



DAFNI



Integrating OpenMOLE

- Running workflow with OpenMOLE + visualization (Saltelli Global Sensitivity Analysis)
- Provides OpenMOLE methods (Design of Experiments, Sensitivity Analysis, Genetic Algorithm Calibration, Diversity Search, Spatial Sensitivity Analysis) to DAFNI users
- Need to embed model inside the OpenMOLE docker with experiment scripts
- No interactive access to workflow system (future possibility as a visualization step)



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Integrating SPENSER

- Running workflow with SPENSER microsimulation module (generate synthetic population for all MSOAs in a given region) – *visualization still failing*
- Next step: conversion SPENSER output → Matsim xml format (within SPENSER docker or as a separate coupled model?)



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Integrating road network data preprocessing

- Running workflow with the *spatialdata* model (using scala-sbt docker)
- Converts road network shapefiles into Matsim xml network file (runs on a test sample)
- Next steps:
 - plug with the Ordnance Survey dataset within DAFNI
 - implement multi-modal network (which data source?)



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Issues

- Bug subdirectory output data
- Example models notebooks persistence

Suggestions

- More complex workflows (parallel tasks)
- Docker exec command in containers
- More info on running status
- Replace model definition file only (keep model image)
- Available memory for model or workflow
- DSL to build workflows?
- Upload API (webdav?)