

3.3.1 INSPECTION Web Service

This manual helps the on-site and office personnel who accomplish daily/weekly inspections and check construction site work performance.

360-degree photos help preserve the work's chronology and compare finished work volumes for a certain period.

Initial data

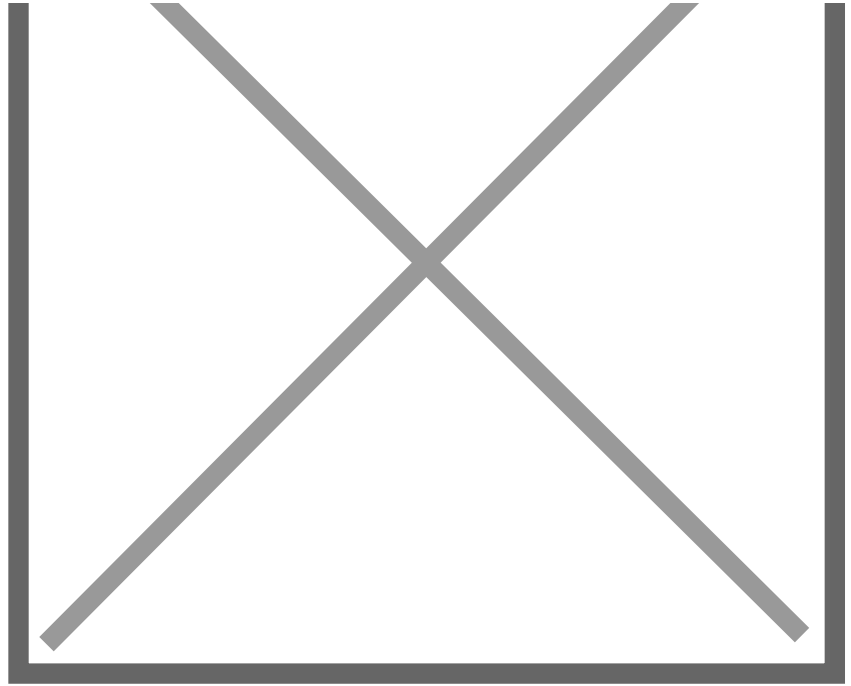
- 360-degree pictures (JPG format)
- Project drawings/plans (JPG/PNG formats)

Tools

- Ricoh Theta or Insta360 cameras
- Monopod, tripod, or hardhat mount

Software

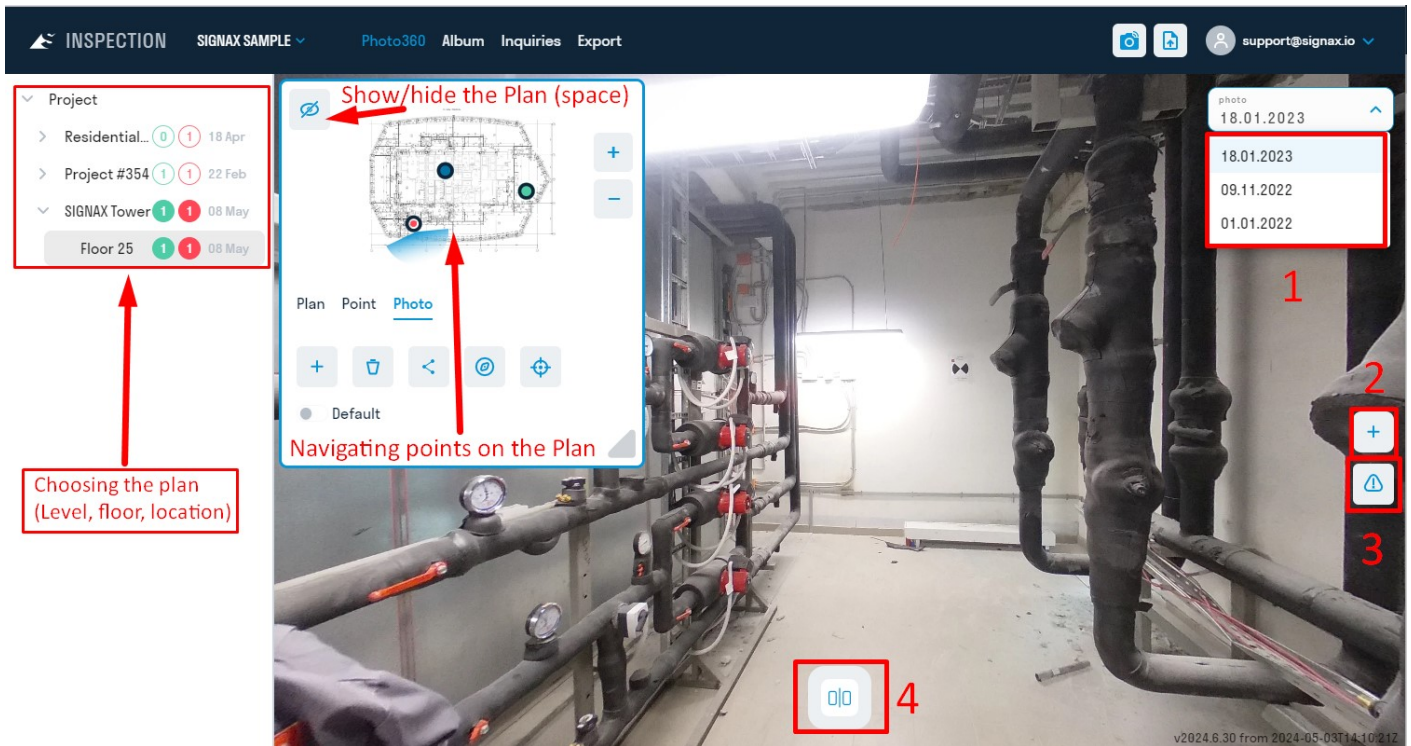
- [SIGNAX INSPECTION](#) web service
- Photomaker mobile apps [iOS app](#) / [Android app](#)



Using the Service to View 360 Photos

INSPECTION users can view photos at pa.signax.io.

User interface



- On the left side of the screen, select a floor plan.
- After it's loaded, you can choose a photo capture point on the plan.
- To adjust the plan area size, click and drag the bottom right corner.
- Press the "space" button on the keyboard to hide or show the plan.

1. Choosing the date of the Photo.


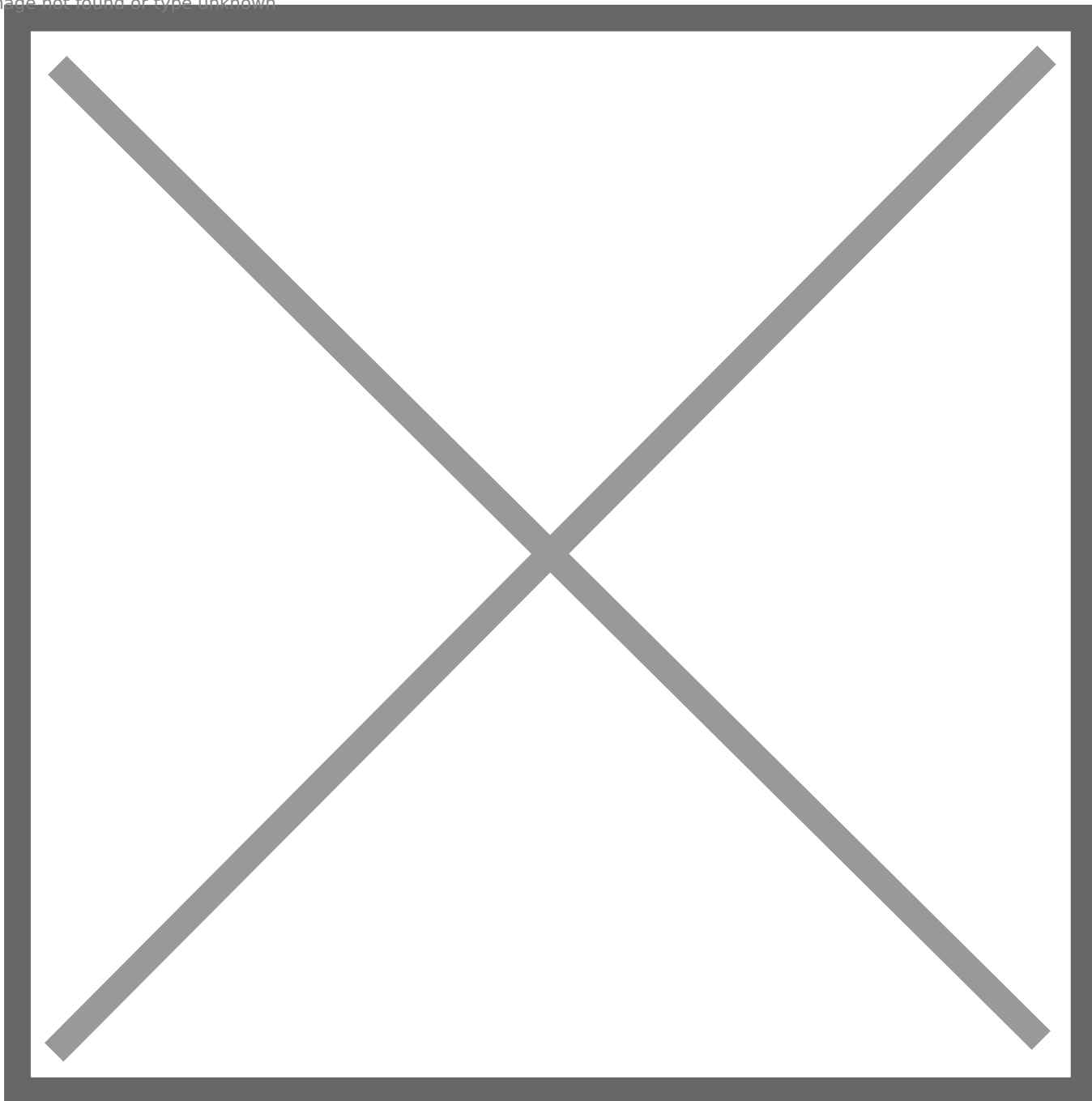








2. Click  to add a comment to the Photo.

Image not found or type unknown



3. Click  to see a list of comments.

Comments							
Name	Description	Date	Status	Link	Location		
MEP issue	Needs to be resol...	03/29/2024 12:00 AM	Open	https://CAFM_link...	SIGNAX Tower/Floor...		
Issue111	wrong materials	11/07/2023 12:00 AM	Open		SIGNAX Tower/Floor...		
Issue 123	Wrong fitting	09/20/2023 12:00 AM	Open	https://accounts.a...	SIGNAX Tower/Floor...		
Issue 54	Inappropriate mat...	05/04/2023 4:32 PM	Open	https://acc.autod...	Residential compl...		
MEP Works project...	Risk of failing the ...	04/19/2023 2:57 PM	Open	https://acc.autod...	SIGNAX Tower/Floor...		

You can export all comments as an XLSX file with a location and other details.


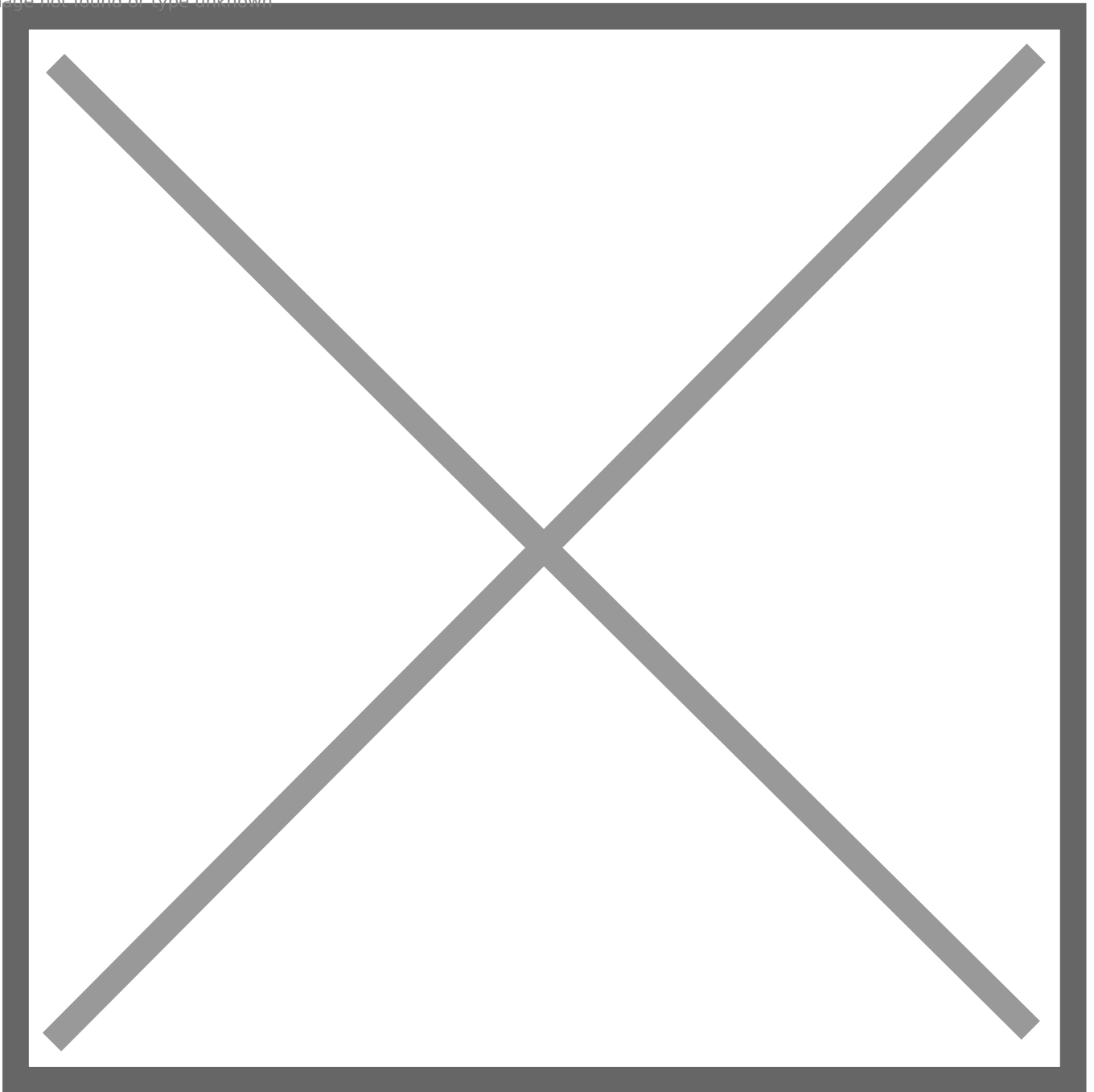
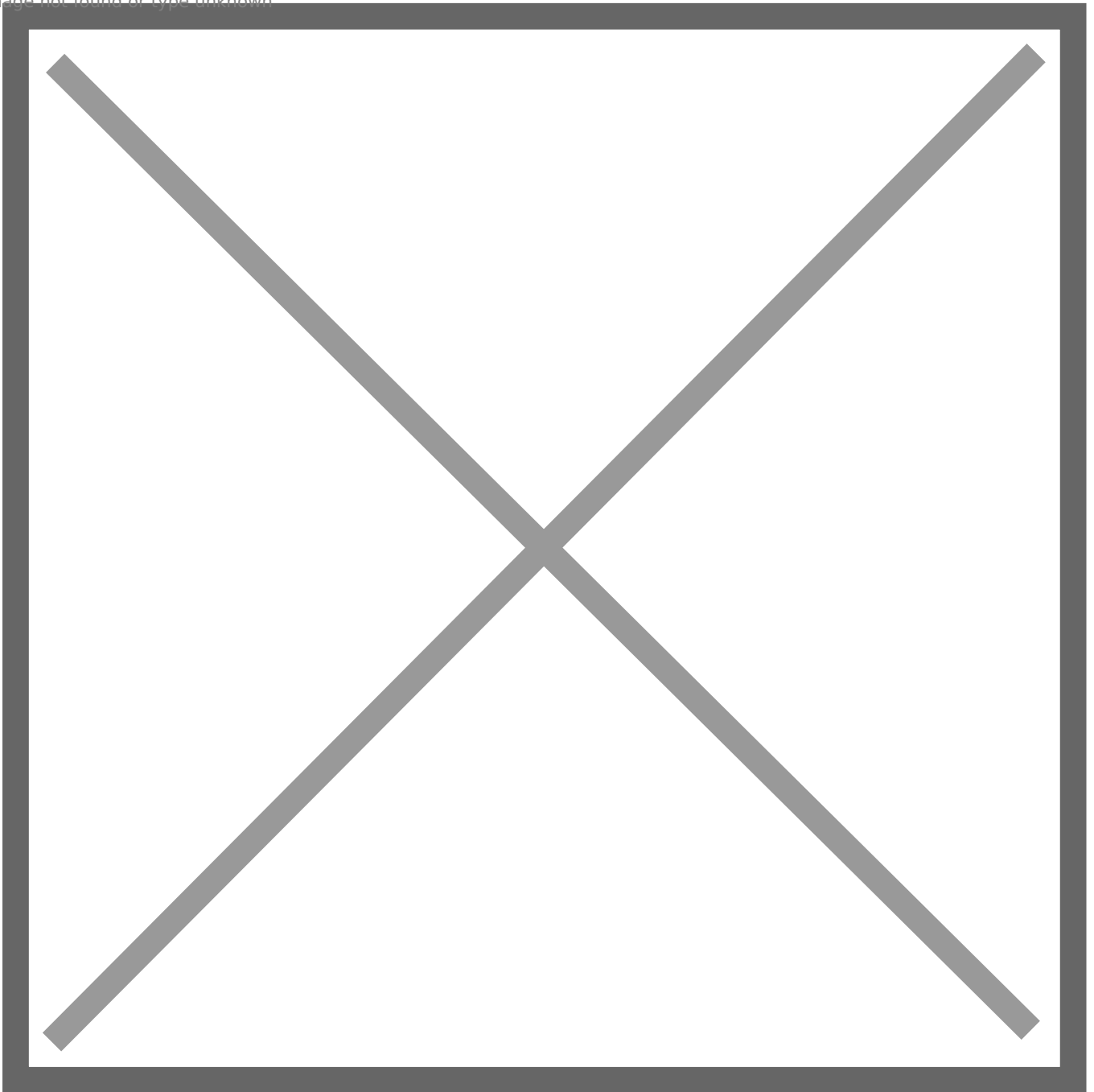
4. Click  to compare photos to different dates.

Image not found or type unknown



You can also compare photo-360 with a model. For this opportunity produce panoramic images of the planned construction from various viewpoints within the model in Navisworks. You must use our plugin, SIGNAX TOOLS, to export the required BIM model panoramic images with one button. These model-generated panoramas serve as a benchmark for progress and quality control.

Image not found or type unknown



By comparing these model panoramas with actual field panoramas, we can visually identify differences between the planned and the current construction status. This comparison is crucial for detecting deviations early and addressing them rapidly, ensuring that the project adheres to its specifications.

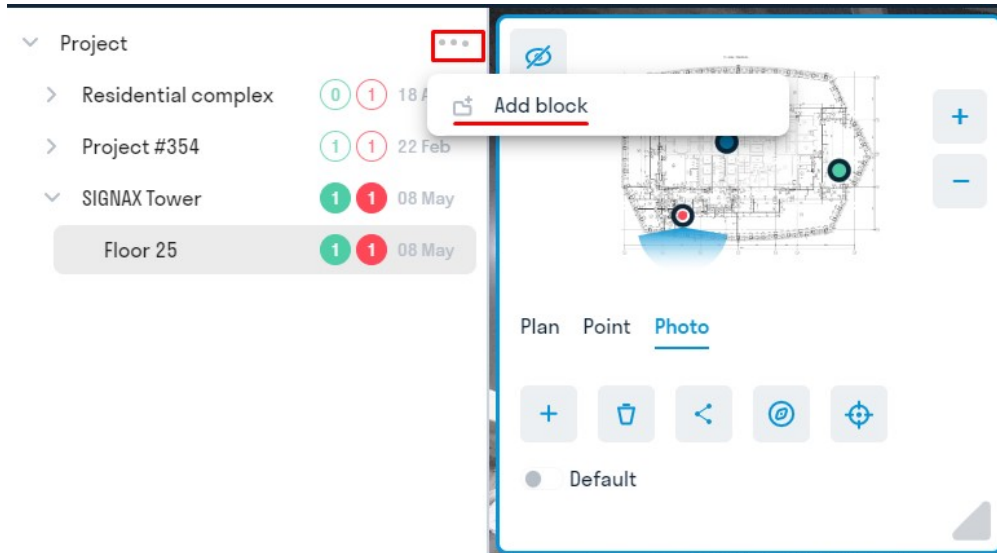
Project Administration

[Project administration](#) is done at pa.signax.io. The Administrator can access project and plan creation, photo uploads, album creation, statistics export, project settings, and more.

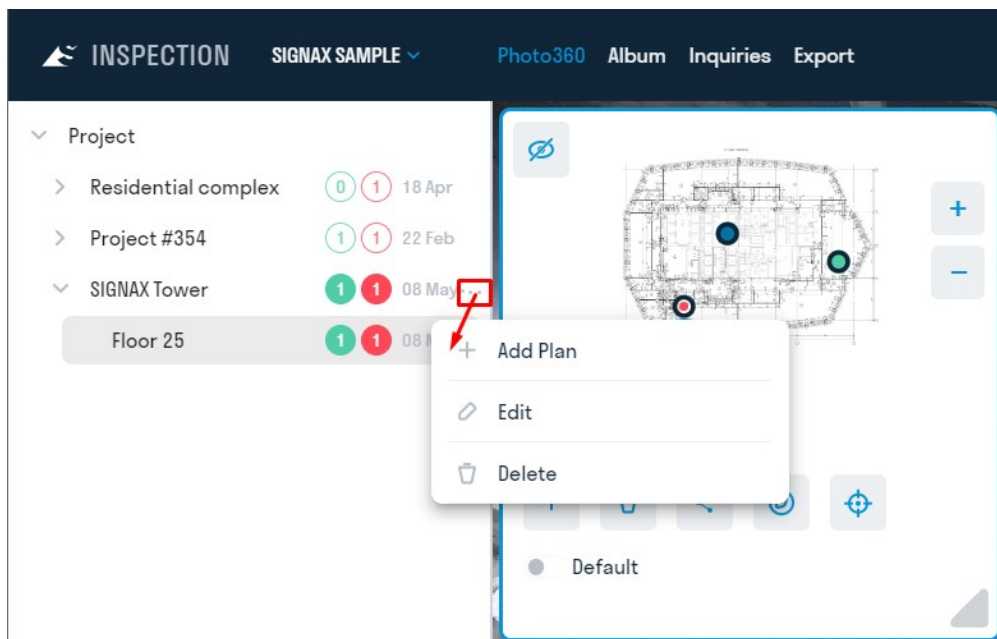
Creating Plans

The Project structure consists of blocks (buildings, sections, structures, etc.) and plans (floors, levels, locations) with points and photos.

1. To create a block, click the three dots next to "Project" ➤ "Add Block."



2. To create a plan, click the three dots next to the "Block" ➤ "Add Plan."



Enter the plan's name in the open window, such as "Floor 1," and upload the plan image in PNG, JPEG, or WEBP format.

Create plan

×

Title

Image. Maximum 25 MiB
PNG, JPEG, WEBP

CANCEL

SAVE


If plans are saved in PDF, they need to be converted using online services

(e.g., <https://pdf.io/pdf2jpg/> or <https://smallpdf.com/en/pdf-to-jpg>) or the STDU Viewer program.

3. Add the remaining blocks and floors similarly.

Setting Up Plans.

To define the north direction for a plan, go to the "PLAN" tab, move the slider to set the correct north orientation

( indicated by "N"), and then click  "Set Azimuth."

INSPECTION

SIGNAX SAMPLE

Photo360

Album

Inquiries

Export

Project

Residential complex

01

18 Apr

Project #354

11

22 Feb

SIGNAX Tower


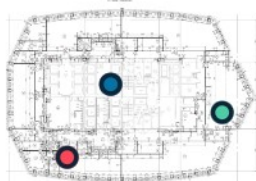

11

08 May

Floor 25

11

08 May



+

-

Plan

Point

Photo

Creating Points

1. There are two methods to create a Point:

Method 1: Hold down the CTRL key on your keyboard and click the left mouse button in the desired area of the plan.

INSPECTION

SIGNAX SAMPLE

Photo360

Album

Inquiries

Export

Project

Residential complex

01

18 Apr

Project #354

11

22 Feb

SIGNAX Tower

11


08 May

Floor 25

11

08 May

Ctrl+click



Plan

Point

Photo

INSPECTION

SIGNAX SAMPLE

Photo360

Album

Inquiries

Export

Project

Residential complex

01

18 Apr

Project #354

11

22 Feb

SIGNAX Tower

11

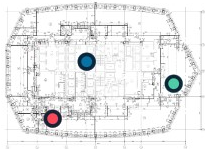
08 May

Floor 25

11

08 May

Point



Plan

Point

Photo

appear on the plan. Choose the location for

INSPECTION

SIGNAX SAMPLE

Photo360

Album

Inquiries

Export

Project

Residential complex

01

18 Apr

Project #354

11

22 Feb

SIGNAX Tower

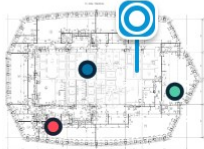
11

08 May

Floor 25

11

08 May

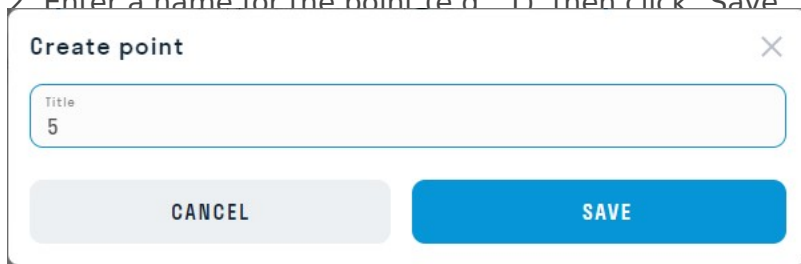


Plan

Point

Photo

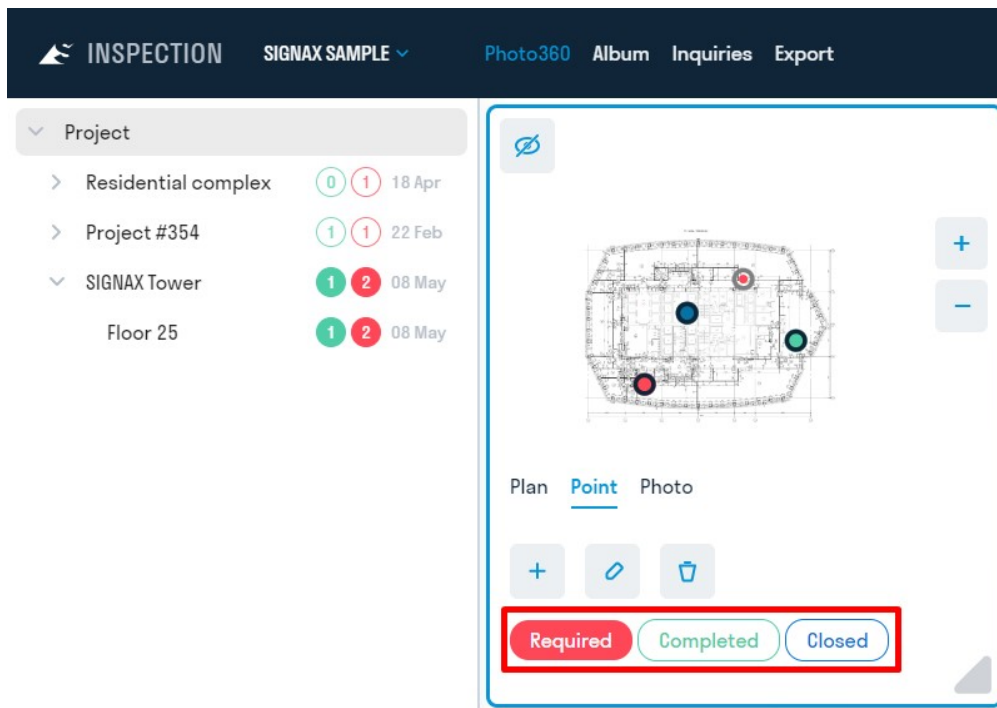
2 Enter a name for the point (e.g. 1) then click "Save ". The point will appear on the plan.

A dialog box titled "Create point" with a close button (X) in the top right corner. It contains a text input field labeled "Title" with the number "5" entered. Below the input field are two buttons: "CANCEL" and "SAVE".

Configuring Points

After creating a point, the point settings will be enabled in the "POINT" tab.

Assigning Point Status



Points can be assigned one of three statuses:

- **Required:** A red point. This point needs a photograph.
- **Completed:** A green point. A photograph has been uploaded this week.
- **Finished:** A blue point. No further photographs are needed here.

Statuses help the Digital engineer identify which points need attention on the site.

Recommendation: Configure the automatic reset of the status from "Completed" to "Required" on a specified day of the week so that the Digital Engineer receives up-to-date information about point statuses during project synchronization. For more details, see ["Project Settings."](#)

Example of Working with Point Statuses

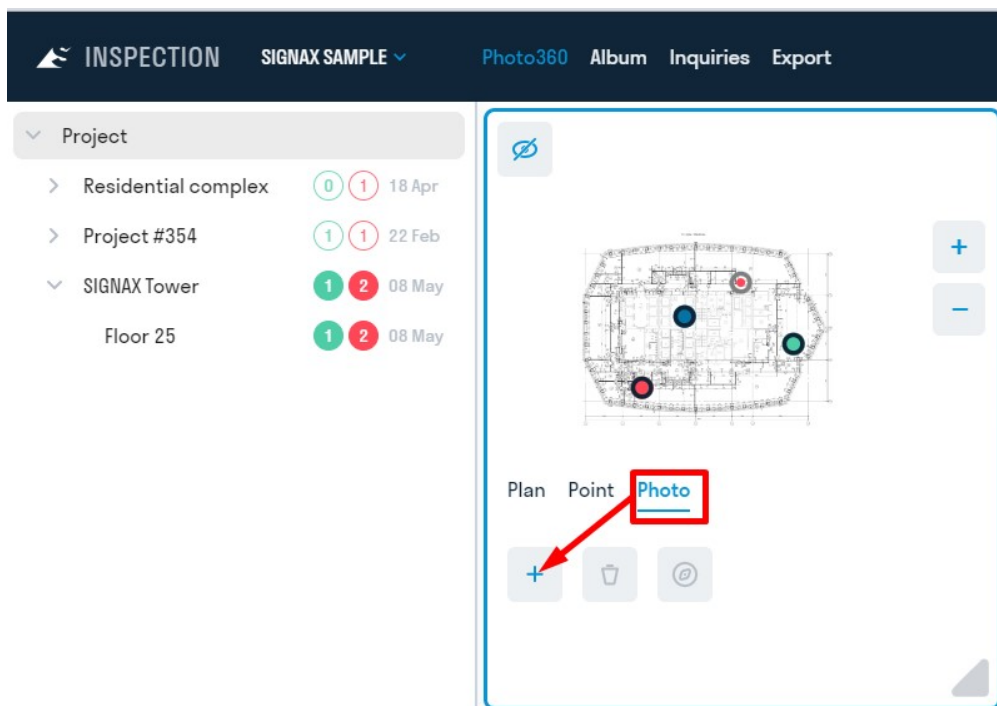
Initially, points are created with the "Required" status. The Digital engineer (photomaker) arrives at the site, synchronizes with the Photomaker app, and receives the points that must be visited. Once the engineer has taken a photo at the point, the point's status changes to "Completed" and turns green, simplifying the search and highlighting the points not yet completed. After covering the entire site, the engineer uploads the photos to the SIGNAX INSPECTION service. If "status change" is enabled in the project settings, the points in the INSPECTION service will change status from "Required" to "Completed."

Then, the scope engineer, QA/QC engineer, and project manager review the photos, provide comments, and add new points. It's recommended that the project automatically reset the point status from "Completed" back to "Required" before the photomaker's next visit. This way, the photomaker will receive the most up-to-date information on point statuses after synchronization.

Uploading Photos

Typically, photos are automatically uploaded through the SIGNAX Photomaker app after each Digital Engineer inspection. However, there are cases where 360-degree photos can be added manually (e.g., when uploading 360-degree photos taken by a drone).

1. To add a photo, select a point, go to the "PHOTO" tab, and click "Add."



2. In the window that appears, choose the Photo's creation date and upload the Photo itself in PNG, JPEG, or WEBP format. Also, select the photo type: ordinary or 360-degree. Click "Save."

Add photo

Date of creation

08.05.2024

Image. Maximum 25 MiB

PNG, JPEG, WEBP

PHOTO TYPE

☐ ORDINARY

☒ PHOTO360

CANCEL

SAVE

Photos added can be viewed in chronological order.

The screenshot displays the SIGNAX mobile application interface. At the top, a dark navigation bar contains the 'INSPECTION' logo, a 'SIGNAX SAMPLE' dropdown menu, and links for 'Photo360', 'Album', 'Inquiries', and 'Export'. On the right side of the navigation bar are icons for camera, document, and user profile, with the email 'support@signax.io' displayed next to the user icon.

On the left side, a 'Project' sidebar lists the following hierarchy:

- Project
 - Residential complex
 - Project #354
 - SIGNAX Tower
 - Floor 25

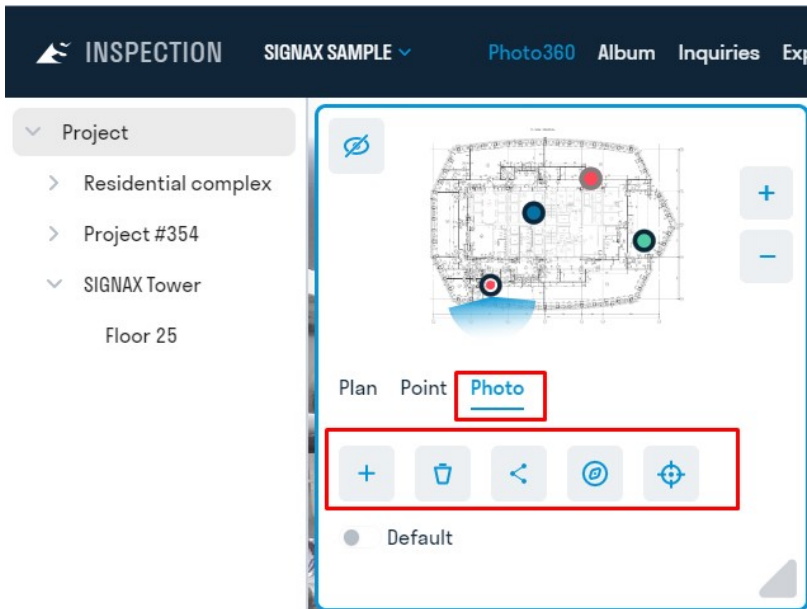
The main content area is split into two sections. The top section features a blue-bordered map of a building floor plan with three red location markers and zoom controls (+, -, and a compass icon). The bottom section shows a live video feed of a mechanical room with complex piping and valves. A red-bordered overlay on the right side of the video feed displays a photo history list:

- photo 18.01.2023 (with an upward arrow icon)
- 18.01.2023
- 09.11.2022
- 01.01.2022


At the bottom right of the video feed, there are two icons: a plus sign (+) and a warning triangle (⚠). A version string 'v2024.6.30 from 2024-05-03T14:10:21Z' is visible in the bottom right corner of the video frame.

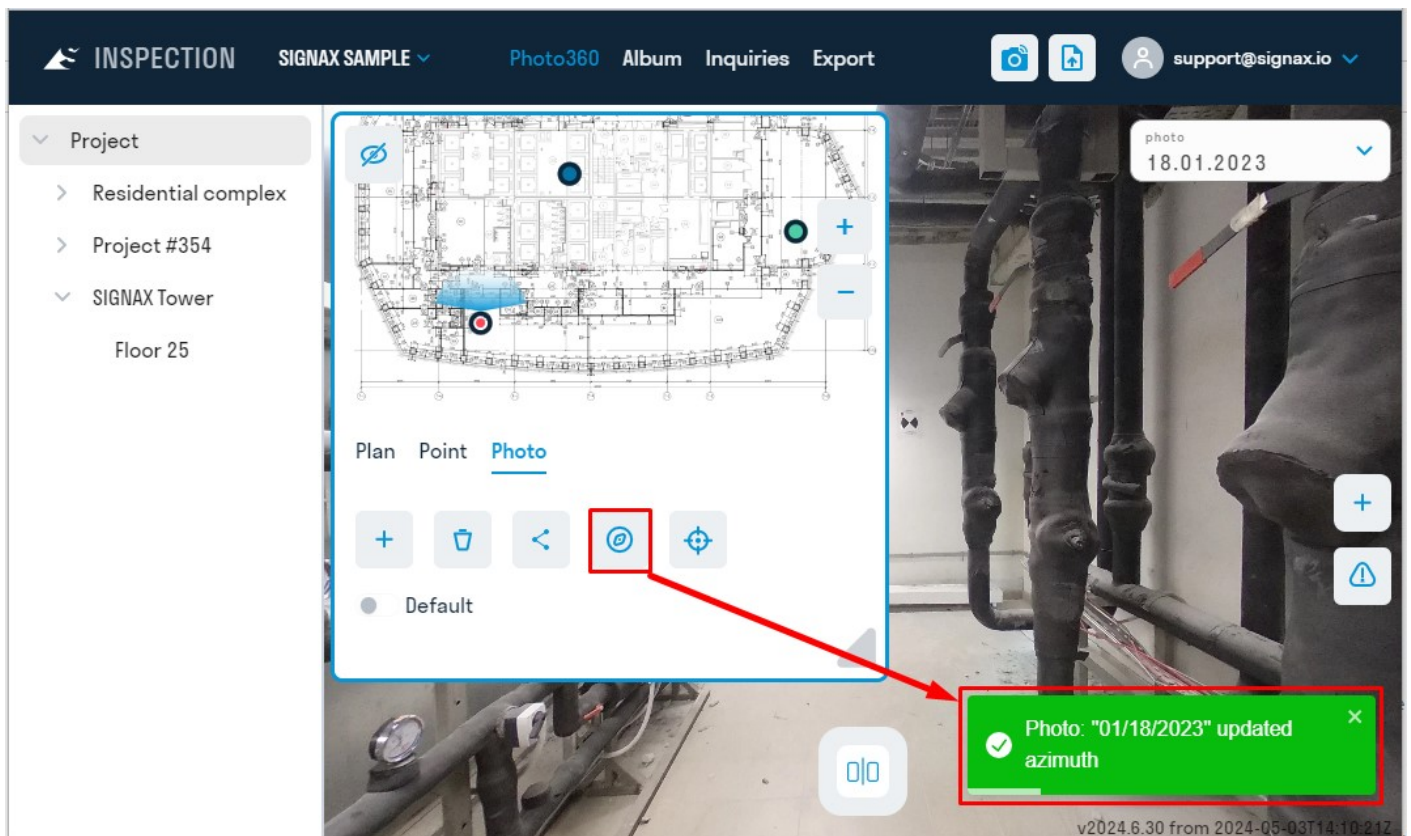
Configuring Photos

After adding a photo, the photo settings on the "PHOTO" tab become active.



Setting the Azimuth

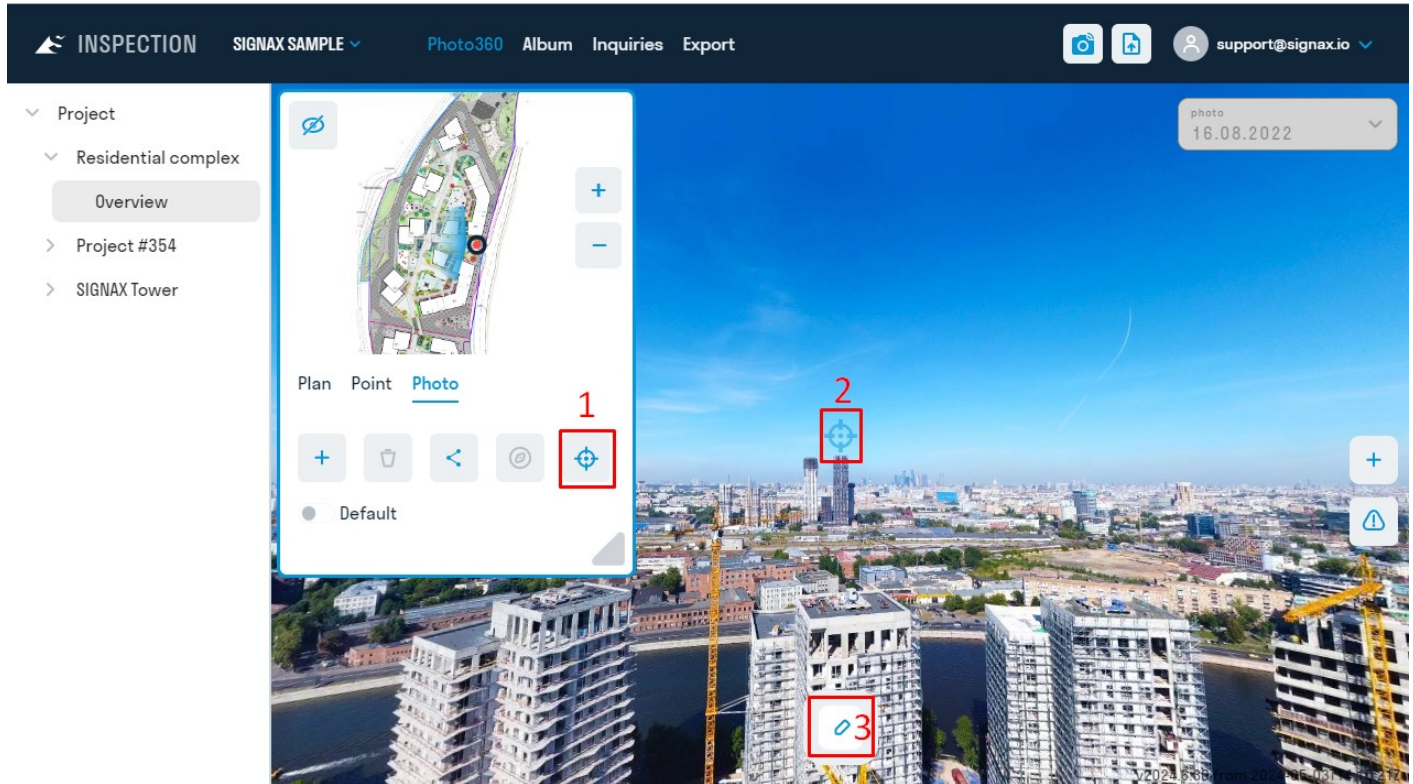
To align the Photo's direction relative to the plan, rotate the Photo to face north, then click  "Set Azimuth."



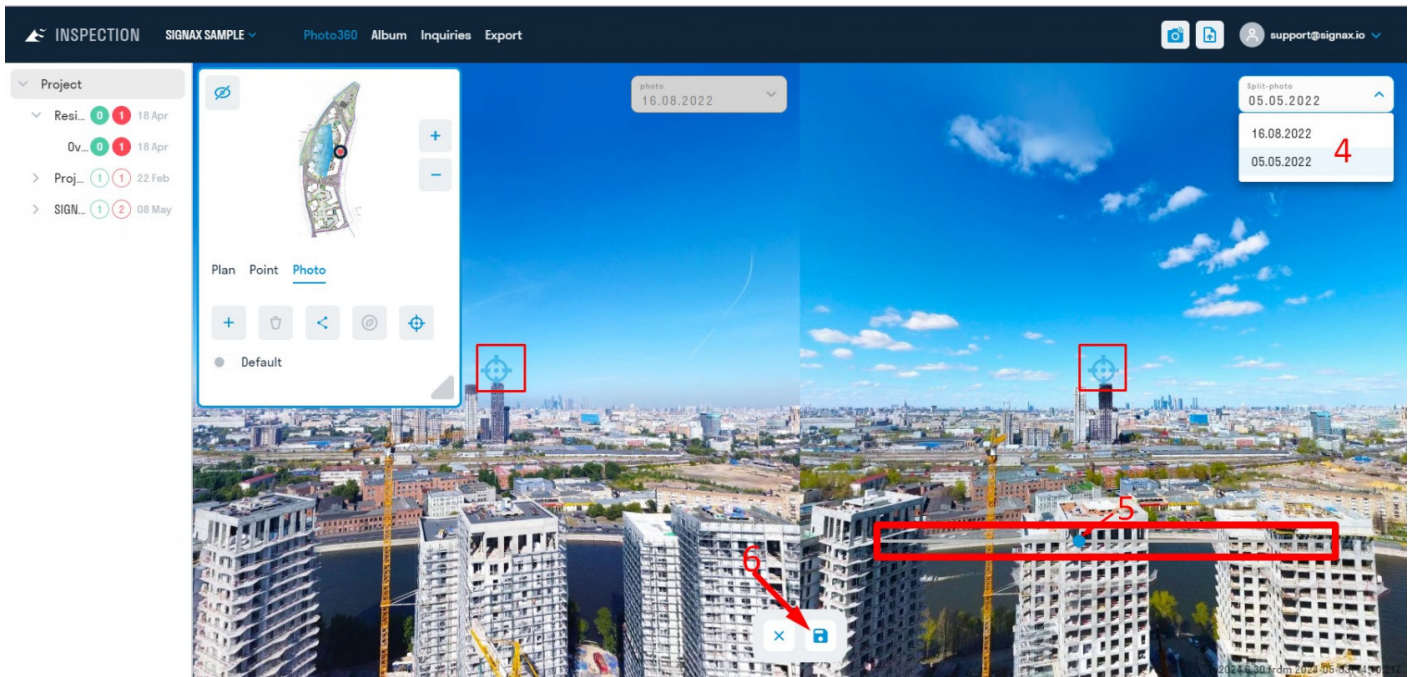
Setting the Azimuth Using Photo Alignment

Alignment is used to set the Photo's azimuth based on another photo, for instance, with drone shots in open areas where finding north each time can be challenging.

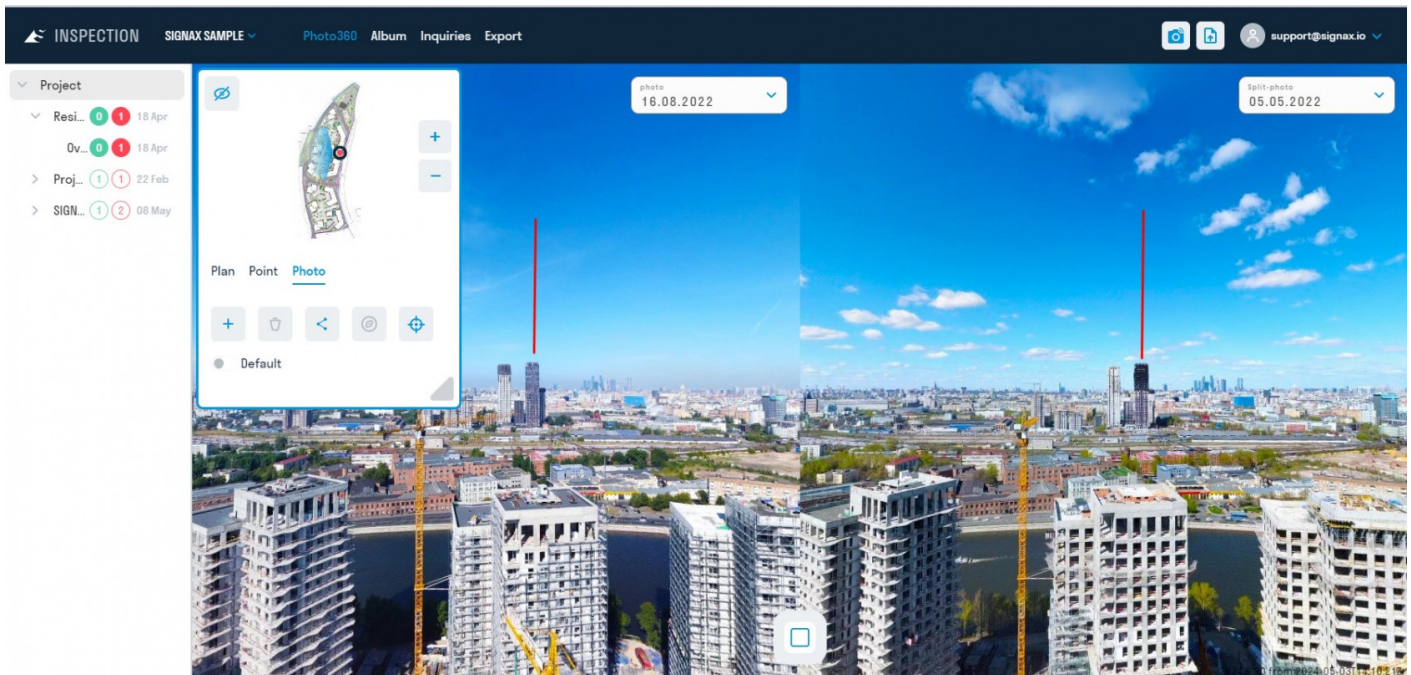
1. Select the Photo you want to align with and click "Align."
2. Use the sight on the Photo to aim at a static object that will remain consistent between photos, such as a building.
3. Click "Select Reference Photo."



4. On the right, you'll see the reference photo that will be used to align the left Photo. By default, the previous Photo in the list is chosen, but you can select a different one from the list.
5. Use the slider to aim the sight on the right Photo toward the same object.
6. Click "Save."



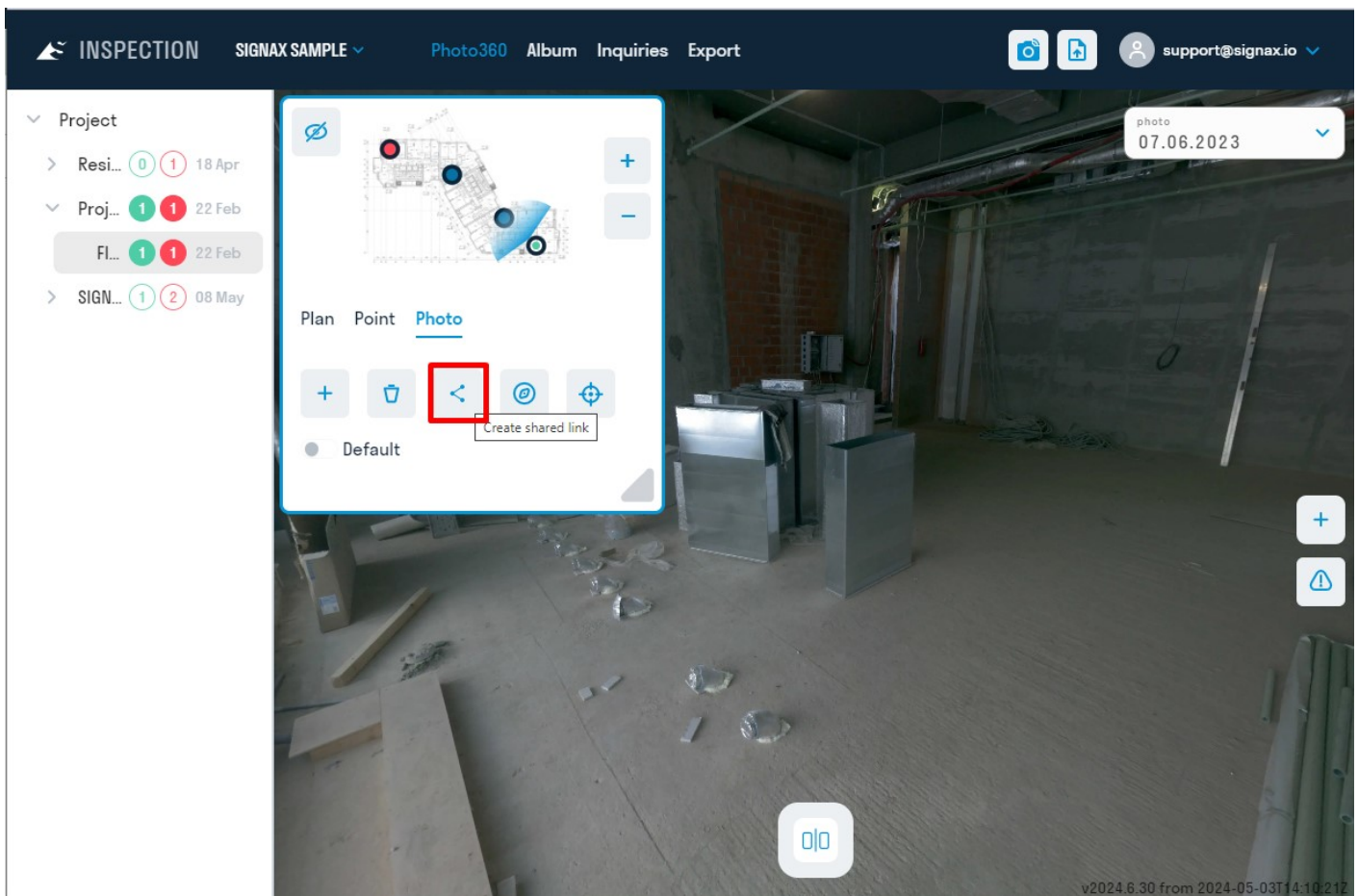
7. The left Photo will match the reference photo's orientation, ensuring both are aligned northward.



Creating Photo Links

Links can be shared for a specific photo to be used, for instance, by construction control specialists for comments or by the sales department to send 360-degree photos of an apartment under construction to a customer.

1. Select a photo and, in the "PHOTO" tab, click "Create Link."



2. Enter a name for the link and click "Save." The link will be copied to the clipboard and saved in the "Public Photo List."


Create shared link

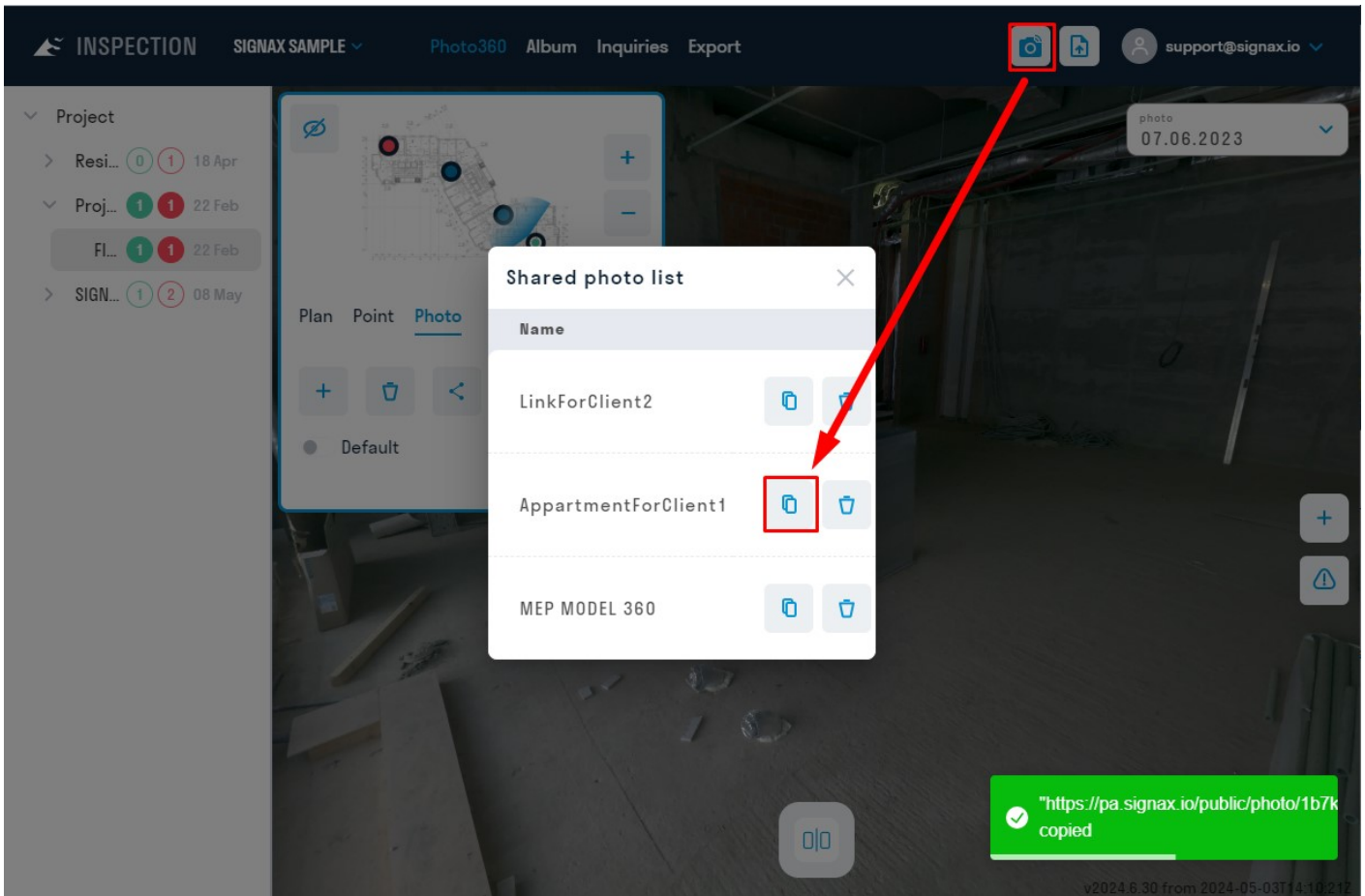
Name

AppartmentForClient1

CANCEL

SAVE

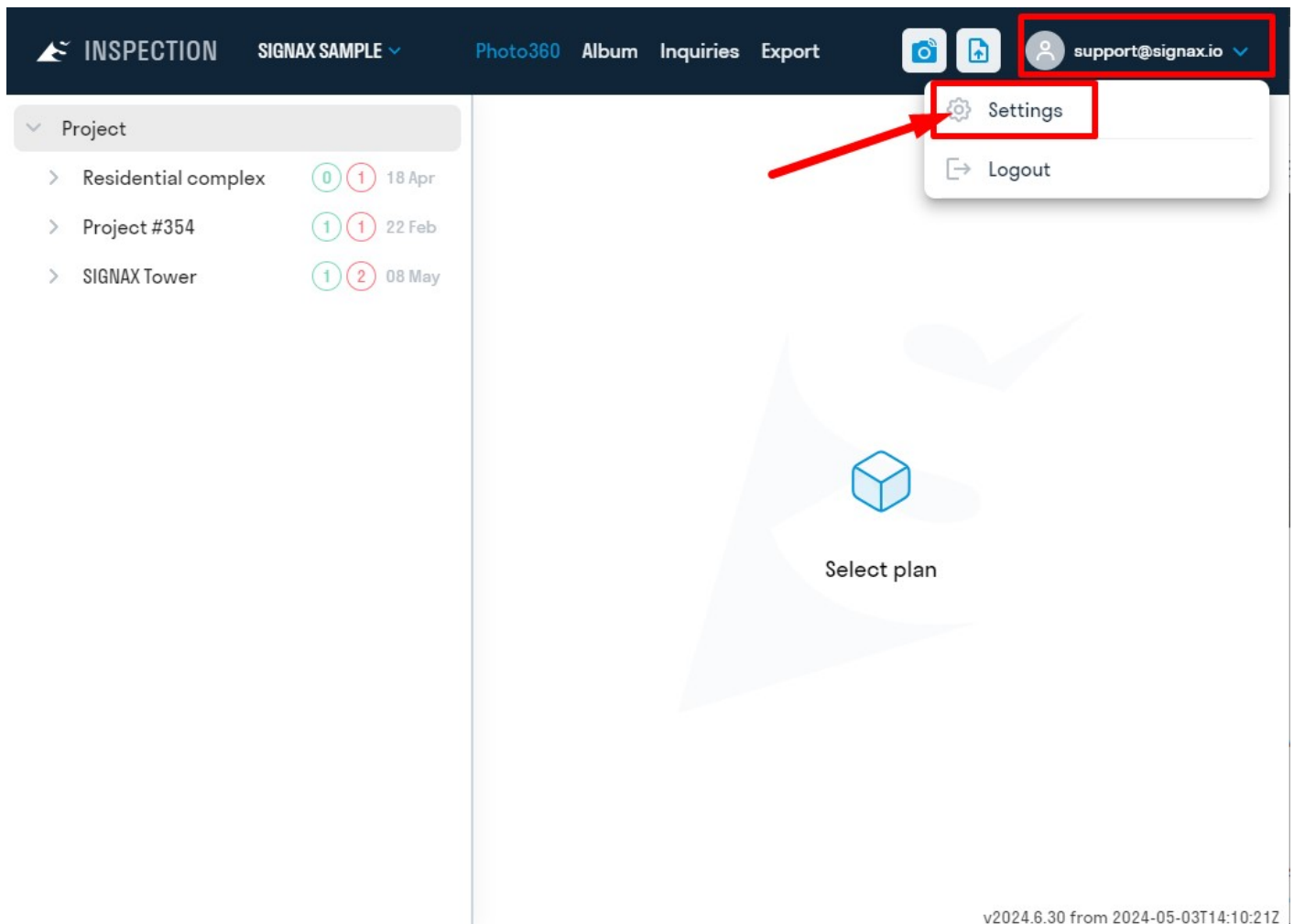
3. All created links are stored in the "Public Photo List." To access them, Click the "Photo Links" button  and copy the link.



Project Settings

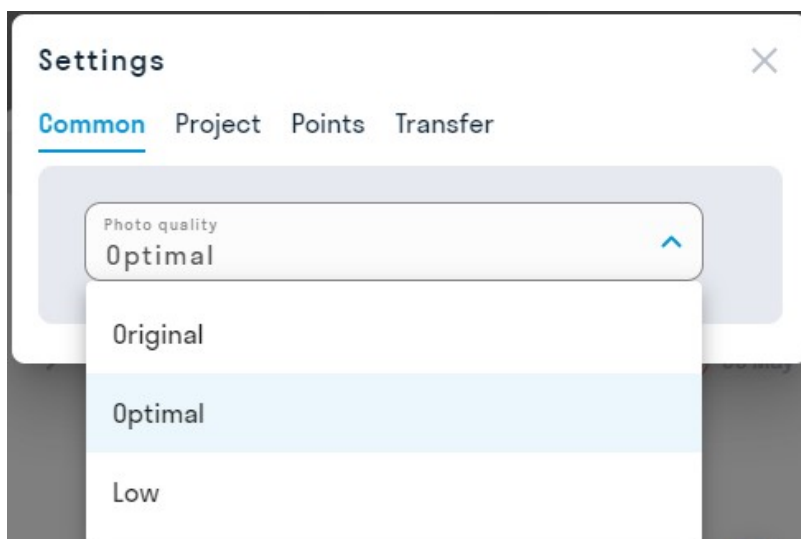
Project configuration is done by the user to ensure convenient and efficient work on each project, with the ability to customize parameters flexibly.

Click on your Profile icon and go to Settings.



Common

This tab allows you to change the image quality. A higher resolution means the Photo will take longer to open.



Project

Settings

×

Common

Project

Points

Transfer

Auto publish photo mode

Change status to "Completed" when a new photo appears at the point

- Auto-publishing Photos adds newly uploaded photos directly to the album.
- Change Status to "Completed" when a new photo appears at a point that allows the point's status to change from "Required" to "Completed" once a photo is uploaded. If tracking completed photos is necessary, keep this toggle enabled. It's also recommended that the automatic status reset from "Completed" to "Required" be enabled so the photomaker receives accurate status information during project synchronization.

Points

Settings

×

Common

Project

Points

Transfer

Day of week

Monday

▼

Time

12:00

▼

+

RESET NOW

*UTC time

Day of week	Time *UTC	Last run	Last run processed	Next run	
Monday	12:00	-	0	05/13/2024 4:00 PM	🗑️

This setting changes the status of all project points from "Completed" to "Required" according to a set schedule. The status reset helps the Digital Engineer (photomaker) receive up-to-date status information after synchronizing with the project. Typically, the photomaker only needs to visit the site once weekly, so it's advisable to reset statuses before each visit.

- To schedule status resets, select the weekday and time in UTC from the drop-down menus, then click the "+" button. A form will appear below, showing the Day and Time of the reset, the last reset date, how many points had their status changed, and the next reset.
- If you need to reset statuses immediately instead of following a schedule, click "Reset Now."

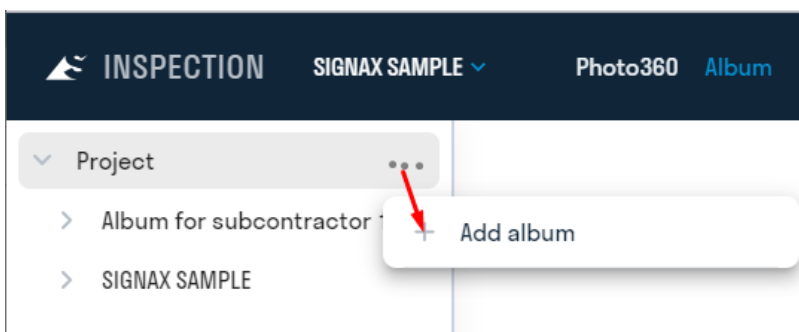
Albums

Albums are managed at pa.signax.io in the "Album" section.

Albums contain selected and approved photos that can be shared with developers and embedded via `<iframe>`. No SIGNAX INSPECTION license is needed to view a published album.

Creating an Album

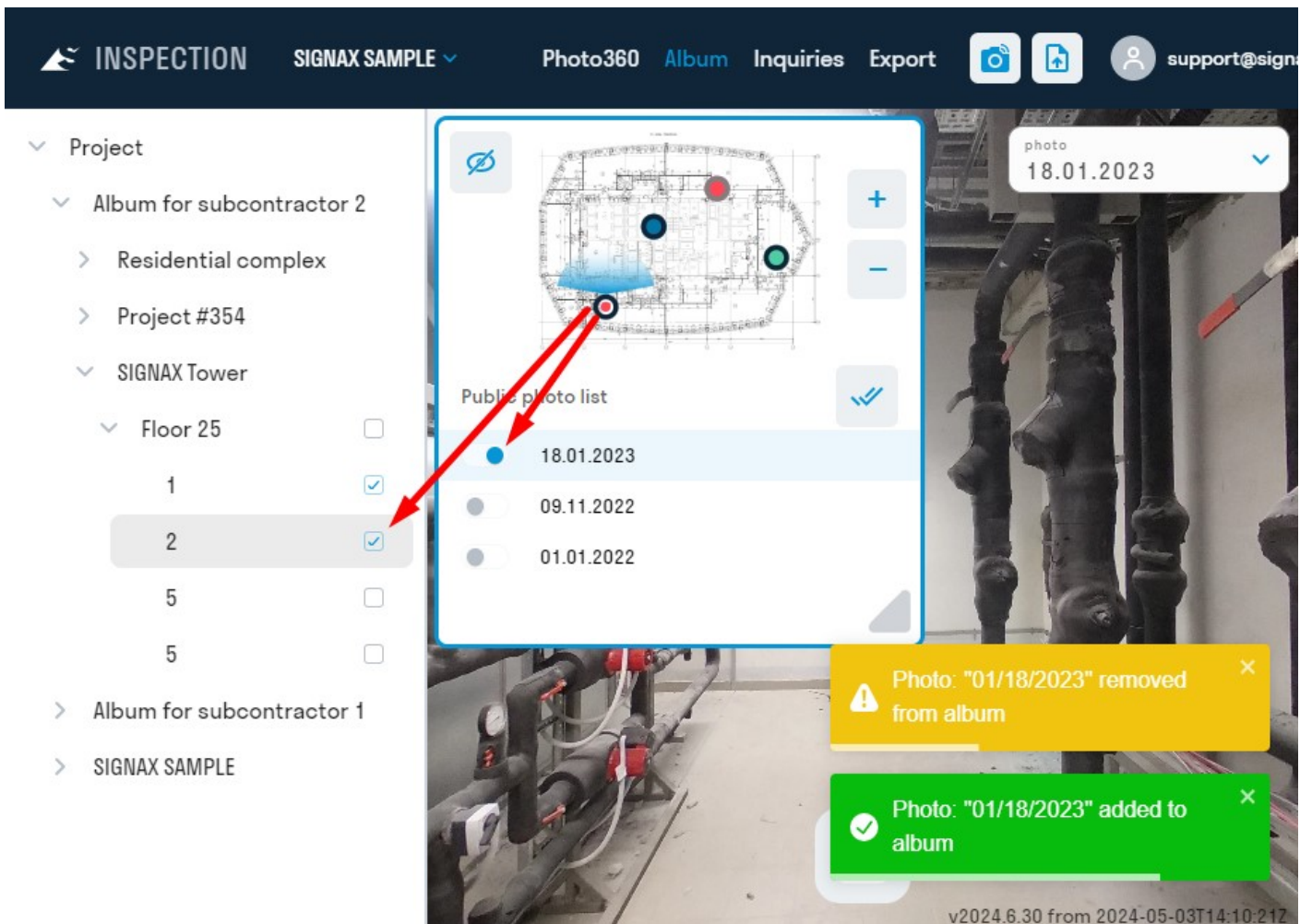
1. Go to the "Album" section.
2. To create an album, click the three dots next to "Entire Object" ► "Add Album."




3. Enter the album's name and the developer's domain (optional), for instance, <https://www.hub.signax.io>, where the album will be used. If there are multiple domains, list each on a new line. The domain is specified to prevent the album link from being copied from `<iframe>` on the developer's site and inserted into an unauthorized site.

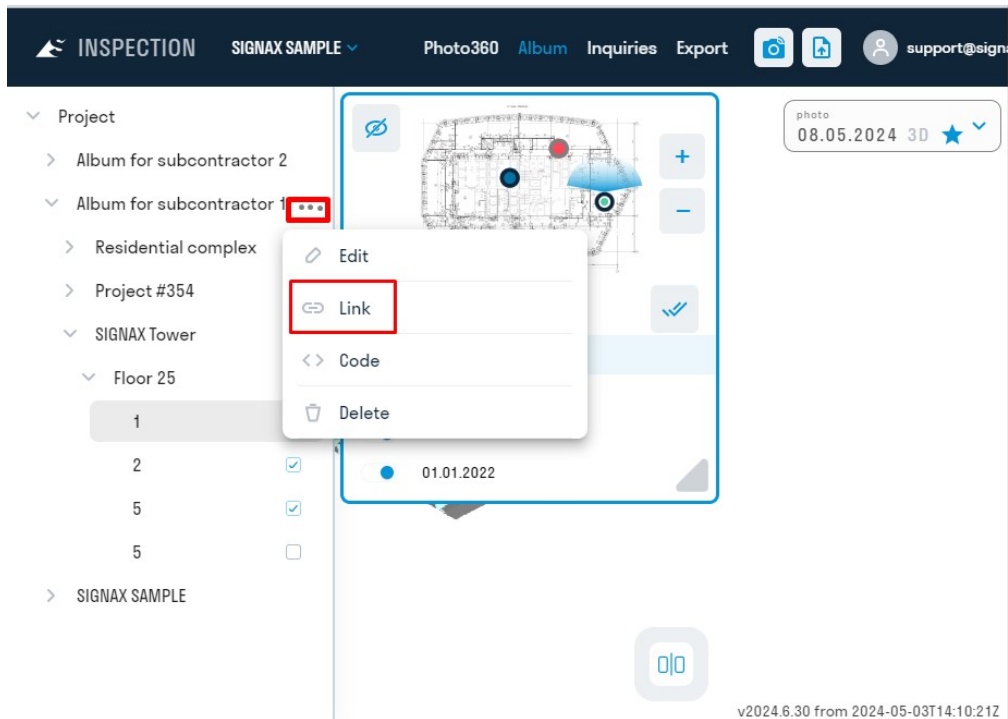
A screenshot of the 'Create Album' dialog box. The dialog has a title bar with 'Create Album' and a close button (X). Inside, there is a 'Name' input field containing the text 'Album for subcontractor 2'. Below it is a 'Domain list' text area. At the bottom of the dialog are two buttons: 'CANCEL' and 'SAVE'.

4. An empty album will be created, showing the entire object structure with all plans, points, and photos.
5. Fill the album with photos by checking the boxes next to the plans or points to include. For each selected point, use the toggle to add photos to the album.

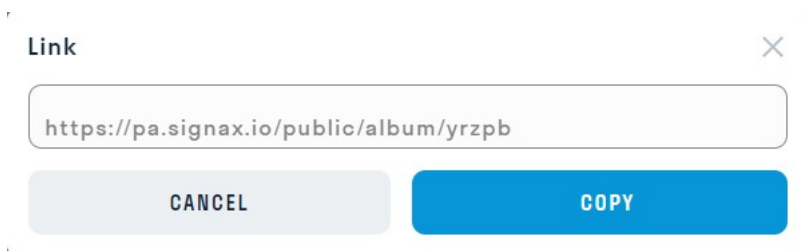


-  Adds all photos at the selected point to the album.
- Automatic album photo addition can be enabled in the project settings on the "Project" tab.

6. To share the album, click the three dots next to the album name and select ► "Link."



A window will open with a link to the published album that can be sent to the customer.



7. The customer will see only the plans, points, and photos you've selected and nothing extra.

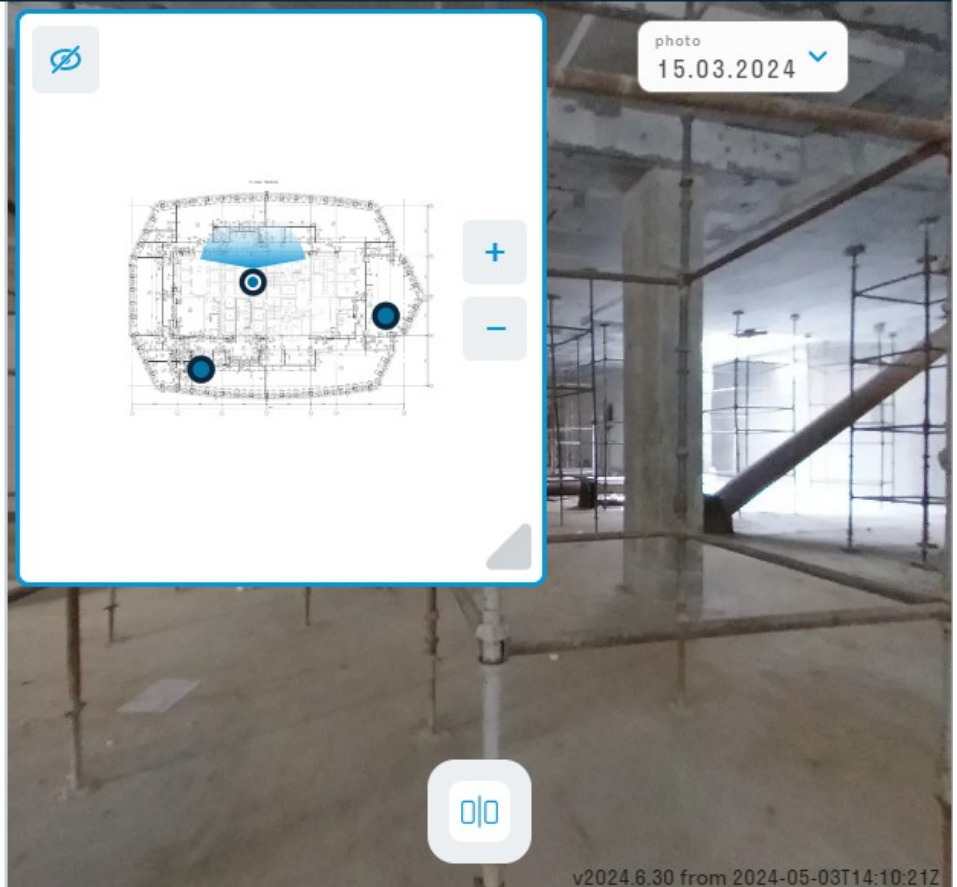
▼ Project

> Project #354

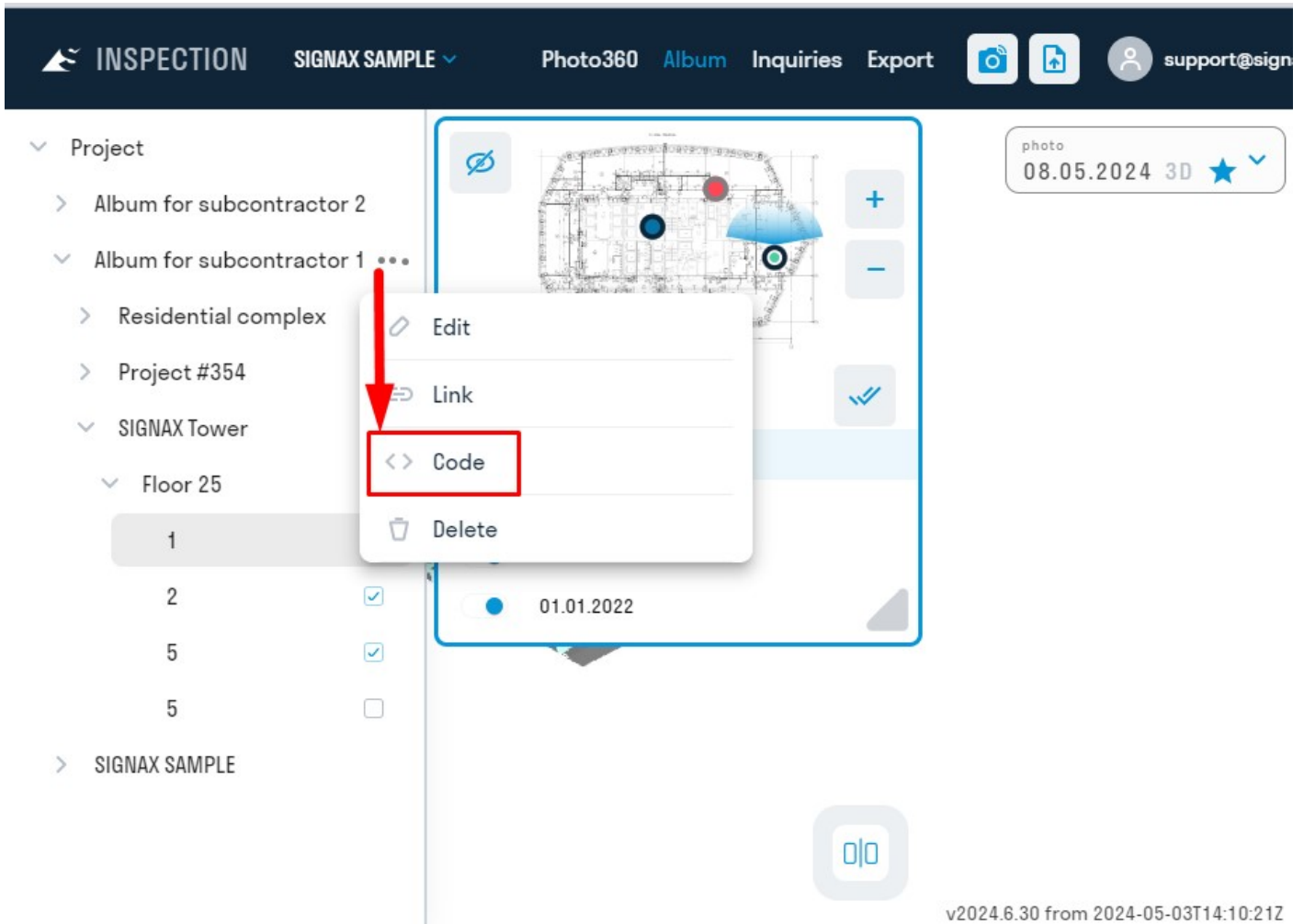
▼ SIGNAX Tower

Floor 25

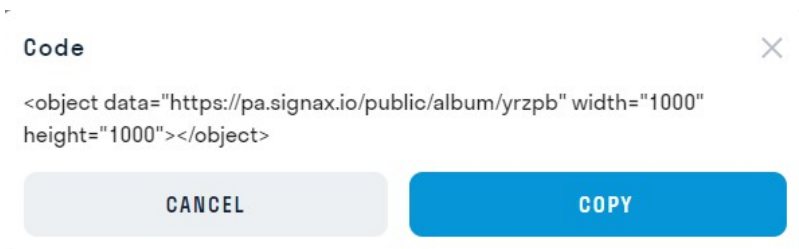
> Residential complex



8. You can also copy the embed code to integrate the album into the developer's website via `<iframe>`. Click the three dots next to the album name and choose "Code."



A window will open with the code, which can be sent to the customer's IT to embed the album into their web page.



Inquires

Inquiries are managed at pa.signax.io in the "Inquiries" section. The inquiries section is designed to create inquiries on plans, similar to photos. Inquiries serve as a communication tool between the office and engineers on-site and for project participants.

1. Go to the "Inquiries" section.
2. To create an inquiry, click "Add."

INSPECTION
SIGNAX SAMPLE
Photo360
Album
Inquiries
Export

support@signax.io

Project
Residential c... 0 1 18 Apr
Project #354 1 1 22 Feb
SIGNAX Tower 1 2 08 May
Floor 25 1 2 08 May

30 7 1
Added by
Responsible by

+ ADD

Carpet has stains on it. Request for cleaning
To whom: demo@sgnl.pro
03/27/2024 5:14 PM

No HVAC opening
To whom: n.pospelov@signax.ae
10/24/2023 11:23 AM

Tile damage. Request for repair
To whom: support@signax.ae
10/24/2023 11:29 AM

No corrosion paint applied
To whom: 87c67ebb-6657-4ad8-a0e0-73788522671c
10/24/2023 11:24 AM

Door damaged. Request for repair or change
To whom: support@signax.ae

3. Complete the inquiry description, assign a responsible person, and attach photos or explanatory materials if necessary. Then, click "Save."

<

Description

Take an additional photo

Responsible by

Andrei Serafimin

+

CANCEL

SAVE

4. The list of all inquiries is displayed on the right side of the window. You can easily filter the inquiries using the filter menu by selecting the necessary filter (inquiries made today, this week, this month, by the creator of the inquiry, or by the responsible person).

Tips & Tricks

Tripod Weights



Adding weights to your tripod improves stability and wind resistance, enhancing safety but reducing mobility due to the lower setup speed. This is crucial for outdoor shoots in windy conditions, ensuring your equipment remains stable and secure.

Power Bank



A power bank allows your equipment to work without needing frequent recharges. This is especially beneficial during colder seasons when battery life diminishes faster. We recommend using a power bank immediately when you start work in cold weather.

Protective Case



Always use a protective case for your camera when moving between floors on a construction site. This enhances safety, prevents accidents, and protects the camera from dust and debris. It is a simple yet effective way to avoid damage and maintain the integrity of your equipment.

Remember: Sometimes, despite the best preparations, things can go wrong.



Construction sites are inherently high-risk areas, and not all things can be planned for. Always prioritize safety and prepare for the unexpected to minimize risks. [Safety first!](#)

Revision #19

Created 7 May 2024 13:19:33 by Andrew Serafimin

Updated 8 May 2024 14:22:29 by SIGNAX SUPPORT