nHCI
Open and flexible SDDC platform

Hyper-Converged & Virtualization Platform for modern data centers

nHCI is a Software-Defined Data Center (SDDC) platform that integrates compute, network, storage, and security control into a single stack, with an entirely software- and hardware-independent architecture. It allows you to reuse existing or new infrastructure, avoiding lock-in and adopting an open and automatable operating model (API).

Open and Interoperable

Hardware independence; comprehensive REST APIs and SDKs (Java/Python) for integration with DevOps and IaC tools.

Operational Simplicity

Single web console for the entire data center, with monitoring, alerts, RBAC, and SSO.

Automation and IaC

Everything is programmable via API; IaC workflows (e.g., Terraform) can orchestrate provisioning and configurations through it.

Reliability and Resilience

Multi-level HA for VMs, cluster DRS, snapshots, and granular restore backups.

nHCI combines an optimized hypervisor with advanced orchestration, monitoring, and data protection capabilities, ensuring linear scalability and simplified management of complex environments.
With integrated tools for automation, security, and governance, it helps companies reduce provisioning times, increase operational efficiency, and accelerate the adoption of digital and cloud-native services.

Architecture & Openness

- Microservices stack, simplified updates

- Rapid deployment

- Single console with auditing, tagging, and notifications (email, Teams, SMS, webhooks)

- Pubblic RESTful API.

- Terraform integration for IaC

Compute Virtualization

- Optimized KVM hypervisor

- HA and DRS multi-cluster

- Hot/cold migration of VMs and disks

- Snapshots and quick clones

- CPU pinning, hot-plugging of vCPUs and RAM

- GPU passthrough and vGPU

Network Virtualization

- Distributed Switch and Port Group

- VLAN 802.1Q, DHCP/DNS

- Security Group with distributed firewall and anti-spoofing

- OVS-DPDK e SR-IOV low latency and high throughput; IPv6, PVLAN and NIC QoS.
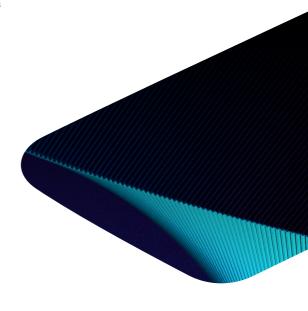
NEXAVM

Virtualizzazione Storage

- Local, NFS, SAN (iSCSI/FC/NVMe)

- Distributed block storage with replication or erasure coding

- Advanced snapshots and capacity management

- Distributed and synchronized image storage

- Transparent migration between different datastores

Data Protection & Recovery

- Local/remote backups with retention policy

- Granular restore on existing or new VMs

- Recycle Bin and deletion protection

Security & Compliance

- RBAC e personalized roles

- SSO with OIDC, AD and LDAP

- Secure access with 2FA, policy and certificates
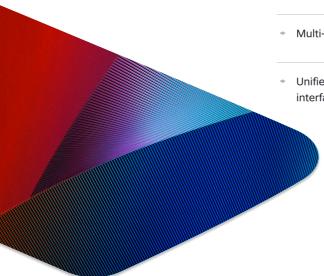
- Centralized auditing and detailed logs

NEXAVM

Operazioni & Observability

- Single console for VMs, clusters, hosts, and storage

- Custom tags and attributes

- Reporting with CSV exports

- Integrated alarms and notifications

Compatibilità & Scalability

- x86/ARM host support

- Scale-out elastico for compute and storage

- Multi-cluster and multi-datacenter with a single console

- Unified management of VMs and bare metal with customizable interfaces and bulk operations

With nHCI, you can consolidate data centers, ensure service continuity, and centrally manage heterogeneous resources. High availability, data protection, and advanced observability features reduce operational risks and improve day-to-day efficiency, paving the way for a more resilient infrastructure that is ready for future developments.

True Openness

API/SDK, enterprise SSO, alarm integrations, SNMP, AccessKey, no hardware lock-in.

IaC-Ready

Provisioning and management processes exposed via API/SDK, integrable into CI/CD pipelines and tools such as Terraform.

Reliability

HA/DRS, snapshot/backup, and restoration. Single console, tagging/attributes, exports, and audits.

Flexible Storage

Local, NFS, SAN (iSCSI/ FC/NVMe), and distributed block storage with high availability.

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