

Standardising Structure in URIs

draft-ietf-appsawg-uri-get-off-my-lawn-00

Using URIs is great.

- Massive deployment / mindshare
- Lots of implementations
- Part of a pretty good distributed system

AS LONG AS YOU DON'T
HURT THE WEB

URI Opacity Axiom

“The only thing you can use an identifier for is to refer to an object. When you are not dereferencing, you should not look at the contents of the URI string to gain other information.” - TimBL

<http://www.w3.org/DesignIssues/Axioms.html#opaque>

Delegated Structure

- **authority** - defined by URI scheme
- **path** - defined by URI scheme, server
- **query** - defined by URI scheme, resource
- **fragment** - defined by media type

Ad Hoc Structure

- **Scheme substructure** - “web+foo:”
- **Hostname patterns** - “_special.example.com”
- **Fixed paths, path prefix/suffix** - “/v1/app”
- **Query conventions, “reserved” strings** - “?sig=abc”

Ad Hoc Bad.

- **Collisions** - The Web is very, very big.
- **Dilution** - “dirty” URIs.
- **Brittleness** - Managing change in a distributed system.
- **Operational Difficulty** - “my server doesn’t support...”
- **Client Assumptions** - “/v1/foo means...”

Examples

- `draft-leung-cdni-uri-signing`
- `draft-ietf-weirds-rdap-query`
- `registerProtocolHandler()`

But, but, but...

- Open Source projects do it!
- Commercial products do it!
- Yes, but they OPT INTO IT, and have other choices.
- By their nature, standards are forced onto the market.

Better Ways

- Use links!
- Use `.well-known/`
- Use headers

Next

- Three private drafts
- Lots of +1 on list
- Adopted as WG item
- Ready?