

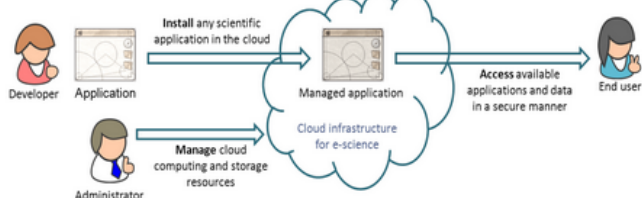
# Cloud Platform for Medical Applications



M. Bubak, P. Nowakowski, T. Bartynski, T. Gubala, D. Harezlak, M. Kasztelnik, M. Malawski, J. Meizner - Cyfronet AGH Krakow, PL  
 A. Belloum, S. Koulouzis, D. Vasunin - University of Amsterdam, NL  
 P. Coveney, D. Chang - UCL London, UK  
 R. Diaz Rodriguez, D. Ruiz Lopez - ATOS Research, ES

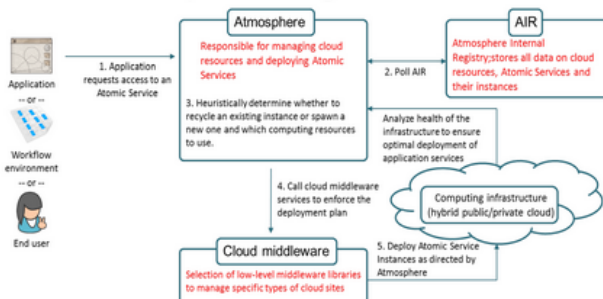


## Basic Features



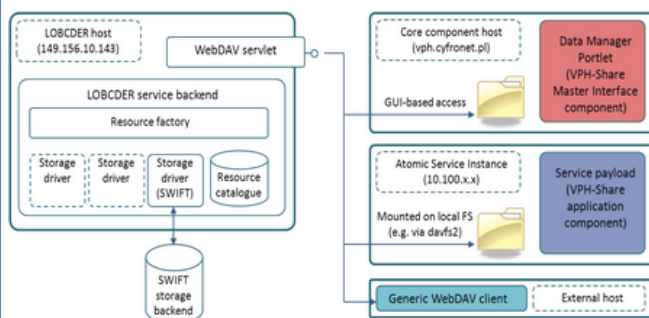
Direct access to raw virtual machines, large-scale computations can be delegated to cloud/HPC, computations can be executed close to data

## Atmosphere Management Service



Manages the available cloud infrastructure and heuristically deploys application services to ensure optimal QoS

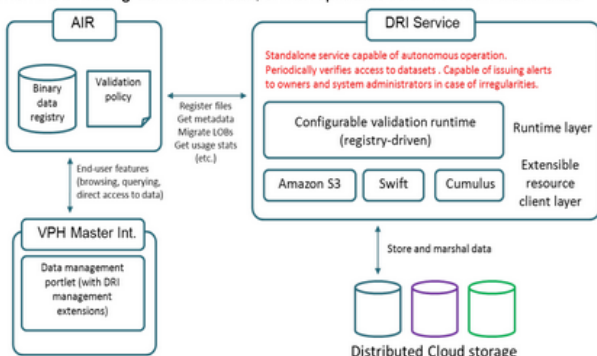
## Data Access for Large Binary Objects



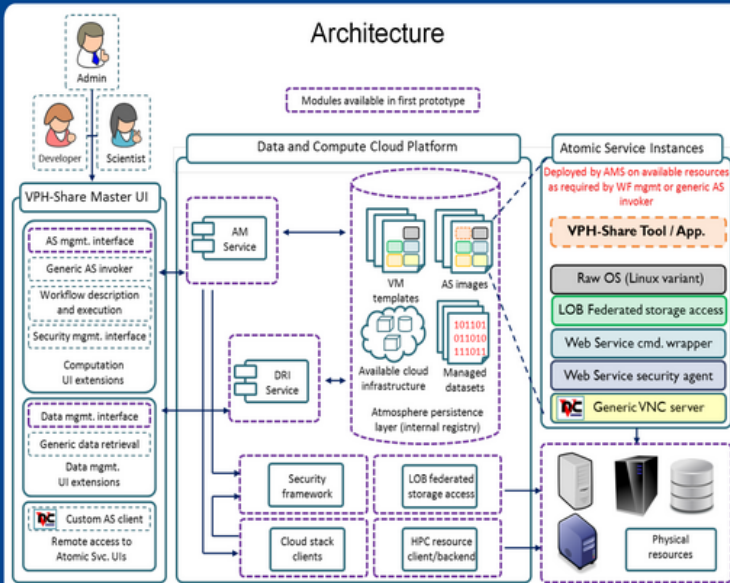
Enables data sharing, interfacing various storage resources, exposes a WebDAV interface

## Data Reliability and Integrity

Keeps track of binary data and monitors its availability, advises the cloud platform when instantiating atomic services, shifts/replicates data between cloud sites

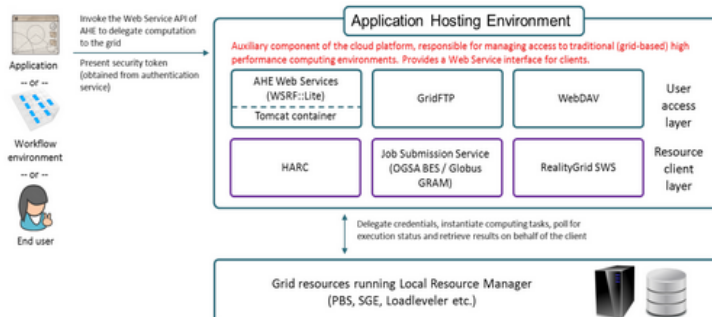


## Architecture



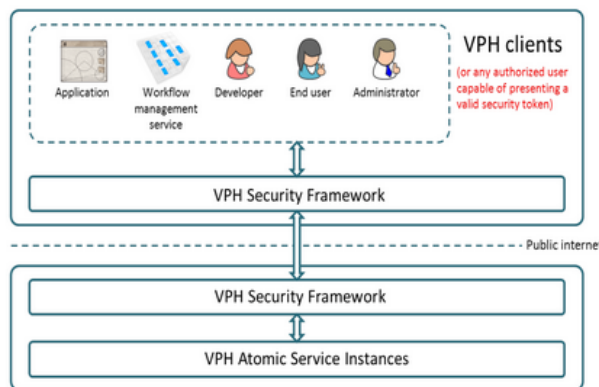
## High Performance Execution Module

Provides virtualized access to high performance execution environments



## Security Framework

Provides policy-driven access, ensures privacy and confidentiality of data



[www.vph-share.eu](http://www.vph-share.eu)

<http://dice.cyfronet.pl/>

### References

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- Maciej Malawski, Tomasz Gubala, and Marian Bubak: Component-based Approach for Programming and Running Scientific Applications on Grids and Clouds. *International Journal of High Performance Computing*, 26 (3) 275-295 2012
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