QNAP

QuCPE-3032/3034

Network Virtualization Premise Equipment to deploy virtual network in edge offices

intel. ATOM

Refresh 4/8-core

DPDK

QAT

SRIOV

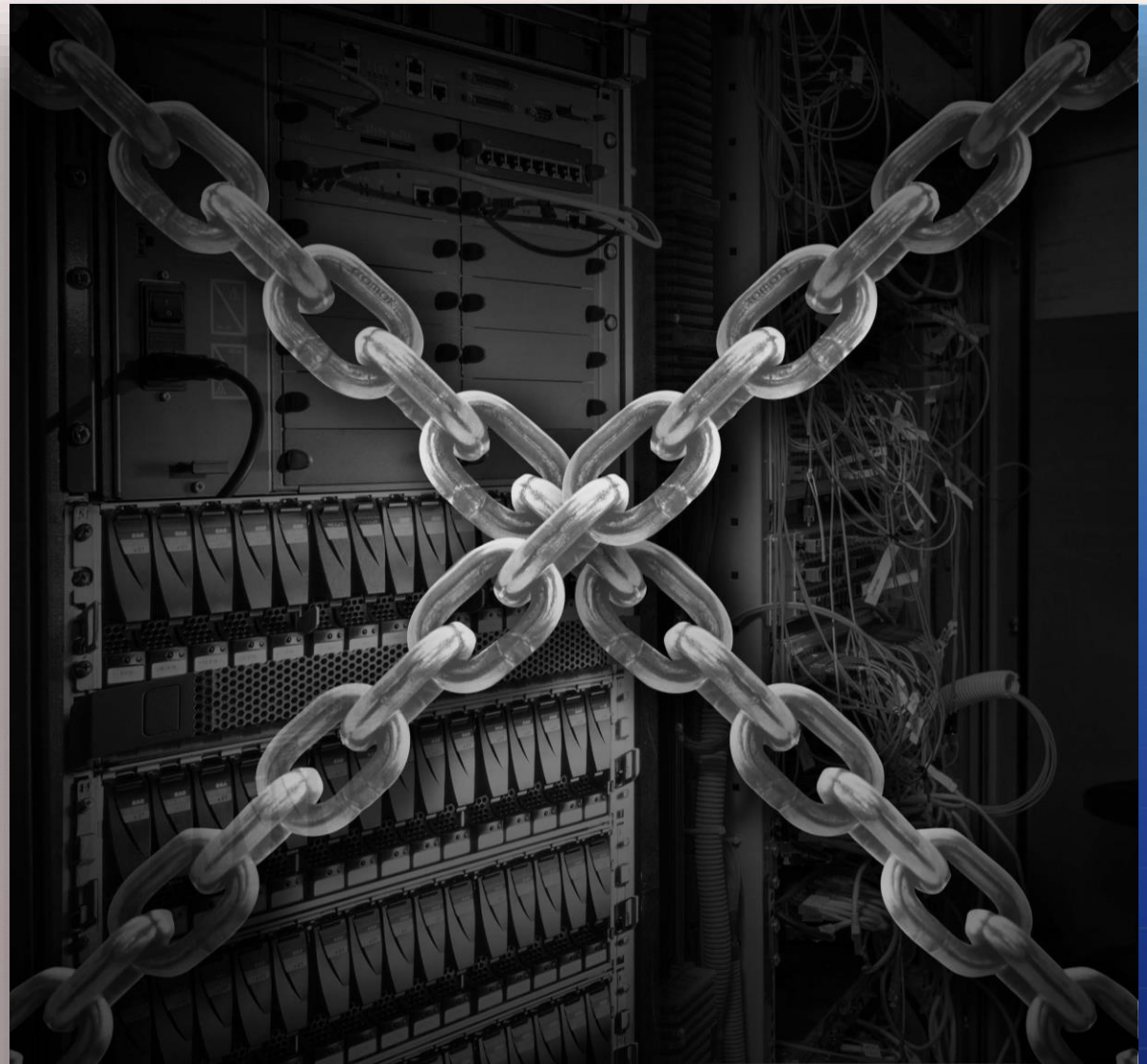
Still manage a traditional messy network?

QuCPE

Massive single function devices

- Complexity of daily operation
- More boxes, more interoperability issues
- More boxes, more failure points
- Energy wasting

Difficulties of upgrade



- Fixed boxes lack of flexibilities for future extensions
- Too many things to worry in complicated environment
- Service down time is always long to make physical changes

Match function? Match cost?

QuCPE

- Too costly and complex to replicate same functions to new branches
- Potential security breaches or additional operation expense occurs if not matching network functions with original network

No professional IT managers in branches

- Difficult to identity real problems remotely without professional trouble shooting
- OPEX of IT people traveling around makes IT properties become burdens of business

Business wait nobody

- Hardware boxes delivery suddenly become a critical issue nowadays (Chip shortage, port congestion, charge raises…)
- The longer new service deploy takes, the low competitiveness you got

A new era has come…

Benefit of IT virtualization

QuCPE

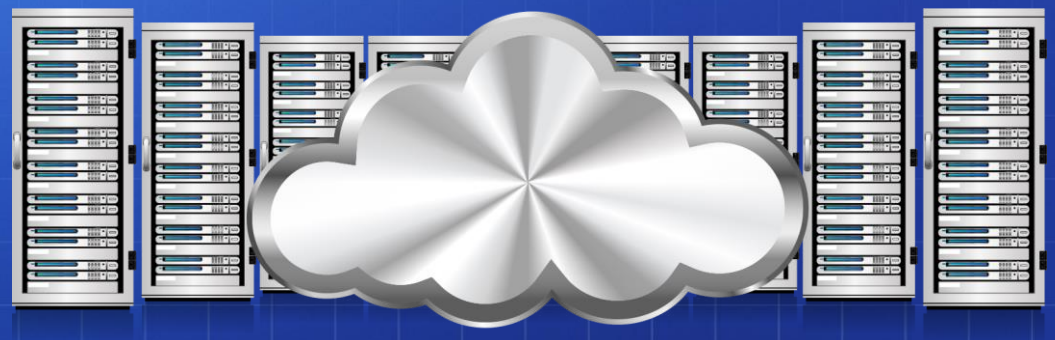
Simple
Deploy new services via VM/VNF, no complicate hardware installation process.

Minimize downtime
On site support is no longer required, remote manage, trouble shoot VM/VNF directly.

Cost effective
Single multiple function box instead of multiple boxes with single function.

Quick
Few clicks to get complex jobs done. Such as service modifying, shifting or bulk deployment.

Flexible
Software defined, breaks hardware barriers and limitations. Release the possibility of your IT environment.



Can I virtualize my IT? What do I need?

- Powerful device not only carry existing services but also with buffers for future upgrades.
- Flexible platform that can enable and well manage various services
- An easy way to monitor, manage all around the world.

Traditional IT

Internet

WAN Optimization

Firewall

Application Acceleration

Router

IPS/IDS

Switch

Server

+

QNAP
IT Virtualization Solution

AMIZ Cloud

QNE Operating System

QuCPE

QNAP IT virtualization solution

QuCPE

AMIZ Cloud

Efficient cloud management platform allows remote deploy and manage VM or software containers to your network.

QNE Operating System

Flexible OS provides a safe, easy managed environment to attach various services, release the possibility of your network.

QuCPE

Powerful platform to carry QNE and your services. Simplify your network and make the daily operation much easier.

QNAP

Networking

Equipment

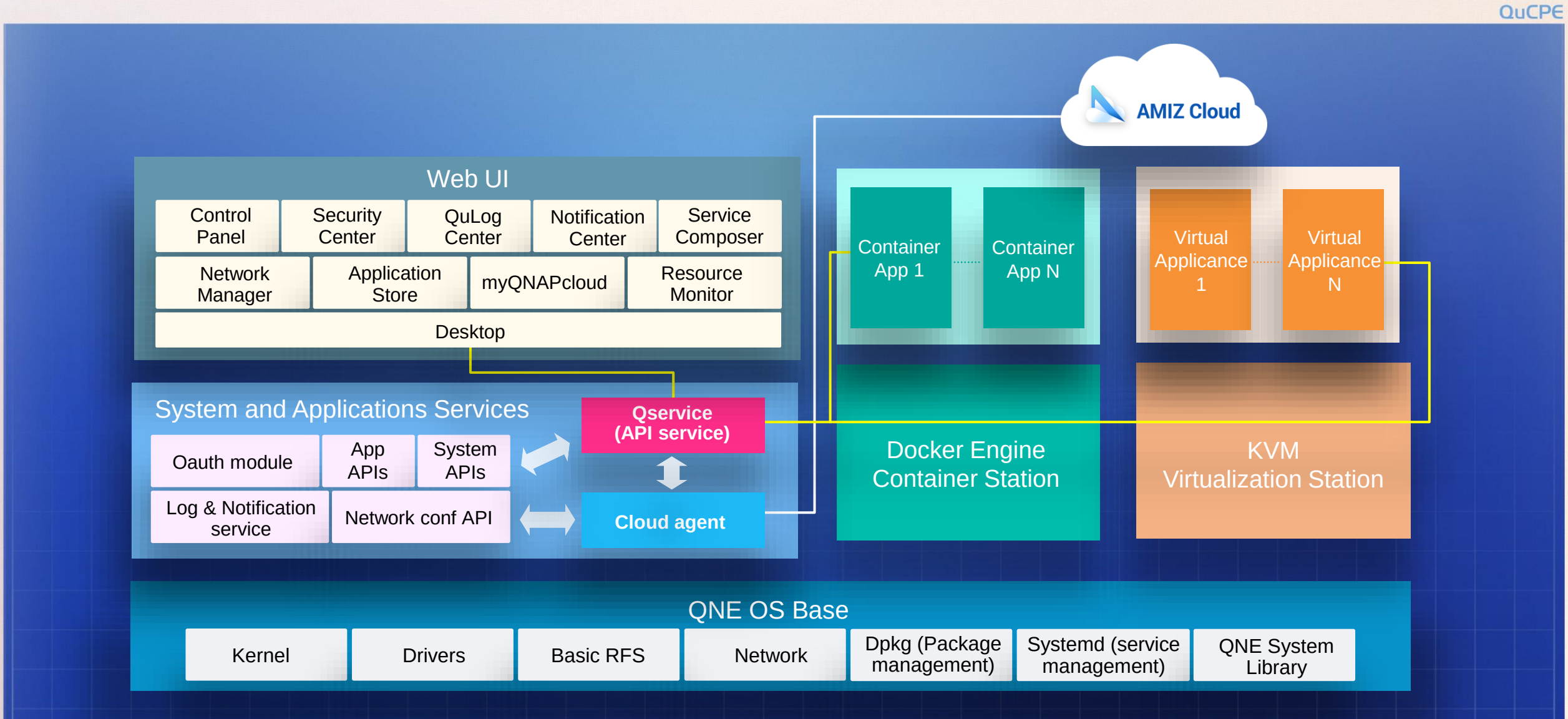
Operating System

Next-generation Operating System

QuCPE

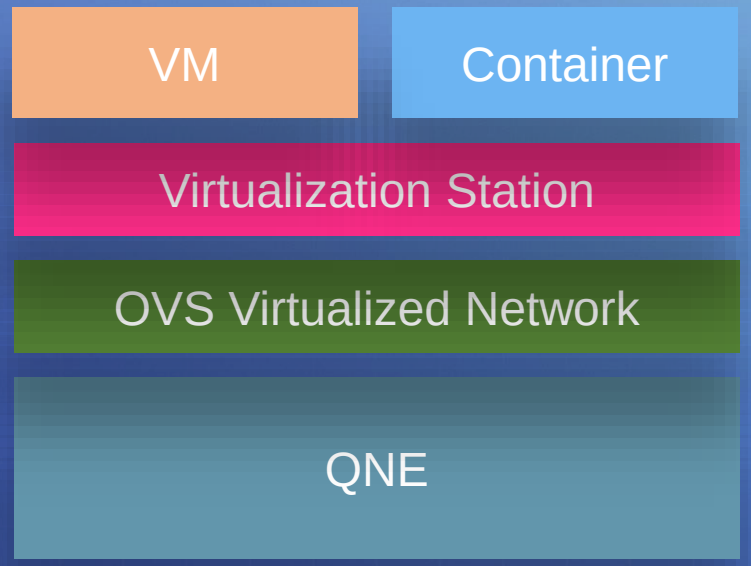
Next generation OS	**QNE (QNAP Network Equipment OS)** • Inherit the experiences for Enterprise storage OS • The foundation for QNAP next generation products
Break-through design than legacy Servers	**Break-through architecture** • Redesigned architecture for virtualized services • Extremely fast service's response and migration
Data center technologies from CSPs	**Flexible software-defined and virtualized technologies** • Simplified the IT management for SD-Branch • Remotely adjustment along with business locations

QNE architecture



QNE differences to server system

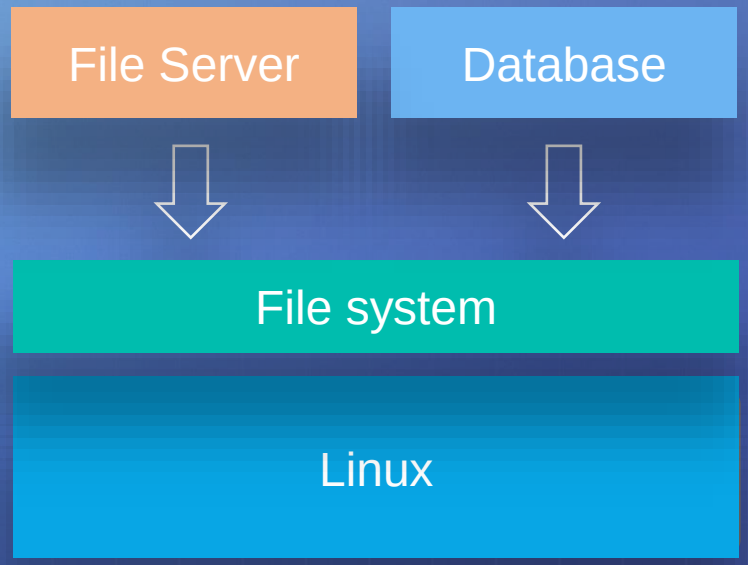
QuCPE



QNE

VM & Container (application) are virtualized on top of hypervisors

V.S.



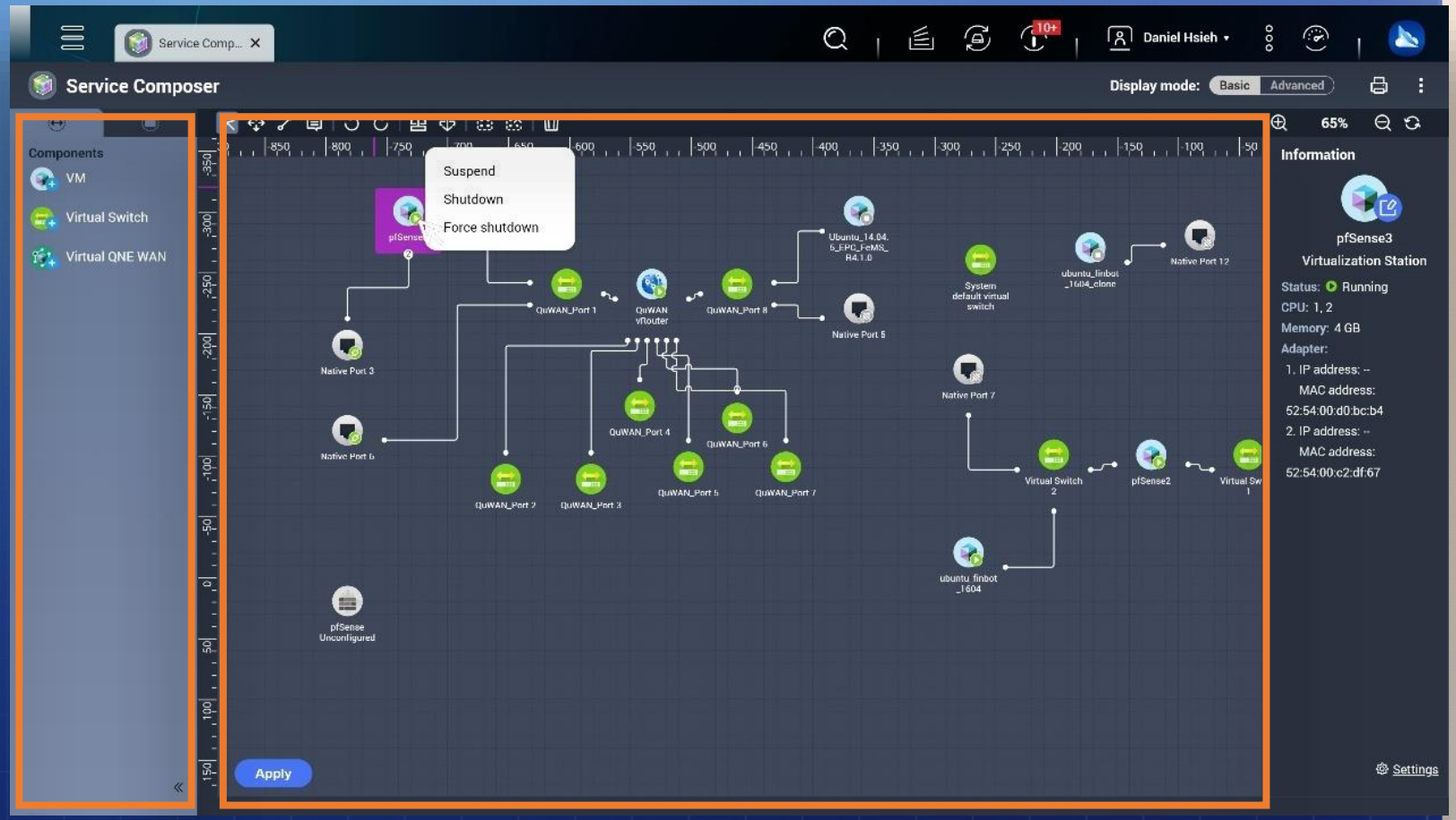
Linux Server

Application (e.g., Database) assign disk volume from Linux

Service composer

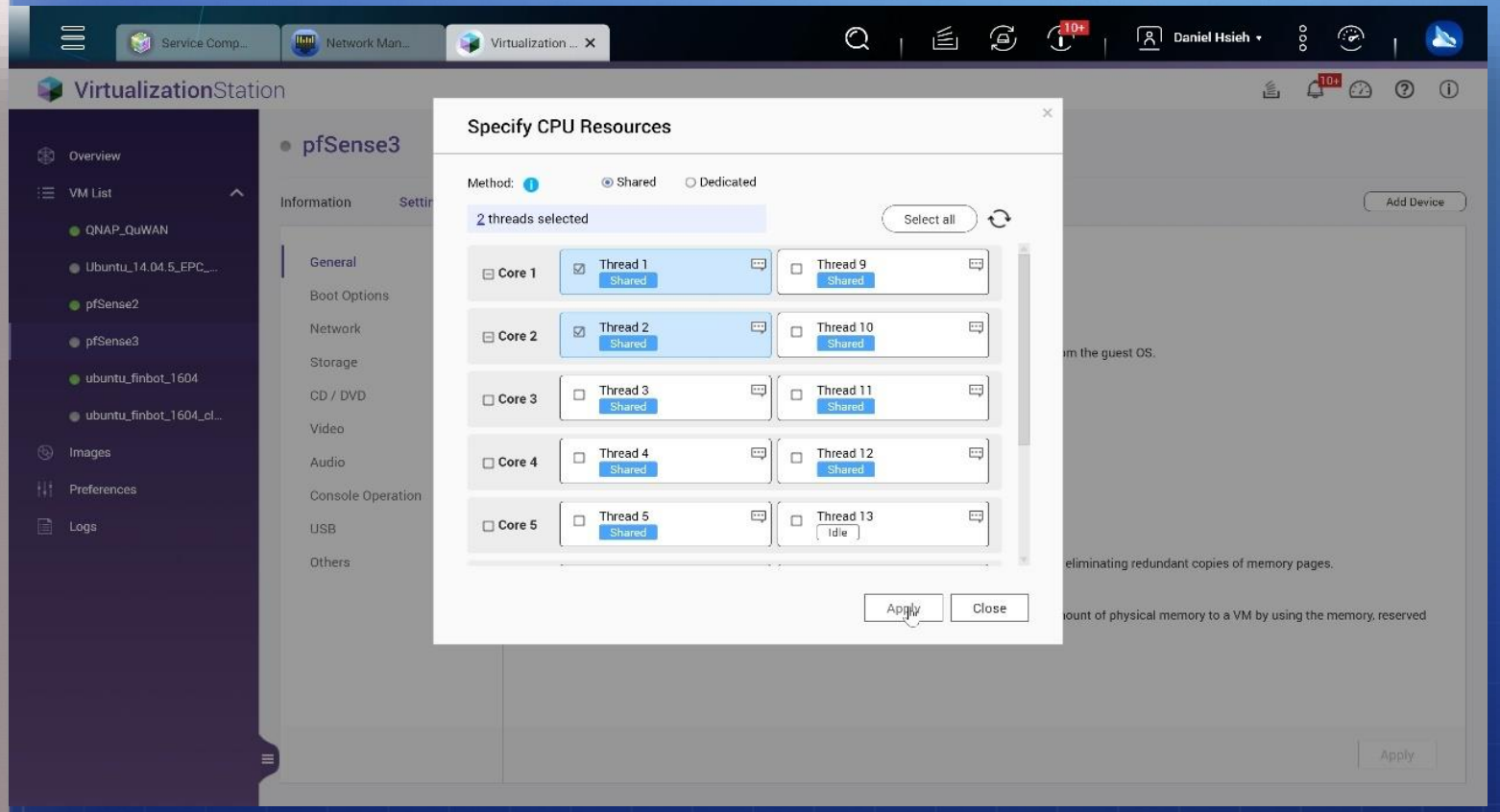
QuCPE

- Objective graphic UI help to easily create VM, VNF and links between.
- Visual virtual network topology makes the maintenance much easier.



CPU resource arrangement

QuCPE

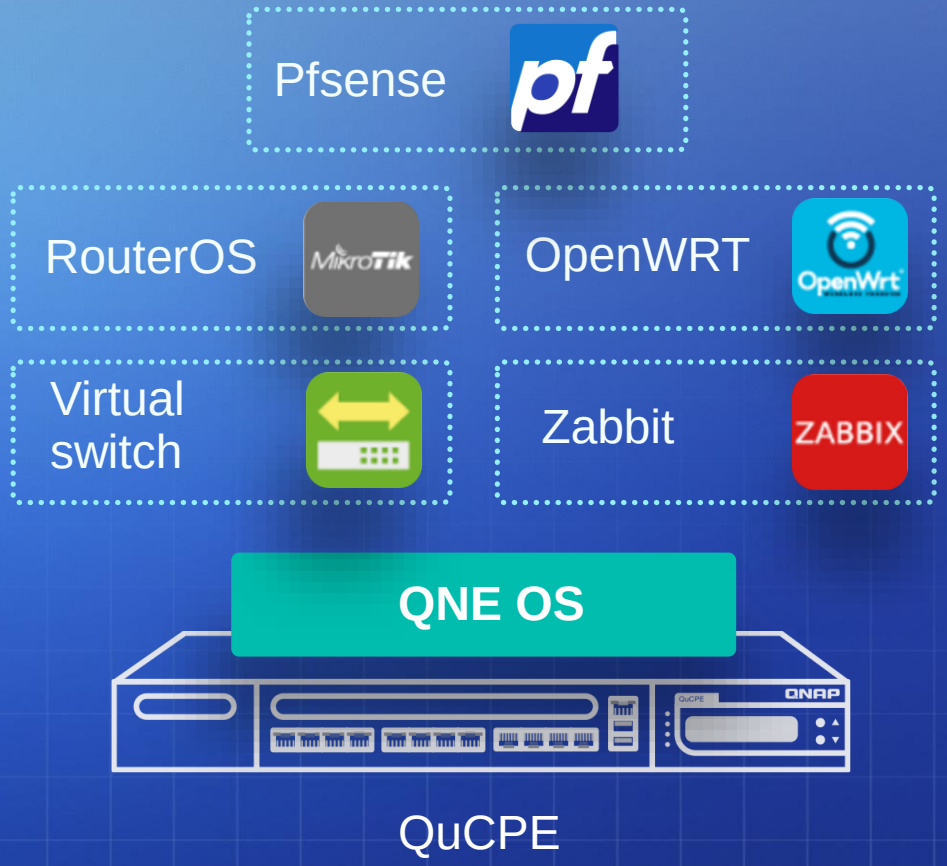


Allocate CPU resource for each VM or services through CPU pinning function. Guarantee critical services are always in good quality in your network.

Service to deploy

Following services are verified running on QNE

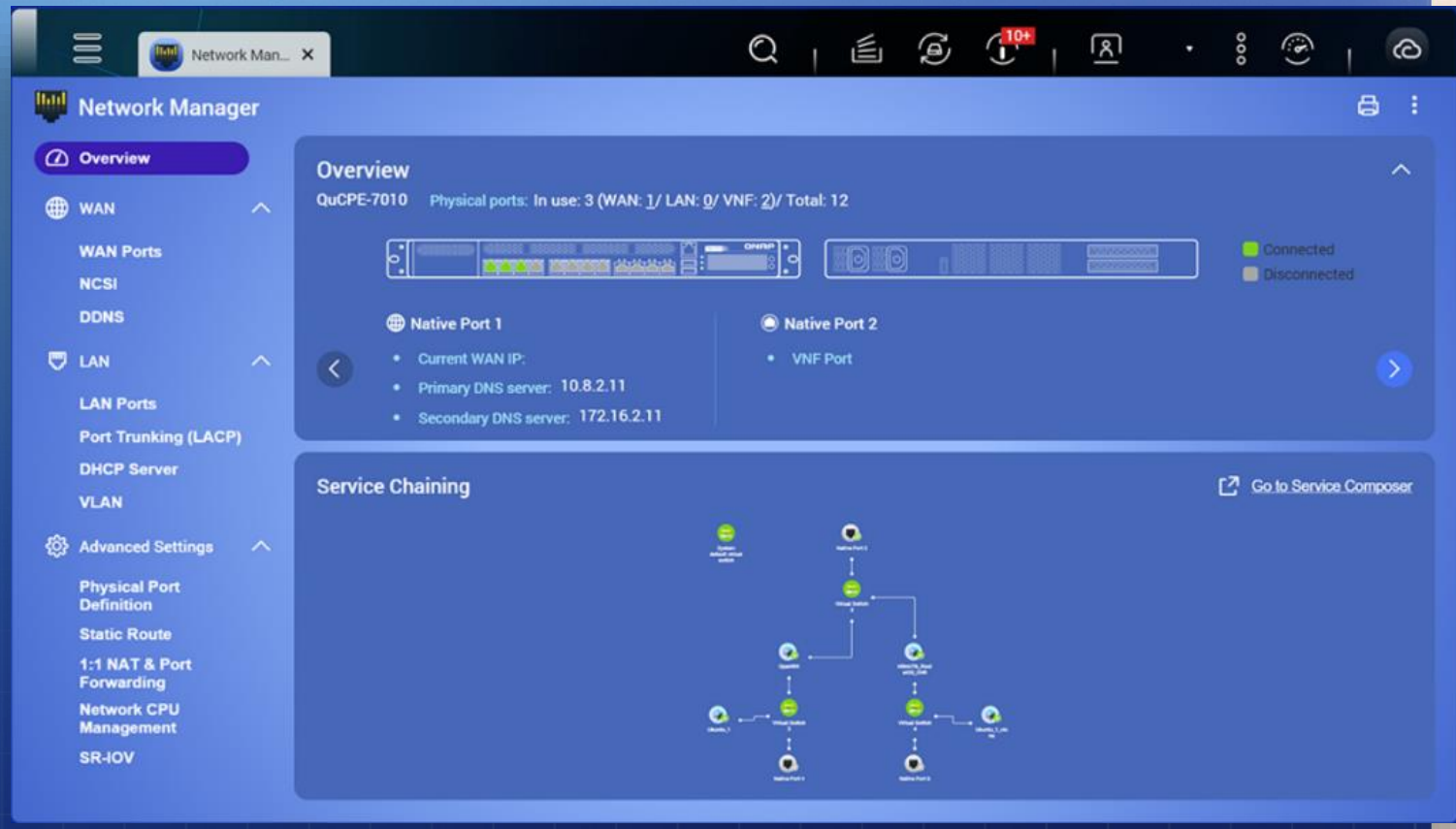
- Firewall/router (pfSense)
- Router OS (MikroTik)
- Network Management (Zabbix)
- OpenWRT
- Virtual Switch



Network manager

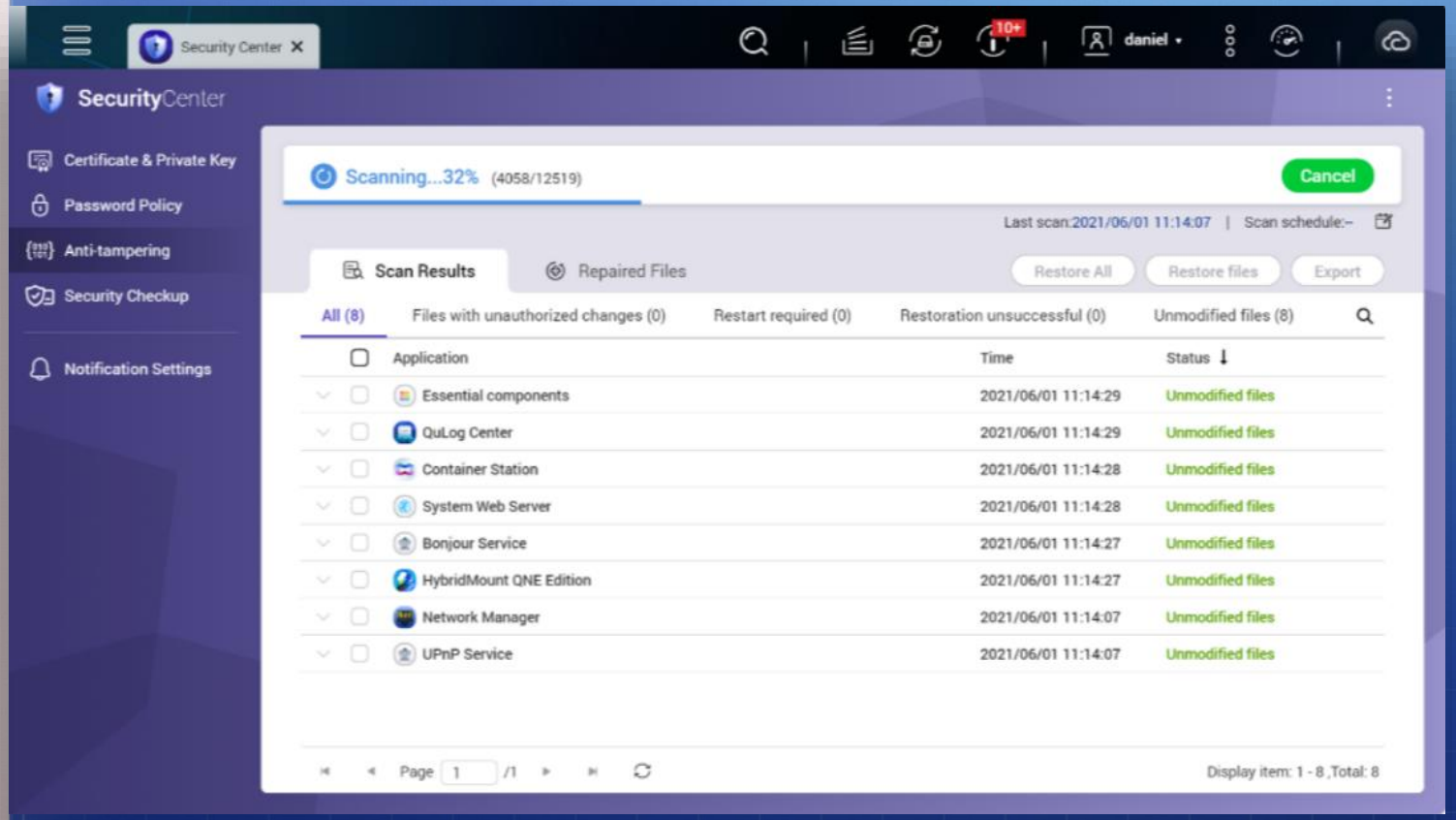
QuCPE

Assigning physical interfaces for VM and VNF. Hook your network services to the real network.



Security center

QuCPE



- Military grade anti-tampering function preventing malware change QNE or app
- Auto-recovery when unauthorized change was detected.
- Ensure the security of management access through certificates or password policies.

Stable, light platform

QuCPE

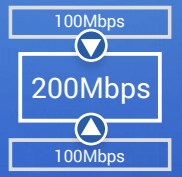
- Leverage Linux kernel 5.1LTS (Long Term Support) version, ensure the stability of all your services.
- QNE is a light weight OS that can finish boot up in short time.
  Helping quickly enable services to the network.

Subscription free SD-WAN

QuCPE

- QuWAN provides an easy way to build VPN connections for your business network.
- Hub & Spoke topology suitable for network that requires fast deployment, extension and backup route.

Auto Mesh VPN



WAN Optimization

Cloud Management

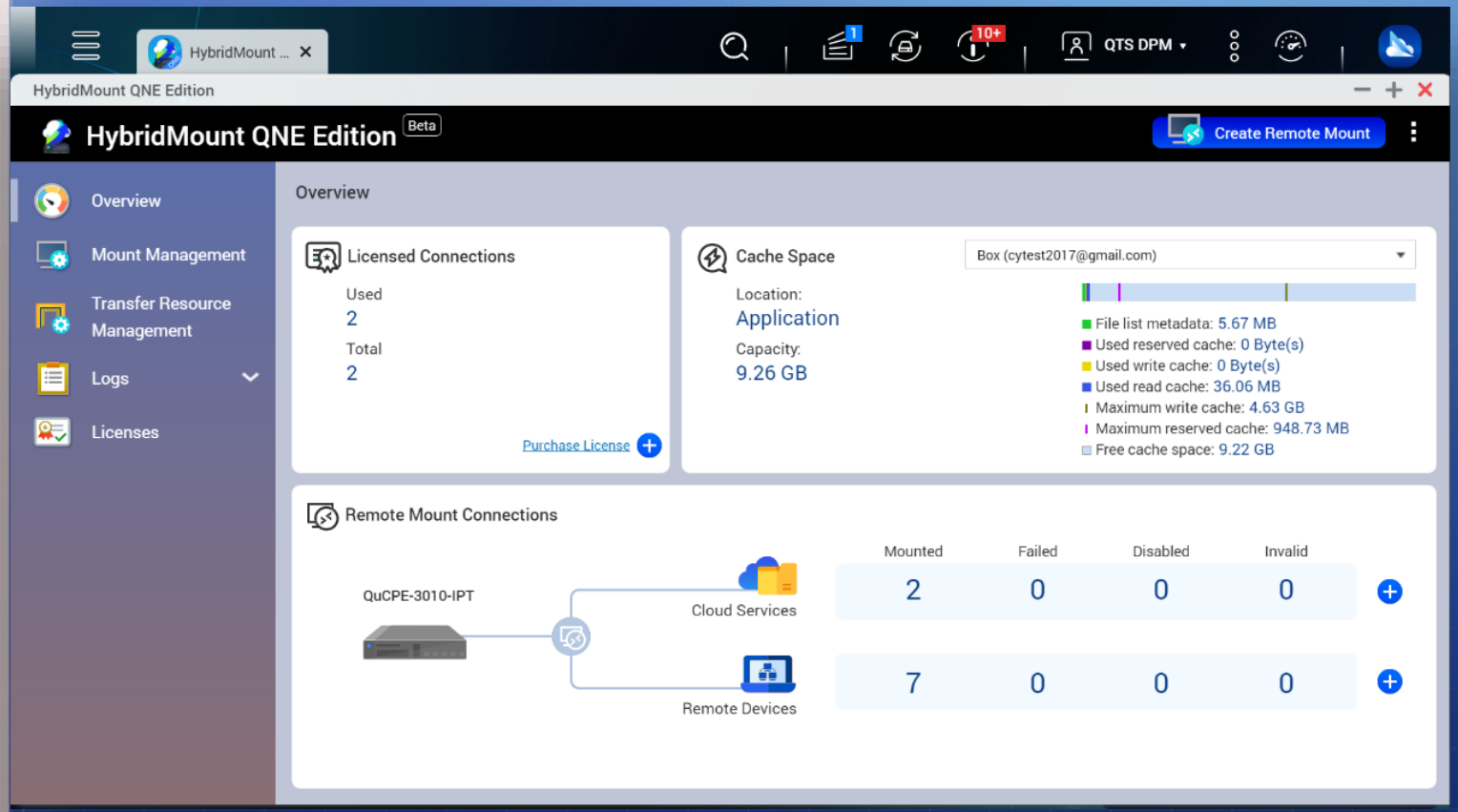
Cost Optimization

Intuitive Web Management

Networking Security

Hybrid mount

QuCPE

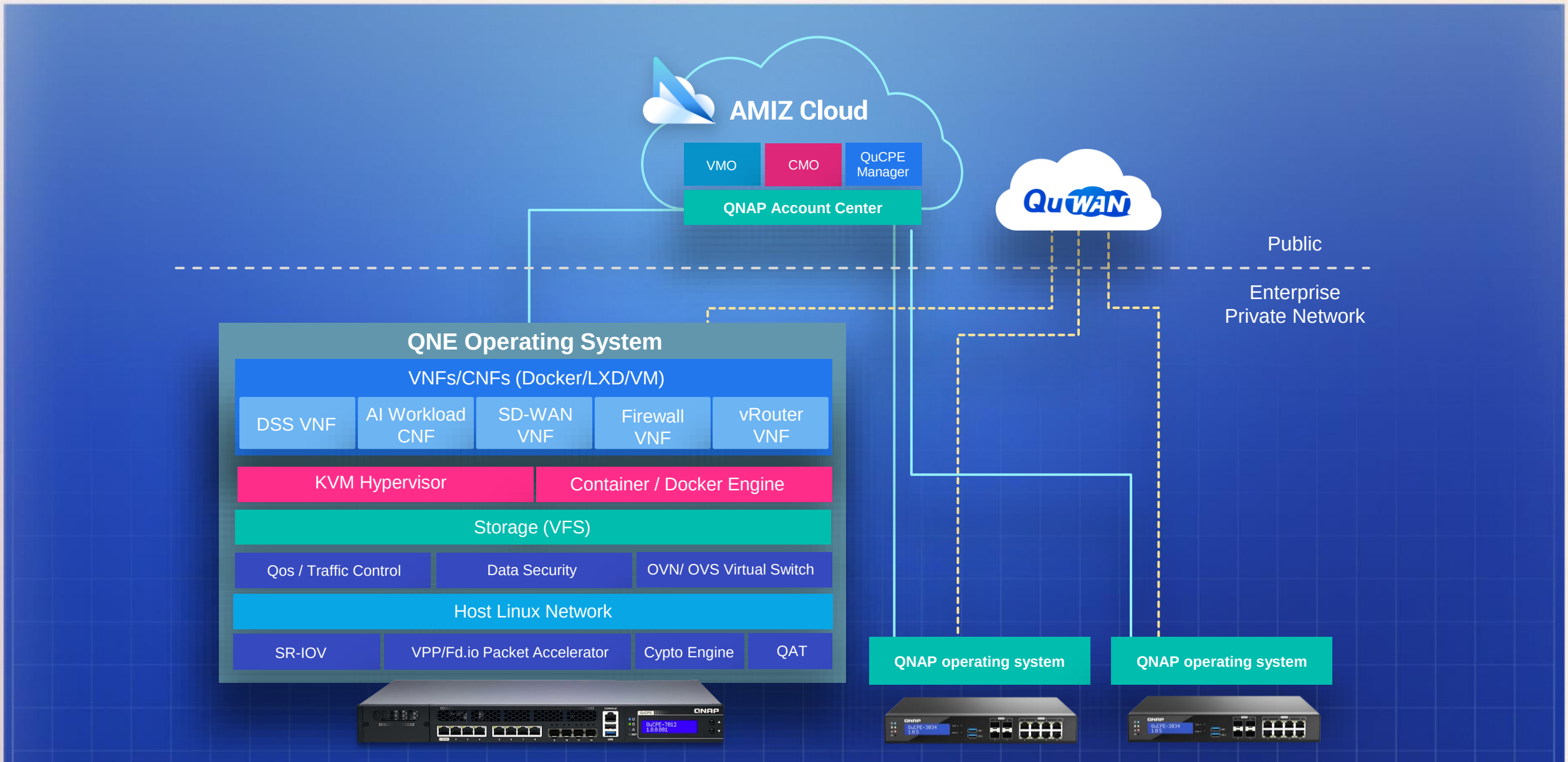


- Free hybrid mount service frees your WAN bandwidth by well managed those frequent access files.
- It improves the efficiency of your intranet and also help to reduce leasing line expense.

AMIZ

Cloud Platform

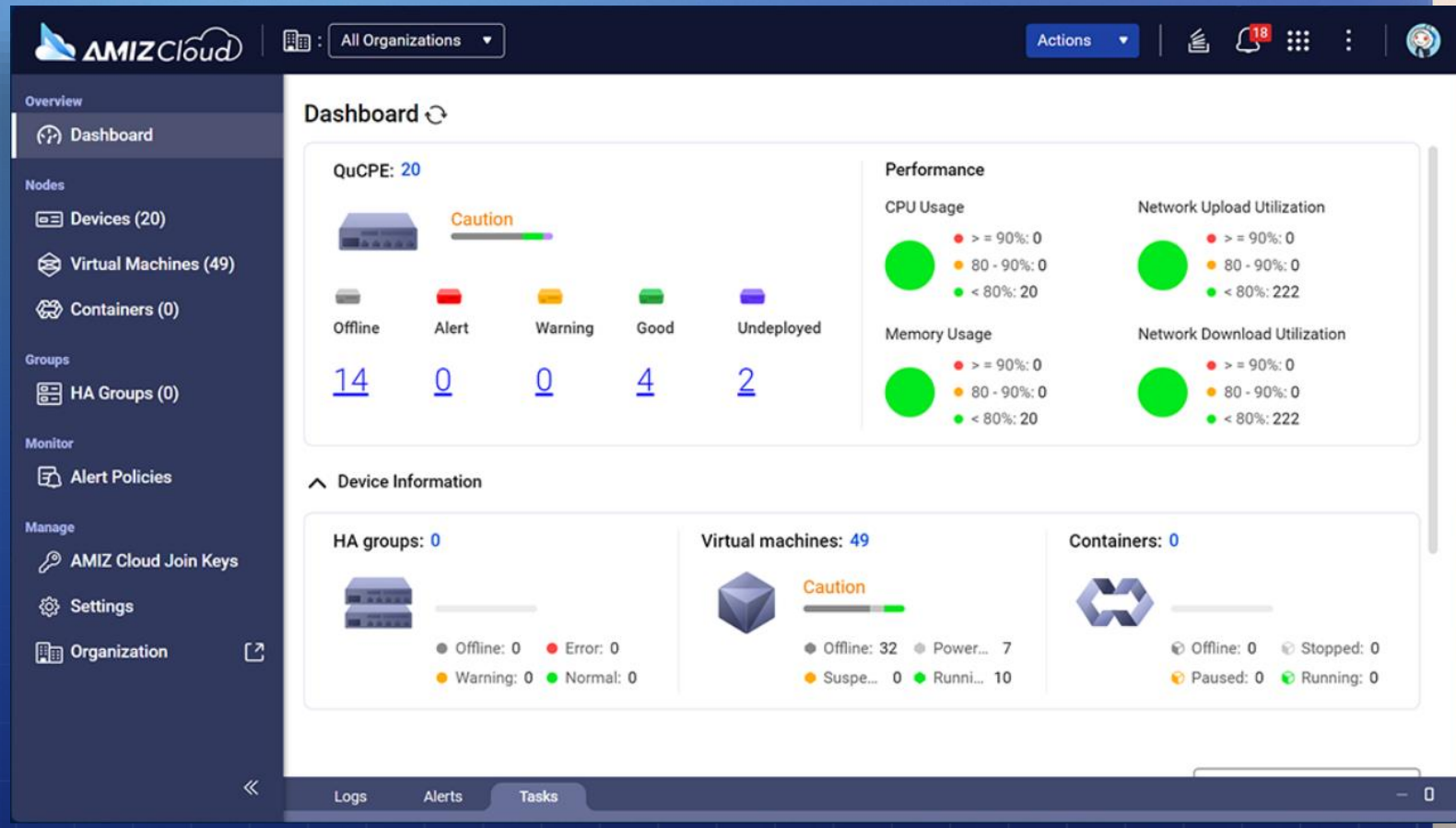
Manage QuCPEs across multiple sites or organizations



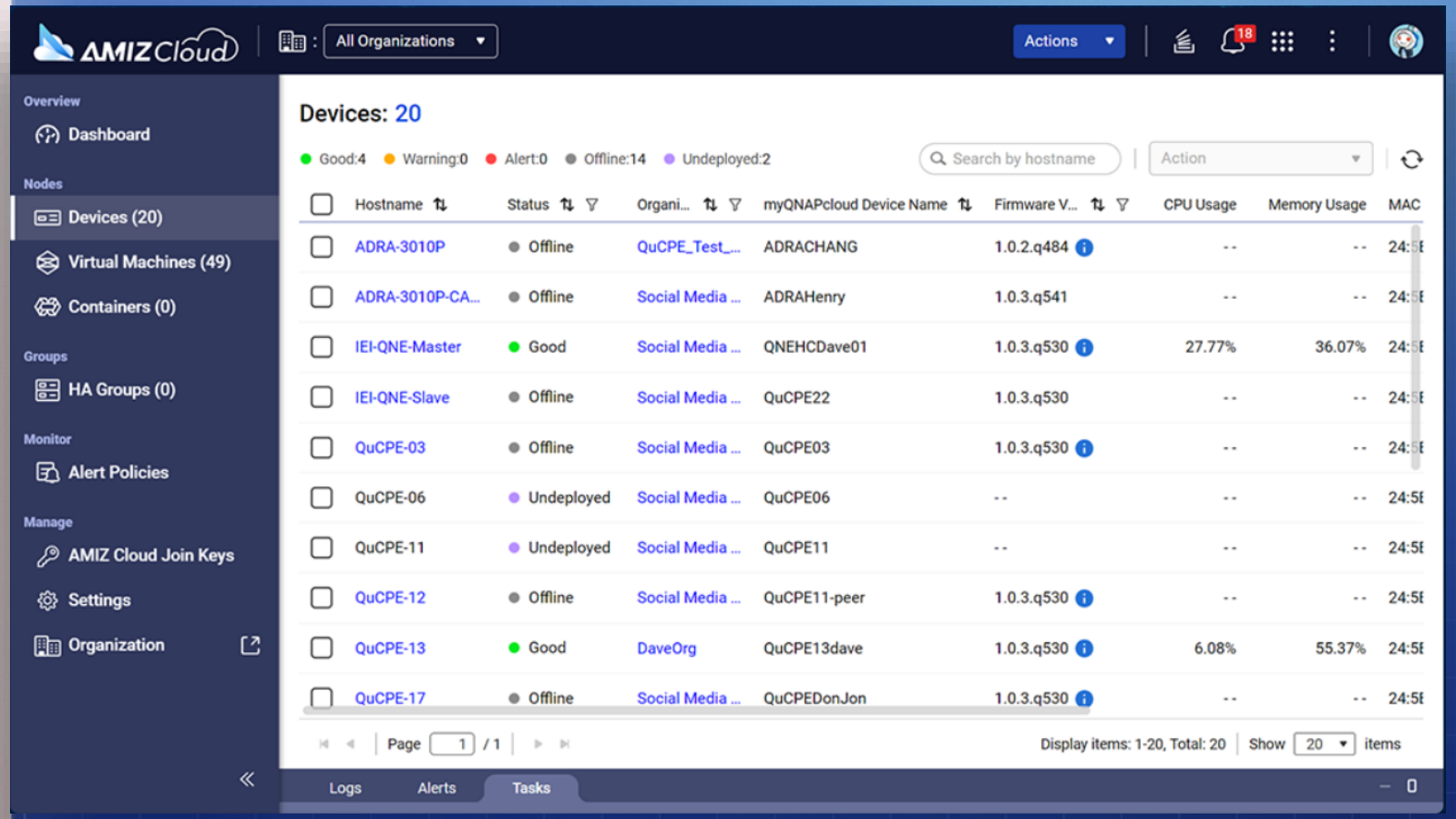
Remote management

QuCPE

- Centralized management for all QuCPE, VM and software container in different sites, improve the efficiency of IT management.
- Zero Touch Provisioning (ZTP) deploy VM/VNF without touching real devices. Save time and money for on-site support.



Bulk deployment

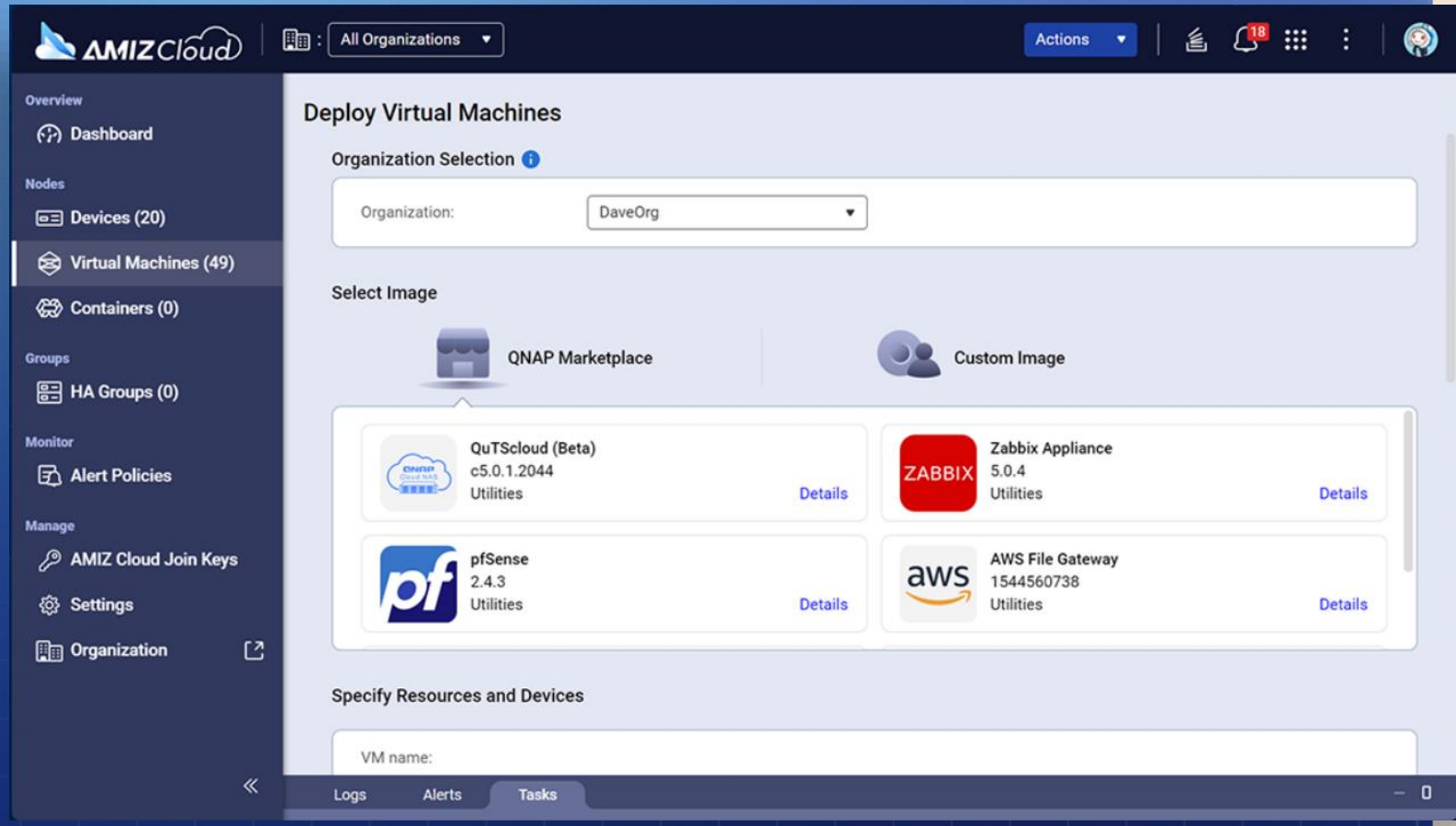


Deploy dozens or even hundreds of VM/VNF by simply clicks on GUI. Enable new services quickly to catch business chances.

VM image management

QuCPE

Save/copy the VM images allows you the replicate or shift VMs to new sites, or recover disasters even more quickly.



QNAP

Universal

Customer

Premises

Equipment

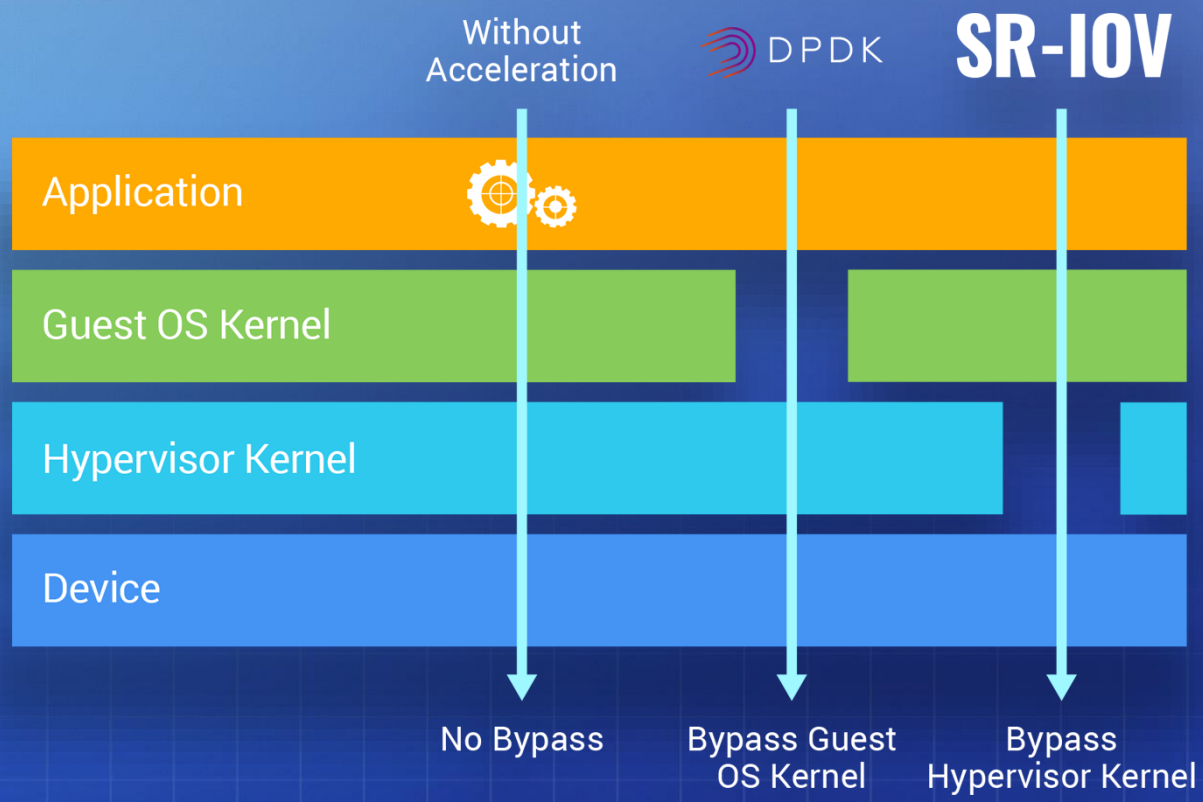



	QuCPE-7012-D2166NT-64GB	QuCPE-7012-D2146NT-32GB	QuCPE-7012-D2123IT-8GB	QuCPE-3034-C3758R-16G	QuCPE-3032-C3558R-8G
CPU	Intel Xeon D-2166NT 12 cores, 24 treads 2.0GHz (Max 3.0GHz)	Intel Xeon D-2146NT 8 cores, 16 treads 2.3GHz (Max 3.0GHz)	Intel Xeon D-2123IT 4 cores, 8 treads 2.2GHz (Max 3.0GHz)	Intel Atom C3758R 8 cores, 8 treads 2.4GHz	Intel Atom C3558R 4 cores, 4 treads 2.4GHz
Memory	64GB DDR4 ECC (4x16GB)	32GB DDR4 ECC (2x16GB)	8GB DDR4 ECC (2x4GB)	16GB DDR4 (2x8GB)	8GB DDR4 (2x4GB)
Port	10GbE SFP+ x4 2.5GbE RJ45 x8	10GbE SFP+ x4 2.5GbE RJ45 x8	10GbE SFP+ x4 2.5GbE RJ45 x8	10GbE SFP+ x4 2.5GbE RJ45 x8	10GbE SFP+ x2 2.5GbE RJ45 x8
Network Module	1	1	1	-	-
PCIe Slot	1x PCIe Gen3 x8	1x PCIe Gen3 x8	1x PCIe Gen3 x8	-	-
HDD Slot	2x 2.5” SATA slots	2x 2.5” SATA slots	2x 2.5” SATA slots	-	-
M.2 SSD Slot	-	-	-	2x 2280 M.2 MVMe	2x 2280 M.2 MVMe

Network performance acceleration

QuCPE

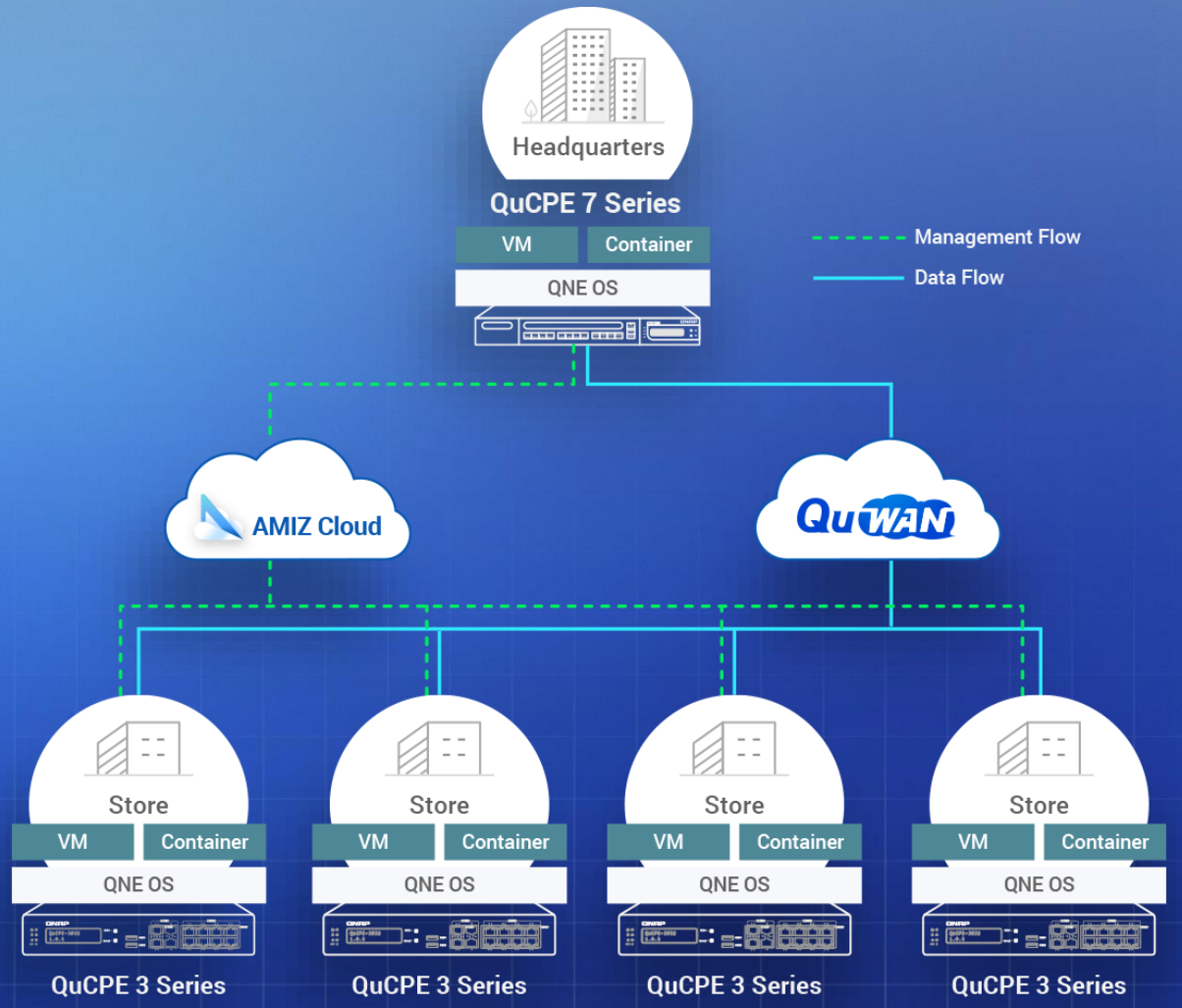
- **OVS-DPDK**
  Accelerate packet processing speed in between physical / virtual networks
- **SR-IOV**
  Accelerate 10Gbps+ Smart NIC via SR-IOV.
  Best-in-class pass through for Smart-NIC
- **Intel @ QAT**
  Speed up QuWAN or IPSec encryption and decryptions



Best fit for multi-site deployment

QuCPE

- HQ: Powerful QuCPE 7 series
- Branches: Cost effective QuCPE 3 series
- Intranet VPN: Subscription-free QuWAN
- Central management: AMIZ cloud



QuCPE-3032/3034

is your best choice

LIVE DEMO

QuCPE-3032/3034