

Cloud Native BNG Control Plane Release Change Reference

- Features and Behavior Change Quick Reference, on page 1
- Feature Defaults Quick Reference, on page 1
- AAA Attribute Enhancements, on page 2
- cnBNG Cluster Deployment Using Inception Server, on page 3

Features and Behavior Change Quick Reference

The following table provides the list of Cloud Native BNG (cnBNG) Control Plane (CP) features and changes in this release.

Features / Behavior Changes	Release Introduced / Modified
AAA Attribute Enhancements	2023.04.0
cnBNG Cluster Deployment Using Inception Server	2023.04.0

Feature Defaults Quick Reference

The following table indicates what features are enabled or disabled by default.

Feature	Default
AAA Attribute Enhancements	Disabled – Configuration Required
cnBNG Cluster Deployment Using Inception Server	Disabled – Configuration Required

AAA Attribute Enhancements

Feature Summary

Table 1: Feature Summary

Applicable Product(s) or Functional Area	cnBNG
Applicable Platform(s)	SMI
Feature Default Setting	Disabled - Configuration Required
Related Documentation	Cloud Native BNG Control Plane Configuration Guide

Revision History

Table 2: Revision History

Revision Details	Release
Enhancement Introduced:	2023.04.0
The user-plane-ip keyword is added to the nas-ip attribute under RADIUS accounting, and RADIUS attribute configurations.	
• RADIUS IETF attributes such as Filter-Id , and Session-Timeout are now supported.	
 RADIUS Cisco vendor-specific attributes such as user-plane-ip-address, and vrf-id are now supported. 	

Feature Description

RADIUS attributes are used to define specific authentication, authorization, and accounting (AAA) elements in a user profile, which is stored on the RADIUS daemon. With this release, the following RADIUS attributes are introduced in cnBNG:

- **Session-Timeout**: You can use this IETF attribute to disconnect a subscriber after the specified time expires.
- **Filter-Id**: This IETF attribute can be used to specify a filter or access control policy to be applied to a user's session.
- **vrf-id**: This Cisco attribute-value pair (AVP) can be used to specify the virtual routing and forwarding (VRF) instance ID for the subscriber.

• user-plane-ip-address: In Broadband Network Gateway (physical BNG) deployments, the IP address of the User Plane Function (UPF) is typically available in the nas-ip attribute of the RADIUS Access-Request or Accounting-Request messages. However, in cloud native BNG deployments, the nas-ip attribute carries the IP address of the cnBNG itself, rather than the specific UPF.

To address this issue, the Cisco AVP **user-plane-ip-address** is used to carry the UPF IP address in the RADIUS messages. This attribute enables the awareness of the UPF IP address in the policy plane during cnBNG migration.

For more information, see the Cloud Native BNG Control Plane Configuration Guide > Authentication, Authorization, and Accounting Functions chapter, and Radius Attributes chapter.

cnBNG Cluster Deployment Using Inception Server

Feature Summary

Table 3: Feature Summary

Applicable Product(s) or Functional Area	cnBNG
Applicable Platform(s)	SMI
Feature Default Setting	Disabled - Configuration Required
Related Documentation	Cloud Native BNG Control Plane Configuration Guide

Revision History

Table 4: Revision History

Revision Details	Release
First introduced.	2023.04.0

Feature Description

You can now deploy the cnBNG cluster using the Inception server alone. You do not require the SMI Cluster Manager, which was previously used along with the Inception server to deploy the cnBNG cluster. This enhancement can help you save on hardware resources (servers).

For more information, see the Cloud Native BNG Control Plane Configuration Guide > cnBNG Installation and Configuration chapter.

Feature Description