1. DOIs from ivoids using voidoi

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- ivoid vs. DOI
- Get a DOI
- The landing page
- VOResource to DataCite in XSLT

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2. ivoid vs DOI

If you're running a VO service, you already have an identifier: Your IVOID:

 $\frac{ivo://\underbrace{org.gavo.dc}_{Authority}}{Authority}/arigfh/katkat/q$

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This can be resolved (e.g., by prepending http://dc.g-vo.org/I/), but

- Because even astronomers generally don't know that, that's not useful for citations
- · Because it contains the publisher's authority, it will change when the resource moves
- No provisions are made for when the publisher goes belly-up

DOIs fix all this, and hence if we want people to cite VO resources, we better give them DOIs.



Subject: Your DOI Registration X-Mailer: DaCHS VO Server

Hello,

Someone (hopefully you) asked for a DOI to be created for the Virtual Observatory resource ivo://org.gavo.dc/arigfh/katkat/q with the title ARI Catalog of Catalogs.

Your are listed as the contact person for that resource in the VO registry. If you agree that a DOI should be created for your resource, go the the following URL:

http://dc.zah.uni-heidelberg.de/voidoi/q/ui/custom/confirm/a840f9e89e0d1608ef9 329b60385cf3e

If you did not ask for a DOI, apologies. DO NOT retrieve the above link unless you know what you are doing. The creation of a DOI is IRREVERSIBLE (at least a tombstone will always remain).

Fig. 2

3. From VOR to DOI

If you have a properly registered service, it's easy to get a DOI: http://dc.g-vo.org/voidoi/q/ui

 $\mathit{Technically},$ it's a DOI for the registry record – but we don't tell RRs and services apart in the VO.

So, enter the URI of your registry record (your ivoid):

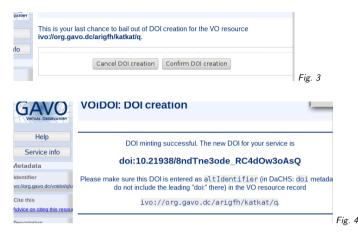
(cf. Fig. 1)

This will validate the resource record and complain if there's something wrong with it. If all is well, it will send a mail to the contact person given in the registry record.

4. You Got Mail

(cf. Fig. 2)

DOI minting is a serious business! At least conceptually, it will always have to resolve to something. In the worst case, that can be an apology that one messed it up, but it clearly would be a lot better if it didn't came to that. So: think twice before minting DOIs.



5. Mint the DOI

(cf. Fig. 3) (cf. Fig. 4)

6. Your Landing Page

An important part of the DOI system is that, from now on, http://dx.doi.org/10.21938/8ndTne3ode_RC4dOw3oAsQ should end up on a page that either

• points you to ways to use the resource or

• tells you what happened to it ("tombstone")

For the latter use case: VOResource has the ${\it Continues}$ relationship that hopefully will let us create forwards. . .

7. Reuse, Contribute

If you have VOResource metadata and need to build DOI records and landing pages without voidoi, don't miss

https://github.com/ivoa/vor-doi

- it has almost all the XSL you'll need for that.

Thanks!