



Schedule Server 4

Improve the quality of your schedules. Say goodbye to manual updates.



Your goal is to provide the best paratransit service you can for your passengers while maximizing limited resources. Your schedules should reflect that, day in and day out. But this daily grind can be tough, when paratransit demand is unique and dynamic, changing from hour to hour.

Schedule Server 4 performs scheduling functions for PASS that help you get the best schedules out on the live day, allowing for same-day booking, resulting in shorter trips for passengers, and increased efficiencies for your agency. With automated, real-time scheduling and more advanced capabilities than ever, your staff can deliver better paratransit service, with less manual and wasted effort.

Overview

Automate Scheduling Within a Pre-Defined Live Window

- The Real-time Scheduling Agent (RSA) schedules and optimizes trips within a narrow, customizable time window (2hr default); schedules unscheduled trips on the day of service
- Features easy to configure “set it and forget it” options; no complex agents to set up
- Supports interfacing to third parties (such as Google or Bing) for estimating travel times based on real-time traffic, for trips that fall within a user-customizable time window

Move Bad Trips to Better Runs

- Bad Trip Locator optimizes schedules by selectively removing the worst trips that don't fit the current run; reduces amount of driver time and miles added to the run
- Bad Trip Locator now learns from your operations and automatically sets bump threshold, removing the need for manual editing of costing weight settings
- Temporarily moves bad trips to a “bump” or clipboard run until a more suitable run is found; moves back bumped trip to the run if it can fit into some slack that opened up because of the previous phase of bumping out



Get More Out of Your Scheduling Engine

- Shadow scheduling automatically allows multiple users to work with shadow copies so they can simultaneously search for results without blocking each other
- Auto Arrive/Auto Depart automatically records vehicle arrival and departure times for a trip, enabling PASS to accurately calculate trip times
- Improves batch scheduling outcomes by building a template schedule first then matching template's solutions onto all corresponding solutions, rather than re-batching from scratch; automatically updates a run's estimated times and flags any schedule violations
- Enables users to configure distance and travel time calculation back-up methods for the primary method (e.g., specify straight and barrier as second and third methods if primary method is Street Routing)
- Our second-generation Reverse Travel Algorithm determines what time vehicle needs to leave to arrive at a destination by the required time; helps produce more accurate travel estimates on the run, improving OTP

Agency Benefits



Increased Passengers Per Hour and Trips

The ability to perform real-time scheduling, and schedule re-optimization during the day, means you better match vehicle resources to passenger needs, finding the best groupings and the most cost-effective and efficient trips. This translates into improved paratransit KPIs.



Better On-Time Performance

Real-time scheduling within a live window leverages live data, such as traffic updates and weather conditions, to optimize a run. For example, Schedule Server sees which vehicles are running late and can reassign another vehicle to make a scheduled pickup. With more accurate information at their fingertips, your operational staff can better allocate resources, minimizing delays and improving OTP.



Reduced Need for Brokered Trips

Scheduling most bookings just before the required pickup time minimizes the impact of late cancellations, no shows, and vehicle breakdowns on the live schedule. With fewer holes to plug in your schedule, you don't have to outsource as many trips to taxis and TNCs, significantly reducing costs.

Passenger Benefits



Optimized Same-Day Booking

- Enables riders to make last-minute appointments and errands, giving them more flexibility and control, with less need to plan their lives way in advance



Shorter Trips

- The best schedules get your passengers to their destinations in the quickest time possible, reducing frustration over unreasonable ride lengths



Improved Passenger Experience

- Optimized, on-demand schedules enable paratransit providers to improve service quality to meet their passengers' changing expectations



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