Cloud Native BNG Control Plane Release Change Reference, Release 2022.01

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About this Guide

Note The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. While any existing biased terms are being substituted, exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

This Release Change Reference (RCR) describes new and modified feature and behavior change information for the applicable Cloud Native Broadband Network Gateway (cnBNG) Control Plane (CP) release.

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Conventions Used

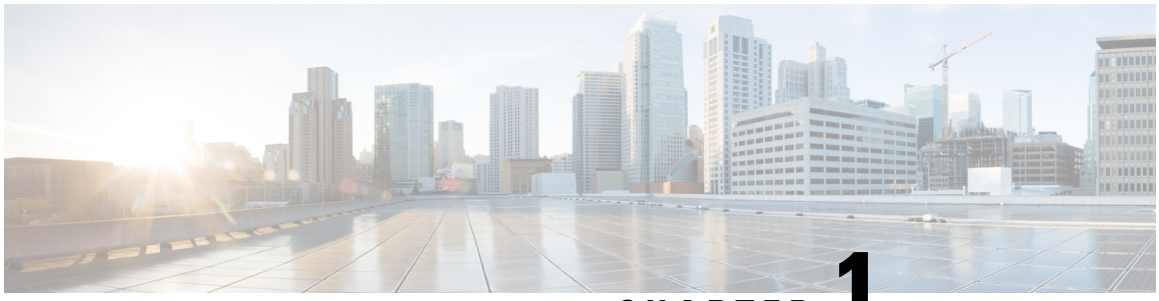
The following tables describe the conventions used throughout this documentation.

Notice Type	Description
Information Note	Provides information about important features or instructions.
Caution	Alerts you of potential damage to a program, device, or system.
Warning	Alerts you of potential personal injury or fatality. May also alert you of potential electrical hazards.

Typeface Conventions	Description
Text represented as a `screen display`	This typeface represents displays that appear on your terminal screen, for example: `Login:`

About this Guide

Typeface Conventions	Description
Text represented as **commands**	This typeface represents commands that you enter, for example: **show ip access-list** This document always gives the full form of a command in lowercase letters. Commands are not case sensitive.
Text represented as a **command** *variable*	This typeface represents a variable that is part of a command, for example: **show card** *slot_number* *slot_number* is a variable representing the desired chassis slot number.
Text represented as menu or sub-menu names	This typeface represents menus and sub-menus that you access within a software application, for example: Click the **File** menu, then click **New**



CHAPTER 1

Cloud Native BNG Release Change Reference

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- cnBNG CP Deployment on Bare Metal Server, on page 2
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Features and Changes 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
cnBNG CP Deployment on Bare Metal Server, on page 2	2022.01.0
Smart Licensing, on page 3	2022.01.0
UP Rollback Failure Handling Notification, on page 4	2022.01.0

Feature Defaults Quick Reference

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

Feature	Default
cnBNG CP Deployment on Bare Metal Server	Disabled – Configuration Required
Smart Licensing	Enabled – Always-on
UP Rollback Failure Handling Notification	Enabled – Always-on

cnBNG CP Deployment on Bare Metal Server

Feature Summary and Revision History

Summary Data

Table 1: Summary Data

Applicable Product(s) or Functional Area	cnBNG
Applicable Platform(s)	SMI
Feature Default Setting	Disabled - Configuration Required
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 2: Revision History

Revision Details	Release
cnBNG CP deployment on bare metal server is supported (with support for IPoE, PPPoE, LAC and LNS call models and High Availability) and fully qualified in this release.	2022.01.0

Feature Description

This release supports deployment of cnBNG CP on bare metal server. For information on how to deploy BNG Ops Center on bare metal servers (currently Cisco UCS-C servers) environment, see *Operating the SMI Cluster Manager on Bare Metal* section in *Ultra Cloud Core Subscriber Microservices Infrastructure — Operations Guide*.

This release further supports pod-level labelling using the CLI configuration. Note that the pod-level configuration takes precedence over the layered node-level configuration, that is, at the protocol, service, or session-level configuration.

High Availabiltiy on cnBNG CP is also validated on bare metal server deployment.

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

Smart Licensing

Feature Summary and Revision History

Summary Data

Table 3: Summary Data

Applicable Products or Functional Area	cnBNG
Applicable Platform(s)	SMI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 4: Revision History

Revision Details	Release
First introduced.	2022.01.0

Feature Description

Cisco employs two types of license models - Legacy Licensing and Smart Software Licensing.

Legacy Licensing consists of software activation by installing Product Activation Keys (PAK) on to the Cisco product. A Product Activation Key is a purchasable item, ordered in the same manner as other Cisco equipment and used to obtain license files for feature set on Cisco Products. This traditional licensing does not need any online communication with the Cisco licensing server.

Smart Software Licensing is a cloud-based licensing of the end-to-end platform through the use of a few tools that authorize and deliver license reporting. Smart Software Licensing functionality incorporated into the NFs complete the product registration and authorization.

The cnBNG CP supports Smart Software Licensing. For more information, see the Cloud Native BNG Control Plane Configuration Guide > Smart Licensing chapter.

UP Rollback Failure Handling Notification

Feature Summary and Revision History

Summary Data

Table 5: Summary Data

Applicable Product(s) or Functional Area	cnBNG
Applicable Platform(s)	SMI
Feature Default Setting	Enabled – Always-on
Related Changes in this Release	Not Applicable
Related Documentation	Not Applicable

Revision History

Table 6: Revision History

Revision Details	Release
First introduced.	2022.01.0

Feature Description

The User Plane (UP) Rollback Failure Handling Notification feature sends a failure notification to the Control Plane (CP) as follows:

- The CP sends the subscriber configuration in a session modification request to the UP. The UP rolls back the configuration if the application of the configuration fails. The UP deletes the session if the rollback configuration also fails and returns the rollback failure error in the session modification response to the CP.
- The UP sends the final statistics, if applicable, for the session and for each service activated for the failed session, in the session modification response.
- The CP deletes the session in the CP only after receiving a rollback failure in the session modification response from the UP.