The EGI Applications on demand Infrastructure

Content

The Applications on demand Infrastructure (here referred as “Infrastructure”) is the EGI response to address the requirements of a large number of researchers, National Users Support Teams and small laboratories which do not have access to dedicated computational resources, storage and community specific Virtual Research Environments to manage and analyse large amount of data. The Infrastructure, opened in April 2017 at http://access.egi.eu, is directly targeting those researchers and research teams who do not fit into any established ‘Virtual Organization community’, and/or do not have suitable and usable services within their established VO community. Today the infrastructure is now open to additional applications, user environments, and cloud/HTC resources. In the next few months we are intensively promoting the system to potential users, mainly through the user support teams of EGI members and partners. This poster is an important milestone on this endeavour. In a nutshell, through this infrastructure, the users can: 1.) Re-use already existing applications that are made available “as a service” in dedicated user environments; 2.) Get access to a computational and data management environments to define and manage scientific workflows; 3.) Deploy elastic virtual clusters and science domain specific services within IaaS clouds to support domain specific analysis. Clusters are configured with a list of pre-defined applications/utilities and also some advanced functionalities to power on/off internal cluster nodes when they are needed. The high-level of applications/utilities available in the infrastructure can be grouped in the following categories: 1.) Applications for supporting Life Sciences disciplines: Galaxy, ClustalW2, Chipster, NAMD and AutoDock Vina; 2.) Utilities: Docker, Apache Tomcat, Hadoop, Marathon, and Chronos; 3.) Applications for supporting Engineering disciplines: GnuPlot, Octave and the Statistical R for Computing and Jupyter Notebook; 4.) Applications for A&H: the parallel Semantic Search Engine.

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