



Technology, meet Humanity.

opus:interactive

# Cloud Services with Opus Interactive

VMware Cloud Foundation Private Cloud

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

Cloud security

Operational services

Infrastructure services

Innovation services

Learn more

## Current state of cloud transformations

65% of organizations have made strategic investments in cloud, but only 32% are achieving their ambitions.

Source: HFS, “[Only a third of enterprises are realizing their cloud ambitions](#),” Oct 2023

“The transformation journey is taking large enterprises especially at least twice as long and costing twice as much as they originally anticipated.”

Source: Gartner, “[The IT Roadmap for Digital Business Transformation](#),” 2023

### Symptoms of cloud transformation failure

- Unexpected cost overruns
- Operational inefficiencies leading to fragmented systems and impede rather than streamline operations
- Skills gaps preventing full utilization of cloud benefits
- New security vulnerabilities that increase cyber risk

Source: CIO Dive, “[Half of cloud transformations are ‘abject failures’](#),” Nov 2023



“The culprit is often an unwillingness or inability to untether the enterprise from pre-migration habits.”

If your transformation is stalled,  
Opus Interactive and VMware can help.

# If these challenges sound familiar, you need Opus Interactive's help!

Legacy architecture typically involves significant technical debt and demands a siloed approach that can slow innovation and adoption of modern applications. But moving from an IT infrastructure to cloud can be extremely complicated and expensive.

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Cloud solutions

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Operational services

Infrastructure services

Innovation services

Learn more



### Technical expertise

Does your staff have the knowledge to fully leverage the potential of cloud?



### Operational complexity

Are stretched teams unable to manage configurations and policies across clouds and legacy architecture?



### Cost management

Are cloud costs escalating from unanticipated scale, data transfer fees, increased storage needs, or other "premium" services?



### Regulatory compliance

Has meeting compliance grown in complexity?



### Security and privacy

What are your biggest risks securing your expanded attack surface?



### Reliability and performance

Are you seeing the performance and availability you need for your workloads?



### Integration with existing systems

Do you struggle to integrate existing systems with cloud? Does problem resolution take significant time and resources?



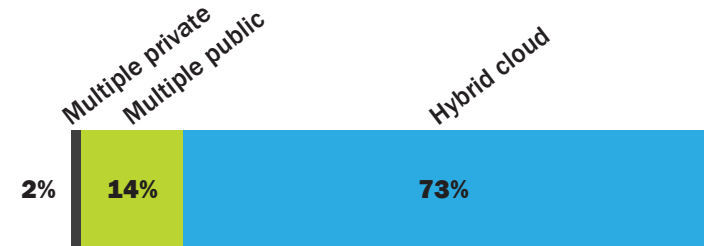
### Data management

Is it harder to manage and control access to data as your volume grows across services and environments?

## Cloud challenges

### Businesses are all in on cloud

**89%**  
of organizations have a  
multi-cloud strategy



### But struggle to migrate existing workloads

**58%**  
want more workloads in the cloud,  
but migration challenges stand in the  
way



#### Top migration challenges

- Understanding app dependencies
- Assessing on-premises vs. cloud costs
- Assessing technical feasibility

### And have difficulty managing costs once they get there

Managing spend is the  
**#1 cloud challenge**



Nearly **1/4** of all cloud spend is  
wasted

Cloud spend is over budget by  
**15%** on average

# Migration paths and application modernization strategies

Opus Interactive VMware Cloud offers a ubiquitous infrastructure that grants the flexibility to update applications across cloud endpoints at your preferred pace. The future trajectory of each application is based on business priorities, timeline, and available resources.

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Cloud solutions

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Jumpstart ESG

Meet compliance

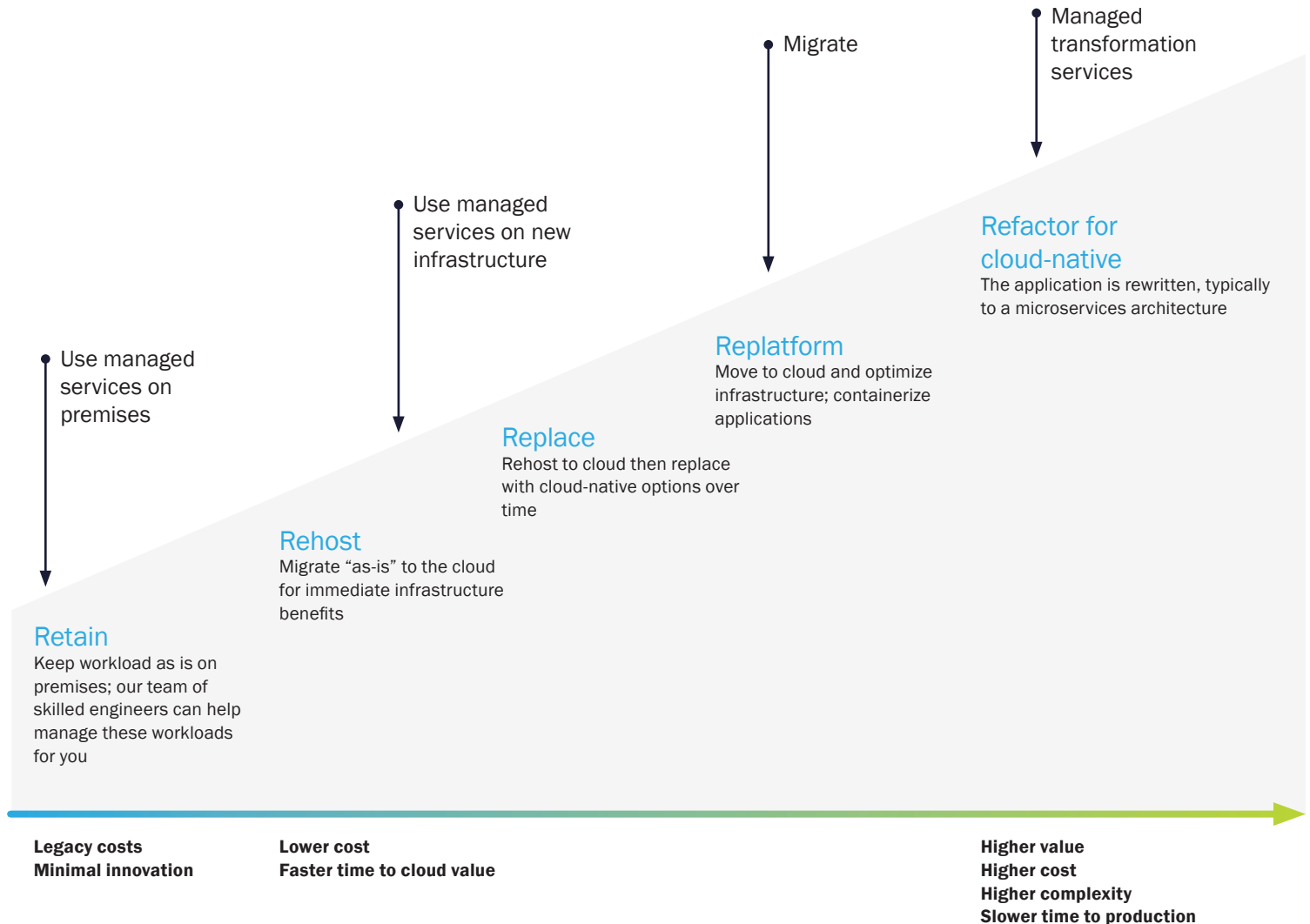
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Infrastructure services

Innovation services

Learn more



# Opus Interactive is a full stack cloud provider, powered by VMware

Run the same cloud infrastructure on premises and in the cloud. It's powered by VMware Cloud Foundation™, a private cloud solution that enables customers to move seamlessly from data center to edge and Opus Interactive private and public cloud environments.



**Consume cloud  
with total  
flexibility**



**Run apps in  
their ideal  
venues**



**Maximize cloud cost-  
effectiveness**



**Ensure app  
performance**



**Improve overall  
business agility**



**Support digital  
transformation agenda**

## Work with Opus Interactive to:

- Transform your infrastructure to support your innovation
- Reduce complexity and technical debt
- Streamline your move to cloud
- Accelerate transformation
- Empower application modernization
- Lower cost and infrastructure overhead



- Shift to VCF
- License portability
- Benefits

# Making the shift to VMware Cloud Foundation

VMware by Broadcom has streamlined its sales approach, offering the versatile VMware Cloud Foundation (VCF) for on-premises, cloud, or edge deployments. VCF provides numerous features to address technical debt, resource scarcity, and to fast-track cloud-based transformation—if effectively utilized. Opus Interactive provides services to identify valuable VCF features for your business and advises on optimal deployment and management, whether on site or in Opus Interactive VMware Cloud.

## So, you've bought a bunch of VCF capabilities



### PRIVATE AI SERVICES

Optional add on for architecture that supports AI



### KUBERNETES

Platform that brings operational scale, governance, consistency, and efficiency to Kubernetes operations



### NETWORKING

Consistent policy, operations, and automation across hybrid cloud; add-on modules available for lateral security and advanced load balancing



### COMPUTE

Enterprise workload platform for traditional and next-gen apps



### STORAGE

Enterprise-class storage virtualization software

## Let us help you realize your investment with VCF services



### PARTNER PROFESSIONAL AND MANAGED INFRASTRUCTURE AND APPLICATION SERVICES



### OPERATIONS AND MANAGEMENT

#### Automated delivery

Self-serve consumption for app and infrastructure teams

#### Cost and capacity

Maximize utilization at minimal cost

#### Performance and troubleshooting

Expand visibility into app and infrastructure health

#### Governance and compliance

Ensure control and reduce risk through policy management



### DATA PROTECTION SERVICES

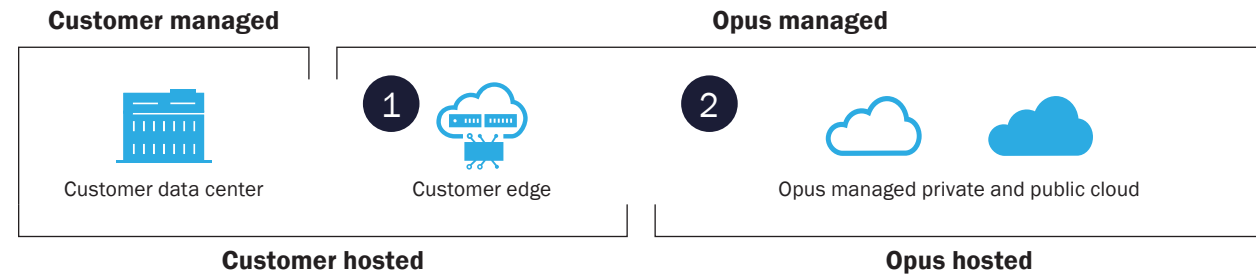
Essential add-on services available to ensure data recoverability and business continuity

- Shift to VCF
- License portability
- Benefits

## License portability

VMware Cloud Foundation’s license portability offers deployment flexibility and protects your investment, allowing on-premises licenses to be used in Opus Interactive VMware Cloud during the subscription term.

### Infrastructure powered by VCF



### License options

- 1 Transition to managed on-premises edge**  
 Collaborate with us to transfer your license to a partner-provided infrastructure edge device located within your data center, featuring full VCF capabilities and managed by Opus Interactive. This ensures a smooth workload transition with negligible latency and no downtime.
- 2 Migrate to hosted Opus Interactive VMware Cloud**  
 Partner with us to relocate your license and workloads to a device housed within Opus Interactive’s tier III+ data centers. Hosting workloads in our facilities ensures redundancy, uptime, and resilience, while supporting your companies’ ESG goals with sustainable and efficient infrastructure.





- Shift to VCF
- License portability
- Benefits

# Cloud your way with Opus Interactive VMware Cloud



## Clean migration

Leverage your team's existing skill sets—most apps needn't be refactored to move to our cloud.



## Managed or self-service

Get disaster recovery, migration, backup services, and more, as self-service or fully managed.



## Buy what you need

Only pay for what you need with completely flexible cloud storage at your fingertips.

## Key features

### Greater elasticity

Provision new resources in minutes and handle peaks and seasonality with ease

### Reduced overhead

Monitor resources across both public and private clouds

### More control

Fine tune your cloud experience with customizable storage policies, firewall policies, and more

### Choice of storage

Choose from robust, flexible storage options to meet different demands

### Always-on security

Get policy-driven security and compliance with always-on features, including encryption

### Advanced metering and billing

View performance and capacity dashboards via the metering and billing interface

## Accelerate digital transformation



### Accelerate app deployment

Click to deploy hundreds of validated apps with security and infrastructure already configured



### Drive digital transformation

Click to deploy Kubernetes clusters in your cloud and manage lifecycle from UI and API



### Use infrastructure as code

Leverage infrastructure as code deployment of cloud resources and components


# Opus Interactive cloud solutions + managed services

Choose the cloud model that best fits your business, security, compliance, and infrastructure priorities. Managed solutions and VCF infrastructure are available for all cloud models.


- State of cloud transformation
- Transformation challenges
- Cloud challenges
- Migration paths & app mod strategies
- Full stack cloud provider
- VMware Cloud Foundation
- Cloud solutions
  - Hosted private cloud
  - Managed private cloud
  - Managed public cloud
- Consumption models
- Jumpstart ESG
- Meet compliance
- Cloud security
- Operational services
- Infrastructure services
- Innovation services
- Learn more

| Opus Interactive managed solutions                 |   |                                |
|--|---|--------------------------------|
| <b>S3-compatible storage and disaster recovery</b> | <b>Network, log, and cloud monitoring</b> | <b>Sovereignty</b>             |
| <b>Kubernetes and developer capabilities</b>       | <b>Cloud migration</b>                    | <b>Security and encryption</b> |


### Opus Interactive cloud solutions




**Hosted private cloud**




- Use for sensitive or sovereign workloads
- Fully self-managed
- Total control and autonomy
- Higher cost



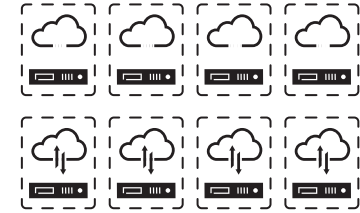
**Managed private cloud**



- Dedicated private cloud
- Includes managed services
- Align with lines of business
- Enables workload isolation



**Managed public cloud**



- Highly scalable
- Maintain control over where workloads run
- Flexible consumption models
- More cost-effective

- Hosted private cloud
- Managed private cloud
- Managed public cloud

# Hosted private cloud



Opus Interactive hosted private cloud delivers dedicated infrastructure and tailored solutions to meet your organization’s unique requirements with a compelling combination of security, customization, and scalability for critical and sensitive workloads.

## Why choose hosted private cloud

- Prioritize data protection
- Highly regulated workloads or data
- Need high degree of cloud control



### Get enhanced security for your mission critical apps

- Dedicated resources and isolated infrastructure
- More secure than public cloud
- Reduced risk of unauthorized access and data breaches



### Achieve vertical compliance and complete data privacy

- Enhanced compliance capabilities
- Support industry regulations and data privacy requirements
- Maintain control over data residency and security measures
- Mitigate compliance risks and maintain data sovereignty



### Maintain cloud controls

- Greater control over environments
- Tailor resources, configurations, and security policies
- Optimize for performance and efficiency



### Establish predictable costs

- Predictable pricing models
- Forecast costs more accurately
- Avoid over provisioning or unforeseen usage charges
- Maintain budgetary control
- Allocate resources efficiently



### Let us handle the hardware and service levels

- Dynamically scale host resources based on demand
- Accommodate fluctuating workloads and peak periods without sacrificing performance
- Zero performance degradation with dedicated hardware



### Meet sovereign requirements

- Complete solution for sovereign data management and security
- Locally implemented and operated sovereign cloud
- Data independence, protection, management, and control
- Local expertise to help you comply with regulations and data privacy laws
- Backed by value-added management services

# Managed private cloud



With Opus Interactive’s managed private cloud, your business benefits from a fully managed, seamless cloud environment optimized for performance, reliability, and security for critical applications and data. This solution combines expertise and flexibility, ideal for organizations aiming to enhance IT infrastructure, reduce operational costs, and increase agility.

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

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**Cloud solutions**

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Consumption models

Jumpstart ESG

Meet compliance

Cloud security

Operational services

Infrastructure services

Innovation services

Learn more

### Public cloud experience

- Self-service access
- High degree of automation
- Rapid deployment
- Secure shared user interface
- Underlying segregated workload domain infrastructure

The best of both worlds



### Private cloud control

- Dedicated hardware in your own workload domain
- Ideal for sensitive data
- Segregated workload domains avoid “noisy neighbors”
- Provide services to your internal organization



### Visibility

Easily monitor your organization’s usage with separate virtual data centers for different business lines, enabling accountability for consumption.



### Segregated for security

Enhance security with dedicated VMware Cloud Foundation workload domains and hardware ensuring complete isolation for sensitive data.



### Seamless migration

Easily migrate to and from the private cloud with VMware vSphere®, ensuring a smooth transition.



### Unburden IT

Lighten the IT load with our managed private cloud, covering infrastructure, backups, disaster recovery, and support. Enjoy seamless service consumption while we ensure smooth operations, freeing you to concentrate on core business activities.



### Protection

Secure internal resource access with a private cloud, controlling your infrastructure and providing developers with secure, isolated environments for CI/CD pipelines.

# Multi-tenant managed public cloud



Opus Interactive's managed public cloud offers a secure, cost-effective platform for application deployment and management on VMware Cloud Foundation, fostering innovation and operational efficiency. It features flexible, straightforward resource allocation models, allowing for dynamic adjustment of VMs and resources to meet changing needs, without complex pricing.

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

- Hosted private cloud
- Managed private cloud
- Managed public cloud

Consumption models

Jumpstart ESG

Meet compliance

Cloud security

Operational services

Infrastructure services

Innovation services

Learn more



## Automated infrastructure

Our cloud automates infrastructure with extensive APIs for security, networking, and infrastructure as code, ensuring efficiency. Navigate our user-friendly cloud with secure OS options, flexible licenses, and comprehensive monitoring.



## Stability

Trust Opus Interactive VMware Cloud, the technology you've relied on for years, with seamless maintenance and uninterrupted operations.



## Simplicity

Familiar with VMware Cloud? Explore our cloud effortlessly. Choose from our secure OS builds or bring your own, along with flexible OS licenses. Enjoy built-in visibility, chargeback, and resource monitoring.



## Secure and compliant

Virtualized firewalls provide easy protection, supporting unlimited connections and compliance with VMware standards and can be tailored to your needs. VCF enables simple workload migration across clouds without complex networking, ensuring seamless, risk-free transfers. Deliver a secure, on-demand cloud environment for DevOps without friction.



## Hybrid portability

Need to move workloads across clouds? It's easy to migrate workloads onto our VMware Cloud Foundation infrastructure. There is no complex re-networking and you can use the same architectures and hypervisors creating a simple, risk-free migration.



## Dev and test

Dev, test, and DevOps teams need resources they can spin up and tear down as needed. Opus Interactive managed public cloud offers an on-demand, secure cloud environment that's self-serve and developer ready.

# Flexible cloud consumption

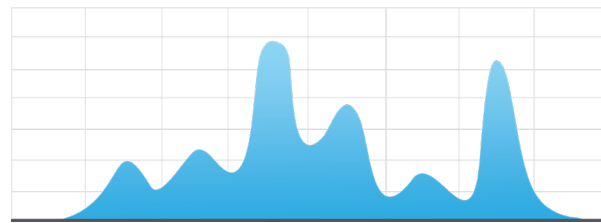
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Opus Interactive VMware Cloud offers total flexibility to meet application requirements for resources and performance. Pricing available monthly or get a price break with longer-term contracts.

## Allocation pools

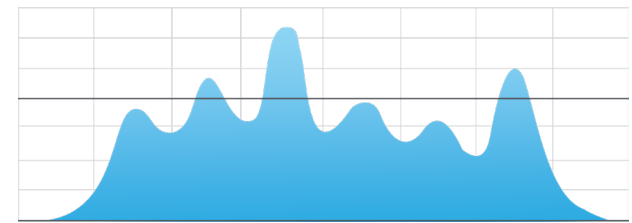
Get predictable cost by guaranteeing resources and with burst capacity to ensure workloads can start if resources are running low. Ideal for stable workloads such as databases.



Variable demand

## Pay-as-you-go

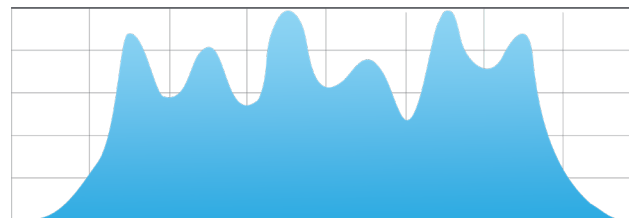
On-demand virtual server with no upfront resource allocation or costs, providing a true public cloud experience. Only pay for what you use. Ideal for seasonal, variable, or transient workloads such as dev/test.



Allocated pool with the option to burst

## Reservation pools

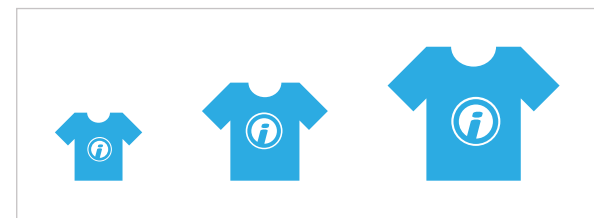
Guarantee 100% of reserved capacity, ideal for business-critical applications that need completely reserved resources and deliberate underutilization to ensure a smooth service.



Fixed for optimal performance

## Pre-fixed options

Flex VMs provide a pre-fixed menu of popular-sized or custom VMs that are available on demand and easy to deploy, with policy-based control over VM resources.



Accelerated deployments with pre-fixed options

# Jumpstart your ESG with Opus Interactive

At Opus, we're stewards to the mission critical workloads of our customers. As such, we are passionately committed to delivering hybrid cloud solutions that not only take exceptional care of our customers' needs, but also pave the way for sustainable energy use and the next generation of technology builders. Technology, meet humanity.

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

**Jumpstart ESG**

Meet compliance

Cloud security

Operational services

Infrastructure services

Innovation services

Learn more



## Enhanced sustainability

Transition your workloads to a partner cloud utilizing renewable energy sources, ENERGY STAR-rated hardware, and efficient cooling technologies to significantly reduce your carbon footprint.



## Risk management

Partner with an organization that has built an offering around sustainable IT from supply chain to continuous optimization. Mitigate risk and prepare your business for stricter future regulations.



## Compliance and reputation

A WBENC-certified business, Opus Interactive VMware Cloud aligns with ESG principles, boosting your organization's compliance with sustainability regulations and enhancing its reputation.



## Employee and customer attraction

Demonstrate a commitment to environmental stewardship, appealing to eco-conscious employees and customers.



## Innovation and leadership

Adopting a cloud infrastructure focused on sustainability positions your company as a leader in innovation and environmental responsibility.



## Save energy, save costs

Partner with Opus Interactive and gain efficiencies we've built through decades of commitment to sustainable IT - from right-sized solutions to net zero data centers.

For more information on our ESG commitments, please visit [www.opusinteractive.com](http://www.opusinteractive.com).

# Meet compliance with Opus Interactive

VMware Cloud Foundation enables your enterprise to meet regulatory requirements by bridging the gap between compliance frameworks and implementation guides. Opus Interactive can configure VMware Cloud Foundation to meet regulatory and security requirements needed for your workloads. We also provide explanations and information to help you and auditors navigate the compliance landscape.

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

- Overview & benefits
- Compliance services


Cloud security

Operational services

Infrastructure services

Innovation services

Learn more

|   |  |
|---|--|
|  <p><b>Enhanced compliance</b><br/>           Ensure adherence to industry-specific regulations and standards, reducing the risk of non-compliance penalties and enhancing trust among stakeholders.</p>             |  <p><b>Streamlined operations</b><br/>           Opus Interactive simplifies IT management with managed services that understand your industry's workflow and requirements, so you can focus on core business functions.</p>                            |
|  <p><b>Tailored solutions</b><br/>           Opus Interactive offers solutions and services designed for the unique needs and challenges of your industry, improving efficiency and effectiveness.</p>               |  <p><b>Faster time to market</b><br/>           Leverage Opus Interactive's <b>HIPAA, ISO 27001, SOC 2, and PCI DSS</b> compliance and expertise in high compliance workloads to accelerate deployment of your new products, systems, and services.</p> |
|  <p><b>Competitive advantage</b><br/>           Access to specialized tools and expertise gives you an edge over competitors, enabling you to innovate and respond to market changes more quickly.</p>              |  <p><b>Scalability and flexibility</b><br/>           With scalable solutions that adapt to your industry's fluctuating demands, Opus Interactive can support your growth without significant capital investment on your part.</p>                     |
|  <p><b>Reduced costs</b><br/>           Eliminate the need for extensive in-house compliance and industry-specific technology investments, lowering your operational expenses.</p>                                 |  <p><b>Expert support</b><br/>           Access to Opus Interactive professionals with specialized knowledge of your industry can enhance decision-making and enable more strategic managed services.</p>   |
|  <p><b>Improved security</b><br/>           Opus Interactive provides robust security measures tailored to the specific threats and requirements of your industry, safeguarding sensitive data and operations.</p> |  <p><b>Enhanced customer trust</b><br/>           Piggy backing on our standards and conformance demonstrates to customers your commitment to maintaining high standards of compliance and security, fostering trust and loyalty.</p>                 |



- Overview & benefits
- Compliance services

# Cloud compliance as a service


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Opus Interactive cloud compliance as a service (CCaaS) helps you achieve and maintain compliance with relevant regulations and standards in your cloud computing environments. As businesses increasingly adopt cloud services to store, process, and manage data, ensuring compliance with industry regulations, legal requirements, and internal policies becomes paramount. CCaaS streamlines the compliance process and mitigates risks associated with cloud deployments.



**Regulatory compliance**




**Risk assessment and management**



**Policy development and enforcement**




**Continuous monitoring and reporting**



**Auditing and documentation**



**Scalability and flexibility**



**Expertise and support**



State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

Cloud security

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
- Web application firewall
- Encryption management
- Data protection

Operational services

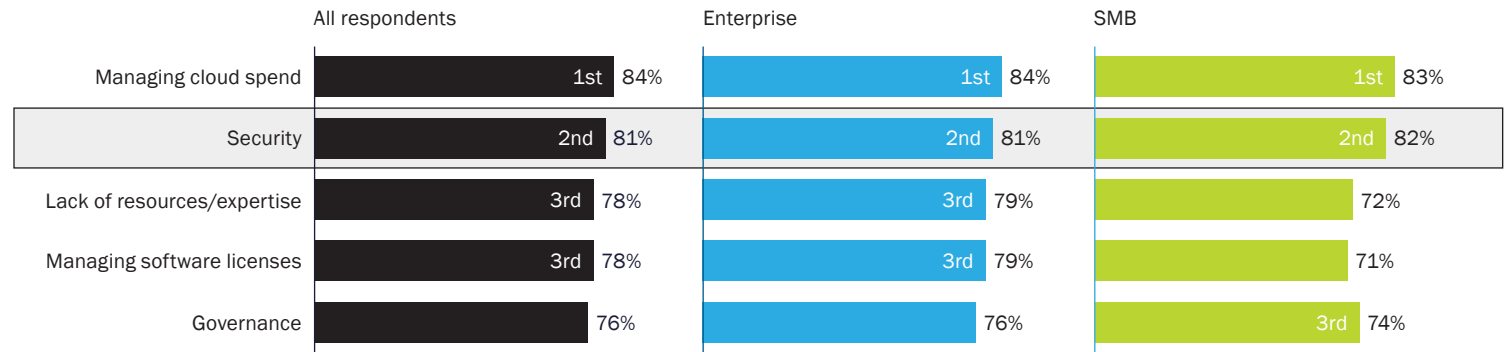
Infrastructure services

Innovation services

Learn more

# Security challenges

## Cloud security remains a top concern<sup>1</sup>



**Q: What are your organization's top cloud challenges?**

All respondents: N=753, Enterprise: N=621, SMB: N=132

## And for good reason:

**60%**  
of business data is kept in the cloud<sup>2</sup>

On average,  
**over 40%**  
of cloud data is sensitive<sup>3</sup>

Cloud remains a  
**top target**  
for cyberattacks<sup>4</sup>

Sources

1. Flexera, [2024 State of the Cloud Report](#), 2024
2. Future Market Insights, [Cloud Encryption Market Outlook](#), 2023
3. Statista, [Concentration of Sensitive Data Stored in the Cloud Worldwide](#), Nov 2023
4. CISA, [2023 Year in Review](#), 2024

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
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# Cloud security overview

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Move to a cloud operating model that combines the scale and agility of public cloud with the security and performance of private cloud.

## Cloud security

### Automated lifecycle

Remove human error and reduce risk introduced through bad configurations

### Monitoring

Get instant alerting and reaction to possible security issues and non-compliant configurations

### Data protection

Ensure recovery from incidents and attacks

## Workload security

### Encryption

Keep data encrypted at rest and in transit

### Web application firewall

Protect apps with elastic horizontal auto-scaling to handle attacks and easy rule generation to customize response

### Dynamic groups

Simplify maintaining your security posture without burning out ITOps teams

## Network security

### Perimeter firewall

Set up a perimeter firewall to control and monitor north-south traffic and deliver NAT and IPSec and VPN functionality

### Distributed firewall

Deploy virtual firewalls that move with the VM and protect east-west threats

### IDS/IPS

Establish a critical last line of defense to detect intruders

- Security challenges
- Cloud security overview
- Network firewall security
  - Distributed firewall
  - Dynamic groups
  - Firewall-as-a-service
  - Service-defined firewalls
  - IDS/IPS & security intelligence
- Ransomware
- Web application firewall
- Encryption management
- Data protection

# Protect against internal threats

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Hosted private



Managed private



Managed public

Opus Interactive east-west traffic protection with distributed firewall helps mitigate risks from internal threats, such as compromised devices or insider threats, by restricting lateral movement within the network.



## Optimized for increased data center traffic

Modern data centers and cloud environments experience a significant volume of east-west traffic due to the intercommunication between applications and services. Without adequate protection, malicious activities could spread more easily within the network.



## Advanced persistent threats (APTs)

APTs often move laterally within a network to find valuable data after breaching the perimeter. Monitoring and controlling east-west traffic can help detect and stop these threats before they reach critical assets.



## Granular control over east-west traffic

Firewalls that monitor east-west traffic enable micro-segmentation, allowing for more granular control of traffic between workloads. This reduces the attack surface by limiting access to only what is necessary for each application or service to function.



## Reduced risk of propagation

In the event of a breach, firewalls that cover east-west traffic can help contain the attack, preventing it from spreading to other parts of the network and reducing the overall impact.



## Compliance requirements

Certain regulatory standards require protection of sensitive data, not just from external threats but also from unauthorized internal access. East-west traffic monitoring and control help ensure compliance with these requirements.



## Complexity of modern networks

With the adoption of cloud services, BYOD (bring your own device) policies, and IoT devices, networks have become more complex. Protecting east-west traffic acknowledges and addresses the complexity and diversity of modern communication patterns within networks.

- Security challenges
- Cloud security overview
- Network firewall security
  - Distributed firewall
  - **Dynamic groups**
  - Firewall-as-a-service
  - Service-defined firewalls
  - IDS/IPS & security intelligence
- Ransomware
- Web application firewall
- Encryption management
- Data protection

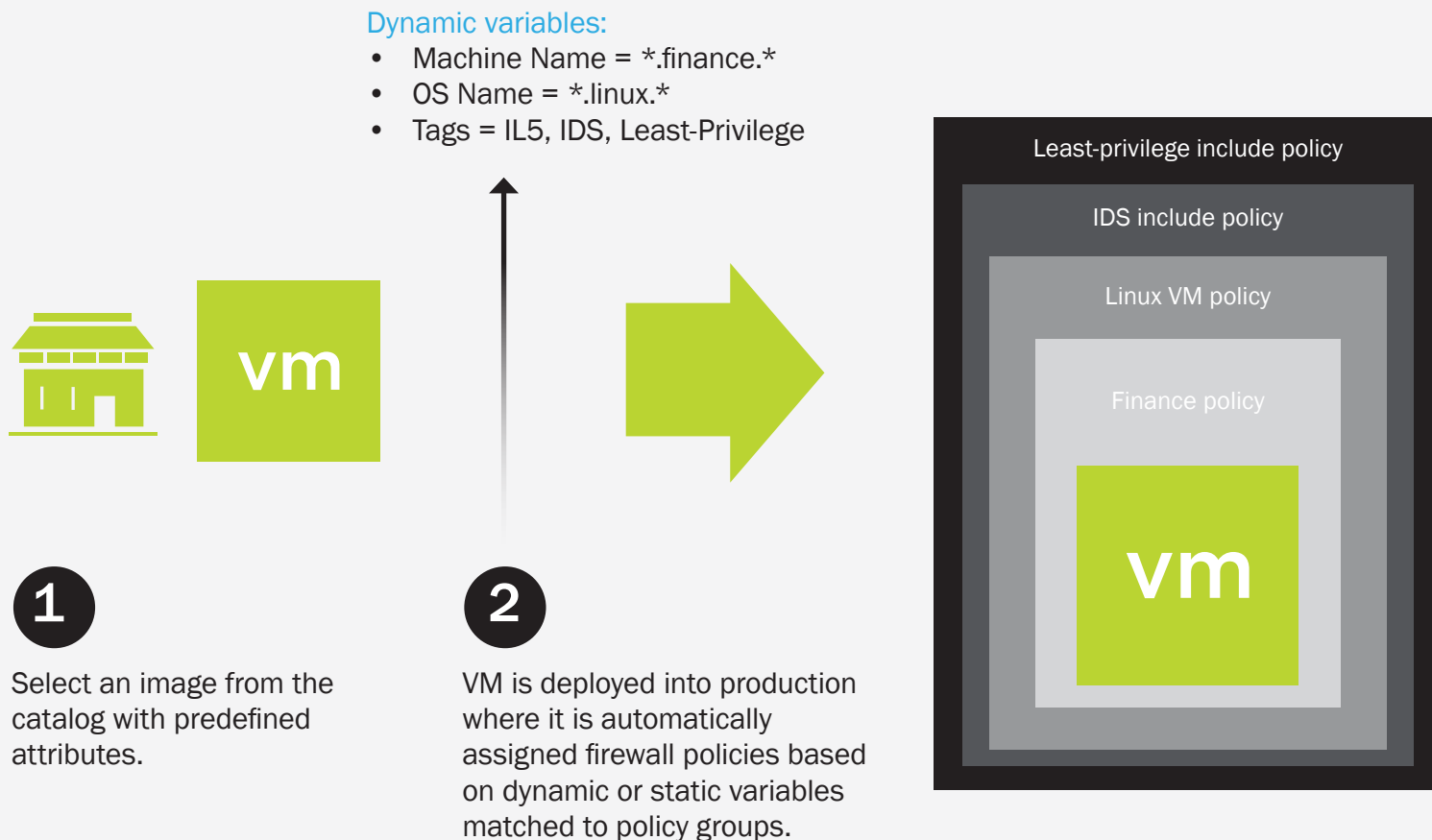
# Distributed firewall dynamic groups

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Implementing zero-trust security can be straightforward. Dynamic groups allow for the creation of distributed and edge gateway firewall rules tailored to each VM within a data center group's networking framework.

Leveraging dynamic security groups for distributed firewall rules enables precise micro-segmentation of network traffic, ensuring robust protection of your organization's workloads, regardless of their location within the data center.



- Security challenges
- Cloud security overview
- Network firewall security
  - Distributed firewall
  - Dynamic groups
  - **Firewall-as-a-service**
  - Service-defined firewalls
  - IDS/IPS & security intelligence
- Ransomware
- Web application firewall
- Encryption management
- Data protection

## Intrinsic security with firewall-as-a-service

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Opus Interactive offers professional and managed services to help you design, deploy, and manage your distributed firewalls.

### Features

- ✓ Assess on-premises networks, applications, and dependencies
- ✓ Design and deploy stretched networks for cloud environments
- ✓ Define and implement firewall policies
- ✓ Migrate existing workloads and applications
- ✓ Transform security and networking to improve business agility and outcomes

Now you can deploy a distributed, scale-out internal firewall to:

Secure east-west traffic across the cloud environments.

Achieve superior protection against lateral movement of malware with stateful Layer 7 security controls and advanced threat detection.

Gain a unique, intrinsic approach to security that simplifies deployments and streamlines firewalling of every workload—at a fraction of the cost.

# Get proactive security with service-defined firewalls

AVAILABLE ON:



State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

## Cloud security

- Security challenges
- Cloud security overview
- Network firewall security
  - Distributed firewall
  - Dynamic groups
  - Firewall-as-a-service
  - **Service-defined firewalls**
  - IDS/IPS & security intelligence
- Ransomware
- Web application firewall
- Encryption management
- Data protection

Operational services

Infrastructure services

Innovation services

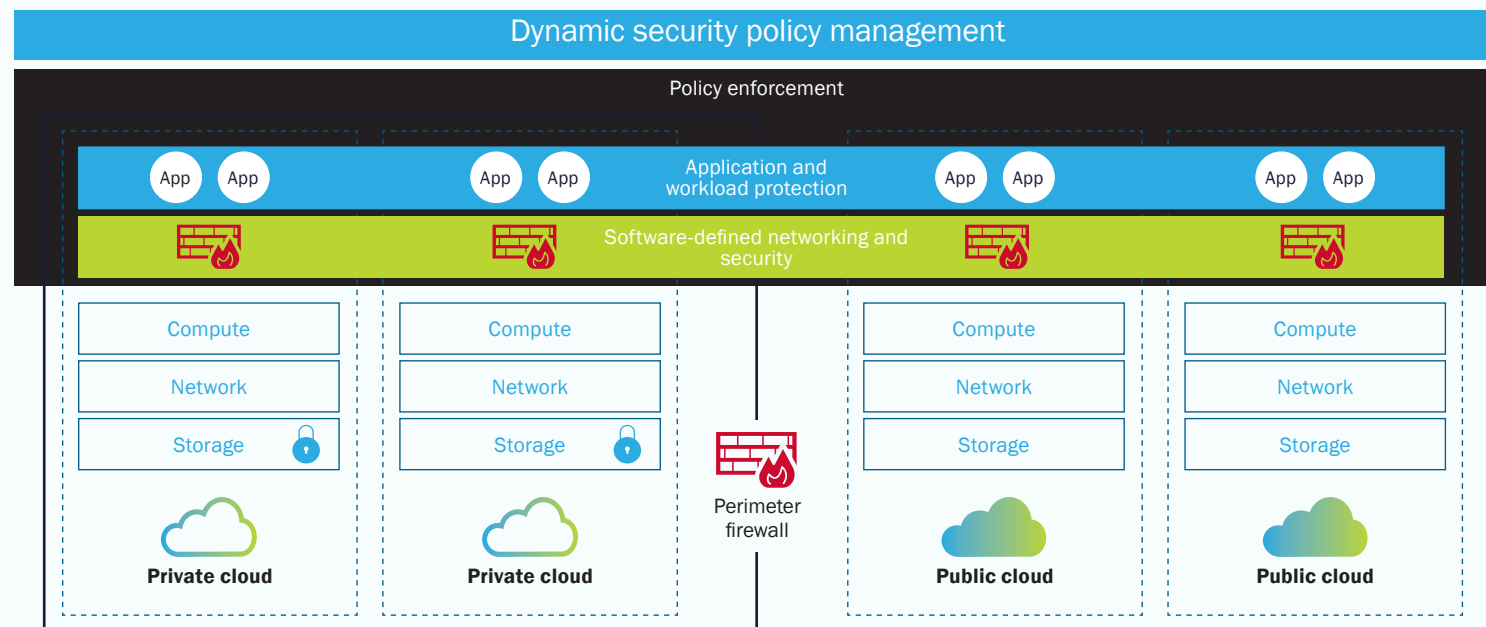
Learn more

Service-defined firewall is a paradigm built on the premise that security is an embedded part of an application or workload regardless of its location, better positioning enforcement to ensure consistent security posture. This is a departure from how security has historically been done with tools that are reactive in nature.

Use a multi-layer, defense-in-depth strategy to minimize the attack vector.

Protect each service at all possible layers or levels in the infrastructure as necessary for each app.

Address data sensitivity, user base, accessibility needs, and availability requirements.



# Intrusion detection and prevention services (IDS/IPS) and security intelligence

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

## Cloud security

- Security challenges
- Cloud security overview
- Network firewall security
  - Distributed firewall
  - Dynamic groups
  - Firewall-as-a-service
  - Service-defined firewalls
  - [IDS/IPS & security intelligence](#)
- Ransomware
- Web application firewall
- Encryption management
- Data protection

Operational services

Infrastructure services

Innovation services

Learn more

Many exploits access workloads not from the outside, but from other workloads. Enhance your east-west network traffic security posture with app-aware, advanced threat detection that's purpose-built to detect lateral threat movement. Security intelligence, service-defined firewall, and IDS/IPS work together to create a complete, easy-to-deploy internal firewall stack, delivering on the intrinsic security strategy inside your data center.



**Elastic throughput**



**Simplified network**

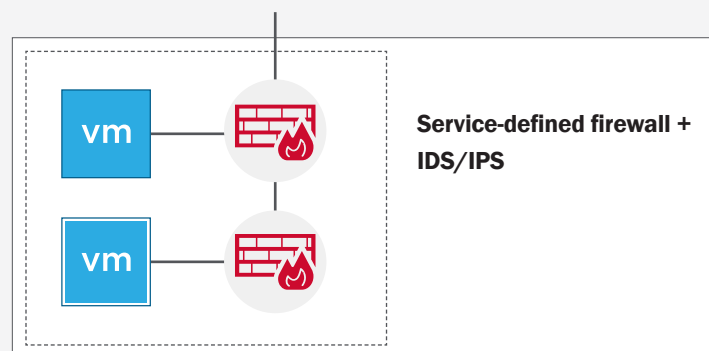


**Reduced false positives**



**Improved capacity utilization**

Opus Interactive professional and managed services can help you deploy IDS and IPS with a single control plane, centralizing data collection and analytics with security intelligence for a complete secure standing.



- Add additional traffic inspection capabilities to a service-defined firewall
- Lower cost of IDS/IPS appliances with intelligence host processing
- Scale inspection capacity automatically with IDS/IPS functionality built into each workload, eliminating hardware bottlenecks
- Secure movement with policies that stay with the workload for protected mobility
- Use with distributed firewall to better meet compliance requirements



- Security challenges
- Cloud security overview
- Network firewall security
- **Ransomware**
- Web application firewall
- Encryption management
- Data protection

# Ransomware protection

AVAILABLE ON:



Hosted private



Managed private



Managed public

## Intrinsic end-to-end security and ransomware with Veeam and Opus Object Storage technology.



### Real-time data protection monitoring and alerts

Maintain visibility and mitigate issues with 340+ pre-set alarms and 150+ pre-built reports and heatmaps.



### Instant VM and database recovery

Restore VMs and databases to production environments by running them from compressed and deduplicated backup files.



### Immutable backups

Secure options on premises and in the cloud using Veeam scale-out backup repository and Opus Object Storage.



### Ransomware workload clean restore

Restore data in an isolated virtual sandbox and scan for malware without impacting production systems.



### Storage flexibility

Choose from multiple storage options including object, hybrid and all flash, all of which are immutable.



### Confident recovery orchestration

Dynamically update and automate testing of recovery plans and quickly recover without manual intervention.

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
- [Web application firewall](#)
- Encryption management
- Data protection

# Self-service web application firewall

AVAILABLE ON:



Using Opus Interactive VMware Cloud, you can integrate web application firewall (WAF) capabilities to fortify your cloud environments with an extra layer of defense against common web-based attacks.



## Benefits of WAF

### Enhanced security

Provide an additional layer of defense against web-based attacks, helping to protect web applications and data from various threats such as SQL injection, cross-site scripting (XSS), and other vulnerabilities.

### Protection of applications

Safeguard web applications from malicious traffic and unauthorized access, reducing the risk of data breaches and ensuring the integrity of sensitive information.

### Regulatory compliance

Implementing a WAF can help organizations meet regulatory requirements and industry standards related to data protection and security, such as PCI DSS and GDPR.

### Granular control

WAFs offer fine-grained control over incoming and outgoing web traffic, allowing administrators to create custom rules and policies tailored to specific applications and security requirements.

### Real-time monitoring + logging

Get visibility into web traffic patterns and potential security threats through real-time monitoring and logging capabilities, so teams can detect and respond to incidents more effectively.

### Scalability and flexibility

WAF solutions are designed to scale with the evolving needs of organizations, offering flexibility to deploy across various environments, including on-premises, cloud, and hybrid.

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
- Web application firewall
- **Encryption management**
- Data protection

# Encryption management service

AVAILABLE ON:



Hosted private



Managed private



Managed public

Using Opus Interactive encryption management service provides comprehensive encryption solutions tailored to safeguard your sensitive data across all platforms and devices, ensuring confidentiality, integrity, and compliance with data security standards.

## Available encryption methods



### VM encryption

Users can enhance data security with VM encryption. By aligning virtual machines and disks with storage policies featuring VM encryption capabilities, users can encrypt these components to bolster data protection.



### Virtual trusted platform module

Incorporating Virtual Trusted Platform Module (vTPM) devices ensures heightened security, offering assurance that your guest operating system is more fortified and can only be executed on selected hosts, enhancing security for VMs.



### Bring your own encryption

Bring your own keys to retain control and management of encryption keys while utilizing encryption services.

Bring your own key management server to control and manage encryption keys and the system used for key management, offering enhanced security and governance over data.

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

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Cloud security

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
- Web application firewall
- Encryption management
- **Data protection**
  - Disaster recovery services
  - Backup services

Operational services

Infrastructure services

Innovation services

Learn more

## Why you need data protection

As businesses continue to transform and become more digital, they also increase their dependency on technology—putting them at risk. IDC predicts that by 2025, 55% of organizations will have adopted a cloud-centric strategy toward their data protection.<sup>1</sup>

### The dangers and likelihood of downtime

## 53% of global IT decision makers

think it's likely their company will experience a brownout or outage so severe that it makes national media headlines.<sup>2</sup>

### Top business impacts of downtime<sup>2</sup>

- **Lost revenue**
- **Compliance failure**
- **Damage to the brand**
- **Lowered stock price**
- **Mitigation costs**
- **Lost productivity**
- **Costs to mitigate and recover**
- **Career negatively impacted**
- **Business failed**

### Cost of server downtime<sup>3</sup>

Hourly cost for 97% of businesses averages \$300,000 per hour, with over half of those firms citing costs from \$1M to over \$5M.

#### Sources

1. IDC, [Worldwide Data Protection as a Service Forecast, 2023–2027](#), Dec 2023
2. LogicMonitor, [IT Outage Impact Study 2023 Report](#)
3. ITIC, [ITIC 2023 Global Server Hardware, Server OS Reliability Report](#), Sept 2023

Companies with frequent outages and brownouts see<sup>2</sup>

**16x**  
higher costs

**2x**  
as long to  
troubleshoot problems

**Nearly 2x**  
more team members to  
troubleshoot problems

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
- Web application firewall
- Encryption management
- Data protection
  - [Disaster recovery services](#)
  - Backup services



## Disaster recovery services

In a world where cloud-first has become the prevailing strategy, Opus Interactive goes above and beyond to deliver unparalleled disaster recovery services that safeguard your applications and data. Our solutions offer a robust shield against unforeseen events, ensuring seamless recovery and uninterrupted business operations tailored to the unique RPO and RTO needs of your workloads..

### Disaster recovery capabilities

#### Fast and reliable recovery

Automate a recovery plan and eliminate the risks involved with manual processes.

#### Zero-downtime application mobility

Tailor your organization's topologies and RPOs while performing recovery, live migration of applications at scale, and non-disruptive testing.

#### Simplified DR management

From setup to management, Opus Interactive disaster recovery delivers simple, policy-based operations for thousands of VMs due to automation and integration with VMware Cloud Foundation.

#### Frequent, non-disruptive testing

Perform frequent, non-disruptive testing, even during business hours, to ensure predictable recovery objectives.

#### Automated orchestration workflows

Reduce recovery time to minutes with reliability using Opus Interactive disaster recovery's automated orchestration workflows.

#### Automated failback at scale

Return to regular operations with ease, using centralized recovery plans through automated failback.

### Additional key features

- ✓ Metering and performance analysis of storage consumption
- ✓ Public APIs and automation for on-premises-to-cloud disaster recovery
- ✓ Tiered disaster recovery services that match the criticality of workloads at the most competitive price point
- ✓ Managed services and self-serve options

- Security challenges
- Cloud security overview
- Network firewall security
- Ransomware
- Web application firewall
- Encryption management
- Data protection
  - Disaster recovery services
  - [Backup services](#)

# Backup services with leading partners

AVAILABLE ON:

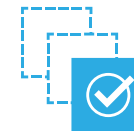


Opus Interactive backup services deliver availability for all your cloud, virtual, and physical workloads so you can easily achieve fast, flexible, and reliable backup, recovery, and replication for all applications and data, including support for VMware vSAN™.



### Automated backup

Automate the protection of vOrgs, vDCs, vApps, and VMs. Flexible data protection options enable backups to be run automatically through policies or on demand.



### Granular recovery

Speed vApp and VM recovery to their original or alternate locations, on premises or to the cloud. Restore a subset of VMs, individual files, or an entire vApp instantly.



### Self serve

Use self-serve controls to manage your own VMs and vApps, as well as the scheduling of backup and restore operations.



### Advanced deduplication

Minimize your operating costs with industry-leading deduplication.



- Day 2 operations
- Lifecycle management

## Day 2 managed operations

AVAILABLE ON:



Opus Interactive Day 2 operations service enables organizations to offload routine IT management tasks, reduce operational overhead, and leverage external expertise and resources to ensure the reliability, security, and performance of their IT infrastructure and services.

-  **Monitoring and alerting**
-  **Incident management and response**
-  **Change and patch management**
-  **Compliance and security**
-  **Performance optimization**
-  **Capacity planning and scaling**
-  **Backup and disaster recovery**

By leveraging external expertise and resources, organizations can focus on their core business activities while ensuring that their IT infrastructure and services are effectively managed, maintained, and optimized.

- Day 2 operations
- Lifecycle management

# Lifecycle management

AVAILABLE ON:



Opus Interactive lifecycle management services streamline the management of resources throughout their entire lifecycle. Benefit from enhanced operational efficiency, improved scalability, better cost control, and reduced management overhead to ensure your cloud infrastructure remains agile, secure, and cost-effective.

## This service encompasses



**Planning and deployment**



**Monitoring and optimization**



**Security and compliance**



**Cost management**



**Scaling and elasticity**



**Backup and disaster recovery**



**Retirement and decommissioning**



- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
- Migration services

# Networking services

AVAILABLE ON:



Opus Interactive offers a comprehensive suite of features designed to enhance security posture, streamline network management, and ensure a smooth transition to the cloud.



## Network assessments

Evaluate on-premises networks, applications, and dependencies to identify and mitigate security risks.



## Security transformation

Upgrade security and networking to boost business agility and outcomes, incorporating features like micro-segmentation and advanced threat protection.



## Stretched network deployment

Design and implement networks that extend from on-premises to cloud environments, ensuring seamless security and policy consistency.



## Continuous monitoring and compliance

Monitor network traffic and security events in real time for threats and ensure regulatory compliance through detailed reports and audits.



## Firewall policy management

Define and apply tailored firewall policies, with dynamic adjustments to meet changing security and compliance needs.



## Custom security services

Work with Opus Interactive for vulnerability assessments, penetration testing, and security consulting tailored to your unique requirements.



## Workload migration

Securely migrate existing workloads and applications to the cloud with minimal downtime.



## Scalability and flexibility

Support business growth and evolving security needs with scalable solutions and flexible deployment options for various cloud environments.

Infrastructure services

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
- Migration services

# Advanced load balancer


AVAILABLE ON:




Adding hardware or virtual load balancers when extra capacity is needed can lead to appliance sprawl, higher costs, wasted time and capacity, and complex management, especially in high-availability configurations. Load balancers also need to deliver applications effectively in cloud environments—something that is almost impossible with hardware-based load balancing.

Opus Interactive advanced load balancer (ALB) is an enterprise-grade, software-defined load balancer that can deliver any app on your VMware Cloud at any scale. It ensures seamless distribution of network traffic, optimizing application performance and enhancing reliability. With intelligent load balancing capabilities, we provide a scalable solution to efficiently manage and distribute workloads, ensuring a smooth and responsive user experience for your applications.


## Top-line impact

 **\$13.6 million average higher revenue per year**  
 (~\$630,000 per 100 applications)

 **27% application developer productivity**


## Post deployment benefits

 **90% faster to scale capacity**

 **54% fewer outages**

## Lower operational costs

 **6 month payback**

 **43% cost of operations savings**

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
- Migration services

# Advanced load balancer

AVAILABLE ON:



Hosted private



Managed private



Managed public

Advanced load balancer with Opus Interactive cloud has scalability, web application firewall, and container ingress services. Based on a software-defined architecture with on-demand auto-scaling and per app/per tenant deployments, our advanced load balancer provides a resilient, self-healing application services fabric that elastically scales to handle unpredictable peak loads and delivers high availability across clouds.

## Consistency

Simplify administration with centralized policies and operational consistency across on-premises data centers and public clouds

## Pervasive analytics

Gain unprecedented insights, including network, end user, and security, with real-time application performance monitoring

## Extend to cloud

Extend application services, such as container ingress and security, seamlessly to cloud-native applications in Kubernetes and Red Hat OpenShift environments

## Organizational benefits



### Fast time-to-value

- Deployment and installation
- Multi-tenancy
- Day 0 automation
- Self-service



### Operational simplicity

- Software upgrades
- Health monitoring
- Backups and handling DR
- Faster troubleshooting



### Proactive resilience

- Anomaly detection
- Reduced misconfiguration
- Auto sizing and scaling
- High availability and self healing

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
- Migration services

# Cloud object storage

AVAILABLE ON:



Managed private



Managed public

Opus Interactive managed clouds offer a choice of storage options as well as cloud object storage (COS) from Scality which is highly scalable and can be more cost-effective for unstructured data, such as video generated from surveillance cameras or high volumes of data too large for normal storage.

## Customizable storage tiers

Cut your COS costs by tiering your storage to align with the frequency of data access. Data that is infrequently accessed could be moved to lower-cost storage.

## Faster data access anywhere

Retrieve data much faster compared to other storage types as COS does not have file hierarchy and is usually delivered as a service.

## Unlimited scalability

COS is suitable for cloud scalability and grows with your data without limitation.

## Lower cost

Due to the unlimited ability to scale out with COS, it is less costly to store all types of data.

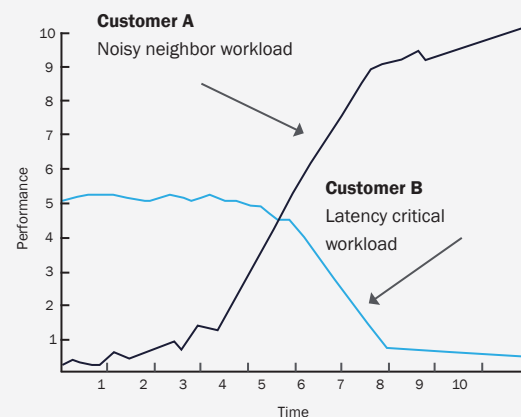
## Better business insight

COS enables improved insight, as each object is driven by metadata and can be analyzed for cataloging and insights.

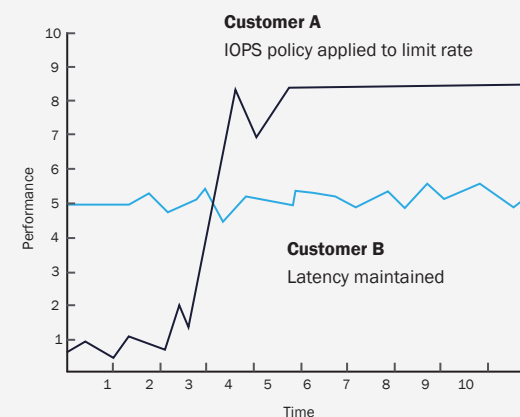
## Enhanced storage performance

In shared environments, storage spikes can affect the performance of other VMs on the same system. With Opus Interactive managed clouds, you can control the application experience with tiered, host-based IOPS rules on storage policies to protect workload performance.

No performance protection



Enhanced storage performance with Opus Interactive managed cloud



- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
  - [Overview of monitoring services](#)
  - How insights are delivered
  - Network monitoring
  - Log management
  - Cloud monitoring
- Migration services

# Monitoring services

AVAILABLE ON:



Over the last few years, businesses faced challenges that tested their resilience and adaptability. Years of planned digital projects were deployed in months or even weeks. With new technology now implemented and embraced, it's essential to pause and assess:

- |  |   |
|--|---|
| ✓ <b>What do you have?</b>                         | ✓ <b>What's your visibility from end to end?</b>        |
| ✓ <b>Where and how did cloud use grow?</b>         | ✓ <b>Where have you grown in complexity?</b>            |
| ✓ <b>How are applications performing?</b>          | ✓ <b>How difficult is it to troubleshoot a problem?</b> |
| ✓ <b>Is everything under the right governance?</b> | ✓ <b>Is cloud consumption out of control?</b>           |

Your IT environment was already complex. While your IT operations staff and budget likely stayed the same (or reduced), the job of managing IT operations has gotten harder.

Equip your teams with Opus Interactive end-to-end monitoring services that establish unified visibility, support cloud strategies, and give you greater confidence in capacity and cost management, application performance management, proactive remediation, and meeting compliance.



## Optimized performance

Self-driving, continuous optimization is based on operational and business intent, automatically balancing workloads to avoid contention as well as optimize utilization.



## Efficient utilization

Manage and optimize cloud infrastructure to get more VMs out of the same hardware and manage data center growth using capacity planning and modeling.



## Reduced downtime

Predict, prevent, and troubleshoot faster with actionable insights by correlating metrics and logs with unified visibility from applications to infrastructure.



## Out-of-the-box compliance

Reduce risk and enforce IT and regulatory standards with integrated compliance and automated drift remediation.

**Infrastructure services**

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
  - Overview of monitoring services
  - [How insights are delivered](#)
  - Network monitoring
  - Log management
  - Cloud monitoring
- Migration services

# Monitoring services

AVAILABLE ON:



Hosted private



Managed private



Managed public

Opus Interactive offers a variety of near real-time monitoring, alerting, and reporting services, including custom-designed insights, across your hybrid and multi-cloud infrastructure. Available as a self-serve or a fully managed service.



## Alerting services

Opus Interactive provides out-of-the-box and custom alerts and intelligent analytics to help you manage the health of your resources.



## Real-time monitoring

Gain full visibility into your entire dedicated private cloud resources and real-time insight for more informed decisions.



## Reporting services

Visualize ongoing health and trends with ready-to-go dashboards, views, reports, heat maps, and performance charts for the insights you need to plan for and identify trends.

- ✓ **Near real-time monitoring within 20 seconds**
- ✓ **Support for most clouds as well as on-premises resources**
- ✓ **Alerts and reports typically delivered via email but other options are available**

Infrastructure services

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
  - Overview of monitoring services
  - How insights are delivered
  - [Network monitoring](#)
  - Log management
  - Cloud monitoring
- Migration services

# Application-aware network monitoring and troubleshooting

Opus Interactive network monitoring services deliver intelligent operations for software-defined networking and security. We help you build, monitor, discover, and analyze networks to improve application performance for a highly optimized, available, and scalable network infrastructure.

- **Troubleshoot and preempt network issues**
- **Enable visibility across virtual and physical networks**
- **Provide operational views to manage and scale network deployments**
- **Improve network performance**
- **Avoid business downtime by keeping business-critical applications running in a secure environment**
- **Accelerate application discovery**
- **Run Day 2 network operations and plan network segmentation**



Hosted private

AVAILABLE ON:



Managed private



Managed public

Outcomes with network monitoring services

**90%**  
 increased network mapping efficiency

**80%**  
 reduced time spent monitoring the network

**50%**  
 decreased network outages

Source: Forrester, [The Total Economic Impact™ of VMware Cloud Foundation Network Operations](#), April 2024

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
  - Overview of monitoring services
  - How insights are delivered
  - Network monitoring
  - [Log management](#)
  - Cloud monitoring
- Migration services

# Intelligent log management services

AVAILABLE ON:



Hosted private



Managed private



Managed public

Opus Interactive intelligent log management delivers heterogeneous and highly scalable log management and deep operational visibility with intuitive, actionable dashboards, sophisticated analytics, and broad third-party extensibility. It helps you make sense of all log data and provides predictive analytics, machine learning, and root-cause analysis across physical, virtual, and multi-cloud environments for faster problem resolution.

## Intelligent log management features



### Unified log collection and analytics

Connect to everything in your IT environment, including operating systems, applications, storage, firewalls, and network devices for enterprise-wide visibility.



### Intuitive GUI and easy deployment

Easily run simple, interactive searches as well as deep analytical queries for quick insights that provide immediate value and boost IT efficiency.



### Built-in VMware Cloud knowledge

Enable centralized analysis of your entire IT environment with a log analysis tool offering built-in support for VMware Cloud technologies.



### Customizable data policies

Use customizable data retention to improve compliance with license agreements and internal security policies and avoid unnecessary storage consumption.



### Integration with operations management

Extend operational visibility and proactive management capabilities across infrastructure and applications by integrating with VMware Aria Operations.



- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
  - Overview of monitoring services
  - How insights are delivered
  - Network monitoring
  - Log management
  - [Cloud monitoring](#)
- Migration services

# Physical, virtual, and hyperscale cloud monitoring

Integrate monitoring across a hybrid environment and extend to the cloud in confidence.

AVAILABLE ON:



## One view

Unified visibility, monitoring, and planning for workloads across Opus Interactive VMware Cloud, data center, and public cloud, enabled by VMware vCenter.



## Multi-cloud

Support multi-cloud strategies with unified monitoring across clouds including support for AWS, Azure, Google Cloud, and VMware clouds.



## Insights

Get insights to help with workload balancing, capacity and cost management, performance management, troubleshooting, compliance, planning, and assessment.

## Support includes:

Virtualization, app mgt.  
 Citrix Virtual Apps and Desktops  
 Docker  
 IBM PowerVC  
 IBM HMC  
 Microsoft Hyper-V  
 VMware Tanzu Application Service

Hyperconverged  
 Cisco HyperFlex  
 NetApp HCI  
 VMware vSAN

\*Note supported technology list can change over time. Please refer to [vmware.com/products/aria-operations-for-integrations.html](https://www.vmware.com/products/aria-operations-for-integrations.html) for up to date management packs.

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
- Migration services
  - [Considerations & benefits](#)
  - Migration steps
  - Dedicated private cloud migration

# Migrate to cloud

AVAILABLE ON:



Migration to cloud is the process of moving resources, such as VMs or virtual applications, from one place (an on-premises or cloud site) to a cloud computing environment. This might seem easy but is often more complicated than expected.

## Do any of these migration challenges sound familiar?

### Replatforming

Is the cloud environment compatible with your on-premises infrastructure? Are security, networking, data disk formats the same?

### Right-sizing

Is the cloud offering flexible enough? Opus Interactive VMware Cloud Foundation can accommodate any size VM—you are not forced down a particular route.

### Security

Is the migration process secure enough?

### Stability

Is there a guarantee that the migration will be successful?

### Downtime

How long can you afford to have critical applications powered off?

### Size

Are the migrated workloads too big, and will this slow down the process significantly?

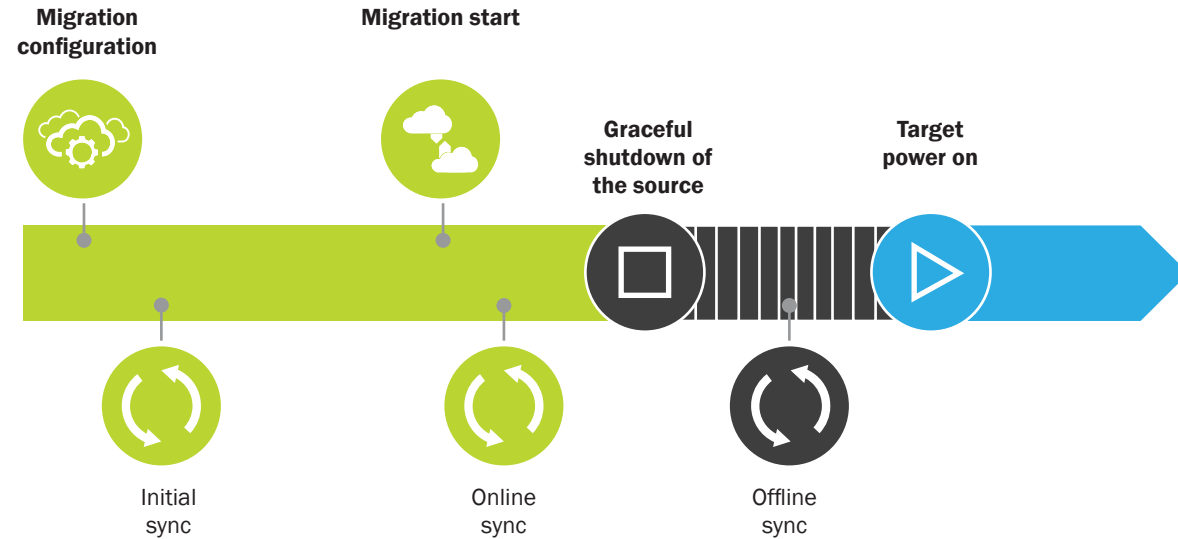
### Level of customization

Are there many dependencies between the different elements of a vApp?

Not all migrations are identical. Migrating to a VMware Cloud is straightforward and low-risk. Utilizing our vSphere-based cloud eliminates the need for replatforming, reducing migration duration and minimizing the risk of conversion failures or security vulnerabilities.

You have full flexibility to initiate a self-service migration from your vSphere console to our secure target cloud. Within our cloud environment, you can select [appropriately-sized resources](#) tailored to your needs, without being limited to constrained or unsuitable sizing options.

# Migration steps



- State of cloud transformation
- Transformation challenges
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- Migration paths & app mod strategies
- Full stack cloud provider
- VMware Cloud Foundation
- Cloud solutions
- Consumption models
- Jumpstart ESG
- Meet compliance
- Cloud security
- Operational services
- Infrastructure services
  - Networking services
  - Advanced load balancer pt. 1
  - Advanced load balancer pt. 2
  - Cloud object storage
  - Monitoring services
  - Migration services
    - Considerations & benefits
    - [Migration steps](#)
    - Dedicated private cloud migration
- Innovation services
- Learn more

**Pre-step:** Arrange virtual data center resources on our cloud, obtain connectivity credentials, and deploy the vSphere DRaaS Plugin and components on your premises.

## Step 1 Migration configuration

- The migration is configured in the DRaaS vCenter plugin or directly in our cloud.
- Source workloads continue running without interruption.
- When the initial sync is complete, workloads are ready to be switched to the destination site.
- During this wait period, changes are synchronized once every 24 hours.

## Step 2 Migration start

- After preparation, the migration can be started.
- At the time of switchover, online sync is executed first, followed by a graceful shutdown.
- If the graceful shutdown fails with a timeout, a forced power off will be triggered.
- When the machine is offline, a rapid sync is performed to capture any changes since the previous sync.

## Step 3 Start the migrated VM

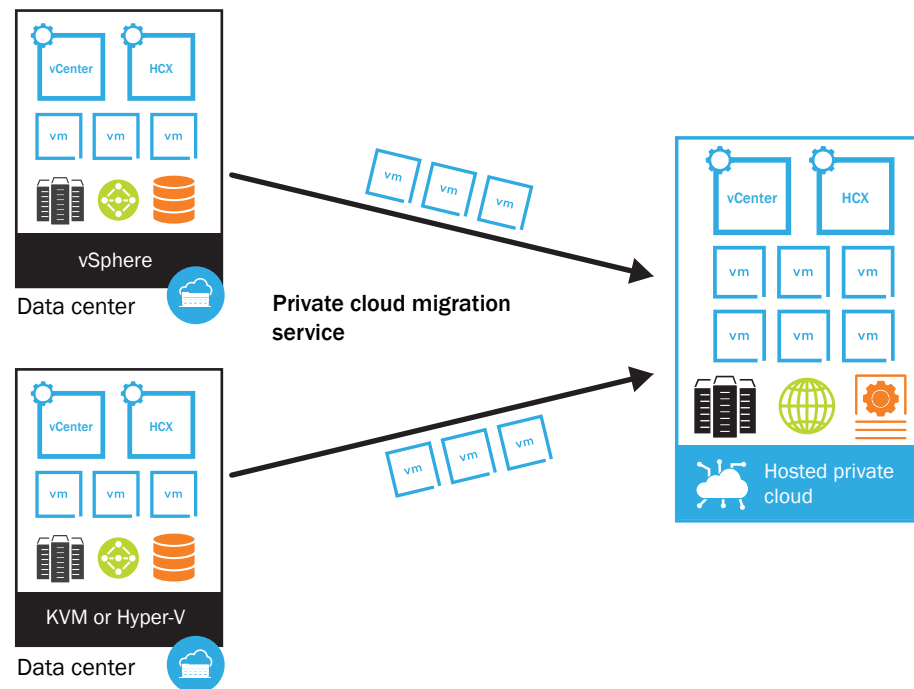
- The final step is to compose the VM and power it on.
- Workload downtime is minimized to almost that of a graceful restart.

Welcome to cloud made easy!

# Dedicated private cloud migration service

Opus Interactive private cloud migration service delivers non-disruptive, seamless migration of mission critical workloads from on premises to private cloud, with:

- **Zero downtime**
- **Self-service migration to execute at your pace**
- **Support for VMs and containers**
- **Accelerated transformation with fast migration to new VCF environment**
- **BYOL portability for existing licenses**



Unlock the full potential of hosted private cloud, enabling greater agility, efficiency, and resilience for your business.

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Transformation challenges

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Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

Cloud security

Operational services

Infrastructure services

- Networking services
- Advanced load balancer pt. 1
- Advanced load balancer pt. 2
- Cloud object storage
- Monitoring services
- Migration services
  - Considerations & benefits
  - Migration steps
  - [Dedicated private cloud migration](#)

Innovation services

Learn more

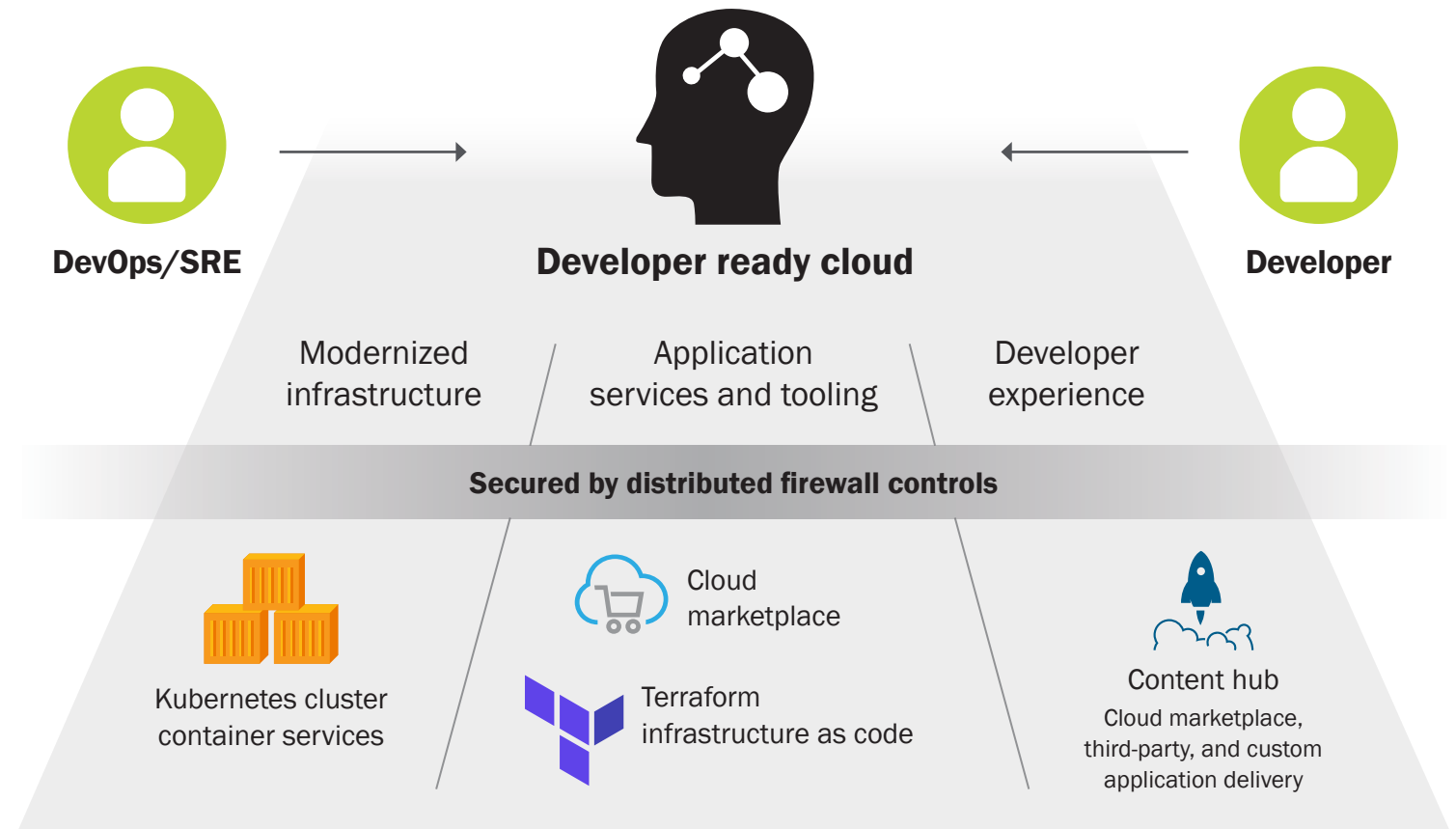
- Developer services
  - Kubernetes service
  - Data services
  - Cloud marketplace
  - Application catalog
  - Terraform IaC
- Private AI (AI/ML)

# Secure application services for developers within your cloud

AVAILABLE ON:



Modernize and develop cloud-native applications with support for Kubernetes in your secure cloud environment. Give developers easy access to validated, secure apps while streamlining deployments with security, networking, and compliance controls built in.



- Developer services
  - [Kubernetes service](#)
  - Data services
  - Cloud marketplace
  - Application catalog
  - Terraform IaC
- Private AI (AI/ML)

# Keep your business running on secure Kubernetes clusters

AVAILABLE ON:



Hosted private



Managed private



Managed public

Opus Interactive Kubernetes as a service (KaaS) makes it possible to streamline the creation and lifecycle management of Kubernetes clusters and serve them up to developers through a fast, secure self-service.

## KaaS runtime offerings

### Dedicated cloud with VCF

KaaS on private cloud is the best way to run Kubernetes in a dedicated cloud environment. VMware Cloud Foundation simplifies VM management and container orchestration with automated, software-defined infrastructure.

### Agile cloud services

KaaS on Opus Interactive cloud is the fastest way to get started with Kubernetes. To modernize workloads, you can use vSphere with Tanzu to deploy developer-ready infrastructure, align DevOps and IT teams, and simplify cloud operations.

### Dev-ready cloud with VCF

KaaS on Opus Interactive cloud accelerates Kubernetes adoption at scale. Our solution on VCF helps you deploy dev-ready infrastructure and align DevOps and IT teams, simplifying cloud operations.

## Available add-ons

### Monitoring and management

Observability

### Kubernetes services

Application platform  
[Data services](#)  
[Application catalog](#)

- Developer services
  - Kubernetes service
  - [Data services](#)
  - Cloud marketplace
  - Application catalog
  - Terraform IaC
- Private AI (AI/ML)

# Data services

AVAILABLE ON:



## Data services deliver modern data for modern apps

Simplify your digital transformation and application migration with Opus Interactive data services. We understand that modernizing applications has far more needs than container infrastructure. Our services gives you the best of tools, catalogs, and ecosystem integration to assist you with modern day applications.

Store, move, process, and query complex data resources in real-time and at massive scale, both on premises and on the Opus Interactive VMware Cloud.



Accelerate time-to-market by reducing custom code required for data-intensive apps.



Improve app performance and orchestration with messaging and queuing services.



Overcome the scarcity of expertise and pertinent skills in the adoption of data streaming services.



Enable AI/ML models and real-time processing.

### Embrace performance

Capture, process, and serve data with lightning speed.

Organizations can capture data sets of all types, make them available to every workload, and ensure they're immediately available for use.

Provide extraordinary insights and analytics faster than ever.

### Ensure freedom of scale

Run data operations with massive scale and growth.

Scale as large as your business takes you. We ensure your data operations move and grow as fast as you do.

### Deploy anywhere

Implement your data assets with open-source innovation.

The choice is yours: deploy on premises, in the cloud, or anywhere in between—while maintaining control and visibility. Open-source code means freedom from vendor lock-in while enjoying constant innovation.

# Cloud marketplace

AVAILABLE ON:



State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

Cloud security


Operational services

Infrastructure services


Innovation services

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Learn more



Support rapid development for modern containerized apps



More than 180 open-source, dev-centric applications



Tested and checked for security to keep your application development safe and secure

Applications, components, frameworks, templates, and more, including managed databases, web and blogs, API gateways, AI/ML, and analytics.





# The Opus Interactive application catalog

AVAILABLE ON:



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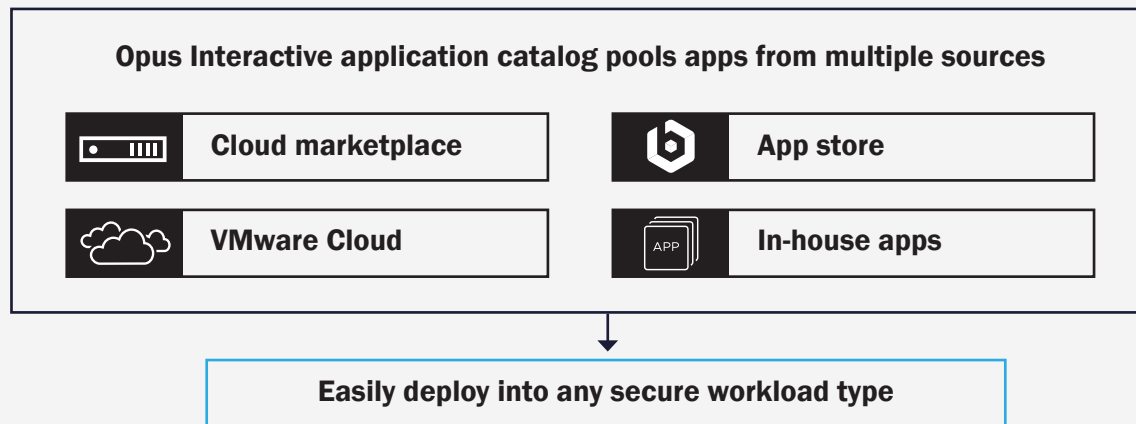
**Innovation services**

- Developer services
  - Kubernetes service
  - Data services
  - Cloud marketplace
  - [Application catalog](#)
  - Terraform IaC
- Private AI (AI/ML)

Learn more

Deliver a simple app deployment experience to the cloud that further accelerates your development lifecycles and helps launch new services and apps.

Let your users drive by giving them access to the app catalog to deploy what they want, when they want, without needing infrastructure or security knowledge.



1-click deployments for applications with an end user license agreement



Automate VM, vApp, or container creation, networking, firewalling, assign public IP



No knowledge of underlying infrastructure required

# Terraform infrastructure as code

AVAILABLE ON:



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Infrastructure services

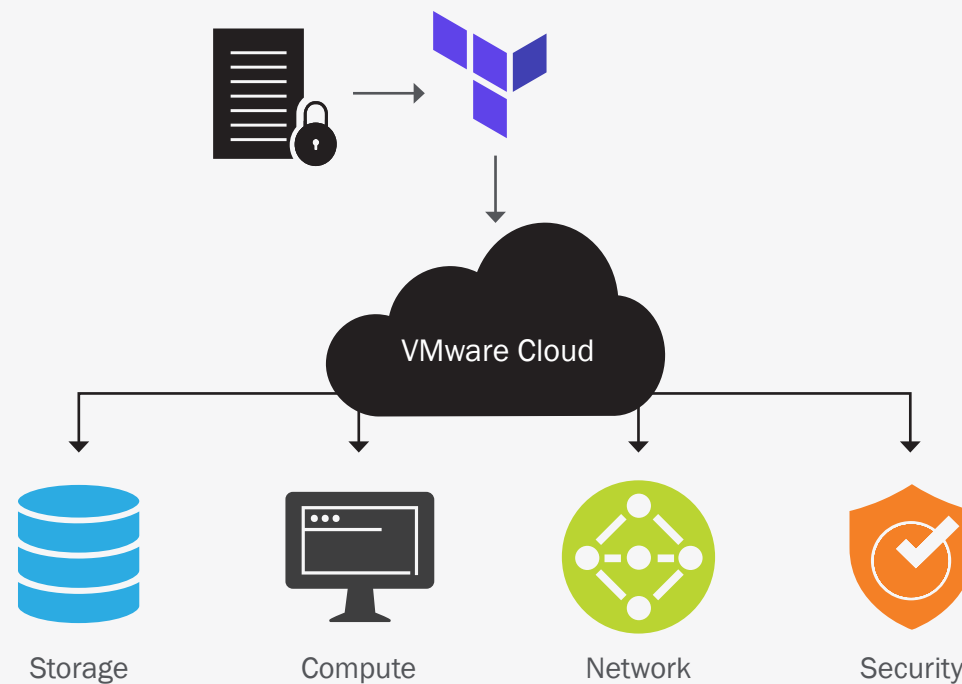
Innovation services

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Learn more

Terraform is an efficient automation tool that enables DevOps engineers to define their infrastructure as code within Terraform configuration files. This allows teams to quickly spin up and wind down infrastructure for build, test, and production phases.

Terraform supports the latest Opus Interactive VMware Cloud objects for complete automation of compute, storage, network, and security.



# Artificial intelligence and machine learning services

AVAILABLE ON:



**Unlock the power of AI with an end-to-end enterprise platform optimized for AI workloads.**

Opus Interactive AI and ML services deliver powerful capabilities to augment business operations, streamline processes, and unlock valuable insights from your data, enabling smarter decision making and driving innovation across your organization.

End users can access NVIDIA AI Enterprise software for applications, GPU, and DPU-backed VM instances to build successful generative AI projects; IT admins can support projects using familiar tools.

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths & app mod strategies

Full stack cloud provider

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Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

Cloud security

Operational services

Infrastructure services

Innovation services

- Developer services
- Private AI (AI/ML)
  - AI & ML services
  - GPU as a service

Learn more



**Data center AI training and inference**



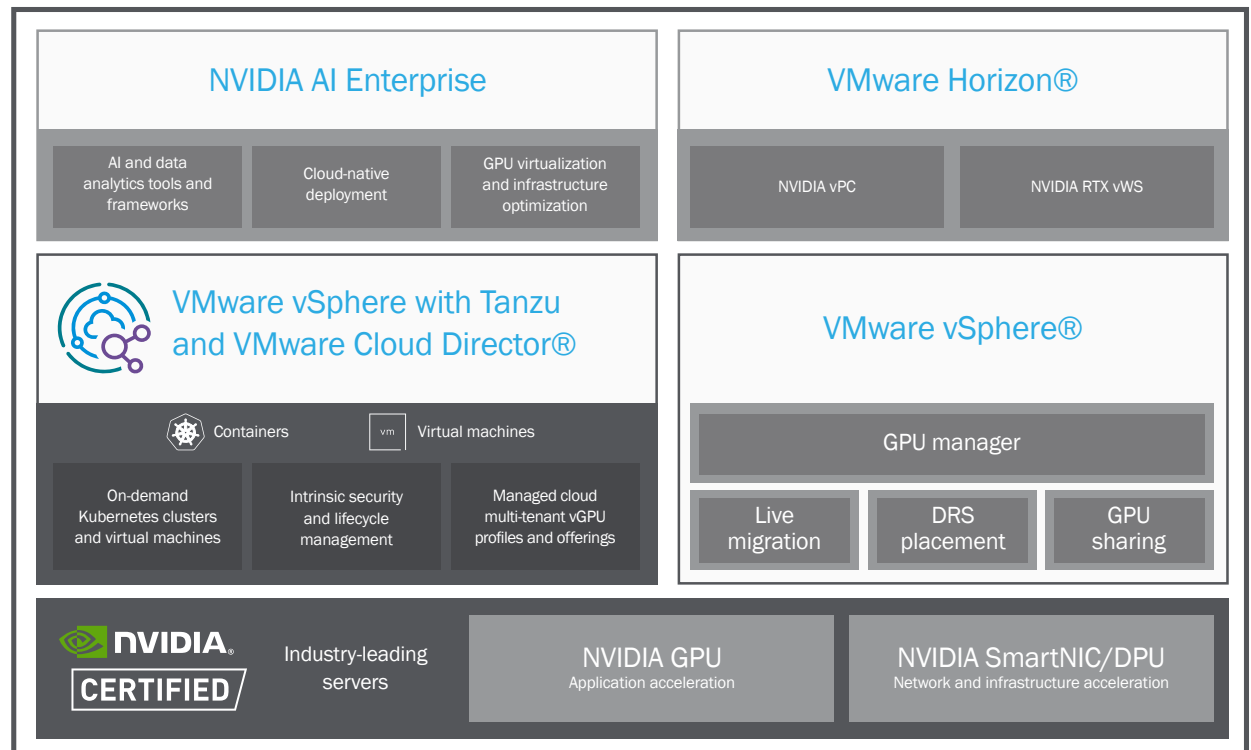
**Edge AI inference**



**Data analytics and machine learning**



**Data scientist  
 Developer  
 AI researcher**



- Developer services
- Private AI (AI/ML)
  - AI & ML services
  - GPU as a service

# Opus Interactive GPU as a service

AVAILABLE ON:



Hosted private



Managed private



Managed public

Opus Interactive GPU as a service delivers the best of both worlds: scalable NVIDIA GPU processing power with NVIDIA AI Enterprise applications and operators, all on demand without dedicated infrastructure overhead. Have your cake and eat it too!

## Reduce costs with any size GPU

Never under- or over-provision again and get exactly the amount of GPU needed, when it's needed.

## Reduce overhead and risk

Avoid AI silos and simplify management by leveraging virtualization to fold AI deployments into existing enterprise infrastructure. Supported NVIDIA AI Enterprise applications and GPU operators minimize future risk.

## Scale simply

Simplify management at scale across AI infrastructure with automatic initial placement of workloads based on optimal resource consumption and deterministic costs.

## Achieve high availability for your AI applications

Enable high availability for AI workloads while simplifying infrastructure maintenance such as consolidation, expansion, and upgrades.

## Avoid open-source pitfalls

Reduce deployment risks with a complete suite of NVIDIA solutions certified for VMware vSphere.

## Accelerate DevOps processes

Cut time out of DevOps processes and refocus developers and data scientists on their applications and code with a managed platform and services designed to simplify GPU utilization.

## Achieve optimum performance

NVIDIA is optimized to deliver near bare-metal performance across multiple nodes to power large, complex training and machine learning workloads.

## Plus all the benefits of a VMware Cloud



Clean, seamless workload migrations and application mobility



Always-on security and compliance



Self-service control over your cloud experience with storage policies, firewall policies, and much more



Flexible consumption models to meet your application needs

State of cloud transformation

Transformation challenges

Cloud challenges

Migration paths &  
app mod strategies

Full stack cloud provider

VMware Cloud Foundation

Cloud solutions

Consumption models

Jumpstart ESG

Meet compliance

Cloud security

Operational services

Infrastructure services

Innovation services

[Learn more](#)

## Want to find out more?



Visit: [www.opusinteractive.com](http://www.opusinteractive.com)



Call: 888.678.7955



Email: [sales@opusinteractive.com](mailto:sales@opusinteractive.com)

### About Opus Interactive

Our mission is to help customers reduce cost and optimize resources with tailored solutions and sustainable IT.

A WBENC-certified business, Opus was founded in 1996. We operate from Tier III+ data centers that are net -zero and located in Hillsboro, Dallas, and Northern Virginia.

Our past performance includes more than 27 years of proven results, a 9.409 NPS, and solutions that meet PCI-DSS, HIPAA, ISO 27001, and SSAE 18 Type II SOC 2 compliance standards.

Our services include:

- **VMware Cloud & Dedicated IaaS**
- **Public and private cloud management**
- **Enterprise Colocation**
- **Backup and Disaster Recovery**
- **Cloud Security**
- **Hybrid & Multi-Cloud Monitoring**

