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## Simulation concept of NICA-MPD-SPD Tier0-Tier1 computing facilities

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The simulation concept for grid-cloud services of contemporary HENP experiments of the Big Data scale was formulated in practicing the simulation system developed in LIT JINR Dubna. This system is intended to improve the efficiency of the design and development of a wide class of grid-cloud structures by using work quality indicators of some real system to design and predict its evolution. For these purposes the simulation program are combined with real monitoring system of the grid-cloud service through a special database (DB). The DB accomplishes acquisition and analysis of monitoring data to carry out dynamical corrections of the simulation. Such an approach allows to construct a general model pattern which should not depend on the concrete simulated object, while parameters describing this object can be used as input to run the pattern. The simulation of some processes of the NICA-MPD-SPD Tier0-Tier1 distributed computing is considered as an example of our approach applications.

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