

Proposals regarding the IVOA standards development process
September 2009

1. Require every IVOA standards document to include in its preamble in non-technical language in the VO. This text should be general enough for a non-technical reader to understand the scope and relevance of the document. Reference to an overview of the VO architecture should be included (see item 2).
2. Develop a top-down view of the VO infrastructure/architecture in which components, sub-systems, and functions are defined and their relationships are shown. This should be as free as possible of technical language and should identify the relationships between the VO architecture and the associated standards. This document should be understandable to anyone understand the overall design and scope of the VO. A more specialized description, e.g., using UML, might be developed for a technical audience, but this is secondary. The roles and relationships of standards documents should be shown in this diagram.
3. Strengthen the TCG document review process by including a specific assignment of both technical and non-technical reviewers. These might be drawn from outside the TCG, and indeed from outside the core IVOA community, when appropriate. Whether internal or external to IVOA, they would function like the peer reviewers/referees used for the astronomy research literature. One or two technical reviewers would be appropriate, depending on the complexity and scope of the document, and one non-technical reviewer should be included to assure that the context described in items 1 and 2 above is clear. This would supplement the TCG and Exec review.
4. Complement 3) by refocusing the TCG and Exec review functions. Given expert peer reviews, TCG reviews would emphasize interoperability concerns and Exec reviews would emphasize a) adherence to process and b) clarity of context. Every TCG and Exec reviewer, before adding their approval to a document, should understand how that document is relevant. And although the Twiki history tells when people have edited the RFC pages, reviewers should explicitly include date/time information when they make their comments.
5. Identify a technical writer/copy editor, perhaps someone in the employ of one of the IVOA projects, to edit all IVOA documents to a similar style and presentation. Focus not only on typos, grammar, and usage problems, but also on typographic styles and conventions.
6. Develop a view of the IVOA document collection on the web that reflects the top-down view in 2), and provide this as an alternate entry (perhaps primary entry) to the collection instead of the WG-based view.

It would take a significant but not impossible effort to retrofit the existing standards documents per 1), but 2) and 6) should really be done first by a small, senior team. The result of 2) is a reference document, and one can debate whether it should itself be an IVOA standard. Review of the new document preambles could be carried out by an ad hoc panel appointed by the IVOA Chair. The revised documents would carry new dates but would retain their version number and not go through RFC. If 5) can be implemented, edited documents would similarly have new dates and review would be carried out by the documents¹ original authors/editors to assure that meaning/substance have not been changed, identical to the copy editing process for journals. In the future the copy-editing step would precede promotion to REC.

rjh, 4 Nov 2009