

# Quick Guide

Tuesday 16<sup>th</sup> November, 2021

## 1 Create a new project

Whenever you are planning to scan a new building, create a new project in the weScan app and fill in all necessary information (address details etc.) so you can always redirect to your real estate in seconds.

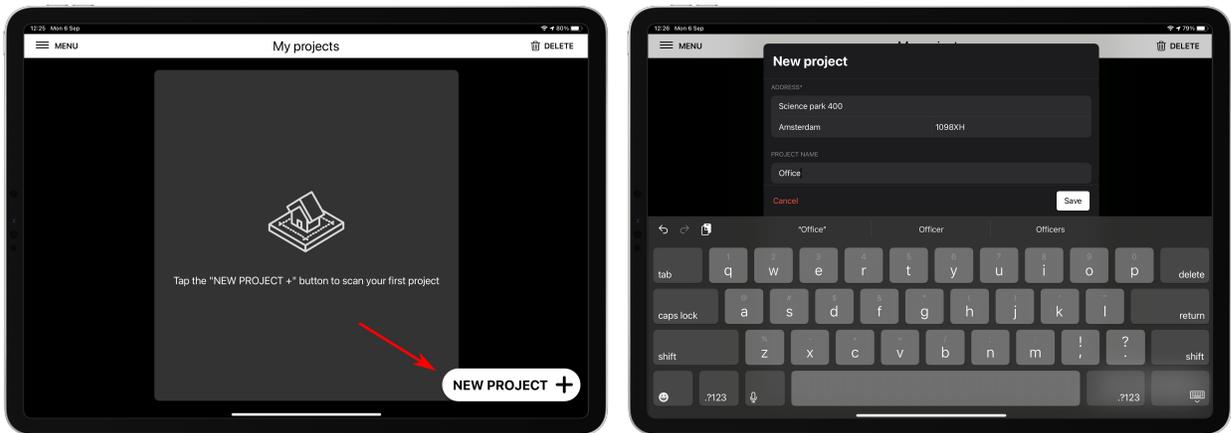


Figure 1: Create a new project

## 2 Select a floor

If the building has multiple floors, we strongly recommend scanning each floor by itself. weScan offers the possibility to select and create a new floor each time you start and finish scanning a floor.

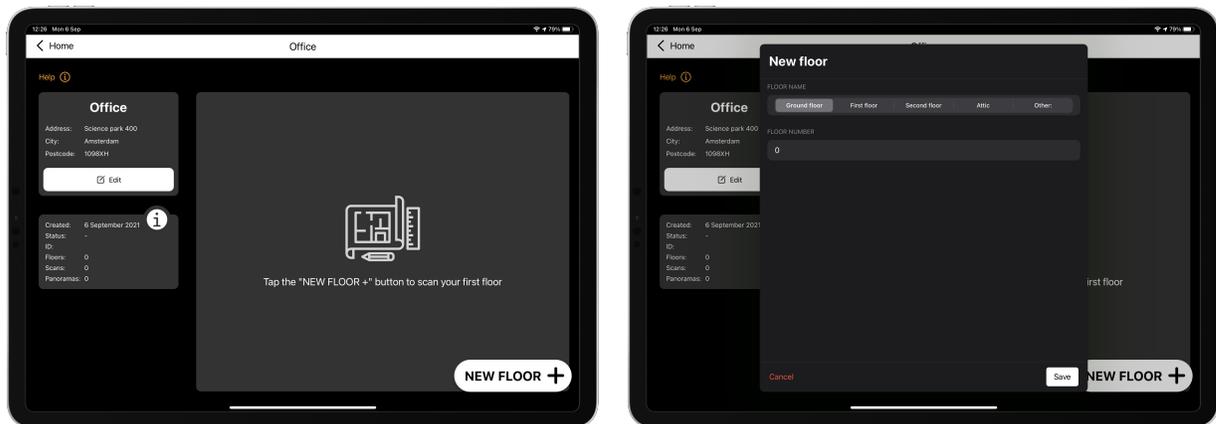


Figure 2: Create a new floor

### 3 Checklist before you start

- Make sure your mobile device is fully charged.
- Clean the sensors of your camera and scanner.
- Plan your scanning route before you start scanning. Make sure to remove unnecessary and/or moving objects. If there are curtains in the room, keep them at least halfway open to ensure there is enough light coming into the room.



- Keep your mobile device straight
- Start your scan in the middle of the biggest room of the floor. If possible open all doors to scan the whole floor in one. If this is not possible you can also align the scans together manually.
- Make sure the doors are open or closed. Not half-open.

### 4 Start your scan

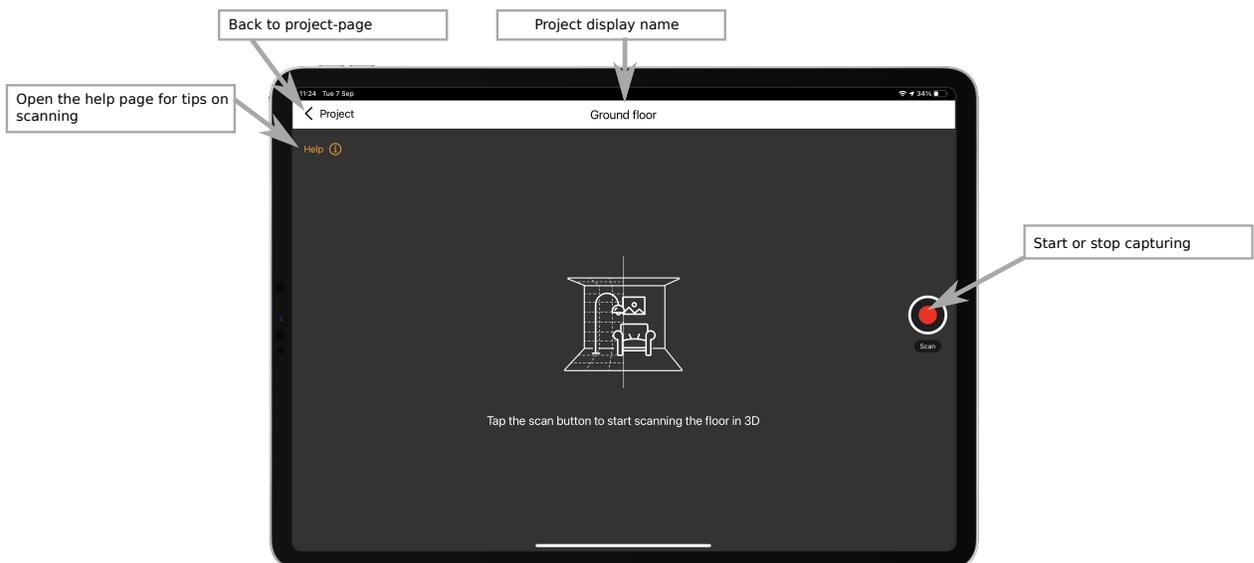
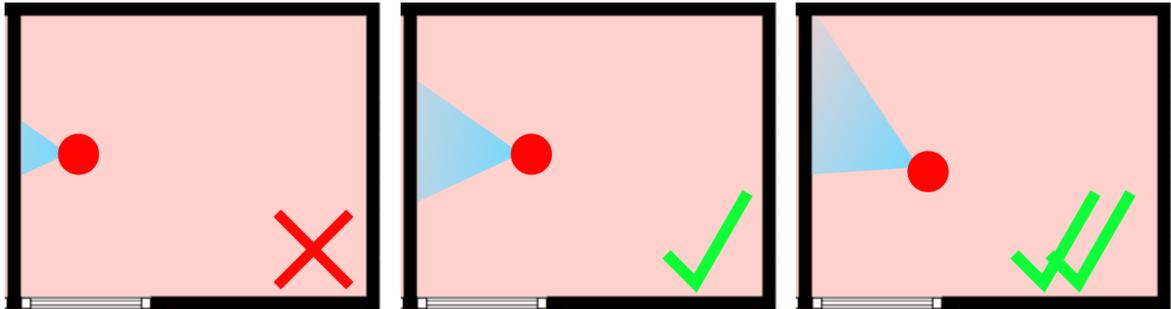


Figure 4: Scanning page

- When you scan, imagine you are painting a room with a brush. Move up and down in a continuous motion, not too fast or too slow.
- Do not get too close to walls/objects while scanning. We recommend a 2 to 3 meter distance.

While scanning, the mesh color indicates the distance: purple = too close, red/orange = sufficient distance, yellow = too far.



- Make sure to include all corners and walls to generate a complete 3D model.
- Keep checking the mini map on the bottom right to see if you missed any areas in the room.
- Avoid double scanning of the same location. This will not only slow down the scanning routine but also worsen the results. Think about the best way to scan each room and rotate clockwise or counter-clockwise through the room until it is completely scanned.
- For large floors, the best results are obtained by making several smaller scans rather than one large one. We recommend that the scans should not take longer than 10 minutes.
- When you suddenly have to stop scanning, press cancel to save your current scan and press continue to start scanning again. The app will ask you to scan a previous place to recognize your scanning position and allows you to align the multiple scans automatically.
- Make sure that each room is completely covered by at least one scan. Otherwise, if a room is scanned in several parts, this may reduce the accuracy of the measurement report.

## 5 Annotation

- Add sufficient laser measurements, preferably 1 to 2 rooms (length and width) per floor. These can be directly added while making a scan. This is only necessary for a measurement report since our scan is 99% accurate.

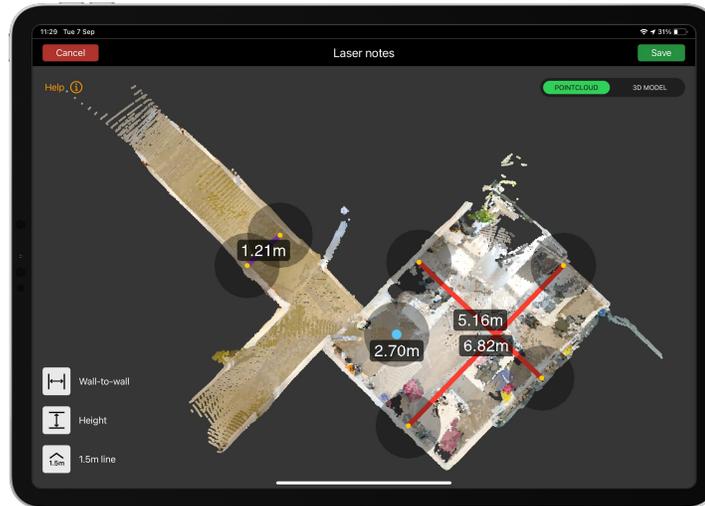
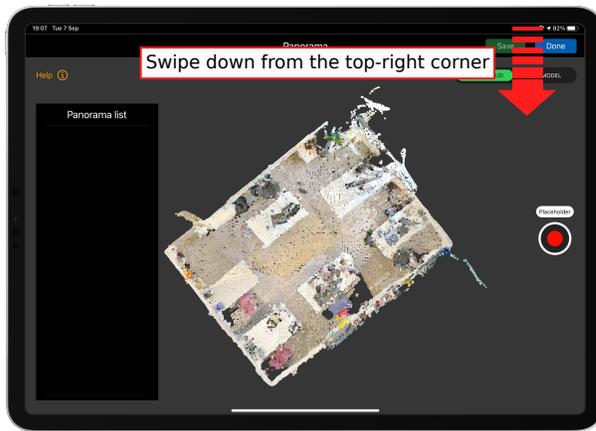
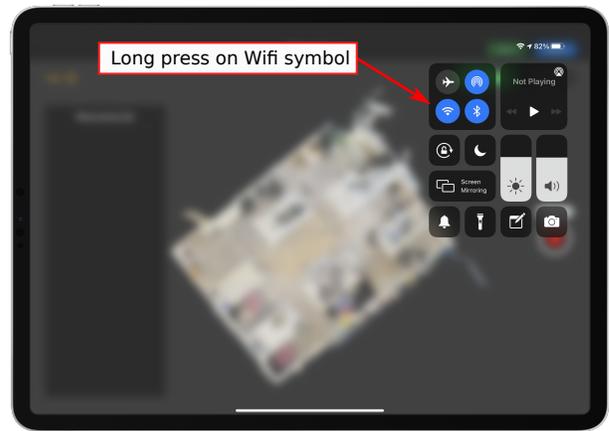


Figure 6: After adding laser notes

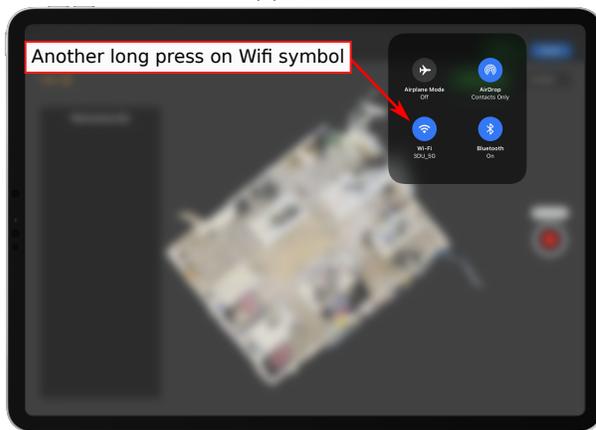
- Add panoramas by simply connecting your panorama device (Ricoh Theta/ Insta One) through WiFi or upload your panoramas made from your mobile device directly to weScan.



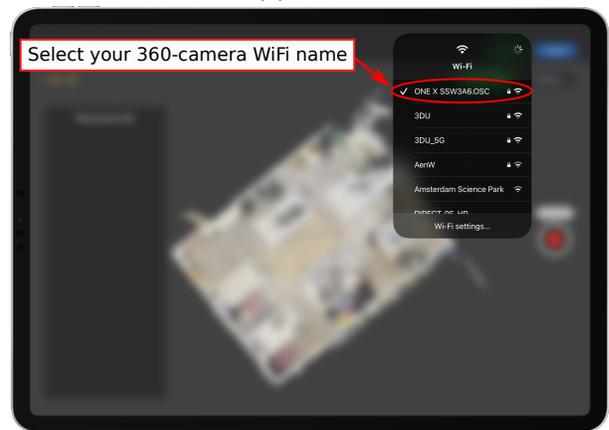
(a) Step 1



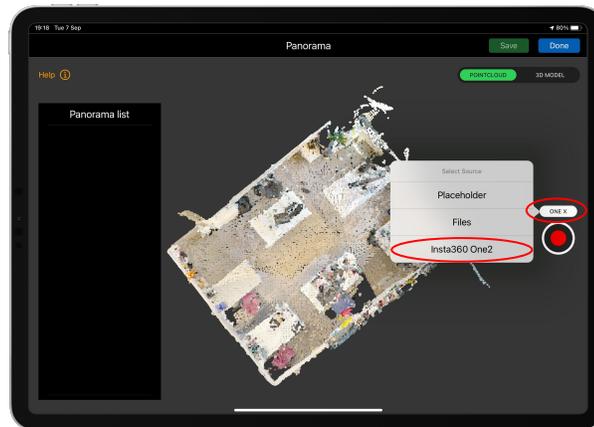
(b) Step 2



(c) Step 3



(d) Step 4



(e) Step 5

Figure 7: Configuring Insta-360 camera

- Make your panoramas directly in the weScan app and use a placeholder to directly locate where the panorama has been made.

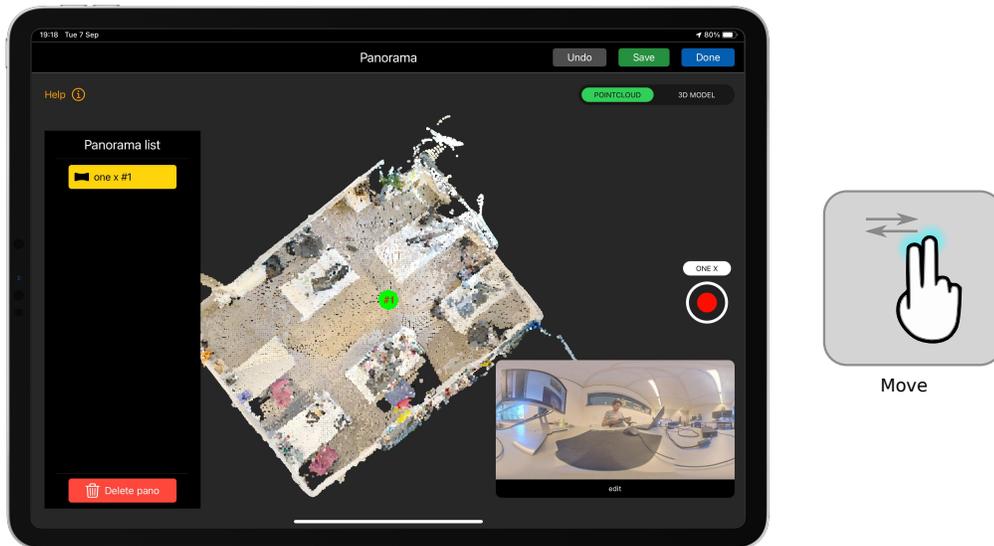


Figure 8: Adding panorama's

- Use the note-function for situations which may require additional context to help the annotators better understand the house. E.g. area's that cannot be scanned because they are cluttered, make a note of the dimensions, or rooms which have a window less than 0.5m<sup>2</sup> (as such, these rooms will be labeled differently).

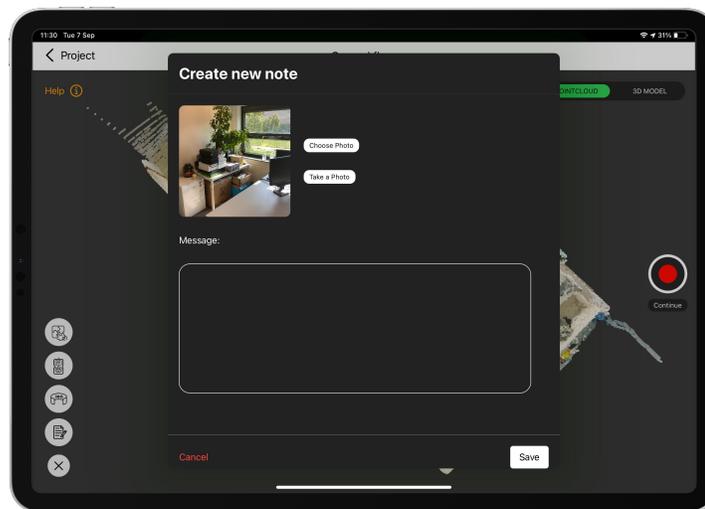


Figure 9: Adding floor notes

## 6 Upload your scan

When you have finished scanning the house, make sure you go through the following steps:

- Make sure that the 3D model does not contain any major errors, such as large holes, missing parts or warping of the model due to the iPad becoming disoriented during scanning.
- If multiple scans are made for a floor, make sure they are roughly aligned.
- Make sure you are connected to a WiFi network while uploading, and press the upload button found on the project page. When the model is completely uploaded, we will process the scan within 1 working day.

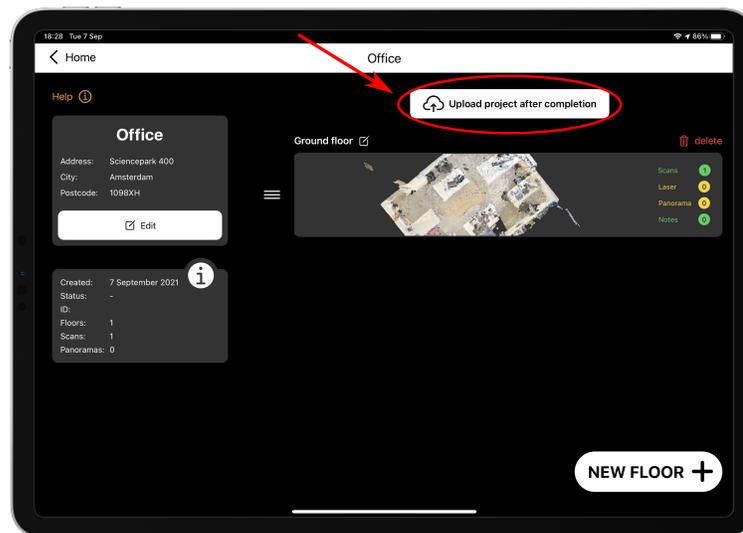


Figure 10: Uploading



Figure 11: weScan Webviewer