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Title: LDMS (Lightweight Distributed Metric Service) Deployment on CSM Systems Abstract

Abstract:

The Lightweight Distributed Metric Service (LDMS) is a High Performance Computing specific piece of software meant to track system metrics at a wide range of scales; from a few nodes to tens-of-thousands of nodes. It is an open-source project created by a team at Sandia National Labs (SNL) and now has contributions from many HPC centers including LANL and from hardware vendors, such as Intel and Cray. At present, the current deployment of LDMS provided by HPE/Cray on Los Alamos National Labs (LANL) clusters lacks both functionality and updates. The current version deployed by Cray is based on a release of LDMS from 2016 (~8 years ago) and due to stability concerns we do not have it configured to run on compute nodes. The inclusion of LDMS on LANL clusters should give greater insight into issues occurring on clusters for both system admins as well as users.

For the project, a newer release of the LDMS Software needed to be stood up on testbeds, tested, packaged, and deployed. These are the tasks we will focus on, and what problems cropped up in the process; as well as what solutions were devised.