Detecting Reuse of TCP Ports

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:             32   Downlink Pkts Retrans:             7
    Uplink Bytes Retrans:         13567   Downlink Bytes Retrans:         3558
    Flows Readdressed:                0   PP Flows Readdressed:              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
```