



SAVE




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SAVE (*State of the Art & Visionary Energetics*) is a response to a still increasing demand for electricity. System SAVE will enable optimizing and planning the development of the existing energy transmission grid on the basis of the Smart Grid concept. Such an approach may support the process of setting up new companies interested in building renewable power plants and will encourage potential “*prosumers*” to share their surplus of energy. SAVE may also show how to wisely use the energy and how expensive energy wasting can be.

When the grid manager plans to modify its infrastructure, it has to be decided what to do to achieve a significant improvement at a minimum cost. SAVE is a well-developed tool used to build a model of the grid topology. Our system allows to perform a deep analysis of the examined grid, supported by graph theory algorithms, showing exactly its vulnerabilities and bad behaviors. SAVE may answer the question of how to expand the grid, indicating the potential location of new power stations and storage batteries where the transmission losses would be at their lowest.

As a result, SAVE may affect the environment by reducing energy losses and hence reducing the amount of CO2 from fossil fuels combustion. In the long term this may lower energy prices and also increase the reliability of the grid.

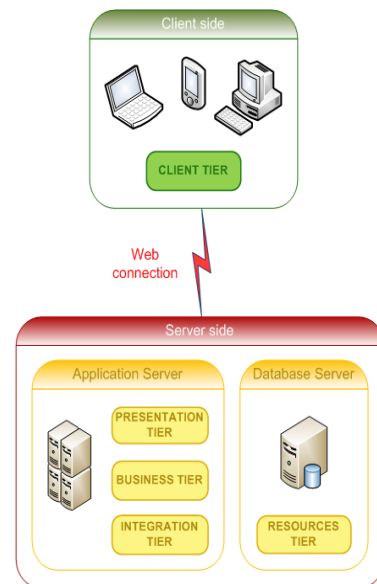


Fig. 1 SAVE Architecture

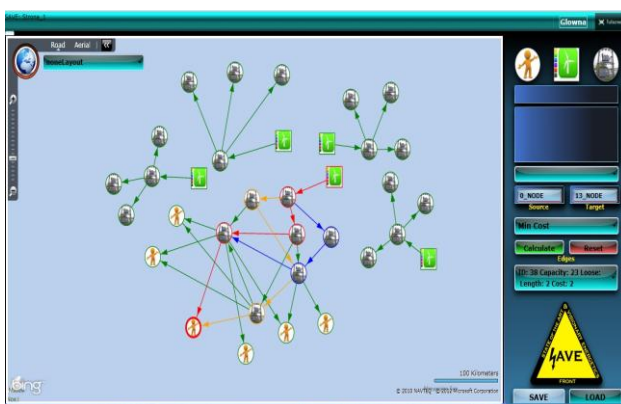


Fig. 2 GUI overview

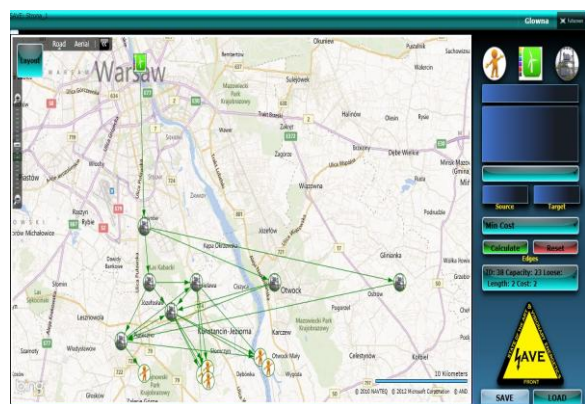


Fig. 3 SAVE system with background map

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