



FONAFE TECH

Innovación y Tecnología:
Transformando las Empresas del Estado



FONAFE TECH

Víctor D'Gibbs
Senior Systems Engineer
Nutanix





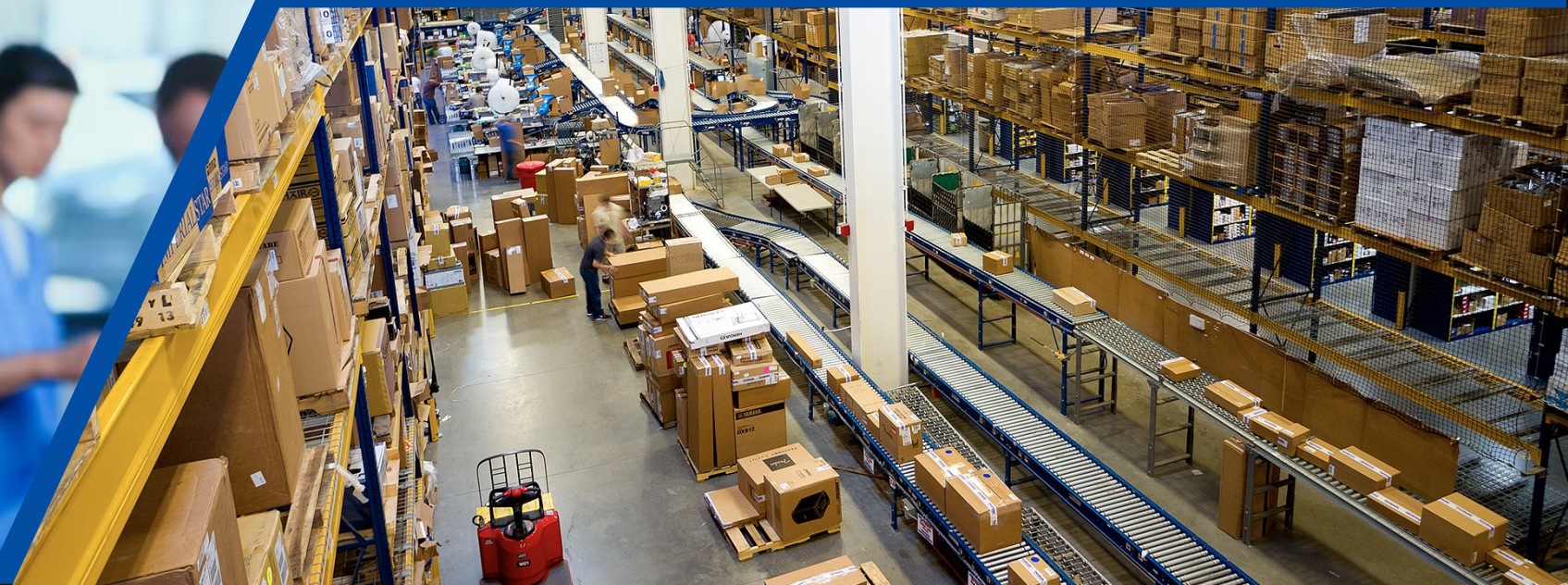
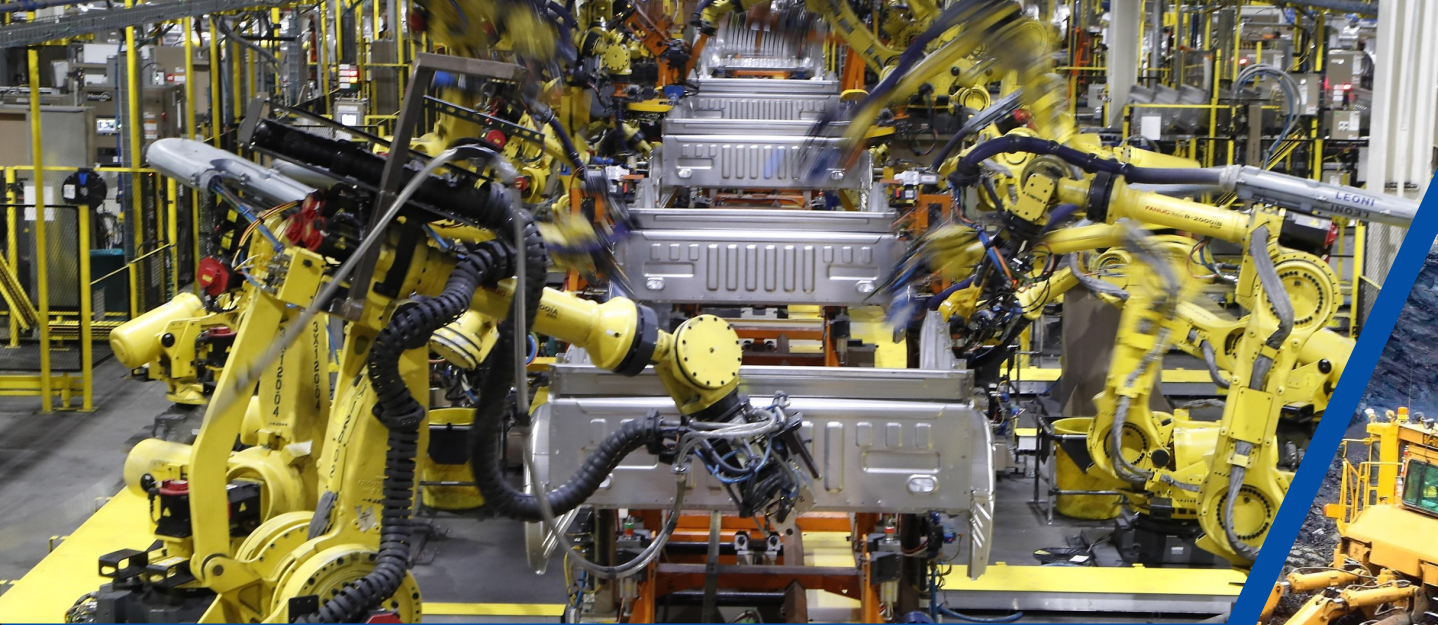
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HCI y Virtualización

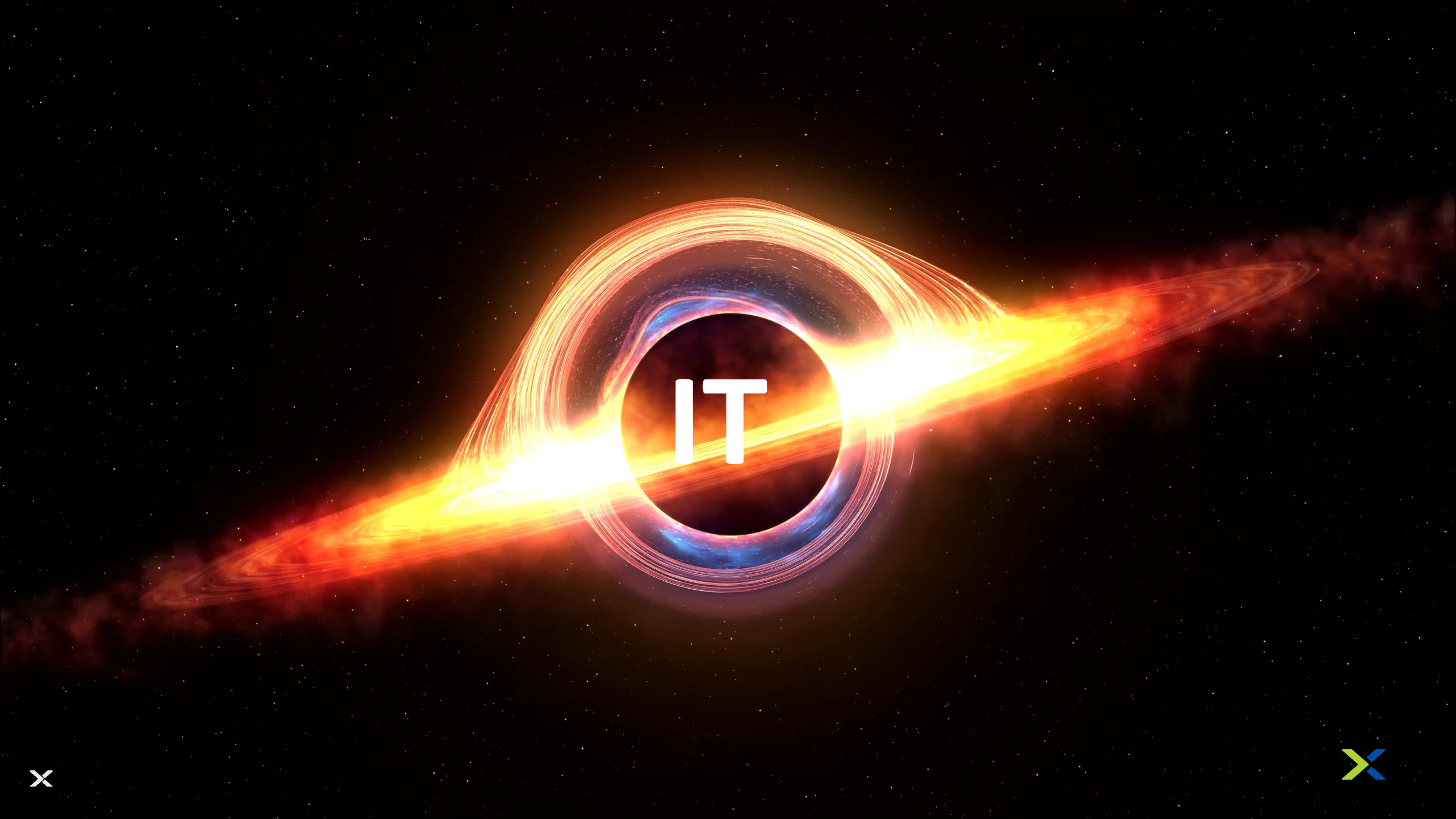
Nutanix Enterprise Cloud

Victor D'Gibbs | Sr. System Engineer | South of Latin America

NUTANIX







IT

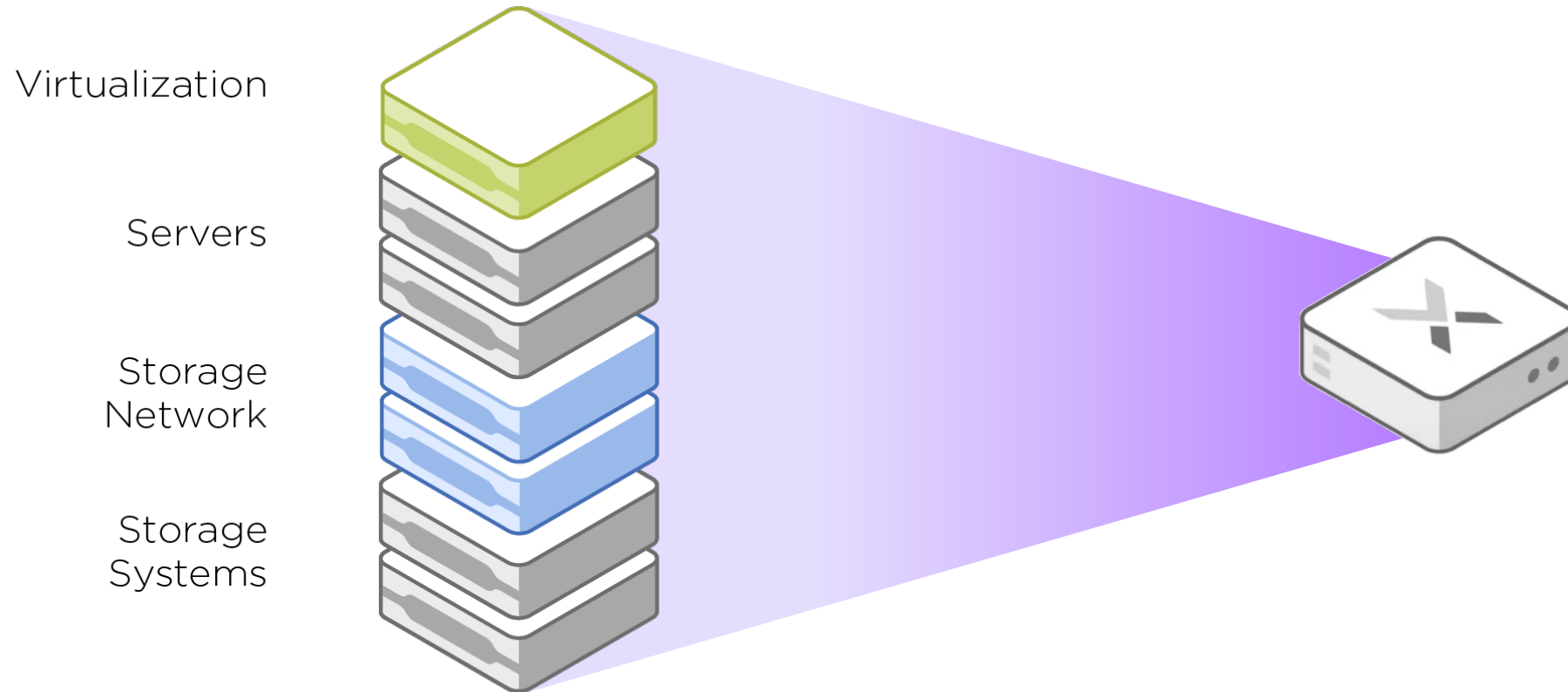


IT?

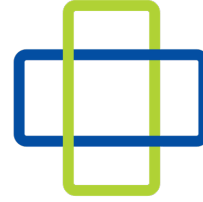
NUTANIX

YOUR ENTERPRISE CLOUD

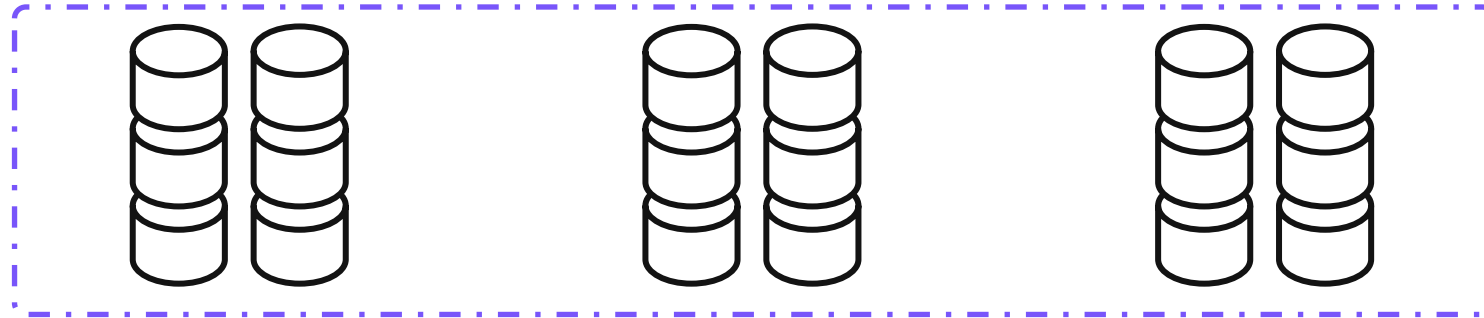
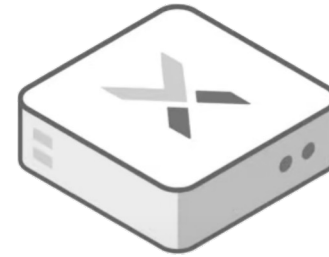
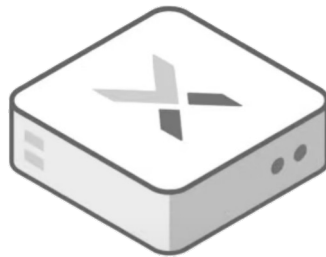
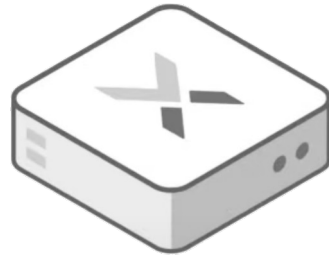
Modernización del Data Center



Nutanix



AOS



Distributed Storage Fabric

Software Defined Storage

 Snapshots

 Clones

 Deduplicación

 Compresión

 Backups

 Data Locality

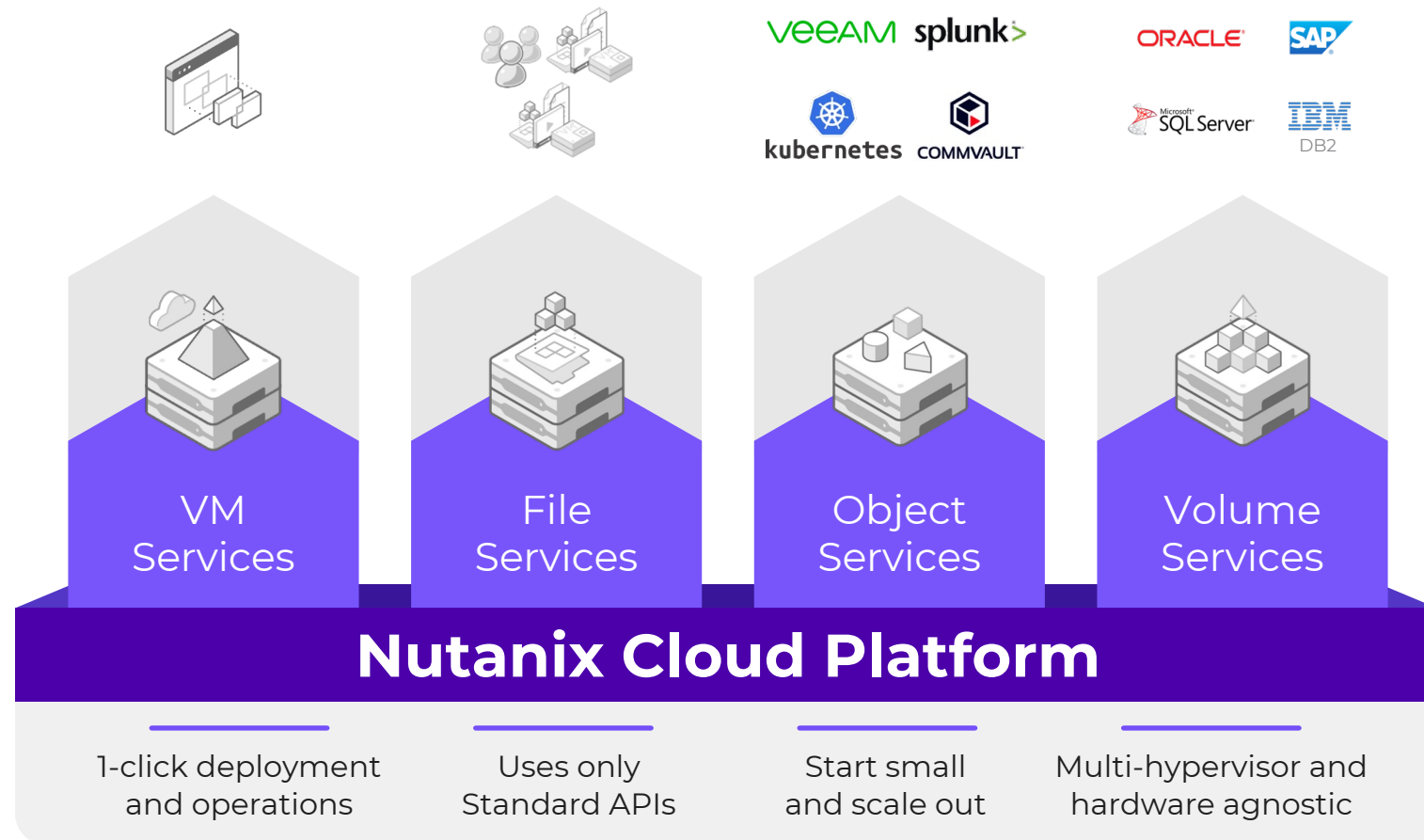
 Tiering

 Resiliencia

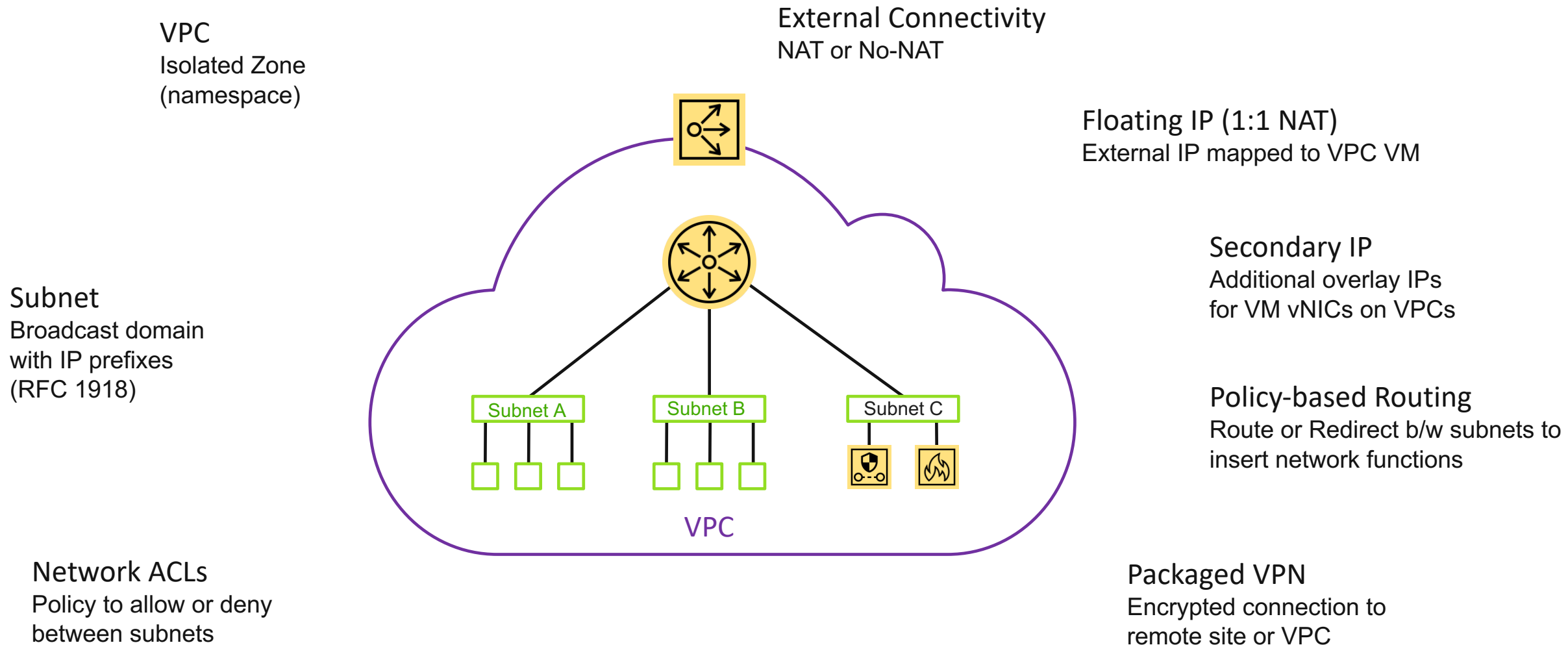
 Disaster Recovery

 Encriptación

Storage para Todas las Cargas de Trabajo



Flow Virtual Networking



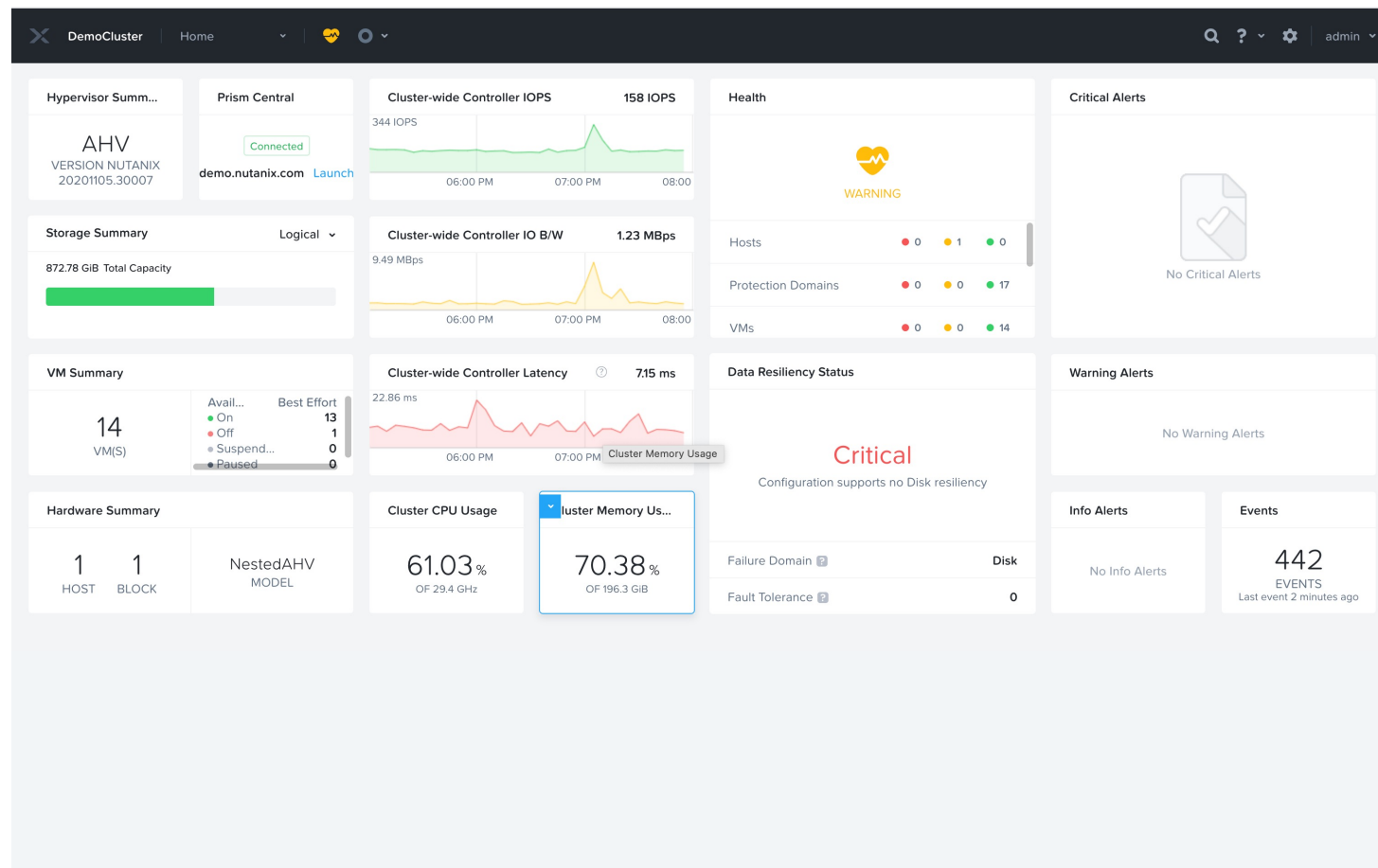
Full Stack HCI

SIMPLE

SEGURO

RESILIENTE

FLEXIBLE





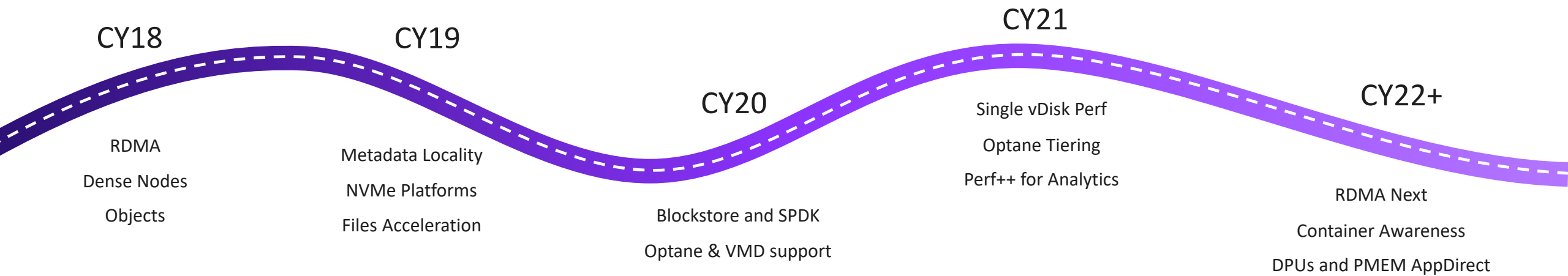
NUTANIX™

SKO 23



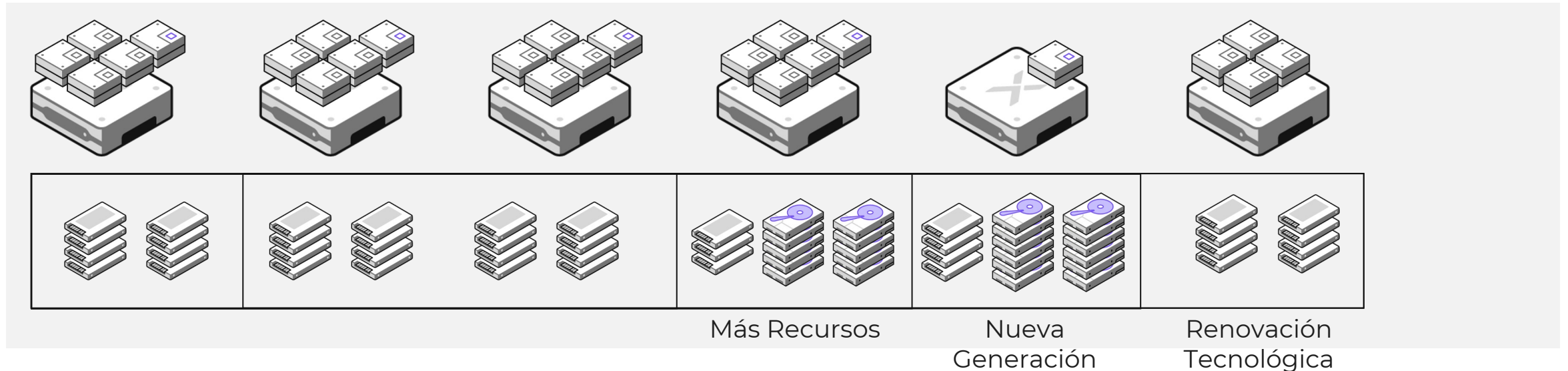
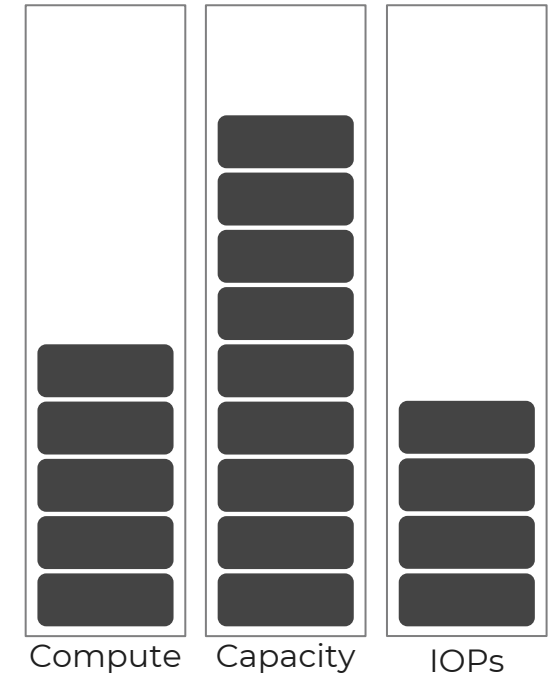
Avances Generacionales de la Arquitectura HCI

- Nutanix HCI se contruye sobre una arquitectura web-scale con un principio data-first
- Evolución de la arquitectura para el performance y la escalabilidad
 - Modernice la nfraestructurea para las nuevas aplicaciones
 - Fortalecer el TCO y la densidad
 - Acclera la innovación



Crecimiento Flexible con HCI

- Performance y capacidad crecen linealmente
- Crecer en cómputo y storage independientemente
- Mix & Match node types
- Datos automáticamente rebalancados



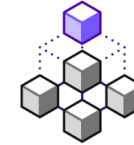
LCM: Infrastructure Upgrades



Fácil de Usar



Elimina la
Complejidad



Escalable

Software/Firmware Full Stack Upgrades



AOS



AHV



Prism



Files



Objects



Calm



Foundation



BIOS



BMC



HDD



SDD



Boot
Drive



NIC



HBA



Expander



Automatic Dependency Management

Unified Upgrade Process



NUTANIX

Lenovo

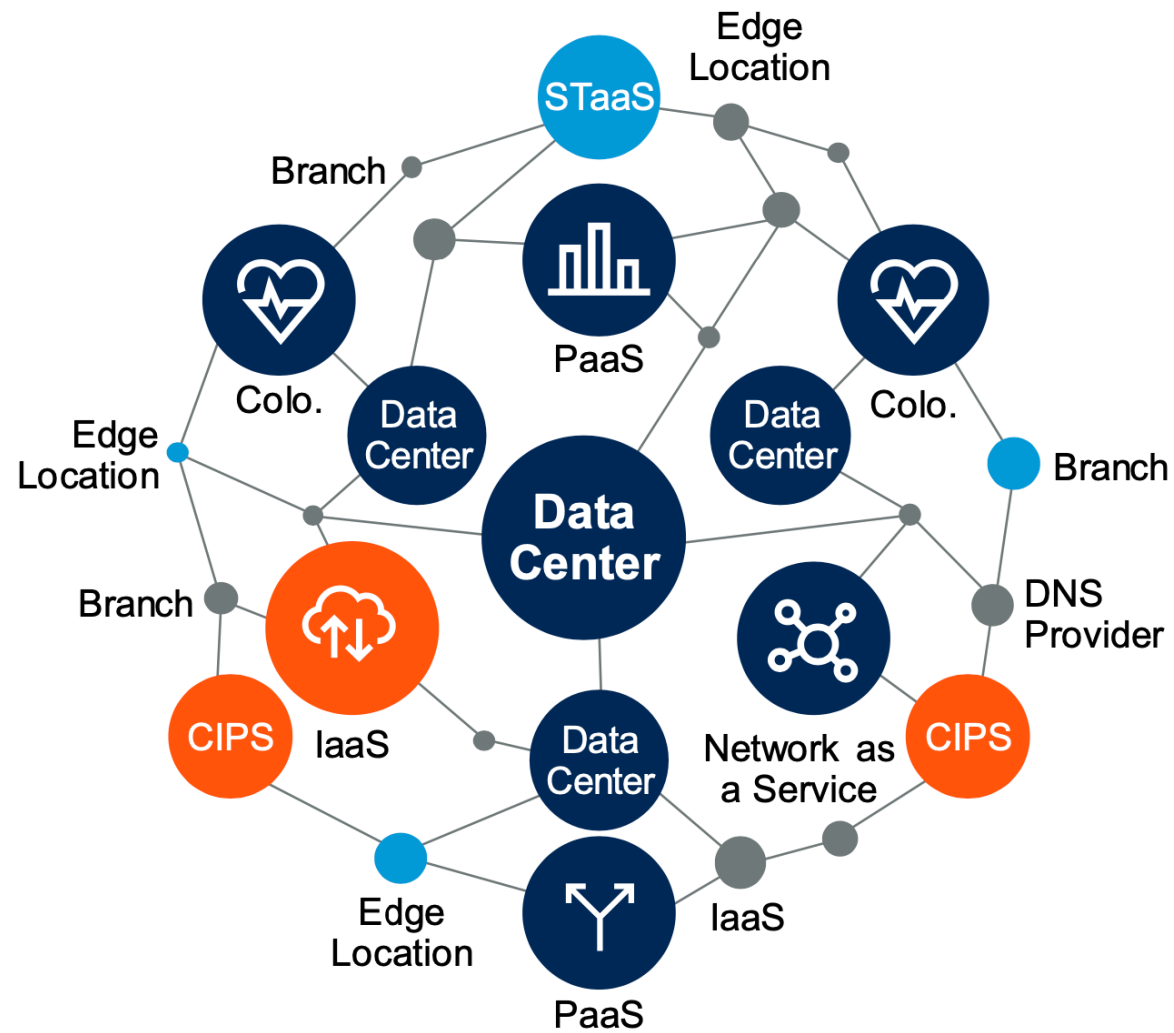
Hewlett Packard
Enterprise

inspur

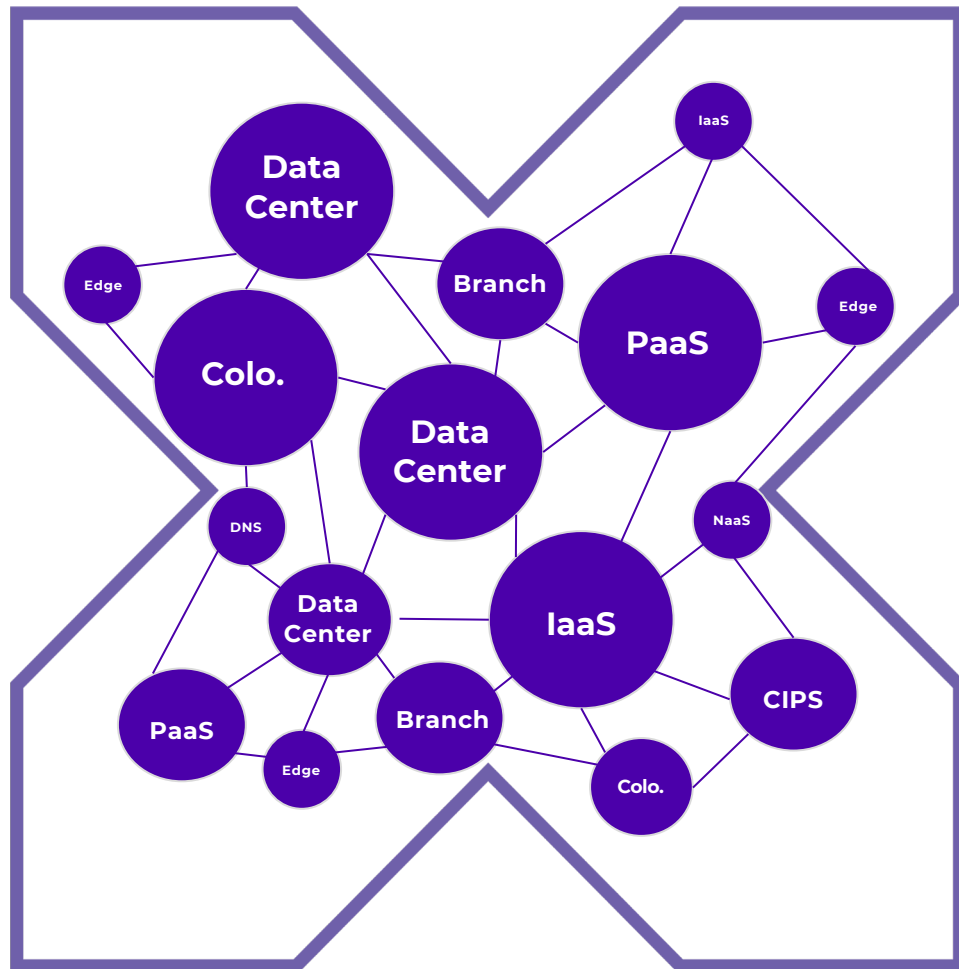
DELL EMC

FUJITSU

intel



La Respuesta: Una Plataforma Hybrid Multicloud



Opere una única plataforma utilizando estructuras y conjuntos de habilidades consistentes

Mueva aplicaciones y datos con facilidad según los requisitos comerciales

Administre centros de datos, nubes y edge como uno solo

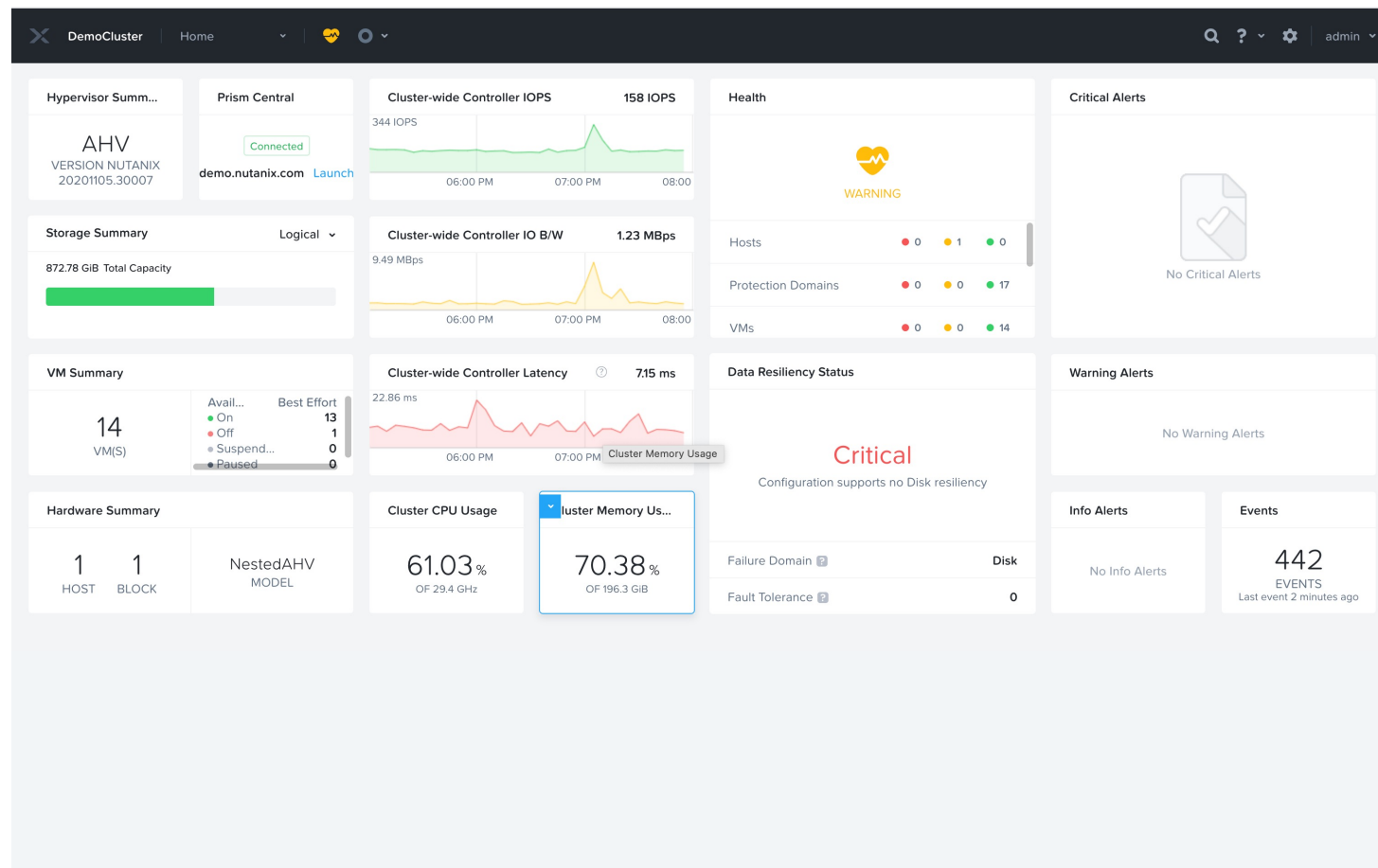
Full Stack HCI

SIMPLE

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Asegurar el Cloud Híbrido

Implica nuevos desafíos

80,000

Ciber-ataques
reportados por día

~50%

Incidentes internos
con hasta ~50%



60%

De ataques son
resultado de errores
de configuración

75%

De los usuarios no se
enfocan en la
prevención

Nutanix Security Benefits

Security by Design



-  Spend less time securing your infrastructure
-  Monitor and patch vulnerabilities without downtime
-  Secure your sensitive data and apps without friction
-  Build defense-in-depth with a growing ecosystem
-  Meet certification and standards with ease

Why Microsegmentation?

Application-Centric Security/Zero Trust



Insider Incidents up ~50%.

The volume of incidents due to insiders continues to rise. More than half are due to negligence vs. malice.

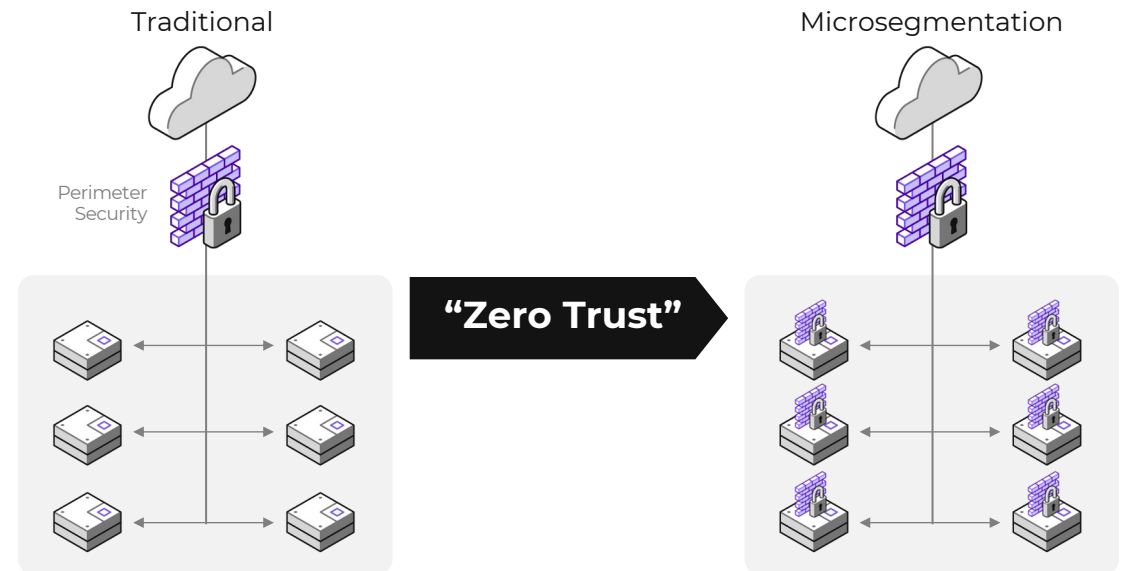
"The Real Cost of Insider Threats in 2020", Ponemon Institute



75% Don't Focus on Prevention.

A balanced approach to the entire security lifecycle is required. Prevention, Detection, Containment, and Recovery.

"Preventing Cyberattack Penetration Can Save Enterprises Up To \$1.4 Million", Ponemon Institute

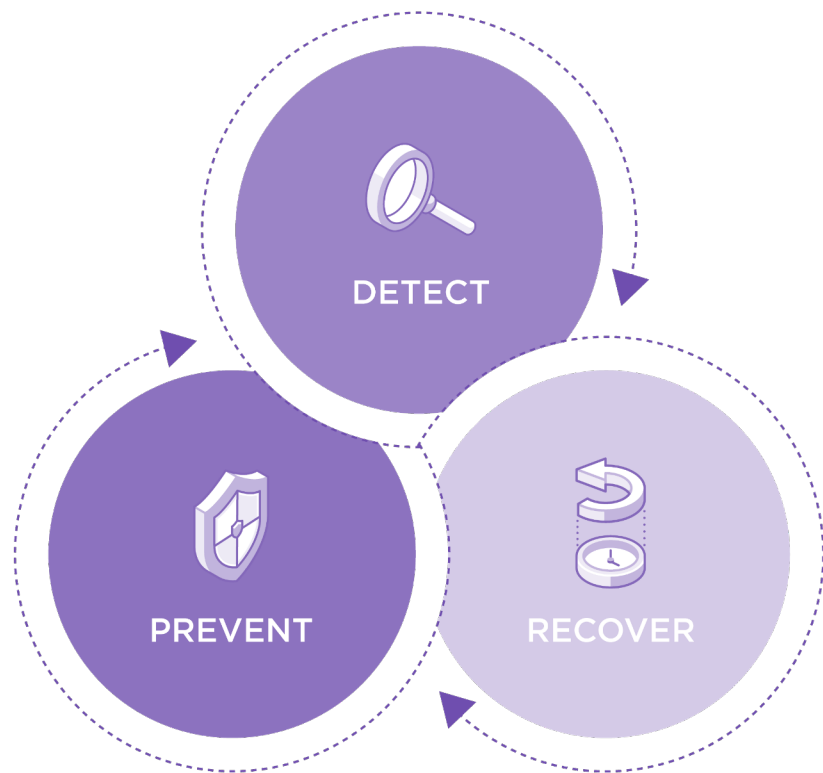


Zero Trust Models Are Needed.

"Organizations should not automatically trust anything inside or outside its perimeters..."

John Kindervag, former principal analyst at Forrester Research

Nutanix como parte de su Estrategia de Seguridad y Ransomware



	Prevent	Detect	Recover
Nutanix AOS - Security hardened with self-healing security configuration - Native storage snapshots - Built-in data protection, replication, and runbook automation - Native data-at-rest encryption with FIPS 140-2 validated modules - Data plane & Control plane segmentation - Native AHV virtualization - built for security	✓		✓
Nutanix Life Cycle Manager (LCM) "One-click" CVE patching, platform upgrades, and life cycle management - Firmware and BIOS upgrade management	✓		
Prism Central Role-Based Access Control (RBAC)	✓		
Nutanix Calm Application blueprints, automation, and life-cycle management to ensure consistent security configuration	✓		
Prism Ops with X - Play - Resource analytics and insights with anomaly detection - Codeless automation and event triggers		✓	
Nutanix Flow - Network segmentation and application microsegmentation - Integrated partner solutions for deep packet inspection and threat intelligence - Policy and event logging for SIEM integration	✓	✓	
Nutanix Files - File type blocking policies - File activity anomaly detection from Files Insights - ICAP support for antivirus integration	✓	✓	✓
Nutanix Objects Immutable S3-compatible WORM storage for critical data and backups	✓		✓
Nutanix Mine Turnkey archive and backup solution for secondary storage with all the benefits of Nutanix HCI			✓
Xi Leap Simplified cloud Disaster-Recovery-as-a-Service built for Nutanix			✓

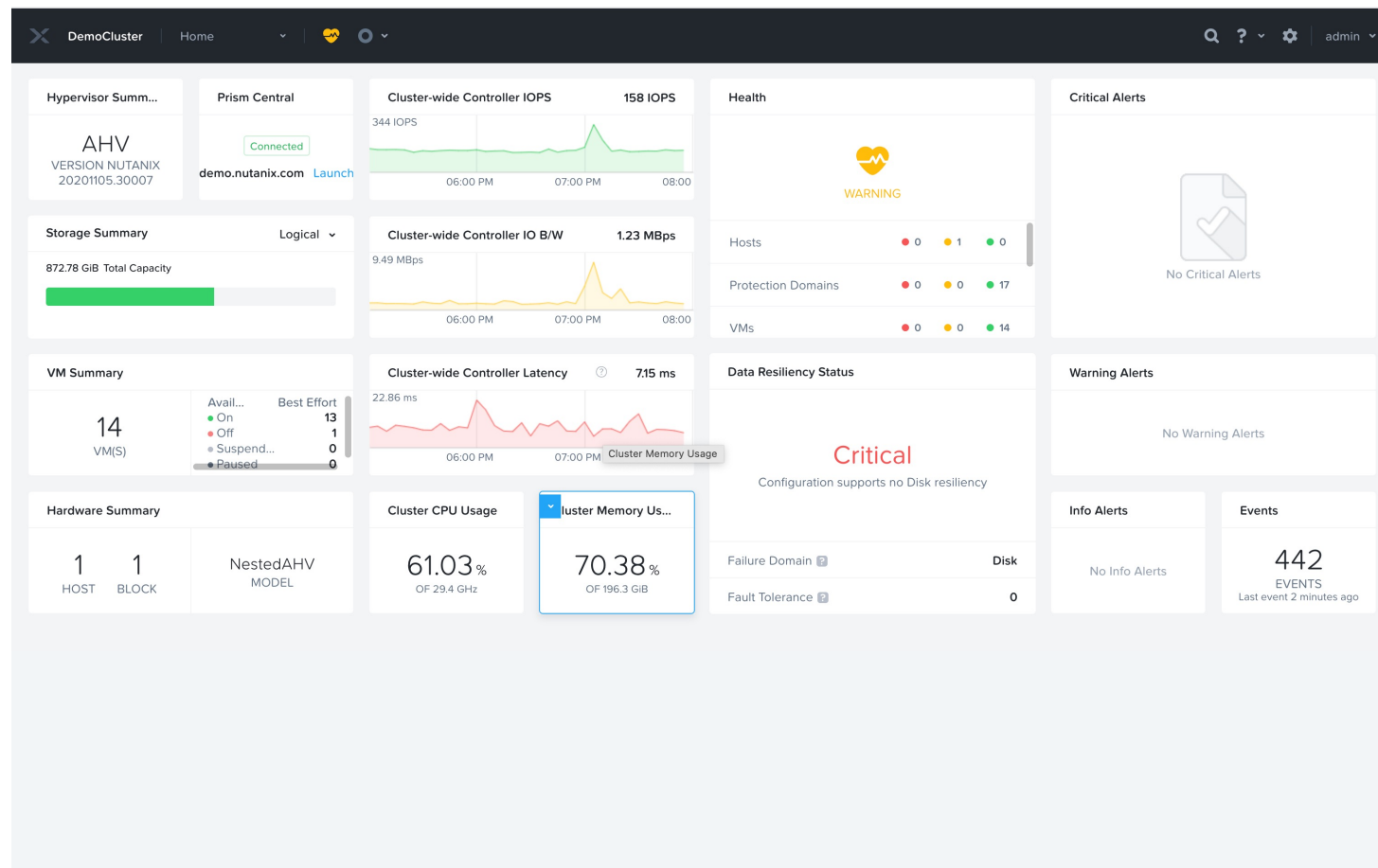
Full Stack HCI

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FLEXIBLE



A man in a light blue checkered shirt and dark trousers is sitting on the floor of a server room. He is gesturing with his hands, palms facing each other, as if explaining something. The background shows rows of server racks with blue cables. A dark horizontal band is overlaid across the middle of the image, containing the text "Hardware Falla, Garantizado".

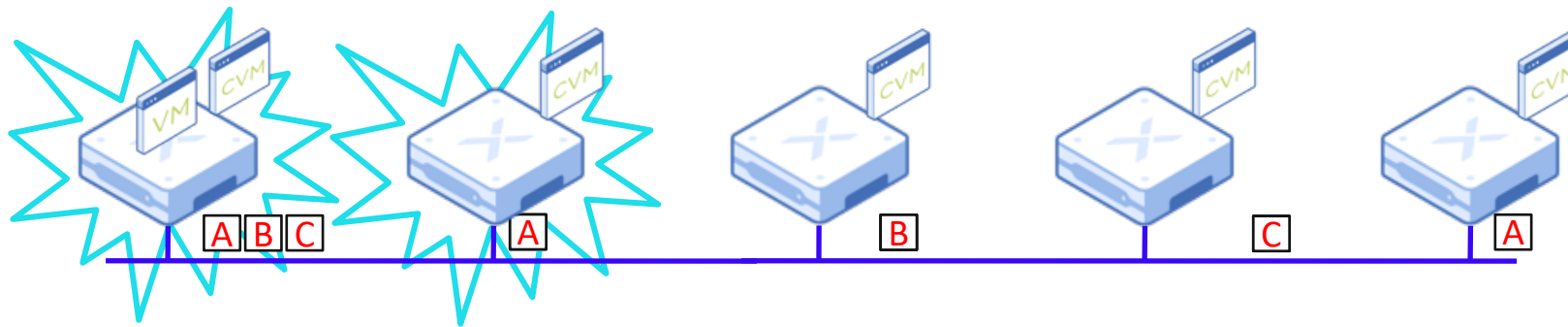
Hardware Falla, Garantizado



Resilient From Hardware Failure

Nutanix self-healing:

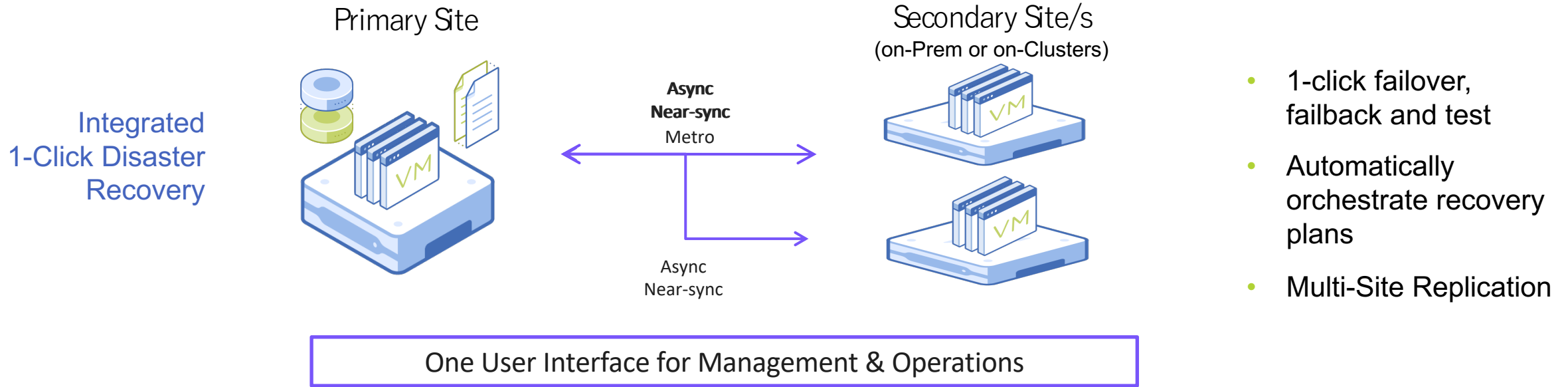
- Begins immediately upon failure
- Faster than traditional RAID
- Fully distributed – all nodes participate
- Rebuild performance improves with cluster size



Sí, Data Centers también pueden tener problemas...



Comprehensive BCDR Solution



Integrated Best-in-Class Backup



- Backup & archive data
- Use popular data protection software

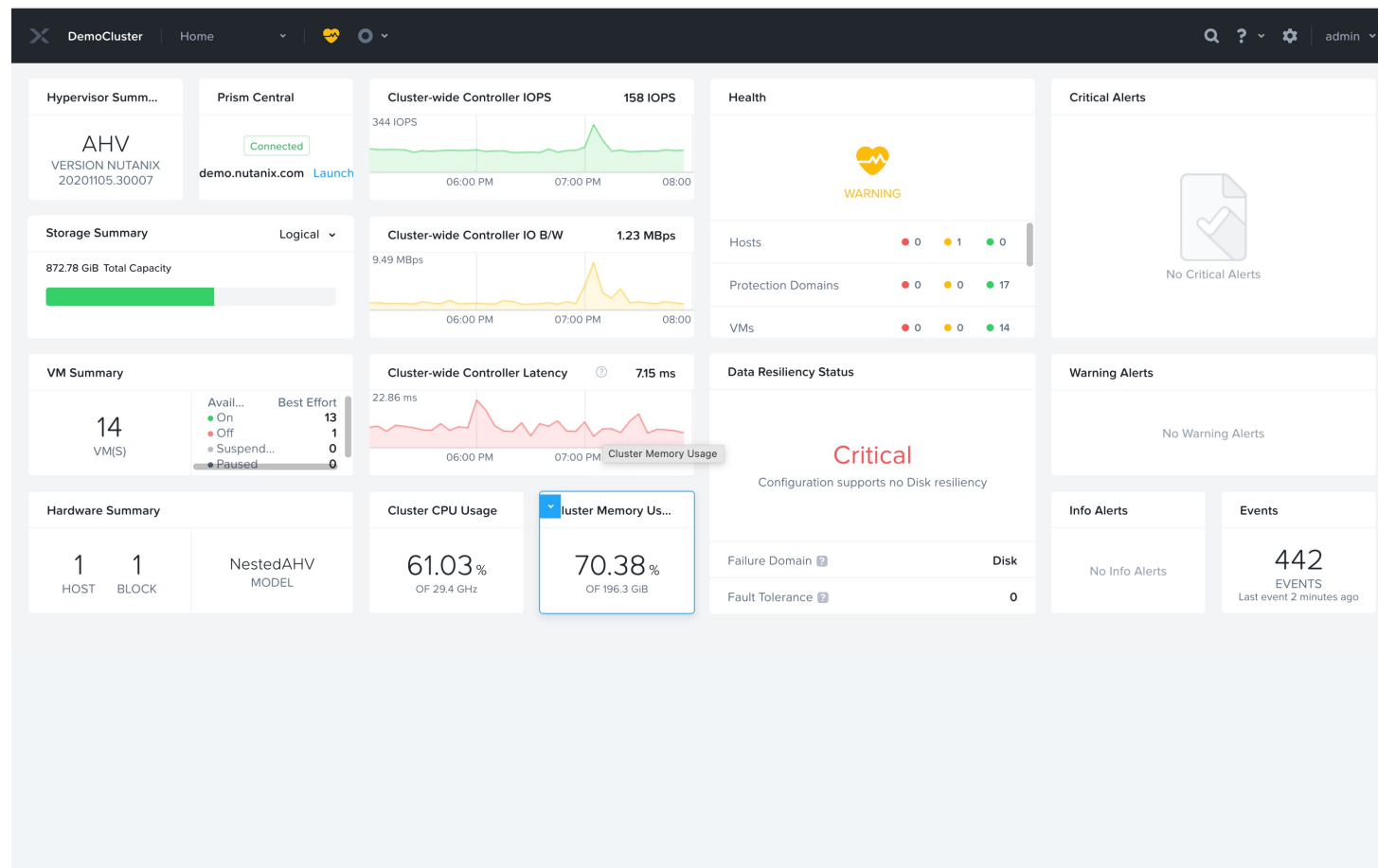
Full Stack HCI

SIMPLE

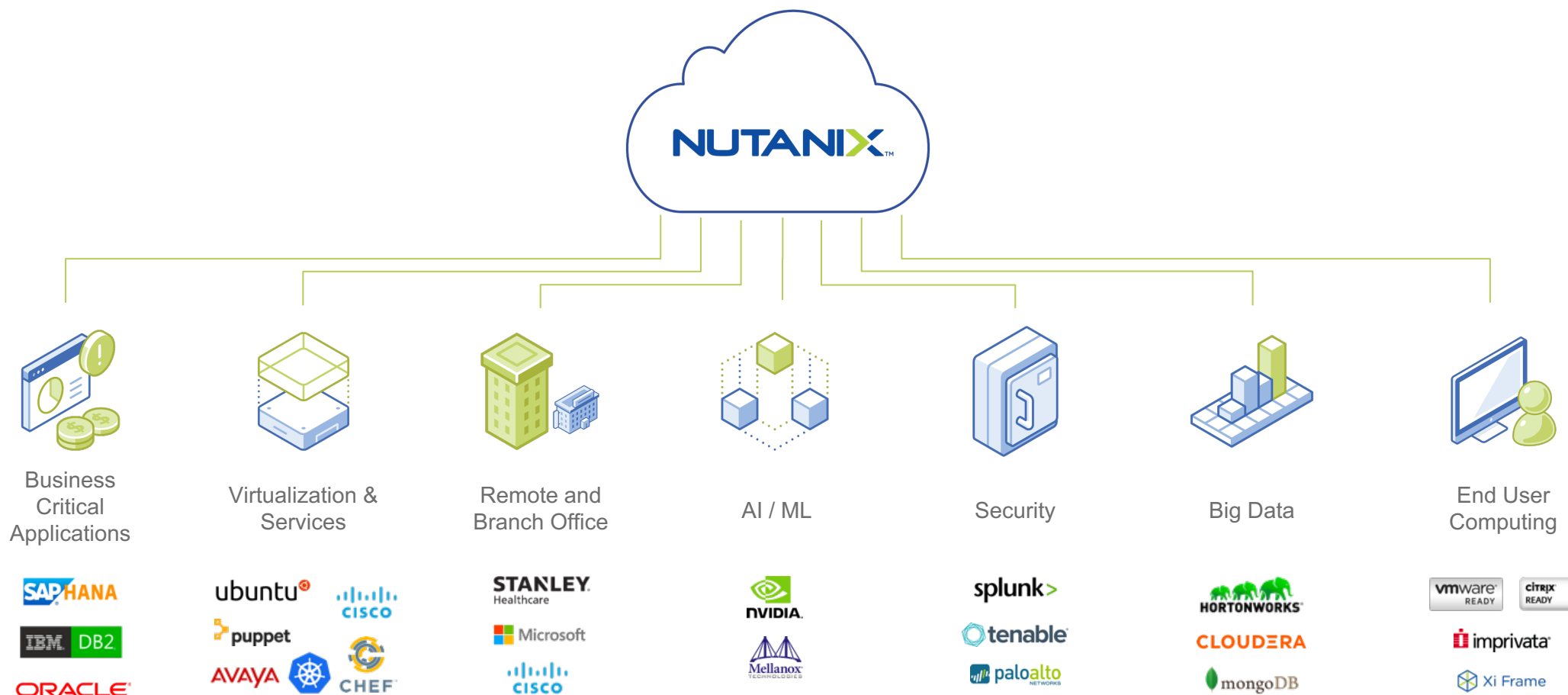
SEGURO

RESILIENTE

FLEXIBLE



Flexible to run All Workloads and Use Cases



NKE: Kubernetes Made Simple



Nutanix Kubernetes Engine (NKE) es una solución de administración empresarial de Kubernetes que permite el aprovisionamiento, operación y la gestión del ciclo de vida, llave en mano, de Kubernetes



NKE is Kubernetes
Certified

Simple

- Menos de 20 minutos para desplegar un cluster Kubernetes para producción
- Operación tipo cloud, pero on-premise
- Actualizaciones y crecimiento automatizado
- Soporte técnico expert que cubre el stack completo

Solución Completa

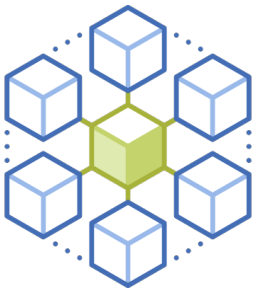
- Integra a la perfección el monitoreo, el registro y las alertas de Kubernetes
- El CSI integrado se implementa con cada clúster K8s y ofrece almacenamiento persistente de bloques y archivos

No lock-in

- Ofrece una experiencia de usuario nativa de Kubernetes con API estándar

Plataforma HCI Preferida para OpenShift

- Full Nutanix platform support
 - Installer-provisioned infrastructure
 - Assisted installer
 - Operator-integrated CSI
 - Full Machine API support
 - Machine autoscaler
-



- Roadmap de ingeniería conjunta que proporciona una interoperabilidad sólida
- Experiencia de soporte más fluida que brinda tiempos de resolución más rápidos para clientes conjuntos

Strategic
Partnership

NUTANIX

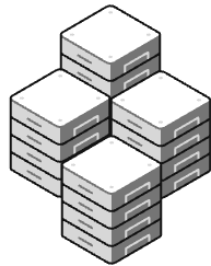
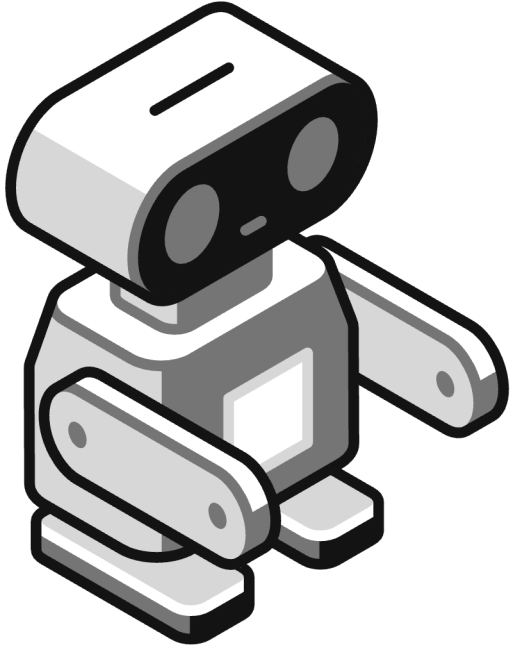


Red Hat

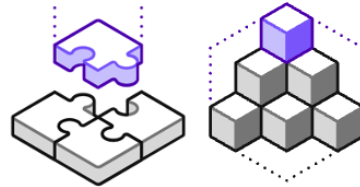
Artificial Intelligence

Sustantivo

Teoría y desarrollo de **sistemas informáticos** combinados con conjuntos de **datos robustos**, capaces de realizar tareas de **resolución de problemas** que normalmente requieren inteligencia humana, como la *percepción visual*, el *reconocimiento de voz*, la *toma de decisiones* y la *traducción entre idiomas* basadas en **machine learning** y algoritmos de **deep learning**.



Large-scale Compute



Data & Models



Artificial Intelligence

Casos de Uso Artificial Intelligence?

All Verticals



AI bots para customer service



Búsqueda de Documentos y análisis E.g. Préstamos, contratos, investigación



Code co-piloting



Protección contra fraude y robo



Pharma/Health care

Diseño generative de anticuerpos

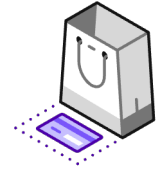
Procesamiento de datos OMICs para descubrimiento de gases



Financials

Optimización del Portfolio

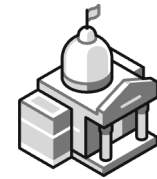
Análisis de upsell a clients



Retail/Edge

Inspección visual de calidad

Detección de Fraudes



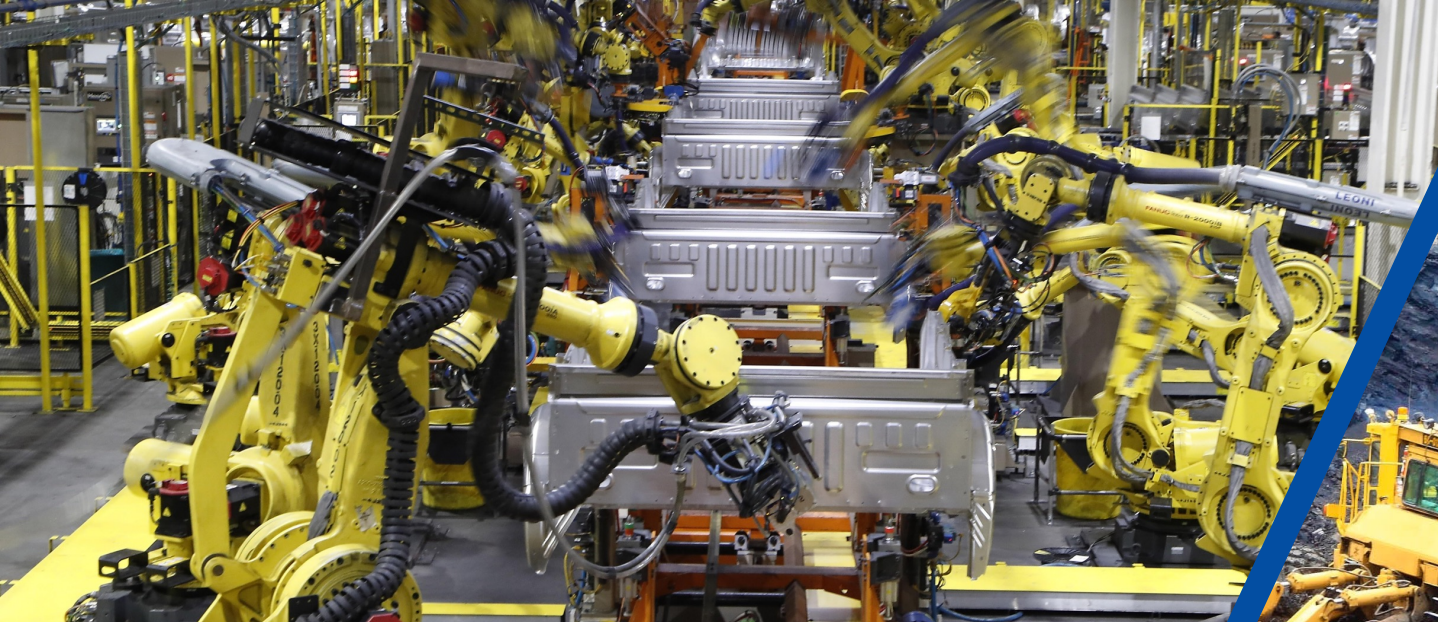
Federal

Mission Co-pilot

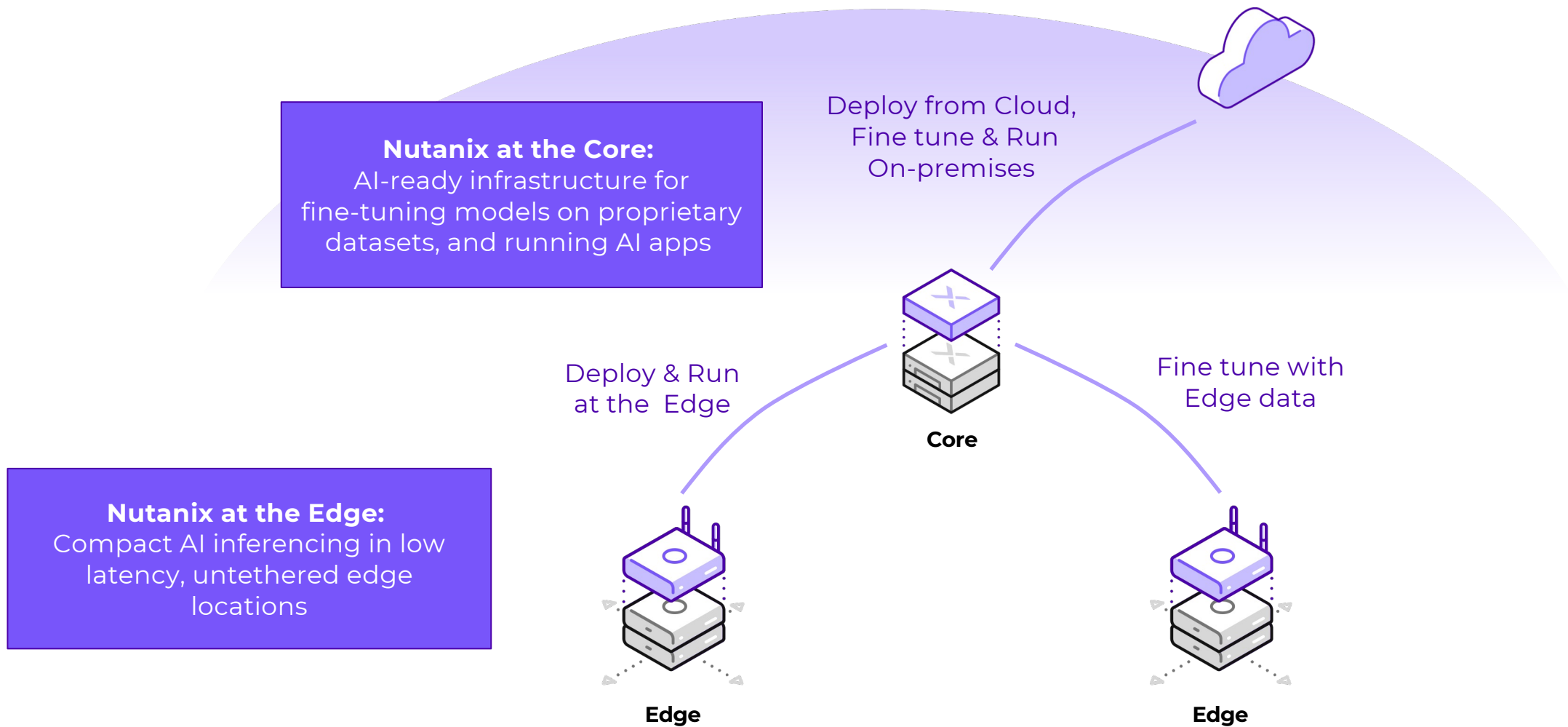
Simulaciones – digital twins, multiagent systems

Inteligencia Artificial en el Edge?

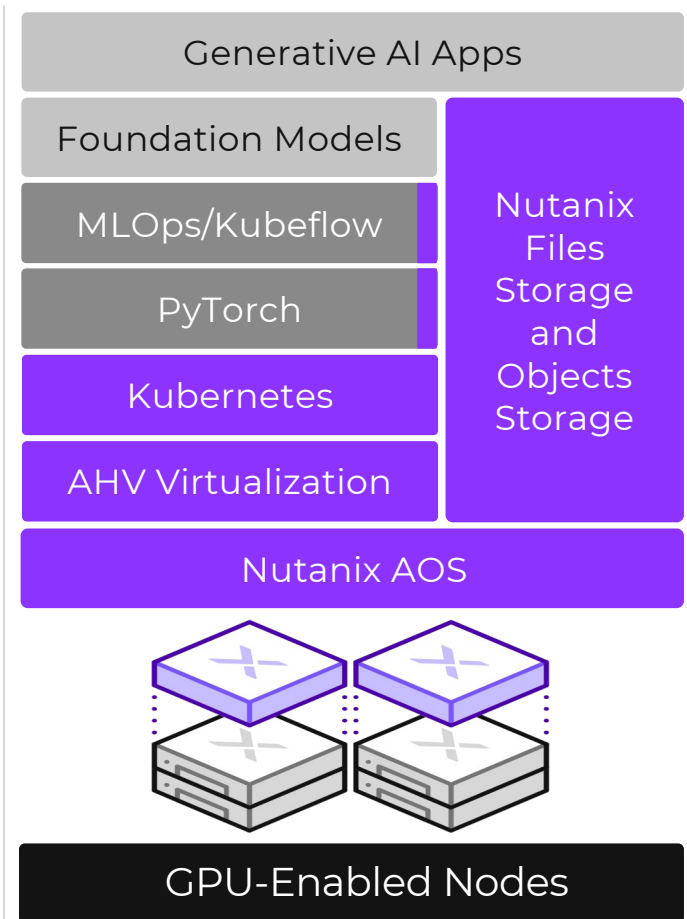
- Por qué?
 - Latencia (Algunas aplicaciones requieren real-time)
 - Ancho de Banda (Muchos datos que procesar)
 - Privacidad (Propiedad Intelectual y Privacidad de los Datos)
- Desafíos
 - Cambiar de sólo Inferencia a contínuo completo
 - Aplicaciones Edge:
 - Data Pipeline (ingest, infer, publish, store, visualize)
 - Lógica del Negocio (alertar, detener un proceso, ejecutar una acción)



Generative AI Cloud at Core y al Edge



Nutanix GTP-in-a-Box



Computer Systems

(webscale, ease of use, centralized management)



Robust Datasets

(secure, scalable, multimodal/protocol, resiliency)



Machine/Deep learning

(experimented in house, up and running in an automated fashion)



Foundation Models/Generative AI Apps

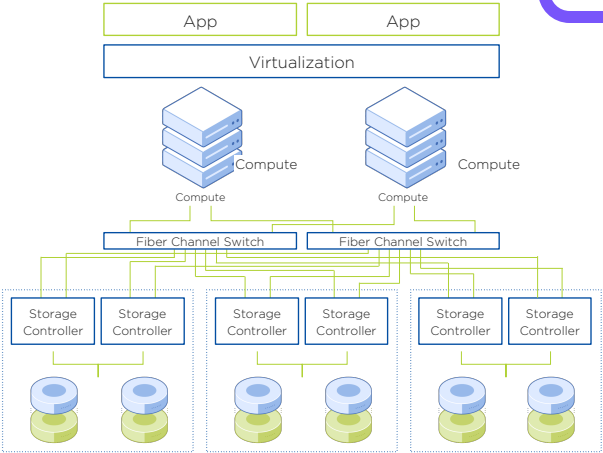
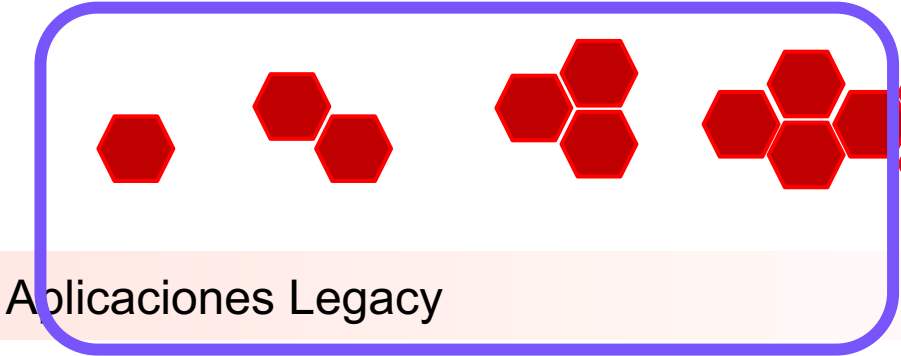
(freedom: BYO GPT allow you to get going quickly)

Modelo Operativo Nutanix Cloud

Aplicaciones
Cloud Native



 **Red Hat**
OpenShift



NUTANIX

Cloud on Your Terms

Su paz mental es
nuestra obsesión.

nutanix.com/yourcloud



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Muchas Gracias