**Manuals+** — User Manuals Simplified.
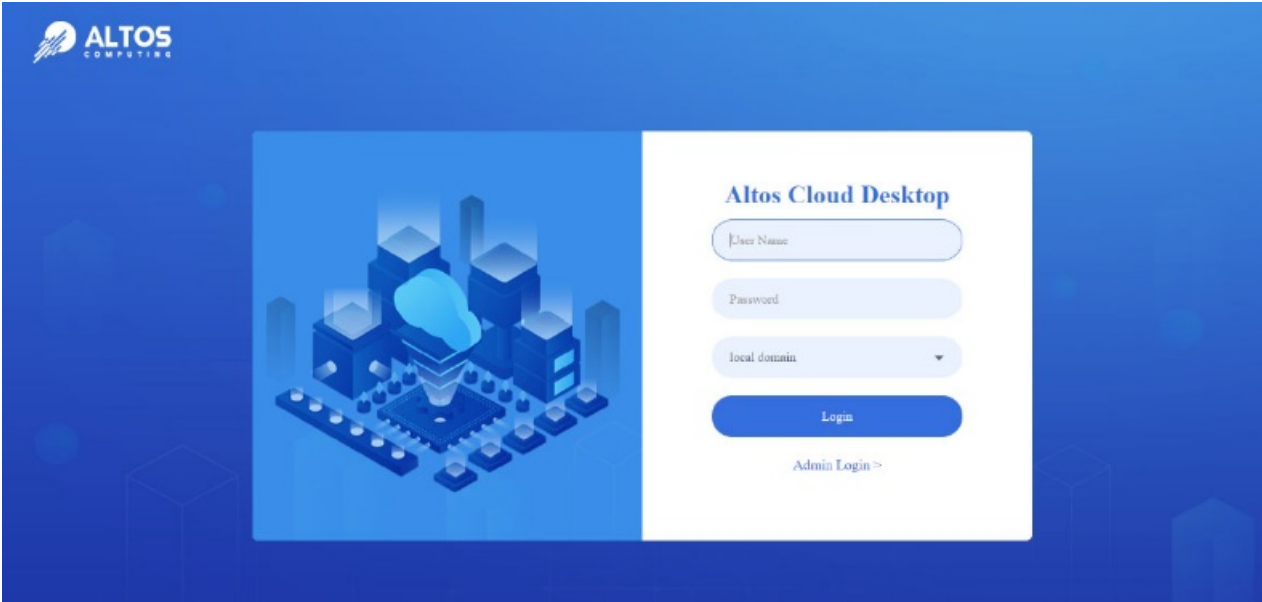


# Altos Cloud HCI FAQ User Manual
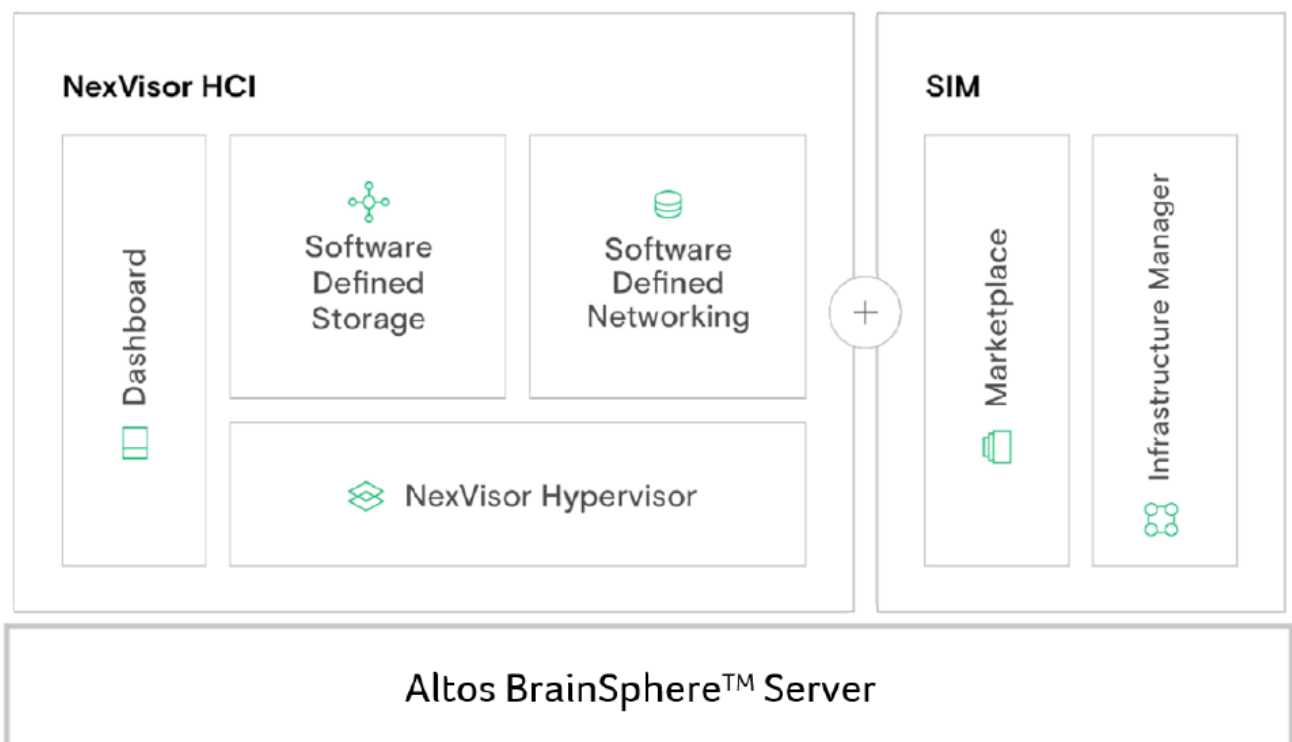
**Altos Cloud HCI FAQ**

## General

### What is AltosCloud HCI?

**ANSWER:** AltosCloud HCI is a fully HCI (hyper-converged infrastructure) platform optimized to provide high-performance IO for network and storage traffic to and from virtual machines or containers.

The AltosCloud HCI is based on Sunlight NexVisor HCI and is composed of the following parts.

- Sunlight NexVisor, a lightweight high-performance virtualization hypervisor
- Sunlight SDN (Software-defined network)
- Sunlight SDS (Software-defined storage)
- Sunlight Dashboard, an easy-of-use interface for managing the cluster



- SIM (Sunlight Infrastructure Manager), a central dashboard to manage clusters from anywhere
- Sunlight Marketplace, provides common pre-Installed application recipes for rapid deployment
- Altos BrainSphereTM Server, including Altos BrainSphereTM R320 F5, R389 F4, R365 F5, R385 F5 and R685 F5.

AltosCloud HCI can support most applications anywhere from the edge to the data center.

### What edition does AltosCloud HCI provide?

**ANSWER:** There are two AltosCloud HCI editions:

- AltosCloud HCI Datacenter edition
- AltosCloud HCI Edge edition

**What difference between the editions?**

**ANSWER:** The only different is the CPU core count. There is no difference in terms of features.

- AltosCloud HCI Datacenter edition, when CPU vcore > 16
- AltosCloud HCI Edge edition, when CPU vcore <= 16

AltosCloud HCI Edge edition is ideal for SMB (small and medium-sized business) or Edge deployment use cases.

**Do you have management software to manage AltosCloud HCI nodes?**

**ANSWER:** AltosCloud HCI provides a web interface dashboard. You can use the dashboard to manage your AltosCloud HCI cluster. AltosCloud HCI also provides SIM (Sunlight Infrastructure Manager) for you to manage multiple AltosCloud HCI clusters.

**Does AltosCloud HCI protect data through hardware RAID?**

**ANSWER:** No, AltosCloud HCI does not need hardware RAID. Currently, AltosCloud HCI provides data mirroring across physical nodes via SDS (software-defined storage). You can disable or enable replication (mirroring) with the resource group failover policy. The function is easy to control and manage through the AltosCloud HCI dashboard.

**What is the minimum node required for AltosCloud HCI?**

**ANSWER:** AltosCloud HCI can be deployed in several configurations from single node to large multi-nodes cluster (Up to 8 nodes). For high availability, the best practice of minimum node is a two-node configuration. This allows one node failure and provide storage redundancy.

**How to properly estimate the useful capacity of AltosCloud HCI?**
ANSWER: About the two-node configuration, all data is protected with replication. For example, 2 x 2TB drives are installed per node. The usable capacity would be 2 (node) x 2 x 2TB x 0.9 / 2 = 3.6TB (0.9 is conversion of decimal to binary).

**How to deploy virtual machine on AltosCloud HCI?**

**ANSWER:** There are several ways to deploy a virtual machines on AltosCloud HCI.

- You can deploy virtual machine on AltosCloud HCI using existing templates from Sunlight (http://docs.sunlight.io/template_management/). Then, follow the steps to deploy virtual machine (http://docs.sunlight.io/instances)
- If you want to deploy virtual machine with your own ISO image, please import the image through the local template server (http://docs.sunlight.io/local_template_server/)

**If we want to add more resources to the AltosCloud HCI cluster, such as more memory capacity or more NVMe SSD drives, can we just add hardware directly? What else do we need to configure?**

**ANSWER:** Adding new hardware resources to the AltosCloud HCI cluster are straight forwards, including upgrade CPU, add more capacity of memory, or add more NVMe SSD drives.

## License

### What are the license types?

**ANSWER:** AltosCloud HCI license is based on per node. Not by CPU sockets or CPU cores. There are two editions: AltosCloud HCI Datacenter edition and AltosCloud HCI Edge edition, with different subscription prices. The license is a subscription-based license and includes platform support, maintenance, and upgrades during the subscription period.

### Can I use AltosCloud HCI without license?
**ANSWER:** AltosCloud HCI requires activation before you can use it. Please contact your SI or the Altos contact window for the license.

## Network

### I see only a pair of Physical NIC 0 and Physical NIC 1 in Network of AltosCloud HCI Dashboard. Does it apply to physical NIC 0 & NIC 1 of all nodes?

| | Name | ⓘ Types | DHCP | IP Address Start | IP Address End | Gateway | DHCP Server IP | VLAN | Network Prefix |
|---|---|---|---|---|---|---|---|---|---|
| | Physical NIC 0 | ● | Static | 192.168.50.50 | 192.168.50.80 | 192.168.50.254 | - | - | 192.168.50.0/24 |
| | Physical NIC 1 | ● | External | - | - | - | - | - | - |
| | internal_net_with_NAT | ● | Internal | 192.168.7.3 | 192.168.7.100 | 192.168.7.1 | 192.168.7.2 | - | 192.168.7.0/24 |

**ANSWER:** Yes, it is referring to all nodes. All nodes in the AltosCloud HCI cluster should have the same configuration, such as # of disk drives, # of NICs. The Physical NIC 0 and Physical NIC 1 present all eth0 and eth1 network ports of nodes in the cluster.

## High Availability

### How does AltosCloud HCI support HA (High Availability)?

**ANSWER:** Please refer to the URL **http://docs.sunlight.io/high_availability**, the diagram on this page should be a good reference. The deployment using this architecture can provide full high availability of node, network and storage. (Note. the dual network switches shown in the diagram is for the switch redundancy, which is not the requirement of AltosCloud HCI)

- Node level, supports cluster controller failover that can ensure the administration dashboard is available when the any of the nodes fail. The cluster controller will also restart VMs from any failed node to the other node
- Network level, physical NIC failover policy, including the support of VLAN
- Disk level, supports two replicas for data protection

## More Information

### Where can I get more information about AltosCloud HCI?

**ANSWER:** Since AltosCloud HCI is based on Sunlight NexVisor HCI, if you want to know more about AltosCloud HCI, please refer to the following URL.

- **FAQ https://docs.sunlight.io/faqs/**

- **User Guide [https://docs.sunlight.io/](https://docs.sunlight.io/)**
- **YouTube channel [https://www.youtube.com/channel/UC0MviqGnG5-vLDD1u-fcupw](https://www.youtube.com/channel/UC0MviqGnG5-vLDD1u-fcupw)**
- **Supported features [http://docs.sunlight.io/supported_features_4.0.20/](http://docs.sunlight.io/supported_features_4.0.20/)**
- **Performance Benchmarks [https://performance.sunlight.io/](https://performance.sunlight.io/)**

## Documents / Resources

| | |
|---|---|
| AltosCloud HCI FAQ<br><br>Version 1.0 | **[ALTOS AltosCloud HCI FAQ](#)** [pdf] User Manual<br>AltosCloud HCI FAQ, AltosCloud HCI, FAQ |

## References

- **[Configure for High Availability - Sunlight Enterprise Platform](#)**
- **[Instances & Clusters - Sunlight Enterprise Platform](#)**
- **[Local Template Server - Sunlight Enterprise Platform](#)**
- **[Supported Features for version 4.0.20 - Sunlight Enterprise Platform](#)**
- **[Instance Template Management - Sunlight Enterprise Platform](#)**
- **[Sunlight Enterprise Platform](#)**
- **[FAQs - Sunlight Enterprise Platform](#)**
- **[Sunlight Performance Benchmarks](#)**