

HDF Group report to LLNL
March 1 – March 31, 2011
Quincey Koziol

Summary:

During the period from March 1 to March 31, 2011 the HDF Group worked on the following tasks:

- Port and test HDF5 1.8.x releases on LLNL machines (38.8 hours)
- User Support (10.6 hours)
- Misc. Admin Tasks (5.7 hours)
- Single Chunk Index Method for Chunked Datasets (0.2 hours)

The **total number of hours** worked is **55.3** hours.

New tasks:

During this time period the following tasks were begun:

- *User Support*
 - Investigate possible memory leak in HDF5 library.

Completed tasks:

During this time period the following tasks or sub-tasks were completed:

- *none*

Tasks in progress:

During this period of time The HDF Group worked on the following tasks:

- *Port and test HDF5 1.8.x releases on LLNL machines, Albert Cheng* (38.8 hours)
 - Testing 1.8.6 release and 1.8 branch on dawndev.
 - Working automating regression testing, to reduce manual intervention.
- *User Support, Quincey Koziol, Neil Fortner* (10.6 hours)
 - Investigate possible memory leak in HDF5 library (unresolved).

- *Miscellaneous Admin Tasks, Quincey Koziol, Albert Cheng, Neil Fortner (5.7 hours)*
 - Planning and reporting activities.
 - User discussions, status telecons & e-mail.
 - Make snapshots, etc.
- *Single Chunk Index Method, Vailin Choi (0.2 hours)*
 - Task estimation.

Current Projects for People:

- Quincey Koziol:
 - Design & architecture guidance
 - Project management
- Albert Cheng:
 - Port and test HDF5 on LLNL machines
- Vailin Choi:
 - Scoping effort for adding single chunk index method
 - Add feature to trunk (for 1.10.0 release)
- John Mainzer:
 - Enable starting “core” VFD from existing buffer
 - “stackable” VFD design and implementation
 - Design VFDs to enable poor man’s parallel I/O

Ongoing tasks for next reporting period:

- *Scope effort for implementing “stackable” VFDs, John Mainzer*
 - Discuss feature and write RFC for allowing VFDs to be “stacked” on top of each other.
- *Design VFDs to enable poor man’s parallel I/O, John Mainzer*
 - Discuss feature and write RFC for VFDs that can improve “Poor Man’s Parallel” I/O on HPC systems.
- *Enable starting “core” VFD from existing buffer, John Mainzer*
 - Write and circulate RFC for adding feature to library.
 - Implement feature.
- *Single Chunk Index Method for Chunked Datasets, Vailin Choi*
 - Scope effort for adding feature to library.
 - Implement feature.
- *Port and test HDF5 on LLNL machines, Albert Cheng*
 - Stand up daily testing on LLNL machines.

- Investigate and add tests for “poor man’s parallel” I/O to HDF5 regression test suite.