

Schedule Optimisation Tools



2020-01-31

Tools for common
schedule optimisation
problems

Theme 3 Theme 5

The schedule optimisation tools are a suite of applications to help solve some of the common problems dealing with planning and optimising schedules which are common tasks within the centres Theme 3 projects.

There are 3 proposed tools, each targeted at resolving a different problem:

1

A schedule visualisation tool, that allows a user to easily view and interactively inspect a schedules pain points or other areas of interest. The tool acts a platform for experimenting with new schedule visualisation techniques for different scheduling problems.

2

A schedule comparison tool to help a user quickly compare the advantages and disadvantages of multiple different schedules at the same time. This aims to address a common problem when optimising schedules - showing how one optimised schedule is different from another.

3

An optimiser tool to allow users to execute and easily interact with the schedule optimisation models that have been developed by Theme 3 researchers.

All of these tools have been designed to work with easily reproducible data formats that will be defined and documented to allow for easy integration with external scheduling tools.

John Hille and Yunlong Li have been working with Hoa Bui and Mojtaba Heydar to help define these problems and develop the tools.

Significant progress has been made on prototype tools that will be soon be available for internal demonstrations.

Try the demo