



Compute

Secure, Multi-Tenant Cloud for Government & Highly Regulated Industries

Key Benefits

Security

FedRAMP Moderate/DoD authorized cloud with 325+ security controls, Security Enhanced Linux, and HPE hardware featuring Silicon Root of Trust

Low Latency

High-speed data transport over a private fiber optic backbone network

Flat-Rate Billing

Predictable costs with no charge for data ingress, egress, access or transfer

No Vendor Lock-In

Enterprise-grade open source environment with no inflated exit costs

Flexibility

Configured to your needs without forcing you to conform to proprietary tools or environments

Support

U.S.-based NOC and SOC provide premier service for setup and ongoing management of your cloud environment at no extra cost

Out-of-Band Access

Gain access to your environment for remediation even if you lose access to your virtual machines

Your Hybrid Cloud, Multi-Cloud Strategy Demands Alternatives

Large cloud service providers (CSPs) dominate today's cloud computing landscape with proprietary, complex one-size-fits-all solutions that cost more than anticipated. These hyperscale public clouds were developed for scale at the expense of flexibility, service, cost predictability and billing transparency. As a result, they often fail to address the unique needs of organizations in defense, civilian government and highly regulated commercial industries (including health care, financial services and critical infrastructure).

ORockCloud: The Secure Open Source Cloud

ORockCloud is a FedRAMP-authorized cloud environment architected on the OpenStack platform. We built ORockCloud from the ground up for secure, high-performance data operations using industry-leading hardware, a private fiber optic backbone network, scalable storage, and enterprise-grade open source applications.

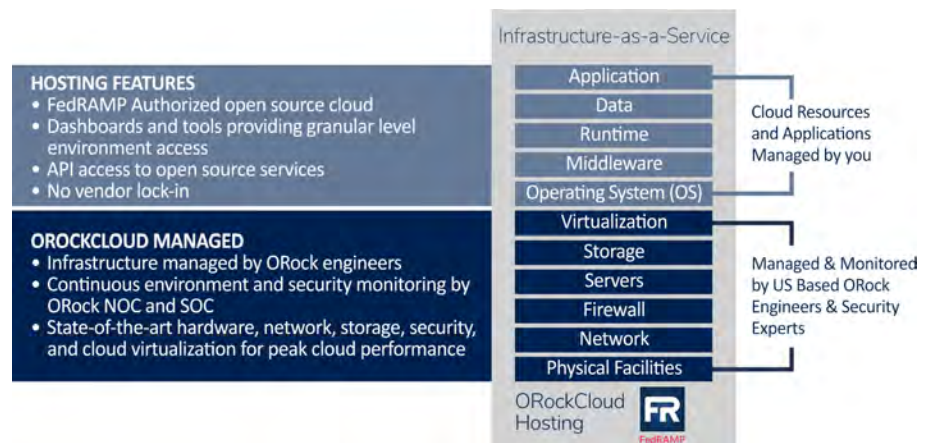
Our IT engineers and security professionals designed ORockCloud to meet the most stringent customer requirements for security, compliance, cost predictability and control. We integrated security and regulatory compliance across every element of the cloud stack, from the physical data center and network, to the platforms and tools used to manage your workloads and applications.

Support for Complex, Data and Compute Intensive Workloads

ORockCloud is the perfect infrastructure for workloads such as Artificial Intelligence and Machine Learning, SIEM and data analysis applications such as Splunk, as well as complex integrations such as CI/CD (continuous integration/continuous delivery).

Fully-Managed Infrastructure

ORock manages the infrastructure layer so your IT team can focus on innovation while transitioning your IT costs from CapEx to OpEx.



A True Open Source Cloud

ORockCloud is the first and only FedRAMP-authorized open source cloud built on the OpenStack platform, enabling you to host applications and workloads in a vendor-agnostic environment and giving you more control as your technology and cloud needs evolve.

Benefits include:

- Avoid vendor lock-in
- Red Hat Security Enhanced Linux provides additional enterprise-grade security and features
- Large open source community with thousands of developers quickly addressing security and technology challenges in real-time
- APIs designed to be compatible with AWS

CAPABILITY	DETAILS	
Compute Nova	<ul style="list-style-type: none"> • VM/Instance Provisioning • Windows Guest Support • FIPS Compliant 	<ul style="list-style-type: none"> • REST APIs • UEFI
Object Storage Ceph	<ul style="list-style-type: none"> • Object Buckets • Access Control List (ACL) • FIPS Compliant 	<ul style="list-style-type: none"> • Distributed • REST APIs
Software-Defined Networking Neutron	<ul style="list-style-type: none"> • Network Provisioning • Firewall as a Service • Public/Floating IPs 	<ul style="list-style-type: none"> • DNS as a Service • VPN as a Service • REST APIs
Identity Management Keystone & Barbican	<ul style="list-style-type: none"> • Multi-Tenant • Access Control Lists (ACL) • Two-Factor Authentication (2FA) 	<ul style="list-style-type: none"> • FIPS Compliant • REST APIs
Containers Ezmeral & OpenShift	<ul style="list-style-type: none"> • Tenant-Aware • Multi-Region • Open Container Interface (OCI) 	<ul style="list-style-type: none"> • Automated Image Builds • Auto-Scaling
Management Console Horizon	<ul style="list-style-type: none"> • Horizon Dashboard Service • Network Utilization Reports • VM and Resource Tagging 	<ul style="list-style-type: none"> • Cloud Resource Utilization • REST APIs
Block Storage Cinder	<ul style="list-style-type: none"> • Persistent storage • Cloning • Snapshots 	<ul style="list-style-type: none"> • Cinder APIs • Fault Tolerance
Database Service Trove	<ul style="list-style-type: none"> • Relational and non-relational data-bases • Trove APIs • Enterprise scalability 	<ul style="list-style-type: none"> • Fault tolerant • As needed scalability
Load-Balancing Service Octavia	<ul style="list-style-type: none"> • Quality of Service Policies • Monitoring and notification • REST APIs 	<ul style="list-style-type: none"> • Heterogeneous load-balancing (compute nodes, containers and bare-metal) • Auto-scaling
Auto-Scale Orchestration Heat	<ul style="list-style-type: none"> • Auto-scale Compute, Network and Storage instances • Scale up / Scale down • User Interface (Horizon) 	<ul style="list-style-type: none"> • API Support • Compatible with existing AWS Cloud Formation templates

OROCKCLOUD TECHNOLOGY PILLARS

Built for Security, Speed and Compliance

The cloud isn't only hardware and virtualized services. ORockCloud leverages important technology and security pillars from the physical data center to our ongoing support, providing a set of holistic capabilities that contributes to a cost-effective, secure, highly-available cloud. While other hyperscale CSPs use proprietary cloud applications and "white box" hardware, ORock's differentiators range from our reliance on secure latest generation hardware (featuring best-in-class Silicon Root of Trust security) to the use of community-driven, enterprise grade open source platforms to minimize vendor lock-in.

Data Centers

- Tier III Designed Facilities
- Multifactor Biometric Authentication Access Controls
- SOC 2 Type II, HIPAA and PCI DSS
- Full Redundancy of Electrical, Cooling, Power, etc.
- Energy Star & LEED Certified



Hardware

- Built on secure, latest generation Compute & Storage Hardware
- Silicon Root of Trust (SROT)
- Tiered Storage Model Including High IOPs Options
- Next Gen Firewalls with Integrated Cybersecurity Innovations



Network

- Private Fiber Optic Backbone Network
- Layer 2 Direct Access to Most Major Telcos
- Redundant Diverse Network Paths
- Industry-Leading, Carrier-Grade Routing Equipment
- Fixed Cost for Data Transfer



Open Source

- OpenStack Cloud Computing Platform
- Security Enhanced Linux Based Operating System
- CEPH High Performance Storage System
- Kubernetes Container Orchestration
- Red Hat OpenShift and HPE Ezmeral Platforms for Containers



Security

- 325+ FedRAMP Security Controls
- NIST SP 800-53
- FIPS Compliant
- Two-Factor Authentication (2FA)
- Advanced Threat Protection Across the Extended Network



Support

- NOC & SOC Managed by US Citizens
- 24/7/365 Support Availability
- Compliance Certifications include Security +, PMP, CAP, CISSP
- Level I, II and III Help Desk Included




Certifications & Compliance



ORockCloud Tenancy Compute Options




ORockCloud provides you with a variety of options to meet your unique cloud infrastructure needs. Unlike hyperscale CSPs, the ORock team works closely with each customer to help you determine the right size and deployment options for your requirements. ORockCloud offers generous compute, storage, Internet connection, IP addresses, container compute, and Red Hat Enterprise Linux License (RHEL) options with no charge for data ingress or egress. Choose from two different pricing models:

Flexible Compute Option	Reserved Compute Option
 <ul style="list-style-type: none">• Spin-up/spin-down resources as needed• Rated in hourly increments• Billed monthly based on usage	 <ul style="list-style-type: none">• Discounted dedicated resources• Contracted in annual increments• Option for monthly or annual billing

24/7/365 Customer Service Sets You Up for Success

Our IT resources are here to help you determine the best deployment options for your organization's unique needs. Starting early in the engagement we work with your team to understand your project based on the size and number of workloads you plan on moving to the cloud.

Our goal is to provide the necessary resources and technical support to guide you through the overall process. Our engagement life cycle has been successfully proven to help shorten the time to define, configure, and migrate to the cloud.

Flexible Compute Option	Design & Deployment	Support & Maintenance
 <ul style="list-style-type: none">• Collaborative Project Review• Technical Assessment & Recommendations• Estimates & Timelines Defined• Demos, Sandbox & POCs Provided	 <ul style="list-style-type: none">• Refine Estimates & Timelines• Business & IT Plan Execution• Pre-production Deployment & Testing• Final Deployment	 <ul style="list-style-type: none">• Monitor Cloud Environment - NOC/SOC• Continuous Infrastructure as a Service Maintenance• Help Desk Support• Fulfill Audit and Compliance Requirements