SANGFOR HCI

Hyper-Converged Infrastructure

Fully Converge Your Data Center

www.sangfor.com

Traditional 3-Tier Data Center
— Challenges & Limitations

IT is a fast changing industry. With organizations trying to follow the trend of digitalization and stay agile at all time, IT departments are looking at growing and seemingly endless requests for better and faster services delivery, as well as increased efficiency and robust operating environment. The driving force that ensures your business stays ahead and evolves smoothly, is your data center.

The revolution of x86 server virtualization over a decade ago marked the change of IT service delivery. However, the rest of the IT infrastructure in the data center haven't kept up, namely the virtualization of networking, security and storage.

What was the Time Spent On?

The traditional data center is very delicate in many ways, the work it takes to keep it running properly is complex and tedious — deployment, expansion, resource scheduling, upgrade, maintenance, troubleshooting, fault tolerance and release of new versions — these have occupied the majority of time of IT department's daily work.

What was the Money Invested in?

With traditional data center, the provision of new services usually starts with planning and scaling of networking, and hardware selection. Organizations also take into account their overall planning for the next 3-5 years. As a result, the actual quantity of device purchased and model selected shall exceed the current business needs to a great extent, thus leading to a considerable amount of investment in advance. Not to mention the speed data center technology is evolving and the follow-up investment that comes with it.

Is Current Architecture Scalable?

Whenever new business needs to go online or data center needs expansion, it requires supplementary storage and massive data migration; and the IT department have to go over the entire hardware planning/selecting process again. Not to mention the manpower it takes to set it up and keep in running.
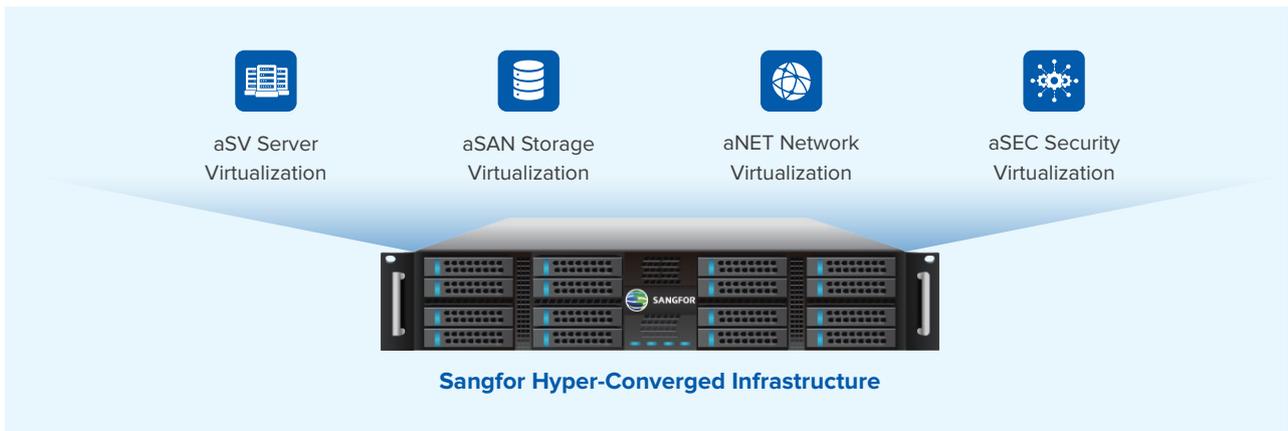
Is Your Data Center Cloud Era Compatible?

With the emergence of "The Era of Cloud", increasingly people are resorting to Cloud to deal with the hurdles physical data center brings — namely expensiveness, inefficiency and difficulty to manage — in business transitions. However, it's not the case that you could enjoy the full breadth of benefits that go with cloud at a snap of finger. Easily put your IT architecture needs to be simplified and automated.

Sangfor HCI Solution

Traditional Data Center

Data Center with Sangfor HCI

One hardware consolidating legacy appliances

One management console removing silos

One click deployment simplifying the time to market of application

One stop solution cutting TCO up to 80%

One step to hybrid cloud

Sangfor HCI at a Glance

aSV Server Virtualization

aSAN Storage Virtualization

aNET Network Virtualization

aSEC Security Virtualization

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Sangfor Hyper-Converged Infrastructure

5-Tier Architecture Consolidated into 1
1 Single User Interface Managing All IT Resources

Sangfor Hyper-Converged Infrastructure (HCI) provides innovative 3rd-gen cloud computing architecture that reduces at least 70% of the TCO, simplifies operations, and multiplies network security. It converges compute, storage, networking and security on a single software stack. The foundation of all these are Server Virtualization (aSV), Storage Virtualization (aSAN) and Network Virtualization (aNET), on top of that we have Security Virtualization (aSEC) which is the built-in cloud security center on HCI that provides comprehensive protection with full integration of Sangfor security solutions like vAF and endpoint secure.

Highlights of Sangfor HCI

aSAN (Storage Virtualization)

Built with multi-copies and data is written synchronously to ensure data consistency. Multiple innovative features enable Sangfor HCI to reach 1 million IOPS with just three nodes, including SSD caching and patented I/O localization technology - aSAN detects where a VM's data is stored and makes it a priority to run the VM on that physical host, which dramatically increases IOPS in a clustered environment.

aSV (Hypervisor)

High availability, distributed resource scheduling, VM resource hot add, NUMA and resource over-commitment bring you the ultimate performance and consolidation ratio of server

Ultra Simple Deployment & Operation

Deploy the infrastructure with "what you draw is what you get" topology to get your business online in minutes. Manage your infrastructure through a unified dashboard and get AI-driven insights with a virtualized data center that displays the real-time flow.

Disaster Recovery Management (DRM)

Sangfor provides a choice of disaster recovery solutions, including active-active stretched cluster and active-passive DR for Sangfor HCI customers and active-passive DR for third-party hypervisors and servers.

More Secure Than Ever

Brand-new aSecurity cloud security center integrates all the security products you need to protect your entire architecture, including built-in web application firewall, next-generation firewall, EDR, distributed IPS and more.

Reduced TCO & Scale as you Grow

Minimum 70% reduction in overall CapEx & Opex than traditional data center. Up to 90% reduction in power, cooling and space. Start from 2 nodes and scale linearly according to your need without limits. Shift your focus to business. IT could be a revenue generating department instead of a cost center.

Distinguished Performance

Reach 1 Million IOPS with just 3 nodes (NVMe). High stability and reliability ensured by vAD business clustering, HA (High Availability), distributed management platform, distributed virtual networking device, multi-copies, back-up plans etc.

Best Security Integration

Sangfor leverages its powerful security capabilities on HCI to provide comprehensive security posture for the workloads and the platform. Not only does it provide distributed firewall and vAF for network traffic protection, it also provides a built-in cloud security center to manage VM security with capabilities like EDR and distributed IPS. Not to mention the correlative security service integration that's only possible with Sangfor one-stop integration of security and cloud.
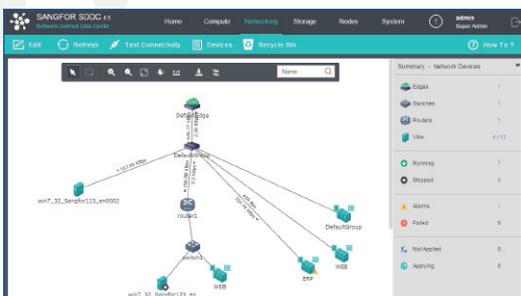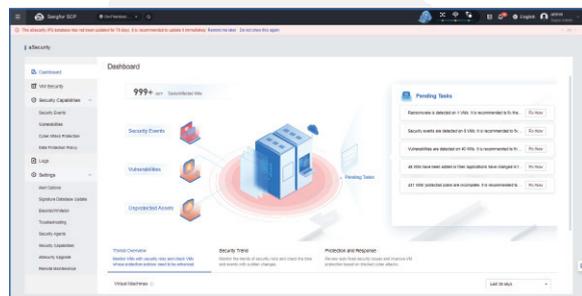
Sangfor HCI

Hybrid Cloud

Multi Cloud

Transit Smoothly into Multicloud Era

Build Data Center by Simple Drawing Your Architecture

Built-in Cloud Security Center

Business Use Cases with Sangfor HCI

Data Center Consolidation

Getting rid of legacy architecture and complex costly data centers with Sangfor's software-defined HCI technology.

Cloud Transformation

Deploy the HCI cloud platform engineering for superior and leading virtualization for your enterprise - providing scalability and agility.

Data Protection & Disaster Recovery

Business continuity is prioritized with effortless and secure data recovery and disaster recovery options such as snapshot, CDP and stretched cluster.

Enterprise Applications

Run your company's applications through Sangfor's HCI for elite performance and reliable capabilities.

Sangfor HCI's Awards & Achievements

Gartner Market Share

2nd Largest HCIS Vendor by Revenue in Asia-Pacific for 2Q2023

Gartner® Peer Insights™

Strong Performer in the Gartner® Peer Insights™ Voice of the Customer for Full-Stack HCI Software (2023)

Gartner Market Guide

Representative Vendor in Gartner Market Guide for Server Virtualization

Top 3 HCI Vendors

Named as Top 3 HCI Vendors in China for 6 Consecutive Years

SAP Certification

SAP Certified for Cloud and Infrastructure Operations and SAP HANA Operations

Listed in Forrester Now Tech

Listed in "Now Tech: Hyperconverged Infrastructure, Q2 2020"

Sangfor HCI 3rd Generation CPU Models Data Sheet - Appliance Based

Model	aServer-3000	aServer-3100	aServer-3205	aServer-3305	aServer-3405	aServer-3305F
CPU	Intel 4310 2.1GHz 12C/24C 120W	Intel 6326 2.9GHz 16C/32T 185W	Intel 4314 2.4GHz 16C/32T 135W	Intel 6326 2.9GHz 16C/32T 185W	Intel 5318Y 2.1GHz 24C/48T 165W	Intel 6326 2.90GHz 16C/32T 185W
No. of CPU	1	1	2	2	2	2
RAM	32GB	32GB	32GB	32GB	32GB	32GB
No. of RAM	4	4	4	4	4	4
OS Disk	1*240GB SATA SSD Occupy front disk slot	1*240GB SATA SSD Occupy front disk slot	2*240GB SATA SSD	2*240GB SATA SSD	2*240GB SATA SSD	2*240GB SATA SSD
RAM Slot	32 (only 16 are available)	32 (only 16 are available)	32	32	32	32
No. of RAID Card	1	1	1	1	1	1
Disk Slots	7 (for data) + 1 (for OS)	7 (for data) + 1 (for OS)	12+2	12+2	12+2	24 (U.2 NVMe) + 2 (SATA for OS)
NIC	4*GE+2*10GE	4*GE+2*10GE	4*GE+2*10GE	4*GE+2*10GE	4*GE+2*10GE	4*GE+2*10GE
USB2.0	0	0	0	0	0	0
USB3.0	4	4	4	4	4	4
Dimension	2U 86.1mm(H)*447mm(W) *790mm(L)	2U 86.1mm(H)*447mm(W) *790mm(L)	2U 86.1mm(H)*447mm(W) *790mm(L)	2U 86.1mm(H)*447mm(W) *790mm(L)	2U 86.1mm(H)*447mm(W) *790mm(L)	2U 87mm(H)*478.8mm(W) *811.7mm(L)
Gross Weight	28kg	28kg	29kg	29kg	29kg	37.5kg
Net Weight	23kg	23kg	24kg	24kg	24kg	28kg
Total PCIE Slots	3	3	3	3	3	3
Available PCIE Slots	1	1	2	2	2	2
Redundant Power Supply	2	2	2	2	2	2
Working Power	Typical Power: 227W Max Power: 900W	Typical Power: 227W Max Power: 900W	Typical Power: 227W Max Power: 900W	Typical Power: 227W Max Power: 900W	Typical Power: 227W Max Power: 900W	Typical Power: 900W Max Power: 1600W/1500W
VGA	1	1	1	1	1	2
IPMI	1	1	1	1	1	1

Sangfor HCI 3rd Generation CPU Models Data Sheet - Software Based

Sangfor can also provide a software-only HCI solution compatible with most of the commodity servers commercially available on the market.

License (Per physical CPU)	aSV (Server Virtualization)	Server virtualization, HA, DRS, Automated Hot Add, backup, clone, ...
License (Per physical CPU)	aSAN (Storage Virtualization)	Storage virtualization, 2-3 copies, SSD read and write acceleration, data locality, data striping, VM-based storage policy,...
License (Per physical CPU)	aNET (Network Virtualization)	Network virtualization, distributed firewall, drawable topology, visualized network, virtual switch, virtual router...
License (Per physical CPU)	aSEC (Secuity Virtualization)	Built-in cloud security center that includes real-time virus prevention, ransomware prevention, vulnerabilities discovery and repair, distributed IPS, etc,.
License (Per physical CPU)	SCP (Cloud Management)	Cloud management platform, IaaS, IT resource automation, self-service portal, reporting, multi-tenancy, billing & metering,...
License (Per physical CPU)	aSC (Stretched Cluster)	Active-active stretched cluster, zero RPO and cross-site high availability
License (Per VMware VM)	aHM (VMware Backup)	Provides integration with vCenter with unified management and backup for VMware VMs
License (Per VM)	CDP (Continuous Data Protection)	Near-zero data protection with file-level recovery
License (Per VM)	aDR (Disaster Recovery)	Active-passive distaster recovery between Sangfor HCI, seconds-level RPO and 1-click failover
License (Per VM or capacity)	hDR (Heterogeneous DR)	Active-passive disaster recovery between 3rd party infrastructure and Sangfor HCI, zero RPO and minutes-level RTO

* NFV components on HCI may employ IPSec VPN techologies using encryption algorithms.

- IPSec Protocol: AH, ESP

- D-H Group: MODP768 Group(1), MODP1024 Group(2), MODP1536 Group(5)

- IPSec Authentication Algorithm: MD5, SHA-1. SHA-2, SM3

- IPSec Encryption Algorithm: DES, 3DES, AES-128, AES-256. SANGFOR_DES, SCB2, SM4

CERTIFIED BY CCC, FCC and CE.

SANGFOR HYPER-CONVERGED INFRASTRUCTURE

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AVAILABLE SOLUTIONS

IAG - Internet Access Gateway
Secure User Internet Access Behaviour

Network Secure - Next Generation Firewall
Smarter AI-Powered Perimeter Defence

Endpoint Secure - Endpoint Security
The Future of Endpoint Security

Cyber Command - Network Detection and Response
Smart Efficient Detection and Response

TIARA - Threat Identification, Analysis and Risk Assessment
Smart Threat Analysis and Assessment

IR - Incident Response
Sangfor Incident Response – One Call Away

Cyber Guardian - Managed Threat Detection & Response Service
Faster Response Through Human/AI Collaboration

HCI - Hyper-Converged Infrastructure
Fully Converge Your Data Center

MCS - Managed Cloud Services
Your Exclusive Digital Infrastructure

VDI - aDesk Virtual Desktop Infrastructure
Seamless Experience, Secure and Efficient

Access Secure - Secure Access Service Edge
Simple Security for Branches & Remote Users

EDS - Enterprise Distributed Storage
The Only Secured Data Storage You Need

SD-WAN
Boost Your Branch with Sangfor

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