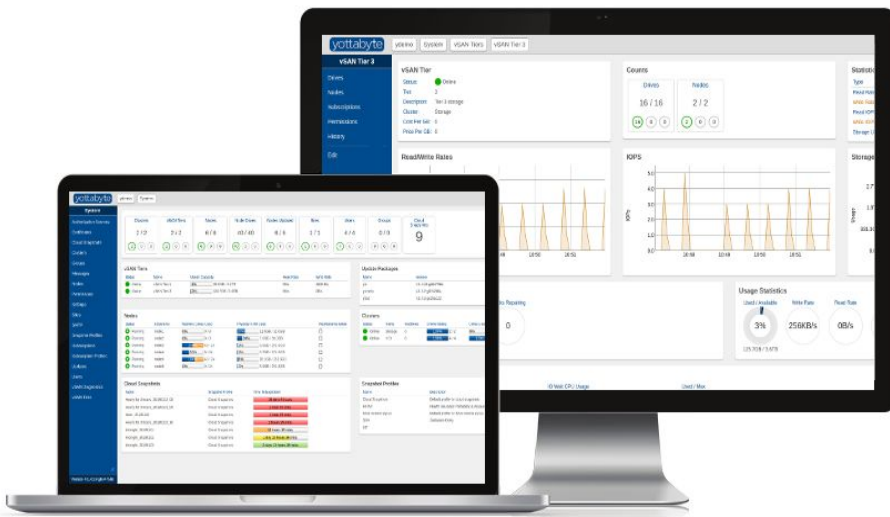




# The New Unit of Virtualization: The Data Center

## Complete Cloud Data Center Stack

Yottabyte provides the complete stack for building a private cloud infrastructure; this includes everything you need in storage, compute, networking, and virtualization. Our fully integrated Cloud software stack was built with simplicity and completeness in mind so you can build, deploy, and manage cloud data centers and services fast and efficiently to grow your business.



The tightly integrated components within the Yottabyte software stack eliminates the need to coordinate updates and compatibility across vendors. This means rapid deployment, simpler staff training, straight forward maintenance, and scale-out operations.

## Key Benefits

Yottabyte includes everything you need to build a complete software-defined datacenter infrastructure. Take advantage of the Yottabyte solution and realize the following benefits and more:

- *Cost effective – initial and ongoing investment needs*
- *Software solution utilizing commodity hardware*
- *Security to meet all IT requirements*
- *Scalable architecture*
- *No additional software licenses required*

## Key Features

### Fully Integrated Complete Stack

Built from the ground up with full integration of everything needed to deploy and manage complete cloud data centers.

### Securely Nested Multi-Tenancy

Yottabyte is the only solution that provides secure, nested multi-tenancy. This tenancy model provides dedicated instances of the complete Yottabyte stack. The architecture is designed from the lowest level for building secure enclaves to isolate your tenants without dedicated physical hardware.

### Enterprise Grade Infrastructure Services

High availability with no single point of failure delivers the best customer experience possible.

### Data Center Automation

The software allows for management of resources as a complete virtual data center presented through an easy to use web-based management console. New storage volumes, virtual networks, and entire virtual computing environments can be spun up with just a few clicks, on a moment's notice, securely from any connected device.

### High Performance Elastic Storage

Similar to blockchain technology, the Yottabyte vSAN guarantees data integrity through the use of cryptographic hashes.

### Unlimited Scalability

Yottabyte is designed to grow with your needs from a simple pair of servers at a remote branch office to a rack-scale platform to power a Service Provider. Fault-tolerant resources can be scaled out on-demand, without service interruption. In addition, the Nested Multi-Tenancy allows management delegation to tenants, so your management layer is as scalable as your physical resources.



# The New Unit of Virtualization: The Data Center

*Simple and effective Cloud building for Service Providers and Enterprise*

## General System Features

Multi tenant/cluster/site platform  
Create multiple virtual data centers  
Intuitive web-based dashboard  
Recipe engine  
Monitoring, managing & alerting  
Statistics & accounting  
Rest-like API

## Compute Features

Built-in hypervisor (QEMU / KVM)  
Supports Linux and Windows guests  
Live migration – zero downtime  
Web-based machine management  
Web console with KVM/audio support  
Bare metal-like performance  
Automated VM snapshot & retention

## Storage Features

Scaleout vSAN; no 3<sup>rd</sup> party software needed  
Global inline deduplication  
Silent corruption detection/correction  
Dedupe-aware remote synchronization  
Automated health scanning  
Multiple tiers of storage including:  
NVMe, SSD, and HDD  
High performance  
Live maintenance/software updates  
Encryption – 256bit option

## Network Features

Built-in web-based firewall  
External/internal network management  
NAT/PAT rules engine  
Throughput and packet rate throttling  
Real-time and historical metrics  
External network management for:  
BGP, OSPF, vLAN, vXLAN  
Per Network DHCP/DNS server, IP  
address management, authoritative DNS,  
and more  
Isolated secure networks/nested tenants

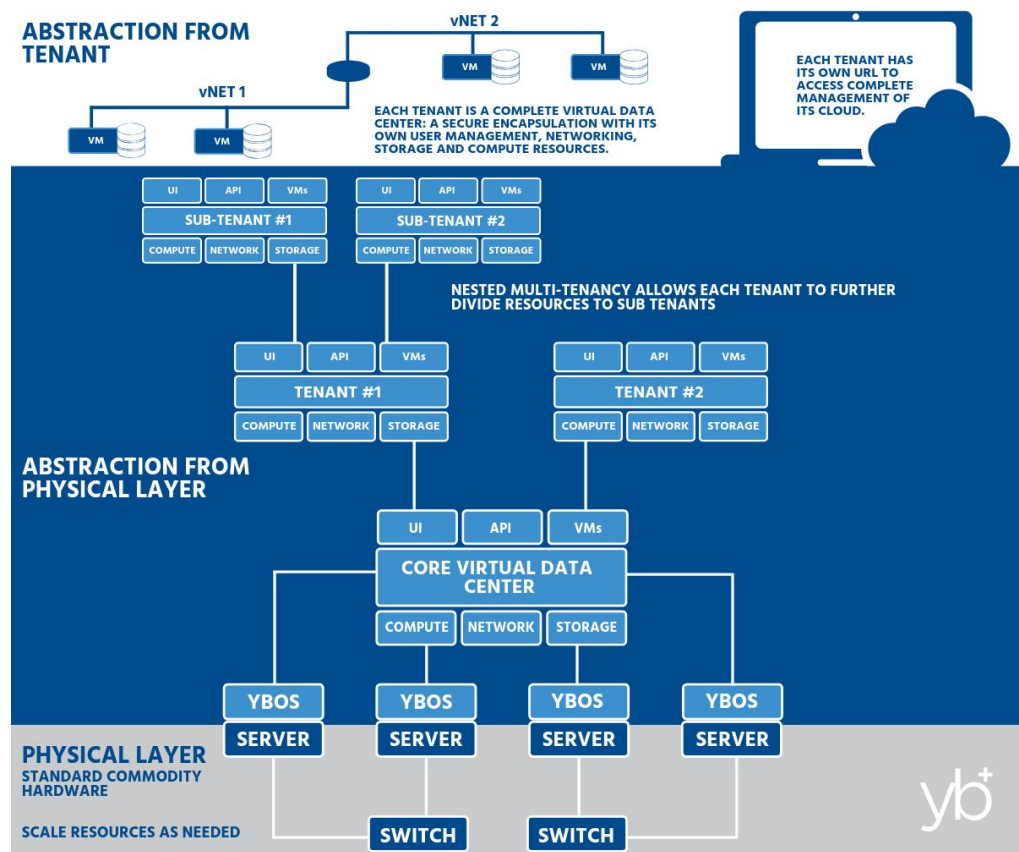
## Yottabyte Operating System (YBOS)

Automatic non-disruptive update  
process  
Secure OS Firmware, ensures security  
and version continuity across servers  
Automated install supports PXE network  
Linux based kernel  
Latest hardware compatibility  
Secure, console-less administration

## Yottabyte's Total Solution – Physical & Virtual Cloud Architecture:

Your Yottabyte Cloud infrastructure begins with commodity hardware and the Yottabyte Operating System (YBOS) installed on each server. YBOS then connects and pools all the raw resources and presents them as your core virtual data center (VDC). From the core VDC, the virtual resources can be provisioned to create self-contained tenant VDCs - each its own secure encapsulation.

## Yottabyte: The Complete Cloud Data Center Stack



## Yottabyte Software Options:

Yottabyte solutions are configured on a per-instance basis. Yottabyte offers several investment programs, including:

- software subscription which includes maintenance & support
- perpetual license with optional annual maintenance & support

**Both options provide access to all major and minor release upgrades as well as the Yottabyte technical support center.**