

EGI ACE – retour experience VIP

Atelier technique EOSC-France 2023, 25/01/2023



Sorina POP

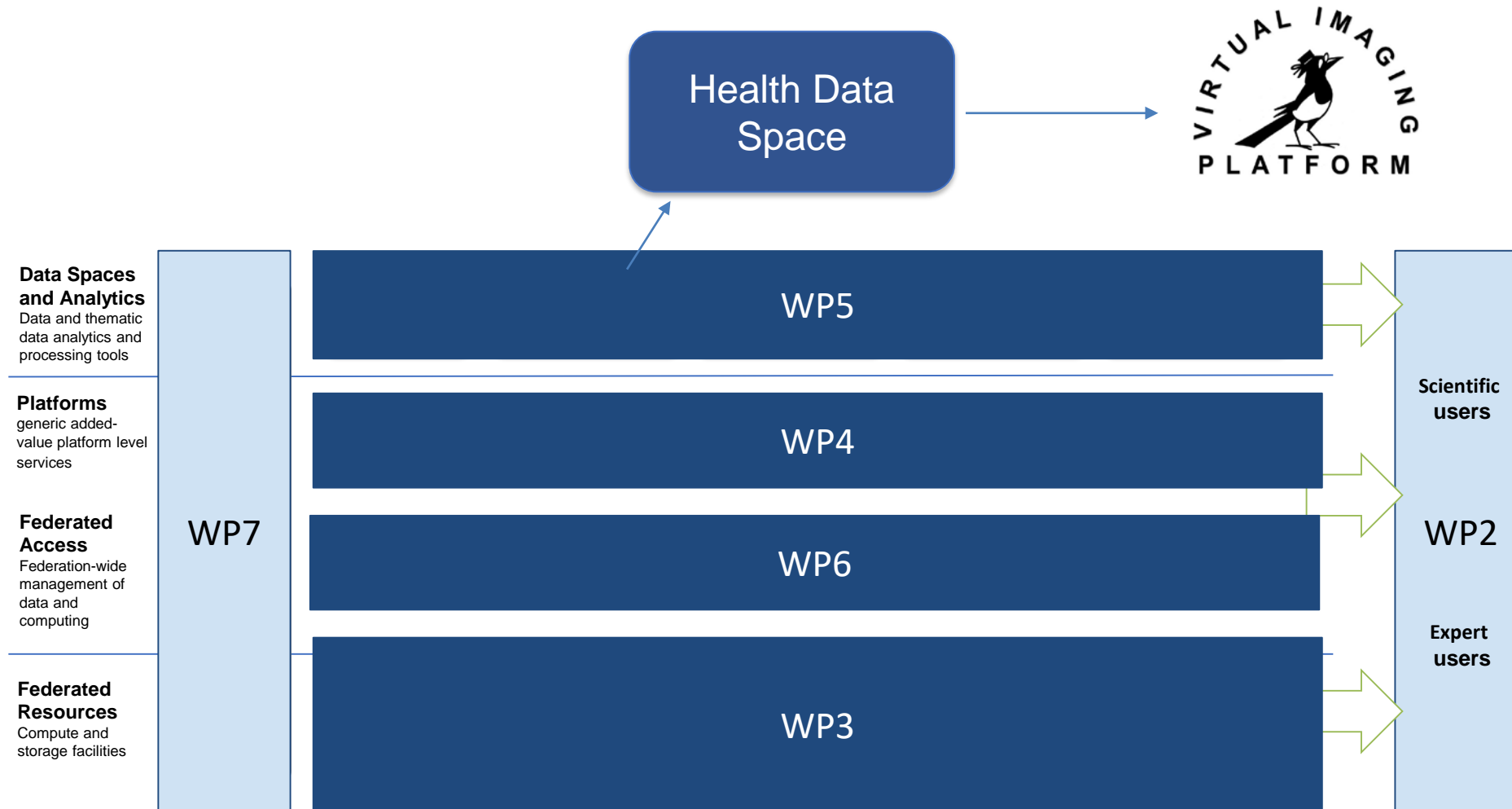
CREATIS; CNRS (UMR 5220); INSERM (U1294); INSA Lyon; Université de Lyon, France

EGI ACE

- EGI Advanced Computing for EOSC
 - Jan 2021 - June 2023 (30 months)
 - Total budget: € 12,009,988
- Main mission
 - Empower researchers from all disciplines to collaborate in data- and compute-intensive research through free-at-point-of-use services
- Main objectives
 - Implement the Compute Platform of the EOSC and contribute to the EOSC Data Commons by delivering integrated computing, platforms, data spaces and tools



EGI ACE Structure

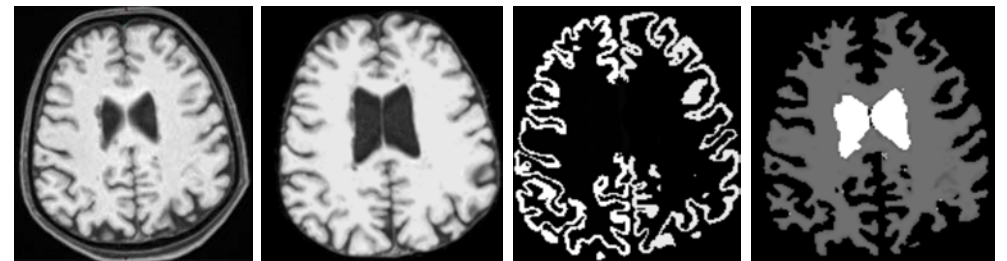


The Virtual Imaging Platform

- Scientific applications as a Service
 - More than 20 applications publicly available
- Transparent access to computing resources
 - Relies on Dirac
 - Uses computing and storage resources from the EGI biomed VO
 - 40 CPU years used in 2022
- Large community
 - More than 1450 registered users
- Open and reproducible science
 - Zenodo, DOIs, Containers, Boutiques



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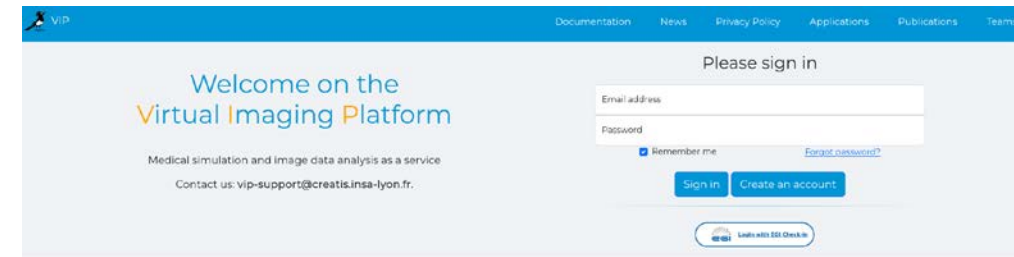
Example of white/grey matter brain segmentation with [Freesurfer](#) on VIP
Credits : Bernardino Barile and Dominique Sappey-Marini r, Creatis

VIP in EGI ACE (I)

- VIP as a service provider for the medical imaging research community
- Integration of the VIP portal/service in the EOSC marketplace
 - <https://marketplace.eosc-portal.eu/services/virtual-imaging-platform>
- Integration of new Neuroimaging applications in VIP
 - One new application every 6 months
- Integration with EGI Check-In
 - Available and demonstrated at ISGC 2022

VIP in EGI ACE (II)

- User training & support
 - Online webinar (March 2022) and training event at the EGI conference in Prague (Oct 2022)
 - Improve VIP GUI
- Support for new storage resources
 - Initially targeted iRods, but did not confirm
- Better integration with Cloud and GPU resources
 - MSSEG-2 Challenge example



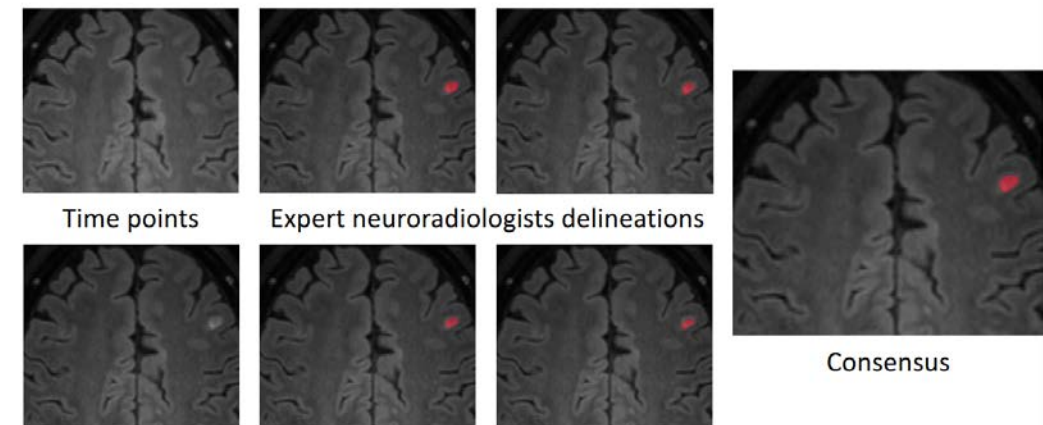
VIP is a web portal for medical imaging applications. It allows you to access scientific applications as a service (directly through your web browser with no installation required), as well as distributed computing resources in a transparent manner. It exploits the resources available in the biomed virtual organization of the EGI e-infrastructure to offer an open service to researchers worldwide. This portal is exclusively dedicated to non-commercial academic use, as indicated in the [terms of use](#). For commercial use, please contact us at vip-support@creatis.insa-lyon.fr.

Screenshot of the next VIP release 😊

The MSSEG-2 Challenge

- MSSEG-2
 - 2nd Multiple Sclerosis (MS) Segmentation (Seg), MICCAI 2021 conference
 - Automatic segmentation of tissues and lesions in MRI brain scans
 - <https://portal.fli-iam.irisa.fr/msseg-2/>
- The Challenge Partners
 - OFSEP, Empenn, France Life Imaging (FLI-IAM)
- VIP used
 - The DIRAC EGI Workload Manager Service
 - EGI Cloud and GPU resources within the Biomed VO (IN2P3 IRES, CESNET, SAVBA).
 - Note: the resources were « booked » during the testing duration

An example dataset



Conclusion

- VIP is well integrated with EGI services (by design 😊)
- EGI ACE fostered
 - Contact/integration with EOSC
 - Adoption/integration of EGI Check-in
 - Access to Cloud and GPU resources
 - User support and training

Thank you for your attention!
Questions?