



# Nimbus

*A new solution for public  
transportation GPS tracking*

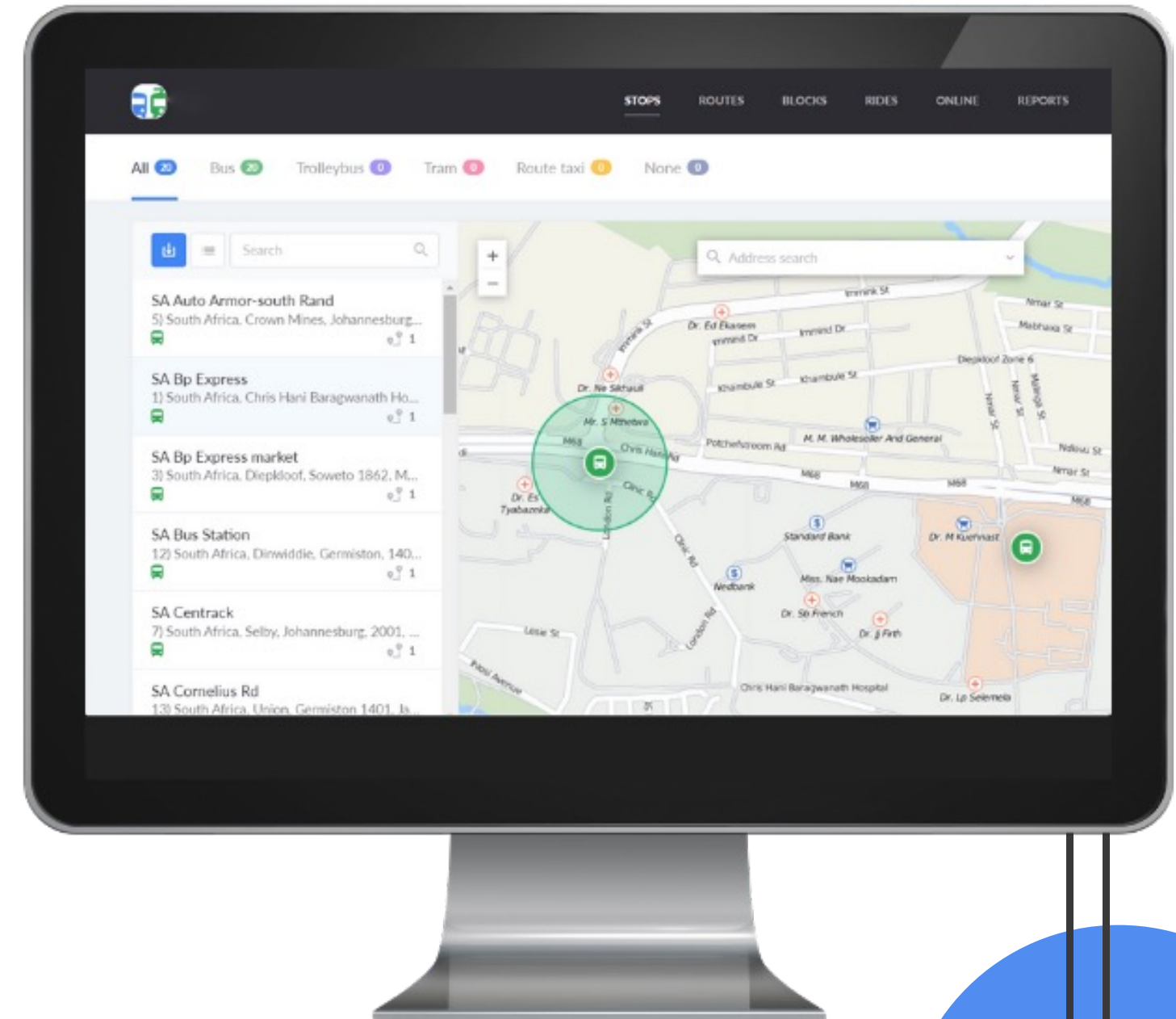
astre<sup>on</sup>

# Nimbus Overview

Nimbus comprises the core functionality of satellite tracking software and specialized tools designed for route management. Use the service to create stops, optimize routes, distribute vehicles across routes, manage schedules, and track route performance in real-time.

## FEATURES

- Free Astreon-based solution
- User-friendly interface
- Intuitive navigation
- Flexible configuration and ACL system
- API for third-party system integrations





# Nimbus: Public Transportation Control



## Key functionality



### Stop and routes

Create and import stops for different transport types, make routes with schedules, operation patterns, and assigned vehicles.



### Rides

Assign vehicles to rides and make changes throughout the day. The automatic assignment is possible as soon as vehicles visit the first stop. You can also replace the vehicle during the active ride.



### Blocks

Create blocks – chains of schedules that are executed by one vehicle belonging to the routes with the same number and transport type.



### Online monitoring

Monitoring the vehicle location and ride execution via the map or linear scheme.



### Online notifications

Get notifications about violations during the ride execution.



### Reports

View the history of trips, assess the quality of rides execution in terms of vehicles and routes.



## —● **How it works?**

**1 Add or import stops**

**3 Assign units to rides**

**5 Generate detailed reports**

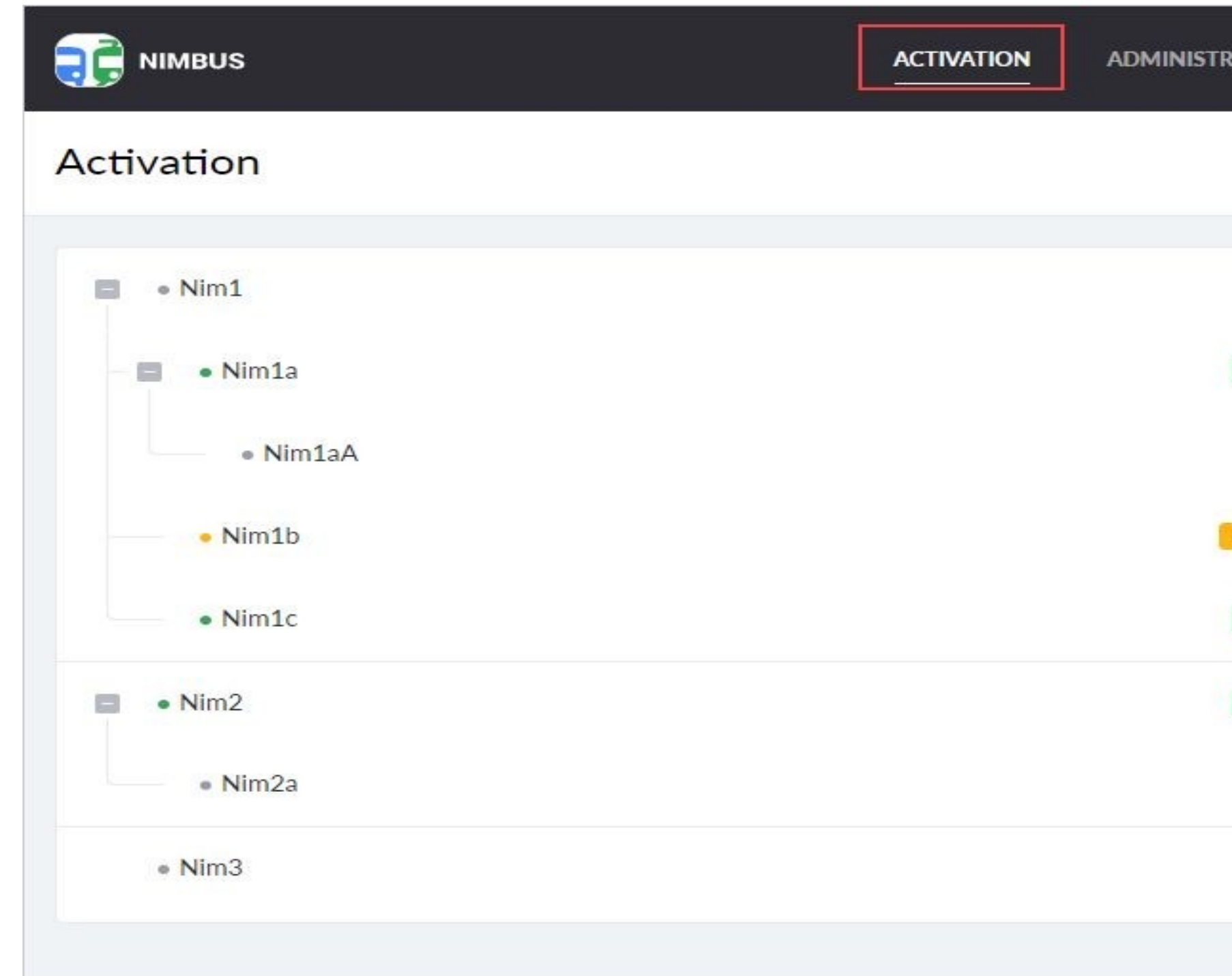
**2 Create routes and add schedules**

**4 Track units in real time**



# Getting started with Nimbus

- Add the new app from the library Authorize in Nimbus
- Activate “Depot” for one of your lower-level accounts
- Continue working under the sub-account
- Good luck!



# Depot Administration

## Manage user ACL

Grant users access rights to manage depots, stops, routes, rides, and online tracking.

← Administration: NimA3

Access rights | Route groups | Depot settings

Search  Cancel Save

Users	Admin	Patterns	Stops	Group	Routes	Rides	Online
Nim1	—	—	+ ✎ 🗑	All	👁 📄 🗑	—	—
Nim1a	✓	✓	+ ✎ 🗑	All	👁 📄 🗑	✓	✓
Nim1aA	—	—	+ ✎ 🗑	All	👁 📄 🗑	—	—
Nim1b	—	—	+ ✎ 🗑	All	👁 📄 🗑	✓	✓
Nim1c	✓	✓	+ ✎ 🗑	All	👁 📄 🗑	—	—
Nim2	—	—	+ ✎ 🗑	All	👁 📄 🗑	✓	✓
Nim2a	—	—	+ ✎ 🗑	All	👁 📄 🗑	—	—
Nim3	—	—	+ ✎ 🗑	All	👁 📄 🗑	—	—

## Create and edit route groups

Restrict the list of routes available to users to advance organizational management.

Administration: NimB2

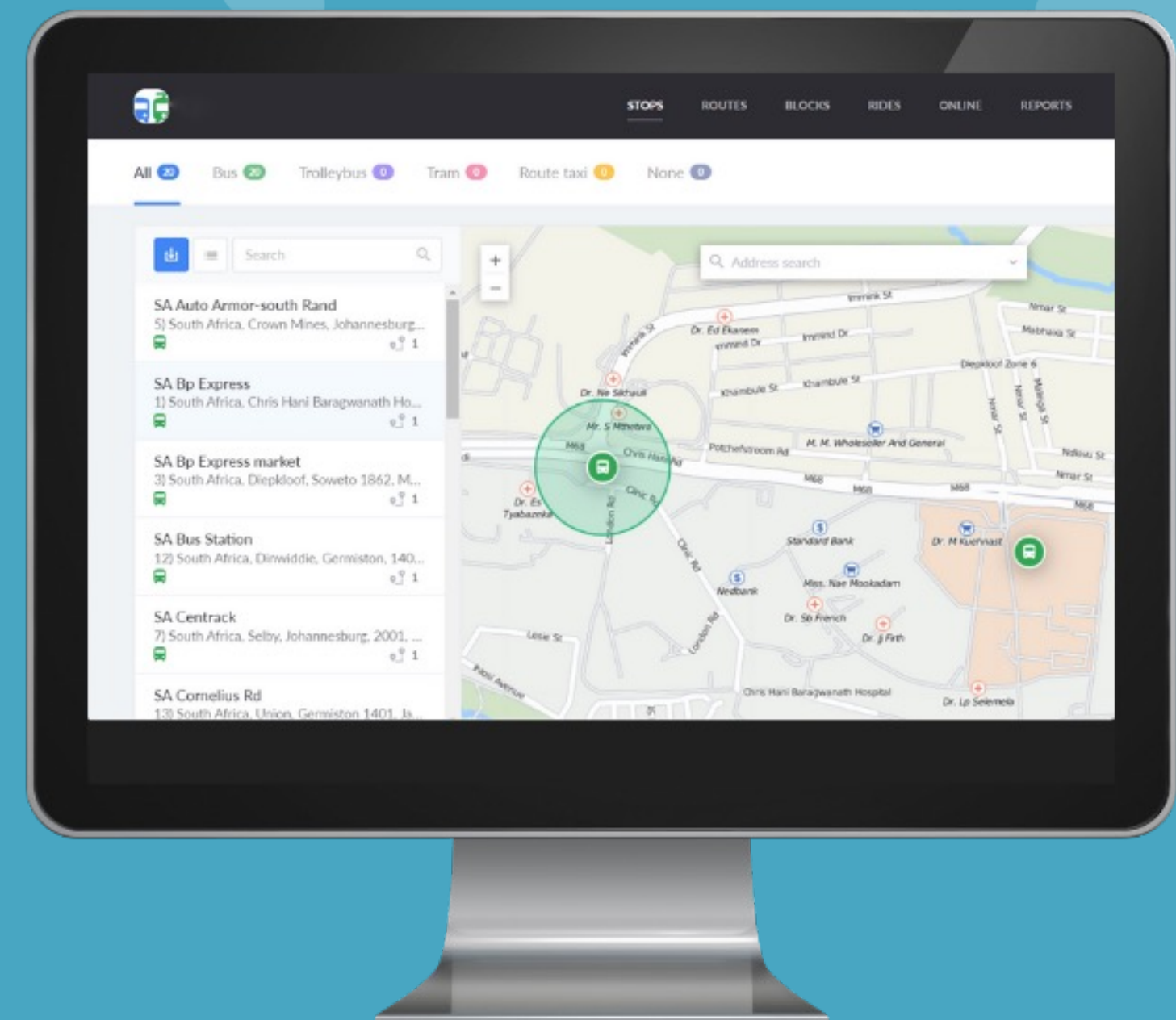
Access rights | Route groups | Depot settings

+ Search

Group 3 1 1 ✎ 🗑

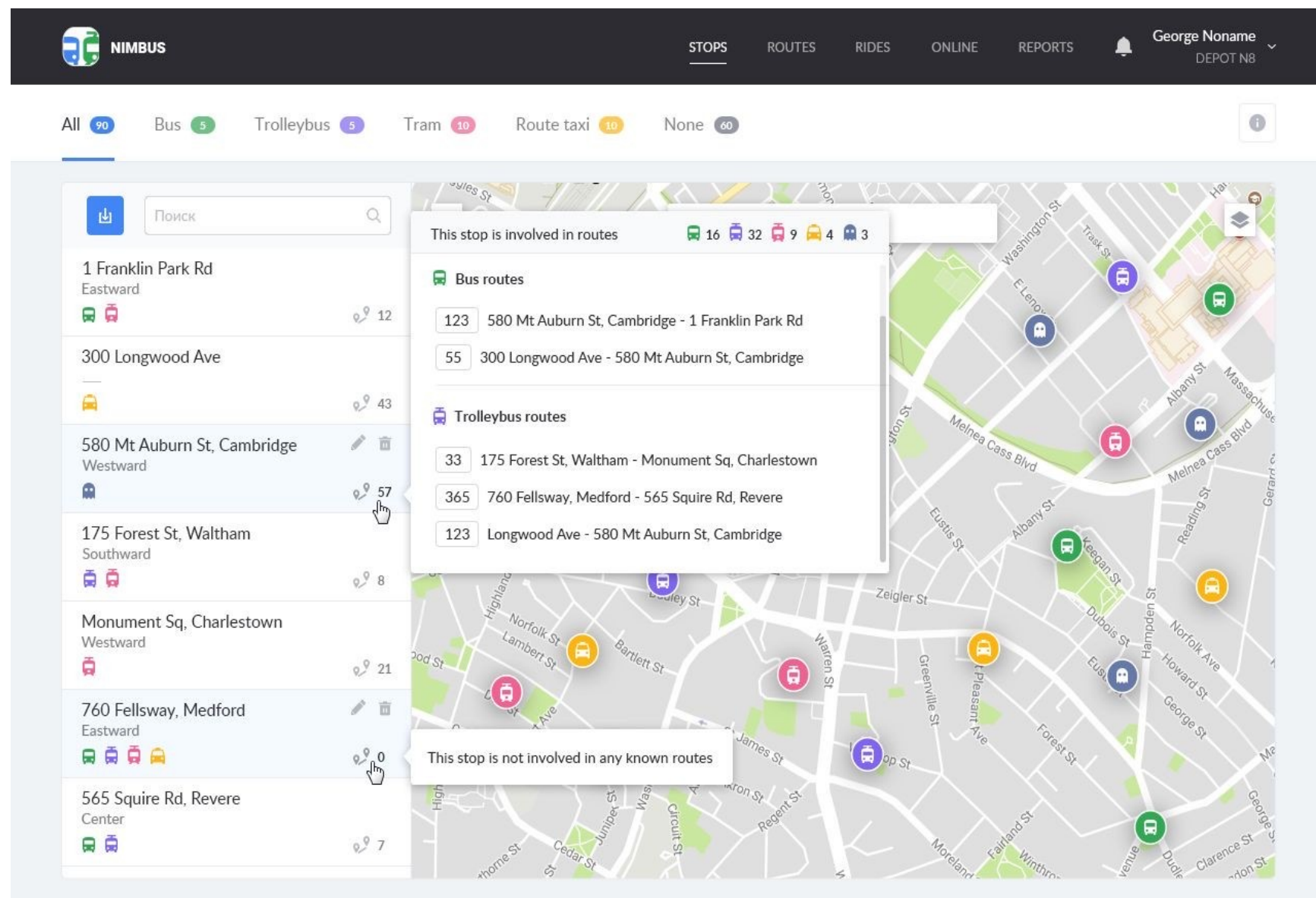
Group	Bus routes	Trolleybus routes	Users
Group 1			NimB2a
Group 2			NimB2c
Group 3	4 DSMiami1 – DSMiami5	3 NS1 – NS9	NimB2d
Group 5			NimB2e
New route group			

Let's have a closer look at  
Nimbus and its advantages





# Stop

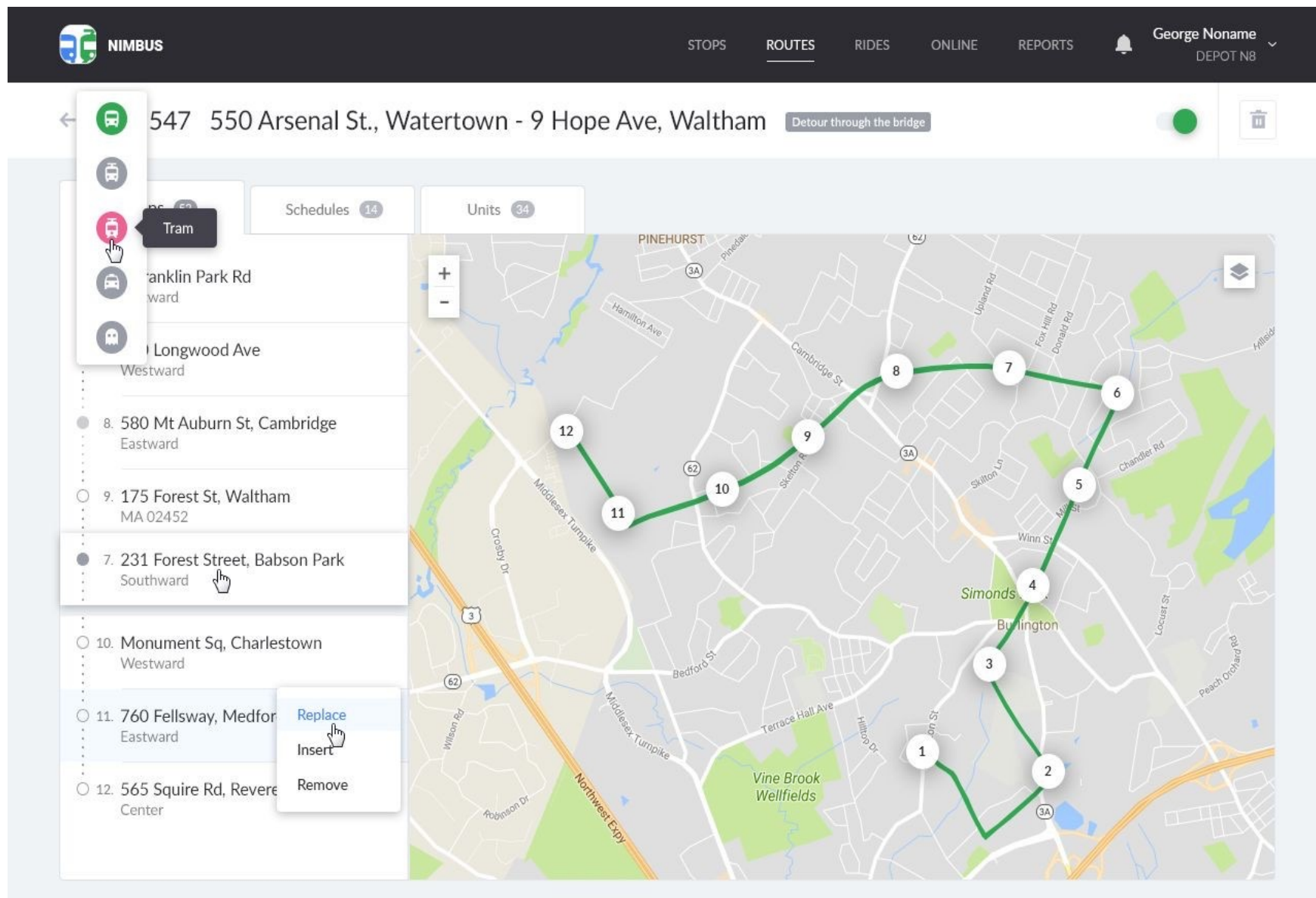


## CREATE OR IMPORT STOPS

- Create and edit waypoints of any shape in a few clicks or select their location in the address search field
- Import stops from KML/KMZ files
- Specify transport vehicle type for advanced filtration and search in the list and on the map
- Identify stops not involved in routes
- Quick access to stops on the map from the list



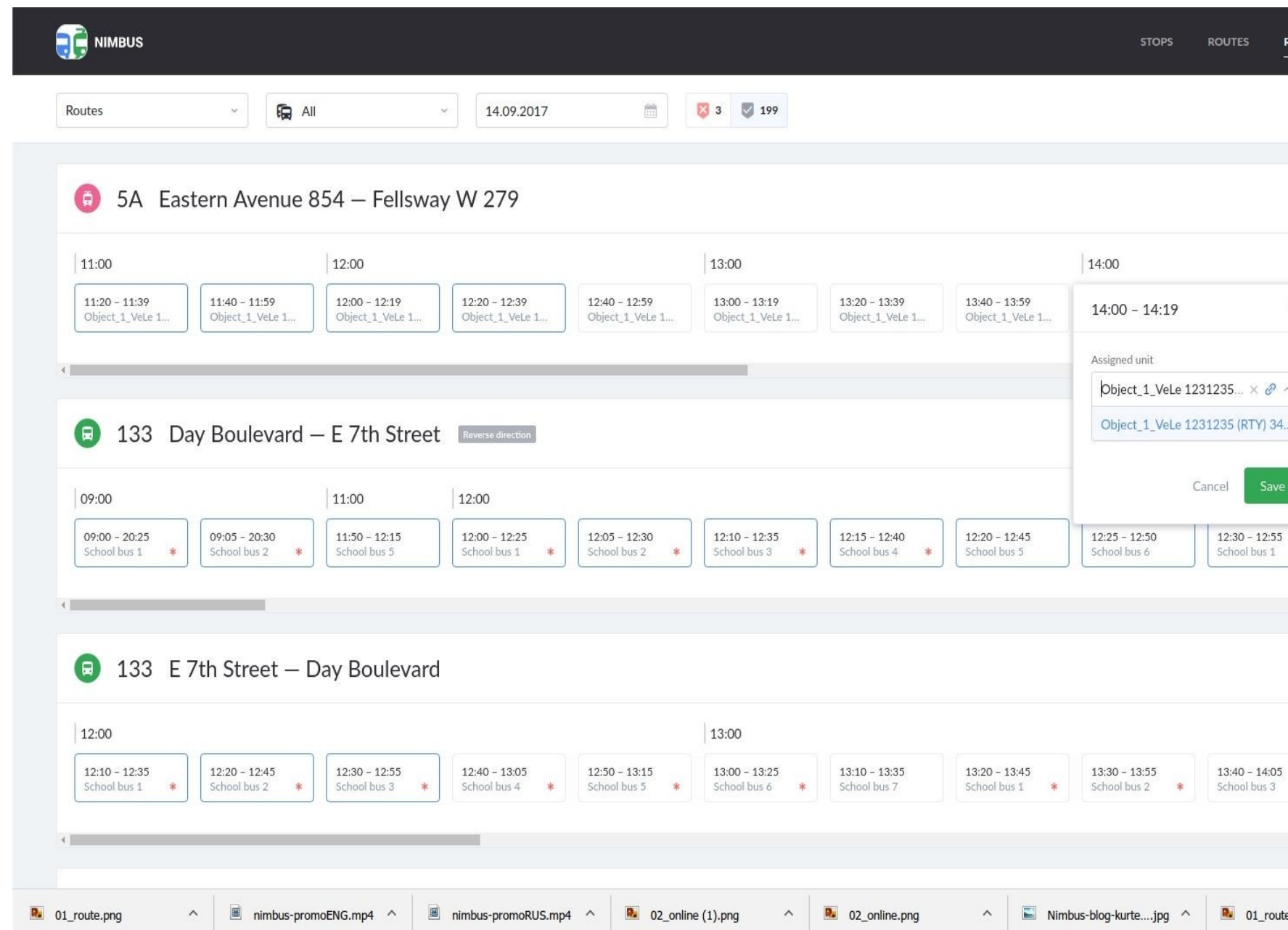
# Route



## MANAGE ROUTES

- Generate routes with precise schedules, individual operation patterns and bound units
- Add hundreds of schedules for various circumstances and create schedules on the basis of the existing ones
- Assign the units constantly following the route on the specified schedule in advance
- Use dynamic search and filtration by vehicle type, route number, name, etc.
- Change stops sequence by drag & drop or replaces one-stop by another

# Rides



The screenshot displays the NIMBUS software interface for route planning. The top navigation bar includes the NIMBUS logo and tabs for STOPS and ROUTES. Below the navigation bar, there are filters for Routes, All, and a date selector set to 14.09.2017. The main content area shows three route planning sections:

- 5A Eastern Avenue 854 – Fellsway W 279:** This section shows a timeline from 11:00 to 14:00. Rides are listed as "Object\_1\_VeLe 1..." with various time slots.
- 133 Day Boulevard – E 7th Street:** This section shows a timeline from 09:00 to 12:00. Rides are listed as "School bus 1" through "School bus 6" with various time slots. A "Reverse direction" button is visible.
- 133 E 7th Street – Day Boulevard:** This section shows a timeline from 12:00 to 13:00. Rides are listed as "School bus 1" through "School bus 7" with various time slots.

At the bottom, there is a taskbar with several open files, including "01\_route.png", "nimbus-promoENG.mp4", "nimbus-promoRUS.mp4", "02\_online (1).png", "02\_online.png", "Nimbus-blog-kurte....jpg", and "01\_route".

## PLAN RIDES

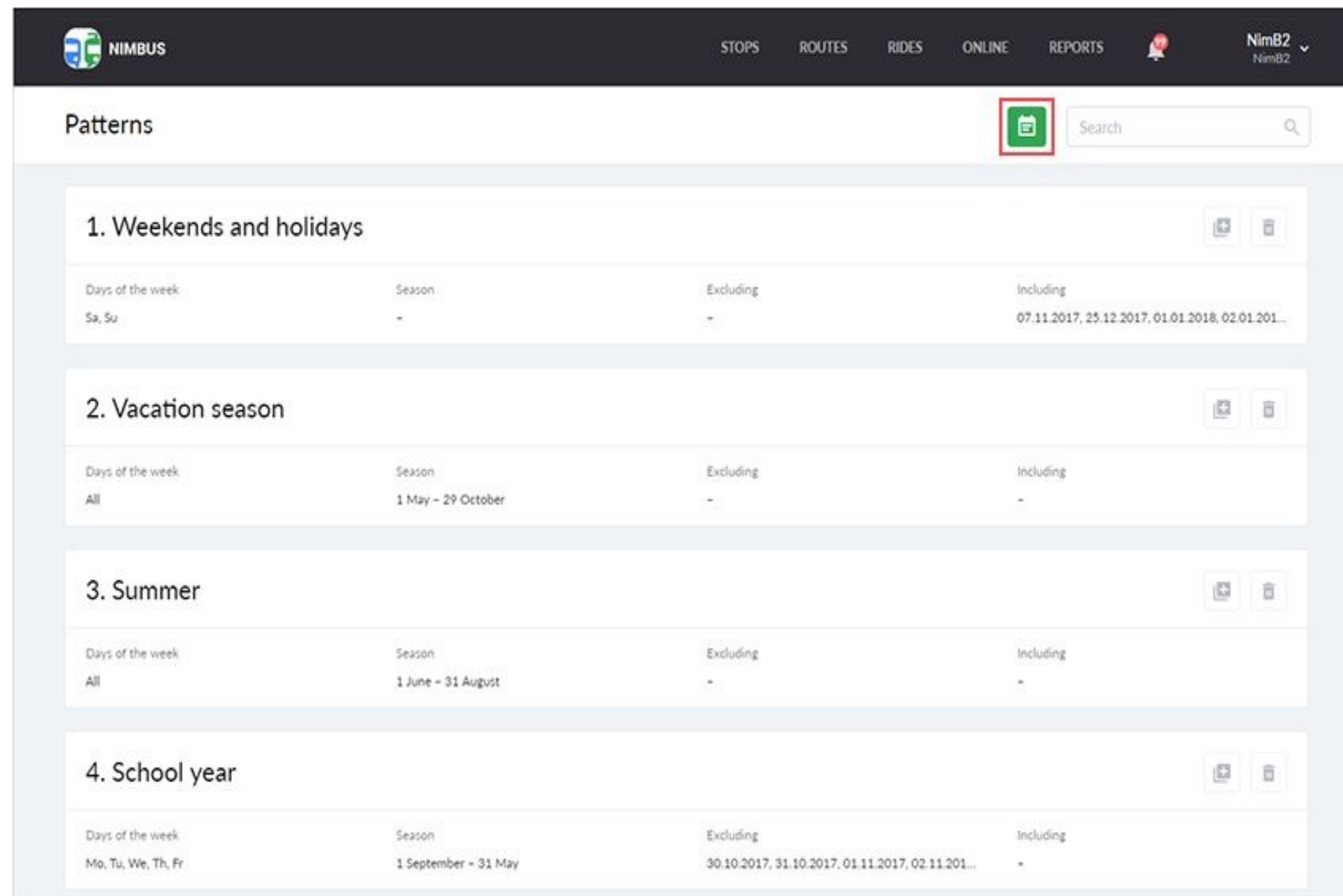
- Automatically create rides based on the schedules and operation patterns of active routes
- View planned rides for any date and manage rides within the following week
- Use dynamic search and filtration to identify rides with no units assigned
- Plan rides for schedules going beyond 24hours
- Group rides by a route/unit for more convenient data display



# Operation pattern

## CREATE CUSTOM ACTIVITY SCHEMES FOR EACH ROUTE

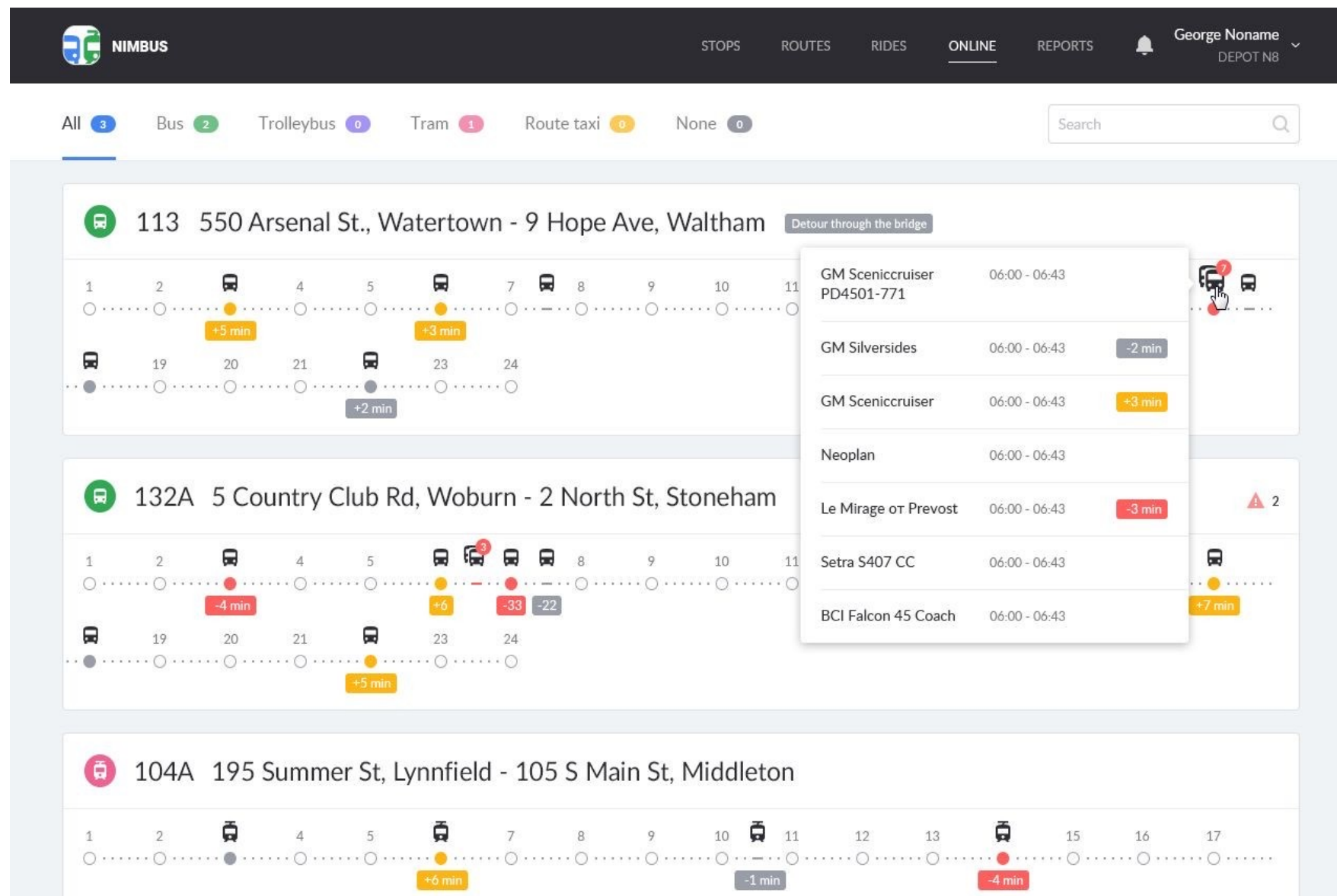
Operation patterns are directly connected with schedules and determine the days when the latter should be active (weekdays, seasons, roadworks periods, etc.).



The screenshot shows the 'Patterns' management interface in the NIMBUS system. The interface has a dark header with the NIMBUS logo and navigation links: STOPS, ROUTES, RIDES, ONLINE, REPORTS, and a user profile 'NimB2'. Below the header, the 'Patterns' section is visible, featuring a search bar and a list of four predefined patterns. Each pattern is represented by a card with a title, a table of configuration options, and edit/delete icons.

Pattern Name	Days of the week	Season	Excluding	Including
1. Weekends and holidays	Sa, Su	-	-	07.11.2017, 25.12.2017, 01.01.2018, 02.01.201...
2. Vacation season	All	1 May - 29 October	-	-
3. Summer	All	1 June - 31 August	-	-
4. School year	Mo, Tu, We, Th, Fr	1 September - 31 May	30.10.2017, 31.10.2017, 01.11.2017, 02.11.201...	-

# Online tracking




## CONTROL RIDES IN REAL TIME

- Use handy timeline and notifications to control late/early arrivals, deviations from the route, etc.
- Employ 1 of 3 GIS sources for unit tracking on the map
- Make use of color identification when analyzing late/early arrivals and view tooltips for additional information
- Replace a vehicle on the already started ride
- Configure settings for late/early arrivals detection



# Reports

 NIMBUS

STOPS

Rides of unit Object\_1\_VeLe 1231235 (RTY) 34526-346

Route	Date	Schedule	Beginning	End	Duration	Avg deviation
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	09:30 - 09:49	01.09.2017 09:26	01.09.2017 09:43	17 min	5 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	09:55 - 10:14	01.09.2017 09:52	01.09.2017 10:08	17 min	4 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	10:20 - 10:39	01.09.2017 10:18	01.09.2017 10:34	17 min	3 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	10:40 - 10:59	01.09.2017 10:31	01.09.2017 10:34	4 min	24 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	11:00 - 11:19	01.09.2017 10:52	01.09.2017 11:00	9 min	18 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	11:20 - 11:39	01.09.2017 11:10	01.09.2017 11:26	17 min	11 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	11:40 - 11:59	01.09.2017 11:36	01.09.2017 11:52	17 min	5 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	12:00 - 12:19	01.09.2017 12:02	01.09.2017 12:18	17 min	2 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	12:20 - 12:39	01.09.2017 12:10	01.09.2017 12:18	9 min	20 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	12:40 - 12:59	01.09.2017 12:32	01.09.2017 12:44	13 min	13 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	13:00 - 13:19	01.09.2017 12:54	01.09.2017 13:10	17 min	7 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	13:20 - 13:39	01.09.2017 13:20	01.09.2017 13:36	17 min	1 min
5A Eastern Avenue 854 — Fellsway W 279	01.09.2017	13:40 - 13:59	01.09.2017 13:33	01.09.2017 13:36	4 min	22 min

## ANALYZE THE PERFORMANCE OF YOUR FLEET

- Study ride history and assess performance quality in terms of routes and units
- Generate basic and detailed reports
- Execute reports for intervals of up to 100days
- Export reports in .xlsx



## **For owners and managers**

- Create an effective dispatch center for comprehensive control
- Cut mileage, fuel and maintenance expenses by eliminating unauthorized trips
- Avoid fines for violating schedules
- Optimize the number of vehicles on a route by minimizing idle time
- Get quick access to analytics for decision making



## ● **For dispatchers**



- Ensure schedule compliance, proper vehicle distribution, and reliability of services
- Minimize traffic disruption cases
- Improve planning accuracy, driver discipline and passenger transportation quality
- Optimize time for route planning, schedule management and route sheets creation
- Replace vehicles on the already started rides in case of breakdowns

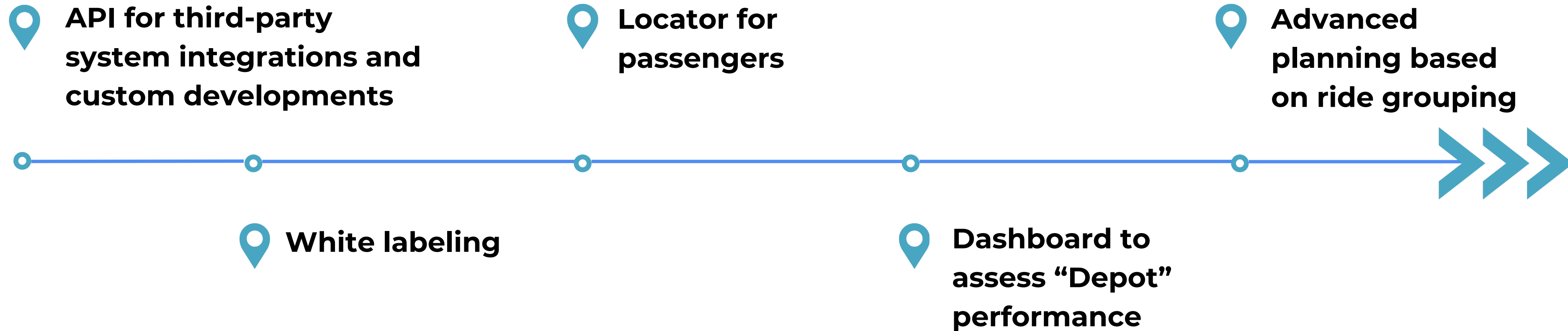


# Enjoy a complete solution

Use advanced Astreon functionality to  
create a comprehensive passenger  
transportation management solution



## —● **Developed Q4, 2017**



# CONTACT US

Connect with us today to find out more about how Astreon can benefit your business.



[www.astreon.com](http://www.astreon.com)



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# Thank you!

WE CAN'T WAIT TO WORK WITH YOU.

**astre****n**

