Content:
The Open Cloud Computing Interface (OCCI) standard by OGF has become widely adopted in various cloud environments, such as the EGI Federated Cloud. It is currently supported by mainstream open source cloud management frameworks, e.g., OpenStack (through OCCI-OS) or OpenNebula (rOCCI) as well as others, less wide-spread ones. It is likewise supported by many workflow and submission tools used by user communities – VMDIRAC, JSAGA or SixSq. SlipStream to name but a few.

OCCI is, however, found somewhat lacking in the availability of general-purpose clients supporting the standard. Only recently, its use was enabled only in the Ruby programming language through the rOCCI Framework, and command-line/scripting use was facilitated by the rOCCI-cli client. Naturally, there has been long-standing demand for OCCI support in other programming languages, primarily in Java. It has now been answered by the introduction of jOCCI – a native Java library implementing the OCCI class structure, rendering and transport specifications, currently in accordance with the OCCI v. 1.1 specification.

Provided by the same product team already producing the rOCCI framework, it is more than "just another feature in the cloudscape." Rather than a simple translation of the client part of rOCCI, it is a brand new product – a choice that has been made not only to make it a truly native Java library, but also to introduce additional, independent, client to validate the generic functionality of existing OCCI server applications.

This work describes the new library and compares it to rOCCI in terms of design and interoperability when used against other server-side OCCI implementations. It also discusses the relative merits of implementing the client library as a fresh product, relatively separate from rOCCI, rather than just providing Java bindings for the client side of the rOCCI Framework.

Finally, the future of rOCCI and jOCCI is briefly discussed in view of the emerging OCCI v. 1.2 specification.
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Session classification: Infrastructure Cloud III

Track classification: Infrastructure Clouds and Virtualisation

Type: Oral