

EMPRESS–Extensible Metadata PProvider for Extreme-scale Scientific Simulations

Monday, 4 December 2017 11:50 (25 minutes)

Significant challenges exist in the efficient retrieval of data from extreme-scale simulations. An important and evolving method of addressing these challenges is application-level metadata management. Historically, HDF5 and NetCDF have eased data retrieval by offering rudimentary attribute capabilities that provide basic metadata. ADIOS simplified data retrieval by utilizing metadata for each process' data. EMPRESS provides a simple example of the next step in this evolution by integrating per-process metadata with the storage system itself, making it more broadly useful than single file or application formats. Additionally, it allows for more robust and customizable metadata.

HPC content

Contained in Abstract

Primary author: Dr LOFSTEAD, Jay (Sandia National Laboratories)

Presenter: Dr LOFSTEAD, Jay (Sandia National Laboratories)

Session Classification: Storage and I/O

Track Classification: Storage and I/O