

Ganeti Web Manager

Cluster Management Made Simple

Kenneth Lett OSU Open Source Lab



Who are we?

OSU Open Source Lab

We provide infrastructure and hosting for Open Source Projects

We foster and develop Open Source software

We are from Oregon

How do we use Ganeti

Ganeti Instance Image

Primary prod cluster

6 nodes, 147 instances

Project clusters (i.e. PSF, OSGeo, etc)

Host mail servers, websites, etc

What is GWM?

Easy to use Web interface to Ganeti

Make everything visible

Client-facing interface

Leverage all of Ganeti's features via RAPI

Provide granular permissions

Organize users arbitrarily

Make management easy with templates and bulk actions

GWM Structure

Django web framework

jQuery

Open Sourced Components

Django Object Permissions

Django Object Log

NoVNC

GWM Structure

User/Group structure determines authorization and ownership

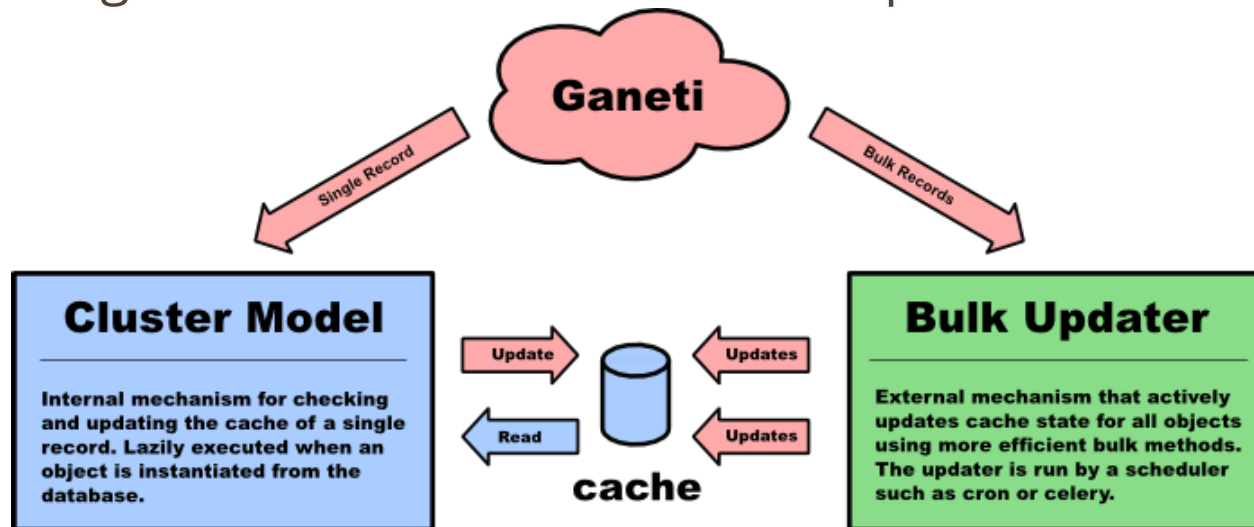
Models encapsulate persistent data for clusters and instances

Changes to the models are communicated to Ganeti as jobs

Cache system updates models from current Ganeti state

GWM Structure

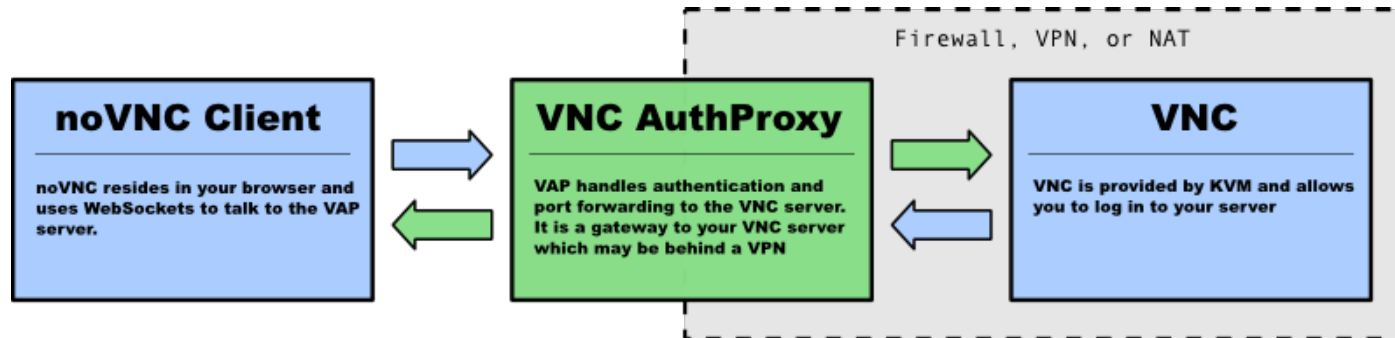
Caching cluster information to avoid frequent API calls



GWM Structure

NoVNC provides console access from the web interface

VNC Auth proxy allows access to a VNC terminal on instances from the web client



New in 0.11

Stabilize and Package

Move to Github

Modularization

Setup script (GSoC project)

Python package

Development Environment (vagrant)

Better documentation

Chef deployment (Work in progress)

New in 0.11

New Features

VM creation wizard

Bulk actions

Visualization

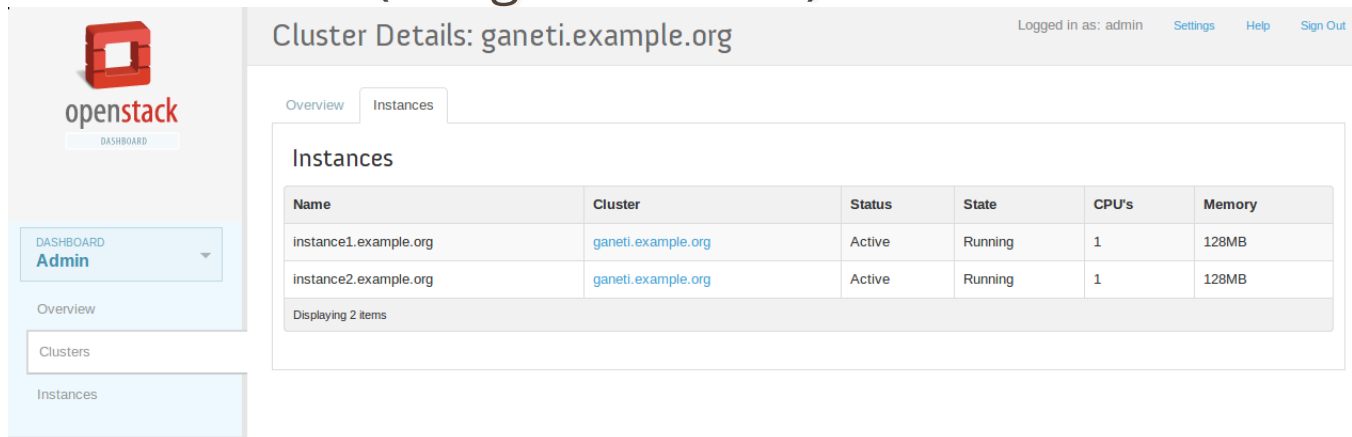
Experimental Projects

Export VM

Serial Console

Omnibus packaging

Horizon Ganeti (Design discussion)



The screenshot displays the OpenStack Admin interface. On the left is a sidebar with the OpenStack logo and a navigation menu containing 'Dashboard Admin', 'Overview', 'Clusters', and 'Instances'. The main content area is titled 'Cluster Details: ganeti.example.org' and includes a top bar with 'Logged in as: admin', 'Settings', 'Help', and 'Sign Out'. Below the title, there are tabs for 'Overview' and 'Instances', with 'Instances' being the active tab. The 'Instances' section contains a table with the following data:

Name	Cluster	Status	State	CPU's	Memory
instance1.example.org	ganeti.example.org	Active	Running	1	128MB
instance2.example.org	ganeti.example.org	Active	Running	1	128MB

Below the table, it states 'Displaying 2 items'.

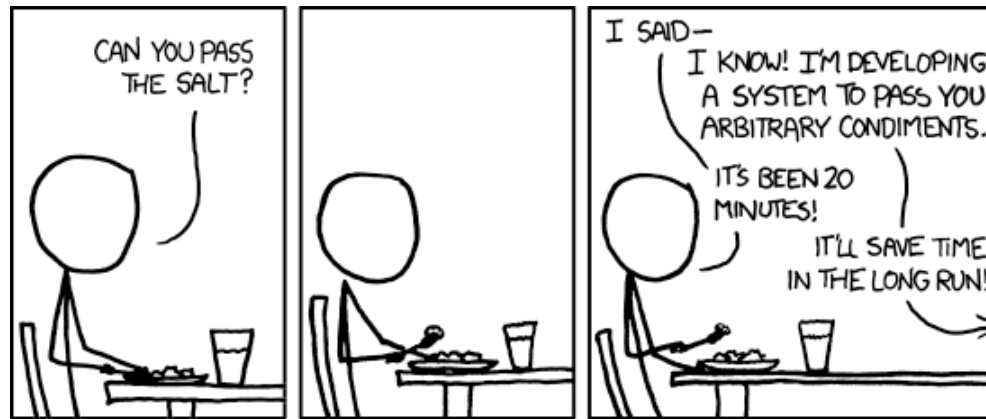
Lessons Learned

Serial terminal communication

Django packaging

Ganeti RAPI Documentation

Future Plans



GWM API

Rest API layer between Ganeti RAPI and user interface

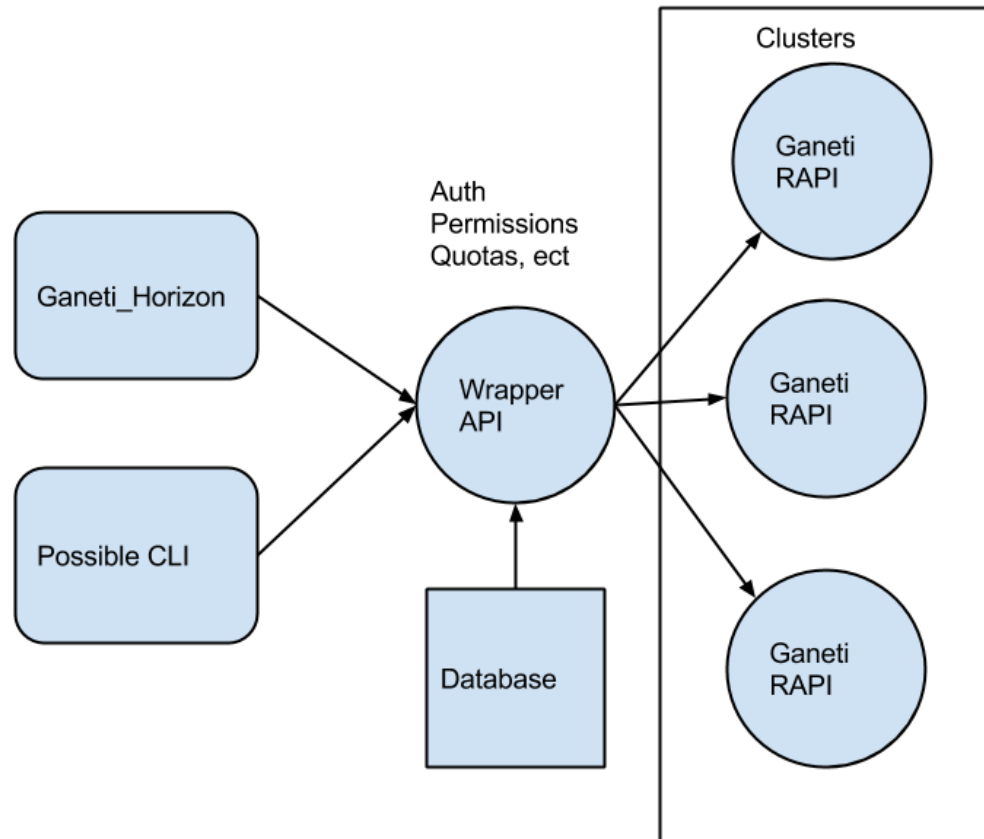
Implement core GWM functions, user/group management, quotas, VNC and Serial consoles

Allow multiple front-end interfaces, Horizon, mobile apps, etc

Leverage third party authentication tools

Use external job queue and caching systems

GWM API



Ganeti at OSL Status Report

Not much has changed since last year

Still running 2.6.2 :(

Still migrating hosts from Gentoo to CentOS 6

Consolidating project clusters

Working on a Chef Cookbook

Ganeti/Openstack integration ideas

Questions?

author: Ken Lett, Lance Albertson

email: kennric@osuosl.org, lance@osuosl.org

twitter: @kenlett, @ramereth

sites: <http://code.google.com/p/ganeti/>,
<http://code.osuosl.org/projects/ganeti-webmgr>

irc: #ganeti-webmgr, #osuosl

