

storage automated-working-set-analyzer commands

ONTAP 9.3 commands

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Table of Contents

storage automated-working-set-analyzer commands	1
storage automated-working-set-analyzer show	1
storage automated-working-set-analyzer start.	3
storage automated-working-set-analyzer stop	4
storage automated-working-set-analyzer volume show	5

storage automated-working-set-analyzer commands

storage automated-working-set-analyzer show

Display running instances

Availability: This command is available to *cluster* administrators at the *advanced* privilege level.

Description

The automated-working-set-analyzer show command displays the Automated Working-set Analyzer running instances.

Parameters

{ [-fields <fieldname>,...]

If you specify the -fields <fieldname>, ... parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

[-instance] }

If you specify the -instance parameter, the command displays detailed information about all fields.

[-node <nodename>] - Node Name (privilege: advanced)

This parameter indicates the node name that the AWA instance runs on.

[-flash-cache {true|false}] - Flash Cache Node-wide Modeling (privilege: advanced)

This parameter indicates whether the AWA is modeling flash-cache.

[-aggregate-uuid <UUID>] - Uuid of the Aggregate (privilege: advanced)

This parameter indicates the aggregate uuid that the AWA instance runs on.

[-aggregate <aggregate name>] - Aggregate (privilege: advanced)

This parameter indicates the aggregate name that the AWA instance runs on.

[-working-set-size {true|false}] - Working Set Size (privilege: advanced)

This parameter indicates whether the AWA instance is configured to find the working set size.

[-start-time <Date>] - Starting Time (privilege: advanced)

This parameter indicates the time when the AWA instance was started.

[-total-intervals <integer>] - Total Interval Count (privilege: advanced)

This parameter indicates the total number of intervals that the AWA instance has covered.

[-read-throughput {<integer>[Bps|KBps|MBps|GBps]}] - Read Throughput (privilege: advanced)

This parameter indicates the maximum read throughput over an interval that AWA has observed from the storage disks.

[-write-throughput {<integer>[Bps|KBps|MBps|GBps]}] - Write Throughput (privilege: advanced)

This parameter indicates the maximum write throughput over an interval that AWA has observed to the storage disks

[-cacheable-read <percent>] - Cacheable Read (privilege: advanced)

This parameter indicates the maximum percent of cacheable read over an interval that AWA has observed. Cacheable reads are non-sequential reads, i.e., the percentage of data reads that could have been cached.

[-cacheable-write <percent>] - Cacheable Write (privilege: advanced)

This parameter indicates the maximum percent of cacheable write over an interval that AWA has observed. Cacheable writes are random overwrites, percentage of disk writes that could have been cached.

[-projected-cache-size {<integer>[KB|MB|GB|TB|PB]}] - Max Projected Cache Size (privilege: advanced)

This parameter indicates the projected Flash Pool cache usage.

[-projected-read-hit <percent>] - Projected Read Hit (privilege: advanced)

This parameter indicates the percentage of blocks that could be read from the Flash Pool cache instead of HDDs.

[-projected-write-hit <percent>] - Projected Write Hit (privilege: advanced)

This parameter indicates the percentage of block overwrites that could go to the Flash Pool cache instead of HDDs.

[-referenced-interval-id <integer>] - Referenced Interval ID (privilege: advanced)

This parameter indicates the interval in which the cache size effect information is derived from.

[-referenced-interval-time <Date>] - Referenced Interval Time (privilege: advanced)

This parameter indicates the time when the referenced interval for the cache size effect information is derived from.

[-referenced-interval-cache-size {<integer>[KB|MB|GB|TB|PB]}] - Referenced Interval Cache Size (privilege: advanced)

This parameter indicates the cache size at the end of the referenced interval from which the cache size effect information is based on.

[-read-hit-20 <percent>] - 20% Cache Read Hit (privilege: advanced)

This parameter indicates the predicted read hit rate when the cache size is 20% of the referenced cache size.

[-read-hit-40 <percent>] - 40% Cache Read Hit (privilege: advanced)

This parameter indicates the predicted read hit rate when the cache size is 40% of the referenced cache size.

[-read-hit-60 <percent>] - 60% Cache Read Hit (privilege: advanced)

This parameter indicates the predicted read hit rate when the cache size is 60% of the referenced cache size.

[-read-hit-80 <percent>] - 80% Cache Read Hit (privilege: advanced)

This parameter indicates the predicted read hit rate when the cache size is 80% of the referenced cache size.

[-read-hit-100 <percent>] - 100% Cache Read Hit (privilege: advanced)

This parameter indicates the predicted read hit rate when the cache size is 100% of the referenced cache size.

[-write-hit-20 <percent>] - 20% Cache Write Hit (privilege: advanced)

This parameter indicates the predicted write hit rate when the cache size is 20% of the referenced cache size.

[-write-hit-40 <percent>] - 40% Cache Write Hit (privilege: advanced)

This parameter indicates the predicted writehit rate when the cache size is 40% of the referenced cache size.

[-write-hit-60 <percent>] - 60% Cache Write Hit (privilege: advanced)

This parameter indicates the predicted write hit rate when the cache size is 60% of the referenced cache size.

[-write-hit-80 <percent>] - 80% Cache Write Hit (privilege: advanced)

This parameter indicates the predicted write hit rate when the cache size is 80% of the referenced cache size.

[-write-hit-100 <percent>] - 100% Cache Write Hit (privilege: advanced)

This parameter indicates the predicted write hit rate when the cache size is 100% of the referenced cache size.

Examples

The following example shows a running instance of automated-working-set-analyzer on node *node1* for aggregate *aggr0*.

storage automated-working-set-analyzer start

Command to start Automated Working Set Analyzer on node or aggregate

Availability: This command is available to *cluster* administrators at the *advanced* privilege level.

Description

The automated-working-set-analyzer start command enables the Automated Workload Analyzer that is capable of doing the following:

- Flash Pool modeling for an aggregate
- Flash Cache modeling for a node can not specify an aggregate.
- · Working set size estimation
- Workload monitoring

Parameters

```
-node <nodename> - Node Name (privilege: advanced)
```

This parameter indicates the node name that the AWA instance runs on.

```
[-flash-cache {true|false}] - Flash Cache Node-wide Modeling (privilege: advanced)
This parameter indicates whether the AWA is modeling flash-cache.
```

```
[-aggregate <aggregate name>] - Aggregate (privilege: advanced)
```

This parameter indicates the aggregate name that the AWA instance runs on.

[-working-set-size {true|false}] - Working Set Size (privilege: advanced)

This parameter indicates whether the AWA instance is configured to find the working set size.

Examples

```
cluster1::> storage automated-working-set-analyzer start -node vsim1
-aggregate aggr0
```

storage automated-working-set-analyzer stop

Command to stop Automated Working Set Analyzer on node or aggregate

Availability: This command is available to *cluster* administrators at the *advanced* privilege level.

Description

The storage automated-working-set-analyzer stop command terminates one or multiple Automated Workload Analyzer running instances.

Parameters

```
-node <nodename> - Node Name (privilege: advanced)
```

This parameter indicates the node name that the AWA instance runs on.

[-flash-cache {true|false}] - Flash cache node-wide modeling (privilege: advanced) This parameter indicates whether the AWA is modeling flash-cache.

[-aggregate <aggregate name>] - Aggregate (privilege: advanced)

This parameter indicates the aggregate name that the AWA instance runs on.

Examples

```
cluster1::> storage automated-working-set-analyzer stop -node vsim1
-aggregate aggr1
```

storage automated-working-set-analyzer volume show

Displays the Automated Working Set Analyzer volume table

Availability: This command is available to *cluster* administrators at the *advanced* privilege level.

Description

The automated-working-set-analyzer volume show command displays the volume statistics reported by the corresponding Automated Working-set Analyzer running instances.

Parameters

{ [-fields <fieldname>,...]

If you specify the -fields <fieldname>, ... parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

[[-instance] }

If you specify the -instance parameter, the command displays detailed information about all fields.

[-node <nodename>] - Node (privilege: advanced)

This parameter indicates the node name that the AWA instance runs on.

[-flash-cache {true|false}] - Flash Cache Node-wide Modeling (privilege: advanced)

This parameter indicates whether the AWA is modeling flash-cache.

[-vol-uuid <UUID>] - Uuid of the Volume (privilege: advanced)

This parameter indicates the volume uuid that this command is issued on.

[-aggregate <aggregate name>] - Aggregate (privilege: advanced)

This parameter indicates the aggregate name that the AWA instance runs on.

[-volume <volume name>] - Volume (privilege: advanced)

This parameter indicates the volume name that this command is issued on.

[-rank <integer>] - Cache Benefit Rank (privilege: advanced)

This parameter indicates the rank of this volume among all volumes that would be most benefited by the modeled cache technology based on the AWA prediction.

[-read-throughput {<integer>[Bps|KBps|MBps|GBps]}] - Read Throughput (privilege: advanced)

This parameter indicates the maximum read throughput over an interval that AWA has observed from the storage disks for this volume.

[-write-throughput {<integer>[Bps|KBps|MBps|GBps]}] - Write Throughput (privilege: advanced)

This parameter indicates the maximum write throughput over an interval that AWA has observed to the storage disks for this volume.

[-cacheable-read <percent>] - Cacheable Read (privilege: advanced)

This parameter indicates the maximum percent of cacheable read over an interval that AWA has observed for this volume. Cacheable reads are non-sequential reads, i.e., the percentage of data reads that could have been cached.

[-cacheable-write <percent>] - Cacheable Write (privilege: advanced)

This parameter indicates the maximum percent of cacheable write over an interval that AWA has observed. Cacheable writes are random overwrites, percentage of disk writes that could have been cached.

[-projected-cache-size {<integer>[KB|MB|GB|TB|PB]}] - Max Projected Cache Size (privilege: advanced)

This parameter indicates the projected Flash Pool cache usage by this volume.

[-projected-read-hit <percent>] - Projected Read Hit (privilege: advanced)

This parameter indicates the percentage of blocks that could be read from the Flash Pool cache instead of HDDs for this volume.

[-projected-write-hit <percent>] - Projected Write Hit (privilege: advanced)

This parameter indicates the percentage of block overwrites that could go to the Flash Pool cache instead of HDDs for this volume.

Examples

cluster1::> c	luster	-1::*> storage	e automated-wo	orking-	-set-analyzer volume
show					
Node	FC	Aggregate	Volume	Rank	Read Thrupt Write
Thrupt					
vsiml	false	aggr0	volO	1	230.47KBps
580.09KBps					

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