Offline Software Documentation

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Outline

Our Documentation Problem

Tour of the Documentation

Contributing to Improvements

Nota bene:

- This PDF has hyperlinks you can click on.
- "Expert" means: anyone that knows an answer to a question.

Documentation Problems

Some perceived and supposed reasons for our poor documentation:

- Effort has been focused on fast development.
  - To make use of the development, people need to know what to do.
- Documentation that does exist is scattered and disorganized.
  - Too much documentation is not enough if you can't find it.
- Less involvement by/with non-experts than desirable.
  - Tendency to ask questions to individuals instead of the mailing list causes information to spread slowly.
    - Worries about appearing ignorant(?)
    - Worries about "bothering" too many people(?)
  - Experts "enable" this behavior by answering directly to the individual and not Cc'ing list
    - Respect for individuals privacy(?)
- General unfamiliarity (?) with documentation tools (wiki, trac, LaTeX).

Let's take this week to start making improvements!

Overview of Existing Documentation

We have (too?) many sources of documentation:

- The Wiki. Provides searchable, online documentation and organization of other sources of documentation.
- Offline mailing list and archives. Ask questions! Searchable archive of answers.
- Formal Tech Note "`Documentation/OfflineUserManual`" in SVN with links to built versions. Bed time reading.
- Doxygen generated reference pages. Exposes documentation in the comments in the source files.
- Trac bug/issue tracker. See if someone already has your problem, report it if it's new.
- The `tutorial` project has many examples.
- Materials from past tutorials and workshops.
- Command line utilities and help.
- The source code is the ultimate documentation!

The Documentation Poll

A January poll showed our opinions about the wiki:

- **Likes**:
  - Fast update cycle, low barrier for contributions and can be searched.
- Dislikes:
  - Lack of organization, focus, navigation and ability to print out.

My conclusion: we should embrace the **good** and fix the bad.
To that end we have:

- leveraged MediaWiki templates to provide coherent navigation links to primary entries into the documentation on every documentation related topic.
- identified four types of documentation targeting different needs.
- developed some simple rules for maintaining consistency.
  - $\Rightarrow$ "documentation documentation".

Wiki: Offline Documentation Types

Several types of documentation are in the Wiki:

- **FAQ** **F**requently **A**sked/**A**nswered **Q**uestions. Asked by non-experts, answered by experts.
- **Howto** How to do something. Written by anyone that wants to share a useful recipe.
- **Manual** Formal documentation. Written by expert and/or author of some part of the offline.
- **Reference** Reference conventions (PMT IDs, coordinate systems, etc). Written with consensus of experts.

Each type has:

- A Wiki "Category" with each of its wiki pages as a member.
- A hand maintained "portal" page organizing each type's pages in a human oriented way.
- Member pages' names should start with a namespace prefix, eg "`FAQ:How do I...?`" or "`Howto:Write a howto`"

Wiki: Basic Navigation

Let's visit the wiki: https://wiki.bnl.gov/dayabay/

Main Page :
Main page provides a starting point [click here].

Search :
On the side bar or [click here].

Offline Documentation :
The offline docs "portal" [click here] and associated pages.

Categories :
Categories build a hierarchy, [click here]

Help :
Help for using the wiki [click here]

Wiki: Getting Started with Editing

Show of hands: who has ever edited the wiki? (discussion)

- Log in with `dayabay` or your own account name.
  - Anyone logged in can make a new account [click here]
- Edit existing page via "`edit`" tab or the per-section "`[edit]`" links.
- Three ways to start a new page, choose one of:
  1. Click on a red link - this is a "wiki link" that does not yet have a page.
  2. Add a "wiki link" to an existing page, save and click on it.
  3. Type a page title into the search box and click "`Go`"
- Tips for editing:
  - Click "Show preview" button to see how page looks but not yet save it.
  - Emacs user? Install FireFox Plugin "Firemacs" [click here] to use emacs-like key bindings.
- Basic syntax [click here]
- Daya Bay specific, see "`Help`" link in side bar or [click here]

(Note: simultaneous editing of the same page can be troublesome.)

Wiki: Example, Adding a FAQ

FAQs can be added by the asker or the answerer. Whenever an expert answers a question through email, consider making a FAQ instead.

Ask (easy to do):

1. Edit the FAQ "portal" page [click here]
2. Find a section that fits, make a new one or choose "Misc"
3. Type your question.

Answer (must follow some conventions):

1. Experts should "watch" the FAQ portal for new questions.
2. Reformat the question so it is like:

   ```
   #[[FAQ:What was the original question?]]
   ```

3. Save the page and click on the question's newly made red wiki link.
4. Answer the question using this boiler plate:

   ```
   {{doc:header}}
   The answer to the question is....
   {{doc:footer|Faq}}
   ```

Trac as Documentation

Show of hands: who has ever entered a trac ticket? (discussion)

We use Trac for bug/issue reports but it is also powerful for documentation:

- If you have troubles, search trac to see if someone else has already found the solution.
- If you can not find documentation, it is a bug! Enter a new ticket to get it fixed. Be as descriptive as possible as about what you think is missing. You can assign it to the `dybgaudi//Documentation` component.
- Feel okay to guess who should get the ticket and assign it.

Let's visit trac for a demo.

OfflineUserManual

Show of hands: who has read through the OfflineUserManual? (discussion)

What do we do with it in the new "wiki paradigm"?

A proposal:

- Focus on developer documentation.
- Move the so called "Quick Start" sections into Wiki howtos.
- Remove currently empty/useless "infrastructure" section.
- Replace/improve installation section with how `dybinst`, `dybin` and environment setup mechanisms work.
- Expand the remaining section with an emphasis on developer documentation - more "how things work", less "how to use things".

This Workshop

During this workshop:

Everyone : Ask questions!

Experts : when answering:

1. First try to locate existing documentation that answers the question.
2. If it exists, analyze why it was not easily found and try to fix that immediately or make a Trac ticket.
3. If it is missing, provide it immediately if feasible or make an FAQ to be answered later or a Trac ticket to remind us of work needed.