



Hewlett Packard
Enterprise

La innovación en el almacenamiento Intelligent Storage

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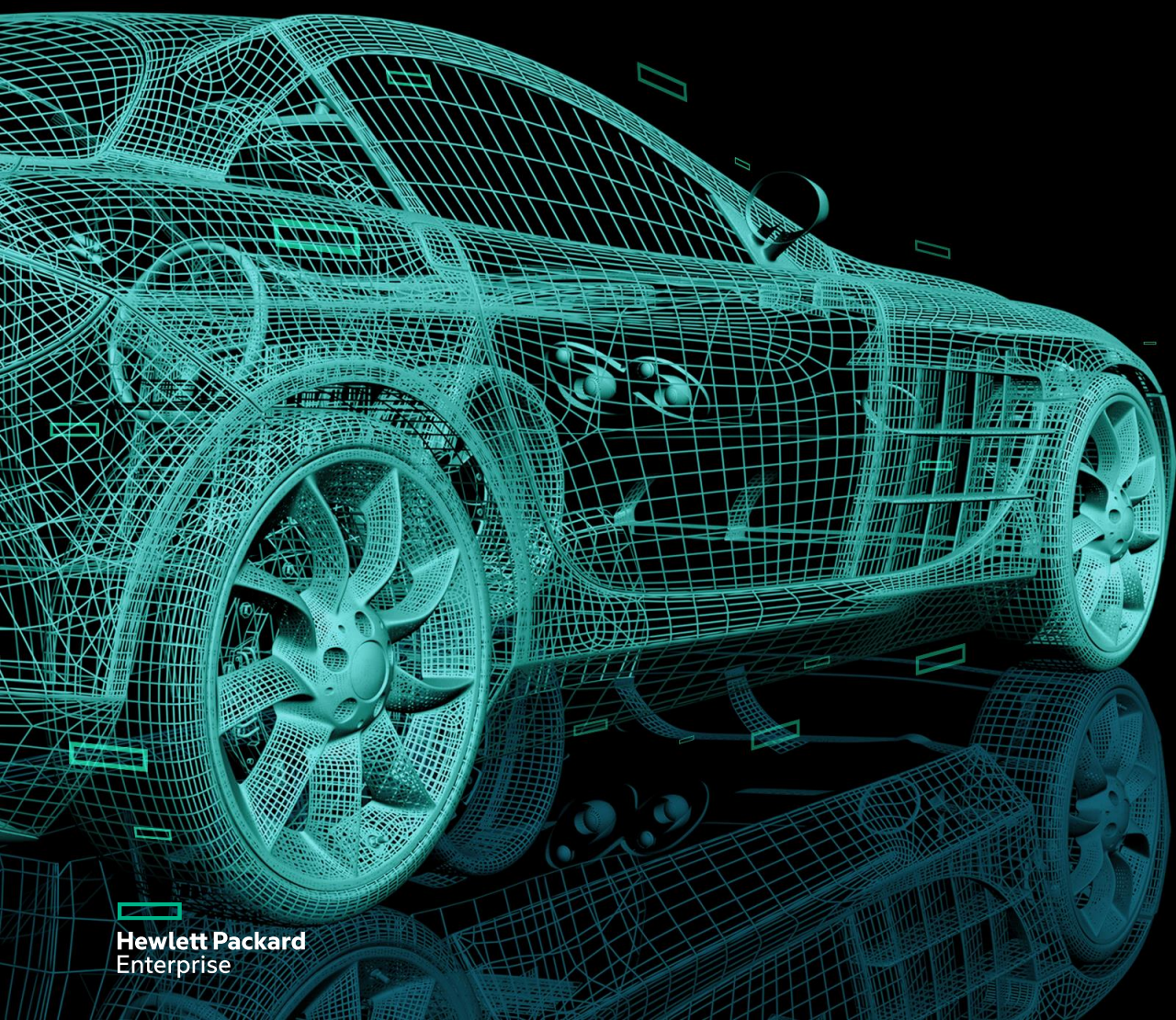
Consultor Preventa de HPE





LA INTELIGENCIA LO CAMBIA TODO

Imaginad un almacenamiento que pueda



**ENTENDER LAS
NECESIDADES DE LAS
CARGAS DE TRABAJO**



**AUTOADAPTARSE EN
TIEMPO REAL**



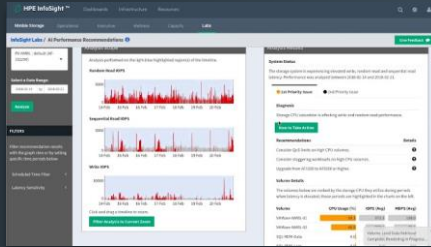
**MOVER LOS DATOS
SEGUN SE NECESITE**



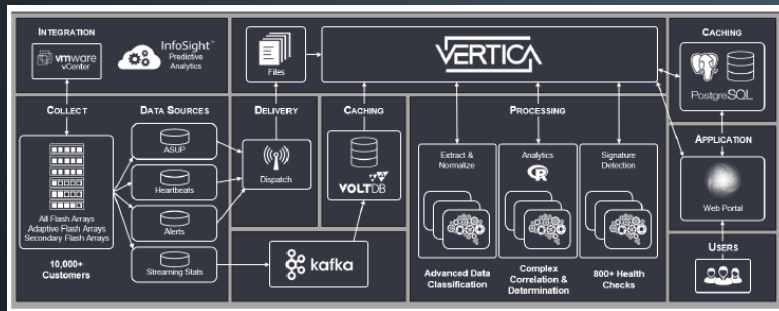
**OPTIMIZAR LOS DATOS
PARA MEJORAR LOS
COSTES**

HPE Infosight to hace posible

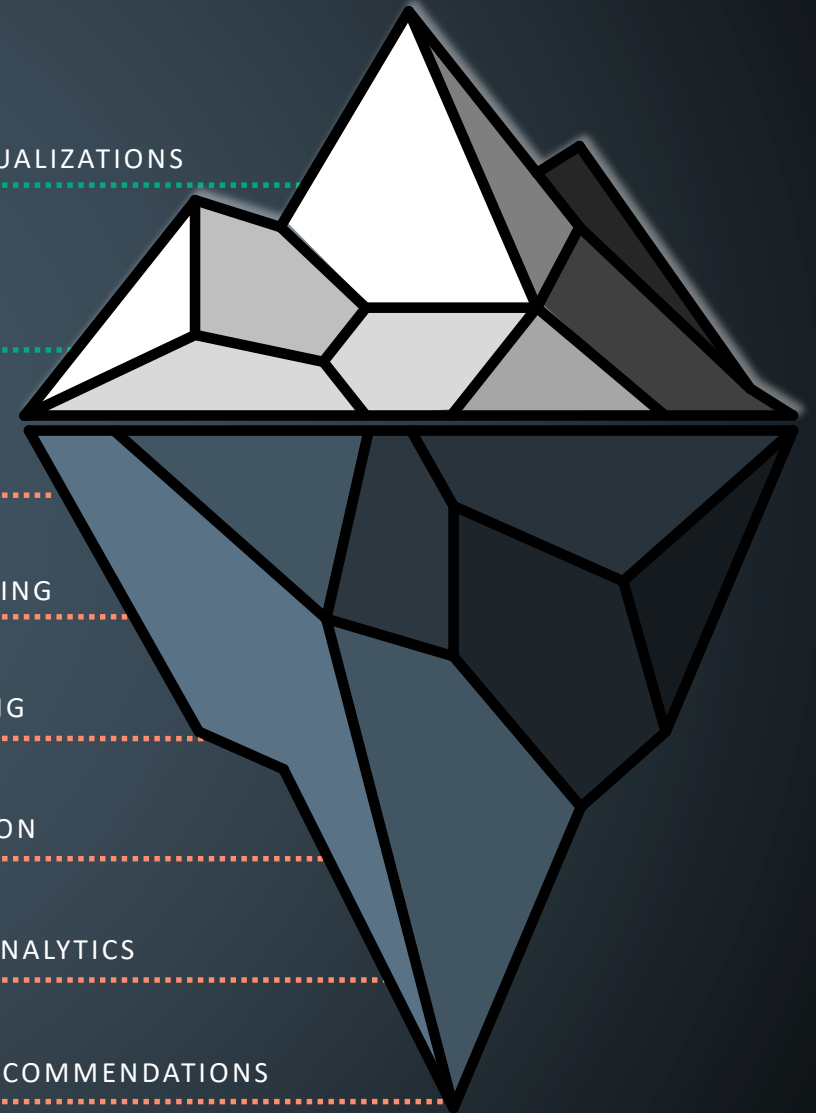
Customer Portal



Red neuronal



- ADVANCED VIRTUALIZATIONS
- DASHBOARDS
- BLACKLISTING
- MACHINE LEARNING
- GLOBAL LEARNING
- CASE AUTOMATION
- CLOUD-BASED ANALYTICS
- PRE-EMPTIVE RECOMMENDATIONS



Cambiando el modelo tradicional de soporte

Ya lo hemos conseguido

- 1** Sin escalaciones
Automated Level 1 and 2 issues
- 2** Rapid Root Cause
Analytics with full stack expertise
- 3** Nosotros te llamamos
Never worry about who to call



HPE Cloud Volumes

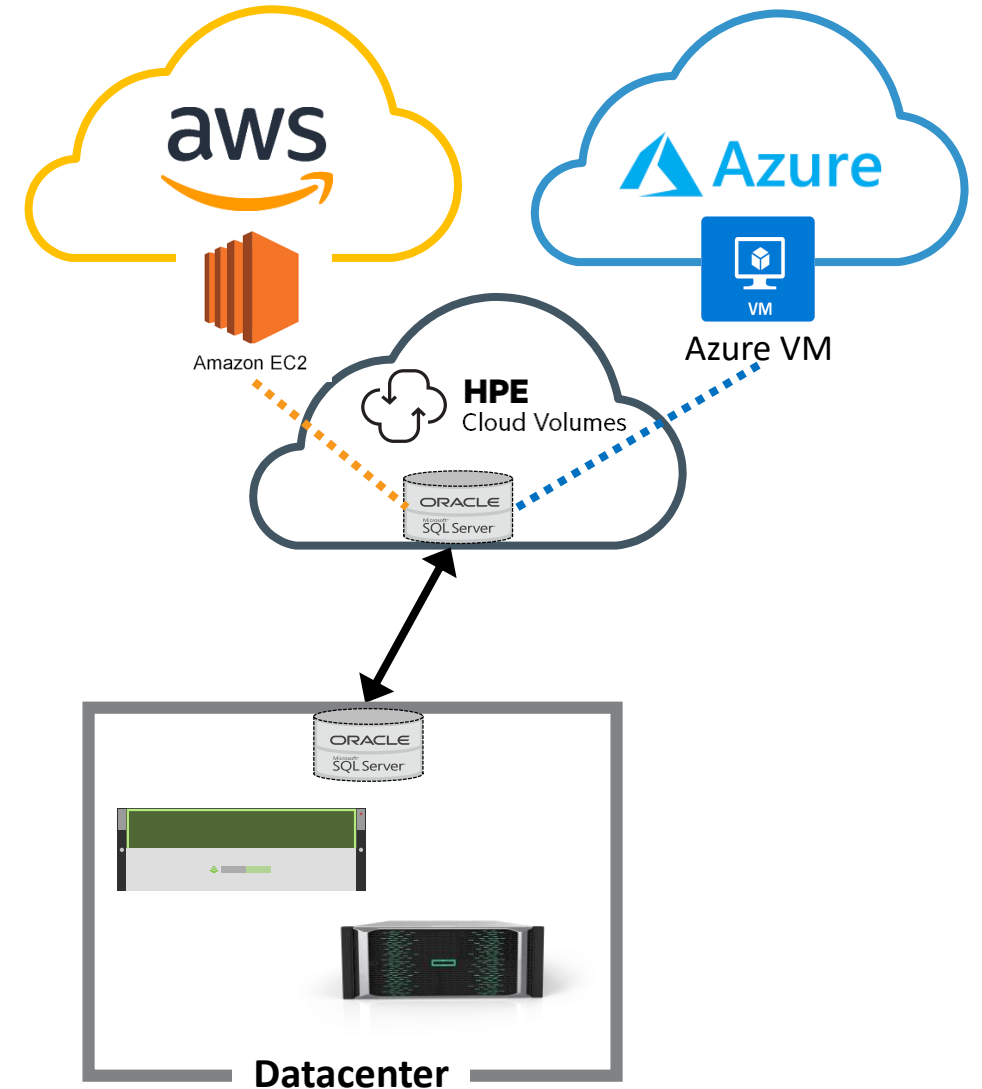
- Solución Multi-Cloud
- Casos de uso:
 - Levantar volúmenes en la nube y añadirlos a servicios (VMs) ya desplegados en AWS o Azure
 - Replicación a la nube desde on-premise for DR/test/backup...

BENEFICIO

- Disponibilidad (6-9s), snaps, encriptación, rendimiento y evitar Lock-in permitiendo mover datos entre SPs
- Visión global de todo e integración con Infosight

Demo replication volumes:

<https://www.youtube.com/watch?v=hlpM3MoEokM>



NVMe Casos de Usos

Back-end (NVMe)

NVMe protocols within the storage system/media (SSD)

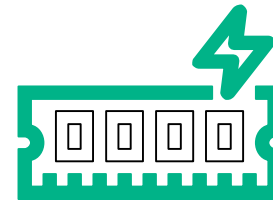


NVMe and SCM in the storage system as an extended cache

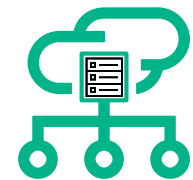


Fabric (NVMe-oF)

NVMe interconnect from controller shelf to expansion drive

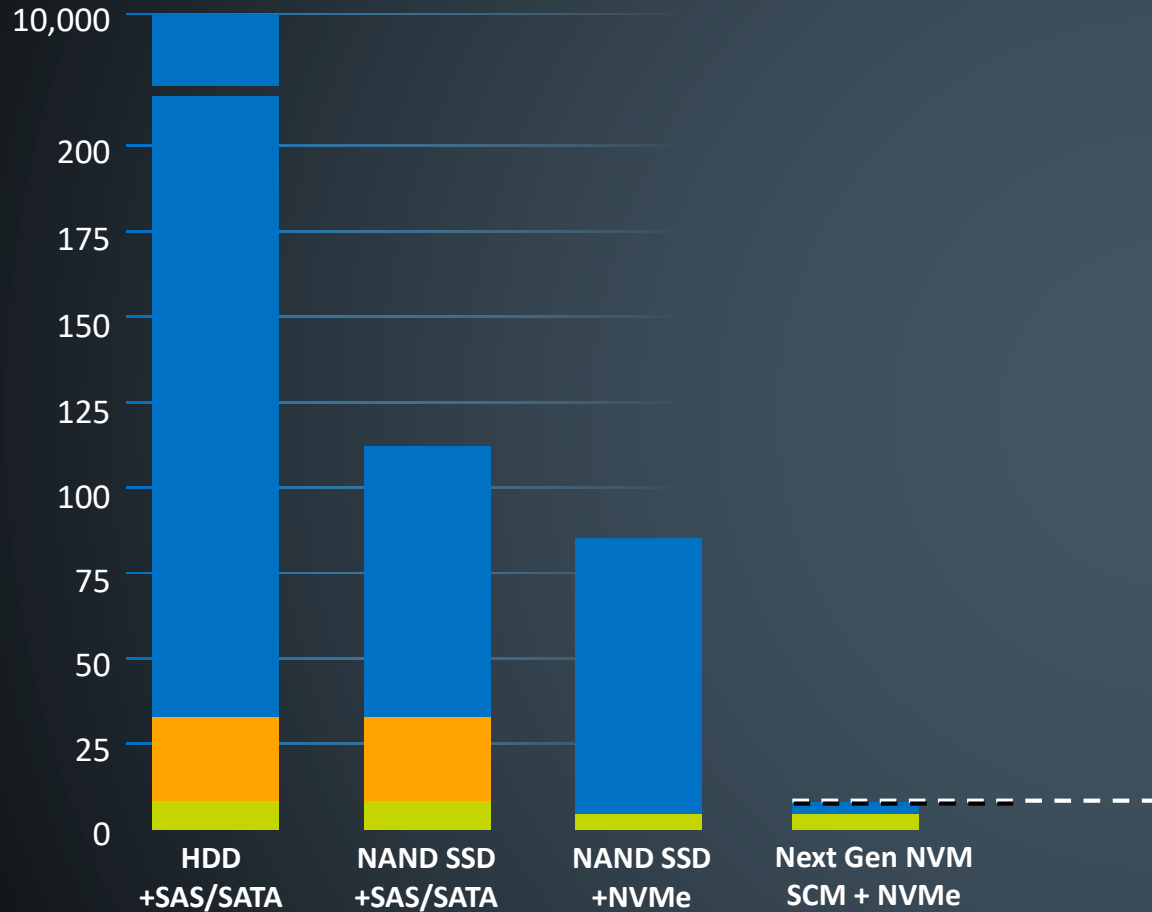


NVMe as an Interconnect to fabric (hosts)



NVM Express Addresses sources of latency

Latency (uS)



- Legacy HDD/SSD device latency was much greater than the software and controller latency
- NAND latency is dramatically lower than HDD latency and contribution of storage stack became significant
 - ~0.3% of the total latency for HDD*
 - ~23% of the total latency for NAND SSD*
 - ~300% of the total latency for next gen storage *
- Removing SAS/SATA controller removes ~25uS* latency
- Optimized driver stack removes ~5uS*

Sistemas Multi-Convergentes

Soluciones Software-Defined Storage. Elige tu caso de uso



HPE Proliant Gen10 Apollo server

Apollo 2000
(2U / 4 nodes x 24 disks)



Performance nodes

Apollo 4200
(2U / 1 node x 28 disks)



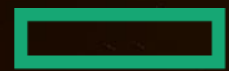
Storage & performance

Apollo 4500
(4U / 1 node x 60 disks)



Massive storage





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Gracias