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qos settings commands

qos settings throughput-floors-v2
Enable/Disable throughput floors v2 on AFF

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

Description
The qos settings throughput-floors-v2 command is used to enable or disable floors v2 on AFF. The default is enabled. With floors v2 enabled, throughput floors can be met when controllers are heavily utilized at the expense of higher latency on other workloads. Floors v2 applies to both QoS and Adaptive QoS.

Parameters
-enable {true|false} - enable or disable throughput floors v2 on AFF (privilege: advanced)
   This specifies if floors v2 is enabled or disabled. If this parameter is specified with false floors v2 will be disabled.

Examples
The following example disables floors v2 on AFF.

   cluster1::*> qos settings throughput-floors-v2 -enable false

qos settings cache modify
Modify the cache policy

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

Description
The qos settings cache modify command modifies the existing default caching-policy. The list of caching policies can be obtained from the qos setting cache show -fields cache-setting command.

Parameters
-cache-setting <text> - Cache Policy Name
   Valid inputs to this parameter include any one of the listed caching-policies. This command is to be used together with the default parameter. If you use this parameter, the command modifies the specified caching-policy based on the default parameter.

[-default {true|false}] - Is Default?
   Valid inputs to this parameter are true and false. Together with cache-setting, this parameter helps set or unset a caching-policy as default.
### Examples

```
cluster1::> qos settings cache modify -default true -cache-setting random_read_write-random_write
```

Sets caching-policy random_read_write-random_write as default.

### `qos settings cache show`

Display list of cache policies

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

**Description**

The `qos settings cache show` shows the current caching-policies, class to which they belong, the number of workloads associated with each of the policies, and whether or not they are set to default. The following external-cache policies are available:

- **none** - Does not cache any user data or metadata blocks.
- **auto** - Read caches all metadata and randomly read user data blocks, and write caches all randomly overwritten user data blocks.
- **all** - Read caches all data blocks read and written. It does not do any write caching.
- **all-random_write** - Read caches all data blocks read and written. It also write caches randomly overwritten user data blocks.
- **all_read** - Read caches all metadata, randomly read, and sequentially read user data blocks.
- **all_read-random_write** - Read caches all metadata, randomly read, and sequentially read user data blocks. It also write caches randomly overwritten user data blocks.
- **all_read_random_write** - Read caches all metadata, randomly read, sequentially read and randomly written user data.
- **all_read_random_write-random_write** - Read caches all metadata, randomly read, sequentially read, and randomly written user data blocks. It also write caches randomly overwritten user data blocks.
- **meta** - Read caches only metadata blocks.
- **meta-random_write** - Read caches all metadata and write caches randomly overwritten user data blocks.
- **noread-random_write** - Write caches all randomly overwritten user data blocks. It does not do any read caching.
- **random_read** - Read caches all metadata and randomly read user data blocks.
- **random_read_write** - Read caches all metadata, randomly read and randomly written user data blocks.
- **random_read_write-random_write** - Read caches all metadata, randomly read, and randomly written user data blocks. It also write caches randomly overwritten user data blocks.

*Note that in a caching-policy name, a hyphen (-) separates read and write caching policies.*
Parameters

{[-fields <fieldname>,...]
   The input to this parameter is one of the following: {cache-setting|class|default|num-workloads}. If you use this parameter, the command displays information related to the specified input field.

[-instance ]
   If you use this parameter, the command displays information about the caching-policies in a list format.

[-cache-setting <text>] - Cache Policy Name
   The input to this parameter is any one of the above listed caching-policies. If you use this parameter, the command displays information corresponding to the specified caching-policy.

[-class <QoS Configuration Class>] - Cache Policy Class
   The input to this parameter is one of the following: {undefined|preset|user-defined|system-defined|autovolume}. If you use this parameter, the command displays information corresponding to the specified policy-group class.

[-default {true|false}] - Is Default?
   The input to this parameter is true and false. If you use this parameter, the command displays information corresponding to entries that have the specified default value.

[-num-workloads <integer>] - Number Of Workloads With This Policy
   The input to this parameter is an integer. If you use this parameter, the command displays information about policy-groups matching the specified number of workloads.

Examples
```
cluster1:~> qos settings cache show
Policy Name       Class        Num Workloads        Default
-------------  ------------ -------------        -------
all            preset       0                    false
all-random_write preset       0                    false
all_read       preset       0                    false
all_read-random_write preset       0                    false
all_read_random_write preset       0                    false
all_read_random_write-pres preset       0                    false
auto           preset       2                    false
meta           preset       0                    false
meta-random_write preset       0                    false
none           preset       0                    false
noread-random_write preset       0                    false
random_read    preset       25                   false
random_read_write preset       0                    false
random_read_write-random_write preset       28                   true
14 entries were displayed.
```

Shows QoS settings for the caching policies.