
DataLink-next progress report

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DataLink :

a 5 years history since recommendation

- Recommendation June the 21st 2015
- Feedback as early as 2017
- Several feedback sessions at Interops (Shangai, Santiago, Victoria, College Park)
- Splinters at Paris and Groningen
- Version 1.1 started in January 2019
- Moved to [ivoatexd/github](https://github.com/ivoatexd) in June 2019 (Mark Taylor)
→ by the way Mark became a new author (issue#6)



Closed issues

6 Open ✓ 17 Closed	Author ▾	Label ▾	Projects ▾	Milestones ▾	Assignee ▾	Sort ▾
 completing the bibliographical references 1.1						1
#38 by Bonnarel was closed 21 hours ago						
 An Implementation appendix was missing.						2
#31 by Bonnarel was closed 3 days ago						
 Lack of a simple links endpoint column recognition in tables						1
#29 by Bonnarel was closed yesterday						
 Incomplete self-describing services subsection						1
#25 by Bonnarel was closed yesterday						
 missing DESCRIPTION element in the service descriptor						2
#23 by Bonnarel was closed yesterday						
 Add a "content-type" PARAM in the service descriptor RESOURCE						1
#22 by Bonnarel was closed yesterday						
 free name for service descriptors						2
#21 by Bonnarel was closed yesterday						
 Nest service descriptor resources in case of multi "results" resources						1
#20 by Bonnarel was closed yesterday						
 INFO DataLink tag in VOTable response						2
#17 by Bonnarel was closed 23 hours ago						
 insisting on the importance of using the description field						3
#16 by Bonnarel was closed 23 hours ago						
 URL with URI fragments						9
#15 by Bonnarel was closed 23 hours ago						
 DataLink availability TBD						5
#14 by Bonnarel was closed 21 hours ago						
 DataLink capability and DataLink registration						2
#13 by Bonnarel was closed 21 hours ago						
 replacing "resource" by "endpoint" when appropriate						2
#11 by Bonnarel was closed 23 hours ago						
 Add new author for Datalink spec : Mark Taylor						3
#8 by Bonnarel was closed yesterday						
 Add new use cases in 1.2 1.1						2
#7 by Bonnarel was closed 21 hours ago						
 In General Introduction the scope of "DataLinking" is restricted to datasets						1
#6 by Bonnarel was closed 21 hours ago						

DataLink scope

- DataLink is not only for adding links to datasets but also for
 - recordsets in catalogs,
 - entities in ProvTAP/ProvSAP,
 - Journals,
 - Catalogs
 - Etc...
- Intro text + use cases to reflect that (issues #6 #7)
- Simple RECOGNITION mechanism using LINK + special content-type (issue #29)



Links « endpoint » changes

- Change « resource » to « endpoint » (issue #11)
- Enhance the standardID INFO tag (issue #17)
- Enhance the need for meaningful « description » FIELD in the response (issue #16)
- Allow URI fragment in access URL (issue #15)



Service descriptors changes

- Better recognition and organization of service descriptors
 - Nesting of resources (Optional) (issue #20)
 - Name for service descriptor (issue #21)
 - Description TAG (issue #23)
 - Content-type PARAM (issue #24)
- Changes in examples which makes more sense (issues #20, #21, #22, #23)
- Full refurbishing of self-describing service (custom services oriented) (issue #25)



Capability/availability issues

- one PR Approved but sharp discussion on need for registration of services, VOSI endpoints and usage of availability. (issues #13, #14)
 - Text changed from registrable services with VOSI endpoints to a simple « capability ».
 - Still possible to create a « service » with this single capability
 - Availability comes for free (or not) according to DALI (if it is a service) according to DALI



Other things

- Implementation note proposed and drafted (issue #31)
- 3 errata for version 1.0 fixed but not published. (issues #1, #2, #3)



Open issues

ivoa-std / DataLink

Watch 8

Star 0

Fork 3

Code

Issues 6

Pull requests 1

Actions

Projects 0

Wiki

Security 0

Insights

Filters

is:issue is:open

Labels 13

Milestones 0

New issue

6 Open 17 Closed

Author

Label

Projects

Milestones

Assignee

Sort

Incomplete content_type subsection. TBD

#42 opened 15 days ago by Bonnarel

Some links in the {links} table may have restricted acces. Trying to access them gets a 403 error message.. TBD enhancement

#33 opened on 23 Oct 2019 by Bonnarel

4

Lack of templated endpoints mechanism TBD enhancement

#27 opened on 22 Oct 2019 by Bonnarel

7

Missing ID in Self-Describing Service example?

#3 opened on 4 Jun 2019 by mbtaylor

2

Missing text in sec 4.4

#2 opened on 4 Jun 2019 by mbtaylor

2

Hanging if clause in sec 4.3

#1 opened on 4 Jun 2019 by mbtaylor

2

Completing « content-type » mime-type by dataproduct_type parameter

- Clients have to know if the « progenitor », « derived » « co-generated » or « counterpart » link is an image, timeseries, spectrum, etc ..
- Reuse ObsCore vocabulary
- This vocabulary will become soon an IVOA vocabulary.
- Issue #42



Some links in the {links} table may have restricted access.
Add new field to give status for some specific user

- Avoid error 401 or error 403 when accessing reserved access links
- Proposal to add one or two fields to give status
- Issue #33
- DataLink 2 ?



Lack of templated endpoint mechanism in service descriptor

- We have various use cases where we want to pick up variables values in the table to fill a template URL (eg : RESTful URL but not only)
- Proposal to have a mechanism based on RFC6570
- Various flavors discussed :
 - absolute URL :

```
<PARAM name="accessURL" datatype="char" arraysize="*" value="http://example.com/mylinks/{ $ID/download}" />
```

- Relative URL :

```
<PARAM name="accessURL" datatype="char" arraysize="*" value="http://example.com/mylinks/ » />
```

```
+ <PARAM name="Proposal" utype="template" datatype="char" arraysize="*" value="P/{?Proposal*}#summary" />
```

- Templated Link inside a PARAM

```
<PARAM name="accessURL" datatype="char" arraysize="*" value="*">
```

```
<DESCRIPTION> Bibcode retrieval for sources</DESCRIPTION>
```

```
<LINK contentType="text/html" title="URL for ${MAIN ID} bibcode"
```

```
href="http://simbad.u-strasbg.fr/simbad/sim-id?bibdisplay=refsum&ident=${MAIN_ID}#lab_bib"/>
```

```
</PARAM>
```

- Issue #27
- DataLink 1.1 or 2 ?



New Link semantic model proposal

- Link « semantics » made of :
 - Relationship
 - Information
 - Dataproduct type
 - Format
- Ada's proposal : new fields ? →
DataLink 2

