

A services validator for IVOA registries

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IVOA Interoperability Workshop
Napoli, 18 May 2011

DAL Validator

- Developed by VO-Paris Data Centre
- Presented by Pierre in Nara. Available at <http://voparis-validator.obspm.fr/>
- VOTable validation and DAL validation:
- ConeSearch, SIA, SSA, SLA, PDAP
- Output format: HTML or XML
- Simple or batch mode

VOTable Validation Service

Load specification:

Simple Image Access 1.0

Required parameters:

POS

SIZE

FORMAT

Additional parameters:

URL of the service to validate:

Run batch tests

Output format:



VOTable Validation Service

http://voparis-srv.obspm.fr/sia/sia_mama.php?&POS=180.0%2C60.0&SIZE=1.0%2C1.0&FORMAT=ALL

```
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <VOTABLE version="1.1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.ivoa.net/xml/VOTable"
3 <RESOURCE type="results"><DESCRIPTION>VOPSAT</DESCRIPTION>
4 <INFO name="QUERY_STATUS" value="OK"/>
5 <PARAM name="POS" datatype="char" unit="deg" value="180.0,60.0"/>
6 <PARAM name="SIZE" datatype="double" unit="deg" value="1.0,1.0"/>
7 <PARAM name="FORMAT" datatype="char" value="ALL"/>
8 <PARAM name="INTERSECT" datatype="char" value="OVERLAPS"/>
9 <PARAM name="SURVEY" datatype="char" value="all"/>
10 <TABLE rows="0"><PARAM name="Instrument" ucd="meta.id:instr" datatype="char" value="Photographic Focus / MAMA"/>
```

SUCCESS: valid VOTable 1.1!

SUCCESS: valid Simple Image Access 1.0!

Warning: Exactly one **FIELD** or **PARAM** *should* have `ucd="INST_ID"`, with `datatype="char"`, and `arraysize="*"`, identifying the instrument or instruments used to make the observation. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Warning: Exactly one **FIELD** or **PARAM** *should* have `ucd="VOX:BandPass_RefValue"`, with `datatype="double"`, specifying the characteristic (reference) frequency, wavelength, or energy for the bandpass model. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Warning: Exactly one **FIELD** or **PARAM** *should* have `ucd="VOX:Image_PixFlags"`, with `datatype="char"`, and `arraysize="*"`, specifying the type of processing done by the image service to produce an output image pixel. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

VOTable Validation Service

Test: FORMAT=ALL

http://voparis-srv.obspm.fr/sia/sia_mama.php?&POS=180.0%2C60.0&SIZE=1.0%2C1.0&FORMAT=ALL

```
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <VOTABLE version="1.1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.ivoa.net/xml/VOTable/v1.1" x
3 <RESOURCE type="results"><DESCRIPTION>VOPSAT</DESCRIPTION>
4 <INFO name="QUERY_STATUS" value="OK"/>
5 <PARAM name="POS" datatype="char" unit="deg" value="180.0,60.0"/>
6 <PARAM name="SIZE" datatype="double" unit="deg" value="1.0,1.0"/>
7 <PARAM name="FORMAT" datatype="char" value="ALL"/>
8 <PARAM name="INTERSECT" datatype="char" value="OVERLAPS"/>
9 <PARAM name="SURVEY" datatype="char" value="all"/>
10 <TABLE rows="0"><PARAM name="Instrument" ucd="meta.id:instr" datatype="char" value="Photographic Focus / MAMA"/>
```

SUCCESS: valid VOTable 1.1!

SUCCESS: valid Simple Image Access 1.0!

Warning: Exactly one **FIELD** or **PARAM** *should* have **ucd="INST_ID"**, with **datatype="char"**, and **arraysize="*"**, identifying the instrument or instruments used to make the observation. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Warning: Exactly one **FIELD** or **PARAM** *should* have **ucd="VOX:BandPass_RefValue"**, with **datatype="double"**, specifying the characteristic (reference) frequency, wavelength, or energy for the bandpass model. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Warning: Exactly one **FIELD** or **PARAM** *should* have **ucd="VOX:Image_PixFlags"**, with **datatype="char"**, and **arraysize="*"**, specifying the type of processing done by the image service to produce an output image pixel. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Test: FORMAT=METADATA

http://voparis-srv.obspm.fr/sia/sia_mama.php?&POS=180.0%2C60.0&SIZE=1.0%2C1.0&FORMAT=METADATA

```
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <VOTABLE version="1.1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.ivoa.net/xml/VOTable/v1.1" x
3 <RESOURCE type="meta"><DESCRIPTION>VOPSAT</DESCRIPTION>
4 <INFO name="QUERY_STATUS" value="OK"/>
5 <PARAM name="INPUT:POS" datatype="char" value=""/>
6 <PARAM name="INPUT:SIZE" datatype="double" value=""/>
7 <PARAM name="INPUT:FORMAT" datatype="char" value=""/>
8 <PARAM name="INPUT:INTERSECT" datatype="char" value="OVERLAPS"/>
9 <PARAM name="INPUT:SURVEY" datatype="char" value=""/>
10 <TABLE><PARAM name="OUTPUT:Instrument" ucd="meta.id:instr" datatype="char" value="Photographic Focus / MAMA"/>
```

SUCCESS: valid VOTable 1.1!

SUCCESS: valid Simple Image Access 1.0!

Warning: Exactly one **FIELD** or **PARAM** *should* have **ucd="INST_ID"**, with **datatype="char"**, and **arraysize="*"**, identifying the instrument or instruments used to make the observation. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Warning: Exactly one **FIELD** or **PARAM** *should* have **ucd="VOX:BandPass_RefValue"**, with **datatype="double"**, specifying the characteristic (reference) frequency, wavelength, or energy for the bandpass model. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Warning: Exactly one **FIELD** or **PARAM** *should* have **ucd="VOX:Image_PixFlags"**, with **datatype="char"**, and **arraysize="*"**, specifying the type of processing done by the image service to produce an output image pixel. Either the element is missing, or some of its required attributes are missing or erroneous. No match found.

Test: error

http://voparis-srv.obspm.fr/sia/sia_mama.php?&POS=invalid&SIZE=invalid&FORMAT=invalid

```
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <VOTABLE version="1.1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.ivoa.net/xml/VOTable/v1.1" xsi:
3 <RESOURCE type="results"><INFO name="QUERY_STATUS" value="ERROR">POS value syntax error. SIZE syntax error.</INFO>
4 </RESOURCE>
5 </VOTABLE>
```

SUCCESS: valid VOTable 1.1!

SUCCESS: valid Simple Image Access 1.0!

Questions, comments: vo.paris@obspm.fr



Validator Specifications

```
{
  "VOTable version": "1.0",
  "required parameters": {
    "POS": "180.0,60.0",
    "SIZE": "1.0,1.0",
    "FORMAT": ["ALL", "GRAPHIC", "METADATA"]
  },
  "optional parameters": {
    "INTERSECT": ["OVERLAPS", "COVERS", "ENCLOSED", "CENTER"],
    "NAXIS": "",
    "CFRAME": ["ICRS", "FK5", "FK4", "ECL", "GAL", "SGAL"],
    "EQUINOX": "",
    "CRPIX": "",
    "CRVAL": "",
    "CDELTA": "",
    "ROTANG": 0,
    "PROJ": ["TAN", "SIN", "ARC"],
    "VERB": [0, 1, 2, 3]
  },
  "test cases": [
    { "FORMAT": "ALL" },
    { "FORMAT": "METADATA" }
  ],
  "RESOURCE": {
    "xpath": "/vot:VOTABLE/vot:RESOURCE",
    "then": {
      "QUERY_STATUS": {
        "xpath": "/vot:VOTABLE/vot:RESOURCE/vot:INFO[@name='QUERY_STATUS']",
        "error type": "warning",
        "documentation": "The <code class='element'>RESOURCE</code> element <a href='\"http://ivoa.net/Documents/SIA/20091116/REC-SIA-1.0.html#query-err\"><em>should</em></a> contain an <code class='element'>INFO</code> with <code class='attribute'>name='\"QUERY_STATUS\"</code>. Its <code class='attribute'>value</code> attribute should be set to <kbd>OK</kbd>, <kbd>ERROR</kbd> or <kbd>OVERFLOW</kbd>."
      },
      "QUERY_STATUS OK": {
        "xpath": "/vot:VOTABLE/vot:RESOURCE/vot:INFO[@name='QUERY_STATUS' and @value='OK']",
        "then": {
          "6.1": {
```


Sample of DAL validator XML output

```
<?xml version="1.0" encoding="UTF-8" ?>
<validator xmlns="http://voparis-validator.obspm.fr/" xmlns:html="http://www.w3.org/1999/xhtml">
  <valid spec="VOTable" version="1.1">yes</valid>
  <valid spec="Simple Image Access" version="1.0">yes</valid>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="INST_ID"</code>, with <code
class="attribute">datatype="char"</code>, and <code class="attribute">arraysize="*"</code>, identifying the instrument
or instruments used to make the observation. Either the element is missing, or some of its required attributes are
missing or erroneous. No match found.</html:div></warning>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="VOX:BandPass_RefValue"</code>, with
<code class="attribute">datatype="double"</code>, specifying the characteristic (reference) frequency, wavelength, or
energy for the bandpass model. Either the element is missing, or some of its required attributes are missing or
erroneous. No match found.</html:div></warning>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="VOX:Image_PixFlags"</code>, with
<code class="attribute">datatype="char"</code>, and <code class="attribute">arraysize="*"</code>, specifying the type
of processing done by the image service to produce an output image pixel. Either the element is missing, or some of its
required attributes are missing or erroneous. No match found.</html:div></warning>
</validator>
```

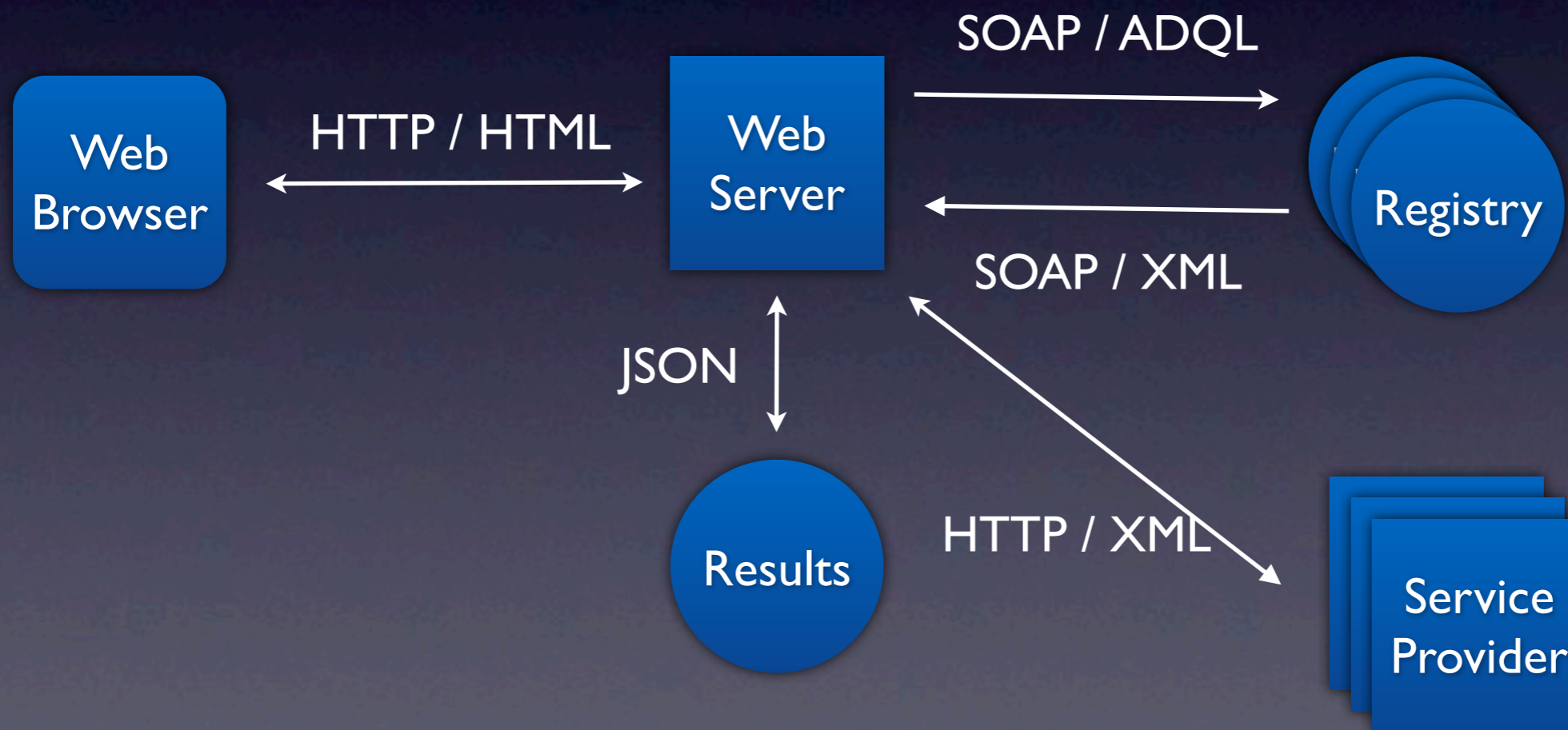
Sample of DAL validator XML output (batch mode)

```
<?xml version="1.0" encoding="UTF-8" ?>
<validator xmlns="http://voparis-validator.obspm.fr/" xmlns:html="http://www.w3.org/1999/xhtml">
<test title="FORMAT=ALL">
  <valid spec="VOTable" version="1.1">yes</valid>
  <valid spec="Simple Image Access" version="1.0">yes</valid>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="INST_ID"</code>, with <code
class="attribute">datatype="char"</code>, and <code class="attribute">arraysize="*"</code>, identifying the instrument
or instruments used to make the observation. Either the element is missing, or some of its required attributes are
missing or erroneous. No match found.</html:div></warning>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="VOX:BandPass_RefValue"</code>, with
<code class="attribute">datatype="double"</code>, specifying the characteristic (reference) frequency, wavelength, or
energy for the bandpass model. Either the element is missing, or some of its required attributes are missing or
erroneous. No match found.</html:div></warning>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="VOX:Image_PixFlags"</code>, with
<code class="attribute">datatype="char"</code>, and <code class="attribute">arraysize="*"</code>, specifying the type
of processing done by the image service to produce an output image pixel. Either the element is missing, or some of its
required attributes are missing or erroneous. No match found.</html:div></warning>
</test>
<test title="FORMAT=METADATA">
  <valid spec="VOTable" version="1.1">yes</valid>
  <valid spec="Simple Image Access" version="1.0">yes</valid>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="INST_ID"</code>, with <code
class="attribute">datatype="char"</code>, and <code class="attribute">arraysize="*"</code>, identifying the instrument
or instruments used to make the observation. Either the element is missing, or some of its required attributes are
missing or erroneous. No match found.</html:div></warning>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="VOX:BandPass_RefValue"</code>, with
<code class="attribute">datatype="double"</code>, specifying the characteristic (reference) frequency, wavelength, or
energy for the bandpass model. Either the element is missing, or some of its required attributes are missing or
erroneous. No match found.</html:div></warning>
  <warning><html:div class="warningBlock"><strong><span class="warning">Warning</span>:</strong> Exactly one
<code class="element">FIELD</code> or <code class="element">PARAM</code> <a href="http://ivoa.net/Documents/SIA/20091116
/REC-SIA-1.0.html#query-out"><em>should</em></a> have <code class="attribute">ucd="VOX:Image_PixFlags"</code>, with
<code class="attribute">datatype="char"</code>, and <code class="attribute">arraysize="*"</code>, specifying the type
of processing done by the image service to produce an output image pixel. Either the element is missing, or some of its
required attributes are missing or erroneous. No match found.</html:div></warning>
</test>
<test title="error">
  <valid spec="VOTable" version="1.1">yes</valid>
```

Specifications

- A batch-mode validator to run every day
- Language = PHP : interactive + scripted with wget
- Queries several registries (ESA, NVO, AG)
- Select services by type (SIA, SSA, CS...)
- Select services by keyword or all
- Perform validation and extract results
- Use JSON files to store results and perform comparisons

Architecture



Algorithm

- Construct SOAP request (type, keyword)
- Send query to selected registry via WS
- For each resource found examine services
- For each services of xsi:type ParamHTTP perform validation
- If comparison is requested show diffs, if same results, increment # of days
- If required, save results to JSON file

Implementation

- PHP Class `IVOARegistry.php` to handle SOAP communication
 - Derived from `VORRegistry.php` (Shui Hung Kwok - NVO Summer School 2005)
- JSON files = natural way to save PHP arrays with `json_encode()`

SOAP concepts

- **WSDL - local or remote, eg**
<http://nvo.stsci.edu/vor10/ristandardservice.asmx?WSDL>
- **end point - the SOAP Services Provider, eg**
<http://registry.euro-vo.org/services/RegistrySearch>
- **SOAP query:**
 - input = PHP array or direct XML
 - output = PHP array and/or XML
 - NB: <interface>'s xsi:type only avail in XML output (because it's an attr) !?

I/OARegistry.php

```
// Create SOAP client and connect it to the endpoint
$this->soapClientOrg = new nusoap_client ($this->wsdl, True);
$this->soapClient = $this->soapClientOrg->getProxy ();
$this->soapClient->setEndPoint ($this->endpoint);

// Define the SOAP query using ADQL (see next slide)
$soap = <rs:Search> ... <rs:Search>

// Call the web service - send SOAP message directly
$res = $this->soapClient->call ($method, $soap);

// package the result array
$result = array (
    'data' => $res ["VOResources"], // first element is the
VOResource, possibly an array (if several resources returned)
    'xml' => $this->soapClient->responseData // since not sufficient for
some analysis also provide the XML SOAP response
);

return $result;
```


Sample SOAP Message

```
<rs:Search xmlns:rs="http://www.ivoa.net/wsdl/RegistrySearch/
v1.0"><rs:Where xmlns:rs="http://www.ivoa.net/xml/ADQL/v1.0"
xmlns:ad="http://www.ivoa.net/xml/ADQL/v1.0" xmlns:xsi="http://www.w3.org/
2001/XMLSchema-instance">
<ad:Condition xsi:type="ad:intersectionSearchType">
<ad:Condition xsi:type="ad:closedSearchType">
<ad:Condition Comparison="=" xsi:type="ad:comparisonPredType">
<ad:Arg Table="" name="@standardID" xpathName="capability/@standardID"
xsi:type="ad:columnReferenceType"/>
<ad:Arg xsi:type="ad:atomType">
<ad:Literal Value="ivo://ivoa.net/std/'.$type.'" xsi:type="ad:stringType"/
>
</ad:Arg>
</ad:Condition>
</ad:Condition>
</ad:Condition>
</rs:Where>
<from xmlns="">'.$from.'</from>
<max xmlns="">'.$max.'</max>
</rs:Search>
```

Select Registry WSDL:	NVO
Select Registry endpoint:	ESA
Select resource type:	Simple Image Access
Additional keyword:	quasar
Result Selection:	From: 1 Max: 100
Run validator:	<input type="checkbox"/> Run validator for results <input type="checkbox"/> Run validator in batch mode (several tests)
Storage:	<input type="checkbox"/> Save results to JSON file Display results <input type="checkbox"/> Compare to existing JSON file results.json
Debug level	0
<input type="button" value="Search and Process"/>	

IVOA Registry Query for type=SIA and keyword=quasar from=1 max=100

IVOA Registry Results

2 resources found.

#	IVOA Identifier	Short Name	Title (description)	Interface xsi:type, Role, Type => spec	Service URL and Validator URL	Validator results								
1	ivo://opo.stsci.edu/hst_pr_sia	HST PR SIA	Hubble Space Telescope Press Release Image Archive	Interface xsi:type=vs:ParamHTTP Role=std Type=ivo://ivoa.net/std/SIA => Spec=Simple Image Access 1.0	http://hubblesite.org/cgi-bin/sia/hst_pr_sia.pl? Validate Validate(Batch)	<table border="1"> <tr> <td>Simple</td> <td>0 fatals</td> </tr> <tr> <td>VOTable</td> <td>7 warnings</td> </tr> <tr> <td>Image</td> <td>0 errors</td> </tr> <tr> <td>Access</td> <td></td> </tr> </table>	Simple	0 fatals	VOTable	7 warnings	Image	0 errors	Access	
Simple	0 fatals													
VOTable	7 warnings													
Image	0 errors													
Access														
2	ivo://org.gavo.dc/maidanak/res/rawframes/siap	mdk_siap	Maidanak Observatory SIAP Query	Interface xsi:type=vs:ParamHTTP Role=std Type=ivo://ivoa.net/std/SIA => Spec=Simple Image Access 1.0	http://dc.zah.uni-heidelberg.de/maidanak/res/rawframes/siap/siap.xml? Validate Validate(Batch)	<table border="1"> <tr> <td>Simple</td> <td>0 fatals</td> </tr> <tr> <td>VOTable</td> <td>0 warnings</td> </tr> <tr> <td>Image</td> <td>0 errors</td> </tr> <tr> <td>Access</td> <td></td> </tr> </table>	Simple	0 fatals	VOTable	0 warnings	Image	0 errors	Access	
				Simple	0 fatals									
VOTable	0 warnings													
Image	0 errors													
Access														
Interface xsi:type=vs:ParamHTTP Role= Type=ivo://ivoa.net/std/VOSI#availability => Spec=undefined	http://dc.zah.uni-heidelberg.de/maidanak/res/rawframes/siap/availability UNKNOWN SPEC	N/A (unknown spec)												
Interface xsi:type=vs:ParamHTTP Role= Type=ivo://ivoa.net/std/VOSI#capabilities => Spec=undefined	http://dc.zah.uni-heidelberg.de/maidanak/res/rawframes/siap/capabilities UNKNOWN SPEC	N/A (unknown spec)												

Validation Results

- Simple mode: 2 tests done: VOTable and Specification

- Color coding for test results
 grey = test tried, no result
 green = test passed
 red = test failed

VOtable	Simple Image Access	1 fatals 0 warnings 0 errors
VOtable	Simple Image Access	0 fatals 7 warnings 0 errors
VOtable	Simple Image Access	1 fatals 0 warnings 0 errors

- Nb of warnings, errors, fatal errors

- Batch mode:

FORMAT=ALL	FORMAT=METADATA	error
Simple VOtable Image Access	Simple VOtable Image Access	Simple VOtable Image Access

- Validation links to see details

http://hubblesite.org/cgi-bin/sia/hst_pr_sia.pl?Validate
[Validate\(Batch\)](http://hubblesite.org/cgi-bin/sia/hst_pr_sia.pl?Validate(Batch))

JSON files

```
{"id":"ivo:\\\\opo.stsci\\hst_pr_sia","url":"http:\\\\hubblesite.org\\cgi-bin\\sia\\hst_pr_sia.pl?","title":"Hubble Space Telescope Press Release Image Archive","short_name":"HST PR SIA","date":"2011-05-09","xsi_type":"vs:ParamHTTP","spec":"Simple Image Access","specv":"1.0","params":"POS=180.0,60.0&SIZE=1.0,1.0&FORMAT=ALL","val_mode":"normal","result_vot":"yes","result_spec":"yes","nb_warn":7,"nb_err":0,"nb_fatal":0,"days_same":3}
{"id":"ivo:\\\\org.gavo.dc\\maidanak\\res\\rawframes\\siap","url":"http:\\\\dc.zah.uni-heidelberg.de\\maidanak\\res\\rawframes\\siap\\siap.xml?","title":"Maidanak Observatory SIAP Query","short_name":"mdk_siap","date":"2011-05-09","xsi_type":"vs:ParamHTTP","spec":"Simple Image Access","specv":"1.0","params":"POS=180.0,60.0&SIZE=1.0,1.0&FORMAT=ALL","val_mode":"normal","result_vot":"yes","result_spec":"yes","nb_warn":0,"nb_err":0,"nb_fatal":0,"days_same":3}
{"id":"ivo:\\\\org.gavo.dc\\maidanak\\res\\rawframes\\siap","url":"http:\\\\dc.zah.uni-heidelberg.de\\maidanak\\res\\rawframes\\siap\\availability","title":"Maidanak Observatory SIAP Query","short_name":"mdk_siap","date":"2011-05-09","xsi_type":"vs:ParamHTTP","spec":"undefined","specv":"","params":"POS=180.0,60.0&SIZE=1.0,1.0&FORMAT=ALL","val_mode":"not_run","result_vot":"","result_spec":"","nb_warn":-1,"nb_err":-1,"nb_fatal":-1,"days_same":0}
{"id":"ivo:\\\\org.gavo.dc\\maidanak\\res\\rawframes\\siap","url":"http:\\\\dc.zah.uni-heidelberg.de\\maidanak\\res\\rawframes\\siap\\capabilities","title":"Maidanak Observatory SIAP Query","short_name":"mdk_siap","date":"2011-05-09","xsi_type":"vs:ParamHTTP","spec":"undefined","specv":"","params":"POS=180.0,60.0&SIZE=1.0,1.0&FORMAT=ALL","val_mode":"not_run","result_vot":"","result_spec":"","nb_warn":-1,"nb_err":-1,"nb_fatal":-1,"days_same":0}
{"id":"ivo:\\\\org.gavo.dc\\maidanak\\res\\rawframes\\siap","url":"http:\\\\dc.zah.uni-heidelberg.de\\maidanak\\res\\rawframes\\siap\\tableMetadata","title":"Maidanak Observatory SIAP Query","short_name":"mdk_siap","date":"2011-05-09","xsi_type":"vs:ParamHTTP","spec":"undefined","specv":"","params":"POS=180.0,60.0&SIZE=1.0,1.0&FORMAT=ALL","val_mode":"not_run","result_vot":"","result_spec":"","nb_warn":-1,"nb_err":-1,"nb_fatal":-1,"days_same":0}
```

Loading Results

- Another page to simply load an existing JSON file previously generated
- Time period (in days) for which the result have not changed.
- Quick access to statistics allows to build a metric of IVOA services health.


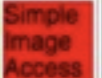
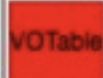
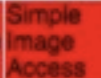
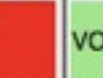
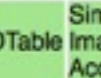
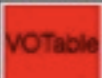
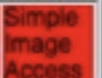
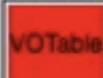
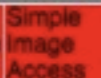
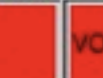
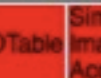
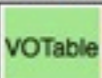
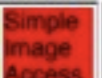
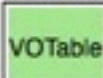
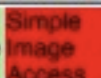

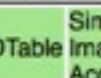
Demo

Select Registry WSDL:	NVO
Select Registry endpoint:	AstroGrid
Select resource type:	Simple Image Access
Additional keyword:	HST
Result Selection:	From: 1 Max: 100
Run validator:	<input type="checkbox"/> Run validator for results <input type="checkbox"/> Run validator in batch mode (several tests)
Storage:	<input type="checkbox"/> Save results to JSON file Display results <input type="checkbox"/> Compare to existing JSON file results.json
Debug level	0
<input type="button" value="Search and Process"/>	

IVOA Registry Query for type=SIA and keyword=HST from=1 max=100

IVOA Registry Results

3 resources found.

#	IVOA Identifier	Short Name	Title (description)	Interface xsi:type, Role, Type => spec	Service URL and Validator URL	Validator results		
						FORMAT=ALL	FORMAT=METADATA	error
1	ivo://stecf/HST/PREVIEW	HST/SIAP /PREVIEW	SIAP Service Hubble Space Telescope preview images	Interface xsi:type=vs:ParamHTTP Role=std Type=ivo://ivoa.net/std/SIA => Spec=Simple Image Access 1.0	http://archive.eso.org/archive/hst/siap1.0/preview/siap.cgi.pl? Validate Validate(Batch)	 	 	 
2	ivo://irsa.ipac/COSMOS	COSMOS	Cosmic Evolution Survey with HST	Interface xsi:type=vs:ParamHTTP Role=std Type=ivo://ivoa.net/std/SIA => Spec=Simple Image Access 1.0	http://irsa.ipac.caltech.edu/cgi-bin/Atlas/nph-atlas?mission=COSMOS&hdr_location=%5CCOSMOSDataPath%5C&collection_desc=Cosmic+Evolution+Survey+with+HST+%28COSMOS%29&SIAP_ACTIVE=1& Validate Validate(Batch)	 	 	 
3	ivo://cadc.nrc.ca/siap/hst	CADC/HST	CADC/HST Image Search	Interface xsi:type=vs:ParamHTTP Role=std Type=ivo://ivoa.net/std/SIA => Spec=Simple Image Access 1.0	http://www.cadc-ccda.hia-ihp.nrc-cnrc.gc.ca/sia/HST/query? Validate Validate(Batch)	 	 	 

Daily Cron Job

```
#!/usr/local/bin/bash
# crontab file for IVOA Service Validator

WGET=/usr/local/bin/wget

# Registry: ESA

for svc in SIA SSA ConeSearch; do
for from in 001 101 201 301 401; do
$WGET --output-document=/share/web/voparis-validation/cron-ESA-$svc-
$from.html \
--post-data "keyword=\
&type=$svc\
&wsdl=http://nvo.stsci.edu/vor10/rstandardservice.asmx?WSDL\
&endp=http://registry.euro-vo.org/services/RegistrySearch\
&from=$from\
&max=100\
&run_validator=on\
&save_json=on\
&compare_json=on\
&json_file=results-cron-ESA-$svc-$from.json\
&debug=0" \
http://voparis-validation.obspm.fr/registry-search.php
done # from
done # svc
```


Perspectives

- Works, but requires improvements / ability to save/compare “batch” validator output.
- Registries return 100 VOResources max !
Eliminate paging to store results in 1 file.
- Why NVO and AG reg. sometimes behave differently with our SOAP query ? (new)
- SimpleDALRegExt will also provide
versions of services in Registries: App. B of
[http://www.ivoa.net/internal/IVOA/SimpleDALRegExt/
SimpleDALRegExt-wd.html](http://www.ivoa.net/internal/IVOA/SimpleDALRegExt/SimpleDALRegExt-wd.html)

Try it !

- <http://voparis-validation.obspm.fr/registry-search.php> to perform a new query
- <http://voparis-validation.obspm.fr/registry-load.php> to check existing results
- Please use unique filenames (prefix with your name) for the moment...
- Questions ?