ACS TCP Acceleration Profile Configuration Mode Commands

The ACS TCP Acceleration Profile Configuration Mode is used to configure Active Charging Service (ACS) TCP Acceleration Profile for Inline TCP Optimization.

Command Modes

Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* > **tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-tcp-accl-profile)#
```

Important The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).

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accl-flags

This command configures TCP acceleration related optimization flags.

Product

P-GW

Privilege

Security Administrator, Administrator

Command Modes

Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* > **tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-tcp-accl-profile)#
```

Syntax Description

accl-flags *flag_value*
default accl-flags

default

Restores default values assigned to its following options.

value

The value is an integer ranging from 0 to 65535.

Usage Guidelines

Use this command to configure the acceleration related optimization flags for a TCP connection.

Example

The following command configures a TCP acceleration optimization flag with value 20.

```
accl-flags 20
```

buffer-size

This command configures the TCP Proxy buffer size for downlink and uplink data in Kilobytes

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Command Modes

Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* **> tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-tcp-accl-profile)#
```

Syntax Description

buffer-size { [downlink [128KB | 256KB | 512KB | 1024KB | 1536KB | 2048KB | 2560KB | 3072KB | 3584KB | 4096KB] [uplink [128KB | 256KB | 512KB | 1024KB | 1536KB | 2048KB | 2560KB | 3072KB | 3584KB | 4096KB]]] | [uplink [128KB | 256KB | 512KB | 1024KB | 1536KB | 2048KB | 2560KB | 3072KB | 3584KB | 4096KB] [downlink [128KB | 256KB | 512KB | 1024KB | 1536KB | 2048KB | 2560KB | 3072KB | 3584KB | 4096KB]]] }
default buffer-size

default

Restores default values assigned to its following options.

Usage Guidelines

Use this command to configure the TCP Proxy buffer size for downlink and uplink data in Kilobytes

Example

The following command configures a TCP Proxy buffer size for downlink data as 256KB and uplink data as 256KB:

```
buffer-size downlink 256KB uplink 256KB
```

cwnd-gain

This command configures the TCP congestion window gain by continuously evaluating the actual congestion window size.

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Command Modes

Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* **> tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-tcp-accl-profile)#
```

Syntax Description

```
cwnd-size { dynamic { off | on } [ factor factor_value ] | factor factor_value
 [ dynamic { off | on } ] }
default cwnd-gain
```

default

Restores default values assigned to its following options.

dynamic

Automatically scales-up the congestion window gain to ensure that it is sized correctly to allow for RTT variation during the flow.

factor *factor_value*

Configures the TCP congestion window gain factor. The *factor_value* is an integer ranging from 1 to 16378.

Usage Guidelines

Use this command to configure the TCP congestion window gain by continuously evaluating the actual congestion window size. This command is used by the TCP optimization engine to continuously calculate the actual congestion window size. Scaling the window size allows the TCP optimization engine to manage the in-flight of data in the engine.

Example

The following command configures TCP congestion window size dynamically along with a gain factor value 10:

```
cwnd-size dynamic on factor 10
```

end

Exits the current configuration mode and returns to the Exec mode.

Product All

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Syntax Description **end**

Usage Guidelines Use this command to return to the Exec mode.

exit

Exits the current mode and returns to the parent configuration mode.

Product All

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Syntax Description **exit**

Usage Guidelines Use this command to return to the parent configuration mode.

initial-cwnd-size

This command configures the initial congestion window size is segments

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Command Modes Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* **> tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

`[local]`*`host_name`*`(config-acs-tcp-accl-profile)#`

Syntax Description **initial-cwnd-size** *window_segment_size*
default initial-cwnd-size

default

Restores default values assigned to its following options.

window_segment_size

The *window_segment_size* is an integer ranging from 1 to 65535.

Usage Guidelines Use this command to configure the initial congestion window size is segments

Example

The following command configures the initial congestion window size with a segment value 200:

```
initial-cwnd-size 200
```

max-rtt

This command configures the maximum RTT value.

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Command Modes Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* **> tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-tcp-accl-profile)#
```

Syntax Description

```
max-rtt max_rtt_value
default max-rtt
```

default

Restores default values assigned to its following options.

max_rtt_value

The *max_rtt_value*is an integer ranging from 1 to 10000.

Usage Guidelines Use this command to configure the maximum RTT value in Milliseconds.

Example

Use the following command to configure the maximum RTT value of 500 milliseconds:

```
max-rtt 500
```

mss

This command configures the maximum segment size for TCP.

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Command Modes

Exec > ACS Configuration > ACS TCP Acceleration Profile Configuration

active-charging service *service_name* **> tcp-acceleration-profile** *profile_name*

Entering the above command sequence results in the following prompt:

```
[local]host_name(config-acs-tcp-accl-profile)#
```

Syntax Description

mss *mss_value*
default mss

default

Restores default values assigned to its following options.

mss_value

The *mss_value*is an integer ranging from 496 to 65535.

Usage Guidelines

Use this command to configure the maximum segment size in Bytes.

Example

Use the following command to configure the maximum segment size value of 500 bytes:

```
mss 500
```