EGI: Advanced Computing for Research



Installation EC3

EGI-ACE WP6



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Introduction

Name	EC3		
Description	Elastic Cloud Computing Cluster. Deploy virtual elastic clusters on cloud resources.		
User group	Any researcher that needs a virtual cluster.		
Features	The EC3 enables users from the EGI Access Virtual Organization to deploy self-managed clusters in the resources of EGI Cloud Compute that supports this VO. The clusters are enlarged and shrunk automatically depending on the workload. The dashboard uses publicly available recipes that support SLURM, TORQUE, Apache Mesos and Kubernetes clusters, among others.		
Integrations with EGI infrastructure	Integrated with EGI Check-in and EGI Cloud Compute.		
Entry in the EGI Catalogue (www.egi.eu)	https://www.egi.eu/services/applications-on-demand/		
Entry in the EOSC Portal	https://marketplace.eosc-portal.eu/services/elastic-cloud-compute-cluster-ec3		





Introduction

- Documentation:
 - https://ec3.readthedocs.io/en/ltos/
- Sample videos:
 - https://youtube.com/playlist?list=PLgPH186Qwh_1IOesmaTLjd35Q-QqdWf9k
- Source repository including the recipes:
 - https://github.com/grycap/ec3/tree/master/templates







Roadmap

Activity	Responsible person/Partner	Description	Start Date (MM/YY)	End Date (MM/YY)
Onboarding in EGI catalogue	UPV	Already done (As part of AoD).		
Onboarding in EOSC Portal	UPV	Already done (As a separate service).		
Integration with Check-in	UPV	Already done.		
Software and recipes maintenance and upgrade	UPV (Miguel Caballer & Amanda Calatrava)	Maintain updated the software installation recipes. Add software recipes as requested by use cases.	1/21	6/23





Exploitation

Interested new communities with the need of self-managed computing clusters.

■ EC3 offers an user-friendly web interface that allows to easily deploy and configure a virtual elastic cluster on EGI FedCloud.

Not only scientific communities but also academic programs that might need that type

of resources.





