

JRA 2.2 plans and roadmap

Álvaro López García ¹

¹Instituto de Física de Cantabria - CSIC-UC
Advanced Computing and e-Science Group



Objectives

- Evolve the federated IaaS Cloud platform with functionalities required by the CCs.
- Extend "open standards"-based interfaces exposing new capabilities.
- Maintain interface support for future versions of popular Cloud Management Frameworks (CMFs).

Activities

- Extend AppDB.
- Extending VM management standards support.
- Relocating VM instances between providers.
- Integration support for CMFs.

- Basic VM management applications.
- Involved partners: GRNET (IASA).

Extending VM Management standards support

- Create two new OCCI standard extensions:
 - Support for users creating snapshots.
 - Support for changing attached resources to an executing VM instance (i.e. resize).
- Incoming requests from EGI-Engage's CC.
- Almost all CMFs support these features, but OCCI standard lacks them.
- Involved partner: CESNET

D4.2 Final specification: VM snapshot support (M9).

D4.3 Final specification: Resource template changes (M9).

Relocating VM instances between providers

- Workflow and interactions to support VM relocation.
- Involved partner: CSIC (UPV).

D4.4 Final specification: Relocating VM instances between providers (M12).

- Contribute and maintain per-backend (ONE, OpenStack, Syneffo) OCCI implementations.
- Full support for OCCI1.x
- Client support (rOCCI, jOCCI, etc.).
- Integration of new frameworks and platforms according from collected requirements.
- Implement outcome of D4.2 and D4.3.
- Support for D4.4.
- Involved partners: CESNET, CSIC (CESGA, UNIZAR, CSIC), GRNET.

- M2 Survey on OCCl support request for other CMFs.
- M3 JRA activities presentation and collection of requirements.
- M3 Review of OCCl 1.1 status and plans for OCCl 1.2.
- M3 Setup communication channel for requirements
- M6 Draft design of OCCl extension for creating snapshots
- M6 Draft design of OCCl extension for resizing running VMs
- M7 Draft of the design for VM relocation within sites.
- M7 AppDB initial design.
- M9 Final design of OCCl extension for creating snapshots (**D4.2**).
- M9 Final design of OCCl extension for resizing running VMs (**D4.3**).
- M9 Candidate version of the design for VM relocation within sites.
- M12 Initial implementation of OCCl (rOCCl, Syneffo, OpenStack) extensions.
- M12 Final design of interactions to relocate running VMs within sites (**D4.4**).

- Plans for OCCl 1.1 support in each implementation.
- Plans for OCCl 1.2 support in each implementation.
- Plans for AppDB new functionality.
- Review survey results.
 - Limited effort, so we need to prioritise effort.
 - People demanding support for other CMFs.
 - People complaining about complexity.