Cloud Native BNG Control Plane Release Change Reference

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
CP Geographical Redundancy, on page 2	2024.01.0
Support of Multiple UPFs with a Static-IP-Pool, on page 3	2024.01.0
RADIUS Automated Testing, on page 3	2024.01.0
Support for RADIUS IPv6 Transport, on page 4	2024.01.0
Support for Variable Pool Chunk Size for an IPAM Data Plane, on page 5	2024.01.0

Feature Defaults Quick Reference

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

Feature	Default
CP Geographical Redundancy	Disabled – Configuration Required
Support of Multiple UPFs with a Static-IP-Pool	Disabled – Configuration Required
RADIUS Automated Testing	Disabled – Configuration Required
Support for RADIUS IPv6 Transport	Disabled – Configuration Required
Support for Variable Pool Chunk Size for an IPAM Data Plane	Disabled – Configuration Required

CP Geographical Redundancy

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
First introduced.	2024.01.0

Feature Description

CP Geographical redundancy provides protection to the cnBNG Control Plane site against service failures that occur due to natural disasters or massive system outages such as power failures. CP Geo redundancy takes place through replication of sessions, configuration, and any other data required for seamless failover and failback of services to the remote site.

For more information, see the Cloud Native BNG Control Plane Configuration Guide > CP Geographical Redundancy chapter.

Support of Multiple UPFs with a Static-IP-Pool

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
Introduced support of multiple UPFs with a static IP-pool.	2024.01.0

Feature Description

The cnBNG Control Plane now supports sharing a single static IP-pool with multiple UPFs. To enable sharing of the same static IP-pool across multiple UPFs, you must configure the static IP-pool as a Global Static pool.

For more information, see the Cloud Native BNG Control Plane Configuration Guide > IP Address Management chapter.

RADIUS Automated Testing

Feature Summary

Table 5: 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 6: Revision History

Revision Details	Release
First introduced.	2024.01.0

Feature Description

The RADIUS Automated Testing feature allows the cnBNG-CP to periodically check the status of the RADIUS server until the server is considered dead or the dead-timer expires. With this feature, if the dead-timer expires, the cnBNG-CP attempts to send authentication and accounting TEST messages to the RADIUS server that is currently unreachable. If the server does not respond to these messages, it is marked as dead, and this process continues until the server is reachable. If the RADIUS server responds within the set number of retransmissions and timeouts, it is marked as available, and is then included in the selection algorithm list that is used to choose RADIUS servers.

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

Support for RADIUS IPv6 Transport

Feature Summary

Table 7: 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 8: Revision History

Revision Details	Release
First introduced.	2024.01.0

Support for Variable Pool Chunk Size for an IPAM Data Plane

Feature Summary

Table 9: 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 10: Revision History

Revision Details	Release
Introduced support for variable chunk size for an IPAM Data Plane.	2024.01.0

Feature Description

You can now configure multiple pools of IP addresses, each with different chunk sizes for a given IPAM Data Plane (SRG group in SRG deployment, or an UPF in non-SRG deployment).

For more information, see the Cloud Native BNG Control Plane Configuration Guide > IP Address Management chapter.