Spectrum Spatial Routing

Identify key target markets or new business locations and determine routes and catchment areas by calculating travel times and distances between points.

Locate accurate routing information and empower individuals responsible for logistics, marketing, and network performance. With Spectrum Spatial Routing, users can determine whether a specific address falls within a pre-defined coverage area or calculate the most efficient route between two points.

Spectrum Spatial Routing combines data quality, location intelligence, and sophisticated algorithms to streamline decision making across the enterprise.

Accurate routing by distance or time

By transforming addresses into precise latitudes and longitudes, you can automatically calculate the distance between two points in terms of time or distance. Spectrum Spatial Routing calculates both: an isochrone is an area that can be traversed in a given amount of time, while the isodistance represents the points that are within a certain distance, such as miles or kilometers.

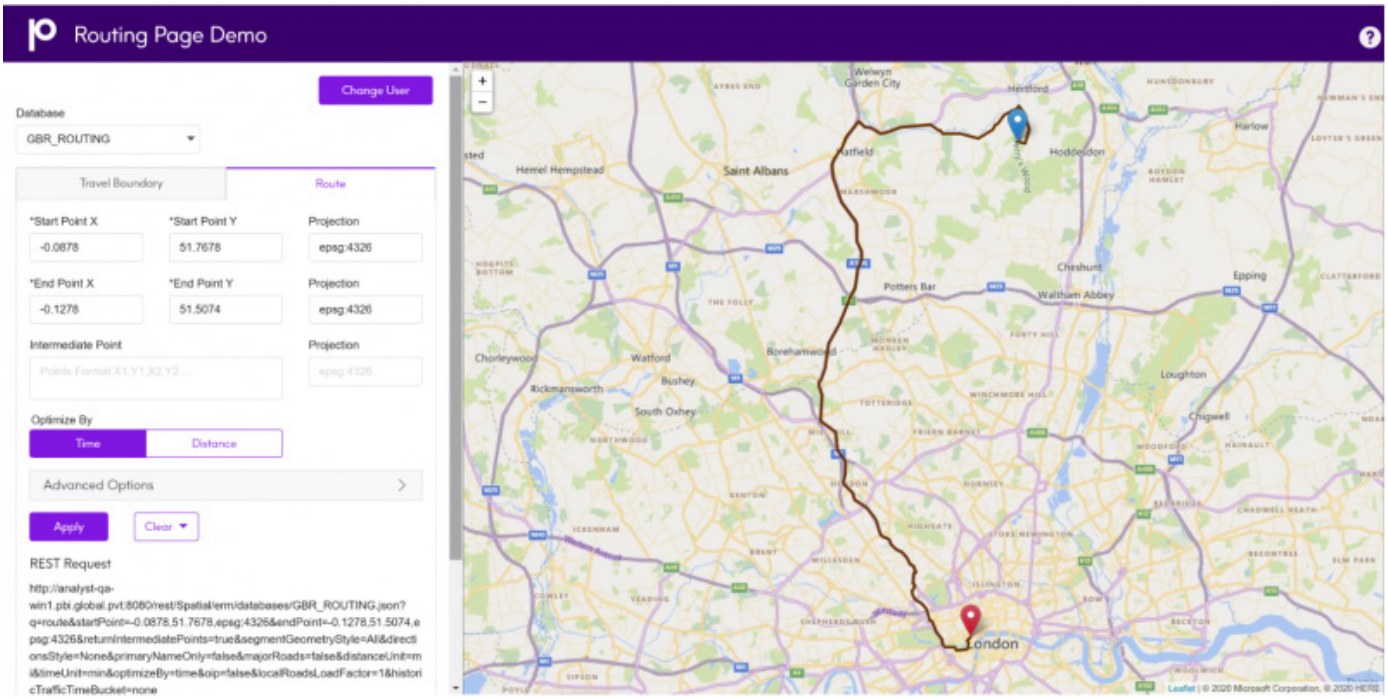
Nearly every industry must make decisions based on time or distance between two points. With Spectrum Spatial Routing, you can:

- Identify market penetration in areas around specific stores or branches
- Establish sales, risk or rating territories from coast to coast
- Target marketing based on proximity to specific outlets
- Identify the nearest service providers
- Determine if a prospect lives within your coverage areas
- Calculate the most efficient driving routes

Benefits

Calculate routes, determine points within a boundary, and see how to get from one point to another in the fastest time possible.

- Map out efficient routes
- Set travel boundaries
- Identify gaps in service
- Target more effectively
- Determine service eligibility

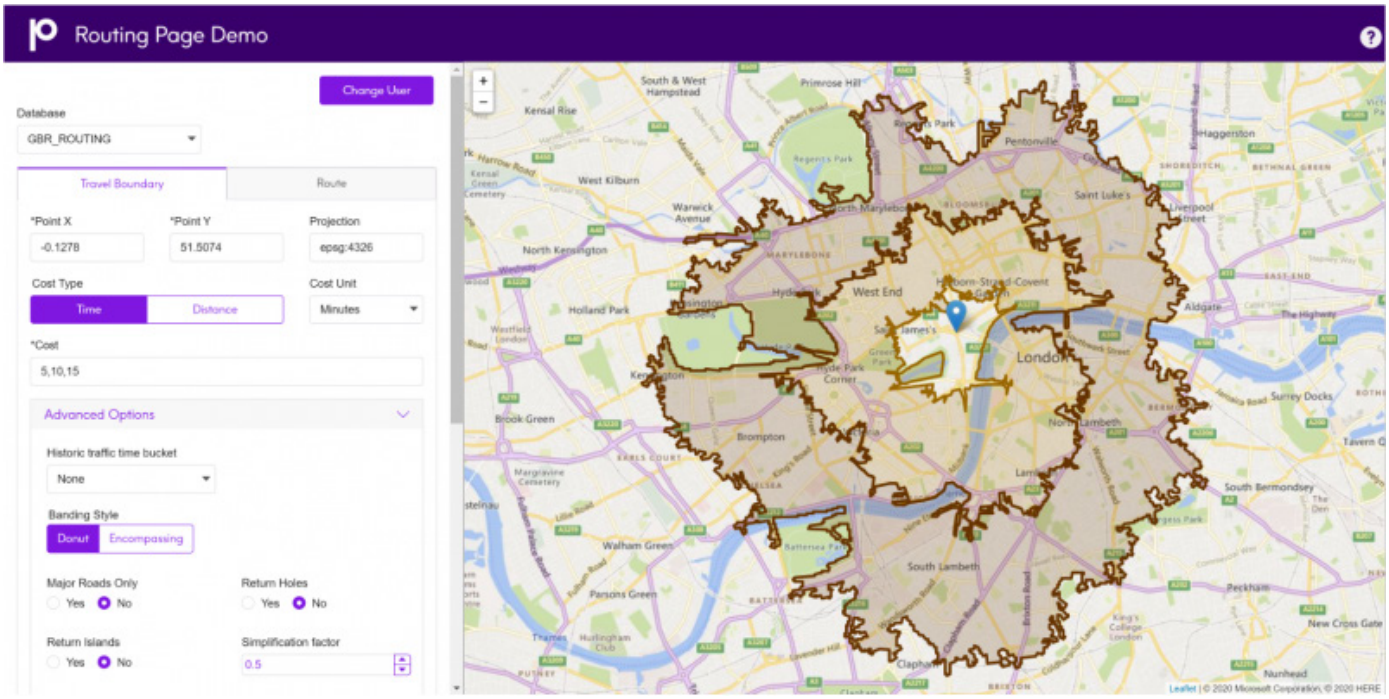


Establish point-to-point routing context

Access accurate travel boundaries

How far are you or your customers willing to go? 'Create Travel Boundary' is a tool that allows you to create polygons corresponding to precise isochrone or isodistance calculations. In addition to the information needed for targeting and service eligibility, this tool provides insights that can lead to a competitive advantage.

- Identify areas within your geography that cannot be reached within the desired time or distance
- Identify pockets that fall outside your traditional boundaries that can be reached within a desired time or distance



Identify routing travel boundaries

Obtain meaningful directions

'Get Travel Directions' is a tool that returns routing information for two distinct points or for multiple points, accessing up-to-date databases for the specific countries you select. For companies, this point-to-point optimization helps reduce the costs of fuel, maintenance and manpower, while shortening overall delivery times. For customers, it provides easy-to-understand information that can be accessed through your own website.

- Simplify logistics
- Determine accurate delivery costs
- Load trucks in a last-in, first-out order
- Set realistic expectations
- Save time and money

Point-in-polygon analysis

The 'Within Boundary' component takes latitude and longitude coordinates and instantly determines whether a specific point is within a pre-defined boundary. Depending on your business needs, boundaries can coincide with:

- Flood zones
- Rating territories
- Sales territories
- Individual store markets
- Congressional districts
- Other business-specific zones

Routing accuracy meets user-friendly functionality

Spectrum Spatial Routing combines innovative data quality functions and analytics in a single, service-oriented architecture that seamlessly integrates into business operations. You can even integrate in-house data, including customer records and network locations, and run analysis in batch or real-time mode, providing you with access to a best-in-class enterprise routing solution.

Contact us to learn how Spectrum Spatial Routing can optimize your business planning and operations.

Key features

- **Get Travel Boundary**

  Allows you to obtain polygons corresponding to isochrones or isodistance calculation

- **Get Bounding Box**

  Returns data in the form of a bounding box made up of two points

- **Get Travel Directions**

  Allows you to route from one point to another point or from one point to multiple other points

- **Is Within Boundary**

  Takes latitude/longitude coordinates, as well as polygon information and determines whether the point represented by the latitude and longitude is in that polygon