Storage limits for ONTAP Cloud 9.3

Cloud Volumes ONTAP

Ben Cammett
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Storage limits for ONTAP Cloud 9.3

ONTAP Cloud has storage configuration limits to provide reliable operations. For best performance, do not configure your system at the maximum values.

The following sections list limits for aggregates, volumes, LUNs, and related storage objects. Note that the maximum capacity for an ONTAP Cloud system is model specific. ONTAP Cloud configurations that support a lower raw capacity limit cannot reach some of the size and disk limits.

Physical storage limits for ONTAP Cloud in AWS

Physical storage	Parameter	Limit
Aggregates and disks	Maximum number of aggregates	34 for single-node configurations 18 per node in an HA configuration [1]
	Maximum aggregate size	96 TB of raw capacity
	Disks per aggregate	1-6 [2]
	Maximum disk size	16 TB
	Maximum number of data disks across all aggregates [3]	34 for single-node configurations 31 per node in an HA configuration
RAID groups	Maximum per aggregate	1

Notes:

1. It is not possible to create 18 aggregates on both nodes in an HA pair because doing so would exceed the data disk limit.
2. All disks in an aggregate must be the same size.
3. The data disk limit is specific to disks that contain user data. The boot disk and root disk for each node are not included in this limit.

Physical storage limits for ONTAP Cloud in Azure

Physical storage	Parameter	Limit
Aggregates and disks	Maximum number of aggregates	63
	Maximum aggregate size	200 TB of raw capacity
	Disks per aggregate	1-12 [1]
	Maximum disk size	32 TB
	Maximum number of data disks across all aggregates [2]	• DS3_v2: 15 • DS4_v2: 31 • DS5_v2: 63 • DS13_v2: 31 • DS14_v2: 63
RAID groups	Maximum per aggregate	1

Notes:

1. All disks in an aggregate must be the same size.
2. The data disk limit is specific to disks that contain user data. The boot disk and root disk for each node are not included in this limit.

Logical storage limits

Logical storage	Parameter	Limit
Storage virtual machines (SVMs)	Maximum number for ONTAP Cloud (HA pair or single node)	One data-serving SVM and one destination SVM used for disaster recovery. You can activate the destination SVM for data access if there's an outage on the source SVM. [1] The one data-serving SVM spans the entire ONTAP Cloud system (HA pair or single node).
Files	Maximum size	16 TB
	Maximum per volume	Volume size dependent, up to 2 billion
FlexClone volumes	Hierarchical clone depth [2]	499
FlexVol volumes	Maximum per node	500
	Minimum size	20 MB
	Maximum size	AWS: Dependent on the size of the aggregate [3] Azure: 100 TB
Qtrees	Maximum per FlexVol volume	4,995
Snapshot copies	Maximum per FlexVol volume	255

Notes:

1. Cloud Manager does not provide any setup or orchestration support for SVM disaster recovery. It also does not support storage-related tasks on an additional SVM. You must use System Manager or the CLI for SVM disaster recovery.
   - SVM Disaster Recovery Preparation Express Guide
   - SVM Disaster Recovery Express Guide
2. Hierarchical clone depth is the maximum depth of a nested hierarchy of FlexClone volumes that can be created from a single FlexVol volume.
3. Less than 100 TB is supported because aggregates for this configuration are limited to 96 TB of *raw* capacity.

iSCSI storage limits

iSCSI storage	Parameter	Limit
LUNs	Maximum per node	1,024
	Maximum number of LUN maps	1,024
	Maximum size	16 TB
	Maximum per volume	512
igroups	Maximum per node	256
Initiators	Maximum per node	512
	Maximum per igroup	128
iSCSI sessions	Maximum per node	1,024
LIFs	Maximum per port	32
	Maximum per portset	32
Portsets	Maximum per node	256

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