# **■** NetApp

## volume rebalance commands

ONTAP 9.11.1 commands

NetApp February 12, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap-cli-9111/volume-rebalance-file-move-abort.html on February 12, 2024. Always check docs.netapp.com for the latest.

## **Table of Contents**

olume rebalance commands	1
volume rebalance file-move abort	1
volume rebalance file-move modify	2
volume rebalance file-move show	4
volume rebalance file-move start	10
volume rebalance file-move statistics reset	12
volume rebalance file-move statistics show	15

## volume rebalance commands

### volume rebalance file-move abort

Abort a file-move operation that is in progress

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

#### **Description**

The volume rebalance file-move abort command aborts a file-move operation that has been started and is in progress.

A file-move operation goes through different stages as part of the move operation. During the cutover stage of the file-move operation, the actual file is created at the destination FlexGroup constituent, after which the data blocks are transferred. Once the file is created at the destination FlexGroup constituent, the file is visible in the namespace of the FlexGroup volume. If the file-move operation has entered the cutover stage, it cannot be aborted.

The volume rebalance file-move abort command is only supported on FlexGroup volumes. For a given FlexGroup volume, there can be many file-move operations that are currently in progress for different sets of constituents. The parameters for this command provide a way to identify a particular file-move operation within a FlexGroup volume.

#### **Parameters**

- -vserver <vserver name> Vserver Name (privilege: advanced)
  - Identifies the Vserver that contains the FlexGroup volume involved in the file-move operation.
- -volume <volume name> Volume Name (privilege: advanced)

Identifies the FlexGroup volume that is hosting the file being moved in the file-move operation.

- -path <text> Path (privilege: advanced)
  - Identifies the path to the file being moved within the FlexGroup volume.
- -destination-constituent <volume name> Destination Constituent Volume (privilege: advanced)

  Identifies the destination constituent name of the FlexGroup volume where the file is being moved.
- [-operation-uuid <UUID>] Operation UUID (privilege: advanced)

If specified, this parameter identifies the UUID of the file-move operation. Use the volume rebalance file-move show command to obtain the UUID for a file-move operation.

#### **Examples**

The following example aborts a file-move operation for the file "/system/build/image.tgz" within the FlexGroup volume "bld volume":

```
cluster1::*> volume rebalance file-move abort -vserver vs0 -volume
bld_volume -path /system/build/image.tgz -destination-constituent
bld_volume__0005
File-move operation cancelled.
```

The following example aborts the file-move operation in progress for the file "/system/build/image.tgz" within the FlexGroup "bld volume". The UUID of the file-move operation is also provided:

```
cluster1::*> volume rebalance file-move abort -vserver vs0 -volume
bld_volume -path /system/build/image.tgz -destination-constituent
bld_volume__0005 -operation-uuid f8d780b4-32fc-4053-be5e-2f6edc0a652b
File-move operation cancelled.
```

The following example attempts to abort the file-move operation for the file "/system/build/image.tgz" within the FlexGroup volume "bld\_volume". However, the file-move operation could not be aborted as it is past the cutover stage of the operation. A file-move operation can only be aborted if it has not entered the cutover stage:

#### **Related Links**

· volume rebalance file-move show

### volume rebalance file-move modify

Modify a file-move operation

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

### **Description**

The volume rebalance file-move modify command modifies certain attributes of a file-move operation that is currently in progress. Specifically, the maximum throughput allowed on a particular file-move operation can be modified, and the data transfer of a file-move operation can be paused or resumed.

The volume rebalance file-move modify command is only supported on FlexGroup volumes. For a given FlexGroup volume, there can be many file-move operations that are currently in progress for different sets of constituents. The parameters for this command provide a way to identify a particular file-move operation within a FlexGroup volume.

#### **Parameters**

#### -vserver <vserver name> - Vserver Name (privilege: advanced)

Identifies the Vserver that contains the FlexGroup volume involved in the file-move operation.

#### -volume <volume name> - Volume Name (privilege: advanced)

Identifies the FlexGroup volume that is hosting the file being moved in the file-move operation.

#### -path <text> - Path (privilege: advanced)

Identifies the path to the file being moved within the FlexGroup volume. This parameter can be specified with the <code>-destination-constituent</code> parameter to identify a particular file-move operation within a FlexGroup volume.

#### -destination-constituent <volume name> - Destination Constituent Volume (privilege: advanced)

Identifies the destination constituent name of the FlexGroup volume where the file is being moved. This parameter can be specified with the <code>-path</code> parameter to identify a particular file-move operation within a FlexGroup volume.

#### [-operation-uuid <UUID>] - Operation UUID (privilege: advanced)

Identifies the UUID of the file-move operation. Use the volume rebalance file-move show command to obtain the UUID for a file-move operation. This parameter can be specified in addition to the <code>-path</code> and <code>-destination-constituent</code> parameters to identify a particular file-move operation if there are multiple ongoing operations involving the same path and destination constituent.

#### [-max-throughput {<integer>[KB|MB|GB|TB|PB]}] - Maximum Scanner Speed (privilege: advanced)

If specified, this parameter will modify the rate limit for the data transfer in bytes per second. A non-zero value less than 1 MB/s will be set to 1 MB/s. A non-zero value greater than 1 MB/s will be truncated to the nearest integral megabyte value. A value of "0" specifies that no range will be set for the data transfer. This value does not represent a throughput the system will guarantee, but a limit that cannot be exceeded.

#### [-scanner-paused {true|false}] - Scanner Paused (privilege: advanced)

If specified, the data transfer of the file-move operation will be paused or resumed. Using a value of false will pause the data transfer while using a value of true will resume the data transfer.

### **Examples**

The following example modifies the maximum throughput of the ongoing file-move operation for the file "/system/build/image.tgz" within the FlexGroup volume "bld\_volume". -path and -destination -constituent are used to identify the particular file-move operation:

cluster1::\*> volume rebalance file-move modify -vserver vs0 -volume bld\_volume -path /system/build/image.tgz -destination-constituent bld\_volume\_\_0005 -max-throughput 2MB The following example pauses the data transfer of the ongoing file-move operation for the file "/system/build/image.tgz" within the FlexGroup volume "bld\_volume". This stops any further data from being transferred from the source volume to the destination volume:

```
cluster1::*> volume rebalance file-move modify -vserver vs0 -volume
bld_volume -path /system/build/image.tgz -destination-constituent
bld_volume__0005 -scanner-paused true
```

The following example resumes the data transfer of a paused file-move operation for the file "/system/build/image.tgz" within the FlexGroup volume "bld\_volume". -path and -destination -constituent are used to identify the particular file-move operation:

```
cluster1::*> volume rebalance file-move modify -vserver vs0 -volume
bld_volume -path /system/build/image.tgz -destination-constituent
bld_volume__0005 -scanner-paused false
```

#### **Related Links**

volume rebalance file-move show

### volume rebalance file-move show

Display a list of files being moved

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

### **Description**

The volume rebalance file-move show command displays a list of files being moved between the FlexGroup Constituents.

The volume rebalance file-move show command is only supported on FlexGroup volumes. The command displays information about each ongoing file-move operation, as well as any file-move operations that have completed, failed or have been cancelled within the last two minutes. For all file-move operations matching the specified parameters, the command displays the following information:

- Vserver name
- · Volume name
- · File Path
- Source Constituent Volume
- · Destination Constituent Volume
- Current status of the file-move operation ("Preparing", "Data-Transfer", "Paused", "Complete", "Failed" or "Terminated-Manual")
- Percentage of total data bytes transferred to the destination

To display detailed information about each file-move operation, run the command with the -instance

parameter. The detailed view provides the following information:

- Vserver Name
- Volume Name
- Destination Constituent Volume
- Source Constituent Volume
- Destination Constituent Node
- · Source Constituent Node
- Operation Status: Current status of the file-move operation ("Preparing", "Data-Transfer", "Paused", "Complete", "Failed" or "Terminated-Manual")
- Scanner Progress Percentage
- Operation UUID: UUID of the overall file-move operation
- · Source Operation UUID: UUID used to identify the file-move operation on the source constituent
- File Path: Path of the file being moved
- Source Constituent Master Data Set ID
- · Source Constituent Data Set ID
- · Source File ID: ID of the inode on the source constituent
- Source Generation: Generation number of the inode on the source constituent
- Destination File ID: ID of the inode on the destination constituent
- Destination Data Set ID
- Destination Master Data Set ID
- Destination Generation: Generation number of the inode on the destination constituent
- · Maximum Scanner Speed (per sec): Maximum throughput of the data scanner
- · Scanner Paused: Displays information if the underlying data transfer scanner is paused
- Scanner Status: The current stage of the underlying data transfer scanner ("Preparing", "Allocation-Map", "Data", "Destroying", "Paused-Manual", "Paused-Error", "Complete", "Terminated-Manual" or "Destroyed")
- · Scanner Progress: Number of bytes transferred
- Scanner Total: Total number of bytes to be transferred
- Data Scanner Priority: Priority of the data scanner assigned to the file-move operation (high or low)
- Elapsed Time
- · Cutover Time: Time elapsed during the cutover stage of the file-move operation, in seconds
- Is Snapshot Fenced: Whether snapshots are fenced for the file-move operation
- Is Destination Ready: Whether the destination volume is ready for the file-move operation
- · Last Failure Time
- · Last Failure Reason

You can specify parameters from the above list to display information. For example, to display information only about paused operations, run the command with the -status Paused parameter.

#### **Parameters**

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

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

#### |[-instance]}

If this parameter is specified, the command displays the additional detailed information described above.

#### [-vserver <vserver name>] - Vserver Name (privilege: advanced)

If this parameter and the -volume parameter are specified, the command displays the file-move operations on the specified volume. If this parameter is specified by itself, the command displays the file-move operations on all volumes on the specified Vserver.

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

If this parameter and the <code>-vserver</code> parameter are specified, the command displays the file-move operations on the specified volume. If this parameter is specified by itself, the command displays the file-move operations on all volumes matching the specified name.

## [-destination-constituent <volume name>] - Destination Constituent Volume (privilege: advanced)

If this parameter is specified, the command displays only the file-move operations with the specified destination FlexGroup constituent name.

#### [-operation-uuid <UUID>] - Operation UUID (privilege: advanced)

If this parameter is specified, the command displays only the file-move operation with the specified operation UUID.

#### [-destination-node <nodename>] - Destination Constituent Node (privilege: advanced)

If this parameter is specified, the command displays only file-move operations for files being moved to the specified destination node.

#### [-destination-dsid <integer>] - Destination Constituent DSID (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified destination volume data set ID.

#### [-source-constituent <volume name>] - Source Constituent Volume (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified source FlexGroup constituent name.

#### [-source-operation-uuid <UUID>] - Source Operation UUID (privilege: advanced)

If this parameter is specified, the command displays only the file-move operation with the specified internal source job operation UUID.

#### [-source-node <nodename>] - Source Constituent Node (privilege: advanced)

If this parameter is specified, the command displays only file-move operations for files being moved from the specified source node.

#### [-source-dsid <integer>] - Source Constituent DSID (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified source

## [-status {Preparing|Data-Transfer|Paused|Complete|Failed|Manually-Terminated}] - Operation Status (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified status ("Preparing", "Data-Transfer", "Paused", "Complete", "Failed" or "Terminated-Manual").

#### [-scanner-percent <percent>] - Scanner Progress Percentage (privilege: advanced)

If this parameter is specified, the command displays only file-move operations that have transferred the specified percentage of total bytes.

#### [-last-failure-reason <text>] - Last Failure Reason (privilege: advanced)

If this parameter is specified, the command displays only file-move operations whose last failure reason matches the specified string.

#### [-path <text>] - File Path (privilege: advanced)

If this parameter is specified, the command displays only file-move operations for files that match the specified path.

#### [-destination-msid <integer>] - Destination Constituent MSID (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified destination volume master data set ID.

#### [-destination-fileid <integer>] - Destination Fileid (privilege: advanced)

If this parameter is specified, the command displays only file-move operations pertaining to files with the specified file ID on the destination constituent.

#### [-destination-generation <integer>] - Destination Generation (privilege: advanced)

If this parameter is specified, the command displays only file-move operations pertaining to files with the specified generation number on the destination constituent.

#### [-source-msid <integer>] - Source Constituent MSID (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified source volume master data set ID.

#### [-source-fileid <integer>] - Source Fileid (privilege: advanced)

If this parameter is specified, the command displays only file-move operations pertaining to files with the specified file ID on the source constituent.

#### [-source-generation <integer>] - Source Generation (privilege: advanced)

If this parameter is specified, the command displays only file-move operations pertaining to files with the specified generation number on the source constituent.

## [-max-throughput {<integer>[KB|MB|GB|TB|PB]}] - Maximum Scanner Speed (per sec) (privilege: advanced)

If this parameter is specified, the command displays only file-move operations that use the specified value as the maximum scanner speed (in MB/s). This value does not represent a throughput the system will guarantee, but a limit that cannot be exceeded.

#### [-scanner-paused {true|false}] - Scanner Paused (privilege: advanced)

If this parameter is specified, the command displays only file-move operations that are paused (true) or unpaused (false).

## [-scanner-status {Preparing|Allocation-Map|Data|Destroying|Paused-Manual|Paused-Error|Complete|Destroyed|Terminated-Manual}] - Scanner Status (privilege: advanced)

If this parameter is specified, the command displays only file-move operations in the specified scanner stage ("Preparing", "Allocation-Map", "Data", "Destroying", "Paused-Manual", "Paused-Error", "Complete", "Terminated-Manual" or "Destroyed")

#### [-scanner-progress {<integer>[KB|MB|GB|TB|PB]}] - Scanner Progress (privilege: advanced)

If this parameter is specified, the command displays only file-move operations that have transferred the specified number of bytes.

#### [-scanner-total {<integer>[KB|MB|GB|TB|PB]}] - Scanner Total (privilege: advanced)

If this parameter is specified, the command displays only file-move operations with the specified total transfer size in bytes.

#### [-data-scanner-priority {high|low}] - Data Scanner Priority (privilege: advanced)

If this parameter is specified, the command displays only the file-move operations that give the data scanner high priority (high) or low priority (low).

#### [-elapsed-time <time\_interval>] - Elapsed Time (privilege: advanced)

If this parameter is specified, the command displays only file-move operations that have a matching <code>elapsed-time</code> interval. Specify an <code>elapsed-time</code> range by using the ".." operator between two values. For example, the following command displays file-move operations with <code>elapsed-time</code> between 2 hours and 3 hours 30 minutes:

volume rebalance file-move show -elapsed-time 2h..3h30m

+

Specify a comparative elapsed-time value using the ">" and "<" operators. For example, the following command displays the file-move operations with an elapsed-time greater than 5 hours and 30 minutes:

volume rebalance file-move show -elapsed-time >5h30m

## [-cutover-time <[<integer>m] [<integer>s]>] - Cutover Time (privilege: advanced)

If this parameter is specified, the command displays only the file-move operations with the specified cutover time.

#### [-is-snapshot-fenced {true|false}] - Is Snapshot Fenced (privilege: advanced)

If this parameter is specified, the command displays only the file-move operations with snapshots fenced (true) or unfenced (false).

#### [-is-destination-ready {true|false}] - Is Destination Ready (privilege: advanced)

If this parameter is specified, the command displays only the file-move operations for which the destination volume is ready (true) or not ready (false).

#### [-last-failure-time <MM/DD/YYYY HH:MM:SS>] - Last Failure Time (privilege: advanced)

If this parameter is specified, the command displays file-move operations that have a matching last-failure-time value. Use the format: "MM/DD/YYYY HH:MM:SS". Specify a time range by using the ".." operator between two time statements. For example, the following command displays file-move operations with a last-failure-time value between "08/13/2014 05:55:00" and "08/13/2014 06:10:00":

```
volume rebalance file-move show -last-failure-time "08/13/2021 05:55:00".."08/13/2021 06:10:00"
```

+

Specify a comparative last-failure-time value using the ">" and "<" operators. For example, the following command displays file-move operations with a last-failure-time value after "8/27/2021 14:58:00":

```
volume rebalance file-move show -last-failure-time >"8/27/2021 14:58:00"
```

### **Examples**

The following example displays information about all file-move operations on the Vserver named "vs1":

<pre>cluster1::volume rebalance file-move*&gt; show -vserver vs1 Vserver: vs1</pre>			vs1
Volume: fg1 Path Progress	Source	Destination	Status
/d1/d2/foo	fg1 0002	fg1 0003	Paused
0% /d1/d2/bar 100%	fg10002	 fg10004	Completed
Vserver: vs1 Volume: bld_volume Path Progress	Source	Destination	Status
/system/build/image.tgz	bld_volume(	0001 bld_volume(	0005 Data-Transfer
50% 3 entries were displayed.			

The following example displays detailed information about a specific file-move operation on Vserver vs0:

```
cluster1::volume rebalance file-move*> show -instance -vserver vs0 -volume
fg -path /test
  (volume rebalance file-move show)
Vserver Name: vs0
                   Volume Name: fg
 Destination Constituent Volume: fg 0001
                 Operation UUID: 283a983e-c06a-42bc-8bd7-8830211cb2a9
   Destination Constituent Node: sti96-vsim-ucs539i
   Destination Constituent DSID: 1635
      Source Constituent Volume: fg 0004
          Source Operation UUID: 283a983e-c06a-42bc-8bd7-8830211cb2a9
        Source Constituent Node: sti96-vsim-ucs539j
        Source Constituent DSID: 1638
               Operation Status: Paused
    Scanner Progress Percentage: 0%
            Last Failure Reason: -
                      File Path: /test
   Destination Constituent MSID: 2154447497
             Destination Fileid: 97
         Destination Generation: 247243720
        Source Constituent MSID: 2154447500
                  Source Fileid: 504
              Source Generation: 214935427
Maximum Scanner Speed (per sec): 1MB
                 Scanner Paused: true
                 Scanner Status: Paused-Manual
               Scanner Progress: 0B
                  Scanner Total: 10MB
          Data Scanner Priority: low
                   Elapsed Time: 0h2m27s
                   Cutover Time: 0s
             Is Snapshot Fenced: false
           Is Destination Ready: true
              Last Failure Time: -
```

### volume rebalance file-move start

Moves a file from one FlexGroup constituent to another

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

#### **Description**

The volume rebalance file-move start command initiates a retroactive file movement for a file residing in a FlexGroup volume in the given Vserver. You must provide the path to the file to be moved. Additional parameters may be used to control certain properties of the move operation. The parent directory's mtime may be modified by this command which may impact analytics mtime histogram. This command only takes NFS filenames and only UTF-8 encoding is supported.

The volume rebalance file-move start command is only supported on FlexGroup volumes.

#### **Parameters**

#### -vserver <vserver name> - Vserver Name (privilege: advanced)

Identifies the Vserver that contains the FlexGroup volume involved in this operation.

#### -volume <volume name> - Volume Name (privilege: advanced)

Identifies the FlexGroup volume that is hosting the file being moved in this operation.

#### -path <text> - Path (privilege: advanced)

Path to the file being moved within this FlexGroup volume.

## [-destination-constituent <volume name>] - Destination Constituent Volume (privilege: advanced)

Identifies the destination constituent name of the FlexGroup volume where the file is being moved to. The constituent must be a member of the same FlexGroup volume as the source constituent.

#### [-max-throughput {<integer>[KB|MB|GB|TB|PB]}] - Maximum Scanner Speed (privilege: advanced)

Specifies the range of the data transfer in bytes per second. A non-zero value less than 1 MB/s will be set to 1 MB/s. A non-zero value greater than 1 MB/s will be truncated to the nearest integral megabyte value. If unspecified, the default value is "0" which means no range will be set for the data transfer. This value does not represent a throughput the system will guarantee, but a limit that cannot be exceeded.

#### [-scanner-paused {true|false}] - Scanner Paused (privilege: advanced)

Specifies that the data scanner should not be started immediately when the move operations starts. If unspecified, the default value is "false". Use the volume rebalance file-move modify command to start the data scanner.

#### [-force <true>] - Force (privilege: advanced)

If this parameter is specified, the file move operation will break the existing lock state on the file and proceed. This may cause a disruption for some client applications.

#### **Examples**

In this example, a file-move operation is started for the file "/d1/d2/foo" within the FlexGroup volume "fg1" in vserver "vs0". The path is relative to the root directory of this FlexGroup volume, not the global namespace path of the file. In this example, the file is being moved to the destination constituent identified by the name "fg1\_\_0003".

cluster::volume rebalance file-move\*> start -vserver vs0 -volume fg1 -path /d1/d2/foo -destination-constituent fg1\_\_0003 File move started with operation-uuid f8d780b4-32fc-4053-be5e-2f6edc0a652b

#### **Related Links**

· volume rebalance file-move modify

### volume rebalance file-move statistics reset

Reset statistics for file-move operations between FlexGroup constituents

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

### **Description**

The volume rebalance file-move statistics reset command resets completed statistics for the file-move operations.

The volume rebalance file-move statistics reset command is only supported on FlexGroup volumes.

#### **Parameters**

#### -vserver <vserver name> - Vserver Name (privilege: advanced)

If this parameter and the -volume parameter are specified, the command resets statistics for the FlexGroup constituents on the specified volume. If this parameter is specified by itself, the command resets statistics for the FlexGroup constituents on all volumes on the specified Vserver.

#### -volume <volume name> - Volume Name (privilege: advanced)

If this parameter and the -vserver parameter are specified, the command resets statistics for the FlexGroup constituents on the specified volume. If this parameter is specified by itself, the command resets statistics for the FlexGroup constituents on all volumes matching the specified name.

### **Examples**

The following example resets completed statistics for all FlexGroup constituents on the FlexGroup volume "bld\_volume" in Vserver "vs0":

bld volume 0001			
- — In Progress:	1	10GB	0
0B			
Completed:	5	100GB	0
0B			
bld_volume0002			
In Progress:	0	0B	1
10GB			
Completed:	0	0B	10
150MB			
bld_volume0003			
In Progress:	1	10GB	0
0B			
Completed:	15	100GB	0
0B			
bld_volume0004		2-	_
In Progress:	0	0B	1
10GB	^	0.5	1.0
Completed:	0	0B	10
150MB			
bld_volume0005	٥	0.0	1
In Progress:	0	0B	1
10GB	0	0B	10
Completed: 150MB	U	OB	10
bld_volume0006 In Progress:	0	0B	1
10GB	U	0B	1
Completed:	0	0B	10
150MB	O	0.0	10
bld volume 0007			
In Progress:	0	0B	1
10GB	v	0.2	-
Completed:	0	0в	10
150MB			
bld volume 0008			
In Progress:	0	0B	1
10GB			
Completed:	0	0В	10
150MB			
cluster1::*> volume	rebalance file-mov	e statistics re	set -vserver vs0
-volume bld_volume			
( volume rebalance	file-move statisti	cs reset)	

cluster1::\*> volume rebalance file-move statistics show -vserver vs0
-volume bld volume

Vserver: vs0

Vserver: vs0			
Volume: bld_volume			
	Source	2	Destination
Constituent	Files	Bytes	Files
Bytes			
bld_volume0001			
In Progress:	1	10GB	0
0B			
Completed:	0	0B	0
0B			
bld volume 0002			
In Progress:	0	0B	1
10GB			
Completed:	0	0B	0
0B			
bld volume 0003			
In Progress:	1	10GB	0
0B			
Completed:	0	0B	0
0B			
bld volume 0004			
- — In Progress:	0	0B	1
10GB			
Completed:	0	0B	0
0B			
bld volume 0005			
 In Progress:	0	0B	1
10GB			
Completed:	0	0B	0
0B			
bld volume 0006			
- — In Progress:	0	0B	1
10GB		-	
Completed:	0	0B	0
0B	-		
bld volume 0007			
In Progress:	0	0B	1
10GB	ů	0.2	_
Completed:	0	0B	0
0B	ŭ	0.2	Ÿ

bld_volume0008				
In Progress:	0	0B	1	
10GB				
Completed:	0	0B	0	
0B				

### volume rebalance file-move statistics show

Display statistics for file-move operations across FlexGroup Constituents

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

#### **Description**

The volume rebalance file-move statistics show command displays common statistics for the file-move operations at a FlexGroup constituent level.

The volume rebalance file-move statistics show command is only supported on FlexGroup volumes. For all FlexGroup constituents matching the specified parameters, the command displays the following information:

- Vserver name
- Volume name
- · Constituent name
- Source Files In-Progress: Number of files currently being moved from the FlexGroup constituent
- Source Files Completed: Number of files already moved from the FlexGroup constituent
- Source Bytes In-Progress: Total number of bytes of all the files currently being moved from the FlexGroup constituent
- Source Bytes Completed: Total number of bytes of all the files already moved from the FlexGroup constituent
- Destination Files In-Progress: Number of files currently being moved to the FlexGroup constituent
- Destination Files Completed: Number of files already moved to the FlexGroup constituent
- Destination Bytes In-Progress: Total number of bytes of all the files currently being moved to the FlexGroup constituent
- Destination Bytes Completed: Total number of bytes of all the files already moved to the FlexGroup constituent

You can specify parameters from the above list to display information. For example, to display statistics only for FlexGroup constituents with more than one file currently being moved from them, run the command with the -source-files-inprogress >1 parameter.

#### **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.

#### [-vserver <vserver name>] - Vserver Name (privilege: advanced)

If this parameter and the -volume parameter are specified, the command displays statistics for the FlexGroup constituents on the specified volume. If this parameter is specified by itself, the command displays statistics for the FlexGroup constituents on all volumes on the specified Vserver.

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

If this parameter and the -vserver parameter are specified, the command displays statistics for the FlexGroup constituents on the specified volume. If this parameter is specified by itself, the command displays statistics for the FlexGroup constituents on all volumes matching the specified name.

#### [-constituent <volume name>] - Constituent Name (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents matching the specified name.

#### [-source-files-inprogress <integer>] - Source Files In Progress (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of files currently being moved from them.

#### [-source-files-completed <integer>] - Source Files Completed (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of files already moved from them.

## [-source-bytes-inprogress {<integer>[KB|MB|GB|TB|PB]}] - Source Bytes in Progress (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of bytes currently being moved from them (across all files currently being moved from them).

## [-source-bytes-completed {<integer>[KB|MB|GB|TB|PB]}] - Source Bytes Completed (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of bytes already moved from them (across all files already moved from them).

## [-destination-files-inprogress <integer>] - Destination Files In Progress (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of files currently being moved to them.

#### [-destination-files-completed <integer>] - Destination Files Completed (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of files already moved to them.

## [-destination-bytes-inprogress {<integer>[KB|MB|GB|TB|PB]}] - Destination Bytes In Progress (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of bytes currently being moved to them (across all files currently being moved to them).

## [-destination-bytes-completed {<integer>[KB|MB|GB|TB|PB]}] - Destination Bytes Completed (privilege: advanced)

If this parameter is specified, the command displays statistics only for FlexGroup constituents which have the specified number of bytes already moved to them (across all files already moved to them).

### **Examples**

The following example displays statistics for all FlexGroup constituents on the FlexGroup volume "bld\_volume" in Vserver "vs0":

<pre>cluster1::*&gt; volume reb -volume bld_volume</pre>	alance lile-move	e Statistics Si	low -vserver vsu
Vserver: vs0			
Volume: bld_volume			
	Source	2	Destination
Constituent	Files	Bytes	Files
Bytes			
bld volume 0001			
In Progress:	1	10GB	0
0B	1	1000	V
Completed:	5	20GB	0
0B			
bld_volume0002			
In Progress:	0	0B	1
10GB			
Completed:	0	0B	10
40GB			
bld_volume0003			
In Progress:	1	5GB	0
OB	1 5	100CD	٥
Completed: 0B	15	100GB	0
bld volume 0004			
In Progress:	0	0В	1
5GB	ŭ	Q D	_
Completed:	0	0B	10
80GB			
bld_volume0005			
In Progress:	0	0В	0
0B			
Completed:	0	0B	0
0B			
bld_volume0006			
In Progress:	0	0B	0

0B				
Completed:	0	0B	0	
0B				
bld_volume0007				
In Progress:	0	0B	0	
0B				
Completed:	0	0B	0	
0B				
bld_volume0008				
In Progress:	0	0B	0	
0B				
Completed:	0	0B	0	
0B				

The following example displays statistics for all FlexGroup constituents on the FlexGroup volume "bld\_volume" in Vserver "vs0" with more than 4 files already sent from them:

<pre>cluster1::*&gt; volume rebalance file-move statistics show -vserver vs0 -volume bld_volume -source-files-completed &gt;4</pre>					
Vserver: vs0					
Volume: bld volume					
_	Source		Destination		
Constituent	Files	Bytes	Files		
Bytes		-			
bld volume 0001					
In Progress:	1	10GB	0		
0В					
Completed:	5	20GB	0		
0В					
bld volume 0003					
In Progress:	1	5GB	0		
0В					
Completed:	15	100GB	0		
0В					

#### Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

#### **Trademark information**

NETAPP, the NETAPP logo, and the marks listed at <a href="http://www.netapp.com/TM">http://www.netapp.com/TM</a> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.