Route Optimization and Fleet Routing

02/20/2025 2:08 pm CST

Overview

Route Optimization and Fleet Routing are both add-on services. If you have not purchased them as part of your service**minder** subscription, then you will not be able to use these features. You can purchase them by going to **Marketplace** or speaking with your Brand Admin team for approval.

Efficient routing ensures timely service, minimizes drive time, and optimizes resource allocation. This guide covers the key steps for building, optimizing, and committing routes, while also addressing route constraints, confirmation settings, and printing work orders. Whether you're managing a single agent's schedule or coordinating a fleet, these best practices will help streamline operations and improve service efficiency.

This article will review:

- Route Optimization rearrange appointments for a single agent to optimize drive time
- Fleet Routing optimize appointments for the day for your entire team/fleet at the same time
- FAQs

Route Optimization

To optimize a service agent's route, click the down arrow to the right of their name on the Daily calendar, then click Optimize.



When optimizing a route, the system will default the route's start time to the agent's availability and their starting location. If an appointment on the route is already in progress, the system will update the route's start time to be the actual (or projected) end time of that appointment. That time/location is then used to set the start time of the next and all subsequent unstarted appointments.

On the screen are two columns, the first is the route as is. The **Suggested Route** will be displayed as the second column so you can review it before updating the route. This will show any started appointments at the top, then the appointments not started with their suggested times in the suggested order.



Once you have reviewed, click **Update** to accept the changes and apply to the calendar.

Fleet Routing

This is an add-on service. If you have not purchased this as part of your service**minder** subscription, then you will not be able to use this feature. You can purchase by going to **Marketplace** or speaking with your Brand Admin team for approval.

General Settings

To review your general Fleet Routing settings, go to **Control Panel > Tools > Route Settings**. Here, you can find information about your vehicle count in the billing plan and access basic configuration options.



<u>Routing</u> Manage route settings and monitor usage.

Route Settings							
	Billing						
	Your current billable routing vehicle units is 0						
	Route Optimization Settings						
	Use these settings to control the behavior of se	erviceminder.io's Routing Add-on.					
Initial Start Time	Include initial appointment drive times for	or first start time					
	Check this box to set the start time for the first ap	Check this box to set the start time for the first appointment to be the availability start time plus the initial drive time.					
Commit Confirmations	Send appointment confirmations when a	a route solution is committed					
Hold Route Builder Edits	Hold Route Builder edits until save						
	Routing Breaks						
	Add	Label	Starts	Duration			
	Edit Delete		12:00a	30 mins			

Route Confirmation Settings

Depending how you set up your confirmation settings emails may be sent when you commit routes for the day. In **Control Panel > Route Settings**, if you have **Commit Confirmations** turned off, no emails are sent to customers.

If email reminders are not being sent upon committing a route you have two other options.

- 1. You can click "resend confirmations" after the route is committed to manually send appointment reminders to customers.
- 2. You would either have to edit your Notification Settings in the Control Panel so that emails go out to all queued appointments at a certain time each day automatically. You would need to fill out details for Appointment Notifications. Example image below:

	Appointment Notifications
En Route Window	30
	Include all appointments within this window when sending
	Include Calendar Attachment?
	serviceminder attaches calendar events to appointment confirmation emails. You can disable this here.
	Resend Confirmations?
	Turn this on to resend appointment confirmations before the appointment's scheduled start date.
ys Before Appointment	1
Time to Send	4:30p
	Include Queued Appointments?

Confirmation emails won't go out for queued appointments unless this is enabled.

Building Routes

- 1. In **Day View**, find the **Queued Appointments** list below active agents and teams. If empty, no appointments are awaiting assignment.
- 2. Click Route to open the Route Builder.



3. Select appointments individually or click **All** to select all available appointments. Filter appointments by **Service** or **GeoZones**, if needed.

	437 Appointments for <u>9/30/2024</u>						
	Services ▼ GeoZones ▼						
	Queued for 1/1/2024 Annual Maintenance (2	<u>Jason Sponzilli</u> Hampshire Lane Richardson					
	hours) - \$199.00	TX 75080					
	Queued for 1/5/2024	Rourk Traynor					
	Installation (8 hours / Man: 8 hours) - \$235.00	2342 Boxwood Dr Allen, TX 75013					
	Queued for 1/7/2024 Installation (8 hours / Man: 8 hours) - \$20.00	<u>B B King</u> 12342 Coit Rd Dallas, TX 12345					
	Constraint 11p-2a						
ĺ	Queued for 1/8/2024	Clifford B.R. Dog					
	Pressure Clean (1 hour 2 mins) - \$80.00	7373 Valley View Ln Dallas, TX 75240					
ĺ	Queued for 1/19/2024	Rourk Traynor					
	Installation (8 hours / Man: 8 hours) - \$235.00	2342 Boxwood Dr Allen, TX 75013					
	Queued for 1/19/2024	<u>Jason Sponzilli</u>					
	Tent Annual Maintenance (2	Hampshire Lane Richardson, TX 75080					

4. Adjust the following settings:

Settings	Optimize	Route Name: Optional but useful for tracking.			
Name Load Duration Scale	Truck 1 50 % 1.5	Load : Determines job distribution across agents/teams. (e.g., 100% means the first agent gets all jobs before assigning to another.)			
Options	 Disable Demand Disable Constraints Optimize Vehicles 	Duration Scale : Adjusts appointment time buffers to account for delays (e.g., traffic, weather). A value of 1.5 would increase the			
Resources	 Agents Teams All 4WG Avis Agent Barb Dywer barney agent 	duration of each appointment by 50%. Demand : Controls inventory requirements (e.g., truck needs bug repellant or fertilizer).			
Disable Constra	ints: Allows greater flexi	ibility for scheduling.			
Optimize Vehicl	l es : Create a route with t	he fewest vehicles possible.			
Resources : Assigns appointments to a single agent, multiple agents, or a team.					

5. Click **Optimize** to generate an efficient route solution. You will see this message as the Route Solution is calculated.

	Milliounian	Keyboard s	noncuts map data w2024 d	oogle _10 km	rayo i tan	erns keport a map error
You are free to roam about serviceminder.io while your route solution is being built. We'll notify you when it's ready.						
Routing History						
Action	Created	Started	Completed	Duration	Total	Committed
	12/30/2024 10:20a	12/30/2024 10:20a	Routing 🏟		1	

6. Review the optimized route, make manual adjustments as needed (drag and drop stops), then click **Commit** to finalize the schedule. If any appointments in the route conflict with a constraint, it will be highlighted in orange.

Route S	olution	Option	3			Commit!	
Summary							
					1 hour 4	15 mins (70 mi)	
Name	Stops	Demand	Duration	Drive Time	Depart	Return	
4WG	2	0	1 hour 50 mins	42 mins (25.8 mi)	8:00a	10:24a	
Barb Dywer	4	0	5 hours 6 mins	3 hours 37 mins (225.9 mi)	8:00a	8:36p	
	6	0	6 hours 56 mins	4 hours 19 mins (251.8 mi)			
Thu Eab 20	2025						
Thu, reb 20	, 2023 μ						
📒 4WG				4	2 mins (25.8 mi) 🕪 치 🚳 🗕	
:: 1 - 12:00a ·	Sean Gras	is		4565 Druid Hills Dr Fris	ico, TX 75034 - 15	5 mins (9.6 mi)	
Thu, Feb 2	0, 2025			P	ressure Clean (1	hour 14 mins,1)	
2 - 12:00a - <u>Dust Buster</u>				6400 FM 423 Fri	sco, TX 75036 - 8	8 mins (3.6 mi)	
Thu, Feb 2	0, 2025				Recurring Serv	vice (36 mins,1)	
			k		19	mins (12.6 mi)	
🔲 Barb Dyw	/er			3 hours 37	' mins (225.9 mi) 🕅 치 🚳 🗕	
:: 1 - 8:00a -	Lilly Lemon	<u>is – RaggaMu</u> p	opets Tails and Feathers	4524 Catina Ln Dallas, TX 75229 – 3 hours 2 mins (204.8 mi)			
Thu, Feb 2	0, 2025			Recurring Service with promo pricing (54 mins,1)			
:: 2 - 12:09p	- <u>Lilly Lemo</u>	<u>ns – RaggaMu</u>	ppets Tails and Feathers	4524 Catina Ln Dallas, TX 75229 - 0 mins (0 ft)			
Thu, Feb 2	0, 2025			Recurring Service with promo pricing (54 mins,1)			
:: 3 - 1:03p -	Jason Spon	zilli		Hampshire Lane Richardson, TX 75080 - 17 mins (11 mi			
Thu, Feb 2	0, 2025			Annual M	laintenance (2 ho	ours 24 mins,1)	
:: 4 - 3:57p -	Eric McVey			7416 Stoney Point Dr Pla	no, TX 75025 - 18	8 mins (10.1 mi)	
Thu, Feb 2	0, 2025			Recurring Service	with promo pric	ing (54 mins,1)	
Constraint	10a-12p						
					3 hours 15	mins (218 9 mi	

7. Once committed, the route appears on the calendar, and customers receive automatic confirmations (if enabled).

If you back out without committing, do not fear! You will see the suggested route available to view or accept/decline directly on the calendar (be sure you are still on Day View). Based on the example below, you see that someone attempted to route the same appointments many times. It will tell you the name of the route and the **Started** column shows the date that someone made that route.

Route Solutions					
Action	Name	Stops	Started	Duration Committe	ed
liew Delete Commit!	11/13	1	Mon, Dec 30, 2024 at 10:51a	1s	
/iew Delete Commit!	11/13	1	Mon, Dec 30, 2024 at 10:51a	1s	
View Delete Commit!		1	Mon, Dec 30, 2024 at 10:51a	1s	
View Delete Commit!		1	Mon, Dec 30, 2024 at 10:51a	1s	
1 Queued Appointr	nent			Queued Backlog Move	Route
Wednesday, November 13					Katie Te
Installation				1234 Service Circle Fort Wort	th, TX 7624
Qty1 Dur 8 hours / Man: 8	hours			Pri (303) 902-27	'00 (Mobile

Route Constraints and Calculations

Routing Constraints limit assignments based on customer preferences or geographic restrictions. Go to **Contact Details > Edit > Routing Constraints** to configure limitations.

Routing Constraints					
	None	• No constraints			
	First	O First stop			
	Last	O Last stop			
	Range	◯ Time range (e.g. 11a-2p)			

We recommend being sparse with adding constraints. The more limitations on a route, the less efficient it will be when the routing engine runs.

The system will first segment all of the appointments by required **skills** so there is a group that requires no skills and then one group for each required skill. We will then look at the available service agents for the solution and match them to the segments based on their available skills. If you require a skill on a service and have no services agents that have those skills, those appointments will be **unrouteable**. You will see a red banner appear.

Tue, Sep 17, 2024 🚺	
	0 mins (0 ft) 🗎 🖓 🗕

The system will then segment by **GeoZones**. Service Agents will be grouped by their GeoZone restrictions and then assigned the appointments in that area. If you have a service agent that has a GeoZone constraint but there are no appointments in those GeoZones, that service agent will not receive any appointments in the solution. Learn more about service agent GeoZone constraints HERE.

Print Work Orders

- To print work orders for all trucks, click **Print** above **Route Solutions**.
- To print for individual trucks, click the **Print Icon** next to each agent/team.

Multiple Starting Locations/Depots

For fleets with multiple warehouses or independent vendors, follow this workflow:

- 1. In Day View, assess Queued Appointments and their locations.
- 2. Use Route Builder to:
 - a. Select the first geographic area.
 - b. Click Lasso to highlight stops in that area or filter by GeoZone.
 - c. Assign the appropriate agents/teams and configure the settings for that route.
 - d. Optimize the selection.
 - e. Repeat the process for remaining stops.

Each route should be mutually exclusive (no stop or team should be assigned twice). Adjust the Load setting as

FAQs

What is Duration vs Drive time?

Duration is the sum of the time on the property form the pricing bands for every service eon the route. Drive time is the estimated drive time. So if we add these together we get the time the route will take?

Can you commit multiple routes with the same customers?

NO, you cannot commit multiple routes with the same customers. Once you commit a route, it will appear in the tablets and Contact Details with the time/agents. If the job has not been done, you can uncomplete a route—start again because this day is a mess. Once stops are completed, you may not change them.

What happens when a job is cancelled in the field?

It will appear in the queue. Form there, it can be added back to a scheduled for for the same day, or "bumped to another day and have an email (options) sent to the customer. This is what the MOVE button is for.

Does the route optimize off the daily view calendar (hard scheduled) or does it pull only from the queue for that Route Optimization?

When optimizing for a specific service agent, the Optimize feature works on appointments already assigned to an agent on the calendar; it will not pull in from the queue on its own. Consider Optimize as having to methodologies.

- 1. You assign and optimize in a single step.
- 2. You assign appointments to an individual throughout the week and optimize before the agent heads out.

Does routing work differently through serviceminder than through google maps?

We use google for all geocoding. You can also manually adjust the pin locations -- that's the primary reason why when we integrate with a device's navigation app, we're passing coordinates, not necessarily the name of the address. For addresses you have trouble with, definitely look at the location of the pin for that address.*

What is the difference between Fleet Routing/Route Optimization add-ons?

Fleet Routing is best used for cases where you have a large number of appointments and a decent number of technicians. Fleet routing will optimize the stops down to the fewest number of technicians to minimize overall drive time. It's a one-click do-it-all tool. Clients who frequently use Fleet Routing include pest control, irrigation (season startup/shutdown), pool cleaning, etc.

Route Optimization gives you the ability to do the same thing, but at the individual service agent level. Once you've assigned the appointments to the agent, use the Optimize action to sort their stops into an efficient order to minimize drive time.

Route Optimization is a flat rate feature. Fleet Routing varies based on the number of vehicles used in your route solutions. Fleet Routing includes the Route Optimization option as well.

I've been waiting and the wheel is just spinning without anything happening. What should I do?

If you are trying to route appointments and it is taking longer than a few minutes, then try refreshing the page. If the route was able to be created, your work shouldn't be lost. You can view it on the calendar above the queued appointments. It would look this this below:

Route Solutions						F
Action	Name	Stops	Started	Duration	Committed	11
View Delete Commit!		1	Mon, Dec 30, 2024 at 10:20a	3s		
1 Queued Appointment				Queued Backlog	Move Route	
Wednesday, November 13					<u>Katie Test</u>	
Installation				1234 Service Cir	rcle Fort Worth, TX 76244	s Cr
Qty1 Dur 8 hours / Man: 8 hours				Pri	(303) 902-2700 (Mobile)	
						áre

If the route wasn't able to be created at all then there may be something preventing it on the schedule. It could be that there are constraints on the contact and/or agent/team availability that makes it impossible for the system to route. If you are routing a large quantity of appointments, it may take several minutes to generate the route.

How would I fix the agents available so I could optimize and route appointments for them?

If you had tried to route optimize appointments for Billy, it would not have worked since he is not active on the calendar. Drag and drop Billy into his own column on the other side of Andy.

If you wanted to use Time Block Guy, he is unavailable for the chosen day, so you need to Edit his Service Agent. It may be due to his hours of availability, or he has a time block on that day, or if he only works in certain GeoZones on certain days. Click his name to go to his service agent and investigate further.



Time Block Guy has no scheduled availability so he isn't available any day of the week. Learn more about Service

Agents and Subcontractors and setting up hours for availability.