


## UBIVERTEX - Letter of Intention

Institute/Company: Universidad Complutense de Madrid	
Name: Ignacio Martin Llorente	Country: Spain
Activity domain: Cloud computing and virtualization	
Number of employees: <input type="checkbox"/> <50 <input type="checkbox"/> <250 <input checked="" type="checkbox"/> > 500	
Name of the team: Distributed Systems Architecture Research Group	
Scientific contact	
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Challenge descriptions:	
<p>Our research group (DSA-Research.org) conducts research in advanced distributed computing and virtualization technologies for large-scale infrastructures and resource provisioning platforms. We participate in the main European projects in cloud computing and virtualization (RESERVOIR, StratusLab, BonFIRE and 4CassSt) and grid computing (EGEE-III and IGE); lead the OpenNebula open-source project, widely used open-source technology to build cloud infrastructures; and have co-founded the OGF Working Group on Cloud Computing Interface.</p> <p>The capacity of the UBIVERTEX platform to control physical machines, storage devices and network facilities will let us to make further progress in the area of private cloud computing by enabling us to address following challenges:</p> <ul style="list-style-type: none"><li>• Compare OpenNebula with other similar technologies on the same infrastructure and with a guarantee of reproducibility</li><li>• Evaluate the scalability and elasticity of OpenNebula on large scale infrastructures</li><li>• Evaluate the support of OpenNebula for hybrid and federated deployments</li><li>• Study different alternatives and solutions for storage and networking integrations</li><li>• Evaluate alternatives for reliability and quality of service</li></ul> <p>Type of commitment (internship, Phd grant, engineering staff): 2 PhD students and 1 engineer</p> <p>Number of persons involved in these challenges: 4</p>	
Signature of Scientific Contact:	Signature of the Legal Representative:
	
Date: September 9 <sup>th</sup> , 2011	Date: