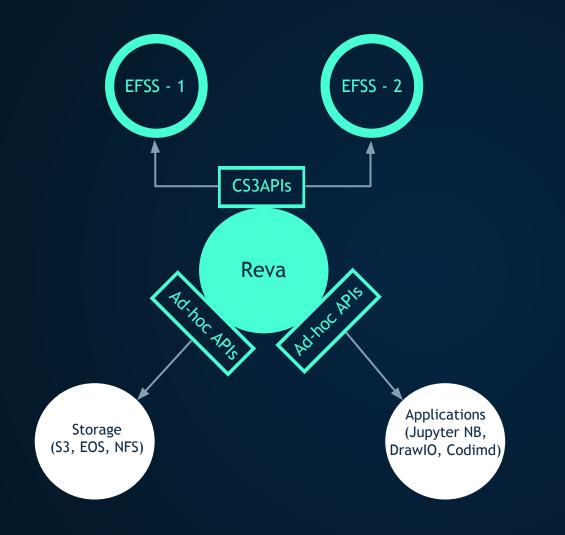


Evolution of CS3APIs and the IOP

Ishank Arora CS3 2021



The concept

What?

Why?



CS3APIs: The gateway to Interoperability

- Defined using Protocol Buffers
- GRPC as transport protocol
- Microservices architecture

Dynamic Registries



Authentication Mechanisms

- Basic
- Bearer
- OIDC



Storage Mounts

- **EOS Home**
- EOS Global
- Local Home
- S3 Home



Application Providers

- Jupyter-labs
- Codimd
- DrawlO

Behind the curtain

Alice shares file with Bob

/home/file-123.txt /home mount: ID xxxx456 01



Bob accesses file via /global/alice/file-123.txt

Registry redirects xxxx456 requests to Global SP

02



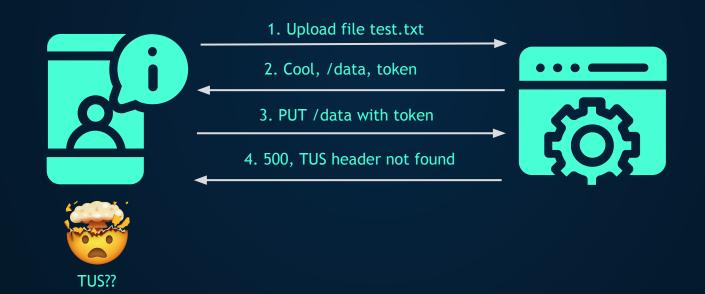
Evolution of CS3APIs: Past



Config-controlled protocol choice



Supports only one at a time



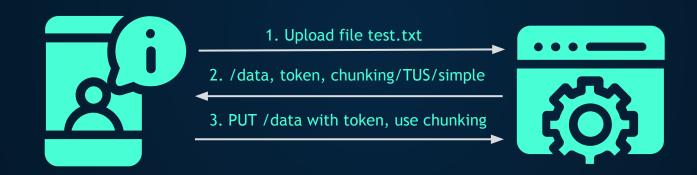


Choice of protocol with the client



User-agent based capabilities

Evolution of CS3APIs: Now



Interoperability for Europe





User Discovery

User-privacy compliant discovery and invites

Invitation API Mesh Provider API



User Experience

Seamless integration with your favourite EFSS

OCM API



Use Cases

Data science envs, Collaborative editing, BYOP

Application Provider API

CS3APIs: OCM

Invite API

- Generate invite tokens
- Forward metadata to original provider
- Accept invites
- Retrieve metadata for accepted users

CS3APIs: OCM

OCM API

- Create/delete/list/update created and received shares
- Create share references (to WebDAV endpoints)
- Unprotected endpoints on the recipient site

CS3APIs: OCM

Mesh Provider API

- Retrieve metadata exposed by providers
- Check if incoming requests can be allowed

Contribute



https://reva.link/docs/



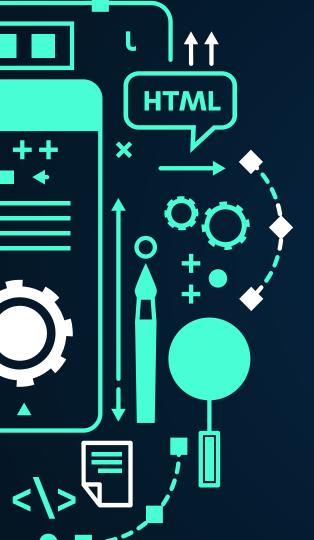
https://gitter.im/cs3org/REVA



https://github.com/cs3org/reva



https://cs3mesh4eosc.eu/



Thank you!

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