

PTV Flows

Service Description



PTV Planung Transport Verkehr GmbH, Sitz der Gesellschaft Registered Office Karlsruhe, Geschäftsführung Management Board Christian U. Haas (Vors. CEO), Andrew W. Myers (CFO), Handelsregister (HRB Nr.) Commercial Register (HRB No.) 743055, USt-ID-Nr. VAT ID No. DE 812 666 053, Registergericht Court of Registration Mannheim.

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1 General profile

PTV Flows is a web based, SaaS application that allows traffic operators and responsible of mobility authorities to:

- Monitor the status of a road network in terms of level of services.
- Forecast the status of a road network in terms of level of services.
- Visualize the status of areas and corridors with two different visualizations: map based and graphs.
- Define KPIs (Key Performance Indicators) and related alerts also on areas and corridors.
- Visualize alerts to manage promptly any problem that may arise.
- Send automatically KPI alerts by email to users of the instance.
- Visualize on map KPIs
- Retrieve KPIs results to use data also in a M2M (machine to machine) context.
- Analyse KPIs to understand what is happening and what happened in the network, including unusual trends.

2 Technical system description

2.1 General

PTV Flows can be used as a web application and is recommended to be used with the last version of Google ChromeTM web browser on a desktop computer. Microsoft Edge is not officially supported but most of the functionalities should work with no problems. Functionality and layouts from untested web browsers and operating system recommendations can vary.

PTV Flows operates via Windows Azure, PTV GmbH's data center and network.

The Service Description is not an assurance of a claim to all variants.

2.2 Technical requirements

Browser

Use the latest version of Google Chrome.

Web.GL 2.0, Java.Script and Cookies need to be enabled.

Client configuration

Network bandwidth: recommended connection speed 20 Mbps or more.

Screen resolution: 1600 x 900 (high color quality) or higher.

Processor: recommended Intel Core i5 or newer.

Graphics card: needs to support webGL.¹

Operating systems

PTV Flows is a web application that can be used through a browser.

Therefore, it is not limited by a specific operating system.

Mobile requirements

PTV Flows is not designed for mobile devices. Usage and viewing on a mobile device are at the customer's own risk.

Performance limitations for road network data

PTV Flows currently supports up to 500.000 road segments on one single instance.

Fair usage of API

PTV Flows allows for a call rate of one call every 30 seconds per specific API endpoint.

3 Service descriptions

3.1 Subscriptions

A PTV Flows subscription gives the customer access to a single product instance that includes a selected map and the ability to receive the integrated Floating Car Data (FCD). A specific group of users can access this instance. Typically, a subscription is used by a city or road authority to monitor their network.

A subscription is assigned to a plan. A plan defines the edition limitations of the subscription and the term duration.

There are 5 editions available for public for PTV Flows:

- 1) Free (60-day) Trial Edition
- 2) Extra Small
- 3) Small, Corridor Edition
- 4) Medium, town
- 5) Large, City/Regional roads
- 6) Extra Large, Regional/National Roads Edition.

Access to API, Additional kilometres, forecast elements, user and KPIs are offered and priced on demand.

¹ To determine if your computer is compatible with WebGL, please launch Google Chrome and enter "chrome://gpu/" in the URL bar. If the report displays "Hardware accelerated," it indicates that your graphics card supports WebGL.

3.1.1 Free 60-day Trial Edition

The Free 60-day Trial Edition can be upgraded to a paid plan (but with same road coverage). Upon conversion to a paid plan, a new trial subscription can be activated by the user.

Only one trial subscription can be owned at a time per user. After upgrading a trial plan to a paid plan, an additional trail subscription can be activated by the user.

The Free 60-day Trial Edition is meant to be used to explore product features, classroom/training, and education, or for project marketing activities (tenders/proposals).

This subscription shall not be used on paid private or public projects or university research (professional usage) without authorization by PTV Group.

Any screen capture, result, or data pulled from the Free 60-day Trial Edition shall properly credit the use of "PTV Flows".

Upon termination of the Trial Period, the Customer may not keep or store any data that they have downloaded from the API or GUI. All data is to be deleted immediately.

3.1.2 Small, Medium, Large and Extra Large editions

The Extra Small, Small, Medium, Large and Extra Large editions differ in the number of directional kilometres of roads they include.

In the event of a particular requirement, PTV Group is open to considering an increase in this limit. However, PTV Group does not guarantee that such a request will be approved.

3.2 Functionalities

3.2.1 User Roles

PTV Flows currently supports 2 user roles:

- Client Administrator: the owner of the instance; he can invite/delete other users by email, he can also add API keys; he is responsible of the general setup of the PTV Flows instance. He can also do everything that the user "Traffic operator" can do.
- Traffic operator: the normal user in charge of traffic monitoring. He can visualize the map, create/add/modify KPIs and set alert thresholds.

3.2.2 Background Services

Flows web maps and data results are provided according mainly with:

- TomTom© FCD feed
- ModelToGo maps based on TomTom© maps
- MapBox© (maps background, geocoding)

PTV Flows may discontinue, replace, or update these 3rd party services or add others at any time during a plan term, or access may be removed by the 3rd party provider. For more details and

usage requirements, see the 3rd Party License information in the Terms of Use PTV Cloud Services, available under: <u>https://www.ptvgroup.com/en/Terms_of_Use_PTV_Cloud_Services_EN.pdf</u>.

3.2.3 Map updates

The base network, which serves as a point of reference for FCD data and other information, undergoes updates roughly every 12 months. It is the responsibility of the client administrator to accept and initiate the update process. Reverting to previous or older maps is not feasible. Using the same map for more than 12 months will result in a gradual deterioration of the amount of map matched FCD data (e.g., data on new roads will not be captured).

3.2.4 Historical data analysis (HDA)

PTV Flows base license does not include the capability to analyse the KPIs' evolution over the past days/months/years.

Upon additional purchase of the HDA module, the user can review the evolution of the KPIs (by API and by GUI) and of the network (by API) for a specific maximum number of previous days. The HDA module by default includes 365 days in the past, but it is possible to purchase additional days.

3.3 Help

Documentation for PTV Flows application is provided through the Help Center (that can be accessed from the Product Main Page). The Help Center information provides minimum guidance to set up and use PTV Flows.

3.4 Support

The support offering is summarized in Section 3: Editions per subscription Plan. The Terms of Use PTV Cloud Services, available under https://www.ptvgroup.com/en/Terms_of_Use_PTV_Cloud_Services_EN.pdf discusses support levels offered for paid plans.