

GeoJob – User Manual

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2 OVERVIEW

GeoJob is an application that plots efficient routes through geographically distributed jobs. A goal job is selected based on the time since the job was received and the start date, if provided. A route is then plotted to that job, grouping other jobs under the same route number where possible. The jobs on a route can then all be done sequentially or a selection can be taken depending on user preference. There are two ways of interacting with GeoJob: one is directly through the use of Rocket Software's SB/XA, the other is through a web interface that allows for easy visualisation of the software output. This manual documents the access and usage of the software.

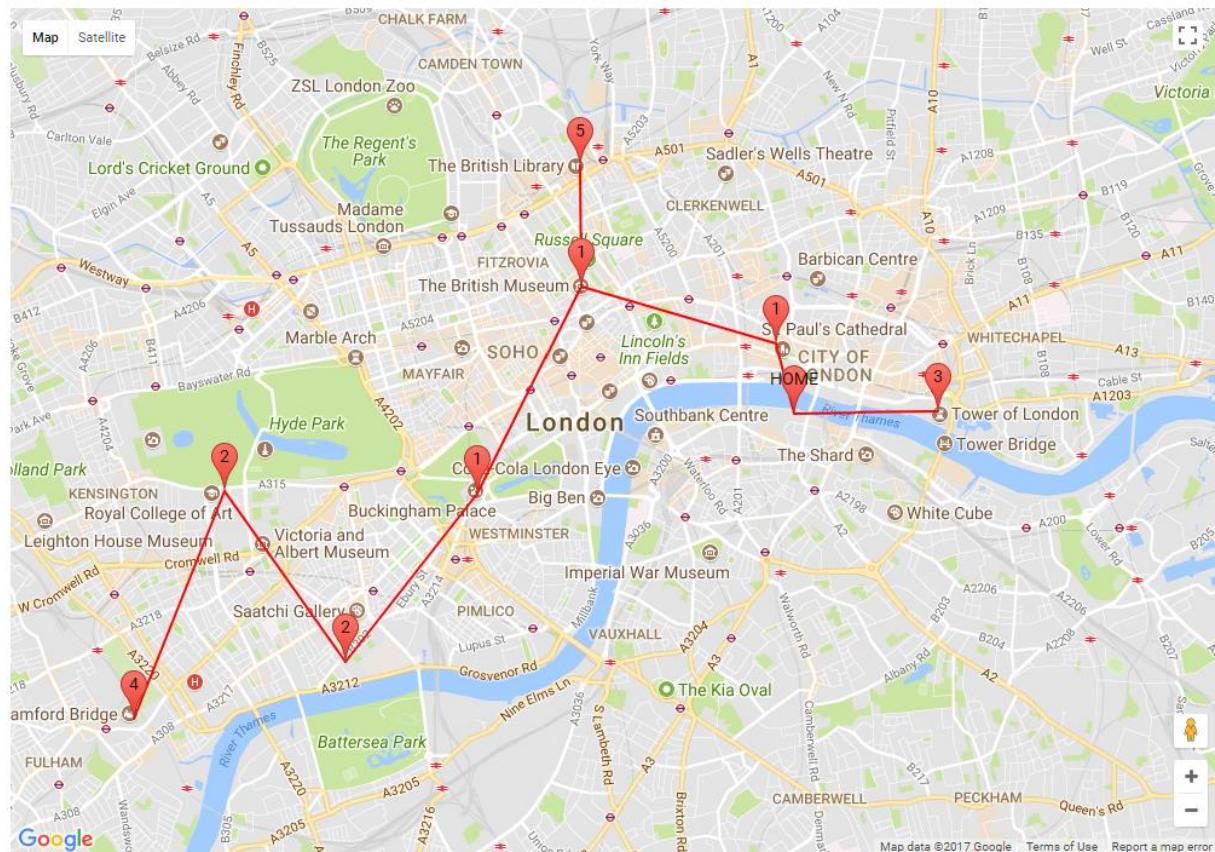
3 WEB INTERFACE

To access the web interface, open `GEOJOB/WEB/index.html` with any modern web browser.

Job View

The map below shows the current arrangement of jobs into routes, with 1 being the highest priority.

Selected location: London Home ▾



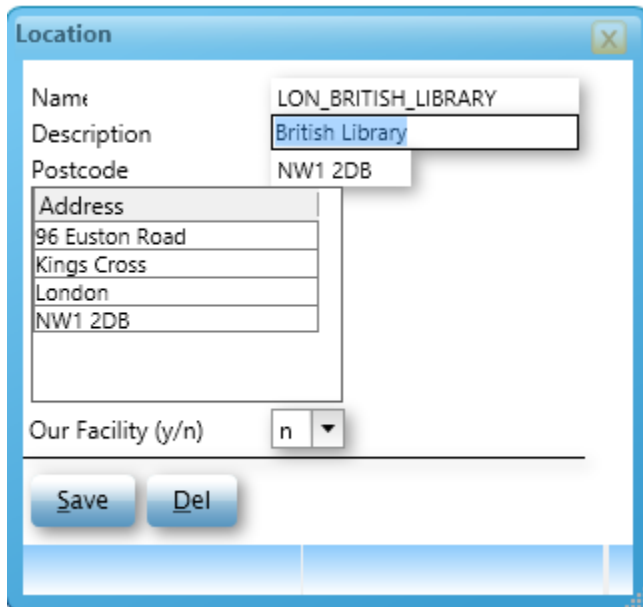
The web interface allows routes to be visualised on a map. The select box at the top of the page can be used to centre on different company home locations. Route numbers are rendered on each marker, with 1 being the highest priority. The furthest location from home on a route is the goal job.

4 SB/XA INTERFACE

To access the SB/XA interface, open the SB/XA rich client and log in to the 'GEOJOB' application. All data entry is done within SB/XA; it also makes available a basic report interface for viewing calculated routes. Execution of the route planning script located in GEOJOB/PP/route_planner.py is done automatically when relevant data is changed.

5 LOCATION INPUT

Find location input under GeoJob -> Edit -> Location.



The screenshot shows a 'Location' dialog box with the following fields and values:

- Name: LON_BRITISH_LIBRARY
- Description: British Library
- Postcode: NW1 2DB
- Address: 96 Euston Road, Kings Cross, London, NW1 2DB
- Our Facility (y/n): n

Buttons: Save, Del

Name – The unique identifier for the location.

Description – Description to be displayed on reports.

Postcode – UK postcode for the location. This is converted to a latitude and longitude internally by a Python script located in GEOJOB/PP/postcode.py.

Address – Full address for the location.

Our Facility – Indicates whether this location is owned by the firm and can be used to distribute resources.

6 JOB INPUT

Find job input under GeoJob -> Job Manager.

The screenshot shows a 'Job Manager' window with a form containing the following fields and values:

Field	Value
Name	LON BRITISH LIBRARY INST
Description	British Library
Location	LON BRITISH LIBRARY
Date Filed	10/09/2017
Start Date	18/09/2017

At the bottom left of the window are two buttons: 'Save' and 'Del'. The window has a blue title bar and a standard Windows-style border.

Name – Unique identifier for the job.

Description – Description to be displayed on reports.

Location – Unique identifier of the location at which this job is to be carried out.

Date filed – Date on which this job was received by the firm. This is used to calculate priorities.

Start date (Optional) – Date on which this job must be started. This is an optional field that can be used by the priority calculation algorithm.

7 PRIORITY VIEW

Find the priority view under GeoJob -> Priority View.



When the basic report interface is started, the user is prompted for the base location they want to receive information for. Use the intuitive help key (F3) to get a list of valid locations.

JOBS R E P O R T

Route No.	Description	Continued From
1	St Paul's Cathedral	London Home
1	British Museum	
1	Buckingham Palace	
2	Army Museum	Buckingham Palace
2	Royal Albert Hall	
3	Tower of London	London Home
4	Stamford Bridge	Royal Albert Hall
5	British Library	British Museum

Route No. – Indicates the priority of the route, with the highest priority being 1. Jobs sharing the same route number can be done together. The furthest location from home on a route is the goal job.

Description – The job description.

Continued From – The location from which the route branches off the tree.

8 VEHICLE INPUT

Find vehicle input under GeoJob -> Edit -> Vehicle.

The screenshot shows a software window titled "Edit Vehicle". It contains five input fields: "Registration" (with value "RE45TTY"), "Name" (with value "Ford Transit" and a dropdown menu open showing "WINDRUSH HOME"), "Home Location", "Type" (with a dropdown menu open showing "Van" and "Active"), and "Status". At the bottom left are "Save" and "Del" buttons. A scrollbar is visible at the bottom of the window.

Registration – The vehicle registration, without spaces.

Name – The name of the vehicle.

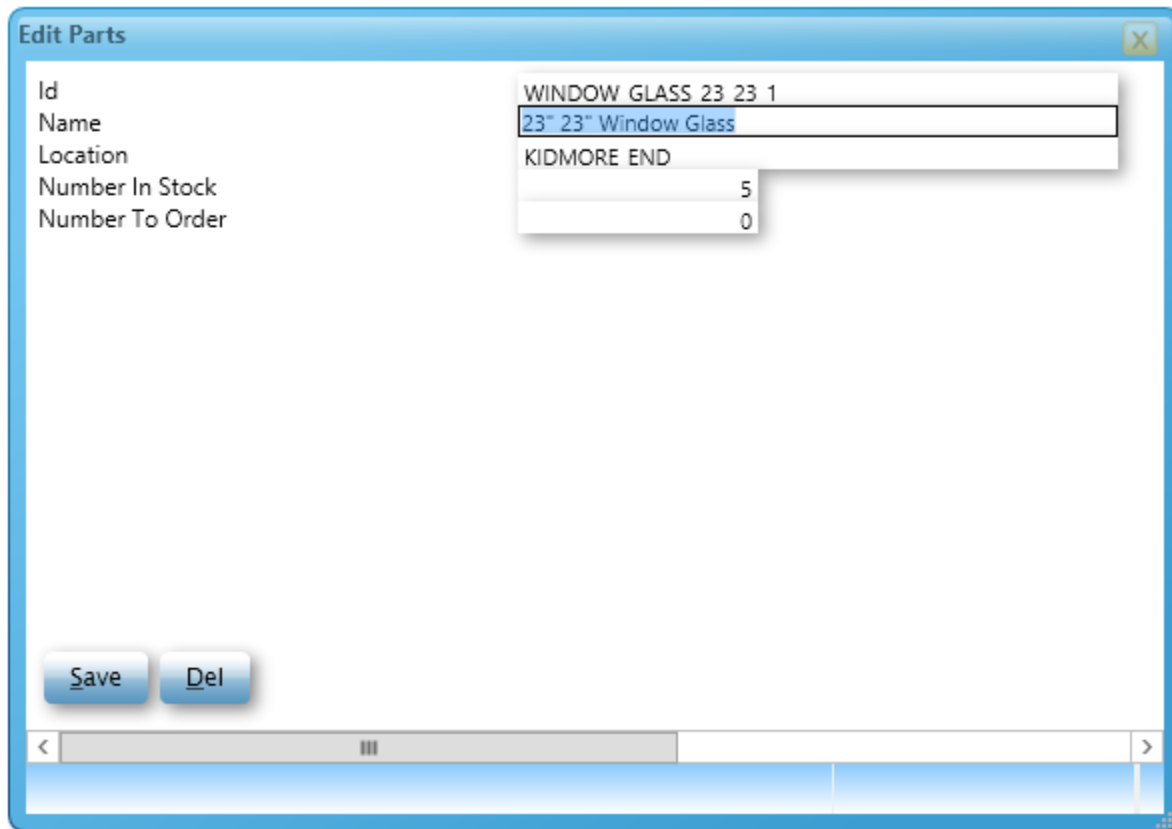
Home Location – The location at which this vehicle is based.

Type – The type of vehicle.

Status – The current state of repair of this vehicle.

9 PART INPUT

Part input can be found under GeoJob -> Edit -> Part.



Id	Name	Location	Number In Stock	Number To Order
WINDOW GLASS 23 23 1	23" 23" Window Glass	KIDMORE END	5	0

Buttons: Save, Del

Id – The unique identifier of the part.

Name – The name of the part.

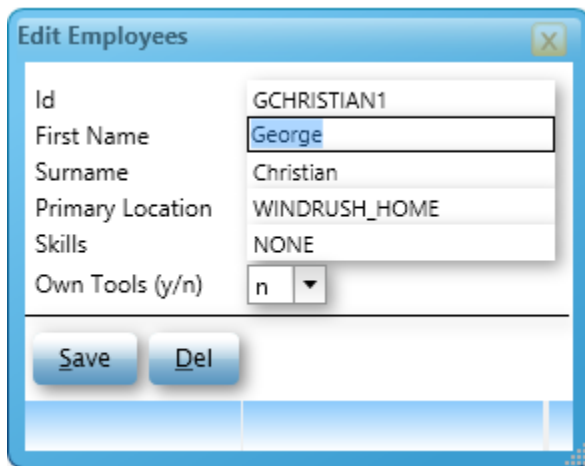
Location – The unique identifier of the part location.

Number in stock – The number of this part in stock at this location.

Number to order – The number of this part on order.

10 EMPLOYEE INPUT

Employee input can be found under GeoJob -> Edit -> Employee.



Id	GCHRISTIAN1
First Name	George
Surname	Christian
Primary Location	WINDRUSH_HOME
Skills	NONE
Own Tools (y/n)	n

Save Del

Id – The unique identifier of the employee.

First Name – The first name of the employee

Surname – The surname of the employee.

Primary Location – The location to which this employee reports.

Skills – A description of the particular skills this employee has.

Own Tools – Does this employee own their own tools?