



How to set gates to count objects in your video?

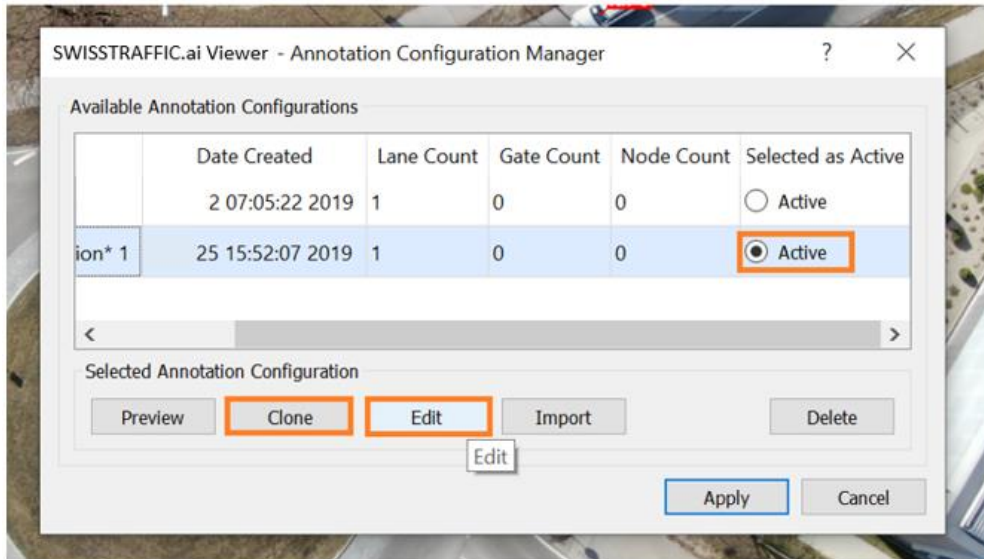
How to count each kind of object in one or both directions and get advanced analysis such as O-D matrix, gaptime or average speed?

Do you want to **count vehicles** in your video? Sure, no problem, first you must set your own Gates. **Gates** are **virtual lines** which are crossed by vehicles and other tracked objects. You can set **your own gates at any place** in the video and you **can change** them any time you want. Gates are used to count each kind of object in one or both directions or you can set gates to get more advanced analysis such as **O-D matrix, gaptime, time to follow or average speed** of the object within two gates and others.



If this is your first time working with **SWISSTRAFFIC.ai Viewer**, check the article **How to export data from SWISSTRAFFIC.ai Viewer in 5 minutes**.

For **setting** the gate you have to open the tracking log with your video through SWISSTRAFFIC.ai Viewer and Configure new Annotation. Once you set new Configuration and press Edit new configuration window opens.

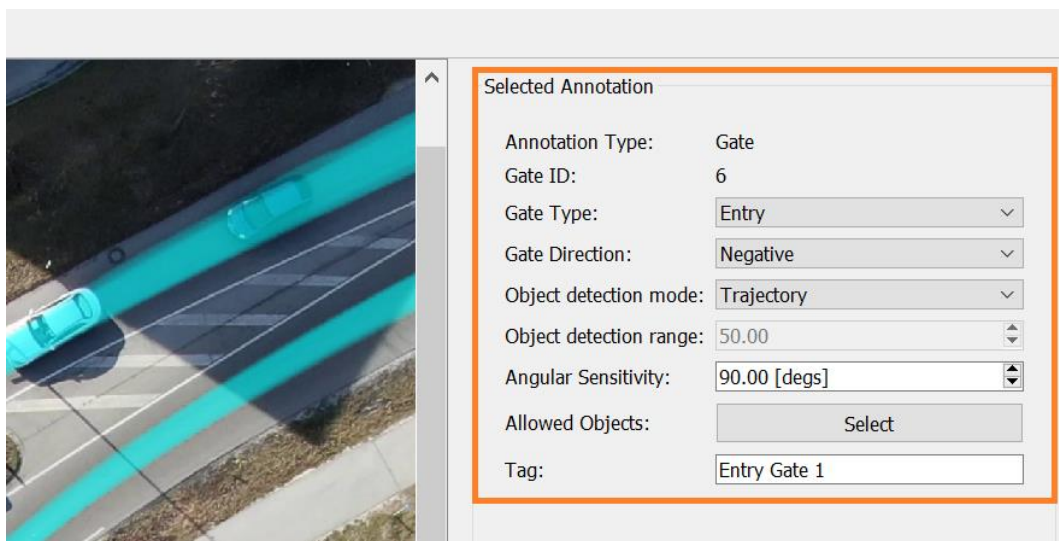


Now you can set **gates for your O-D matrix**. Gates are **virtual lines** which are **crossed by vehicles** and other tracked objects. They are in the form of a line consisting of straight segments connecting points, so you need **at least 2 points** to create them. Set the characteristics of the gate in the right menu:

- **Gate Type** – Sets whether the gate is entry, exit, or neutral. Set Entry Gate to places where vehicles enter the intersection, roundabout or the traffic. Set Exit Gate to places where vehicles exit the intersection, roundabout or the traffic. Entry and Exit gates are used for the export of **O-D matrix**. Neutral Gates are not used for O-D Matrix, but you can export **gate crossing** data for these gates.
- **Gate Direction** – Sets the direction in which passing objects should be tracked by the gate. Positive direction points up, negative direction points down. Bi-Directional option counts objects in both directions. To be sure, see arrow-direction by each gate.
- **Angular Sensitivity** – Adjusts the sensitivity of the gate depending on the angle of the passing object.



- **Allowed Objects** – After clicking on this menu you can choose what kind of object the gate will count. (Car, Medium Vehicle, Heavy Vehicle, etc.).
- **Allowed Colours** – Only in LIGHT mode. Sets which object colours the gate will count.
- **Tag** – This field is used to set the gate name.

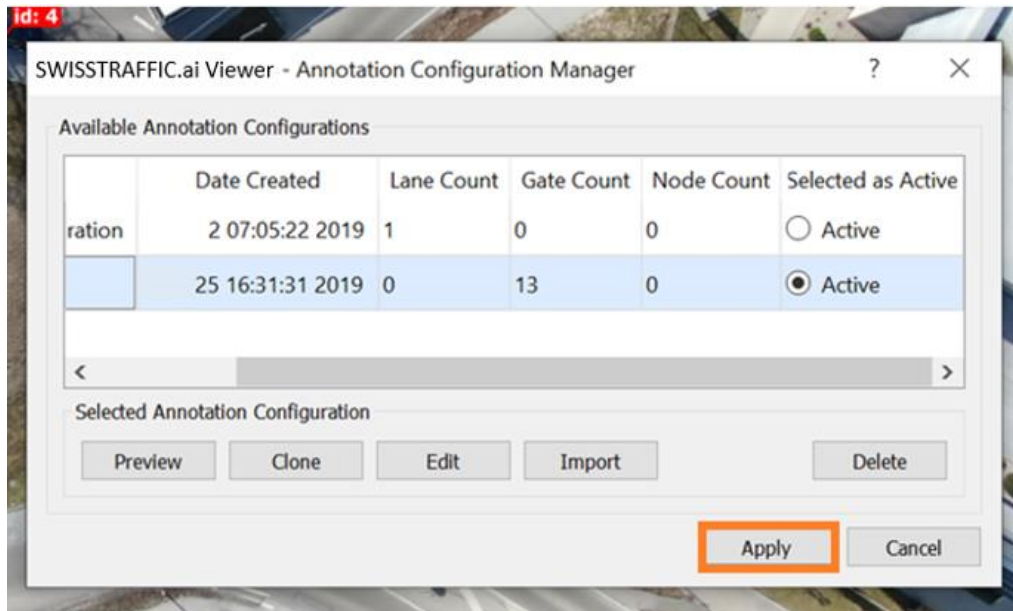


After setting the desired properties, **confirm the gate settings** with the Finish Editing button. In this menu you can choose Edit Annotation and change the line shape as well. You can **move** the created point by clicking and dragging the mouse. Point can be **removed** by right-clicking and selecting Remove Control Point.

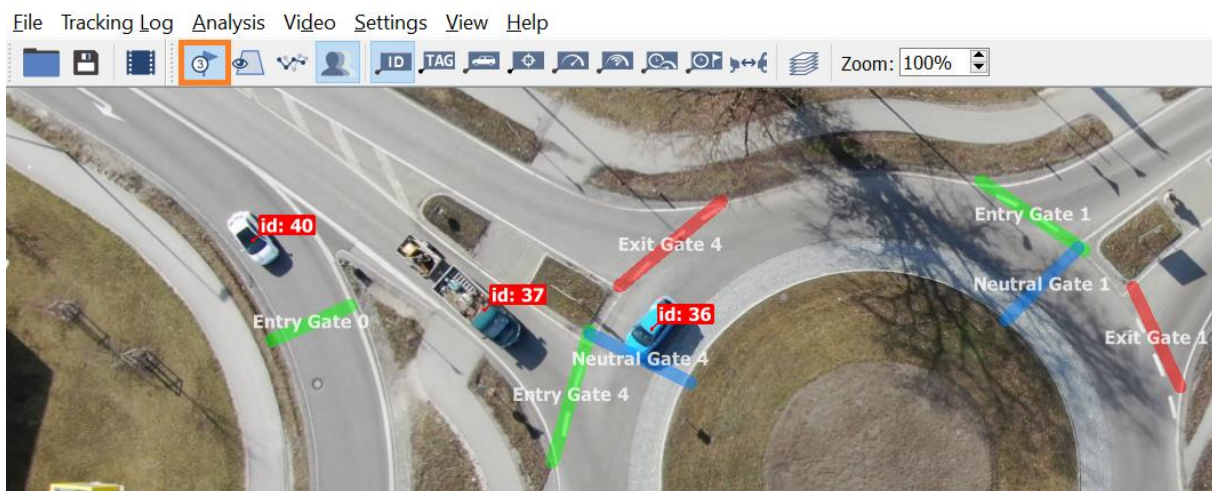


By repeating positioning and setting gates set the whole network of virtual gates.

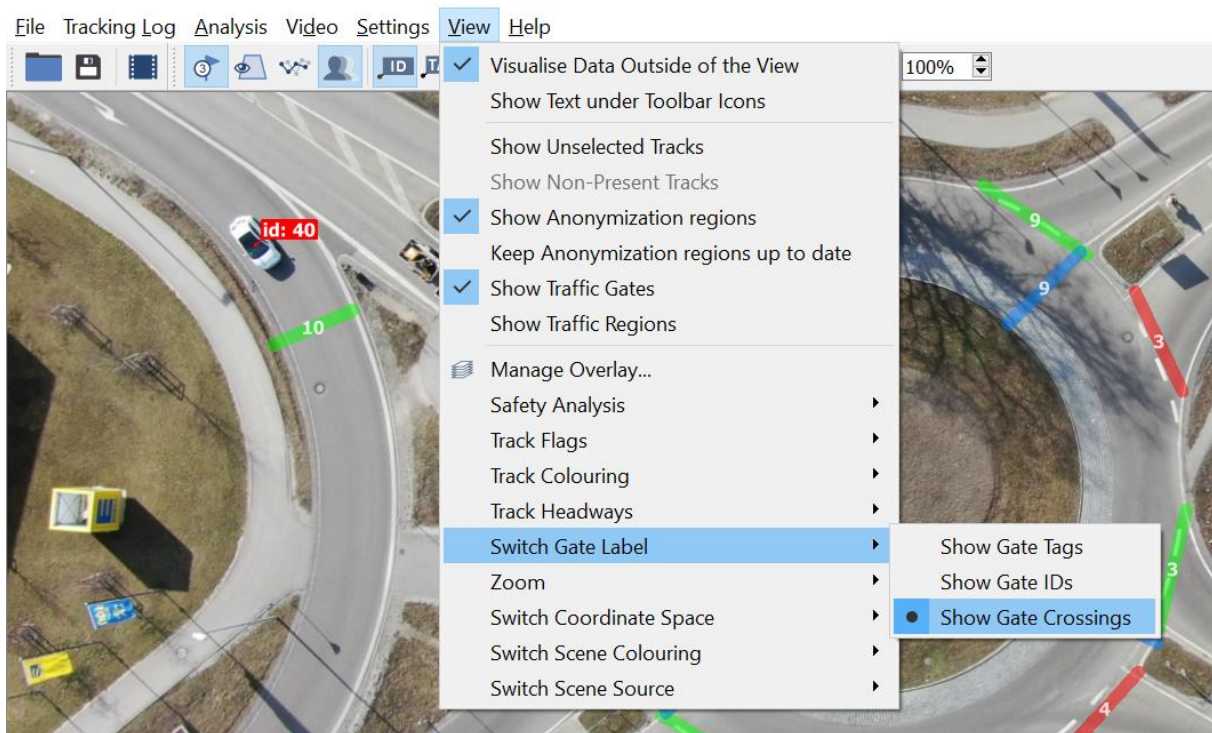
Once you are done with gates, click Confirm Annotation Redefinition in left bottom corner. In Annotation Configuration Manager select new configuration as Active and press Apply button.



Now you can display all traffic gates by pressing button **Show Traffic Gates** in top menu and **the list of gates** in right-bottom corner, where you can go through the **statistics per each selected gate** (including possibility to **export** data to .CSV file).



If you want to see **number of gate crossing**, you can change it in section View – Switch Gate Label – Show Gate Crossings.



Congrats! You have set your gates! Now check the article **How to export gate crossing data**. If you are looking for an export of OD matrix, see an article **How to export Origin-Destination matrix**. For visual exports check article **How to make an visual export from SWISSTRAFFIC.ai Viewer**.