

# Hong Kong OpenStack User Group 2<sup>nd</sup> Technical Workshop Openstack for Digital Entertainment and Media Industry: Learn how to deploy a 3D Virtual World on OpenStack Cloud

## **Programme Details**

#### **Date and Venue**

Date: 5 July 2013 (Friday)

**Time:** 9:00am – 5:00pm

**Venue:** Training Room, Level 3, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong (Map)

**Fee:** HK\$ 300

HK\$ 240 (for Cyberport Incubatees/ Alumni/ Tenants only)

\*Light lunch will be provided.

### **Outline and Purpose**

This is a short rapid paced workshop where you install and use the OpenStack cloud operating system to practice creating and using a distributed computing approach for the developers and talents in digital entertainment and media industry.

A Linux, Apache, MySQL, PHP (LAMP) based installation of the **OpenSimulator Virtual World Server** is presented as a working example for the seminar. The seminal workshop considers the possibility that digital entertainment businesses could share a "collective cloud" and demonstrates how shared clouds might be set up to be distributed.

In this competitive team based session you are put in a situation of action and innovation. This workshop requires hands on creation of an OpenStack cloud server in miniature shared across participants personal laptop computers.

This workshop is based on the following beliefs:

- Short course learning is best achieved in a playful competition between teams of learners.
- Innovation is achieved through actions under pressure, without catastrophic risk taking.
- People, not technology, are the most important components of information systems. Professionals concentrate on acquiring skills in collaboration, critical thinking, quantitative reasoning, effective communication and finding needed information. In this rapidly changing field it is important that knowledge gained is relevant to both the current and future needs of participants.
- Computing resources are a valuable asset that needs to be managed carefully. Understanding
  infrastructure design and implementation is essential for the proper management of computing,
  and for enabling an organisation to develop useful information and knowledge.

#### **Course Instructor**

**Mr. Todd Cochrane** is a software developer in research and for art, and Senior Lecturer in Business Services, Digital Technologies & Business Administration at the Nelson Marlborough Institute of Technology in Nelson, New Zealand. Todd is also a very experienced software developer who has a strong interest in computing, creative and innovative projects.

## **Prerequisites and Preparations**

Anyone who have:

- Intermediate or advanced command line interface experience either in PowerShell, Linux or Unix;
- An interest in 3D Animation or Virtual World.

Each participants has to <u>prepare a laptop computer with a recommended 4GB RAM</u> (preferably 8GB RAM), minimum 30GB free disk space, 100/1000Mbps LAN Card, VT-X enabled in BIOS. The OS can be any Linux, Windows, Mac OSX supporting Oracle VM VirtualBox 4.

#### **Assessment Details and Prizes**

This course takes a participant centred approach to work. Successful achievement of the course is indicated by the participant's capacity as developed. Participants should be able to take the developed systems to their own practices.

The best team will win a New Zealand Momento Prize and each participant receives a small New Zealand gift.

#### **Learning Outcomes**

On successful completion of this workshop, participants will be able to:

- 1 Implement a miniature cloud service based on OpenStack;
- 2 Create a network of virtual computing units based on in-house computer systems;
- 3 Consider the development of innovative applications of cloud services for information systems.

#### **Timetable**

Some topics may change depending on technical issues, new developments and participant interest. The challenges are units that include an introduction to required techniques, discussions and actions.

Time	Programme Rundown
9:00 - 9:30	<ul> <li>Create participant teams</li> <li>Connect all computers of the teams to the LAN</li> </ul>
9:30 - 10:30	<ul> <li>Install Virtual Box on each computer</li> <li>Set up UDP based tunnel using VirtualBox between computers</li> </ul>
10:30-12:00	Configure a provided installation of OpenStack
12:30 - 16:30	<ul> <li>Deploy a LAMP ( Linux, Apache, MySQL, PHP) service onto the cloud</li> <li>Deploy OpenSim</li> <li>Do compute, network and storage configurations for the cloud</li> </ul>
16:30 – 16:40	Build your OpenStack under economy x86 servers
16:40 - 17:00	Prize Giving

## **Payment Method**

We accept the bank deposit to settle your payment. Once the <u>online registration form</u> is submitted, you will be received a payment instruction by email.

Noted: Seats are limited and reserved on a first come, first serve basis, as determined by the order of full payment received. All fees paid are non-refundable under any circumstances

For enquiries, please email tc@cyberport.hk or call 3166-3788

## Organizer:



## **Technology Partner:**



