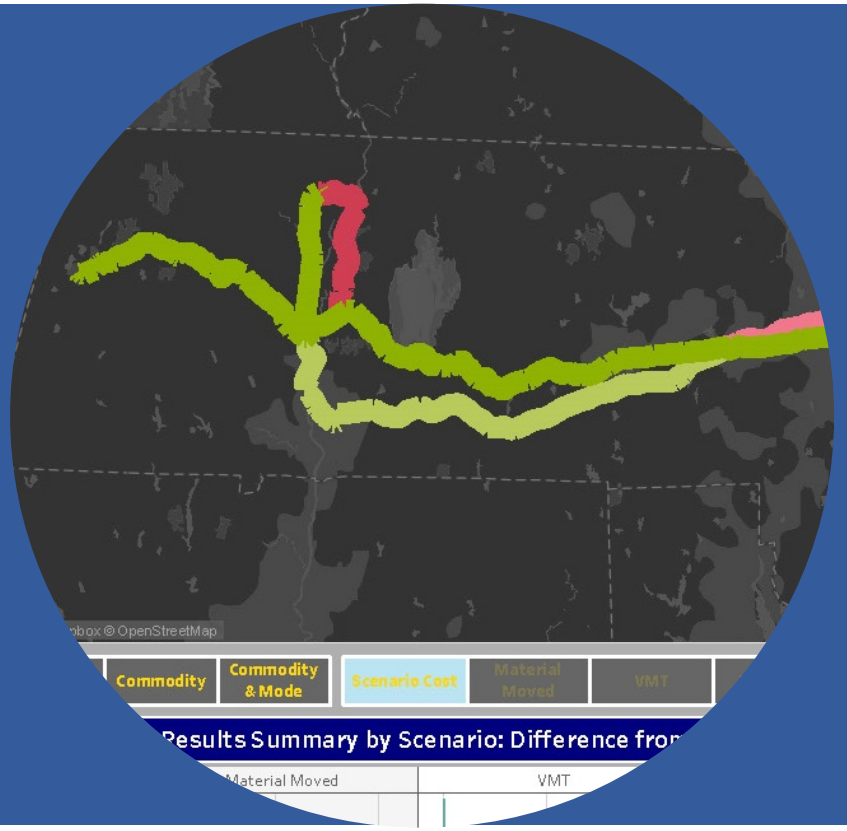
FTOT Link Removal Resiliency Testing Use Case



Question: How resilient is my solution to disruptions?

https://github.com/dflynn-volpe/FTOT-Public-Link_Removal

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50 YEARS 1970 – 2020

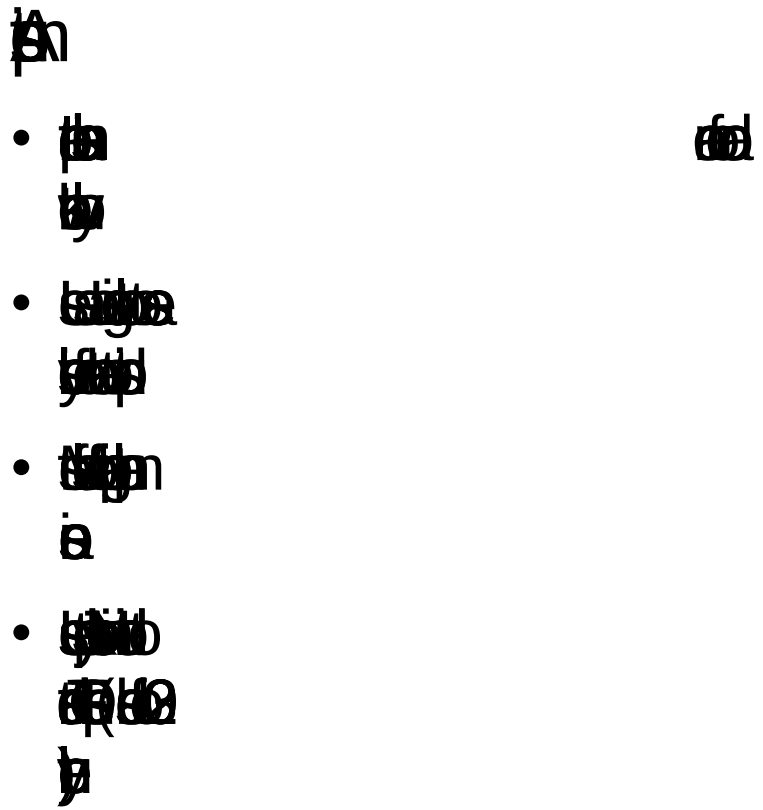
U.S. Department of Transportation Volpe Center

TRANSPORTATION INNOVATION FOR THE PUBLIC GOOD

Overview

Process

- Complete baseline run in FTOT
- Rank edges by ‘importance’
- Disruptions applied by removing edges from optimal solution
- Re-calculate new optimal solution and calculate total scenario cost



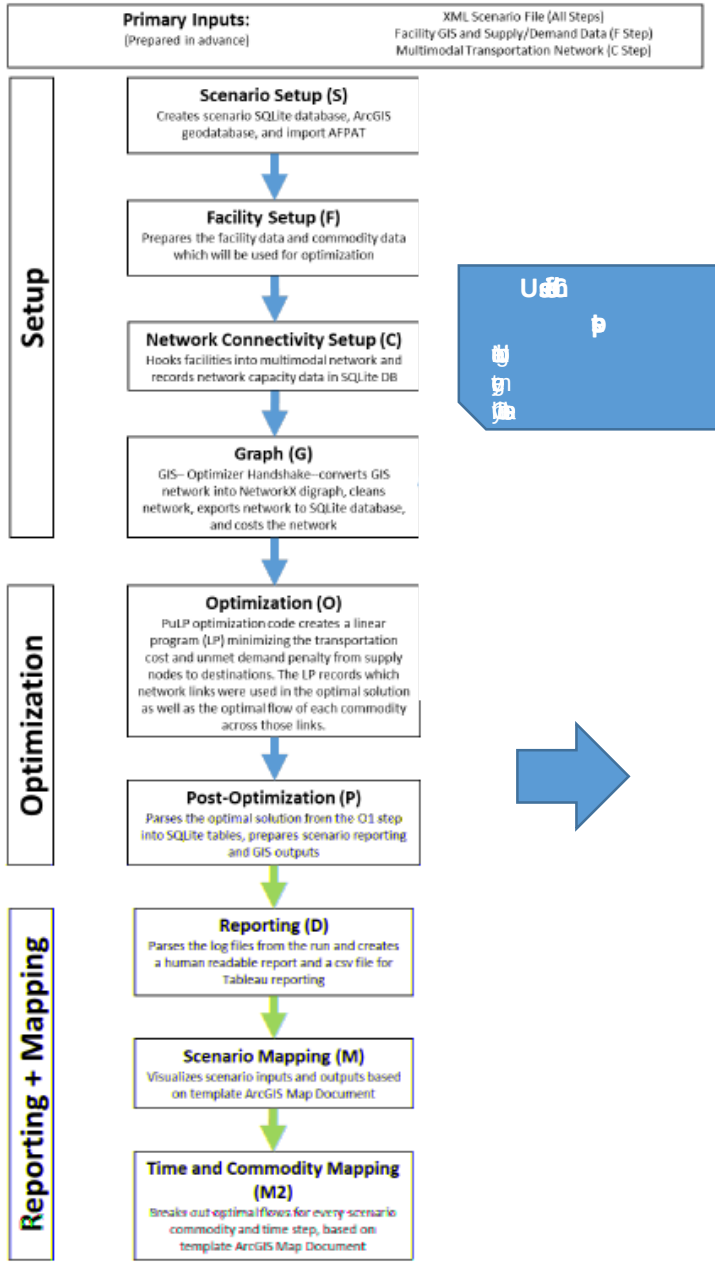
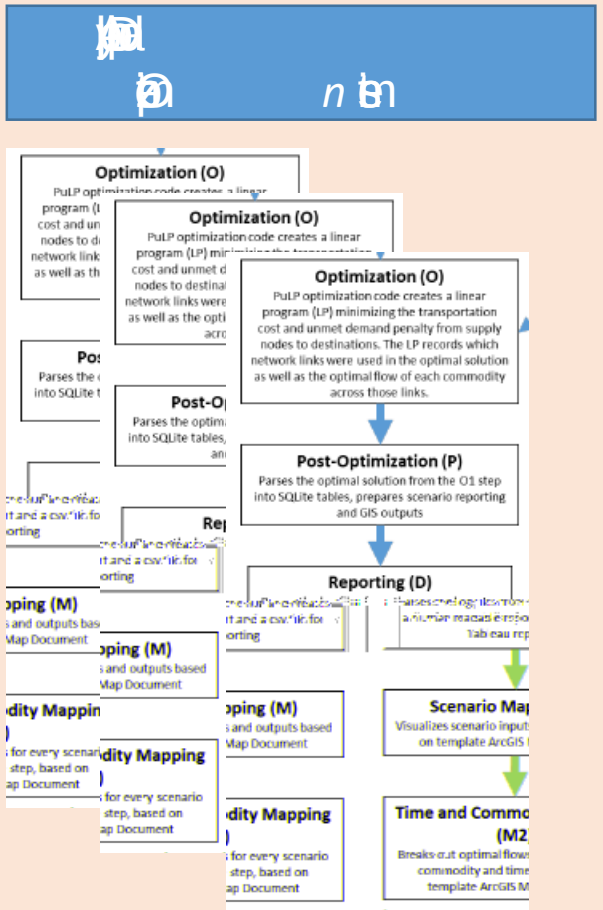
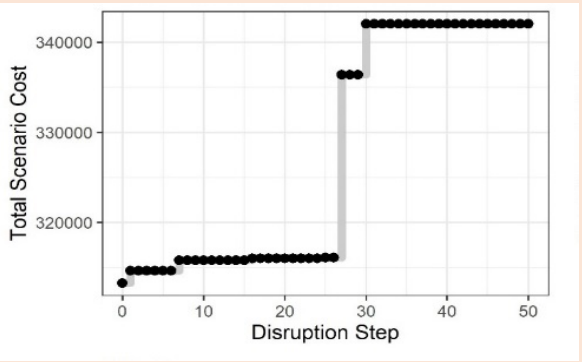
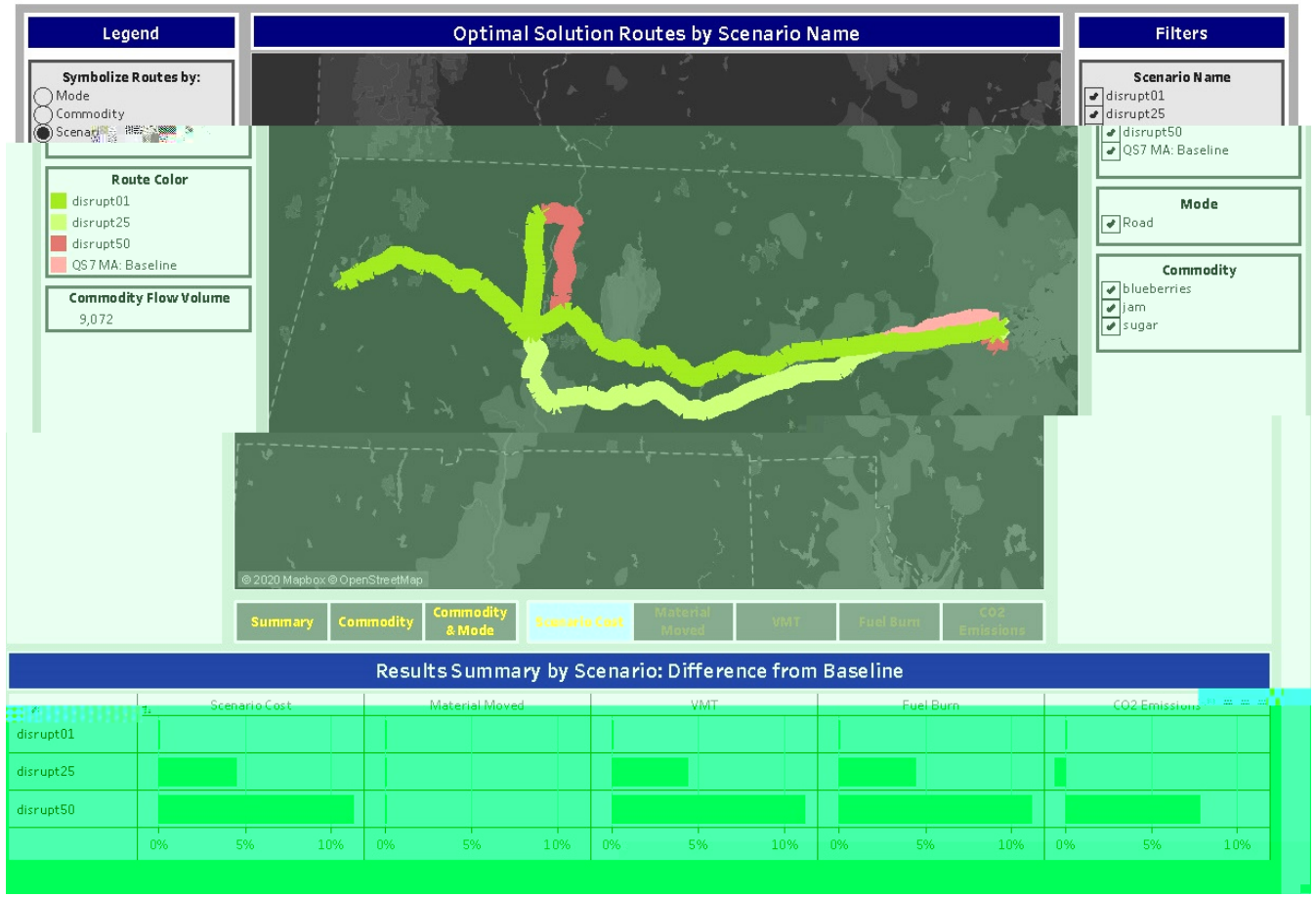


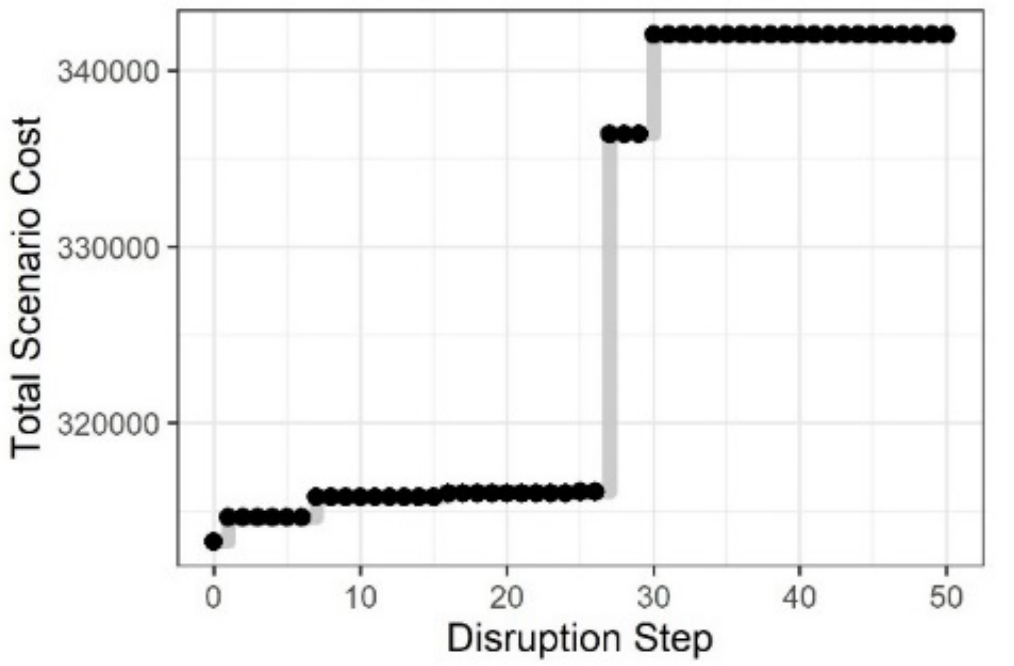
Figure 3 - Analytical tool data flow schematic showing the key components/roles of each component of the FTOT





Example outputs





Development scenarios

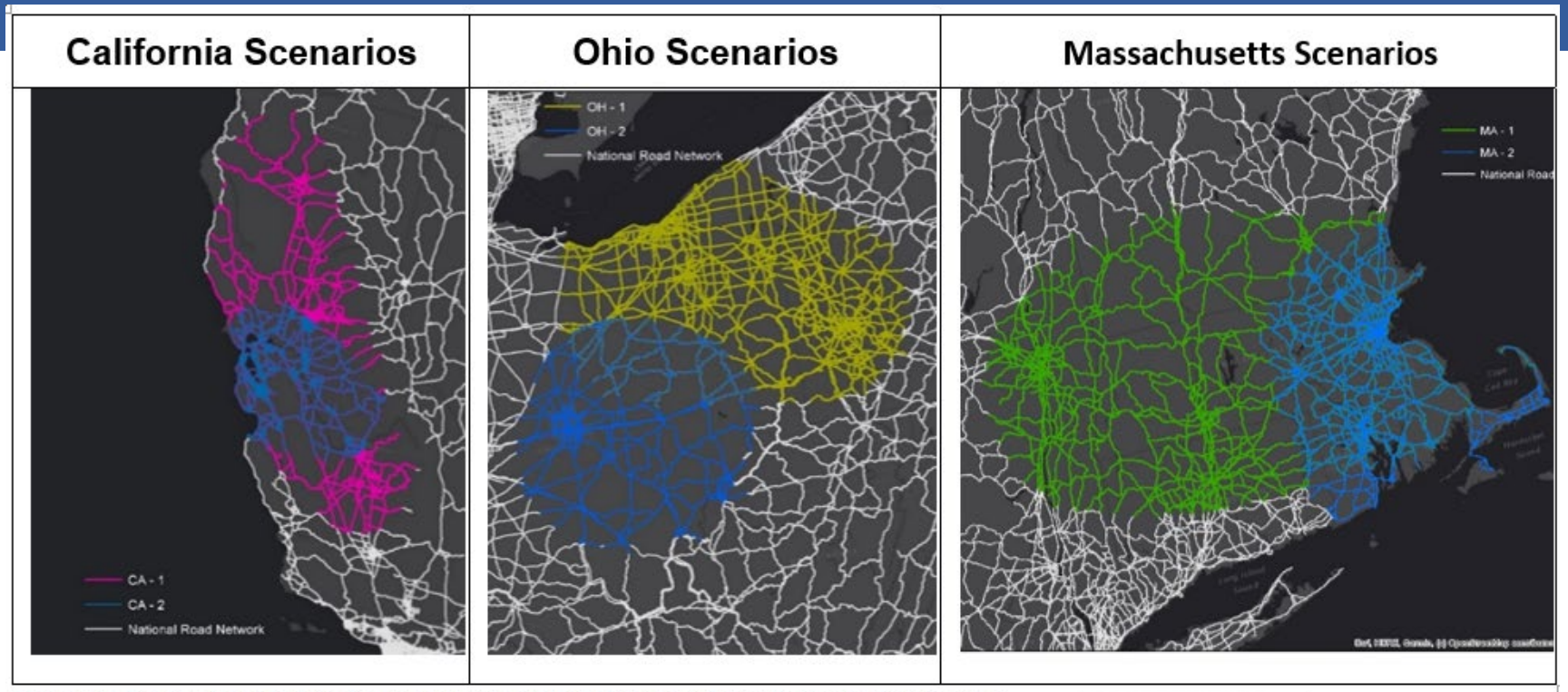
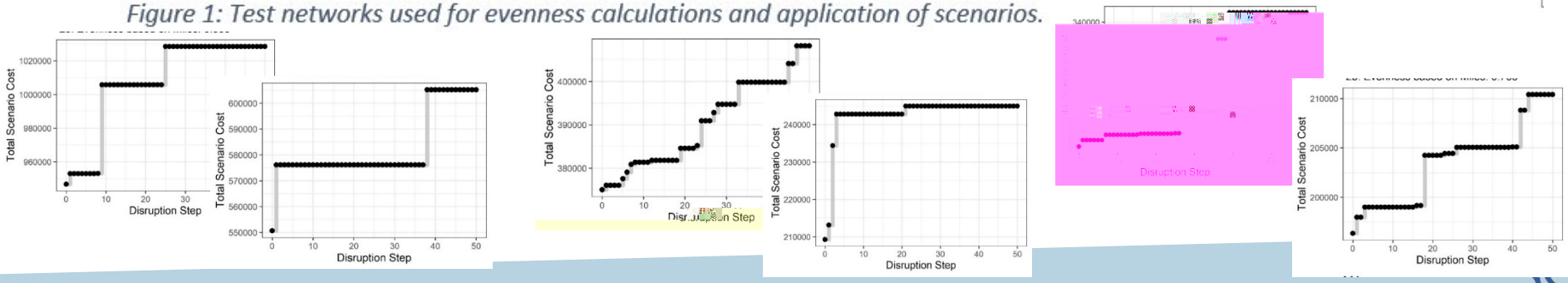
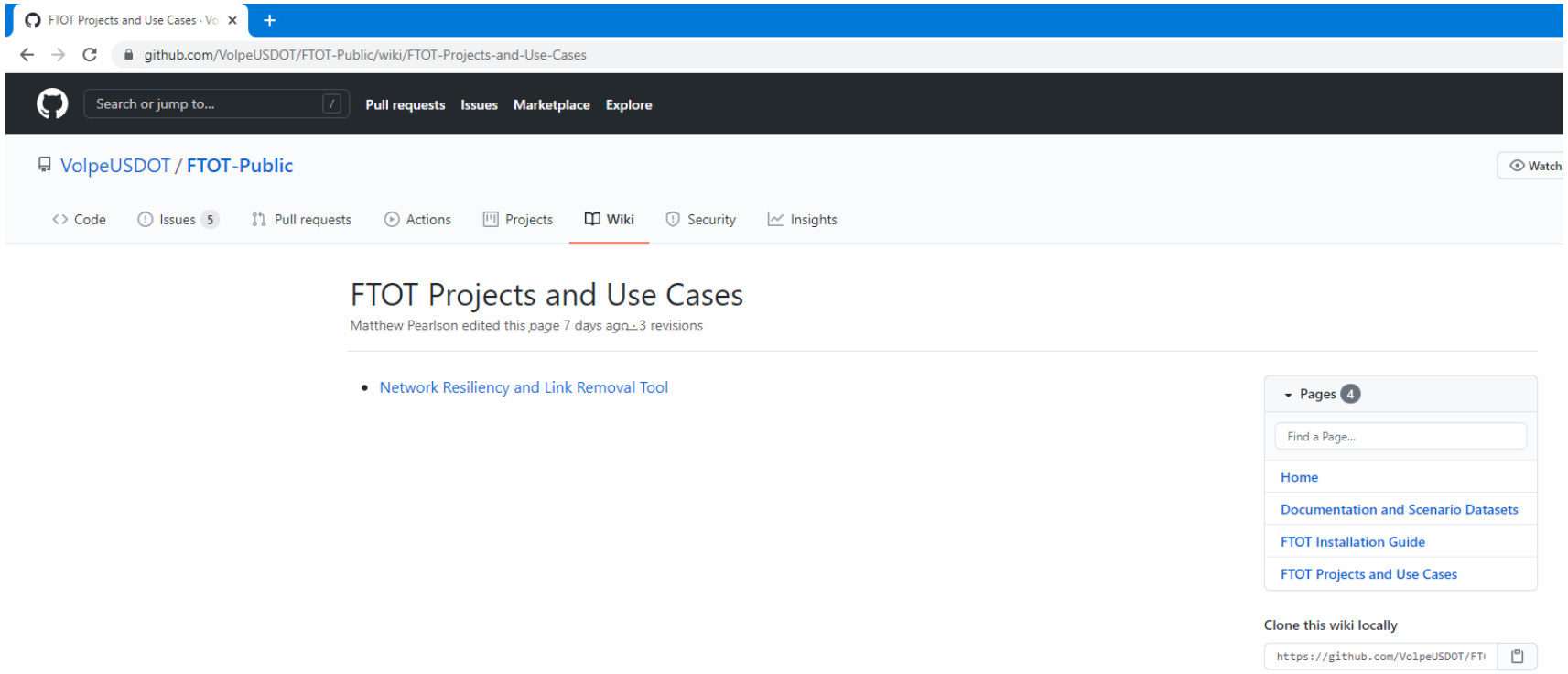


Figure 1: Test networks used for evenness calculations and application of scenarios.

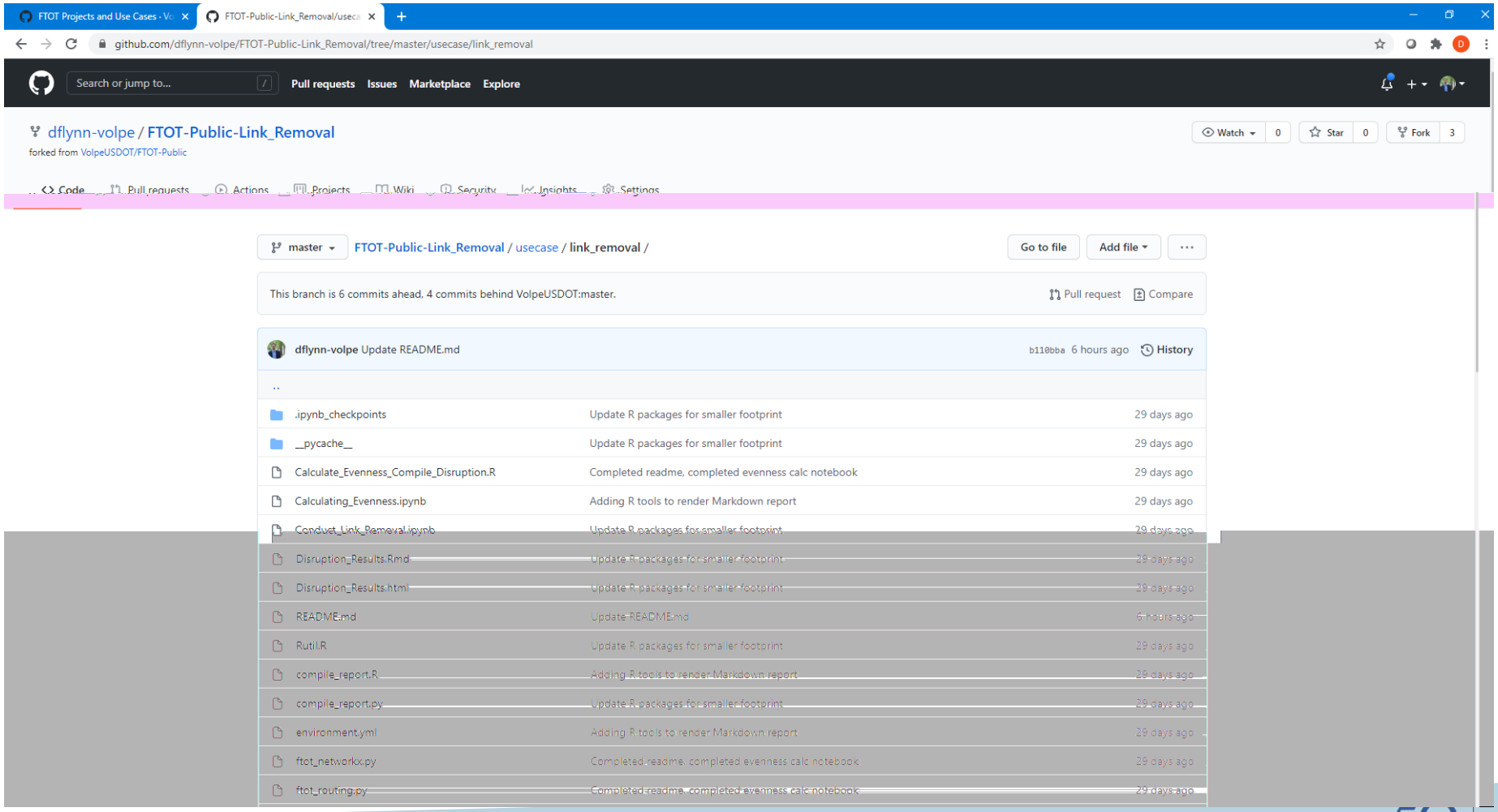


Demo

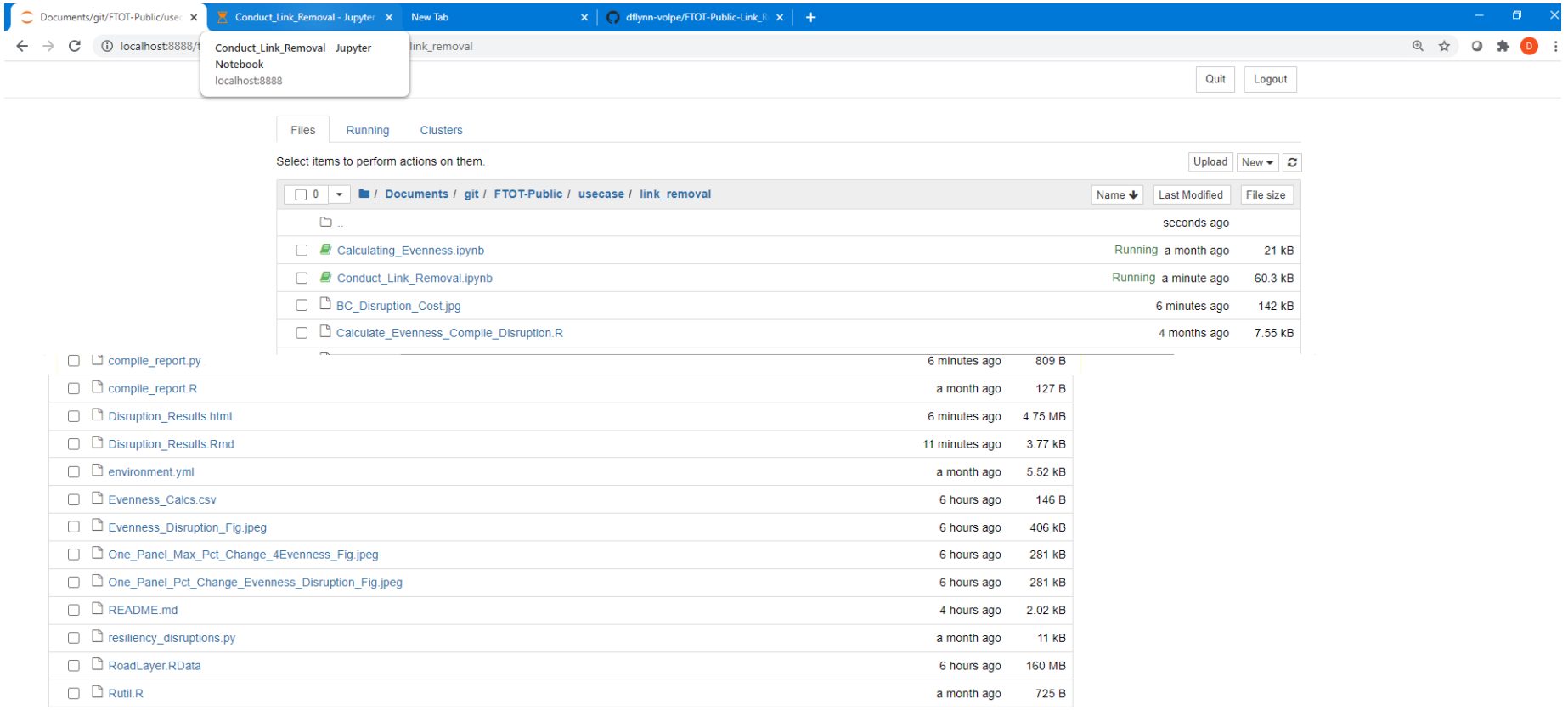
- To FTOT-Public Wiki



Demo



Demo



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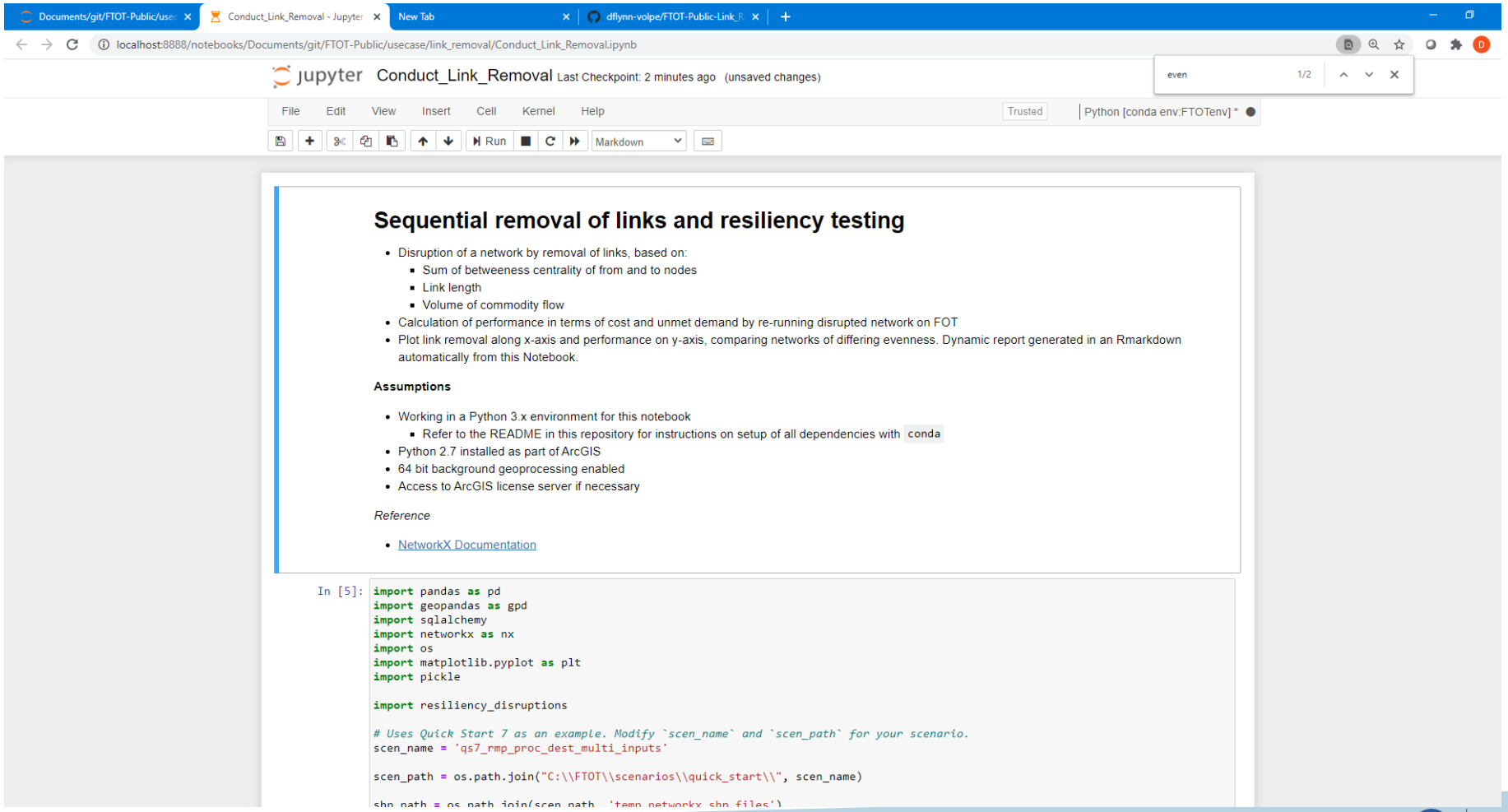
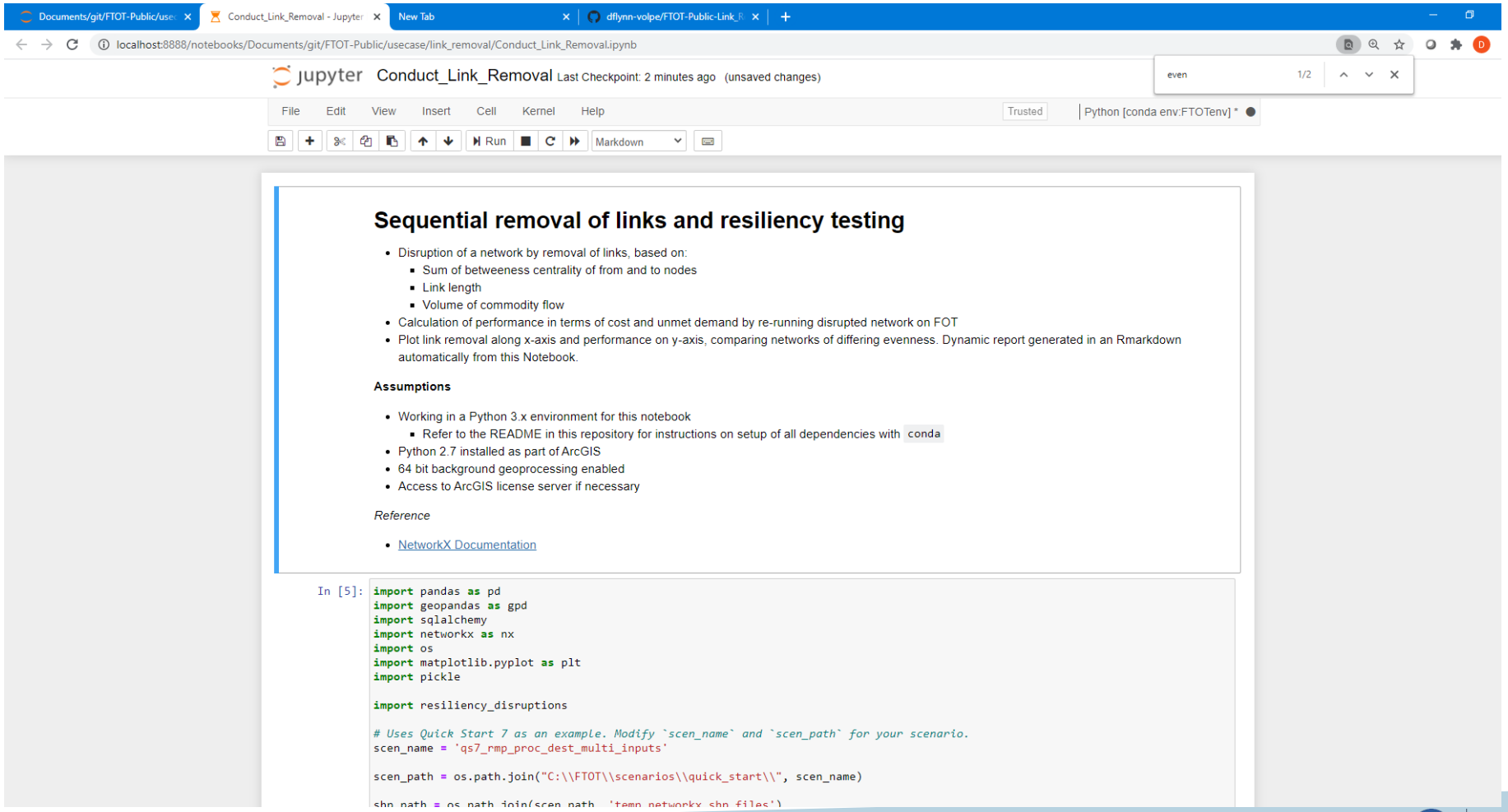


Demo



Demo