


Grid and Web Services Working Group



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Memories From the past...




ESCAPE
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Grid and Web Services Working Group

IVOA Interop - Groningen 2019

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Grid and Web Services Group Overview

The unique and only palindrome WG in the IVOA

“The aim of the GWS WG is to define the use of *Grid technologies* and *web services* within the VO context”

What we do :

Computing, storage, Auth&Authz, Science Platforms, cloud, containers...

Documents:

Standards;

Best practices;

GWS	PDL - Parameter Description Language	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1
	SSO - Single-Sign-On Profile: Authentication Mechanisms	2.0		2.0	2.0	2.0	2.0	2.0	2.0	1.01	1.01		
	VOSpace service specification	2.1		2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	
				2.0	2.0	2.0	2.0	1.15	2.0	1.15	1.15	1.14	
				1.13	1.12	1.12	1.11	1.10	1.02	1.02	1.01		
				1.00	1.00								
	Credential Delegation Protocol	1.0		1.0	1.0	1.01	1.01	1.00					
	UWS - Universal Worker Service	1.1		1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	
				1.0	1.0	1.0	1.0						
	VOSI - IVOA Support Interfaces	1.1		1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	
				1.0	1.0								
	GMS - Group Membership Service	1.0		1.0	1.0	1.0	1.0	1.0	1.0				

GWS hot topics for this virtual Interop

- Single sign on and Tokes
- Computing and containers
- New requirements from projects (e.g. Ska) and their impact on the stadards
- What if....? Moving into the JSON epoch

FOCUS



GWS sessions....

Schedule Summary							
Session	DateTime CEST	DateTime UTC	UTC-07:00	UTC-04:00	UTC+02:00	UTC+08:00	UTC+10:00
			<i>Victoria BC/Pasadena</i>	<i>Washington DC</i>	Bologna	<i>Perth/Beijing</i>	<i>Canberra</i>
GWS 1	<u>9 May 14:00 CEST</u>	<u>9 May 12:00 UTC</u>	9 May 05:00	9 May 08:00	9 May 14:00	9 May 20:00	9 May 22:00
GWS 2	<u>11 May 09:00 CEST</u>	<u>11 May 07:00 UTC</u>	11 May 00:00	11 May 03:00	11 May 09:00	11 May 15:00	11 May 17:00

GWS1—the most crowded session in the...

Speaker	Title	Time	Time	Material	Abstract
Giuliano Taffoni	GWS Status and perspectives	5'	14:00	PDF	Introduction to the status of the GWS. Activity done during the last year.
Séverin Gaudet	Role of an Execution Planner in an SKA Regional Centre Network Demonstrator	12'	14:05	PDF	The mini-SRCNet Demonstrator proposes to implement an interoperability model for data centres participating in the SKA Regional Centre Network and to understand the necessary APIs and services required to meet the goals of location-agnostic services for users. We will outline the model and the role for a science platform capability model, a software execution requirements data model and an execution planner in this model.
Simon O'Toole	The Australian Data & Computing Landscape	12'	14:20	PDF	An overview of the complex data and computing environment in Australia and some of the challenges to overcome for Science Platforms
Stefano Alberto Russo	Software containers and reproducibility: what can IVOA learn from it?	12'	14:30	PDF	TBD
Patrick Dowler	OIDC SSO in SRCNet prototypes	12'	14:40	PDF	TBD
Dave Morris	Execution Planner update	10'	14:55	PDF	Changes to the design from new use cases. Adding time and date ranges, "when can I do this". Simplifying the API and using UWS for execution
Baptiste Cecconi	EXTRACT-TASKA: orchestration, data mining and decision making in radio astronomy	10'	15:05	PDF	The EXTRACT project aims at building a compute continuum framework for extreme datamining. Radio astronomy is one of the selected use cases, with the NenuFAR instrument, an SKA pathfinder, focussing on transient astrophysics. The result of the project will be a computing framework enabling distributed computing, orchestrated across cloud infrastructures, from the raw data production to the public release of the derived data.
Stéphane Aicardi	EOSC computational service	5'	15:15	PDF	In the context of VESPA, I have built a model of a computational service using the UWS protocol and the EOSC cloud. The objective is to make the best use of the EOSC resources by activating or deactivating virtual computing machines according to the requested load.
All	Discussion	5'	15:20		General discussion following the talks

GWS2 – What if...and discussion

Speaker	Title	Time	Time	Material	Abstract
Dave Morris	Introduction	5'	09:00	-	Updating the IVOA specifications
Frossie Economou	A "what-if?" VO service implementation	20'	09:05	-	<p>For historical reasons, Rubin Science Platform had a mature web services architecture before starting to implement many of the required VO-compliant APIs.</p> <p>This made the gaps between the our common development patterns and the ones required to implement the standards particularly noticeable.</p> <p>We have talked about these issues before in the IVOA context (see also sqr-063.lsst.io) but sometimes these arguments come across as theoretical, or can end up being dominated by format arguments (e.g., xml vs json).</p> <p>In order to demonstrate more concretely the issues we have raised, we have done a what-if implementation alongside our standard compliant SODA service to highlight some of the divergence with current web services practice.</p> <p>We would like to prompt a discussion on how the standards can change not to solve any specific concern as a one-off, but in order to be able to evolve again, and again.</p>
ALL	Discussion	60'	09:25		

Thanks for your attention...

Have a productive 2022 **IN PERSON** Iterop!

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Slack channel: [#grid-webservices](https://ivoa.slack.com)