

# ZADARA On Premise As-a-Service

The power of enterprise infrastructure.  
The agility of the cloud.

# Enterprise Infrastructure “At Your Service”

Zadara delivers enterprise-grade infrastructure services - compute, networking and storage - in an agile model, with 24/7 expert management — leaving you free to focus on your customers.



## ENTERPRISE-GRADE PERFORMANCE AND SECURITY

vCPUs & memory (EC2), SSDs and HDDs,  
in-flight and at-rest encryption,  
snapshots, mirroring, HA

FULLY FEATURED



## AGILE, INFINITE RESOURCES PAY ONLY FOR USAGE

On premises, scale up or down, pay  
as you go, hardware upgrades  
included

FULLY ELASTIC



## EXPERT MANAGEMENT 99.999% UPTIME GUARANTEE

24/7/365 proactive support,  
seamless migrations and upgrades,  
backed by our 99.999% uptime  
guarantee

FULLY MANAGED

# DATACENTER INFRASTRUCTURE IS COMPLEX

- × Islands of infrastructure with no ability to share capacity
- × Inflexible hardware that cannot be changed after deployment
- × Complex architecture that's difficult to support
- × Many management tools reduces operational efficiency
- × Limited scalability that require hardware changes
- × Disruptive refresh cycle every 5 years
- × Risky data migration during refresh
- × Expensive CAPEX investment

A man in a white shirt is seen from behind, working on a server rack in a data center. The rack is filled with various electronic components and cables. The man's hands are raised, and he appears to be adjusting or connecting something. The background shows more server racks and the typical environment of a data center.

**"More than 90% of data centers cannot keep up with storage needs."**

IDC

February 2016

## BENEFITS OF ZADARA

- ✓ One infrastructure platform for server and storage.
- ✓ One storage platform for Block, File and Object storage; supporting FC, iSCSI, NFS, CIFS, S3 and other protocols.
- ✓ Privacy, performance assurance and reliability across multi-tenants.
- ✓ Resilient infrastructure platform backed by 99.999% Uptime Guarantee.
- ✓ Extremely scalable, start small and grow to petabytes easily using the same hardware.
- ✓ Delivered on-premise at customer's own data center.
- ✓ Pay-per-use; no CAPEX investment, no leasing agreement.
- ✓ Multi-cloud ready.



# ZADARA

## On Premise-as-a-Service

zCOMPUTE

zNETWORK

zSTORAGE



COMPLETELY ELASTIC CONSUMPTION-  
BASED USAGE

zCOMPUTE SERVICES  
EC2 COMPATIBLE APIs

ELASTIC  
COMPUTE/VMs



ELASTIC  
BLOCK STORAGE



VPC

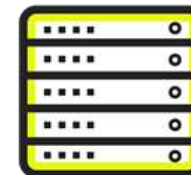


LOAD BALANCER

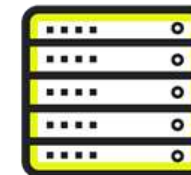


zSTORAGE SERVICES

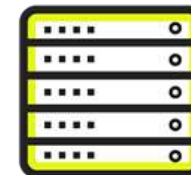
BLOCK



FILE



OBJECT





# THE DO-EVERYTHING DATA CENTER INFRASTRUCTURE

**zSTORAGE**



**zCOMPUTE**

**DELIVERED ON PREMISE, AS-A-SERVICE**

# zCOMPUTE

ELASTIC COMPUTE WHICH SCALES AS YOUR BUSINESS DEMANDS

zCompute	
VM	VM
VM	VM
VM	VM
VM	VM

On Premise,  
Colo, or Public Cloud

- Self Service Compute Provisioning
- Predefined & Fully-Customizable Instance Types (vCPU based)
- Autoscale groups
- Network and Application Load Balancers
- Run Standard MS and Linux workloads
- AWS EC2 compatible APIs
- Standard EBS (zStorage) for Boot and O/S drive

## 1. Choose your location: Enterprise Example

Create Compute Cloud Service

Type Name and Region Service Limits Review

Compute Cloud Account Name \*

Compute Cloud Service Name \*

Enterprise Site

Enterprise Name Here

Select Region

Enterprise Site

High Availability

Protection Zone

Back Next

## 2. Define your Compute Resource Limits, and create VPC

Create Compute Cloud Service

Type Name and Region Service Limits Review

Limits

Compute

Name	Limit
RAM (GiB)	128
Number of instances	10
Number of cores	20

128 GiB of RAM  
10 Instances  
20 Total Cores

Back Next

## 3. Deploy your zCompute

Create Compute Cloud Service

Type Name and Region Service Limits Review

Service Type

Name and Region

Compute Cloud Account Name: 1 Region: AWS US East (IL Virginia) #2

Protection Zone: zone\_1

Service Limits

RAM (GiB): 128 Number of instances: 10

Number of cores: 20

Hit the Create Button

Back Create



# CREATE YOUR INSTANCES

Create VM

Setup

Resources

Networking

Initialize

1

2

3

4

Name\*

howard\_win

VM OS

From Image

Install from ISO

From Volume

Image\*

windows\_2019\_custom

Storage Pool

SSD Pool

Instance Type\*

Name

CPU

RAM

m4.large

2 vCPUs

8 GiB

Subnet\*

subnet-7b01201f... | 172.31.0.0/20

Power Up

Cancel

Next

Finish

<b>Z4 MEDIUM</b>	1 vCPU, 4 GB RAM
<b>Z4 LARGE</b>	2 vCPU, 8 GB RAM
<b>Z4 XLARGE</b>	4 vCPU, 16 GB RAM
<b>Z4 2XLARGE</b>	8 vCPU, 32 GB RAM
<b>Z4 4XLARGE</b>	16 vCPU, 64 GB RAM
<b>Z4 8XLARGE</b>	32 vCPU, 128 GB RAM
<b>Z4 12XLARGE</b>	48 vCPU, 192 GB RAM
<b>Z4 CUSTOM</b>	n vCPU, m GB RAM

zCOMPUTE PRICING		
Budgetary Rate Card	Description of Services	On Demand
Prices for North America		List Price
Elastic Compute Instances	1 vCPU= 1 CPU thread	HOURLY
Z4 medium	1 vCPU, 4 GB RAM	\$0.050
Z4 large	2 vCPU, 8 GB RAM	\$0.100
Z4 xlarge	4 vCPU, 16 GB RAM	\$0.200
Z4 2xlarge	8 vCPU, 32 GB RAM	\$0.400
Z4 4xlarge	16 vCPU, 64 GB RAM	\$0.800
Z4 8xlarge	32 vCPU, 128 GB RAM	\$1.600
Z4 12xlarge	48 vCPU, 192 GB RAM	\$2.400
Z4 custom	nMax vCPU, mMax GB RAM	
Elastic Storage Volumes		
EBS Volume (HDD)	per GB/mo (volume size + optional snap	\$0.080
EBS Volume (SSD)	per GB/mo (volume size + optional snap	\$0.160
Network		
Data Egress Fees	No Charge	--
Data Ingress Fees	No Charge	--
VPC	No Charge for 6 VPC's per region per ac	--
Elastic Load Balancing (ELB)	Charged as EC2 instances	EC2 Instance
DNS	No Charge	--

**Z4 medium server (1vc x 4GB)**  
 $\$0.05 / \text{hr} \times 730 \text{ hrs} = \$36.50/\text{mo}$

**EBS boot volume 20GB**  
 $\$0.160 / \text{GB} \times 20 = \$3.20/\text{mo}$

**On-demand price**  
**\$39.70/mo**

36-month commit price  
 \$19.85/mo for end-user

# MONITOR YOUR APPLICATIONS & CLOUD SERVICES FROM A SINGLE PLATFORM

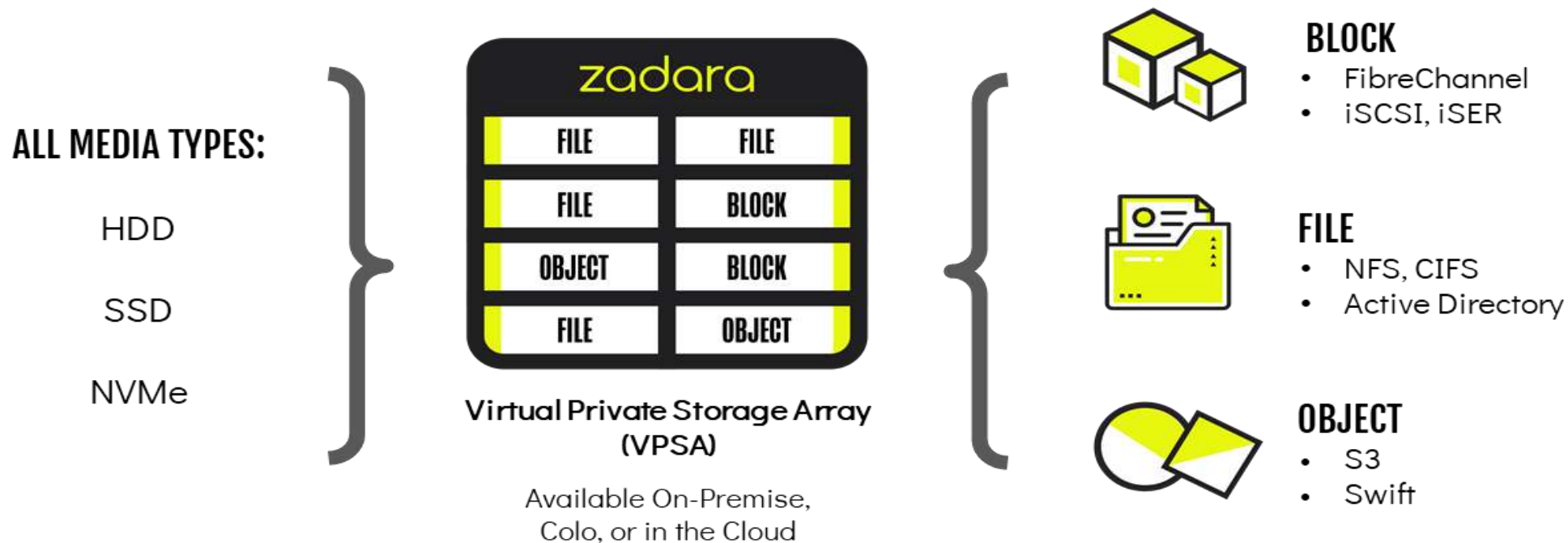
With Zadara's web-based interface, you have the option to give your customers visibility into the services they consume:

- Visualized Dashboard
- Automated Monitoring & Alerting
- Detailed Reporting



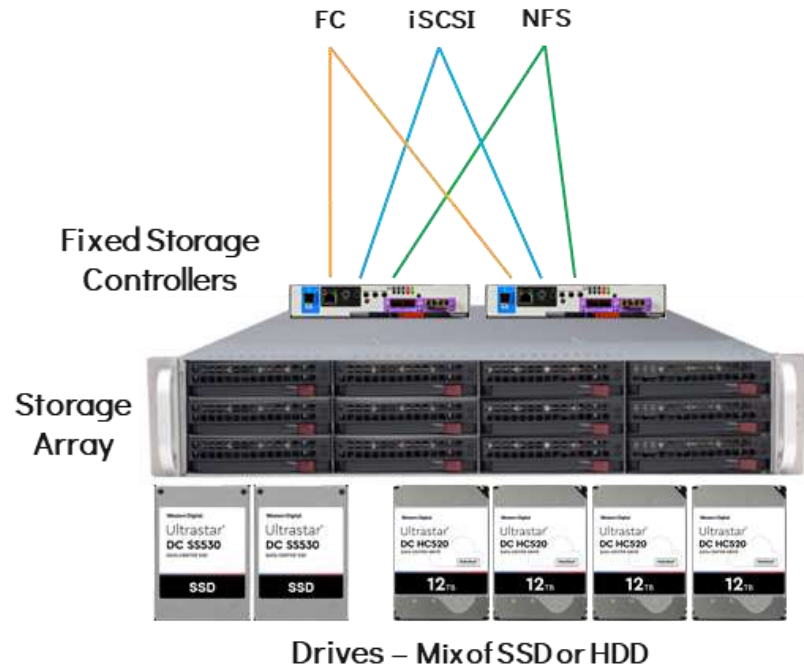
# zSTORAGE

Zadara's **Virtual Private Storage Array (VPSA)** can be configured -- and re-configured -- on the fly for any storage workload. A single storage solution for: Any data type. Any protocol. Any location. Adjust on demand.



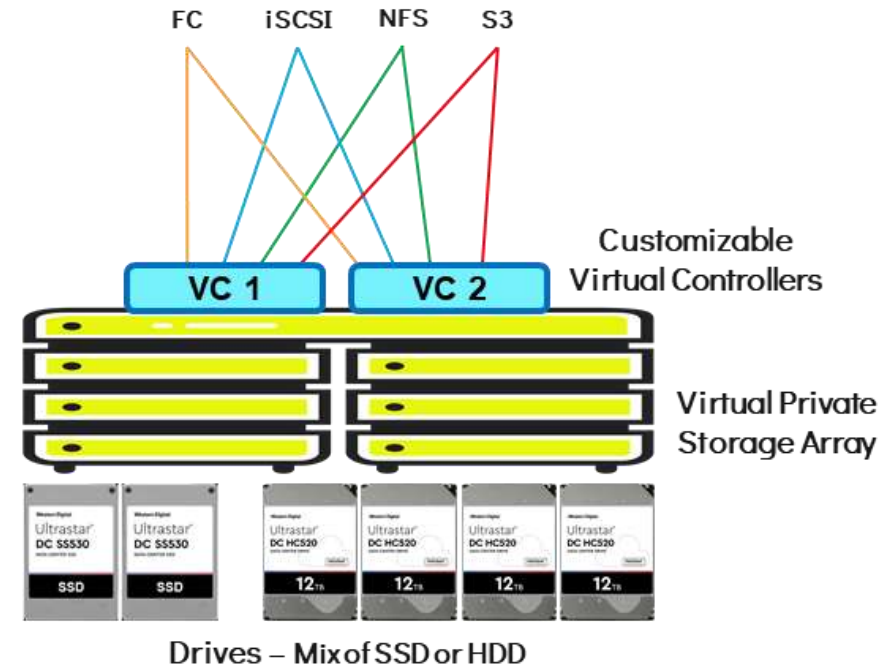
# WHAT IS VIRTUAL PRIVATE STORAGE ARRAY (VPSA)?

## Traditional Storage



**Shared by All Tenants**

## Zadara zStorage

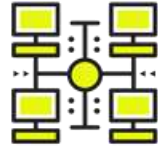


**Dedicated to One Tenant  
(Share Nothing Architecture)**

# POWERFUL CAPABILITIES. CAPABLY MANAGED.



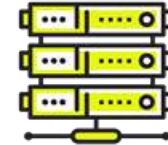
Block, file and  
object storage



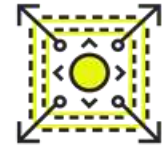
All-Flash + dedupe;  
SSD cache options



Thin provisioned  
volumes



Large volume sizes



NFS, CIFS (AD), FC,  
iSCSI, iSER



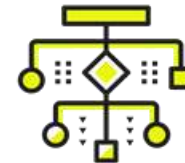
Multi-zone  
high-availability



Non-disruptive  
upgrades



Remote mirroring



Cluster support

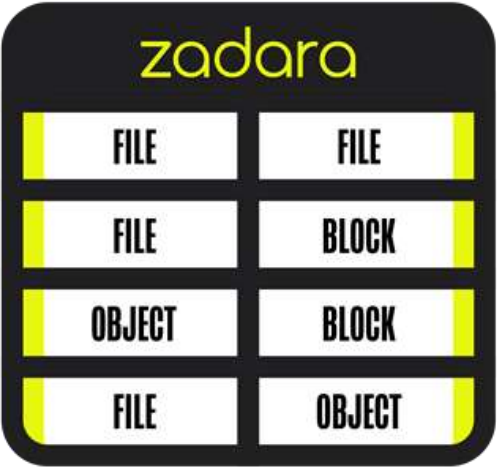


At-rest, in-flight data  
encryption

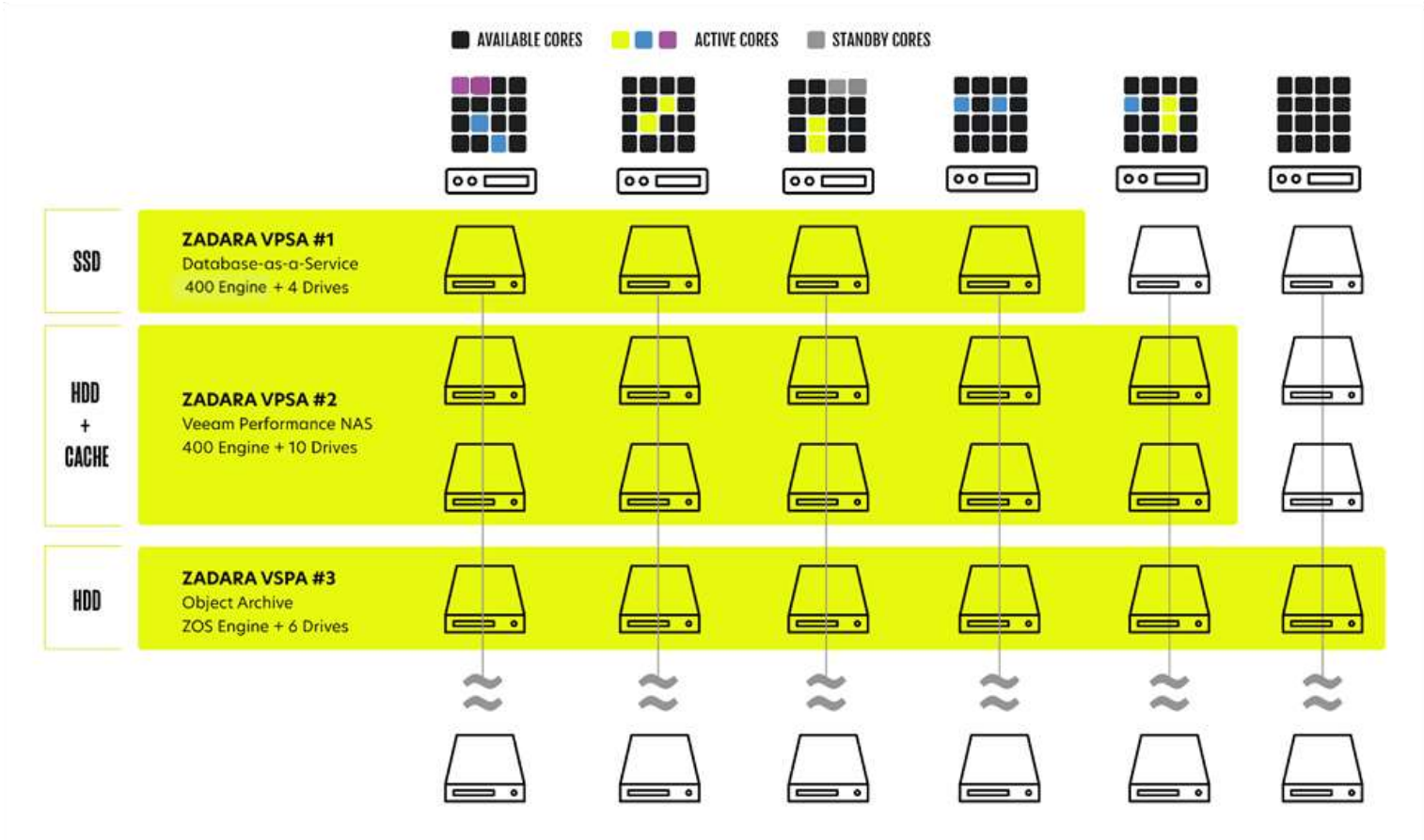


# MULTI-TENANT EFFICIENCY IN A SINGLE-TENANT EXPERIENCE

Share Nothing – Dedicated CPU, cores, memory, drives, SSD cache. Elastic in all directions.



Virtual Private Storage Array (VPSA)



# NO MORE WASTED SPEND—FREE UP YOUR CASH FLOW

Simplify your cloud. Increase productivity.  
Decrease costs.

- Avoid large investments in your cloud infrastructure
- Convert CapEx storage and compute to OpEx
- Reduce storage administration costs; redeploy people to higher-value tasks
- Scale your storage & compute up or down as needed;
- Never pay for unused capacity

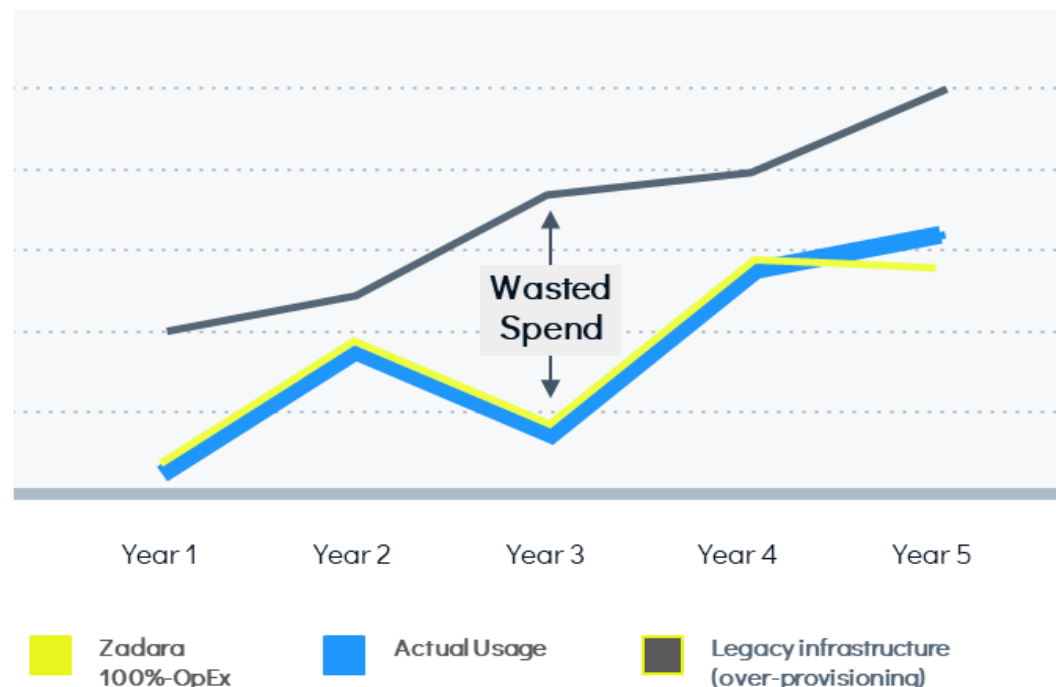
## Series of Events:

Y1: Initial Need + Growth

Y2: Shrink (Lost Customer)

Y3: New Customer

Y4: Tech Refresh (e.g. dedupe)



# THE CONTROL, PREDICTABILITY AND TRANSPARENCY YOU CRAVE

With Zadara's web-based interface, you have the option to give your customers visibility into the solutions you provide to them:

- Analytics, performance metrics
- Automated alerts
- Elastic provisioning
- Chargeback actual usage
- Add or reduce storage capacity as needed



# SECURE ENCRYPTION, YOU CONTROL THE KEYS

Zadara OPaaS is built with security in mind. Your data is stored on dedicated hardware, and protected with in-flight and at-rest encryption using AES-256 encryption.

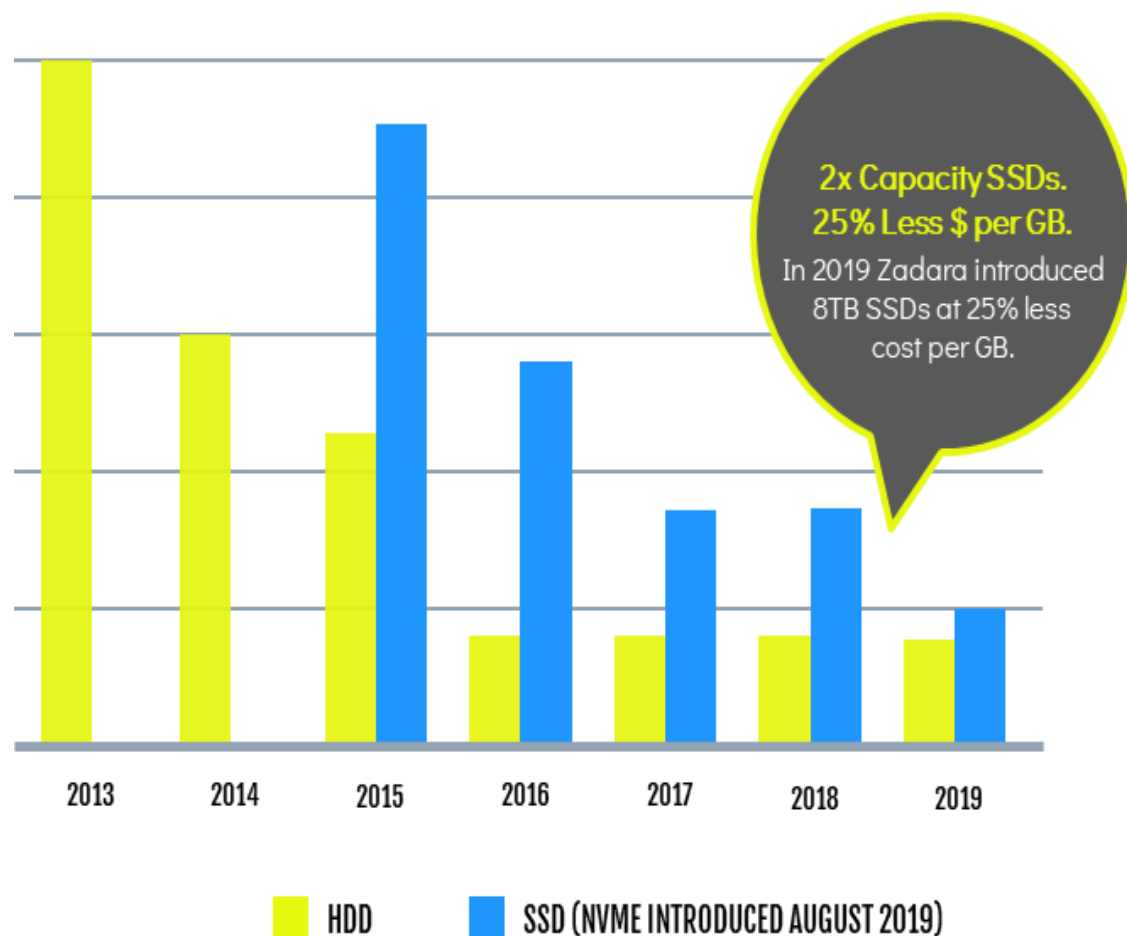
Also, because you manage your keys, only you control access to your data.



# **24/7/365 MANAGEMENT. 99.999% GUARANTEED.**

- Live, proactive management 24/7
- 99.999%-uptime guarantee
- Notifications, alerts based on operating thresholds
- Periodic, non-disruptive hardware and software upgrades at No Cost
- Expert DevOps team builds solutions to solve both Compute and Storage challenges

# REFRESH ON YOUR TIMELINE, NOT ON OURS



## UPGRADE YOUR TECHNOLOGY, LOWER YOUR COSTS.

The prices per GB of HDDs and SSDs have decreased significantly over the last six years. As a Zadara customer you get to upgrade on demand and enjoy those cost savings.

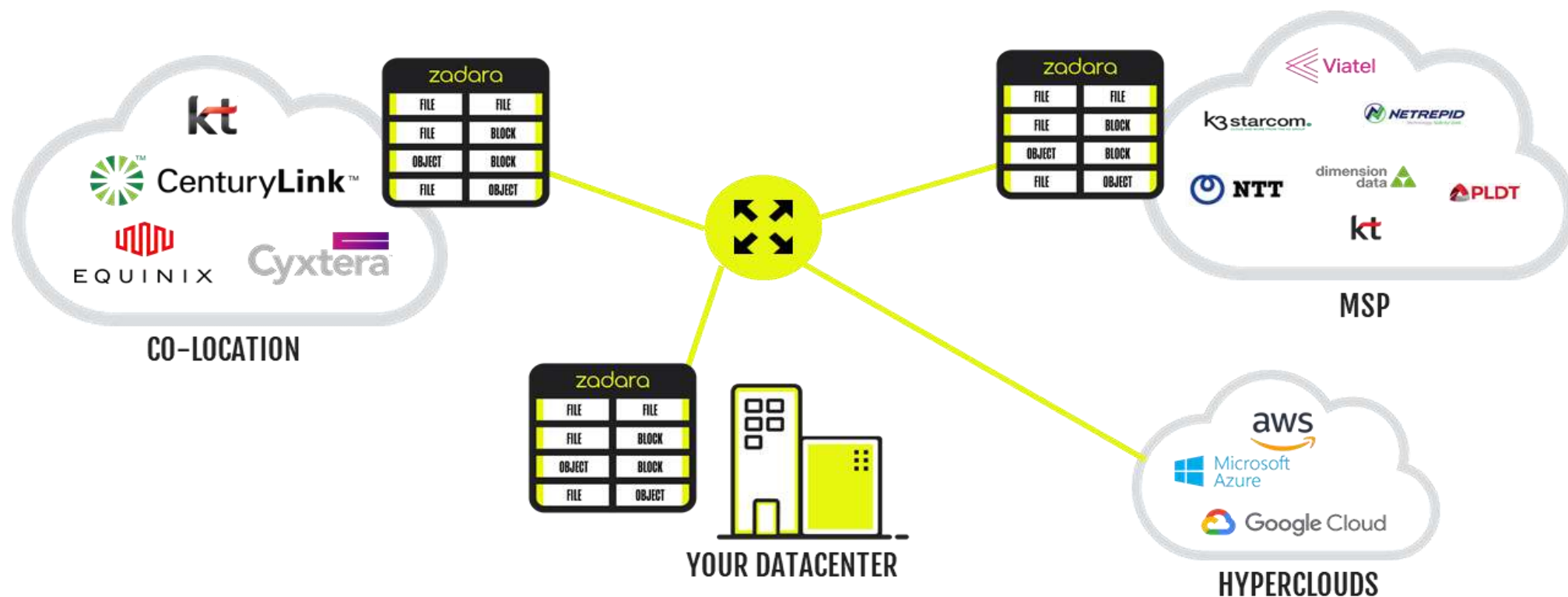


# ZADARA zSTORAGE VS OTHER STORAGE VENDORS

	Other Storage	Zadara zStorage
Commitment	Buy or 3-5 years lease	1-year
Finance Lease	Yes, 3-5 years	None
True Consumption-Based Payment Model	No	Yes
Modify/change Base after deployment	No	Yes
Modify/change Buffer	No	Yes
Order Only What You Need Now	No – Must Overprovision	Yes – Grow on Demand
Hardware Refresh after 5-years	New purchase/lease	Included
Migration services for refresh	Chargeable	Included
Zero downtime hardware refresh	No	Yes
Capacity monitoring	No	Yes
Proactive addition of buffer	No	Yes

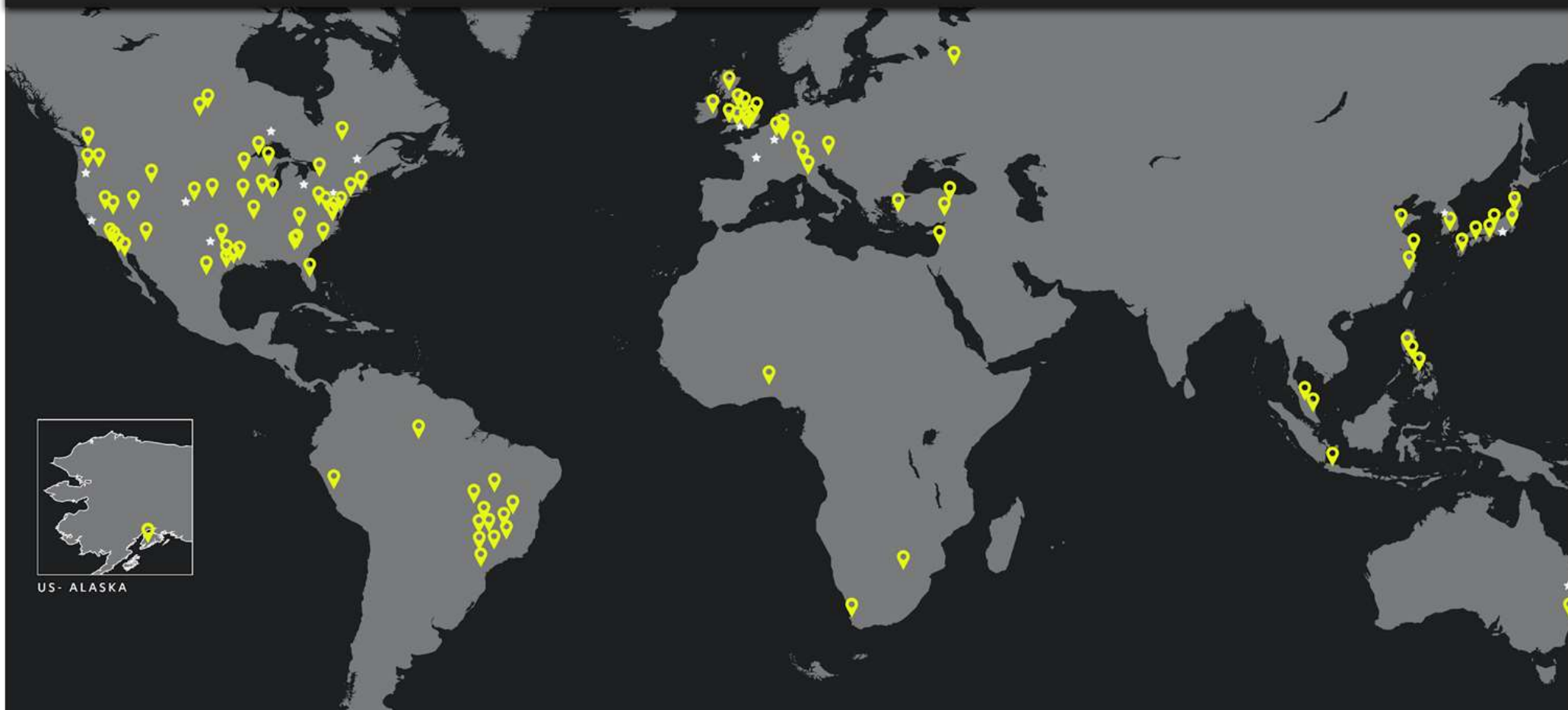
# ZADARA IS AVAILABLE ANYWHERE. ON DEMAND.

The zStorage allows you to operate from anywhere to anywhere — in 300 global locations on premises, at colocation facilities, service providers and in public clouds.



## OUR WORLDWIDE NETWORK GIVES YOU AN ON-DEMAND GLOBAL FOOTPRINT

We manage over 300+ clouds across six continents on behalf of our customers.



# ZADARA GLOBAL CLOUD PARTNERS

## Hyperscale Public Clouds



## Service Provider Clouds



# TRUSTED BY LEADING COMPANIES WORLDWIDE

