VxDatacenter Service Provider Edition (SPE)

VxDatacenter Enables Multi-Tenant Cloud Services

Channel the benefits of premium cloud technology with ultimate efficiency!
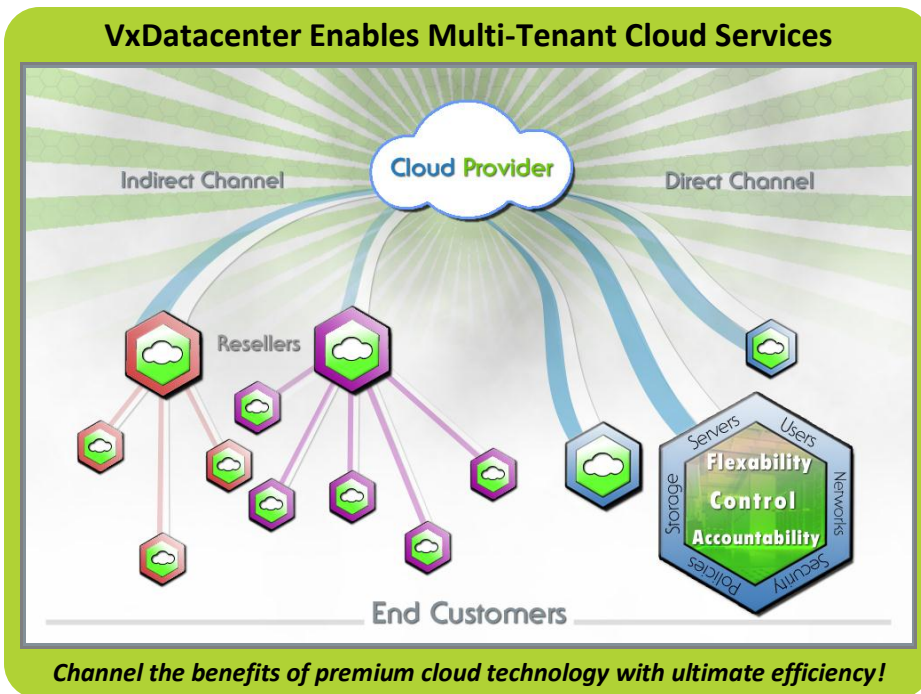
Hexagrid's state-of-the-art VxDatacenter platform is a comprehensive cloud solution specifically designed for real-world IT delivery. This tightly integrated platform provides unprecedented control and agility enabling IT organizations to deliver all the benefits of today's popular commodity clouds without all the hassles. With VxDatacenter; *It's your cloud, own it!*

- Virtualize off-the-shelf commodity server hardware with optimal IT infrastructure performance, availability, and scalability.

- Deploy and manage total IT infrastructure (network, compute and storage) at any time, from anywhere using the intuitive VxPortal.

- Deliver Infrastructure as a Service (Iaas), Platform as a Service (PaaS) and Software as a Service (SaaS) without add-ons or piecemealed third-party software components.

- Create SaaS service offerings like Hosted Exchange / Sharepoint / Desktop-on-Demand to share with resellers and customers.

- Own a self-branded cloud identity with multi-tenant capability which allows subsidiaries, resellers, and/or clients to do the same.

- Implement a complete cloud solution that's easily customized for your business model, your security needs, and your organizational structure.

Platform Elements

VxPortal:
This secure, brand-aware control console provides authorized web access and self-provisioning capability for complete IT infrastructure (network, compute, and storage) control with international language support. Real-time utilization dashboards easily integrate tracking, monitoring, auditing, reporting, billing, and accounting systems.

VxGrid
Scalable to 100+ physical servers or 3 racks per POD, VxGrid optimizes network speed and disk throughput with a stateless KVM hypervisor cache-tuned for high-performance computing. VxGrid supports off-the-shelf commodity server hardware and includes a self-healing resource manager and zero-impact patch-update manager.

API
Scriptable command line infrastructure management allows RESTful/SOAP programmable functions for all VM operations and third-party integration (such as WHMCS billing integration).

Storage
Isolated storage and computing facilities ensure maximum performance and flexible integration of Hexagrid's ZFS-based block storage (optional), third- party NAS storage (i.e. NetApp, EMC, etc.) or Mezeo Distributed Object Store (similar to Amazon S3 Storage).

Network Switch Fabric
A unified networking layer includes high-speed SAN Switch and intraVLAN policy manager to secure the self-managed IP address routes and n-tiered VLAN access to VPN, back-up, and physical networks with bonding support for fault tolerance.
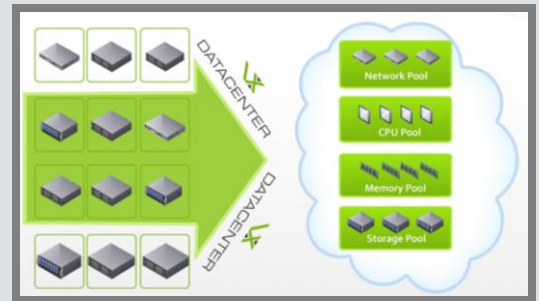
Scheduler
An integrated workload scheduler facilitates zero-downtime resource migration using intelligent auto-allocation of VM resources based on detected fault tolerances.

VxDatacenter SPE: *It's your cloud, own it!*

From architecture planning to full implementation, building a reliable cloud should be quick, simple, and painless. *With VxDatacenter, it is!* In less than 4 hours, service providers can build a public or private cloud complete with provisioning, billing, application repository, and comprehensive security controls. As business needs evolve, the features and functionality of the platform expand allowing IT organizations to upgrade customers and increase services. With VxDatacenter, service providers avoid time the racks and focus time on customer support and business growth initiatives.

Turnkey Cloud Computing Solution

Virtualize hardware in less than 4 hours!

VX DATACENTER FEATURES

Dashboard
Comprehensive unified dashboards summarize resource subscriptions, consumption, and any over commitments.

Resource Management
Quickly add or upgrade hardware/resources by simply de-registering a node, VMs automatically realign within the cloud.

Resource Control
Easily control/allocate resource availability (CPU, memory, network, and Disk Pool capacity) and dashboard auto-updates.

Resource Scheduler
Optimize IaaS platform to distribute/migrate VMs without disrupting service or complex multi-tenant requirements.

Managed VLANs
Allow customers to easily self-provision multiple private VLANs to suite their n-tier architecture needs.

Network Access Policy
Access control between VLANs provides comprehensive firewall and security policy for network and server interconnectivity.

Control Panel
Complete VM lifecycle management—change VM properties, extend VM resources, modify VM VLAN associations, and clone VM servers.

Audit Logs
Get complete audits of VM server events, search audit logs for event types/timeframes, and track all changes at the customer or reseller level.

Usage Reports
Track resource usage by hour/day/month per VM/customer/reseller and export data via API/to CSV for flexible billing integration.

Business Continuity
Easily manage servers or upgrade hypervisors with live migration of VM instances based on best-fit criteria or admin specifications.

Self-Provisioning
Optional controls allow customers to self-install VMs, appliances, and their own ISO as well as clone, decommission or extend resources.

Channel Management
Create accounts with resource limits—each customer/reseller can add or manage users within their account and specify access controls for each.

AppMarket
Resellers and customers can upload and consume ISO/pre-packaged virtual appliances on-demand to self-provision common application stacks.

Branding
Set cloud interface colors and themes to maintain brand identity. Resellers and customers self-brand the interface seen by users on their accounts.

Intuitive Management Portal

Control total channel IT resources from a single pane-of-glass.

Self-branded AppMarket
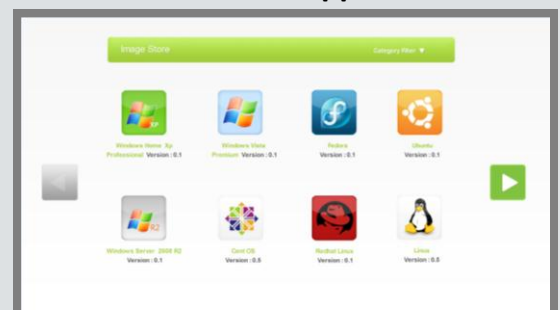
Sell proprietary or 3rd-party applications!

VxDatacenter SPE: *It's your cloud, own it!*

PLATFORM COMPARISON	Hexagrid VxDatacenter	VMWare vDirector	Abiquo	Cloud.com	Enomaly	OnApp
Business Functions						
Multi-tenancy	✓	✓	✓	✓	✓	✓
Public Cloud	✓	✗	✗	✗	✗	✗
Private Cloud	✓	✓	✓	✓	✓	✓
Internationalization	✓	✗	✗	✗	✓	✗
3rd-party Storage Integration	✓	✓	✓	✓	✓	✓
Public IP Allocation	✓	✓	✓	✓	✓	✓
Private VLAN Support	✓	✓*	✓	✗	✗	✗
Cloud API	✓	✓	✗	✓	✓	✗
Industry Customization	✓	✗	✗	✗	✗	✗
Resource Pools	✓	✗	✗	✗	✗	✗
Channel Management						
Multi-level Co-branding	✓	✗	✗	✗	✗	✗
Multi-level Reporting	✓	✗	✗	✗	✗	✗
Customer Billing Portal	✓	✗	✗	✗	✗	✗
Delegated ACL's Users	✓	✓	✓	✓	✓	✓
Tiered Audit Logs	✓	✓	✗	✗	✗	✗
Customer Management	✓	✗	✗	✗	✗	✗
Single-view Channel Mgmt.	✓	✗	✗	✗	✗	✗
AppMarket	✓	✗	✗	✗	✗	✗
White Label Program	✓	✗	✓	✓	✓	✓
System Management						
High Availability	✓	✓*	✓*	✓*	✓*	✓*
Live Migration	✓	✓*	✓*	✓*	✓*	✓*
Workload Scheduler	✓	✗	✗	✗	✗	✗
Online Maintenance	✓	✓*	✓*	✓*	✓*	✓*
Templates	✓	✓	✓	✓	✓	✓
Auto Provisioning	✓	✗	✗	✗	✗	✗
Host Update Manager	✓	✓*	✓*	✓*	✓*	✓*
Install Custom OS	✓	✓	✗	✗	✗	✗
Secure Console Access	✓	✗	✗	✗	✗	✗

* Requires add-on or 3rd-party plugin to achieve specified functionality
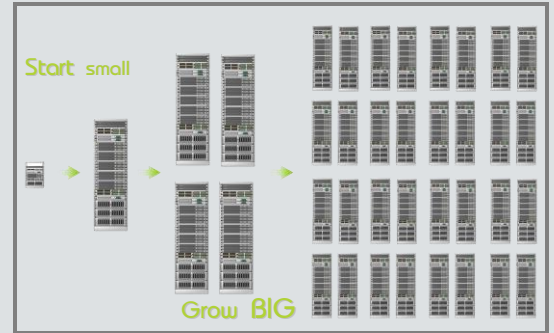
VxDatacenter SPE: *It's your cloud, own it!*

Purpose-built for service providers, VxDatacenter comprises the tools to both deliver and manage IaaS-generated business, essential requirements characterized as 'optional' / 'addable' / 'configurable' on other platforms.

- Secure console access with segregated multi-tenancy, policy-based user management, and single-pane-of-glass channel administration.

- Fault tolerance optimized to auto-detect failures and auto-migrate VM workloads, achieving IaaS continuity without intervention.

- Scalable design for virtualization without specifying server layout and self-service provisioning with peace-of-mind protection.
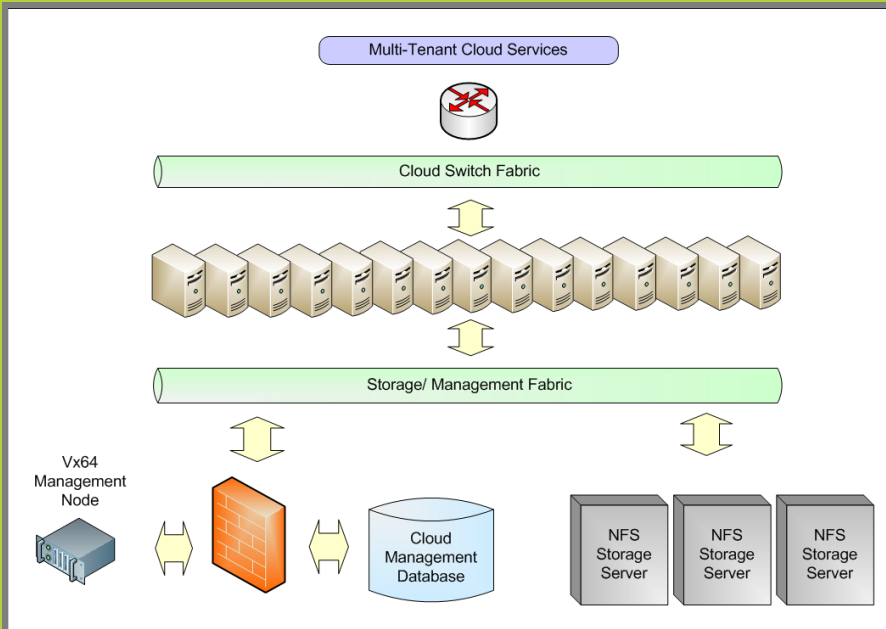
Confidently sell multi-tenant IaaS with VxDatacenter, the same Hexagrid platform trusted for years by mission-critical service providers worldwide.

VxDatacenter Deployment Layout

Maximum IT consolidation with optimal IT performance!

Easy Scalability Without Limitations

Add capacity in minutes, just plug-in and register!

Hexagrid Computing, Inc.

Hexagrid's revolutionary approach to IaaS cloud computing truly simplifies virtual IT management. Hexagrid provides all the software and support necessary for service providers to successfully build and manage customized private/public clouds to address their clients' unique business needs. From basic everyday computing to intensive high-powered operations, Hexagrid's VxDatacenter enables service providers to immediately generate profits by reducing costs and increasing efficiencies while selling IaaS.

The Future of Cloud Computing
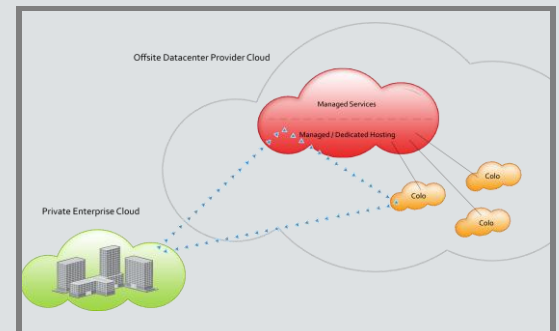
VxDatacenter distributes IaaS computing!