

Mobile Policy Common Commands

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cluster

Configures the cluster information.

Command Modes

Exec > Global Configuration

Syntax Description

`cluster { cluster-id` *`cluster_id`* **`| system-id`** *`system_id`* **`}`**

cluster-id *cluster_id*

Specify the cluster ID.

Must be a string.

Default Value: "cluster-1".

system-id *system_id*

Specify the system ID.

Must be a string.

Default Value: "system-1".

Usage Guidelines Use this command to configure cluster information.

cps-license

Registers the cnAAA license.

Command Modes Exec > Global Configuration

Syntax Description **cps-licence** *license_name* **encrypted-key** *encrypted_key*

cps-licence *license_name*

Specify the feature name.

Must be a string.

encrypted-key *key*

Specify the encrypted key.

Must be a string.

Usage Guidelines Use this command to registers the cnAAA license.

db

Configures the database parameter.

Product cnAAA

Privilege Security Administrator, Administrator

Syntax Description **db { balance shard count** *number_of_shard* **| global-settings { db-replica** *number_of_replica* **| timers { catchup-timeout-millis** *catchup_timeout* **| election-timeout-millis** *election_timeout* **| heartbeat-interval-millis** *heartbeat_interval | db-user-name MongoDB_username password PlainTextPassword* **| } } | spr shard-count** *number_of_spr_shards* **}**

balance shard count *number_of_shard*

Specify to abort commit. Specify the persist ID.

Must be an integer.

db-replica *number_of_replica*

Specify the number of database replicas.

Must be an integer.

catchup-timeout-millis *catchup_timeout*

Specify the catchup timeout in milliseconds.

Must be an integer.

election-timeout-millis *election_timeout*

Specify the election timeout in milliseconds.

Must be an integer.

heartbeat-interval-millis *heartbeat_interval*

Specify the heartbeat interval in milliseconds.

Must be an integer.

db-user-name *MongoDB_username* password *PlainTextPassword*

Specify the MongoDB database username and password.

spr shard-count*number_of_spr_shards*

Specify the number of SPR shards.

Must be an integer.

Usage Guidelines Use this command to configure the database parameter.

db global-settings backup-settings

Configures the backup settings for replica sets.

Command Modes Exec > Global Configuration

Syntax Description **db global-settings backup-settings** *backup-file-prefix* backup-frequency *backup-from-member* **exclude-dbs** local-backup-path **max-backup-time-seconds** *max-restore-time-seconds* **| purge-local-file** *scp-server* **} }**

backup-file-prefix

Command Modes Exec > Global Configuration

Syntax Description

backup-file-prefix

Backup file title prefix

Must be a string.

backup-frequency

Command Modes Exec > Global Configuration

Syntax Description **`backup-frequency`** *`{ day Day_which _backup_need _to_execute`* `| time-to-backup Backup_initiate_time,_HH:MM:SS}`

backup-from-member

Command Modes Exec > Global Configuration

Syntax Description **`backup-from-member`** *`member { primary`* `| primary-preferred | secondary | secondary-preferred}`

Usage Guidelines Backup shall be initiated from selected option.

exclude-dbs

Command Modes Exec > Global Configuration

Syntax Description

exclude-dbs

Must be a string.

List of dbs to be excluded being backed up.

local-backup-path

Command Modes Exec > Global Configuration

Syntax Description

local-backup-path

Local backup file path, Default: /data/db

Must be a string.

max-backup-time-seconds

Command Modes Exec > Global Configuration

Syntax Description

max-backup-time-seconds

Maximum time for each db to be backed up.

Must be an integer .

Default value 300

max-restore-time-seconds

Command Modes Exec > Global Configuration

Syntax Description

max-restore-time-seconds

Maximum time for each db to be restored.

Must be an integer .

Default value 300

purge-local-file

Command Modes Exec > Global Configuration

Syntax Description

purge-local-file

Deletes the locally created backup file after uploading to the backup server.

Type Boolean

scp-server

Command Modes Exec > Global Configuration

Syntax Description

Syntax Description

`scp-server` *{ host Ip_address* | password password | port server_port | remote-backup-path file_path | user-name user_name}

Backup server configuration parameters

Host

Command Modes Exec > Global Configuration

Syntax Description

host

Server name or IP Address

Must be a String.

Password

Command Modes Exec > Global Configuration

Syntax Description

password

Login password

Port

Command Modes Exec > Global Configuration

Syntax Description

port

Server port

Must be type of unsigned int

Default value is 22

remote-backup-path

Command Modes Exec > Global Configuration

Syntax Description

remote-backup-path

Absolute file path in scp server to be restored

Must be a String.

user-name

Command Modes Exec > Global Configuration

Syntax Description

user-name

Login user name

Must be a String.

user-name

Command Modes Exec > Global Configuration

Syntax Description

user-name

Login user name

Must be a String.

db balance

Configures the Balance database.

Command Modes Exec > Global Configuration

Syntax Description **balance shard-count** *balance_db_shard_count*

shard-count *balance_db_shard_count*

Specify the Balance database's shard count.

Must be an integer.

Default Value: 1.

Usage Guidelines Use this command to configure the Balance database.

Example

The following command configures the Balance database's shard count to 1:

```
db balance shard-count 1
```

db global-settings db-replica

Configures the replica count for the global DB.

Command Modes Exec > Global Configuration

Syntax Description **`global-settings db-replica`** *`replica_count`*

db-replica *replica_count*

Specify the global DB replica count.

Must be an integer.

Default Value: 3.

Usage Guidelines Use this command to configure the replica count for the global DB.

db-replica

Command Modes Exec > Global Configuration

Syntax Description

Global DB replica count

Must be an integer.

Default value is 3.

db global-settings db-tunings

Command Modes Exec > Global Configuration

Syntax Description **`db global-settings db-tunings`** *`{ concurrent-transactions-read | concurrent-transactions-write | oplog-size-mb | slowms | wired-tiger-cache-size-gb }`*

concurrent-transactions-read

Command Modes Exec > Global Configuration

Syntax Description

concurrent-transactions-read

Maximum number of concurrent read transactions allowed into the storage engine.

Must be an integer.

Default value is 16.

concurrent-transactions-write

Command Modes Exec > Global Configuration

Syntax Description

concurrent-transactions-write

Maximum number of concurrent write transactions allowed into the storage engine.

Must be an integer.

Default value is 16.

oplog-size-mb

Command Modes Exec > Global Configuration

Syntax Description

oplog-size-mb

OpLog Size(in MB) for data-bearing members.

Must be an integer from range 3072..5120.

Default value is 3072.

Slowms

Command Modes Exec > Global Configuration

Syntax Description

slowms (in milliseconds)

(in milliseconds) Operations that run for longer than this threshold are considered slow.

Must be an integer.

Default value is 500.

wired-tiger-cache-size-gb

Command Modes Exec > Global Configuration

Syntax Description

wired-tiger-cache-size-gb

Maximum size of the internal cache that WiredTiger uses for all data.

Must be an integer from range 1 .. 5.

Default value is 2.

db global-settings db-user-name

db-user-name

Command Modes Exec > Global Configuration

Syntax Description

Uses Mongodb user name for authentication.

Must be a String.

db global-settings enable-database-encryption

Command Modes Exec > Global Configuration

Syntax Description

Enable-database-encryption.

Must be of type Boolean.

Default value is false.

db global-settings enable-tmpfs

Command Modes Exec > Global Configuration

Syntax Description

enable-tmpfs:

Must be of type Boolean.

Default value is false.

db global-settings password

Command Modes Exec > Global Configuration

Syntax Description

password:

Mongodb password for authentication.

db global-settings resource

Command Modes Exec > Global Configuration

Syntax Description

resource { cpu | memory }

Pod resource configuration.

Cpu

Command Modes Exec > Global Configuration

Syntax Description

cpu { limit cpu_limit_in_ millicores |request cpu_resource_request_in_millicores }

CPU resource requests and limit configuration.

Memory

Command Modes Exec > Global Configuration

Syntax Description

memory { limit memory_limit_in_mb | request memory_request_in_mb }

Memory resource requests and limit configuration.

db global-settings timers

Configures global MongoDB timers.

Command Modes Exec > Global Configuration

Syntax Description **global-settings timers { catchup-timeout-millis** *catchup_timeout* **| election-timeout-millis** *election_timeout* **| heartbeat-interval-millis** *heartbeat_interval* **}**

catchup-timeout-millis *catchup_timeout*

Command Mode

Exec > Global Configuration

Specify the global catchup timeout period, in milliseconds.

Must be an integer.

Default Value: 2000.

connect-timeout-millis

Command Mode

Exec > Global Configuration

connect-timeout-millis

MongoClient driver wait time for a connection to open before timing out.

Must be an integer.

Default Value: 2000.

election-timeout-millis *election_timeout*

Command Mode

Exec > Global Configuration

Specify the global election timeout period, in milliseconds.

Must be an integer.

Default Value: 2000.

heartbeat-interval-millis *heartbeat_interval*

Command Mode

Exec > Global Configuration

Specify the global heartbeat interval period, in milliseconds.

Must be an integer.

Default Value: 300.

Usage Guidelines

Use this command to configure the global MongoDB timers.

server-selection-timeout-millis

Command Mode

Exec > Global Configuration

MongoClient driver wait time for server selection to succeed, before throwing an exception.

Must be an integer.

Default Value: 2000.

socket-timeout-millis

Command Mode

Exec > Global Configuration

MongoClient driver wait time to send or receive a request before timing out.

Must be an integer.

Default Value: 2000.

db global-settings volume-storage-class

Command Mode

Exec > Global Configuration

volume-storage-class:

Volume storage class if use-volume-claims is enabled.

Values can be default or local.

Default value is default.

db scdb replica-name

Command Mode

Exec > Global Configuration

Sample configuration

```
db scdb replica-name sdb-subscriber1
port 65001
interface vlan 2400
storage   5
resource cpu limit 6000
resource memory limit 112000
replica-set-label key smi.cisco.com/node-type
replica-set-label value oam
member-configuration member sdb-rs1-arbiter
host 10.192.1.24
arbiter true
site local
exit
member-configuration member sdb-rs1-s1-m1
host 10.192.1.22
arbiter false
priority 102
site local
exit
member-configuration member sdb-rs1-s1-m2 host 10.192.1.23 arbiter false  priority 101 site
 local
exit
exit
```

replica-name

Specify the name of the replica-set.

Must be a string.

Port

Specify the port for replica set. Must be an integer. Default Value: 27720.

db-path

Specify the data path for the replica set.

Must be a String. Default Value: /data/db.

Interface

Specify the Interface for Mongo.

Must be a String.

resource cpu limit

Specify the CPU resource limit in millicores.

Must be an integer.

Input range value: 100 to 1000000.

resource cpu request

Specify the CPU resource request in millicores.

Must be an integer.

Input range value: 100 to 1000000.

resource memory limit

Specify the CPU resource limit in megabytes.

Must be an integer.

Input range value: 100 to 200000.

db scdb replica-name <replica-name> storage <integer-value>

This value specifies the storage size allocated to the replica set.

resource memory request

Specify the CPU resource request in megabytes.

Must be an integer.

Input range value: 100 to 200000.

replica-set-label key KEY_NAME **value** value

Specify the replica set pod node affinity label key value.

member-configuration member member_name

host

Mongo host (Enter IP Address).

Must be a String.

arbiter

If role of member is arbiter, value shall be set to true.

Default Value: false.

priority

Specify the member priority for this replica-set.

Must be an integer.

site

Member in local or remote cluster.

Default value: local

db scdb replica-name <replica-name> storage <integer-value>

db scdb execute backup-data

Command Mode

Exec

Syntax Description

db scdb execute backup-data

Initiate backup.

db scdb execute restore-data

Command Mode

Exec

Syntax Description

db scdb execute restore-data

Restore data from backup.

db scdb execute password encrypt-password

Command Mode

Exec

Syntax Description

password encrypt-password plain-text <*PlainTextPassword*>

Encrypts a plain text password.

db scdb execute password decrypt-password

Command Mode

Exec

Syntax Description

password decrypt-password encrypted-text <*EncryptedPassword*>

Decrypts an encrypted password.

show running-config

Command Mode

Exec

Syntax Description

show running-config

Display the current configuration.

Show system status

Command Mode

Exec

Syntax Description

show system status

Display status of the system.

show db scdb replica-set-status

Command Mode

Exec

Syntax Description

show db scdb replica-set-status

Show replica set status.

show helm charts

Command Mode

Exec

Syntax Description

show helm charts

Display helm release details.

Show replica set status.

nacm rule-list

Command Mode

Exec

Syntax Description

nacm `rule-list <rule-name> group <group-name> cmdrule <cmdrule-name>` command `<command to restrict>` access-operations exec action deny

Specifies access restrictions for a user group.

nacm rule-list

Command Mode

Exec

Syntax Description

nacm `rule-list <rule-name> group <group-name> cmdrule <cmdrule-name>` command `<command to restrict>` access-operations exec action deny

Specifies access restrictions for a user group.

db spr

Configures the SPR database.

Command Modes Exec > Global Configuration

Syntax Description **spr shard-count** *shard_count*

shard-count *shard_count*

Specify the SPR database's shard count.

Must be an integer.

Default Value: 1.

Usage Guidelines Use this command to configure the SPR database.

Example

The following command configures the SPR database's shard count to 20:

```
db spr shard-count 20
```

debug

Configures the debug parameters.

Syntax Description **debug { logging { default-level** *logging_level* **| logger** *logger_name* **} | tracing { jaeger agent udp { host** *host_address* **| port** *port_number* **} | type } }**

default-level *default_level*

Specify the default level that must be logged.

Must be one of the following:

- trace
- debug
- info
- warn
- error
- off

logger *logger_utility*

Specify the logging utility name.

Must be a string.

debug tracing type *tracing_type*

Specify the tracing type.

Must be one of the following:

- OPENTRACING_JAEGER
- DISABLED

Default Value: DISABLED.

host *host_address*

Specify the host address of the Jaeger agent.

port *port_number*

Specify the port number of the Jaeger agent.

Usage Guidelines Use this command to configure debug information.

debug logging

Configures the logging parameters.

Command Modes Exec > Global Configuration

Syntax Description `logging default-level [ debug | error | info | off | trace | warn]`

default-level *default_level*

Specify the default level that must be logged.

Must be one of the following:

- trace
- debug
- info
- warn
- error
- off

Usage Guidelines Use this command to configure the logging parameters.

debug logging sizing

Configures the storage and rotation parameters for system logs.

Command Modes

Exec > Global Configuration

Syntax

```
debug logging sizing { storage-size size_gb | ocs-log { max-index index_count | max-file-size
 size_mb } | bng-log { max-index index_count | max-file-size size_mb } | audit-log { max-index
 index_count | max-file-size size_mb } | api-log { maxfilesize size_mb | maxhistory hours
| totalcapsize cap_gb } | app-log { maxfilesize size_mb | maxhistory minutes | totalcapsize
 cap_gb } | engine-log { maxfilesize size_mb | maxhistory minutes | totalcapsize cap_gb }
}
```

ocs-log max-file-size *size_mb*

Specify the maximum log file size in MB.

Must be an integer. Range from 10 to 300. Default 200.

ocs-log max-index *index_count*

Specify the maximum number of files to retain after rotate.

Must be an integer. Default/minimum 15 and maximum is 21.

bng-log max-index *index_count*

Specify the maximum number of files to retain after rotate.

Must be an integer. Default/minimum 15 and maximum is 21.

bng-log max-file-size *size_mb*

Specify the maximum log file size in MB.

Must be an integer. Range from 10 to 300. Default 200.

audit-log max-index *index_count*

Specify the maximum number of files to retain after rotate.

Must be an integer. Default/minimum 15 and maximum is 21.

audit-log max-file-size *size_mb*

Specify the maximum log file size in MB.

Must be an integer. Range from 10 to 300. Default 200.

api-log maxfilesize *size_mb*

Specify the maximum log file size in MB.

Must be an integer. Range from 10 to 300. Default 200.

api-log maxhistory *hours*

Specifies how long logs are retained before deletion (in hours).

Must be an integer. Range 1 to 72. Default 72.

api-log totalcapsize *cap_gb*

Defines the total storage allocated for each log type (in GB).

Must be an integer. Range 1 to 1000. Default 300.

app-log maxfilesize *size_mb*

Specify the maximum log file size in MB.

Must be an integer. Range from 10 to 300. Default 200.

app-log maxhistory *minutes*

Specifies how long logs are retained before deletion (in minutes).

Must be an integer. Range 1 to 4320. Default 4320.

app-log totalcapsize *cap_gb*

Defines the total storage allocated for each log type (in GB).

Must be an integer. Range 1 to 1000. Default 500.

engine-log maxfilesize *size_mb*

Specify the maximum log file size in MB.

Must be an integer. Range from 10 to 300. Default 200.

engine-log maxhistory *minutes*

Specifies how long logs are retained before deletion (in minutes).

Must be an integer. Range 1 to 4320. Default 4320.

engine-log totalcapsize *cap_gb*

Defines the total storage allocated for each log type (in GB).

Must be an integer. Range 1 to 1000. Default 300.

Use this command to configure the log rotation and storage sizing for various system components.



Note Once the storage-size is configured, this config will not be allowed to remove or reduce size.

debug splunk

Configures the Splunk parameters.

Command Modes Exec > Global Configuration

Syntax Description **splunk { batch-count** *event_count* **| batch-interval-ms** *batch_interval* **| batch-size-bytes** *max_batch* **| hec-token** *splunk_hec* **| hec-url** *port_splunk* **}**

batch-count *batch_count*

Specify the maximum number of events to send per batch.

Must be an integer.

Default Value: 10.

batch-interval-ms *batch_interval*

Specify the interval at which to send batched events, in milliseconds.

Must be an integer.

Default Value: 10000.

batch-size-bytes *batch_size*

Specify the maximum size of each batch of events, in bytes.

Must be an integer.

Default Value: 10240.

hec-token *hec_token*

Specify the Splunk HEC token.

Must be a string.

hec-url *hec_url*

Specify the protocol, hostname, and HTTP Event Collector port (8088 by default) of Splunk server.

Must be a string.

Usage Guidelines Use this command to configure the Splunk parameters.

debug tracing

Configures the tracing parameters.

Command Modes Exec > Global Configuration

Syntax Description

tracing [jaegar agent *agent* **udp [host** *host_name* **| port** *port_number* **] | type** *tracing_type* **]**

jaegar agent *agent*

Specify the Jaegar agen'st name

host *host_name*

Specify the host name of the Jaegar agent.

port *port_number*

Specify the port number of the Jaegar agent.

debug tracing type *tracing_type*.

Specify the tracing type.

Must be one of the following:

- OPENTRACING_JAEGER
- DISABLED

Default Value: DISABLED.

Usage Guidelines

Use this command to configure the tracing parameters.

debug backup-config

Configures the backup options.

Command Modes

This table lists the mandatory options for backup-config:

Option	Description
backup-type	Specifies the type of backup to perform (all, PB, CRD, Ops-center).
crd-httproutes	CRD httproutes details (e.g., crd-api.pcf-pcf-engine-app-pcf-green.xx.xx.xx.xx.nip.io).
password	Password for authentication of PB or CRD.
pb-httproutes	PB httproutes details (e.g., pb.pcf-pcf-engine-app-pcf-green.xx.xx.xx.xx.nip.io).
scp-server-dest-backup-path	Destination path for backup files on the SCP server.
scp-server-user-ip	Host IP address of the SCP server.
scp-server-user-name	Username for the SCP server.

Option	Description
`scp-server-user-password`	Password for the SCP server user.
`svn-url`	SVN URL for Policy Builder export (e.g., `http://svn/repos//configuration`).
`username`	Username for authentication of PB or CRD.
`schedule-backup-daily`	Specifies the hour of the day when the backup operation should be executed (Values range from 00 to 23).
`schedule-backup-weekly`	Indicates the day of the week when the backup should occur (Values range from 1-7 and start with 1-Monday).

features

Configures the control configuration for the application features.

Command Modes Exec > Global Configuration

Syntax Description **`features`** `{ patching httproutes-enabled { false | true } }`

Usage Guidelines Use this command configure the control configuration for the application features.

Example

The following command configures the control configuration for the application feature:

```
features { patching httproutes-enabled true }
```

features patching

Enables or disables the httproutes API.

Command Modes Exec > Global Configuration

Syntax Description **`patching httproutes-enabled { false | true }`**

httproutes-enabled { false | true }

Specify to enable or disable patching httproutes, not secured.

Must be either "false" or "true".

Default Value: false.

Usage Guidelines Use this command to enable or disable the httproutes API.

testing

Configures the parameters for the Testing feature

Command Modes Exec > Global Configuration

Syntax Description **`testing { external-mongo-access { admin | balance | session | spr } | subversion-httproutes-enabled | compiler-options } { ip`** *`ip_address`* **`| port`** *`port_number`* **`}`**

code-coverage-enabled { false | true }

Specify to enable or disable code coverage reporting with jacoco.

Must be either "false" or "true".

Default Value: false.

development-mode-enabled { false | true }

Specify to enable or disable development mode.

Must be either "false" or "true".

Default Value: false.

enforce-affinity-rules { false | true }

Specify to enable or disable anti affinity rules for pod scheduling.

Must be either "false" or "true".

Default Value: true.

subversion-httproutes-enabled { false | true }

Specify if the subversion httproutes is enabled.

Must be either "false" or "true".

Default Value: false.

Usage Guidelines Use this command to configure the parameters for the Testing feature.

pod management

Configuration to disable the optional pods:

Command Modes Exec > Global Configuration

Syntax Description `pods-management disable-pods <pod_name1> <pod_name2>`

Disables specified pod.

system commands

cpc-system about-system-info

Command Mode

Exec

Syntax Description

cpc-system about-system-info

This command displays the current system state, details the versions of all components, and lists the URLs for endpoints that are accessible from outside the system.

```
CPC VERSION

------------------------


CPC VERSION                    BUILD_2026.02.0.i55


CPC CORE COMPONENT VERSION

------------------------


pcf-beta-cncps-cnat-cps-infrastructure        BUILD_2026.02.0.i55

pcf-beta-cncps-cps-radius-ep                  BUILD_2026.02.0.i55

pcf-beta-cncps-etcd-cluster                   BUILD_2026.02.0.i55

pcf-beta-cncps-network-query                  BUILD_2026.02.0.i55

pcf-beta-cncps-ngn-datastore                  BUILD_2026.02.0.i55

pcf-beta-cncps-ops-center                     BUILD_2026.02.0.i55

pcf-beta-cncps-pcf-config                     BUILD_2026.02.0.i55

pcf-beta-cncps-pcf-dashboard                  BUILD_2026.02.0.i55

pcf-beta-cncps-pcf-engine-app-production-rjio BUILD_2026.02.0.i55

pcf-beta-cncps-pcf-oam-app                    BUILD_2026.02.0.i55

pcf-beta-cncps-pcf-services                   BUILD_2026.02.0.i55

pcf-beta-cncps-unified-api-proxy-ep           BUILD_2026.02.0.i55
```

```
CNDP VERSION
------------------------

cee-beta-cncps-cee-ops-center  2026.02.1.i05


ULB VERSION
------------------------

lbs-beta-ops-center            BUILD_2025.04.0.i18


DATABASE VERSION
------------------------

CDL VERSION                    2.2.0

MONGO VERSION                  v7.0.28


OS VERSION
------------------------

POD OS VERSION                 Ubuntu 22.04.5 LTS
NODE OS VERSION                Ubuntu 24.04.4 LTS


CPC ENDPOINT URLs
------------------------

Grafana              https://grafana.xx.xx.xxx.xx.nip.io
Control Center       https://pcf.controlcenter.xx.xx.xxx.xx.nip.io
```

```
Policy Builder
https://pb.pcf-beta-cncps-pcf-engine-app-production-rjio.xx.xx.xxx.xx.nip.io/pb

CPC Central
https://pb.pcf-beta-cncps-pcf-engine-app-production-rjio.xx.xx.xxx.xx.nip.io
```