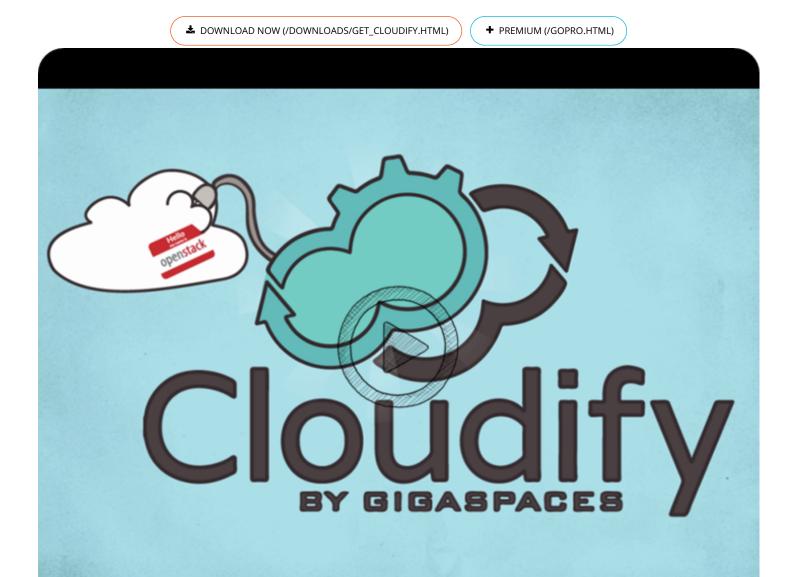
Cloudify for OpenStack

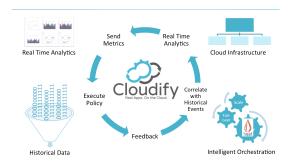
Cloudify redesigned to fit natively into OpenStack project

Becoming *OpenStack Native* is a two part process - integrating with OpenStack components and core services - Nova, Neutron, Cinder, Keystone, Heat, and more, as well as following the implementation guidelines for OpenStack projects.

With Cloudify, we took this need seriously and have rewritten our entire product in Python, and have implemented a similar stack and architecture to easily fit right in with any OpenStack project.



(http://www.youtube.com/embed/byuYoplsabw?enablejsapi=1&wmode=opaque)



Support for OpenStack Orchestration (Heat)

OpenStack Heat provides an infrastructure orchestration framework and is a core service within OpenStack.

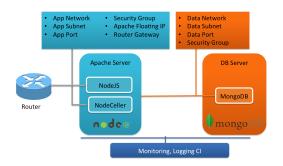
Cloudify integrates with Heat out of the box

• Cloudify Heat Template

Cloudify can be provisioned on an OpenStack environment using a Heat template. OpenStack users can use this template to modify and control the Cloudify manager configuration just like they would with any other service.

• Infrastructure Orchestration

Users can setup their OpenStack infrastructure (machines, storage, networking), directly through Heat and add Cloudify as a service on-top of that environment. Cloudify adds monitoring, logging, alerts, analytics, workflow automation, software stack configuration, and dependency management just to name a few. The Cloudify Heat plugin can also be used to deploy any given Heat stack (in the event that it has not been deployed already), along with any other Cloudify component, through the same deployment commands.



Built-in Network Orchestration with Neutron

Networking becomes a core service in any cloud deployment. Networking refers to any element under this general group of services, including security groups, private IPs, floating IPs, along with routers, DNS, vLANs, load balancers, and any other required networking function. Cloudify 3 includes support for all the networking elements, and can help automate the creation and management of these networking requirements all as part of the application deployment.



Integrating Your Entire Automation and Monitoring Tool Chain

A typical automated environment does not end with configuration management; it typically involves a varied and fluctuating toolchain to manage provisioning, configuration management, logging & monitoring, real-time analytics and workflow automation.

Cloudify brings together a variety of tools that are used throughout the various stages of the application lifecycle:

- Configuration management tools, such as Chef, Puppet, Fabric and Docker
- Infrastructure orchestration tools, such as OpenStack Heat
- Logging and monitoring tools, such as logstash and elasticsearch
- Real-time analytics tools, such as Reimann.IO

In doing so, Cloudify promotes common industry best practices, making it easy to integrate and use best of breed tools to manage your environment. In addition, Cloudify 3 comes with a new plug-in architecture that allows to easily integrate of a wide range of tools for monitoring, configuration management and cloud infrastructure.

More OpenStack Goodness



Support for OpenStack Compute (Nova) (/guide/3.1/plugin-openstack.html#nova-net-support)

Users can create machine instances, provision their software stack (even multi-tier stacks), manage their dependencies, add logging, monitoring, and policies on top, all using the OpenStack standard orchestration language - TOSCA.



TOSCA Support (http://docs.getcloudify.org/3.3.0/blueprints/spec-dsl-definitions/)

Cloudify 3 uses the TOSCA (Topology and Orchestration Specification for Cloud Applications) (https://www.oasis-open.org/committees/tc_home.php? wg_abbrev=tosca) specification as its standard templating language. The current integration includes mapping of the current HOT template into the Cloudify/TOSCA format. We are also working with the Heat team to have official support for TOSCA as a standard templating language within Heat.



VMware Support (/vmware-hybrid-cloud.html)

Cloudify integrates seamlessly with VMware Integrated OpenStack, vSphere, as well as vCloud and vCloud Air. The support for all three VMware environments provides users with a common management and automation framework. This makes it possible to easily build a hybrid cloud with VMware and OpenStack clouds. With Cloudify, users can create machine instances, provision their software stack (even multi-tier stacks), manage their dependencies, add logging, monitoring, and policies on top, all using a standard orchestration language - TOSCA.



AWS and Other Public Cloud Support

While OpenStack is becoming the de-facto standard for private cloud, the public cloud arena is still mostly dominated by AWS and GCE. Cloudify comes with built-in support for other public clouds making it simpler for OpenStack users to expand their OpenStack environment into AWS or other public clouds on-demand.

Getting Started

- Getting Started with Cloudify and OpenStack (/guide/3.1/quickstart-openstack.html)
- Setting Up Cloudify on DevStack (http://getcloudify.org/2014/07/29/DevStack-Boostrap-Cloudify.html)
- How to Bootstrap the Cloudify Manager with a Heat Template (http://getcloudify.org/2014/07/07/openstack-orchestration-heat-devstack.html)