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SPD offline computing software architecture and current status

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The SPD (Spin Physics Detector) facility at the NICA accelerator complex at JINR is under construction. In addition to the physics facility itself, the software for the future experiment is also being developed. There is already a constant demand for sufficiently large-scale data productions to simulate physical processes in a future experiment. To facilitate their implementation, MLIT staff are developing a set of systems and services that allow for the orderly storage and processing of experimental data both on JINR resources and on the resources of the institutes that are members of the SPD collaboration and, in common, forming a distributed computing environment of the experiment. The distributed computing environment is in trial operation, but it is already running full fledged productions based on requests from physics groups. Over the past six months, the system has modeled more than 1 billion physical events and generated more than 200 TB of data. An overview of the recent developments in the SPD offline software is presented in this talk.

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