



How to plan a Marathon using the Iventis Planner

Marathons are more than just races.

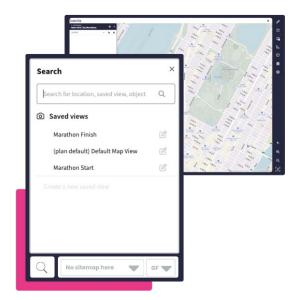
They are a celebration of endurance, determination and movement, and they attract thousands of runners, supporters and spectators. By definition, a marathon takes place over a large area, requiring careful planning, approval from multiple stakeholders, and clear communication with local authorities in order to be successful. There's undeniably a lot to consider, but that doesn't mean it has to be complicated.

With Iventis, marathon organisers can be sure that their event is planned to the last detail, offering everything needed to organise a successful event in one platform. Find out how to plan your marathon, stepby-step, in our handy guide.

Why should I plan my marathon in the Iventis Planner?

- Holistic view
 Combine maps, CAD uploads, operational plans, and more into one centralised plan.
- Flexibility
 Plan all operational aspects, from transport and traffic management to security and staffing, or focus on one!
- Asset planning
 Estimate the assets and resources needed along the route, including barriers, scrim, and traffic cones.
- Crowd control
 Plot designated crowd spaces in 3D and quickly calculate safe capacities.
- Event timings
 Create a minute-by-minute timeline to visualise the sequence of operations like road closures and traffic regulations.





Step 1: Set up your project

The first step in creating your plan is to start a new project in the Iventis Planner and create a base map where your marathon will take place. You can choose from a range of background maps, including satellite imagery to view the roads, paths and spaces where your event will take place. Not sure how to get started? Take a look at our blog explaining how to begin your first project.

While setting up your **Base Map View**, it can also be helpful to set quick views for the start and finish of your marathon. Centre your map around the start of your race, then click the magnifying glass at the bottom of the map. Click **Create a New Saved View**, and save your map with a name ("Start" works well!). This way, your default map remains the same, but your starting point is always just a click away. Repeat the step with the finishing point to move quickly between the two without having to scroll across the map, which can be useful when building a race of this length.



Step 2: Add your route

To make planning a marathon even easier, Iventis offers a **Road Events** category which contains every marathon-related template you need in one handy place. You don't need to waste time searching for mile markers, water stations, first aid points etc. – it's all ready and waiting.

To draw your route, you can access the **Road Events** templates by clicking the + sign to add a new layer then selecting **Road Events**. Choose **Marathon Route** and click **Add to Plan**. Before starting, you can customise your route however you like by changing your line colour, thickness, outline and more; select the three dots to the right of your Marathon Route Layer and select **Layer Settings**.



Now select the **Draw** icon, a pencil icon on the right-hand side and click the squiggly line. To start drawing, click your mouse at your starting point. Then, move your cursor along the road and click to place the next point along the route. When you're finished you can either double click, press enter or click the tick in the toolbar. You can always continue drawing the route later or make adjustments by editing the line.

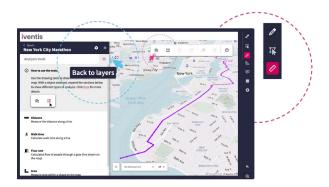
In the **Object Details** panel, you'll be able to name the route (referred to as the Map Object) and see the distance of your route – an important factor in a marathon! Iventis provides metric measurements by default, but you can change this in your settings to show the distance in miles.



Step 3: Mark your distance

Mile (or kilometre) markers are useful for a variety of reasons. They help you visualise the distance between different parts of your route, such as the space between water points. They also act as a great motivator during the race itself, providing updates for the runners and encouraging them to keep going.

To add mile markers, click + to add a new layer, select **Distance Marker** from **Road Events** and hit **Add to Plan**.



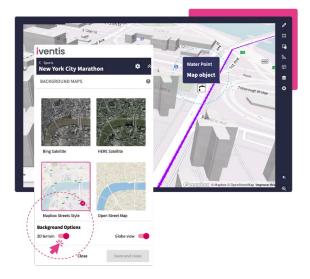
You can then use the measurement tool to place your markers. Select the **ruler (Analysis)** from the right-hand panel, which will display all available measurement tools on the left-hand side. Using the **Draw** function in the top right corner, begin tracing your route. You'll see a distance counter following your cursor as you draw. Continue tracing until the distance counter measures a mile (or kilometre).



When you have found your milestone, click the **Return to Layers** icon near the top of the left-hand panel. This will allow you to access your mile markers layer. Click on the layer, and the **Draw** tool will automatically be chosen. From here, click on **Draw Point** and place your point in the location you measured as a milestone distance.

The measured line won't show up in this view, but if you toggle back to **Analysis** on the right-hand panel, you can see whether your point is in the correct place.

If not, return to the **Draw** function to adjust its position. Once you're happy with it, use the measurement tool to repeat the process for each mile of the marathon. It's helpful to name each point as "Mile 1", "Mile 2", and so on, so that you can easily find a specific distance on your map.



Step 4: Check your terrain

Wherever you're planning your marathon, it's likely that the route won't be completely flat. These small hills and dips need to be considered when you plot services such as water, first aid or other stations needed in your race.

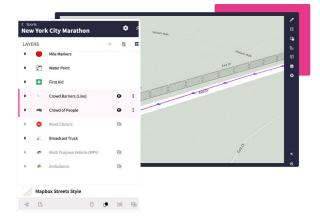
To check the terrain along your route, toggle **3D Terrain** on the map panel. In this view, you can pan across your route and check for any significant hills, helping you to avoid these as service points and ensure the most practical placement.



Step 5: Add service points

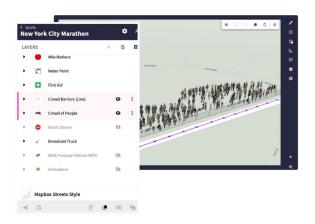
Water stations and dedicated first aid areas are crucial when planning a safe marathon. You can find water and first aid within the **Road Events** category, which you can place along your route.

However, it isn't enough to just place them anywhere – they should be in strategic locations that make sense for the runners. Your terrain check can help with this by showing you where uneven terrain might make runners exert more effort, suggesting it might be beneficial to put a water point close by. You can also use your mile markers as guidance, ensuring that your service points are plotted at a reasonable distance from each other, and runners are never too far from their next stop.

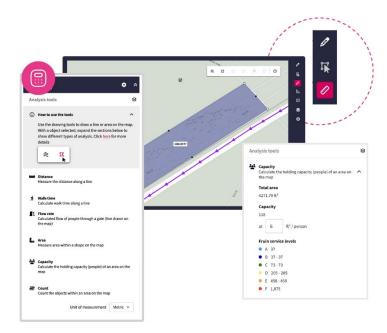


Step 6: Crowd control

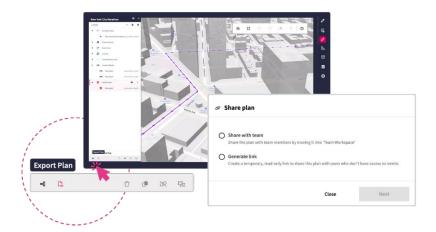
Marathons attract large crowds of spectators and supporters, and it's crucial that these crowds are separated from the runners in order to avoid safety hazards. Crowd barriers are therefore important throughout your route, ensuring that there is a clear separation between supporters and athletes and maintaining order. There are two options for crowd barriers within **Road Events**: individual barriers for small areas, or a barrier line which can be drawn in the same way as a route.



It's important to consider the space available for crowds behind the barrier, especially if your marathon is taking place in a tightly packed area. To help visualise this, add a crowd behind your barriers to understand how much space is taken up by a group of people. You can do this by selecting the **Crowd of People** template within the **Road Events** category. Once selected, you can place the crowd on your plan and duplicate accordingly. This ensures that you can account for enough space around your event and reduces the risk of the race becoming too crowded.



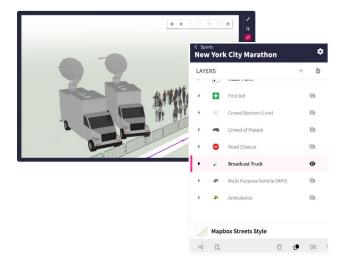
You can also use the **Analysis** tools to calculate safe capacity for your spectators in a given area. In the **Analysis** function, select the **Draw a Polygon** tool and map the designated spectator area around the race. Once selected, choose **Crowd Capacity** on the left-hand panel to find out how many people can safely occupy the space.



Step 7: Civil planning and sharing

Road races will always be a cause of disruption to local traffic, so it's important to ensure that vehicles have ample signage regarding any road closures, detours or alternate access routes. You can plot these using the Road Closure map layer, found in the Road Events category.

With Iventis, it's easy to share the entire plan as a link, or by **exporting a PDF document**. You can also share isolated layers, to help secure stakeholder approval and feedback where required. Simply click on the **Eye** icon next to the layers and toggle them to either visible or invisible. Once your map displays the desired layer(s), you can easily share it by selecting the **Export Plan** or **Share Plan** icons located at the bottom left of the screen.



Step 8: Further details

There are plenty more intricate details to consider adding to your plan. For example, you may choose to add press and broadcasting vehicles for optimal event coverage at specific points along the route, or ambulances etc.

Iventis offers an array of **3D models** which can be accessed in the **3D layers template**. And if you would like to import your own bespoke models, you can create custom layers!

You've created your marathon plan!