



Xen and OpenStack

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Hi Dr. Sandhu,
Here are some of the links from the class discussions:

How to install Xen with Ubuntu 12.04

[https://help.ubuntu.com/community/Setting%20up%20Xen%20and%20XAPI%20\(XenAPI\)%20on%20Ubuntu%20Server%2012.04%20LTS%20and%20Managing%20it%20With%20Citrix%20XenCenter%20or%20OpenXenManager](https://help.ubuntu.com/community/Setting%20up%20Xen%20and%20XAPI%20(XenAPI)%20on%20Ubuntu%20Server%2012.04%20LTS%20and%20Managing%20it%20With%20Citrix%20XenCenter%20or%20OpenXenManager)

The General Wiki Page for Xen and OpenStack:

<https://wiki.openstack.org/wiki/XenServer>

The deployment architecture of Xen with OpenStack:

<https://wiki.openstack.org/wiki/XenServer/XenAndXenServer>

Explanation of some of the terms used with Xen Hypervisor:

XCP

The Xen Cloud Platform (or XCP) is a turnkey open source virtualization solution that provides out-of-the box virtualization and cloud computing. XCP includes the [Xen Hypervisor](#), the enterprise ready Xen API toolstack and integrations for cloud, storage and networking solutions. Additional functionality that is available in XCP includes:

- VM lifecycle: live snapshots, checkpoint, migration
- Resource pools: flexible storage and networking
- Event tracking: progress, notification
- Upgrade and patching capabilities
- Real-time performance monitoring and alerting
- Built-in support and templates for Windows and Linux guests
- Open vSwitch support built-in
- Storage XenMotion® live Migration (cross-pool migration, VDI migration)
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XAPI

- A Toolstack implementing the XAPI interface
- An interface for remotely configuring and controlling virtualised guests running on a Xen-enabled host

It is the core component of [XCP](#) and [XenServer](#). XAPI adds additional functionality compared to other Xen toolstacks, for example (but not limited to)

- Extends Xen to cover multiple hosts
- VM lifecycle: live snapshots, checkpoint, migration
- Resource pools: live migration, auto configuration, disaster recovery

- Flexible storage and networking
- Event tracking: progress, notification
- Upgrade and patching capabilities
- Real-time performance monitoring and alerting

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