



NIMBUS

The solution to control fixed route vehicles

Planning. Control. Analytics

winalon

Scope of application



NimBus helps to manage the fleet of vehicles following predefined routes:



Stops

Create route points or import them from third-party systems



Routes

Create chains of stops, add schedules, and assign units



Rides

Automatically create rides based on schedules and operation patterns of active routes



Monitoring

Control ride performance in real time, monitor delays, hurries, and route deviations



Reports

Get access to rides history, estimate their quality in terms of units and routes





Dispatcher

Controls rides online and promptly reacts to emergency situations



Fleet manager

Reduces mileage, downtime, fuel costs, and eliminates unauthorized rides



Fleet owner

Makes decisions based on objective data in reports

How NimBus changes businesses?



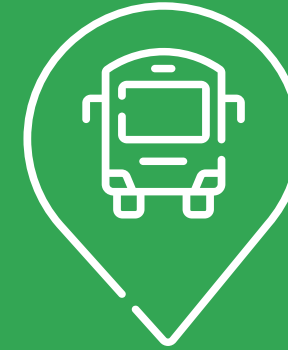
Keeps you informed

Notifications tell about the ride progress and attract the dispatcher's attention to emergency situations



Becomes the development platform

Open API helps to create unique solutions in the passenger transportation sphere



Keeps passengers informed

"Locator" tool shares the location and movements of transport with passengers



Saves the history

Information on the rides to be used in reports is available for 100 days

Why use NimBus?



Free Wialon-based solution



User-friendly interface



Flexible configuration and ACL system



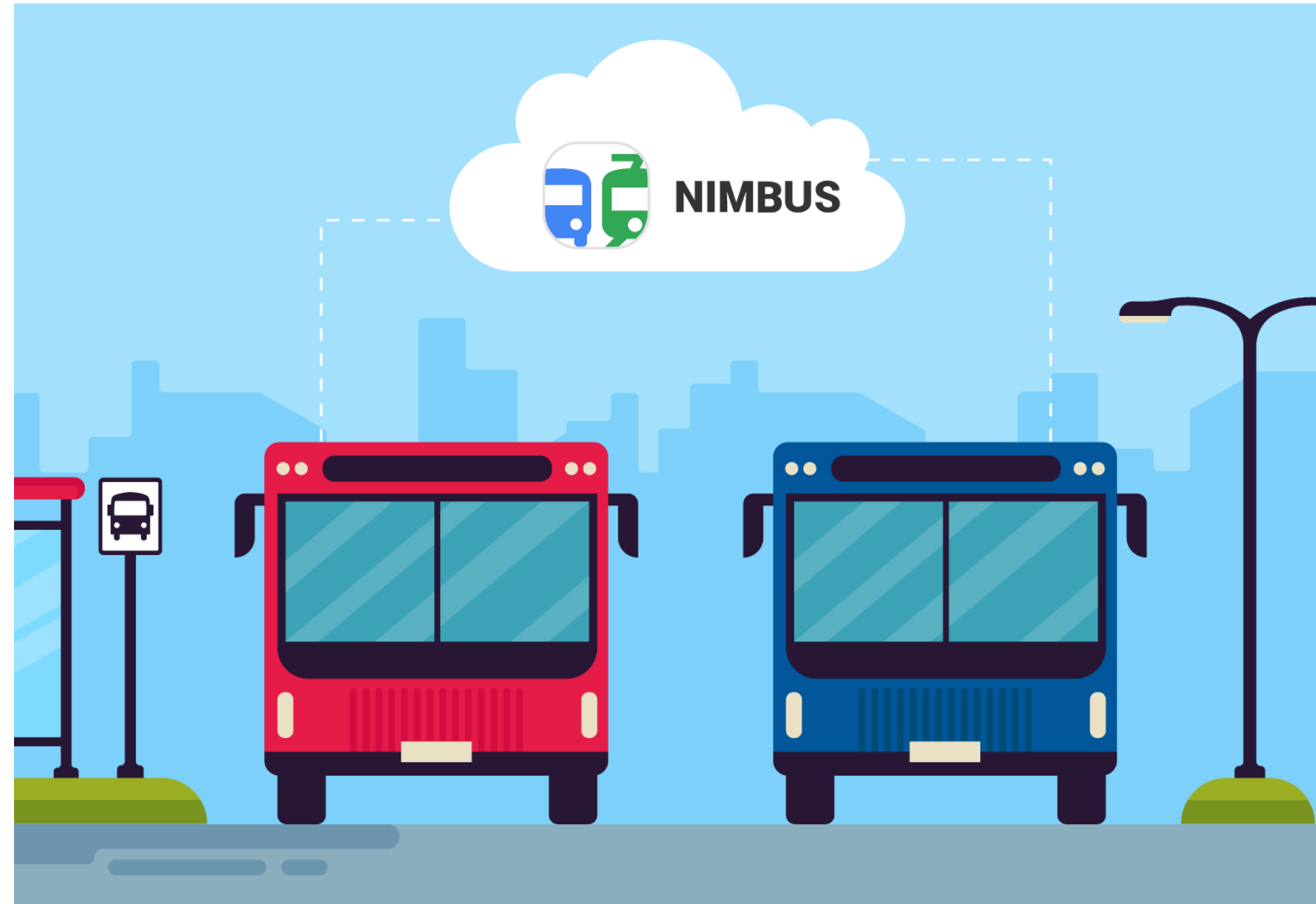
Analytics and statistics on ride performance



API for development and third-party system integrations



Multiple languages support



How it works? Administrator interface

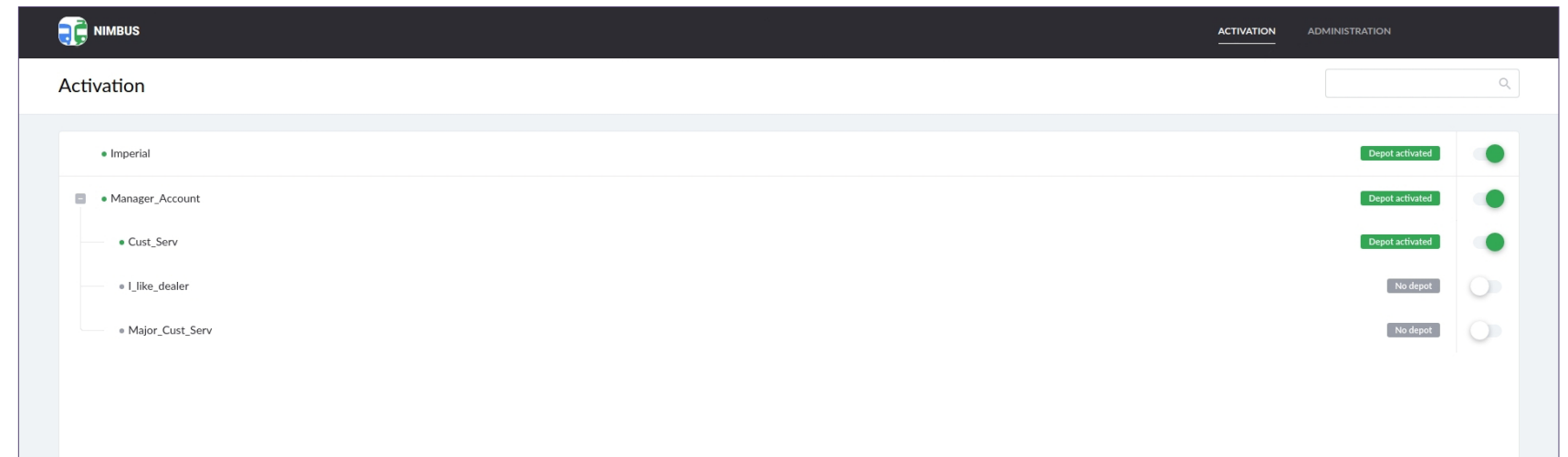


1

Get started: Activation

- Sign in to NimBus under a top-level account;
- Activate “**Depot**” for lower-level accounts.

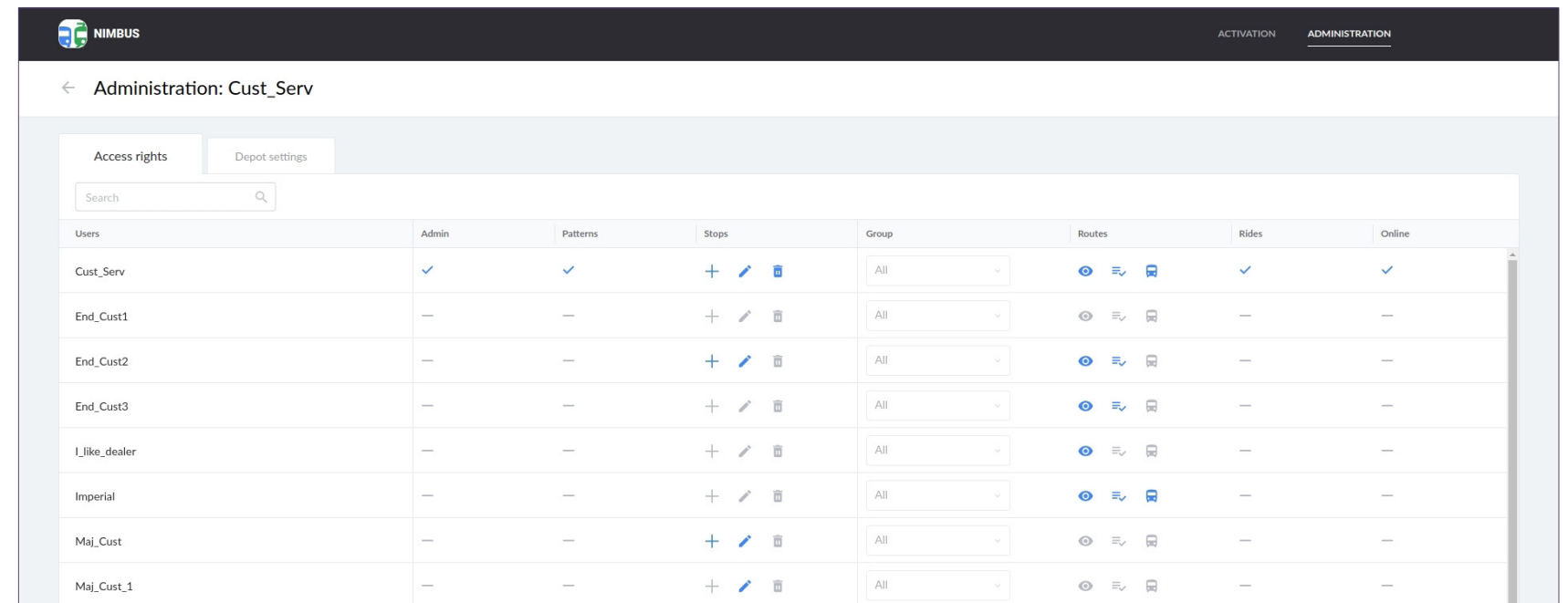
***Depot** is the storage for all stops, routes, schedules, rides history, and other information on the service.



2

Get started: Administration

- **Protect your information with access rights:** decide who can view and edit stops, schedules, and rides data.
- **Create and edit route groups:** limit the list of routes available to the user.
- **Localize the system:** set the time zone, daylight saving time period, and ride activation time.
- **Go on working in the user interface.**



How it works? "Dashboard"



3

Analyze the overall fleet performance. "Dashboard" tab displays the summary of depot contents. All the data is updated in real time.

- **Stops**

The total number of stops in the depot and the number of stops for each means of transport

- **Routes**

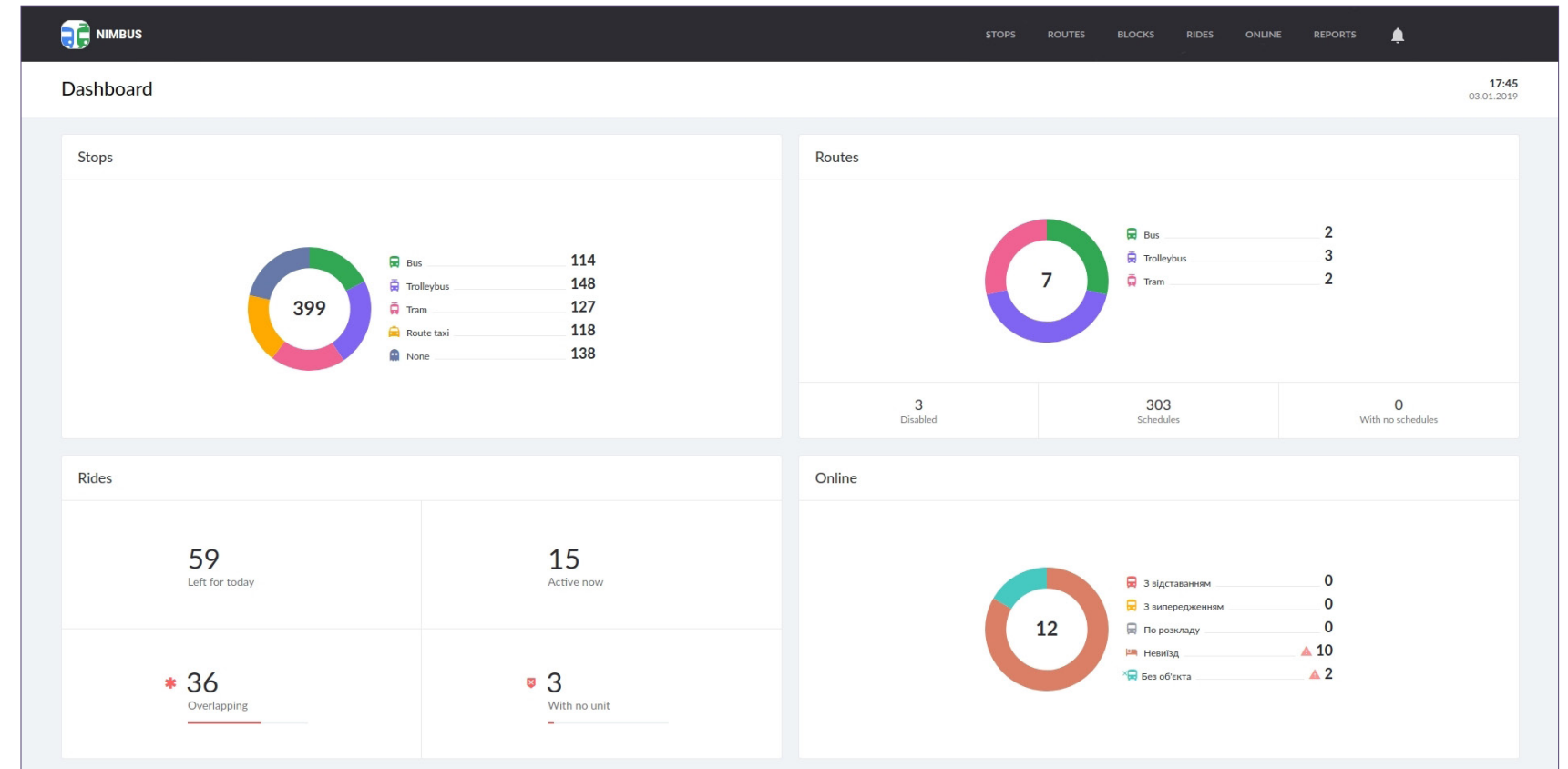
The total number of routes in the depot and the number of routes for each means of transport

- **Rides**

The total number of active and upcoming rides as well as rides active now, overlapping, and rides with no unit

- **Monitoring**

The number of rides on time, behind schedule, ahead of schedule, with no unit, and with no units assigned



How it works? Stops



4

Create and edit stops:

- **Add** waypoints of any shape in two clicks or select their location in the address search field
- **Import** stops from .kml/.kmz files
- **Specify** transport type for advanced search in the list and on the map
- **Identify** stops not involved in routes

The screenshot displays the NIMBUS web application interface. At the top, there is a navigation bar with the NIMBUS logo and menu items: STOPS, ROUTES, RIDES, ONLINE, and REPORTS. Below the navigation bar, there are filters for transport types: All (90), Bus (5), Trolleybus (5), Tram (10), Route taxi (10), and None (60). The main content area is split into a list of stops on the left and a map on the right. The list of stops includes:

- 1 Franklin Park Rd Eastward (12 routes)
- 300 Longwood Ave (43 routes)
- 580 Mt Auburn St, Cambridge Westward (57 routes)
- 175 Forest St, Waltham Southward (8 routes)
- Monument Sq, Charlestown Westward (21 routes)
- 760 Fellsway, Medford Eastward (0 routes)
- 565 Squire Rd, Revere Center (7 routes)

The map on the right shows a street grid with various stops marked by colored icons. A tooltip for the stop at 580 Mt Auburn St, Cambridge Westward is open, showing the following route information:

- This stop is involved in routes:** 16, 32, 9, 4, 3
- Bus routes:**
 - 123 580 Mt Auburn St, Cambridge - 1 Franklin Park Rd
 - 55 300 Longwood Ave - 580 Mt Auburn St, Cambridge
- Trolleybus routes:**
 - 33 175 Forest St, Waltham - Monument Sq, Charlestown
 - 365 760 Fellsway, Medford - 565 Squire Rd, Revere
 - 123 Longwood Ave - 580 Mt Auburn St, Cambridge

Another tooltip for a stop at 760 Fellsway, Medford Eastward is open, showing the message: "This stop is not involved in any known routes".

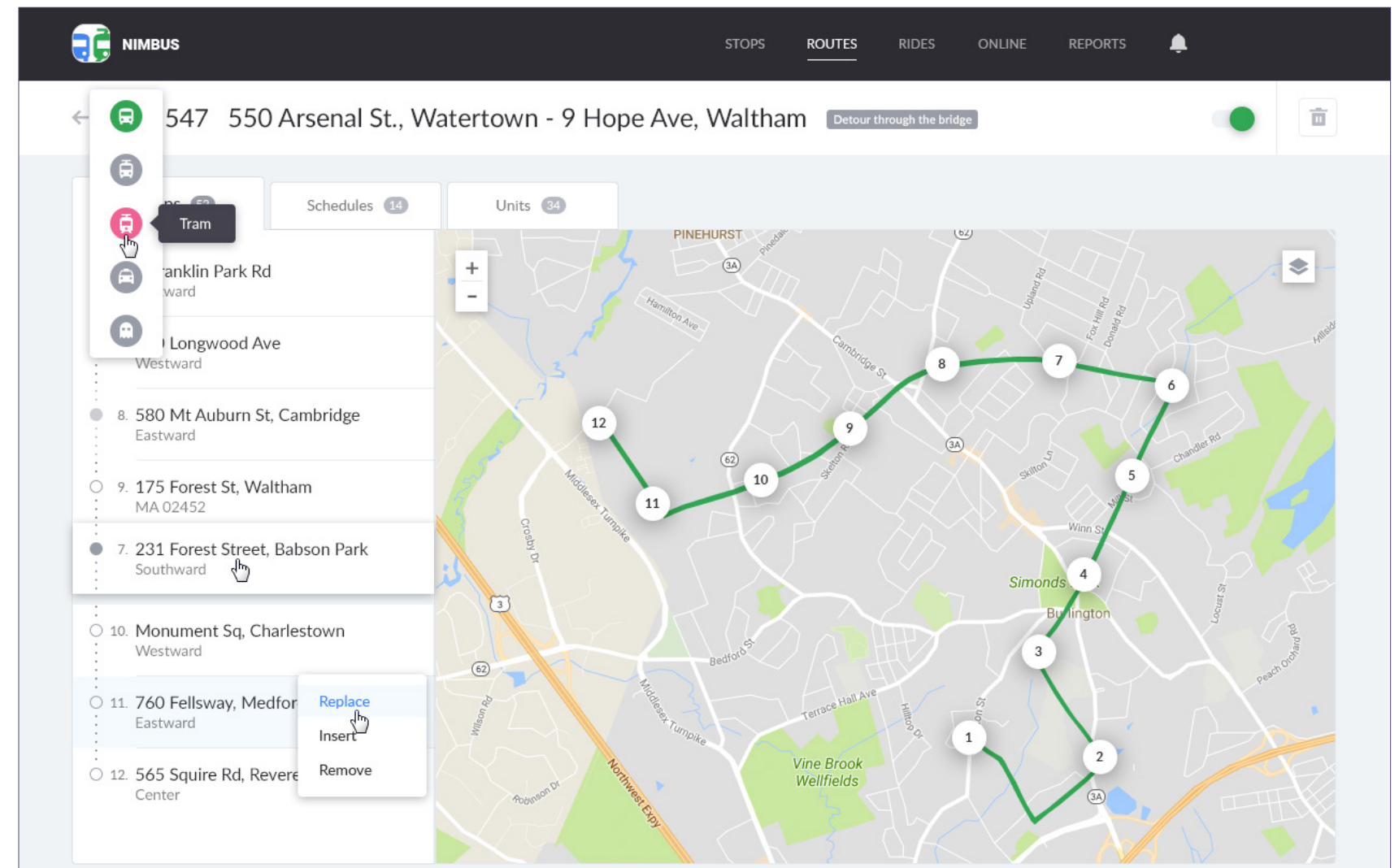
How it works? “Routes”



5

Manage routes:

- **Generate** routes with precise schedules, individual operation patterns, and assigned units
 - **Add** hundreds of schedules for various circumstances and create schedules based on the existing ones
 - **Change** stops sequence by drag & drop or replace one stop by another
 - **Use** dynamic search and filtration by vehicle type, route number, name, etc
- ***Operation patterns** determine the periods when the schedules should be active (weekdays, seasons, roadworks periods, etc.)



How it works? “Rides”



6

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 assigned units
- Plan rides for schedules valid for longer than 24 hours
- Group rides by routes and units for handy data display

The screenshot shows the NIMBUS software interface for planning bus rides. The top navigation bar includes 'STOPS', 'ROUTES', 'RIDES', 'ONLINE', and 'REPORTS'. The main content area displays three route sections:

- 5A Eastern Avenue 854 – Fellsway W 279**: Shows a grid of time slots from 11:00 to 15:00. A modal window is open for the 14:00 - 14:19 slot, showing 'Assigned unit' options: 'Object_1_VeLe 1231235...' and 'Object_1_VeLe 1231235 (RTY) 34...'. Buttons for 'Cancel' and 'Save' are visible.
- 133 Day Boulevard – E 7th Street**: Shows a grid of time slots from 09:00 to 12:45. A 'Reverse direction' button is present.
- 133 E 7th Street – Day Boulevard**: Shows a grid of time slots from 12:00 to 14:00.

Each ride card in the grid displays the time interval and the assigned unit name. The interface also includes a search bar and various status indicators (e.g., 3, 199, 1, 29, 1, 101, 6, 0, 48, 8).

How it works? “Blocks”



7

Work with blocks:

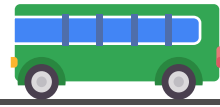
***Block is a chain of schedules which are executed successively by one unit and belong to the routes with the same number and type of transport.**

- Create blocks by selecting necessary routes, schedules, and operation patterns
- Filter blocks by operation patterns

The screenshot shows the NIMBUS software interface for route 42ex. The top navigation bar includes STOPS, ROUTES, BLOCKS, RIDES, ONLINE, and REPORTS. The main content area displays three blocks (B1, B2, B3) with their respective schedules and operation patterns.

Block	Start Time	End Time	Operation Pattern
B1	08:00	08:33	straight
	08:35	08:43	Back direction
	09:00	09:33	straight
	09:35	09:43	Back direction
	10:00	10:33	straight
	10:35	10:43	Back direction
	11:00	11:33	straight
	11:35	11:43	Back direction
	12:00	12:33	straight
	12:35	12:43	Back direction
	13:00	13:33	straight
	13:35	13:43	Back direction
B2	08:10	08:43	straight
	08:45	08:53	Back direction
	09:10	09:43	straight
	09:45	09:53	Back direction
	10:10	10:43	straight
	10:45	10:53	Back direction
	11:10	11:43	straight
	11:45	11:53	Back direction
	12:10	12:43	straight
	12:45	12:53	Back direction
	13:10	13:43	straight
	13:45	13:53	Back direction
B3	08:20	08:53	straight
	08:55	09:03	Back direction
	09:20	09:53	straight
	09:55	10:03	Back direction
	10:20	10:53	straight
	10:55	11:03	Back direction
	11:20	11:53	straight
	11:55	12:03	Back direction
	12:20	12:53	straight
	12:55	13:03	Back direction
	13:20	13:53	straight
	13:55	14:03	Back direction

How it works? "Online tracking"



8

Control rides in real time:

- Use a handy timeline and notifications to control late/early arrivals, deviations from the route, etc.
- Identify late/early arrivals and problematic rides by means of color marking and special indicators
- View tooltips for stops and units for additional information
- Replace transport on the already started route in case of breakdown
- Control the distribution of vehicles across the routes

The screenshot displays the NIMBUS online tracking interface. At the top, there is a navigation bar with the NIMBUS logo and menu items: STOPS, ROUTES, RIDES, ONLINE (selected), and REPORTS. Below the navigation bar, there are filters for vehicle types: All (3), Bus (2), Trolleybus (0), Tram (1), Route taxi (0), and None (0). A search bar is located on the right side of the filter bar.

The main content area shows three route cards:

- Route 113:** 550 Arsenal St., Watertown - 9 Hope Ave, Waltham. A tooltip for this route indicates a detour: "Detour through the bridge". The timeline shows stops 1 through 11. Deviations are marked with yellow boxes: +5 min at stop 2, +3 min at stop 5, and +2 min at stop 23.
- Route 132A:** 5 Country Club Rd, Woburn - 2 North St, Stoneham. The timeline shows stops 1 through 11. Deviations are marked with red boxes: -4 min at stop 2, +6 min at stop 5, -33 min at stop 7, and -22 min at stop 8. A tooltip for this route shows a list of vehicles with their status:

Vehicle	Status
GM Scenicruiser PD4501-771	06:00 - 06:43
GM Silversides	06:00 - 06:43 -2 min
GM Scenicruiser	06:00 - 06:43 +3 min
Neoplan	06:00 - 06:43
Le Mirage or Prevost	06:00 - 06:43 -3 min
Setra S407 CC	06:00 - 06:43
BCI Falcon 45 Coach	06:00 - 06:43 +7 min

- Route 104A:** 195 Summer St, Lynnfield - 105 S Main St, Middleton. The timeline shows stops 1 through 17. Deviations are marked with yellow boxes: +6 min at stop 5, -1 min at stop 10, and -4 min at stop 15.

How it works? "Reports"



9

Analyze the fleet performance:

- Examine ride history and assess performance quality
- Generate basic and detailed reports in terms of routes and units
- Execute reports for the intervals of up to 100 days
- Export reports in .xlsx
- Compare data in report tables with ride performance on the map

Rides of unit Object_1_VeLe 1231235 (RTY) 34526-346

Route	Date	Schedule	Beginning	End	Duration	Avg deviation	Max hurry	Max delay	Stops	Result
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	6 min	0 min	10/20	Fulfilled
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	5 min	0 min	10/20	Fulfilled
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	4 min	0 min	10/20	Fulfilled
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	24 min	0 min	3/20	Fulfilled
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	18 min	0 min	4/20	Fulfilled
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	12 min	0 min	10/20	Fulfilled
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	6 min	0 min	10/20	Fulfilled
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	0 min	3 min	10/20	Fulfilled
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	20 min	0 min	4/20	Fulfilled
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	15 min	0 min	7/20	Fulfilled
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	9 min	0 min	10/20	Fulfilled
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	3 min	1 min	10/20	Fulfilled
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	23 min	0 min	3/20	Fulfilled