




AuthVO implementation: Data Central status update

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What is AuthVO

- Replacement for SSO Rec, see talks at previous interops
- Mark (next talk) will cover the current status of the document
- This talk will cover what Data Central has done since Strasbourg (the last interop)

Updates since Strasbourg

- Pull Request to pyvo to add initial support for AuthVO with OAuth 2.x and Device Code
- Pull Request to vollt for AuthVO support
- Apereo CAS fully tested
- Dynamic Client Registration helper fully tested

pyvo Pull Request

- https://github.com/astropy/pyvo/pull/785
- Just does device code for now
  - Other challenge types can be added in future PRs
- Need to clarify what OAuth libraries to use
  - There's some concerns about requests-oauthlib's maintenance

pyvo Pull Request next steps

- What do the pyvo maintainers think of the design/approach? What do users think?
  - I would expect that astroquery would use this code to handle authentication in the future
- Is there anything missing (other than additional challenge types)?

vollt Pull Request

- https://github.com/gmantele/vollt/pull/165
- Authorised and anonymous queries work with a dummy client and pyvo (with the above PR)
- To be included as part of our new TAP service for Data Central 3.0
  - Will run under Kubernetes and deployed via helm, come ask if interested

Apereo CAS

- Found a bug with client ID scopes and device code access, resolved in latest Apereo CAS release candidate (version 8.1)
  - Will upgrade production instances to 8.1 once the final release is available
- Apereo CAS (based on our testing) provides all the features required for AuthVO

Dynamic Client Registration helper

- Created so we have more control over how and what clients register
- Will allow us to block clients requesting scopes that VO clients don't need, incorrect redirect URLs etc.
- Fully tested and ready for Data Central 3.0

What next?

- Finish AuthVO for other Data Central VO services (SIA/SSA/SCS)
- Finish pyvo pull request (aiming to get it in May 2027 release)
- Launch Data Central 3.0 with discoverable authentication