



Technology to power up
your telematics solutions

User-centered Mobile Resource Management platform



MRM stands for Mobile Resource Management. You are free to create solutions effective for fleet management, field service, and GPS asset tracking – all at once. Discover how Navixy transforms your data to opportunities to drive the business forward.

Data collection

Easy to collect, manage, monitor and troubleshoot the data remotely in real time.

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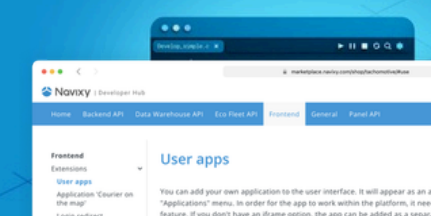
Data processing and monitoring



Make telematics data work for you the best way. Easily access and transfer raw data, IoT Logic solution - a traffic manager for data.

[go to page](#) **09**

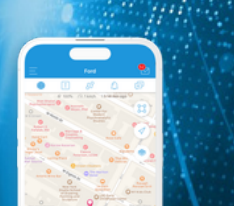
Data integration



Efficiently work with telematics data across various platforms with Navixy's robust tools.

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App integration and development



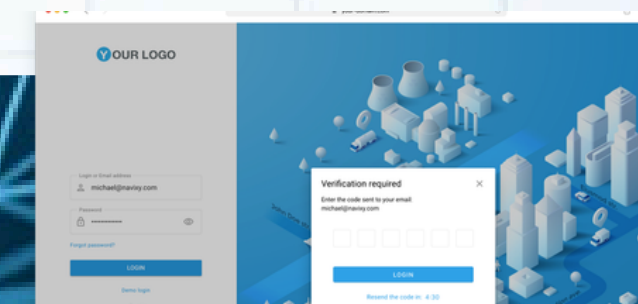
Tailor Navixy to your specific needs and extend it's capabilities or embed telematics functionality into your apps.

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Security

Be sure with a proactive, robust approach to information security, meeting the strict standards.

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Data collection

Easily collect telematics data across multiple devices. Manage, monitor and troubleshoot the data remotely in real time, ensuring uninterrupted flow and maximum efficiency.

Device agnosticism

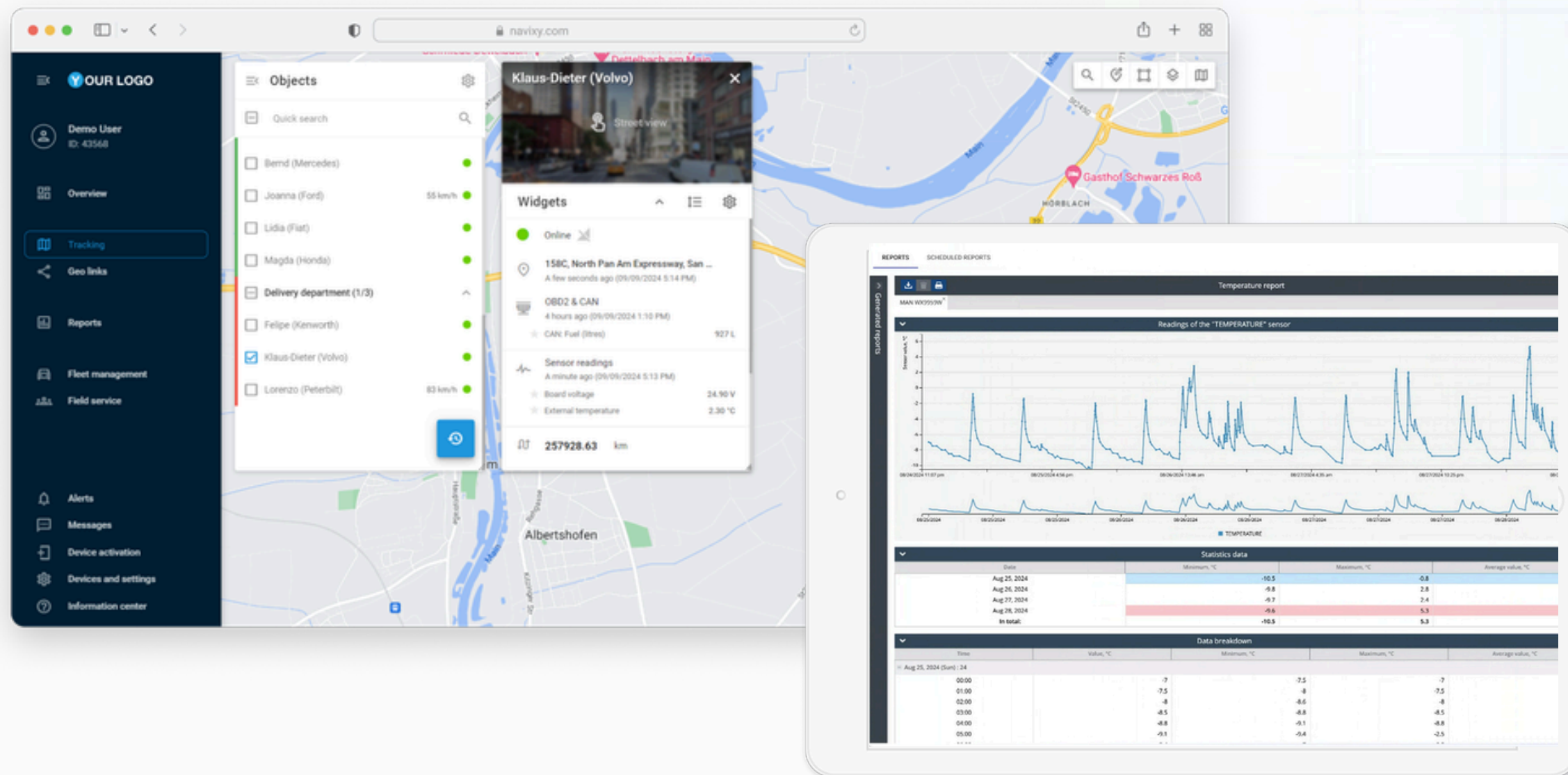
Connectivity

Remote device management

Data collection

Device agnosticism

Get data from multiple devices in one place. Monitor assets, vehicles, and environmental conditions efficiently, adapting to your operational needs.



GPS trackers

1600+

devices supported

Video devices

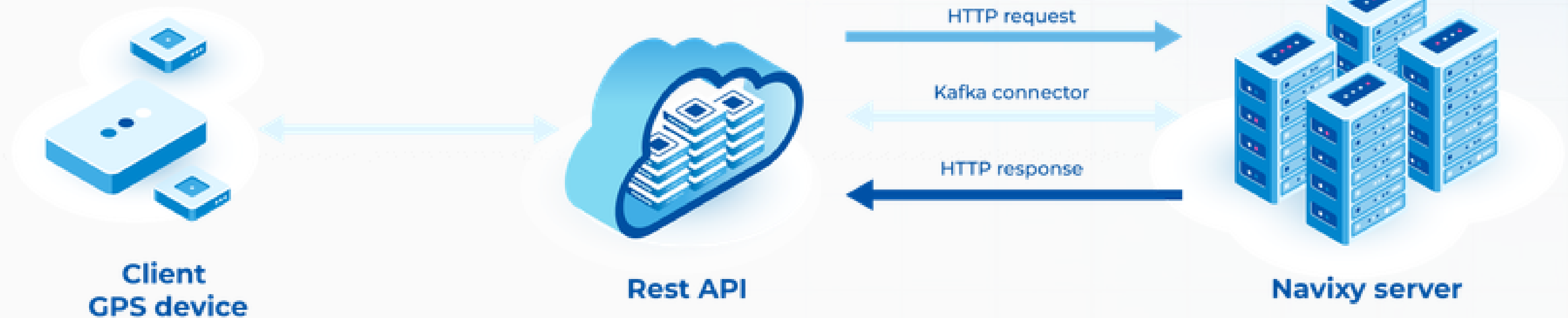
- ▶ Dash cams
- ▶ MDVR

Telemetry sensors

- ▶ Built-in sensors
- ▶ External sensors

Comprehensive connectivity

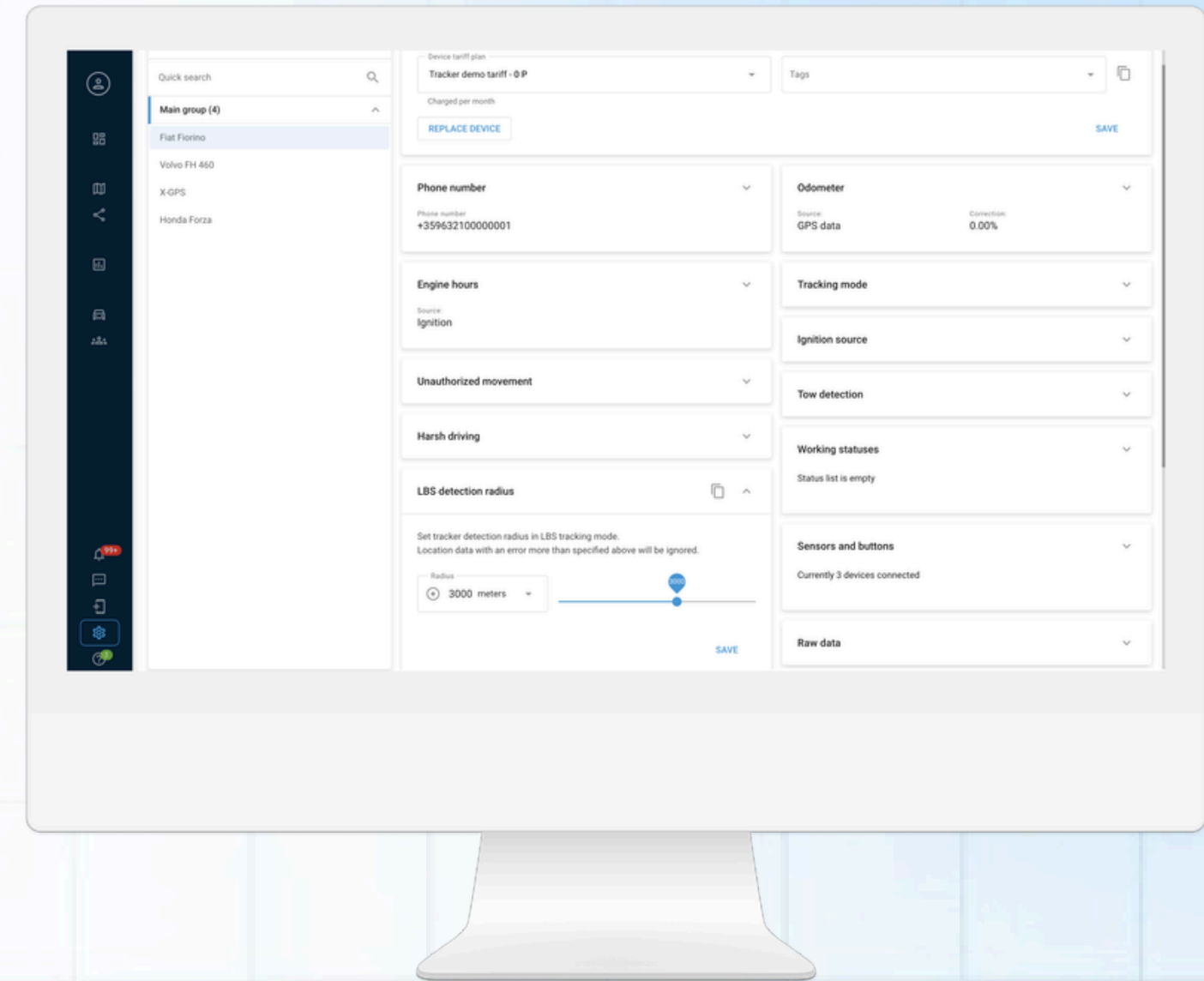
Maintain real-time control and responsiveness, even in challenging locations, boosting operational efficiency and reducing downtime. Whether devices send data directly to Navixy or your server first, Navixy can retrieve the information in multiple ways, ensuring a consistent data stream.



Remote IoT device management

Guaranty reliable, real-time data collection by monitoring and adjusting devices from anywhere on the go. Reduce downtime, cut maintenance costs, and keep operations running.

- ✓ Minimize response times and downtime, managing devices remotely from any location.
- ✓ Adjust tracking modes, alert settings, and other parameters to optimize device performance and address specific operational needs.
- ✓ Centralize device management and data monitoring from a single platform.



Device settings



Air Console

Device settings

Configure devices remotely, setup device sensors, and apply other settings related to particular devices (assets).

- ✓ Set how often the device collects and sends GPS data.
- ✓ Manage ignition-related functions like vehicle start/stop detection.
- ✓ Enable alerts like tow detection or harsh driving.
- ✓ Set up sensors and parameters like CAN BUS, fuel, temperature, etc.

The screenshot displays the Navixy web interface for configuring a vehicle. The left sidebar shows the user profile (Demo User, ID: 307076) and navigation menu (Overview, Tracking, Geo links, Reports, Fleet management, Field service). The main content area is titled 'Objects' and lists a 'Main group (4)' containing 'Fiat Fiorino', 'Volvo FH 460', 'X-GPS', and 'Honda Forza'. The 'Fiat Fiorino' object is selected, showing its settings. The 'Tracking mode' section includes 'On moving' settings (By distance: 100 meters, By interval: 60 seconds, When turning: 15 degrees) and 'On idle' settings (Tracking interval on stop: 180 seconds, Idle detection: By ignition, Disabled). The 'Engine hours' section shows 'Source: Ignition'. The 'Unauthorized movement' section is empty. The 'Harsh driving' section is empty. The 'LBS detection radius' section shows a radius of 3000 meters. The 'Parking detection' section shows 'Min idle detection: 5 minutes' and 'Max idle speed: 3 km/h'. The 'Ignition source' section is empty. A 'Tracking mode' modal window is open, showing 'On engine-on' settings (By distance: 100 meters, By interval: 300 seconds, Turning angle: 15 degrees) and 'On engine-off' settings (Every: 900 seconds, Motion control: By ignition state, Sleep mode: Light (GSM ON, GPRS ON, GPS OFF)).

Air Console

Monitor raw device data in real time, send remote commands, and troubleshoot issues efficiently. Ensure accurate data conversion, device communication and control.

- 01 Instantly view raw data from the devices.
- 02 Troubleshoot incoming device parameters and messages.
- 03 Manually send commands to any device, using GPRS.

Air console for tracker #10189980: FMC003

Terminate session

(15:51:20) Connection is established

(15:51:29) 00 78 CA FE 01 D4 00 0F 38 36 36 32 35 38 30 34 38 38 30 32 33 34 39 8E 01 00 00 01 88 2B 7B 5C C8 00 C7 9E CD D3 17 4E 94 EC 01 23 01 03 0F 00 00 00 00 00 0F 00 06 00 EF 01 00 F0 01 00 50 01 00 15 05 00 C8 00 00 45 01 00 07 00 B5 00 0B 00 B6 00 08 00 42 2F 66 00 18 00 00 00 CE 65 02 00 43 0F B9 00 44 00 00 00 02 00 F1 00 04 BC 8A 00 10 06 0E FA C8 00 00 00 00 01

(15:51:29) 00 05 CA FE 01 D4 01

(15:51:58) 00 78 CA FE 01 D5 00 0F 38 36 36 32 35 38 30 34 38 38 30 32 33 34 39 8E 01 00 00 01 88 2B 7B D1 F8 00 C7 9E CD D3 17 4E 94 EC 01 23 01 03 0C 00 00 00 00 00 0F 00 06 00 EF 01 00 F0 01 00 50 01 00 15 05 00 C8 00 00 45 01 00 07 00 B5 00 0C 00 B6 00 08 00 42 2F 81 00 18 00 00 00 CE 65 02 00 43 0F B9 00 44 00 00 00 02 00 F1 00 04 BC 8A 00 10 06 0E FA C8 00 00 00 00 01

(15:51:58) 00 05 CA FE 01 D5 01

(15:52:29) 00 78 CA FE 01 D6 00 0F 38 36 36 32 35 38 30 34 38 38 30 32 33 34 39 8E 01 00 00 01 88 2B 7B 5C C8 00 C7 9E CD D3 17 4E 94 EC 01 23 01 03 0C 00 00 00 00 00 0F 00 06 00 EF 01 00 F0 01 00 50 01 00 15 05 00 C8 00 00 45 01 00 07 00 B5 00 0B 00 B6 00 08 00 42 2F 66 00 18 00 00 00 CE 65 02 00 43 0F B9 00 44 00 00 00 02 00 F1 00 04 BC 8A 00 10 06 0E FA C8 00 00 00 00 01

(15:52:29) 00 05 CA FE 01 D6 01

(15:52:58) 00 78 CA FE 01 D7 00 0F 38 36 36 32 35 38 30 34 38 38 30 32 33 34 39 8E 01 00 00 01 88 2B 7B 5C C8 00 C7 9E CD D3 17 4E 94 EC 01 23 01 03 0E 00 00 00 00 00 0F 00 06 00 EF 01 00 F0 01 00 50 01 00 15 05 00 C8 00 00 45 01 00 07 00 B5 00 0C 00 B6 00 08 00 42 2F 7F 00 00 18 00 00 00 CE 65 02 00 43 0F B9 00 44 00 00 00 02 00 F1 00 04 BC 8A 00 10 06 0E FA C8 00 00 00 00 01

(15:52:58) 00 05 CA FE 01 D7 01

(15:53:29) 00 78 CA FE 01 D8 00 0F 38 36 36 32 35 38 30 34 38 38 30 32 33 34 39 8E 01 00 00 01 88 2B 7B 5C C8 00 C7 9E CD D3 17 4E 94 EC 01 23 01 03 0A 00 00 00 00 00 0F 00 06 00 EF 01 00 F0 01 00 50 01 00 15 05 00 C8 00 00 45 01 00 07 00 B5 00 0B 00 B6 00 08 00 42 2F 83 00 00 18 00 00 00 CE 65 02 00 43 0F BB 00 44 00 00 00 02 00 F1 00 04 BC 8A 00 10 06 0E FA C8 00 00 00 00 01

(15:53:29) 00 05 CA FE 01 D8 01

Type the command

Device status

Time

2023-05-06T22:54:2...

Location valid

yes

Latitude

55.6115733

Longitude

13.0191133

Altitude

8

Speed

0

Heading

171

Moving

false

Satellites

18

Hardware mileage

141710.2

Analog input 1

0.087

Analog input 2

0.087

GSM Level

25

GSM Operator code

24001

Roaming status

false

Battery level

4.02

avl_io_76

-533226191550566...

board_voltage

12.754

battery_voltage

4.019

avl_io_200

0

avl_io_78

0

Send

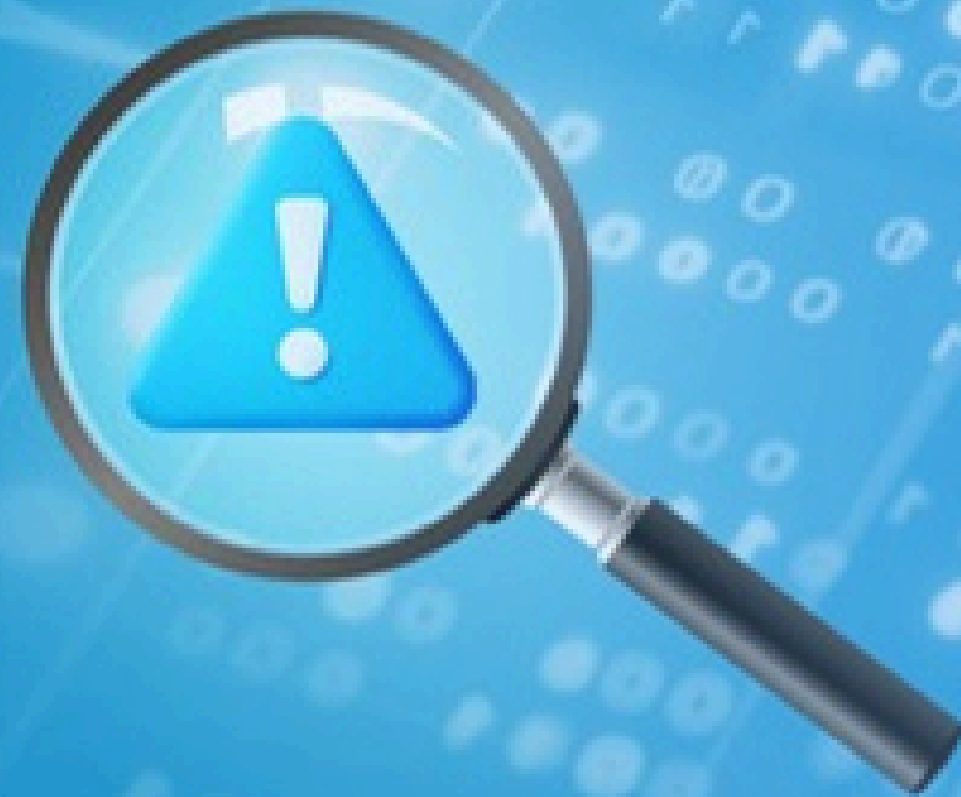
Data processing and monitoring

Make telematics data work for you the best way. Easily access and transfer raw data, monitor and manage real-time and historical data flow, and troubleshoot on the go.

Raw data

Navixy IoT Logic

Data forwarding



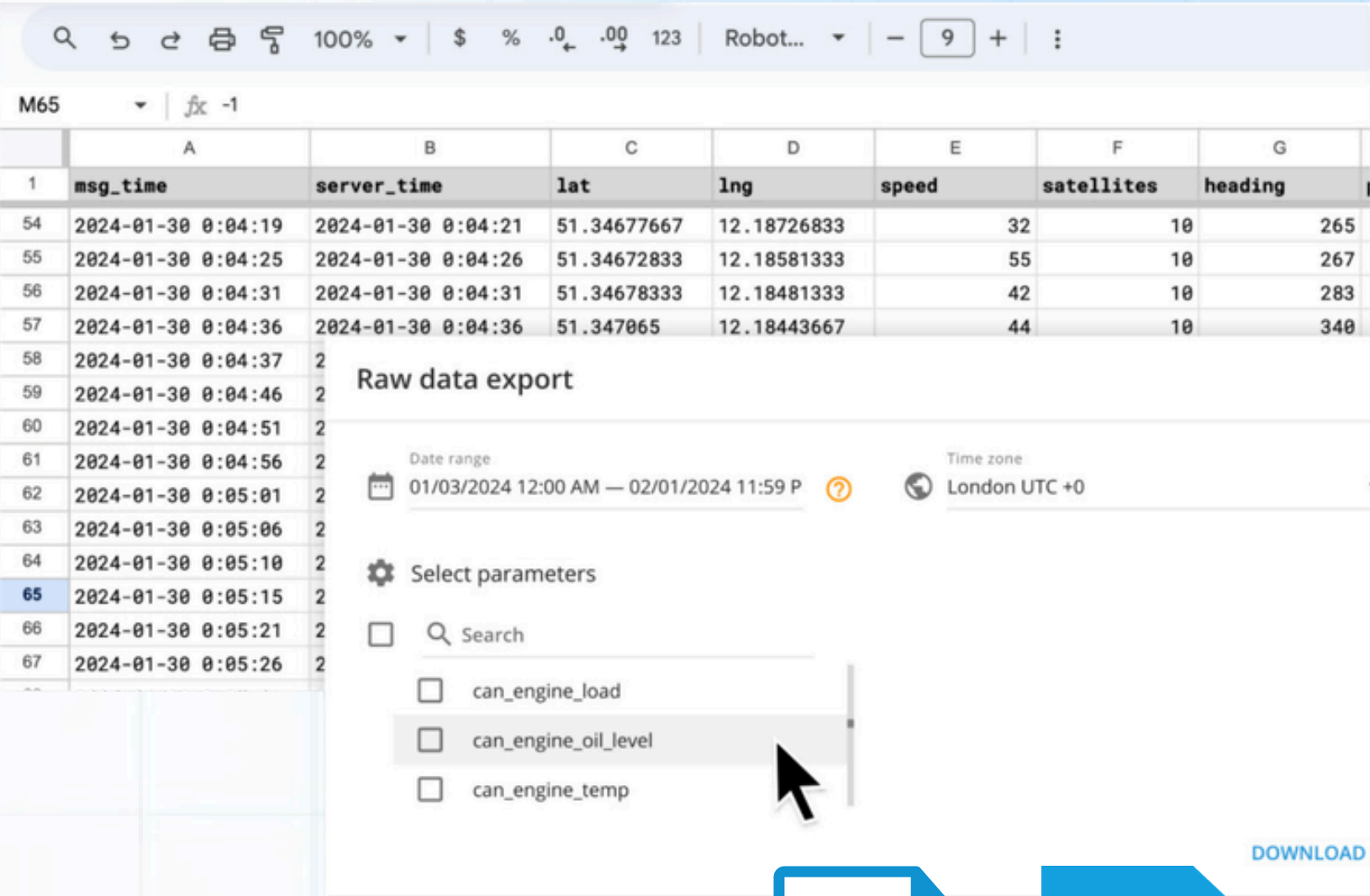
Raw data export

Facilitate detailed analysis (ex. evaluating sensor performance) supporting various telematics applications.

Select up to **1000 specific parameters** for export, including CAN bus data and sensor values for tailored data management.

Quickly choose devices, date ranges, and parameters.

Export up to 6 months' worth of data in the Parquet format.



Data processing and monitoring

Navixy IoT Logic

Process, decode, and route data in real time. **Navixy's IoT Logic** enables telematics service providers, system integrators, and developers to integrate diverse data sources hands down.

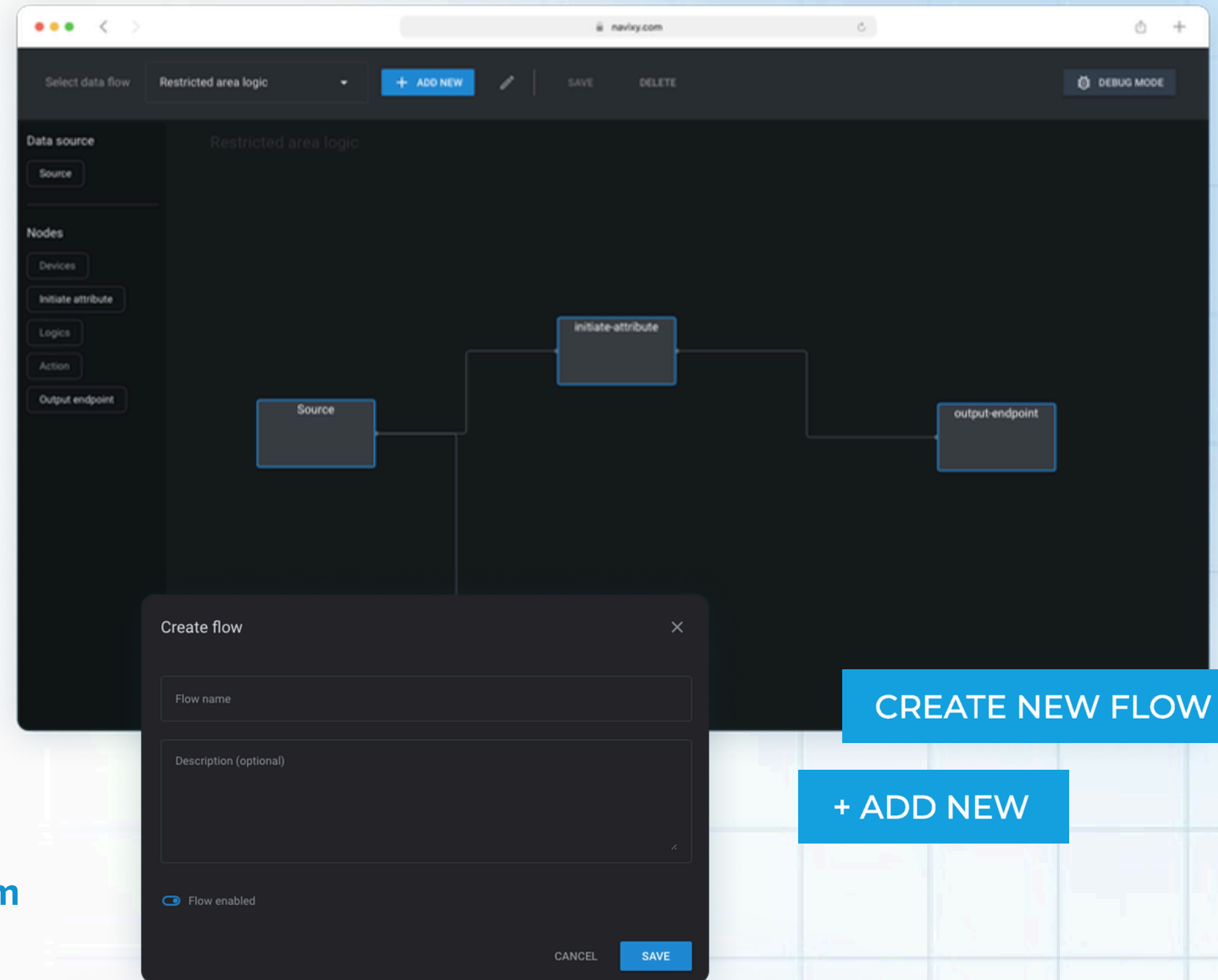
- ✓ Track and manage large-scale data streams.
- ✓ Set how often the device collects and sends GPS data.
- ✓ Send enriched data to multiple recipients and manage various parameters for different sources.



IoT Logic Expression
Language



Data Stream
Analyzer



IoT Logic Expression Language

A Java-based tool for real-time manipulation and enrichment of raw device data. It facilitates custom functions creation and seamless integration with other platforms.



IoT Logic Expression Language

- ✓ Utilize a low-code JEXL-based language for real time and historical data manipulation, enabling tailored calculations and automated processes.
- ✓ Transform raw data into actionable insights with custom logic, enhancing data utility beyond straightforward tracker outputs.

Name	Value	Generation time	Server time
Speed mph	value('can_fuel')/1,609	null	null
temp_data	value('temp_1', 0, 'valid') - value('temp_1', 1, 'valid')	now()	now()

Name	Value	Generation time	Server time
temp_delta	value('temp_1', 0, 'valid') - value('temp_1', 1, 'valid')	now()	now()
Speed mph	can_speed/1.609	null	null

Save Close

Data Stream Analyzer

Data Stream Analyzer lets you analyze and track device data in real time, focusing on specific parameters and trackers. View enriched data, compare sources, and examine logs for troubleshooting and analysis.



- ✓ Tracks and analyzes data flows, storing the last 12 parameter values for current and past data.
- ✓ Utilizes distributed caching for rapid access and processing, facilitating effective debugging and trend detection.

Last attribute values

Exclude null

Depth 4

Pause

Download

Devices Last update	#1Teltonika FMB001 2 minutes ago	#2Teltonika FMB001 3 minutes ago	#3Teltonika FMB001 7 minutes ago	#4Teltonika FMB001 a minute ago	#5Teltonika FMB001 19 minutes ago	STARLINK 19 minutes ago
latitude						
[0]	53.77461	52.3241133	52.2075899	52.3250816	19.425115	
[1]	53.77461	52.3241133	52.2075899	52.3250816		
[2]	53.77461	52.3241133	52.2075899	52.3250816		
	53.77461	52.3241133	52.2075899	52.3250816		
	104.2521566	103.9552649	104.2508483	-99.16666166666667		
	104.2521566	103.9552649	104.2508483			
	104.2521566	103.9552649	104.2508483			
	104.2521566	103.9552649	104.2508483			
	0	0	0			
	0	0	0			
	0	0	0			
	0	0	0			

DispositivosAtributos

Búsqueda

☒ Grupo principal (6)

☒ #1Teltonika FMB001

☒ #2Teltonika FMB001

☒ #3Teltonika FMB001

☒ #4Teltonika FMB001

☒ #5Teltonika FMB001

☒ Starlink SF SR

☐ Navtelecom (6)

☒ #1 Navtelecom S-2435

☒ #2 Navtelecom S-2435

☒ #3 Navtelecom S-2437

☒ #4 Navtelecom S-2437

DispositivosAtributos

Búsqueda

☒ Location information

☒ altitude

☒ hdop

☒ latitude

☒ longitude

☒ pdop

☒ satellites

☒ speed

☒ Mobile cells

☒ heading

☒ Device motion and status

☒ battery_voltage

☒ board_voltage

☒ OBD/CAN

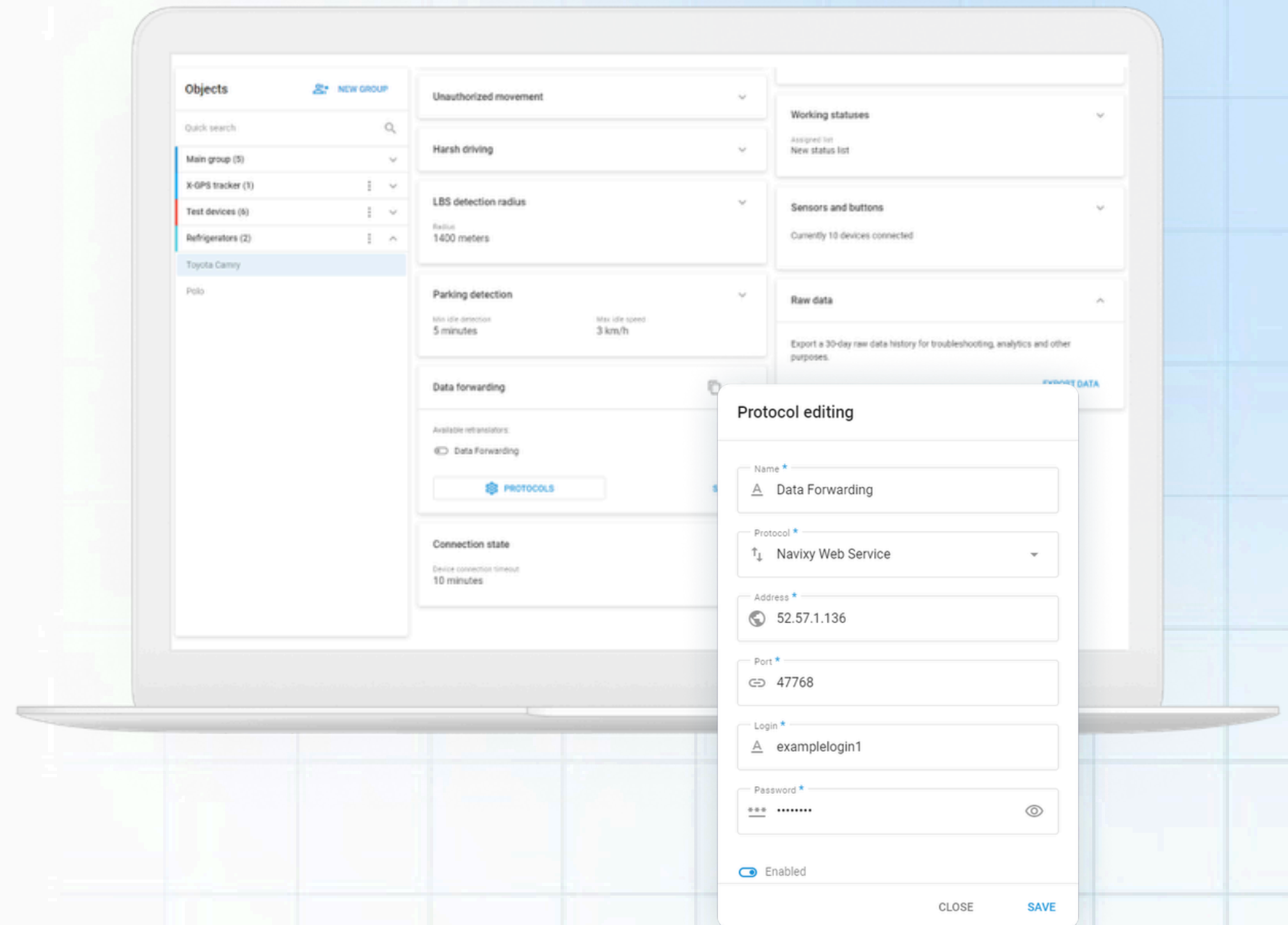
Data forwarding

Forward GPS tracker data from Navixy to external servers, supporting integration with various software and IT systems.

Real-time data transfer to multiple servers

Support for various data protocols and custom server configurations

Configurable via the web interface or API



Data integration

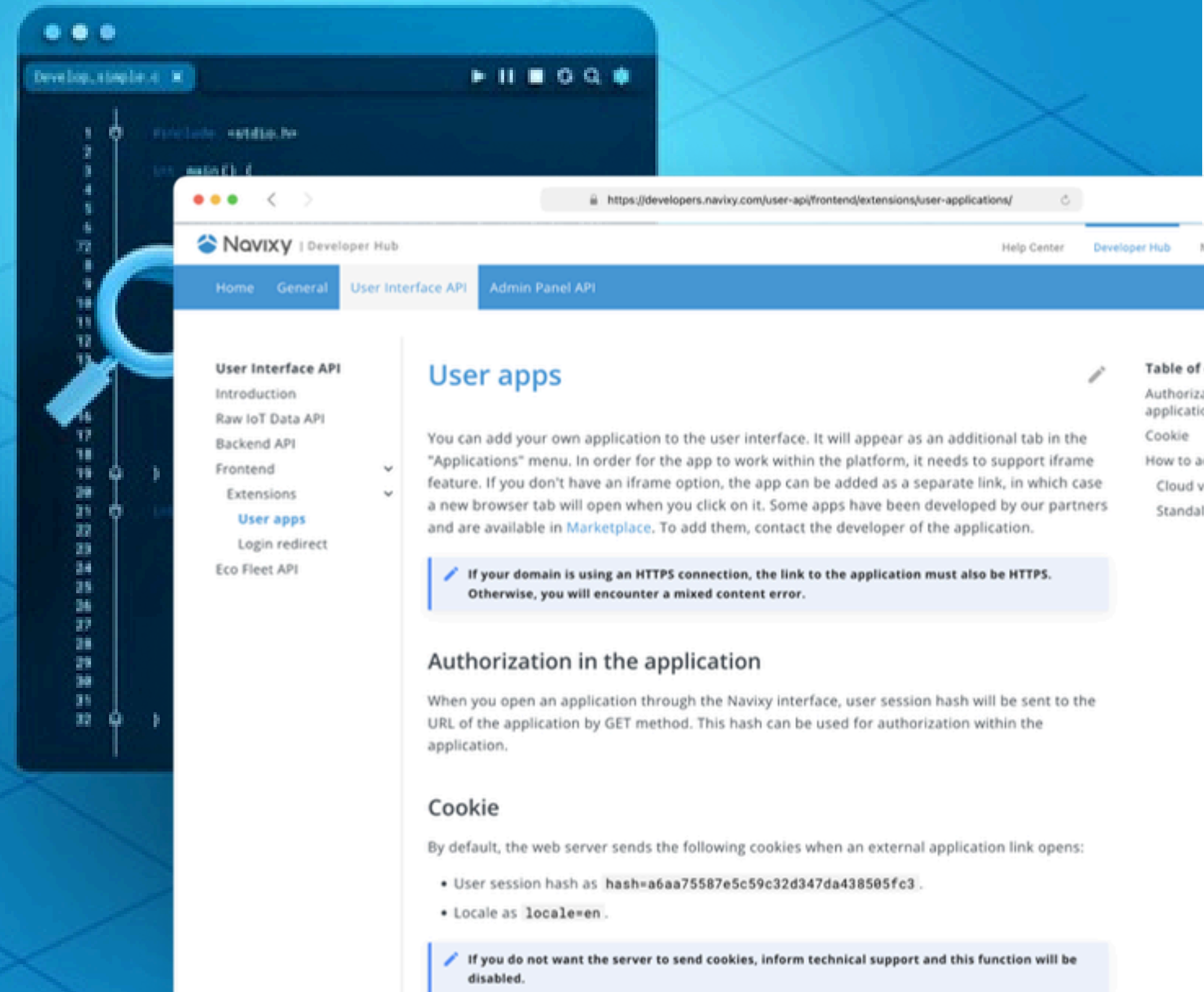
Efficiently work with telematics data across various platforms with Navixy's robust tools for seamless data integration.

 IoT Query

Navixy APIs

Navixy API Sandbox in Postman

Navixy SDK



Navixy Repository

Navixy Repository is a high-performance, PostgreSQL-based system designed for unified modeling of business data.

- ▶ **With a RESTful API**, technical teams can define custom entities such as trucks, geofences, departments, groups, and associate them with sensor inputs, spatial boundaries, and inter-entity relationships.
- ▶ **Navixy Repository** enables organizations to create a digital twin of their operations through a structured and scalable data model. Real-world entities such as vehicles, geofences, technicians, or containers are represented not as static labels but as dynamic, richly described objects linked directly to live telematics data.

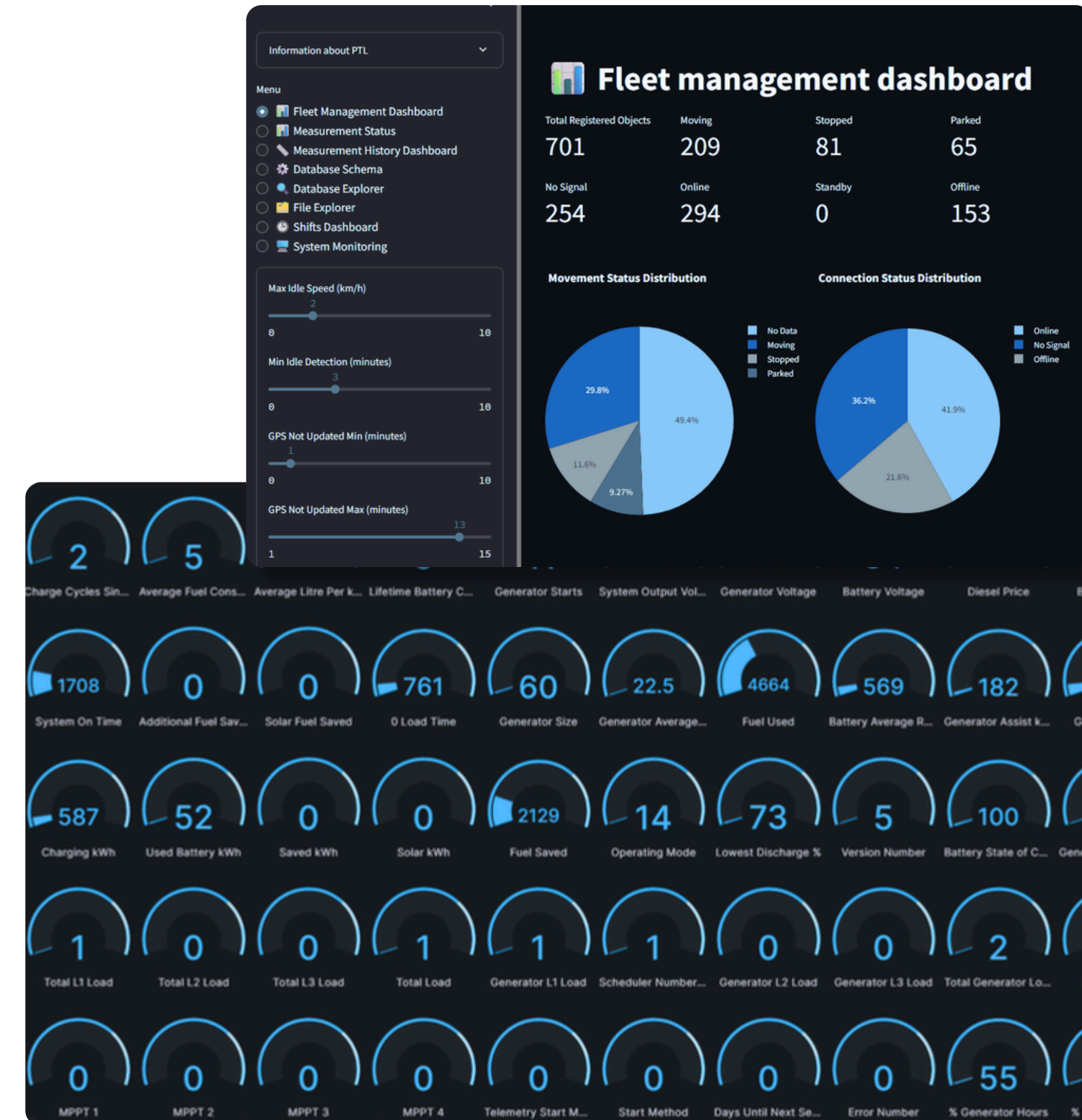


Data integration

IoT Query

IoT Query delivers direct, fast, and secure access to telematics and business data — purpose-built for enterprise fleets 500+ assets.

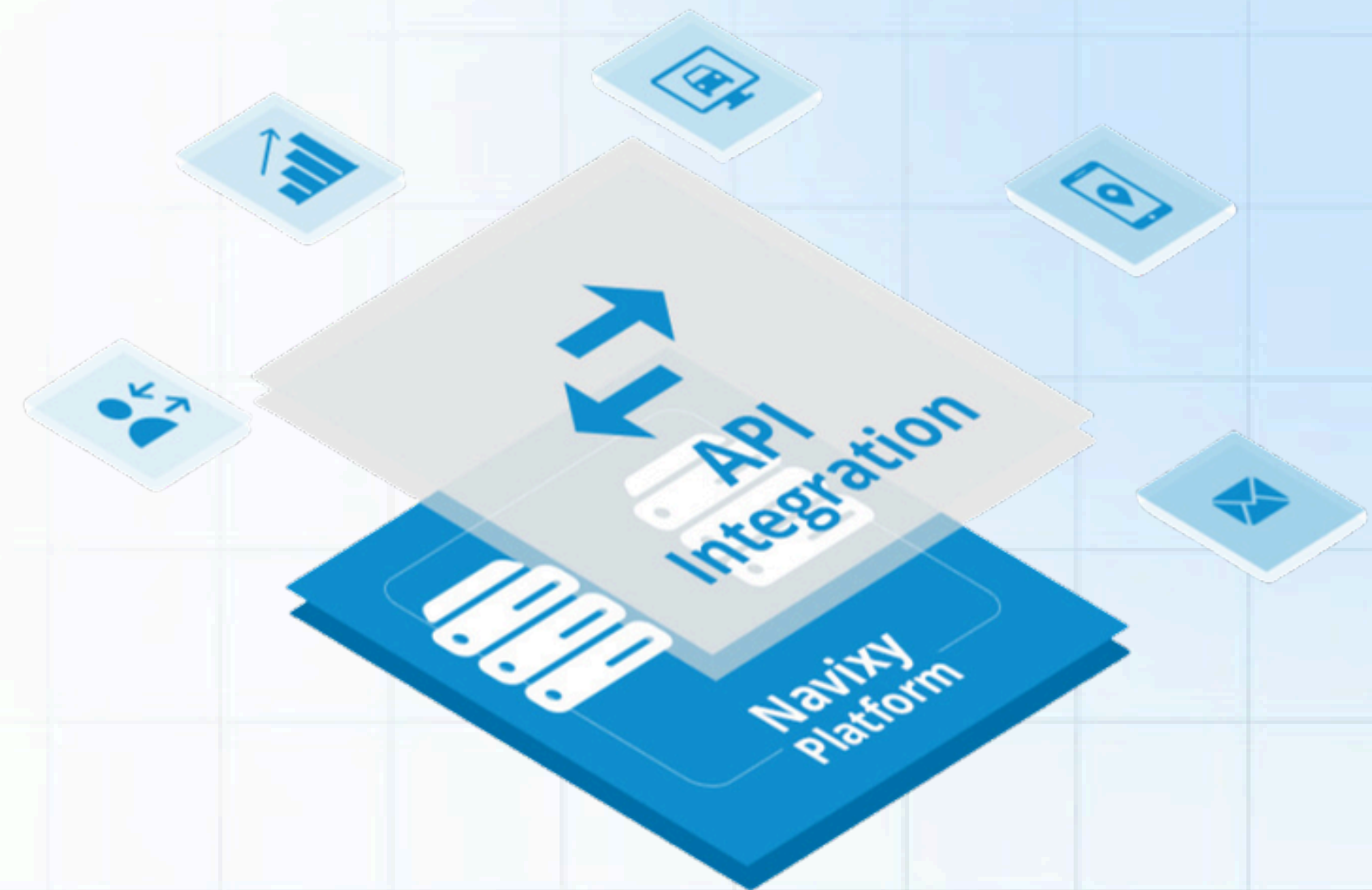
- ▶ **Direct SQL access.** Query telematics and business data directly using standard SQL—no API limits, no static reports, no delays.
- ▶ **Zero infrastructure overhead.** Navixy's managed Private Telematics Lakehouse architecture removes infrastructure costs and technical complexity, reducing total cost of ownership (TCO).
- ▶ **BI and ML seamless integration.** Connect instantly with BI, analytics, and ML tools. Applicable for data modeling, forecasting, and real-time insights with plug-and-play connectivity.



Navixy APIs

Integrate telematics with CRMs, ERPs or any other 3rd party tools. Get access to all the data to integrate or create your own applications for customers with the powerful Navixy API.

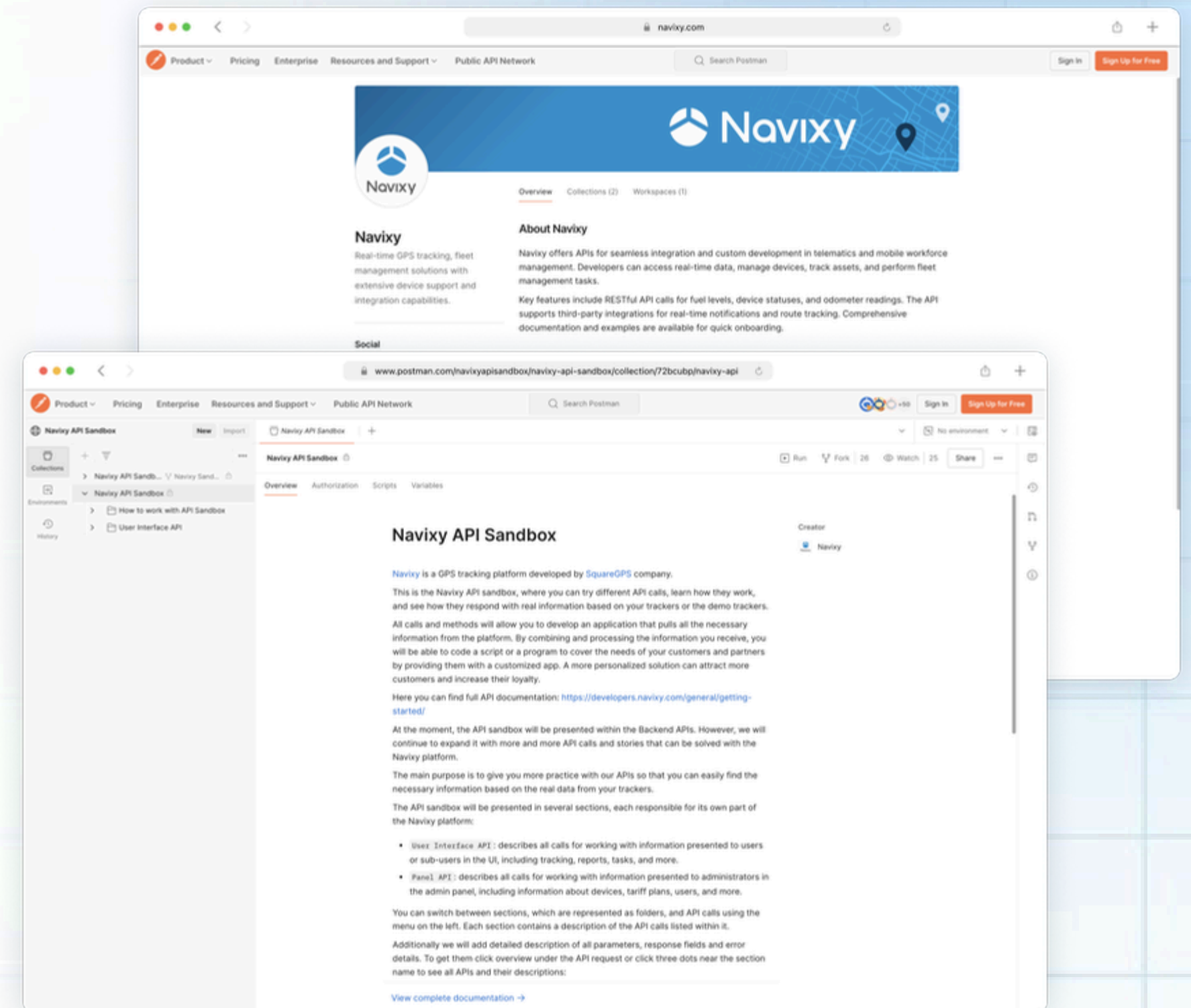
- ▶ **Backend API** – user interface functionalities like tracking, reports, and tasks.
- ▶ **Admin Panel API** – admin panel functionalities such as platform config and user management.
- ▶ **Raw IoT Data API** – obtaining raw IoT data received from devices.



Navixy API Sandbox in Postman

[Navixy's API Sandbox](#) allows developers to easily explore and test Navixy's telematics APIs within Postman, providing a seamless environment for quick integration and experimentation without needing a live account.

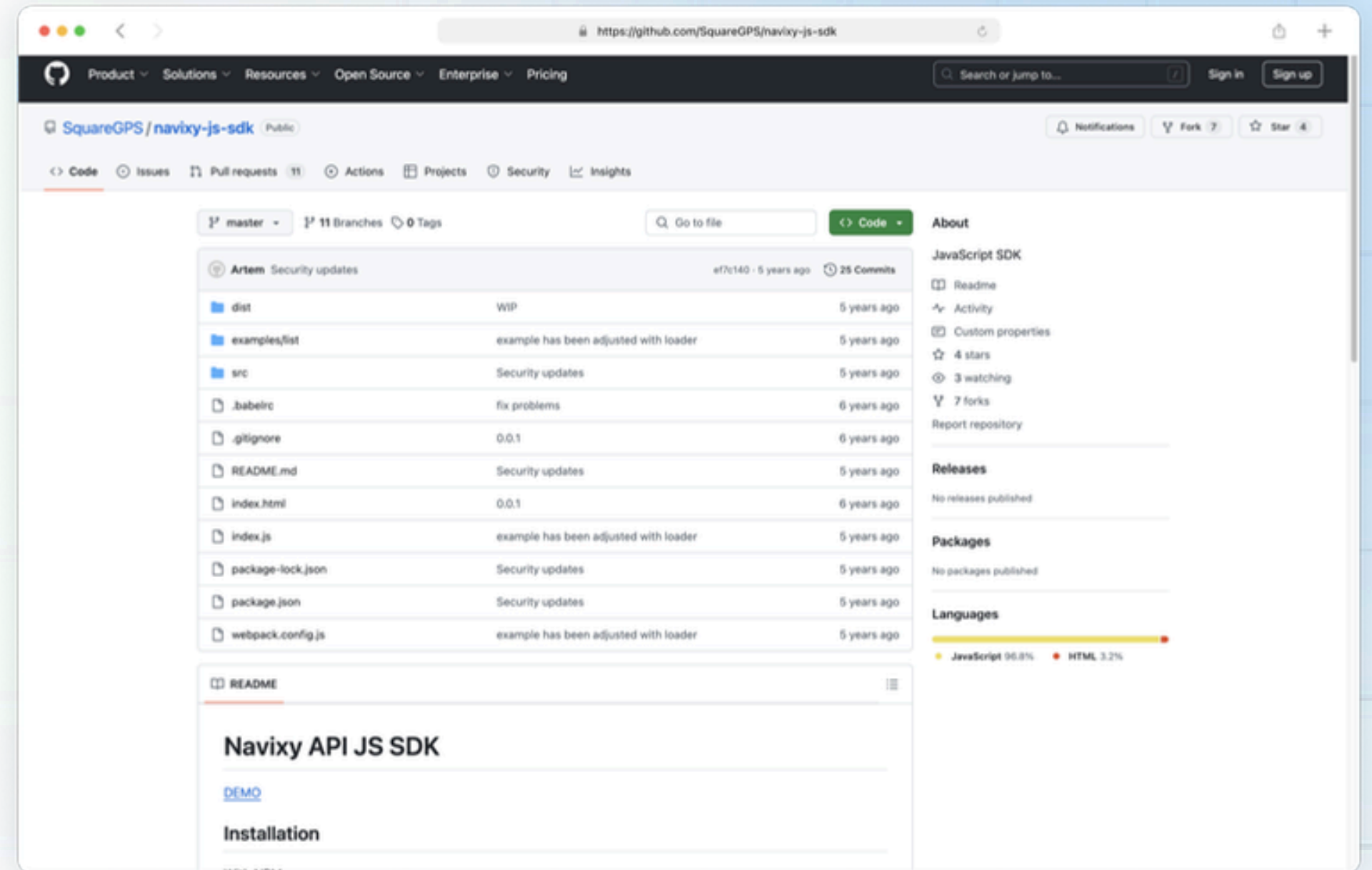
- ▶ Test API endpoints without affecting live data or production environments.
- ▶ Easily access pre-set collections and environments for rapid testing.
- ▶ Quickly identify issues and validate API responses.
- ▶ Reduce time spent on setup, enabling faster prototyping and implementation.



Navixy SDK

Accelerate integration with [Navixy SDK](#), a set of tools, libraries, and documentation for developers, and create custom applications using Navixy's telematics and GPS tracking platform.

- ▶ Facilitate the integration of Navixy's telematics and GPS tracking capabilities into custom applications.
- ▶ Utilize detailed documentation for developers to understand and create unique solution.
- ▶ Build solutions for different operating systems and environments.



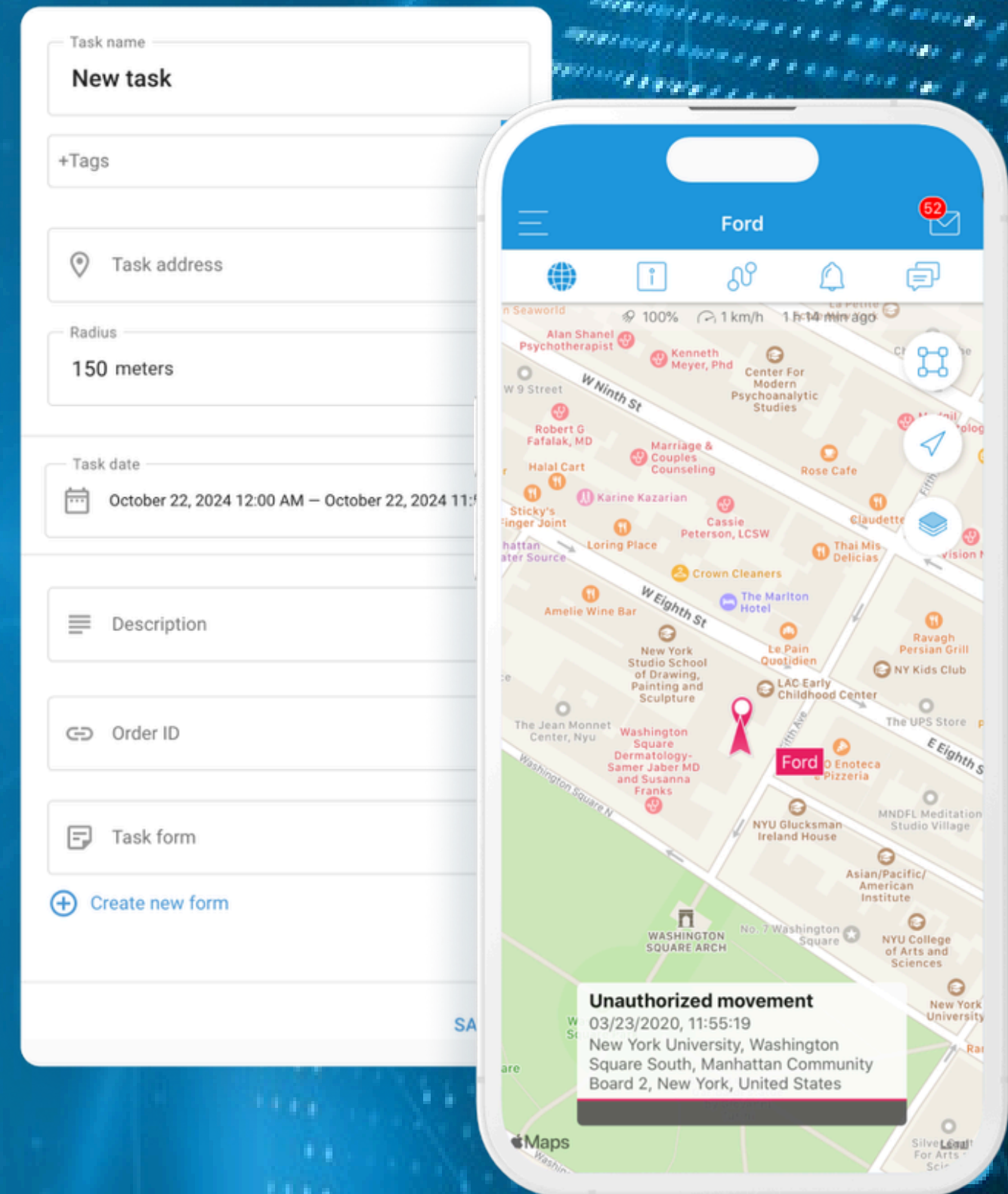
App integration and development

Tailor Navixy to your specific needs and extend its capabilities or embed telematics functionality into your apps using Navixy's app integration and development features.

Customizable menu

Integrated UX

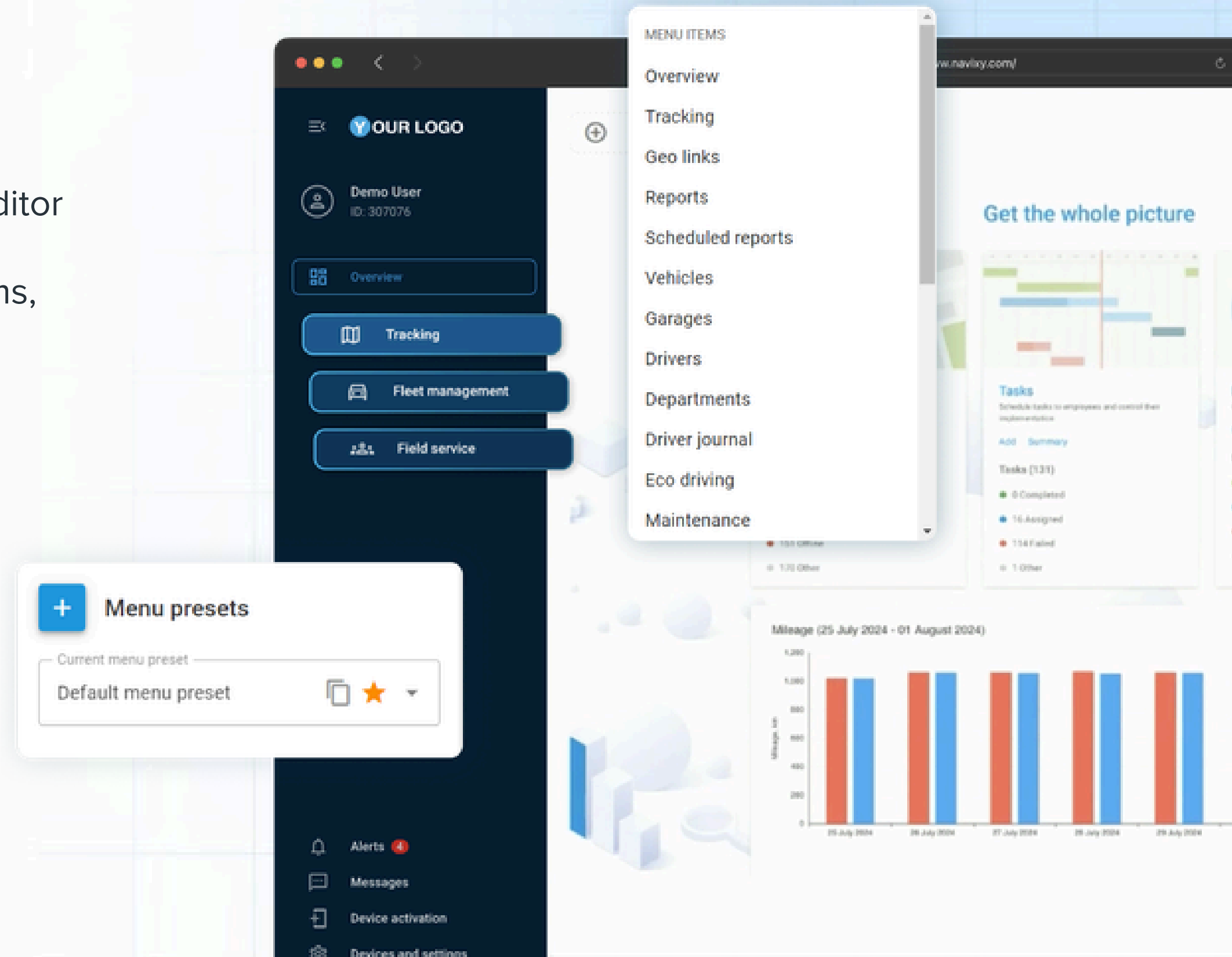
Geo links



A no-code customizable menu

Easily customise the platform's interface with Menu Editor to improve navigation and user experience. Simplify deployment, accelerate transitions from other platforms, and align the system with specific business needs.

- ✓ Effortless menu customisation: reorder, rename, and group items.
- ✓ Improved navigation for faster access to critical functions.
- ✓ Personalised interface without coding or technical support.



Integrated UX

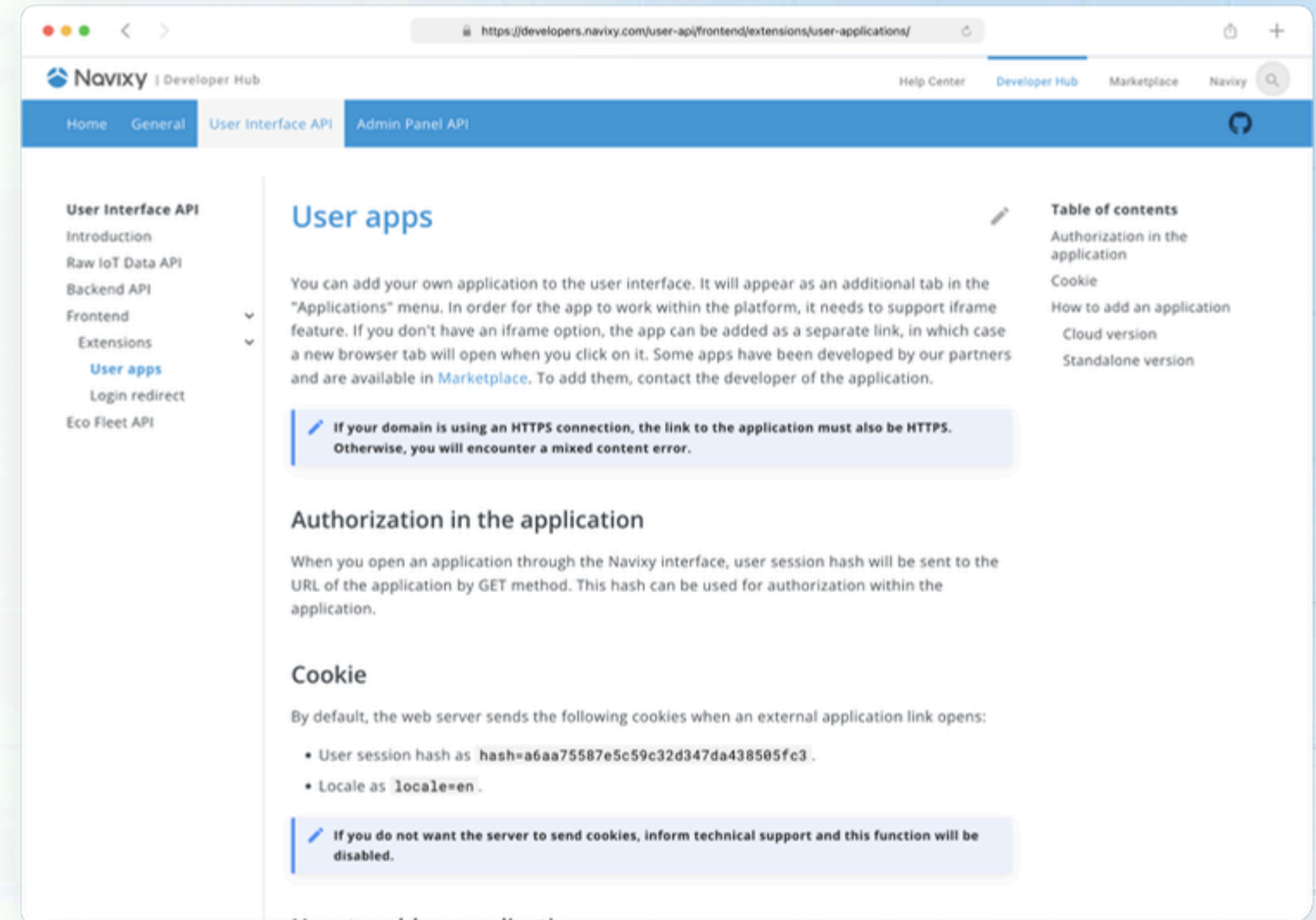
Expand Navixy's functionality with [apps and plugins](#) – access native and third-party apps within the same UI for a seamless user experience. Easily integrate custom applications to address your particular needs. Choose the one from the [Marketplace](#) or create your own.



**App embedding
via i-frame**

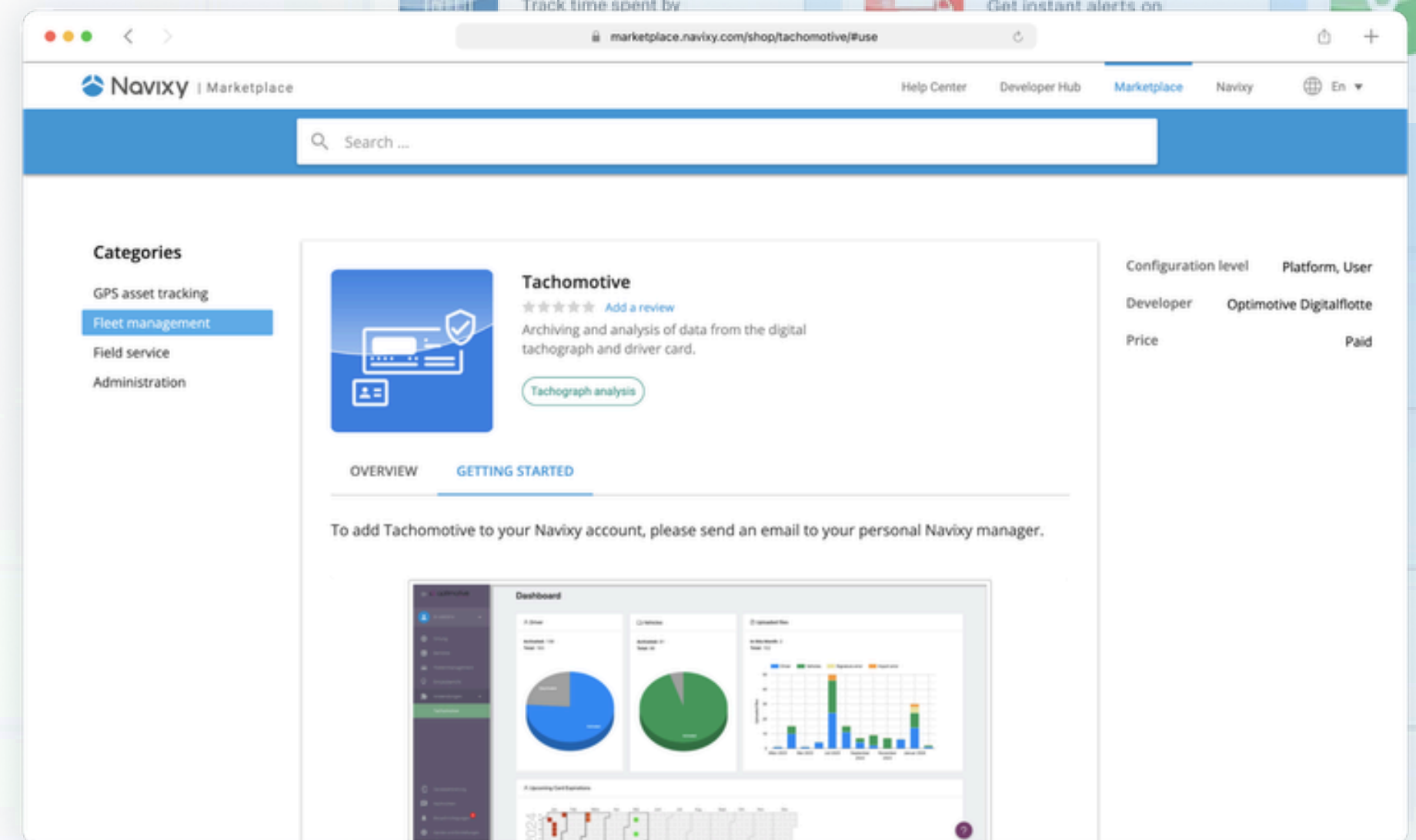


**Adding custom apps
via API**



Adding custom apps via API

- 01 Write your custom web application using any programming language
- 02 Integrate the application with Navixy system data through API calls.
- 03 Submit the app name and URL to Navixy.
- 04 Use SQL queries to enable the app in the Navixy database for specific users or the entire service account.

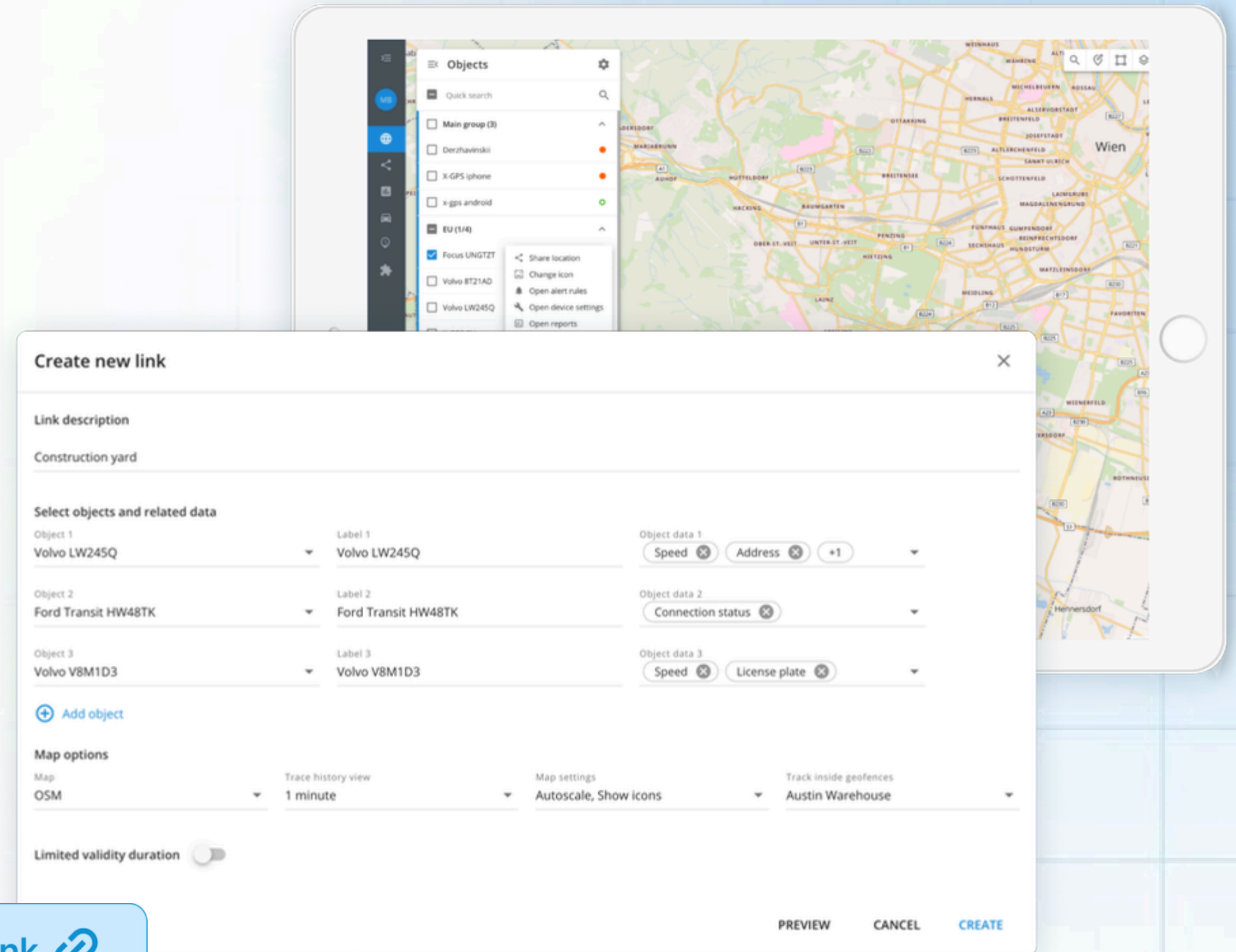


Geo links

Share [real-time location data](#) of vehicles, cargo, and assets with customers or team members through simple, customizable links. Enhance operational efficiency, transparency, and customer satisfaction across industries.

- ✓ Instantly share asset locations via a simple link.
- ✓ Adjust assets, attributes and link duration.
- ✓ Supports Email, Whatsapp, Viber and Telegram
- ✓ Easily add live location sharing to your website or apps.

Create link 



The screenshot displays the Navixy application interface. In the background, a map of Vienna is visible with various districts labeled. Overlaid on the map is a 'Create new link' dialog box. The dialog box contains the following sections:

- Link description:** A text field with the value 'Construction yard'.
- Select objects and related data:** A table with three rows of objects and their associated data fields.

Object	Label	Object data
Object 1 Volvo LW245Q	Label 1 Volvo LW245Q	Object data 1 Speed, Address, +1
Object 2 Ford Transit HW48TK	Label 2 Ford Transit HW48TK	Object data 2 Connection status
Object 3 Volvo V8M1D3	Label 3 Volvo V8M1D3	Object data 3 Speed, License plate
- Map options:** A section with four dropdown menus: 'Map' (OSM), 'Trace history view' (1 minute), 'Map settings' (Autoscale, Show icons), and 'Track inside geofences' (Austin Warehouse).
- Limited validity duration:** A toggle switch that is currently turned off.
- Buttons:** 'PREVIEW', 'CANCEL', and 'CREATE' buttons at the bottom right.

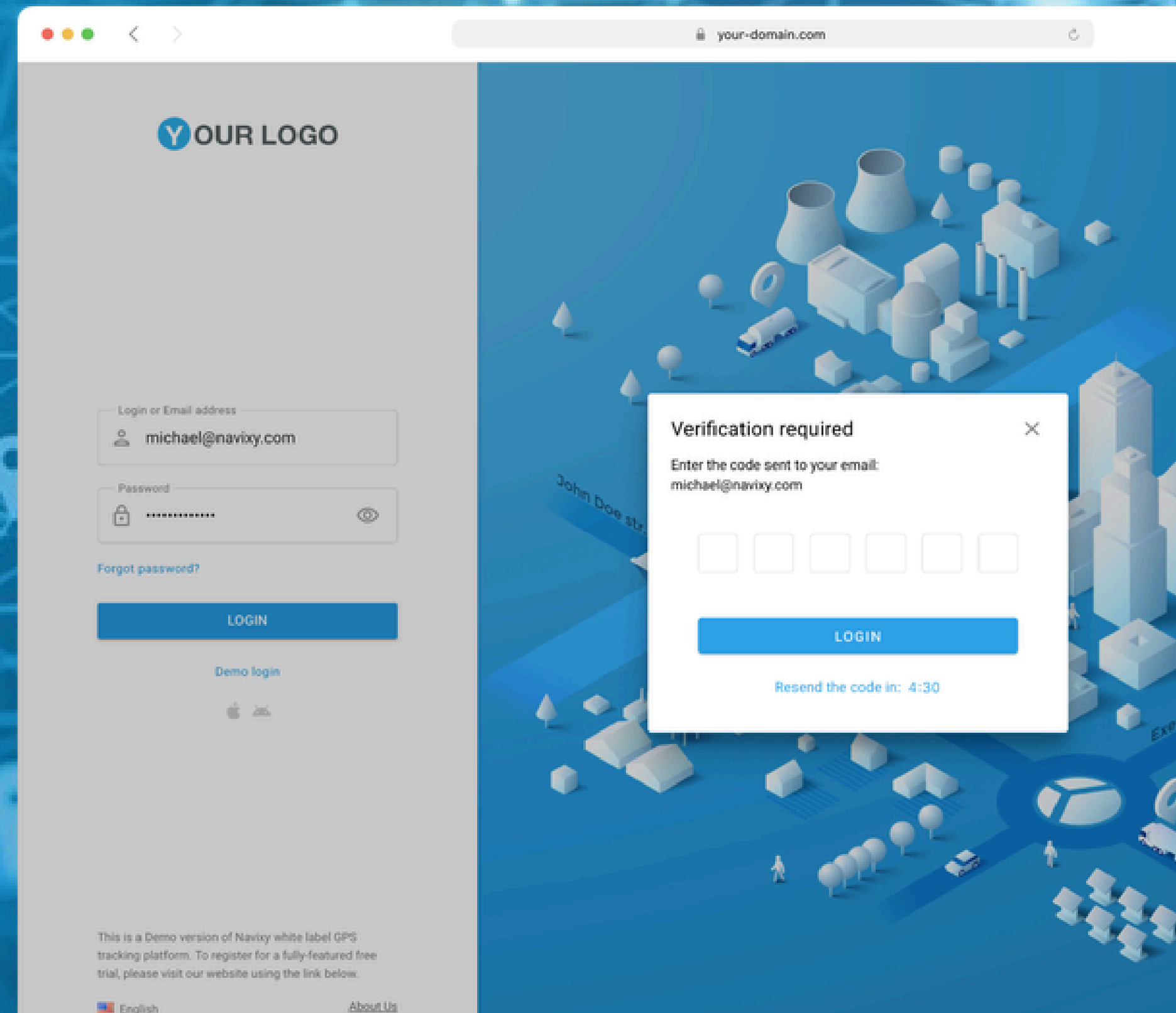
Security

Ensure your data is secure with Navixy. We take a proactive, robust approach to information security, meeting the strict standards of enterprises, telematics service providers, and government organizations.

Data protection & encryption

Access control & authentication

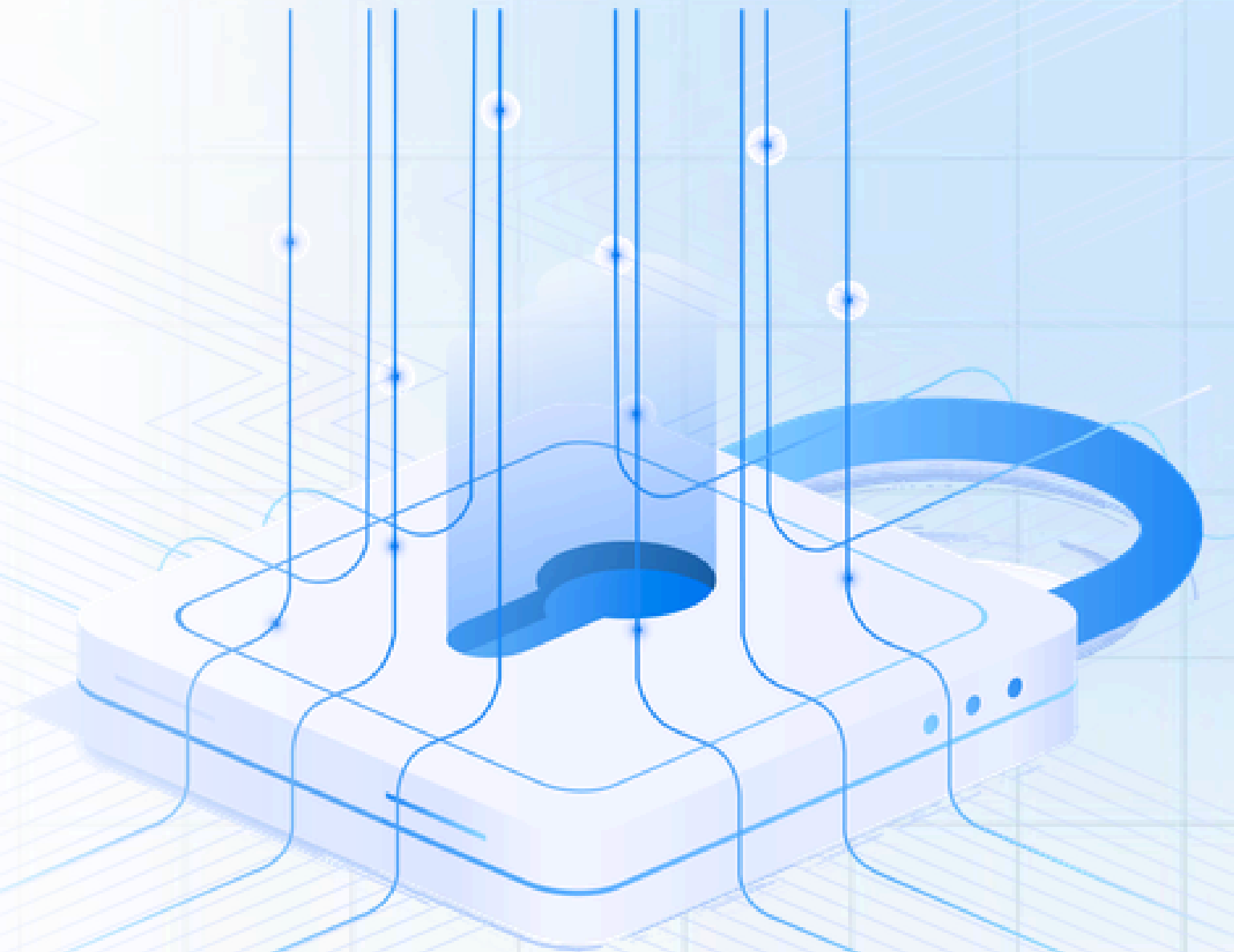
Security monitoring & auditing



Data protection & encryption

Navixy employs industry-leading encryption standards to safeguard data at all stages. We leverage region-specific encryption keys, ensuring that data complies with local regulations.

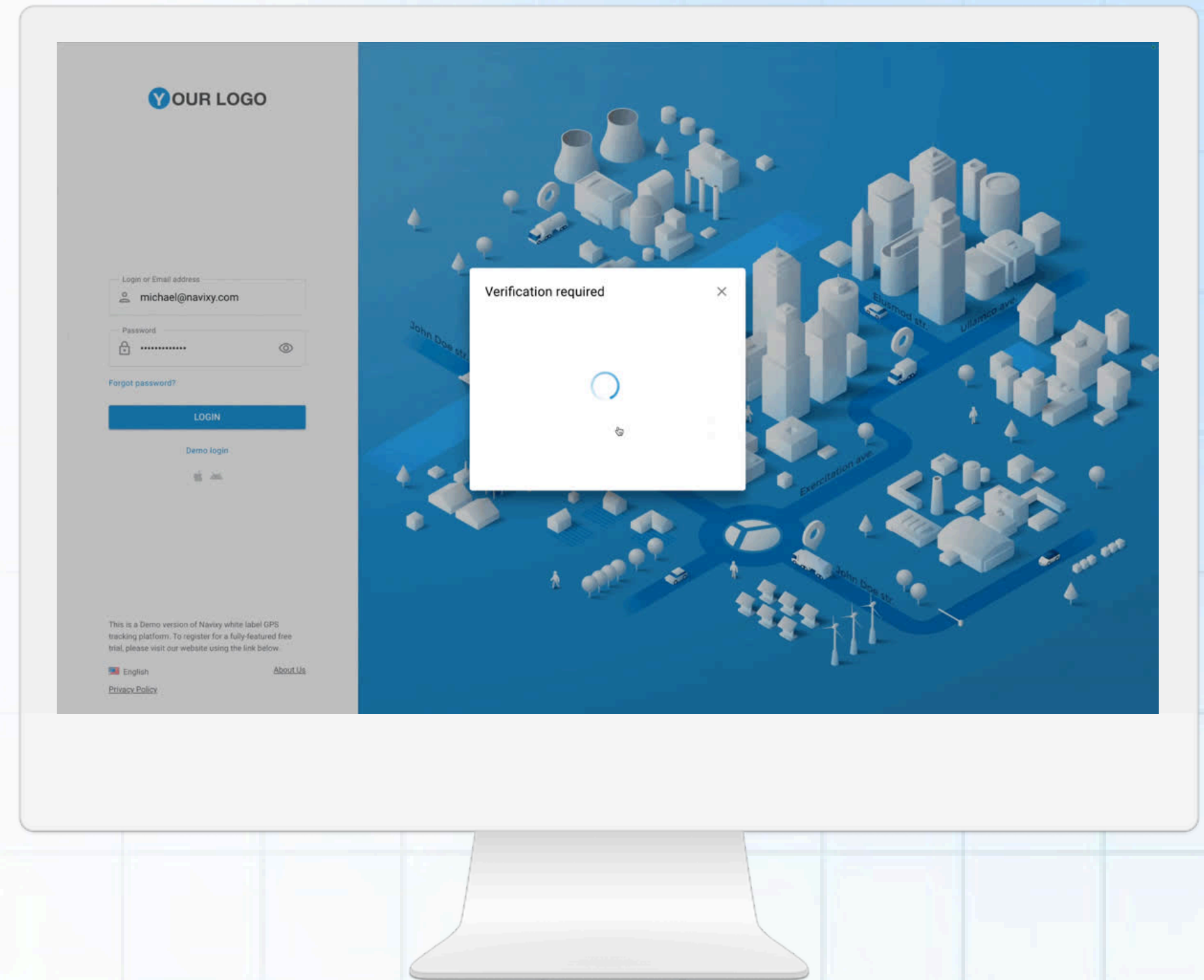
- ✓ Industry-leading encryption standards (AES-256, TLS)
- ✓ Data protection at all stages: in transit & at rest
- ✓ Region-specific encryption keys for local compliance
- ✓ Continuous monitoring & updates to security protocols



Access control & authentication

Navixy implements a multi-layered approach to access control, designed to minimize the risk of unauthorized access to sensitive systems and data:

- ✓ Role-based access control (RBAC) to limit user permissions
- ✓ Multi-layered authentication with Two-Factor Authentication (2FA)



Security monitoring & auditing

Navixy ensures continuous monitoring of system performance and potential security risks. Our security auditing process includes both internal and third-party assessments, providing a comprehensive review of our infrastructure

- ✓ Regular internal and third-party security audits
- ✓ Compliance with global data protection regulations (GDPR, CCPA)
- ✓ Region-specific data storage and high availability



Learn more about Navixy



Opportunities for your
business

[Explore blog](#)



Technical side of our
platform

[Learn more](#)



Get quick answers
24/7

[Use Navixy AI Assistant](#)

Thanks for your attention!