

A world-wide databridge supported by a commercial cloud provider

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Volunteer computing has the potential to provide significant additional computing capacity for the LHC experiments.

One of the challenges with exploiting volunteer computing is to support a global community of volunteers that provides heterogeneous resources.

However, HEP applications require more data input and output than the CPU intensive applications that are typically used by other volunteer computing projects.

While the so-called “databridge” has already been successfully proposed as a method to span the untrusted and

trusted domains of volunteer computing and Grid computing respective, globally transferring data between potentially poor-performing public networks at home and CERN can be fragile and lead to wasted resources usage.

The expectation is that by placing closer to the volunteers a storage endpoint that is part of a wider, flexible geographical databridge deployment, the transfer success rate and the overall performance can be improved.

This contribution investigates the provision of a globally distributed databridge implemented upon a commercial cloud provider.

Tertiary Keyword (Optional)

Storage systems

Primary Keyword (Mandatory)

Distributed data handling

Secondary Keyword (Optional)

Cloud technologies

Primary authors: FURANO, Fabrizio (CERN); Mr CHEUNG, Kwong Tat (University of West England); FIELD, Laurence (CERN)

Presenters: FURANO, Fabrizio (CERN); FIELD, Laurence (CERN)

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