Introduction to HDF5 Reference Manual Resources

Prepared for and adapted from HDF5 Development meeting, 21 Aug 2009

These notes provide a quick introduction to the resource materials prepared to assist those who write new entries and maintain existing portions of the HDF5 Reference Manual. See Maintaining The HDF5 Reference Manual *for a more details description.*

Introduction

Several resource documents have been prepared as part of the ongoing effort to facilitate (and increase) developer participation in HDF5 documentation development and maintenance.

- These materials are available in the hdf5doc Subversion repository:

```
svn ls https://svn.hdfgroup.uiuc.edu/hdf5doc/trunk/hdf5doc_support/
       examples/
       guidelines/
       templates/
```

  - These are living documents; check for updates periodically and each time you "dive back in" so that you always work with the current version.
- Always feel free to ask questions or seek assistance.

RM resource materials

Maintaining the HDF5 Reference Manual

- This is the "guidelines" document; it prescribes and guides the work.

```
hdf5doc_support/guidelines/ReferenceManualProcess.pdf
```

- This document discusses applicable standards and the use of templates.
- The guidelines are necessary to ensure consistent documentation for users; the templates are provided in part because automated tools will require a certain level of enforced consistency in the coding.
- As we move along updating the HDF5 documentation (for example, content reuse and more tailored content management), the guidelines are expected to evolve.

Reference manual templates

- We have created a series of templates to facilitate creating consistent, standardized RM entries.
  - `hdf5doc_support/templates/H5function_entry.htm` for function and callback function entries. This will be the most frequently used template.
  - `hdf5doc_support/templates/h5tool_entry.htm` for HDF5 tool entries.
  - Other templates are provided in support of these two and for more specialized purposes.
- The templates also provide useful resources to facilitate bringing old entries up to current standards.

- As we move along updating the HDF5 documentation (for example, to XHTML or XML), the templates are expected to evolve.

Examples RM entries

- Examples are provided to illustrate "standard entries" and for reference.
- The aim is to provide a good cross-section of types of content.
- Examples also illustrate "grouping" related entries through cross-references in running text and in "See Also." See the set of inter-related functions in `hdf5doc_support/examples/set_1/`
- Examples also illustrate sections that we have not used heavily in the past, such as "Motivation," "See Also," and "Failure Modes."

A suggestion regarding RFCs:

- RFCs often include full function descriptions. To avoid duplicate work, consider the writing function descriptions so that they comply with Reference Manual standards from the outset:
  1. Draft RFC function entries using the RM templates.
  2. Cut and paste the entries to the RFC.
  3. As the RFC and interfaces evolve, maintain the entries in the `.htm` files.
- See the RM Guidelines for browser/OS combinations that have been shown to provide acceptably formatted cut-and-paste function entries in a Microsoft Word document.

Tools

- We recognize that with our current tools, it is tedious to create a properly formatted RM entry; we are now beginning the search for tools to make all of this work easier and less error prone.
- We will be looking at tools to automate certain parts of the process (such as Doxygen and DocBook), editors to ease the editing work (such as the Eclipse editor, Coffee Cup, Kate), tools that will facilitate content reuse, content management, and publication.
- Selection criteria will include ease of use, suitability for the task, standards adherence, the robustness of the output, etc.
- The development team will be kept apprised of progress, but no specific tools have been selected as yet.

Where are the RM resource materials?

```
svn ls https://svn.hdfgroup.uiuc.edu/hdf5doc/trunk/hdf5doc_support/
             examples/
             guidelines/
             templates/
             assignments/    (updated only for specific training occasions)
```

These materials are maintained only in the hdf5doc/ trunk; they are not replicated in repository branches.