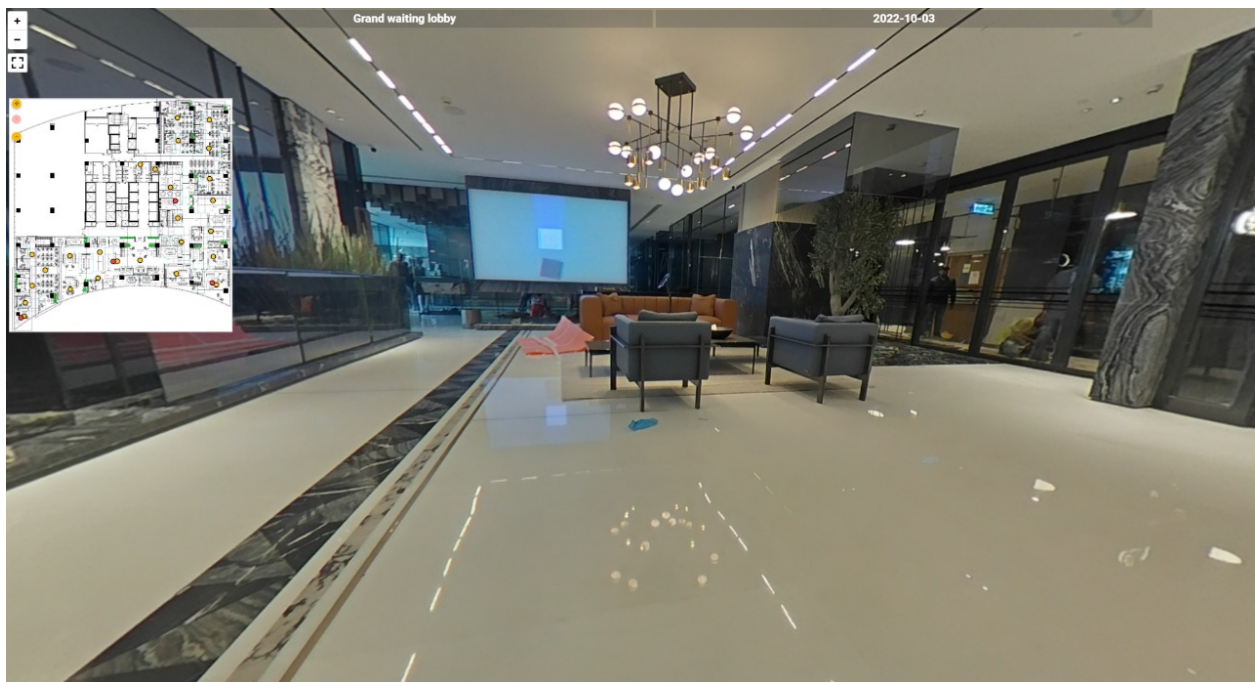# 360° Image-Based Construction Documentation and Collaboration:
User Manual

OpticVyu Construction Monitoring & Documentation Solutions

Overview

Construction monitoring has evolved from still photographs to 360-degree image monitoring. Using 360-degree images of construction, you can realistically view the entire project through your dashboard.

OpticVyu offers 360-degree image and video-based construction monitoring solutions for large construction projects.

Contents

Login, Project, and Module Selection
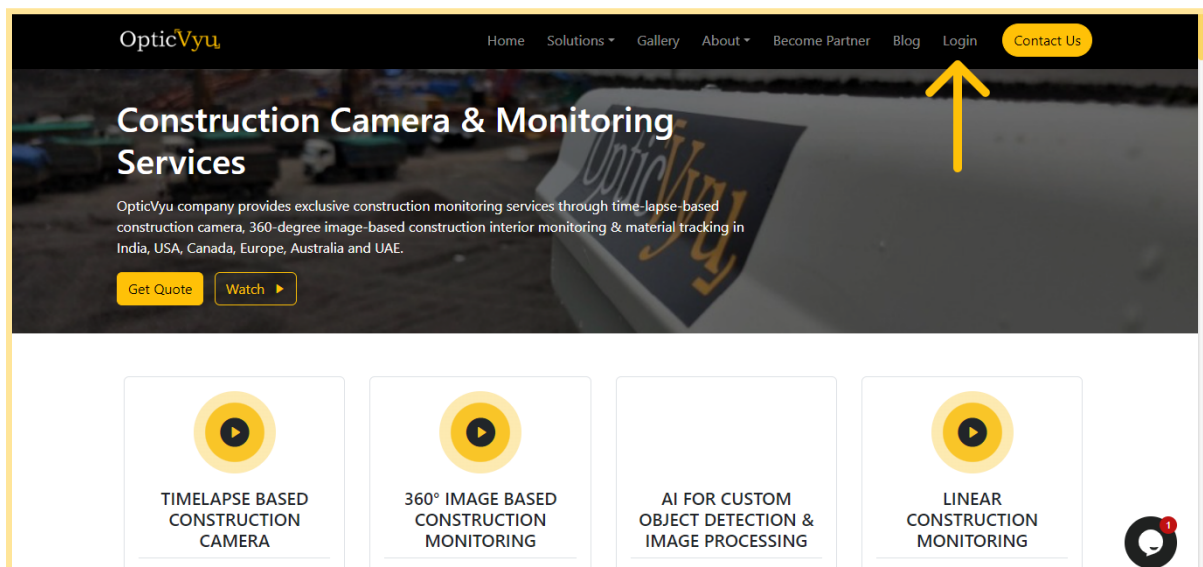
Step 1. Visit the OpticVyu website

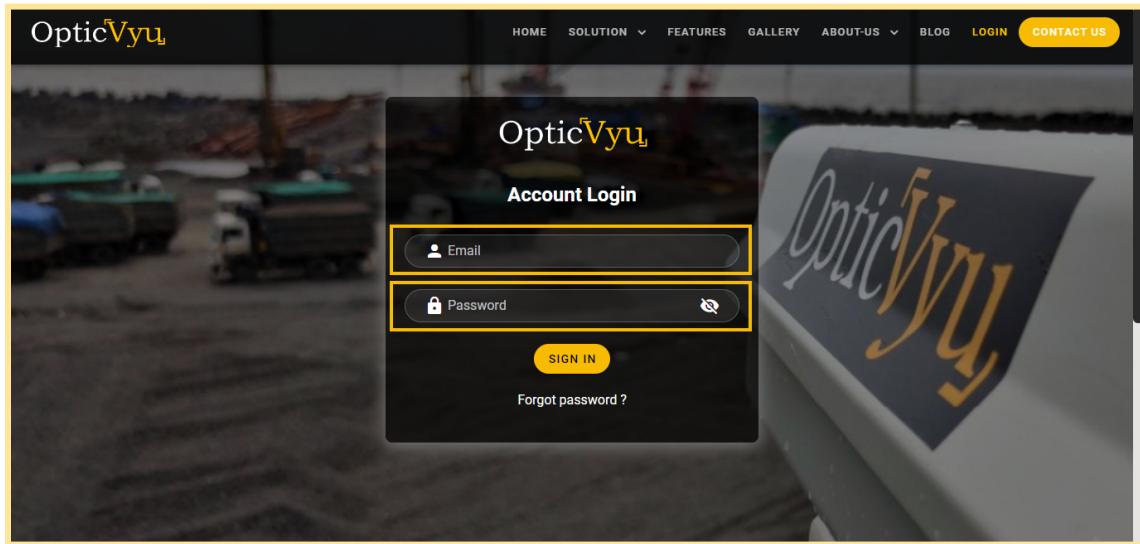Visit www.opticvyu.com in your web browser

Step 2. Click on login

Go to the login page.
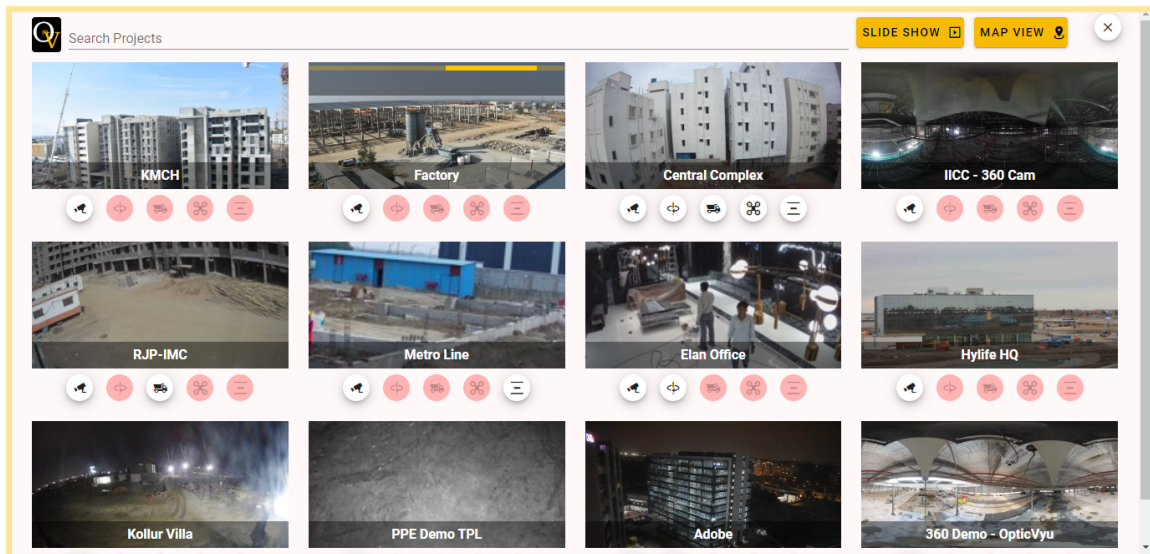

Step 3. Login with credentials

Enter your login credential here.

You may enable Multi-factor authorization for secured login.

Step 4. Explore Projects & Select Module

Here is the project explorer. You can see all your projects here. Simultaneously, you can also check the module enabled on any project.


Here are 5 modules available for any project - construction camera, **360-degree Interior monitoring**, material tracking, drone integration & linear construction monitoring.
You can select any project with a 360-degree interior monitoring module enabled on it & check corresponding zones.
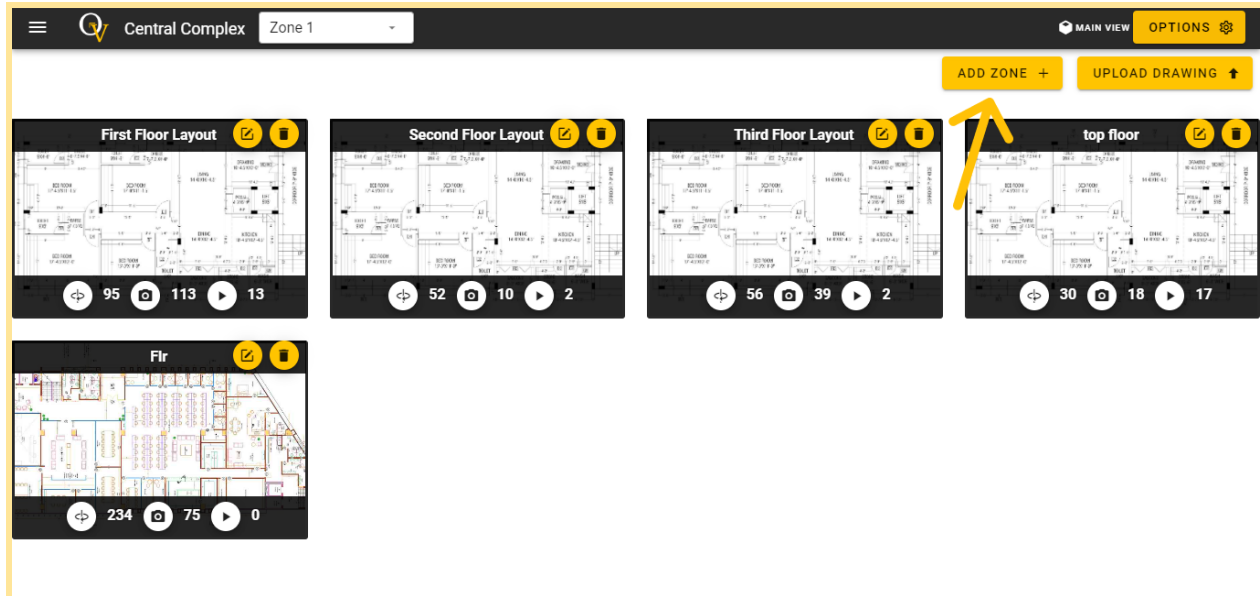
Zone Creation and Selection

Step 1. Switch to Edit View

There are two views available in the 360-degree monitoring dashboard navbar - one is the **main view** and another is the **edit view.** Click on the **edit view** to switch to the edit mode.
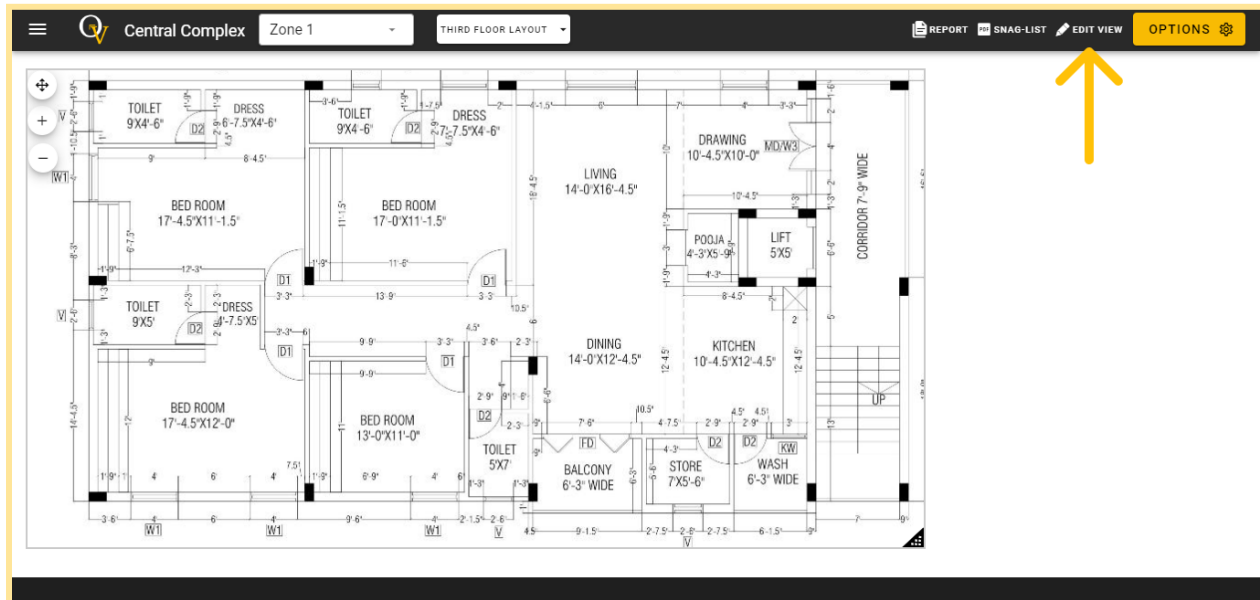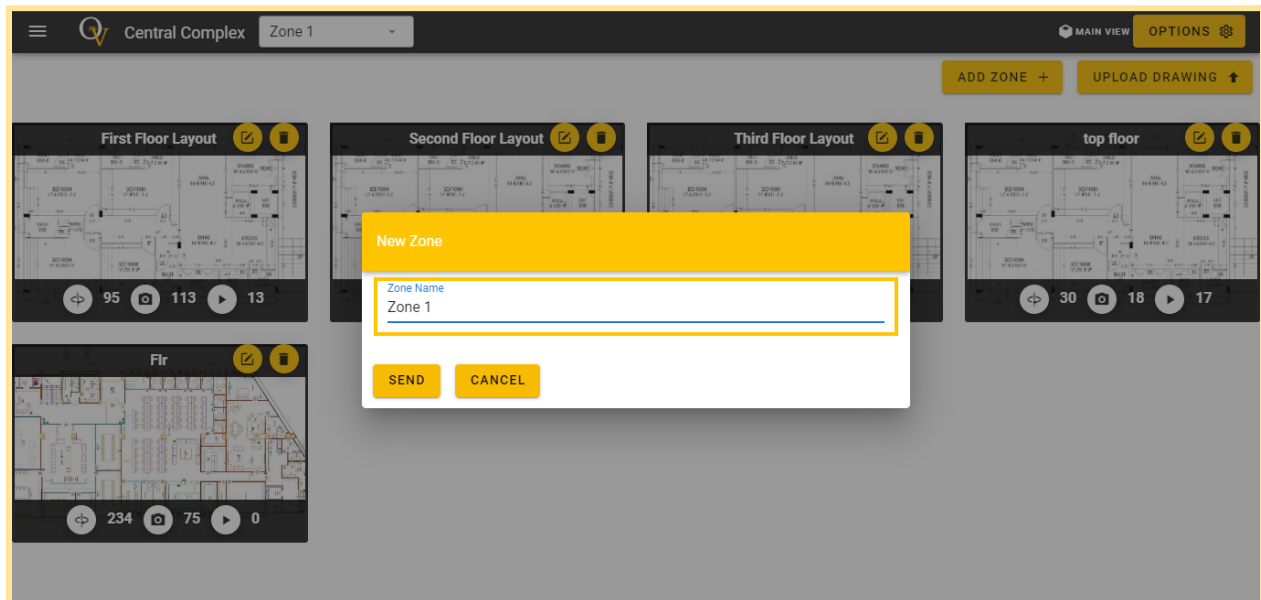

Step 2. Add new zone

Once you change to edit view, you will see two options one is, to **add zone** and **upload drawings**. Click on Add new zone.
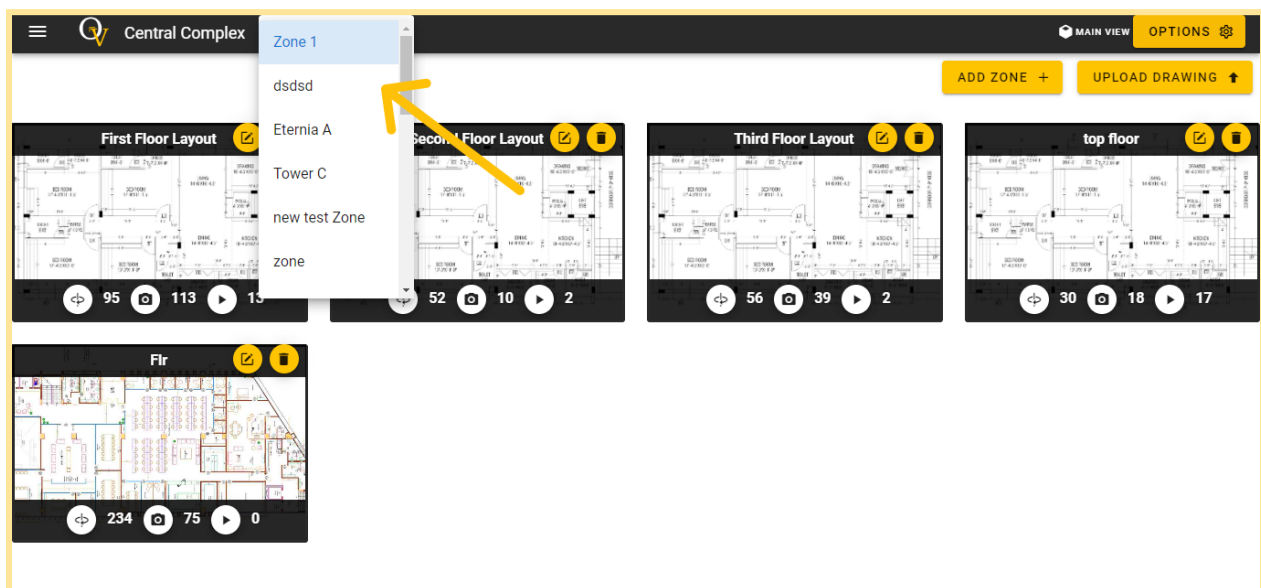
Once you click on "add zone", a popup form will appear. Enter the division or zone name here and hit send. "Zone" can be the building name, phase name, etc which broadly divides the project into multiple areas.
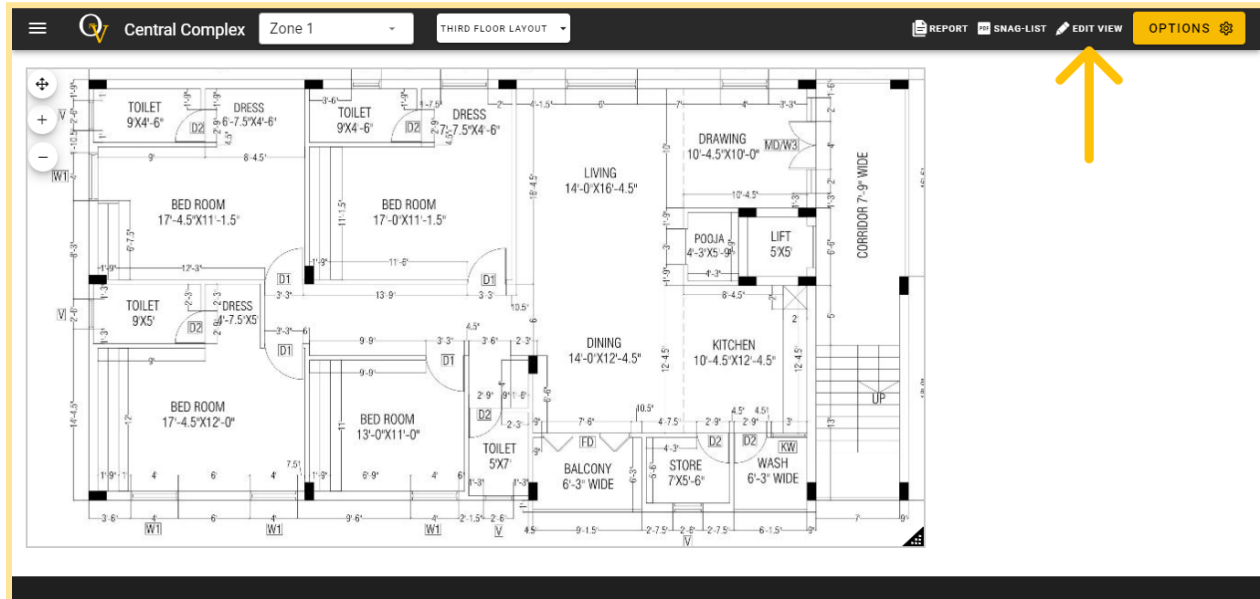

Step 3. Select a Zone

There is a zone dropdown beside the project name. All the zones defined for given projects can be seen here in the main view.
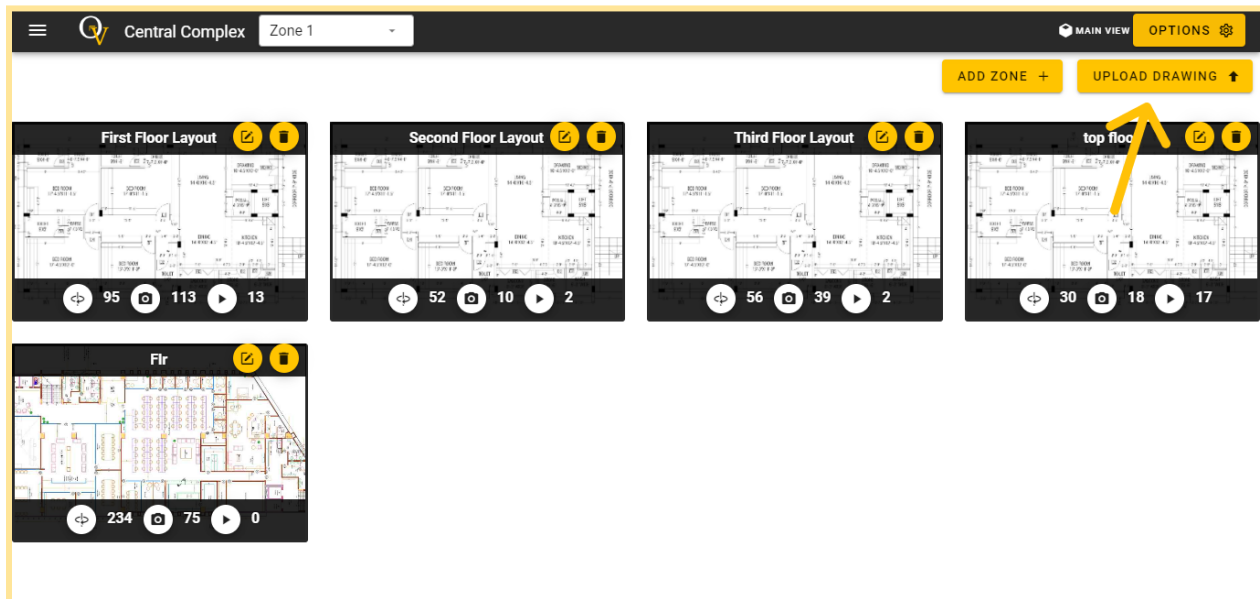
Upload Layouts

Step 1. Switch to Edit View
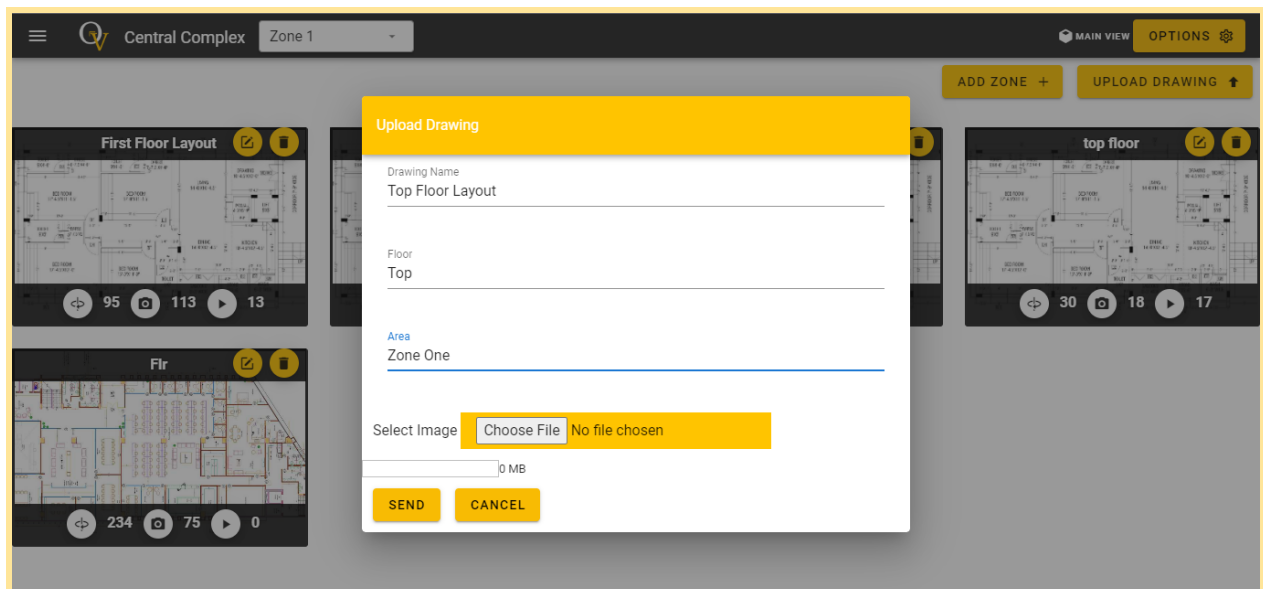
Go to edit view.

Step 2. Upload Drawings (Only JPEG drawings are allowed to upload)

As you switch to the edit view, hit the **upload drawing** button.

A popup form for layout upload will appear. Fill out this form, upload the drawing here, and hit send.

Central Complex | Zone 1

MAIN VIEW   OPTIONS ⚙

ADD ZONE +   UPLOAD DRAWING ↑

First Floor Layout
95   113   13

Flr
234   75   0

top floor
30   18   17

Upload Drawing

Drawing Name
Top Floor Layout

Floor
Top

Area
Zone One

Select Image   Choose File   No file chosen

0 MB

SEND   CANCEL

Create Strategic Points

Step 1. Select the Layout in Edit View

Select the layout for creating strategic points.
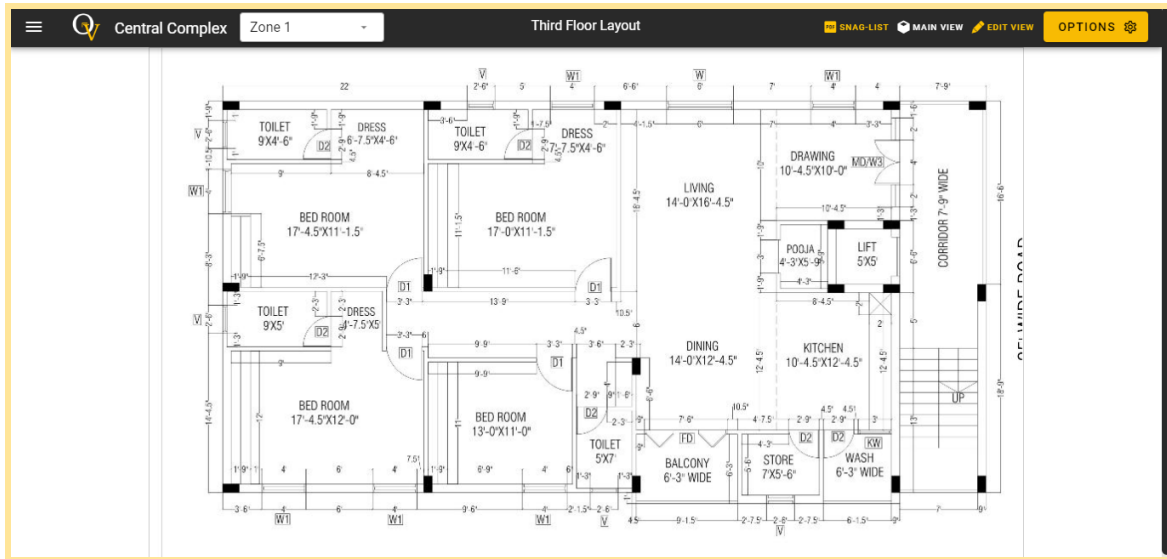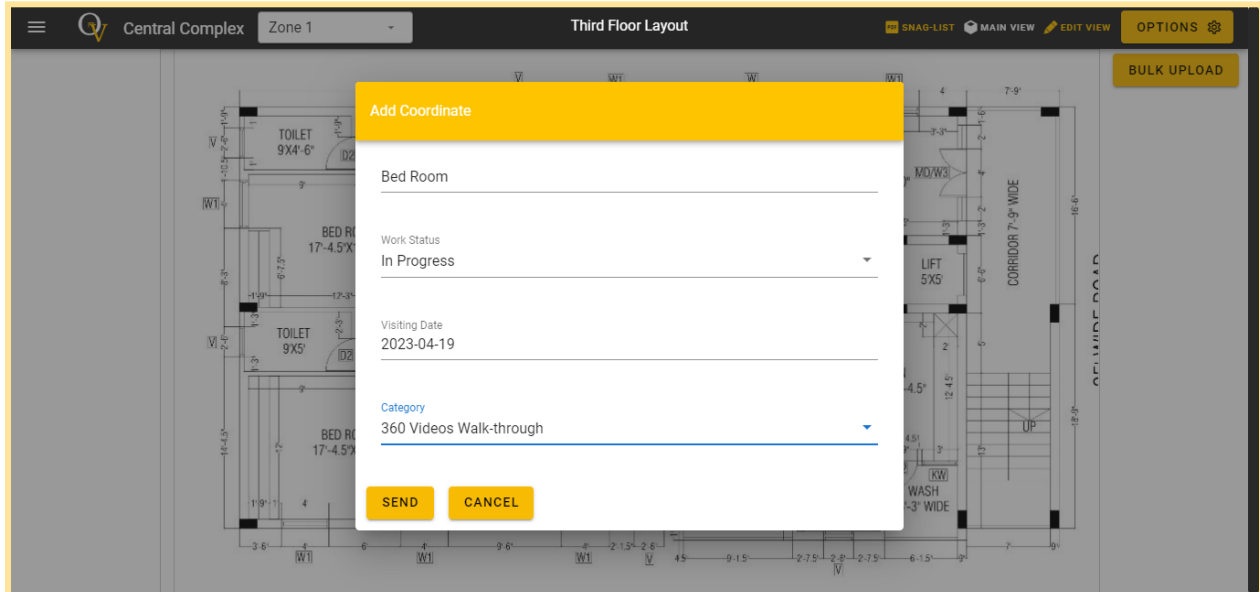

Step 2. Create Strategic Points

Strategic points are the points at which a site engineer or OpticVyu representative captures the 360-degree images/videos etc until the project completion. A strategic point will be highlighted as a yellow dot once created.
Click on the layout where you want to create a strategic point. A window alert will appear to show the strategic point creation notification. Click on okay.
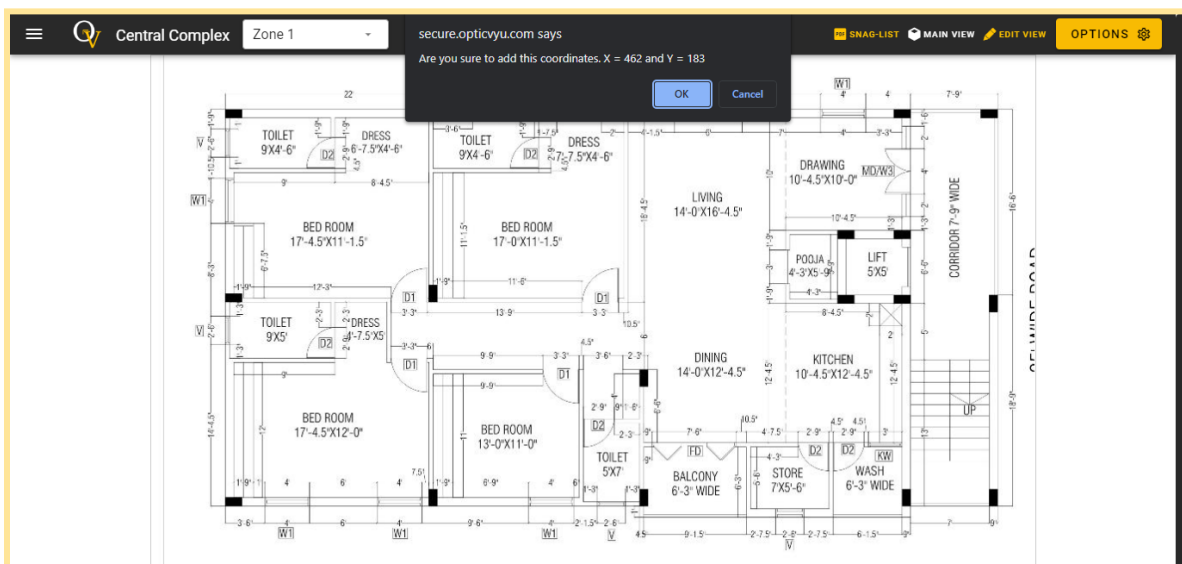
Now, a point creation pop-up form will appear. Fill out the form with the information that best represents that point and hit send.

A point can be a normal point or a 360-degree walkthrough point depending on its use case & marked location. The 360-degree walkthrough category will allow you to upload 360-degree videos only and the normal category will allow you to upload normal images, 360-degree images, videos, tasks, comments, etc.


Create as many strategic points as required to cover the entire area. Make sure not to create points so close that data collection becomes very difficult.

Capture & Upload 360-Degree Images

You have to connect the Richo Theta camera with the **OpticVyu 360° Monitoring** android application in order to capture and upload 360-degree or normal mobile phone images to the OpticVyu interior monitoring dashboard. Follow these steps to capture and upload 360-degree images

**Step 1:** Log in to the mobile app and navigate to the required project & layout
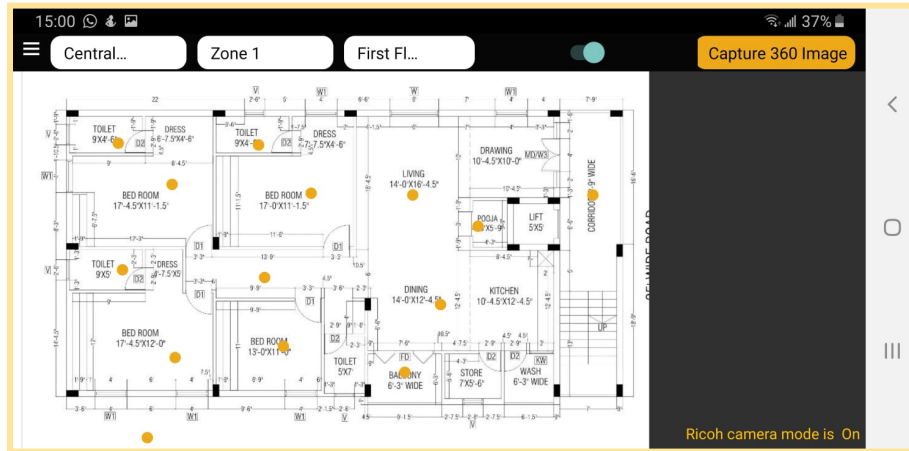
Step 2: Connect the mobile with Ricoh Theta Camera through a Wifi hotspot.
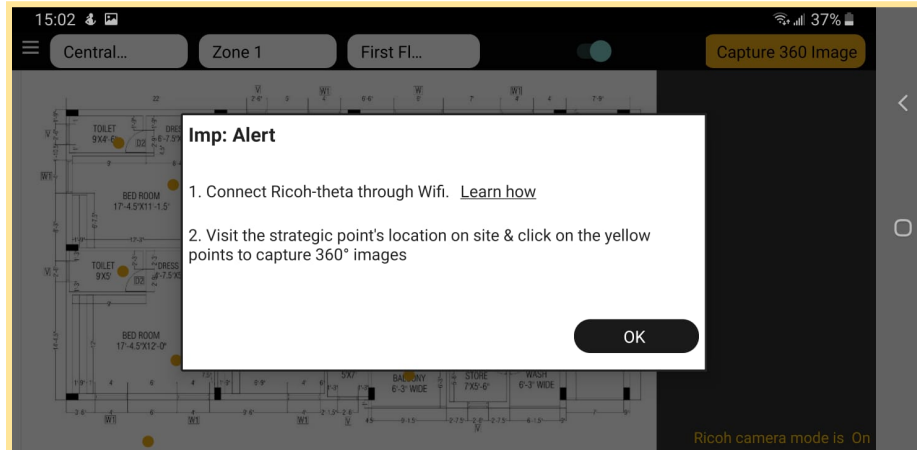
Turn on the Wifi option (on your Richo Theta Camera) and connect your mobile Wifi using the password mentioned at the bottom of your Richo Theta camera. Ignore the 1st two digits of the code and enter only the last 8 digits as a password.
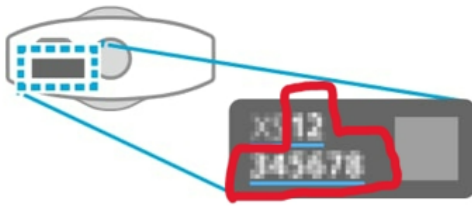
The serial No. is written on the base of the camera
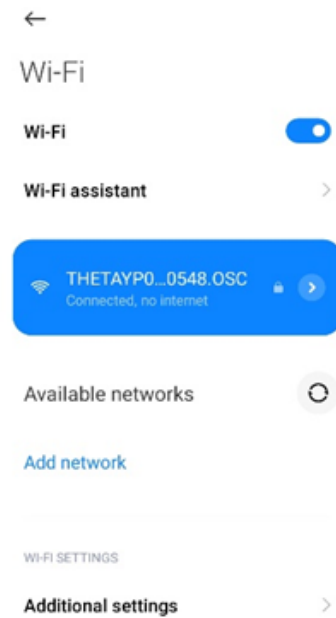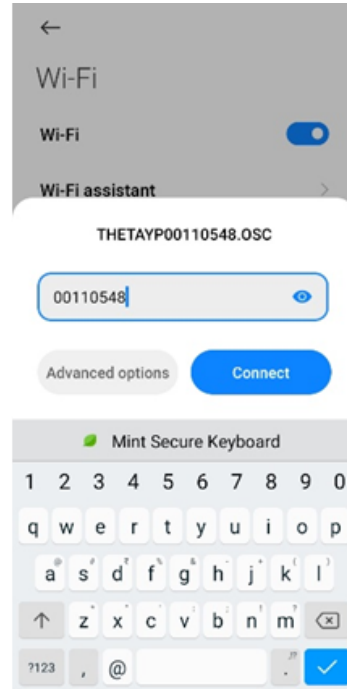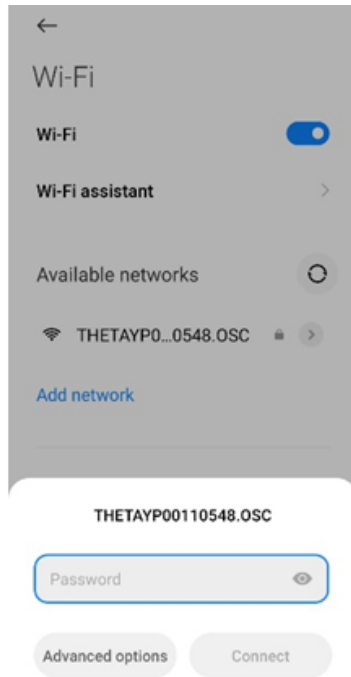
Step 3: Go to the OpticVyu app and tap on the strategic points one by one to capture the images.
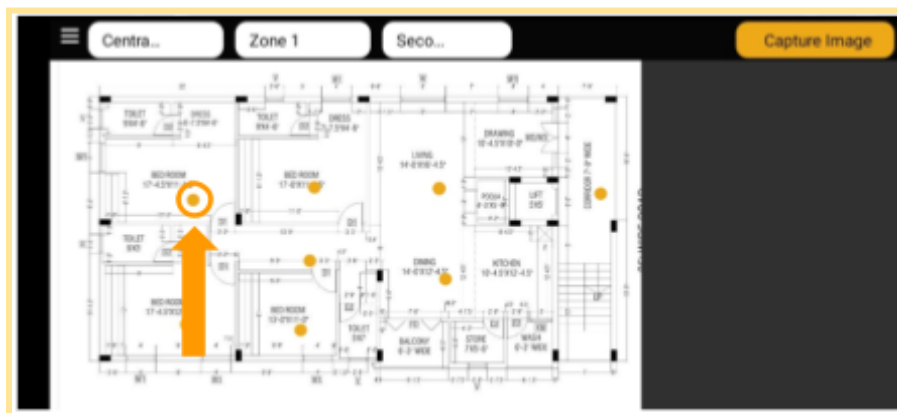
Step 9: After capturing the images on all the points, click on the upload button.
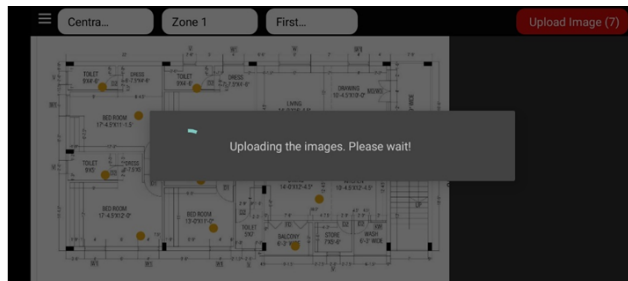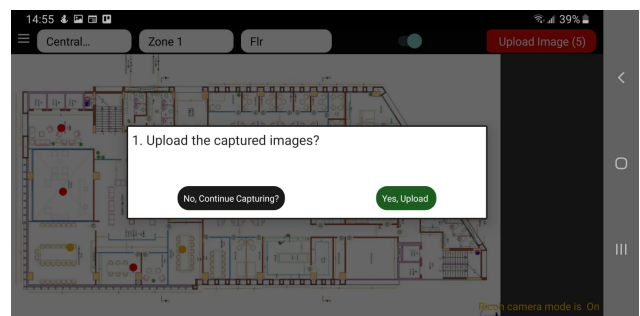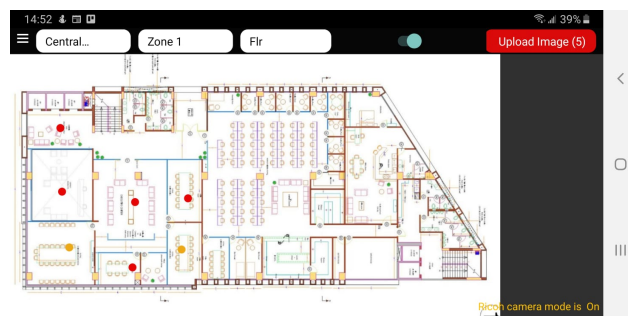
Features

Feature 1. Timeline View

Access historical data pertaining to every strategic location marked on a layout through the timeline view.
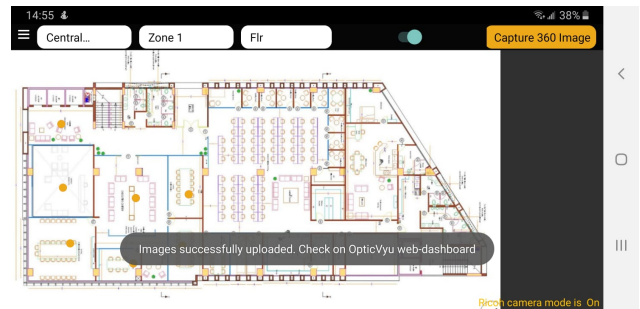
To check the timeline view click on any strategic point and select the images or videos icon. As you select the image icon, an image's timeline will appear at the bottom.
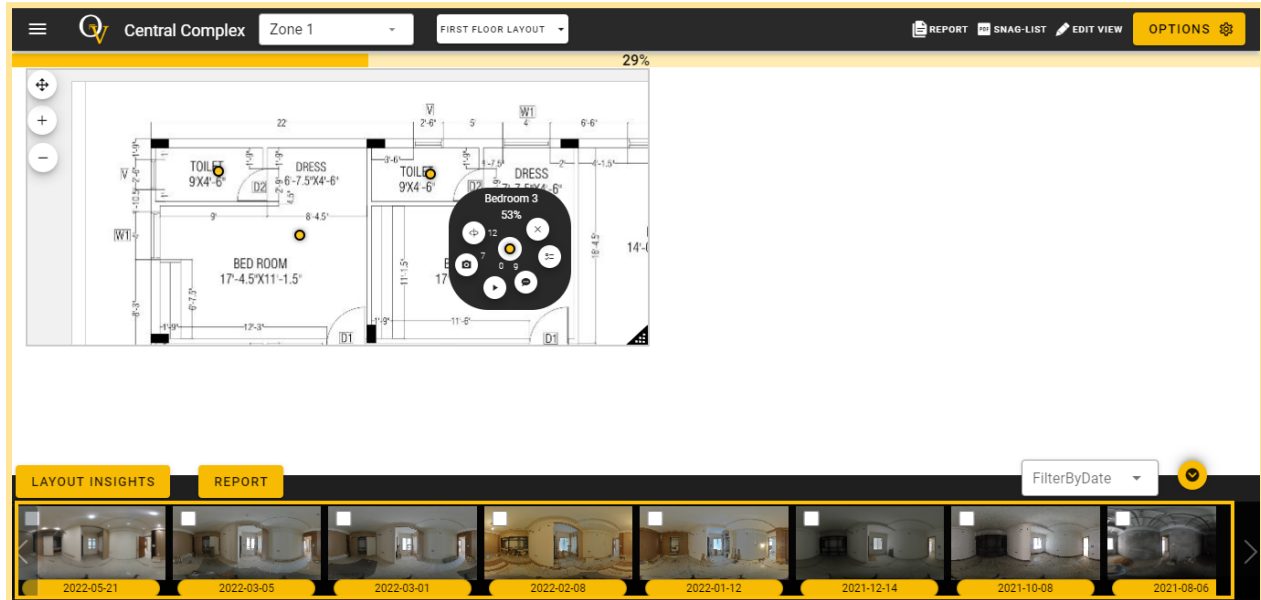
You can also filter the timeline by date by selecting the dropdown at the top-right of the timeline.
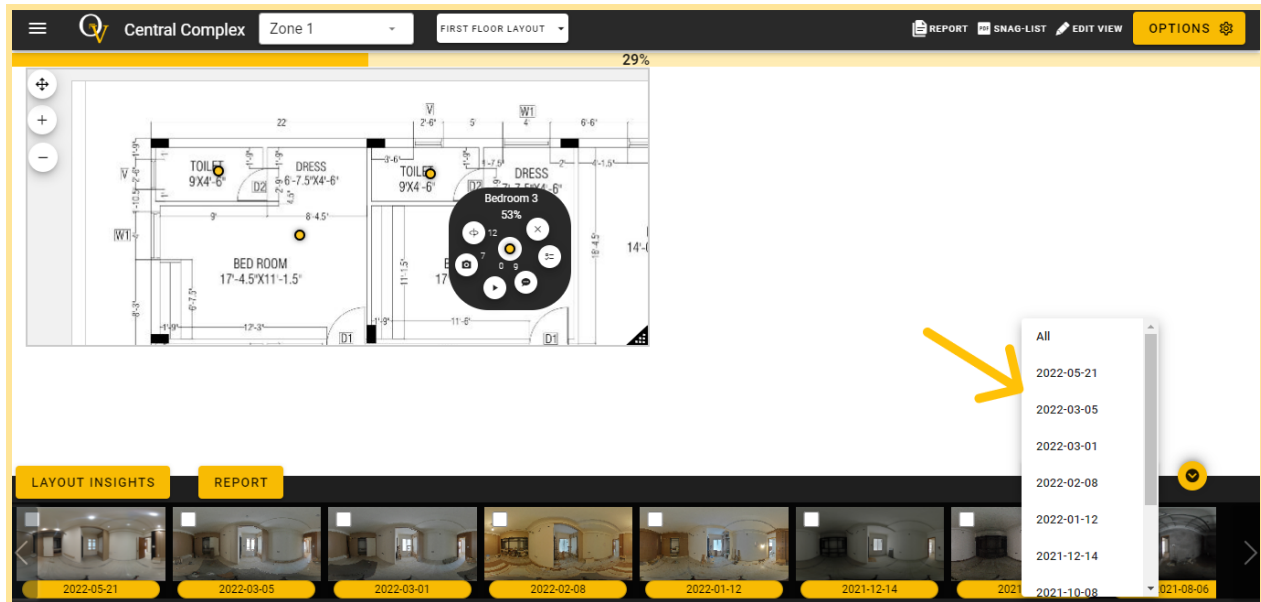
Feature 2. Watch Images/Videos

Select an image/video from the timeline & watch it alongside the layout. If it's a 360° image, a yellow-colored highlighter on the layout points toward the area visible in the current image view.
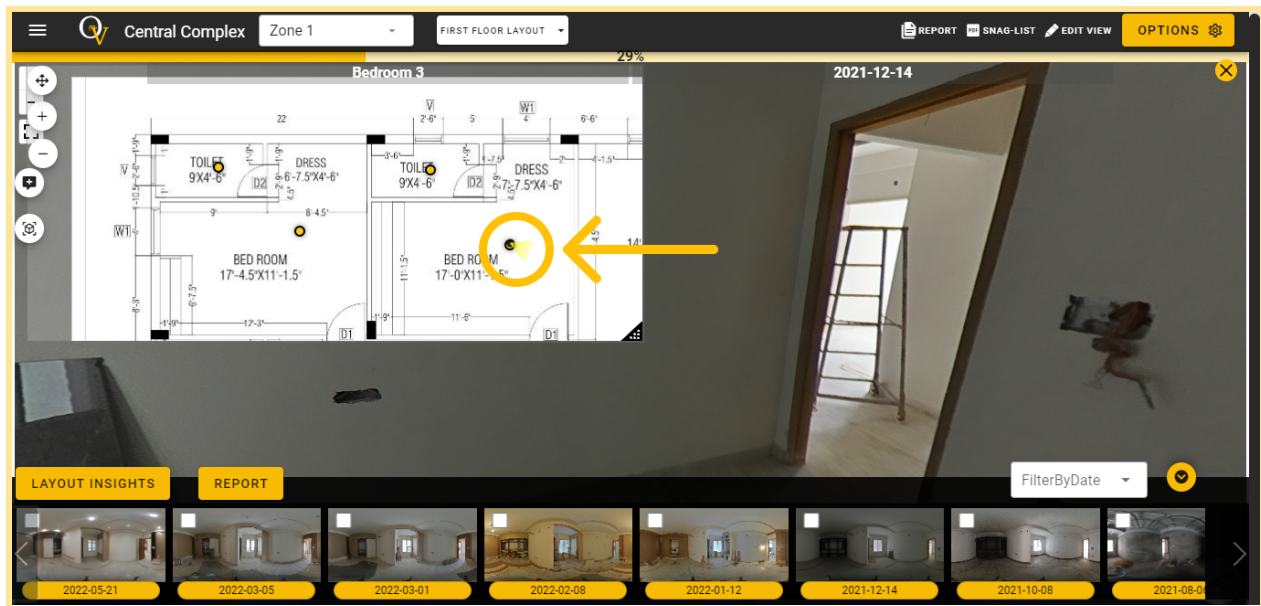
Feature 3. Compare to Review Progress

Comparing images is the best way to check the progress of the project.
Check an image from the timeline and click on it.
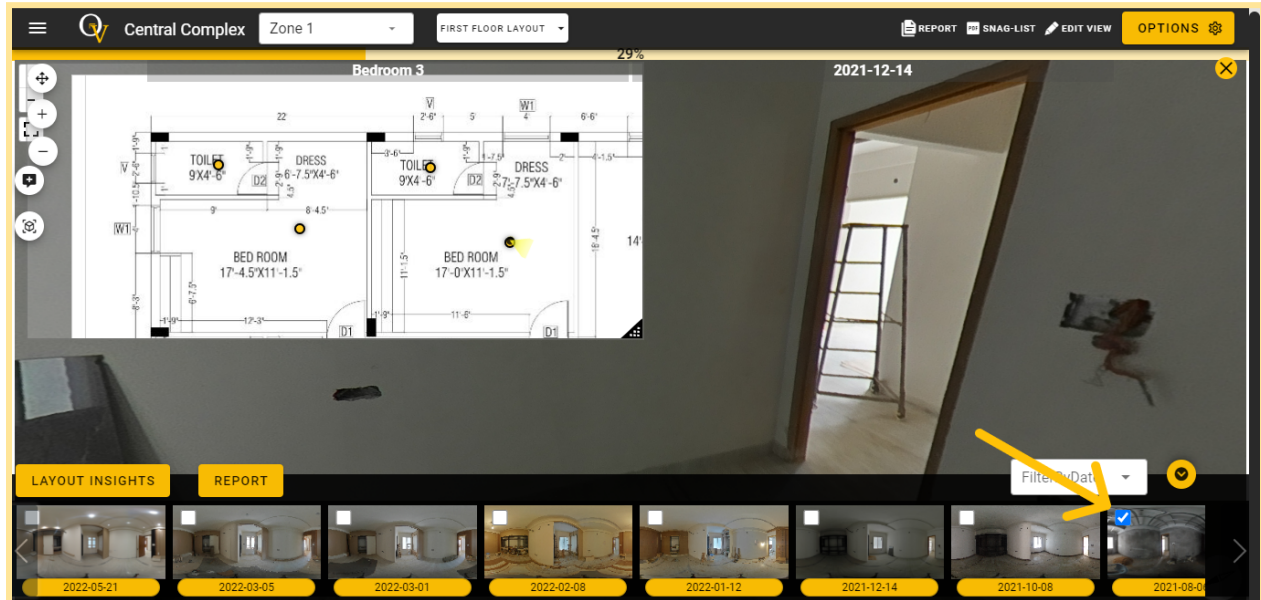
Now check the second image and click on it.
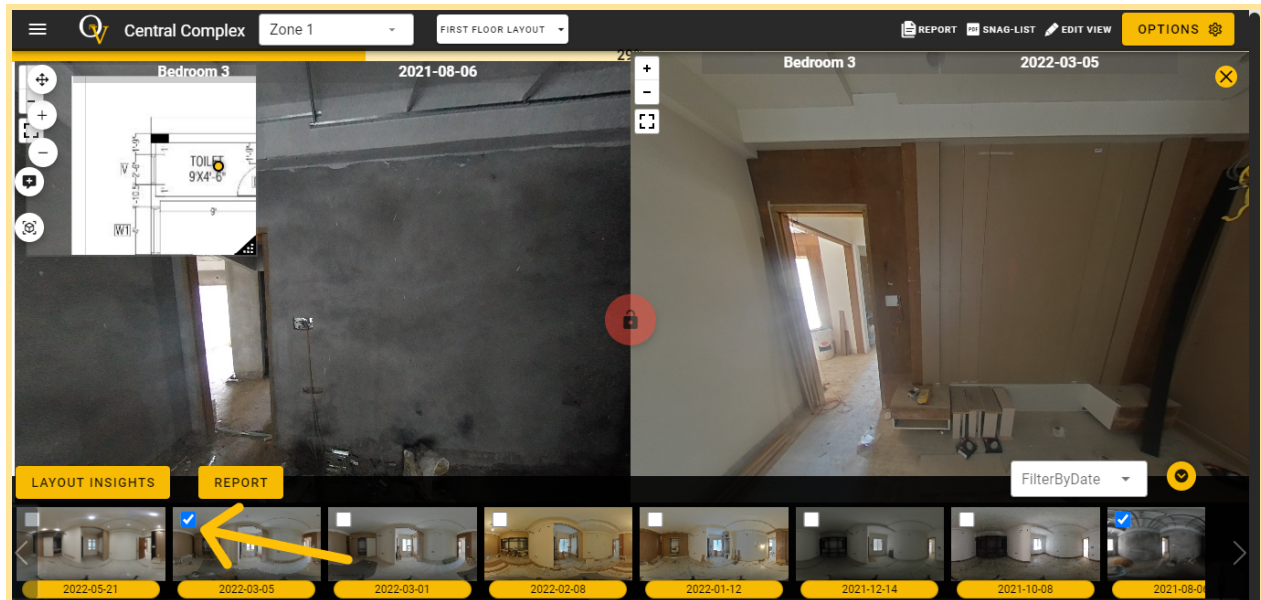
Now drag the images to an identical location & lock them using the lock button at the center.

Page 16
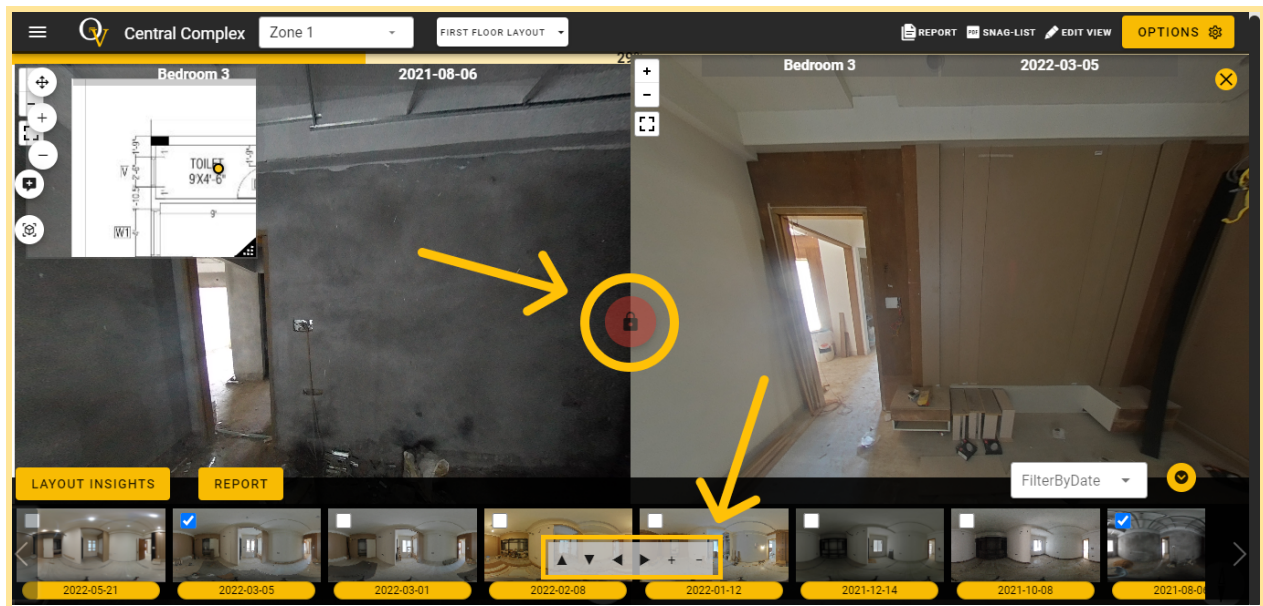
You can rotate both images synchronously using the controls at the bottom.

Feature 4. Put Comments/ Create Snag List

Select a 360° image from the timeline & click on the comment icon. As you click on the comment icon, a comment form will appear. Fill out the form, edit the image if needed, and submit it.

You can check all the comments by clicking on the comment/snag list icon on the strategic point menu. Under the Snag list, you can get all the comments, their details & status.
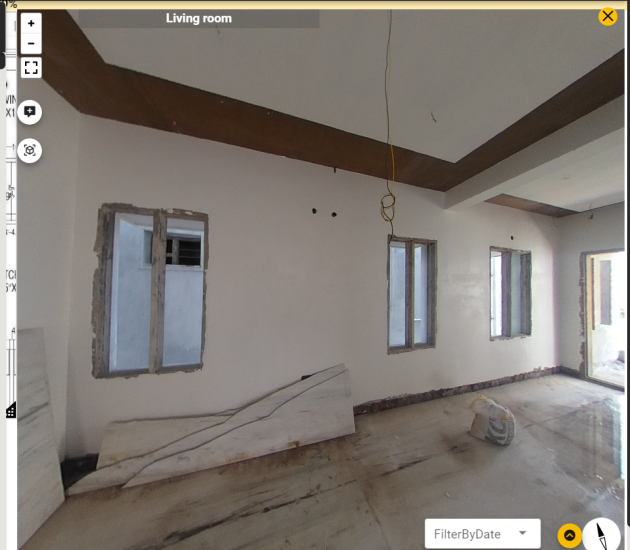
Note: The Snag-list is created separately for each point.

Feature 5. Create & Manage Task Checklist

To create or manage a task checklist, click on the tasks icon from the strategic point menu.
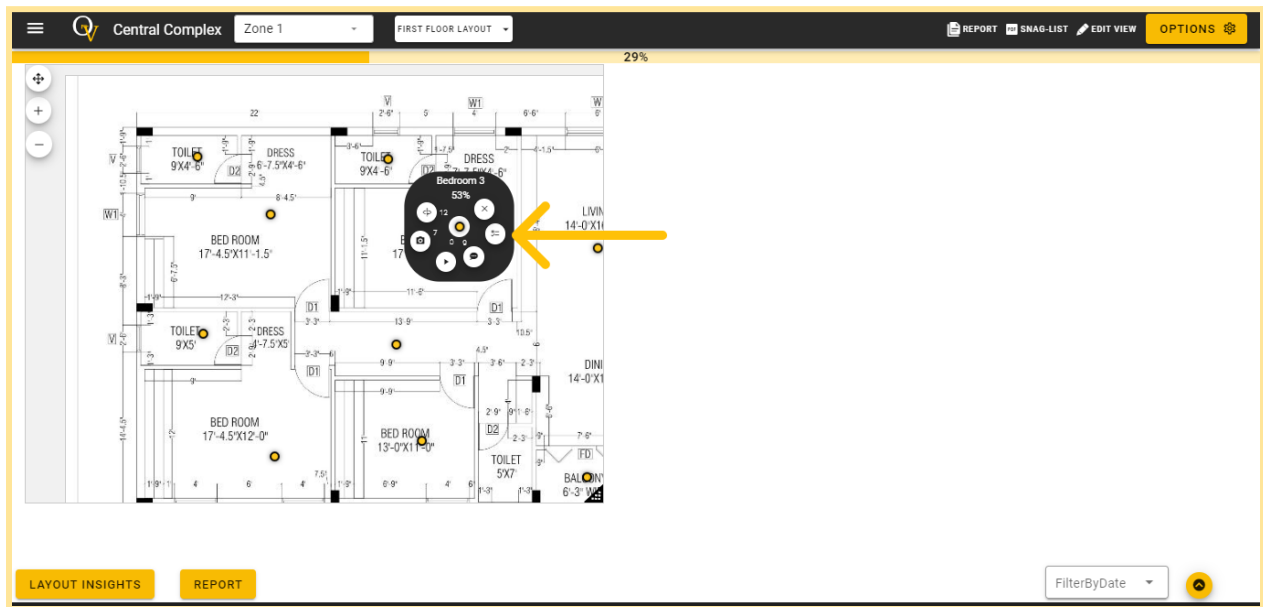
As you click on the strategic point task checklist, you will be able to view the complete task checklist here. By clicking the plus button, you can also add more tasks here.

Note: The tasklist is created separately for each point.
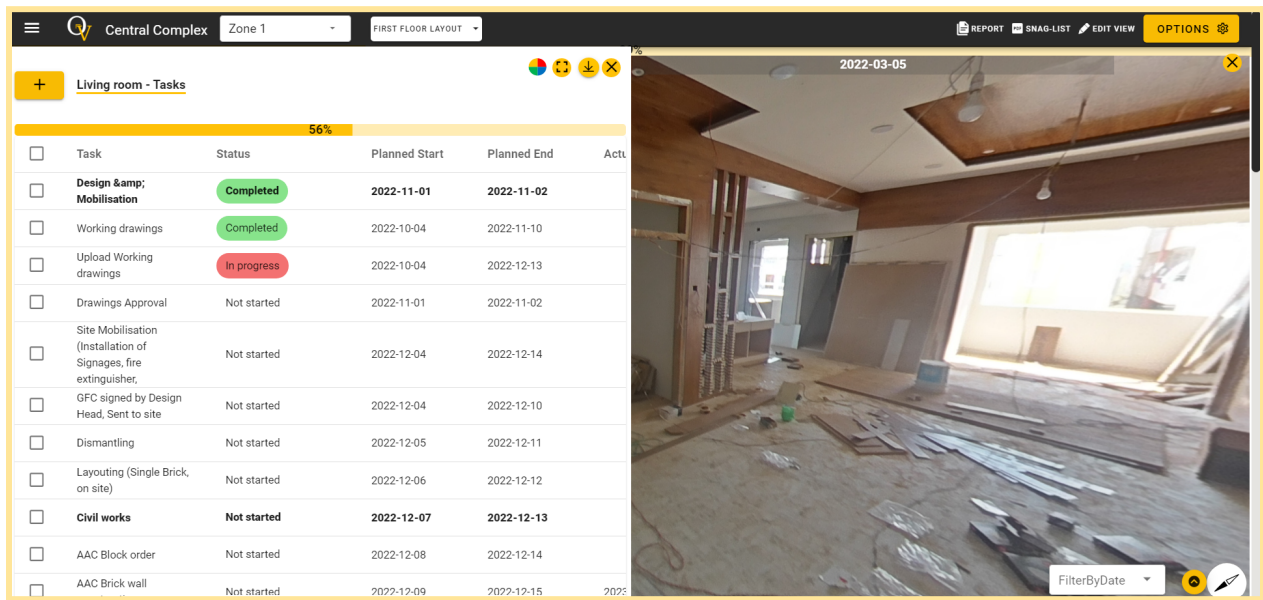
Feature 6. Compare the 360° image with the BIM model

If you have uploaded the BIM Revit model of your project to the OpticVyu portal from the Options menu > BIM Model, you can view the BIM 3D model alongside the 360° image to compare as-built vs. as-planned construction.
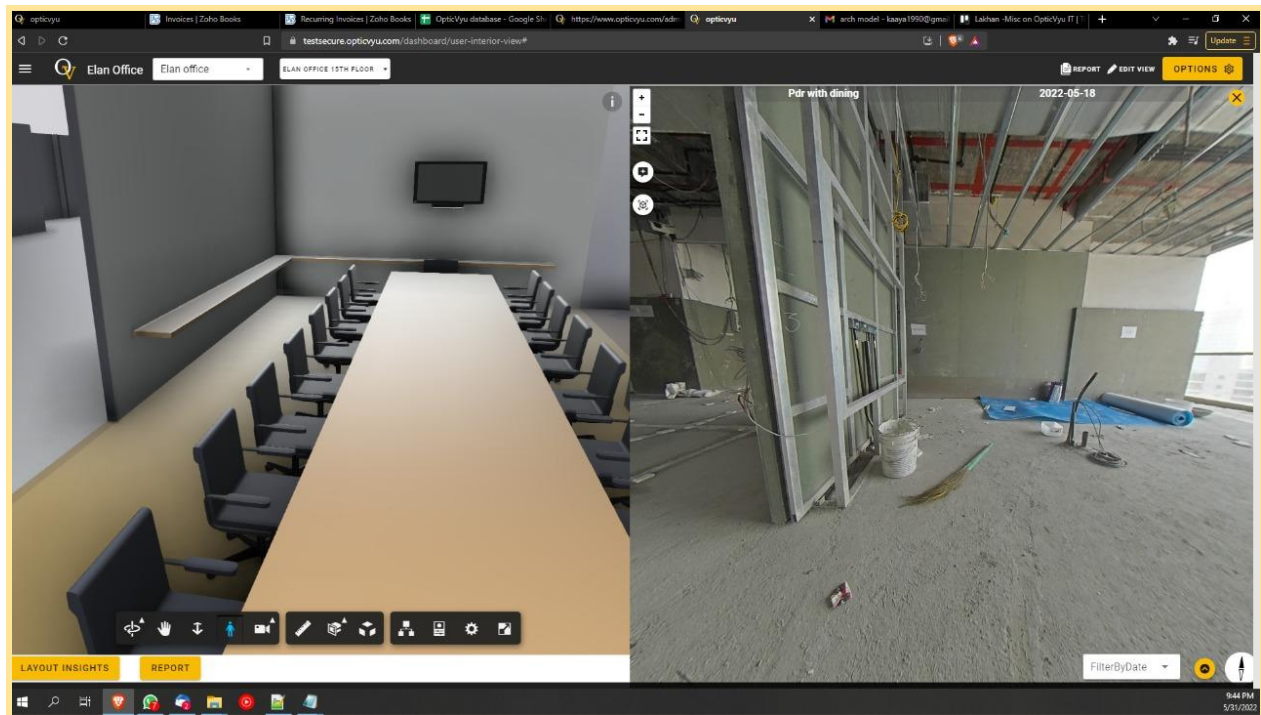
To enable the feature, contact admin@opticvyu.com

Reports

OpticVyu interior monitoring dashboard allows you to create "Floorwise" & "Pointwise" reports. These two types of reports are further classified into 360-degree image report or tasklist/snag list report as explained below.

1. Floorwise reports
   a. Task-list reports
   b. 360° image-based report
2. Pointwise reports
   a. Snag-list report
   b. 360° image-based report

Floorwise Reports:

A Floorwise report can be created by clicking on the reports button in the right top corner. These reports will be useful for getting insights into the whole plan.

1. Floor-Tasklist Report

Click on the Report and then click on the task-wise report from the right corner of the top navigation.
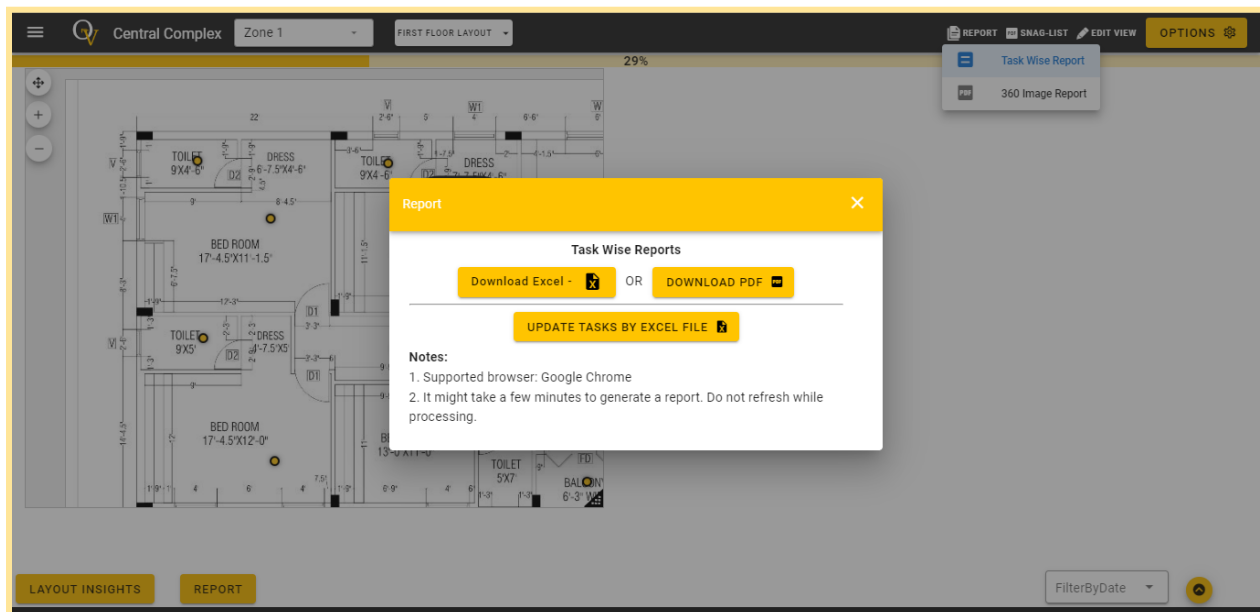
From here users can download the task-wise report in Excel and pdf format. Also, the user can update the tasks by updating and uploading the downloaded Excel file.

Here is an example of the task-wise report for checking the tasks, their start dates, end dates, percentage completion, status, etc for all the points marked on the plan.

| Task	Status	Start	End	Actual Start	Actual End	Progress %	
Bedroom 2							
Marble work	In progress	2021-10-14	2021-12-23			70	0
Wiring	Completed	2021-07-05	2021-10-30			95	0
Dining room							
Paint	Completed	2022-07-15	2022-06-30			80	0
Flooring	Completed	2022-08-15	2022-06-30			81	0
Ceiling	In progress	2022-09-08	2022-06-18			82	0
Kitchen tables	In progress	2022-06-08	2022-06-29			75	0
Wall Paint	In progress	2022-07-01	2022-07-16			40	0
Demo	In progress	2022-08-19	2022-08-31			25	0
Painting	In progress	2022-08-10	2022-08-24			60	0
Table top	In progress	2022-08-10	2022-08-31			30	0
Demo 1010	In progress	2022-09-15	2022-09-30			30	0
aaa	In progress	2022-09-22	2022-10-13			30	0
Carpet	In progress	2023-02-01	2023-02-06	2023-02-04		30	0

2. Floorwise - 360° Images Report

Click on the reports and then click on the 360 image report from the right corner of the top navigation bar.
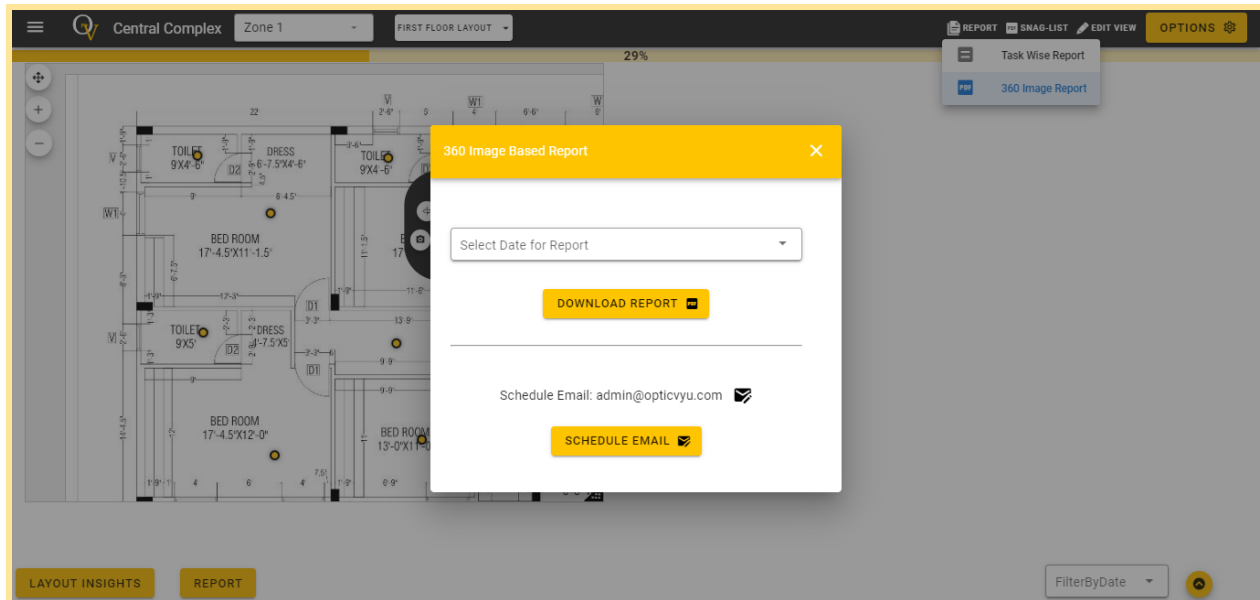
Here you can download the report in pdf format by selecting the date.
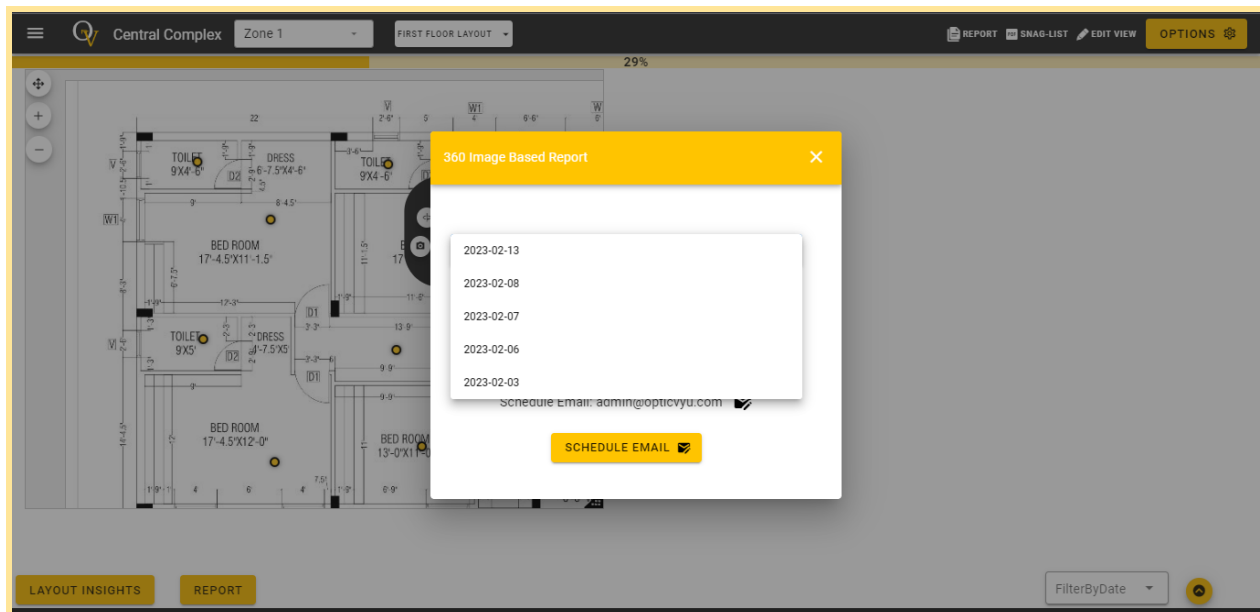
Also, a user can schedule a 360 report to email. Once the 360 images are uploaded on the layout, the email with the pdf report will be sent to the user on the next day at 3:00 AM IST.

Here is a sample of 360 images report (floorwise reports) of all points of the floor layout.
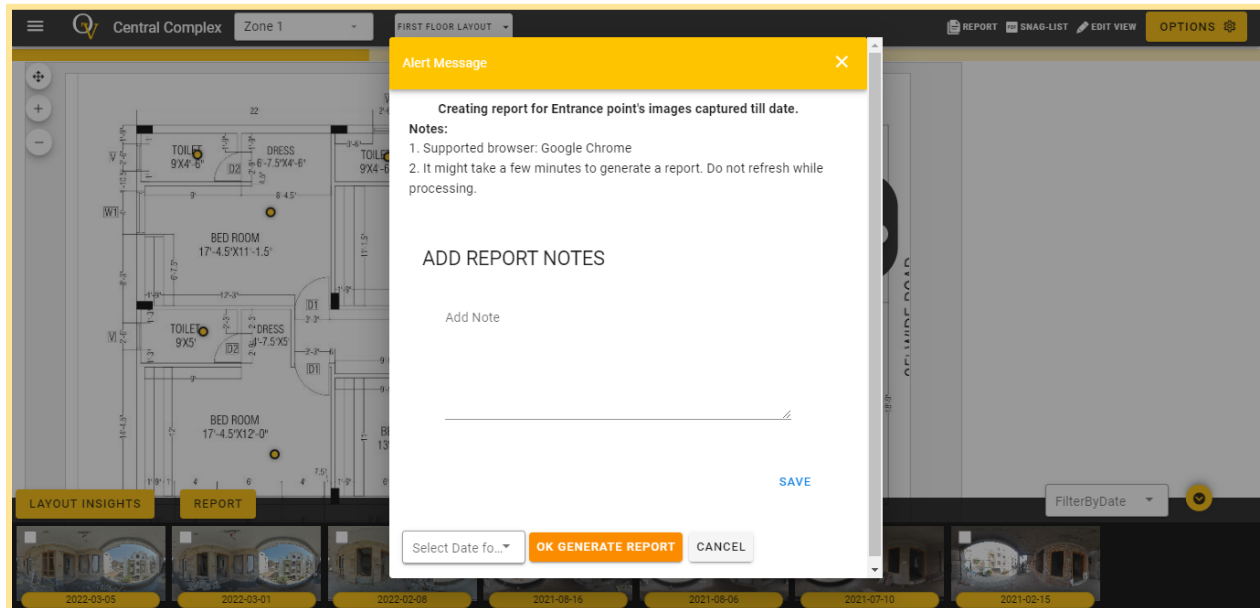
Pointwise Reports:
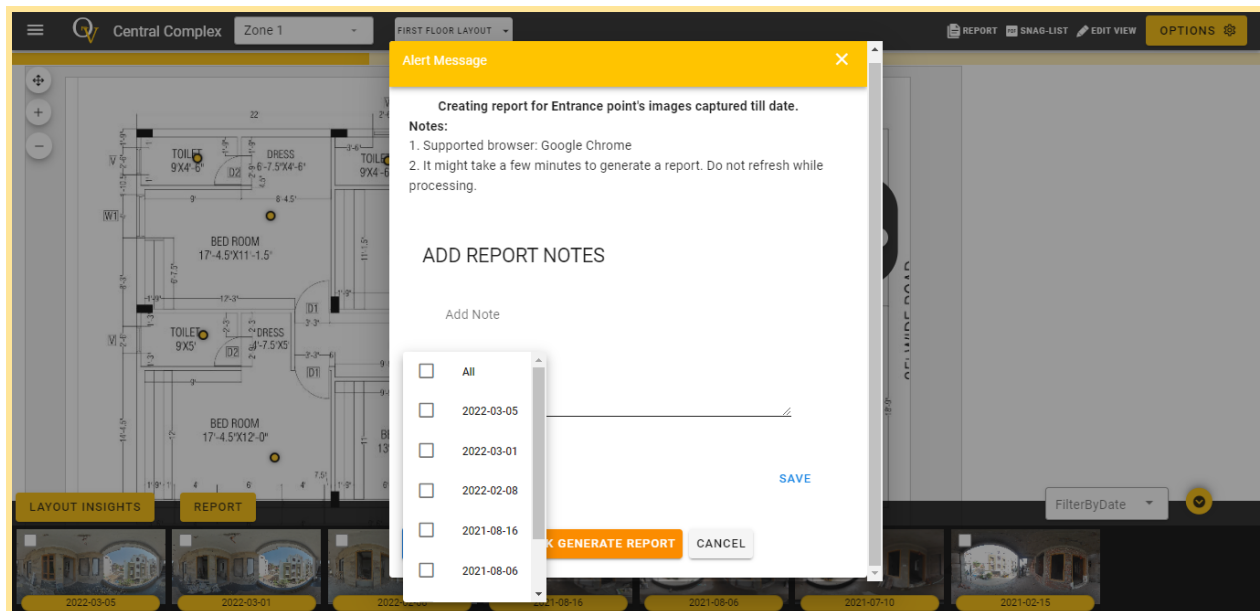You must select a point first for which you want to generate a report.

1. Pointwise - 360° Image Report
First select the point and click on the "Report" button placed at the left top of the image timeline.
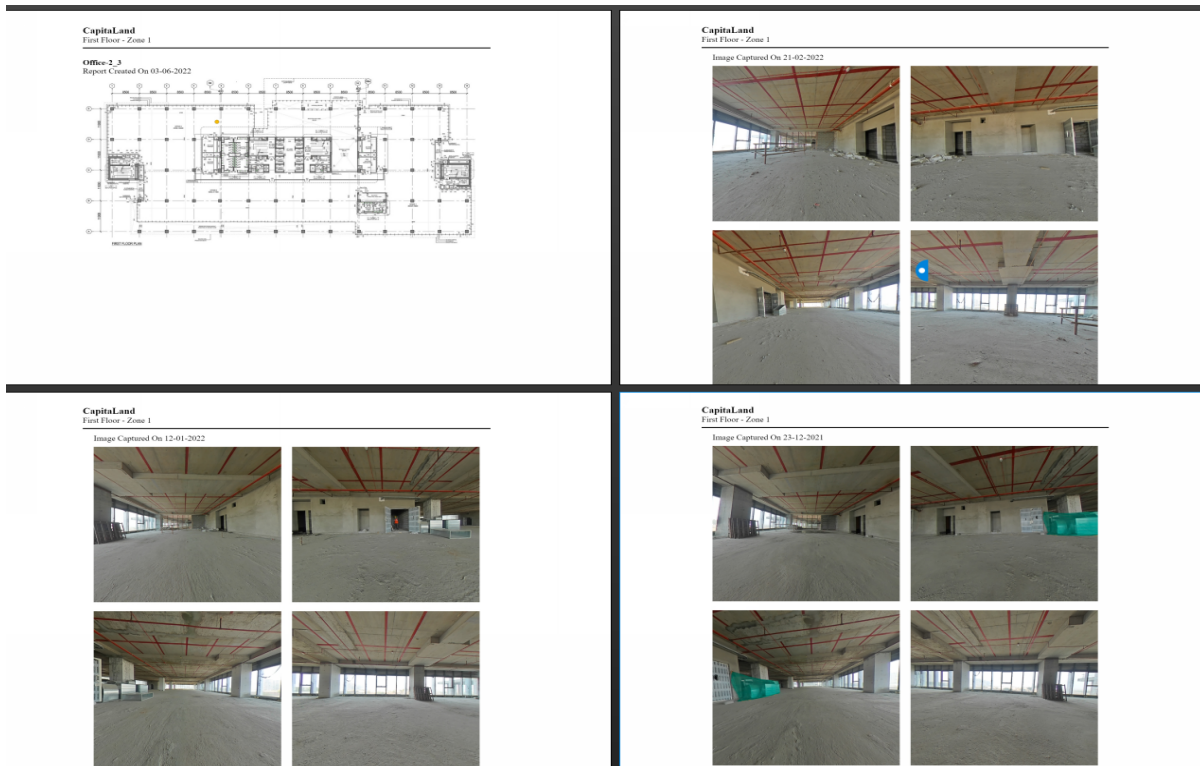

Here the user can add notes to the report.

To generate the pointwise 360 image report select the date, Add progress notes if required, and click on "OK GENERATE REPORT".
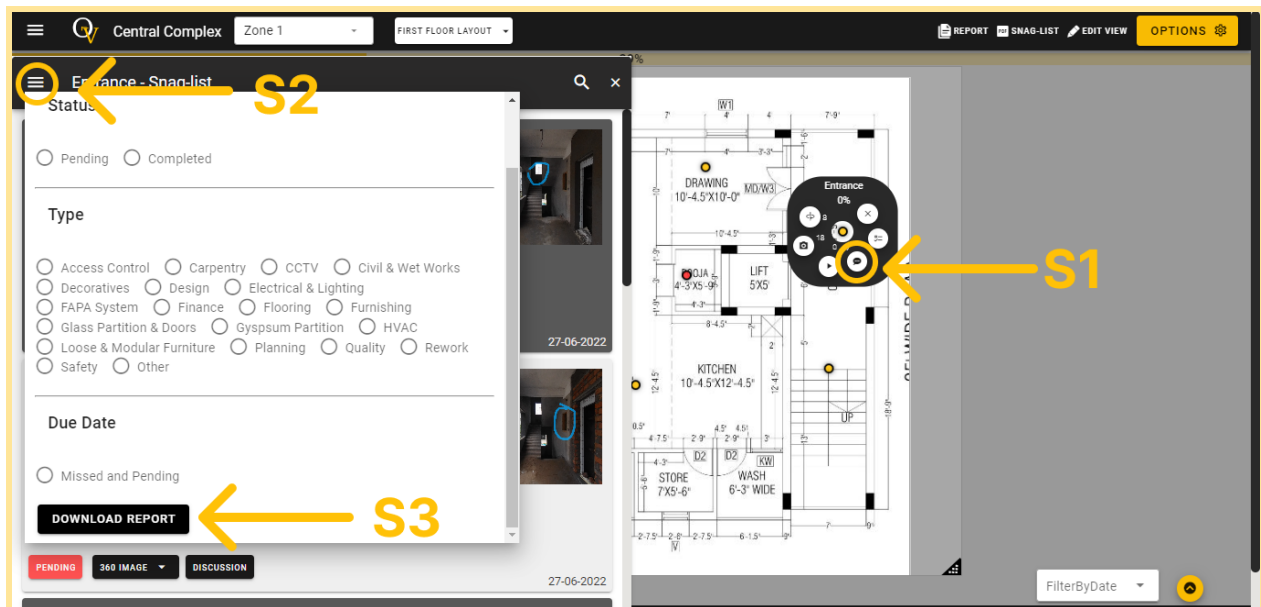

Example of pointwise 360-degree image report

2. Pointwise - Snaglist Report

To create a pointwise snag list report, select the point, open the snag list, and click on the hamburger menu icon. Select the filters accordingly and generate the report.

Example of pointwise snag list report

Date: 31-05-2022   **Sent by:** Anshul Jain

Title Electrical switches

Description Electrical switches have not been setup

Root Cause Not available

Sent to: demo@opticvyu.com	Assigned to:
Type: Design	Due Date: 2022-06-04 00:00:00
Status PENDING	

Date: 31-05-2022   **Sent by:** Anshul Jain

Title Electrical Wire

Description Electrical wires are still open, Try to fix it

Root Cause Not available

Sent to: demo@opticvyu.com	Assigned to:
Type: Design	Due Date: 2022-06-03 00:00:00
Status PENDING	

www.opticvyu.com