

MOORING

DEPLOYMENT ORCHESTRATION PROVISIONING MODELLING AND IDE





Contributors:



Automated orchestration with SODALITE

FOD

Deploying applications along the continuum means to deal with a set of heterogeneous infrastructures from the edge up to the cloud, including HPC facilities. The decision-making process is not so simple, identifying when and where applications must be deployed in a simple manner without experts intervening manually.

Heterogeneous deployments

Infrastructure Management

One of the most complex issues while deploying applications across the continuum is to provision and configure the underlying infrastructures to allow the application deployment, redeployment or even refactoring. Experts must know how to handle issues in heterogeneous infrastructures.

Parallelization and concurrency

XLAB

ADAPTANT*

Parallel and concurrent computing for increased application scalability adds even more complexity to design and development phases, including new classes of potential bugs as well as communication and synchronization obstacles. This, without counting on any issue at deployment stage.

Application heterogeneity

There is no one single type of application that can be deployed along the continuum, as it may range from services to functions or algorithms. Each of these applications needs different orchestration mechanisms to be deployed and current solutions do not cover all the specific needs.

How It Works

MOORING provides the means to automate the deployment of different applications over heterogeneous infrastructures, from HPC to Kubernetes clusters including support for OpenFaaS functions. Through an orchestration engine, infrastructure provisioning and configuration as well as application deployment, redeployment, configuration and refactoring are possible.

laC Layer	Runtime Layer Refactoring	Modelling Layer
Image repository	Cichestrator	ment Semantic reasoner
laC Visut Builder	Driver Node Manager Petact	IDE
TOSCA	Moniforing Option	orer
	Exporter Manager	
	Dashboard	

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