Contribution ID: **108**   Type: **Training session**

Contrail cloud middleware support for EGI community platforms

Friday, 12 April 2013 11:00 (1h 25m)

Impact

The tutorial aims to give an overview of Contrail tools, the support available for these tools and examples of applications in an EGI context. As a result the participants will get a good overview of whether one or more of the tools could be applied in their situation to improve the efficiency of their community platform.

Because of the presented business & use cases they can more easily see the potential benefits, or conclude it is not something for them.

The participants will receive a good feeling for what type of support is available and whether that is suitable for them.

Summary

Operators and users of EGI Community Platforms are always looking for better tools that help the researchers of their platform, and tools that make administration of the platform easier. However interoperability with the EGI core infrastructure developments has to be maintained. The Contrail project (http://contrail-project.eu) has developed several tools that can be used by Community Platforms. This includes a Cloud filesystem (XtreemFS), a Platform-as-a-Service service (ConPaaS) and a federated identity management toolkit. Several use cases show real-life application of these tools. Contrail experts are involved in EGI infrastructure development work groups so they know about the EGI developments and requirements.

URL

http://contrail-project.eu/egi

Description

Presentations (each 20 minutes):
- Overview of Contrail offerings for EGI Virtual Research communities
This presentation will concentrate on providing an overview of the Contrail tools, use cases and support. It will do so from the perspective of Virtual Research communities. Emphasis will be on well tested tools that are directly usable.
- Cloud file system (XtreemFS)
In scientific collaborations, shared use of data is important. However data must cross administrative Cloud boundaries, be made available under certain security and performance conditions. The XtreemFS Cloud filesystem is well suited for usage as part of a community platform. The presentation will introduce XtreemFS and show how it can be used.
- ConPaaS
Deploying complex applications fast and in a scalable manner is an important part in e-Science applications. There are many cases where researchers need to do several big bursts of computation, change their applications a bit and do another set of runs. What they need then is an environment in which that is possible, without having to set up a Cloud environment for each run in cooperation with system administration. ConPaaS offers a Platform-as-a-Service service.
- Federated identity management
Single sign-on in Cloud federations is a topic in which solutions pioneered by Contrail experts are now being discussed in for instance EGI and EUDAT federated environments. This presentation will concentrate on the

needs of Community Platforms. What tools are available and useful?

- Business case examples

Contrail software tools are put into action in several use cases. In this presentation we will concentrate on a Scientific Data Analysis use case and show the advantage of using the new Contrail software tools.

- Wrap-up and questions

In the wrap-up we will introduce the open source community around Contrail. The software repository where Contrail tools can be downloaded and the support that is available. Then there is room for questions.

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Session Classification: Contrail cloud middleware

Track Classification: Cloud Platforms (Track Lead: M Drescher and M Turilli)