

# Suggested Specifications

There are many factors that determine how many virtual servers you can run. Below you can find specifications for a Medium Production Cloud as well the requirements for Integrated Storage.

An OnApp installation requires at least two physical machines – one for the Control Panel server, and the other for the compute resource server. You can have as many compute resource servers as you need. You will also need storage for your virtual servers (a data store), and we recommend that you set up a separate server for storing backups and templates.

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## See also:

[Server Config Reminder - supported versions of the servers](#)

[Supported Functionality](#)

[Software Requirements](#)




[Recommended Network Configurations](#)

[Types of Cloud Service with OnApp](#)

## Need more help?

With the full version of OnApp Cloud you get free support from our integrations team to spec the exact hardware you'll need for your cloud deployment.

## Suggested Specifications

<b>OnApp License</b>		Cloud
<b>Number of Control Panel (CP) Servers</b>		1
<b>Separate Database Server/Cluster</b>		No
<b>Dedicated Backup Servers</b>		1
<b>Number of Compute Resources (XEN/KVM)</b>		8
<b>Compute Resource Type (Static / Cloudboot)</b>		Cloudboot
<b>CP Server</b> 	<b>Processor</b>	2 x 8 Core CPUs eg. Xeon e5-2640 v3
	<b>Memory</b>	32GB RAM
	<b>Disks</b>	4 x 100GB SSD
	<b>RAID Configuration</b>	RAID 10
	<b>Network Adapters</b>	Dual port 1Gps + Dual Port 10Gbps eg. Intel I350 + X520
<b>Backup Server</b> 	<b>Processor</b>	2 x 8 Core CPUs eg. Intel Xeon e5-2620 v3
	<b>Memory</b>	32GB RAM
	<b>HDDs</b>	12x2TB SAS
	<b>RAID</b>	RAID10
	<b>Network Interfaces</b>	Dual port 1Gbp Intel NIC + Dual port 10Gbps Intel NIC
<b>Compute Resource</b> 	<b>Processor</b>	2 x 8 Core CPUs eg. Xeon e5-2640 v3
	<b>Memory</b>	256GB
	<b>HDDs</b>	8 x 400GB SSD
	<b>RAID Controller</b>	PCIe gen3 eg. PERC H730, 1GB cache
	<b>RAID Configuration</b>	JBOD

	<b>Network Interfaces</b>	4 x 10Gbps eg.
<b>iSCSI SAN</b>	<b>Type</b>	Optional Dual-Controller Hardware SAN
	<b>HDDs</b>	12+ x SSD
	<b>RAID Configuration</b>	RAID10
<b>Network Hardware</b>		2 x High performance switch with: 48 x 10GbE ports, 4 x 40 GbE ports

## Storage Hardware Requirements

If you are going to use OnApp [Integrated Storage](#), make sure to meet the following requirements:

<b>Integrated Storage Platform</b>	<b>Local Storage Only</b>	<b>Enterprise SAN</b>
<ul style="list-style-type: none"> <li>OnApp Integrated Storage can group together any number of drives across any compute resource. We strongly recommend a minimum of 2 drives per compute resource to enable redundant data store configurations.</li> <li>At least 1 dedicated NIC assigned per compute resource for the storage network (SAN)</li> <li>IGMP snooping must be disabled on storage switch for storage network</li> </ul>	<ul style="list-style-type: none"> <li>minimum 1 dedicated partition in each compute resource</li> <li>separate disk from the primary OS drive <i>recommended</i></li> </ul>	<ul style="list-style-type: none"> <li>centralised Block Storage SAN (iSCSI, ATA over Ethernet or Fibre Channel) accessible to every compute resource</li> <li>at least 1 dedicated 1Gbit/s NIC assigned per compute resource for the SAN</li> <li>multiple NICs bonded or 10Gbit/s ethernet <i>recommended</i></li> </ul>