

IVOA spring Interop.
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Updates on the last developments on VO edu resources

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Outline

- The EDU-IG note
 - content
 - registry for education
 - document registry extension
 - SVN repository
- Summary of technical presentations
 - Reg II – M. Molinaro: *An Education Resource Registry*
 - App III – F. Cepparo: *VESPA*
- Open questions on edu resources



Edu IG note - goal

- **practices and requirements** found deploying educational resources
- **issues, proposed solutions and desirables** possibly leading to modifications of standards



- **curation** of educational resources inside standard registries
- use cases and techniques for **registering and locating documents** within registries
- dealing with **multiple languages**

Curated registry for education

- Distinction btw resources for education vs research
 - teachers and educators overwhelmed by professional data
 - astronomers may refer to avoid retrieving educational data

⇒ tag resources for educational usage

- Possible simplified tagging solution, based on ContentLevel element of VOResources
 - general / research / amateur
 - Add education?
- Goals
 - better description of resources
 - filtering of resources at client level

Document registry extension

- Current registry extension takes not into account
 - document language
 - formatted/source material distinction
 - *accessURL* allowing access to one or more rendering (e.g. pdf) of the document
- New proposed registry extension
 - takes into account previous items
 - tag “uses” for relationships with other VO resources the document may use
 - ...
- Example: [distance to the CRAB nebula](#)

SVN repository

- Goal
 - cooperatively development of documentation
 - repository of updated usecases
 - repository of master english docs for translators
- Access
 - <http://svn.ari.uni-heidelberg.de/svn/edu/>
 - https for contributors
- Contribution guidelines
 - users (contributor, translator, user)
 - document layout (readme, license, /res, /en, ...)
 - how to update the translation status
 - how to add a license
 - how to add, update and translate tutorials
 - naming



SVN repository: documentation schema

- AIDA_01_the_sky
 - README
 - brief description the use case (few rows)
 - contac person and e-mail
 - translation status
 - en (master): 24 Jan 2014
 - it: 24 Jan 2014
 - de: 14 Jun 2010
 - LICENSE
 - /en
 - en_aida_01_the_sky.doc
 - en_aida_01_the_sky.pdf
 - /... (ISO country or ISO language code)
 - (eventually) /res



SVN repository: the future

- HTML page for users
 - friendly layout
 - index
 - search by keywords
 - brief description
- New use cases
 - search for contributors
- Increase number of translations
 - SVN repo uses master English and translated resources
 - only IT have all use cases translated
 - dissemination in non English (and Italian) countries
 - search for translators



VESPA web application

- VO Educational Service Publisher Archive
- VESPA development prompted by the Edu IG
- Web application allowing quick and easy generation of educational VO services and data publishing
 - Targeted to managers of educational telescopes
- VESPA
 - observations with educational telescopes easily stored and accessed
 - observations easily available to all teachers

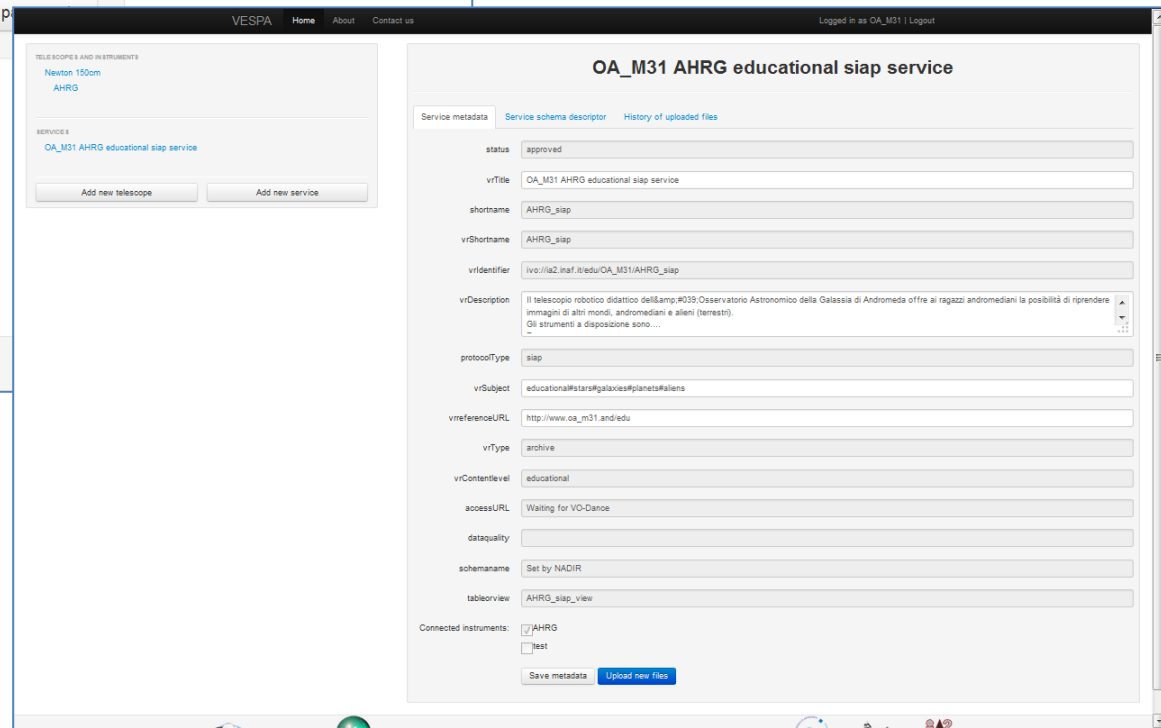
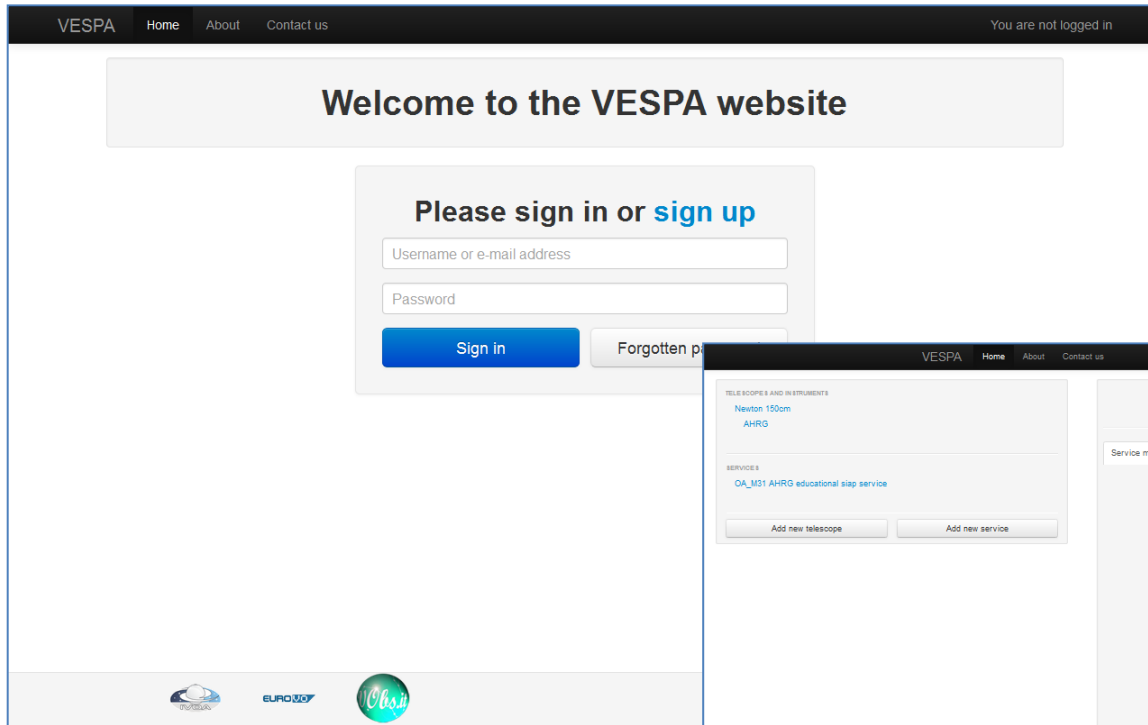


VESPA web application

- Current status
 - VESPA is a web application already deployed and available at <http://ia2-edu.oats.inaf.it:8080/vespa>
 - currently in beta testing phase
 - new users are welcome!
- The user/institution has to:
 - register
 - insert a new telescope and a new instrument
 - create the new service
 - wait for notification of new service registration
 - start to upload data

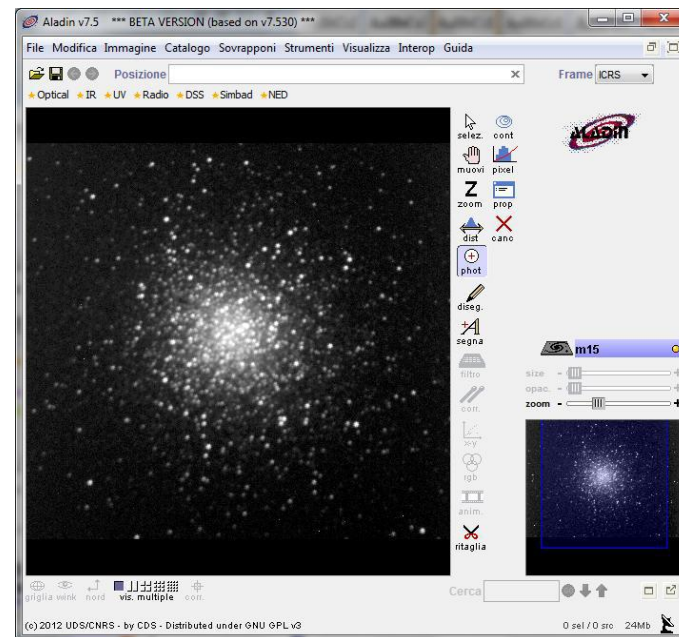
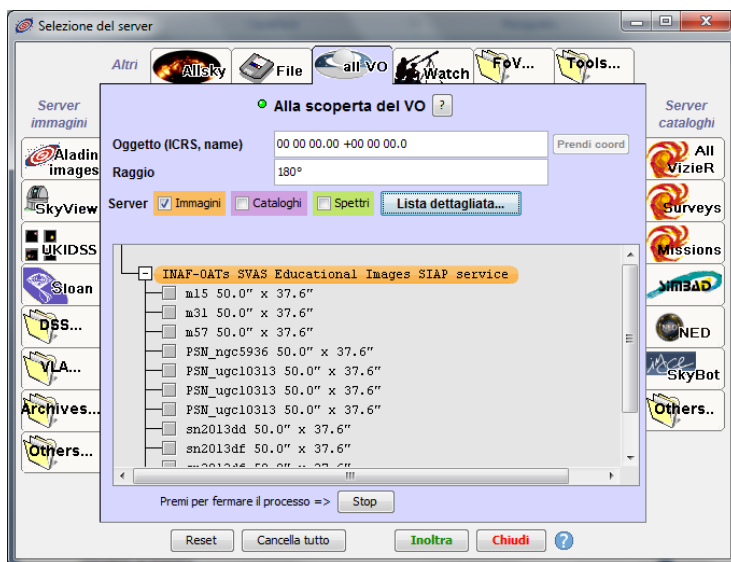


VESPA - Graphical User Interface



VESPA - access data through the VO

- Successfully used at Trieste observatory for publishing data of our educational SVAS (stars go to school) telescope
- The SVAS service has been registered (EURO-VO registry) and accessible through the standard VO tools



VESPA - technical details and the future

- FITS headers must include
 - TELESCOPE and INSTRUMENT that define the service
 - keyword has to match name assigned during registration
 - “PURPOSE = edu”
- Extend support to other protocol types (SSAP):
 - at the moment only the SIAP (Simple Images Access Protocol) is supported
 - we are in contact with users interested in educational radio spectra publishing
 - we are working on their test files in order to implement SSAP (Simple Spectra Access Protocol)



Open issues

- Document curation and preservation
 - on the contributor side
 - provide new documents and register them
 - keep documents updated
 - manage translations
- Distinction between educational and professional data
 - find the best tagging solution and update already existing resources
- Tools compliant to retrieve educational data
 - implement a way to query educational resources



Thank you!

- IVOA Note on Educational Resources in Virtual Observatory available in Volute, link on Edu IG wiki page:

<http://wiki.ivoa.net/twiki/bin/view/IVOA/IvoaEducation>

Educational Resources in the Virtual Observatory Version 1.0

IVOA Note 25 February 2014

Working Group

[Edu IG](#)

This version:

<http://www.ivoa.net/Documents/edumatters-20140225>

Latest version:

not issued outside EDU-IG

Previous version(s):

None

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Abstract

The goal of this IVOA Note is to introduce and explain practices followed and requirements found while creating and deploying astrophysical resources dedicated to educational purposes within the standard VO framework. Issues, proposed solutions and desirables are here reported to be possibly taken into account in future modifications of relevant standards.

In detail, we discuss: the curation of educational resources inside or along with standard registries; use cases and techniques for registering and locating documents, tutorials and similar within the registries; dealing with multiple languages.

Status of This Document

This is an IVOA Note expressing suggestions from and opinions of the authors. It 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.

