International

Virtual

Observatory

Alliance

Design notes for revised IVOA web pages

Version 0.5

IVOA Note 2009-11-07

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Abstract

I discuss the different kinds of "customer" for the IVOA web pages, and what their respective needs are. Four types of customer are distinguished - the interested visitor, the astronomer wishing to use the VO, deployers of IVOA standards, and ourselves - VO project staff and Working Group members. I then examine how the needs of these customers are currently served, and compare our web pages to those of the W3C. Based on this analysis, and some very general design principles, I produce a sketch of a new web site that (a) routes the four customers in different directions, and (b) adds considerable context setting and explanatory material.

Status of This Document

This is an IVOA Note, expressing suggestions from and opinions of the author. An IVOA Note is intended to share best practices, possible approaches, or other perspectives on interoperability with the Virtual Observatory. It should not be referenced or otherwise interpreted as a standard specification.

The first release of this document was a paper presented to IVOA Executive Meeting FM34 on Nov 11th 2009. This version (0.5) has been converted into an IVOA Note in order to expose the ideas to wider IVOA readership. It is intended that after a short period in which comments and further ideas can be received, V1.0 will be issued, after which an informal working party will begin development of the web pages.

Acknowledgements

The design principles and other concepts discussed here have been strongly influenced by both the AstroGrid and US-VO web sites, both of which went through significant improvements in the last two years.

1 Introduction

Before and during the IVOA interoperability workshop of November 2009, there was considerable discussion of the intelligibility of IVOA standards documents, and how hard it is for technical data centre staff, let alone ordinary astronomers, to understand how to deploy against IVOA standards. While thinking about these issues, I came to the conclusion that the problem is not so much to do with the standards documents themselves, but the context in which people find these documents - i.e. the IVOA web site. The key is to ask oneself "who reads this stuff" ? Ordinary astronomers don't want to, or need to, read our very technical documents - they are for technically minded data centre staff and so on. But astronomers will nonetheless end up at the IVOA web site, and we need to cater for them; and those technical staff, while positively desiring technical rigour, are likely not to understand everything in advance.

2 Comparison with W3C

Our processes and document structure were originally closely modelled on those of the World Wide Web Consortium (W3C). How do our documents and our website compare to theirs ? (http://www.w3.org/)

If you find the actual standards documents, they are not so different from ours. (eg the definition of HTML-4.01 : http://www.w3.org/TR/html401/) We based our structure on theirs after all, and even borrowed the CSS... These documents need to be dry and technically rigorous in order to do their intended job. The W3C documents are probably rather better than ours in terms of introductory material and consistency of editing, but they are not fundamentally different in approach or style.

However, they are set in a *structured context* - see for example the page at

http://www.w3.org/standards/webdesign/

Each of the sections at that site has introductory explanatory material which is easier to understand than the material in the actual standards documents, eg:

http://www.w3.org/standards/webdesign/htmlcss

This is what we are really missing - a map of the standards landscape, and a beginners guide. One does not put this in the actual standards documents, but in the surrounding context. This material needs to be aimed at *deployers*, not at *ordinary astronomers* using the VO; and in fact ordinary astronomers should probably be carefully steered away from the technical material.

3 Customer Analysis

3.1 Types of Customer

I suggest the customers are as follows :

- **ourselves** : IVOA working groups
- **interested visitors** : NSF types, other e-science folk, curious astronomers
- **astronomers** : folks who will *use* VO services and tools
- **deployers** : those who will *implement* our standards.

"Deployers" includes data centre staff, third party tools developers, and staff from our own VO projects, when they are in deployment mode as opposed to creation mode. Note that the same physical people can wear different hats at different times, but the above are I think the correct categories. It has been suggested that a fifth category is "education and outreach customers" i.e. members of the public in learning mode as opposed to casual curiosity mode, but I am not sure whether this is distinct enough from "interested visitors" to warrant a separate category.

3.2 What do they get now ?

- **ourselves** : not bad but some issues on comprehensibility
- **visitors** : not bad but needs updating and smartening
- **astronomers** : was minimal, getting better with newsletter, but needs more
- **deployers** : almost nothing ; only a laundry list of standards

All the above need improving, but I think the last category needs the most drastic improvement. My personal opinion is that this category of customer is also the most important for the IVOA.

3.3 What do the customer types need ?

When different types of customer arrive at the web site, they need quite different types of material :

- **ourselves** : access to Working Group pages; discussions (mailing lists); calendar; access to standards docs and IVOA notes; access to *working drafts* of new standards docs; meetings pages.

- **visitors** : general info; who is involved; why we are doing this; what we do and where we are going; need to leave them with a sense of competence and professionalism, but keep it very slim.

- **astronomers**: explanation of why they should care; what its about at practical level; information on what they need to know, and *not more*; links to projects and portals; links to tools. I think the IVOA website should not develop towards being a user portal; but it clearly needs to cater for people who arrive there first.

- **deployers** : explanation of why they should care; technical overview/map of landscape; structured navigation to the technical docs they need; cookbook - what you need if you are doing X; links to VO projects; links to related technical software produced by VO projects; access to *current* standards docs as opposed to old versions and drafts.

4 Design and Navigation Logic

Here are some suggested design principles to follow :

(1) The four customer types need to be separated right at the top.

(2) We should minimise navigation complexity and confusion. The structure should be no more than two levels deep, i.e. there should be sections and subsections but no sub-sub-sections; the main choices for each customer type should be clearly available on front page; but these should also always be available via a menu wherever you end up.

(3) People can flip between customer types, even during a session. This is another reason for having the sections and subsections always available.

(4) The exception to "everything is always available" could be the members wiki. This could be seen as a distinct site, as long as it is clearly labelled "IVOA members wiki" and with an ever present link back to the IVOA home page.

(5) Will some sections/pages be the same ? eg both "astronomer" and "visitor" maybe want a page called "idiots guide to the VO". But this doesn't mean we repeat this link, and so muddy the distinction between the customer sections. It is much better not to repeat links or documents. Instead we make sure it is always easy to flip between sections so things are easy to find.

(6) One might worry that as time goes by we will think of more pages that need adding, so we will be tempted finally into sub-sub-sections, or into continually updating the menu-tree. My instinct is that we should stick rigorously to the concept of "no-sub-sub-sections", but allow the possibility of adding new sub-sections. However, these would normally be accessed only through links on existing pages; they don't appear on the menu tree. Periodically the menu structure can be updated, but one doesn't want to do this too often.

5 Proposed Design

A sketched design consistent with the above analysis is presented below. The first page shows what the home page could look like, with four sections, and links within each. The boxes on the left are meant to be a drop-down menu, with the same choices, and which is available on every page. In the illustration, the user has clicked on "VO standards landscape" within the "Deployers" section. The second page illustrates what this page could look like, and shows selection of the same page via a drop-down menu. The picture on bottom right of the front page is of course St Lawrence being Martyred On The Grid.

HOME PAGE :

The International Virtual Observatory Alliance

- Home
- About
- Astronomer
- Deployer
- Member

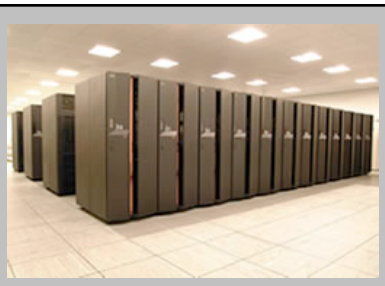
About IVOA

- What is the Virtual Observatory ?
- What is the IVOA ?
- Roadmap
- Member Organisations

For Astronomers

- Using the VO
- Links to VO portals
- Links to VO tools
- IVOA newsletter

For Deployers



- VO concepts
- The VO standards landscape
- Deployment Cookbook
- Current technical standards
- Links to related software

For Members

- IVOA twiki
- IVOA mailing lists
- Working Groups
- Executive
- Calendar
- Documents in progress

LINKED PAGE :

The VO standards landscape

Home

About

Astronomer

Deployer

>>VO concepts

Member

>>standards landscape

>>cookbook

>>current standards

>>related software

Blah Blah overview rhubarb rhubarb etc ipso facto rice pudding. Not only but also and furthermore, with no exceptions. Amazingly, and accordingly, without further ado, it is certainly without a doubt. Izzy whizzy lets get busy. Then again, I have one grunch but the egg plant over there. Dearly beloved, knowing as we do the exceptional qualities of blah blah rhubarb rhubarb and occasionally zuppa inglese with well known consequences. But, I hear you say, it is a truth universally acknowledged that the VO without standards is like a fish without a bicycle. Jesus saves, but Beckham scores on the rebound. So, unaccustomed as I am to the deployment of cliches, we have to acknowledge that time and tide makes dusty fools of us all. Tomorrow and tomorrow and tomorrow creeps in this most excellent adventure, dudes. Now is the winter of our discontent made glorious summer by eating the heads off chocolate bunnies.

Blah Blah overview rhubarb rhubarb etc ipso facto rice pudding. Not only but also and furthermore, with no exceptions. Amazingly, and accordingly, without further ado, it is certainly without a doubt. Izzy whizzy lets get busy. Then again, I have one grunch but the egg plant over there. Dearly beloved, knowing as we do the exceptional qualities of blah blah rhubarb rhubarb and occasionally zuppa inglese with well known consequences. But, I hear you say, it is a truth universally acknowledged that the VO without standards is like a fish without a bicycle. Jesus saves, but Beckham scores on the rebound. So, unaccustomed as I am to the deployment of cliches, we have to acknowledge that time and tide makes dusty fools of us all. Tomorrow and tomorrow and tomorrow creeps in this most excellent adventure, dudes. Now is the winter of our discontent made glorious summer by eating the heads off chocolate bunnies.

6 Next steps

The Exec has now approved the general principles of this re-design. It was noted that one hand, some aspects of the implied content will require considerable work, but on the other hand, some of the changes are quite urgent. The preferred solution is to produce a version-1 as quickly as possible with only some of the new content, and placemarkers in other places. This will force us to finish the full thing reasonably quickly, so it doesn't look embarassing.

Comments are invited for a short period at a new wiki page :

http://www.ivoa.net/cgi-bin/twiki/bin/view/IVOA/RevisedWebsiteDesign

Following this, V1.0 of this note will be finalised, and design and construction of the new web pages will begin. An evolving draft will be available for inspection at the same twiki page.