

# Route Optimisation

## OVERVIEW

Add functionality to the ServiceTracker Web console to enable customers to achieve efficiency with route planning

## GOALS

1. Save our customers money by planning the most efficient route
2. Save our customers time by planning the most efficient route.
3. Deliver an easy to use / flexible experience to admin teams

## SPECIFICATIONS

The route planning system needs to take multiple visits across multiple dates and resources and organise the visits into daily plans. The goal is to maximise the amount of visits that can be achieved for any given date and resource combination.

## MILESTONES

### Create an interface that uses the mapping software to show current capacity

This milestone demonstrates that the data required can be passed between ServiceTracker and the Mapquest API successfully, and that the route planning data can be used to include the travelling time in the logic we are looking to create.

### Create an interface that shows a re-route proposal for a set of visits

This milestone will prove the logic work and give us data for testing.

### Add user configurable variables to the UI process

Enable the user to add in a % of capacity to the plan and decide whether the journey to the first job and from the last job are to be included in the plan.

## **Considerations**

### **Phase 1**

#### **Necessities**

Need to know Resource Start and end times (Working Time)

Need to know Resource lunch/break time?

Can we select or exclude Resource Weekend Work

Can we implement this for on foot technicians?

Include overdue visits

Fixed visits need to be planned around

Work visits around events

Use route no as criteria

#### **Niceties**

Fixed visit overdues to be weighted toward the front of the queue

### **Later Phases**

Do we need to detail overnight stay options

Is visit Priority and number of days overdue going to be a factor

How can we factor in opening hours of the site

How do missed visits and aborted visits get pushed back into the fold?

On foot / Vehicle variance per technician

Do we need to enable resource allocation? Switch in custom settings.

Need to find a Resource for a Visit where the Product Skill matches the Resource Skill