



Simple Access to VOTable

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Goals

■ The main goals of this work are :

- to provide Java VOTable parsers based on different parsing models
 - SAVOT Pull is the parser based on the pull parsing method
 - SAVOT SAX is the parser based on the SAX parsing method
- to provide small Java VOTable parsers which can be used in applets
 - memory use optimization (DOM parsers need often very large memory size)
- to provide a VOTable writer

■ History

- SAVOT is available and maintained since September 2002



SAVOT Pull

- A “data model” has been created to be able to load a VOTable document into memory
 - `cds.savot.model`
 - independent from the parsers
 - it can be used for other parsers
 - manipulations through an API (`getTable`, `setTable`, etc.)

- How to use the SAVOT pull mode ?
 - `cds.savot.pull`, `cds.savot.model`, `cds.savot.common` and `kXML` packages are required (Total : 62 Kb !)
 - The pull mode has 2 sub modes :
 - FULL : the whole VOTable document is loaded into memory
 - SEQUENTIAL : the document is loaded RESOURCE per RESOURCE in the memory

SAVOT Pull (2)

- A pull parser which loads the whole VOTable document into memory is very easy to use and it is useful to manipulate the data through the API

SAVOT SAX

■ How to use SAVOT SAX ?

- `cds.savot.sax`, `cds.savot.common` and `kXML` packages are required (Total : 23 Kb !)
- a consumer must be defined (action to execute when a start or an end element occurred, etc.)
- `cds.savot.model` is not required
 - Why ??

SAVOT Writer

■ How to use SAVOT Writer ?

- `cds.savot.writer` (14 Kb) creates a VOTable document from SAVOT model (`cds.savot.model`)
- It can be
 - associated to the model to create VOTable document from scratch
 - associated to the SAVOT parsers it is possible to parse, edit and write a VOTable document

SAVOT Future... 3.0

- Follow the VOTable versions
- Add some additional functionalities :
 - Accepted formats :
 - Encoded (64 bits) binary
 - ▶ Example : <http://vizier.u-strasbg.fr/cgi-bin/votable/-b64?-source=ISO>
 - FITS
 - ▶ Example : <http://vizier.u-strasbg.fr/cgi-bin/votable/-fits?-source=ISO>
 - In addition
 - New documentation (tutorial, ...)
 - Better SEQUENTIAL mode (not limited to Resource per Resource)
 - Higher speed for parsing and writing (if possible)
 - Sources available through CVS

Conclusion

- **Other functionalities could be added**
 - Suggestions ?
 - Warning : that must remain in the same philosophy (light, ...)

- **SAVOT is a light java based VOTable parser**
 - light but adapted to different kind of use
 - SAVOT is maintained

- **Have a look at CDS Developer's corner**
<http://cdsweb.u-strasbg.fr/devcorner.gml>
for further information