



How to contribute to ScienceMesh

Hugo Gonzalez Labrador

CS³MESH⁴EOSC Connecting European Data

Various areas















APIS OPENCLOUDMESH

API/Protocol Design

WOPI





























Software Development

Monitoring/Insights





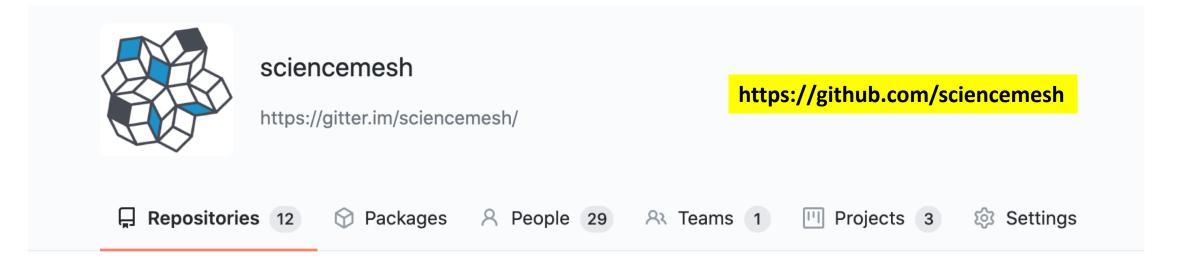


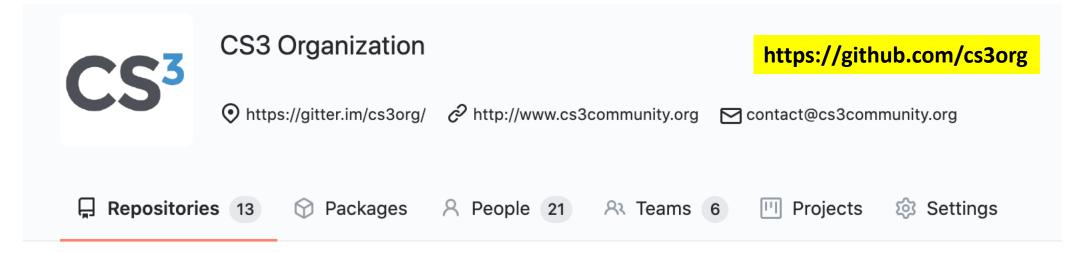






Everything happens on Github







How to contribute?

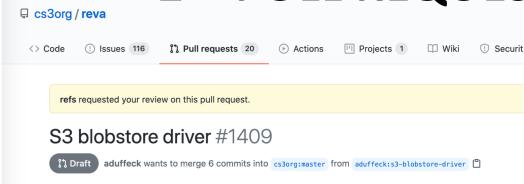
1 – FORK



4 – MERGE



2 – PULL REQUEST

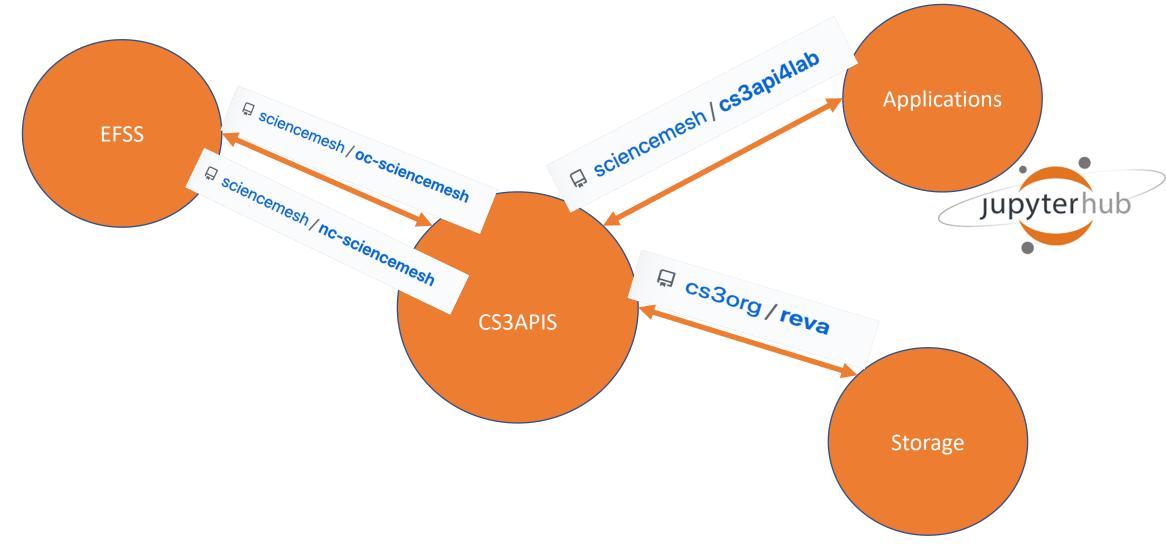


3 – DISCUSS & REVIEW











CS3 APIs – From proto to prod

☐ cs3org / cs3apis

Protocol Documentation

Table of Contents

GatewayAPI

cs3/gateway/v1beta1/resources.proto

cs3/gateway/v1beta1/gateway_api.proto

70 77 70 70 70 70 70 70 70 70 70 70 70 7	
M AuthenticateRequest	
M AuthenticateResponse	99
M GetQuotaRequest	100
M InitiateFileDownloadResponse	101
M InitiateFileUploadResponse	102
M ListAuthProvidersResponse	103
M ListRecycleRequest	104
M ListRecycleStreamRequest	105
OpenFileInAppProviderRequest	
M PurgeRecycleRequest	106
M WhoAmlRequest	107
M WhoAmIResponse	108
OpenFileInAppProviderRequest.ViewMode	100

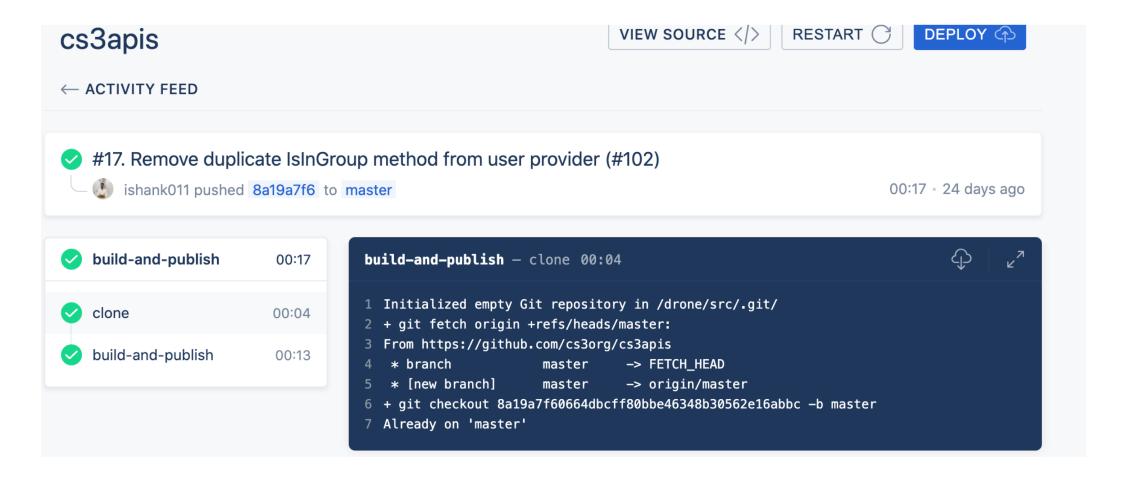
AuthenticateRequest

Field	Туре	Label	Description
opaque	cs3.types.v1beta1.Opaque		OPTIONAL. Opaque information.
type	string		REQUIRED. The type of authentication to use.
client_id	string		OPTIONAL. The id of the client. For basic authentication with usernam password both client_id and client_secret are expected to be filled. He example, for OIDC only a token is necessary.
client_secret	string		OPTIONAL. The secret of the client.

```
Opaque: &typespb.Opaque{
        Map: map[string]*typespb.OpaqueEntry{
                "Upload-Length": {
                        Decoder: "plain",
                                 []byte(strconv.FormatInt(md.Size(), 10)),
                        Value:
                },
        },
},
```

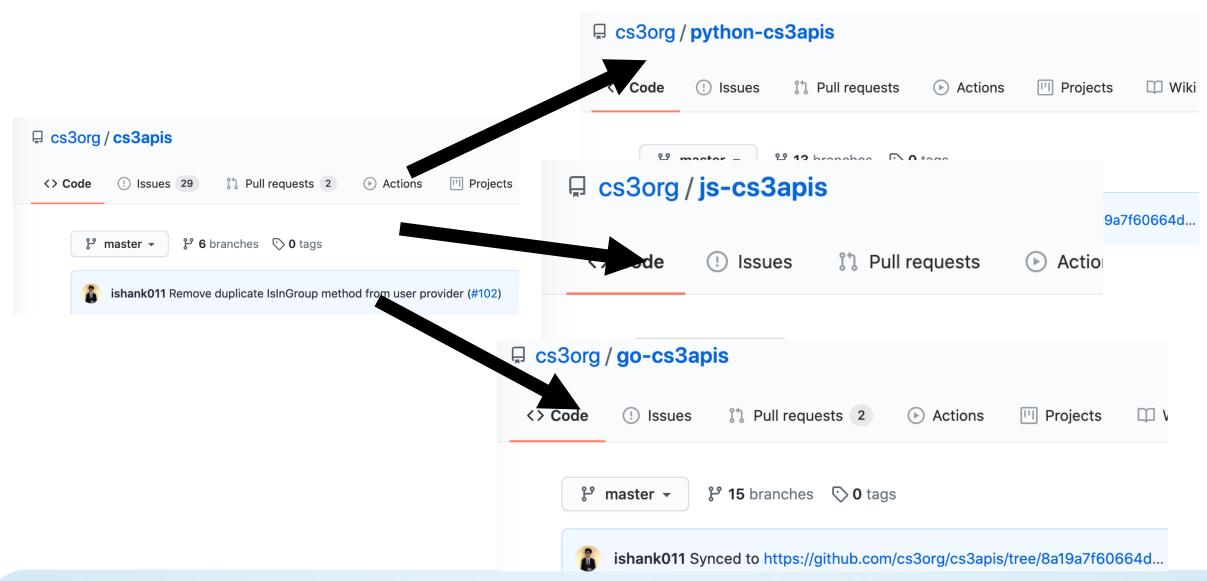






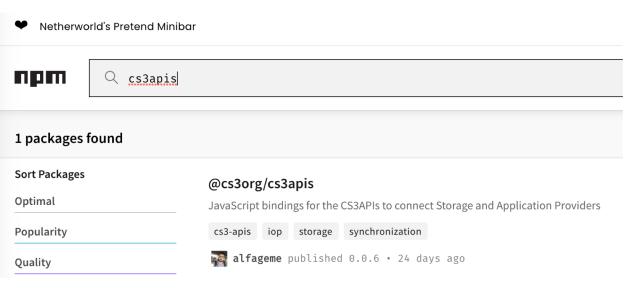


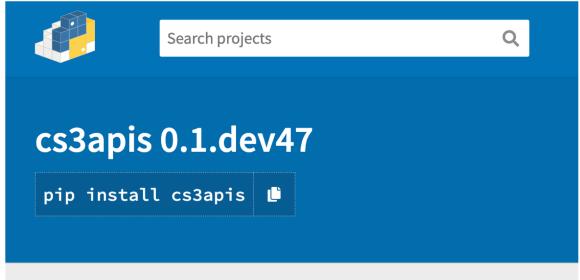
CS3APIs available in major languages





And in major package repositories (Go, Pypi, NPM)













Documentation

Overview

IOP

Deployment

Monitoring

Accounting Metrics

How to join

ScienceMesh?

Integrations

Changelog

Contribution

Guidelines

Documentation / IOP

Inter-Operability Platform

What is the IOP?

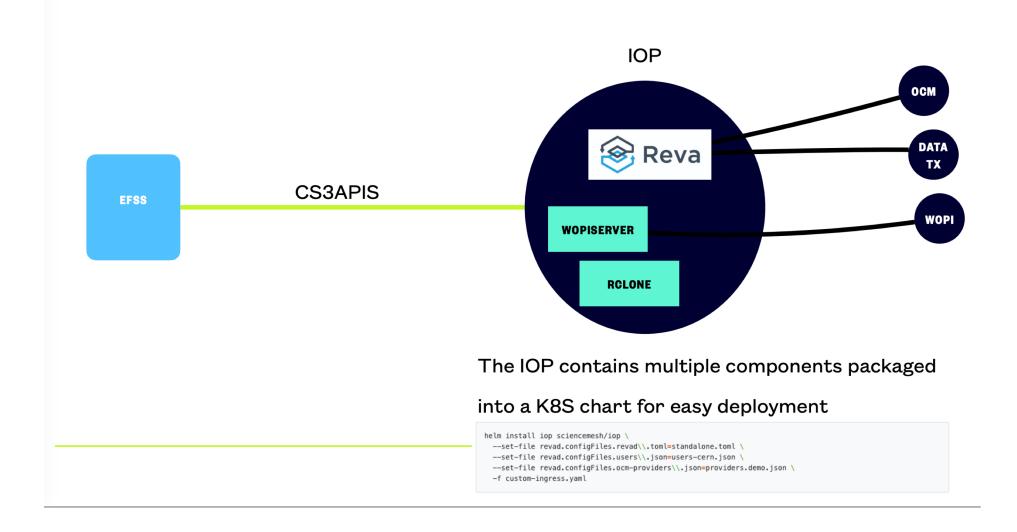
What is the IOP?

ScienceMesh is the Federated Science Cloud Mesh that connects existing and heterogenous sites in a transparent way. Is very important to ensure inter-operability that the sites are able to talk to each other independently of the technology stack. For such reason, the IOP is a compoent to be deployed in each site to ensure compatibility across sites and being able to join the mesh.

How deploy the IOP?

https://developer.sciencemesh.io/docs/iop/





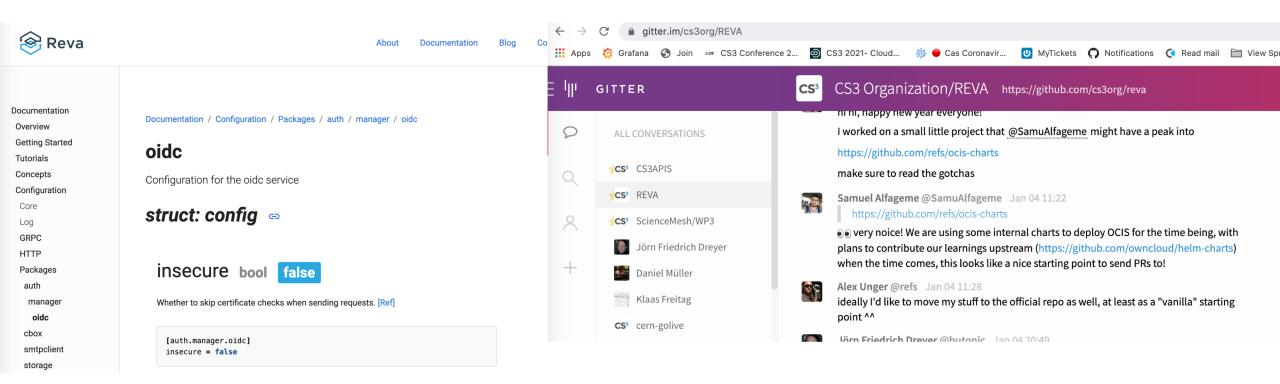




- Go server, ideal for systems engineering
- Multi-protocol: GRPC, HTTP, add your own (WebSockets, FTP, ...)
- Implements various APIs: CS3APIS, OCM, WebDAV, OIDC, ...
- Process management done as NGINX (kill, reload, ...) to ensure prod safet
- No-nonsene config: revad —c config —p /var/run/revad.pid
- Modules to extend GRPC services: storages, auth mechanisms, ...
- Modules to extend HTTP services
- Service discovery, clustering, ... left to other technologies (K8s, etcd, ...)
- Keep it minimal and simple



Reva – Documentation and Forum



https://reva/link

https://gitter.im/cs3org/REVA



Reva: Enforce Quality

18:04 • 9 days ago

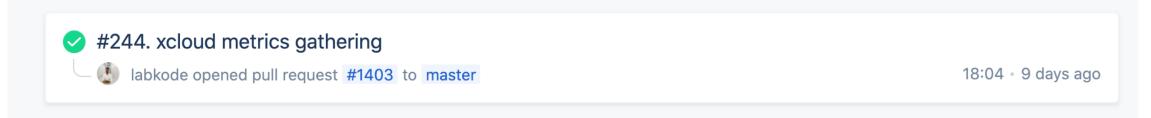


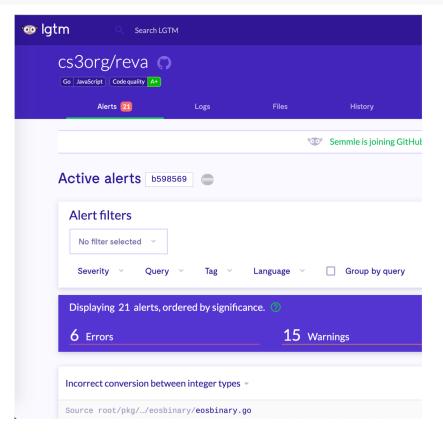


1. License check – ensure software remains open



Reva: Enforce Quality





2. Security vulnerability check







#244. xcloud metrics gathering



labkode opened pull request #1403 to master

18:04 • 9 days ago

```
251 go test -race ./...
252 go: downloading github.com/cs3org/cato v0.0.0-20200828125504-e418fc54dd5e
253 go: downloading github.com/google/go-github v17.0.0+incompatible
254 go: downloading github.com/stretchr/testify v1.6.1
255 go: extracting github.com/cs3org/cato v0.0.0-20200828125504-e418fc54dd5e
256 go: extracting github.com/google/go-github v17.0.0+incompatible
257 go: extracting github.com/stretchr/testify v1.6.1
258 go: downloading github.com/pmezard/go-difflib v1.0.0
259 go: downloading github.com/davecgh/go-spew v1.1.1
260 go: downloading gopkg.in/yaml.v3 v3.0.0-20200605160147-a5ece683394c
261 go: extracting github.com/davecgh/go-spew v1.1.1
262 go: downloading github.com/google/go-querystring v1.0.0
263 go: extracting github.com/pmezard/go-difflib v1.0.0
```

3. Run unit tests and linters







#244. xcloud metrics gathering



labkode opened pull request #1403 to master

18:04 • 9 days ago

Documentation / Changelog / v1.5.1

v1.5.1

Changelog for Reva v1.5.1 (2021-01-19)

Changelog for reva 1.5.1 (2021-01-19)

The following sections list the changes in reva 1.5.1 relevant to reva users. The changes are ordered by importance.

Summary 👄

- Fix #1401: Use the user in request for deciding the layout for non-home DAV requests
- Fix #1413: Re-include the '.git' dir in the Docker images to pass the version tag
- Fix #1399: Fix ocis trash-bin purge
- Enh #1397: Bump the Copyright date to 2021
- Enh #1398: Support site authorization status in Mentix
- Enh #1393: Allow setting favorites, mtime and a temporary etag
- Enh #1403: Support remote cloud gathering metrics

4. Enforce changelog to avoid surprises when upgrading



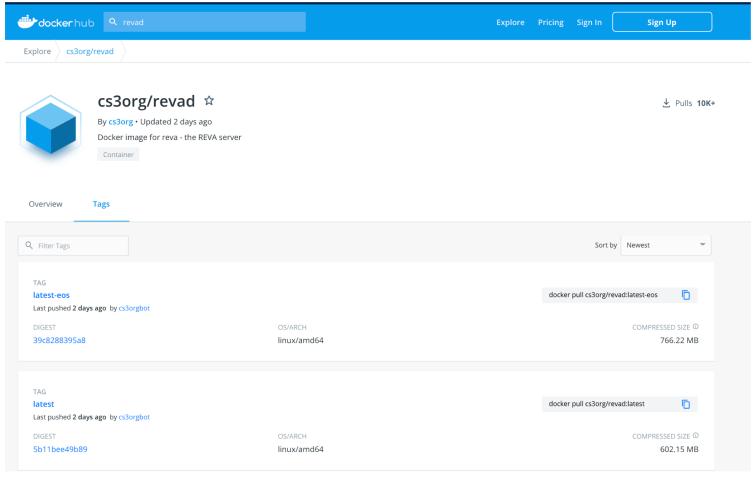
Index of /reva-releases/daily/2021-01-26/b5985691146a07a8c7c14562e0a9c01c16641595

	<u>Name</u>	Last modified	<u>Size</u>	Description
	Parent Directory		-	
2	reva_2021_01_26T141757_b5985691146a07a8c7c14562e0a9c01c16641595_darwin_386	2021-01-26 14:19	18M	
?	reva_2021_01_26T141757_b5985691146a07a8c7c14562e0a9c01c16641595_darwin_386.sha256	2021-01-26 14:19	64	
?	reva 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 darwin amd64	2021-01-26 14:19	20M	
?	reva_2021_01_26T141757_b5985691146a07a8c7c14562e0a9c01c16641595_darwin_amd64.sha256	2021-01-26 14:19	64	
?	reva 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux 386	2021-01-26 14:19	13M	
?	reva 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux 386.sha256	2021-01-26 14:19	64	
?	reva 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux amd64	2021-01-26 14:19	15M	
?	reva 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux amd64.sha256	2021-01-26 14:19	64	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 darwin 386	2021-01-26 14:19	33M	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 darwin 386.sha256	2021-01-26 14:19	64	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 darwin amd64	2021-01-26 14:19	38M	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 darwin amd64.sha256	2021-01-26 14:19	64	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux 386	2021-01-26 14:19	24M	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux 386.sha256	2021-01-26 14:19	64	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux amd64	2021-01-26 14:19	30M	
?	revad 2021 01 26T141757 b5985691146a07a8c7c14562e0a9c01c16641595 linux amd64.sha256	2021-01-26 14:19	64	

5. We store daily commit releases







6. Docker images are created daily



Major areas for improvement, want to help?

- Documentation and how-to tutorials
- Package distribution using native package managers (RPM, APT, Snapcraft, Flatpack, ...)
- Runtime plugins
- More testing (unit, end to end)
- Benchmarking (stress tests, ...)

https://gitter.im/sciencemesh

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