PTV LOGISTICS

Product Description PTV Mira

PTV LOGISTICS

Content

Short title	Product Description PTV Mira
Template history	V1.0.0 dated 2026-03-30

1. Product objective

PTV Mira is designed to transform how Users interact with route planning, optimization and execution by enabling fast, strategic, and interactive scenario planning. It complements the existing PTV Logistics SaaS product suite by targeting business planners and strategists who need quick answers without deep expertise in route planning, optimization, and execution.

PTV Mira is a conversational driven interface allowing Users to interact with route planning, optimization and execution solutions provided by underlying PTV Developer APIs using natural language commands, drastically reducing the time needed to build and analyze scenarios from days to seconds. It combines conversational AI with visualization tools and connects various PTV services and data, avoiding the need for separate user interfaces. It also enables seamless commands, addressing the strategic "what-if" questions from planners and analysts rather than operational questions typical for the user interface products in the existing SaaS suite.

PTV Mira is an expansion or addition to the existing SaaS offering, not a replacement for it, attracting new Users who may later require the robust operational features of PTV's traditional user interfaces and APIs.

2. Product description, Registration and Support

2.1. Product Description

2.1.1. PTV Mira is an AI-based chat interface that simplifies interaction with route planning, optimization and execution for Users. The Software uses various generative third-party AI models to perform its tasks.

2.1.2. The Software provides the following functionalities:

- AI-supported, dialogue-based control of logistics processes for optimization and analysis;
- Output of responses as text and visualizations (maps and diagrams)

2.2. Registration and Activation

Registration for a MyPTV ID and use of PTV Cloud Services are mandatory prerequisites for using PTV Mira.

Access to PTV Mira is granted to the User upon registration at https://developer.myptv.com/en, login with a valid MyPTV ID, and successful provisioning of the product.

PTV Mira is only accessible through one user account owned by the registered User who activated the subscription.

2.3. Support

PTV Mira constitutes an add-on to existing Services and is not subject to any separate support services or service level agreements.

3. Technical system description

PTV Mira has the following technical properties and system requirements:

System Requirements:

- Browser: Latest version of Google Chrome or another Chromium-based browser
- Screen resolution: 1600 x 900 (high colour quality) or higher
- Device support: Designed for desktop usage, not for mobile devices

Security Measures: Secure HTTPS data transmission

Language Support: English only. Configurable metric/imperial units and date/time formats, time zones and currencies.

4. Implementation Scenarios / Use Cases / Target Groups

4.1. PTV Mira is designed for Users working at the intersection of operations and strategy. Its primary user groups are:

4.1.1. Tactical and strategic analysts who evaluate existing logistics networks and identify improvement potential;

4.1.2. Solution modellers (e.g. implementation partners, consultants, pre-sales engineers) who translate complex logistics setups into robust models to test scenarios and assumptions; and

4.1.3. Implementation teams at direct customers deploying new business units or expanding networks who need to establish an optimized baseline efficiently.

4.2. Use Cases

4.2.1. Plan Analysis and Performance Investigation

Users can query existing optimization results in natural language to calculate KPIs (cost, distance, duration, vehicle utilization), identify high-cost or inefficient routes, and investigate root causes - for example, why a specific order was not planned. PTV Mira explains constraint violations and capacity issues without requiring manual data exports or filter navigation.

4.2.2. Filtering & Geographic Navigation

Users can filter routes and orders by geographic proximity, depot, vehicle type, or performance criteria. PTV Mira applies the resulting filters directly to the map view, enabling fast focus on relevant areas of a plan without manual interface interaction.

4.2.3. Cost Calculation & Result Validation

Users can calculate toll costs for individual routes, compare costs across vehicle types (e.g., van vs. truck), and model the financial impact of date or profile changes. PTV Mira validates constraint compliance and time window adherence within an existing optimization result.

4.2.4. Depot Network Design

Users can model depot location scenarios - adding, moving, or removing depots - and compare multiple configurations side by side. PTV Mira quantifies the impact on cost, coverage, unplanned orders, and CO_2 emissions, enabling data-driven decisions on network structure without external consulting resources.

4.2.5. Fleet Distribution & Resource Allocation

Users can determine optimal vehicle quantities per depot, model electric vs. conventional fleet mixes, and simulate shared vehicle usage across shifts or drivers. PTV Mira creates and runs the corresponding optimization scenarios and reports the resulting allocation with quantified impact.

4.2.6. Time Window & Service Level Optimization

Users can analyze the structure of existing time windows, model penalty costs for extended delivery windows, and evaluate cost-versus-service trade-offs. PTV Mira translates business-level service level questions into optimization constraints and reports results in business terms.

4.2.7. Complex Constraint Modeling

Users can model operational constraints that are not covered by standard optimization defaults - including loading dock availability, product-vehicle compatibility (e.g., frozen vs. fresh goods), driver territory preferences, and mandatory break regulations. PTV Mira translates natural language descriptions of these constraints into the corresponding API configuration.

4.2.8. Electric Vehicle & Sustainability Planning

Users can assess which routes are suitable for electrification without additional infrastructure, model EV fleet sharing with handover times, and estimate CO_2 reduction potential. PTV Mira generates scenarios that quantify the operational and environmental impact of fleet electrification decisions.

4.2.9. Scenario Creation from Natural Language

Users can describe a business scenario in plain language including vehicles, drivers, cost structures, time windows, and operational rules and PTV Mira translates the description into a fully configured optimization request. This enables Users without API or modeling expertise to run sophisticated what-if analyses conversationally.

5. AI Terms

The use of the AI functionalities is subject to PTV's AI Terms, available at https://www.ptvlogistics.com/en/ai_terms?inline, which govern the permitted use of the AI functionalities.