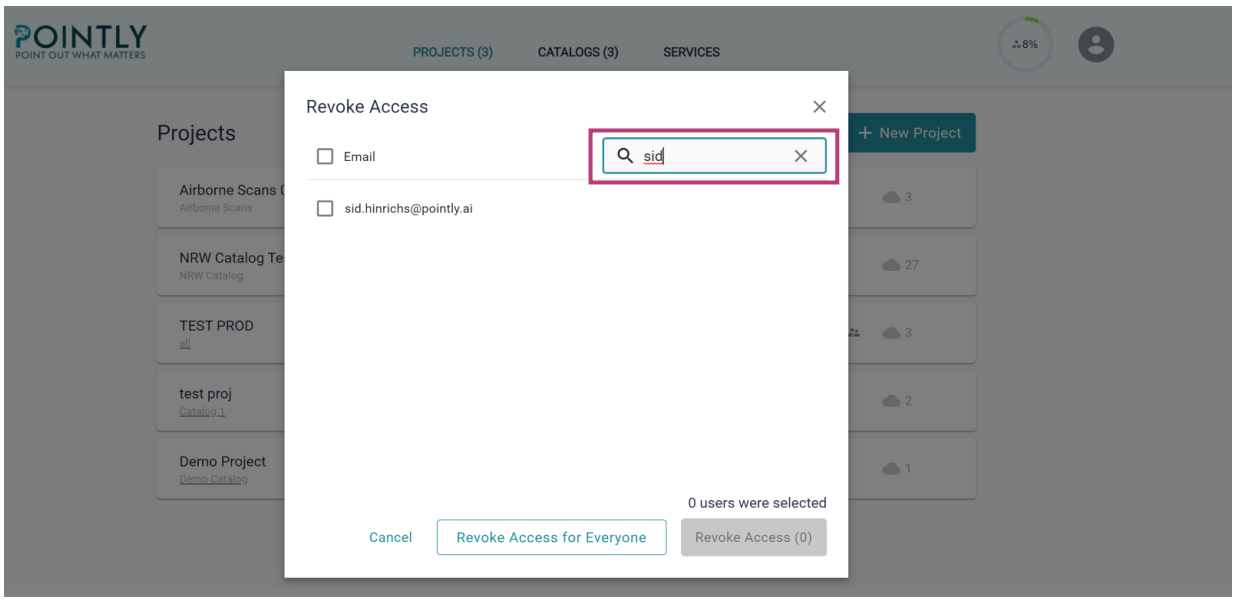


To delete the user from the list you need to select him by checking the appropriate checkbox and then press **Revoke Access**. You can always see the number of selected users above the action buttons.

To revoke access for the whole list at once simply click **Revoke Access For Everyone**.



There is an option to search for a particular email address if the list is too long.



12.2. What can I do with the Annotator Account?

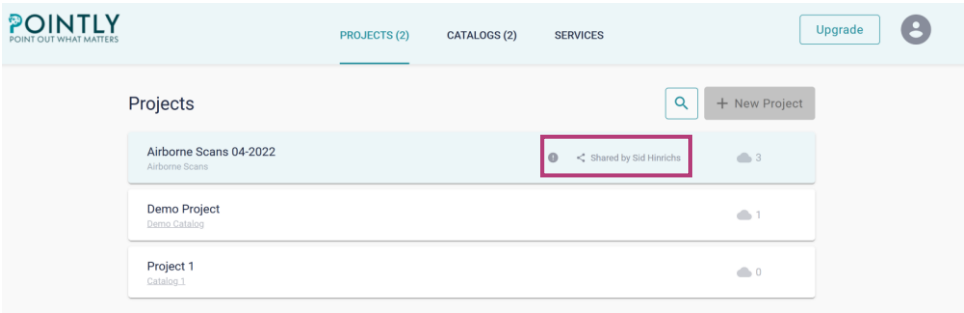
The Annotator Account is only available in combination with a Professional Account (S, M or L). To one Professional Account as many Annotator Accounts as you like can be added.

Annotators can access, view, classify and export point clouds in projects that are shared with them. Also editing tags is possible. As an Annotator you can't upload or delete point clouds and projects. You don't have access to edit the project catalog or see it unless you are in Viewer.

Quick tip: You can give an Annotator Account to your clients to share the projects with them.

Project can be shared with any person that is registered as a Pointly user. Shared projects do not require additional upload or storage space for the shared users.

In case a project was shared with a Free Account, the user won't be able to open the project and edit clouds. The project will still be listed for the user and becomes only available as soon as account is upgraded to Annotator or Professional.

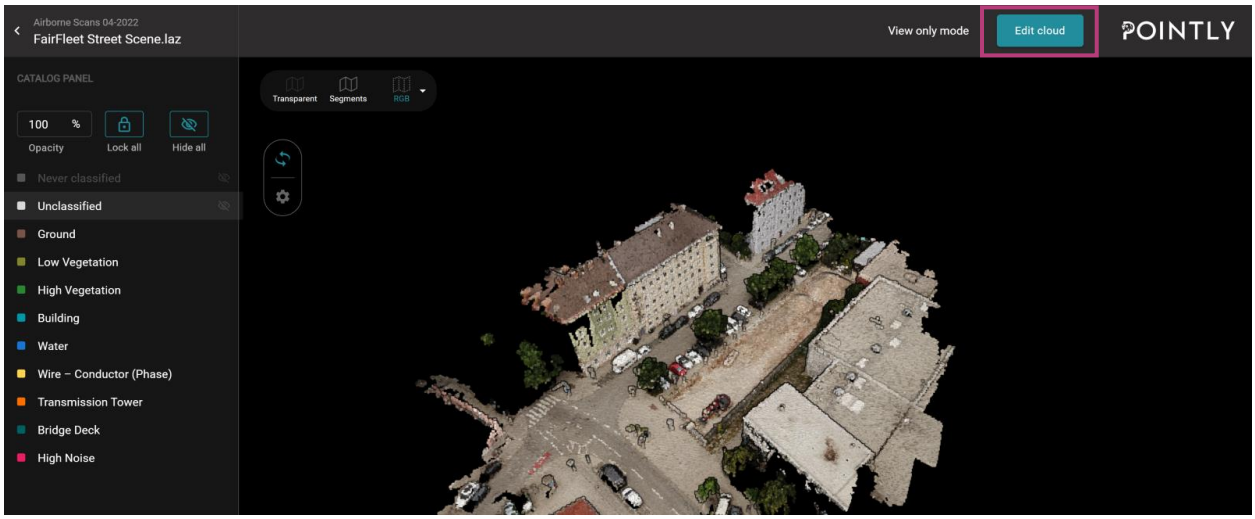


Shared user with appropriate subscription (Annotator Account) can open the projects and see containing point clouds, though such users can't rename or delete items. The class catalog cannot be edited by shared users but only by the project owner.

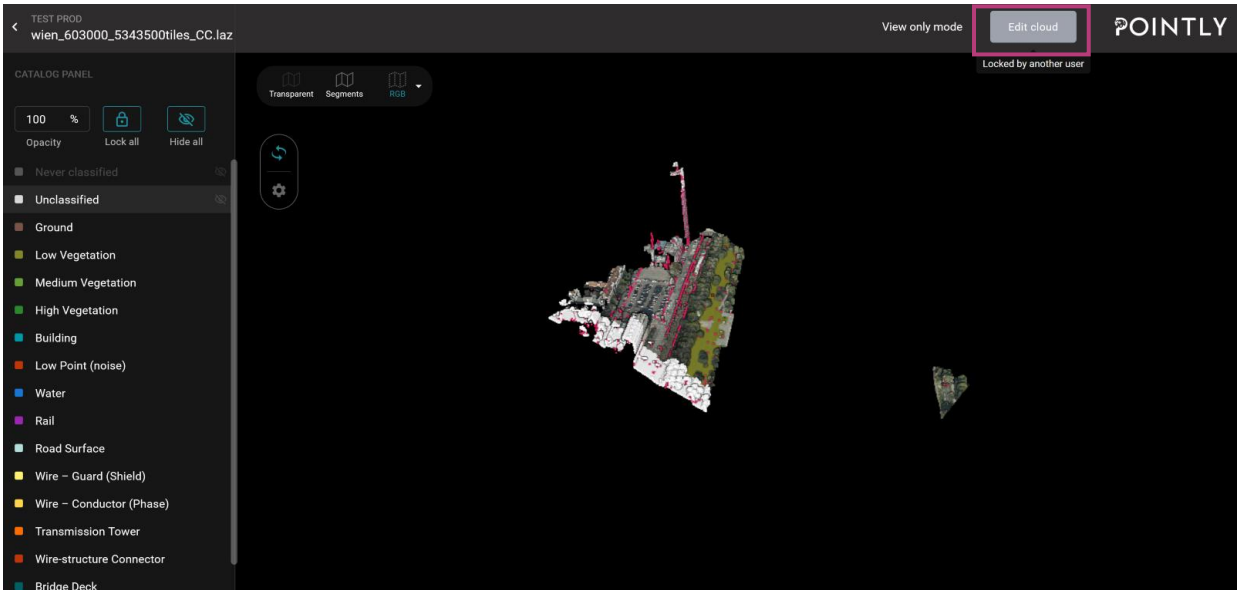
12.3. Editing Mode

Both Project owner and Annotator can edit any cloud in the shared project. There are no restrictions for using tools while you are in the Viewer. Though, only one user at a time can edit

the same cloud. By default, a point cloud is opened in **View-only mode**. To start labeling the file, you need to switch to the editing mode. Just click **Edit cloud** to do that.



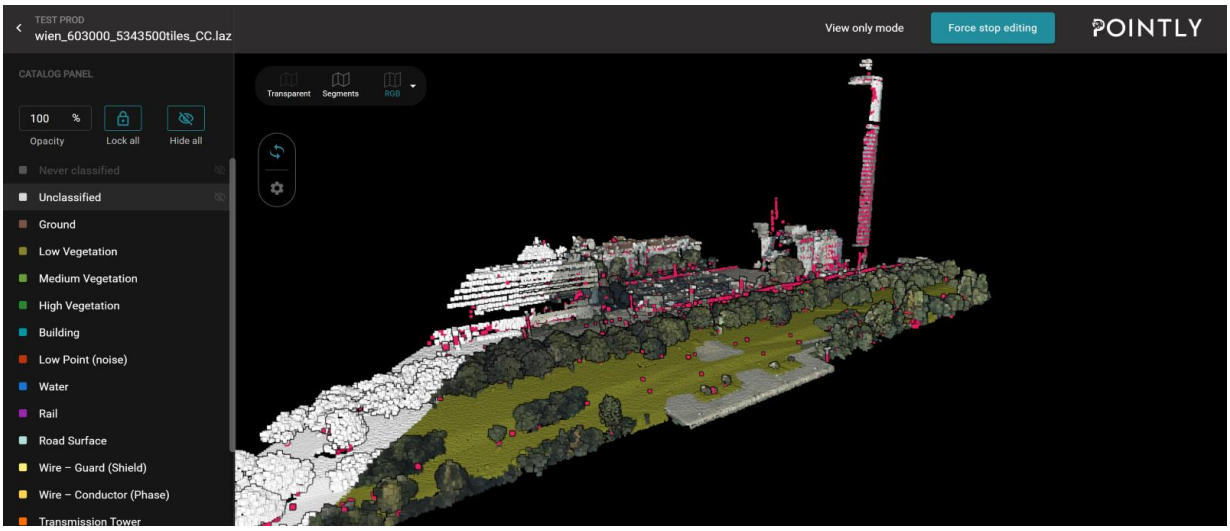
Quick tip: The button is unavailable if someone else is already working with the cloud.



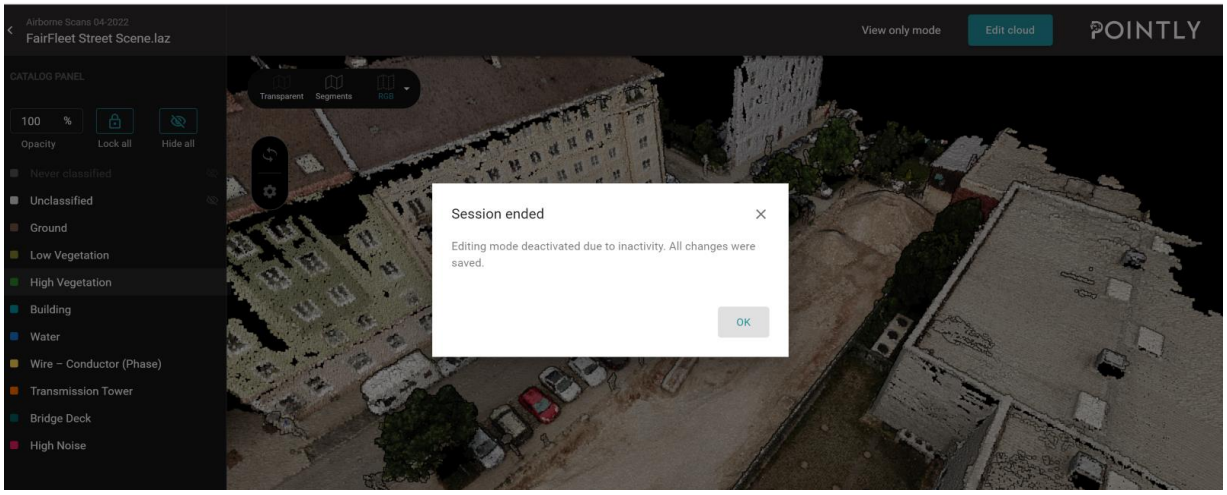
Also, we would highly recommend you click **Finish Editing** every time you're done so that other users could have the ability to edit the cloud as well.

12.4. Force Stop Editing (Project Owner)

The Project owner is the only user who will be able to interrupt another user's editing session. He can use the **Force stop editing** button for every cloud in his projects while another user is in an active editing session.

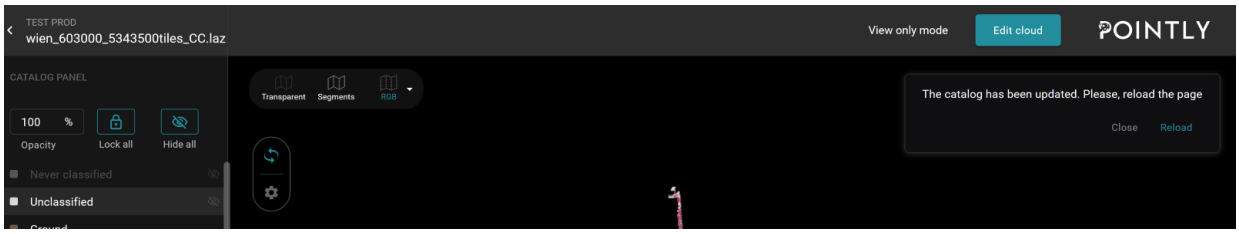


Quick tip: If the user is in editing mode and doesn`t perform any new labeling command for 10 minutes, the session will be ended automatically. A notification will be sent that the session was ended and other shared users can begin working on the point cloud.



12.5. Catalog updates

he Project owner is the only one who can access and manage the project catalog. In case a user is actively working on a point cloud and the corresponding catalog is edited by the project owner, a message will pop up in the viewer. Keep in mind that the notification is only sent for the following changes: After reloading the page, the changes will be applied and newly added classes can be selected for classification.



13. Any Open Questions?

For technical support, software assistance or if you have any feedback for us just contact us at support@pointly.ai