Advantages of formalizing the route graph

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Formalisation in OilEd or CASL . . .

- forces precise concepts and definitions
- allows for automatic checking of types and consistency (e.g., with Racer, Cats)
- basis for a machine-readable “Route graph interchange format” (RGIF)
Formalisation in CASL

- more precise specification of datatypes and operations with help of axioms
- reference for implementation of “route graph server”: what can clients rely on?
- dynamic behaviour of implementation can be checked against specification (test case generation, testing, theorem proving)