volume

The volume commands let you work with volumes, snapshots and mirrors:

- volume audit enables auditing on a volume
- volume container move moves a container.
- volume container switchmaster switches the master replica for a specified container to another replica in the replica chain.
- volume create creates a volume
- volume dump create creates a volume dump
- volume dump restore restores a volume from a volume dump
- volume info displays information about a volume
- volume link create creates a symbolic link
- volume link remove removes a symbolic link
- volume list lists volumes in the cluster
- volume mirror push pushes a volume's changes to its local mirrors
- volume mirror start starts mirroring a volume
- volume mirror stop stops mirroring a volume
- volume modify modifies a volume
- volume mount mounts a volume
- volume move moves a volume
- volume remove removes a volume
- volume rename renames a volume
- volume showmounts shows the mount points for a volume
- volume snapshot create creates a volume snapshot
- volume snapshot list lists volume snapshots
- volume snapshot preserve prevents a volume snapshot from expiring
- volume snapshot remove removes a volume snapshot
- volume unmount unmounts a volume
- volume upgradeformat upgrades an old-type volume to the new format

Fields

The following table lists the data fields that provide information about each volume. Each field has two names:

- Field name - displayed in the output of the `volume list` command and used to specify the columns displayed using the `columns` para meter
- Short name - used to specify the columns displayed using the `columns` parameter

The short name is also used when specifying rows with a filter, for example when specifying a set of volumes about which to get information.

coalesceInterval The interval of time during which only the first instance of an operation on a node is recorded in audit logs, if auditing is enabled. Subsequent identical operations performed on the same node are ignored during the interval. Setting this field to a larger number helps prevent audit logs from growing quickly.The default value is 60 minutes.

actualreplication	arf	The actual current replication factor by percentage of the volume, as a zero-based array of integers from 0 to 100. For each position in the array, the value is the percentage of the volume that is replicated index number of times. Example: arf=5,10,85 means that 5% is not replicated, 10% is replicated once, 85% is replicated twice.
advisoryquota	aqt	A value of 0 indicates there are no soft or advisory quotas for this volume
AdvisoryQuotaExceededAlarm		Alarm raised if the volume size is more than the value configured for the advisory quota.
aename	aen	Accountable entity name
aetype	aet	Accountable entity type:
AlmostFullTopologyAlarm		Alarm raised if the topology disk usage exceeds the value configured for the almost full percentage.
audited	ea	A value of 1 indicates that auditing is enabled for the volume. See Enabling Auditing for the steps to enable auditing on a volume and on directories, files, and tables in that volume.
coalesceInterval	ci	The interval of time during which only the first instance of an operation on a node is recorded in audit logs, if auditing is enabled. Subsequent identical operations performed on the same node are ignored during the interval. Setting this field to a larger number helps prevent audit logs from growing quickly. The default value is 60 minutes.

ContainersNonLocalAlarm		Volume is local but does not have any containers on the local node.
creator	on	Name of the user that created the volume
creatorcontainerid		ID for the container.
creatorvolumeuuid		ID that supports the container chain identification for mirroring. The creatorcontainerid and creatorvolumeuuid fields combined form a unique identifier for the container chain.
DataUnavailableAlarm		Alarm raised if the data is not available.
DataUnderReplicatedAlarm		Alarm raised if the data is under replication.
dbrepllagsecalarmthresh		Defines the lag time in seconds for replication after which the "Table Replication Lag High" alarm is raised.
FullTopologyAlarm		Alarm raised if the topology disk usage is 100%.
InodesExceededAlarm		Number of files in the volume has been exceeded. the threshold (50 million).
lastSuccessfulMirrorTime		Last time when the mirror completed successfully.
limitspread		An internal flag for MapR volumes to control the growth of volumes in terms of the number of containers. When this flag is set, CLDB tried to limit the numb of new containers created depending on the present size of the volume. If the volume size (the data in the volume) is small, the CLDB tries to reuse space in existing containers thus avoiding the creation of new containers.
localpath		Topology of the volume
logicalUsed	dlu	Logical size of disk used by this volume
maxinodesalarmthreshold	miath	The threshold of inodes in use that will set off the VOLUME_ALARM_INODES_EXCEEDED alarm
minreplicas	mrf	Minimum number of replicas before re-replication starts.
mirrorDataSrcCluster		Name of the cluster of the originator volume.
mirrorDataSrcVolume		Name of the originator volume. This is used to identify the mirror family in cascaded mirroring.
mirrorDataSrcVolumeId		ID of the originator volume.
MirrorFailureAlarm		Alarm raised if mirroring fails.
mirrorId		Current mirror ID of the volume.
mirror-percent-complete		Progress bar for the current mirror.
mirrorscheduleid		ID of the schedule that determines when the volume needs to be mirrored.
mirrorSrcCluster		Name of the source cluster from which the current mirroring will happen.
mirrorSrcVolume		Name of the source volume from which the current mirrroring will happen.
mirrorStatus		Status of the last mirror attempt.
mirrorthrottle		Flag to determine if the throttling need to be done on mirroring.
mirrortype		Determines the type of volume: • 0 - Read-write Volume • 1 - Mirror Volume • 2 - Mirror than can be converted to read-write • 3 - Read-write volume that can be converted to mirror
mountdir	p	The path the volume is mounted on
mounted	mt	A value of 1 indicates the volume is mounted
nameContainerSizeMB	ncsmb	
namespaceMinReplica	nsMinReplicas	Minimum replication level for the namespace container.

namespaceNumReplica	nsNumReplicas	Replication level for the namespace container.
needsGfsck	nfsck	A value of TRUE indicates this volume requires a filesystem check
nextMirrorId		Mirror ID that will be assigned if the mirroring successfully completes the next time.
NoNodesInTopologyAlarm		Alarm raised if there are no nodes in the topology where the volume belongs.
numcontainers		Number of containers that the volume has.
numreplicas	drf	Desired number of replicas. Containers with this amount of replicas are not re-replicated.
partlyOutOfTopology	poot	A value of 1 indicates this volume is partly out of its topology
quota	qta	A value of 0 indicates there are no hard quotas for this volume
QuotaExceededAlarm		Alarm raised if the volume size is more than the quota value.
rackpath	rp	The rack path for this volume
readonly	ro	A value of 1 indicates the volume is read-only
replicationtype	dcr	Replication type
reReplTimeOutSec	n/a	Timeout (in seconds) before attempting re-replication of replica containers. This volume property defines the timeout period until CLDB starts re-replicating the containers on the node of the volume when CLDB stops receiving a heartbeat from the node.
scheduleid	sid	The ID of the schedule, if any, used by this volume
schedulename	sn	The name of the schedule, if any, used by this volume
snapshotcount	sc	The number of snapshots for this volume
SnapshotFailureAlarm		Alarm raised if the snapshot fails.
snapshotused	ssu	Disk space used for all snapshots, in MB
TableReplicationAsyncAlarm		A table being replicated under this volume has its synchronous replica fall back to asynchronous mode replication
TableReplicationErrorAlarm		A table being replicated under this volume has encountered an error while trying to replicate.
TableReplicationLagHighAlarm		A table being replicated under this volume has high lag time while trying to replicate.
totalused		Total space used for volume and snapshots, in MB
used		Disk space used, in MB, not including snapshots
volumeid	id	The volume ID
volumename	n	The name of the volume
volumetype		The volume type: • 0 - Read-write volume • 1 - Mirror volume