

A High Performance Data Transfer Service

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To satisfy the demands of data intensive applications it is necessary to move to far more synergetic relationships between data transfer applications and the network infrastructure. The main objective of the High Performance Data Transfer Service we present is to effectively use the available network infrastructure capacity and to coordinate, manage and control large data transfer tasks between many distributed computing centers. The Fast Data Transfer (FDT) application is used to perform all data transfer tasks. FDT is capable of reading and writing at disk or storage speed over wide area networks using standard TCP. FDT is based on an asynchronous, flexible multithreaded system which is used to continuously stream a dataset through one or more TCP sockets. In the MonALISA framework, we developed a set of collaborating agents which are used to monitor the network topology and its load, the available computing and storage resources and based on all this information to efficiently schedule and optimize many concurrent data transfer tasks requested by users or production tools.

Summary

Presentation type (oral | poster)

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