OnApp Cloud
The complete cloud management platform
A complete infrastructure management and go-to-market platform

OnApp software turns your datacenter into an Infrastructure-as-a-Service powerhouse, so you can offer public, private & hybrid cloud, containers, bare metal, DR, SaaS, PaaS, CDN and more through one UI.

Interfaces
- API
- Web UI
- Mobile UI

Management & Administration
- Metering & Monitoring
- User Management
- Billing

Core Infrastructure Services

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Local Infrastructure

- Virtual Servers
- Container Servers
- Application Servers

Federaation Infrastructure

- Marketplace
- Cloud Motion

3rd Party Infrastructure

- AWS
- OpenStack*

* Beta / tba

Turnkey cloud management
- Xen, KVM, VMware and Amazon EC2
- Private, public & hybrid cloud
- Integrated SAN, CDN, DNS and DR
- Integrated user management, metering, monitoring and billing
- Integrated autoscaling, failover, load balancing and firewall
- Huge library of OS templates and apps
- Service catalog & customizable service add-ons
- Customizable web and mobile control panels

One control panel - one pane of glass

OnApp brings every flavor of IaaS together in one fully automated, highly resilient and scalable environment.

What can you provision with OnApp?
- Fully customizable virtual servers
- Pre-configured virtual server instances
- Application servers (pre-installed apps)
- Container servers (CoreOS/Docker)
- VPS based on SAN or local storage
- Bare metal servers with full automation
- Smart servers (hybrid cloud/dedicated)
- Global compute cloud & CDN using OnApp Federation capacity
- Templates, IPs, VMs, IOPS, tiers, zones
- Real-time Disaster Recovery
For service provider and enterprise cloud

Use OnApp to simplify infrastructure management, automate your datacenter, maximize your investments in hardware, and deliver intuitive, secure cloud services to customers, partners and employees.

Easy to deploy
OnApp includes a complete suite of cloud orchestration, management and provisioning tools, fully integrated into one platform. OnApp runs on commodity hardware. It’s a turnkey platform that deploys in days, without months of development or integration work.

Easy to use
OnApp includes a fully customizable, self-service control panel that streamlines workload management, and uses intuitive wizards and GUI controls to make cloud management and provisioning as simple and efficient as possible. You can brand the control panel with your own look and feel, or use our open API to integrate with a third party portal if you wish.

Highly scalable
OnApp clouds feature autoscaling as standard, enabling individual servers to scale vertically and horizontally based on configurable thresholds. With multi-cloud support included too, you can enable users to deploy anywhere in your infrastructure through one control panel.

To add even more scale, you also get access to the OnApp Federation, which extends your local cloud with compute and CDN infrastructure in 170+ locations - all managed through one portal.

Highly available
OnApp clouds are secure, self-healing and extremely resilient, with multiple backup schema, automatic hypervisor failover, High Availability support, and disaster recovery options for real-time remote replication and restore.

Minimum hardware requirements
1 x Controller server: dual or quad core 2Ghz+, 8GB RAM (16GB+ recommended), 100GB RAID 1, 2 Gig NICs, CentOS 5/6 x64
2 x Hypervisor servers: quad core 2Ghz+, 8GB+ RAM, 30GB HD (SSD recommended), 4 Gig NICs, CentOS 5/6 x64
1 x Backup server: dual or quad core 2GHz+, 4GB RAM (8GB+ recommended), 2TB storage mounted locally, 2 x Gig NICs, CentOS 5/6 x64
1 x Data store: 1TB Block Storage (iSCSI, ATAoE, Fiber) or distributed SAN using OnApp Storage & local disks in hypervisors

OnApp includes free iOS and Android apps
Core IaaS capabilities

OnApp gives you a complete set of Infrastructure-as-a-Service building blocks, and an easy way to combine them into a huge range of cloud and dedicated hosting services.

Server types/appliances supported
- Virtual servers - Xen 3, Xen 4, KVM, VMware
- Application servers
- Container servers (CoreOS/Docker)
- EC2 instances
- Smart servers
- Bare metal servers
- CDN edge servers (static and streaming)

Flexible storage support
- Choose your storage strategy:
  - Create your own SAN using local hypervisor disks (OnApp integrated storage)
  - Use traditional hardware or software SANs (any storage that presents a block device)
  - SolidFire integration for guaranteed IOPS
- Create tiered storage services:
  - Multiple SANs per cloud; multiple disks per virtual server
  - Limit max IOPS per vDisk

Huge template library
- Hundreds of OS & app templates based on:
  - ArchLinux, CentOS, ClearOS, CloudLinux, Debian, Elastix, Endian, Fedora, FreeBSD, Gentoo, Mageia, Openfiler, openSUSE, PBXWare, R1SOFT, Red Flag, Red Hat, Scientific Linux, Slackware, SME Server, Ubuntu, and JumpBox virtual appliances
- Create your own templates
- Import your own templates from OVA
- Bring-your-own-ISO for server creation & recovery

Autoscaling and load balancing
- Automatic load balancing of selected virtual servers
- Autoscale up and out based on configurable thresholds: add RAM, CPU and disk to a virtual server, or clone a new virtual server

Workflow automation
- Use service add-ons to offer customized services with your IaaS products, such as monitoring and security software
- Use Recipes to automate configuration and installation of apps, tools & frameworks, for virtual, smart and bare metal servers

OnApp's integrated SAN creates tiered storage services by distributing data across disks in your cloud.
Customizable web control panel
- Enables customer self-provisioning - full GUI control of all server types
- Everything from the system architecture to virtual server root access is managed via the UI
- Integrated VM console (VNC/HTML5)
- Change language, currency, look & feel from the GUI
- Use 3rd party control panels via the OnApp API

iPhone/iPad & Android apps
- Comprehensive mobile cloud management, monitoring & provisioning
- Fully customizable with your own branding

User management
- Create any number of user roles for customers, resellers, VIPs, billing teams, support
- Control user access to every function with our granular permissions system
- Manage user billing plans, payments, suspensions & whitelists, plus custom fields

API & integrations
- RESTful JSON and xml API for all cloud management functionality
- Pre-built integrations with WHMCS, HostBill, Ubersmith, PBA, SolidFire, Bacula4Hosts...
- AWS integration
Network management
- IP management for IP pools and billing
- IPv4/IPv6 support
- Advanced VLAN management
  - VMs access multiple VLANs through multiple virtual interfaces; private VLANs supported too
- Infiniband support

Availability/location/performance zones
- Group physical resources to create tiered services based on performance or location
- Create virtual private clouds and availability zones
- Each zone can be configured with its own pricing & limits

Integrated Anycast DNS
- Low-latency, highly resilient DNS service hosted at locations around the world
- Manage DNS for your own domains, and your customers’ domains

Integrated CDN
- Use OnApp Accelerator to automatically CDN-enable virtual servers with a single click - no configuration required
- Build your own custom CDN using your own infrastructure, and/or the wide range of locations on the OnApp Federation marketplace
- Supported protocols:
  - Video on Demand/Live streaming (Wowza)
  - Pull/Push (HTTP, HTTP/2)

Pricing & billing
- Use plan-based and/or utility billing
- Set prices and calculate bills for all infrastructure resources:
  - CPU cores, CPU priority, RAM
  - Primary & storage disks & backups
  - IP addresses & networks
  - IOPS & DNS
  - Templates, recipes & different server types
- Create and price different zones for dedicated & cloud servers, performance tiers & locations
- Overcommit support

OnApp gives you full control of pricing for all infrastructure resources, different performance zones and different user tiers
High availability & disaster recovery

- Disaster Recovery (DraaS)
  - Add real-time replication and restore for compute zones in your cloud
  - Use OnApp-managed replication sites, or build private DRaaS across your own
- Monitoring & alerts:
  - Customizable alerts (email & SMS)
  - In-product notifications
  - Multi-layered usage reporting
- Automatic failover for hypervisors
  - If a local hypervisor is unresponsive, virtual servers and smart servers are hot migrated to a healthy hypervisor if possible (depends on the OS)
  - Cold migration options, where hot migration is not available
  - Failover thresholds are customizable
- Hypervisor maintenance mode
  - Migrate virtual servers at will to perform maintenance on compute nodes

Backup

- Deploy multiple dedicated backup servers, or use your control panel server
- Backup on demand or via automated schedules
- Full-server snapshot backups
- Native incremental backup, with extended incremental options via Bacula4Hosts

Security

- Multi-layered security model featuring our Customer Isolation Module:
  - Enables secure VLAN sharing
  - Isolates VM data and traffic
  - Includes an anti-sniff, anti-spoof firewall
- Virtual Server Gateways: create private zones for customers, with edge firewall gateway services
- External authentication system connections (OAuth, SAML)
- Two-factor authentication support (Yubikey)
- Make full use of hypervisor firewall features
- Additional user-configurable firewalls
- Whitelists, password policies & other features