

OpenCloudware

WHAT IS OPENCLOUDWARE?

- An Open PaaS Solution
- With a IaaS Model
- To Optimize Cloud Applications
- To Respect SLA Constraints

WHO IS OPENCLOUDWARE DESIGNED FOR?

- Cloud Service Providers
- Applications Developers
- Datacenter Automation Managers
- DevOps Staff

WHERE ARE THE BENEFITS?

- OpenCloudware Supports the Lifecycle of Cloud Applications
- Helps Model, Build and Deploy on private, public and hybrid clouds
- Runs Across multiple IaaS including OpenStack, OpenNebula, VMware, etc.
- Provides Monitoring, Billing and QoS Management

OpenCloudware aims at building an open software engineering platform, for the collaborative development of distributed applications to be deployed on multiple Cloud infrastructures.

The OpenCloudware platform will be available through a self-service portal. OpenCloudware targets virtualized multi-tier applications such as JavaEE - SOA. The results of OpenCloudware will contain a set of software components to manage the lifecycle of such applications, from modelling (Think), developing and building images (Build), to a multi-IaaS compliant PaaS platform (Run) for their deployment, orchestration, performance testing, self-management (elasticity, green IT optimisation) and provisioning. Applications will be deployed potentially on multi IaaS (supporting either one IaaS at a time, or hybrid scenarios).

Partnership :

ActiveEon, Armines, Bull, eNovance, eXo Platform, **France Telecom**, Inria, IRIT – INP Toulouse, Linagora, OW2, Peergreen, Télécom Paris Tech, Télécom Saint Etienne, Thales Communications, Thales Services, Université Joseph Fourier, Université de Savoie – LISTIC, UShareSoft

See more at: <http://www.opencloudware.org>

Opencloudware Use Case and Platform Integration

OpenCloudware

OpenCloudware aims at building an open software engineering platform, for the collaborative development of distributed applications to be deployed on multiple Cloud infrastructures. See also the [Project Information page](#) for more information.

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The main technological issues addressed by the project are:

- End-to-end (retro-)modelling, from applications to the PaaS and IaaS services of the cloud computing platform. This also includes application migration, and should enable to quickly generate a model for an existing application and facilitate its migration to the cloud.
- Automated orchestration of the platform modules to manage the Dev to Cloud lifecycle of virtualized applications.
- Autonomic management of the dynamic changes that occur in Cloud PaaS applications, allowing elasticity (self-adaptation to load), energy optimisation (automated placement, capacity management, network management – Green IT), as well as the reliability of the deployment and the deployed services (self-repair).
- Multi-Cloud IaaS interfaces for interoperability, taking into account IaaS capabilities
- Taking into account the global application context and its usage in the intelligent PaaS engine, in order to optimize the service in terms of performance, energy efficiency, cost, ...
- Security: isolation of applications, encryption and security of images, identity and roles management