

**The implemented researches confirm the effectiveness of chosen method.
Data Depositories Virtualization In The HPC Center**

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Storage virtualization is an aggregation of set of physical storage devices (such as HDD, RAID, or tape) with various interfaces types (such as ATA, SCSI, iSCSI or Fibre Channel) into storage pools, from which the logical storage is created.

Many storage systems, which may be heterogeneous in nature, can be added as and when needed, and the virtual storage space will scale up by the same amount. This process is fully transparent to the applications using the storage infrastructure.

Virtualization considerably simplifies addition of new devices and storage management. The advanced software solutions (such as IPStor) have intuitive GUI for storage administrator, simplifying such tasks as replication, mirroring, setting access rights, etc. A transparent on-line migration of storage devices allows maintenance and modernizing data storage devices without interrupting running applications.

For computer centers of scientific and educational organizations storage virtualization gives such advantages:

Effective disk space utilization at unknown in advance volumes of growth of different data types

Reducing infrastructure cost due to an opportunity of use of an existing local area network for server to storage connection