Overview

SPIDER is a tool for debugging schema mappings for data exchange, similar to debuggers for programming languages. It is implemented on top of the Clio data exchange system developed in the Information Integration Group at IBM Almaden and is based on the Mapping Specification Language of Clio.

Main features

- Data-driven understanding of schema mappings based on routes
  A route illustrates the exchange steps taken by some source data to arrive at some target data according to the schema mapping.

- Display of one or all routes for selected source or target data
  One route can be computed fast and alternative routes can be shown on demand. All routes are shown concisely, with common exchange steps factored out.

- Guided routes computation
  allows one to explore different routes by making choices at each step of the route, as well as undo previous decisions.

- Standard debugging features
  such as single-stepping the exchange process, breakpoints and ‘watch’ windows for variables

- Schema-level routes exploration
  allows one to understand the relationships between elements of a schema mapping.

SPIDER screenshot:  
A – browsing source and target data;  
B – exploring multiple routes;  
C – watch window for bindings to source and target facts.