URI fragments, and the future

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VIA VERITAS VITA

Started with an RFC comment on the VOEvent spec

...but I think it's a bigger issue

...and a practical one, rather than a theoretical nit-picking one.

I'm not trying to warn of an apocalypse, here, but there's a smart thing to do, here (and by implication...)

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http://www.ietf.org/rfc/rfc3986.txt

http://www.ivoa.net/Documents/REC/Identifiers/
Identifiers-20070302.html#defs

ivo://authorityID/resourceKey#local_ID

VOEvent identifiers are defined in VOEvent 2.0, §2.2

RFC 3986, §3.5:

> "The fragment identifier component of a URI allows indirect identification of a secondary resource by reference to a primary resource and additional identifying information."

> "Fragment identifier semantics are independent of the URI scheme and thus cannot be redefined by scheme specifications."

> "the fragment identifier is not used in the scheme-specific processing of a URI"

A URI-handler API could be constructed in such a way that the implementation couldn't get access to the fragment.

This *would not be a bug* in the API

A proxy or cache must ignore the fragment

RFC §6.1: "When URIs are compared to select (or avoid) a network action, such as retrieval of a representation, fragment components (if any) should be excluded from the comparison."

That is, you ask the proxy/cache for `ivo://auth/obj#frag`, you get `ivo://auth/obj`

This also *is not a bug* in the cache

URIs won't last forever

- URIs won't last forever

- At some point – a decade? half a century? – there will be a replacement.

- URIs are important: there will be a mapping + gateways + proxies

- ...which may not be optional

Those gateways cannot be guaranteed to be friendly to URI schemes which depend on behaviour which the URI specification declares must not happen.

TAPRegExt uses URIs as *names*: `ivo://ivoa.net/ TAPRegExt#upload-http`

Here, there's no suggestion that the `#upload-http` 'thing' is a differently-retrieved resource

This goes *with* the grain of the URI definition

Future-proof IVOA Recommendations by not going against the grain of the underlying specifications.

If the resource will ever be *retrieved,* then the standard should explicitly note that the fragment processing is client-side.

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