

Applications Database: New features for user communities

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The EGI Applications Database (AppDB) is a central service that stores and provides information about software solutions in the form of native software products and virtual appliances, about the scientists involved, and about publications derived from the aforementioned solutions. Furthermore, through its VMOps Dashboard, it enables users to deploy and manage Virtual Machines on the EGI Cloud infrastructure.

Persistent Identifiers and OpenAIRE integration

The AppDB's development process has always been focused on providing a solid user experience, by adding new and improving on existing features. In this light, AppDB has recently been extended with *support for persistent identifiers* (PIDs), via GRNet's HANDLE.NET service, for each registered solution. This makes sharing, documenting, and referencing solutions easier and more consistent, both for end users, as well as between services. As an example of the latter, this new feature allows for tighter, two-way integration with OpenAIRE. AppDB has been working on improving its existing integration of offering OpenAIRE data about projects and organizations within its portal and on exporting data about software solutions and virtual appliances back to OpenAIRE through its new OAI-PMH service.

Improvements to VA management and VM operations

As cloud-related services are rapidly proliferating, a versatile, friendly user experience is capital to their success. Up until now, the AppDB portal required that users maintain the information for each release of a virtual appliance, manually. This may become cumbersome to VA authors that use automated services or continuous integration processes to develop and build new VAs. In order to be able to integrate with such automated release flows, a continuous delivery policy has been introduced. When this policy is enabled and configured for a VA, it allows the AppDB backend to monitor for new virtual appliance releases and automatically publish them in the AppDB registry, without requiring any user interaction through the portal. Moreover, with respect to VM operations through the VMOps dashboard, some of AppDB latest developments have been focused on giving users *more control over the resources acquired by their deployed VMs*. Among other features, users can now request and release public IP addresses and attach new block storages at point of the VM lifecycle. Finally, with the upcoming use of OpenID connect, users may authenticate to AppDB's backend services and access their deployed VMs without the need of intermediate proxy certificate.

Consolidation of backend services

Stable and well-tuned backends are crucial to a satisfactory end result to frontend services such as the AppDB portal and its VMOps dashboard. To this end, a new information system service has been developed to harvest and correlate infrastructure information from resource providers and other external services. Its goal is to unify and satinate infrastructure information and provide simple query interfaces from a single access point. Furthermore, as OCCI is becoming obsolete and difficult to maintain for the resource providers, efforts are being made to populate VM image access information through each available Cloud Management Framework (CMF) native API, instead of relying on OCCI semantics.

Type of abstract

Presentation

Summary

The EGI Applications Database (AppDB) is a central service that stores and provides information about software solutions in the form of native software products and virtual appliances. Furthermore, through its VMOps Dashboard, it enables users to deploy and manage Virtual Machines on the EGI Cloud infrastructure.

In this presentation, new features and topics with impact to the user communities will be addressed, topics like, Persistent Identifiers and OpenAIRE integration, Improvements to VA management and VM operations and Consolidation of backend services.

Primary author: CHATZIANGELOU, Marios (IASA)

Co-authors: NAKOS, Alexander (IASA); KARAGEORGOS, William (IASA)

Presenter: CHATZIANGELOU, Marios (IASA)

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