Long-term Identifiers in the VO

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URIs are increasingly becoming *the* source for a document, standard or other resource

SemWeb and Linked Data technologies rely on URIs being stable, and *should* be dereferenceable

There's no technical reason why URIs can't break, and no *technical* way of ensuring that they don't, so this has to be managed at a higher level

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Other resources, such as URIs for astronomical objects

references to literature (DOIs do most of the work)

references to other documents and resources (smallish number, not very high volume)

references to datasets (and possibly data items)

This talk will concentrate on the second set of URIs. The first set is largely sorted, and the third set presents different problems (which people are working on).

Set 3 solutions *may* solve set 2 problems as well.

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FITS: various long-term URIs. Naturally minted under `fits.gsfc.nasa.gov`, though FITS has gone from multilateral, to NASA, to IAU

IVOA SKOS vocabs: naturally `www.ivoa.net/rdf`

SIMBAD objects?: u-strasbg.fr or unistra.fr or what?

VOEvent: not exclusively IVOA, so some other domain?

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Thursday, 2011 May 19

These are the 'natural' domains; are they they best?
gov't dept; NGO; university
responsibilities migrate (eg FITS to IAU)

The timescale is that on which domains like `nasa.gov`, `u-strasbg.fr` or `ivoa.net` will change

...which is not the same as the timescale on which the organisations will change (though they're coupled)

...nor the timescale on which DNS will be replaced

Thursday, 2011 May 19

Preserve for 100 years (300? 1000?)

...so robust in the face of technology change

...and robust w.r.t organisational change

Usable (scribbleable?)

Branding can be important (funding!), but is dangerous; neutral/unbranded/opaque identifiers are safest

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Most URIs are scribbleable, unless you're talking about XRIs
Branding is both important and dangerous

- `http://www.astro.gla.ac.uk/users/norman/ivoa/long-term-uris.html`

- Alberto: at Nara (2010), at Boston ADASS (2010) and Boston AAS (next week)

- Juha Hakala (National Library of Finland): `http://metadaten-twr.org/2010/10/13/pesistent-identifiers-an-overview/` (a *very* good overview!)

- DataCite: `http://datacite.org`

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ARK: `http://www.cdlib.org/services/uc3/curation/ark.html`

EZID: `http://www.cdlib.org/services/uc3/ezid/index.html`

PURL: `http://purl.org`

DOI: `http://www.doi.org/handbook_2000/appendix_1.html`

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For the sake of discussion, how about creating PURLs
under `http://purl.org/astronomy`?