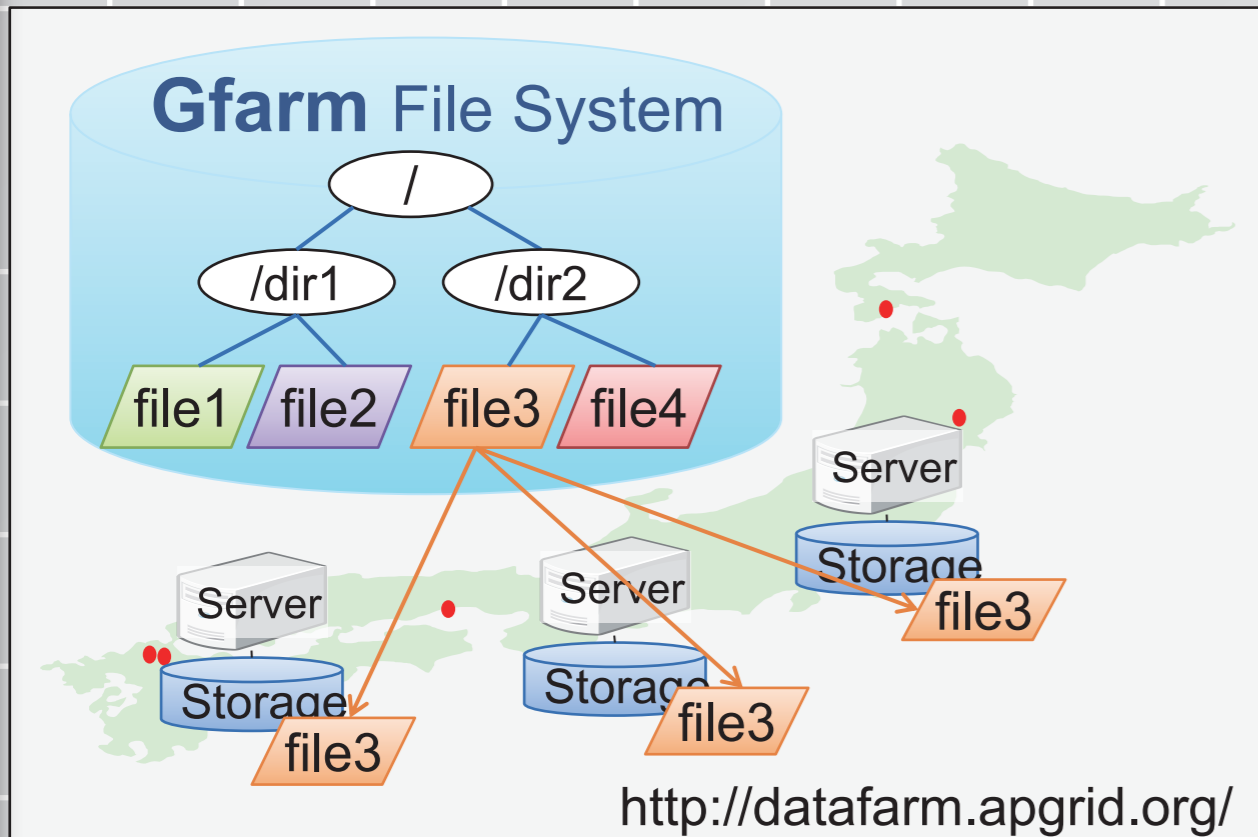
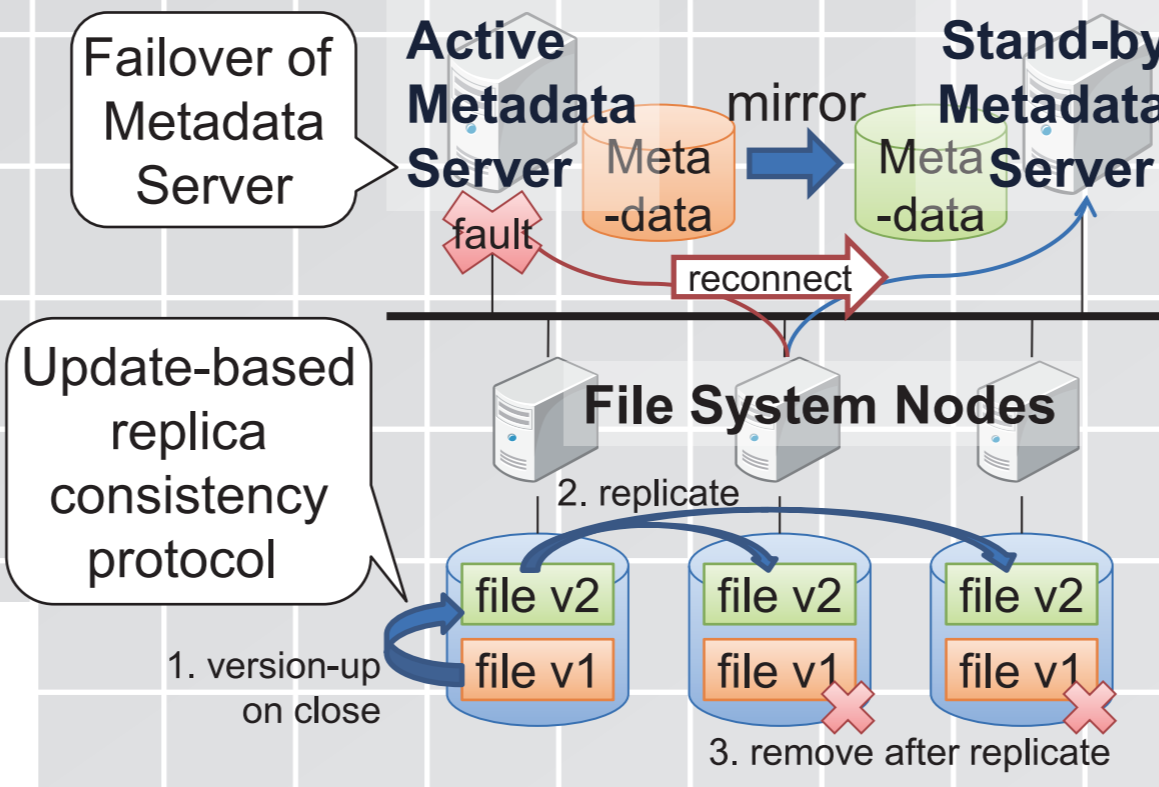


Wide-area Distributed File System

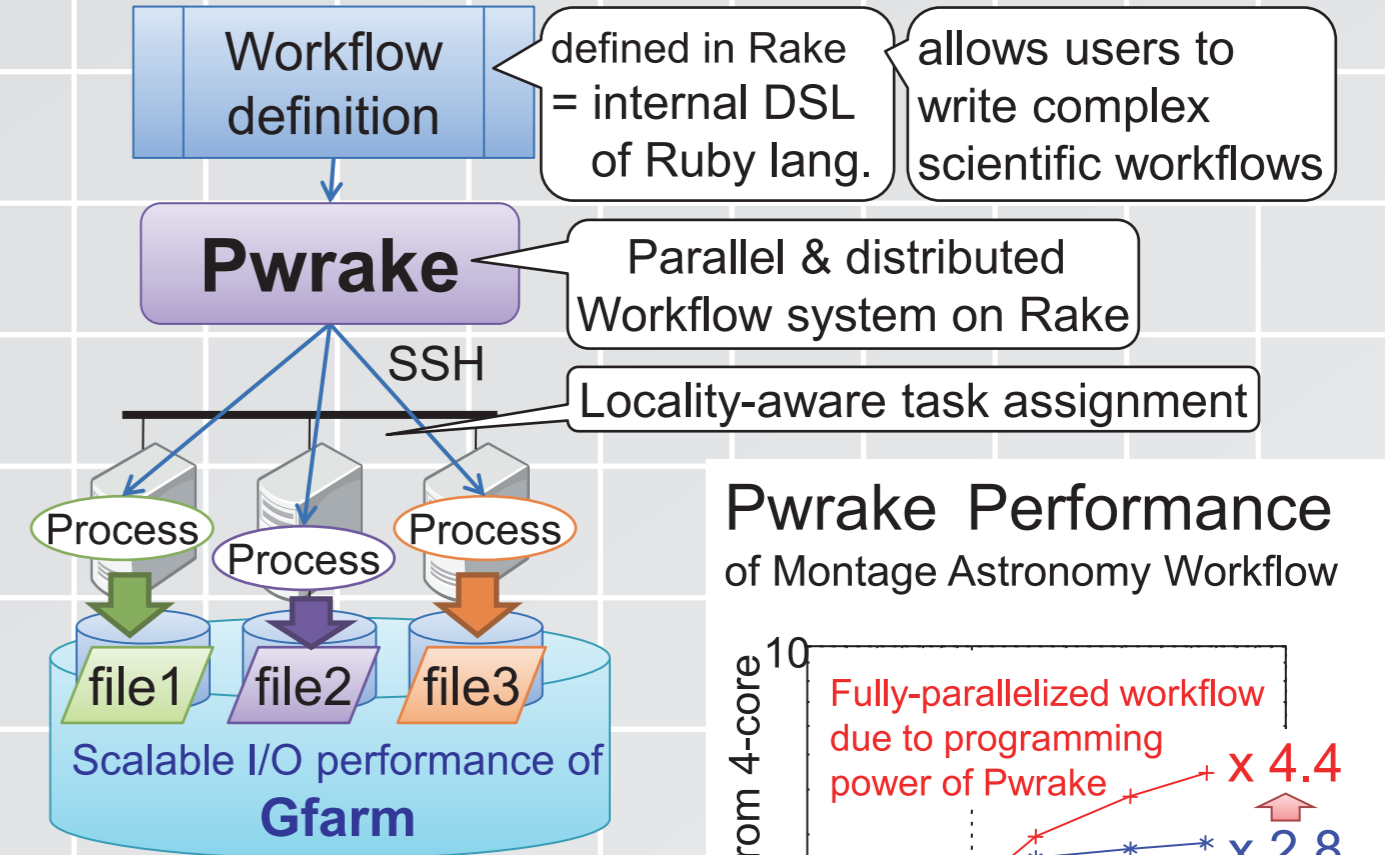
Gfarm: Wide-area Distributed File System for e-Science



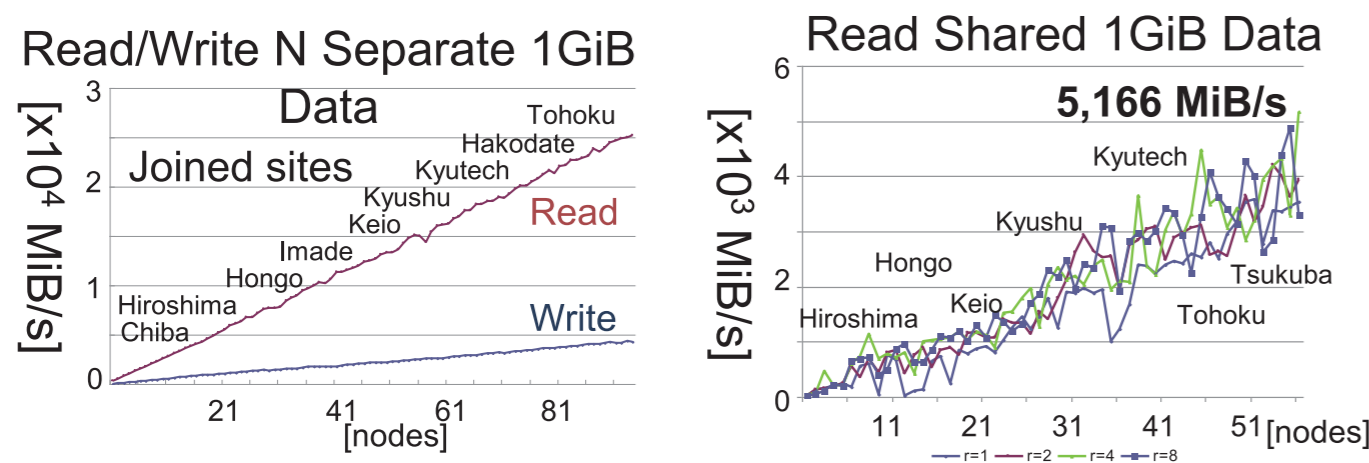
Gfarm Technology for Failover and File Replication



Pwrake : Powerful Tool for Data-intensive Science Workflow



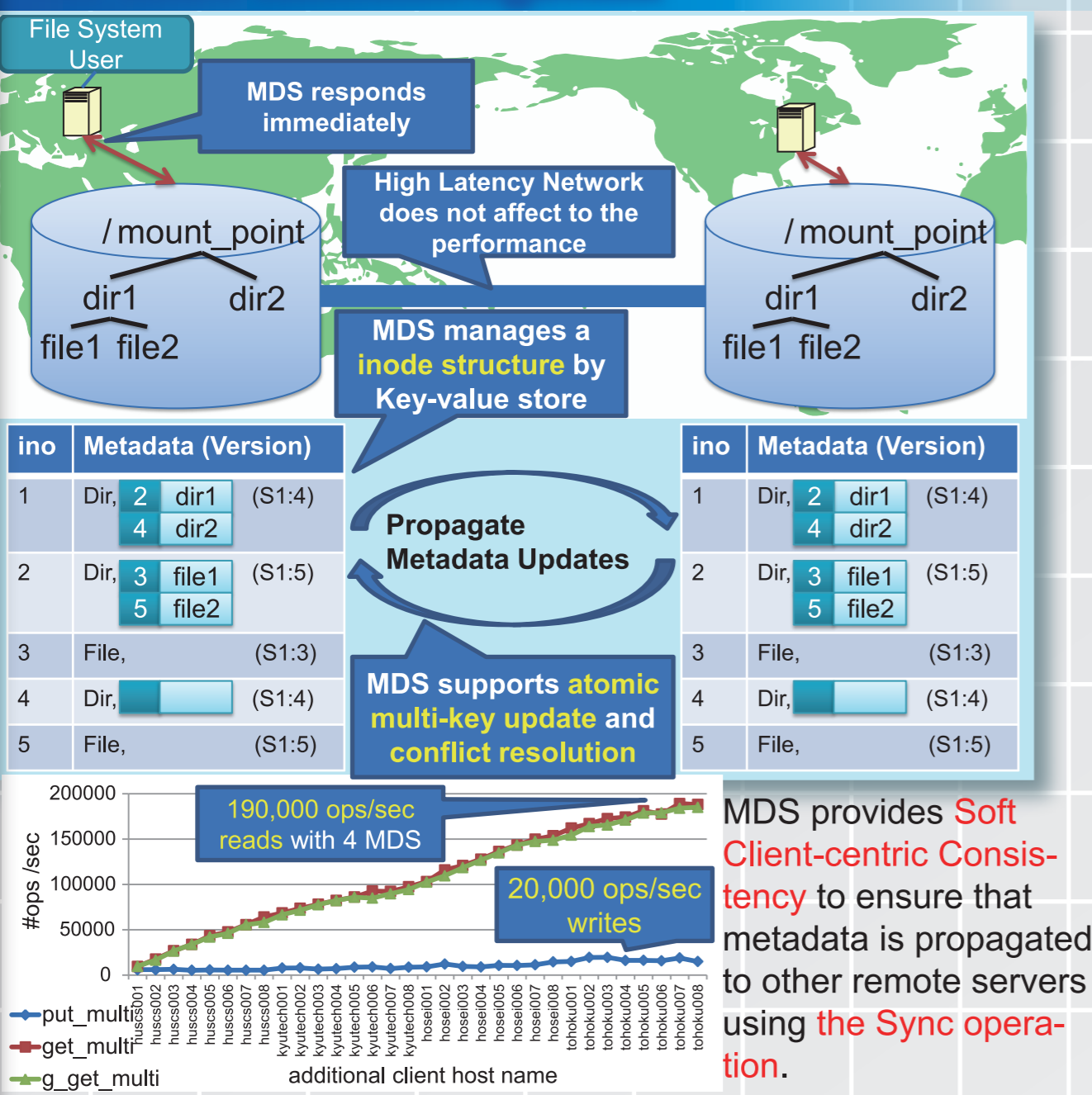
Gfarm Performance



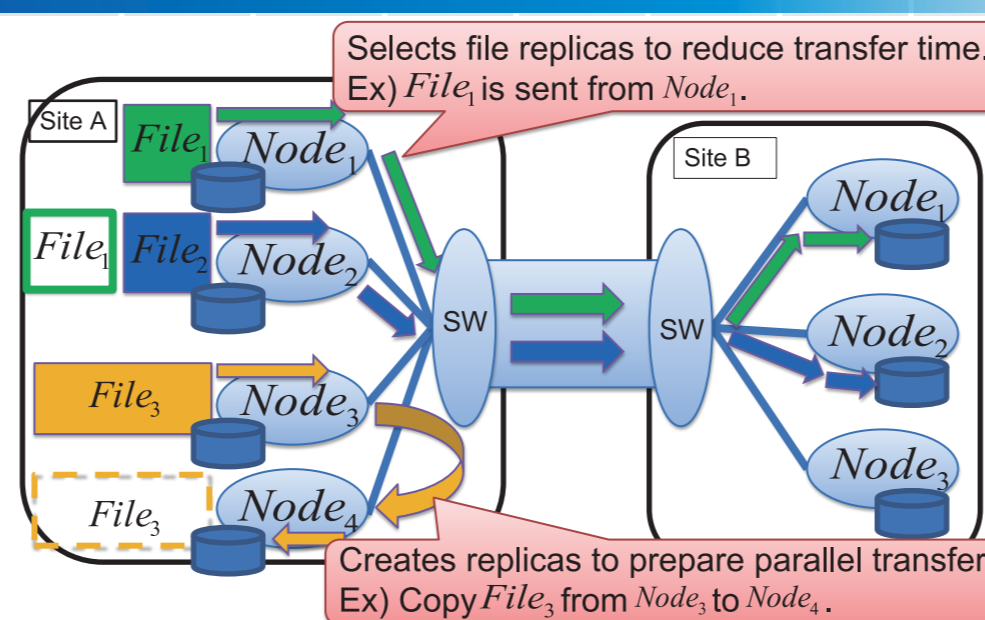
This research is supported by the RENKEI (REsources lInKage for E-science) project sponsored by MEXT of Japan. RENKEI aims to federate (=renkei) e-Science communities through research and development of middleware technologies. RENKEI website: <http://www.e-sciren.org/index-e.html>



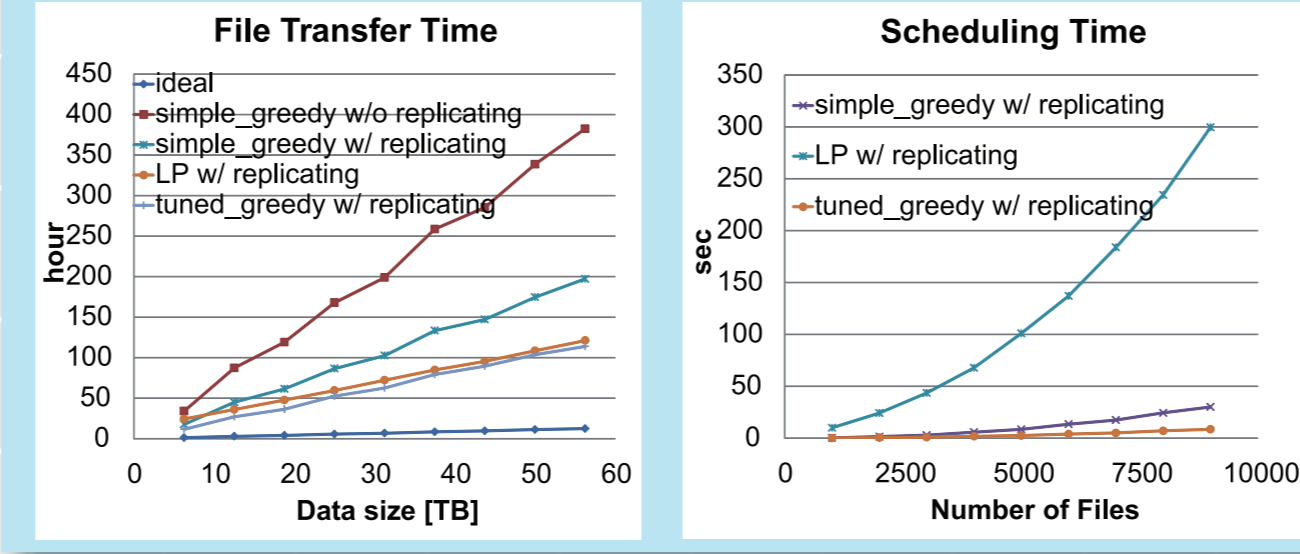
Distributed MetaData Server for Wide-area File System



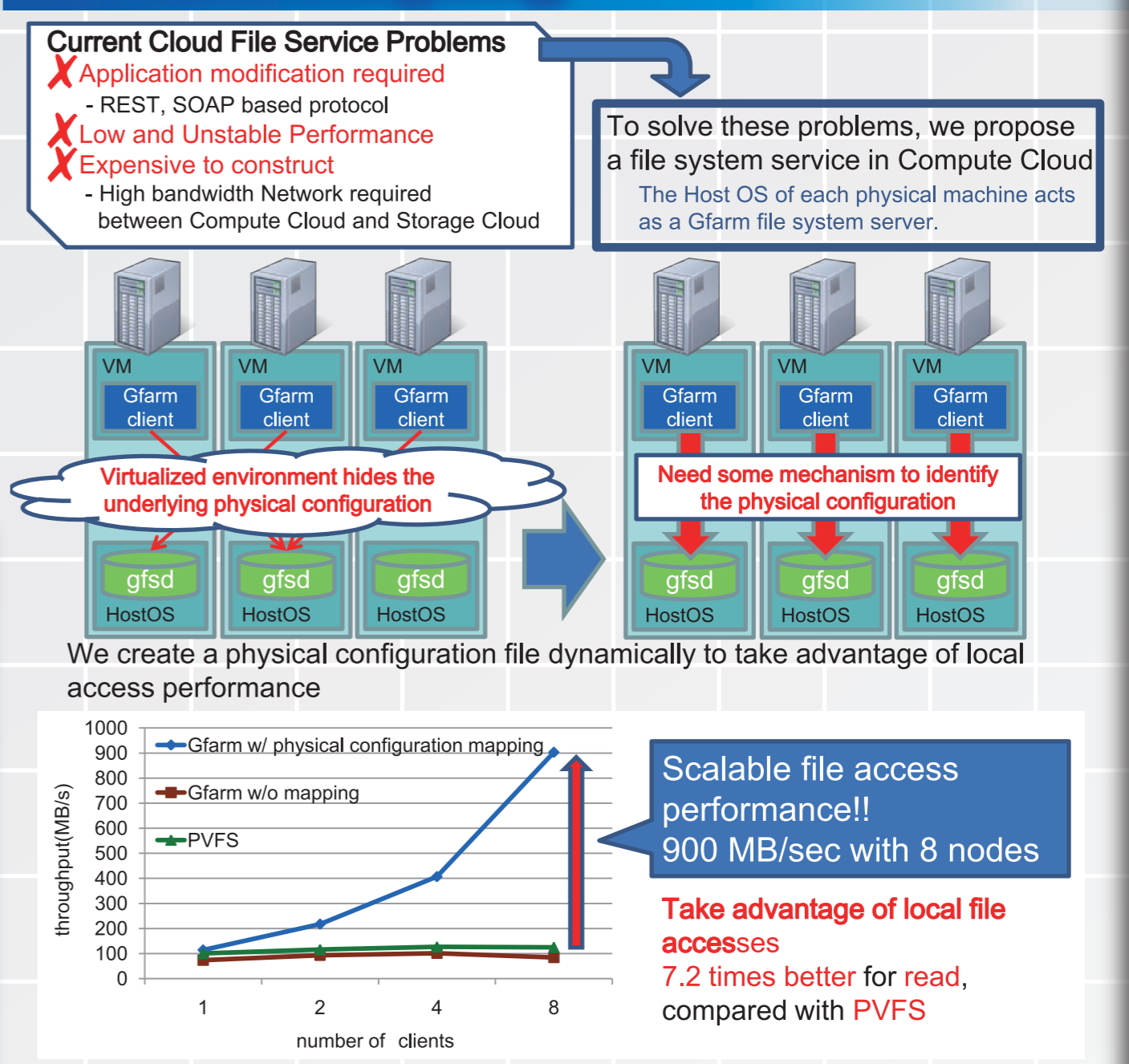
N-to-M Data Replication Scheduling



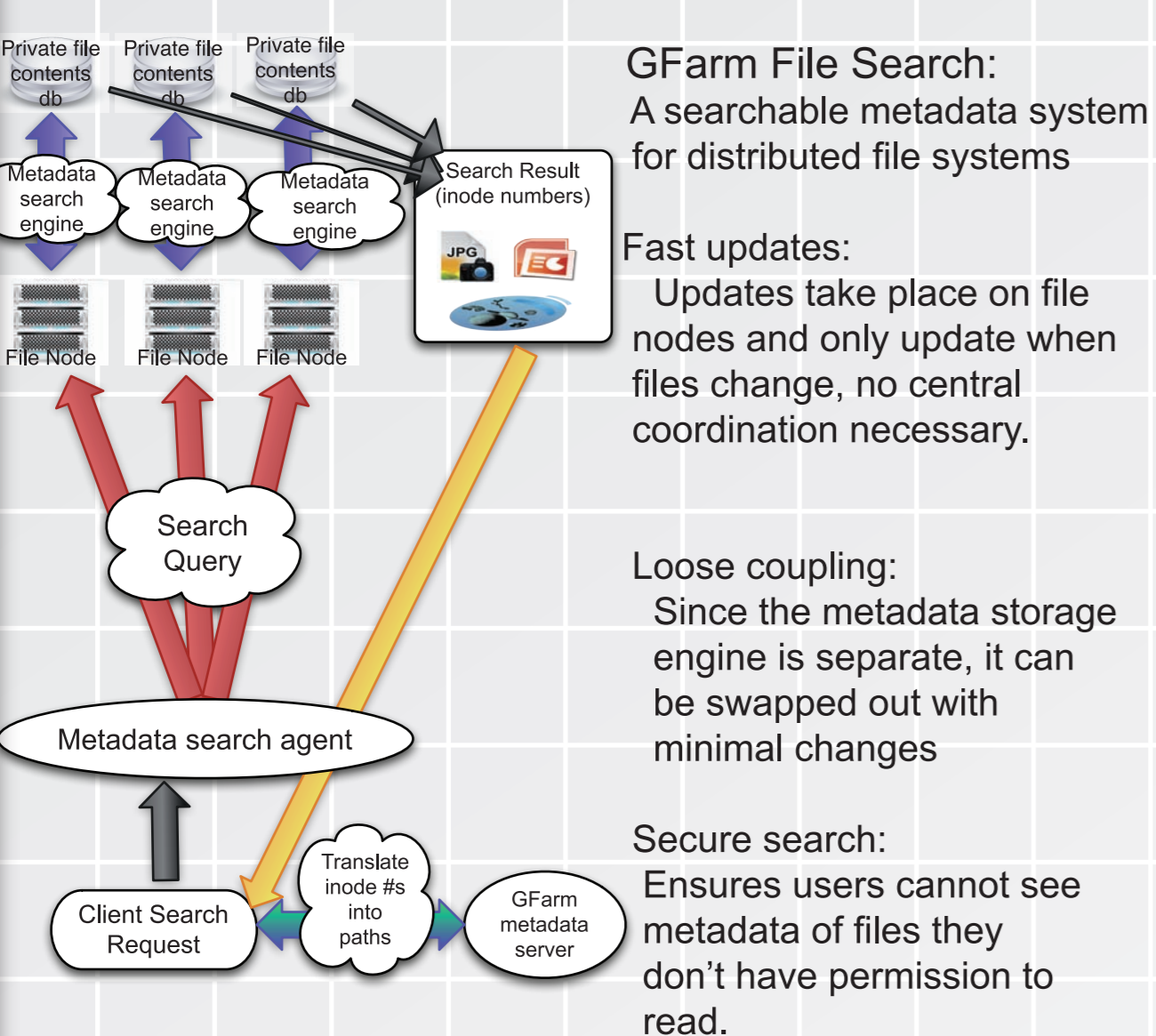
Comparison of algorithms for a Site-A to Site-B data transfer simulation



High Performance File System Service for Cloud Computing

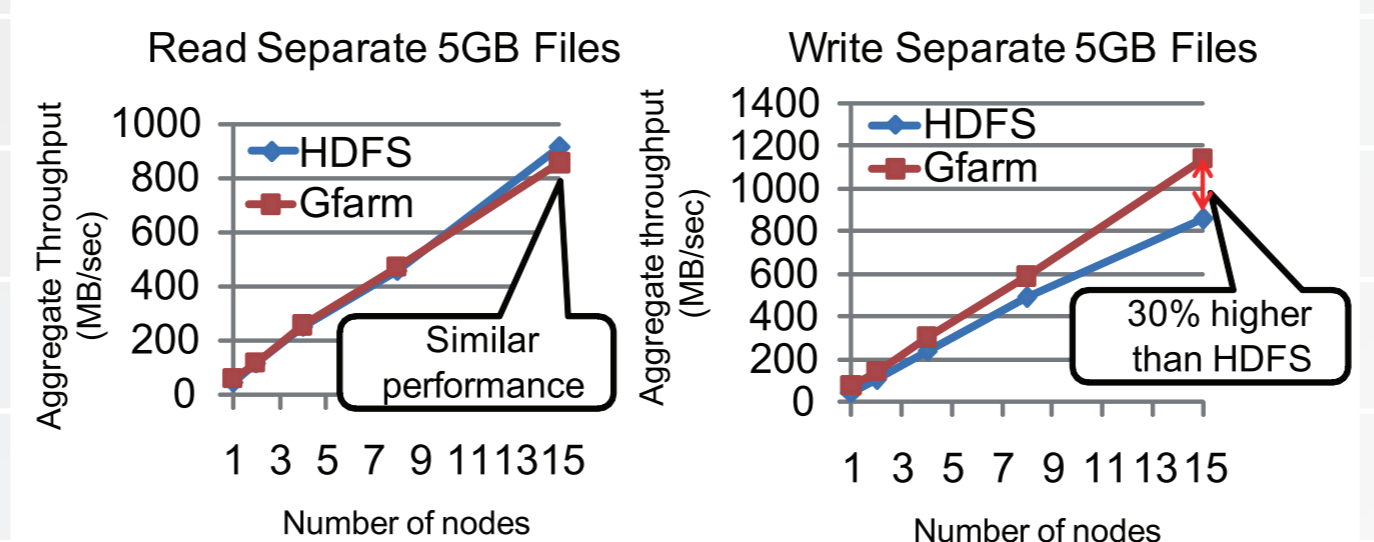
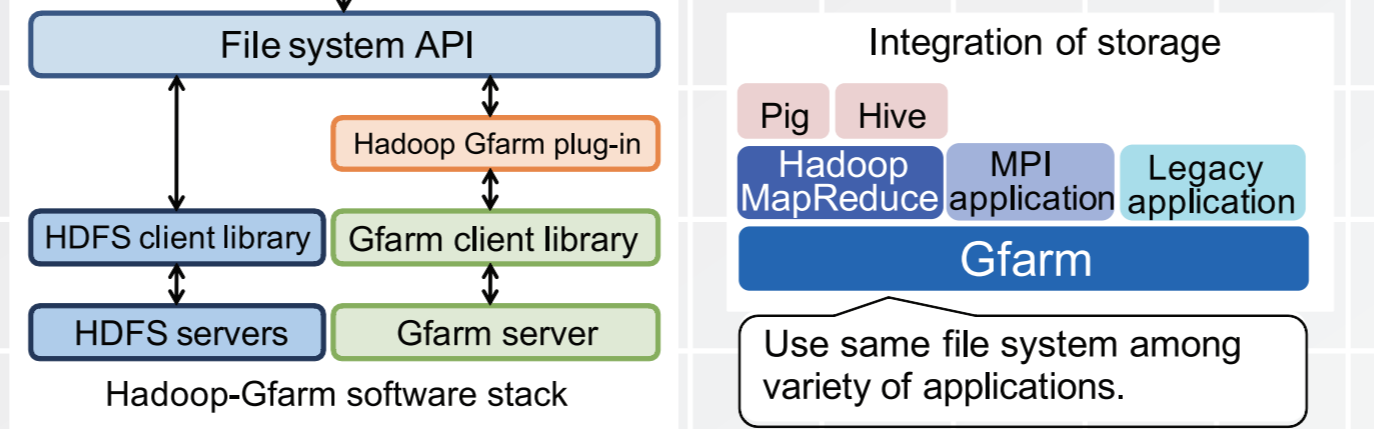


Searching the Farm



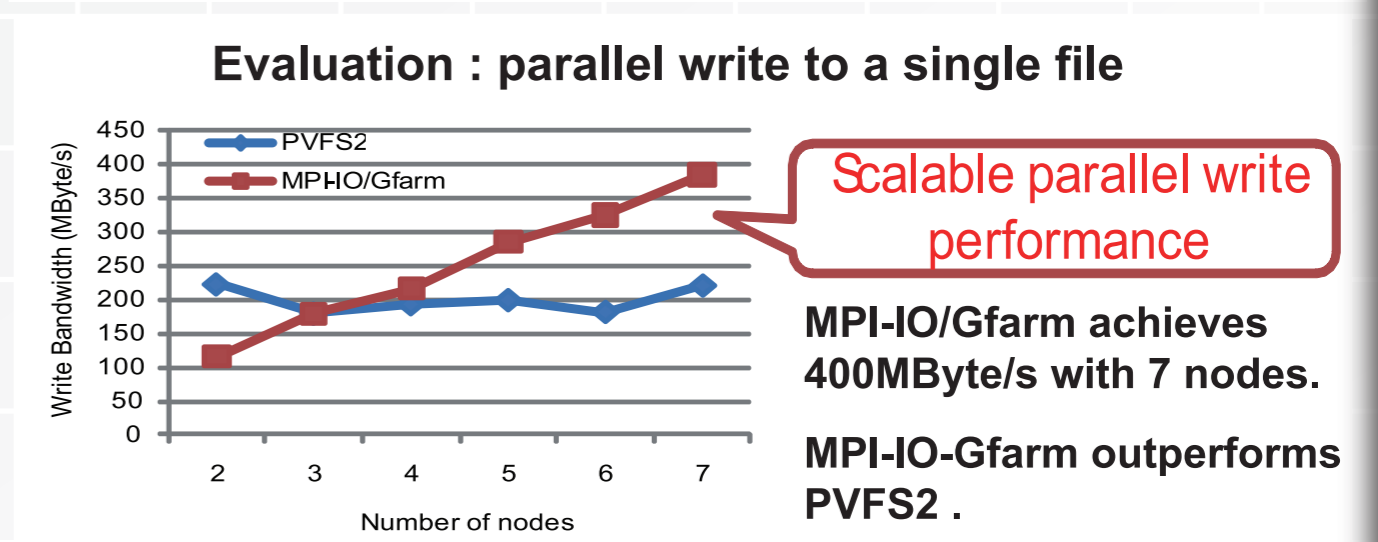
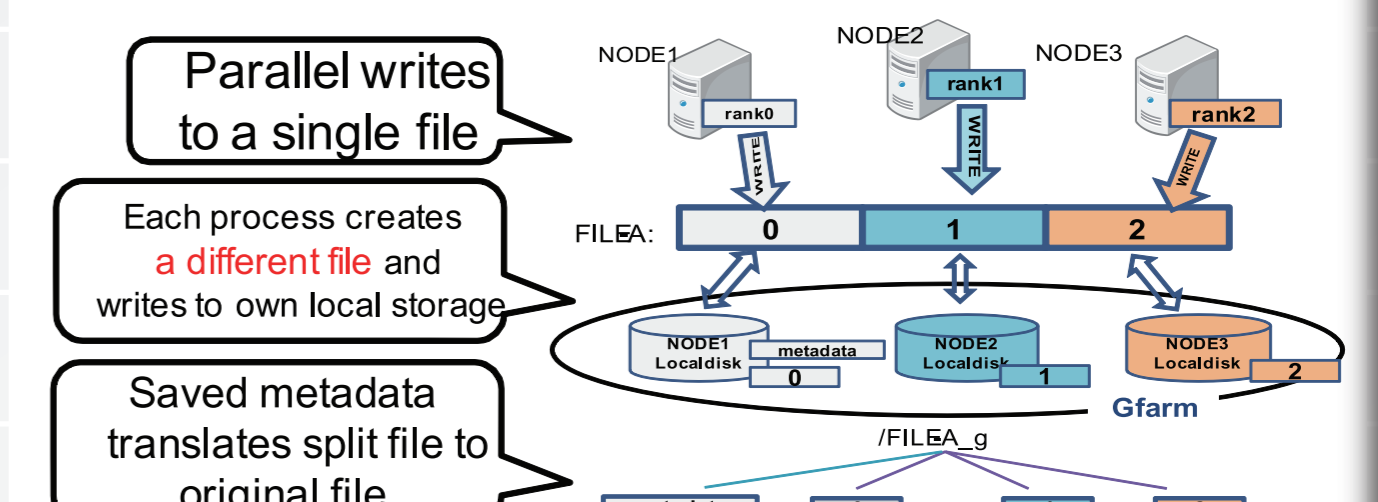
Hadoop / Gfarm

We have developed a Hadoop-Gfarm plugin which enables Hadoop Mapreduce applications to access a Gfarm file system. Problem: HDFS cannot be used from applications other than mapreduce



MPI-IO / Gfarm

MPI-IO/Gfarm is an MPI-IO implementation for the Gfarm file system designed to achieve scalable parallel I/O performance. Problem: Poor performance of parallel writes to a single file



MEXT The Most Advanced Research Infrastructure: System Software for e-Science

This fiscal year, as part of the Ministry of Education, Culture, Sports, Science and Technology(MEXT) High Performance Computing Initiative(HPCI), The University of Tsukuba has been selected to evaluate high performance, wide-area file systems for supercomputers in Japan.

METI Next Generation Green IT infrastructure: Accountability for Cloud Computing

As part of a 3 year effort to create highly reliable and accountable cloud storage platforms The Ministry of Economy, Trade and Industry(METI) has awarded The University of Tsukuba a grant to research exascale cloud storage infrastructure technologies capable of federating thousands of individual clouds.