Grid and Web Services Working Group

IVOA Virtual Interop – on line 2021b

Giuliano Taffoni - Christine Banek

GWS agenda at Interop

Schedule Summary						
Session	**DateTime UTC**	**UTC+01:00**	**UTC-04:00**	**UTC-07:00**	**UTC+08:00**	**UTC+11:00**
		Strasbourg	*Washington DC*	*Victoria BC/Pasadena*	*Perth/Beijing*	*Canberra*
GWS 1	Nov 3 05:00	Nov 3 06:00	Nov 3 01:00	Nov 2 22:00	Nov 3 13:00	Nov 3 16:00
GWS 2	Nov 4 05:00	Nov 4 06:00	Nov 4 01:00	Nov 3 22:00	Nov 4 13:00	Nov 4 16:00

- ## GWS1 is focused on
  - Science platforms
  - GMS discussion

- ## GWS2 is focused on
  - VOSpace
  - SSO and Open discussion (open to all WGs)

- ## Two splinter in Gather.Town
  - execution planner
  - VOSpace and Rucio

Authentication & Authorization

- **Group Membership Service**
- GMS (group membership service) is an API that answers questions about whether a user is a member of a group or which groups they are a member of.

- Great discussion and some interesting outcomes
  - The "recommendation" section for implementation
  - Highly available service
  - Caching to avoid overload of queries
- We extend the RFC period to reply all questions and comments.

Single sign on

- We need to improve/implement:
  - [SecurityMethod](#) (upgrade and clarify the content)
  - Authentication discovery to allow non--browser clients to easily use auth (Mark + CADC)
  - Authentication endpoints (from capabilities or from HTTP challenge)
- Some experiments @ CADC in collaboration with Mark Taylor based on TAP and non—browser clients
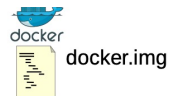
Science platforms

- ## ExecutionPlanner:
  - ### HowTo make SP interoperable
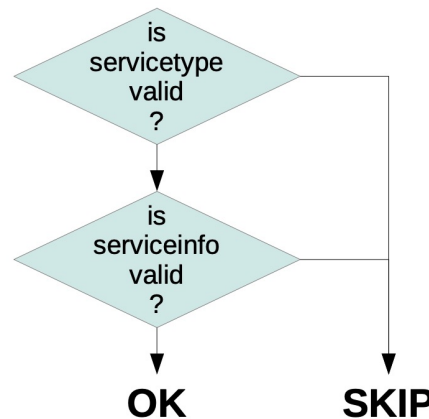 - ### Describe tasks, services and resources

Simple HTTP request

Identity provided by IVOA SSO

Can [I] run [this] <task-type> ?

Task details provided in POST data

docker.img

Simple JSON response

```
{
"reponseword": "YES",
"servicetype": "uri://docker-uws",
"serviceinfo": {
    "endpoint": "http://example.org/dkuws",
    }
}
```

is servicetype valid ?

is serviceinfo valid ?

OK   **SKIP**

```
{
"tasktype": "uri://docker-container",
"taskinfo": {
    "image": "docker.io/example:1.0"
    }


"resources": {
    mincores:  8
    maxcores:
    minmemory:  8G
    maxmemory:
    minduration: 10m
    maxduration:
    }
```

SP discussion

- Reality is much more complex that we expect:
  - There are different specification designed to do different things that interact one with the other (e.g. like Kubernetes uses helm and helm uses docker, ans so on)

- We needed a splinter to focus on different aspects

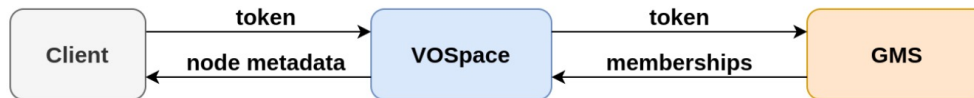- Update UWS

- Small step approach: start from simple cases…

VOSpace

- IA2 VOSpace with Token based auth and GMS
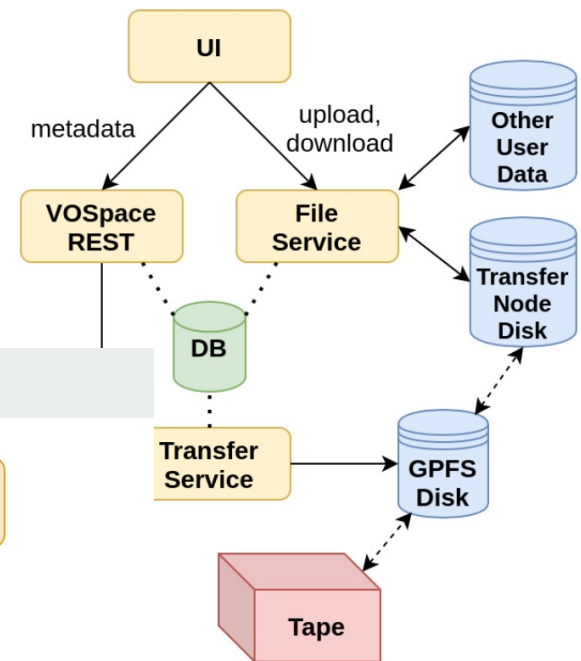
Communication with token-based GMS

- The same token used for VOSpace is forwarded to GMS (token relay)
- All the groups are retrieved and result is cached for some minutes
- getNode() endpoint returns only the nodes that can be accessed by the user (according to groupRead property), so filtering each node using isMemberOf could be heavyweight

What next?

- Close GMS Standard.

- Focus on Single Sign on.

- What about credential delegation? We need to update it (and I am sure there already some ideas/implementation

- Science platforms: we start identifying protocols needs an update…and work on them.

- VOSpace…let's continue towards new verision

- Monthly meetings? Why not….

Thanks for your attention.

We Had a productive "virtual" 2021b Iterop!

https://wiki.ivoa.net/twiki/bin/view/IVOA/InterOpNov2021GWS

Notes:https://wiki.ivoa.net/twiki/bin/view/IVOA/IVOA_Nov3_GWS_etherpad

Subscribe to grid@ivoa.net http://ivoa.net/members

Slack channel: ivoa.slack.com #grid-webservices