Delivering an Open Virtualization Platform

Open Community Project Launch

When: November 1st - 3rd
Location: San Jose, CA, USA
Cisco main campus
Who: All Welcome
RSVP: rsvp@ovirt.org

(RSVP Required)
Launch of the Open Virtualization Management Platform

Cisco, IBM, Intel, NetApp, Red Hat, and SUSE invite you to join in launching a fully open virtualization management project - “oVirt”.

The project will kickoff with a workshop meeting November 1\textsuperscript{st} - 3\textsuperscript{rd} which is open to all who want to use, get involved or learn about the comprehensive open virtualization management platform.

The sessions will cover the technical sub-projects, governance, getting involved, usage and much more. Full GIT repos (source code), site, forums will be launched at the event.

If you have any interest in an Open Virtualization Management platform you need to be there!

Please RSVP by October 26\textsuperscript{th} to rsvp@ovirt.org
Logistics

When:

November 1\textsuperscript{st} - 3\textsuperscript{rd}

Location:

San Jose, CA, USA

Cisco Main Campus

Updates & information can be found at

More information ...
Open Virtualization Alliance

• Alliance formed to promote Open Virtualization
  • Goals
    • Increase overall awareness and understanding of Kernel-based Virtual Machine (KVM).
    • Foster the adoption of KVM as an open virtualization alternative to proprietary solutions.
    • Accelerate the emergence of an ecosystem of third-party solutions around KVM.
    • Encourage interoperability, promote best practices, and highlight examples of customer successes.

• Formed in May 2011 with 7 founding members
• By end of June over 80 member organizations and still growing ....
Open Virtualization Alliance

- Tremendous interest in Open Virtualization throughout industry
  - Hardware vendors
  - Operating System Vendors
  - Management Vendors
  - Service providers
  - System integrators
  - etc

- Cross industry push to deliver open virtualization
Going beyond the Hypervisor

- KVM is well established as a leading hypervisor
  - Superior performance, scalability and security
  - Leverages large Linux ecosystem

- But the growth of an open virtualization ecosystem requires more than just a hypervisor
  - Feature rich management platform
  - Well defined APIs throughout the stack
  - Active and OPEN development community
  - Readily accessible systems and tools for all users
  - 3rd party products that extend the hypervisor
Building an Open 'Development' Community

● The goal is to create a vibrant community where today's and the future platforms, features & interfaces can be designed and implemented

● Create an openly governed community and ecosystem for management

● The project will be seeded ...
  ● ... From Red Hat with
    ● Open sourcing its virtualization management assets
  ● ... From partners, customers and competitors to build an open virtualization community to enable the growth and adoption of open virtualization solutions

● This community will be called Open Virtualization (oVirt)
Goals of the oVirt project

- Build a community around all levels of the virtualization stack – hypervisor, manager, GUI, API, etc.
- To deliver both a cohesive complete stack and discretely reusable components for open virtualization management
- Provide a release of the project on a well defined schedule
- Focus on management of the KVM hypervisor
  - With exceptional guest support beyond Linux
- Provide a venue for user and developer communication and coordination
- Improve the key building blocks for private and public cloud deployments
Existing Open Source Building Blocks

- **KVM**
  - Industry leading Hypervisor

- **oVirt Node**
  - Small footprint image designed to run virtual machines

- **virt tools**
  - Management API for KVM (& other hypervisors)
    - v2v, libguestfs, virt-manager, virt-install, libvirt...
New Community Projects

- oVirt: Engine
  - Backend engine for managing all virtualization resources

- oVirt: VDSM
  - Node Management API used by oVirt engine or other applications to manage the hypervisor. Works with oVirt node or regular Linux installation

- oVirt: Web Admin
  - HTML / AJAX based GUI for managing oVirt Platform
New Community Projects

- oVirt: User Portal
  - HTML based user portal for non-admin use cases
    - Virtual Desktop Users
    - Self Service / Power Users

- oVirt: API
  - Open API for management and integration

- oVirt: Reports
  - Data warehouse for reports
  - Reporting & Dashboards based on Jasper Reports
oVirt Project Deliverables

- Project will deliver a complete & cohesive virtualization platform
  - Including hypervisor, engine, API and GUI
    - Allows all users to easily deploy and manage KVM
    - Open sourcing of GUI may be staggered due to logistics
- Components built discretely for other use cases to allow reusability
  - eg. Engine without GUI
  - eg. Node without engine
- Delivered on a well defined schedule
oVirt Project Summary

- Umbrella for multiple virtualization technology projects
- Provides venue for user and developer cooperation
- Delivers complete integrated platform on a well defined release schedule

- All Projects (sub projects)
  - Governed and hosted by oVirt
    initial projects eg. node, vdsm, engine, webadmin, etc

- Additional Projects, welcome ...
  - Building blocks that are tested and integrated with oVirt engine or APIs.
Governance

- Merit based, open governance model
  - Built using the best concepts taken from Apache and Eclipse Foundations

- Governance split between board and projects
  - oVirt Board
  - Multiple projects under the oVirt brand
Governance (oVirt Board)

Responsibilities

- Define charter & goals for oVirt ecosystem
- Ratify new projects into oVirt
- Vote in new board members (based on merit criteria)
- Coordinate consolidated release schedules
- Ratify votes for smaller member projects (<3 maintainers)
- Develop the ecosystem
- Set license policies for projects (ASL2.0, (L)GPL 2(+))
Governance (oVirt Board)

Board Composition

- Initial board
  - Red Hat, IBM, NetApp, Cisco, SUSE, Intel
  - A few domain leaders from sub-projects
  - Mentors
- There is no limit to the number of board seats
  - Additional seats are voted based on merit
Governance (Projects)

- **Member Projects**
  - Each project is managed by its maintainers
  - Maintainers have complete day to day technical management of the projects
  - Vote in new maintainers based on contribution merit
    - Votes are ratified by the board if there are <3 maintainers

- **New Member Projects**
  - Voted in by oVirt Board
  - Requirements
    - Integrates with the engine / api's
    - Use of KVM
    - Commits to roll up release schedule
    - ASL2.0, and (L)GPLv2+ if linked with QEMU-KVM
Kick off workshop – Tentative agenda

- Final agenda will be posted at http://www.ovirt.org/news-and-events/workshop

- November 1\textsuperscript{st}
  - Introductions
  - Demo of seed source code
  - Intro to the architecture
  - Walk through of key components
  - Evening social

- November 2\textsuperscript{nd}
  - Getting involved
  - Project governance
  - Scheduling the first community release
  - Technical sessions

- November 3\textsuperscript{rd}
  - Roadmap
Q&A …
Questions

• How does oVirt relate to the OVA?

➔ The Open Virtualization Alliance is focused on marketing and promotion of KVM and open virtualization. oVirt would be one of the projects it is able to promote.

The oVirt project is technically focused and will work on implementation and definition of KVM solutions.
Questions

- How does oVirt compare to OpenStack?

  The oVirt project is focused specifically on Data Center virtualization management, related technologies and tooling. oVirt brings the richness required by Data Centers to an open-source platform. OpenStack is focused on cloud which requires a minimum around virtualization richness and rather focuses on cloud features.

  In addition oVirt will be an open virtualization management ecosystem, and may use components from OpenStack or any other community project in achieving that goal. OpenStack and oVirt can be seen complementary in the same way OpenStack has VMWare driver support.
Questions

• Is this a Red Hat Project?

→ The oVirt project is sponsored by Red Hat, IBM, NetApp, Cisco, SUSE, Intel. The initial body of code has been contributed by Red Hat. This project will be openly governed and will not promote or rely on solely Red Hat technologies.
Questions

• How is this licensed?

  ➔ Each individual sub-project – for example oVirt engine, libvirt will have its own open source license. oVirt member projects will prefer ASL2.0.
Questions

• How do I get on the oVirt board?

⇒ Board seats are granted based on merit – based on contribution to the projects. The board may vote at any time to bring an additional member onto the board. There is no limit to the number of board members.

⇒ Initial board was formed with one member from each company committing to dedicate 10+ developers/resources to oVirt projects.

⇒ In addition the initial board will include mentors and domain leaders from oVirt sub-projects.
Questions

• How do I become a committer/maintainer?

   Each individual project will define their own contribution criteria for selection of committers/maintainers. New contributor(s) are nominated and voted in by existing maintainers.

   For the member projects, as with many open source projects, committer or maintainer rights are granted based on contribution merit to the project. Contribution is defined as more than just code.
Questions

- What are the initial assets contributed from Red Hat?

  ➔ The projects used to build Red Hat's enterprise virtualization suite.
      - Feature rich management platform includes
        - High Availability Clustering
        - Live Migration
        - Snapshots
        - Templating
        - OVF import / export
        - Dynamic scheduling
        - Network Management