



Mobile Policy PCF Commands

- [advance-tuning async-threading](#), on page 1
- [advance-tuning async-threading threading-config](#), on page 3
- [advance-tuning diameter global](#), on page 3
- [advance-tuning diameter global action](#), on page 4
- [advance-tuning diameter global limits](#), on page 4
- [advance-tuning http2-threading](#), on page 4
- [advance-tuning overload-control](#), on page 6
- [advance-tuning overload-control rest global](#), on page 7
- [advance-tuning overload-control rest global action](#), on page 7
- [advance-tuning overload-control rest global limits](#), on page 7
- [pcf-tools](#), on page 8
- [rest-endpoint](#), on page 8
- [rest-endpoint interface](#), on page 9
- [traffic engine](#), on page 10
- [traffic engine rule](#), on page 10

advance-tuning async-threading

Configures threading configuration for HTTP outgoing request from PCF.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description `advance-tuning async-threading { default-drop-oldest-when-full { false | true } | default-priority default_priority | default-processing-threads processing_thread_number | default-queue-size default_queue_size | default-worker-threads default_number_worker_threads | request-timeout-ms request_timeout | thread-configuration service_name drop-oldest-when-full { false | true } | priority thread_priority | queue-size queue_size | threads thread_number }`

default-priority default_priority

Specify the default priority of thread.

Must be an integer.

Default Value: 5.

default-worker-threads *default_number_worker_threads*

Specify the default number of worker threads.

Must be an integer.

Default Value: 10.

default-queue-size *default_queue_size*

Specify the default size of the queue.

Must be an integer.

Default Value: 50.

default-processing-threads *processing_thread_number*

Specify the default number of processing threads.

Must be an integer.

Default Value: 5.

default-drop-oldest-when-full { false | true }

Specify to drop the oldest packet when queue is full.

Must be either "false" or "true".

Default Value: false.

request-timeout-ms *request_timeout*

Specify the request timeout period in milliseconds.

Must be an integer.

Default Value: 500.

http2-connect-timeout-ms *http2_connect_timeout*

Specify the request timeout period in milliseconds.

Must be an integer.

Default Value: 100.

Usage Guidelines

Use this command to configure threading configuration for HTTP outgoing request from PCF.

Example

The following command configures the threading configuration for HTTP outgoing request from PCF with default priority of 5:

```
advance-tuning async-threading default-priority 5
```

advance-tuning async-threading threading-config

Configures service threading.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **threading-config** *service_name*

service-name *service_name*

Specify the service name.

Must be a string.

priority *thread_priority*

Specify the threading priority.

Must be an integer.

threads *thread_number*

Specify the number of threads.

Must be an integer.

queue-size *queue_size*

Specify the size of the queue.

Must be an integer.

drop-oldest-when-full { **false** | **true** }

Specify to drop the oldest packet when the queue is full.

Must be either "false" or "true".

Usage Guidelines Use this command to configure threading service.

advance-tuning diameter global

Configures Overload Control configuration for all Diameter interfaces.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description **advance-tuning overload-control diameter global**

Usage Guidelines Use this command to configure Overload Control configuration for all Diameter traffic.

advance-tuning diameter global action

Configures the action to take on overload detection.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description `action throttle-action throttle_action`

action throttle-action *throttle_action*

Specify the action to take when overload traffic is detected.

Must be one of the following:

- REJECT
- DROP

Usage Guidelines Use this command to configure the action that must be taken on overload detection.

advance-tuning diameter global limits

Configures the limits for the overload handling parameters for the REST or Diameter interface.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description `limits max-requests-per-sec maximum_requests`

max-requests-per-sec *maximum_requests*

Specify the maximum number of requests that are allowed per second before throttling is applied.

Must be an integer.

Usage Guidelines Use this command to configure the limits for overload handling parameters for the REST or Diameter interface.

advance-tuning http2-threading

Configures threading configuration for HTTP incoming request to PCF.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description

```
advance-tuning http2-threading { disable-validation { false | true } |
idle-thread-timeout-ms idle_thread_timeout | max-queue-capacity max_packet_capacity
| max-thread-pool-size max_thread_pool_size | min-thread-pool-size
min_thread_pool_size | request-timeout-ms request_timeout }
```

min-thread-pool-size *min_thread_pool_size*

Specify the minimum size of pool of threads.

Must be an integer.

Default Value: 5.

max-thread-pool-size *max_thread_pool_size*

Specify the maximum size of pool of threads.

Must be an integer.

Default Value: 20.

idle-thread-timeout-ms *idle_thread_timeout*

Specify the thread idle timeout in milliseconds.

Must be an integer.

Default Value: 60000.

max-queue-capacity *max_packet_capacity*

Specify the maximum packet capacity of the queue.

Must be an integer.

Default Value: 5000.

disable-validation { false | true }

Specify to enable or disable validation.

Must be either "false" or "true".

Default Value: false.

request-timeout-ms *request_timeout*

Specify the request timeout period in milliseconds.

Must be an integer.

Default Value: 2000.

Usage Guidelines

Use this command to configure threading configuration for HTTP incoming request to PCF.

Example

The following command configures the threading configuration for HTTP incoming request to PCF with maximum queue capacity of 500:

```
advance-tuning http2-threading max-queue-capacity 500
```

advance-tuning overload-control

Configures threading configuration for HTTP incoming request to PCF.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration

Syntax Description

advance-tuning overload-control

min-thread-pool-size *min_thread_pool_size*

Specify the minimum size of pool of threads.

Must be an integer.

Default Value: 5.

max-thread-pool-size *max_thread_pool_size*

Specify the maximum size of pool of threads.

Must be an integer.

Default Value: 20.

idle-thread-timeout-ms *idle_thread_timeout*

Specify the thread idle timeout in milliseconds.

Must be an integer.

Default Value: 60000.

max-queue-capacity *max_packet_capacity*

Specify the maximum packet capacity of the queue.

Must be an integer.

Default Value: 5000.

disable-validation { false | true }

Specify to enable or disable validation.

Must be either "false" or "true".

Default Value: false.

request-timeout-ms *request_timeout*

Specify the request timeout period in milliseconds.

Must be an integer.

Default Value: 2000.

Usage Guidelines Use this command to configure threading configuration for HTTP incoming request to PCF.

advance-tuning overload-control rest global

Configures Overload Control configuration for all REST traffic.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description `advance-tuning overload-control rest global`

Usage Guidelines Use this command to configure threading configuration for HTTP incoming request to PCF.

advance-tuning overload-control rest global action

Configures the action to take on overload detection.

Privilege Security Administrator, Administrator

Command Modes Exec > Global Configuration

Syntax Description `action throttle-action throttle_action`

action throttle-action *throttle_action*

Specify the action to take when overload traffic is detected.

Must be one of the following:

- REJECT
- DROP

Usage Guidelines Use this command to configure the action that must be taken on overload detection.

advance-tuning overload-control rest global limits

Configures the limits for the overload handling parameters for the REST or Diameter interface.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration
Syntax Description	<p>limits max-requests-per-sec <i>maximum_requests</i></p> <p>max-requests-per-sec <i>maximum_requests</i></p> <p>Specify the maximum number of requests that are allowed per second before throttling is applied. Must be an integer.</p>
Usage Guidelines	Use this command to configure the limits for overload handling parameters for the REST or Diameter interface.

pcf-tools

Enables the PCF tools.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration
Syntax Description	<p>pcf-tools enable { false true }</p> <p>enable { false true }</p> <p>Specify whether to enable or disable PCF tools. Must be either "false" or "true". Default Value: false.</p>

Usage Guidelines	Use this command to enable or disable PCF tools.
-------------------------	--

Example

The following command enables PCF tools:

```
pcf-tools enable true
```

rest-endpoint

Configures the REST endpoint.

Privilege	Security Administrator, Administrator
Command Modes	Exec > Global Configuration
Syntax Description	<p>rest-endpoint { ips <i>ip_address</i> port <i>port_number</i> replicas <i>replica_count</i> tracing-service-name <i>service_name</i> }</p>

ips *ip_address*

Specify the IP addresses for the REST service.

Must be an IP address.

port *port_number*

Specify port number of the REST service.

Must be an integer.

tracing-service-name *tracing_service_name*

Specify the tracing service name for REST endpoint.

Must be a string.

replicas *replica_count*

Specify the replica count.

Must be an integer.

Default Value: 1.

repository *repository_name*

Specify to override the Helm repository.

Usage Guidelines

Use this command to configure the REST endpoint.

Example

The following command configures the REST endpoint tracing service name as nPcf-pcf-rest-ep:

```
rest-endpoint tracing-service-name nPcf-pcf-rest-ep
```

rest-endpoint interface

Configures the NF interfaces.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration

Syntax Description

```
rest-endpoint interface interface_type ip ip_address
```

interface *interface_type*

Specify the NF interface type.

ip *ip_address*

Specify the NF interface IP address.

Must be an IP address.

Usage Guidelines

Use this command to configure NF interfaces.

Example

The following command configures the NF interface to restEndpoint with the IP address 11.11.11.11:

```
rest-endpoint interface restEndpoint ip 11.11.11.11
```

traffic engine

Configures the default engine group to receive traffic.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration

Syntax Description

traffic engine default-destination *default_destination*

default-destination *default_destination*

Specify the default engine group to receive the traffic.

Usage Guidelines

Use this command to configure the default engine group to receive traffic. Note that a similar command is available for PCRF.

Example

The following command configures the default engine group as /policy-test:engine/test-test1:group:

```
traffic engine default-destination /policy-test:engine/test-test1:group
```

traffic engine rule

Configures traffic routing rule parameters.

Privilege

Security Administrator, Administrator

Command Modes

Exec > Global Configuration

Syntax Description

```
traffic engine rule rule_name { dnn dnn_route | supi supi_route | gpsi gpsi_route
| hash-prefix hash_prefix_route | intf interface_route | destination engine_group
}
```

rule_name

Specify the rule name.

Must be a string.

dnn dnn_route

Specify the route on DNN - regex.

Must be a string.

supi supi_route

Specify the route on SUPI - regex.

Must be a string.

gpsi gpsi_route

Specify the route on GPSI - regex.

Must be a string.

hash-prefix hash_prefix_route

Specify the route on 2-digit hash - prefix.

Must be a string.

intf interface_route

Specify the route on interface type - exact.

Must be a string.

destination engine_group

Specify the engine group to receive traffic.

Usage Guidelines

Use this command to configure the traffic routing rule parameters.

