



### Enabling Grids for E-sciencE

# Improving Quattor's Accessibility

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- Quattor's Learning Curve
- Improving user experience.
- Improving developers experience.



# **Quattor's Learning Curve**

- Quattor has a steep and difficult learning curve both for users and for developers.
- Some of this is linked to the comprehensive and complete nature of the quattor toolkit.
- But, much is linked to:
  - Inadequate documentation.
  - Treating quattor as an all or nothing affair.
  - Organic development.
  - Evolutionary leftovers.



# **Inconsistent Branding**

- Although it is called the "quattor" toolkit. The name "quattor" is very seldom seen in the individual tools.
  - ccm-fetch, aii-shellfe, panc, ...
  - ncm-cdispd, …
  - EDG::WP4::CCM::, CAF::, LC::
  - /etc/ccm.conf, /etc/ncm-cdispd.conf, ...
- Do the acronyms—CCM, All, NCM, etc.—really serve any useful purpose now?
- This complexity is an unnecessary barrier for both users and developers.



## Documentation

#### Documentation

- Lack of a good overview document.
- Incomplete.
- Often outdated.
- Difficult to relate to a particular release of a tool.

#### Tutorials

- Often outdated.
- Often treat full site management use case.
- Hides incremental ways of integrating quattor into a site.
- Again, this creates an unnecessary barrier for both users and developers.



# Multiple APIs/Tools

- In some cases, have similar tools for the same function (e.g. CDB, SCDB, ...). Not necessarily bad, but...
  - Must clearly document different strengths and weaknesses. (I.e. give the appropriate use cases.)
  - Have good justification for multiple tools.

## Multiple APIs:

- For example, get\_tree(), get\_element(), ....
- Need mechanism for marking deprecated elements.
- And mechanism for marking public/private methods.



# **Coding Practices**

## Coding Practices

- We have a set of coding practices for perl.
- General agreement on using them.
- Agreement to use LC, CAF libraries.

## Nearly completely unenforced.

- Means that they are not rigorously followed.
- Makes understanding and modifying code more difficult.
- Makes common ownership of code difficult.



# Missing Functionality

#### Pan:

- Eclipse-based editor.
- Code checker.
- Debugger.

## Components:

- Lots of duplicated code for skeleton of component.
- Cannot run component as standalone script.

#### Others?



## What to Do?

The community will not solve all of these issues overnight!

#### What needs to be done:

- Agree on a list of problems.
- Evaluate the impact of fixing each of the problems.
- Implement them along with other developments.

#### Automation

- Can help in understanding what problems exist.
- Prevent regression of things that have been fixed.