

Detecting Reuse of TCP Ports

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Feature Summary and Revision History

Summary Data

| Applicable Product(s) or Functional Area | P-GW |
|--|-----------------------------------|
| Applicable Platform(s) | • ASR 5500 |
| | • VPC-DI |
| | • VPC-SI |
| Feature Default | Disabled - Configuration Required |
| Related Changes in This Release | Not Applicable |
| Related Documentation | Command Line Interface Reference |

Revision History

| Revision Details | Release |
|---|-----------|
| P-GW supports TCP port reuse through CLI configuration. | 21.28.m15 |

Feature Changes

Previous Behavior: In P-GW, the non-detection of TCP source port reuse lead to Out-of-order (OOO) packet and retransmission packet which inturn resulted in bypassing the charging module and traffic allowed to the server.

New Behavior: In P-GW, the **tcp-detect-port-reuse** CLI is introduced to control the specific flow matching the charging action to detect the source port reuse by TCP SYN packet. The **tcp-detect-port-reuse** CLI also clears the flow in which port is reused and creates new credentials.

Command Changes

This command allows you to detect the source port reuse by TCP packets. When a packet matches to the rule that includes charging action that is enabled with tcp-detect-port-reuse, TCP SYN packet checks for the port reuse. When port reuse is detected the respective flow is cleared and a new flow is created with the new credentials.

```
configure
context context-name
active-charging service service_name
charging-action charging_action_name
[ no ] tcp-detect-port-reuse
```

NOTES

- tcp-detect-port-reuse : Detects the source port reuse by TCP packets. By default this CLI is disabled.
- no : Removes the tcp-detect-port-reuse configuration from the charging action.

Monitoring and Troubleshooting

This section provides information about the CLI commands available to monitor and/or troubleshoot TCP port reuse feature.

Show Command(s) and/or Outputs

show active-charging rulebase statistics name

This command displays the following specific flow information matching the charging action to detect the source port reuse. Following is a sample output:

```
show active-charging rulebase statistics name RB IITC DAIMLER
      Detect TCP Port Reuse and Flow Cleared:
                                                                    1
[local]laas-setup# show active-charging charging-action statistics name CA RG1 NORMAL
 Service Name: ecs-svc1
  Charging Action Name: CA RG1 NORMAL
    Uplink Pkts Retrans:32Downlink Pkts Retrans:Uplink Bytes Retrans:13567Downlink Bytes Retrans:Flows Readdressed:0PP Flows Retrans:
                                                                                      7
                                    13567 Downlink Bytes Retrans:
                                                                                  3558
                                                                                      0
    Bytes Charged Yet Packet Dropped:
                                                            0
    Predef-Rules Deactivated: 0
    Outer IP header dscp marked Pkts:
                                                           0
Detect TCP Port Reuse and Flow Cleared:
                                                              1
```