

NimBus Online 2.0

Online 2.0 is the operation mode of NimBus with a **new tracking module** which allows you to expand the boundaries of the application. In addition to the standard features of NimBus, the new functions in the Online 2.0 allow you:

- to configure the [automatic assignment of units to rides](#);
- to create [circular routes](#).

The new algorithm of the Online 2.0 tracking module also allows you to execute the rides of [routes with intersections](#) correctly.

Automatic assignment of units to rides

The **automatic assignment of units to rides** is a new feature in Online 2.0 after the activation of which the units associated with a route are assigned to the rides automatically as soon as they visit the first stop of the route according to the schedule. To configure the automatic assignment, follow the steps described below.

1. Open the [Administration](#) page and select the necessary depot (if there are several available).
2. On the **Depot settings** tab, activate the switch of the **Online 2.0** mode.
3. In the **When visiting a stop** field, indicate the number of minutes the system should start taking into account messages from the units associated with the route before any of them visits the first stop on schedule.
4. Click **Save**.

NIMBUS ACTIVATION **ADMINISTRATION** NimB ▾

Administration: NimB2

Access rights Route groups **Depot settings** Locator Notifications

Cancel Save

Time zone: GMT +02:00 Daylight saving time: Not in use

Online 2.0
The operation mode of NimBus in which the following new features are available: automatic assignment of units to rides and circular routes.

Ride activation

According to schedule
10 min
Rides are activated the indicated number of minutes before they begin on schedule regardless of whether they have assigned units or not.

When visiting a stop
10 min
Rides are activated when the unit visits the first stop of the route for which the automatic assignment of units is enabled. The system starts taking into account messages from the unit the indicated number of minutes before it visits the first stop on schedule.

Enable/Disable the Online 2.0 mode

5. On the [Routes](#) page, select the required route.
6. On the **Units** tab, select the units which should be associated with the route from the list of available units. You should select more than 1 unit.
7. Enable the **Assign units automatically** option.
8. Click **Save**.

The screenshot shows the NIMBUS application interface. At the top, there is a navigation bar with the NIMBUS logo and several tabs: STOPS, ROUTES (highlighted with a red box), BLOCKS, RIDES, ONLINE, REPORTS, and a notification bell. The user is logged in as NimB2. Below the navigation bar, there is a header section with a back arrow, a bus icon, a route number '24', the route name 'Młociny – Sokratesa 04', and 'Cancel' and 'Save' buttons. The main content area has three tabs: Stops (11), Schedules (3), and Units (3). The 'Units' tab is selected. Below the tabs, there is a section titled 'Associate units with the route'. It contains a checkbox labeled 'Assign units automatically' which is checked. To the right of this checkbox are 'Units' and 'Groups' buttons and a search bar. Below this, it says 'Items found: 25' and 'Select all'. A list of units is shown with checkboxes: Car 1, Car 2, and Car 3 are checked, while Car 4, Car 5, and Car 6 are unchecked.

If the automatic assignment of units is enabled for a route, the units associated with the route are assigned to the rides automatically **instead of** the units indicated in the schedules. If the unit indicated in the schedule visits the first stop **earlier** than the associated one, the former is assigned to the route.

It is **not recommended** to associate the same units with the routes which have the same first stops.

Circular routes

A **circular route** is a route in which the first stop corresponds to the last one but has another time of visiting indicated in the schedule. In Online 2.0, you can make a route circular in the two ways described below.

1. When creating a route using the **Circular route** option:

- Click on the **Create route** button on the **Routes** page;
- Select filtering by the type of transport in the lower part of the window;
- Move the required stops from the left list to the right one;
- Enable the **Circular route** option;
- Click **Continue**;

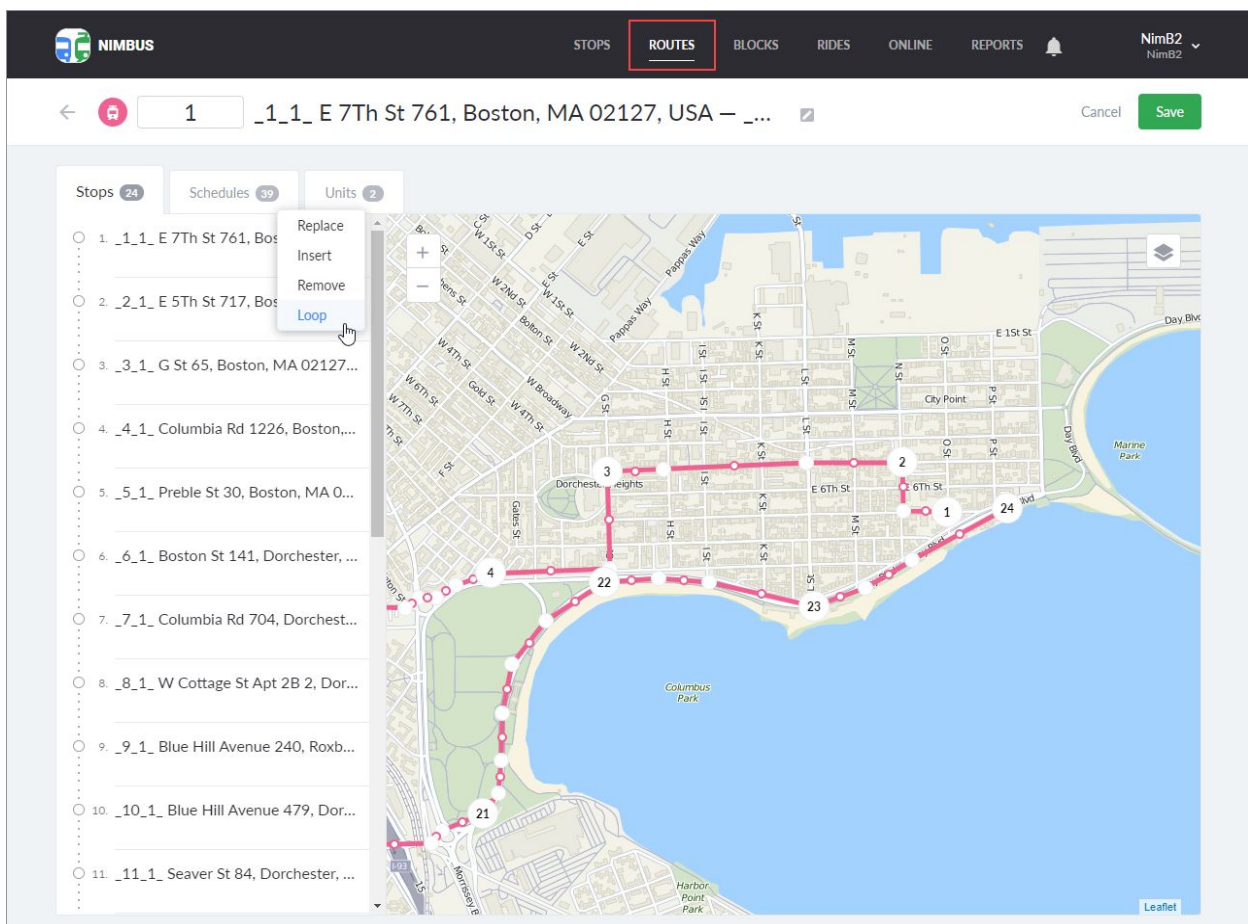
The screenshot shows the 'Stops on route' interface. On the left, under 'Bus stops: 285', there is a list of stops: 1.84. I-15, North Las Vegas, NV 89030, USA; 1.85. I-15, North Las Vegas, NV 89030, USA; 1.86. I-15, North Las Vegas, NV 89030, USA; 1.87. I-15, North Las Vegas, NV 89030, USA; 1.88. I-15, North Las Vegas, NV 89030, USA; and 1.89. 46, North Las Vegas, NV 89030, USA. On the right, under 'Picked stops: 21', there is a list of stops: 17. 16) Skillings Rd, Winchester, MA 01890, USA; 18. 17) Mystic Valley Pkwy 232, Winchester, MA 0...; 19. 18) S Border Rd, Medford, MA 02155, USA; 20. 19) S Border Rd, Medford, MA 02155, USA; 21. 20) Fellsway W 279, Medford, MA 02155, USA; and 22. 0) Bryant St 228, Malden. A red box highlights the last stop, '0) Bryant St 228, Malden', with a line pointing to a text box that says 'The last stop that duplicates the first one'. At the bottom, there are icons for different transport types (bus, train, tram, etc.) and a checkbox labeled 'Circular route' which is checked. There are also 'Cancel' and 'Continue' buttons.

- Fill in the **Route number** field;
- Click **Save**.

When the **Circular route** option is enabled, an additional stop that duplicates the first one appears at the end of the right list. You cannot move this stop and it changes automatically when you change the first stop in the list.

2. When editing a route using the **Loop** action:

- Select the required route on the **Routes** page;
- Select the **Loop** action in the edit menu of the first stop;
- Click **Save**.



You can also loop a route on the map. To do this, click on the first stop of the route on the map and select the **Loop** action.

To unloop a circular route, click on the edit icon of its first stop (or click on this stop on the map) and select the **Unloop** action.

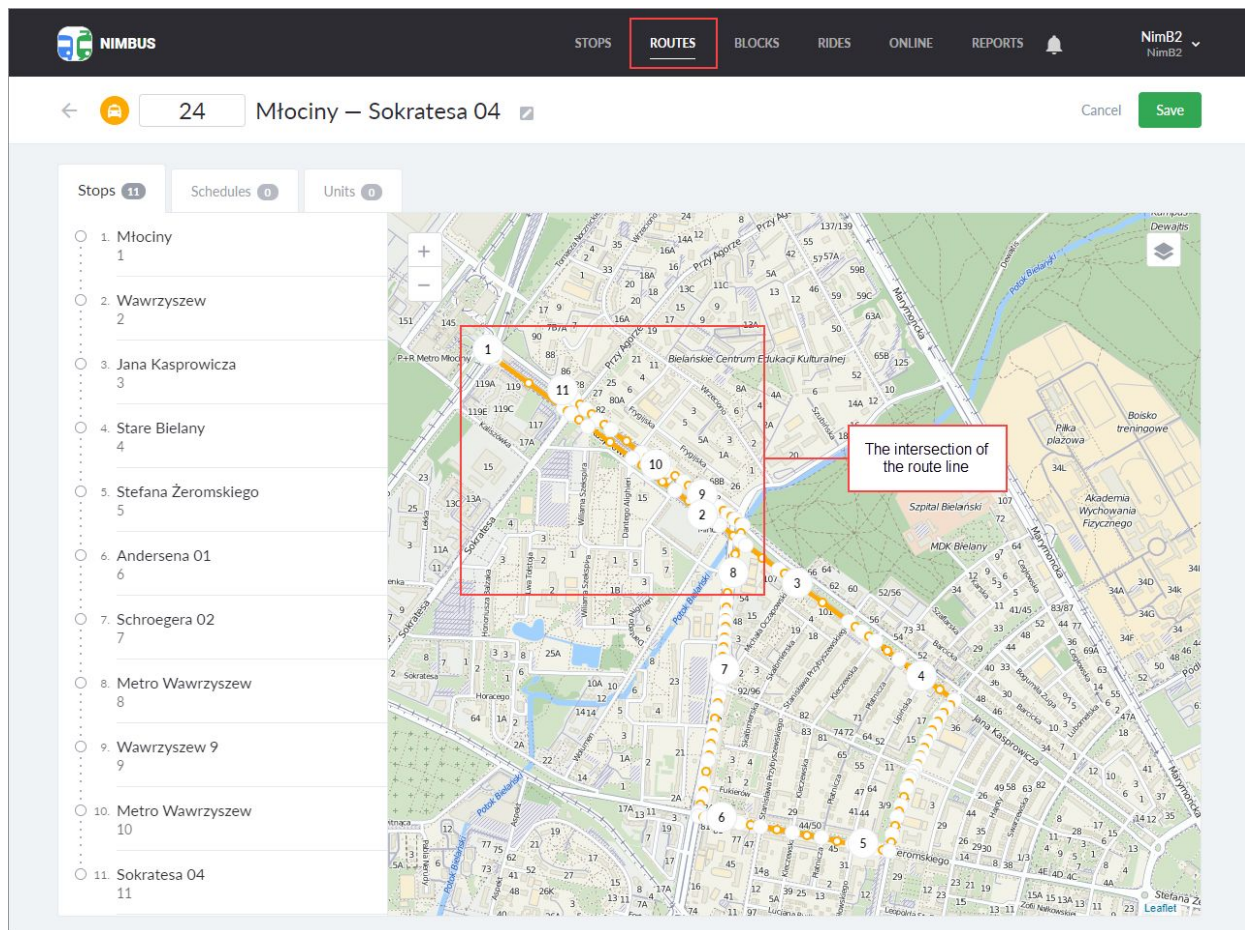
The screenshot shows the NIMBUS software interface. At the top, there's a navigation bar with tabs: STOPS, ROUTES (highlighted), BLOCKS, RIDES, ONLINE, REPORTS, and a user profile icon. Below the navigation bar, there's a header area with a back arrow, a bus icon, the number 21, and the route description '0) Bryant St 228, Malden — 0) Bryant St 228, Mal...'. To the right of the header are 'Cancel' and 'Save' buttons. The main area is divided into three sections: Stops (22), Schedules (29), and Units (2). The Stops section lists 11 stops, with the first stop being '0) Bryant St 228, Malden'. A context menu is open over the first stop, showing options: Replace, Insert, Remove, and Unloop (highlighted). The map shows a circular route with 21 stops, numbered 1 through 21. Stop 1 is at Bryant St 228, Malden, and stop 21 is at Bryant St 228, Malden. A red box highlights the edit icon for stop 21 on the map, with a text box stating 'The first and the last stop of the circular route'.

It is required to indicate the time of visiting the **first** and the **last** stops in the schedule of a circular route. It is recommended to indicate the time of visiting intermediate stops as well.

The automatic assignment of units is **not available** for circular routes in the Online 2.0 mode.

Routes with intersections

A **route with intersections** is a route the line of which intersects or partially overlaps itself. In the new Online 2.0 algorithm, the time of receiving messages from units is compared with the time of visiting every stop indicated in the schedule. The algorithm allows you to execute the rides of such routes correctly, avoid visiting the last stop ahead of schedule and finishing the ride prematurely.



For the algorithm to work, it is required to indicate the time of visiting **all** the stops in the schedules of such a route.