Route

Illustration 1 (TopBraid notation):

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Reusable OWL representation: http://hem.hj.se/~haka/ontologies/2011/11/Route.owl
Example usage: http://hem.hj.se/~haka/ontologies/Examples/RouteExample.owl



Domain: General
Maturity level: Draft

Purpose: To model a way of moving between two end points by way of visiting several points in a certain order.

Example use cases:
- Modelling a subway network or bus line.
- Modelling a path home from work.

Application guidelines:
- GeographicalPoint is linked to existing classes in target ontology using subsumption or equivalence links.
- An instance of Route is created for each route to be described.
- For each stop on the Route, a RoutePoint is instantiated. This RoutePoint instance points to a particular GeographicalPoint. The reason for this abstraction into RoutePoint is that one GeographicalPoint may be used in multiple routes, in different order.
- The order in which the RoutePoints are visited is indicated by the use of the object properties ”routePointFollowedBy” and ”routePointPreceededBy”.
- The first and last RoutePoints on any Route are indicated by the object properties ”routeEndsAt” and ”routeStartsAt”

Competency Questions:
- How many stops are there between Metro Station Stadion and Metro Station Slussen?

- What stops are on the route from Arlanda Airport to Kista?

Requirements:
- A vocabulary suitable for modelling geographic places is helpful but not required to make use of this pattern.

Consequences:
- No known consequences.