zadara

MULTI-TENANCY: THE KEY TO GROWTH FOR MANAGED SERVICE PROVIDERS IN THE UK & EUROPE

INTRODUCTION

As businesses across the UK and Europe continue to embrace digital transformation, **Managed Service Providers (MSPs)** must evolve to deliver scalable, cost-effective, and secure solutions. One of the most effective ways to achieve this is by leveraging multi-tenant infrastructure.

Multi-tenancy enables MSPs to efficiently manage multiple customers within a shared environment, optimising costs, improving operational efficiency, and ensuring seamless scalability.

IN THIS EBOOK, WE'LL EXPLORE:

- Why multi-tenancy is essential for MSPs
- Common business use cases
- Key factors when choosing a multi-tenant infrastructure provider
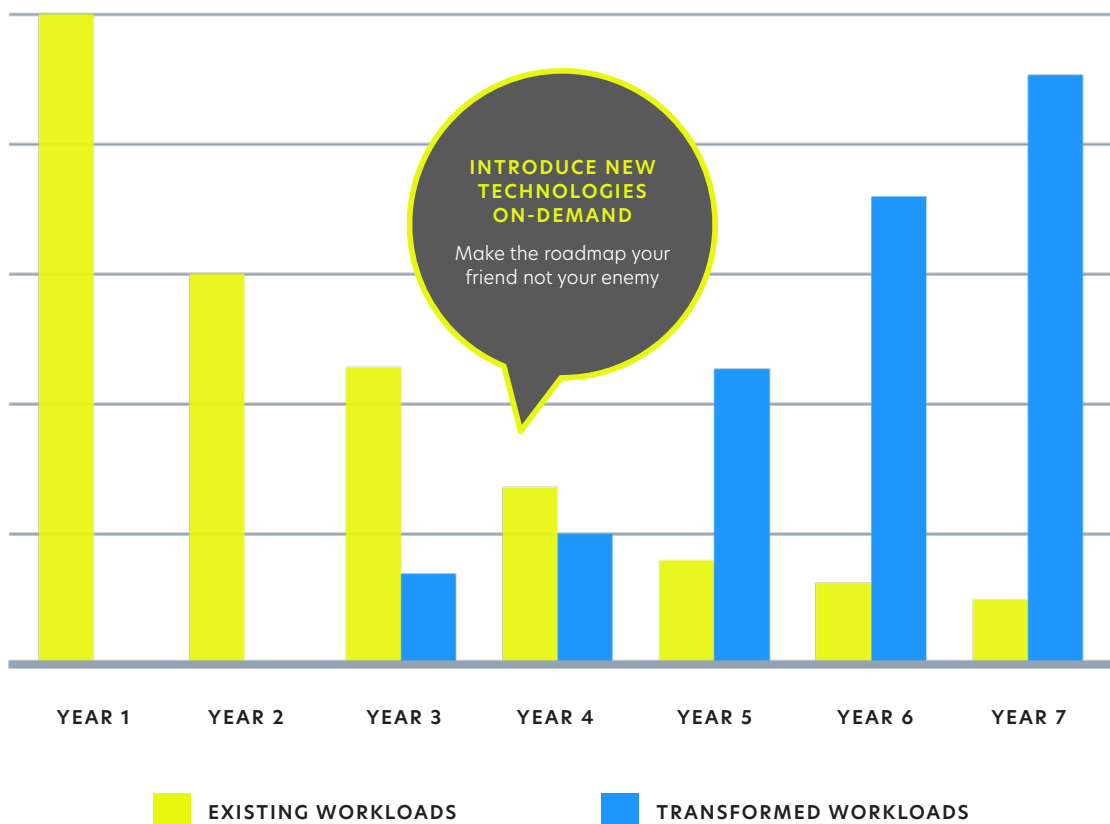- How Zadara compares to other solutions in the market

THE IMPORTANCE OF MULTI-TENANCY FOR MSPS IN THE UK & EUROPE

1. Cost Efficiency & Profitability

Traditional single-tenant environments require dedicated infrastructure for each client, which increases operational costs. Multi-tenancy enables resource sharing across multiple customers, **reducing infrastructure expenses** and increasing **profit margins for MSPs.**

For MSPs: Lower costs mean **better service pricing, higher margins, and increased competitiveness**.
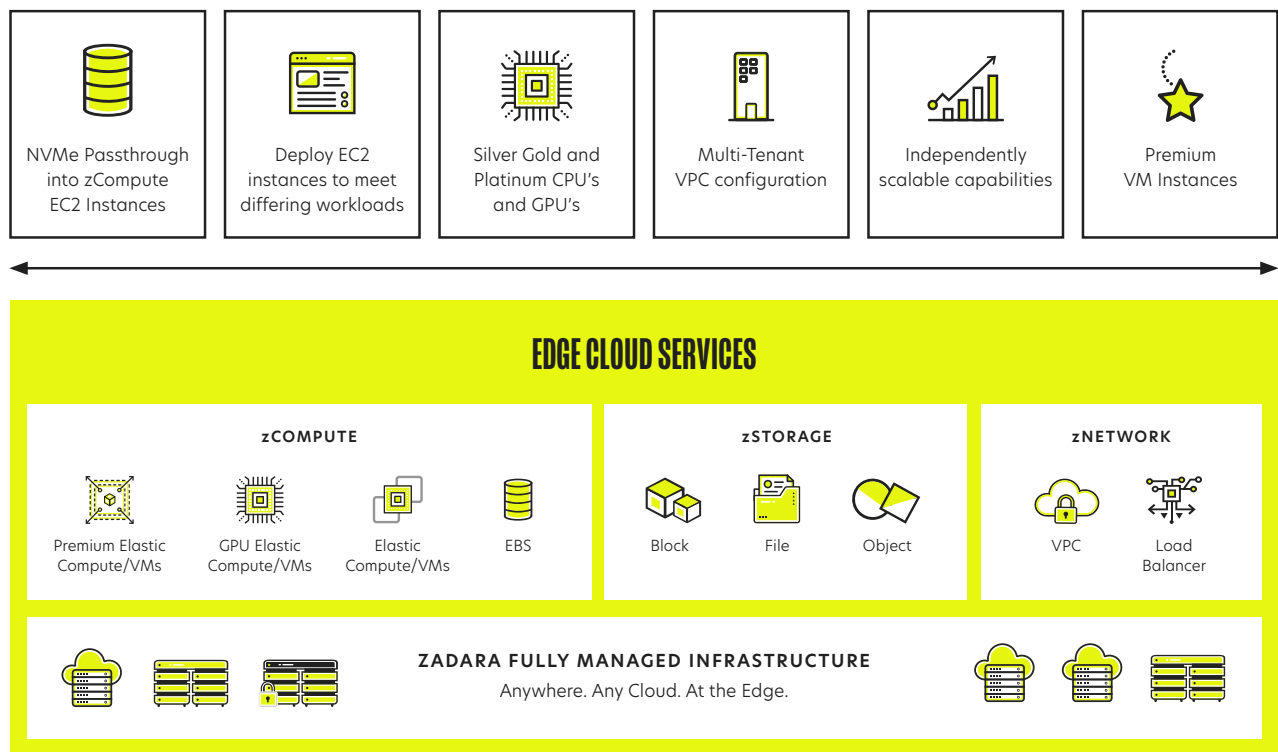
For customers: Businesses get access to **enterprise-level services at a fraction of the cost**.

INTRODUCE NEW TECHNOLOGIES ON-DEMAND

Make the roadmap your friend not your enemy

YEAR 1   YEAR 2   YEAR 3   YEAR 4   YEAR 5   YEAR 6   YEAR 7

☐ EXISTING WORKLOADS   ☐ TRANSFORMED WORKLOADS

2. SCALABILITY & RESOURCE OPTIMISATION

Multi-tenancy enables MSPs to **dynamically allocate computing, storage, and networking resources** based on demand. This is especially important in cloud environments where workloads fluctuate.

- **Seamless expansion:** New customers can be onboarded without major infrastructure overhauls.

- **Efficient resource allocation:** Avoids underutilisation and ensures fair distribution across tenants.

- **Faster service delivery:** Automation and centralised management reduce time-to-market.

NVMe Passthrough into zCompute EC2 Instances	Deploy EC2 instances to meet differing workloads	Silver Gold and Platinum CPU's and GPU's	Multi-Tenant VPC configuration	Independently scalable capabilities	Premium VM Instances

EDGE CLOUD SERVICES

zCOMPUTE

Premium Elastic Compute/VMs · GPU Elastic Compute/VMs · Elastic Compute/VMs · EBS

zSTORAGE

Block · File · Object

zNETWORK

VPC · Load Balancer

ZADARA FULLY MANAGED INFRASTRUCTURE
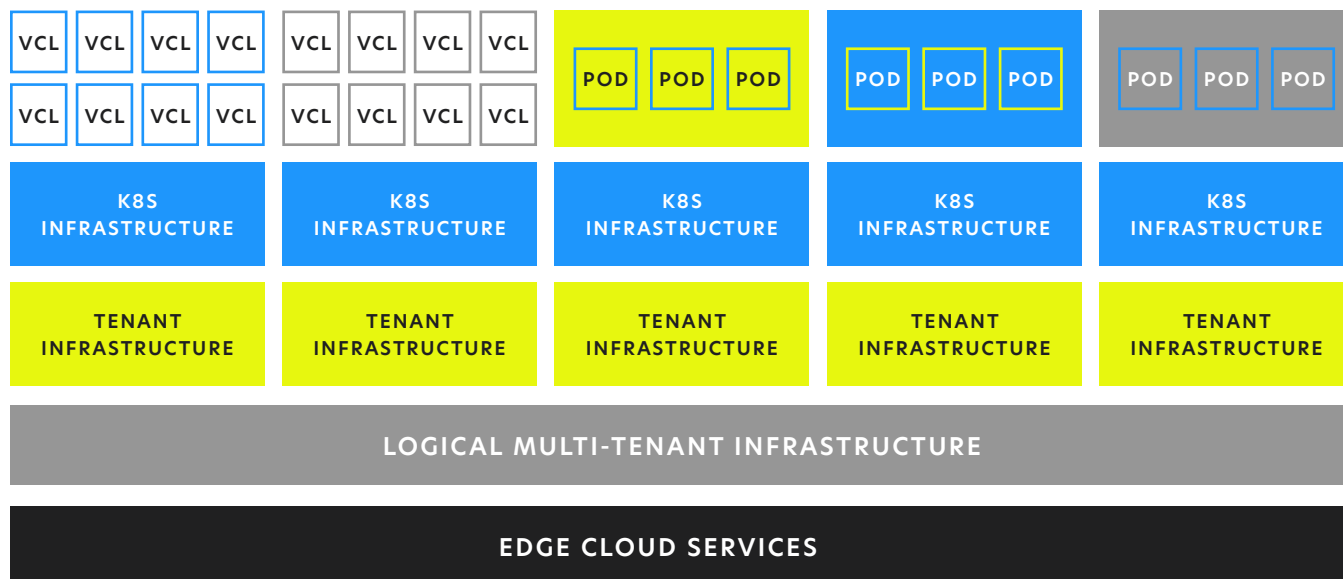Anywhere. Any Cloud. At the Edge.

3. SECURITY & COMPLIANCE IN SHARED ENVIRONMENTS

With increasing regulatory and accreditation pressures, especially from **GDPR and ISO 27001**, MSPs must ensure **secure multi-tenant environments**. A strong multi-tenant solution should provide:

- **Strict data isolation:** Each tenant's data remains separate and protected.

- **Advanced encryption:** Data at rest and in transit should be encrypted.

- **Role-Based Access Control (RBAC):** Ensures limited access based on user roles.

- **Regulatory compliance & security standards:** The provider should comply **with GDPR, HIPAA, and ISO 27001**, whilst not all these are a legal requirement, not demonstrating an independently verified competency may be business impacting.

MODERN APPLICATION DEPLOYMENTS ARE CHANGING

| VCL | VCL | VCL | VCL | | VCL | VCL | VCL | VCL | | POD | POD | POD | | POD | POD | POD | | POD | POD | POD |
| VCL | VCL | VCL | VCL | | VCL | VCL | VCL | VCL | | | | | | | | | | | | |

| K8S INFRASTRUCTURE | K8S INFRASTRUCTURE | K8S INFRASTRUCTURE | K8S INFRASTRUCTURE | K8S INFRASTRUCTURE |

| TENANT INFRASTRUCTURE | TENANT INFRASTRUCTURE | TENANT INFRASTRUCTURE | TENANT INFRASTRUCTURE | TENANT INFRASTRUCTURE |

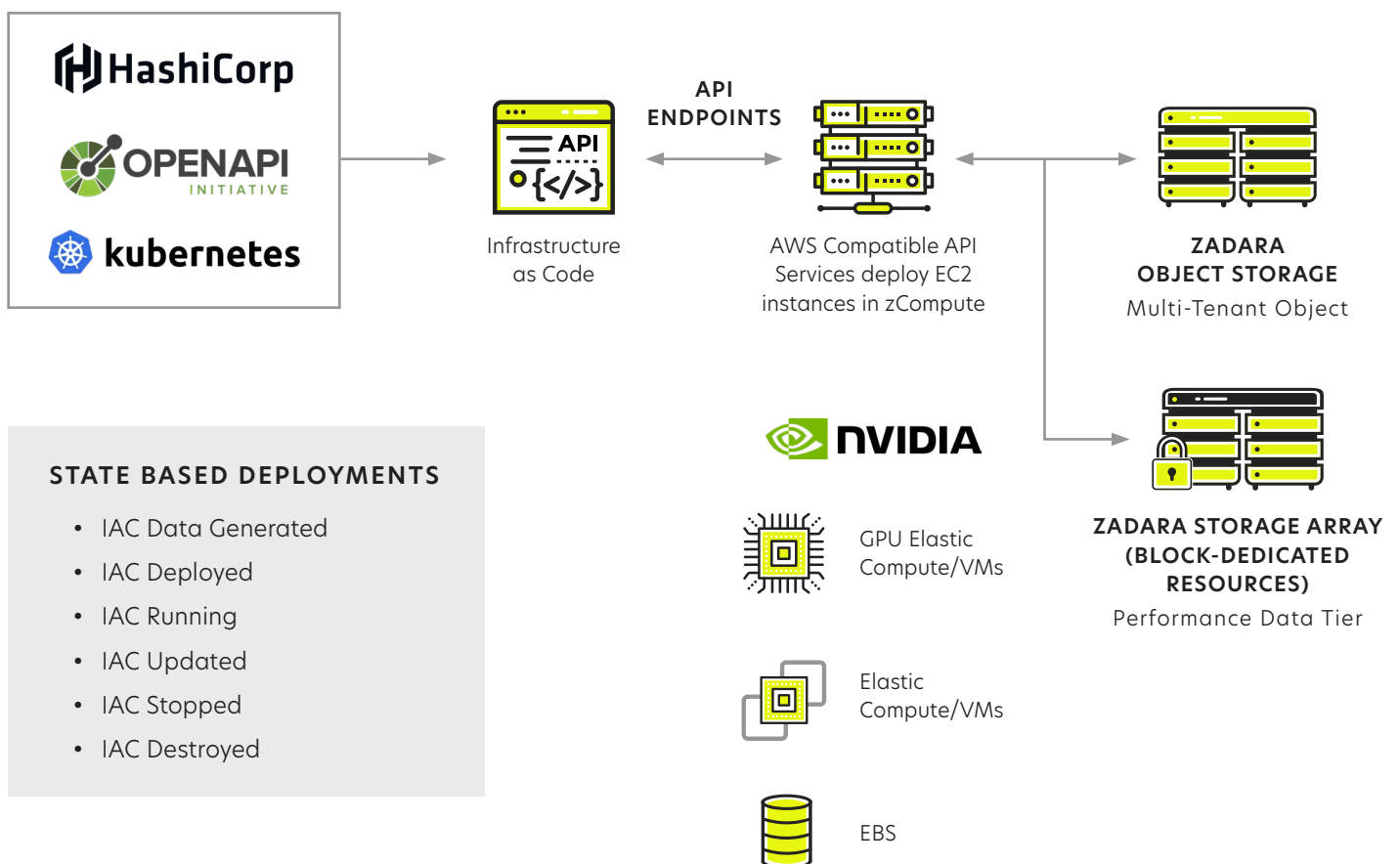**LOGICAL MULTI-TENANT INFRASTRUCTURE**

EDGE CLOUD SERVICES

4. CENTRALISED MANAGEMENT & AUTOMATION

A key benefit of multi-tenancy is **operational efficiency**. MSPs managing multiple customers need:

- A single-pane-of-glass dashboard to monitor all clients.
- Automated provisioning to reduce manual workload.
- Multi-tenant analytics to gain insights into usage, security, and performance.

With these tools, MSPs can manage clients more effectively while **reducing operational overhead**.

Infrastructure as Code

API ENDPOINTS

AWS Compatible API Services deploy EC2 instances in zCompute

ZADARA OBJECT STORAGE
Multi-Tenant Object

ZADARA STORAGE ARRAY (BLOCK-DEDICATED RESOURCES)
Performance Data Tier

GPU Elastic Compute/VMs

Elastic Compute/VMs

EBS

STATE BASED DEPLOYMENTS

- IAC Data Generated
- IAC Deployed
- IAC Running
- IAC Updated
- IAC Stopped
- IAC Destroyed

COMMON BUSINESS USE CASES FOR MULTI-TENANT ENVIRONMENTS

Cloud infrastructure services rely on multi-tenant architectures to efficiently allocate resources among multiple clients or applications while maintaining security and performance.

1. CLOUD HOSTING & INFRASTRUCTURE SERVICES

MSPs providing cloud infrastructure services rely on multi-tenant architectures to **efficiently allocate resources among multiple clients** while maintaining security and performance.

- IaaS, PaaS, and SaaS providers
- Virtualized environments with isolated workloads
- Managed cloud services for SMEs and enterprises

ZADARA EDGE CLOUD: FULLY MANAGED IaaS

| INFRASTRUCTURE AS CODE | Inuvika | asigra | Tiger Technology | Commvault | ZaveIT |
| | veeam | CloudAny | Arrosoft SOLUTIONS | ScaleGrid | |

| ENABLER PARTNER SOLUTIONS | LOADBALANCER | FORTINET | NVIDIA |
| | | Microsoft | Canonical Ubuntu | |

| ON-PREMISES & CLOUD COMPUTE | CSI | Compute | Backup | VPC | Loadbalancer | CPU |

| ON-PREMISES & CLOUD STORAGE | Block Storage | File Storage | Object Storage |

2. MANAGED SECURITY SERVICES

Cybersecurity is a growing concern for businesses, and multi-tenancy allows MSPs to **offer centralised security monitoring, firewall management, and threat detection** services across multiple clients.

- Multi-tenant SIEM solutions

- Centralised security operations centers (SOC)
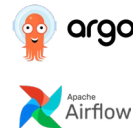
- Endpoint security management

LOG DATA

VM's hosted on
primary storage

splunk>

Splunk Services
running in zCompute

- Log Data Generated
- Log Data Ingested
- Log Data Analysed
- Log Alerts Generated
- Log Data Stored as Evidence

ZADARA STORAGE OFFSITE
Capacity Log Tier

Long Term Retention Object
Storage Repository

**ZADARA STORAGE ARRAY
(BLOCK ON SITE)**
Performance Log Tier
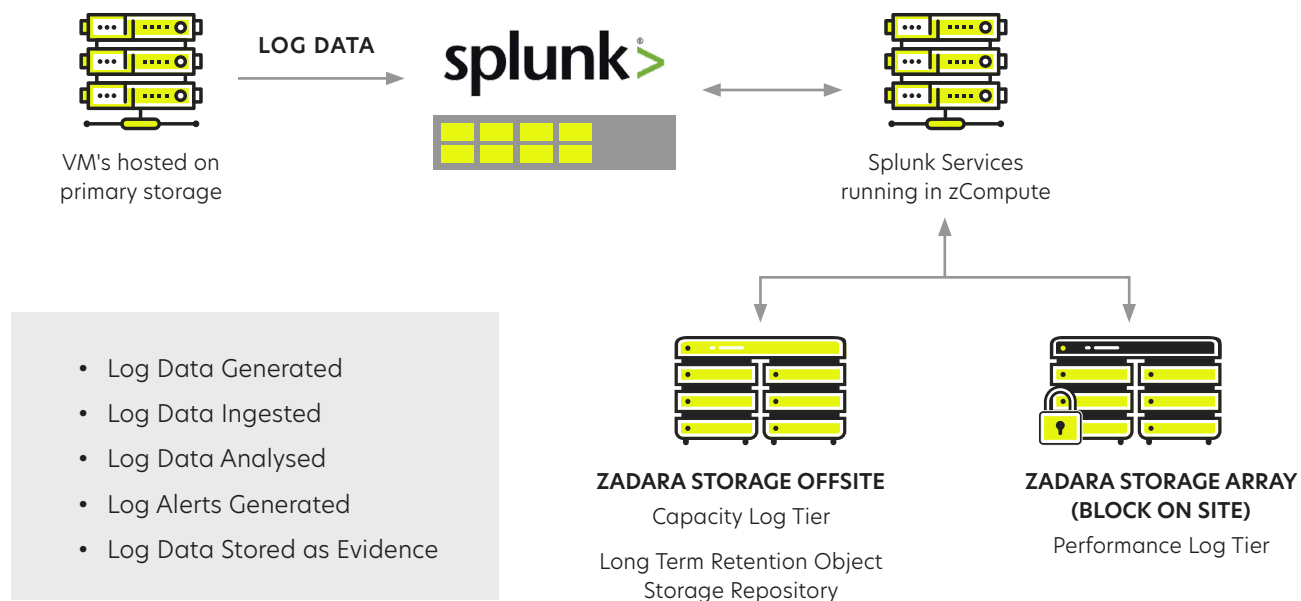
3. MULTI-TENANT SAAS PLATFORMS

Software providers delivering applications to multiple customers benefit from **a shared architecture** that maintains tenant isolation while maximising infrastructure utilisation.

- CRM, ERP, and HR applications
- Collaboration tools and project management platforms
- Industry-specific software solutions (e.g., healthcare, finance)

ZADARA EDGE CLOUD: FULLY MANAGED IaaS

CLOUD NATIVE APPLICATIONS

kafka · PostgreSQL · Apache Spark · argo · veeam Kasten
elastic · mongoDB · Jenkins · Apache Airflow

BRING YOUR OWN KUBERNETES

kubernetes · Public Cloud · EKS-D · RANCHER BY SUSE · taikun

ON-PREMISES & CLOUD COMPUTE

CSI · Compute · Backup · VPC · Loadbalancer · CPU

ON-PREMISES & CLOUD STORAGE

Block Storage · File Storage · Object Storage

4. DATA BACKUP & DISASTER RECOVERY

Businesses require **secure, scalable, and cost-effective backup solutions**. Multi-tenancy enables MSPs to provide:

- Automated backup solutions for multiple clients
- Multi-site disaster recovery environments
- Scalable storage solutions

BACKUP

VM's/host agents hosted on primary storage including Zadara VPSA's

Primary Backup Copies

Remote Veeam server instance

SureBackup recovery

ZADARA STORAGE ARRAY (BLOCK OR OBJECT ON SITE)
Performance Tier

ZADARA BLOCK OR OBJECT STORAGE
Offsite scale-out backup repository (SOBR) Cloud-tier for long term retention

ZADARA OBJECT STORAGE (OFFS SITE AND IMMUTABLE)
Capacity tier

3 Data Copies
2 Different Media (At Least)
1 Offsite
1 Immutable
0 Text Recoverability

5. INTERNET & CONNECTIVITY SERVICES FOR MULTI-TENANT BUILDINGS

With the rise of **co-working spaces and shared office environments**, MSPs can provide multi-tenant internet and connectivity solutions to serve **multiple businesses within a single infrastructure**.

- Managed Wi-Fi for commercial and residential properties
- Network segmentation for tenant-specific security policies
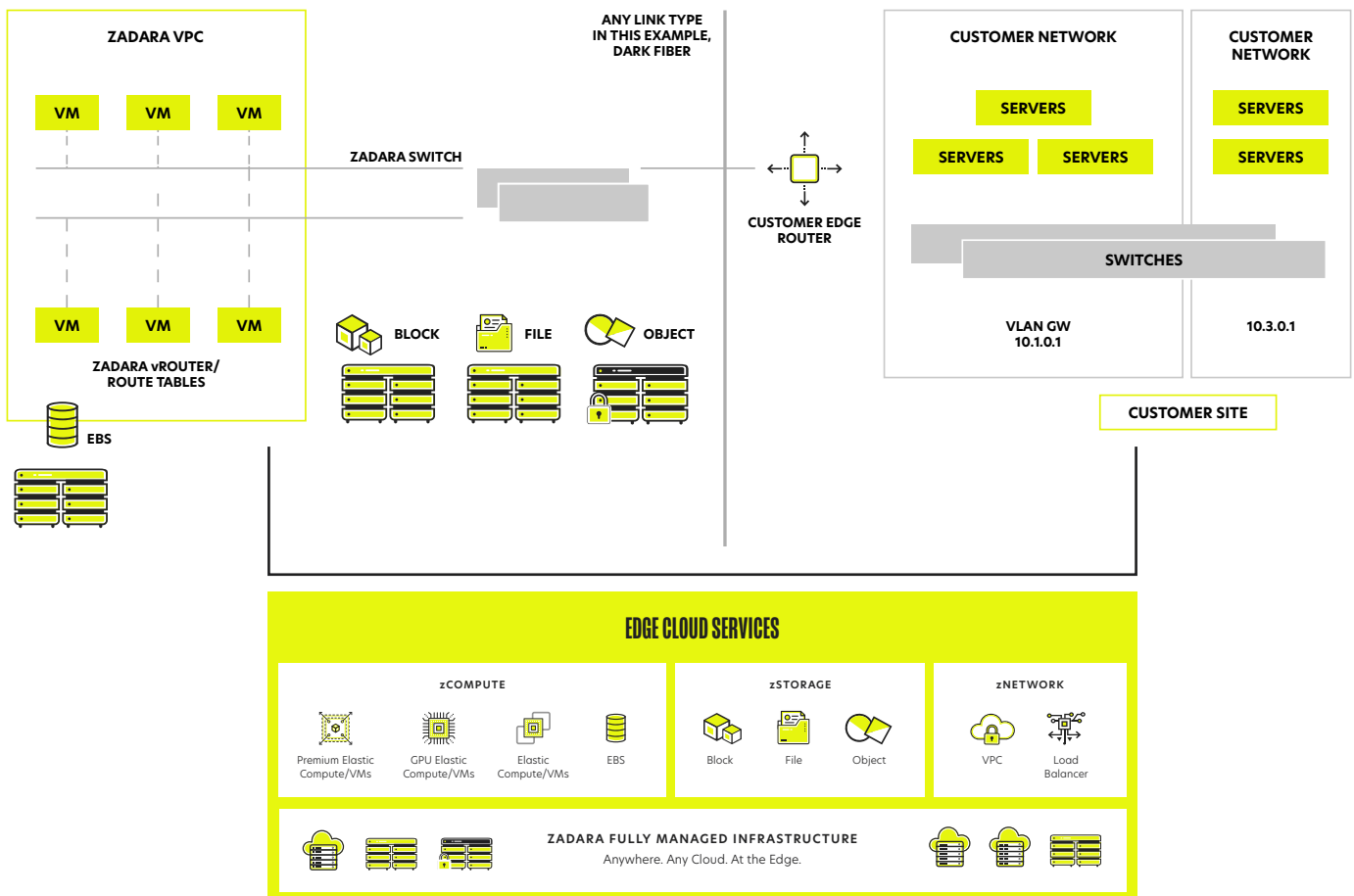
6. DEVELOPING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING CAPABILITIES

Everyone is looking for how they can utilise **modern Artificial Intelligence and Machine Learning concepts** to drive business innovation, enabling the use of a multi-tenant infrastructure allows for **different users or projects to make use of resources dynamically** using automation tools and APIs.

- GPU for VDI during normal business operating hours
- GPU for batch or creative inference out of normal hours
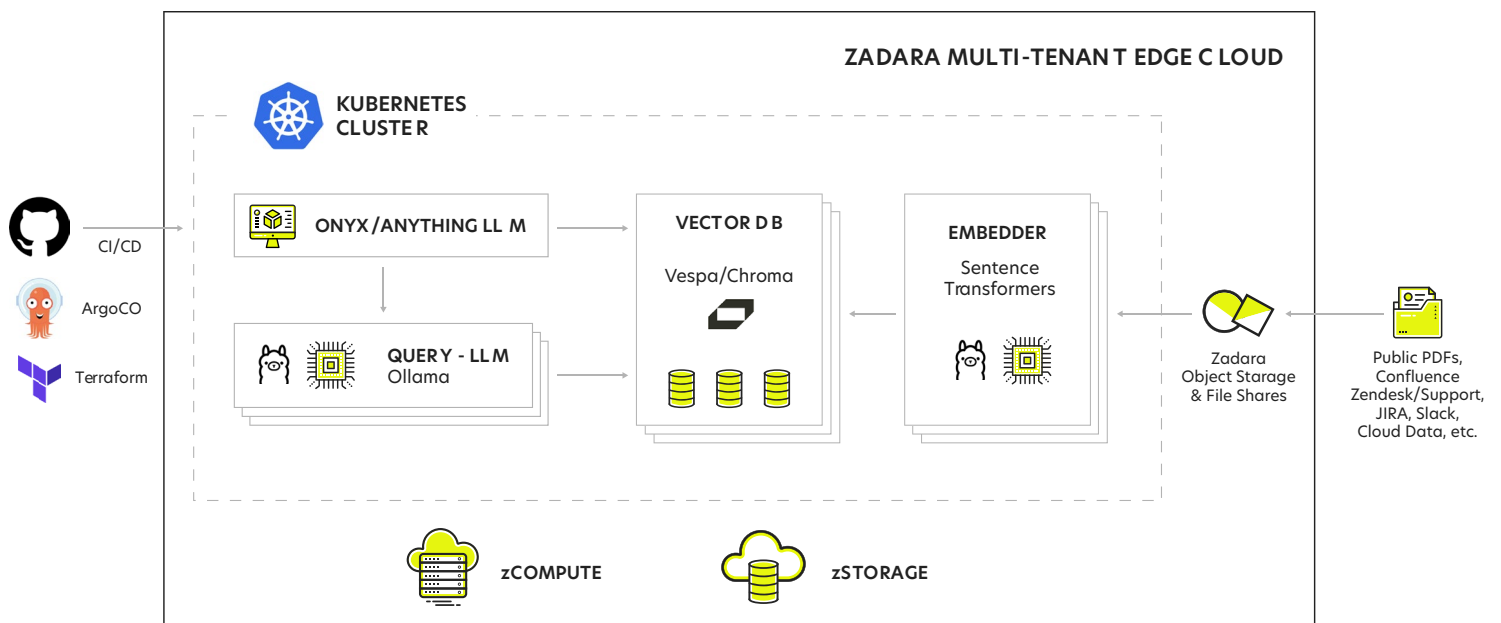
WHAT YOU SHOULD LOOK FOR IN A MULTI-TENANT INFRASTRUCTURE PROVIDER

1. SECURITY & TENANT ISOLATION

- **Strict data segregation** between tenants
- **End-to-end encryption** for data protection
- **Compliance-ready infrastructure**

AVAILABLE CORES | **ACTIVE CORES** | **STANDBY CORES**

SSD	**ZADARA VPSA #1** Customer/Dept. A 200 Engine + 4 Drives	
HDD + CACHE	**ZADARA VPSA #2** Customer/Dept. B 400 Engine + 10 Drives	
HDD	**ZADARA OBJECT STORAGE** Customer/Dept. C ZOS Engine + 6 Drives	
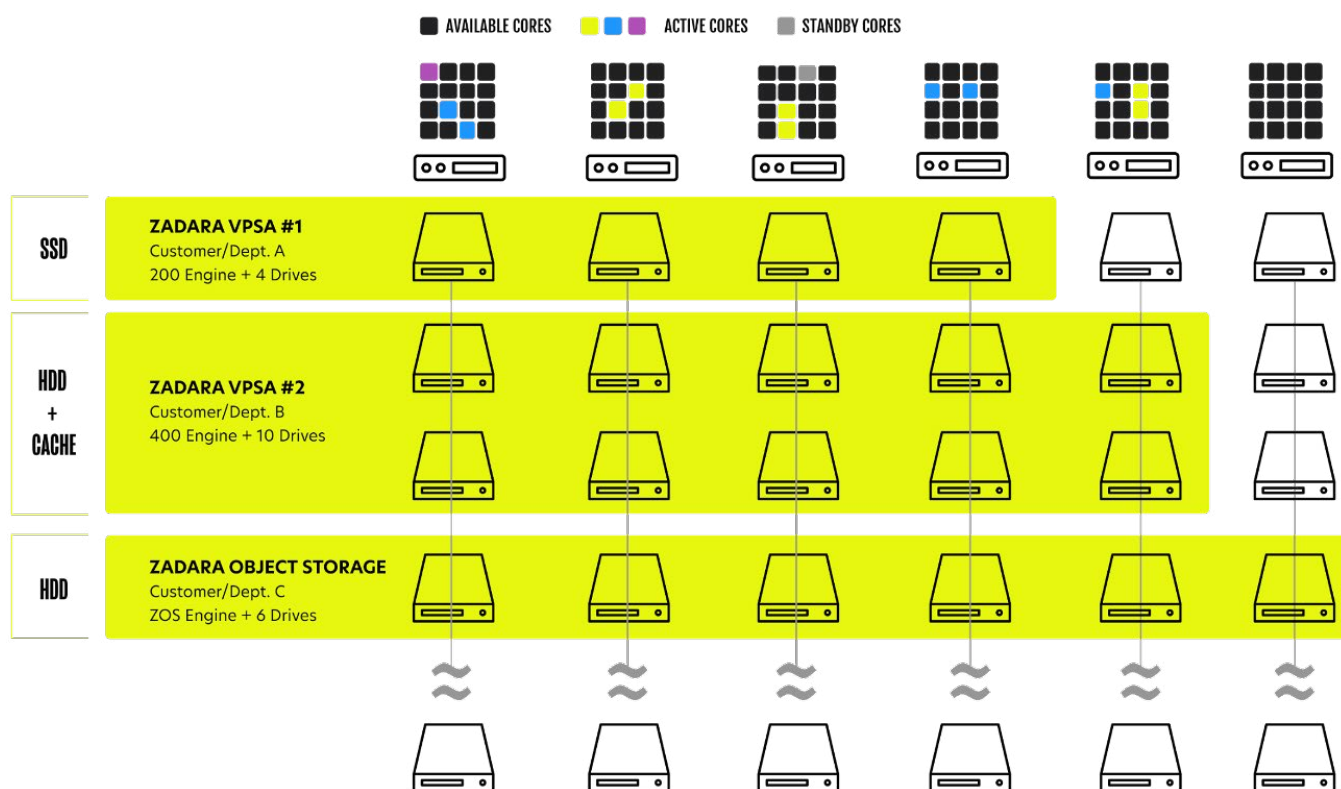
2. SCALABILITY & PERFORMANCE

- **Elastic resource allocation** for demand-based scaling

- **Load balancing and auto-scaling** to prevent performance bottlenecks

- **Geographically distributed architecture** for high availability

N+1 REDUNDANT CLUSTER

AWS API TRANSLATION LAYER
Supports: IAM, EC2, VPC, NLB, ALB, Route53, ASG, ACM, Cloud Watch, Cloud Trail

MANAGED SERVICES

| Load Balancer | Autoscaling | DNS (Route53) | NAT Gateway |

PaaS INFRASTRUCTURE

| Service Lifecycle Mgmt | Configuration Mgmt | Monitoring |
| Engine Mgmt | Communication | Logging |

MANAGED SERVICES

| VM Manager | VPC Manager | Volume Manager |
| Snapshot Manager | Data Protection | Image Manager |

MANAGED SERVICES

| Compute | Network | zStorage API |

3. CENTRALIZED MANAGEMENT & AUTOMATION

- **Single-pane-of-glass dashboard** for managing all customers

- **Automated provisioning & updates**

- **Role-based access control (RBAC) for security**
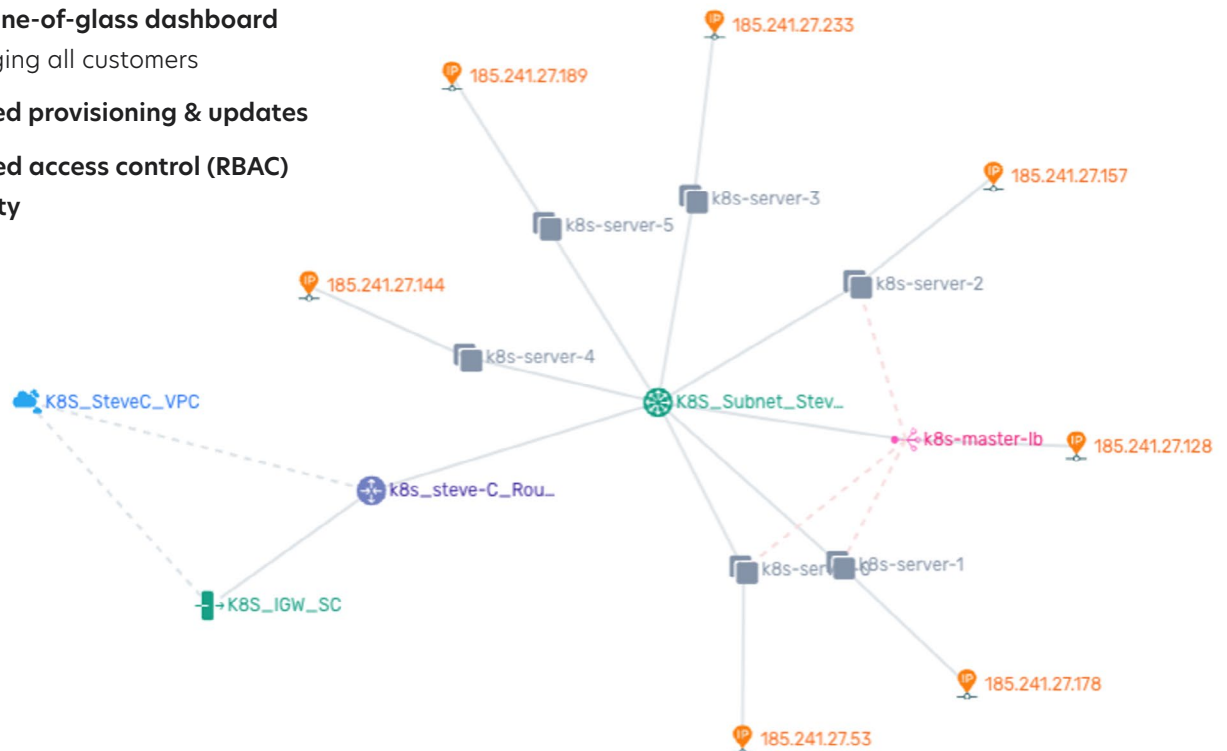
4. COST EFFICIENCY & FLEXIBLE BILLING

- **Pay-as-you-go pricing models**

- **Usage-based billing for transparent costs**

- **Multi-tiered pricing for different customer needs**

5. API & THIRD-PARTY INTEGRATIONS

- **Open API architecture** for seamless integrations

- **Marketplace for third-party add-ons and extensions**

Disaggregated Storage & Compute Clusters
- Independently scale compute and storage

Multi-tenancy by design
- Network isolation, fault isolation, dedicated resources

Self-provisioning, self-configured
- Network, Compute and Storage resources within a Virtual Private Cloud (VPC)
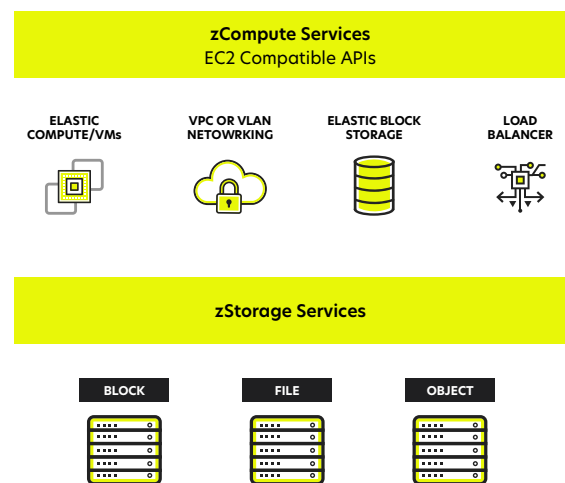
AWS-compatible APIs
- Simplifies automation, migration and edge-to-cloud use cases

APT Driven
- Comprehensive storage and compute APIs

Central Management, Control and Support
- Tools and services for provisioning, monitoring and controlling Global Edge Cloud resources

zCompute Services
EC2 Compatible APIs

ELASTIC COMPUTE/VMs VPC OR VLAN NETOWRKING ELASTIC BLOCK STORAGE LOAD BALANCER

zStorage Services

BLOCK   FILE   OBJECT

HOW ZADARA COMPARES TO OTHER MULTI-TENANT SOLUTIONS

1. FULLY MANAGED MULTI-TENANT CLOUD SOLUTIONS

Zadara provides **end-to-end managed services**, meaning MSPs don't have to worry about infrastructure maintenance.

- Scalable, pay-as-you-go infrastructure
- Global data centers for high availability
- Financial choice - 100% OPEX model with no upfront costs or a SaaS option

2. STRONG SECURITY & COMPLIANCE

Zadara meets **GDPR, HIPAA, ISO 27001 and SOC 2 compliance standards**, making it suitable for **regulated industries**.

- Multi-tenant security with strong isolation
- End-to-end encryption and role-based access control
- 24/7 proactive monitoring & threat detection

3. WHITE-LABEL & CUSTOMISATION FOR MSPS

Unlike traditional cloud providers, Zadara offers **white-label solutions**, allowing Service Providers to **brand services as their own**.

- Flexible deployment: on-premises, hybrid, or public cloud
- Customisable SLAs for client-specific needs

4. COMPETITIVE EDGE OVER TRADITIONAL CLOUD PROVIDERS

Unlike **AWS, Azure, and Google Cloud**, Zadara provides fully **managed on-premises infrastructure**, removing the complexity of cloud management.

- No hidden costs or egress fees
- Predictable billing with flexible pricing models
- Stronger multi-tenancy features than standard public cloud offerings

CONCLUSION: THE FUTURE IS MULTI-TENANT

For UK and European MSPs, multi-tenancy is no longer an option—it's a necessity. It enables MSPs to reduce costs, scale effectively, enhance security, and simplify management while providing customers with cost-effective and compliant solutions.

When choosing a multi-tenant infrastructure provider, MSPs should focus on security, scalability, management efficiency, cost-effectiveness, and integration capabilities. Solutions like Zadara offer fully managed, compliant, and scalable multi-tenant environments, giving MSPs the edge they need to succeed in a competitive market.

Is your business ready for the future?
Now's the time to embrace multi-tenancy!