



# ADC Plugin Version 2\_60\_1384 Release Note

Release Date: Dec 17, 2020

Last Updated: Dec,17, 2020

## Introduction

This Release Note identifies all changes and issues related to this ADC Plugin Release for the StarOS™ based Application Detection Control (ADC) in-line service, formerly known as Peer-to-Peer Detection.

## Feature and Behavior Changes

### CSCvw51811: Support QUIC IETF draft version 29 and Multibyte Packet Number Decryption for Drafts of QUIC

#### Feature Changes

Facebook application traffic was not detected because p2p supported ESNI decryption based on Quic IETF draft versions 27. The feature enables decryption of ESNI based on QUIC IETF draft version 29.

#### Command Changes

Use the following configuration command to enable the decryption of ESNI based on QUIC IETF draft version 29.

```
configure
  active-charging service service_name
    p2p-detection debug-param protocol-param p2p_quic_ietf_decrypt 1
  end
```

**Note:** The feature is CLI controlled and by default it is disabled. The CLI needs to be entered manually to boot configuration as plugin CLI is not part of show/save configuration.

### CSCvw06980: Support for hbomax

#### Feature Changes

##### ADC Support for hbomax

With this release, the support for detection and classification of “**hbomax**” application is added.

Detection accuracy: 97.63%

hbomax(Android): NA

hbomax(iOS): NA

## Command Changes

### p2p-detection protocol

This command enables detection of peer-to-peer (P2P) protocols. With this release, the **hbomax** keyword is added to this command.

#### configure

```
active-charging service service_name
    [ no ] p2p-detection protocol hbomax
    [ no ] p2p traffic-type = streaming-video
    [ no ] p2p traffic-type = unclassified
end
```

### show active-charging analyzer statistics name p2p

This command displays statistical information for protocol analyzers. With this release, the **hbomax** keyword is added to the P2P list.

```
show active-charging analyzer statistics name p2p application p2p_list
```

### show active-charging flows type p2p

This command displays the information for the active charging flows. With this release, the **hbomax** keyword is added to the P2P list.

```
show active-charging flows type p2p application p2p_list
```

### show active-charging sessions summary

This command displays statistics for Active Charging Service (ACS) sessions. With this release, the **hbomax** keyword is added to the P2P list:

```
show active-charging sessions summary type p2p application p2p_list
```

## Performance Indicator Changes

### P2P Schema

New ADC bulk statistics are available in the P2P schema for hbomax as part of the plugin. If detection of the hbomax P2P protocol is enabled, bulk statistics for that protocol will be automatically generated using the Dynamic Software Upgrade plugin installed on the chassis.

The following bulk statistics are added to the P2P schema:

- p2p-hbomax-uplnk-bytes
- p2p-hbomax-dwlnk-bytes
- p2p-hbomax-uplnk-pkts
- p2p-hbomax-dwlnk-pkts
- p2p-hbomax-duration

## Feature and Behavior Changes

- p2p-hbomax-streaming-video-uplnk-bytes
- p2p-hbomax-streaming-video-dwlnk-bytes
- p2p-hbomax-streaming-video-uplnk-pkts
- p2p-hbomax-streaming-video-dwlnk-pkts
- p2p-hbomax-streaming-video-duration
- p2p-hbomax-unclassified-uplnk-bytes
- p2p-hbomax-unclassified-dwlnk-bytes
- p2p-hbomax-unclassified-uplnk-pkts
- p2p-hbomax-unclassified-dwlnk-pkts
- p2p-hbomax-unclassified-duration

### show active-charging analyzer statistics name p2p application hbomax verbose

This command displays Active Charging protocol analyzer statistics for the P2P protocol analyzer.

With this release, the following fields have been added to the output of this command:

- hbomax unclassified:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts
  - Total Downlink Pkts

### show active-charging analyzer statistics name p2p protocol-group name streaming wide all verbose

With this release, the following fields have been added to the output of this command:

- hbomax-streaming-video:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts
  - Total Downlink Pkts

## CSCvw11740: Add Support for amazondrive in ADC

### Feature Changes

#### ADC Support for amazondrive

With this release, the support for detection and classification of “**amazondrive**” application is added.

Detection accuracy: 96.53%.

amazondrive (Android): 1.9.1.147.0

amazondrive (iOS): 1.9.3

## Command Changes

### p2p-detection protocol

This command enables detection of peer-to-peer (P2P) protocols. With this release, the **amazondrive** keyword is added to this command.

```
configure
  active-charging service service_name
    [ no ] p2p-detection protocol amazondrive
    [ no ] p2p traffic-type = unclassified
  end
```

### show active-charging analyzer statistics name p2p

This command displays statistical information for protocol analyzers. With this release, the **amazondrive** keyword is added to the P2P list.

```
show active-charging analyzer statistics name p2p application p2p_list
```

### show active-charging flows type p2p

This command displays the information for the active charging flows. With this release, the **amazondrive** keyword is added to the P2P list.

```
show active-charging flows type p2p application p2p_list
```

### show active-charging sessions summary

This command displays statistics for Active Charging Service (ACS) sessions. With this release, the **amazondrive** keyword is added to the P2P list:

```
show active-charging sessions summary type p2p application p2p_list
```

## Performance Indicator Changes

### P2P Schema

New ADC bulk statistics are available in the P2P schema for Amazon Drive as part of the plugin. If detection of the amazondrive P2P protocol is enabled, bulk statistics for that protocol will be automatically generated using the Dynamic Software Upgrade plugin installed on the chassis.

The following bulk statistics are added to the P2P schema:

- p2p-amazondrive-upInk-bytes
- p2p-amazondrive-dwInk-bytes
- p2p-amazondrive-upInk-pkts
- p2p-amazondrive-dwInk-pkts
- p2p-amazondrive-duration
- p2p-amazondrive-unclassified-upInk-bytes
- p2p-amazondrive-unclassified-dwInk-bytes
- p2p-amazondrive-unclassified-upInk-pkts
- p2p-amazondrive-unclassified-dwInk-pkts
- p2p-amazondrive-unclassified-duration

## Feature and Behavior Changes

### show active-charging analyzer statistics name p2p application Amazon Drive verbose

This command displays Active Charging protocol analyzer statistics for the P2P protocol analyzer.

With this release, the following fields have been added to the output of this command:

- amazondrive unclassified:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts
  - Total Downlink Pkts

## CSCvw11768: Support for amazonprimenow

### Feature Changes

#### ADC Support for amazonprimenow

With this release, the support for detection and classification of “**amazonprimenow**” application is added.

Detection accuracy: amazon prime: 61.18%, amazon cloud: 34.54%

Amazonprimenow (Android): 4.21.6

Amazonprimenow (iOS): 5.16.6

### Command Changes

#### p2p-detection protocol

This command enables detection of peer-to-peer (P2P) protocols. With this release, the **amazonprimenow** keyword is added to this command.

#### **configure**

```
active-charging service service_name  
  
[ no ] p2p-detection protocol amazonprimenow  
  
[ no ] p2p traffic-type = unclassified  
  
end
```

#### show active-charging analyzer statistics name p2p

This command displays statistical information for protocol analyzers. With this release, the **amazonprimenow** keyword is added to the P2P list.

```
show active-charging analyzer statistics name p2p application p2p_list
```

### show active-charging flows type p2p

This command displays the information for the active charging flows. With this release, the **amazonprimenow** keyword is added to the P2P list.

```
show active-charging flows type p2p application p2p_list
```

### show active-charging sessions summary

This command displays statistics for Active Charging Service (ACS) sessions. With this release, the **amazonprimenow** keyword is added to the P2P list:

```
show active-charging sessions summary type p2p application p2p_list
```

## Performance Indicator Changes

### P2P Schema

New ADC bulk statistics are available in the P2P schema for amazonprimenow as part of the plugin. If detection of the amazonprimenow P2P protocol is enabled, bulk statistics for that protocol will be automatically generated using the Dynamic Software Upgrade plugin installed on the chassis.

The following bulk statistics are added to the P2P schema:

- p2p-amazonprimenow-uplnk-bytes
- p2p-amazonprimenow-dwlnk-bytes
- p2p-amazonprimenow-uplnk-pkts
- p2p-amazonprimenow-dwlnk-pkts
- p2p-amazonprimenow-duration
- p2p-amazonprimenow-unclassified-uplnk-bytes
- p2p-amazonprimenow-unclassified-dwlnk-bytes
- p2p-amazonprimenow-unclassified-uplnk-pkts
- p2p-amazonprimenow-unclassified-dwlnk-pkts
- p2p-amazonprimenow-unclassified-duration

### show active-charging analyzer statistics name p2p application amazonprimenow verbose

This command displays Active Charging protocol analyzer statistics for the P2P protocol analyzer.

With this release, the following fields have been added to the output of this command:

- amazonprimenow unclassified:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts
  - Total Downlink Pkts

## CSCvw45638: Support for itunesu

### Feature Changes

#### ADC Support for itunesu

With this release, the support for detection and classification of “**itunesu**” application is added.

Detection accuracy: 97%

itunesu:(Android): NA

itunesu (iOS): 3.8

### Command Changes

#### p2p-detection protocol

This command enables detection of peer-to-peer (P2P) protocols. With this release, the **itunesu** keyword is added to this command.

##### **configure**

```
active-charging service service_name  
  
    [ no ] p2p-detection protocol itunesu  
  
    [ no ] p2p traffic-type = unclassified  
  
    [ no ] p2p traffic-type = streaming-audio  
  
    [ no ] p2p traffic-type = streaming-video  
  
end
```

#### show active-charging analyzer statistics name p2p

This command displays statistical information for protocol analyzers. With this release, the **itunesu** keyword is added to the P2P list.

```
show active-charging analyzer statistics name p2p application p2p_list
```

#### show active-charging flows type p2p

This command displays the information for the active charging flows. With this release, the **itunesu** keyword is added to the P2P list.

```
show active-charging flows type p2p application p2p_list
```

#### show active-charging sessions summary

This command displays statistics for Active Charging Service (ACS) sessions. With this release, the **itunesu** keyword is added to the P2P list:

```
show active-charging sessions summary type p2p application p2p_list
```

## Performance Indicator Changes

### P2P Schema

New ADC bulk statistics are available in the P2P schema for itunesu as part of the plugin. If detection of the itunesu P2P protocol is enabled, bulk statistics for that protocol will be automatically generated using the Dynamic Software Upgrade plugin installed on the chassis.

The following bulk statistics are added to the P2P schema:

- p2p-itunesu-uplnk-bytes
- p2p-itunesu-dwlnk-bytes
- p2p-itunesu-uplnk-pkts
- p2p-itunesu-dwlnk-pkts
- p2p-itunesu-duration
- p2p-itunesu-unclassified-uplnk-bytes
- p2p-itunesu-unclassified-dwlnk-bytes
- p2p-itunesu-unclassified-uplnk-pkts
- p2p-itunesu-unclassified-dwlnk-pkts
- p2p-itunesu-unclassified-duration
- p2p-itunesu-streaming-audio-uplnk-bytes
- p2p-itunesu-streaming-audio-dwlnk-bytes
- p2p-itunesu-streaming-audio-uplnk-pkts
- p2p-itunesu-streaming-audio-dwlnk-pkts
- p2p-itunesu-streaming-audio-duration
- p2p-hbomax-streaming-video-uplnk-bytes
- p2p-hbomax-streaming-video-dwlnk-bytes
- p2p-hbomax-streaming-video-uplnk-pkts
- p2p-hbomax-streaming-video-dwlnk-pkts
- p2p-hbomax-streaming-video-duration

### `show active-charging analyzer statistics name p2p application itunesu verbose`

This command displays Active Charging protocol analyzer statistics for the P2P protocol analyzer.

With this release, the following fields have been added to the output of this command:

- itunesu unclassified:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts
  - Total Downlink Pkts

### `show active-charging analyzer statistics name p2p protocol-group name streaming wide all verbose`

With this release, the following fields have been added to the output of this command:

- itunesu streaming-audio:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts



Enhanced Protocols and Applications Support

- Total Downlink Pkts

show active-charging analyzer statistics name p2p protocol-group name streaming wide all verbose

With this release, the following fields have been added to the output of this command:

- itunesu-streaming-video:
  - Total Uplink Bytes
  - Total Downlink Bytes
  - Total Uplink Pkts
  - Total Downlink Pkts

## Enhanced Protocols and Applications Support

This section lists the enhancements added to support new clients/versions for the existing protocols/applications.

CDETS ID	CDETS Headline/Change Summary
CSCvw59988	<p>New Version Testing for Twitter</p> <p><b>Change Summary:</b> New SNIs added to improve Twitter detection.</p> <p>Detection Percentage: 97.12%  Twitter (Android): 8.71.0  Twitter (iOS): NA</p>
CSCvw62634	<p>New Version testing for iHeart Radio</p> <p><b>Change Summary:</b> New SNIs added to improve iHeart Radio detection.</p> <p>Detection Percentage: 92.95%  iHeart Radio (Android): NA  iHeart Radio (iOS): 19.0</p>
CSCvw62636	<p>New Version testing for iMessage</p> <p><b>Change Summary:</b> New SNIs added to improve iMessage detection.</p> <p>Detection Percentage: 43.31%  iMessage (Android): NA  iMessage (iOS): NA</p>
CSCvw62630	<p>New Version testing for IMO</p> <p><b>Change Summary:</b> New pattern is added for the HTTP and UDP traffic to improve the IMO application detection.</p> <p>Detection Percentage: 93%  IMO (Android): 05.33.06  IMO (iOS): NA</p>
CSCvw61074	<p>New Version testing for Tunein-Radio</p> <p><b>Change Summary:</b> New SNIs added to improve Tunein-Radio detection.</p> <p>Detection Percentage: 98.28%  Tunein-Radio (Android): 25.6.1  Tunein-Radio (iOS): NA</p>
CSCvw55354	<p>New Version testing for 8ballpool</p> <p><b>Change Summary:</b> Application is updated and fix is only for CNAMEs specific flow.</p> <p>Detection Percentage: 82.85%  8ballpool (Android): 5.1.0  8ballpool (iOS): 5.1.0</p>
CSCvw55342	<p>New Version testing for callofduty</p> <p><b>Change Summary:</b> New SNIs added to improve callofduty detection.</p> <p>Detection Percentage: 96.58%  callofduty (Android): 1.0.17  callofduty (iOS): 1.0.17</p>

Related Documentation

CSCvw64757	<p>New Version testing for Viber</p> <p><b>Change Summary:</b> Added support for Viber call flow (one to one, group call),</p> <p>Detection Percentage: 95.5%                  Viber (Android): 14.2.0.26                  Viber (iOS): 14.2</p>
CSCvw64424	<p>New Version testing for Snapchat</p> <p><b>Change Summary:</b> New QUIC classification added in Snapchat</p> <p>Detection Percentage: 94.99%                  Snapchat (Android): 11.5.0.69                  Snapchat (iOS): NA</p>
CSCvw72751	<p>New Version testing for Snapchat</p> <p><b>Change Summary:</b> Added Missing QUIC flows in snapchat.</p> <p>Detection Percentage:94.99%                  Snapchat (Android): 11.5.0.69                  Snapchat (iOS): NA</p>
CSCvw68118	<p>New Version testing for facetime</p> <p><b>Change Summary:</b> New patterns added for facetime.</p> <p>Detection Percentage:96%                  facetime (Android): NA                  facetime (iOS):NA</p>

## Related Documentation

For more information pertaining to changes in this release, refer to the *ADC Administration Guide*, *Command Line Interface Reference*, and *Statistics and Counters Reference* at <http://www.cisco.com/c/en/us/support/wireless/asr-5000-series/products-installation-and-configuration-guides-list.html>.

**NOTE:** The changes identified in this release may not be available in the latest version of the *ADC Administration Guide*, *Command Line Interface Reference*, and *Statistics and Counters Reference* at the time of the ADC Plugin release.

## Installation and Upgrade Notes

This Release Note does not contain installation and upgrade instructions. Refer to the existing installation documentation for specific installation and upgrade considerations.

## Open and Resolved Bugs

### Bugs Open in this Release

CDETS ID	CDETS Headline
CSCvw82796	Improving detection for vtok.
CSCvv62684	Re-configure ADC QUIC support after each GW reload.

### Bugs Resolved in this Release

The table below highlights the known bugs that are resolved in this specific release. For a summary of all resolved issues in earlier releases, see the *Previously Resolved Issues* section. Additional information for all bugs resolved in this release is available in the [Cisco Bug Search Tool](#).

CDETS ID	CDETS Headline
CSCvw29431	Improving p2p detection for youtube.
CSCvw46816	Task restart when voip_subtype_detection is enabled.
CSCvw53725	Googleplay application not detected correctly in P2P 2.59.1330.
CSCvw46263	ADC p2p fraudulent waze packet getting matched as a valid packet when tcp 443 is used.
CSCvw66966	New patterns added for whatsapp to improve p2p detection.
CSCvu93282	Improving p2p detection for telegram, audio sub-classification introduced.
CSCvv41610	Improving p2p detection for Deezer.
CSCvw09550	Detection improvement for Vortex.

## Operator Notes

### ADC Plugin Version Numbering System

This section explains the version-numbering scheme for ADC Plugin releases running on the ASR 5x00 or Cisco Virtualized Packet Core platform. The version numbering is different for the ADC Plugin release as this release is independent of StarOS software releases.

The fields of the version number as reflected in the ADC Plugin are in the form of INTERFACE.MAJOR.BUILD (e.g., 1.140.514).

#### Obtaining Documentation and Submitting a Service Request

- The INTERFACE number indicates the identifier between ASR5x00 and Plugin. This number indicates backward compatibility and only increments when a change will introduce a compatibility issue. This field may increment by '1' when necessary.
- The MAJOR version number indicates a contiguous sequential number that represents incremental changes between releases. This number increments by '1' for each plugin release.
- The BUILD version number indicates the build number that increments with each new build. This is a unique, sequential number across all ADC builds.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation*, at:

<http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

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