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Ihr Weg zur Enterprise Cloud

Die Cloud für Ihre VMs, Daten & virtuelle Desktops



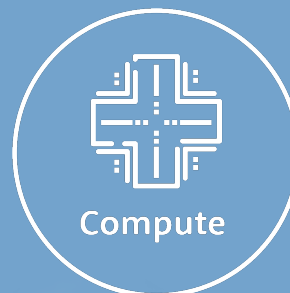
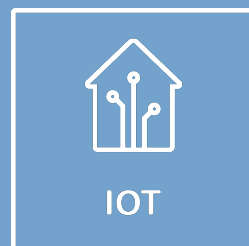
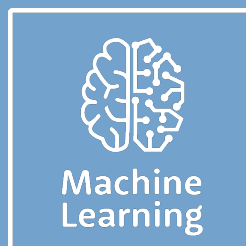
Samuel Rothenbühler
CTO Enterprise Cloud

Nino Hafen
Cloud Engineer

Dienstag, 15. November 2022



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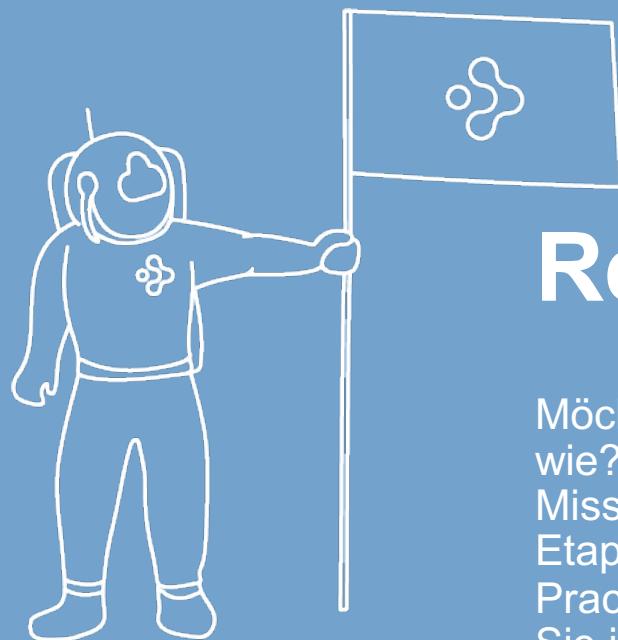
Private Cloud

Public Cloud

Enterprise Cloud



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Reise in die Cloud

Möchten Sie die Cloud einführen, wissen aber nicht genau, wie? Wir sind Ihr vertrauenswürdiger Partner auf Ihrer Mission in die Cloud. Wir kennen den Weg und haben ihn in Etappen eingeteilt. Mit unserer Erfahrung, bewährten Best Practices, viel Know How und bewährten Frameworks sind Sie jederzeit auf dem richtigen Weg.



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5. Optimierung

- Continuous Improvement
- Health Check



5



4. Betrieb

- Managed by Amanox
- Supported by Amanox

4



3. Projektumsetzung

- Conceptual Design
- Project Delivery
- Workload Migration

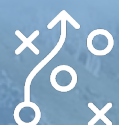
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2. Enablement

- Training & Workshop
- Blueprints
- Proof of Concept

2



1. Strategie & Vision

- Analysis
- Costs & Business Case
- Planning & Assessment

1

Pädagogische Hochschule Bern

Zentrale Virtualisierungsplattform

- Nutanix AHV Virtualisierung für alle Workloads
- Einfache Migration mit Nutanix Move
- 90 Windows und 25 Linux VMs im Einsatz

<https://www.amanox.ch/de/case-study-ph-bern/>



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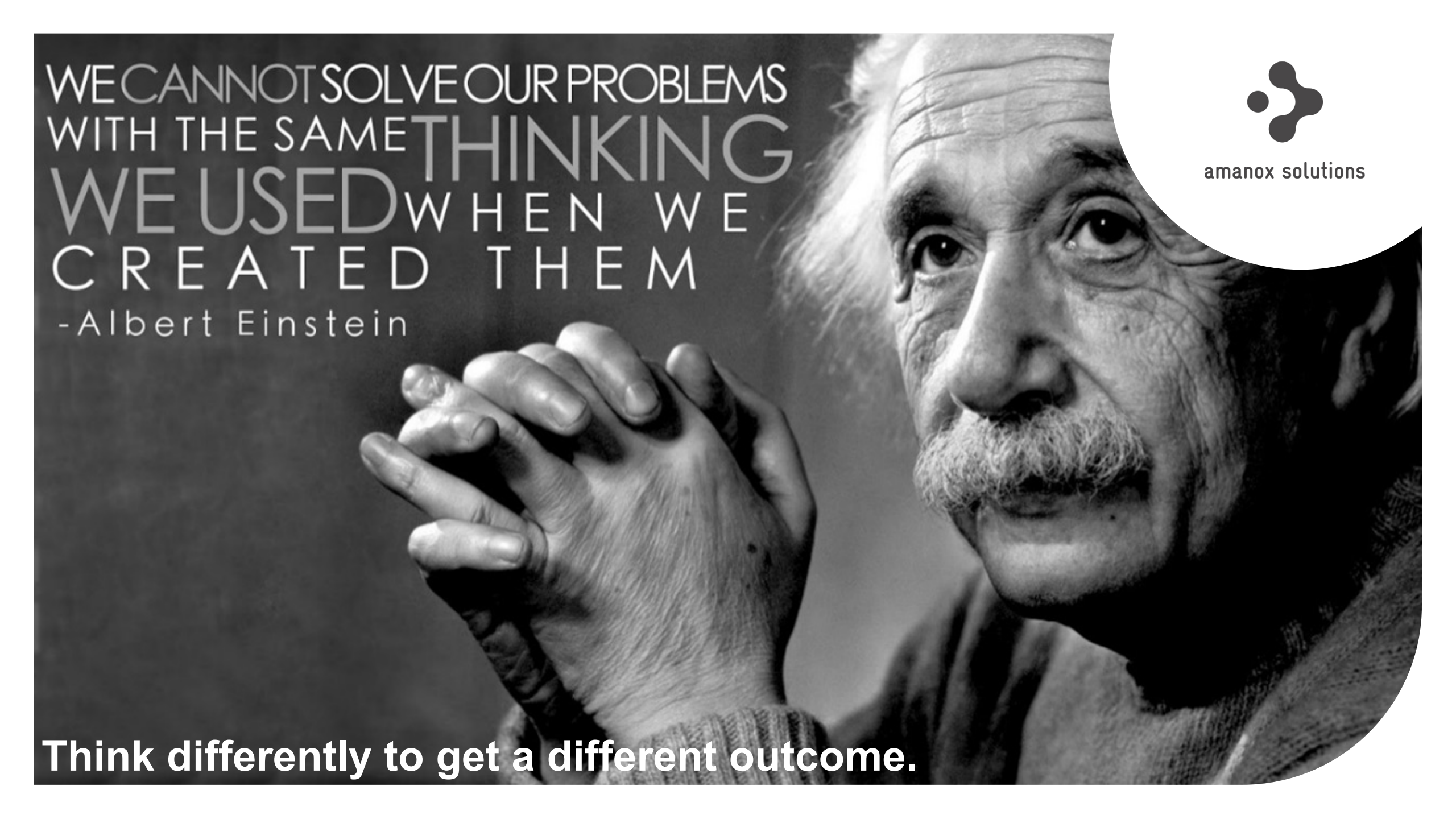


Galliker Transporte AG

Galliker – mehr als Logistik

- Enterprise Cloud für die digitalen Kernprozesse im Bereich Cargo, Food, Fridge, Healthcare, Car und Flower Logistics.
- Nutanix Enterprise Cloud mit Rubrik Backup.
- Acropolis Virtualisierung für business-kritische Anwendungen
- Cloudian Objektspeicher und Nutanix Files Scale Out Datenservice
- <https://www.amanox.ch/de/case-study-galliker-transporte/>





WE CANNOT SOLVE OUR PROBLEMS
WITH THE SAME THINKING
WE USED WHEN WE
CREATED THEM

-Albert Einstein



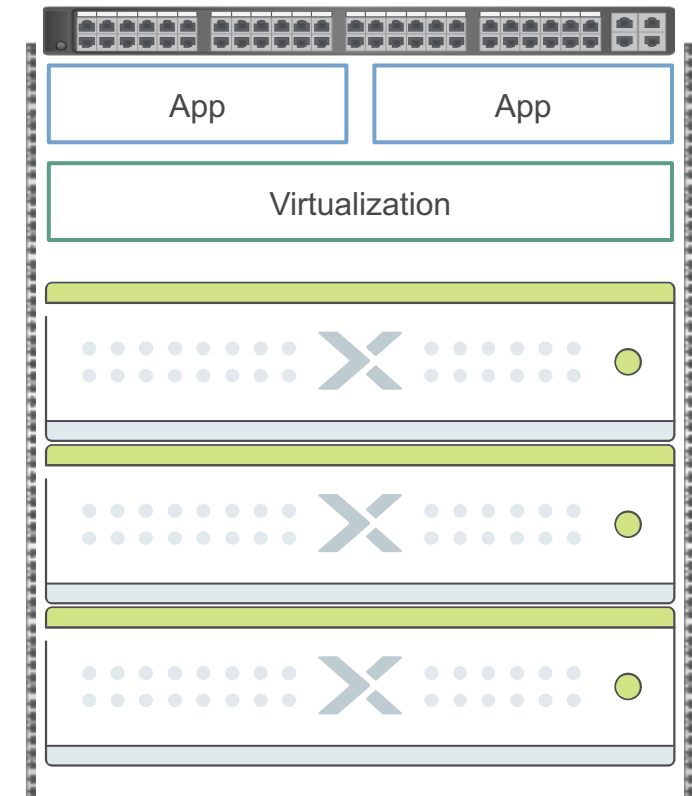
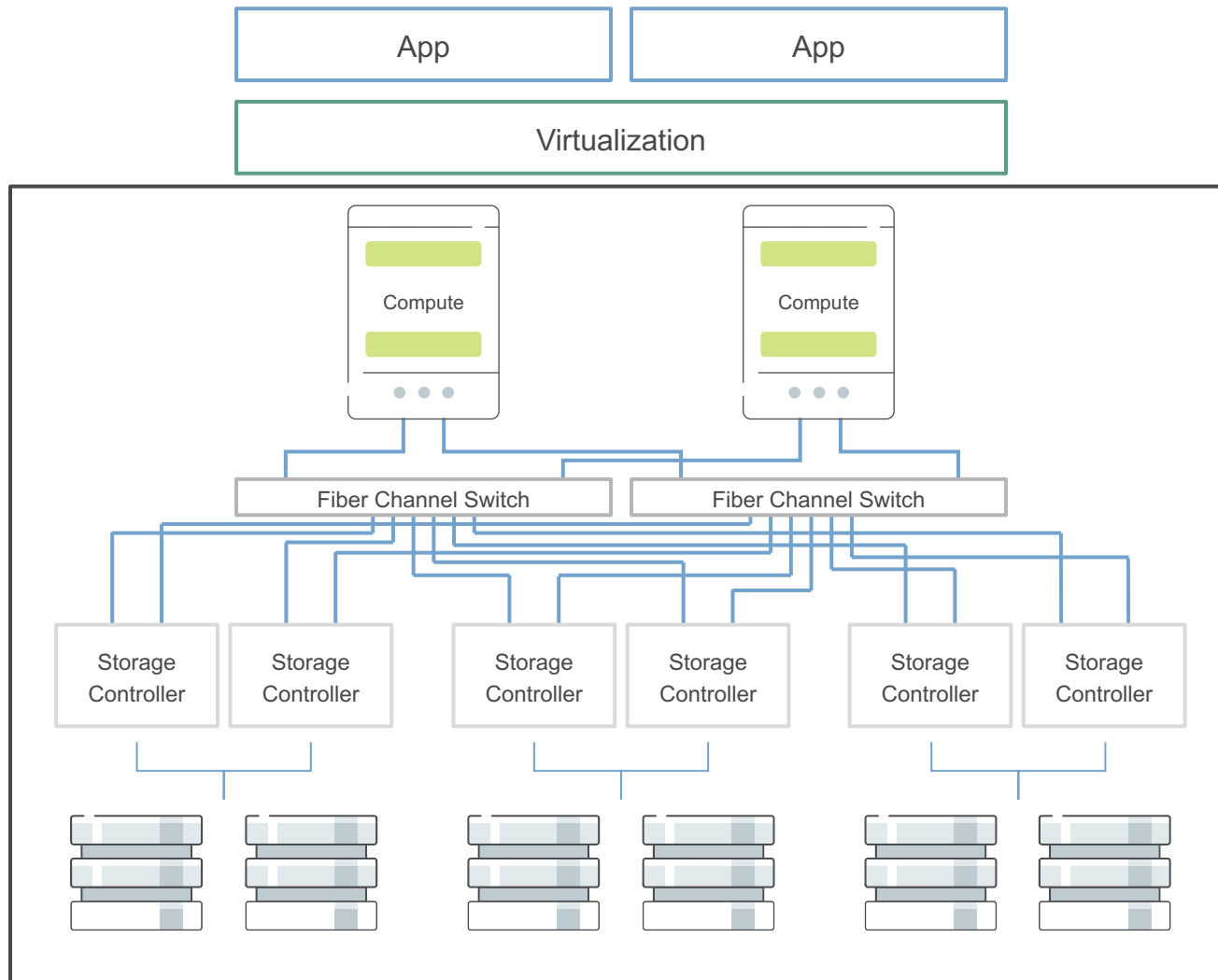
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Think differently to get a different outcome.

Nutanix hyperkonvergente Infrastruktur – HCI



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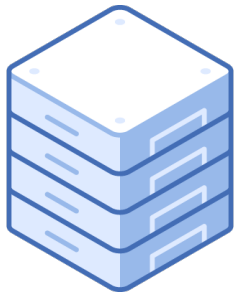


Integrated compute, storage, virtualization, network, and security

Nutanix Design Grundsätze

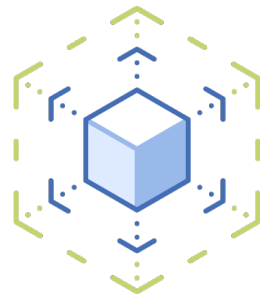


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Off-the-shelf hardware
(x86, power)

All intelligence in SW



Scale-out architecture,
no single point of failure,
no single bottleneck



Self-healing systems



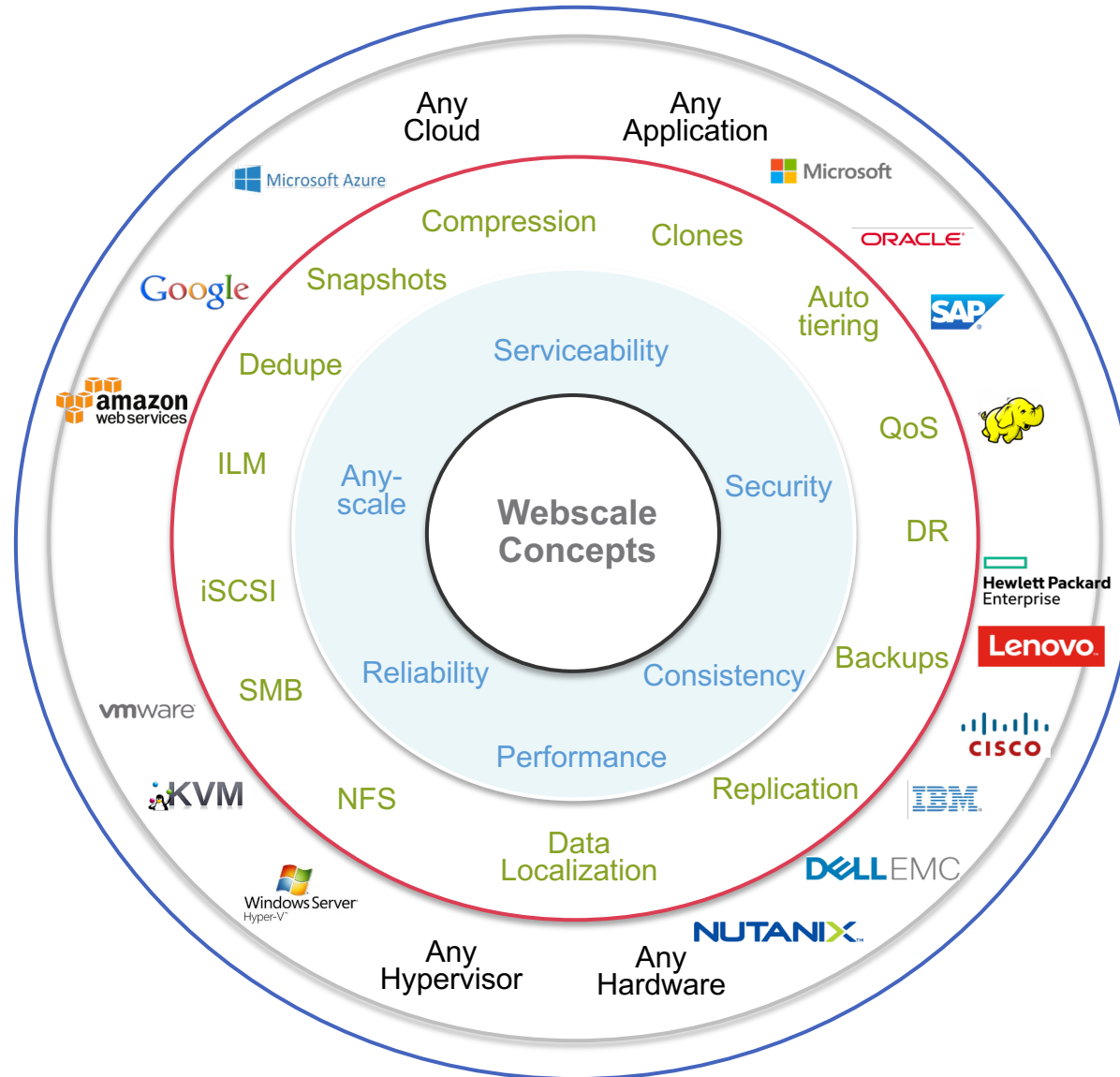
Rich automation and
analytics



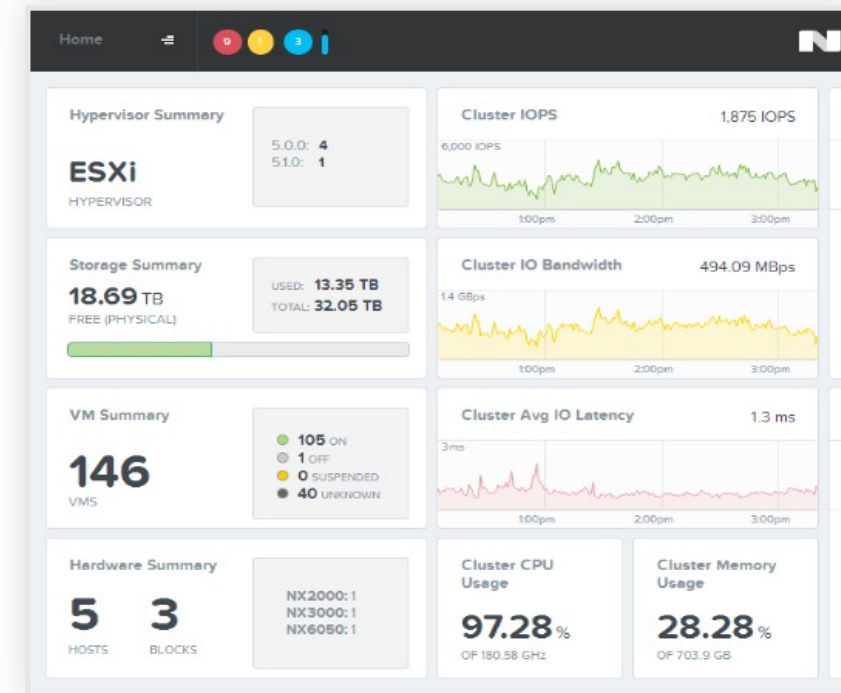
Web-Scale Architektur für alle Unternehmen



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NUTANIX



Gartner Magic Quadrant – HCI Software

Nutanix – Cloud Platform

- Gartner clients continually express **high satisfaction** with the **breadth and depth of Nutanix HCI software**, as well as with the consistency of support services, which results in customer loyalty and a **92 Net Promoter Score (NPS)**.
- Nutanix offers **hybrid cloud infrastructure** with unified management, consistent tooling, and application, data and **license portability between the edge, data center, as-a-service** (through partners) **and public cloud** (Nutanix Clusters) deployments.
- Nutanix provides a **unified platform for multiple workloads and data services**. Databases are deployed with Era, Kubernetes applications with Karbon and Red Hat OpenShift Integration, while unstructured and structured data services, disaster recovery (DR), and backup are delivered through Files, Objects, Volumes, Leap and Mine services.



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Source:

<https://www.nutanix.com/go/gartner-2021-magic-quadrant-for-hyperconverged-infrastructure-software> 12



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Nutanix HCI Appliance

Rechenzentrum Platz- und Strombedarf

Traditional Architecture

- 8 U blade chassis + 6 U storage = **14 U**
- Power Consumption = 2200W
compute + 1600W storage = **3'800 W**



Nutanix Converged Architecture

- 2 Nutanix Blocks = **4 U**
- Power Consumption = **2000 W**



Example: 8 blade servers, 40 TB system

Was ist ein Nutanix Block?



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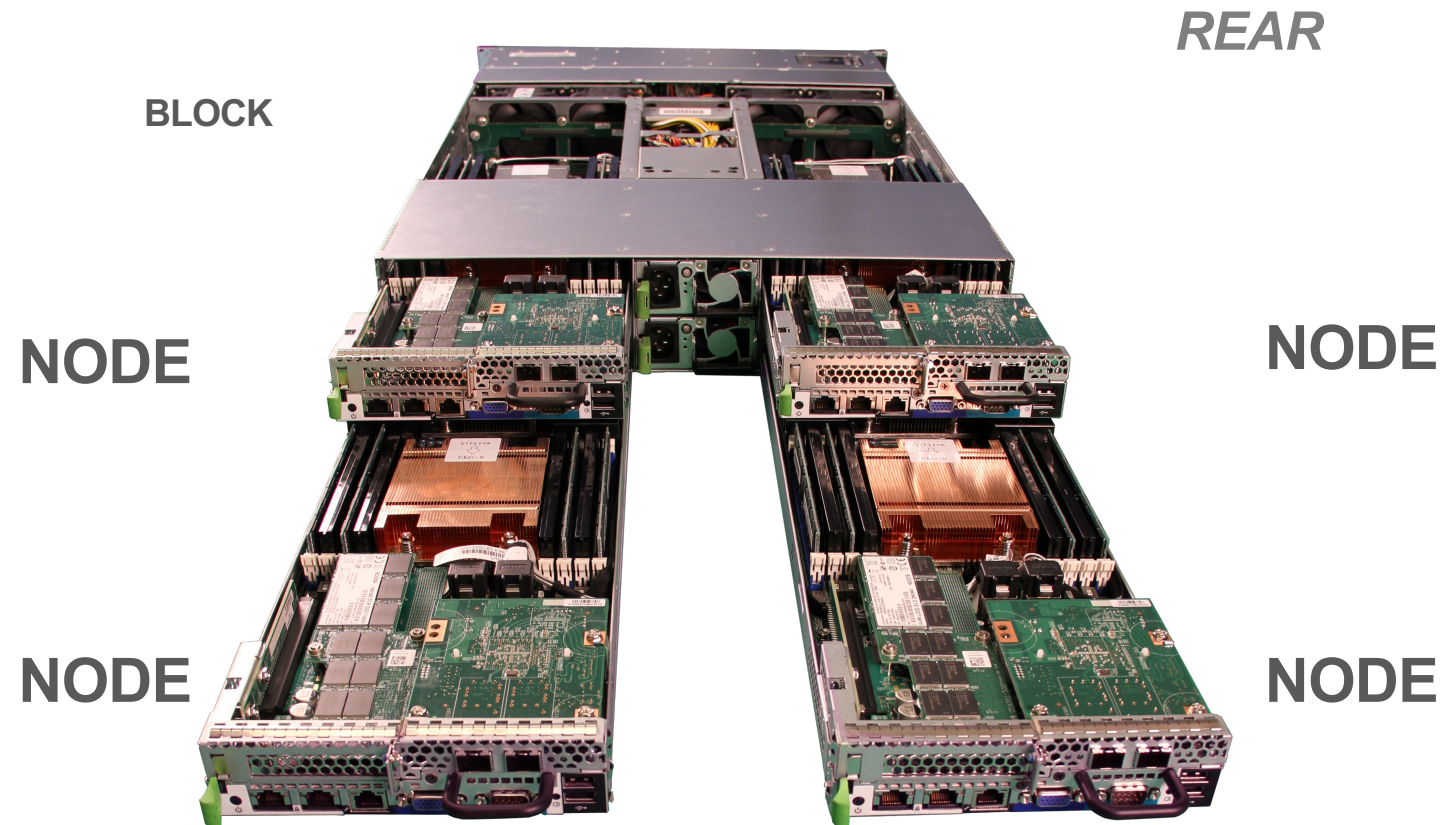
FRONT



Was ist ein Nutanix Block?



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Eine Plattform. Alle Apps. Alle Clouds.



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Enterprise Apps



Cloud Native Apps



Analytics/ML



Databases



Dev & Test



IoT Edge



ROBO



EUC

NUTANIX Cloud Platform

Data Center Services

Storage | Networking | BC/DR

DevOps Services

Cloud Native | Automation | DBaaS

Desktop Services

VDI | DaaS | Digital Workspaces

Digital Hyperconverged Infrastructure Services

Virtualization | Storage | Management & Operations | Security



PRIVATE CLOUD

1-Click Mobility
Seamless Operations



Nutanix Cloud



Telco/XSP



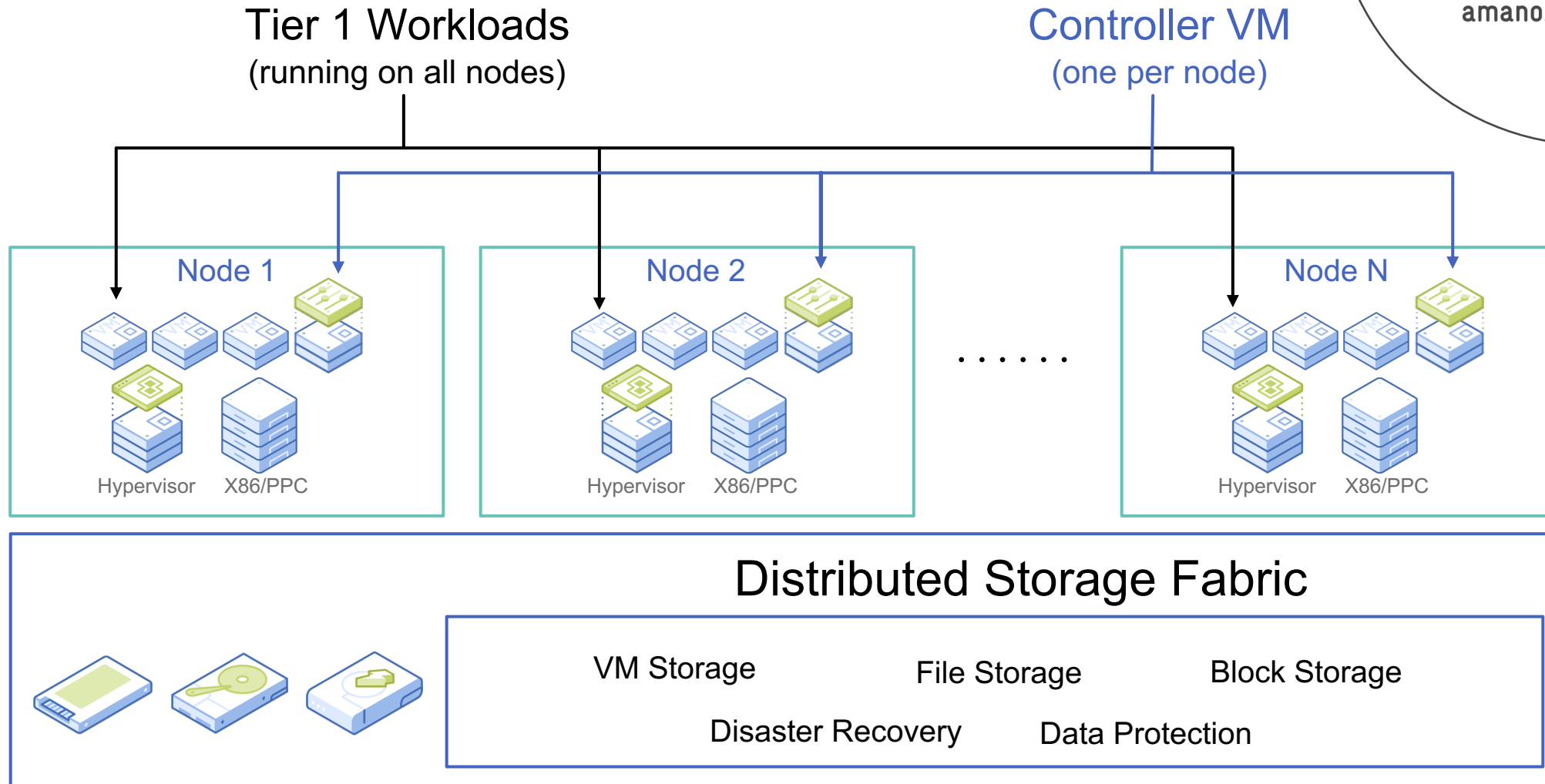
Hyperscalers

PUBLIC CLOUD

Skalierbares, verteiltes Systemdesign



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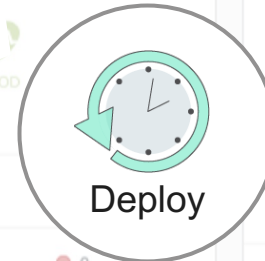
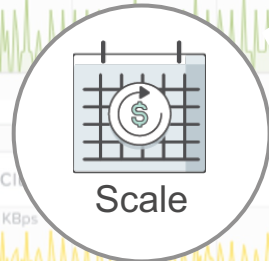
Nutanix Betrieb – Volles Lifecycle Management



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Skalierung ohne Limiten

- Add one node at a time
- Automatic redistribution
- 100% linear performance

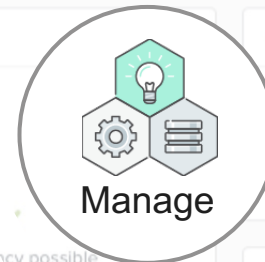
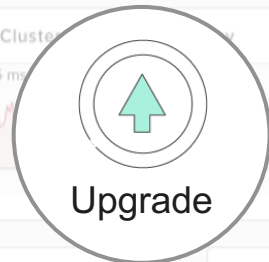


Einfache Implementation

- Quick cluster install
- Auto-discovered nodes
- Simple infra sizing

One-Click Upgrades

- Nutanix software
- Hypervisor
- Firmware and BIOS



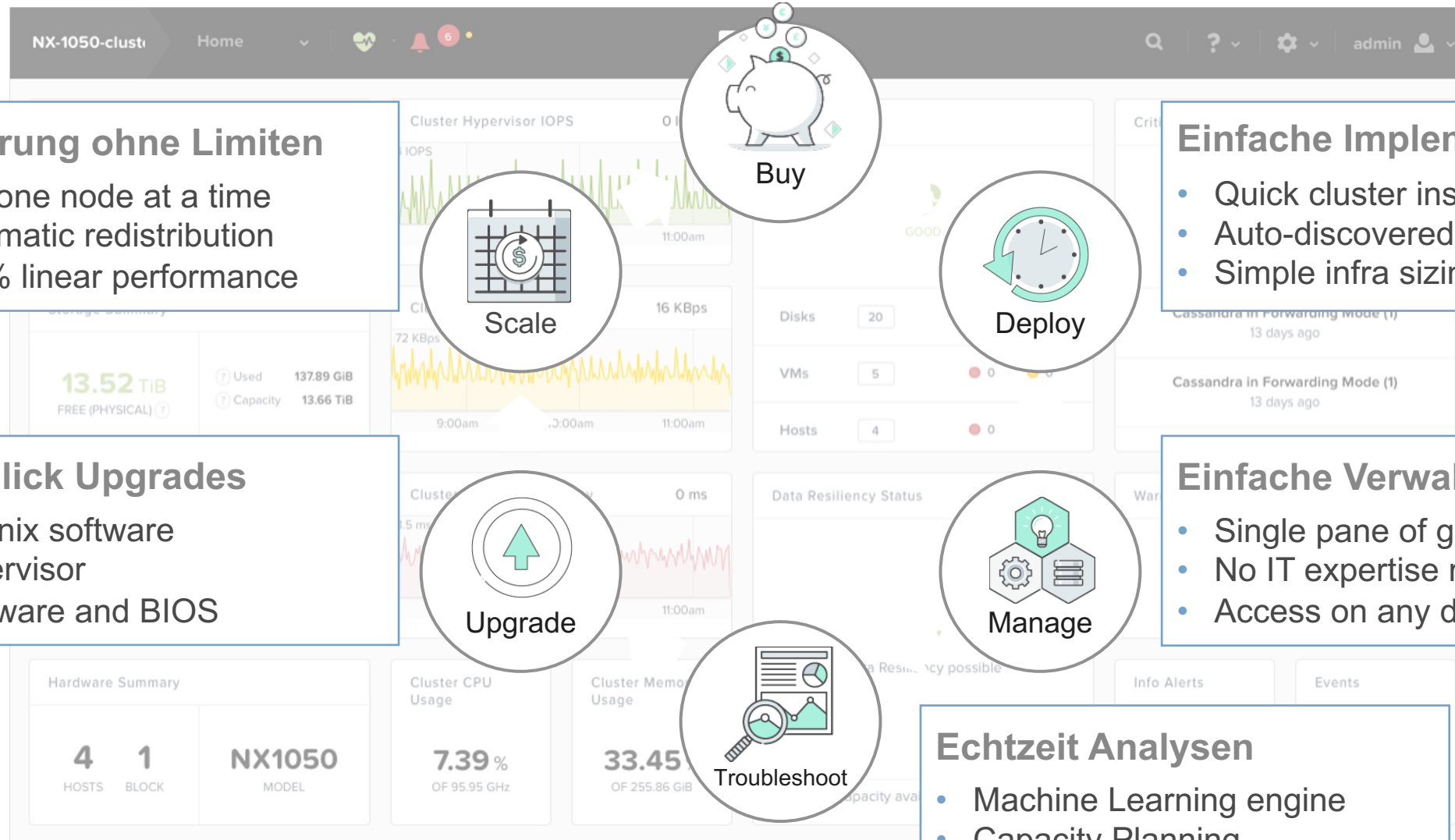
Einfache Verwaltung

- Single pane of glass
- No IT expertise required
- Access on any device



Echtzeit Analysen

- Machine Learning engine
- Capacity Planning
- Anomaly detection



Nutanix Acropolis Hypervisor

Unsichtbare Virtualisierung

- Performance (SAP HANA, EPIC)
- Virtual Networking
- Live Migration
- CPU Compatibility
- Host Configuration
- High Availability
- VM Placement / Affinity
- VM Scheduling
- VM Security (μ -seg, Secure Boot)
- Host Security (Secure Boot)
- UEFI Boot



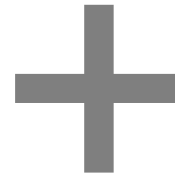
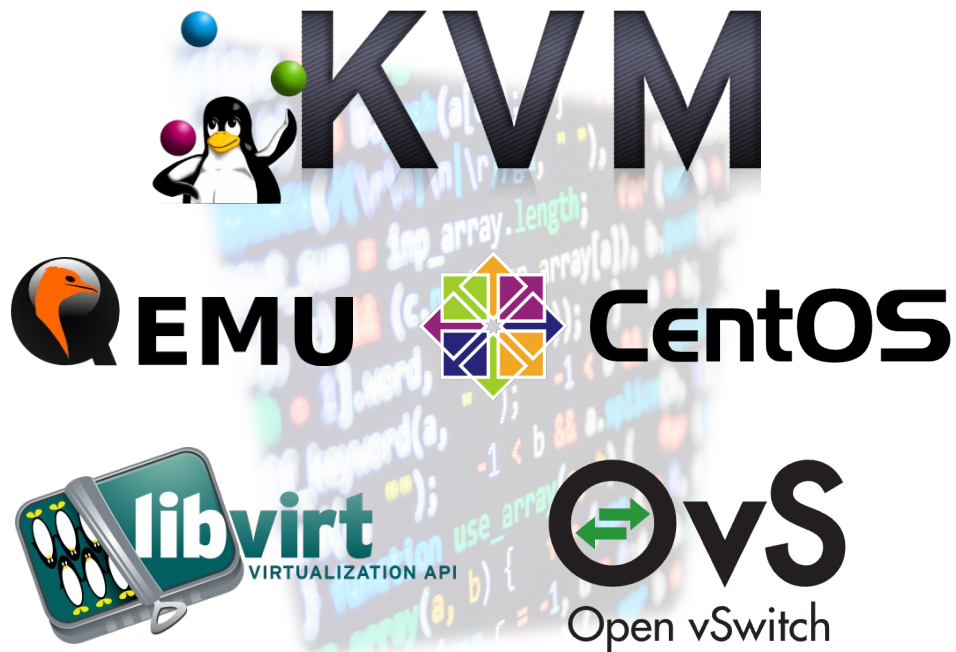
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Was steckt im Nutanix Acropolis Hypervisor – AHV?



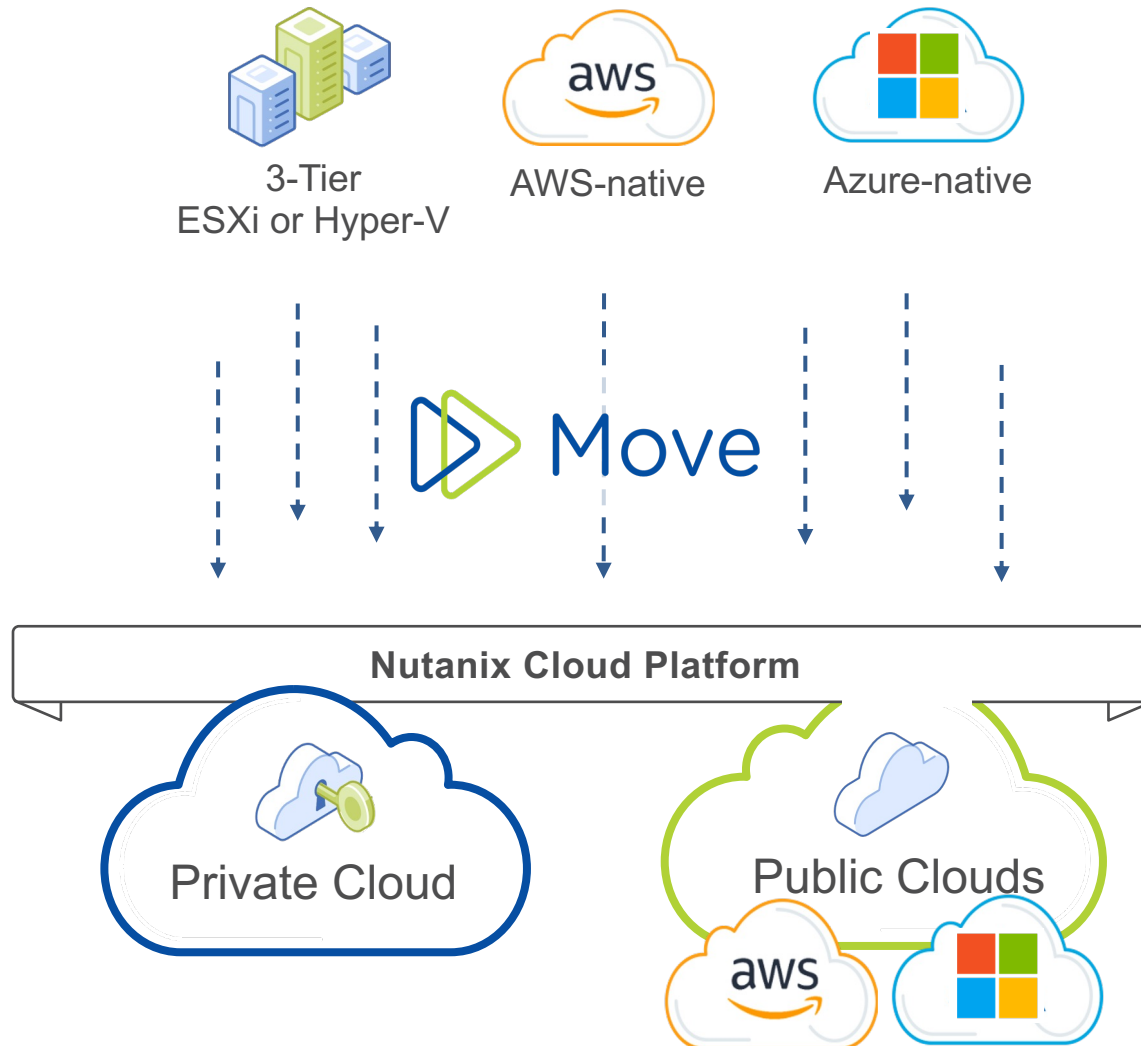
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Open Source Komponenten

Nutanix Erweiterungen

Migration auf Nutanix



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Einfache Bedienung

- Migrate one or multiple VMs per plan
- 1-click migration cut-over
- Flexible source infrastructure

One-Click Migration

- 1-click UI migrations or via APIs
- No application refactoring
- Easily map target to source networks

Minimale Downtime

- Seed VM data days or weeks ahead of cutover
- Easily test migration on isolated network
- Fast cutover as short as few minutes



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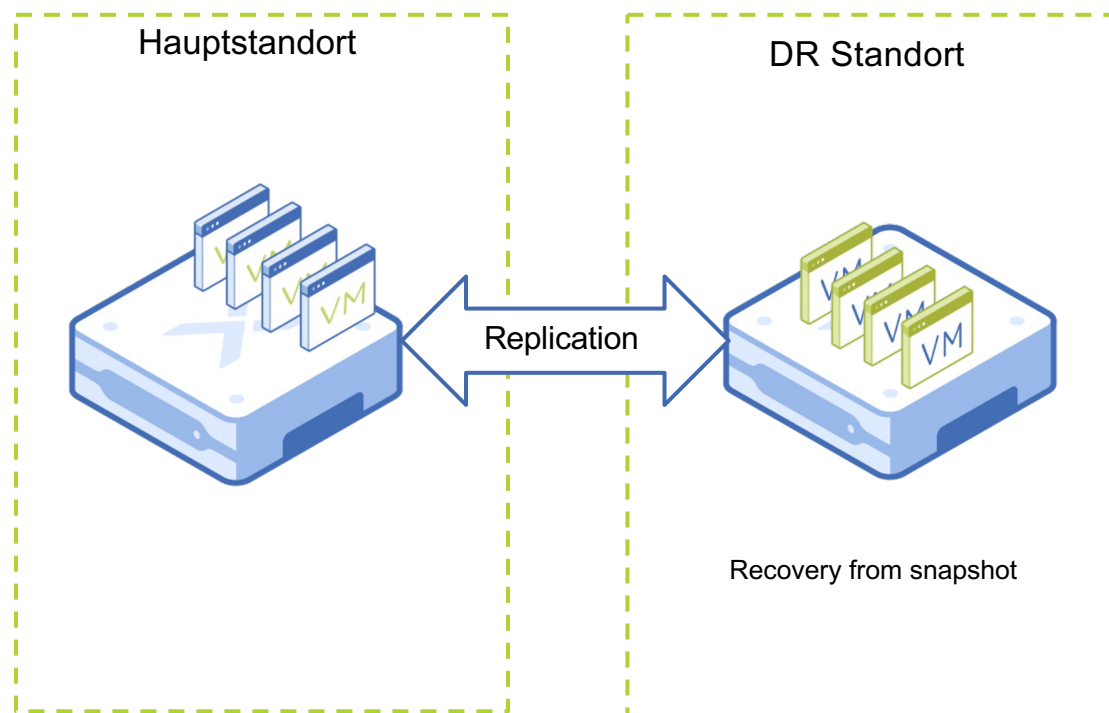
Nutanix für die Hybrid / Multi – Cloud





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Nutanix Disaster Recovery



Einfache DR-Tests

- 1-Click DR testing
- Fully automated process
 - Recover VM on DR cluster
 - Clean up after test
- Keep application protected
- Test in isolated network
- No address IP changes
- Runs next to the live application
- Reporting

Nutanix Flow: Mikrosegmentierung



Plan



Monitor



Audit

Flow Security Central: SaaS Based SecOps



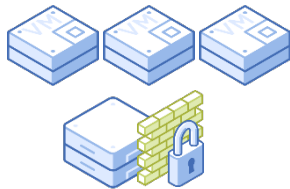
Discover



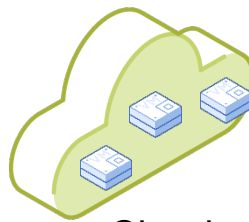
Secure



Automate



On-Prem



Cloud

Clusters | on aws



Flow Microsegmentation: Any Workload, Any Cloud



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Flow Security Central

- Traffic Visualization
- Security Planning
- Compliance

Flow Microsegmentation

- M-Seg for App, EUC and ROBO
- Policy Visualization
- Policy Logs (SIEM Integration)
- Identity Based Segmentation

Service Chain Integrations (L7/DPI)

- Palo Alto VM Series
- Fortinet Fortigate on AHV
- Juniper vSRX
- Gigamon GigaVUE

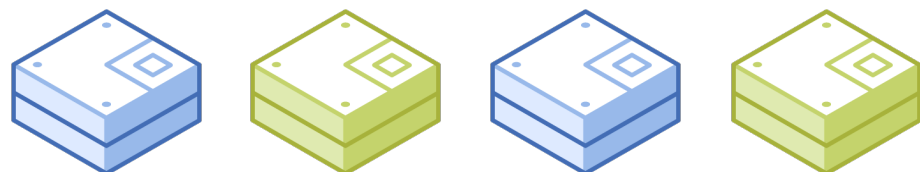
Nutanix Flow: Virtual Private Clouds



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Prism Central

Network Management
VPC and Subnet CRUD

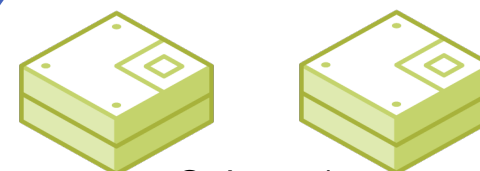


Virtual Private Cloud 1 - Workloads

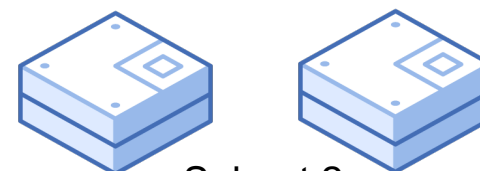


Infrastructure Network

Virtual Private Cloud 1



Subnet 1



Subnet 2

Distributed
Routing
and Edge



SNAT
Floating IP

Overlays using Geneve Tunneling



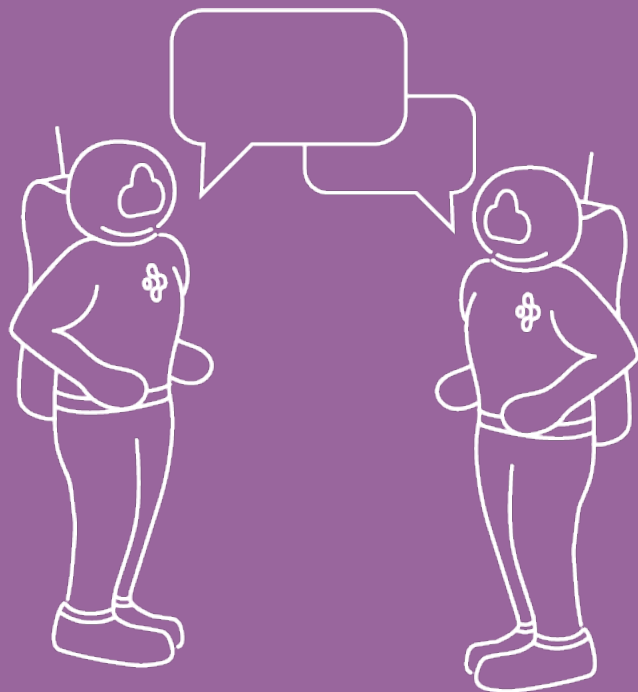
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Wrap Up

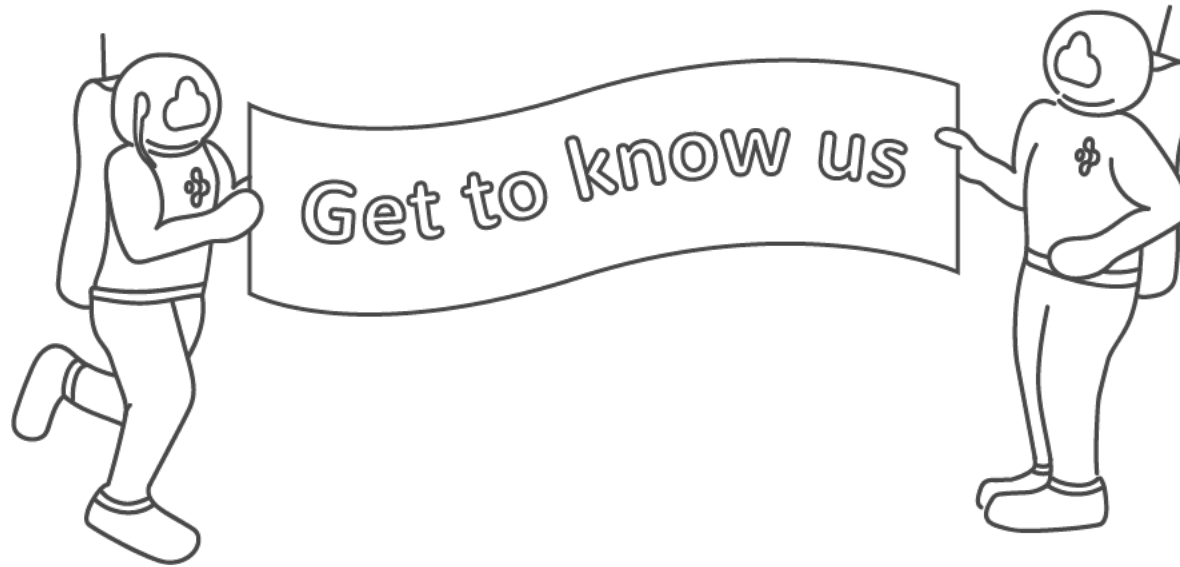
- Nutanix ist die moderne Datacenter-Plattform für kleine, mittlere und grosse Unternehmen. Jederzeit erweiterbar mit der aktuellen Generation.
- Eine Lösung für VMs, Container, Dateien, Objekte, VDI lokal und in der Cloud.
- Nutanix bietet eine erprobte Alternative zu VMware und Hyper-V.
- Der Platz- und Strombedarf aber auch der Betrieb wird stark reduziert bzw. vereinfacht.



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Fragen & Antworten



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Sind Sie ein Endkunde, System Integrator oder Service Provider?
Wir freuen uns auf Ihren Besuch an unserem Stand.



+41 31 320 10 80



info@amanox.ch



Dammweg 9, 3013 Bern



www.amanox.ch