Designing an agent information-analytical system in the thematic area "Cloud Computing"

Currently, there is a significant increase in the number of sources of scientific and technical information on the Internet, which complicates its high-quality processing by scientists. At the same time, the use of cloud computing environments is gaining popularity in organizations.

The Joint Institute for Nuclear Research (JINR) has its own cloud computing environment developed by the Laboratory of Information Technologies (LIT). At the moment, LIT JINR is actively working on the study of cloud computing environments capabilities, developing methods for using cloud technologies to solve various classes of problems.

Thus, there is a need to use agent technologies to extract news information in the subject area under study and reduce the time it takes for people to search for it.

The development and operation of a specialized agent information-analytical system in the direction of "Cloud Technologies" are considered in this paper. The data are extracted from more than 100 sources of authoritative publications in fields of cloud computing. Aggregation of the material is done in a centralized database and then is uploaded to files of various formats to study for users and migrate new publications to the web portal. As a result of the work, an analysis of existing information sources on the subject area "Cloud Technologies" was carried out and their selection by a group of specialists, the algorithm for automated data collection and a data storage and management system was developed, search agents were set up, a system work schedule was implemented, and information of interest was downloaded to files of various formats and to the web portal in the form of an RSS-feed. It is concluded that the use of agent technologies for collection and processing of materials in this field significantly accelerates the analysis of scientific and technical publications in comparison with manual mode, since the developed agent system allows us to conduct information retrieval work on the Internet automatically, without human intervention.

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