The European project PANACEA, provides its first outcomes

SMART, the routing overlay component developed in PANACEA, adopted by PROVE

Madrid, February 1st, 2016. PANACEA is an innovative initiative co-financed by the European Commission that aims at providing **Proactive Autonomic Management of Cloud Resources**. This research project, which started on September 2013, brings together prestigious academic institutions (like Imperial College London, Universidad Complutense de Madrid, CNRS or IRIANC) and important industrial players (like ATOS, IBM or QoS Design).

Besides the expertise provided by this well-balanced consortium, the strength of **PANACEA** relies on:

- The use of Open Source tools like **OpenNebula**[1], with a well-established user base
- The provisioning of wide range of key innovations like
    - Advanced **Machine Learning** techniques that allow to predict the time to crash of applications and proactively reconfigure the system
    - A **Smart** monitoring system that focus monitoring efforts where they are really needed.
    - An overlay routing mechanism that provides fast recovery from path outrages and performance failures
- An innovative solution that covers an existing and challenging problem.

As the project approaches its end, the first results are becoming visible and some important achievements have been obtained.

One example of this is the adoption of one of the PANACEA outcomes by a third party. Thus, **SMART**, the **Self-Managing Routing Overlay** system developed within **PANACEA** will be used by **PROVE**, a **STIC AmSud**[2] research project where different organizations from France, Uruguay and Chile are collaborating.

Prove will benefit from the capabilities provided by **SMART** (self-healing, self-optimizing and high-scalability), obtaining thus the desired flexibility and control over the routing infrastructures and being able to adapt the routes to specific

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[1] http://opennebula.org/
[2] http://www.sticamsud.org/index.php/fr/

application requirements or to the observed quality of the underlying Internet paths.

The benefits provided by **SMART** and therefore by **PANACEA** can be applied to a wide range of applications domains, including but not limited to Mission Critical Applications, Content Delivery Networks (CDN) and to the Online Gaming Industry.

However, **SMART** is only one of the six innovations provided by **PANACEA**. To discover the other key features offered by this project, please visit our website at http://panacea-cloud.eu or follow us on Twitter (http://twitter.com/PANACEA_EU).

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