

What's New in PTV Optima 2026

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PTV Optima 2026

- › **Companion: AI-powered online support**
- › **RADAR Connector: integration of EVO and EPIQ RADAR**
- › **ML forecasting of generic traffic data**
- › **Bulk public transport transfer alerts**
- › **In-product access to PTV Optima resources**
- › **Air quality maps with enhanced 24-bit graphics**

Companion

Waiting

IE
MULATION
VIOLATION

Start simulation

SHC



MAP

Hello, I'm Companion, a virtual assistant. Just so you are aware, I sometimes use AI to answer your questions.



Just now



Type your message

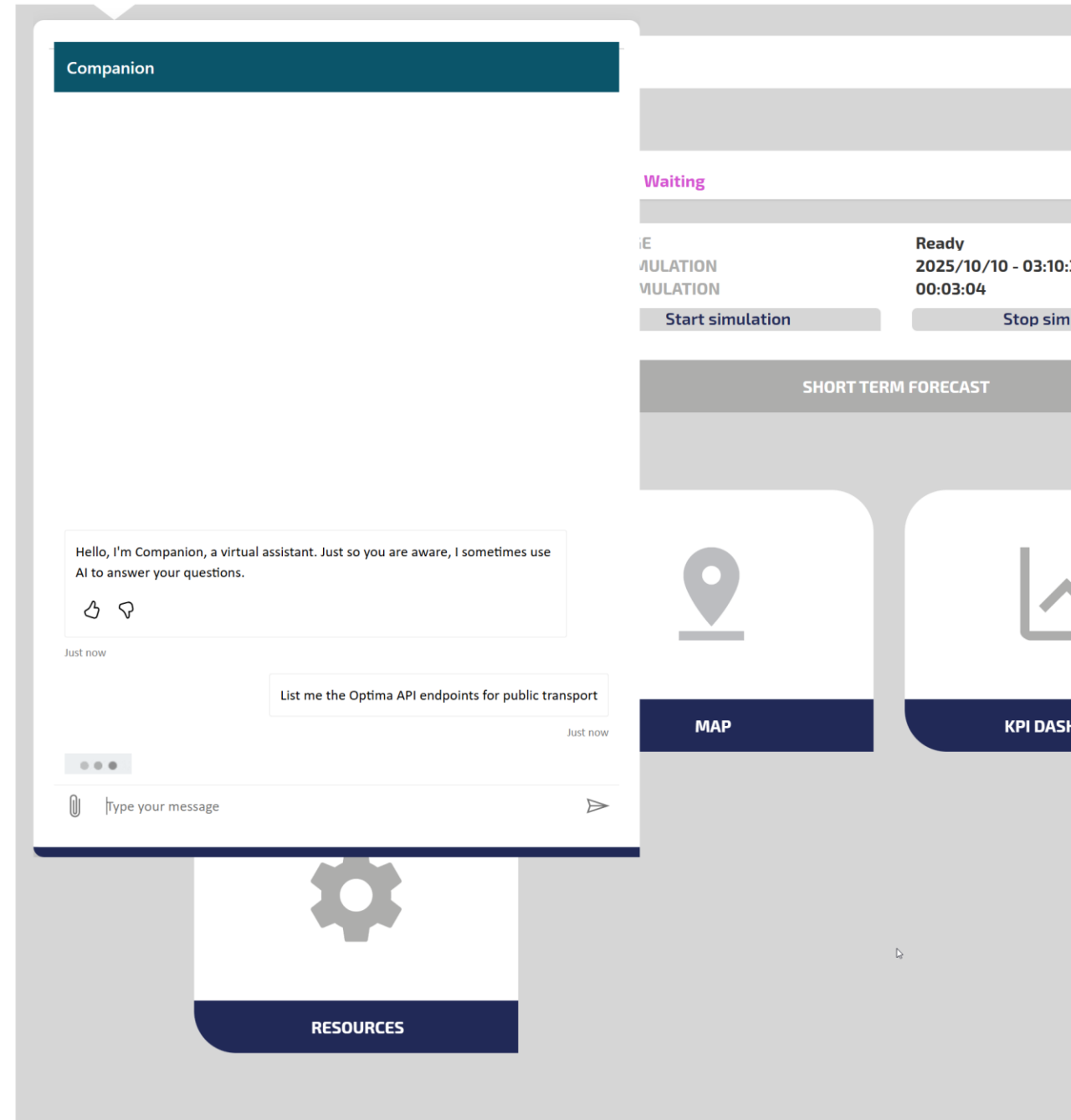


Companion: AI-powered online support

- › Companion, an AI-driven conversational assistant that provides on-demand help, is now available in PTV Optima to get online help.
- › Companion offers guidance for workflows and procedures that may be less familiar to users. Built on large language models (LLMs) and enriched with Optima-specific resources, its knowledge base is focused on product-related content such as online help, support articles, webinars, and other official documentation.
- › Companion is accessible directly from Traffic Supervisor.

Companion: AI-powered online support

- › Companion can be asked about basic or advanced insights about PTV Optima.
- › Note 1: public Internet access is required.
- › Note 2: online content is continuously updated, and then always refers to latest PTV Optima release.



Companion: AI-powered online support

- › Companion answers derive from the knowledge base of PTV Optima Help Center, and other dedicated resources.
- › Answers come with references, which allow the user to browse directly into the meaningful Help Center pages for the requested topic.

Companion

- Get all PuT events
- Get the ETA for a specific stop
- Disable a specific stop
- Vehicle Management Workflow:**
 - Get the ETA for a specific trip
 - Get information on disruptions for a trip
 - Get the position of all vehicles involved in a specific trip at a specific time

Additional Available Endpoints:

- Get the ETA for trips, vehicles, and stops
- Get information on disruptions of a trip or disrupted trips at a stop
- Disable a line, trip, or stops of a trip
- Get PuT events and delete PuT events
- Get lines and line routes that pass a stop
- Get trip-trip, trip-route, and route-route transfer times
- Create and delete transfers
- Acquire positions of vehicles by time (PUSH mode)
- Get expected positions of PuT entities at a specific instant
- Get vehicle raw positions from a GTFS feed

These endpoints can be combined to build various workflows for managing public transport data and operations within PTV Optima. The API is compliant with GTFS 1.0 for output, ensuring compatibility with industry standards. For more details, refer to the "Public transport API" section on the cgi.ptvgroup.com website, API and IO Reference, under the Public transport API paragraph [1].

1 reference ▾

1 [Public transport API - cgi.ptvgroup.com](https://cgi.ptvgroup.com)

12 minutes ago

Type your message

Public transport API

Optima Public Transport (PuT) ETA provides advanced functions to handle several

- Lines
- Streets (associated to Put lines)
- Trips
- Stop locations
- PuT events

The PuT endpoints are based on the General Transit Feed Specification (GTFS), transport providers.

Important: Optima handles GTFS input packets compliant with either GTFS 1.0 without any data losses with respect to GTFS 2.0.

The available endpoints can be combined to build several workflows. Here is a non-exhaustive list of three distinct workflows:

Trip management workflow

- Getting all PuT events:
 - [Getting PuT events](#)
- Getting the Estimated Time of Arrival (ETA) for a specific trip:
 - [Getting the ETA for trips](#)
- Getting information on all events that have an effect on a specific trip:
 - [Getting information on disruptions of a trip](#)
- Disabling a specific trip (according to information resulting from the previous step):
 - [Disabling a trip](#)

Stop management workflow

- Getting all PuT events:
 - [Getting PuT events](#)
- Getting the Estimated Time of Arrival (ETA) for a specific stop:
 - [Getting the ETA for stops](#)
- Disabling a specific stop:
 - [Disabling stops of a trip](#)

Vehicle management workflow

- Getting the Estimated Time of Arrival (ETA) for a specific trip:
 - [Getting the ETA for trips](#)
- Getting information on all events that have an effect on a specific trip:
 - [Getting information on disruptions of a trip](#)
- Getting the position of all vehicles involved in a specific trip, at a specific time:
 - [Getting expected positions of vehicles by trips and time](#)

Topics in this section

[Getting the ETA for trips](#)

Resource Library

Explore our resource library, filled with informative guides, insightful articles, tutorial videos, or customer success stories. All curated to support your endeavor in shaping the future of mobility with us.

Displaying 1 - 3 of 3 matches



WEBINAR

Environment-sensitive traffic management

Dive into the features of PTV Optima for better environment-sensitive Traffic Management.

[Learn more](#)



WEBINAR

Multimodal network management

Learn more on how PTV Optima can help you with Multimodal Network Management with comprehensive digital twins.



WEBINAR

PTV

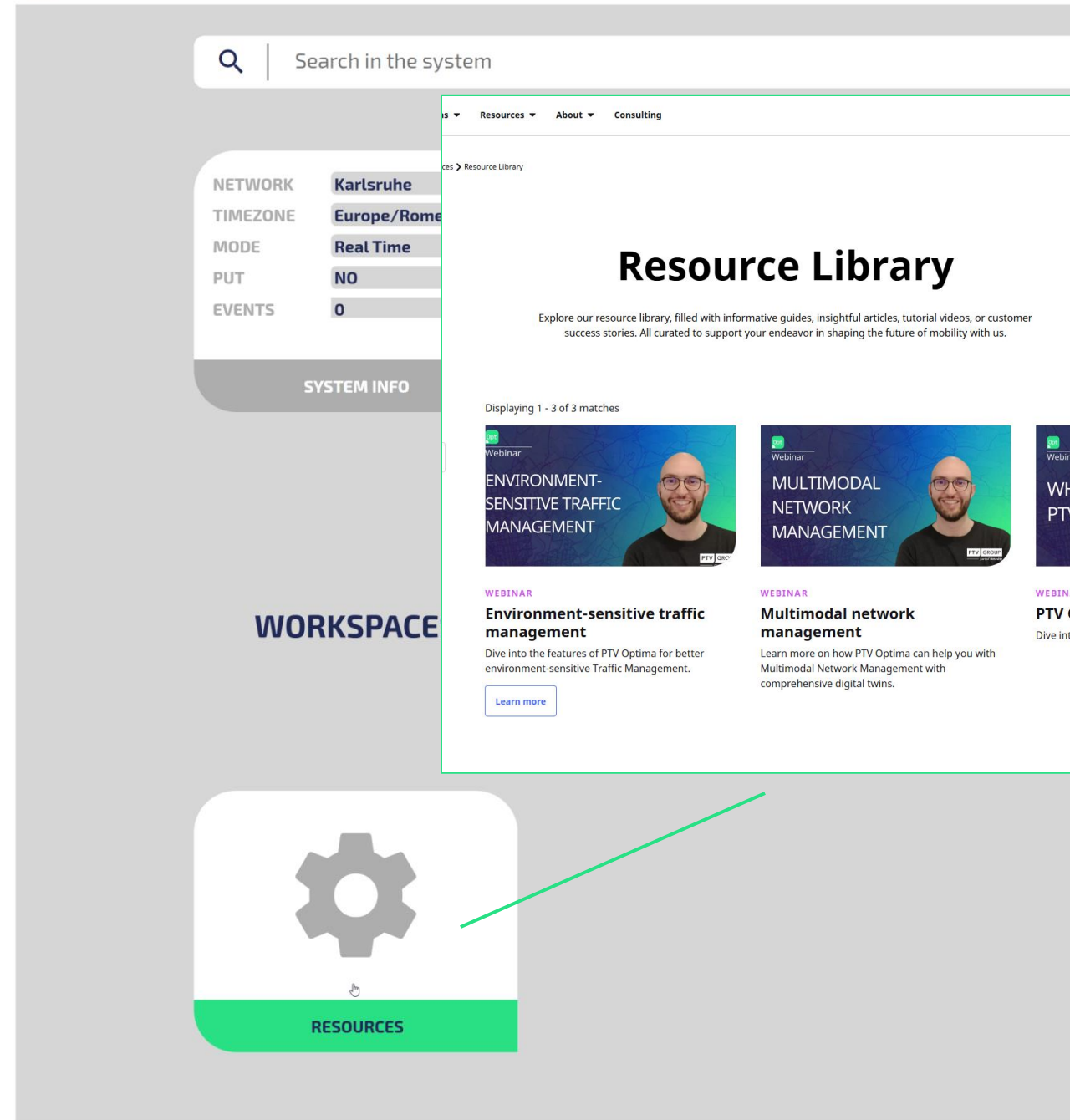
Dive in

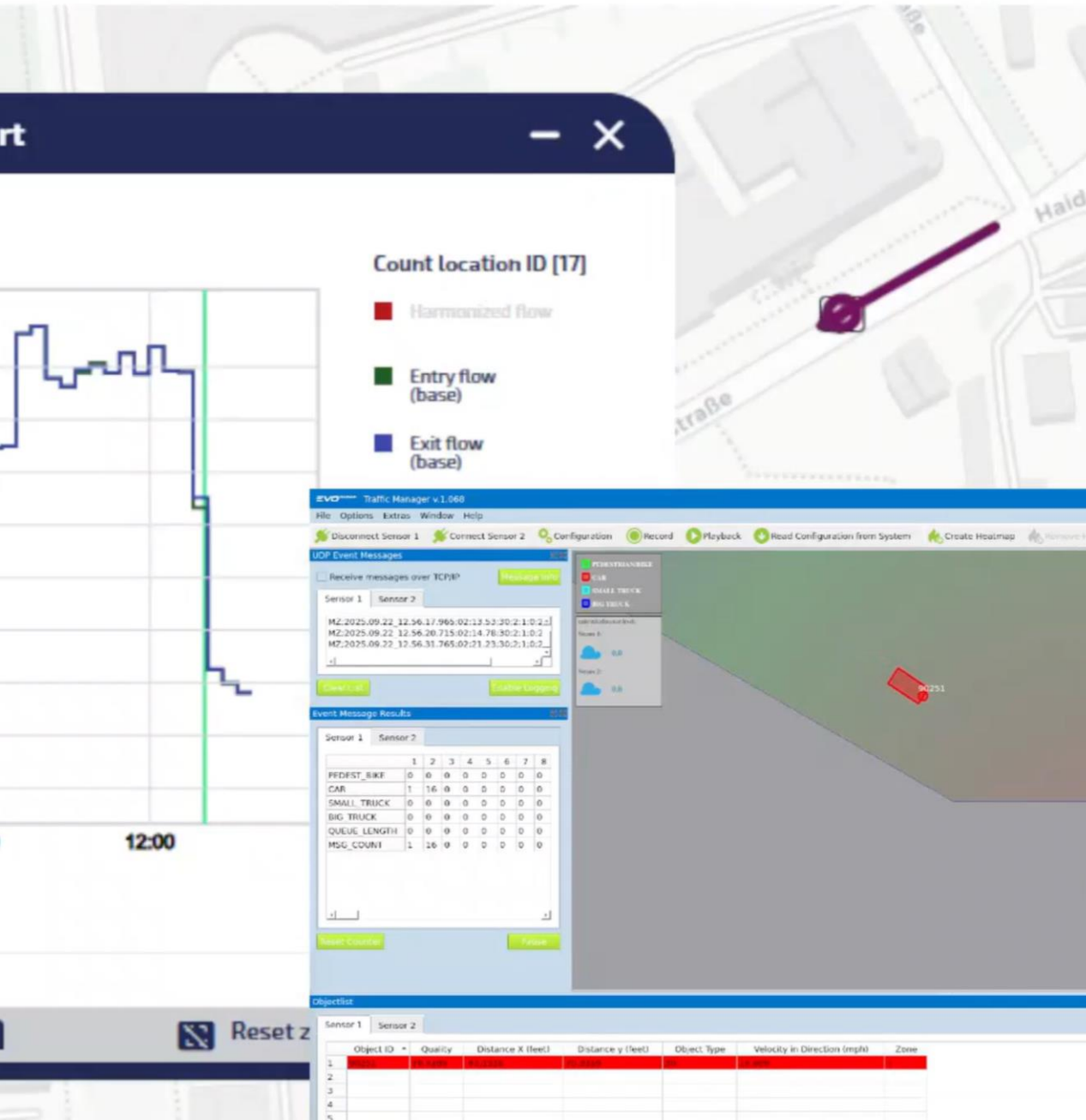
In-product access to PTV Optima resources

- › PTV Optima 2026 makes public resources directly available within the working environment.
- › Users can access them from the traffic operator UI or through the documentation.
- › Staying up to date on Optima capabilities is now simpler and more convenient.

In-product access to PTV Optima resources

- › A new workspace selection allows the user to browse the online available resources of PTV Optima.
- › Note: public Internet access is required.



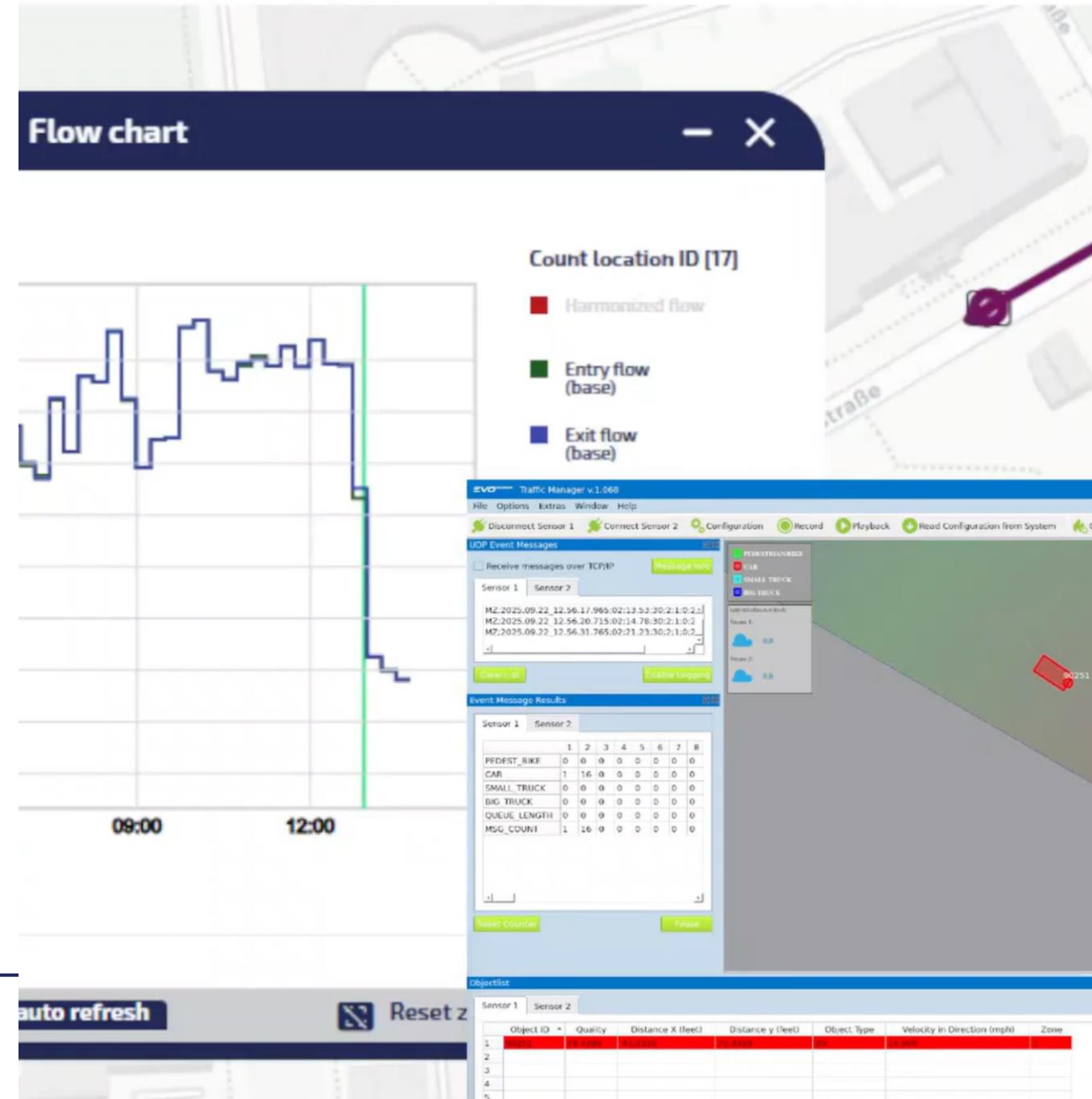


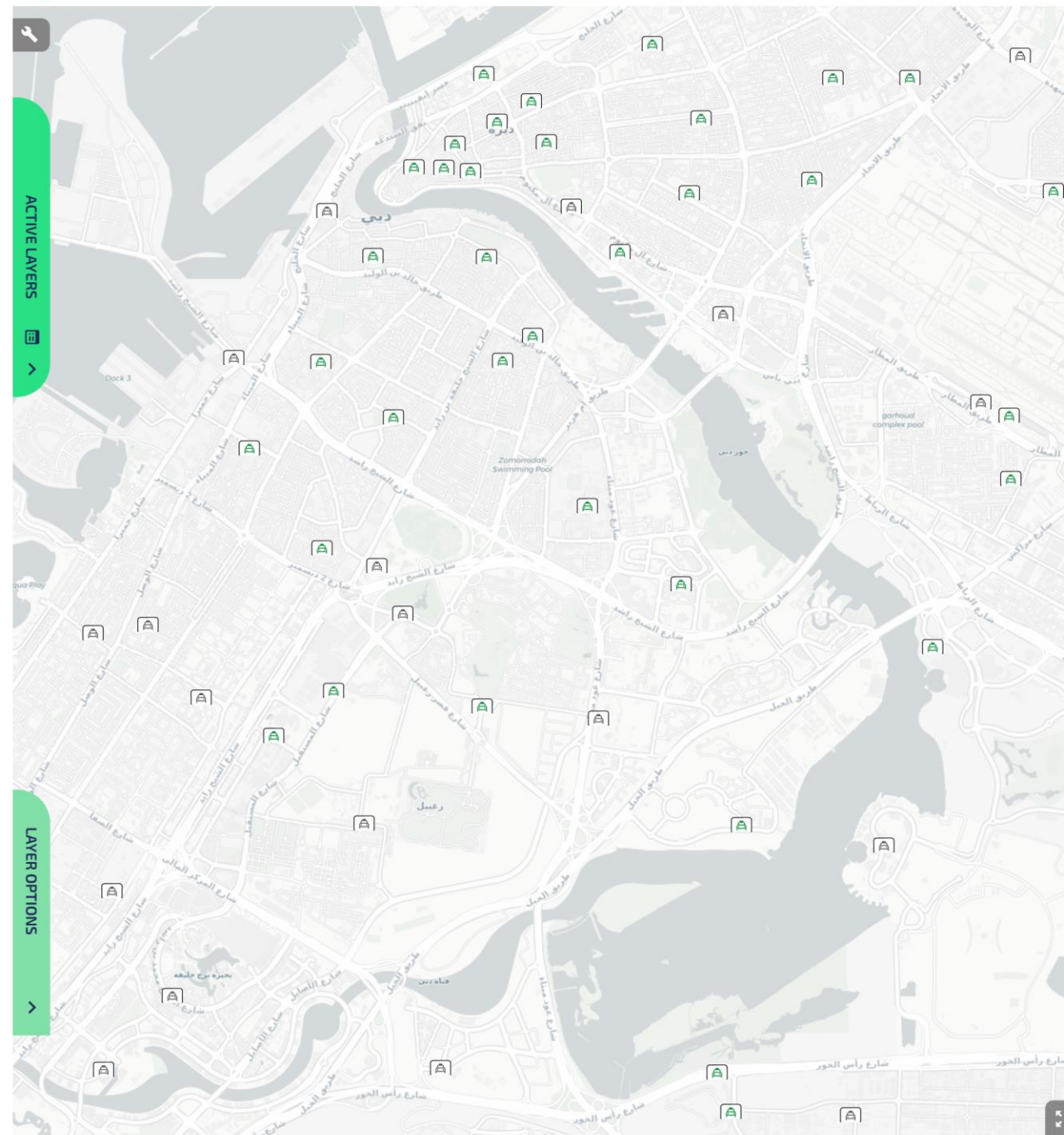
RADAR Connector: integration of Econolite EVO and EPIQ RADAR

- › The RADAR Connector enables PTV Optima 2026 to process data streams from your Econolite EVO and EPIQ radars.
- › Optima can read vehicle speeds and counts from any number of installed EVO or EPIQ RADAR devices, alongside its other supported traffic data sources.

RADAR Connector: integration of Econolite EVO and EPIQ RADAR

- › A set of Econolite RADAR devices, via their corresponding Hubs can be connected to a PTV Optima system.
- › PTV Optima automatically processes the radar detections as aggregated by the Hub.
- › Each road monitored by radars is treated like a PTV Optima count location.
- › PTV Optima can use the count data both for the entire section and for each of the single lanes.



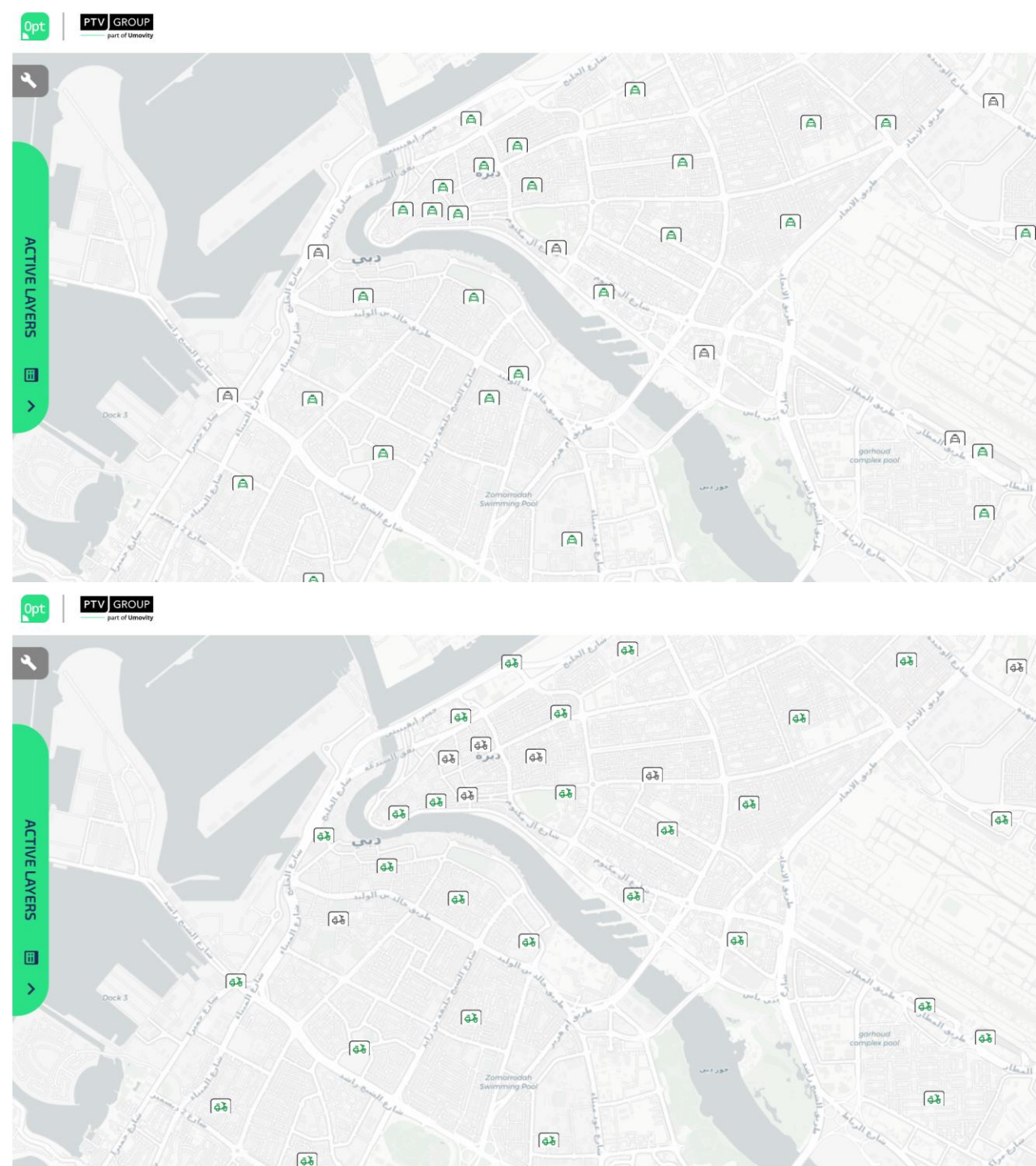


ML forecasting of generic traffic data

- › PTV Optima 2026 extends its machine learning capabilities to forecast volume and speed data for a wide range of mobility-related objects.
- › Examples include predicting taxi call demand, shared scooter bookings, or congestion levels in parking facilities.
- › These forecasts are available in the operator GUI and can also be plugged in external machine-to-machine data consumer processes.

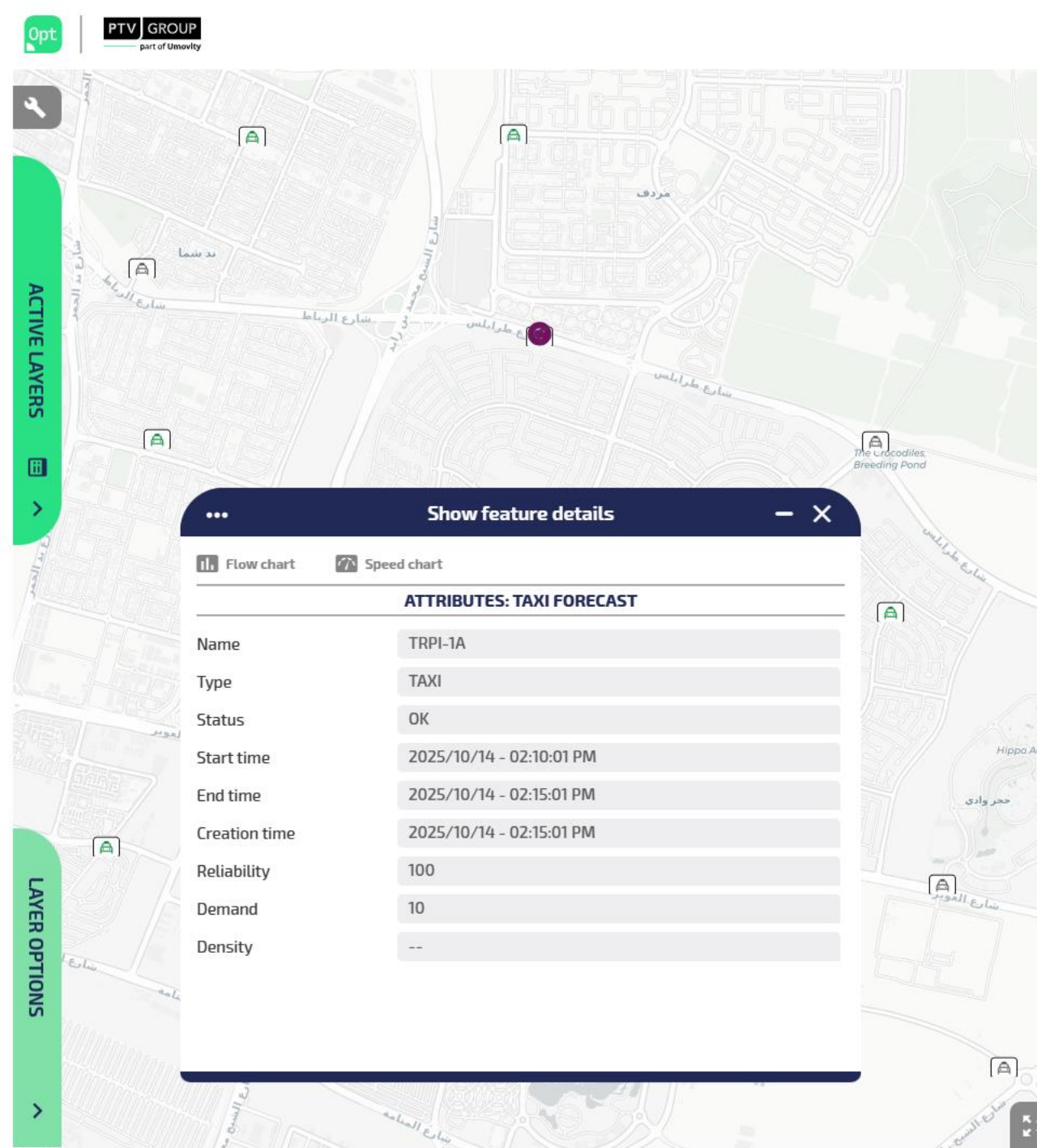
ML forecasting of generic traffic data

- › New objects providing real-time counts or speed values can be added into PTV Optima.
- › Examples include predicting demand for taxi in given areas or stations, searches of shared vehicles, or parking availability.



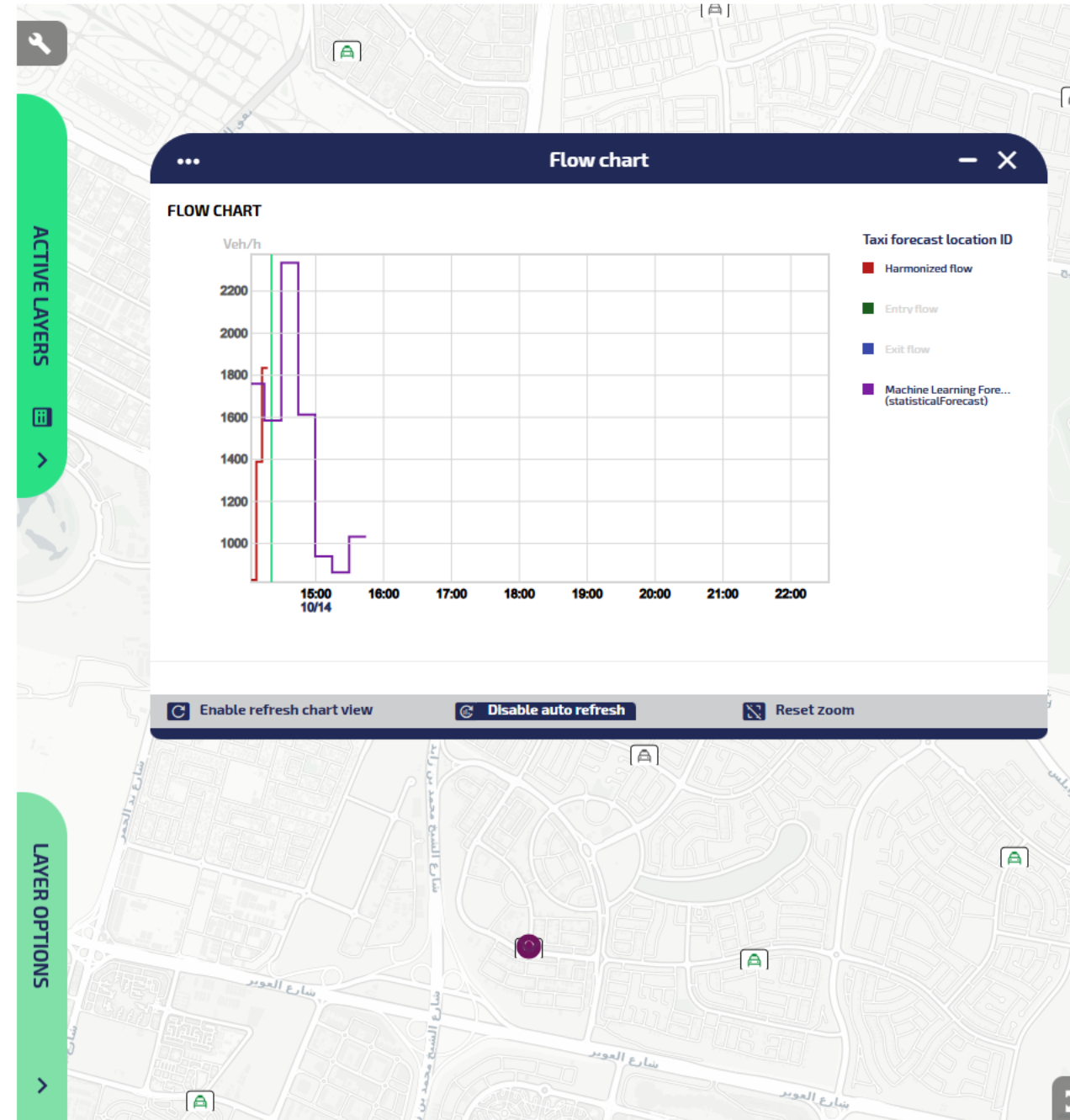
ML forecasting of generic traffic data

- › Each object allows the operators to observe the latest demand data collected on the object.
- › Spatial analyses and current mobility patterns can be identified and inspected.



ML forecasting of generic traffic data

- › PTV Optima contains the data time series of each object.
- › On top of the observations, PTV Optima continuously forecasts the demand or speed data, for the objects.
- › As per road volumes and speeds forecast by module ML Forecast, the forecast time series are continuously updated. Also, PTV Optima constantly learns from the latest received data, allowing your predictions to be always up-to-date with evolving mobility patterns.



Bulk public transport transfer alerts

- › PTV Optima 2026 introduces enhanced monitoring of predefined public transport transfers. Users can now request the status of all transfers at once, with more flexible queries and richer responses that include detailed information for each connection.
- › This makes it faster and easier to monitor public transport operations and detect potential issues.

Bulk public transport transfer alerts

From stop	From line	To Stop	To line	Connection time	Next arriving trip	Estimated arrival time	Next departing trip	Estimated departure time	Estimated waiting time	Threshold	Status
340 - G.A.M.	64	33 - FERRARIS	9	3 min 0 s	651518U	18:21:20	652632U	18:35:40	11 min 20 s	5 min	OK
340 - G.A.M.	64	33 - FERRARIS	60	3 min 0 s	684238U	18:33:00	683251U	18:42:00	6 min 0 s	5 min	OK
473 - CARLO ALBERTO	55	409 - CASTELLO CAPOLINEA	7H	4 min 0 s	849632U	18:20:10	1632T	18:27:00	2 min 50 s	5 min	Alert
473 - CARLO ALBERTO	13	4117 - BOGINO N. 15	ST2	7 min 0 s	768834U	18:24:30	8645S	18:38:40	7 min 10 s	5 min	OK

- › PTV Optima 2026 can now provide information about all the real-time connections, in a single request.
- › Connections to be monitored can be configured upfront or in each data request.
- › Detailed information about upcoming trips, connection and waiting times are returned.
- › Public transport operators and agencies can monitor their whole network at a glance, also considering delays from road congestion and events impacting public transport routes.
- › PTV Optima allows saving time of the operators, letting to instantly focusing on the only items requiring investigation.

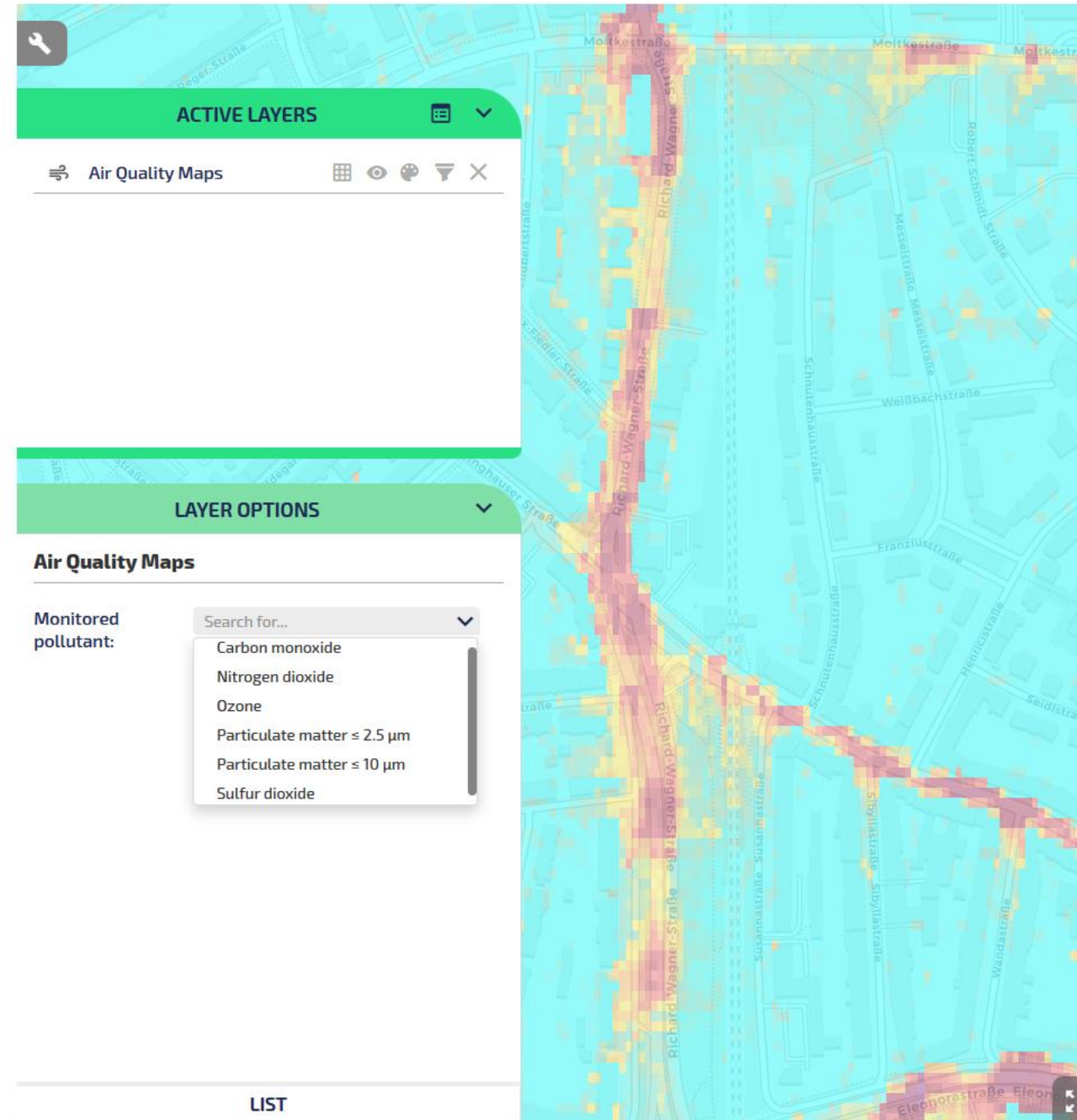


Air quality maps with enhanced 24-bit graphics

- › PTV Optima 2026 provides improved visualization of air quality data with support for a greater number of pollutant thresholds.
- › Maps are now smoother and more fine-grained, with fully customizable thresholds, values, and colors across the RGB palette. Each layer can be configured independently, enabling alignment with common standards for air quality visualization.

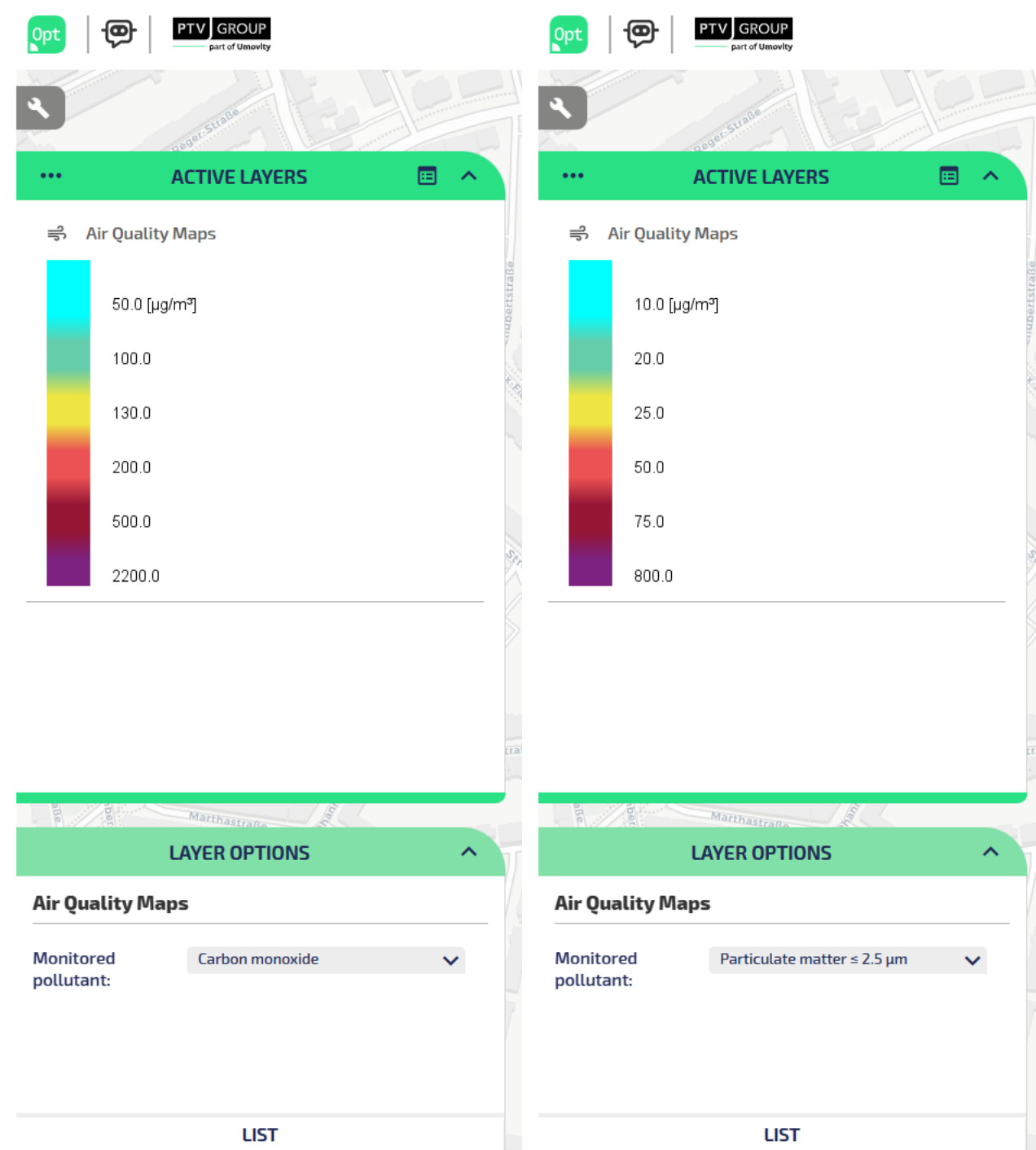
Air quality maps with enhanced 24-bit graphics

- › In PTV Optima 2026, road traffic emission dispersions became Air Quality Maps.
- › PTV Optima allows ingestion of estimates of pollution concentrations, to be displayed in the operator GUI, for the following pollutants:
 - › Carbon Monoxide
 - › Nitrogen Dioxide
 - › Ozone
 - › Particulate matter $\leq 2.5 \mu\text{m}$
 - › Particulate matter $\leq 10 \mu\text{m}$
 - › Sulfur dioxide



Air quality maps with enhanced 24-bit graphics

- › PTV Optima 2026 is aligned with the [European Air Quality Index](#) by [European Environment Agency](#).
- › The number and values of thresholds can be further customized in PTV Optima configuration, for example to meet local regulation values.
- › Color of each single threshold is also configurable, allowing maximum richness in map visualization.





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