

App-based Tethering Detection in User Plane

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Revision History

Note Revision history details are not provided for features introduced before release 21.24.

Revision Details	Release
First introduced	Pre 21.24

Feature Description

Important The App-based Tethering Detection is an existing feature that is supported in non-CUPS architecture. With this release, the feature is supported in the CUPS architecture.

The App-based Tethering Detection solution is built around the existing ADC plugins for App identifications. Tethering-specific patterns are added on top of recognized App plugins. These plugins successively return if the App flow is tethered or not. The App based Tethering Detection interworks with other existing supported tethering technique.

Similar to non-CUPS architecture, the tethering detection is currently supported only for Netflix and Youtube.

This feature on CUPS is in parity with non-CUPS tethering pattern detection technique.

For more information about App-based Tethering Detection, refer the *App-based Tethering Detection* chapter in the *ADC Administration Guide*.

Limitation

This feature on CUPS is in parity with non-CUPS tethering pattern detection technique. And so, if there are any new TLS patterns used by tethered devices in the network, then those are not identified for tethering detection.

Configuring App-based Tethering Detection

This section describes how to enable support for App-based Tethering Detection.

Enabling App-based Tethering Detection at Rulebase Level

Important The tethering configuration must be done on Control Plane and then, it must be pushed to User Plane.

Use the following commands to enable App-based Tethering Detection for ADC traffic under ACS Rulebase Configuration Mode:

```
configure
  active-charging service service_name
    rulebase rulebase_name
      tethering-detection application
      exit
    exit
  exit
```

NOTES:

- The **default tethering-detection** command configures its default setting.

  Default: By default, the Tethering Detection feature is disabled.

Important The OS and UA-based tethering detection are currently not supported in CUPS.

- If previously configured, use the **no tethering-detection** command to remove the tethering detection configuration from the rulebase.

Enabling App-based Tethering Detection at Ruledef Level

Use the following configurations to enable App-based Tethering Detection at Ruledef Configuration mode:

```
configure
  active-charging service service_name
    ruledef ruledef_name
     tethering-detection application { flow-tethered | flow-not-tethered
 }
      exit
```

```
    exit
  exit
```

NOTES:

- If previously configured, use the **no tethering-detection** command to remove the tethering detection configuration from the ruledef.

Monitoring and Troubleshooting the App-based Tethering Detection

This section provides information regarding commands available to monitor and troubleshoot the App-based Tethering Detection.

Show Commands and Outputs

This section provides information regarding show commands and their outputs in support of this feature.

show user-plane-service statistic tethering-detection

The output of this CLI command has been enhanced to include the following fields in support of this feature.

- Tethering Detection Statistics (Application):
  - Total flows scanned
  - Tethered flows detected
  - Tethered uplink packets
  - Tethered downlink packets

show user-plane-service statistic rulebase name <rulebase_name>

The output of this CLI command has been enhanced to include the following fields in support of this feature.

- Tethering Detection (Application):
  - Total flows scanned
  - Tethered flows detected
  - Tethered uplink packets
  - Tethered downlink packets