eZwayZ®

User manual for setting up
eZwayZ indoor navigation app
for your building

• Sign in • Navigation Graph • POIs • Categories • NaviZones • NaviPoints • Staircases • Tips & tricks
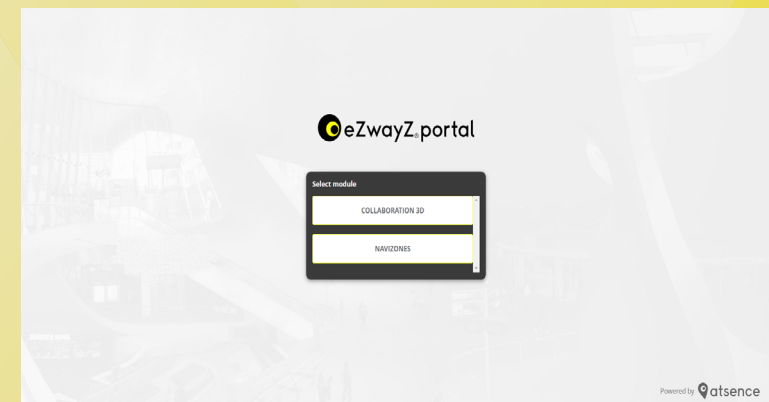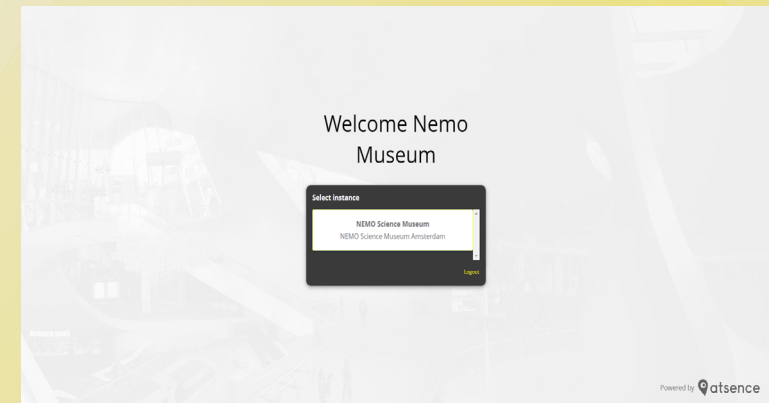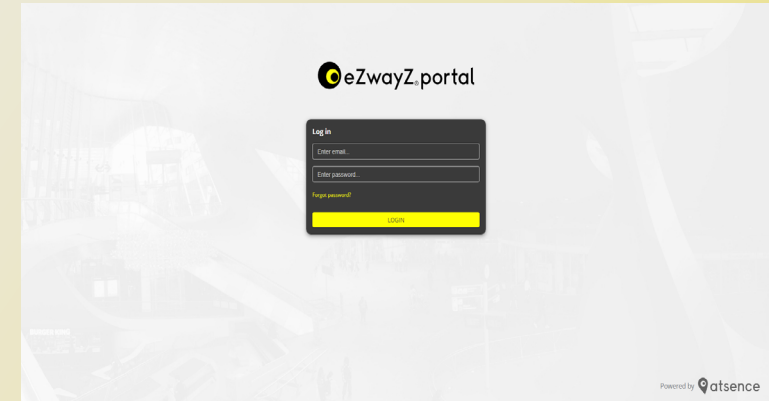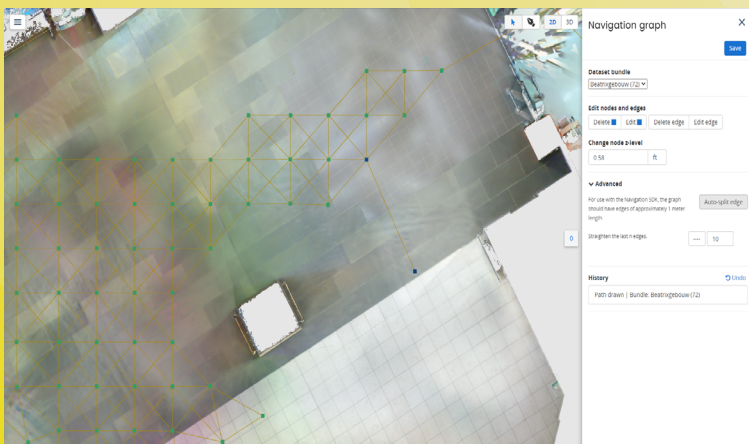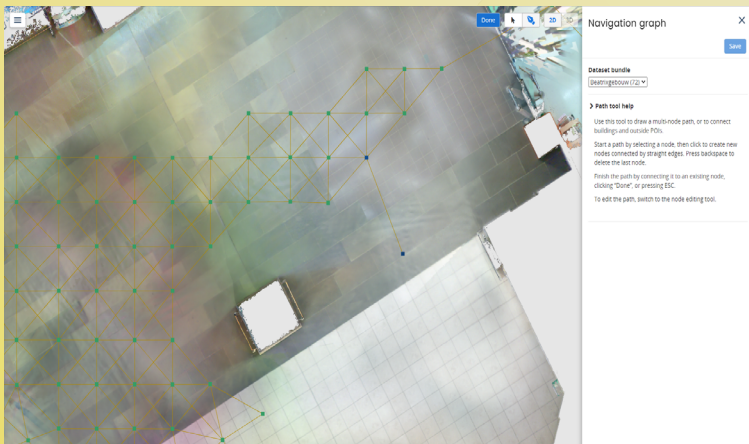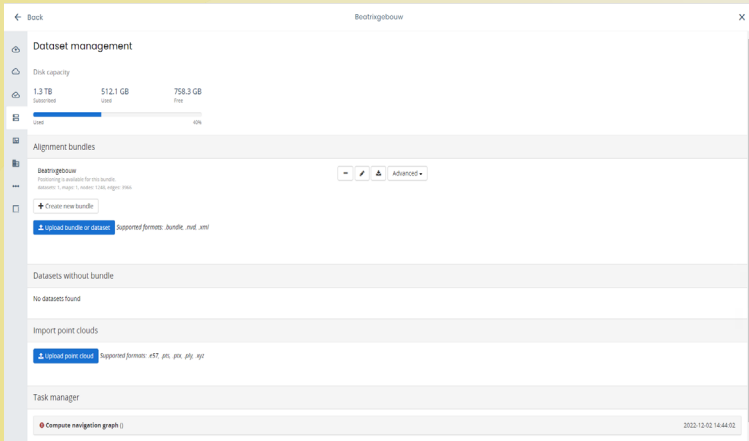
Sign in

Open your web browser and visit: portal.ezwayz.com

◉ eZwayZ®portal

Enter the login credentials you've received from us, select the location you want to work on and select the 'NaviZones' module.

Have you not yet received login information from us? If so, please contact us at: support@atsence.nl

Navigation graph

The navigation graph allows you to visualize the walkways within the building. Within this technique, nodes are used to navigate from point to point. These nodes can be connected to each other, which allows the system to automatically calculates the fastest route to the user's desired POI. The Navigation graph can detect stairs and elevators by placing nodes in a specific way. Information about this and the technicalities of NavGraph and nodes can be found at this link.

Nodes can be generated automatically. To do so, follow step 1 & 2:
1. Go to Site Setup > Dataset Management.
2. If you are generating a navigation graph for the first time, click 'Create Maps and Navgraph' next to the alignment bundle for which you want to generate a navigation graph.
3. Open the workspace-menu on the left side, go to 'Site settings' and open the 'Navigation Graph'.
4. The arrow-tool allows you to select 1 or 2 nodes. By selecting a node you can edit or delete one. Selecting 2 nodes allows you to connect them by clicking 'create edge'.
5. The pen-tool allows you to create a new node with an existing one. If the two nodes are a large distance apart, you can have them split automatically, which will generate between nodes. To use this feature you need to open 'Advanced'.
6. Manually adjust the height of a node using the z-level determination, so it matches the same height as the floor.
7. Remember to press save when you have made changes to the NavGraph, as the system does not automatically save changes.
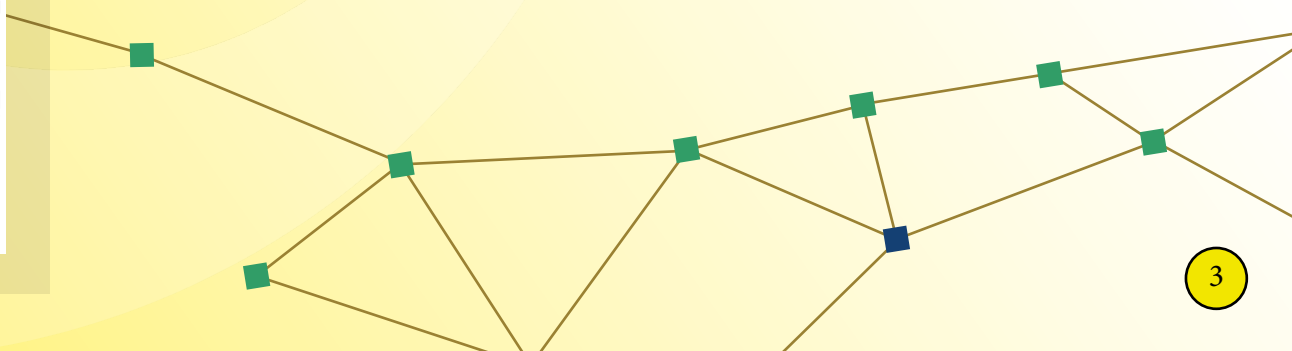
Adding Point of Interest and (sub)categories

POIs and categories can be created through the system of eZwayZ. They are meant to give structure within buildings to landmarks and facilities to navigate to. First we need to create a category where we can put the POI.

Open the workspace-menu on the left side and go to 'POI types'.

1. Add a new main category group by pressing the (+) icon at the top.
2. Define the main category.
3. Add different languages and name them as well and press OK.
5. Press the add (+) button in the category you've just created.
6. Set a main icon for the category by uploading a file.
7. Define the title: **category_icon** and press OK
8. For adding subcategories; repeat step 5 and define the title: **category_level** to set different layers. The icon does not have to be set. Press OK.
9. To enter subcategories; first create an additional layer. Repeat step 5 and define the title: **category_level**. The icon does not need to be set. Then press OK.
10. Next, the subcategory can be created. Repeat steps 5 and 6 and then apply the title: **subcategory_icon** (generic) or **subcategory_icon_name** (namespecific) and press OK.
12. Press the same + icon again to create a POI within the (sub)category. Note: To link a POI to a subcategory, both names must be the same.
13. Name the POI in different languages and add a matching (generic) icon to it. Then press ok.
14. In the 3D environment, right-click on the position where you want to add the POI and press 'create POI'.
15. Specify the POI by giving it a name (in different languages) corresponding to the subject (for example: Entrance A).
16. Select the related category for this POI.
17. The icon can be changed manually in the advanced settings if necessary.
18. Press save and the POI is created.
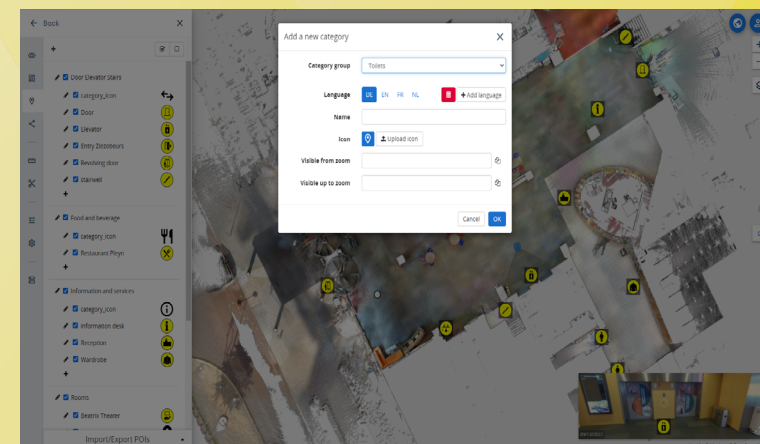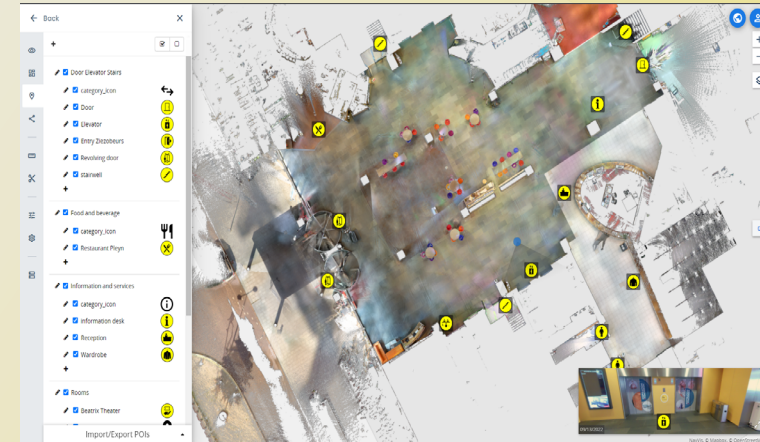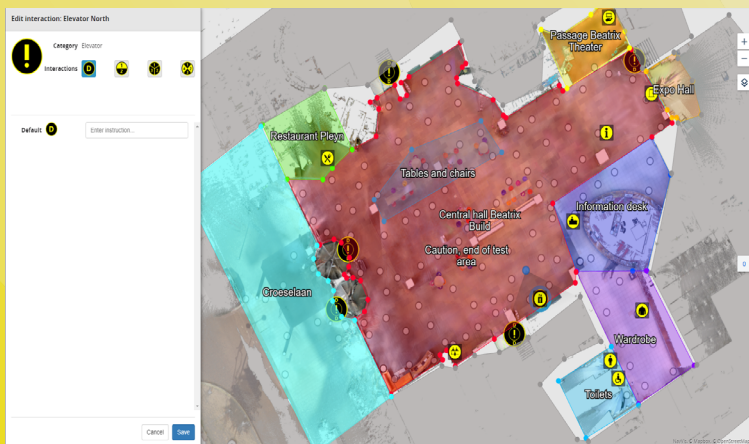
Naviguide

NaviZones and NaviPoints are intended to inform users of their position and the potential hazards within a building.

Open the workspace-menu on the left side and go to 'Modules'.

Select NaviZones
1. Press on the add (+) icon at the top to create a new zone.
2. Make a starting point of the area you want to highlight by clicking on map.
3. Select the area and reconnect to the starting point.
4. If you are satisfied with the selected area press save, if not you can redraw the area by pressing clear layer.
5. Give the zone a name (in different languages).
6. When the user enters or leaves an area, a message can be associated with it.
7. Color the zone to get a better overview of the areas.
8. Once the titles and messages are filled in, press save and you've created a zone.

Select NaviPoints
1. By opening this screen you'll see all the imported POIs on the left bar.
2. For creating a NaviPoint: Right-click on a POI in the 2D map or 3D panaroma view.
3. Press 'Create/edit NaviPoint'.
4. A screen will open where you can select the sort of interaction (default, 2, 3 and 4). This function allows you to specify the available directions of the POI.
5. If necessary, enter a radius of at least 1 meter or more.
6. Enter the instruction (in multiple languages) you want to give to the user.
7. Press save. Now, when the user reach this POI, he will be informed through the message you've just made.
8. Once a NaviPoint has been made, you can't change it back to a normal POI. Therefore you have to delete the NaviPoint and recreate the POI.

Zone implementation for staircase messages

As mentioned earlier, the system automatically recognizes stairs and elevators (on different floors) by usage of nodes. By taking the stairs while navigating, a default message is generated, which which pronounced: "Take stairs up/down to [floor]." However, there are still times when additional information is needed or small stairs are on the same floor. Therefore, an (additional) message can be included by placing and prioritizing three Navi-Zones.

For stairs on the same floor:
1. Add a NaviZone on the perimeter of the staircase. Rename the zone and set the priority to '200'. Then press 'save'.
2. Insert a new zone at the bottom of the NaviZone you just created. To monitor the overview; name the same title and add: 'bottom'.
3. Set the priority to '100' and type the message you want pronounced in 'Zone-in message'. Then click on 'save'.
4. Place a new zone at the top of the NaviZone as well. Name the same title and add: 'top' instead of 'bottom'.
5. Set the priority to '300' and type the message you want pronounced in 'Zone-in message'. Then click 'save'.

**For additional information on different floors:**
To enter an additional message (for example: The number of steps, position of handrails or type of stairs) the same method as described above can be used. However, in this case it is important to create three NaviZones for each staircase and per floor (so a total of 6 zones per staircase).
Avoid duplicate messages by placing a zone-in message only on the direction you are taking the stairs, as in the example below.
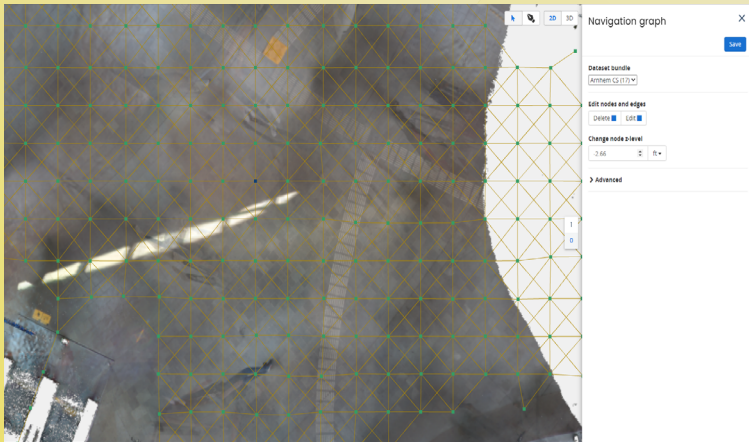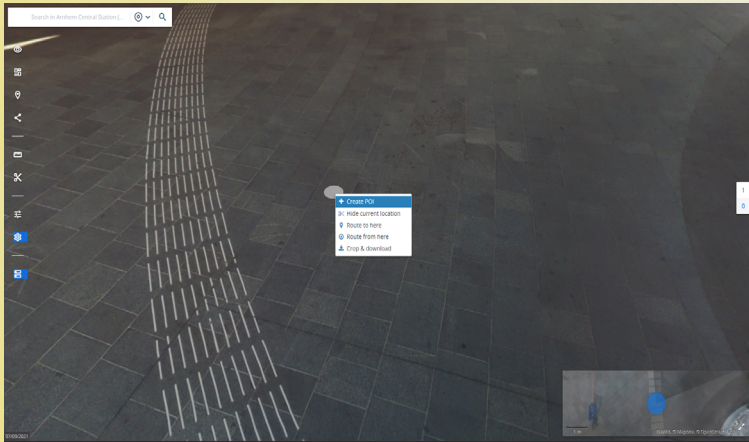
Example:
Floor 1 to 2: only [NaviZone downstairs] zone-in message.
Floor 2 to 1: only [NaviZone upstairs] zone-in message
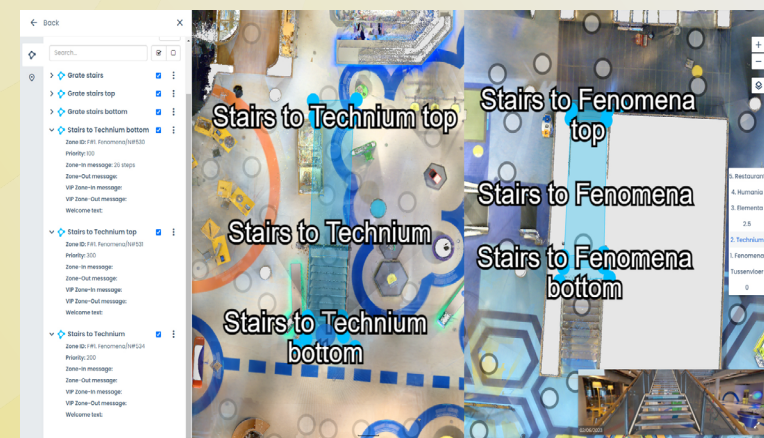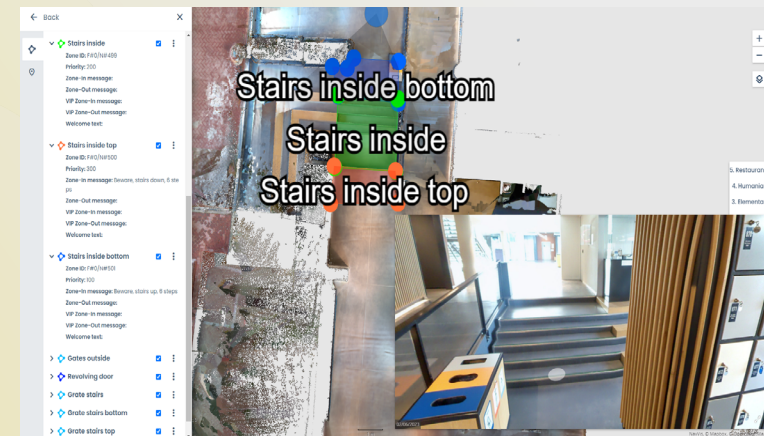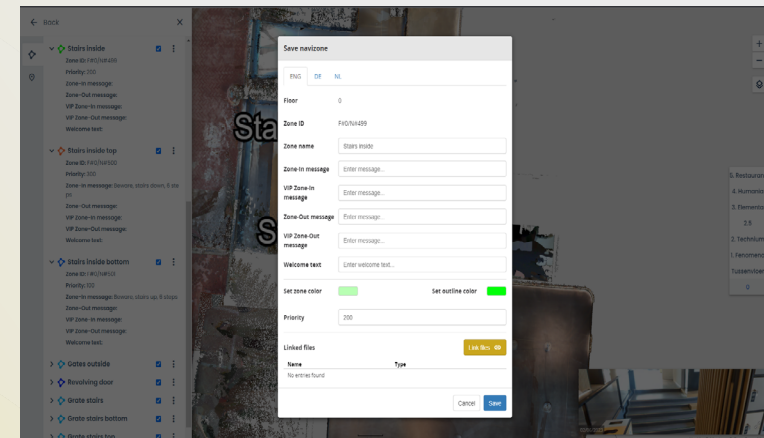
Functionality tips & tricks

Follow these instructions for best optimization to make sure your instance setup is well-integrated:

POIs and NaviPoints
1. Consider your structure of categorization, then create POIs. This will save you a lot of time.
2. Right-click on the POI for quick edits.
3. A POI can only be created in the 3D view.
4. Place the POI in front of the desired destination so the user will be able to reach their final destination at all times.
5. NaviPoints cannot be created until a POI has been created.
6. NaviPoints can figure as an alert and destination.

NavGraph
1. Each node has a Z-level, which means they can differ in height due to floor level. Check if all nodes matches the surfaces and have been set on correct heigts to avoid route glitches.
2. Check if no nodes are connected through walls.
3. For stairs and elevators: Make sure two nodes are connected on different floors. If they are right on top of each other the system will recognizes them as elevator, if they are apart; the system recognizes them as stairs.

Route testing
1. Start a route by right-clicking on a desired location in the 2D or 3D environment. Click 'route from here' in the window to set the starting position.
2. Do the same for the desired final destination and click 'route from here' here.
3. The system calculates a fast track. This way, you can quickly check all nodes for proper positions and make changes if necessary.